

AC

DC

**Switch - disconnectors
and changeover switches
general catalogue**

Presentation

TELERGON is a market leader in the design and manufacture of electromechanical products, providing solutions for the isolation and protection of low voltage electrical equipment.

Experience, knowledge, and innovation are the values of our talented team, providing a strong reputation for the products manufactured by TELERGON.

The various ranges of TELERGON switch disconnectors and changeover switches have numerous applications in the field of electrical engineering, including a range of product designed specifically for renewable energy applications.



www.telergon.com

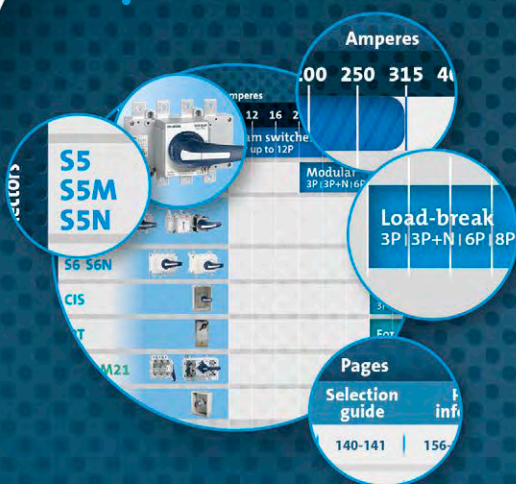


About the catalog

This catalog is organized in a way that you can choose and get quickly and easily all the product information required.

At the beginning (pages 2-3) you will find a complete overview of the range offered, classified by series over its full range of amperages, with an index that will take you to the page of presentation which corresponds, to a general guide for quick selection and to the page where you will find gathered all the information of the selected product.

1 Index & overview of all series



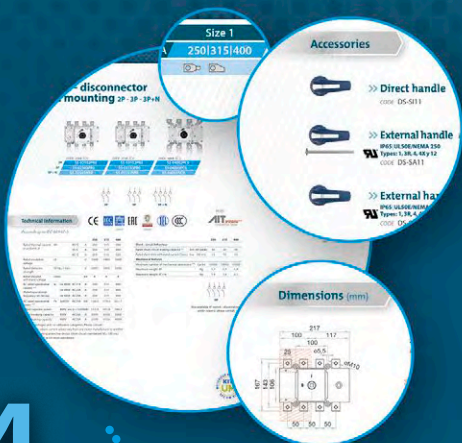
2 General information of the product range



3 Quick selection guide by series & index



4 Full information of selected product



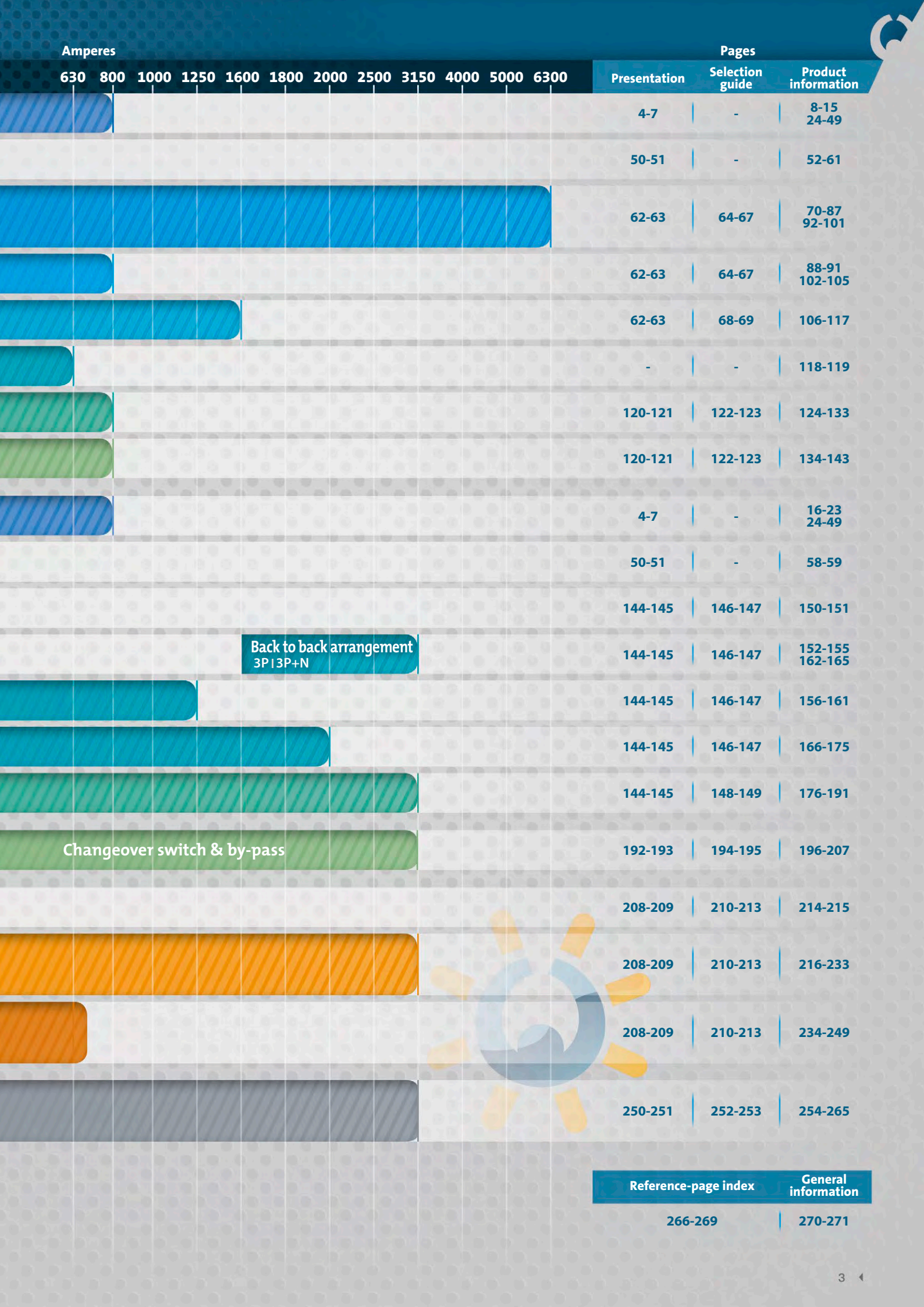
This catalogue is printed on paper coming from sustainable certified forestry

INDEX OVERVIEW
OF THE RANGE

Amperes

10 12 16 20 25 32 40 50 63 80 100 125 160 200 250 315 400 500

		10	12	16	20	25	32	40	50	63	80	100	125	160	200	250	315	400	500
AC	Switch - disconnectors	T TB TF TP	Cam switches 1P up to 12P																Under request, please consult
	ZBK	Modular 3P 3P+N 6P 8P																	
	S5 S5M S5N	Load-break 2P 3P 3P+N 6P 8P																	
	S6 S6N	Load-break 2P 3P 3P+N 6P 8P																	
	CIS	Enclosed load-break 3P 3P+N																	
	IPT	For transformer secondary protection																	
	M11 M21	With fuses 2P 3P 3P+N																	
CIF	Enclosed with fuses 3P 3P+N																		
AC	Changeover switches	T TB TF TP	Cam switches 1P up to 4P																Under request, please consult
	ZBK	Modular 3P 3P+N																	
	CEC	Compact 3P 3P+N																	
	S5F	Back to back or line arrangement 3P 3P+N																	
	CCF CCP	Compact load-break 3P 3P+N																	
	S5B	By-pass load-break 3P 3P+N																	
	CTR	Enclosed load-break 3P 3P+N																	
UM	Motorized Unit Kit	For switch - disconnector																	
DC	Switch - disconnectors	ZFC ZFV	Modular up to 1500 Vdc																
	S5 DC S5M DC S5N DC	Load-break & multi-string up to 1500 Vdc																	
	S6 DC S6N DC S6R DC	Load-break up to 1500 Vdc																	
DC	Disconnectors	S5 DC S6 DC	Isolation only 1500 Vdc																



Amperes

630 800 1000 1250 1600 1800 2000 2500 3150 4000 5000 6300

Pages

Presentation | **Selection guide** | **Product information**

4-7 | - | 8-15
24-49

50-51 | - | 52-61

62-63 | 64-67 | 70-87
92-101

62-63 | 64-67 | 88-91
102-105

62-63 | 68-69 | 106-117

- | - | 118-119

120-121 | 122-123 | 124-133

120-121 | 122-123 | 134-143

4-7 | - | 16-23
24-49

50-51 | - | 58-59

144-145 | 146-147 | 150-151

Back to back arrangement
3P|3P+N

144-145 | 146-147 | 152-155
162-165

144-145 | 146-147 | 156-161

144-145 | 146-147 | 166-175

144-145 | 148-149 | 176-191

Changeover switch & by-pass

192-193 | 194-195 | 196-207

208-209 | 210-213 | 214-215

208-209 | 210-213 | 216-233

208-209 | 210-213 | 234-249

250-251 | 252-253 | 254-265

Reference-page index

General information

266-269

270-271

Cam switches

Cam switches available in different construction models over a wide current range with a large variety of accessories.



Cam switches are manufactured in different series under strict quality controls to provide a reliable product that meets the most demanding requirements.

They consist of chambers, each containing up to two double break contacts of positive opening. These contacts silver alloy plated providing a long electromechanical life.

In sizes 0 - 1 and 2, the terminals are equipped with captive clamp screws to facilitate installation work, and all the connections themselves are covered to provide an IP20 protection rating.

The different configurations of contacts available provide flexible, faster and safer solutions for several electrical operations at a highly competitive cost.

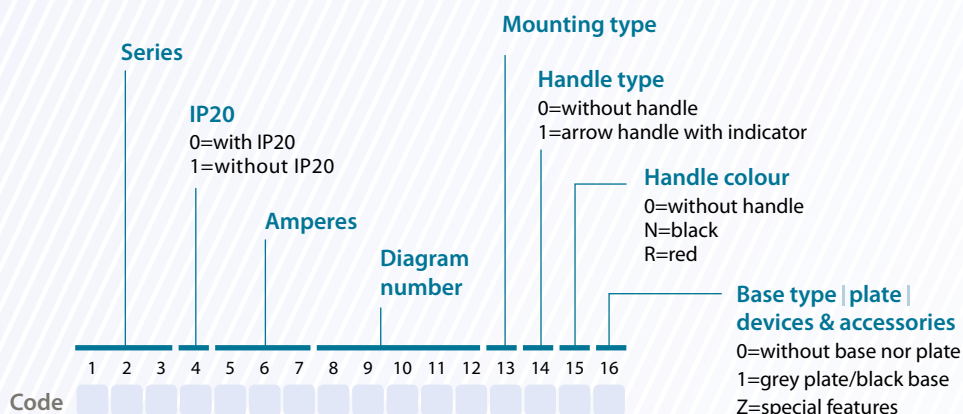
Range codification:

Standard products

They are listed in this section and are encoded according to the 16-digit bar logic explained below. This descriptive method will be used on all pages in the cam switches range for your convenience and better understanding.

Special products

They are made according to customer specifications or to comply with a diagram or special scheme. In these cases, the code is formed by the corresponding series (T-TB-TF-TP), the amperage and an order number assigned to the scheme (see blank diagrams form on page 33).



Example: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
T-0010000012E1N1

T series | 100 amperes | 012 diagram | E fixing |
Standard handle | Black colour |
Grey plate/black base |

According to:

IEC 60947-3



UL508 - CAN/CSA C22.2 N° 14

RoHS

Testing and approvals:



series
T



1 2 3 4 5 6
T -

Wide range of sizes and ratings.

Supplied with IP20 removable terminals protection on sizes 0 - 1 - 2 (except T175).

Wide range of devices and accessories.

series
TB



1 2 3 4 5 6
T B -

Side access to all terminal screws (up and down).

Two different bodies depending on mounting type: door or base mounting.

Wide range of devices and accessories.

series
TF



1 2 3 4 5 6
T F -

Square body, smooth sides, axial access to terminal screws.

Two different bodies depending on mounting type: door or base mounting.

Wide range of devices and accessories.

series
TP



1 2 3 4 5 6
T P -

Reduce-sized body. Door mounting only.

Wide range of devices and accessories.

series | type
TIP



Serie T
1 2 3 4 5 6
C I T P

- > Cam switch in plastic enclosure for gland entry.
- > From 12 up to 40 A.
- > Padlockable handle under request.

series | type
T-TFIR



Serie T Serie TF
1 2 3 4 5 1 2 3 4 5
C I T R C T F R

- > Cam switch in plastic enclosure for gland entry.
- > From 25 up to 100 A.
- > Padlockable handle under request.

series | type
T-TBIA-C



Serie T Serie TB
1 2 3 4 5 1 2 3 4 5
C I T A C T B A
1 2 3 4 5 1 2 3 4 5
C I T C C T B C

- > Cam switch in metal enclosure of cast aluminium
 - A** From 12 up to 63 A.
- > In sheet steel enclosure
 - C** From 100 A upwards.
- > Gland entry.
- > Several enclosure sizes.
- > Padlockable handle under request.

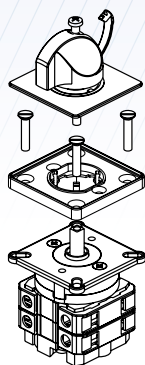
>> Ask for more information about these applications with enclosure.

TP | T | TB | TF

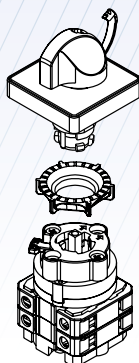
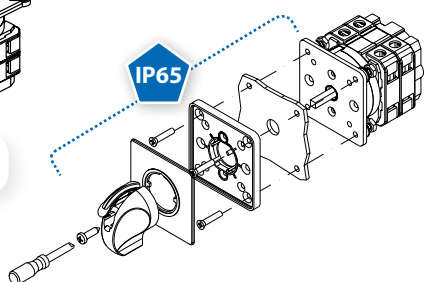
Fixing with screws | E type

For T - TB - TF - TP series

- > Frontal fixing plate for 4 screws, reversible mounting plate in T series (except T175 and size 3).
- > Door mounting with arrow handle, indicating plate, escutcheon and fixing plate IP65.



12 13 14
E

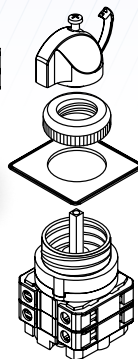


12 13 14
C

Central quick fixing $\varnothing 22$ | C type

For T - TB - TF series

- > Door mounting for $\varnothing 22$ mm available for sizes 0 and 1.
- > For arrow handle with indicator or padlockable handle.
- > Maximum number of chambers supported
Size 0 = 6
Size 1 = 4

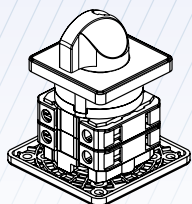


12 13 14
Z

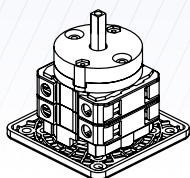
Central fixing with metal nut $\varnothing 22$ | Z type

For T - TF series

- > Door mounting for metal nut $\varnothing 22$ mm available for sizes 0 and 1.
(also $\varnothing 30$ mm under request).



12 13 14
D



12 13 14
G

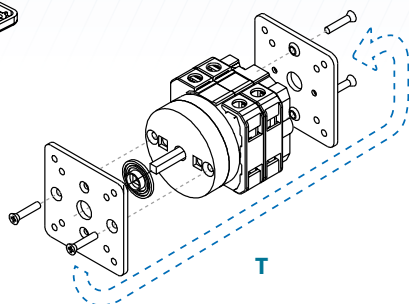
Base mounting by screws with direct handle | D type Base mounting by screws without plate nor handle | G type

For T series

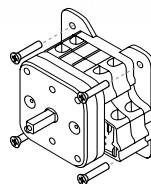
- > Rear fixing plate for 4 screws, reversible mounting plate in T series (except T175 and size 3).

For TB - TF series

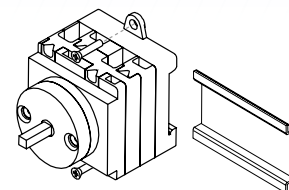
- > Fixed rear support plate as standard.
- > Serie TB for 4 screws.
- > Serie TF for two screws (also DIN rail).



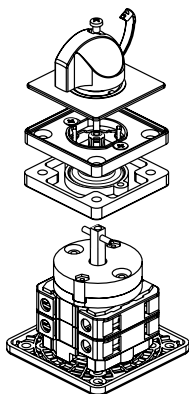
T



TB



TF



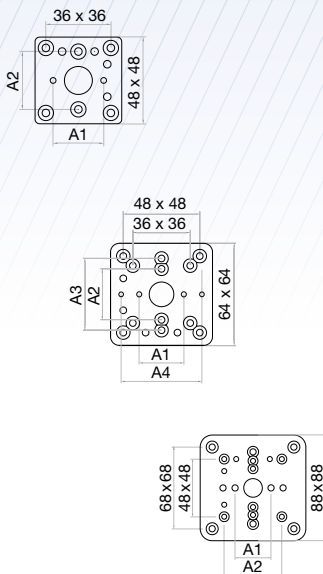
12 13 14
F

Base mounting with clutch device and door handle | F type

For T - TB - TF series

- > Rear fixing plate for 4 screws in T - TB series or two screws and DIN rail in TF series.
- > With clutch device and door lock, according to series and sizes.
- > The clutch device (D501) for size 0, if it is combined with other accessory, must be size 1.
- > The clutch device (D501) and shaft extension are supplied separately (as accessories) or incorporated with the cam switch (size 3 is always incorporated with the cam switch).
- > Specify useful depth of the space available when ordering.

Door mounting



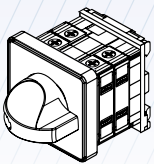
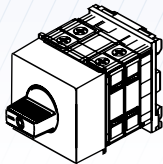
Size	Models		
0	A1 = 28 mm	A2 = 32 mm	M
	A1 = 30 mm	A2 = 34 mm	N
	A1 = 35 mm	A2 = 38 mm	O
1	A1 = 28 mm A4 = 46 mm	A2 = 32 mm	M
	A1 = 33 mm A3 = 47 mm	A2 = 30 mm A4 = 50 mm	N
	A1 = 32 mm A3 = 45 mm	A2 = 32 mm A4 = 45 mm	P
2	A1 = 38 mm	A3 = 40 mm	M
	A1 = 30 mm	A2 = 50 mm	P

Multi-distance fixing plates with screws

For T - TB - TF series

- > Multidrill plates for different fixing distances.
- > Fixing with two screws for mounting without base nor indicating plate.
- > Available for sizes 0 - 1 - 2. (size 0 also supports multi-fixing plate size 1).

Base mounting

12 13 14
A12 13 14 15 16
H 8 N O

DIN rail mounting with direct handle | A type

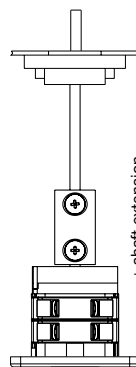
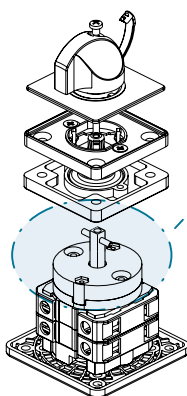
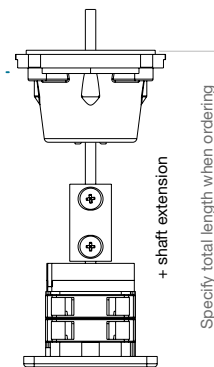
For T series

- > Rear fixing support (D904) for T series sizes 0 and 1.
- > DIN rail is included in TF series.

DIN rail mounting with modular handle | H type

For TF series

- > Rear fixing support and modular handle tape (D905) for T - TF series size 0.

Size
0Clutch device
with door interlockSizes
0 - 1 - 2 - 3

Specify total length when ordering

TP | T | TB | TF

Door mounting switch

1P up to 12P

Size 0

A 10|12|16|20|25|32



series TP | T | TB | TF



Technical information



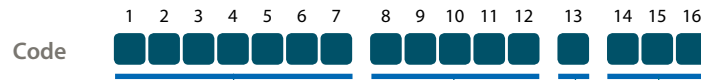
According to IEC 60947-3
UL508 - CAN/CSA C22.2 N° 14

According to IEC 60947-3		TP10	T12	T20	TB20	TB25	TB32	TF12	TF16	TF25		
Rated thermal current	I _{th}	A	12	16	25	20	25	32	20	25	32	
Rated insulation voltage	U _i	V	500	500	500	500	500	690	690	690		
Rated impulse withstand voltage	U _{imp}	kV	4	6	6	4	4	4	6	6		
AC rated operational current	I _e	U _e 415V AC13A	A	10	-	-	-	-	-	-		
		U _e 415V AC21A	A	12	16	25	20	25	32	20	25	32
		U _e 415V AC22A	A	12	16	25	20	25	32	20	25	32
		U _e 415V AC23A	A	10	10	25	20	25	32	8	16	20
Rated conditional short-circuit current		kA	5	10	10	5	5	5	5	5		
Rated maximum current	g _L -g _G	A	16	25	25	35	35	35	20	25	32	
Rated breaking capacity	400V; cos φ=0,45	A	80	80	100	160	200	256	100	160	200	
Rated short-time withstand current (1 sec)		A	100	240	400	240	400	500	350	400	500	
Mechanical durability (according to the standards, for other values please consult)			1000	10000	10000	10000	10000	10000	10000	10000	10000	
Rigid copper conductor		mm ²	2x4	2x4	2x4	1x10 2x6	1x10 2x6	1x10 2x6	1x10	1x10	1x10	
Flexible copper conductor		mm ²	2x2,5	2x2,5	2x2,5	1x6 2x4	1x6 2x4	1x6 2x4	1x6	1x6	1x6	
According to UL508 - CAN / CSA C22.2 N° 14			T12	T20				TF12	TF16	TF25		
Rated thermal current	I _{th}	A	-	12	20	-	-	-	16	20	25	
General use rating		Vac	-	300	300	-	-	-	600	600	600	
AC rated operational power	3x240V	HP	-	2	5	-	-	-	2	5	7,5	
	3x480V	HP	-	-	-	-	-	-	5	10	12	
	3x600V	HP	-	-	-	-	-	-	5	10	15	

Normal service conditions:

Ambient air temperature (°C): -5°...+40°. Maximum altitude: 2.000 m. Maximum humidity: 90%. Pollution degree: 3 (standard for industrial applications). Rated frequency at AC utilization categories: 50/60 Hz.

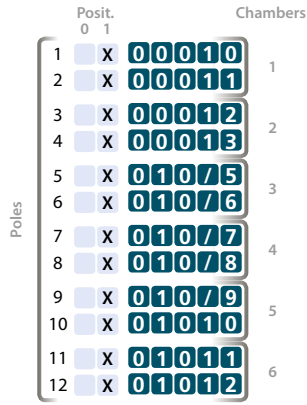
Rated duties at utilization categories AC21A, AC22A and AC23A: Continuing (8 hours); uninterrupted.



Series | Amp

- TP-0010
- T-00012
- T-00020
- TB-0020
- TB-0025
- TB-0032
- TF-0012
- TF-0016
- TF-0025

Diagram



Type

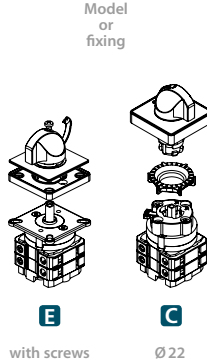
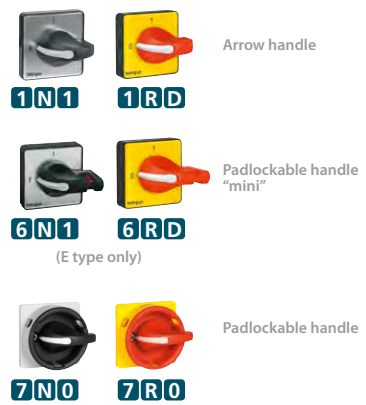
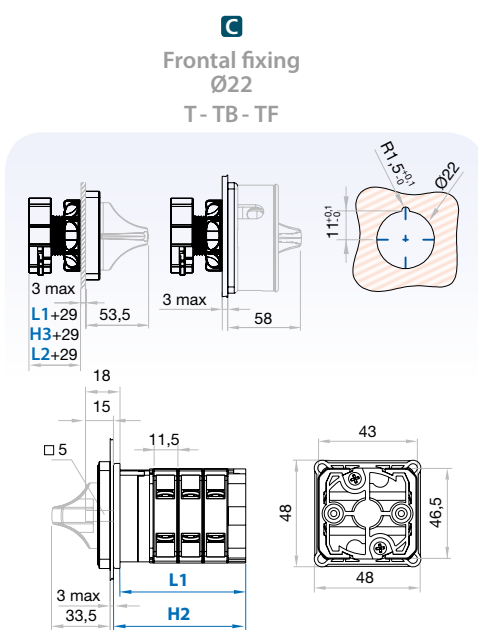
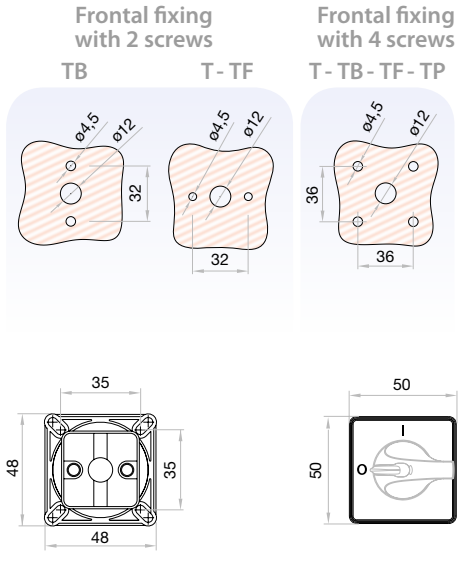
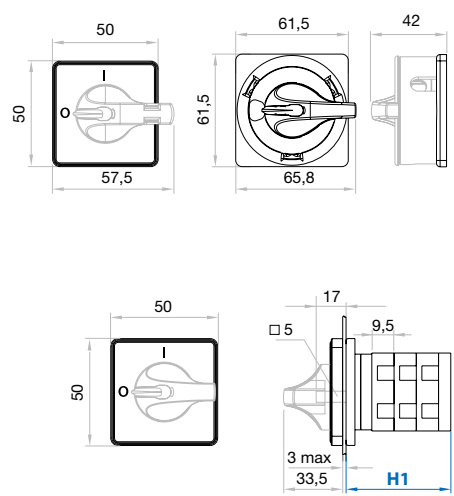


Plate and handle

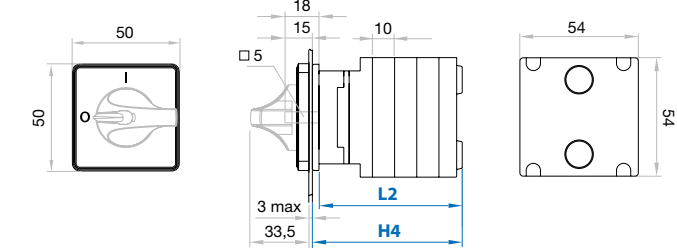
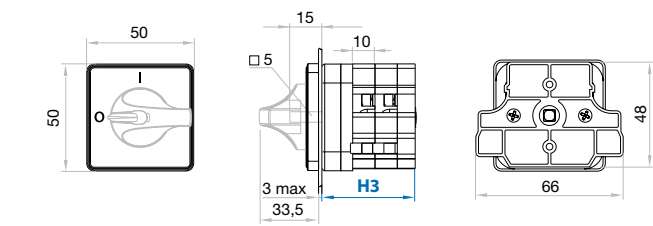


Dimensions (mm)



TP series	Chambers	1	2	3	4	5	6
H1		26,8	36,3	45,8	55,3	64,8	74,3

T series	Chambers	1	2	3	4	5	6
L1		34,5	46	57,5	69	80,5	92
H2		37,5	49	60,5	72	83,5	95



TB series	Chambers	1	2	3	4	5	6
H3		31,5	41,5	51,5	61,5	71,5	81,5

TF series	Chambers	1	2	3	4	5	6
L2		45	55	65	75	85	95
H4		48	58	68	78	88	98

T

Door mounting switch

1P up to 12P

Size 1

A 16|25|32|40



T

Technical information



consult

consult

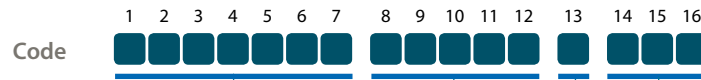
According to IEC 60947-3
UL508 - CAN/CSA C22.2 N° 14

According to IEC 60947-3			T16	T25	T32	T40	
Rated thermal current	I _{th}	A	25	32	40	50	
Rated insulation voltage	U _i	V	690	690	690	690	
Rated impulse withstand voltage	U _{imp}	kV	6	6	8	8	
AC rated operational current	I _e	U _e 415V AC21A	A	25	32	40	50
		U _e 415V AC22A	A	25	32	40	50
		U _e 415V AC23A	A	16	20	25	32
Rated conditional short-circuit current		kA	10	10	10	10	
Rated maximum current	g _L -g _G	A	32	32	50	50	
Rated breaking capacity	400V; cos φ=0,45	A	160	200	256	320	
Rated short-time withstand current (1 sec)		A	500	650	800	800	
Mechanical durability (according to the standards, for other values please consult)			10000	10000	10000	10000	
Rigid copper conductor		mm ²	2x6	2x6	2x10	2x10	
Flexible copper conductor		mm ²	2x4	2x4	2x6	2x6	
According to UL508 - CAN / CSA C22.2 N° 14			T16	T25	T32	T40	
Rated thermal current	I _{th}	A	16	25	32	40	
General use rating		Vac	600	600	600	600	
	3x240V	HP	5	7,5	10	15	
	3x480V	HP	10	15	20	25	
AC rated operational power	3x480V	HP	10	15	20	25	
	3x600V	HP	10	15	20	25	

Normal service conditions:

Ambient air temperature (°C): -5°...+40°. Maximum altitude: 2.000 m. Maximum humidity: 90%. Pollution degree: 3 (standard for industrial applications). Rated frequency at AC utilization categories: 50/60 Hz.

Rated duties at utilization categories AC21A, AC22A and AC23A: Continuing (8 hours); uninterrupted.



Series | Amp

T-00016
T-00025
T-00032
T-00040

Diagram

Posit.	0 1		Chambers
	0	1	
1	X	00010	1
2	X	00011	1
3	X	00012	2
4	X	00013	2
5	X	01075	3
6	X	01076	3
7	X	01077	4
8	X	01078	4
9	X	01079	5
10	X	01010	5
11	X	01011	6
12	X	01012	6

Type

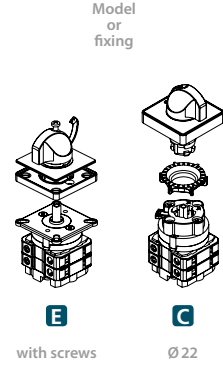
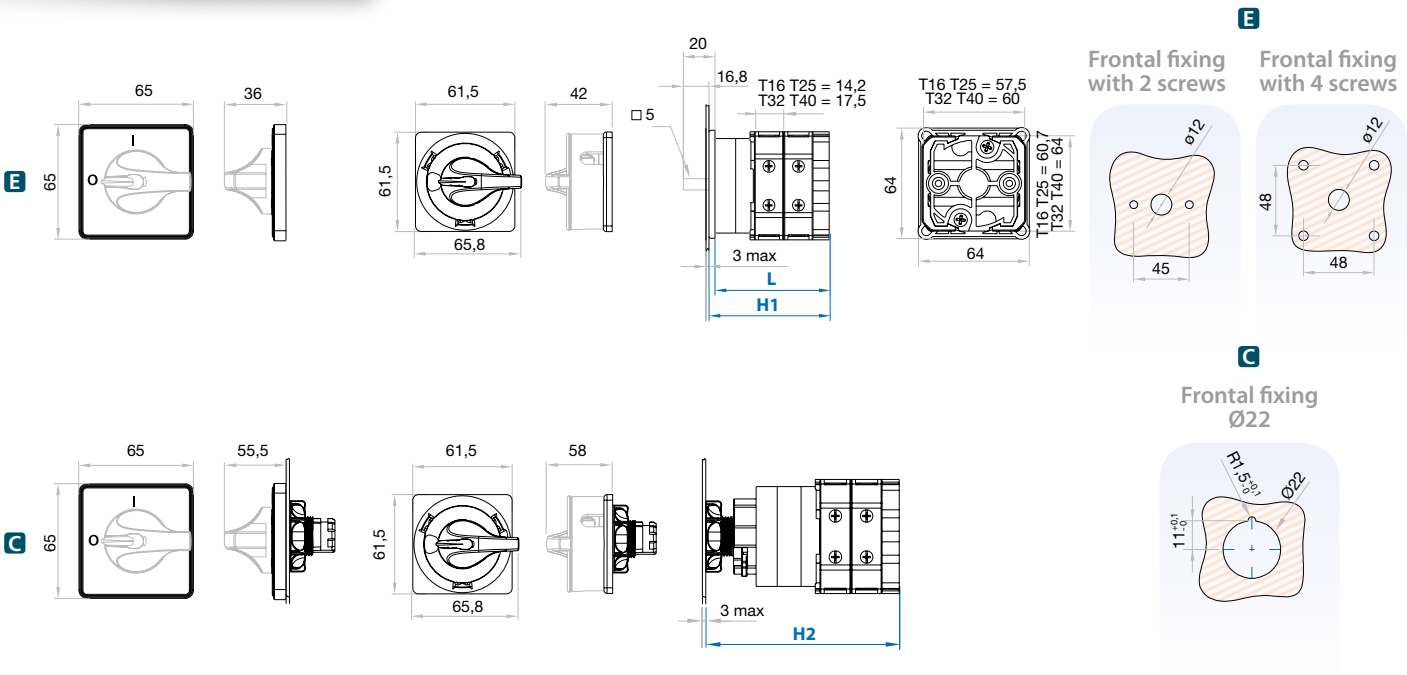


Plate and handle



Dimensions (mm)



T series	Chambers	1	2	3	4	5	6
T16 T25	L	46,4	60,6	74,8	89	103,2	117,4
	H1	49,6	63,8	78	92,2	106,4	120,6
	H2	75,5	89,5	103,7	117,9	132,1	146,3
T32 T40	L	49,8	67,3	84,8	102,3	119,8	137,3
	H1	53	70,5	88	105,5	123	140,5
	H2	78,8	96,3	113,8	131,3	148,8	166,3

T

Door mounting switch

1P up to 12P

Size 2

A 50|63|80|100|125|175



* Except T175



T

Technical information



consult

consult

consult

consult

According to IEC 60947-3
UL508 - CAN/CSA C22.2 N° 14

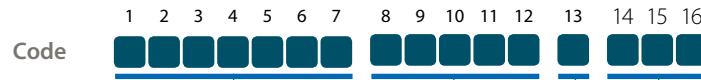
According to IEC 60947-3			T50	T63	T80	T100	T125	T175	
Rated thermal current	I _{th}	A	63	80	80	125	125	200	
Rated insulation voltage	U _i	V	690	690	690	690	690	1000	
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	8	8	8	
AC rated operational current	I _e	U _e 415V AC21A	A	63	80	80	125	125	200
		U _e 415V AC22A	A	63	80	80	115	115	200
		U _e 415V AC23A	A	63	63	63	100	100	200
Rated conditional short-circuit current		kA	15	15	15	15	15	15 ⁽²⁾	
Rated maximum current	g _L -g _G	A	80	80	80	125	125	160	
Rated breaking capacity	400V; cos φ=0,45	A	504	504	504	640	640	1600	
Rated short-time withstand current (1 sec)		A	1600	1600	1600	2500	2500	3500	
Mechanical durability (according to the standards, for other values please consult)			10000	10000	10000	8000	8000	8000	
Rigid copper conductor		mm ²	16/25 ⁽¹⁾	16/25 ⁽¹⁾	16/25 ⁽¹⁾	35/50 ⁽¹⁾	35/50 ⁽¹⁾	95	
Flexible copper conductor		mm ²	10/16 ⁽¹⁾	10/16 ⁽¹⁾	10/16 ⁽¹⁾	16/35 ⁽¹⁾	16/35 ⁽¹⁾	95	
According to UL508 - CAN / CSA C22.2 N° 14			T50	T63	T80	T100	T125	T175	
Rated thermal current	I _{th}	A	63	63	63	100	100	200	
General use rating		Vac	600	600	600	600	600	600	
	3x240V	HP	20	20	20	30	30	25	
	3x480V	HP	40	40	40	50	50	60	
AC rated operational power	3x600V	HP	40	40	40	50	50	50	

⁽¹⁾ With terminals for connection⁽²⁾ Mounting without connection terminals or terminals + phase barriers DT-90025

Normal service conditions:

Ambient air temperature (°C): -5°...+40°. Maximum altitude: 2.000 m. Maximum humidity: 90%. Pollution degree: 3 (standard for industrial applications). Rated frequency at AC utilization categories: 50/60 Hz.

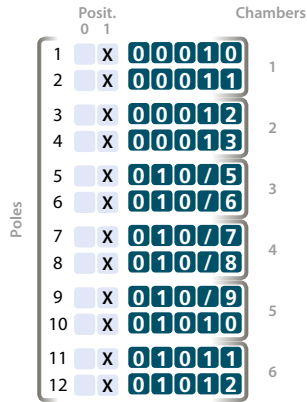
Rated duties at utilization categories AC21A, AC22A and AC23A: Continuing (8 hours); uninterrupted.



Series | Amp

T-00050
T-00063
T-00080
T-00100
T-00125
T-00175

Diagram



Type

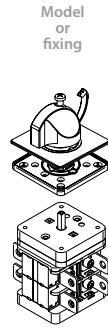
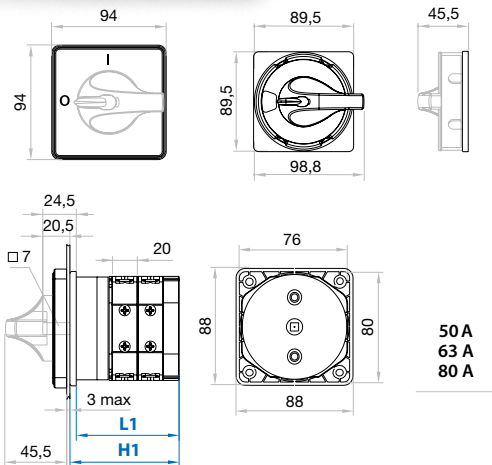


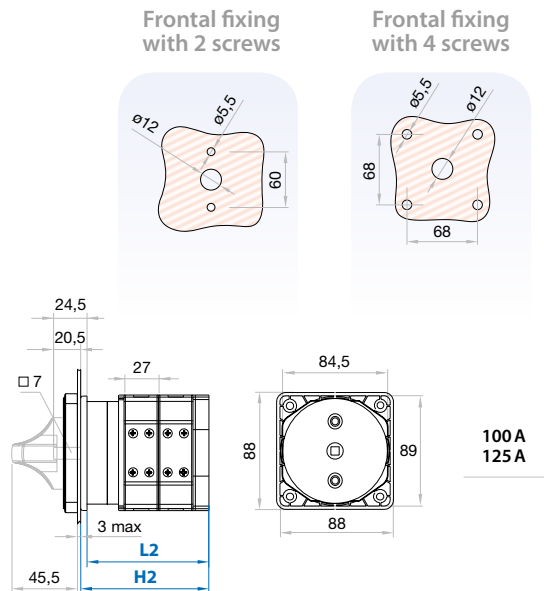
Plate and handle



Dimensions (mm)

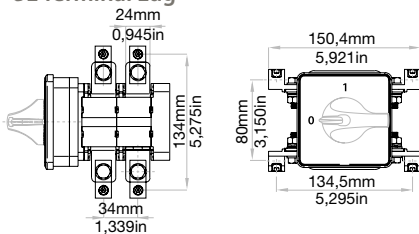


T series	Chambers	1	2	3	4	5	6
T50 T63 T80	L1	58,5	78,5	98,5	118,5	138,5	158,5
	H1	62,5	82,5	102,5	122,5	142,5	162,5

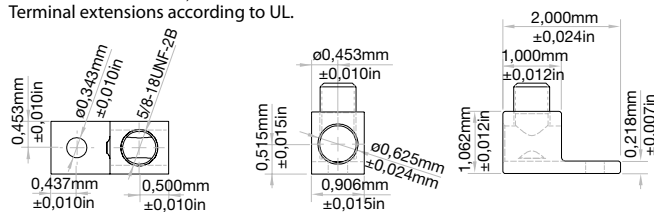


T series	Chambers	1	2	3	4	5	6
T100 T125	L2	67	94	121	148	175	202
	H2	71	98	125	152	179	206

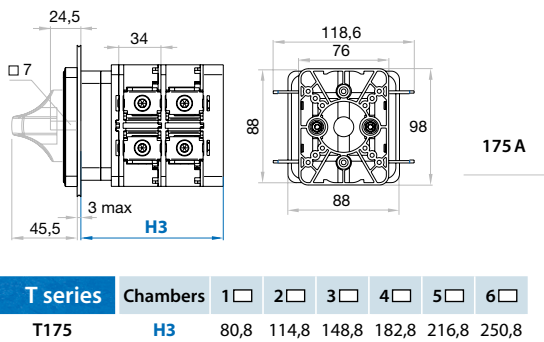
UL Terminal Lug



Terminal extensions according to UL.



Wire size	Wires per lug	Wire type	Kit reference
120 mm ² / 250 kcmil	1	Cu	DS-TLU21 (2-pieces)



T series	Chambers	1	2	3	4	5	6
T175	H3	80,8	114,8	148,8	182,8	216,8	250,8

Note: The hardware needed to complete the wiring is supplied as standard.

>> For more information of this series; accessories see pages 24-31 | diagrams see pages 32-43

T

Door mounting switch

1P up to 12P

Size 3

200|250|315



* Under request also available
in 400A, 500A, 630A, 800A,
consult please



T

Technical information



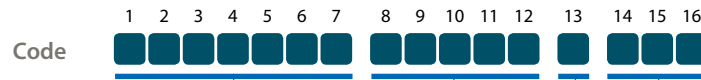
According to IEC 60947-3
UL508 - CAN/CSA C22.2 N° 14

According to IEC 60947-3			T200	T250	T315	
Rated thermal current	I _{th}	A	200	250	315	
Rated insulation voltage	U _i	V	690	690	690	
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	
AC rated operational current	I _e	U _e 415V AC21A	A	200	250	315
		U _e 415V AC22A	A	200	250	315
		U _e 415V AC23A	A	200	200	200
Rated conditional short-circuit current		kA	15	15	15	
Rated maximum current	g _L -g _G	A	200	250	315	
Rated breaking capacity	400V; cos φ=0,45	A	1450	2000	2240	
Rated short-time withstand current (1 sec)		A	4400	4400	4400	
Mechanical durability (according to the standards, for other values please consult)			8000	8000	8000	
Rigid copper conductor		mm ²	95	120	185	
Flexible copper conductor		mm ²	95	120	185	
According to UL508 - CAN / CSA C22.2 N° 14			T200	T250	T315	
Rated thermal current	I _{th}	A	200	200	200	
General use rating		V _{ac}	600	600	600	
	3x240V	HP	60	60	60	
	3x480V	HP	75	75	75	
AC rated operational power	3x480V	HP	75	75	75	
	3x600V	HP	60	60	60	

Normal service conditions:

Ambient air temperature (°C): -5°...+40°. Maximum altitude: 2.000 m. Maximum humidity: 90%. Pollution degree: 3 (standard for industrial applications). Rated frequency at AC utilization categories: 50/60 Hz.

Rated duties at utilization categories AC21A, AC22A and AC23A: Continuing (8 hours); uninterrupted.



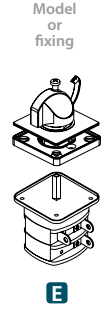
Series | Amp

T-00200
T-00250
T-00315

Diagram

Posit.	0		1		Chambers
	0	1	0	1	
1	X	0	0	0	1
2	X	0	0	0	1
3	X	0	0	0	2
4	X	0	0	0	2
5	X	0	1	0	3
6	X	0	1	0	3
7	X	0	1	0	4
8	X	0	1	0	4
9	X	0	1	0	5
10	X	0	1	0	5
11	X	0	1	0	6
12	X	0	1	0	6

Type

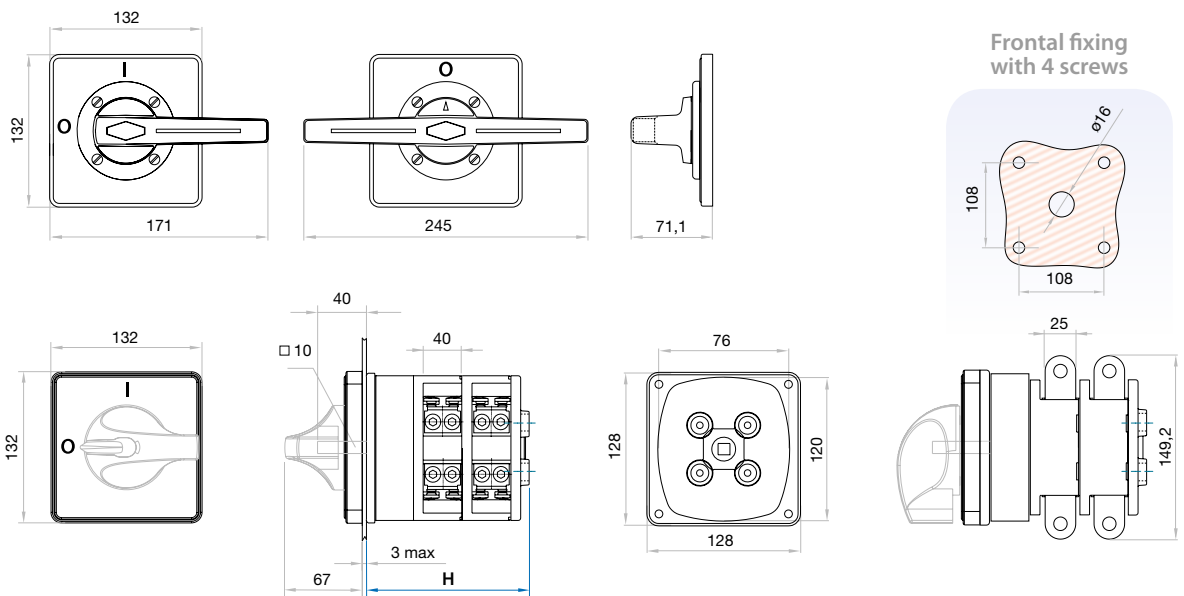


E

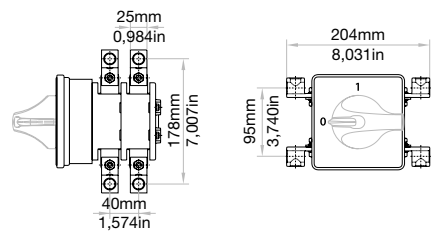
Plate and handle

		Arrow handle (from 1 to 4 poles)
1N1	1RD	
		Simple handle (from 5 to 9 poles)
AN1	ARD	
		Double handle (from 10 to 12 poles)
BN1	BRD	
		Padlockable handle (from 1 to 9 poles)
NN1	NRD	
		Padlockable handle (from 10 to 12 poles)
ON1	ORD	

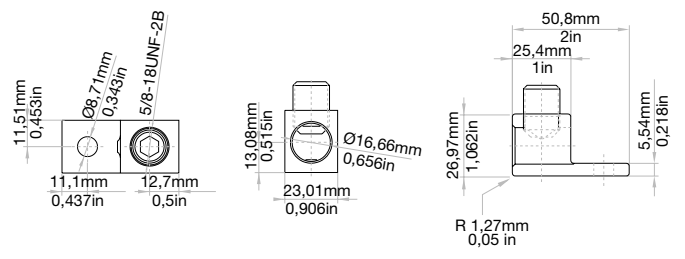
Dimensions (mm)



UL Terminal Lug



Terminal extensions according to UL



T series	Chambers	1	2	3	4	5	6
T200 T250 T315	H	95	135	175	215	255	295

Wire size	Wires per lug	Wire type	Kit reference
150 mm ² / 300 kcmil	1	Cu/Al	DS-TL01 (2 pieces)

Note: The hardware needed to complete the wiring is supplied as standard.

TP|T|TB|TF

Door mounting changeover

1P up to 4P

Size 0
A 10|12|16|20|25|32



Technical information



According to IEC 60947-3
UL508 - CAN/CSA C22.2 N° 14

According to IEC 60947-3			TP10	T12	T20	TB20	TB25	TB32	TF12	TF16	TF25	
Rated thermal current	Ith	A	12	16	25	20	25	32	20	25	32	
Rated insulation voltage	Ui	V	500	500	500	500	500	500	690	690	690	
Rated impulse withstand voltage	Uimp	kV	4	6	6	4	4	4	6	6	6	
AC rated operational current	Ie	Ue 415V AC13A	A	10	-	-	-	-	-	-	-	
		Ue 415V AC21A	A	12	16	25	20	25	32	20	25	32
		Ue 415V AC22A	A	12	16	25	20	25	32	20	25	32
		Ue 415V AC23A	A	10	10	25	20	25	32	8	16	20
Rated conditional short-circuit current		kA	5	10	10	5	5	5	5	5	5	
Rated maximum current	gL-gG	A	16	25	25	35	35	35	20	25	32	
Rated breaking capacity	400V; cos φ=0,45	A	80	80	100	160	200	256	100	160	200	
Rated short-time withstand current (1 sec)		A	100	240	400	240	400	500	350	400	500	
Mechanical durability (according to the standards, for other values please consult)			1000	10000	10000	10000	10000	10000	10000	10000	10000	
Rigid copper conductor		mm ²	2x4	2x4	2x4	1x10 2x6	1x10 2x6	1x10 2x6	1x10	1x10	1x10	
Flexible copper conductor		mm ²	2x2,5	2x2,5	2x2,5	1x6 2x4	1x6 2x4	1x6 2x4	1x6	1x6	1x6	
According to UL508 - CAN / CSA C22.2 N° 14			T12	T20				TF12	TF16	TF25		
Rated thermal current	Ith	A	-	12	20	-	-	-	16	20	25	
General use rating		Vac	-	300	300	-	-	-	600	600	600	
		3x240V	HP	-	2	5	-	-	2	5	7,5	
		3x480V	HP	-	-	-	-	-	5	10	12	
AC rated operational power		HP	-	-	-	-	-	-	5	10	15	
		3x600V	HP	-	-	-	-	-	5	10	15	

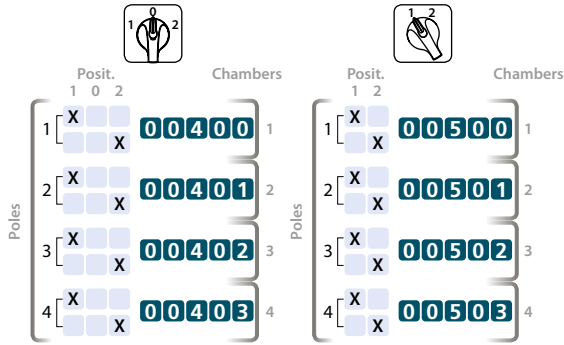
Normal service conditions:
 Ambient air temperature (°C): -5°...+40°. Maximum altitude: 2.000 m. Maximum humidity: 90%. Pollution degree: 3 (standard for industrial applications). Rated frequency at AC utilization categories: 50/60 Hz.
 Rated duties at utilization categories AC21A, AC22A and AC23A: Continuing (8 hours); uninterrupted.



Series | Amp

- TP-0010
- T-00012
- T-00020
- TB-0020
- TB-0025
- TB-0032
- TF-0012
- TF-0016
- TF-0025

Diagram



Type

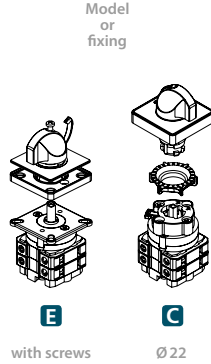
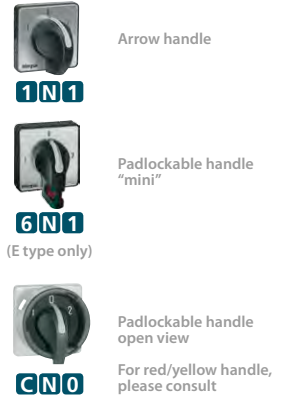


Plate and handle



Dimensions (mm)

E

Frontal fixing
with 2 screws

TB T- TF

Frontal fixing
with 4 screws

T- TB- TF- TP

C

Frontal fixing
Ø22

T- TB- TF

TP series	Chambers	1	2	3	4
H1		26,8	36,3	45,8	55,3

T series	Chambers	1	2	3	4
L1		34,5	46	57,5	69
H2		37,5	49	60,5	72

TB series	Chambers	1	2	3	4
H3		31,5	41,5	51,5	61,5

TF series	Chambers	1	2	3	4
L2		45	55	65	75
H4		48	58	68	78

T

Door mounting changeover

1P up to 4P

Size 1

A 16|25|32|40



T

Technical information



consult

consult

consult

consult

According to IEC 60947-3
UL508 - CAN/CSA C22.2 N° 14

According to IEC 60947-3			T16	T25	T32	T40	
Rated thermal current	I _{th}	A	25	32	40	50	
Rated insulation voltage	U _i	V	690	690	690	690	
Rated impulse withstand voltage	U _{imp}	kV	6	6	8	8	
AC rated operational current	I _e	U _e 415V AC21A	A	25	32	40	50
		U _e 415V AC22A	A	25	32	40	50
		U _e 415V AC23A	A	16	20	25	32
Rated conditional short-circuit current		kA	10	10	10	10	
Rated maximum current	gL-gG	A	32	32	50	50	
Rated breaking capacity	400V; cos φ=0,45	A	160	200	256	320	
Rated short-time withstand current (1 sec)		A	500	650	800	800	
Mechanical durability (according to the standards, for other values please consult)			10000	10000	10000	10000	
Rigid copper conductor		mm ²	2x6	2x6	2x10	2x10	
Flexible copper conductor		mm ²	2x4	2x4	2x6	2x6	
According to UL508 - CAN / CSA C22.2 N° 14			T16	T25	T32	T40	
Rated thermal current	I _{th}	A	16	25	32	40	
General use rating		Vac	600	600	600	600	
	3x240V	HP	5	7,5	10	15	
	3x480V	HP	10	15	20	25	
AC rated operational power	3x600V	HP	10	15	20	25	

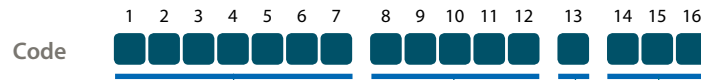
Normal service conditions:

Ambient air temperature (°C): -5°...+40°. Maximum altitude: 2.000 m. Maximum humidity: 90%. Pollution degree: 3 (standard for industrial applications). Rated frequency at AC utilization categories: 50/60 Hz.

Rated duties at utilization categories AC21A, AC22A and AC23A: Continuing (8 hours); uninterrupted.

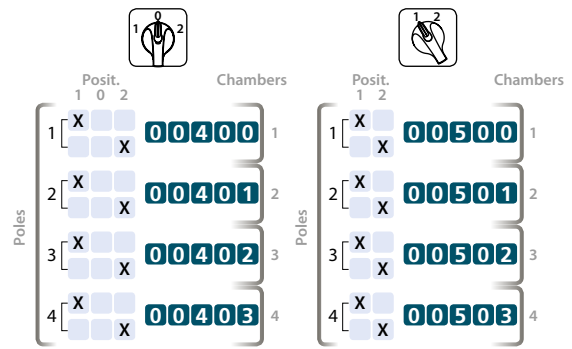


T series



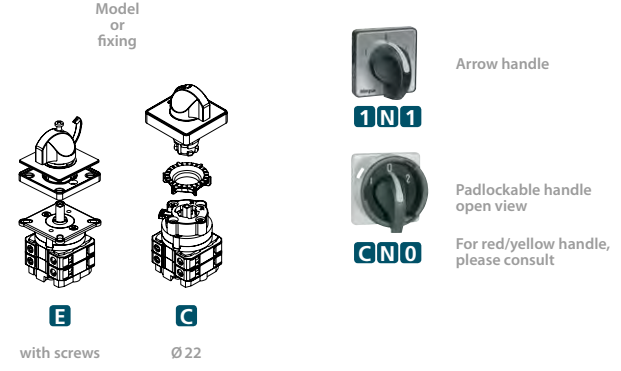
- Series | Amp
- T-00016
 - T-00025
 - T-00032
 - T-00040

Diagram

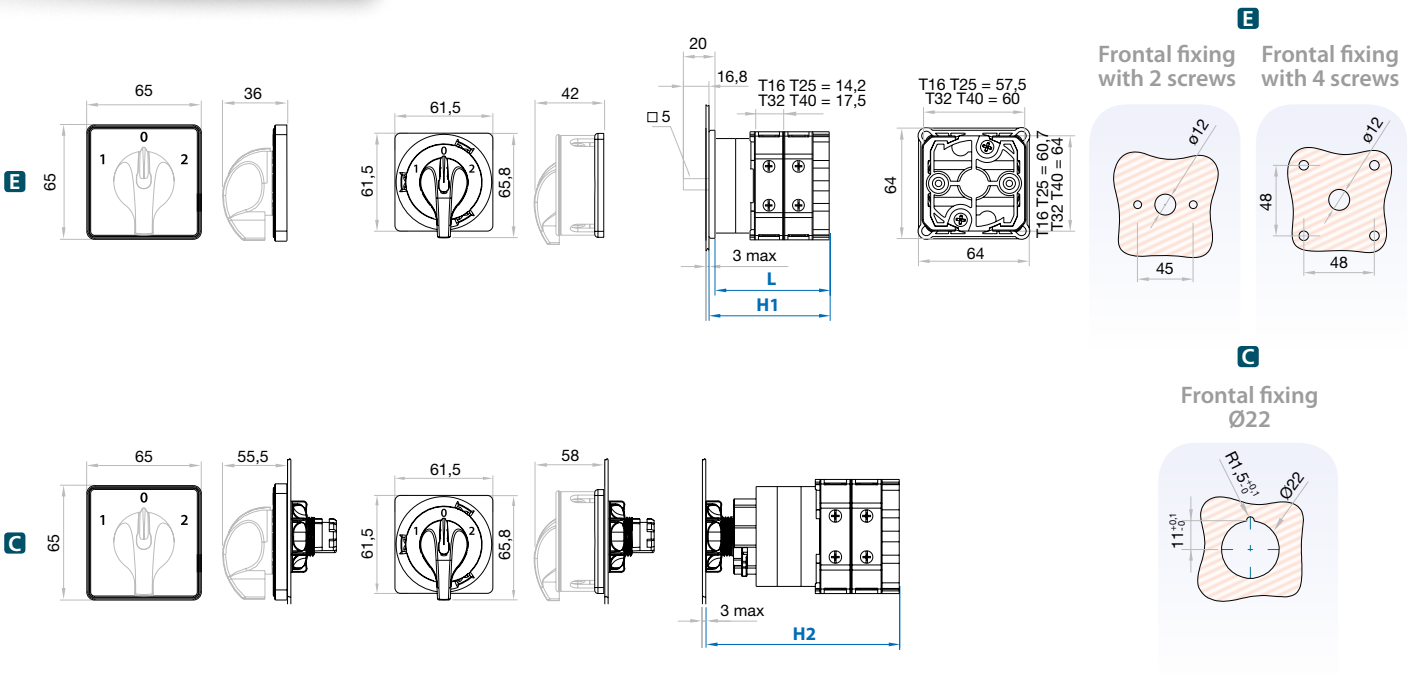


Type

Plate and handle



Dimensions (mm)



T series	Chambers	1	2	3	4
T16 T25	L	46,4	60,6	74,8	89
	H1	49,6	63,8	78	92,2
	H2	75,5	89,5	103,7	117,9
T32 T40	L	49,8	67,3	84,8	102,3
	H1	53	70,5	88	105,5
	H2	78,8	96,3	113,8	131,3

>> For more information of this series; accessories see pages 24-31 | diagrams see pages 32-43

T

Door mounting changeover

1P up to 4P

Size 2

A 50|63|80|100|125|175



* Except T175



T

Technical information



consult

consult

consult

According to IEC 60947-3
UL508 - CAN/CSA C22.2 N° 14

According to IEC 60947-3			T50	T63	T80	T100	T125	T175	
Rated thermal current	I _{th}	A	63	80	80	125	125	200	
Rated insulation voltage	U _i	V	690	690	690	690	690	1000	
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	8	8	8	
AC rated operational current	I _e	U _e 415V AC21A	A	63	80	80	125	125	200
		U _e 415V AC22A	A	63	80	80	115	115	200
		U _e 415V AC23A	A	63	63	63	100	100	200
Rated conditional short-circuit current		kA	15	15	15	15	15	15 ⁽²⁾	
Rated maximum current	gL-gG	A	80	80	80	125	125	160	
Rated breaking capacity	400V; cos φ=0,45	A	504	504	504	640	640	1600	
Rated short-time withstand current (1 sec)		A	1600	1600	1600	2500	2500	3500	
Mechanical durability (according to the standards, for other values please consult)			10000	10000	10000	8000	8000	8000	
Rigid copper conductor		mm ²	16/25 ⁽¹⁾	16/25 ⁽¹⁾	16/25 ⁽¹⁾	35/50 ⁽¹⁾	35/50 ⁽¹⁾	95	
Flexible copper conductor		mm ²	10/16 ⁽¹⁾	10/16 ⁽¹⁾	10/16 ⁽¹⁾	16/35 ⁽¹⁾	16/35 ⁽¹⁾	95	
According to UL508 - CAN / CSA C22.2 N° 14			T50	T63	T80	T100	T125	T175	
Rated thermal current	I _{th}	A	63	63	63	100	100	200	
General use rating		Vac	600	600	600	600	600	600	
	3x240V	HP	20	20	20	30	30	25	
	3x480V	HP	40	40	40	50	50	60	
AC rated operational power	3x600V	HP	40	40	40	50	50	50	

⁽¹⁾ With terminals for connection⁽²⁾ Mounting without connection terminals or terminals + phase barriers DT-90025

Normal service conditions:

Ambient air temperature (°C): -5...+40°. Maximum altitude: 2.000 m. Maximum humidity: 90%. Pollution degree: 3 (standard for industrial applications). Rated frequency at AC utilization categories: 50/60 Hz.

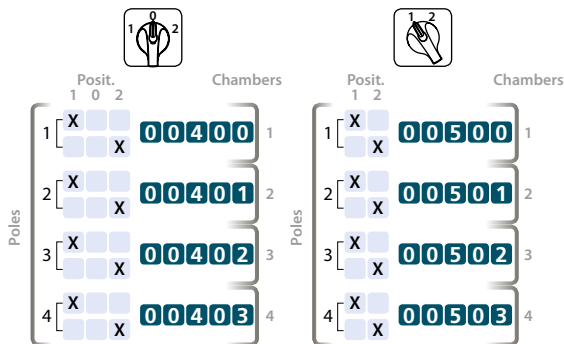
Rated duties at utilization categories AC21A, AC22A and AC23A: Continuing (8 hours); uninterrupted.



Series | Amp

T-00050
T-00063
T-00080
T-00100
T-00125
T-00175

Diagram



Type

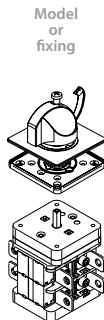


Plate and handle

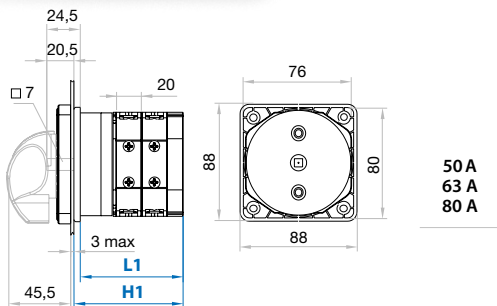


Arrow handle

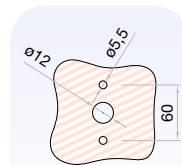
Padlockable handle open view

For red/yellow handle, please consult

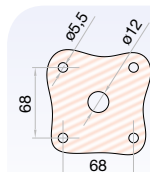
Dimensions (mm)



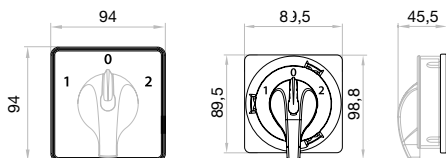
Frontal fixing with 2 screws



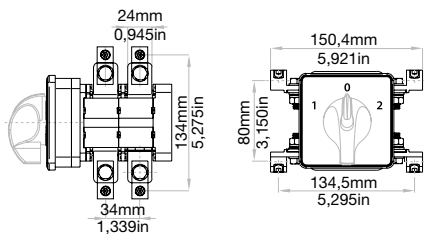
Frontal fixing with 4 screws



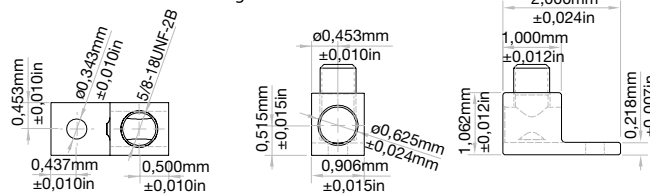
T series	Chambers	1	2	3	4
T50 T63 T80	L1	58,5	78,5	98,5	118,5
	H1	62,5	82,5	102,5	122,5



UL Terminal Lug

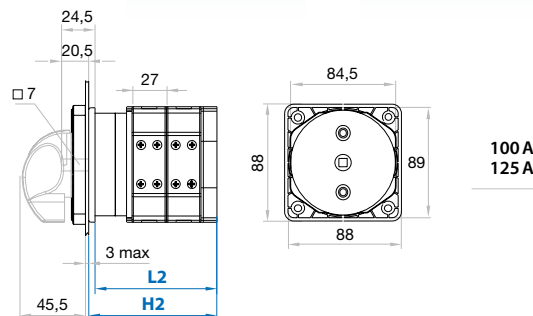


Terminal extensions according to UL.

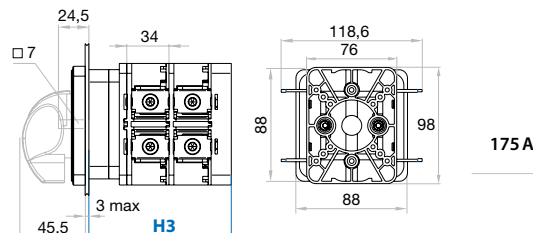


Wire size	Wires per lug	Wire type	Kit reference
120 mm ² / 250 kcmil	1	Cu	DS-TLU21 (2 pieces)

Note: The hardware needed to complete the wiring is supplied as standard.



T series	Chambers	1	2	3	4
T100 T125	L2	67	94	121	148
	H2	71	98	125	152



T series	Chambers	1	2	3	4
T175	H3	80,8	114,8	148,8	182,8

T

Door mounting changeover

1P up to 4P

Size 3

A* 200|250|315



* Under request also available
in 400A, 500A, 630A, 800A,
consult please



T

Technical information



consult

consult

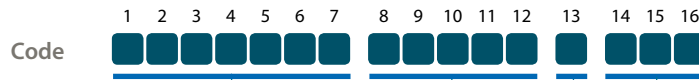
According to IEC 60947-3
UL508 - CAN/CSA C22.2 N° 14

According to IEC 60947-3			T200	T250	T315	
Rated thermal current	I _{th}	A	200	250	315	
Rated insulation voltage	U _i	V	690	690	690	
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	
AC rated operational current	I _e	U _e 415V AC21A	A	200	250	315
		U _e 415V AC22A	A	200	250	315
		U _e 415V AC23A	A	200	200	200
Rated conditional short-circuit current		kA	15	15	15	
Rated maximum current	g _L -g _G	A	200	250	315	
Rated breaking capacity	400V; cos φ=0,45	A	1450	2000	2240	
Rated short-time withstand current (1 sec)		A	4400	4400	4400	
Mechanical durability (according to the standards, for other values please consult)			8000	8000	8000	
Rigid copper conductor		mm ²	95	120	185	
Flexible copper conductor		mm ²	95	120	185	
According to UL508 - CAN / CSA C22.2 N° 14			T200	T250	T315	
Rated thermal current	I _{th}	A	200	200	200	
General use rating		Vac	600	600	600	
	3x240V	HP	60	60	60	
	3x480V	HP	75	75	75	
AC rated operational power	3x480V	HP	75	75	75	
	3x600V	HP	60	60	60	

Normal service conditions:

Ambient air temperature (°C): -5°...+40°. Maximum altitude: 2.000 m. Maximum humidity: 90%. Pollution degree: 3 (standard for industrial applications). Rated frequency at AC utilization categories: 50/60 Hz.

Rated duties at utilization categories AC21A, AC22A and AC23A: Continuing (8 hours); uninterrupted.



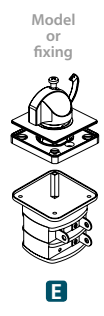
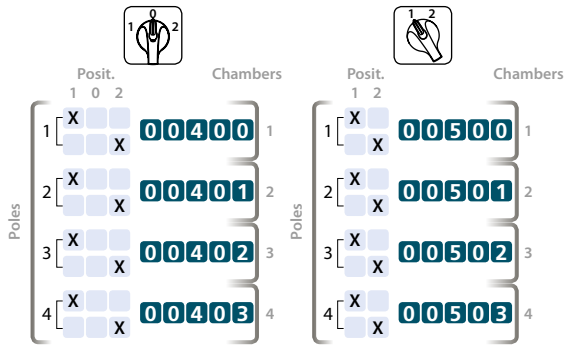
Series | Amp

T-00200
T-00250
T-00315

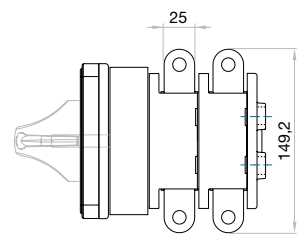
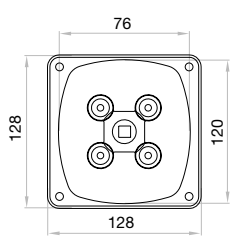
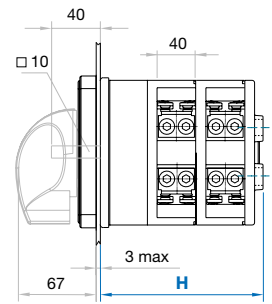
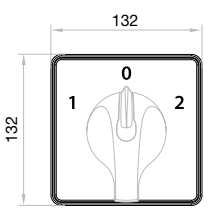
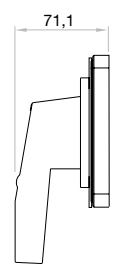
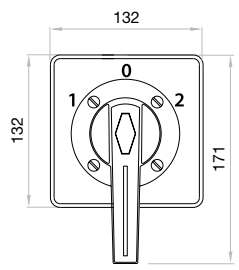
Diagram

Type

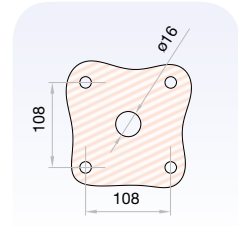
Plate and handle



Dimensions (mm)

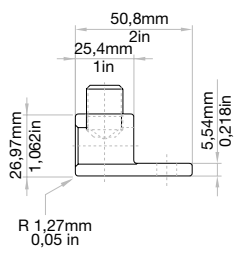
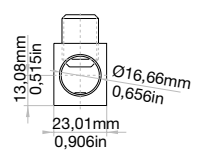
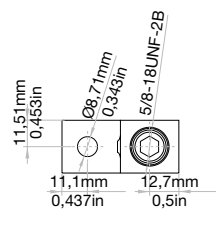
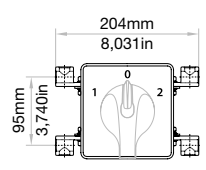
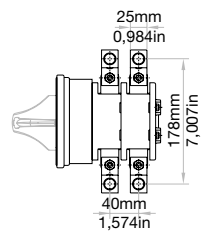


Frontal fixing with 4 screws



UL Terminal Lug

Terminal extensions according to UL.



T series	Chambers	1□	2□	3□	4□
T200 T250 T315	H	95	135	175	215

Wire size	Wires per lug	Wire type	Kit reference
150 mm ² / 300 kcmil	1	Cu/Al	DS-TL01 (2 piezas)

series
T|TB|TF

14 15 16
D100 4



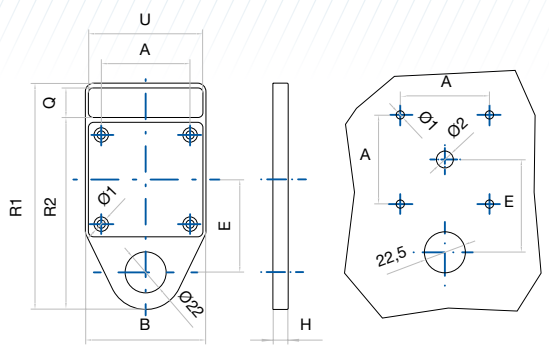
Light with white neon lamp
D100

14 15 16
D101 5



Light with white neon lamp
and inscription plate
D101

D101 Inscription plate included with text as requested.



Supply	Size	For series	Code D100	Code D101
Spare or incorporated in the cam switch	0-1	T12-T20-TB20-TB25-TB32 TF12-TF16-TF25 T16-T25-T32-T40	DT-10011	DT-10111
	2	T50-T63-T100-T175	DT-10021	DT-10121
	3	T200	DT-10031	DT-10131

Series	B	R1	R2	H	E	U	Q	A	Ø1	Ø2
T12 T20 T16 T25 T32 T40 TB20 TB32 TF12 TF25	65	123	102	6,5	50	61	16	48	4,5	9
T50 T63 T100 T175	94	160	137	7,5	70	90	19	68	5,5	12
T200 T800	132	198	173	10	85	126	21	108	6,5	16

13 14 15 16
D201 E

13 14 15 16
D200 D



Tandem drive operation*
D200 with two columns
D201 with three columns

13 14 15 16
D301 G

13 14 15 16
D300 F



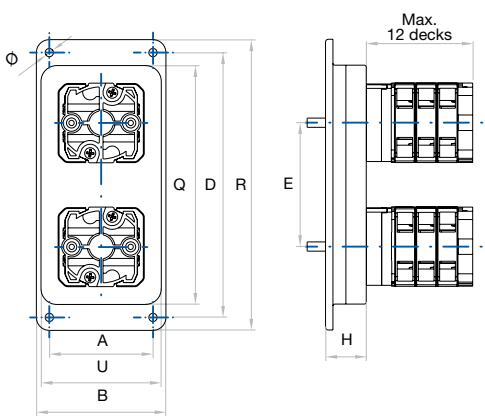
Blocking operation*
D300 with two columns
D301 with three columns

D200-201 Operation with one handle only and up to 48 contacts in two columns, or 72 contacts in three columns according to the electrical diagram.

D300-301 For switching up to 29 positions with two handles and two columns, or 36 positions with three handles and three columns according to the electrical diagram.

Supply	Size	For series
Only incorporated in the cam switch	0-1	T12-T20-TF12-TF16-TF25 T16-T25-T32-T40
	2	T50-T63-T100
	3	T175- T200

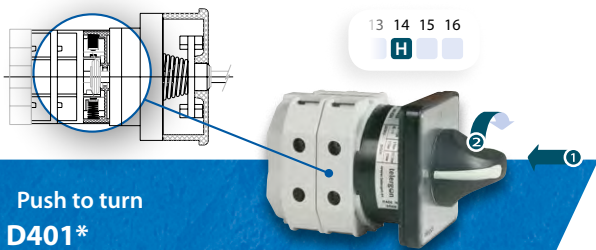
*T Series (without IP20 protections).



Series											Tandem	Blocking
	Tandem	Blocking	A	B	D	R	U	Q	E	H		
T12 T20 T16 T25 T32 T40 TF12 TF16 TF25	D200	D300			143	157		128	67	22	22	4,5
	D201	D301	56	70	210	224	64	195				
T50 T63 T100	D200	D300			210	230		191	97	15	21	
	D201	D301	90	110	306	326	95	288				6,5
T175 T200	D200	D300			290	310		270	139	19	25	
	D201	D301	152	173	426	447	132	407				



TITBITF series



Push to turn
D401*

Before operating the handle must be pressed to unlock, simultaneously an auxiliary contact is open or closed (e.g. for switching without load).

Supply	Size	For series
Only incorporated in the cam switch	0	T12-T20-TB20-TB25-TB32
	1	T16-T25-T32-T40

* for arrow handle with indicator, other combinations with special scheme

One way rotation
D405

This device allows to rotate the handle just in one way.

Supply	Size	For series
Only incorporated in the cam switch	0-1	T12-T20-TB20-TB25-TB32
		TF12-TF16-TF25
		T16-T25-T32-T40

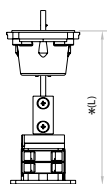


Dual voltage locking device
D420

The screw position, at left or at right, prevents the rotation of the handle.

This device always includes a mounting plate size 1.

Supply	Size	For series
Only incorporated in the cam switch	0-1	T12-T20-TB20-TB25-TB32
		TF12-TF16-TF25
		T16-T25-T32-T40



Shaft extension

To extend the shaft length to the depth required. To be complemented with the corresponding D501 device.

Supply	Size	Length (mm)	For series	Code
Spare or incorporated in the cam switch	0-1	200	T12-T20-TB20-TB25-TB32	DT-EPR11
		500	TF12-TF16-TF25 T16-T25-T32-T40	DT-EPR12
	2	200	T50-T63	DT-EPR21
		500	T100-T175	DT-EPR22
Only incorporated in the cam switch	3	upon request	T200	-

*^(L) Specify total length when ordering

Clutch device with door interlock
D501

With door interlock in ON position (switch 0-1 to 90°) or according to the electrical diagram.

- 1 Size 0 with padlockable handle included.
- 2 Size 0 - 1 - 2 - 3.

Supply	Size	For series	Code		
1	D501 + 704 90°	0	DT-75401N07		
			DT-75401R01		
			12 13 14 15 16 F 6 N 1		
2	90°	0	DT-50102		
			DT-50101		
			DT-50121		
		1	DT-50131		
			60°	0-1	DT-50104
					DT-50124
	DT-50134				
	45°	0-1	DT-50103		
				DT-50123	
				DT-50133	
	Incorporated in the cam switch			12 13 14 15 16 F	

series
T|TB|TF

12 13 14 15 16
B



**Coaxial coupling
D600**

Simultaneous operation of two or more cam switches of different size (T series) coupled together with only one handle.

12 13 14 15 16
D701 Keya Z 4 1 B



**Key handle device
D701**

D701 Supplied as standard with $\varnothing 22\text{mm}$ fixing; $\varnothing 30\text{ mm}$ also available under request.

The key can be locked and removed on request at 60° , 90° or 180° .

Assembly limitation:
4 contacts actuating simultaneously.

D711 Supplied as standard with screw mounting and different types of keys that can be locked and removed at 90° .

Assembly limitation:
4 contacts actuating simultaneously.

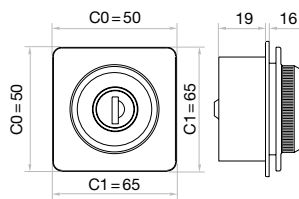
13 14 15 16
D711 Keya M 1 1



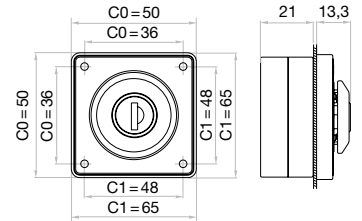
**Key handle device
D711**

Supply	Size	For series
Only incorporated in the cam switch	0-1	T12-T20-TB20-TB25-TB32 TF12-TF16-TF25 T16-T25-T32-T40

D701



D711



14 15 16
D702 6



**Key lock device
D702**

D702 The key lock device allows the adaptation of 1 or 2 auxiliary contacts (1NO + 1NC) operated by turning the key (like signalling or control contacts).

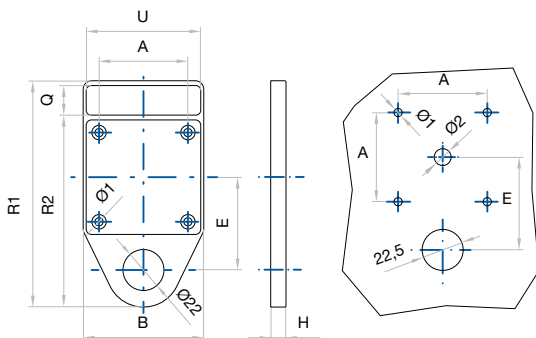
D703 Inscription plate included with text as requested.

14 15 16
D703 7



**Key lock device
with inscription plate
D703**

Supply	Size	For series
Only incorporated in the cam switch	0-1	T12-T20-TB20-TB25-TB32 TF12-TF16-TF25 T16-T25-T32-T40
	2	T50-T63 T100-T175
	3	T200

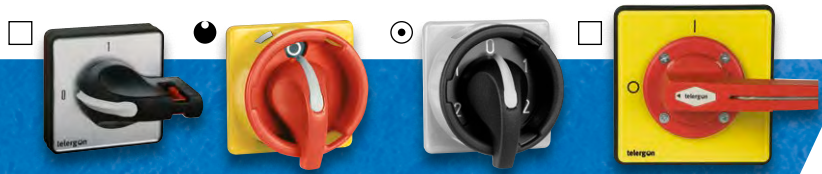


*** Auxiliary contacts 1NO + 1NC**

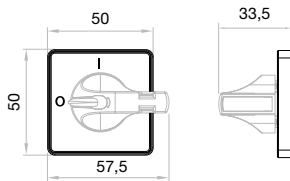


Series	B	R1	R2	H	E	U	Q	A	Ø1	Ø2
T12 T20 T16 T25 T32 T40 TB20 TB32 TF12 TF25	65	123	102	6,5	50	61	16	48	4,5	9
T50 T63 T100 T175	94	160	137	7,5	70	90	19	68	5,5	12
T200 T800	132	198	173	10	85	126	21	108	6,5	16

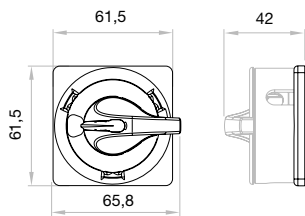
Padlockable handle
D704



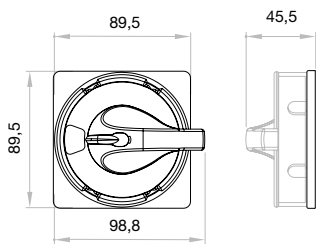
- > Allows the blockade of the handle in OFF position using padlock.
- > Available in red colour on yellow background ¹⁵R or black colour on grey background ¹⁵N
- > According to the machinery directive and the european standards, red & yellow handles ¹⁵R are intended to be used only in ON - OFF safety switches.
- > For switches O-I specify version ¹⁵R or ¹⁵N, for the rest will be supplied ¹⁵N version (padlocks not included).



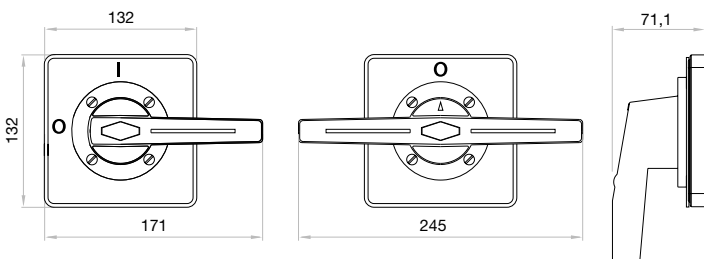
Size 0



Size 0-1



Size 2



Size 3

	Supply	Size	For series	Code
□ Square plate	Spare	0	T12-T20 TB20-TB25-TB32 TF12-TF16-TF25 TP10	● DT-70401N07
	Incorporated in the cam switch			● DT-70401R01*
● Closed view	Spare	0 - 1	T12-T20 TB20-TB25-TB32 TF12-TF16-TF25 T16-T25-T32-T40	● DT-7041CN02
	Incorporated in the cam switch			● DT-7041CR02
○ Open view	Spare	2	T50-T63 T100-T175	● DT-7041AN02
	Incorporated in the cam switch			● DT-7041AR02
● Closed view	Spare	3	T200	● DT-7042CN02
	Incorporated in the cam switch			● DT-7042CR02
○ Open view	Spare	3	T200	● DT-7042AN02
	Incorporated in the cam switch			● DT-7042AR02
□ Square plate (single handle)	Spare	3	T200	● DT-70431
	Incorporated in the cam switch			● DT-70433*
□ Square plate (double handle)	Spare	3	T200	● DT-70432
	Incorporated in the cam switch			● DT-70434*

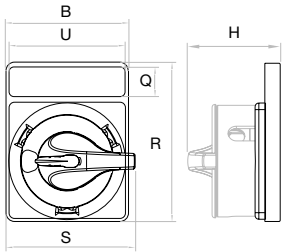
* Yellow plate with 0 - 1 positions included

series
T|TB|TF

Padlockable handle with inscription plate
D705



- > Handle can be blocked in OFF position using padlocks.
- > Available in red colour on yellow background ¹⁵R or black colour on grey background ¹⁵N
- > Inscription plate included with text as requested.
- > According to the machinery directive and the european standards, red & yellow handles ¹⁵R are intended to be used only in ON - OFF safety switches.
- > For switches O-I specify version ¹⁵R or ¹⁵N, for the rest will be supplied ¹⁵N version (padlocks not included).



Size	B	H	Q	R	S	U
0-1	65	48,5	16	85	65,8	61
2	94	53,5	19	117	98,8	90
3	132	71,5	21	157	171 245	126

	Supply	Size	For series	Code
● Closed view	Only incorporated in the cam switch	0-1	T12-T20 TB20-TB25-TB32 TF12-TF16-TF25 T16-T25 T32-T40	● 13 14 15 16 7 N 2
				● 13 14 15 16 7 R 2
⊙ Open view	Only incorporated in the cam switch			● 13 14 15 16 C N 2
				● 13 14 15 16 C R 2
● Closed view	Only incorporated in the cam switch	2	T50-T63 T100-T175	● 13 14 15 16 7 N 2
				● 13 14 15 16 7 R 2
⊙ Open view	Only incorporated in the cam switch			● 13 14 15 16 C N 2
				● 13 14 15 16 C R 2
□ Square plate (single handle)	Only incorporated in the cam switch	3	T200	● 13 14 15 16 N N 2
				● 13 14 15 16 N R 2
□ Square plate (double handle)	Only incorporated in the cam switch			● 13 14 15 16 O N 2
				● 13 14 15 16 O R 2



14 15 16
D708 8



14 15 16
D709 9

Push button blocking system
D708

Push button blocking system with inscription plate
D709

D708 Available in two versions (specify when ordering):

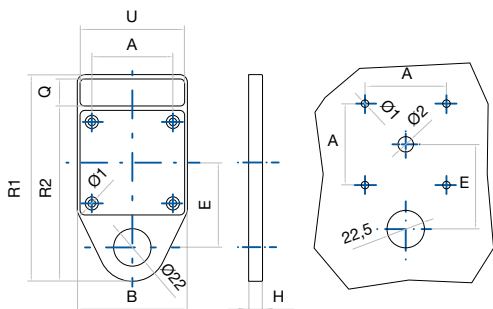
- 1) The handle is blocked in all positions.
- 2) The handle is blocked only in OFF position.

The switch in version 2 can be used for emergency operation since the handle is not blocked in ON position. Both versions admit the adaptation of 1 and 2 changeover auxiliary contacts (1NO+1NC), which are activated when the button is pressed and it can be used as signalling and combined operation with contactors.

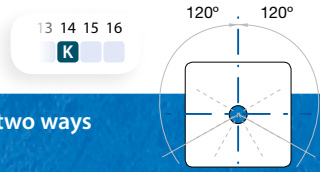
D709 Inscription plate included with text as requested.

Supply	Size	For series
Only incorporated in the cam switch	0-1	T12-T20-TB20-TB25 TB32-TF12-TF16-TF25 T16-T25-T32-T40
	2	T50-T63-T100-T175
	3	T200

* Auxiliary contacts 1NO + 1NC 2NO + 2NC



Series	B	R1	R2	H	E	U	Q	A	Ø1	Ø2
T12 T20 T16 T25 T32 T40 TB20 TB32 TF12 TF25	65	123	102	6,5	50	61	16	48	4,5	9
T50 T63 T100 T175	94	160	137	7,5	70	90	19	68	5,5	12
T200 T800	132	198	173	10	85	126	21	108	6,5	16



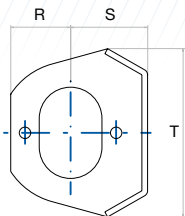
Return from one or two ways up to 120°
D802

Supply	Size	For series
Only incorporated in the cam switch	0-1	T12-T20-TB20-TB25-TB32 TF12-TF16-TF25 T16-T25-T32-T40



Terminal shrouds
D900

Sizes 0-1 and 2 are supplied as standard with removable protected terminals (IP20).

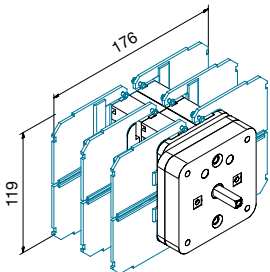


Series	R	S	S
T12 T20	21	27	59
T16 T25 T32 T40	28	34	72
T50 T63 T100	15	52	104
T200	40	155	130

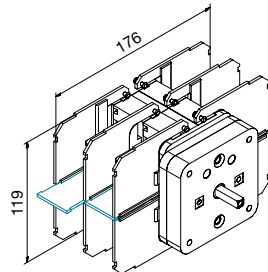
Supply	Size	For series	Code
	0	T12-T20	DT-90002
	1	T16-T25-T32-T40	DT-90012
	2	T50-T63	DT-90022
Spare	2	T100	DT-90024
		T200	DT-90031
	3*	T400	DT-90032

* Max. 2 chambers

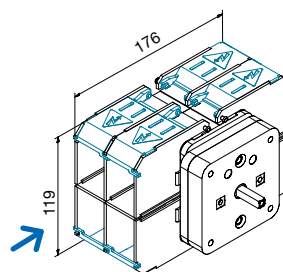
T175 terminal shrouds and phase barriers
D900



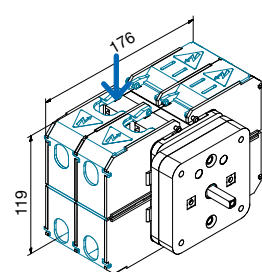
Phase barriers - Vertical
Code DT-90025 (4 units)



Phase barriers - Horizontal
Code DT-90026 (2 units)



Terminal shrouds (L)
Code DT-90027 (4 units)



Terminal shrouds (S)
Code DT-90028 (4 units)



DIN rail mounting device
D904

Front plates for distribution boards
D905



D904 Included as standard in D-F-G fixing types for TB-TF and T175 series.
D905 DIN rail mounting with frontal plate and handle for distribution boards.

	Supply	Size	For series	Code
D904	Spare or incorporated in the cam switch	0-1	T12-T20-T16 T25-T32-T40	DT-90401
		2	T50-T63-T100-T175	DT-90421
D905	Only incorporated in the cam switch	0	T12-T20 TF12-TF16-TF25	12 13 14 15 16 H 8 N O

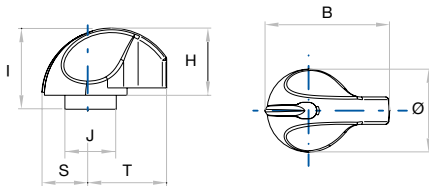
Handles (plastic)



- > ¹⁴ **1** Arrow handle with indicator.
- > ¹⁴ **2** Ball lever handle for size 1 and 3.
- > ¹⁴ **B** Double handle for cam switches size 3.

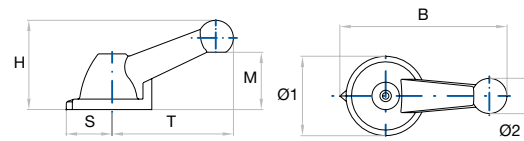
	Supply	Size	Code		
Arrow handle with indicator	Spare or incorporated in the cam switch	0	● 40110030 ● 40110031		
		1	● 40111034 ● 40111035		
		2	● 40112028 ● 40112029		
		3	● 40113023 ● 40113024		
		Ball lever	Spare or incorporated in the cam switch	1	● 40111002 ● 40111003
				3	● 40113002 ● 40113001
3	● 40113008 ● 40113007				

Arrow handle with indicator (sizes 0 - 1 - 2 - 3)



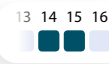
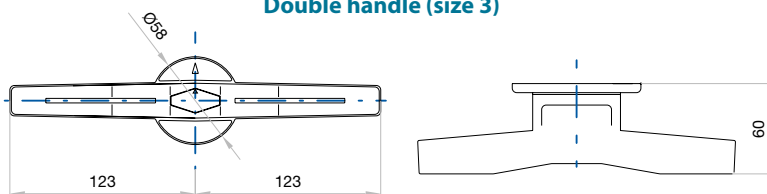
Size	B	H	I	J	S	T	Ø
0	39,3	26,8	30,5	14,5	13,5	24	27
1	50	28	33	14,5	18	32	36
2	66,5	36,5	-	-	22,5	44	45
3	100	54	-	-	38	62	76

Ball lever (sizes 1 - 3)

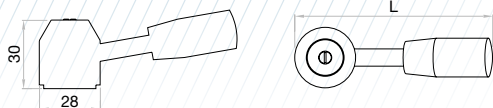


Size	B	H	S	T	M	Ø1	Ø2
1	89	48	24	65	32,5	37	18
3	151,5	81	41,5	110	52	72	32

Double handle (size 3)



Handles (metal & plastic)

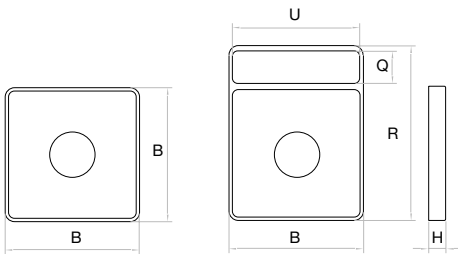


	Supply	Size	Code
Metal lever & plastic	Spare or incorporated in the cam switch	L=90mm	9-KN100146
		L=108mm	9-KN100145



Neutral name plates and neutral inscription plates

- > Plastic indicating plate on square base with black engraving
- > Also in yellow colour available (emergency handle).
- > Different engravings are available under request.
- > PPA model with inscription plate.



PPA

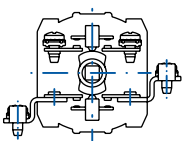
PRA

Size	B	R	H	U	Q
0	50	65	6,5	47	11
1	65	85	6,5	61	16
2	94	117	7	90	19
3	132	157	10	126	21

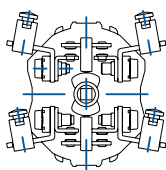
	Supply	Size	Code		
PPA (neutral plate)			□	■	
	Spare or incorporated in the cam switch	0	40140045	40140061	40110028
		1	40141039	40141053	40111032
		2	40142020	40142028	40142025
		3	40143020	40143028	40143084
		Size	Code		
PRA (neutral plate)			■	■	
	Spare or incorporated in the cam switch	0	40140203		40110029
		1	40141188		40111033
		2	40142095		40112026
		3	40143088		40143086

Terminal extensions CP

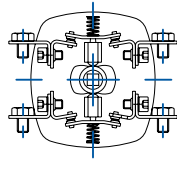
Supply	Size	For series
Only incorporated in the cam switch	0	T12-T20
	1	T16-T25-T32-T40
	2	T50-T63-T100



T12-T16-T20-T25



T32-T40-T63-T100



T200 standard connection as per drawing

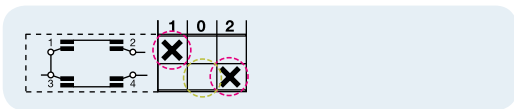
Fast-on terminals 6,25 x 0,8



Supply	Size	For series
Only incorporated in the cam switch	0-1	T12-T20 T16-T25-T32-T40

TP | T | TB | TF Standard diagrams

For many switching operations that can be resolved using cam switches, we have a number of standard schemes applicable to the most common applications in electrical installations, equipment, machinery, etc. If you do not find what you are looking for in this selection, or have a special switching requirement, you can use the blank diagrams form on the next page and send it to our sales department. The descriptive logic representing and interpreting the circuits are explained below.

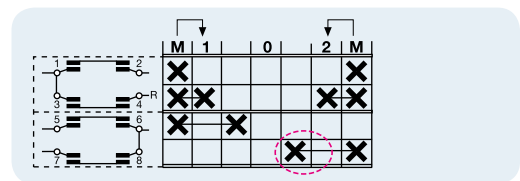


It represents "closed contact".

It represents "opened contact".

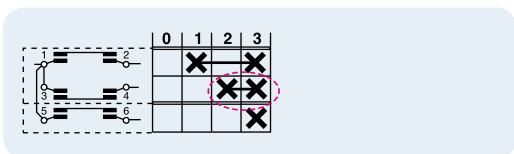
The contact 1/2 is closed in position 1 and opened in positions 0 & 2.

The contact 3/4 is closed in position 2 and opened in positions 0 & 1.



They represent "late break contact" or "early-make contact" in relation to others.

The contacts 5/6 & 7/8 close before the contacts 3/4 & 1/2 and they will also open after these contacts.

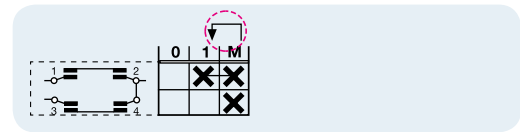


It represents closed contact "without interruption".

The contact 1/2 closes in position 1, and remains closed in position 2 & 3.

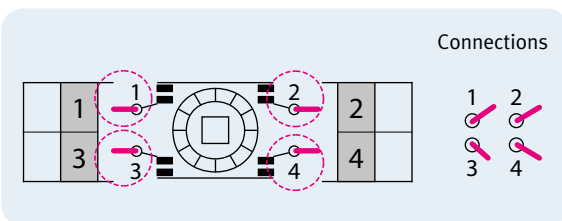
The contact 3/4 closes in position 2 and remains closed in position 3.

When passing from one position to another there is no contact interruption in any cases.

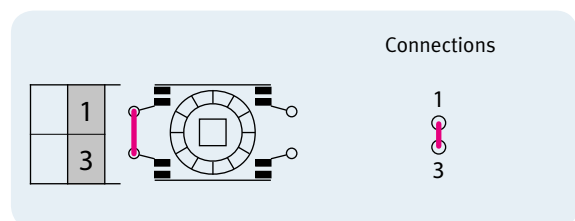


It represent "spring return" to previous position.

The M position is not fixed and it will return to position 1 when the handle is released.



Connection point.



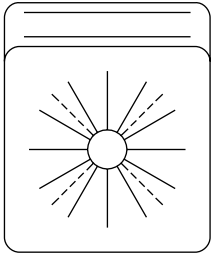
Vertical bridging link.



Horizontal bridging link.



Inscription plate
Name plate



ORDER SHEET FOR NON-STANDARD CAM SWITCHES 10 TO 315 AMP.



Code

Rev.

- Contact closed X
- Closed contact without interruption XX
- Late break contact X-
- Early-make contact -X
- Return from 30° ↙

Number of switch positions

1		2	
3		4	
5		6	
7		8	
9		10	
11		12	
13		14	
15		16	
17		18	
19		20	
21		22	
23		24	
25		26	
27		28	
29		30	
31		32	
33		34	
35		36	
37		38	
39		40	
41		42	
43		44	
45		46	
47		48	

Connections

1	5	9	13	17	21	25	29	33	37	41	45
○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○
3	7	11	15	19	23	27	31	35	39	43	47
○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○
48	44	40	36	32	28	24	20	16	12	8	4

T series

0	12	20				
1	16	25	32	40		
2	50	63	80	100	125	175
3	200	250	315			

TB series

20	25	32	40
----	----	----	----

TF series

12	16	25	32	40
----	----	----	----	----

TP series

10

Type

E | C | Z | D | G | H | F

Handle

- Indicator arrow
- Ball lever handle
- Double handle
- Key

- Black
- Red
- Yellow

Shaft extension

mm

Nameplate

- Aluminium colour
- Yellow colour
- Normal
- With inscription
- Switching angle 30° -45° -60° -90°

Materials

Chambers

Notes

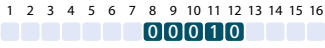
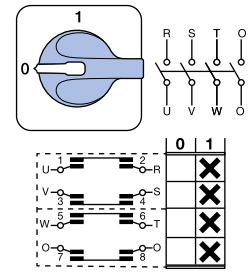
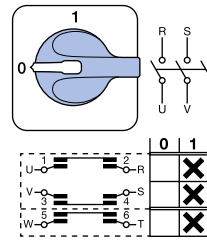
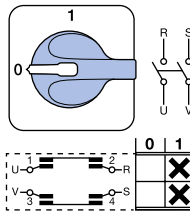
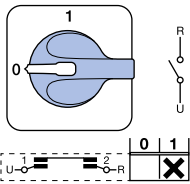
Validity

Date

Signature

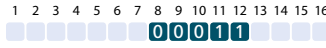
Special devices

On-Off switches



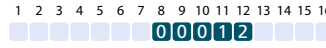
010
1 pole
1 chamber

- 010/5 5 poles
- 010/6 6 poles
- 010/7 7 poles
- 010/8 8 poles
- 010/9 9 poles



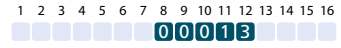
011
2 poles
1 chamber

- 010/10 10 poles
- 010/11 11 poles
- 010/12 12 poles
- 010/13 13 poles
- 010/14 14 poles



012
3 poles
2 chambers

- 010/15 15 poles
- 010/16 16 poles
- 010/17 17 poles
- 010/18 18 poles
- 010/19 19 poles

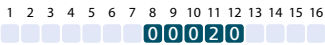
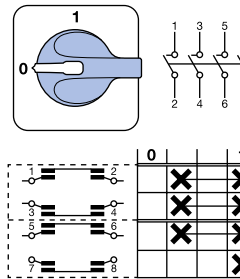
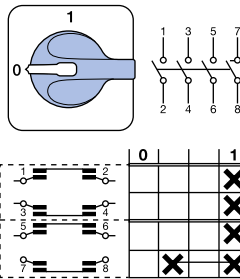
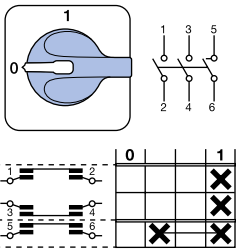


013
4 poles
2 chambers

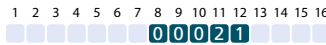
- 010/20 20 poles
- 010/21 21 poles
- 010/22 22 poles
- 010/23 23 poles
- 010/24 24 poles

To view these wiring diagrams please visit our download area on www.telergon.com

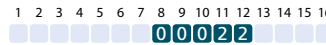
On-Off switches with contacts leading when making



020
3 poles 1 preclosed pole
2 chambers

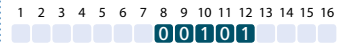
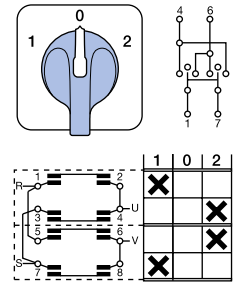


021
4 poles 1 preclosed pole
2 chambers



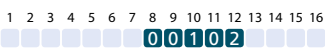
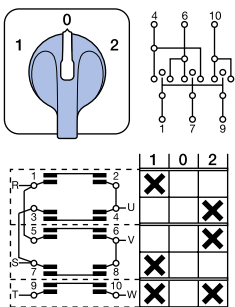
022
4 poles 3 preclosed poles
2 chambers

Reversing switches



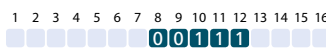
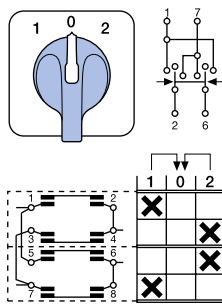
101
2 poles
2 chambers

Reversing switches

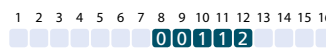
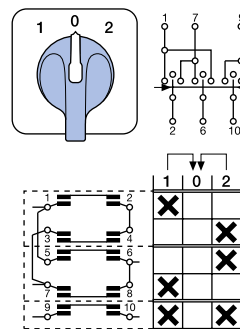


102
3 poles
3 chambers

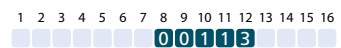
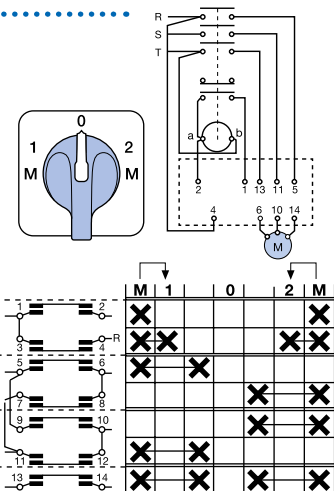
Reversing switches with spring return



111
2 poles
2 chambers

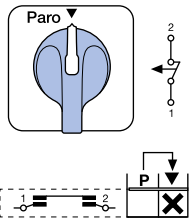


112
3 poles
3 chambers



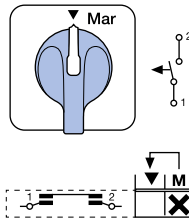
113
3 poles for use with reserving
contactors
4 chambers

Control switches with spring return



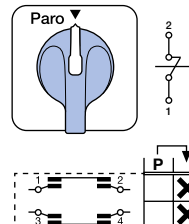
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
002001

201
Start switch 1 pole
1 chamber



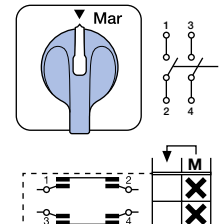
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
002002

202
Stop switch 1 pole
1 chamber



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
002003

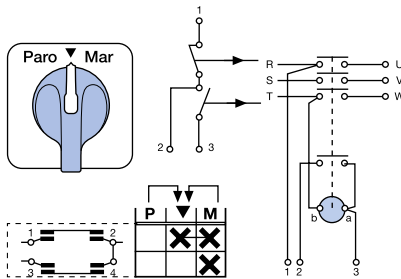
203
Start switch 2 poles
1 chamber



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
002004

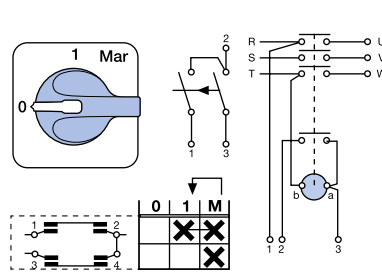
204
Stop switch 2 poles
1 chamber

Stop-Start switches



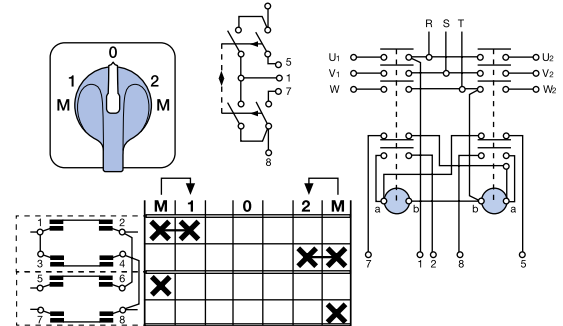
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
002005

205
With contactor
1 chamber



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
002006

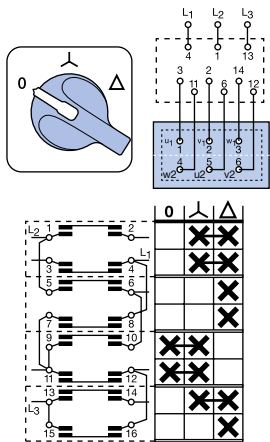
206
With contactor and spring return
1 chamber



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
002007

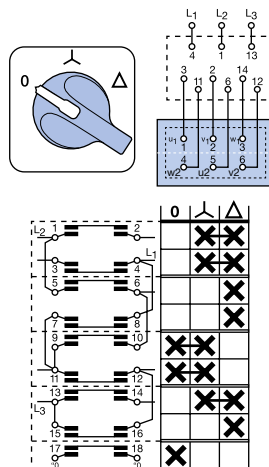
207
With spring return to run for 2 units
2 chambers

Star delta switches



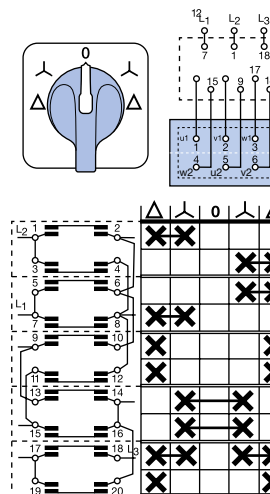
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
003000

300
Normal type
4 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
003001

301
Auxiliary contact closed in "0"
5 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
003002

302
Reversing
5 chambers

303
Rotary
0 - λ - Δ - 0 - λ - Δ - 0
5 chambers

304
Position λ return to 0
0 - λ - Δ
4 chambers

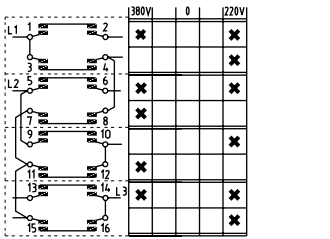
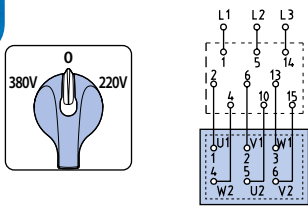
305
Reversing. Return from λ to 0
Δ - λ - 0 - λ - Δ
5 chambers

308
Use with contactor
0 - λ - Δ
4 chambers

309
Reversing for use with contactor
Δ - λ - 0 - λ - Δ
7 chambers

To view these wiring diagrams please visit our download area on www.telergon.com

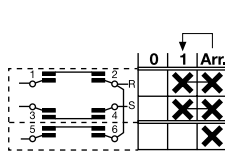
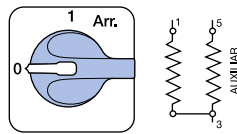
Star delta switches



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
 00310

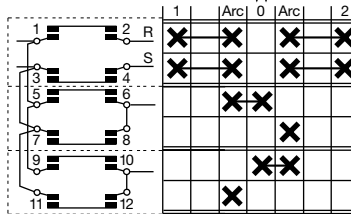
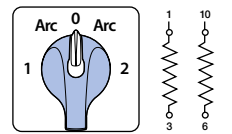
310
 Selector $\lambda - \Delta$
 380 - 0 - 220
 4 chambers

Split phase starting switches



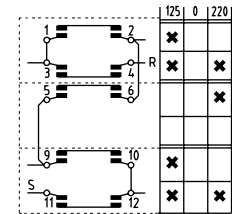
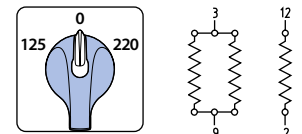
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
 00315

315
 Start return to 1
 2 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
 00316

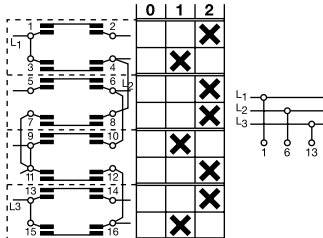
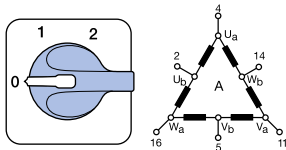
316
 Reversing type of T315
 1 - ARR - 0 - ARR - 2
 3 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
 00317

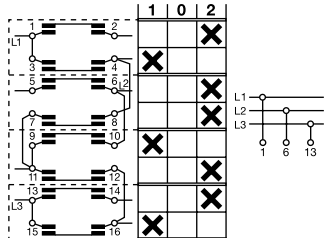
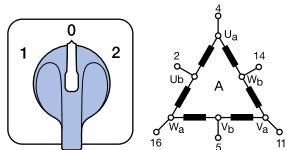
317
 Start single phase 2 voltages
 3 chambers

Dahlander multi-step switches



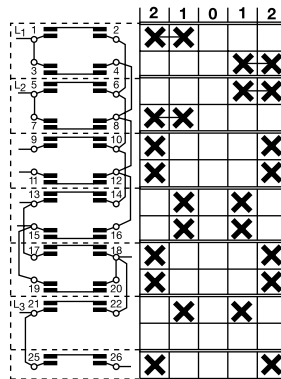
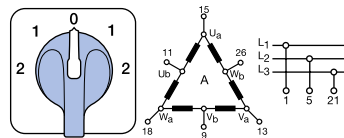
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
 00330

330
 Dahlander 0 - $\Delta_A - \lambda \lambda_A$
 4 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
 00331

331
 Dahlander $\Delta_A - 0 - \lambda \lambda_A$
 4 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
 00332

332
 Reversing type of T330
 7 chambers

333
 Dahlander 0 - $\Delta_A - \lambda \lambda_A - 0 - \Delta_A - \lambda \lambda_A - 0$
 0 - 1 - 2 - 0 - 1 - 2
 5 chambers

334
 For use with contactor
 0 - 1 - 2
 5 chambers

335
 Selector Dahlander
 0 - $\lambda - \Delta_A - \lambda \lambda_A$
 6 chambers

336
 Reversing Dahlander
 $\lambda \lambda_A - \Delta_A - \lambda - 0 - \lambda - \Delta_A - \lambda \lambda_A$
 2 - 1 - $\lambda - 0 - \lambda - 1 - 2$
 8 chambers

To view these wiring diagrams please visit our download area on www.telergon.com

Separate winding to speed

340
 0 - $\lambda_A - \Delta - \lambda_B$
 0 - $\lambda - 1 - 2$
 6 chambers

341
 0 - $\Delta_A - \lambda_B$
 0 - 1 - 2
 4 chambers

342
 0 - A - B en λ or Δ
 0 - 1 - 2
 3 chambers

343
 Reversing del 342
 2 - 1 - 0 - 1 - 2
 5 chambers

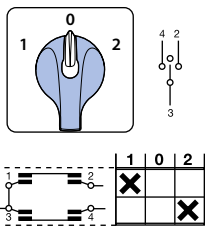
344
 $\Delta_B - \lambda_B - 0 - \lambda_A - \Delta_A$
 1 - $\lambda - 0 - \lambda - 2$
 8 chambers

350
 0 - $\lambda_A - \Delta_B - \lambda \lambda_B$
 0 - 1 - 2 - 3
 6 chambers

351
 Reversing type of T350
 3 - 2 - 1 - 0 - 1 - 2 - 3
 9 chambers

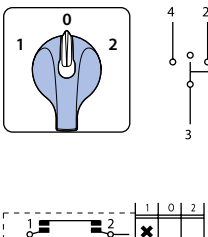
To view these wiring diagrams please visit our download area on www.telergon.com

Changeover switches with center "Off"



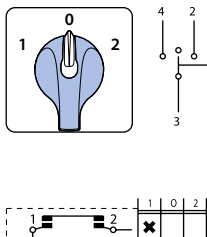
400
1 pole
1 chamber

Poles	Positions	Chambers
400/5	5	3
400/6	6	3



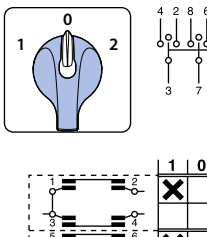
401
2 poles
2 chambers

Poles	Positions	Chambers
400/7	7	3
400/8	8	3



402
3 poles
3 chambers

Poles	Positions	Chambers
400/9	9	3
400/10	10	3

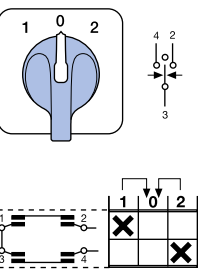


403
4 poles
4 chambers

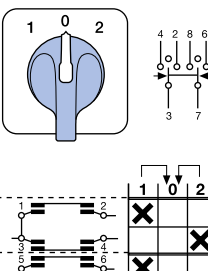
Poles	Positions	Chambers
400/11	11	3
400/12	12	3

To view these wiring diagrams please visit our download area on www.telergon.com

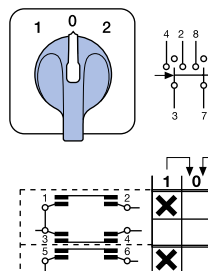
Changeover switches with spring return to center



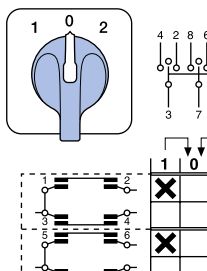
405
1 pole
1 chamber



406
2 poles
2 chambers

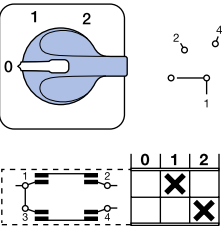


407
3 poles
3 chambers

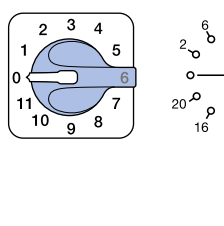


408
4 poles
4 chambers

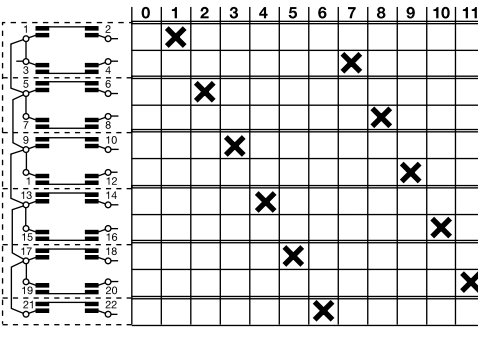
Multi-step switches with "Off" position



410
1 pole 2 positions
1 chamber



419
1 pole 11 positions
6 chambers

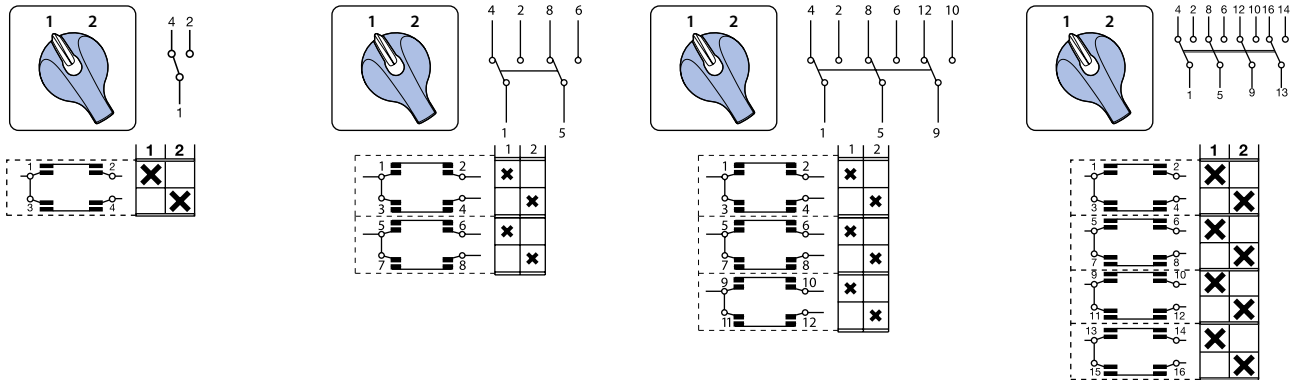


Multi-step switches with "Off" position

	Poles	Positions	Chambers		Poles	Positions	Chambers		Poles	Positions	Chambers		Poles	Positions	Chambers
411	1	3	2	422	2	4	4	432	3	4	6	452	5	4	10
412	1	4	2	423	2	5	5	433	3	5	9	460	6	2	6
413	1	5	3	424	2	6	7	434	3	6	12	461	6	3	9
414	1	6	4	425	2	7	8	435	3	7	12	462	6	4	12
415	1	7	4	426	2	8	9	440	4	2	4	470	7	2	7
416	1	8	5	427	2	9	10	441	4	3	6	471	7	3	11
417	1	9	5	428	2	10	11	442	4	4	8	480	8	2	8
418	1	10	6	429	2	11	12	443	4	5	10	481	8	3	12
420	2	2	2	430	3	2	3	450	5	2	5	490	9	2	9
421	2	3	3	431	3	3	5	451	5	3	8				

To view these wiring diagrams please visit our download area on www.telergon.com

Changeover switches without "Off"

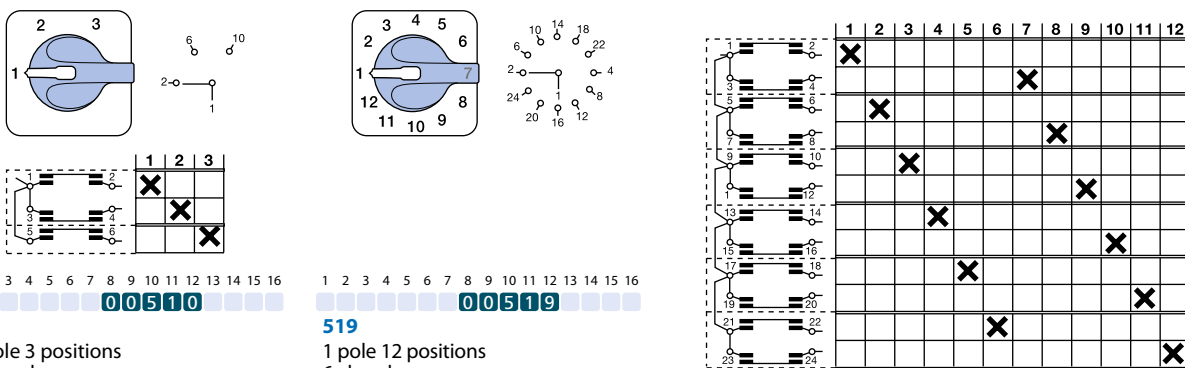


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 005000	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 005001	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 005002	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 005003
500 1 pole 1 chamber	501 2 poles 2 chambers	502 3 poles 3 chambers	503 4 poles 4 chambers

	Poles	Positions	Chambers		Poles	Positions	Chambers		Poles	Positions	Chambers		Poles	Positions	Chambers
500/5	5	2	5	500/7	7	2	7	500/9	9	2	9	500/11	11	2	11
500/6	6	2	6	500/8	8	2	8	500/10	10	2	10	500/12	12	2	12

To view these wiring diagrams please visit our download area on www.telergon.com

Multi-step switches without "Off" position



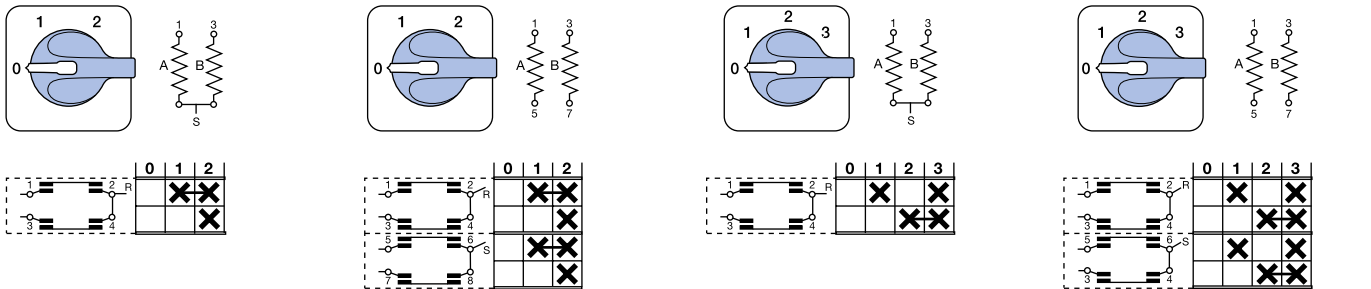
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 005100	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 005109
510 1 pole 3 positions 2 chambers	519 1 pole 12 positions 6 chambers

Multi-step switches without "Off" position

	Poles	Positions	Chambers		Poles	Positions	Chambers		Poles	Positions	Chambers		Poles	Positions	Chambers
511	1	4	2	521	2	4	4	530	3	3	5	543	4	6	12
512	1	5	3	522	2	5	5	531	3	4	6	550	5	3	8
513	1	6	3	523	2	6	6	532	3	5	8	551	5	4	10
514	1	7	4	524	2	7	7	533	3	6	9	552	5	5	13
515	1	8	4	525	2	8	8	534	3	7	11	560	6	3	9
516	1	9	5	526	2	9	9	535	3	8	12	561	6	4	12
517	1	10	5	527	2	10	10	540	4	3	6	570	7	3	11
518	1	11	6	528	2	11	11	541	4	4	8	580	8	3	12
520	2	3	3	529	2	12	12	542	4	5	10				

To view these wiring diagrams please visit our download area on www.telergon.com

Gang switches



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00601

601
1 pole switching sequence
0 - A - (A+B)
1 chamber

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00602

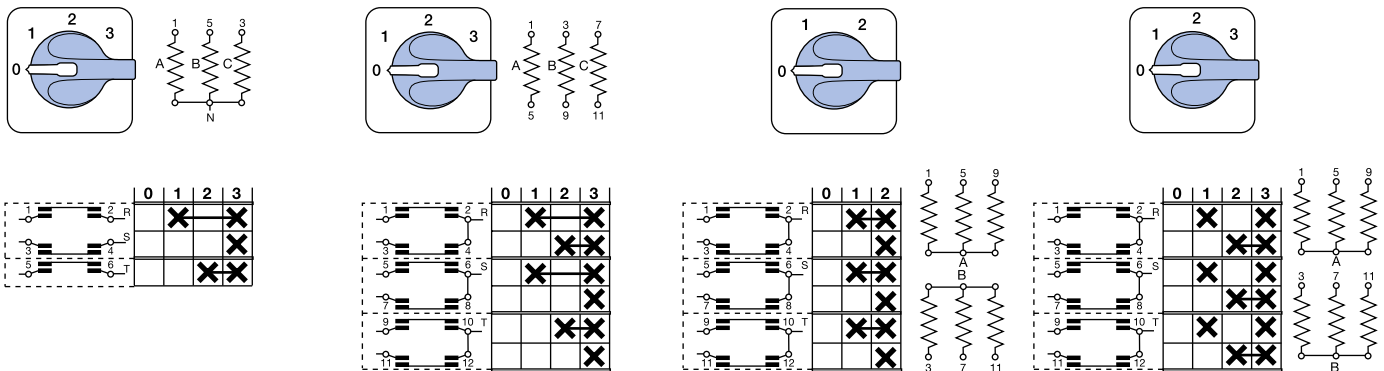
602
2 poles switching sequence
0 - A - (A+B)
2 chambers

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00603

603
1 pole switching sequence
0 - A - B - (A+B)
1 chamber

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00604

604
2 poles switching sequence
0 - A - B - (A+B)
2 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00605

605
1 pole switching sequence
0 - A - (A+B) - (A+B+C)
2 chambers

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00606

606
2 poles switching sequence
0 - A - (A+B) - (A+B+C)
3 chambers

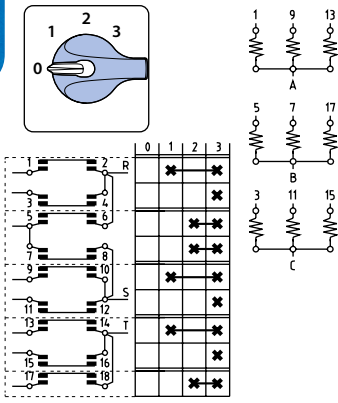
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00607

607
3 poles switching sequence
0 - A - (A+B)
3 chambers

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00608

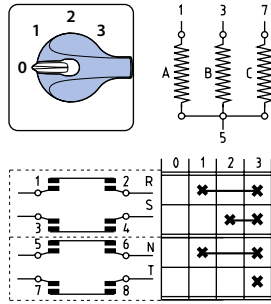
608
3 poles switching sequence
0 - A - B - (A+B)
3 chambers

Gang switches



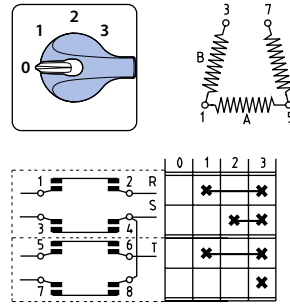
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00609

609
3 poles switching sequence
0 - A - (A+B) - (A+B+C)
5 chambers



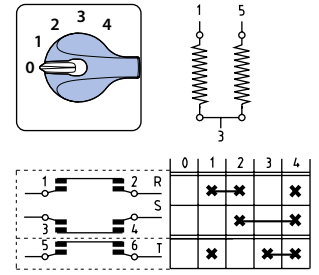
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00610

610
Switching sequence
 λ 0 - A - (A+B) - (A+B+C)
2 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00611

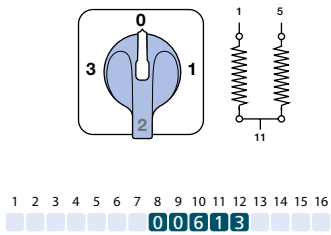
611
Switching sequence
 Δ 0 - A - (A+B) - (A+B+C)
2 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00612

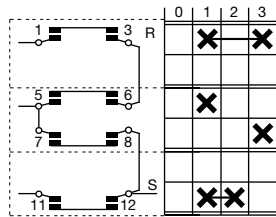
612
Switching sequence 0 - A + B series
A - B - (A + B) parallell
2 chambers

Kitchen and heating switches



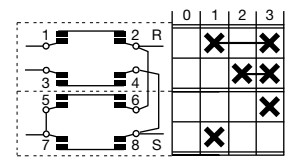
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00613

613
3 positions switching sequence
0-A+B parallell; A or B-A+B series - 0
3 chambers

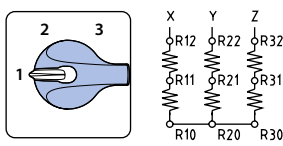


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00614

614
3 positions switching sequence
0-A+B series; A or B-A+B parallell
2 chambers

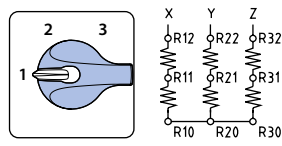


Resistance elimination switches



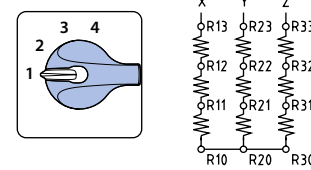
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00620

620
3 phases, 3 points
2 chambers



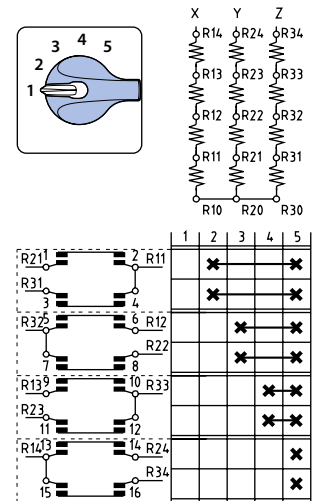
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00621

621
3 phases, 3 points
3 chambers
With auxiliary contact



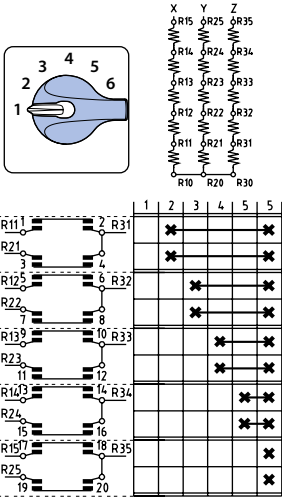
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00622

622
3 phases, 4 points
3 chambers

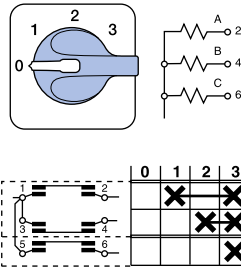


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00624

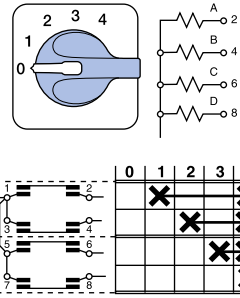
624
3 phases, 5 points
4 chambers



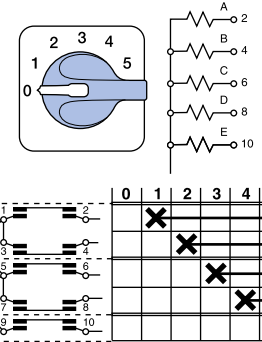
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00626
626
 3 phases, 6 points
 5 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00630
630
 Switching sequence
 0 - A - (A+B) - (A+B+C)
 2 chambers

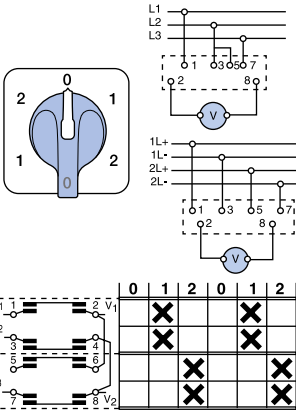


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00631
631
 Switching sequence
 0 - A - (A+B) - (A+B+C) - (A+B+C+D)
 2 chambers

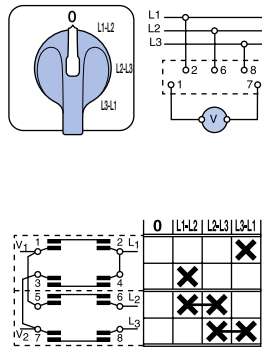


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00632
632
 Switching sequence
 0 - A - (A+B) - (A+B+C) - (A+B+C+D) - (A+B+C+D+E)
 3 chambers

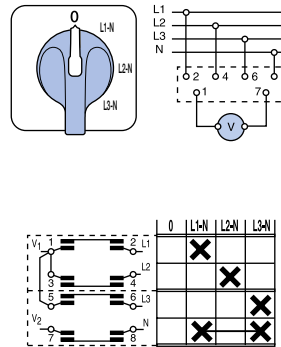
Voltmeter switches



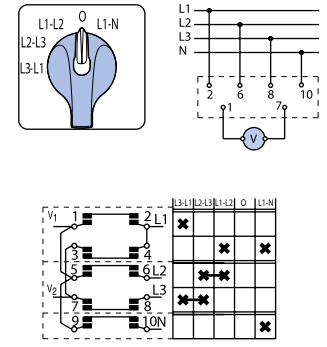
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00700
700
 2 phases C.A. or 2 poles C.C.
 2 chambers



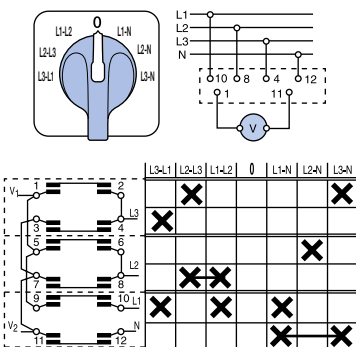
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00701
701
 3 phases
 2 chambers



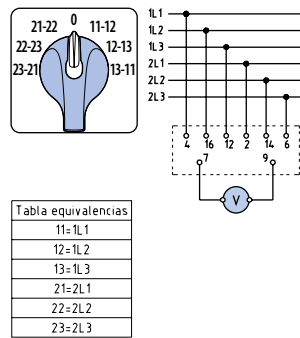
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00702
702
 3 phases to neutral
 2 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00704
704
 3 phases and 1 phase to neutral
 3 chambers



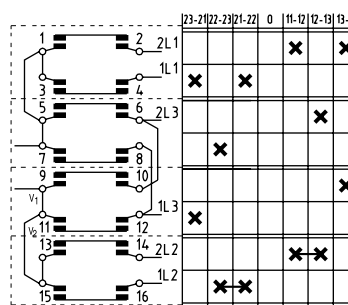
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00705
705
 3 phases to phase and 3 phases to neutral
 3 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00706
706
 2 three-phase lines (phase to phase)
 4 chambers/chambers

Tabla equivalencias

11=	1L1
12=	1L2
13=	1L3
21=	2L1
22=	2L2
23=	2L3

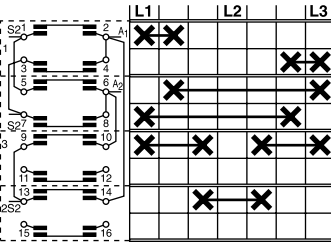
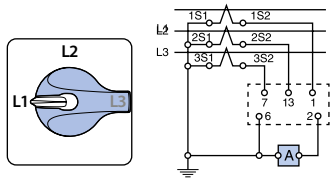


703
 4 lines with 2 wires C.A. o C.C.
 4 chambers

708
 3 phases, 2 potential transformers
 1 pole
 2 chambers

To view these wiring diagrams please visit our download area on www.telergon.com

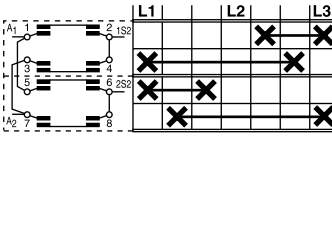
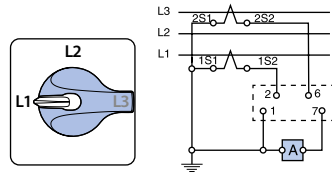
Ammeter switches



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00720

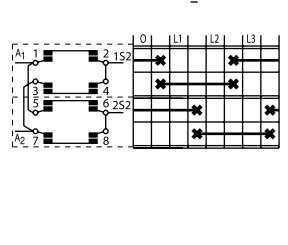
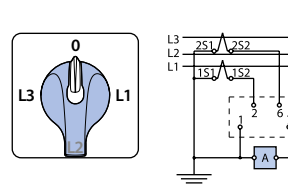
720*
3 phases, 3 current transformers,
1 pole
4 chambers

* New diagram 732



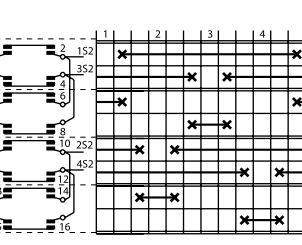
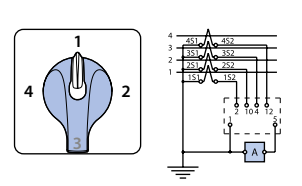
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00721

721
3 phases, 2 current transformers,
1 pole
2 chambers



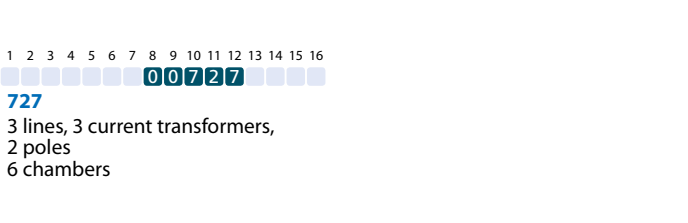
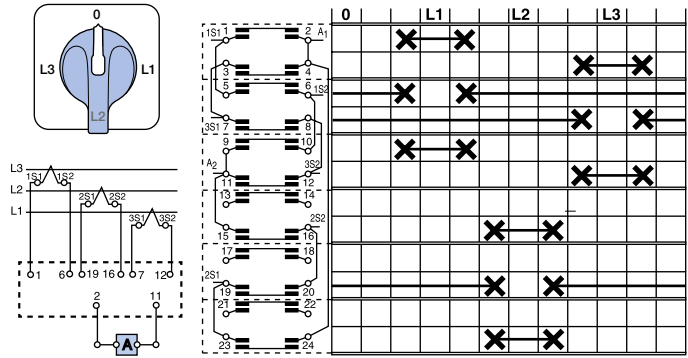
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00724

724
3 phases, 2 current transformers,
1 pole
2 chambers



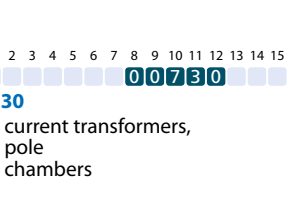
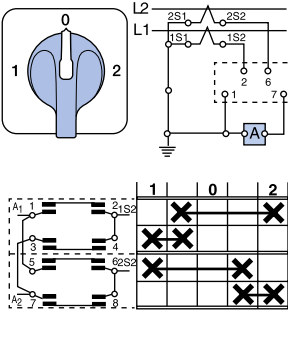
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00725

725
4 lines, 4 current transformers,
1 pole
4 chambers



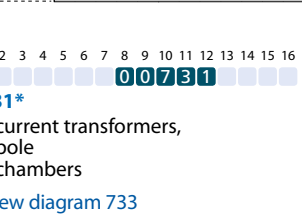
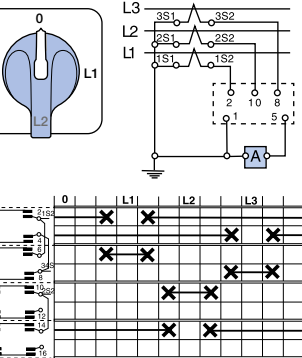
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00727

727
3 lines, 3 current transformers,
2 poles
6 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00730

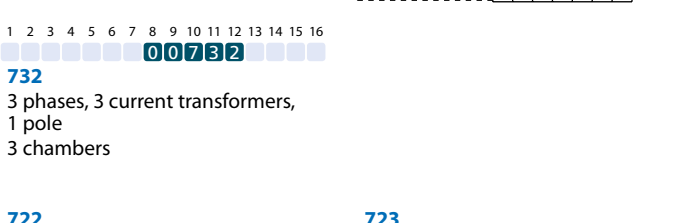
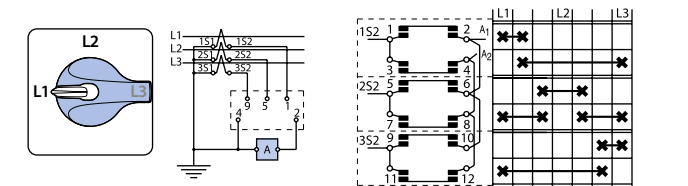
730
2 current transformers,
1 pole
2 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00731

731*
3 current transformers,
1 pole
4 chambers

* New diagram 733

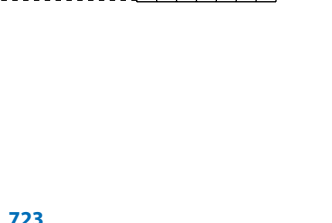
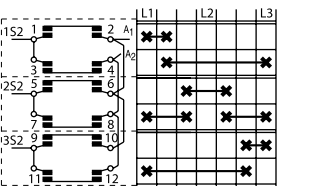


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00732

732
3 phases, 3 current transformers,
1 pole
3 chambers

722
3 phases, 2 or 3 current transformers,
1 pole
5 chambers

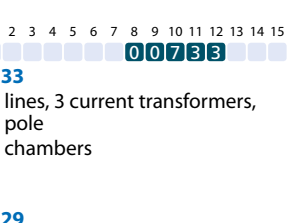
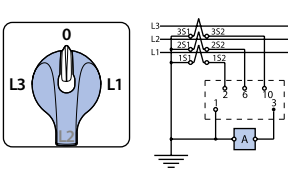
726
2 lines, 2 current transformers,
2 poles
3 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00733

723
2 lines, 2 current transformers,
1 pole
3 chambers

728
4 lines, 4 current transformers,
2 poles
6 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00733

733
3 lines, 3 current transformers,
1 pole
3 chambers

729
1 current transformers,
1 pole
1 chamber

To view these wiring diagrams please visit our download area on www.telergon.com

Switches for B.C.D. codification with "Off"

Switches for B.C.D. codification without "Off"

0BCD3
3 positions
1 chamber

0BCD11
11 positions
2 chambers

1BCD3
3 positions
1 chamber

1BCD12
12 positions
2 chambers

0BCD4 4 positions 2 chambers
0BCD5 5 positions 2 chambers
0BCD6 6 positions 2 chambers
0BCD7 7 positions 2 chambers
0BCD8 8 positions 2 chambers
0BCD9 9 positions 2 chambers
0BCD10 10 positions 2 chambers

1BCD4 4 positions 2 chambers
1BCD5 5 positions 2 chambers
1BCD6 6 positions 2 chambers
1BCD7 7 positions 2 chambers
1BCD8 8 positions 2 chambers
1BCD9 9 positions 2 chambers
1BCD10 10 positions 2 chambers
1BCD11 11 positions 2 chambers
1BCD12 12 positions 2 chambers

To view these wiring diagrams please visit our download area on www.telergon.com

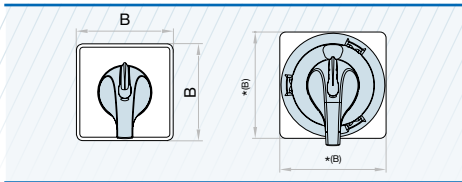
By-pass switches

800 2 poles 3 chambers
801 3 poles 5 chambers
802 3 poles + N 6 chambers
820 2 poles 3 chambers
821 3 poles 5 chambers
822 3 poles + N 6 chambers

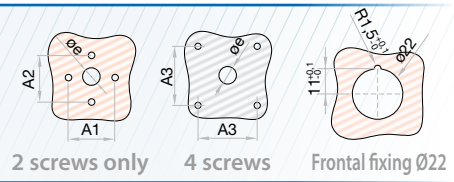
A	L1	L2	L3	N
B	1	5	13	17
C	2	6	14	18
D	7	11	19	23
E	4	10	16	22
F	1	5	13	17
G	4	10	16	22

T Door mounting **E**

series **T**

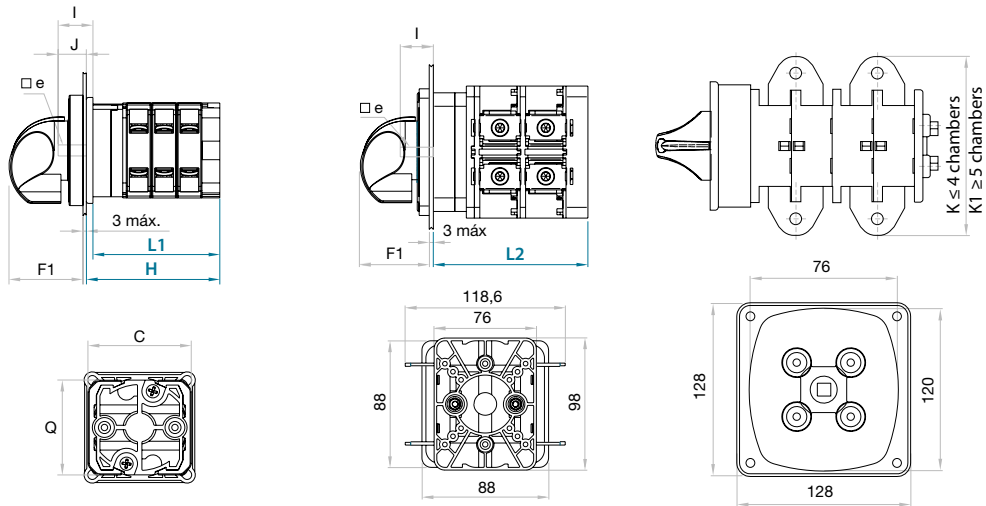


Door mounting drilling



*(B) Features & dimensions in page 27.

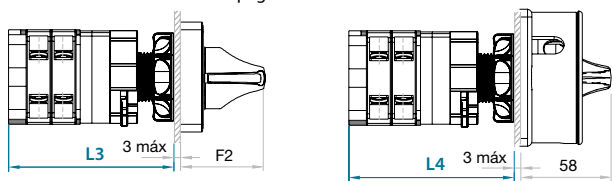
Note:
The cam switches allow a construction up to 12 chambers (24 contacts).
It's necessary to distribute in several columns (maximum three of 12 chambers each) when the number of contacts is higher than 24, so we use the tandem drives D200 or D201.
Depending on the number of contacts to be switched simultaneously, it's possible to supply up to 14 chambers switches in size 0.



Size	Series	A1	øA1	A2	øA2	A3	øA3	B	C	øe	□e	Q	F1	I	J	K	K1
0	T12 T20	32	4,5	-	4,5	36	4,5	50	46,5	12	5	46	33,5	18	15	-	-
1	T16 25	45	4,5	-	4,5	48	4,5	65	60,5	12	5	57,5	36	20	16,8	-	-
	T32 T40											64,5					
2	T50 T63 T80	-	-	60	5,5	68	5,5	94	66	12	7	80	45	24,5	20,5	-	-
	T100 T125								84,5								
3	T175	-	-	60	5,5	68	5,5	94	-	12	7	-	45	24,5	-	-	-
	T200 T250 T315								150								
	T400 T500	-	-	-	-	108	6,5	128	76	16	10	120	67	-	40	176	-
	T630 T800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	218	256

Size	Series	Chambers														
		1□	2□	3□	4□	5□	6□	7□	8□	9□	10□	11□	12□	13□	14□	
0	T12 T20	L1	34,5	46	57,5	69	80,5	92	103,5	115	126,5	138	149,5	161	172,5	184
		H	37,5	49	60,5	72	83,5	95	106,5	118	129,5	141	152,5	164	175,5	187
1	T16 T25	L1	46,4	60,6	74,8	89	103,2	117,4	131,6	145,8	160	174,2	188,4	202,6	*(1)	*(1)
		H	49,6	63,8	78	92,2	106,4	120,6	134,8	149	163,2	177,4	191,6	205,8	*(1)	*(1)
2	T32 T40	L1	49,8	67,3	84,8	102,3	119,8	137,3	154,8	172,3	189,8	207,3	224,8	242,3	*(1)	*(1)
		H	53	70,5	88	105,5	123	140,5	158	175,5	193	210,5	228	245,5	*(1)	*(1)
3	T50 T63 T80	L1	58,5	78,5	98,5	118,5	138,5	158,5	178,5	198,5	218,5	238,5	258,5	278,5	*(1)	*(1)
		H	62,5	82,5	102,5	122,5	142,5	162,5	182,5	202,5	222,5	242,5	262,5	282,5	*(1)	*(1)
4	T100 T125	L1	67	94	121	147,5	174	201	227,5	254	281	307,5	334	361	*(1)	*(1)
		H	71	98	125	151,5	178	205	231,5	258	285	311,5	338	365	*(1)	*(1)
5	T175	L2	80,8	114,8	148,8	182,8	216,8	250,8	284,8	318,8	352,8	386,8	420,8	454,8	*(1)	*(1)
		H	95	135	175	215	255	295	335	375	415	455	495	535	*(1)	*(1)
6	T200 T250 T315	L	135	215	295	375	455	535	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)
		H	175	295	415	535	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)
7	T400 T500	L	175	295	415	535	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)
		H	215	375	535	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)

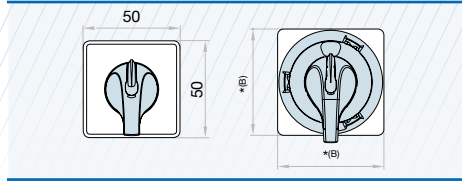
*(1) Tandem drive D200/D201- Features & dimensions in page 24.



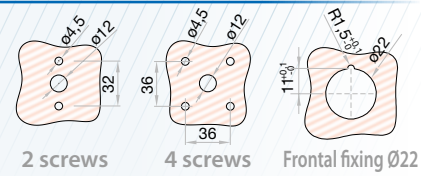
Size	Series	Chambers *(ch)							
		1□	2□	3□	4□	5□	6□	F2	
0	T12 T20	L3	63,5	75	86,5	98	109,5	121	53,5
1	T16 T25	L4	75,5	89,5	103,8	118	-	-	55,5
		L4	78,8	96,3	116,8	131,3	-	-	55,5

*(ch) Central quick fixing ø22 - maximum number of chambers supported.

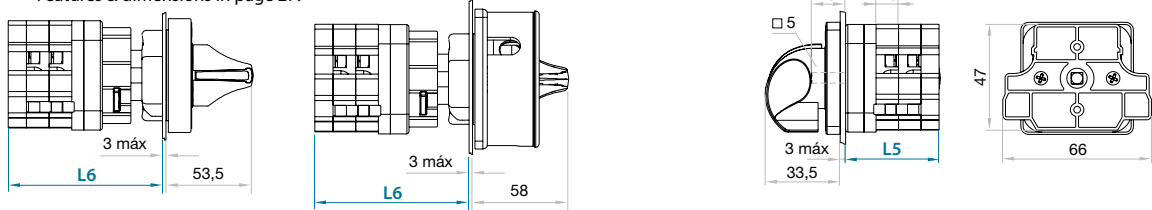
TB Door mounting



Door mounting drilling

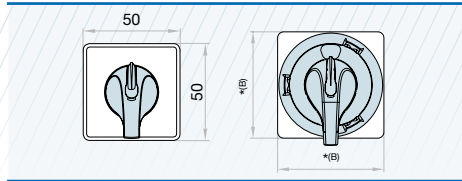


*1(B) Features & dimensions in page 27.

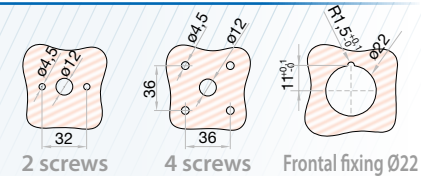


	Chambers											
	1□	2□	3□	4□	5□	6□	7□	8□	9□	10□	11□	12□
L5	31,5	41,5	51,5	61,5	71,5	81,5	91,5	101,5	111,5	121,5	131,5	141,5
L6	60,5	70,5	80,5	90,5	100,5	110,5	-	-	-	-	-	-

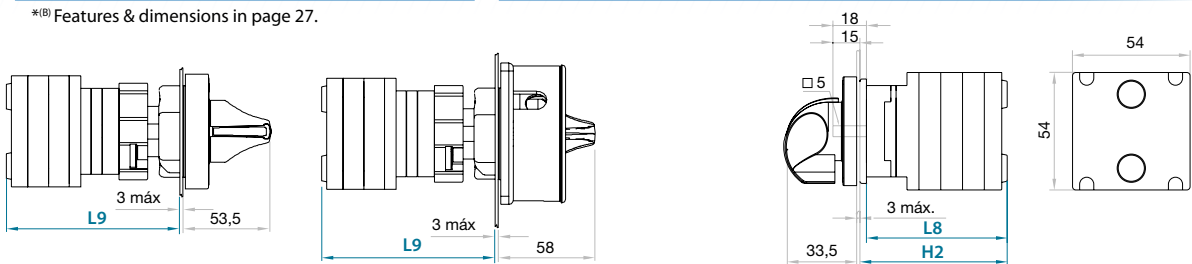
TF Door mounting



Door mounting drilling

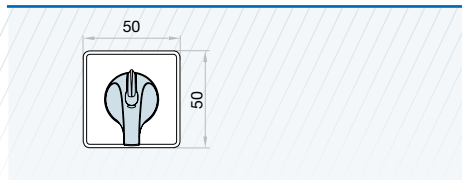


*1(B) Features & dimensions in page 27.

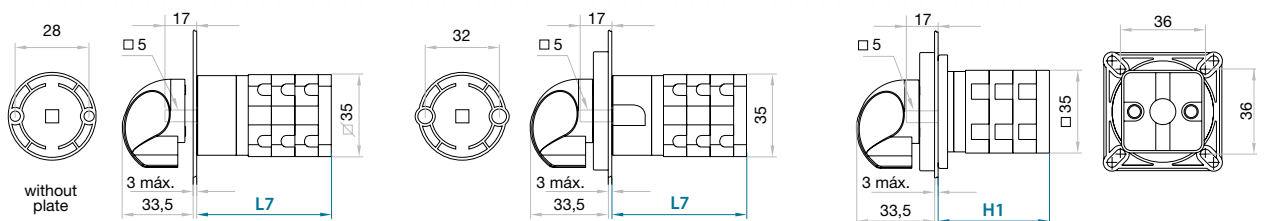
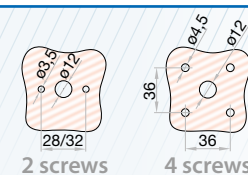


	Chambers											
	1□	2□	3□	4□	5□	6□	7□	8□	9□	10□	11□	12□
L8	45	55	65	75	85	95	105	115	125	135	145	155
L9	73,5	83,5	93,5	103,5	113,5	123,5	-	-	-	-	-	-
H2	48	58	68	78	88	98	108	118	128	138	148	158

TP Door mounting

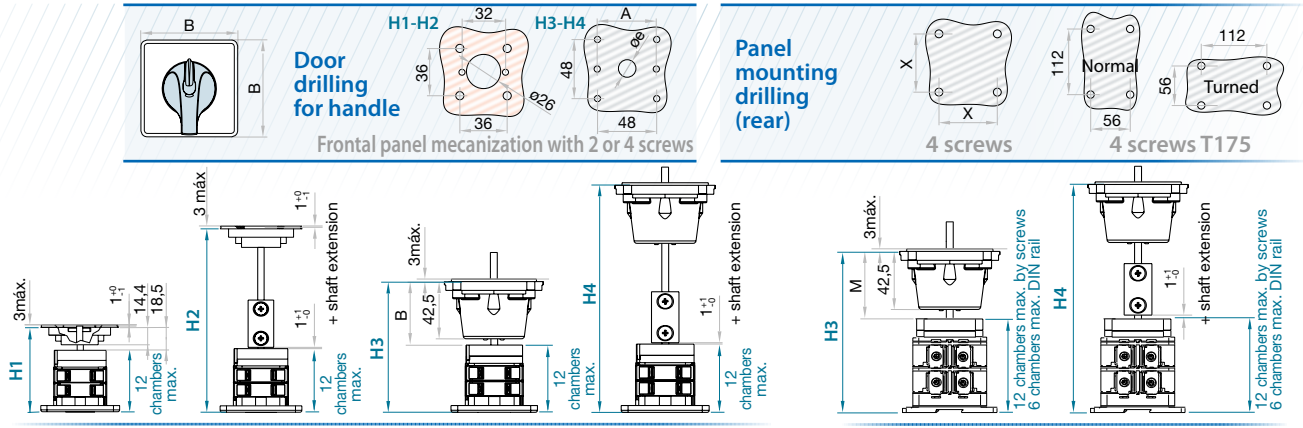


Door mounting drilling



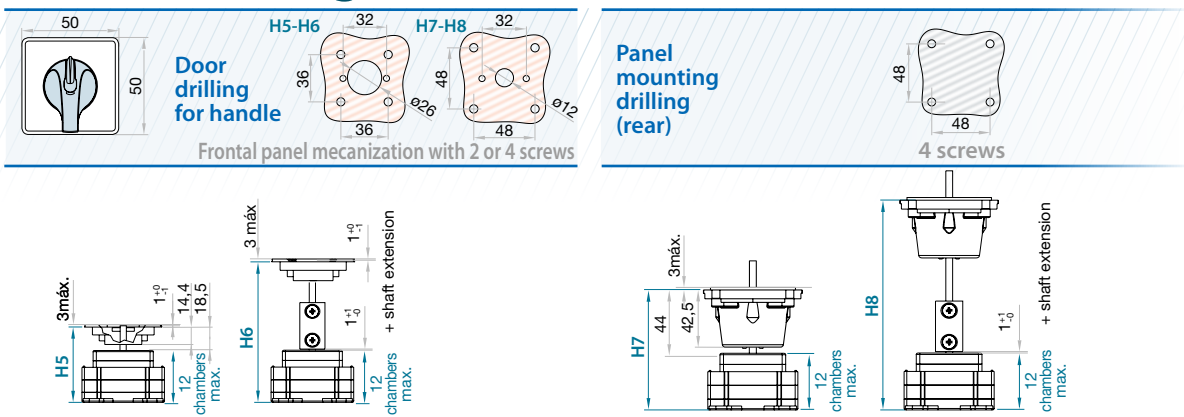
	Chambers											
	1□	2□	3□	4□	5□	6□	7□	8□	9□	10□	11□	12□
L7	37,5	47	56,5	66	75,5	85	94,5	104	113,5	123	132,5	142
H1	26,5	36	45,5	55	64,5	74	83,5	93	102,5	112	121,5	131

T Base mounting with clutch device



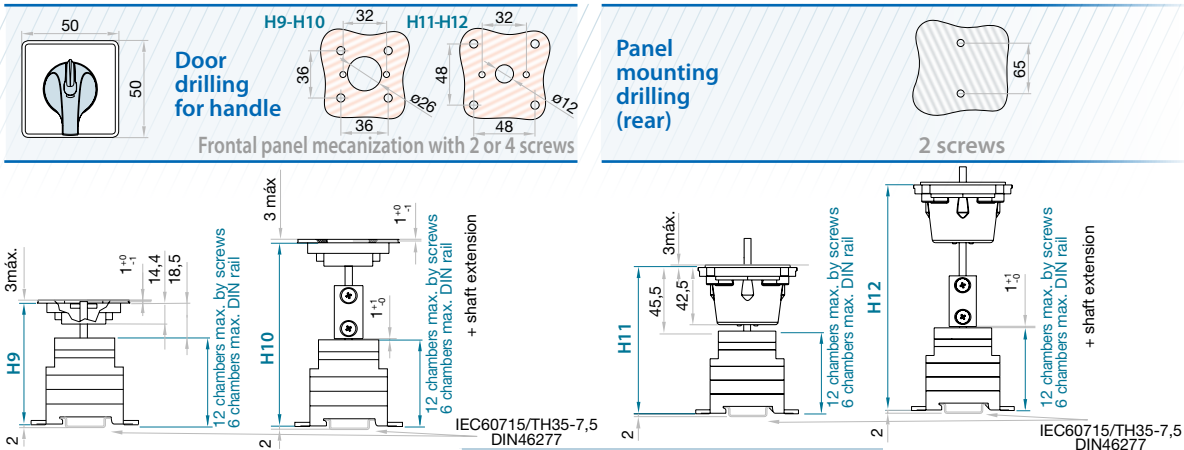
Size	Series		Chambers				A	B	øe	M	X				
			H1	H2	H3	H4									
0	T12 T20	min	56	+11,5	94	+11,5	83	+11,5	121	283	32	50	12	45,5	43
		max	-	-	256	-	-	-	-	-	-	32	65	12	47,5
1	T16 T25	min	-	-	-	-	97,1	+14,2	135,1	297,1	32	65	12	47,5	48
		max	-	-	-	-	100,5	+17,5	138,5	300,5	32	65	12	47,5	48
2	T50 T63 T80	min	-	-	-	-	114,5	+20	152,5	314,5	60	94	12	52	68
		max	-	-	-	-	123	+27	161	323	60	94	12	52	68
3	T100 T125	min	-	-	-	-	141,8	+34	179,8	341,8	60	94	12	52	-
		max	-	-	-	-	162,5	+40	-	-	48	16	67,5	108	-

TB Base mounting with clutch device



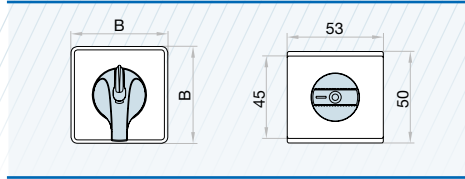
Size	Series		Chambers				A	B	øe	M	X				
			H5	H6	H7	H8									
0	TB20 TB25 TB32	min	46	+10	84	+10	75,5	+10	113	275,5	32	50	12	45,5	43
		max	-	-	246	-	-	-	-	-	-	32	65	12	47,5

TF Base mounting with clutch device

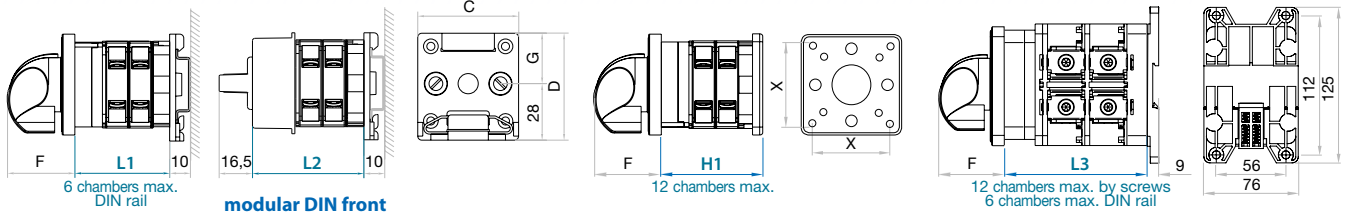
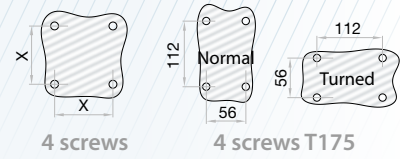


Size	Series		Chambers				A	B	øe	M	X				
			H9	H10	H11	H12									
0	TF12 TF16 TF25	min	65,5	+10	103,5	+10	92,5	+10	130,5	292,5	32	50	12	45,5	43
		max	-	-	265,5	-	-	-	-	-	-	32	65	12	47,5

T Base mounting with screws or DIN rail (direct handle) D



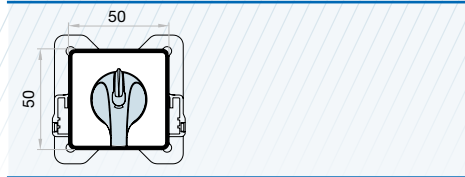
Panel mounting drilling (rear)



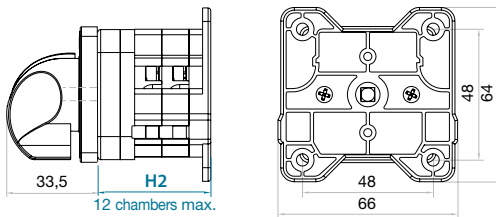
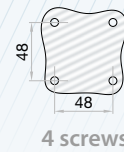
Size	Series		Chambers						+□	B	C	D	F	G	X	
			1□	2□	3□	4□	5□	6□								
0	T12 T20	L1	34,5	46	57,5	69	80,5	92	+11,5	50	50	53	33,5	25	-	
		L2	-	53,5	65	76,5 ^{*(1)}	-	-		-	-	50	53	-	25	-
		H1	37,5	49	60,5	72	83,5	95		50	-	-	33,5	-	43	-
1	T16 T25	L1	46,4	60,6	74,8	89	-	-	+14,2	65	50	53	36	25	-	
		H1	49,6	63,8	78	92,2	106,4	120,6		65	-	-	36	-	48	-
		L1	49,8	67,3	84,8	102,3	-	-		65	-	-	36	-	-	-
2	T32 T40	H1	53	70,5	88	105,5	123	140,5	+17,5	65	-	-	36	-	48	
		L1	62,5	82,5	102,5	122,5	142,5	162,5		+20	94	-	-	45,5	-	68
		H1	71	98	125	152	179	206		+27	94	-	-	45,5	-	68
3	T100 T125	L3	80,8	114,8	148,8	-	-	-	+34	94	-	-	45,5	-	-	
		H1	95	135	175	215	255	295		+40	132	-	-	67	-	108

^{*(1)} Modular enclosure 3 chambers max

TB Base mounting with screws (direct handle) D



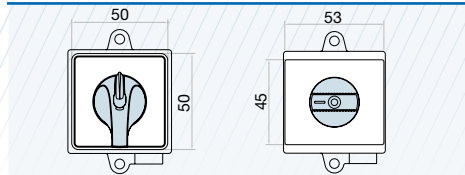
Panel mounting drilling (rear)



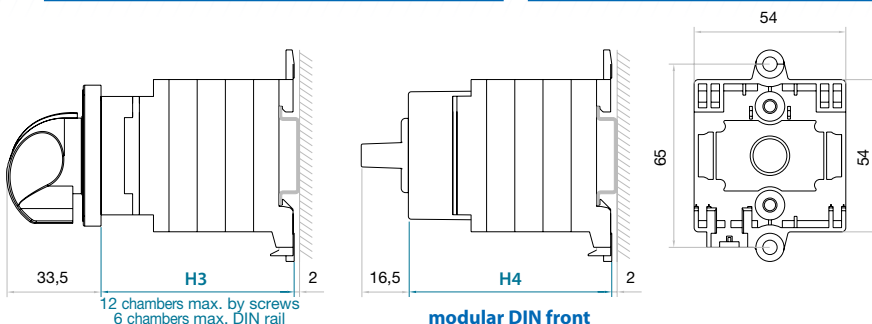
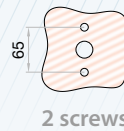
Chambers					
1□	2□	3□	4□	+□	
H2	31,5	41,5	51,5	61,5 ^{*(2)}	+10

^{*(2)} Modular enclosure 3 chambers max

TF Base mounting with screws or DIN rail (direct handle) D



Panel mounting drilling (rear)



Chambers							
1□	2□	3□	4□	5□	6□	+□	
H3	50	60	70	80	90	100	+10
H4	52,5	62,5	72,5	82,5 ^{*(3)}	92,5 ^{*(3)}	-	-

^{*(3)} Modular enclosure 3 chambers max

Technical specifications

According to IEC 60947-3			Size 0		Size 1				Size 2					Size 3									
			T12	T20	T16	T25	T32	T40	T50	T63	T80	T100	T125	T175	T200	T250	T315	T400	T630	T800	T1250	T1600	
Rated thermal current	I _{th}	A	16	25	25	32	40	50	63	80	80	125	125	200	200	250	315	400	630	800	1000	1600	
Rated insulation voltage	U _i	V	500	500	690	690	690	690	690	690	690	690	690	1000	690	690	690	690	690	690	690	690	
Rated impulse withstand voltage	U _{imp}	kV	6	6	6	6	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
			U _e																				
AC rated operational current	I _e	U _e 415V AC21A	A	16	25	25	32	40	50	63	80	80	125	125	200	200	250	315	315	315	400	500	500
		U _e 415V AC22A	A	16	25	25	32	40	50	63	80	80	115	115	200	200	250	315	250	315	315	315	400
		U _e 415V AC23A	A	10	25	16	20	25	32	63	63	63	100	100	200	200	200	200	-	-	-	-	-
Rated conditional short-circuit current	I _{sc}	kA	10	10	10	10	10	10	15	15	15	15	15	15 ^{*(3)}	15	15	15	15	10	10	10	10	
Rated maximum current	I _g -gG	A	25	25	32	32	50	50	80	80	80	125	125	160	200	250	315	400	630	800	1000	2x800	
Rated breaking capacity	400V; cos φ=0,45	A	80	100	160	200	256	320	504	504	504	640	640	1600	1450	2000	2240	1450	1450	1450	1450	1450	
Rated short-time withstand current (1 sec)	I _t	A	240	400	500	650	800	800	1600	1600	1600	2500	2500	3500	4400	4400	4400	6000	7000	7600	8000	8200	
Mechanical durability (according to the standards, for other values please consult)			10000	10000	10000	10000	10000	10000	10000	10000	10000	8000	8000	8000	8000	8000	8000	5000	5000	3000	3000	3000	
Maximum connection capacity																							
Rigid copper conductor		mm ²	2x4	2x4	2x6	2x6	2x10	2x10	16/25 ^{*(2)}	16/25 ^{*(2)}	16/25 ^{*(2)}	35/50 ^{*(2)}	35/50 ^{*(2)}	95	95	120	185	-	-	-	-	-	
Flexible copper conductors		mm ²	2x2,5	2x2,5	2x4	2x4	2x6	2x6	10/16 ^{*(2)}	10/16 ^{*(2)}	10/16 ^{*(2)}	16/35 ^{*(2)}	16/35 ^{*(2)}	95	95	120	185	-	-	-	-	-	

According to UL508 - CAN / CSA C22.2 N° 14			Size 0		Size 1				Size 2					Size 3								
			T12	T20	T16	T25	T32	T40	T50	T63	T80	T100	T125	T175	T200	T250	T315	T400	T630	T800	T1250	T1600
Rated thermal current	I _{th}	A	12	20	16	25	32	40	63	63	63	100	100	200	200	200	200	-	-	-	-	-
General use rating			A	12	20	16	25	32	40	63	63	63	100	100	200	200	200	200	-	-	-	-
			Vac	300	300	600	600	600	600	600	600	600	600	600	600	600	600	600	600	-	-	-
AC rated operational power	I _e	3x240V	HP	2	5	5	7,5	10	15	20	20	20	30	30	25	60	60	60	-	-	-	-
		3x480V	HP	-	-	10	15	20	25	40	40	40	50	50	60	75	75	75	-	-	-	-
		3x600V	HP	-	-	10	15	20	25	40	40	40	50	50	50	60	60	60	-	-	-	-

*⁽¹⁾ 500V size "0" *⁽²⁾ With extension terminals *⁽³⁾ With phase barriers

Approvals T:



Normal service conditions*

- Ambient air temperature (°C): -5°...+40°.
 - Maximum altitude: 2.000 m.
 - Maximum humidity: 90%.
 - Pollution degree: 3 (standard for industrial applications).
 - Rated frequency at AC utilization categories: 50/60 Hz.
 - Rated duties at utilization categories AC21A, AC22A y AC23A: Continuing (8 hours); uninterrupted.
 - Rated duties at utilization categories AC3 and AC4: Intermittent; temporary
 - Switching direct currents: For L/R<50msg, rated operational current (I_e) can be dealt with up to 30Vdc. With higher voltages, several contacts have to be connected in series.
- * Please consult for other service conditions.

According to IEC 60947-3			Size 0						
			TB20	TB25	TB32	TF12	TF16	TF25	
Rated thermal current	Ith	A	20	25	32	20	25	32	
Rated insulation voltage	Ui	V	500	500	500	690	690	690	
Rated impulse withstand voltage	Uimp	kV	4	4	4	6	6	6	
			Ue						
AC rated operational current	Ie	Ue 415V AC21A	A	20	25	32	20	25	32
		Ue 415V AC22A	A	20	25	32	20	25	32
		Ue 415V AC23A	A	20	25	32	-	-	-
Rated conditional short-circuit current		kA	5	5	5	5	5	5	
Rated maximum current	gL-gG	A	35	35	35	20	25	32	
Rated breaking capacity	400V; cos φ=0,45	A	160	200	256	100	160	200	
Rated short-time withstand current (1 sec)		A	240	400	500	350	400	500	
Mechanical durability (according to the standards, for other values please consult)			10000	10000	10000	10000	10000	10000	
Maximum connection capacity									
Rigid copper conductor		mm ²	1x10 2x6	1x10 2x6	1x10 2x6	1x10	1x10	1x10	
Flexible copper conductors		mm ²	1x6 2x4	1x6 2x4	1x6 2x4	1x6	1x6	1x6	

According to UL508 - CAN / CSA C22.2 N° 14			Size 0					
						TF12	TF16	TF25
Rated thermal current	Ith	A	-	-	-	16	20	25
General use rating		A	-	-	-	16	20	25
		Vac	-	-	-	600	600	600
AC rated operational power	3x240V	HP	-	-	-	2	5	7,5
	3x480V	HP	-	-	-	5	10	12
	3x600V	HP	-	-	-	5	10	15

According to IEC 60947-3 / IEC 60947-5			Size 0	
			TP10	
Rated thermal current	Ith	A	12	
Rated insulation voltage	Ui	V	500	
Rated impulse withstand voltage	Uimp	kV	4	
			Ue	
AC rated operational current	Ie	Ue 415V AC13A	A	10
		Ue 415V AC21A	A	12
		Ue 415V AC22A	A	12
		Ue 415V AC23A	A	10
Rated conditional short-circuit current		kA	5	
Rated maximum current	gL-gG	A	16	
Rated breaking capacity	400V; cos φ=0,45	A	80	
Rated short-time withstand current (1 sec)		A	100	
Mechanical durability (thousand of operations)			1000	
Maximum connection capacity				
Rigid copper conductor		mm ²	2x4	
Flexible copper conductors		mm ²	2x2,5	

Approvals TP:



Approvals TB:



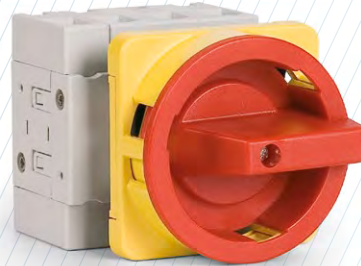
Approvals TF:



consult

AC Modular switch - disconnectors and changeover switches

Modular switch – disconnectors and changeover switches of reduced size, available in different fixation types with a wide range of currents and a variety of accessories.

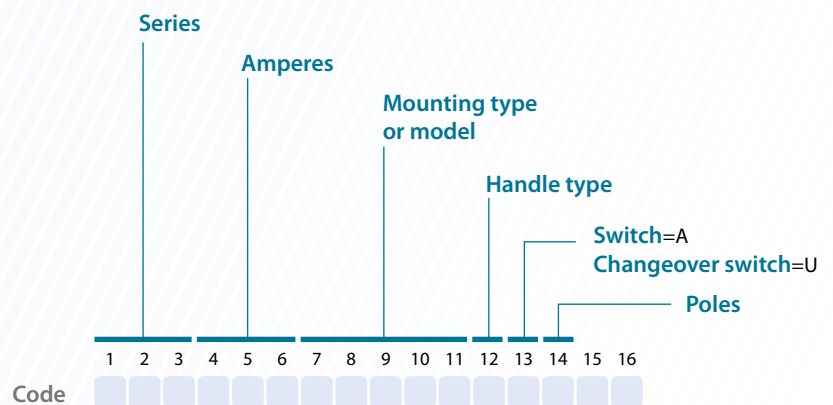


The ZBK switch - disconnectors are 3, 4, 6 and 8-pole modular devices with a high breaking capacity and contact pressure, which respond well to short circuits. They are designed for use in low voltage civil and industrial machines and facilities and made of different models depending on the type of mounting. Manufactured under strict quality controls to provide a reliable product that meets the most demanding requirements.

The ZBK series also includes a range of 1-0-2 changeover switches plus applications with plastic enclosures and various accessories.

Range codification:

The **ZBK** series, are identified by a code that describes their most important characteristics as described below.



According to:
 VDE 0660, IEC 60947-3, IEC 60947-5-1
 UL & cUL
 RoHS



Testing and approvals:



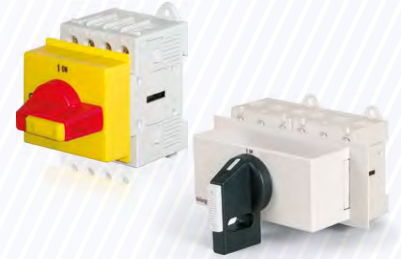
series
ZBK O-I



Door mounting fixing by screws.
 Two sizes of padlockable handles .
 Auxiliary terminals and other accessories.



Base mounting fixing by screws or DIN rail and handle $\varnothing 22$
 Two sizes of padlockable handles .
 Shaft extension depth-adjustable.
 Auxiliary terminals and other accessories.



Base mounting fixing by screws or DIN rail.
 Direct handle (modular) with lock .
 Auxiliary terminals and other accessories.

series
ZBK I-O-II



Modular switch in plastic enclosure (sealable).
 Padlockable handles .

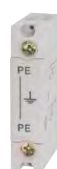


Base mounting fixing by screws or DIN rail.
 Direct handle (modular) with lock .
 Supplied with bridging links included.
 Auxiliary terminals and other accessories.

Accessories



Auxiliary contacts



PE - Terminal



N - Terminal



N - Fixed neutral



Shaft extensions

ZBK

Switch door mounting with padlockable handle IP66

Size 0

A 20|25|40|63|80|125



3P - 3P+N



		CODE-20A	CODE-25A	CODE-40A	CODE-63A	CODE-80A	CODE-125A
64	3P	ZBK20EHN4A3	ZBK25EHN4A3	ZBK40EHN4A3	ZBK63EHN4A3	ZBK80EHN4A3	ZBK125EHN4A3
	3P + N	ZBK20EHN4A4	ZBK25EHN4A4	ZBK40EHN4A4	ZBK63EHN4A4	ZBK80EHN4A4	ZBK125EHN4A4
	3P	ZBK20EH4A3	ZBK25EH4A3	ZBK40EH4A3	ZBK63EH4A3	ZBK80EH4A3	ZBK125EH4A3
	3P + N	ZBK20EH4A4	ZBK25EH4A4	ZBK40EH4A4	ZBK63EH4A4	ZBK80EH4A4	ZBK125EH4A4
48	3P	ZBK20EHN1A3	ZBK25EHN1A3	ZBK40EHN1A3	ZBK63EHN1A3	ZBK80EHN1A3	-
	3P + N	ZBK20EHN1A4	ZBK25EHN1A4	ZBK40EHN1A4	ZBK63EHN1A4	ZBK80EHN1A4	-
	3P	ZBK20EH1A3	ZBK25EH1A3	ZBK40EH1A3	ZBK63EH1A3	ZBK80EH1A3	-
	3P + N	ZBK20EH1A4	ZBK25EH1A4	ZBK40EH1A4	ZBK63EH1A4	ZBK80EH1A4	-

Technical information



According to VDE 0660, IEC 60947-3, IEC 60947-5-1

			20	25	40	63	80	125
Rated thermal current	I _{th}	A	20	25	40	63	80	125
Rated thermal current enclosed	I _{the}	A	20	25	40	63	80	110
Rated insulation voltage	U _i	V	690	690	690	690	690	1000
Rated impulse withstand voltage	U _{imp}	kV	6	6	6	6	6	8
AC rated operational current	I _e	AC21A	20	25	40	63	80	125
Making capacity	I _{eff}	3x380-440V	160	190	300	370	440	850
Breaking capacity		3x220-240V	160	180	250	330	380	680
		3x380-440V	160	180	250	330	380	680
		3x660-690V	80	110	170	190	220	420
		3x400V	12	16	30	37	37	72
Direct switching motors	AC3	3x220-240V	3	4	7,5	11	11	22
		3x380-440V	5,5	7,5	15	18,5	18,5	37
		3x660-690V	5,5	7,5	15	18,5	18,5	30
		3x400V	16	20	32	45	45	85
Main & safety switch	AC23A	3x220-240V	4	5,5	9	15	15	30
	AC23B	3x380-440V	7,5	10	16	22	22	45
		3x660-690V	5,5	7,5	15	18,5	18,5	37
		3x400V	10	10	10	10	10	10
Rated conditional short-circuit current	kA _{eff}		10	10	10	10	10	10
Max. fuse size	gL(gG)	A	25	35	50	63	80	125
Rated short-time withstand current (1sec.)	I _{cw}	A	250	300	500	600	850	1500
Mechanical life		x10 ³	200	200	200	100	100	100
Connecting capacity								
Solid or stranded cable		mm ²	0,5-10			1-25 ^{*(1)}		4-50
		AWG	20-8 (10)			16-4 (10)		10-0 (10)
Flexible cable		mm ²	0,5-6			4-16 ^{*(1)}		10-35
		AWG	20-10			16-6		8-2
Size of terminal screw			M3,5			M5		M6
Tightening torque		Nm	0,8-1,7			2-4		3,5-4,5

According to UL & cUL FILE NO. E123623

			20	25	40	63	80	125
Rated voltage		V	600	600	600	600	600	600
Ampere-Rating "General use"		A	20	25	40	63	80	125
DOL-Rating 3-phase	110-220V	HP	1	1,5	2	3	5	15
	220-240V	HP	3	5	5	10	10	30
	440-480V	HP	7,5	10	10	20	20	60
	550-600V	HP	10	10	15	25	25	60
		HP	1	1	1	2	2	7,5
DOL-Rating 1-phase	110-120V	HP	1	1	1	2	2	7,5
	200-208V	HP	1	2	2	3	3	10
	220-240V	HP	2	2	3	5	5	15
Fuse size (RK5)	Manual Motor Controller	A	40	50	70	90	110	125
	Motor Disconnect	A	40	50	50	70	70	125
Tightening torque		Nm	1,2-2,3	1,2-2,3	1,2-2,3	2,8-4	2,8-4	1,7-4,5
		lb.Inch	11-20	11-20	11-20	24-35	24-35	15-40

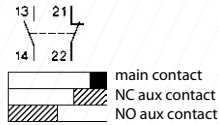
^{*(1)} ZBK63___U stranded 16 mm² / flexible 10 mm²

Accessories

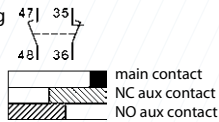
» Auxiliary contacts



1NO+1NC
A 20 125
CODE ZBKLNH11



1NO+1NC overlapping
A 20 125
CODE ZBKLNH11X



» PE - Terminal



PE | PE |
A 20 80
CODE ZBKPE80E

» N - Terminal



N | N1 |
A 20 40
CODE ZBKN40E

A 63 80
CODE ZBKN80E

» N - Fixed neutral



N | N |
A 20 80
CODE ZBKPEN80E

Auxiliary contacts technical information

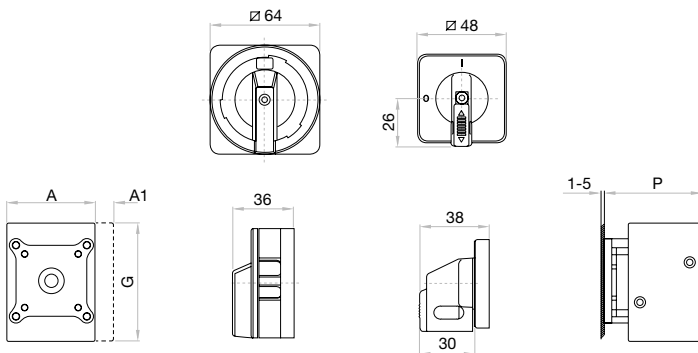
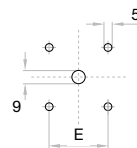
Rated insulation voltage	Ui	V	690
Rated thermal current	Ith - Ithe	A	10
Switching capacity	AC15	220-240V	A 2,5
	AC15	380-440V	A 1,5
Rated conditional short-circuit current		kAeff	3
Max. short circuit protection	gL(gG)	A	10

Connecting capacity

Solid or stranded cable	mm ²	0,75-2,5
	AWG	14-12
Flexible cable (+ multicore cable end)	mm ²	0,75-2,5 (1,5)
	AWG	18-14

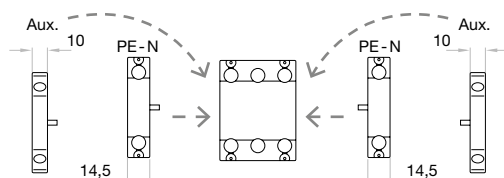
Dimensions (mm)

Door drilling for external handle



	3P	4P	E	G	P
	A	A			
20-80 A □ 48	48	62,5	36	64	54
20-80 A □ 64	48	62,5	48	64	54
125 A □ 64	78	78	48	85	60

Auxiliary contacts A1



- » Other options also available on request:
 - Products external mounting fixing ø22
 - Terminal shrouds

ZBK

Switch base mounting $\varnothing 22$ door clutch padlockable handle IP66

Size 0

A 20|25|40|63|80|125



3P - 3P+N



		CODE-20A	CODE-25A	CODE-40A	CODE-63A	CODE-80A	CODE-125A
64	3P	ZBK20VZVHN4A3	ZBK25VZVHN4A3	ZBK40VZVHN4A3	ZBK63VZVHN4A3	ZBK80VZVHN4A3	ZBK125VZVHN4A3
	3P + N	ZBK20VZVHN4A4	ZBK25VZVHN4A4	ZBK40VZVHN4A4	ZBK63VZVHN4A4	ZBK80VZVHN4A4	ZBK125VZVHN4A4
	3P	ZBK20VZVH4A3	ZBK25VZVH4A3	ZBK40VZVH4A3	ZBK63VZVH4A3	ZBK80VZVH4A3	ZBK125VZVH4A3
	3P + N	ZBK20VZVH4A4	ZBK25VZVH4A4	ZBK40VZVH4A4	ZBK63VZVH4A4	ZBK80VZVH4A4	ZBK125VZVH4A4
48	3P	-	ZBK25VZVHN1A3	ZBK40VZVHN1A3	ZBK63VZVHN1A3	ZBK80VZVHN1A3	ZBK125VZVHN1A3
	3P + N	-	ZBK25VZVHN1A4	ZBK40VZVHN1A4	ZBK63VZVHN1A4	ZBK80VZVHN1A4	ZBK125VZVHN1A4
	3P	-	ZBK25VZVH1A3	ZBK40VZVH1A3	ZBK63VZVH1A3	ZBK80VZVH1A3	ZBK125VZVH1A3
	3P + N	-	ZBK25VZVH1A4	ZBK40VZVH1A4	ZBK63VZVH1A4	ZBK80VZVH1A4	ZBK125VZVH1A4

Technical information



According to VDE 0660, IEC 60947-3, IEC 60947-5-1

			20	25	40	63	80	125
Rated thermal current	I _{th}	A	20	25	40	63	80	125
Rated thermal current enclosed	I _{the}	A	20	25	40	63	80	110
Rated insulation voltage	U _i	V	690	690	690	690	690	1000
Rated impulse withstand voltage	U _{imp}	kV	6	6	6	6	6	8
AC rated operational current	I _e	AC21A	20	25	40	63	80	125
Making capacity	I _{eff}	3x380-440V	160	190	300	370	440	850
Breaking capacity		3x220-240V	160	180	250	330	380	680
		3x380-440V	160	180	250	330	380	680
		3x660-690V	80	110	170	190	220	420
		3x400V	12	16	30	37	37	72
Direct switching motors	AC3	3x220-240V	3	4	7,5	11	11	22
		3x380-440V	5,5	7,5	15	18,5	18,5	37
		3x660-690V	5,5	7,5	15	18,5	18,5	30
		3x400V	16	20	32	45	45	85
Main & safety switch	AC23A	3x220-240V	4	5,5	9	15	15	30
	AC23B	3x380-440V	7,5	10	16	22	22	45
		3x660-690V	5,5	7,5	15	18,5	18,5	37
		kA _{eff}	10	10	10	10	10	10
Rated conditional short-circuit current		kA _{eff}	10	10	10	10	10	10
Max. fuse size	gL(gG)	A	25	35	50	63	80	125
Rated short-time withstand current (1sec.)	I _{cw}	A	250	300	500	600	850	1500
Mechanical life		x10 ³	200	200	200	100	100	100
Connecting capacity								
Solid or stranded cable		mm ²	0,5-10			1-25 ^{*(1)}		4-50
		AWG	20-8 (10)			16-4 (10)		10-0 (10)
Flexible cable		mm ²	0,5-6			4-16 ^{*(1)}		10-35
		AWG	20-10			16-6		8-2
Size of terminal screw			M3,5			M5		M6
Tightening torque		Nm	0,8-1,7			2-4		3,5-4,5

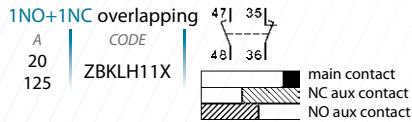
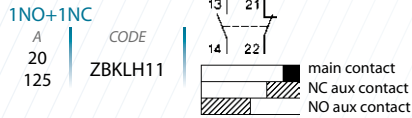
According to UL & cUL FILE NO. E123623

			20	25	40	63	80	125
Rated voltage		V	600	600	600	600	600	600
Ampere-Rating "General use"		A	20	25	40	63	80	125
DOL-Rating 3-phase		HP	1	1,5	2	3	5	15
	110-220V	HP	3	5	5	10	10	30
	220-240V	HP	7,5	10	10	20	20	60
	440-480V	HP	10	10	15	25	25	60
	550-600V	HP	1	1	1	2	2	7,5
DOL-Rating 1-phase		HP	1	2	2	3	3	10
	110-120V	HP	2	2	3	5	5	15
	200-208V	HP	40	50	70	90	110	125
	220-240V	HP	40	50	70	90	110	125
Fuse size (RK5)	Manual Motor Controller	A	40	50	70	90	110	125
5kA / 600V	Motor Disconnect	A	40	50	70	90	110	125
Tightening torque		Nm	1,2-2,3	1,2-2,3	1,2-2,3	2,8-4	2,8-4	1,7-4,5
		lb.Inch	11-20	11-20	11-20	24-35	24-35	15-40

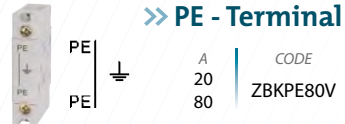
^{*(1)} ZBK63 ___U stranded 16 mm² / flexible 10 mm²

Accessories

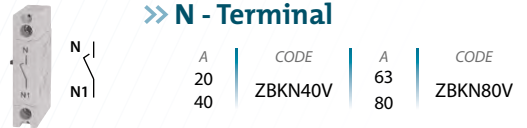
>> Auxiliary contacts



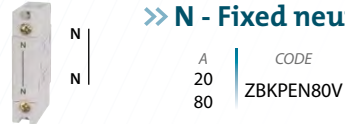
>> PE - Terminal



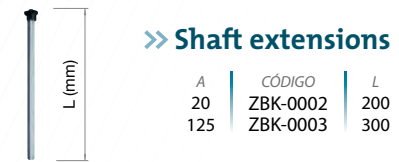
>> N - Terminal



>> N - Fixed neutral



>> Shaft extensions



Auxiliary contacts technical information

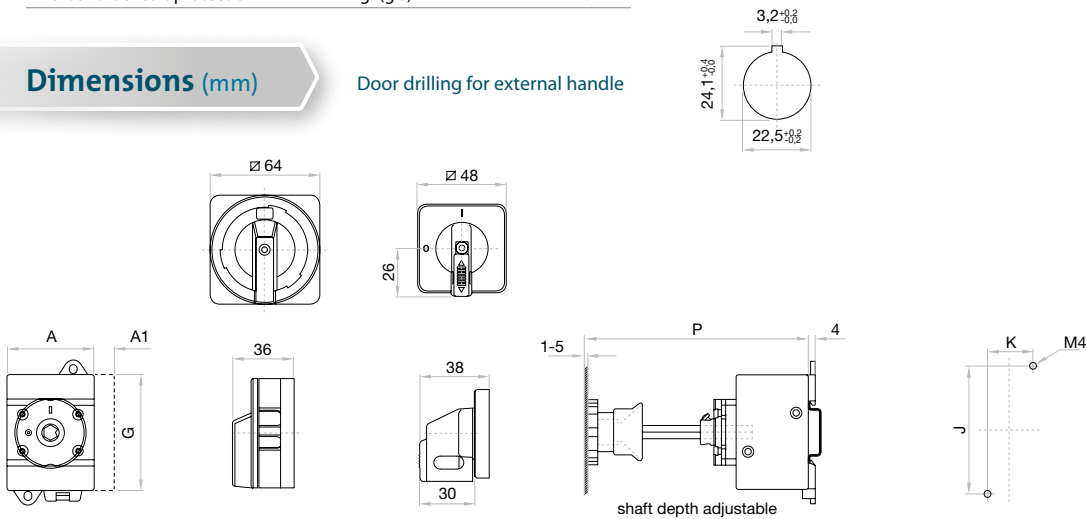
Rated insulation voltage	Ui	V	690
Rated thermal current	Ith - Ithe	A	10
Switching capacity	AC15	220-240V	A 2,5
	AC15	380-440V	A 1,5
Rated conditional short-circuit current		kAeff	3
Max. short circuit protection	gL(gG)	A	10

Connecting capacity

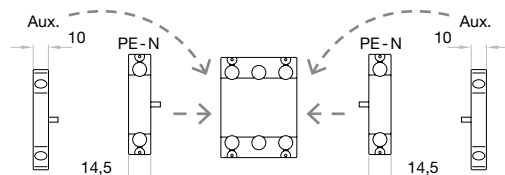
Solid or stranded cable	mm ²	0,75-2,5
	AWG	14-12
Flexible cable (+ multicore cable end)	mm ²	0,75-2,5 (1,5)
	AWG	18-14

Dimensions (mm)

Door drilling for external handle



Auxiliary contacts A1



A	3P		4P		P	
	A	A	G	J	K	min max
20 - 40 A	48	48	64	70	25	91 190
63 - 80 A	48	62,5	64	70	25	91 190
125 A	78	78	85	90	38	95 190

- >> Other options also available on request:
- Products with customized shaft dimensions (L max = 400mm)
 - Terminal shrouds

ZBK

Switch base mounting $\varnothing 22$ door clutch padlockable handle IP66

6P - 8P

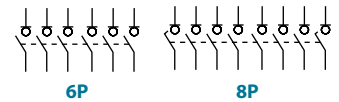
Size 0

A 25|40|80



	CODE - 25A	CODE - 40A	CODE - 80A
6P	ZBK25VZVHN4A6	ZBK40VZVHN4A6	ZBK80VZVHN4A6
8P	ZBK25VZVHN4A8	ZBK40VZVHN4A8	ZBK80VZVHN4A8
6P	ZBK25VZVH4A6	ZBK40VZVH4A6	ZBK80VZVH4A6
8P	ZBK25VZVH4A8	ZBK40VZVH4A8	ZBK80VZVH4A8

Technical information



According to VDE 0660, IEC 60947-3, IEC 60947-5-1

			25	40	80
Rated thermal current	I _{th}	A	25	40	80
Rated thermal current enclosed	I _{the}	A	25	40	80
Rated insulation voltage	U _i	V	690	690	690
Rated impulse withstand voltage	U _{imp}	kV	6	6	6
AC rated operational current	I _e	AC21A A	25	40	80
Making capacity	I _{eff}	3x380-440V A	190	300	440
Breaking capacity		3x220-240V A	180	250	380
		3x380-440V A	180	250	380
		3x660-690V A	110	170	220
Direct switching motors	AC3	3x400V A	16	30	37
	AC3	3x220-240V kW	4	7,5	11
		3x380-440V kW	7,5	15	18,5
		3x660-690V kW	7,5	15	18,5
Main & safety switch	AC23	3x400V A	20	32	45
	AC23A	3x220-240V kW	5,5	9	15
	AC23B	3x380-440V kW	10	16	22
		3x660-690V kW	7,5	15	18,5
Rated conditional short-circuit current		kA _{eff}	10	10	10
Max. fuse size	gL(gG)	A	35	50	80
Rated short-time withstand current (1sec.)	I _{cw}	A	300	500	850
Mechanical life		x10 ³	200	200	100
Connecting capacity					
Solid or stranded cable		mm ²	0,5-10		1-25
		AWG	20-8 (10)		16-4 (10)
Flexible cable		mm ²	0,5-6		4-16
		AWG	20-10		16-6
Size of terminal screw			M3,5		M5
Tightening torque		Nm	0,8-1,7		2-4

According to UL & cUL FILE NO. E123623

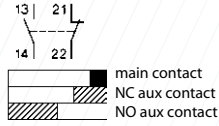
			25	40	80
Rated voltage		V	600	600	600
Ampere-Rating "General use"		A	25	40	80
DOL-Rating 3-phase		110-220V HP	1,5	2	5
		220-240V HP	5	5	10
		440-480V HP	10	10	20
		550-600V HP	10	15	25
		110-120V HP	1	1	2
DOL-Rating 1-phase		200-208V HP	2	2	3
		220-240V HP	2	3	5
		110-120V HP	1	1	2
Fuse size (RK5)	Manual Motor Controller	A	50	70	110
	Motor Disconnect	A	50	50	70
Tightening torque		Nm	1,2-2,3	1,2-2,3	2,8-4
		lb.Inch	11-20	11-20	24-35

Accessories

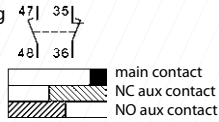
» Auxiliary contacts



1NO+1NC	CODE
A	ZBKLN11
25	
80	



1NO+1NC overlapping	CODE
A	ZBKLN11X
25	
80	

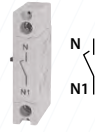


» PE - Terminal



PE	A	CODE
PE	25	ZBKPE80V
PE	80	

» N - Terminal



N	A	CODE	N1	A	CODE
N1	25	ZBKN40V	80	80	ZBKN80V
	40				

» N - Fixed neutral



N	A	CODE
N	25	ZBKPN80V
	80	

» Shaft extensions



A	CÓDIGO	L
20	ZBK-0002	200
125	ZBK-0003	300

Auxiliary contacts technical information

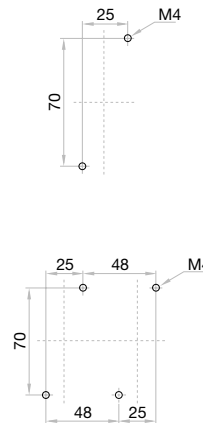
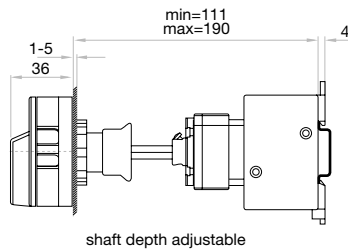
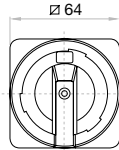
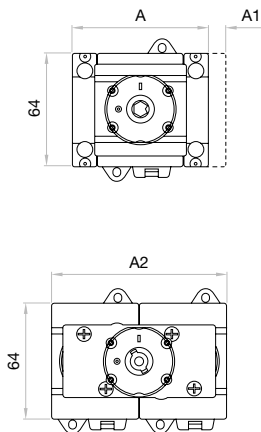
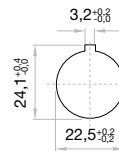
Rated insulation voltage	Ui	V	690	
Rated thermal current	Ith - Ithe	A	10	
Switching capacity	AC15	220-240V	A	2,5
	AC15	380-440V	A	1,5
Rated conditional short-circuit current		kAeff	3	
Max. short circuit protection	gL(gG)	A	10	

Connecting capacity

Solid or stranded cable	mm ²	0,75-2,5
	AWG	14-12
Flexible cable (+ multicore cable end)	mm ²	0,75-2,5 (1,5)
	AWG	18-14

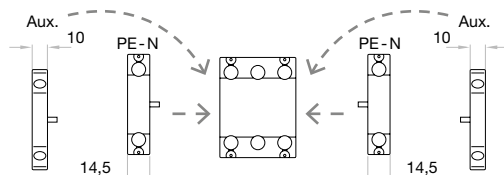
Dimensions (mm)

Door drilling for external handle



	6P	6P	8P
	A	A2	A2
25 - 40 A	77	-	97
80 A	-	97	126

Auxiliary contacts A1



- » Other options also available on request:
 - Products with customized shaft dimensions (L max=400mm)
 - Terminal shrouds

ZBK

Switch & changeover

DIN rail mounting modular padlockable handle IP40 3P - 3P+N - 6P - 8P

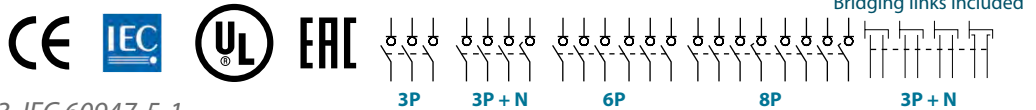
Size 0

A 20|25|40|63|80|125



		CODE-20A	CODE-25A	CODE-40A	CODE-63A	CODE-80A	CODE-125A
Switch	3P	ZBK20SMAHN1A3	ZBK25SMAHN1A3	ZBK40SMAHN1A3	ZBK63SMAHN1A3	ZBK80SMAHN1A3	ZBK125SMAHN1A3
	3P + N	ZBK20SMAHN1A4	ZBK25SMAHN1A4	ZBK40SMAHN1A4	ZBK63SMAHN1A4	ZBK80SMAHN1A4	ZBK125SMAHN1A4
	6P	-	ZBK25SMAHN1A6	ZBK40SMAHN1A6	-	ZBK80SMAHN1A6	-
	8P	-	ZBK25SMAHN1A8	ZBK40SMAHN1A8	-	ZBK80SMAHN1A8	-
	6P	-	ZBK25SMAH1A6	ZBK40SMAH1A6	-	ZBK80SMAH1A6	-
	8P	-	ZBK25SMAH1A8	ZBK40SMAH1A8	-	ZBK80SMAH1A8	-
Changeover	3P + N	ZBK20SMAH1U4	ZBK25SMAH1U4	ZBK40SMAH1U4	ZBK63SMAH1U4	-	-

Technical information



According to VDE 0660, IEC 60947-3, IEC 60947-5-1

			20	25	40	63	80	125
Rated thermal current	I _{th}	A	20	25	40	63	80	125
Rated thermal current enclosed	I _{the}	A	20	25	40	63	80	110
Rated insulation voltage	U _i	V	690	690	690	690	690	1000
Rated impulse withstand voltage	U _{imp}	kV	6	6	6	6	6	8
AC rated operational current	I _e	A	20	25	40	63	80	125
Making capacity	I _{eff}	3x380-440V	160	190	300	370	440	850
Breaking capacity		3x220-240V	160	180	250	330	380	680
		3x380-440V	160	180	250	330	380	680
		3x660-690V	80	110	170	190	220	420
Direct switching motors	AC3	3x400V	12	16	30	37	37	72
	AC3	3x220-240V	3	4	7,5	11	11	22
		3x380-440V	5,5	7,5	15	18,5	18,5	37
		3x660-690V	5,5	7,5	15	18,5	18,5	30
		3x400V	16	20	32	45	45	85
Main & safety switch	AC23A	3x220-240V	4	5,5	9	15	15	30
	AC23B	3x380-440V	7,5	10	16	22	22	45
		3x660-690V	5,5	7,5	15	18,5	18,5	37
		3x400V	10	10	10	10	10	10
Rated conditional short-circuit current		kA _{eff}	10	10	10	10	10	10
Max. fuse size	gL(gG)	A	25	35	50	63	80	125
Rated short-time withstand current (1sec.)	I _{cw}	A	250	300	500	600	850	1500
Mechanical life		x10 ³	200	200	200	100	100	100

Connecting capacity			20	25	40	63	80	125
Solid or stranded cable		mm ²	0,5-10			1-25 ^{*(1)}		4-50
		AWG	20-8 (10)			16-4 (10)		10-0 (10)
Flexible cable		mm ²	0,5-6			4-16 ^{*(1)}		10-35
		AWG	20-10			16-6		8-2
Size of terminal screw			M3,5			M5		M6
Tightening torque		Nm	0,8-1,7			2-4		3,5-4,5

According to UL & cUL FILE NO. E123623

			20	25	40	63	80	125
Rated voltage		V	600	600	600	600	600	600
Ampere-Rating "General use"		A	20	25	40	63	80	125
DOL-Rating 3-phase	110-220V	HP	1	1,5	2	3	5	15
	220-240V	HP	3	5	5	10	10	30
	440-480V	HP	7,5	10	10	20	20	60
	550-600V	HP	10	10	15	25	25	60
	200-208V	HP	1	1	1	2	2	7,5
DOL-Rating 1-phase	200-208V	HP	1	2	2	3	3	10
	220-240V	HP	2	2	3	5	5	15
		HP	40	50	70	90	110	125
Fuse size (RK5)	Manual Motor Controller	A	40	50	70	90	110	125
5kA / 600V	Motor Disconnect	A	40	50	50	70	70	125
Tightening torque		Nm	1,2-2,3	1,2-2,3	1,2-2,3	2,8-4	2,8-4	1,7-4,5
		lb.Inch	11-20	11-20	11-20	24-35	24-35	15-40

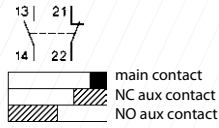
*1) ZBK63 ___U stranded 16 mm² / flexible 10 mm²

Accessories

» Auxiliary contacts



1NO+1NC
A 20 125
CODE ZBK LH11

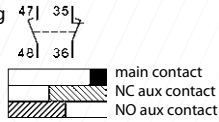


» PE - Terminal



PE |
PE |
A 20 80
CODE ZBK PE80V

1NO+1NC overlapping
A 20 125
CODE ZBK LH11X



» N - Fixed neutral



N |
N |
A 20 80
CODE ZBK PEN80V

Auxiliary contacts technical information

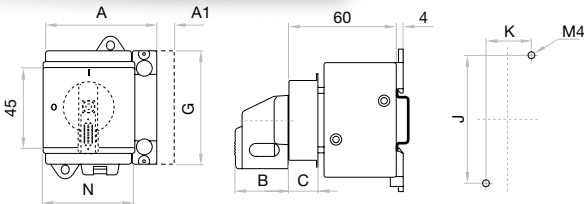
Rated insulation voltage	Ui	V	690
Rated thermal current	Ith - Ithe	A	10
Switching capacity	AC15	220-240V	A 2,5
	AC15	380-440V	A 1,5
Rated conditional short-circuit current	kAeff		3
Max. short circuit protection	gL(gG)	A	10

Connecting capacity

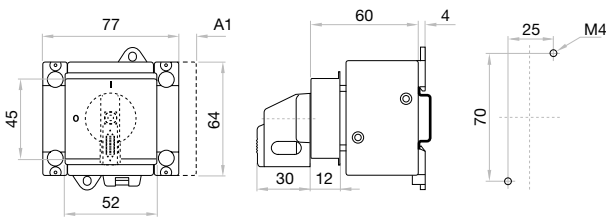
Solid or stranded cable	mm ²	0,75-2,5
	AWG	14-12
Flexible cable (+ multicore cable end)	mm ²	0,75-2,5 (1,5)
	AWG	18-14

Dimensions (mm)

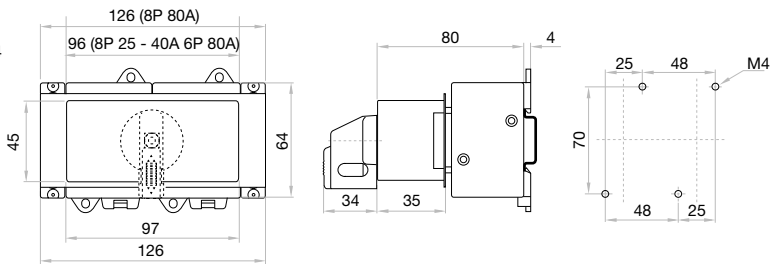
Switch



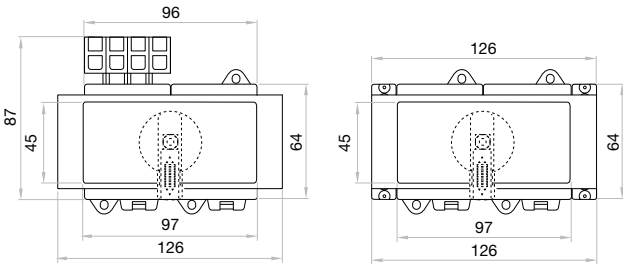
3P-4P 20-125A



6P 25-40A



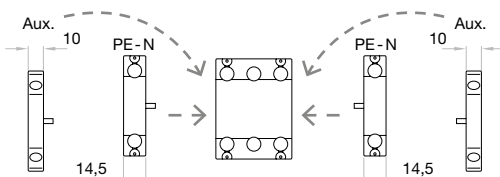
8P 25-40A
6P-8P 80A



20-40A

63A

Auxiliary contacts A1



Switch	3P		4P		C	G	J	K	N
	A	A	B	C					
20-40 A	48	48	30	12	64	70	25	52	
63-80 A	48	62,5	30	12	64	70	25	52	
125 A	78	78	35	10	85	90	38	78	

Changeover

- » Other options also available on request:
 - Terminal shrouds
 - 3P changeovers

ZBK

Switch plastic enclosure padlockable handle IP66

3P - 3P+N - 6P - 8P

Size 0

A 20|25|40|63|80|125



series
ZBK

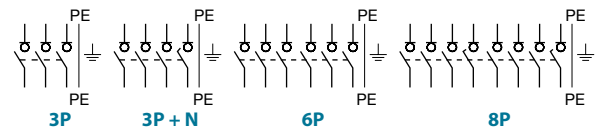


3P-3P+N

6P-8P

	CODE-20A	CODE-25A	CODE-40A	CODE-63A	CODE-80A	CODE-125A
3P	ZBK20PFHN4A3	ZBK25PFHN4A3	ZBK40PFHN4A3	ZBK63PFLHN4A3	ZBK80PFLHN4A3	ZBK125PFLHN4A3
3P + N	ZBK20PFHN4A4	ZBK25PFHN4A4	ZBK40PFHN4A4	ZBK63PFLHN4A4	ZBK80PFLHN4A4	ZBK125PFLHN4A4
6P	-	ZBK25PFLHN4A6	ZBK40PFLHN4A6	-	ZBK80PFLHN4A6	-
8P	-	ZBK25PFLHN4A8	ZBK40PFLHN4A8	-	ZBK80PFLHN4A8	-

Technical information



According to VDE 0660, IEC 60947-3, IEC 60947-5-1

			20	25	40	63	80	125
Rated thermal current	I _{th}	A	20	25	40	63	80	125
Rated thermal current enclosed	I _{the}	A	20	25	40	63	80	110
Rated insulation voltage	U _i	V	690	690	690	690	690	1000
Rated impulse withstand voltage	U _{imp}	kV	6	6	6	6	6	8
AC rated operational current	I _e	AC21A	20	25	40	63	80	125
Making capacity	I _{eff}	3x380-440V	160	190	300	370	440	850
Breaking capacity		3x220-240V	160	180	250	330	380	680
		3x380-440V	160	180	250	330	380	680
		3x660-690V	80	110	170	190	220	420
		3x400V	12	16	30	37	37	72
Direct switching motors	AC3	3x220-240V	3	4	7,5	11	11	22
		3x380-440V	5,5	7,5	15	18,5	18,5	37
		3x660-690V	5,5	7,5	15	18,5	18,5	30
		3x400V	16	20	32	45	45	85
Main & safety switch	AC23A	3x220-240V	4	5,5	9	15	15	30
	AC23B	3x380-440V	7,5	10	16	22	22	45
		3x660-690V	5,5	7,5	15	18,5	18,5	37
		kA _{eff}	10	10	10	10	10	10
Rated conditional short-circuit current		kA _{eff}	10	10	10	10	10	10
Max. fuse size	gLG(gG)	A	25	35	50	63	80	125
Rated short-time withstand current (1sec.)	I _{cw}	A	250	300	500	600	850	1500
Mechanical life		x10 ³	200	200	200	100	100	100
Connecting capacity								
Solid or stranded cable		mm ²	0,5-10			1-25 ^{*(1)}		4-50
		AWG	20-8 (10)			16-4 (10)		10-0 (10)
Flexible cable		mm ²	0,5-6			4-16 ^{*(1)}		10-35
		AWG	20-10			16-6		8-2
Size of terminal screw			M3,5			M5		M6
Tightening torque		Nm	0,8-1,7			2-4		3,5-4,5

According to UL & cUL FILE NO. E123623

			20	25	40	63	80	125
Rated voltage		V	600	600	600	600	600	600
Ampere-Rating "General use"		A	20	25	40	63	80	125
DOL-Rating 3-phase		110-220V	HP	1	1,5	2	3	5
		220-240V	HP	3	5	5	10	10
		440-480V	HP	7,5	10	10	20	20
		550-600V	HP	10	10	15	25	25
		110-120V	HP	1	1	1	2	2
DOL-Rating 1-phase		200-208V	HP	1	2	2	3	3
		220-240V	HP	2	2	3	5	5
		5kA / 600V	Manual Motor Controller	A	40	50	70	90
		5kA / 600V	Motor Disconnect	A	40	50	50	70
Tightening torque		Nm	1,2-2,3	1,2-2,3	1,2-2,3	2,8-4	2,8-4	
		lb.Inch	11-20	11-20	11-20	24-35	24-35	

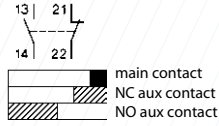
^{*(1)} ZBK63___U stranded 16 mm² / flexible 10 mm²

Accessories



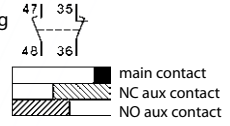
>> Auxiliary contacts ^{*(a1)}

1NO+1NC
A 20
125
CODE
ZBK LH11



>> Auxiliary contacts ^{*(a1)}

1NO+1NC overlapping
A 20
125
CODE
ZBK LH11X



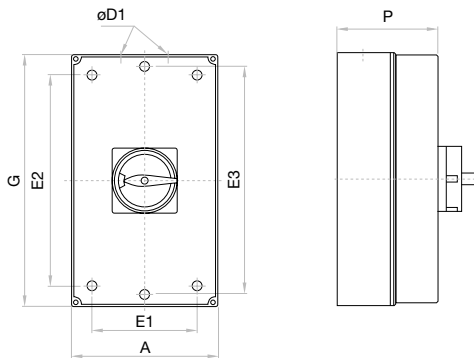
Auxiliary contacts technical information

Rated insulation voltage	Ui	V	690
Rated thermal current	Ith - Ithe	A	10
Switching capacity	AC15	220-240V	A 2,5
	AC15	380-440V	A 1,5
Rated conditional short-circuit current		kAeff	3
Max. short circuit protection	gL(gG)	A	10

Connecting capacity

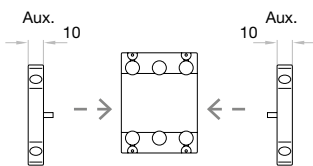
Solid or stranded cable	mm ²	0,75-2,5
	AWG	14-12
Flexible cable (+ multicore cable end)	mm ²	0,75-2,5 (1,5)
	AWG	18-14

Dimensions (mm)



	A	D1	E1	E2	E3	G	P
20 - 40 A	3/4P	98	2 x 25,5/20,5/16,5/12,5	75	150	170	180
63 - 125 A	3/4P	140	40,5/32,5 + 16,5 + 12,5	100	160	188,5	200
25 - 40 A	6P	140	40,5/32,5 + 16,5 + 12,5	100	160	188,5	200
25 - 40 A	8P	176	2x40,5 / 32,5	120	200	228,5	240
80 A	6/8P	176	2x40,5 / 32,5	120	200	228,5	240

Auxiliary contacts ^{*(a1)}



^{*(a1)} Standard enclosure capacity swit + 1 aux.
For other needs please consult.

- >> Other options also available on request:
- Changeovers
 - Black/grey handle

series
S5|S5M|S5N

series
S6|S6N

series
CIS

AC Switch - disconnectors

Switch - disconnectors with high operating load capacity and a high level disconnection insulation; high reliability and safety in abnormal situations, available in different construction models, with a wide range of currents and several accessories.



The switch - disconnectors in its different series, are manufactured with high safety self-extinguishing materials, providing an excellent level of electrical insulation, low smoke emission and high resistance to electromechanical stress.

They comply with environmental requirements and undergo strict quality controls for a reliable product that meets the most demanding requirements.

They consist of a sandwich-type body containing self-cleaning blade type contacts, with pre-arc zones to ensure long term, fault-free energy transmission and coated with silver alloy for long electromechanical life. The detent mechanism provides quick and independent switching due to the accumulation of elastic potential energy, which is transmitted at high speed to the contacts for arc extinction.

Functional and ergonomic handle

- > Good grip and excellent torque/resistance
- > Padlockable handle in **OFF** position (up to three locks Ø 5-8 mm)
- > Door interlock in **ON** position
- > When lock in **OFF** position, door is interlocked
- > Defeatable feature in **ON** position (with the use of a tool for maintenance operations). Handle interlock is restored when closing
- > Self-centering shaft for door handle



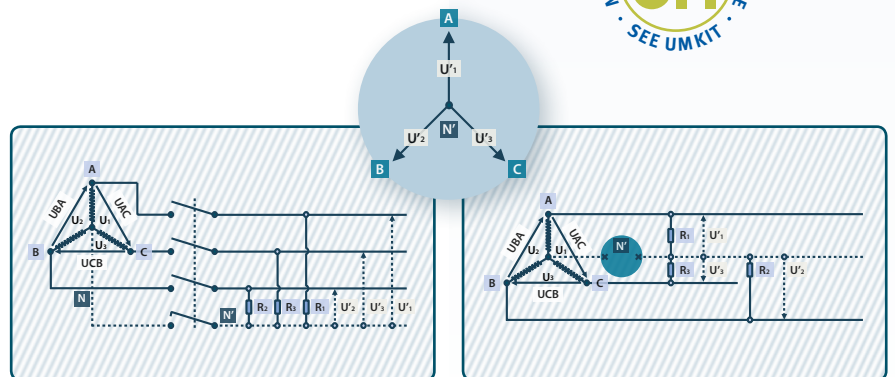
MOTORIZED KIT AVAILABLE
KIT UM
SEE UMKIT

Neutral pole early make & late break



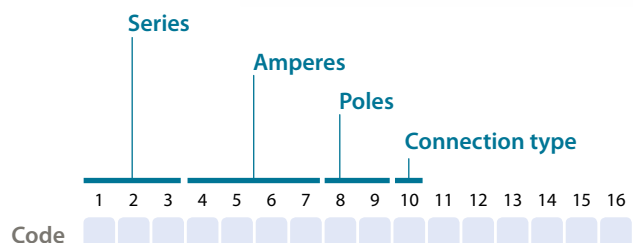
This safety feature prevents accidental overvoltage when making/breaking of loads connected between phase and neutral.

Due to the design in our 3P+N switch - disconnectors and changeover switches, the neutral contact closes before the main phases and opens later, thus ensuring this operation mode.



Range codification:

The **S5|S5M|S5N|S6|S6N** series, are identified by a code that describes their most important characteristics as described below.



According to:
IEC 60947-3
IEC 61439-2
RoHS



Testing and approvals:

series
S5



1 2 3 4 5 6
S 5 -

Wide range of currents.
Base mounting with screws.
Switching under load up to 1000Vac (inductive and capacitive).
Breaking current up to 8 times the operational current.
Able to establish and withstand short-circuit currents up to 100kA.
External or direct handles.

series
S5M



1 2 3 4 5 6
S 5 M

Back to back with operating mechanism in side, arrangement to increase the number of available contacts between 6 or 8.
Base mounting with screws.
External or direct handles.

series
S5N



1 2 3 4 5 6
S 5 N

Back to back with operating mechanism in front, arrangement to increase the number of available contacts between 6 or 8.
Base mounting with screws.
External or direct handles.

series
S6



1 2 3 4 5 6
S 6 -

Switch - disconnectors with housings for 2P - 3P or 3P+N.
Base mounting with screws.
External or direct handles.
Wide range of devices and accessories.

series
S6N



1 2 3 4 5 6
S 6 N

Back to back with operating mechanism in front, arrangement to increase the number of available contacts between 6 or 8.
Base mounting with screws.
External or direct handles.

series
CIS25D



IP65

1 2 3 4 5 6 7
C I S 2 5 D

S5 polyester enclosed switch.
External padlockable handle with locking cover in ON I position.
Removing cover blocked by padlock when handle is in 0 OFF position.

series
CIS25C



IP65

1 2 3 4 5 6 7
C I S 2 5 C

S5 metal enclosed switch.
External padlockable handle with locking door in ON I position.
Door opening blocked by padlock when handle is in 0 OFF position.

series
CIS25A



IP43

IP65

1 2 3 4 5 6 7
C I S 2 5 A

S5 polyester enclosed switch and fuse holders.
External padlockable handle with locking cover in ON I position.
Removing cover blocked by padlock when handle is in 0 OFF position.

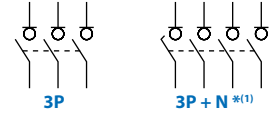
series
CIS25F



IP65

1 2 3 4 5 6 7
C I S 2 5 F

S5 metal enclosed switch and fuse holders.
External padlockable handle with locking door in ON I position.
Door opening blocked by padlock when handle is in 0 OFF position.



S5
S5N

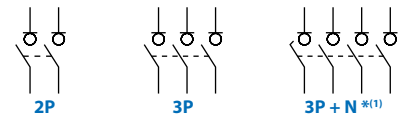
S5 switches 2, 3 & 4 poles (40 - 6300A) (O - I)

Manual handle



Amp.	Size	Connection	2 pole (2P)	3 pole (3P)	4 pole (3P + N) ^{*(1)}	External ^{*(2)}	Direct	Emergency external ^{*(2)}
			Code	Code	Code	Code	Code	Code
40	00		S5-00402PB0	S5-00403PB0	S5-00403NB0	DS-SA01	DS-SI01	DS-SR01
63			S5-00632PB0	S5-00633PB0	S5-00633NB0			
80			S5-00802PB0	S5-00803PB0	S5-00803NB0			
125	0		S5-01252PB0	S5-01253PB0	S5-01253NB0	DS-SA01	DS-SI01	DS-SR01
125			S5-01252PS0	S5-01253PS0	S5-01253NS0			
160			S5-01602PB0	S5-01603PB0	S5-01603NB0			
160			S5-01602PS0	S5-01603PS0	S5-01603NS0			
200			S5-02002PS0	S5-02003PS0	S5-02003NS0			
250			S5-02502PD0	S5-02503PD0	S5-02503ND0			
250	1		S5-02502PR0	S5-02503PR0	S5-02503NR0	DS-SA11	DS-SI11	DS-SR11
315			S5-03152PR0	S5-03153PR0	S5-03153NR0			
400			S5-04002PC0	S5-04003PC0	S5-04003NC0			
500			-	S5-05003PR0	S5-05003NR0			
630	2		-	S5-06303PR0	S5-06303NR0	DS-LA21	DS-LI21	DS-LR21
800			-	S5-08003PC0	S5-08003NC0			
800	3		-	S5-08003PR0	S5-08003NR0	DS-LA31	DS-LI31	DS-LR31
1000			-	S5-10003PC0	S5-10003NC0			
1250			-	S5-12503PC0	S5-12503NC0			
2000	4		-	S5-20003PC0	S5-20003NC0	DS-LA41	DS-LI41	DS-LR41
1000			-	S5-10003PS0	S5-10003NS0			
1250			-	S5-12503PS0	S5-12503NS0			
1600			-	S5-16003PS0	S5-16003NS0			
1800			-	S5-18003PS0	S5-18003NS0			
2000			-	S5-20003PD0	S5-20003ND0			
2000	5		-	S5N20003PS0	S5N20003NS0	DS-LA41	DS-LI41	DS-LR41
2500			-	S5N25003PS0	S5N25003NS0			
3150			-	S5N31503PS0	S5N31503NS0			
2000			-	S5N20003PP0	S5N20003NP0			
2500			-	S5N25003PP0	S5N25003NP0			
3150		-	S5N31503PP0	S5N31503NP0				
4000	6		-	S5-40003PP0	S5-40003NP0	DS-EN61 ^{*(3)}	-	-
5000			-	S5-50003PP0	S5-50003NP0			
6300			-	S5-63003PP0	S5-63003NP0			

For high performance range (800Vac), please consult the corresponding full details.



S6

S6 switches 2, 3 & 4 poles (200 - 800A) (O - I)

Manual handle



Amp.	Size	Connection	Bipolar (2P)	3 pole (3P)	4 pole (3P + N) ^{*(1)}	External ^{*(2)}	Direct	Emergency external ^{*(2)}
			Code	Code	Code	Code	Code	Code
200	1		S6-02002PS0	S6-02003PS0	S6-02003NS0	DS-SA11	DS-SI11	DS-SR11
250			S6-02502PS0	S6-02503PS0	S6-02503NS0			
315			S6-03152PS0	S6-03153PS0	S6-03153NS0			
400			S6-04002PD0	S6-04003PD0	S6-04003ND0			
500	2		S6-05002PS0	S6-05003PS0	S6-05003NS0	DS-LA21	DS-LI21	DS-LR21
630			S6-06302PS0	S6-06303PS0	S6-06303NS0			
800			S6-08002PD0	S6-08003PD0	S6-08003ND0			

For high performance range (800Vac), please consult the corresponding full details.

^{*(1)} Neutral pole early make-late break - Versions 4P with "simultaneous contacts" are also available, please consult.
^{*(2)} Padlockable handle in OFF 0 position. Possibility of unlocking the door in ON I position (with the use of a tool). Door interlock by a padlock in OFF 0 position.
^{*(3)} Slide bar handle, only standard door interlock, please consult the corresponding full details.




Please indicate in your order the switch code and the handle code, as these both products are managed separately. A standard shaft is included with the handle.



Shaft extensions ^{*(4)}		Bridging links ^{*(P2)}		Auxiliary contacts ^{*(5)}		DIN rail mounting	Safety key lock device ^{*(6)}		Terminal protection ^{*(7)}	Terminal shrouds ^{*(7)} (1 unit)			Terminal shrouds ^{*(7)} (2 units)	Full details in page											
Size	□	Type 1 & 2		Code (4 units)	1NO+1NC	2NO+2NC	Code (2 units)	Simple	Double	Code	Up	Down	Up or Down		Code										
		L	Code ^{*(e1)}		Code	Code		Code ^{*(e1)}	Code ^{*(e1)}		Code	Code	Code			Code									
00	7	250	DS-EP04	-	D5LAU01	D5LAU02	-	DS-CAB1	DS-CEB1	-	-	-	-	-	70										
		387	DS-EP05																						
0	7	250	DS-EP04	-	D5LAU01	D5LAU02	DS-DN01	DS-CAB1	DS-CEB1	DS-CU01	-	-	-	-	72										
		387	DS-EP05				-				DS-CU02	DS-CU03	DS-CU04												
							-				-	-	-												
							-				DS-CU02	DS-CU03	DS-CU04												
							-				DS-CU05	DS-CU06	DS-CU07												
1	10	375	DS-EP14	-	D5LAU01	D5LAU02	-	DS-CA11	DS-CE11	DS-CU12	-	-	-	DS-CU11	74										
		536	DS-EP15											DS-CU11											
2	14	345	DS-EP23	-	D5LAU01	D5LAU02	-	DS-CB21	DS-CF21	DS-CU22	-	-	-	DS-CU21	76										
		535	DS-EP24																						
3	14	345	DS-EP23	-	D5LAU01	D5LAU02	-	DS-CB31	DS-CF31	-	-	-	-	DS-CU31	78										
		535	DS-EP24																						
		345	DS-EP23	D5LPC32	DS-AU11	DS-AU12																			
		535	DS-EP24																						
4	14	485	DS-EP44	-	D5LAU01	D5LAU02	-	DS-CB41	DS-CF41	-	-	-	-	DS-CU41	80										
		635	DS-EP45																						
5 (SSN)	-	-	-	D5LPC41	D5LAU01	D5LAU02	-	DS-CB41	DS-CF41	-	-	-	-	-	82										
				D5LPC41																					84
				D5LPC42																					
6	-	-	-	-	DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	86										

^{*(P2)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.




Shaft extensions ^{*(4)}		Auxiliary contacts ^{*(5)}		Safety key lock device ^{*(6)}		Spacers	Phase barriers			Terminal shrouds ^{*(7)}			Full details in page	
□	Type 1 & 2		1NO+1NC	2NO+2NC	Simple	Double	(4 units)	(1 unit)	(2 units)	(3 units)				
	L	Code ^{*(e1)}	Code	Code	Code ^{*(e1)}	Code ^{*(e1)}	Code	Code	Code	Code	Code	Code		Code
10	375	DS-EP14	D5LAU01	D5LAU02	DS-CA11	DS-CE11	DR-EL11	DR-SF11	DR-SF12	DR-SF13	DR-CU11	DR-CU12	DR-CU13	88
	536	DS-EP15												
14	345	DS-EP23	D5LAU01	D5LAU02	DS-CB21	DS-CF21	DR-EL21	DR-SF21	DR-SF22	DR-SF23	DR-CU21	DR-CU22	DR-CU23	90
	535	DS-EP24												

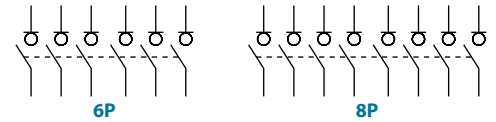
^{*(4)} A standard shaft is included with the external handle.

^{*(5)} To be used as signalling or control contacts – I_e = 16A (resistive loads) 4A (inductive loads) at 250 Vac. Whilst closing, it switches after the main contacts. Whilst opening, it switches before the main contacts.

^{*(6)} Handle interlock in OFF 0 position by means of a key, that only can be removed when the handle is unlocked. Interlocking in other positions available upon request.

^{*(7)} One set or one unit for input or output. Terminals shrouds for **SSN** only for frontal switch. These accessories aren't compatible with each other.









^{*(e1)} All these codes are related to the new handle , in case of replacements for old design handles, please consult.

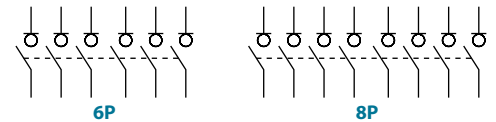


S6N S6 switches 6 & 8 poles (125 - 630A) (O - I)

Manual handle 

















Amp.	Size	Connection	6 pole (6P)	8 pole (8P)	External ^{*(1)}	Direct	Emergency external ^{*(1)}
			Code	Code			
125	1		S6N01256PS0	S6N01258PS0	DS-SA11	DS-SI11	DS-SR11
160			S6N01606PS0	S6N01608PS0			
200			S6N02006PS0	S6N02008PS0			
250			S6N02506PS0	S6N02508PS0			
315			S6N03156PS0	S6N03158PS0			
400			S6N04006PDS0	S6N04008PDS0			
500	2		S6N05006PRO	S6N05008PRO	DS-LA21	DS-LI21	DS-LR21
630			S6N06306PS0	S6N06308PS0			



S5M S5N S5 switches 6 & 8 poles (125 - 2000A) (O - I)


Manual handle 

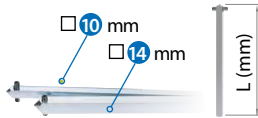


Amp.	Size	Connection	6 pole (6P)	8 pole (8P)	External ^{*(1)}	Direct	Emergency external ^{*(1)}
			Code	Code			
125	0		S5M01256PS0	S5M01258PS0	DS-LA01	DS-SI01	DS-LR01
160			S5M01606PS0	S5M01608PS0			
200			S5M02006PS0	S5M02008PS0			
250	1		S5M02506PRO	S5M02508PRO	DS-LA12	DS-LI12	DS-LR12
315			S5M03156PRO	S5M03158PRO			
400			S5M04006PC0	S5M04008PC0			
500		2		S5M05006PRO			
630			S5M06306PRO	S5M06308PRO			
800	3		S5M08006PRO	S5M08008PRO	DS-LA41	DS-LI41	DS-LR41
1000			S5M10006PC0	S5M10008PC0			
1250			S5N12506PS0	S5N12508PS0			
1600	4 (S5N)		S5N16006PS0	S5N16008PS0	DS-LA41	DS-LI41	DS-LR41
1800			S5N18006PS0	S5N18008PS0			
2000			S5N20006PDS0	S5N20008PDS0			

For high performance range (800Vac), please consult the corresponding full details.

^{*(1)} Padlockable handle in OFF 0 position. Possibility of unlocking the door in ON I position (with the use of a tool). Door interlock by a padlock in OFF 0 position.

 Please indicate in your order the switch code and the handle code, as these both products are managed separately. A standard shaft is included with the handle.



Shaft extensions ^{*(2)}				Auxiliary contacts ^{*(3)}		Safety key lock device ^{*(4)}		Full details in page
Size	□	Type 1 & 2		1NO+1NC	2NO+2NC	Simple	Double	
		L	Code ^{*(e1)}	Code	Code	Code ^{*(e1)}	Code ^{*(e1)}	
1	10	375	DS-EP14	D5LAU01	D5LAU02	DS-CA11	DS-CE11	102
		536	DS-EP15					
2	14	345	DS-EP23	D5LAU01	D5LAU02	DS-CB21	DS-CF21	104
		535	DS-EP24					



Size	Auxiliary contacts ^{*(3)}		Safety key lock device ^{*(4)}		Phase barriers ^{*(5)}		Terminal protection ^{*(5)}	Terminal shrouds ^{*(5)} (1 unit)			Terminal shrouds ^{*(5)} (2 units)	Full details in page	
	1NO+1NC	2NO+2NC	Simple	Double	6P	8P	Code	Up	Down	Up or Down	Only switches		
	Code	Code	Code ^{*(e1)}	Code ^{*(e1)}	Code	Code		6P	6P	8P			Code
0	DS-AU11	DS-AU12	DS-CAB1	DS-CEB1	DS-PB01	DS-PB02	-	-	DS-CU02	DS-CU03	DS-CU04	-	92
					DS-PB01	DS-PB02							
					DS-PB04	DS-PB03							
1	DS-AU11	DS-AU12	DS-CB12	DS-CF11	DS-PB12	DS-PB11	DS-CU12	-	-	-	-	DS-CU11	94
					DS-PB12	DS-PB11							
					DS-PB14	DS-PB13							
2	DS-AU11	DS-AU12	DS-CB21	DS-CF21	DS-PB22	DS-PB21	-	-	-	-	DS-CU21	96	
3	DS-AU11	DS-AU12	DS-CB41	DS-CF41	DS-PB32	DS-PB31	-	-	-	-	DS-CU31	98	
4 (SSN)	D5LAU01	D5LAU02	DS-CB41	DS-CF41	-	-	-	-	-	-	-	-	100

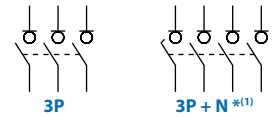
^{*(2)} A standard shaft is included with the external handle.

^{*(3)} To be used as signalling or control contacts – I_e = 16A (resistive loads) 4A (inductive loads) at 250 Vac. Whilst closing, it switches after the main contacts. Whilst opening, it switches before the main contacts.

^{*(4)} Handle interlock in OFF 0 position by means of a key, that only can be removed when the handle is unlocked. Interlocking in other positions available upon request.

^{*(5)} One set or one unit for input or output. Terminal shrouds for **SSM** or **SSN** only for frontal switch. These accessories aren't compatible with each other.

^{*(e1)} All these codes are related to the new handle , in case of replacements for old design handles, please consult.



CIS25A | **CIS25D** | S5 polyester enclosed switches ^{*(2)} IP65 ^{*(3)}
3 & 4 poles (40 - 1600A) (O - I)

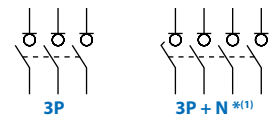


CIS25D



CIS25A

Amp.	Size	CIS25D ___ Without fuse holders		CIS23A ___ With fuse holders NH ^{*(4)}	
		3 pole (3P)	4 pole (3P + N) ^{*(1)}	3 pole (3P)	4 pole (3P + N) ^{*(1)}
		Code	Code	Code	Code
40	00	CIS25D00403PB	CIS25D00403NB	CIS25A00403PB	CIS25A00403NB
63		CIS25D00633PB	CIS25D00633NB	CIS25A00633PB	CIS25A00633NB
80		CIS25D00803PB	CIS25D00803NB	CIS25A00803PB	CIS25A00803NB
125	0	CIS25D01253PB	CIS25D01253NB	CIS25A01253PB	CIS25A01253NB
160		CIS25D01603PB	CIS25D01603NB	CIS25A01603PB	CIS25A01603NB
200		CIS25D02003PR	CIS25D02003NR	CIS25A02003PR	CIS25A02003NR
250	1	CIS25D02503PR	CIS25D02503NR	CIS25A02503PR	CIS25A02503NR
315		CIS25D03153PR	CIS25D03153NR	CIS25A03153PR	CIS25A03153NR
400		CIS25D04003PR	CIS25D04003NR	CIS25A04003PR	CIS25A04003NR
630	2	CIS25D06303PR	CIS25D06303NR	CIS25A06303PR	CIS25A06303NR
800		CIS25D08003PR	CIS25D08003NR	CIS25A08003PR	CIS25A08003NR
1000		CIS25D10003PS	CIS25D10003NS	CIS25A10003PS	CIS25A10003NS
1250	4	CIS25D12503PS	CIS25D12503NS	CIS25A12503PS	CIS25A12503NS
1600		CIS25D16003PS	CIS25D16003NS	CIS25A16003PS	CIS25A16003NS



CIS25C | **CIS25F** | S5 metal enclosed switches ^{*(2)} IP65
3 & 4 poles (40 - 1600A) (O - I)



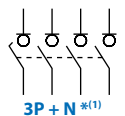
CIS25C



CIS25F

Amp	Size	CIS25C ___ Without fuse holders		CIS25F ___ With fuse holders NH ^{*(4)}	
		3 pole (3P)	4 pole (3P + N) ^{*(1)}	3 pole (3P)	4 pole (3P + N) ^{*(1)}
		Code	Code	Code	Code
40	00	CIS25C00403PB	CIS25C00403NB	CIS25F00403PB	CIS25F00403NB
63		CIS25C00633PB	CIS25C00633NB	CIS25F00633PB	CIS25F00633NB
80		CIS25C00803PB	CIS25C00803NB	CIS25F00803PB	CIS25F00803NB
125	0	CIS25C01253PB	CIS25C01253NB	CIS25F01253PB	CIS25F01253NB
160		CIS25C01603PB	CIS25C01603NB	CIS25F01603PB	CIS25F01603NB
200		CIS25C02003PR	CIS25C02003NR	CIS25F02003PR	CIS25F02003NR
250	1	CIS25C02503PR	CIS25C02503NR	CIS25F02503PR	CIS25F02503NR
315		CIS25C03153PR	CIS25C03153NR	CIS25F03153PR	CIS25F03153NR
400		CIS25C04003PC	CIS25C04003NC	-	-
400	2	CIS25C04003PR	CIS25C04003NR	CIS25F04003PR	CIS25F04003NR
630		CIS25C06303PR	CIS25C06303NR	CIS25F06303PR	CIS25F06303NR
800		CIS25C08003PR	CIS25C08003NR	CIS25F08003PR	CIS25F08003NR
1000	4	CIS25C10003PS	CIS25C10003NS	CIS25F10003PS	CIS25F10003NS
1250		CIS25C12503PS	CIS25C12503NS	CIS25F12503PS	CIS25F12503NS
1600		CIS25C16003PS	CIS25C16003NS	CIS25F16003PS	CIS25F16003NS

Under request higher currents are available, please consult.



IPTA | **IPTR** | **IPTU** | Switch disconnector for transformer secondary protection ^{*(5)} IP65
4 poles (40 - 630A) (O - I)

IPTR



IPTU

IPTA

Amp.	IPTR ___ Manual single module ^{*(4)}	IPTU ___ Manual double module ^{*(4)}	IPTA ___ Automatic single module	
	4 pole (3P + N) ^{*(1)}	4 pole (3P + N) ^{*(1)}	4 pole	
	Code	Code	Amp.	Code
160	IPTR01603NB0	IPTU01603NB0	40	IPTA00404PS0
250	IPTR02503NB0	IPTU02503NB0	50... 63	IPTA00634PS0
400	IPTR04003NB0	IPTU04003NB0	80... 100	IPTA01004PS0
630	IPTR06303NT0	IPTU06303NT0	125... 160	IPTA01604PS0
			200	IPTA02004PS0
			250	IPTA02504PS0
			320... 400	IPTA04004PS0
			630	IPTA06304PT0

Full details in page.



Size	Auxiliary contacts ^{*(6)}		Safety key lock device ^{*(7)}		Terminal shrouds ^{*(8)} (2 unidades)	Full details in page.
	1NO+1NC Code	2NO+2NC Code	Simple Code	Doble Code	Code	
00	D5LAU01	D5LAU02	DS-CAB1	DS-CEB1	-	106
0	D5LAU01	D5LAU02	DS-CAB1	DS-CEB1	-	108
1	D5LAU01	D5LAU02	DS-CA11	DS-CE11	DS-CU11	110
2	D5LAU01	D5LAU02	DS-CB21	DS-CF21	DS-CU21	112
3	D5LAU01	D5LAU02	DS-CB31	DS-CF31	DS-CU31	114
4	D5LAU01	D5LAU02	DS-CB41	DS-CF41	DS-CU41	116



Size	Auxiliary contacts ^{*(6)}		Safety key lock device ^{*(7)}		Terminal shrouds ^{*(8)} (2 unidades)	Full details in page.
	1NO+1NC Code	2NO+2NC Code	Simple Code	Doble Code	Code	
00	D5LAU01	D5LAU02	DS-CAB1	DS-CEB1	-	106
0	D5LAU01	D5LAU02	DS-CAB1	DS-CEB1	-	108
1	D5LAU01	D5LAU02	DS-CA11	DS-CE11	DS-CU11	110
2	D5LAU01	D5LAU02	DS-CB21	DS-CF21	DS-CU21	112
3	D5LAU01	D5LAU02	DS-CB31	DS-CF31	DS-CU31	114
4	D5LAU01	D5LAU02	DS-CB41	DS-CF41	DS-CU41	116

^{*(1)} Neutral pole early make-late break - Versions 4P with "simultaneous contacts" are also available, please consult.

^{*(2)} Padlockable handle in OFF 0 position. Possibility of unlocking the door in ON I position (with the use of a tool). Door interlock by a padlock in OFF 0 position.

^{*(3)} CIS25A size 4 - IP43.

^{*(4)} Fuses are not supplied, please consult.

^{*(5)} All with control for pole drive.

^{*(6)} To be used as signalling or control contacts - I_e = 16A (resistive loads) 4A (inductive loads) at 250 Vac. Whilst closing, it switches after the main contacts. Whilst opening, it switches before the main contacts.

^{*(7)} Handle interlock in OFF 0 position by means of a key, that only can be removed when the handle is unlocked.

^{*(8)} One set for input or output in enclosures without fuse bases. With fuse bases in the input only.

S5 AC Switch - disconnecter base mounting 2P - 3P - 3P+N

Size 00

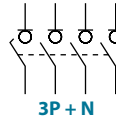
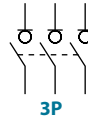
A 40|63|80



series
S5



	CODE-40A	CODE-63A	CODE-80A
2P	S5-00402PB0	S5-00632PB0	S5-00802PB0
3P	S5-00403PB0	S5-00633PB0	S5-00803PB0
3P + N	S5-00403NB0	S5-00633NB0	S5-00803NB0



Technical information

According to IEC 60947-3



tests:

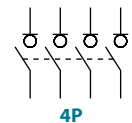


				40	63	80
Rated thermal current in ambient at	Ith	40 °C	A	50	63	80
		50 °C	A	50	63	80
		60 °C	A	40	63	64
Rated insulation voltage	Ui	V	800	800	800	
Rated impulse withstand voltage	Uimp	kV	8	8	8	
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	Ie	Ue 400V AC21A	A	50	63	80
		Ue 400V AC22A	A	50	63	63
		Ue 400V AC23A	A	50	50	50
Rated breaking capacity	400V AC23	A	400	400	400	
Rated making capacity	400V AC23	A	500	500	500	

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

			40	63	80
Short - circuit behaviour					
Rated short-circuit making capacity ^{*(2)}	Icm	kA (peak)	5	5	5
Rated short-time withstand current (1sec.)	Icw	kA rms	3	3	3
Mechanical features					
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		10000	10000	10000
Maximum weight	Kg		0,4	0,4	0,4



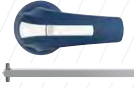
Also available 4P switch - disconnectors
under request, please consult

Accessories



» Direct handle

CODE DS-SI01



» External handle included shaft*(e1)

IP65
CODE DS-SA01



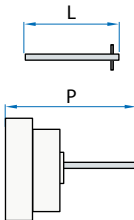
» External handle without shaft

IP65
CODE DS-SA03



» Emergency external handle included shaft*(e1)

IP65
CODE DS-SR01



» Shafts

Standard shaft included *(e1)

L (mm)	P (mm)
177	85... 195,5

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
250	85... 278	DS-EP04

Type 2		
L (mm)	P (mm)	CODE
387	85... 415	DS-EP05



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

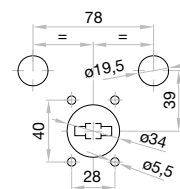
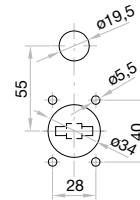


» Safety key lock device

Simple CODE DS-CAB1
Double CODE DS-CEB1

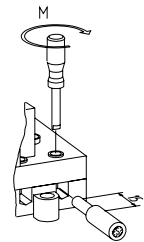
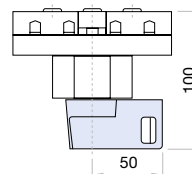
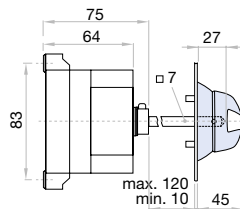
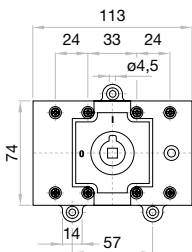
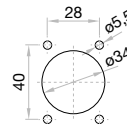
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
Simple Double



Dimensions (mm)

Door drilling for external handle



S max (Cu)	M
mm ²	Nxm
25	2

S5 AC Switch - disconnecter base mounting 2P - 3P - 3P+N

Size 0

A 125|160|200|250



series
S5



CODE - 125A



CODE - 160A



CODE - 125A



CODE - 160A

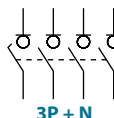
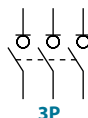


CODE - 200A



CODE - 250A

2P	S5-01252PB0	S5-01602PB0	S5-01252PS0	S5-01602PS0	S5-02002PS0	S5-02502PD0
3P	S5-01253PB0	S5-01603PB0	S5-01253PS0	S5-01603PS0	S5-02003PS0	S5-02503PD0
3P + N	S5-01253NB0	S5-01603NB0	S5-01253NS0	S5-01603NS0	S5-02003NS0	S5-02503ND0



Technical information

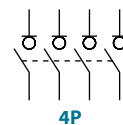
According to IEC 60947-3



			125	160	200	250
Rated thermal current in ambient at	Ith	40 °C	A 125	160	200	250
		50 °C	A 125	160	200	250
		60 °C	A 125	160	200	200
Rated insulation voltage	Ui	V	1000	1000	1000	1000
Rated impulse withstand voltage	Uimp	kV	8	8	8	8
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	Ie	Ue 400V AC21A	A 125	160	200	250
		Ue 400V AC22A	A 125	160	200	250 ^{*(3)}
		Ue 400V AC23A	A 125	160	160	160
Rated breaking capacity	400V AC23	A	1000	1280	1280	1280
Rated making capacity	400V AC23	A	1250	1600	1600	1600

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)
^{*(3)} Rated operational current AC22B

			125	160	200	250
Short - circuit behaviour						
Rated short-circuit making capacity ^{*(2)}	Icm	kA (peak)	13	13	13	13
Rated short-time withstand current (1sec.)	Icw	kA rms	7	7	7	7
Mechanical features						
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		8000	8000	8000	8000
Maximum weight 3P		Kg	0,85	0,85	0,9	0,9
Maximum weight 3P + N		Kg	1	1	1	1



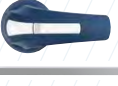
Also available 4P switch - disconnectors under request, please consult

Accessories



» Direct handle

CODE DS-SI01



» External handle included shaft*(e1)

IP65
CODE DS-SA01



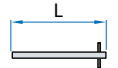
» External handle without shaft

IP65
CODE DS-SA03



» Emergency external handle included shaft*(e1)

IP65
CODE DS-SR01



» Shafts

Standard shaft included *(e1)

L (mm)	P (mm)
177	87... 197,5

Shaft extensions

Type 1		CODE
L (mm)	P (mm)	
250	87... 278	DS-EP04

Type 2		CODE
L (mm)	P (mm)	
387	87... 415	DS-EP05



» Terminal protection

CODE DS-CU01
☞ (1 unit for input or output)



» Terminal shrouds

	UP 3P (1 unit)	DOWN 3P (1 unit)	UP OR DOWN 4P (1 unit)
☞	DS-CU02	DS-CU03	DS-CU04
☞	DS-CU05	DS-CU06	DS-CU07



» DIN rail mounting

CODE DS-DN01
☞ (1 kit for 125-160A switches)



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Safety key lock device

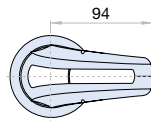
Simple CODE DS-CAB1
Double CODE DS-CEB1

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

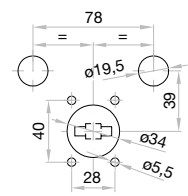
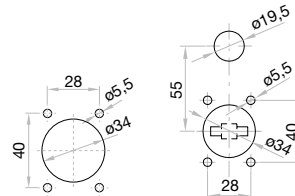
Door drilling for handle and key lock device

Simple

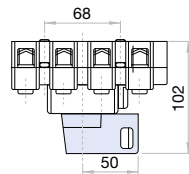
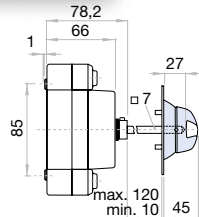
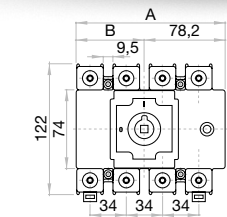
Double



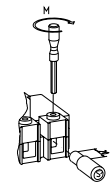
Door drilling for external handle



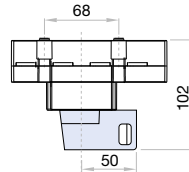
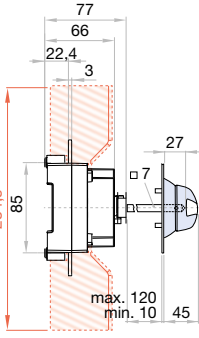
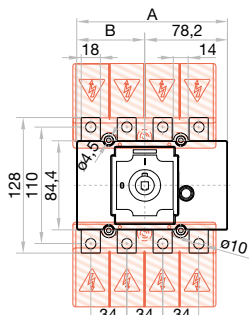
Dimensions (mm)



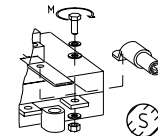
☞	A			B		
	2P	3P	4P	2P	3P	4P
125 A 160 A	131	131	140	53	53	64



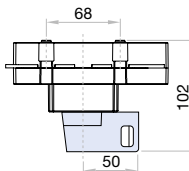
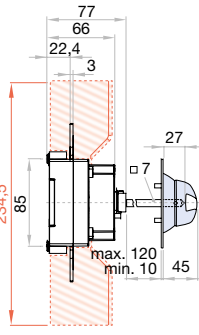
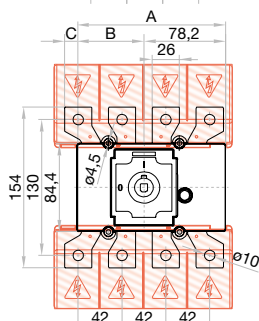
S max (Cu)	M
mm ²	Nxm
95	4



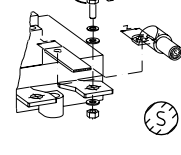
☞	A			B		
	2P	3P	4P	2P	3P	4P
125 A 160 A	131	131	142	53	53	64



S max (Cu)	H max (Cu)	L max (Cu)	T	M
mm ²	mm	mm	T	Nxm
95	5	25	M8	13



☞	A			B		C
	2P	3P	4P	2P	3P	4P
200 A 250 A	131	131	142	53	53	64, 11,8



S max (Cu)	Z max	H max (Cu)	L max (Cu)	T	M
mm ²		mm	mm	T	Nxm
120	30	5	30	M10	18

S5 AC Switch - disconnecter base mounting 2P - 3P - 3P+N

Size 1

A 250|315|400



series
S5



CODE-250A

CODE-315A

CODE-400A

2P S5-02502PRO

S5-03152PRO

S5-04002PC0

3P S5-02503PRO

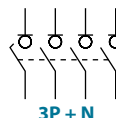
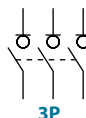
S5-03153PRO

S5-04003PC0

3P + N S5-02503NR0

S5-03153NR0

S5-04003NC0



Technical information

According to IEC 60947-3



tests:

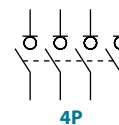


				250	315	400
Rated thermal current in ambient at	I _{th}	40 °C	A	250	315	400
		50 °C	A	250	315	400
		60 °C	A	250	315	320
Rated insulation voltage	U _i	V	1000	1000	1000	
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	I _e	Ue 400V AC21A	A	250	315	400
		Ue 400V AC22A	A	250	315	400
		Ue 400V AC23A	A	250	315	400
Rated breaking capacity	400V AC23	A	2000	2520	3200	
Rated making capacity	400V AC23	A	2500	3150	4000	

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

				250	315	400
Short - circuit behaviour						
Rated short-circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		20	20	20
Rated short-time withstand current (1sec.)	I _{cw}	kA rms		12	12	12
Mechanical features						
Number of mechanical operations (according to the standards, for other values please consult)	Cycles			8000	8000	5000
Maximum weight 3P		Kg		1,7	1,7	1,9
Maximum weight 3P + N		Kg		1,9	1,9	2,1



Also available 4P switch - disconnectors under request, please consult



Accessories



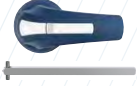
» Direct handle

CODE DS-SI11



» Terminal protection

CODE DS-CU12
 (1 unit for input or output)



» External handle included shaft^{*(e1)}

IP65
 CODE DS-SA11



» Terminal shrouds

CODE DS-CU11
 (1 kit for input or output)



» External handle without shaft

IP65
 CODE DS-SA14



» Auxiliary contacts

1NO+1NC CODE D5LAU01
 2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.



» Emergency external handle included shaft^{*(e1)}

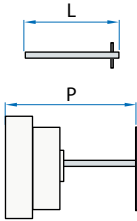
IP65
 CODE DS-SR11



» Safety key lock device

Simple CODE DS-CA11
 Double CODE DS-CE11

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



» Shafts

Standard shaft included ^{*(e1)}

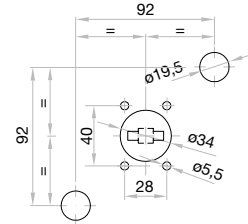
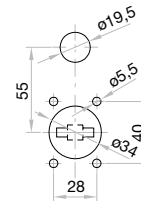
L (mm)	P (mm)
227	103... 256

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
375	103... 415	DS-EP14

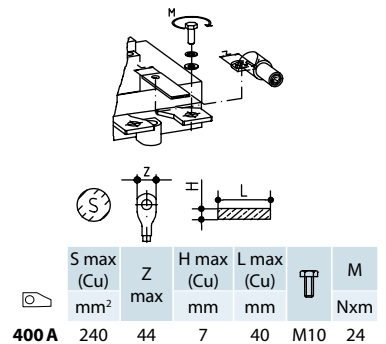
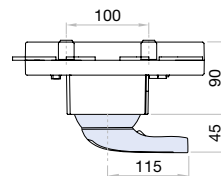
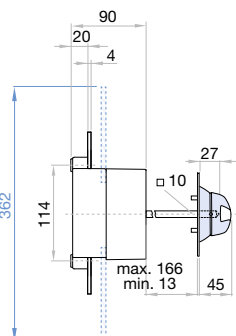
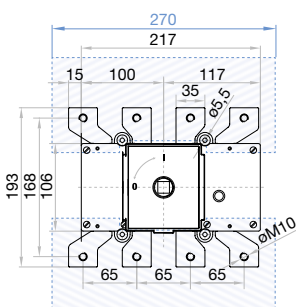
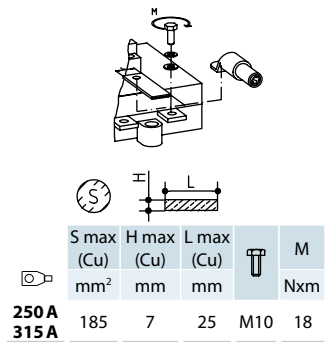
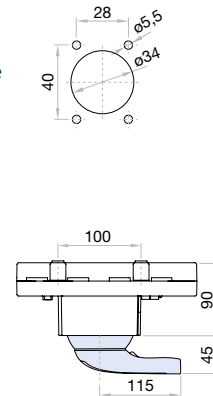
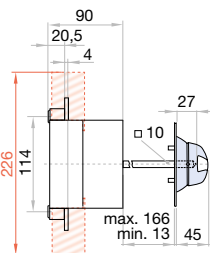
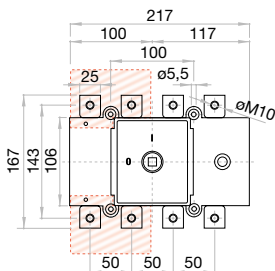
Type 2		
L (mm)	P (mm)	CODE
536	103... 576	DS-EP15

Door drilling for handle and key lock device
 Simple Double



Dimensions (mm)

Door drilling for external handle



S5 AC Switch - disconnecter base mounting 3P - 3P+N

Size 2

A 500|630|800



series
S5



CODE-500A



CODE-630A

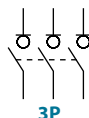


CODE-800A

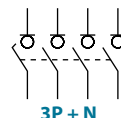
3P
3P + N
S5-05003PRO
S5-05003NR0

S5-06303PRO
S5-06303NR0

S5-08003PC0
S5-08003NC0



3P



3P + N

Technical information

According to IEC 60947-3



consult



tests:

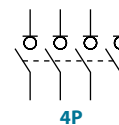


				500	630	800
Rated thermal current in ambient at	Ith	40 °C	A	500	630	800
		50 °C	A	500	630	720
		60 °C	A	500	630	640
Rated insulation voltage	Ui	V	1000	1000	1000	
Rated impulse withstand voltage	Uimp	kV	12	12	12	
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	Ie	Ue 400V AC21A	A	500	630	800
		Ue 400V AC22A	A	500	630	800
		Ue 400V AC23A	A	500	630	800
Rated breaking capacity	400V AC23	A	4000	5000	6400	
Rated making capacity	400V AC23	A	5000	6300	8000	

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(3)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

				500	630	800
Short - circuit behaviour						
Rated short-circuit making capacity ^{*(2)}	Icm	kA (peak)		26	26	26
Rated short-time withstand current (1sec.)	Icw	kA rms		16	16	16
Mechanical features						
Number of mechanical operations (according to the standards, for other values please consult)	Cycles			5000	5000	3000
Maximum weight 3P		Kg		4,2	4,2	4,2
Maximum weight 3P + N		Kg		4,5	4,5	4,5



4P

Also available 4P switch - disconnectors under request, please consult

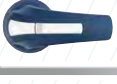


Accessories



» Direct handle

CODE DS-LI21



» External handle included shaft ^{*(e1)}

IP65
CODE DS-LA21



» External handle without shaft

IP65
CODE DS-LA24



» Emergency external handle included shaft ^{*(e1)}

IP65
CODE DS-LR21



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
195	134... 240

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
345	134... 400	DS-EP23

Type 2		
L (mm)	P (mm)	CODE
535	134... 560	DS-EP24



» Terminal protection

CODE DS-CU22
(1 unit for input or output)



» Terminal shrouds

CODE DS-CU21
(1 kit for input or output)



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Safety key lock device

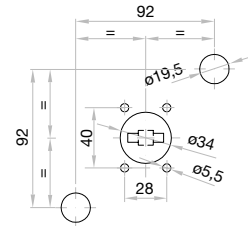
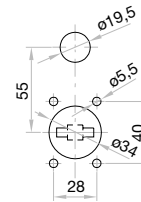
Simple CODE DS-CB21
Double CODE DS-CF21

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device

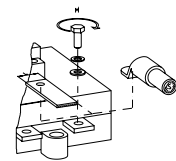
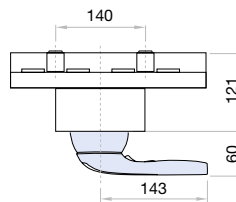
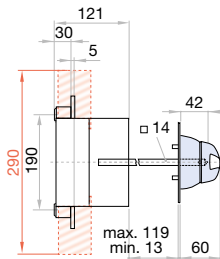
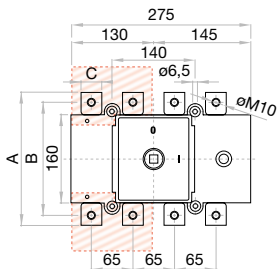
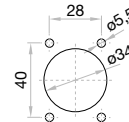
Simple

Double



Dimensions (mm)

Door drilling for external handle



	A	B	C
500 A	220	190	25
630 A	235	205	30
800 A			

S max (Cu)	H max (Cu)	L max (Cu)	T	M
mm ²	mm	mm		Nxm
2x185	6	40	M10	24
2x240	2x5	40		
		50		

S5 AC Switch - disconnecter base mounting 3P - 3P+N

Size 3

A 800|1000|1250|2000



series
S5



CODE-800A

3P S5-08003PRO

3P + N S5-08003NR0



CODE-1000A

S5-10003PC0

S5-10003NC0



CODE-1250A

S5-12503PC0

S5-12503NC0



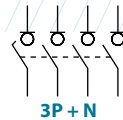
CODE-2000A

S5-20003PC0

S5-20003NC0



3P



3P + N

Technical information

According to IEC 60947-3



consult



consult

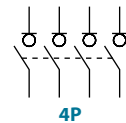
tests:



		800 1000 1250 2000					
Rated thermal current in ambient at	lth	40 °C	A	800	1000	1250	2000
		50 °C	A	800	1000	1125	1800
		60 °C	A	800	900	900	1600
Rated insulation voltage	Ui	V		1000	1000	1000	1000
Rated impulse withstand voltage	Uimp	kV		12	12	12	12
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	Ie	Ue 400V AC21A	A	800	1000	1250	2000
		Ue 400V AC22A	A	800	1000	1250	2000 ^{*(3)}
		Ue 400V AC23A	A	800	1000	1000	-
Rated breaking capacity	400V AC23	A	6400	8000	8000	6000	
Rated making capacity	400V AC23	A	8000	10000	10000	6000	

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)
^{*(3)} AC22B

		800 1000 1250 2000				
Short - circuit behaviour						
Rated short-circuit making capacity ^{*(2)}	Icm	kA (peak)	60	60	60	80
Rated short-time withstand current (1sec.)	Icw	kA rms	25	25	25	38
Mechanical features						
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		3000	3000	3000	3000
Maximum weight 3P	Kg		7	7	7	18,5
Maximum weight 3P+N	Kg		7,6	7,6	7,6	20



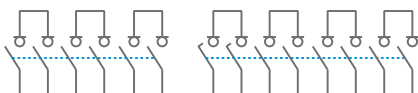
4P

Also available 4P switch - disconnectors under request, please consult

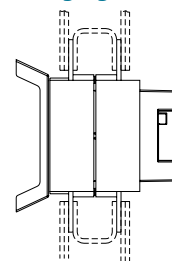
Connection diagram

Connection diagram
between front & rear

BI-1 S5-20003PC0
S5-20003NC0



Bridging links ^{*(P2)}



Accessories



» Direct handle

CODE DS-LI31
CODE DS-LI41 (2000 A)



» External handle included shaft ^{*(e1)}

IP65
CODE DS-LA31
CODE DS-LA41 (2000 A)



» External handle without shaft

IP65
CODE DS-LA33 (for 800-1000-1250A)



» Emergency external handle included shaft ^{*(e1)}

IP65
CODE DS-LR31
CODE DS-LR41 (2000 A)



» Terminal shrouds

CODE DS-CU31
(1 kit for input or output, 2000 A on frontal side only)



» Bridging links ^{*(P2)}

BI-1 2000 A CODE x2 D5LPC32 (4 units)

^{*(P2)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02
1NO+1NC CODE DS-AU11 (2000 A)
2NO+2NC CODE DS-AU12 (2000 A)

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

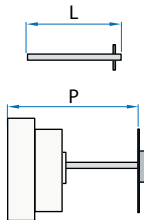


» Safety key lock device

Simple CODE DS-CB31
Double CODE DS-CF31

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
Simple Double



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
186	145... 242
(2000 A) 239	145... 242

Shaft extensions

Type 1

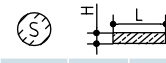
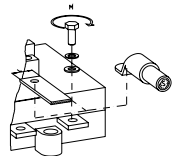
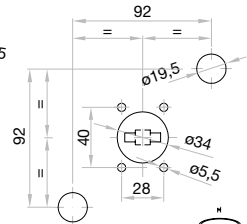
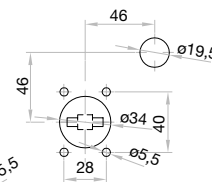
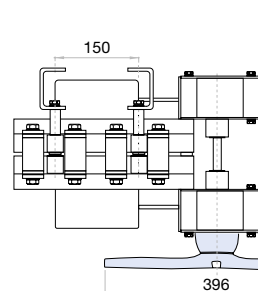
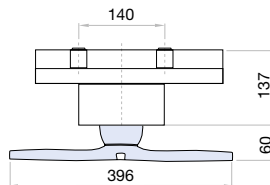
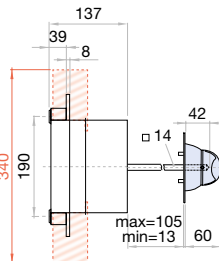
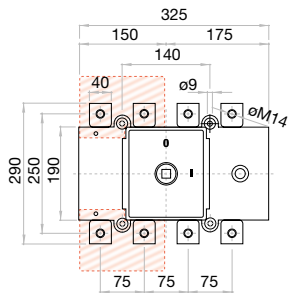
L (mm)	P (mm)	CODE
345	145... 411	DS-EP23
(2000 A) 485	145... 244	DS-EP44

Type 2

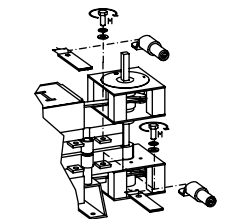
L (mm)	P (mm)	CODE
535	145... 600	DS-EP24
(2000 A) 635	145... 600	DS-EP45

Dimensions (mm)

Door drilling for external handle



S max (Cu)	H max (Cu)	L max (Cu)	M	M
mm ²	mm	mm	T	Nxm
800 A	2x240			
1000 A	2x300	2x10	50	M14 45
1250 A	2x300			



S max (Cu)	H max (Cu)	L max (Cu)	M	M
mm ²	mm	mm	T	Nxm
2000 A	4x300	4x10	50	M14 45

S5 AC Switch - disconnecter base mounting 3P - 3P+N

Size 4

A 1000|1250|1600|1800|2000



CODE-1000A



CODE-1250A



CODE-1600A



CODE-1800A

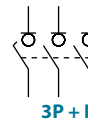
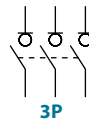
3P
S5-10003PS0
3P + N
S5-10003NS0

S5-12503PS0
S5-12503NS0

S5-16003PS0
S5-16003NS0

S5-18003PS0
S5-18003NS0

S5-20003PS0
S5-20003NS0



Technical information

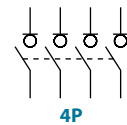
According to IEC 60947-3



		1000 1250 1600 1800 2000						
Rated thermal current in ambient at	Ith	40 °C	A	1000	1250	1600	1800	2000
		50 °C	A	1000	1250	1600	1800	1800
		60 °C	A	1000	1000	1600	1600	1600
Rated insulation voltage	Ui	V	1000	1000	1000	1000	1000	
Rated impulse withstand voltage	Uimp	kV	12	12	12	12	12	
AC rated operational current ^{*(1)} (Rated operational frequency 50 / 60 Hz)	Ie	Ue 400V AC21A	A	1000	1250	1600	1800	2000
		Ue 400V AC22A	A	1000	1250	1600	1800	2000
	Ue 400V AC23B	A	-	-	1600	1600	1600	
		Ue 800V AC21B	A	-	-	-	1600	-
Rated breaking capacity	400V AC23	A	3000	3750	4800	5400	6000	
Rated making capacity	400V AC23	A	3000	3750	4800	5400	6000	

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

		1000 1250 1600 1800 2000					
Short - circuit behaviour							
Rated short-circuit making capacity ^{*(2)}	Icm	kA (peak)	60	60	75	75	75
Rated short-time withstand current (1sec.)	Icw	kA rms	25	25	50	50	50
Mechanical features							
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000	3000	3000	3000	3000	
Maximum weight 3P	Kg	18,5	18,5	18,5	18,5	18,5	
Maximum weight 3P + N	Kg	20,8	20,8	20,8	20,8	20,8	



Also available 4P switch - disconnectors under request, please consult



Accessories



» Direct handle

CODE DS-LI41



» External handle included shaft*(e1)

IP65
CODE DS-LA41



» External handle without shaft

IP65
CODE DS-LA43



» Emergency external handle included shaft*(e1)

IP65
CODE DS-LR41



» Terminal shrouds

CODE DS-CU41
(1 kit for input or output)



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

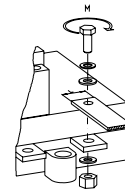
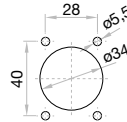
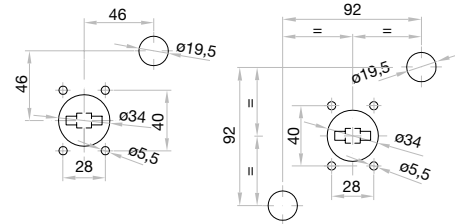


» Safety key lock device

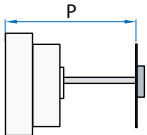
Simple CODE DS-CB41
Double CODE DS-CF41

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
Simple Double



» Shafts



Standard shaft included *(e1)

L (mm)	P (mm)
239	235... 400

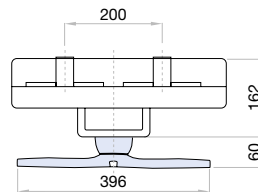
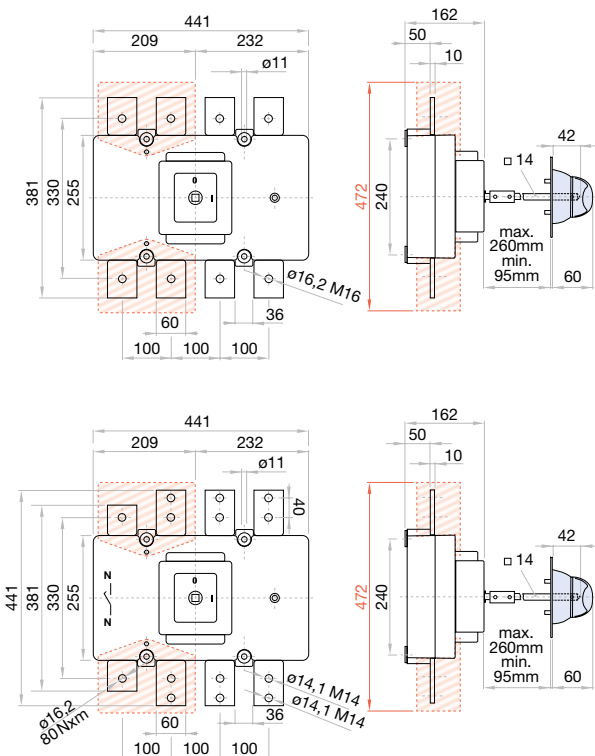
Shaft extensions

Type 1
L (mm) P (mm) CODE
485 235... 686 DS-EP44

Type 2
L (mm) P (mm) CODE
635 235... 836 DS-EP45

Dimensions (mm)

Door drilling for external handle



	H max (Cu)	L max (Cu)	M	M
	mm	mm	T	Nxm
1000 A	2x10	80	M16	80
1250 A	2x10	80	M16	80

	H max (Cu)	L max (Cu)	M	M
	mm	mm	T	Nxm
1600 A	2x10	80	M14	55
1800 A	2x10	80	M14	55
2000 A	2x10	80	M14	55

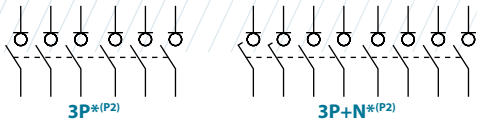
S₅N AC Switch - disconnecter base mounting 3P - 3P+N

series
S5N

Size 5
A 2000|2500|3150



	CODE - 2000A	CODE - 2500A	CODE - 3150A
3P	S5N20003PS0	S5N25003PS0	S5N31503PS0
3P+N	S5N20003NS0	S5N25003NS0	S5N31503NS0



Technical information



According to IEC 60947-3

			2000	2500	3150
Rated thermal current in ambient at	I _{th}	40 °C	A 2000	A 2500	A 3150
		50 °C	A 2000	A 2500	A 2835
		60 °C	A 2000	A 2500	A 2520
Rated insulation voltage	U _i	V 1000	V 1000	V 1000	
Rated impulse withstand voltage	U _{imp}	kV 12	kV 12	kV 12	
AC rated operational current ^{*(1)}	I _e	U _e 400V AC21B	A 2000	A 2500	A 3150
(Rated operational frequency 50 / 60 Hz)		U _e 400V AC22B	A 2000	A 2500	A 2500

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

				2000	2500	3150
Rated breaking capacity	400V	AC21	A	-	-	4725
	400V	AC22	A	6000	7500	-
Rated making capacity	400V	AC21	A	-	-	4725
	400V	AC22	A	6000	7500	-

Short - circuit behaviour

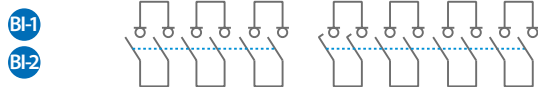
			2000	2500	3150
Rated short-circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	60	60	60
Rated short-time withstand current (1sec.)	I _{cw}	kA rms	50	50	50

Mechanical features

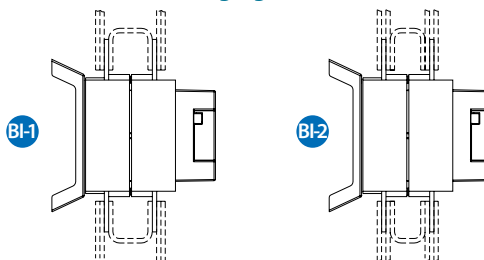
			Cycles	600	600	600
Number of mechanical operations (according to the standards, for other values please consult)						
Maximum weight 3P (without bridging links)			Kg	42,9	42,9	42,9
Maximum weight 3P+N (without bridging links)			Kg	47,3	47,3	47,3

Connection diagram

Connection diagram
between front & rear



Bridging links ^{*(P2)}



Accessories



» Direct handle

CODE DS-LI41



» External handle included shaft*(e1)

IP65
CODE DS-LA41



» External handle without shaft

IP65
CODE DS-LA43



» Emergency external handle included shaft*(e1)

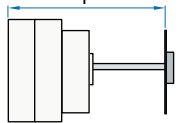
IP65
CODE DS-LR41



» Shafts

Standard shaft included *(e1)

L (mm)	P (mm)
239	458 ... 618



» Bridging links*(P2)

- BI-1 2000 A CODE x2 D5LPC41 (4 units)
2500 A
- BI-2 3150 A CODE x2 D5LPC42 (4 units)
CONSULT CODE

*(P2) To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.



» Auxiliary contacts

- 1NO+1NC CODE DS-LA101
- 2NO+2NC CODE DS-LA102

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

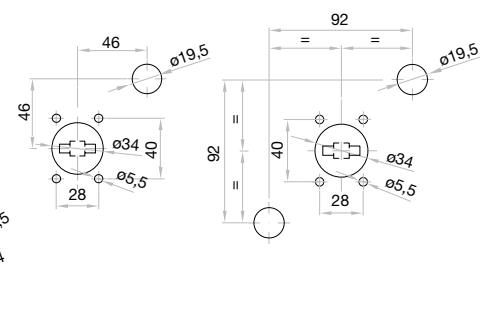


» Safety key lock devices

- Simple CODE DS-CB41
- Double CODE DS-CF41

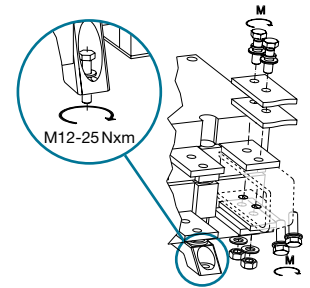
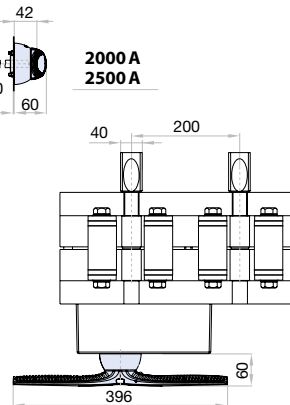
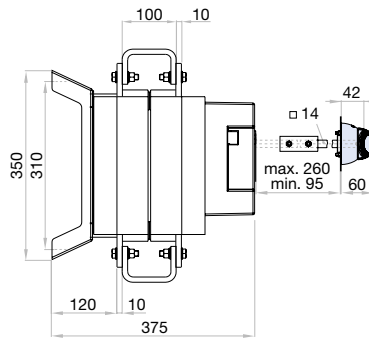
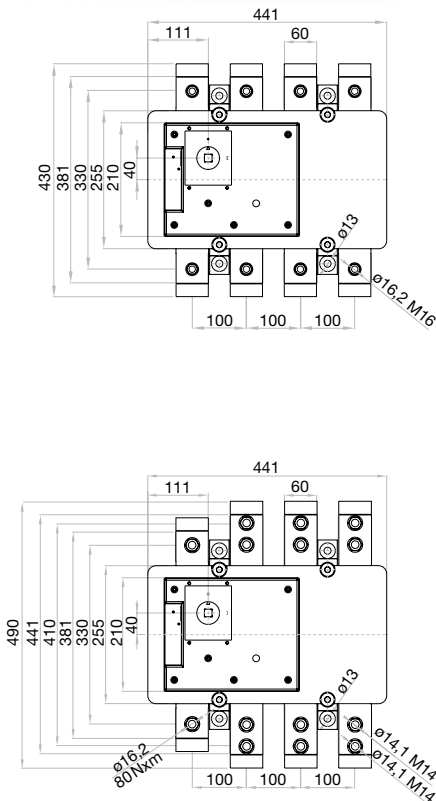
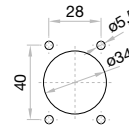
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device



Dimensions (mm)

Door drilling for external handle



	H max (Cu) mm	L max (Cu) mm	M	M
2000 A 2500 A	2x10	80	M16	80
3150 A	2x10	80	M14	55

S5N AC Switch - disconnecter base mounting 3P - 3P+N

Size 5

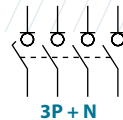
A 2000|2500|3150



series
S5N



	CODE-2000A	CODE-2500A	CODE-3150A
3P	S5N20003PP0	S5N25003PP0	S5N31503PP0
3P + N	S5N20003NP0	S5N25003NP0	S5N31503NP0



Technical information



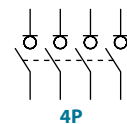
According to IEC 60947-3

				2000	2500	3150
Rated thermal current in ambient at	Ith	40 °C	A	2000	2500	3150
		50 °C	A	2000	2500	2835
		60 °C	A	2000	2500	2520
Rated insulation voltage	Ui	V	1000	1000	1000	
Rated impulse withstand voltage	Uimp	kV	12	12	12	
AC rated operational current ^{*(1)}	Ie	Ue 400V AC21B	A	2000	2500	3150
		Ue 400V AC22B	A	2000	2500	2500

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

				2000	2500	3150
Rated breaking capacity		400V AC21	A	-	-	4725
		400V AC22	A	6000	7500	-
Rated making capacity		400V AC21	A	-	-	4725
		400V AC22	A	6000	7500	-
Short - circuit behaviour						
Rated short-circuit making capacity ^{*(2)}	Icm	kA (peak)		60	60	60
Rated short-time withstand current (1sec.)	Icw	kA rms		50	50	50
Mechanical features						
Number of mechanical operations (according to the standards, for other values please consult)			Cycles	600	600	600
Maximum weight 3P (without bridging links)			Kg	42,9	42,9	42,9
Maximum weight 3P+N (without bridging links)			Kg	47,3	47,3	47,3



Also available 4P switch - disconnecter under request, please consult



Accessories



» Direct handle

CODE DS-LI41



» External handle included shaft ^{*(e1)}

IP65

CODE DS-LA41



» External handle without shaft

IP65

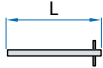
CODE DS-LA43



» Emergency external handle included shaft ^{*(e1)}

IP65

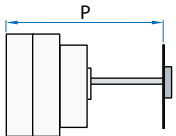
CODE DS-LR41



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
239	458 ... 618



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

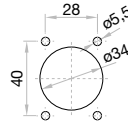
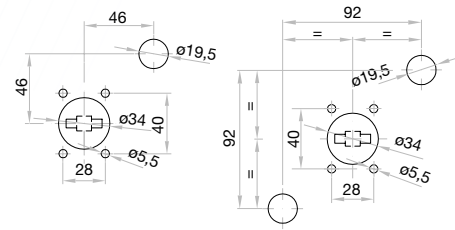


» Safety key lock device

Simple CODE DS-CB41
Double CODE DS-CF41

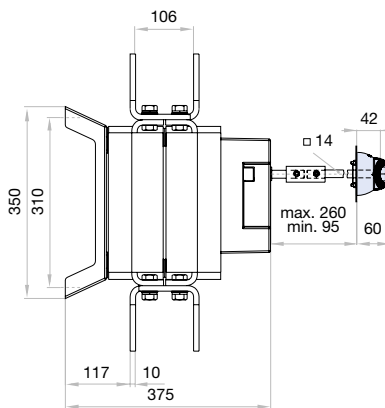
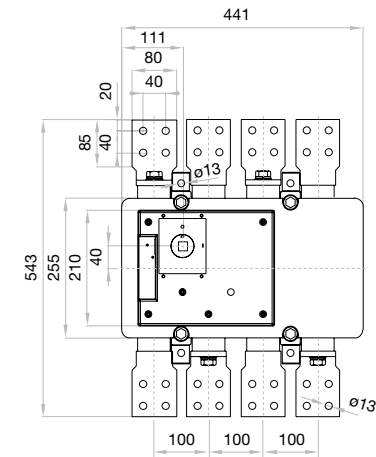
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
Simple Double

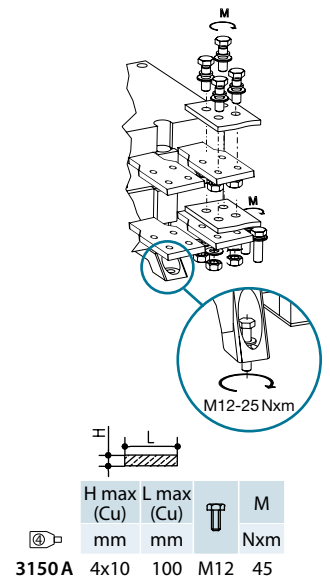
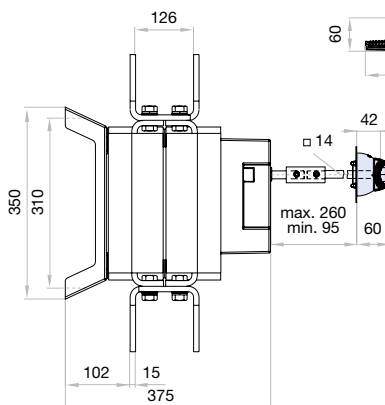
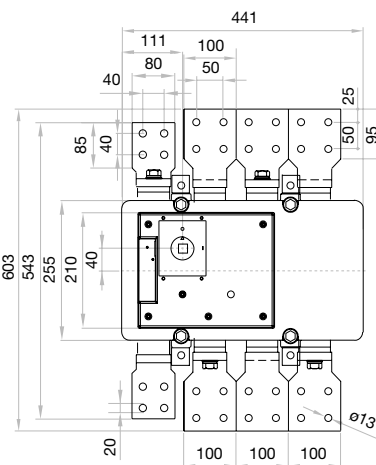


Dimensions (mm)

Door drilling for external handle



	H max (Cu) mm	L max (Cu) mm	M	M
2000 A	4x10	80	M12	45
2500 A				



	H max (Cu) mm	L max (Cu) mm	M	M
3150 A	4x10	100	M12	45

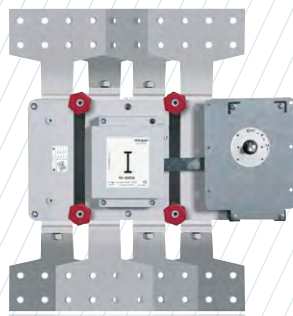
S5 AC Switch - disconnecter base mounting 3P - 3P+N

Size 6

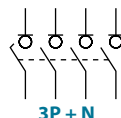
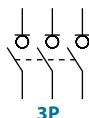
A 4000|5000|6300



series
S5



	CODE-4000A	CODE-5000A	CODE-6300A
3P	S5-40003PP0	S5-50003PP0	S5-63003PP0
3P + N	S5-40003NP0	S5-50003NP0	S5-63003NP0



Technical information



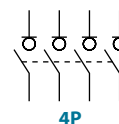
According to IEC 60947-3

				4000	5000	6300
Rated thermal current in ambient at	Ith	40 °C	A	4000	5000	6300
		50 °C	A	4000	5000	5670
		60 °C	A	3500	4400	5040
Rated insulation voltage	Ui	V	1000	1000	1000	
Rated impulse withstand voltage	Uimp	kV	12	12	12	
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	Ie	Ue 400V AC21A	A	4000	5000	6300
		Ue 400V AC22A	A	3500	4000	4000
		Ue 400V AC23A	A	2000	2500	2500

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

				4000	5000	6300
Rated breaking capacity	400V	AC21	A	6000	7500	9450
Rated making capacity	400V	AC21	A	6000	7500	9450
Short - circuit behaviour						
Rated short-circuit making capacity ^{*(2)}	Icm	kA (peak)		100	100	100
Rated short-time withstand current (1sec.)	Icw	kA rms		50	50	50
Mechanical features						
Number of mechanical operations (according to the standards, for other values please consult)	Cycles			2000	2000	2000
Maximum weight 3P		Kg		100	130	130
Maximum weight 3P + N		Kg		110	140	140



Also available 4P switch - disconnectors under request, please consult

Accessories



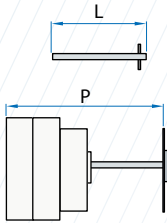
» External handle included shaft^{*(e1)}
 (Slider bar)
 CODE DS-EN61



» Auxiliary contacts

1NO+1NC CODE DS-AU11
 2NO+2NC CODE DS-AU12

I_e = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.



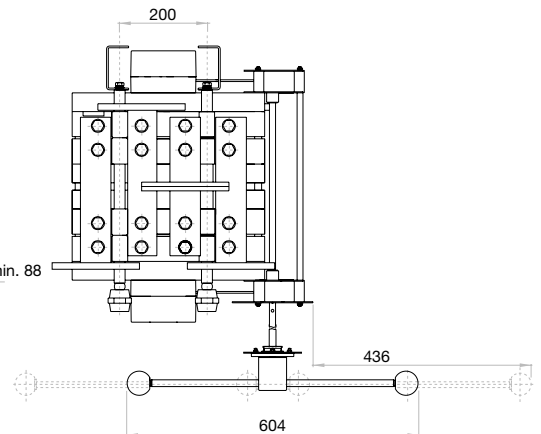
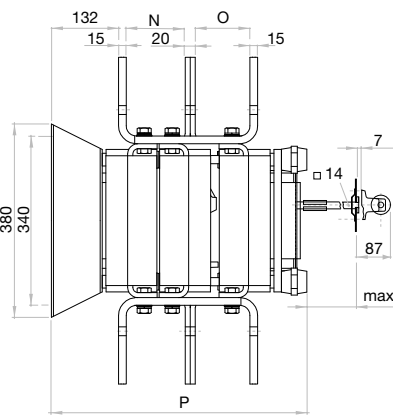
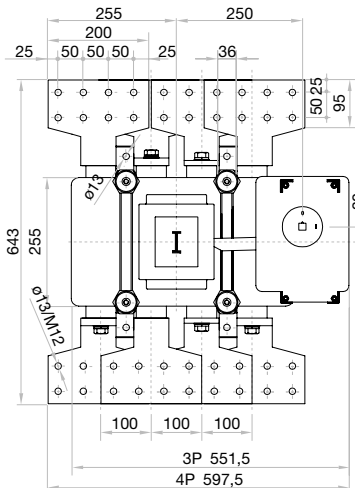
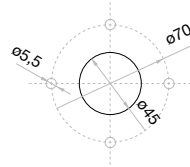
» Shafts

Standard shaft included ^{*(e1)}

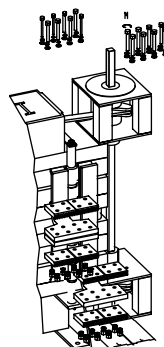
	L (mm)	P (mm)
4000 A	333	578... 728
5000 A	333	720... 870
6300 A	333	720... 870

Dimensions (mm)

Door drilling for external handle



	N	O	P	ø
4000 A	116	107,5	502,5	13
5000 A	164,5	164,5	632	
6300 A				



	H max (Cu)	L max (Cu)	M
4000 A	4x10		M12 45
5000 A	6x10	100	M12 45
6300 A			

S6 AC Switch - disconnecter base mounting 2P - 3P - 3P+N

Size 1

A 200|250|315|400



series
S6



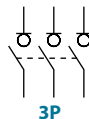
CODE - 2P

200A	S6-02002PS0
250A	S6-02502PS0
315A	S6-03152PS0
400A	S6-04002PD0



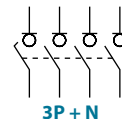
CODE - 3P

200A	S6-02003PS0
250A	S6-02503PS0
315A	S6-03153PS0
400A	S6-04003PD0



CODE - 3P + N

200A	S6-02003NS0
250A	S6-02503NS0
315A	S6-03153NS0
400A	S6-04003ND0



Technical information

According to IEC 60947-3



tests:



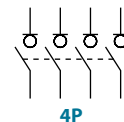
		200 250 315 400					
Rated thermal current in ambient at	lth 40° C	A	200	250	315	400	
	50° C	A	200	250	315	400	
	60° C	A	200	250	315	400	
Rated insulation voltage	Ui	V	1000	1000	1000	1000	
Rated impulse withstand voltage	Uimp	kV	12	12	12	12	
AC Rated operational current ^{*(1)}	Ie Triphasic	Ue 400V AC23A	A	200	250	315	400
		Ue 690V AC21A	A	200	250	315	400
		Ue 800V AC21B	A	-	-	-	250 ^{*(3)}
Rated breaking capacity	400V, cos φ=0,35-0,45	A	1600	2000	2520	3200	
Rated making capacity	400V, cos φ=0,45	A	2000	2500	3150	4000	

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

^{*(3)} 3P/3P+N

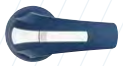
		200 250 315 400			
Short - circuit behaviour					
Rated short-circuit making capacity ^{*(2)}	Icm kA (peak)	20	20	20	20
Rated short-time withstand current (1sec)	Icw kA rms	12	12	12	12
Mechanical features					
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	8000	8000	8000	8000
Maximum weight 2P	kg	1,65	1,65	1,65	1,68
Maximum weight 3P	kg	2,17	2,17	2,17	2,21
Maximum weight 3P + N	kg	2,70	2,70	2,70	2,76



Also available 4P switch-disconnectors under request, please consult



Accessories



» Direct handle

CODE DS-SI11



» External handle included shaft^{*(e1)}

IP65
CODE DS-SA11



» External handle without shaft

IP65
CODE DS-SA14



» Emergency external handle included shaft^{*(e1)}

IP65
CODE DS-SR11



» Terminal shrouds

CODE DR-CU11 (1 unit)
CODE DR-CU12 (1 unit)
CODE DR-CU13 (1 unit)



» Phase barriers

CODE DR-SF11 (1 unit)
CODE DR-SF12 (2 units)
CODE DR-SF13 (3 units)



» Spacers

CODE DR-EL11 (4 units)

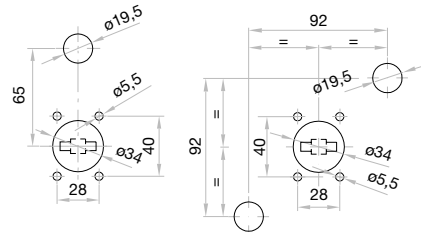


» Safety key lock device

Simple CODE DS-CA11
Double CODE DS-CE11

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
Simple Double



» Shafts

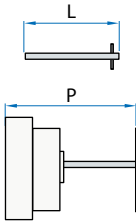
Standard shaft included ^{*(e1)}

L (mm)	P (mm)
227	103... 256

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
375	103... 415	DS-EP14

Type 2		
L (mm)	P (mm)	CODE
536	103... 576	DS-EP15



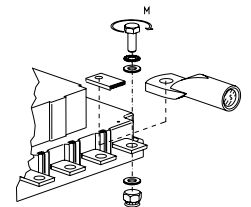
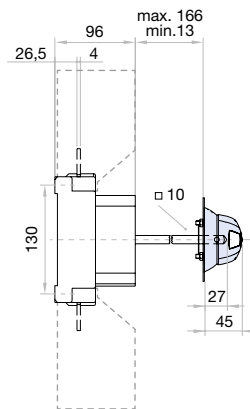
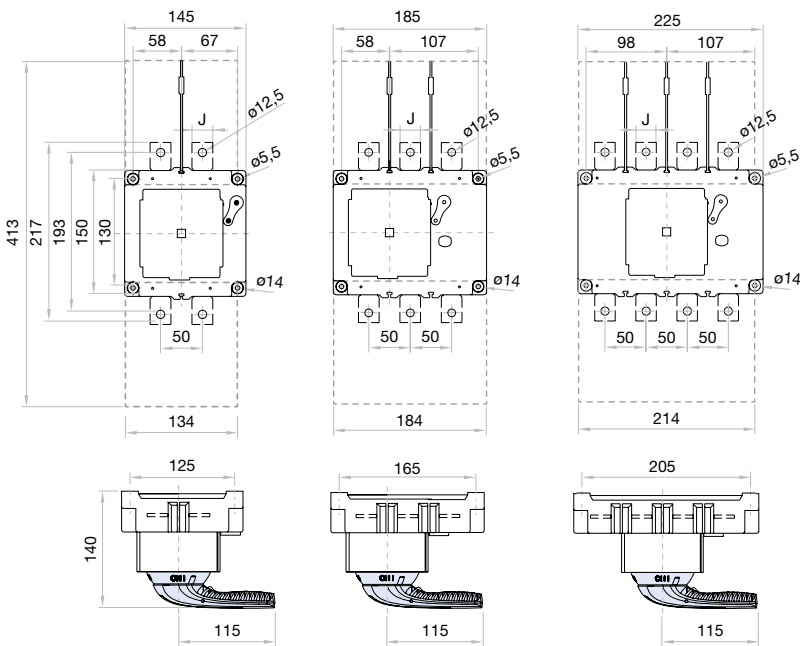
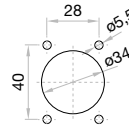
» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

Dimensions (mm)

Door drilling for external handle



	J
	mm
200 A	25
250 A	25
315 A	25
400 A	30

	S max (Cu)	H max (Cu)	L max (Cu)	T	M
	mm ²	mm	mm		Nxm
200 A	185	8	25	M12	24
250 A	185	8	25	M12	24
315 A	185	8	25	M12	24
400 A	240 ^{*(e1)}	8	30	M12	24

^{*(e1)} Using phase barriers DR-SF__ to maintain the required clearance.

S6 AC Switch - disconnecter base mounting 2P - 3P - 3P+N

series
S6

Size 2

A 500|630|800



CODE - 2P

500A S6-05002PS0
630A S6-06302PS0
800A S6-08002PDO



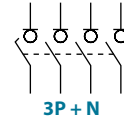
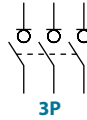
CODE - 3P

500A S6-05003PS0
630A S6-06303PS0
800A S6-08003PDO



CODE - 3P + N

500A S6-05003NS0
630A S6-06303NS0
800A S6-08003NDO



Technical information



tests:



According to IEC 60947-3

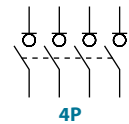
		500 630 800				
Rated thermal current in ambient at	lth 40° C	A	500	630	800	
	50° C	A	500	630	800	
	60° C	A	500	630	800	
Rated insulation voltage	Ui	V	1000	1000	1000	
Rated impulse withstand voltage	Uimp	kV	12	12	12	
AC Rated operational current ^{*(1)}	Ie Triphasic	Ue 400V AC23A	A	500	630	800
		Ue 690V AC21A	A	500	630	630
		Ue 800V AC21B	A	-	-	500 ^{*(3)}
Rated breaking capacity	400V, cos φ=0,35-0,45	A	4000	5040	6400	
Rated making capacity	400V, cos φ=0,45	A	5000	6300	8000	

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

^{*(3)} 3P/3P+N

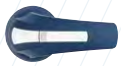
		500 630 800		
Short - circuit behaviour				
Rated short-circuit making capacity ^{*(2)}	Icm kA (peak)	26	26	26
Rated short-time withstand current (1sec)	Icw kA rms	16	16	16
Mechanical features				
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	5000	5000	5000
Maximum weight 2P	kg	3,91	3,91	3,91
Maximum weight 3P	kg	4,76	4,76	4,76
Maximum weight 3P + N	kg	5,70	5,70	5,70



Also available 4P switch-disconnectors under request, please consult



Accessories



» Direct handle

CODE DS-LI21



» External handle included shaft*(e1)

IP65
CODE DS-LA21



» External handle without shaft

IP65
CODE DS-LA24



» Emergency external handle included shaft*(e1)

IP65
CODE DS-LR21



» Terminal shrouds

CODE DR-CU21 (1 unit)
CODE DR-CU22 (1 unit)
CODE DR-CU23 (1 unit)



» Phase barriers

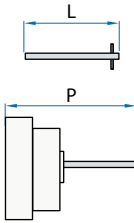
CODE DR-SF21 (1 unit)
CODE DR-SF22 (2 units)
CODE DR-SF23 (3 units)



» Spacers

CODE DR-EL21 (4 units)

» Shafts



Standard shaft included *(e1)

L (mm)	P (mm)
195	134... 240

Shaft extensions

Type 1		CODE
L (mm)	P (mm)	
345	134... 400	DS-EP23

Type 2		CODE
L (mm)	P (mm)	
535	134... 560	DS-EP24

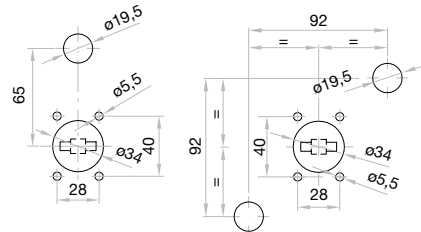


» Safety key lock device

Simple CODE DS-CB21
Double CODE DS-CF21

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device



» Auxiliary contacts

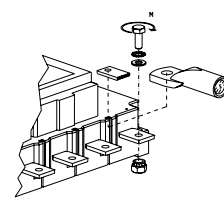
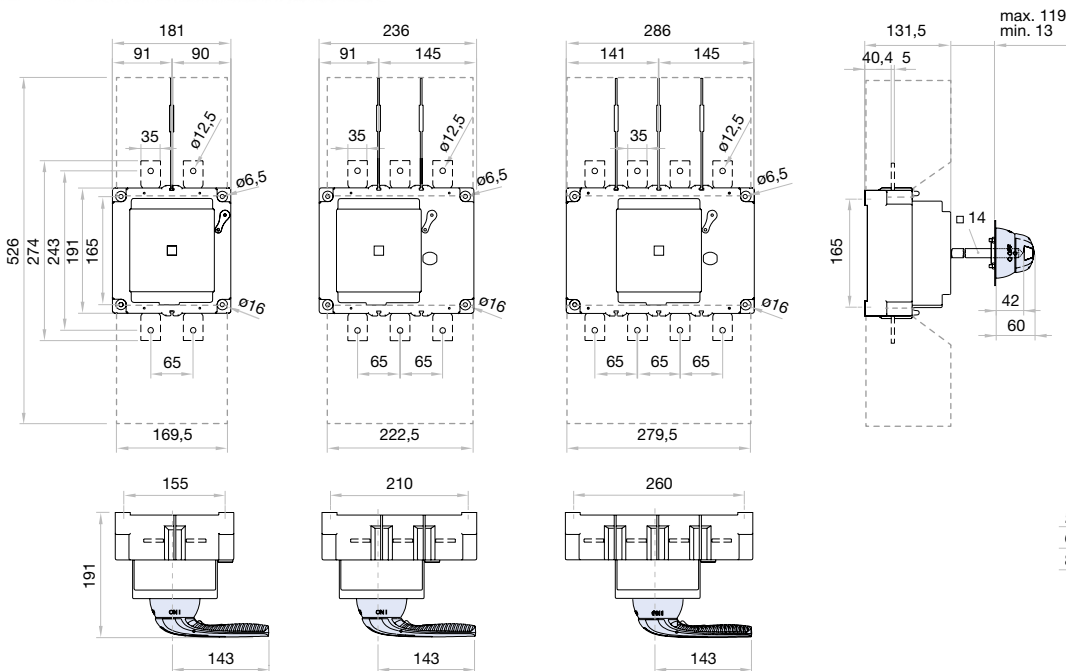
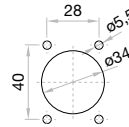


1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

Dimensions (mm)

Door drilling for external handle



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
500 A	2x150	2x5	35	M12	24
630 A	2x185	2x6	35	M12	24
800 A	2x240	2x7	35	M12	24

2P

3P

3P+N

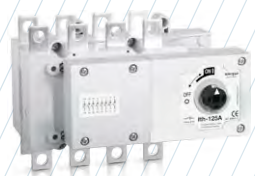
S5M AC Switch - disconnecter base mounting 6P - 8P

Size 0

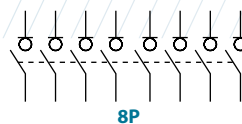
A 125|160|200



series
S5M



	CODE - 125A	CODE - 160A	CODE - 200A
6P	S5M01256PS0	S5M01606PS0	S5M02006PS0
8P	S5M01258PS0	S5M01608PS0	S5M02008PS0



Technical information



According to IEC 60947-3

			125	160	200	
Rated thermal current in ambient at	Ith	40 °C	A	125	160	200
		50 °C	A	125	160	200
		60 °C	A	125	160	200
Rated insulation voltage	Ui	V	1000	1000	1000	
Rated impulse withstand voltage	Uimp	kV	8	8	8	
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	Ie	Ue 400V AC21A	A	125	160	200
		Ue 400V AC22A	A	125	160	200
		Ue 400V AC23A	A	125	160	160
Rated breaking capacity	400V AC23	A	1000	1280	1280	
Rated making capacity	400V AC23	A	1250	1600	1600	

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

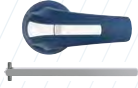
			125	160	200
Short - circuit behaviour					
Rated short-circuit making capacity ^{*(2)}	Icm kA (peak)		13	13	13
Rated short-time withstand current (1sec.)	Icw kA rms		7	7	7
Mechanical features					
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		8000	8000	8000
Maximum weight 6P	Kg		1,8	1,8	1,9
Maximum weight 8P	Kg		2,1	2,1	2,2

Accessories



» Direct handle

CODE DS-SI01



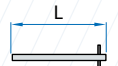
» External handle included shaft^{*(e1)}

IP65
CODE DS-LA01



» Emergency external handle included shaft^{*(e1)}

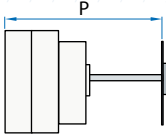
IP65
CODE DS-LR01



» Shafts

Standard shaft included^{*(e1)}

L (mm)	P (mm)
177	155... 263



» Auxiliary contacts

1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal shrouds^{*(T)}

	UP 6P (1 unit)	DOWN 6P (1 unit)	UP OR DOWN 8P (1 unit)
	DS-CU02	DS-CU03	DS-CU04
	DS-CU05	DS-CU06	DS-CU07

(For frontal switch only)



» Phase barrier^{*(T)}

	6P	8P
	DS-PB01	DS-PB02
	DS-PB04	DS-PB03

(1 kit for input or output)

^{*(T)} These accessories aren't compatible with each other.

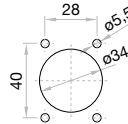
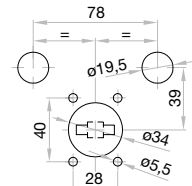
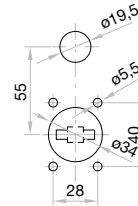


» Safety key lock devices

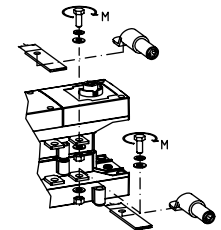
Simple CODE DS-CAB1
Double CODE DS-CEB1

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

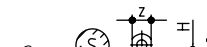
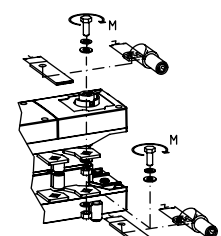
Door drilling for handle and key lock device
Simple Double



Door drilling for external handle

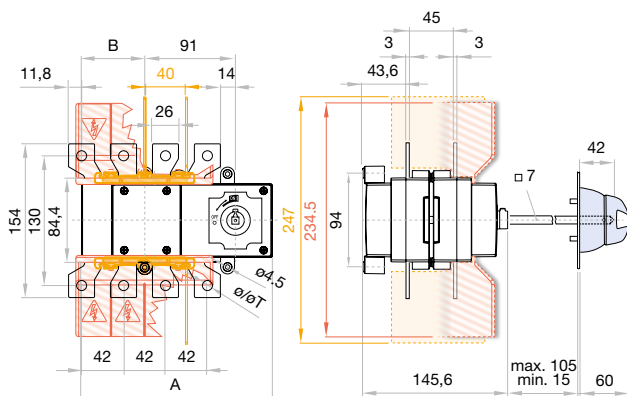
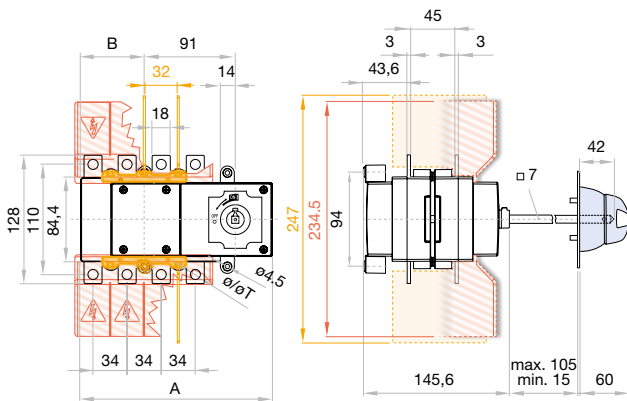


	A		B		ø	S max (Cu)	H max (Cu)	L max (Cu)	T	M
	6P	8P	6P	8P		mm ²	mm	mm	mm	Nxm
125 A	181	192	53	64	10	95	5	25	M8	13
160 A										



	A		B		ø	S max (Cu)	Z max	H max (Cu)	L max (Cu)	T	M
	6P	8P	6P	8P		mm ²	mm	mm	mm	mm	Nxm
200 A	181	192	53	64	10	120	30	5	30	M10	18

Dimensions (mm)



S5M AC Switch - disconnecter base mounting 6P - 8P

Size 1

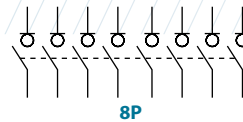
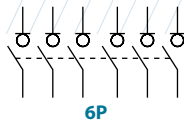
A 250|315|400



series
S5M



	CODE - 250A	CODE - 315A	CODE - 400A
6P	S5M02506PR0	S5M03156PR0	S5M04006PC0
8P	S5M02508PR0	S5M03158PR0	S5M04008PC0



Technical information



According to IEC 60947-3

			250	315	400
Rated thermal current in ambient at	Ith	40 °C	A 250	315	400
		50 °C	A 250	315	400
		60 °C	A 250	315	320
Rated insulation voltage	Ui	V	1000	1000	1000
Rated impulse withstand voltage	Uimp	kV	8	8	8
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	Ie	Ue 400V AC21A	A 250	315	400
		Ue 400V AC22A	A 250	315	400
		Ue 400V AC23A	A 250	315	400
Rated breaking capacity	400V AC23	A	2000	2520	3200
Rated making capacity	400V AC23	A	2500	3150	4000

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

			250	315	400
Short - circuit behaviour					
Rated short-circuit making capacity ^{*(2)}	Icm kA (peak)		20	20	20
Rated short-time withstand current (1sec.)	Icw kA rms		12	12	12
Mechanical features					
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		8000	8000	5000
Maximum weight 6P	Kg		5,5	5,5	5,7
Maximum weight 8P	Kg		5,8	5,8	6

Accessories



» Direct handle

CODE DS-LI12



» Terminal protection ^{*(T)}

CODE DS-CU12

(1 unit for input or output only frontal side)



» External handle included shaft ^{*(e1)}

IP65

CODE DS-LA12



» Terminal shrouds ^{*(T)}

CODE DS-CU11

(1 kit for input or output only frontal side)



» External handle without shaft

IP65

CODE DS-LA15



» Phase barrier ^{*(T)}

	6P	8P
	DS-PB12	DS-PB11
	DS-PB14	DS-PB13

(1 kit for input or output)

^{*(T)} These accessories aren't compatible with each other.



» Emergency external handle included shaft ^{*(e1)}

IP65

CODE DS-LR12



» Safety key lock devices

Simple CODE DS-CB12

Double CODE DS-CF11

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

» Shafts

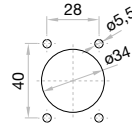
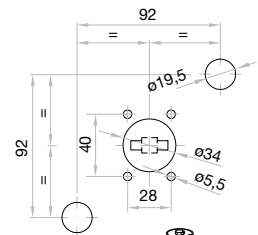
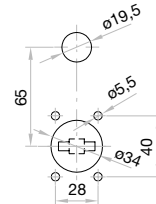
Standard shaft included ^{*(e1)}

L (mm)	P (mm)
277	288... 422

Door drilling for handle and key lock device

Simple

Double



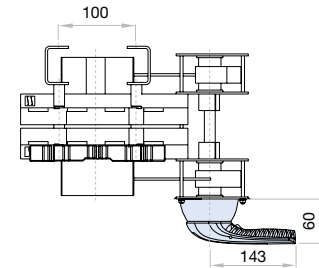
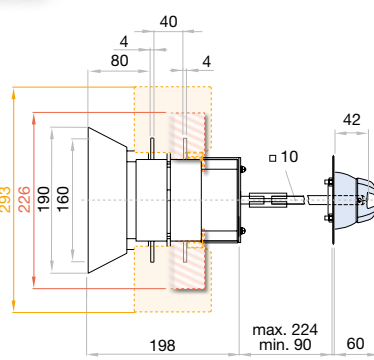
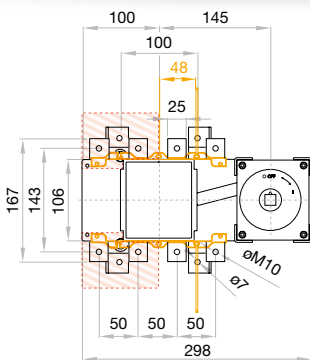
» Auxiliary contacts

1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12

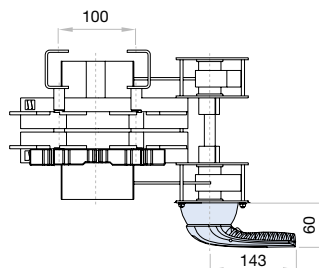
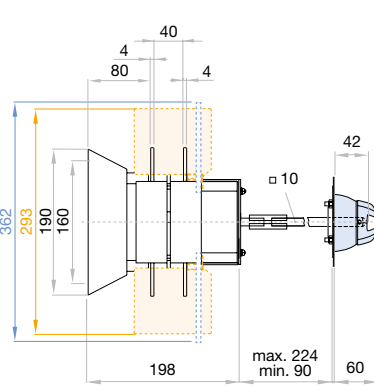
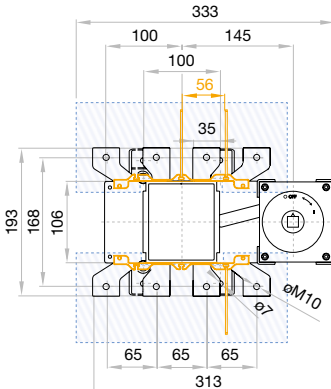
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

Dimensions (mm)

Door drilling for external handle



	S max (Cu)	H max (Cu)	L max (Cu)	T	M
	mm ²	mm	mm		Nxm
250 A	185	7	25	M10	18



	S max (Cu)	H max (Cu)	L max (Cu)	T	M
	mm ²	mm	mm		Nxm
400 A	240	7	40	M10	24

S5M AC Switch - disconnecter base mounting 6P - 8P

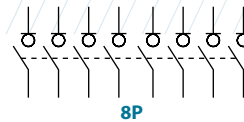
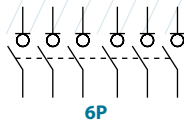
series
S5M

Size 2

A 500|630



	CODE-500A	CODE-630A
6P	S5M05006PRO	S5M06306PRO
8P	S5M05008PRO	S5M06308PRO



Technical information



According to IEC 60947-3

		500		630	
Rated thermal current in ambient at	lth	40 °C	A	500	630
		50 °C	A	500	630
		60 °C	A	500	630
Rated insulation voltage	Ui		V	1000	1000
Rated impulse withstand voltage	Uimp		kV	12	12
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	Ie	Ue 400V AC21A	A	500	630
		Ue 400V AC22A	A	500	630
		Ue 400V AC23A	A	500	630
Rated breaking capacity		400V AC23	A	4000	5000
Rated making capacity		400V AC23	A	5000	6300

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

		500		630	
Short - circuit behaviour					
Rated short-circuit making capacity ^{*(2)}	Icm	kA (peak)	26	26	
Rated short-time withstand current (1sec.)	Icw	kA rms	16	16	
Mechanical features					
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		5000	5000	
Maximum weight 6P			12,3	12,3	
Maximum weight 8P			13	13	

Accessories



» Direct handle

CODE DS-LI22



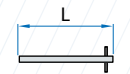
» External handle included shaft^{*(e1)}

IP65
CODE DS-LA22



» Emergency external handle included shaft^{*(e1)}

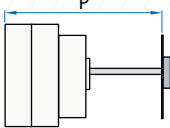
IP65
CODE DS-LR22



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
239	325... 490



» Auxiliary contacts

1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal shrouds ^{*(T)}

CODE DS-CU21
(1 kit for input or output frontal side)



» Phase barrier ^{*(T)}

6P DS-PB22 | 8P DS-PB21

(1 kit for input or output)

^{*(T)} These accessories aren't compatible with each other.



» Safety key lock devices

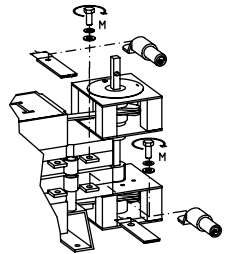
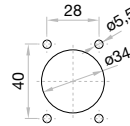
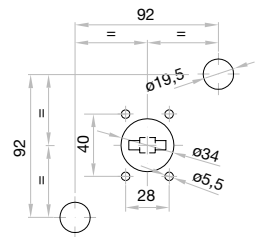
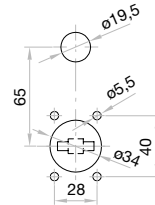
Simple CODE DS-CB21
Double CODE DS-CF21

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device

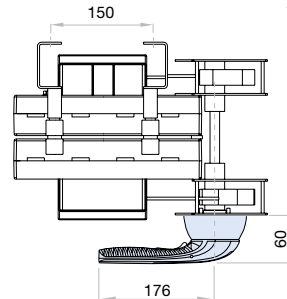
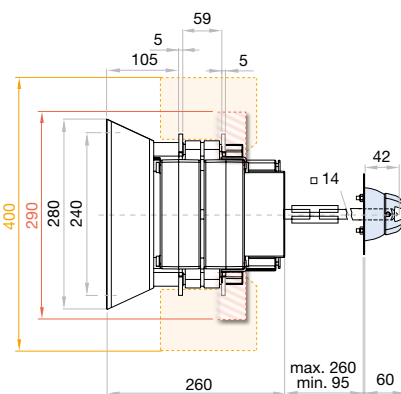
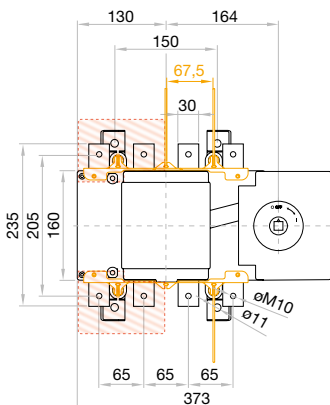
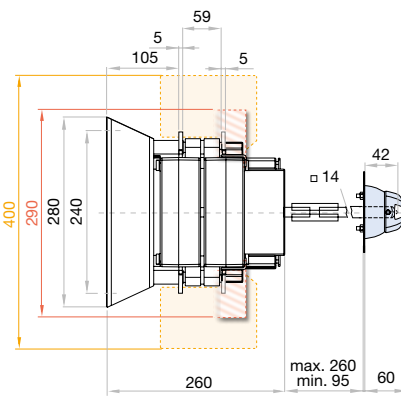
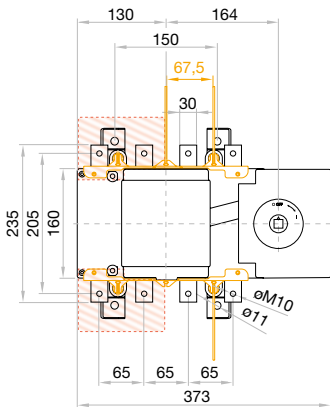
Simple

Double



Dimensions (mm)

Door drilling for external handle



S max (Cu)	H max (Cu)	L max (Cu)	M	
			T	Nxm
500 A	2x185	6	40	M10 24

S max (Cu)	H max (Cu)	L max (Cu)	M	
			T	Nxm
630 A	2x240	2x5	40	M10 24

S5M AC Switch - disconnecter base mounting 6P - 8P

series
S5M

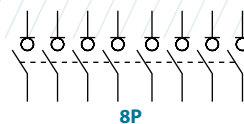
Size 3

A

800|1000



	CODE - 800A	CODE - 1000A
6P	S5M08006PR0	S5M10006PC0
8P	S5M08008PR0	S5M10008PC0



Technical information



According to IEC 60947-3

				800	1000
Rated thermal current in ambient at	I _{th}	40 °C	A	800	1000
		50 °C	A	800	1000
		60 °C	A	800	900
Rated insulation voltage	U _i	V	1000	1000	
Rated impulse withstand voltage	U _{imp}	kV	12	12	
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	I _e	Ue 400V AC21A	A	800	1000
		Ue 400V AC22A	A	800	1000
		Ue 400V AC23A	A	800	1000
Rated breaking capacity	400V AC23	A	6400	8000	
Rated making capacity	400V AC23	A	8000	10000	

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

				800	1000
Short - circuit behaviour					
Rated short-circuit making capacity ^{*(2)}	I _{cm} kA (peak)			60	60
Rated short-time withstand current (1sec.)	I _{cw} kA rms			25	25
Mechanical features					
Number of mechanical operations (according to the standards, for other values please consult)	Cycles			3000	3000
Maximum weight 6P				18,5	18,5
Maximum weight 8P				20	20



Accessories



» Direct handle

CODE DS-LI41



» External handle included shaft^{*(e1)}

IP65
CODE DS-LA41



» External handle without shaft

IP65
CODE DS-LA43



» Emergency external handle included shaft^{*(e1)}

IP65
CODE DS-LR41



» Terminal shrouds^{*(T)}

CODE DS-CU31
(1 kit for input or output only frontal side)



» Phase barrier^{*(T)}

6P DS-PB32 | 8P DS-PB31

(1 kit for input or output)

^{*(T)} These accessories aren't compatible with each other.

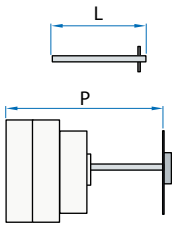
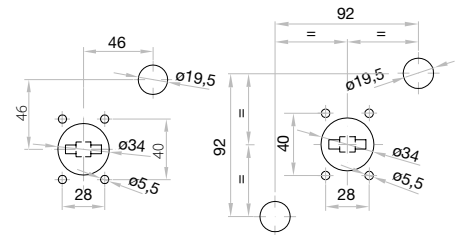


» Safety key lock devices

Simple CODE DS-CB41
Double CODE DS-CF41

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
Simple Double



» Shafts

Standard shaft included^{*(e1)}

L (mm) | P (mm)
239 | 408... 573



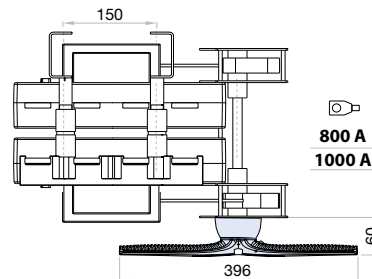
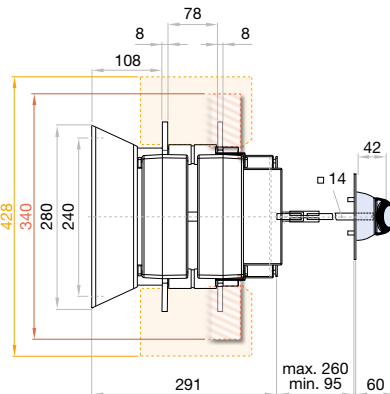
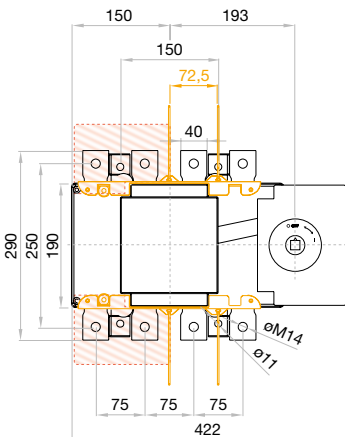
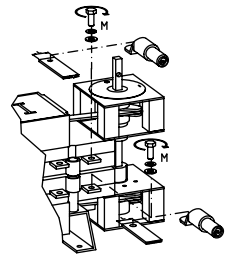
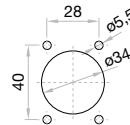
» Auxiliary contacts

1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

Dimensions (mm)

Door drilling for external handle



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
800 A	2x240	2x10	50	M14	45
1000 A	2x300	2x10			

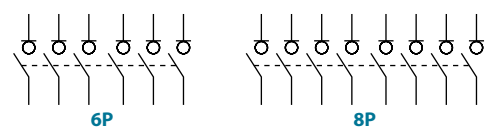
S5N AC Switch - disconnecter base mounting 6P - 8P

series
S5N

Size 4
A 1250|1600|1800|2000



	CODE - 1250A	CODE - 1600A	CODE - 1800A	CODE - 2000A
6P	S5N12506PS0	S5N16006PS0	S5N18006PS0	S5N20006PD0
8P	S5N12508PS0	S5N16008PS0	S5N18008PS0	S5N20008PD0



Technical information



According to IEC 60947-3

		1250 1600 1800 2000				
Rated thermal current in ambient at	lth 40 °C	A	1250	1600	1800	2000
	50 °C	A	1250	1600	1800	1800
	60 °C	A	1000	1600	1600	1600
Rated insulation voltage	Ui	V	1000	1000	1000	1000
Rated impulse withstand voltage	Uimp	kV	12	12	12	12
AC rated operational current ^{*(1)} (Rated operational frequency 50 / 60 Hz)	Ue 400V AC21B	A	1250	1600	1800	2000
	Ue 400V AC22B	A	1250	1600	1800	2000

		1250 1600 1800 2000				
Rated breaking capacity	400V AC22	A	3750	4800	5400	6000
Rated making capacity	400V AC22	A	3750	4800	5400	6000
Short - circuit behaviour						
Rated short-circuit making capacity ^{*(2)}	Icm	kA (peak)	60	60	60	60
Rated short-time withstand current (1sec.)	Icw	kA rms	25	50	50	50
Mechanical features						
Number of mechanical operations (according to the standards, for other values please consult)		Cycles	600	600	600	600
Maximum weight 6P		Kg	42,9	42,9	42,9	42,9
Maximum weight 8P		Kg	47,3	47,3	47,3	47,3

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)



Accessories



» Direct handle

CODE DS-LI41



» External handle included shaft*(e1)

IP65
CODE DS-LA41



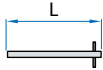
» External handle without shaft

IP65
CODE DS-LA43



» Emergency external handle included shaft*(e1)

IP65
CODE DS-LR41



» Shafts

Standard shaft included *(e1)

L (mm)	P (mm)
239	420 ... 580



» Auxiliary contacts

1NO+1NC CODE DS-LA101
2NO+2NC CODE DS-LA102

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

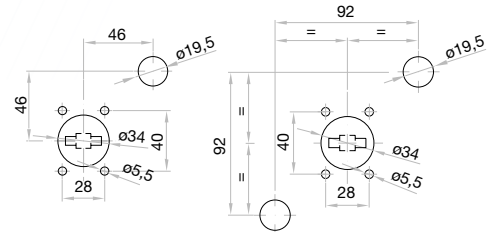


» Safety key lock devices

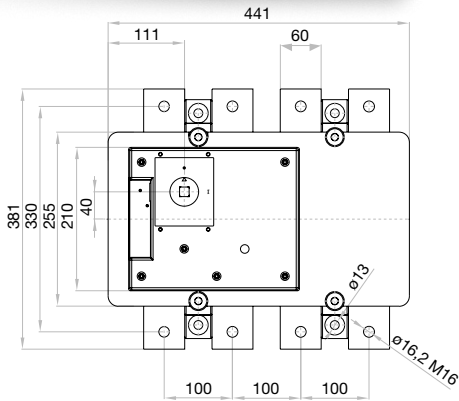
Simple CODE DS-CB41
Double CODE DS-CF41

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

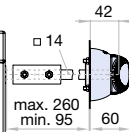
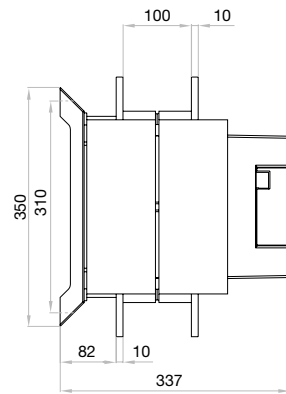
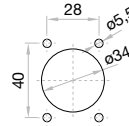
Door drilling for handle and key lock device
Simple Double



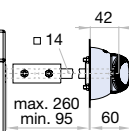
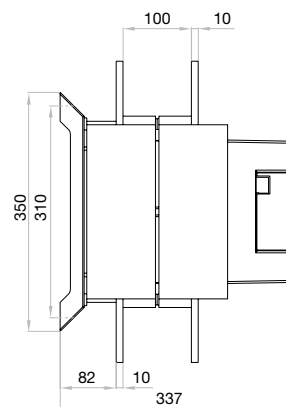
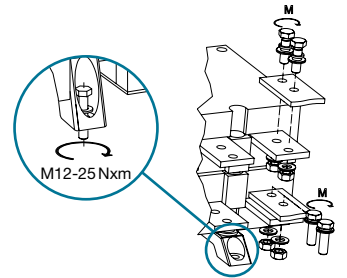
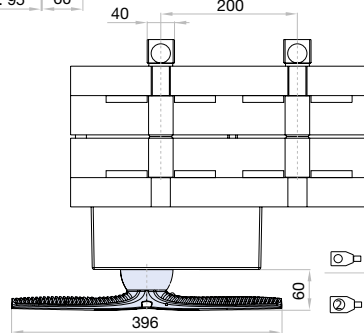
Dimensions (mm)



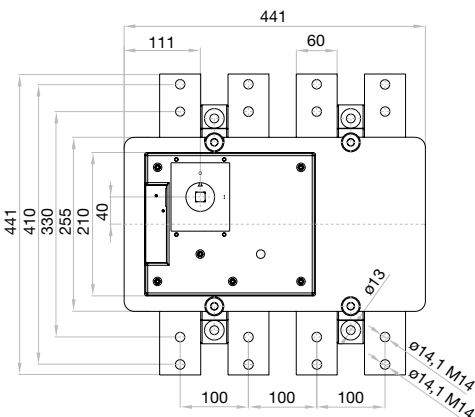
Door drilling for external handle



1250 A



1600 A
1800 A
2000 A



	H max (Cu) mm	L max (Cu) mm	T	M Nxm
1250 A	2x10	80	M16	80
1600 A 1800 A 2000 A	2x10	80	M14	55

S6N AC Switch - disconnecter base mounting 6P - 8P

Size 1

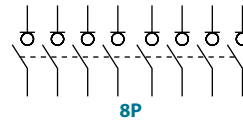
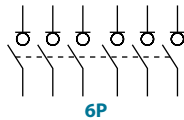
A 125|160|200|250|315|400



series
S6N



	CODE - 125A	CODE - 160A	CODE - 200A	CODE - 250A	CODE - 315A	CODE - 400A
6P	S6N01256PS0	S6N01606PS0	S6N02006PS0	S6N02506PS0	S6N03156PS0	S6N04006PD0
8P	S6N01258PS0	S6N01608PS0	S6N02008PS0	S6N02508PS0	S6N03158PS0	S6N04008PD0



Technical information



According to IEC/EN 60947-3

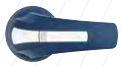
			125	160	200	250	315	400		
Rated thermal current in ambient at	I _{th}	40° C	A	125	160	200	250	315	400	
		50° C	A	125	160	200	250	315	400	
		60° C	A	125	160	200	250	315	400	
Rated insulation voltage	U _i	V	1000	1000	1000	1000	1000	1000		
Rated impulse withstand voltage	U _{imp}	kV	12	12	12	12	12	12		
AC Rated operational current ^{*(1)}	I _e	Triphasic U _e 400V	AC21A	A	125	160	200	250	315	400
			AC22A	A	125	160	200	250	315	400
			AC23A	A	125	160	200	250	315	400
Rated breaking capacity	400V, cos φ=0,35-0,45	A	1000	1280	1600	2000	2520	3200		
Rated making capacity	400V, cos φ=0,45	A	1250	1600	2000	2500	3150	4000		

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

			125	160	200	250	315	400
Short - circuit behaviour								
Rated short-circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	20	20	20	20	20	20
Rated short-time withstand current (1sec)	I _{cw}	kA rms	12	12	12	12	12	12
Mechanical features								
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		8000	8000	8000	8000	8000	5000



Accessories



» Direct handle

CODE DS-SI11



» External handle included shaft^{*(e1)}

IP65
CODE DS-SA11



» External handle without shaft

IP65
CODE DS-SA14



» Emergency external handle included shaft^{*(e1)}

IP65
CODE DS-SR11



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

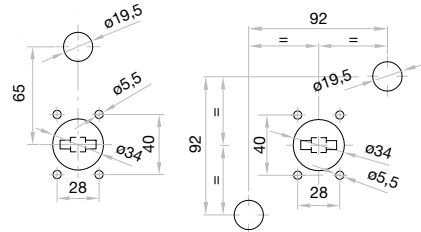


» Safety key lock device

Simple CODE DS-CA11
Double CODE DS-CE11

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
Simple Double



» Shafts

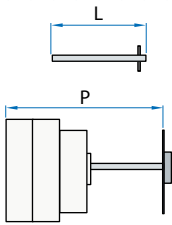
Standard shaft included ^{*(e1)}

L (mm)	P (mm)
227	185... 336

Shaft extensions

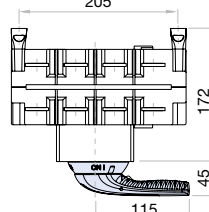
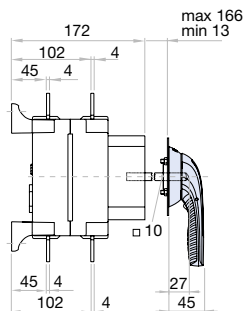
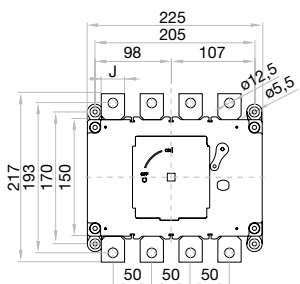
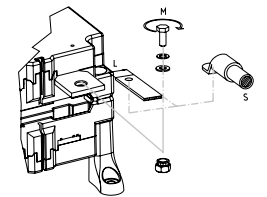
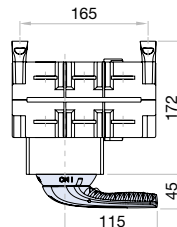
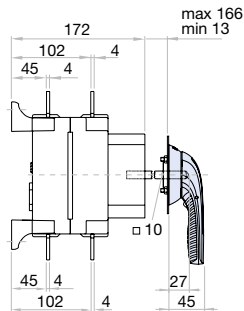
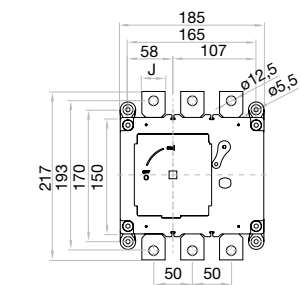
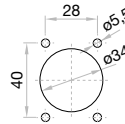
Type 1		
L (mm)	P (mm)	CODE
375	185... 486	DS-EP14

Type 2		
L (mm)	P (mm)	CODE
536	185... 647	DS-EP15



Dimensions (mm)

Door drilling for external handle



	J	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
						Nxm
125 A	25	125 A	185	8	25	M10 18
160 A	25	160 A	185	8	25	M10 18
200 A	25	200 A	185	8	25	M10 18
250 A	25	250 A	185	8	25	M10 18
315 A	25	315 A	185	8	25	M10 18
400 A	30	400 A	240	8	30	M10 18

S6N AC Switch - disconnecter base mounting 6P - 8P

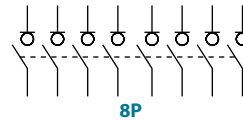
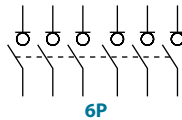
series
S6N

Size 2

A 500|630



	CODE - 500A	CODE - 630A
6P	S6N05006PR0	S6N06306PS0
8P	S6N05008PR0	S6N06308PS0



Technical information



According to IEC/EN 60947-3

		500		630	
Rated thermal current in ambient at	I _{th} 40° C	A	500	630	
	50° C	A	500	630	
	60° C	A	500	630	
Rated insulation voltage	U _i	V	1000	1000	
Rated impulse withstand voltage	U _{imp}	kV	12	12	
AC Rated operational current ^{*(1)}	I _e Triphasic U _e 400V	AC21B	A	500	630
		AC22B	A	500	630
		AC23B	A	500	630
Rated breaking capacity	400V, cos φ=0,35-0,45	A	4000	5040	
Rated making capacity	400V, cos φ=0,45	A	5000	6300	

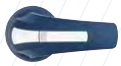
^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

		500		630	
Short - circuit behaviour					
Rated short-circuit making capacity ^{*(2)}	I _{cm} kA (peak)	26	26		
Rated short-time withstand current (1sec)	I _{cw} kA rms	16	16		
Mechanical features					
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	800	800		



Accessories



» Direct handle

CODE DS-LI21



» External handle included shaft^{*(e1)}

IP65
CODE DS-LA21



» External handle without shaft

IP65
CODE DS-LA24



» Emergency external handle included shaft^{*(e1)}

IP65
CODE DS-LR21

» Shafts

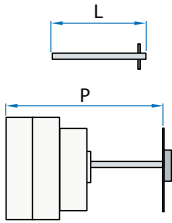
Standard shaft included ^{*(e1)}

L (mm)	P (mm)
195	244... 350

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
345	244... 500	DS-EP23

Type 2		
L (mm)	P (mm)	CODE
535	244... 690	DS-EP24



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

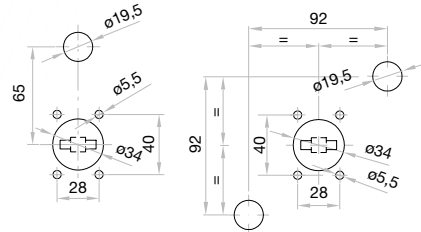


» Safety key lock device

Simple CODE DS-CB21
Double CODE DS-CF21

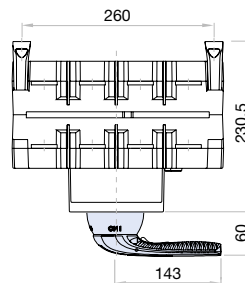
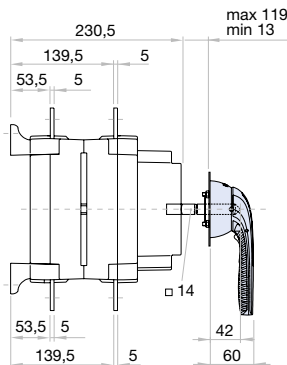
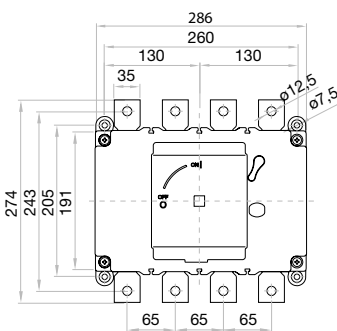
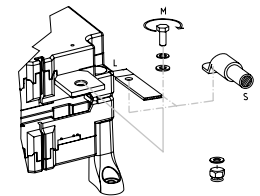
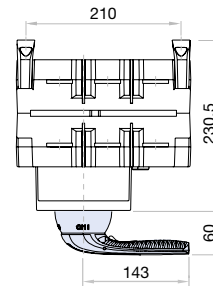
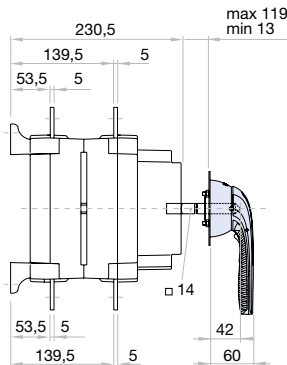
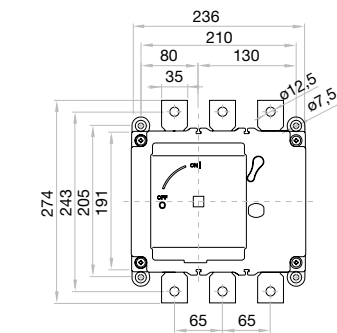
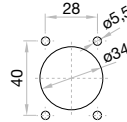
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
Simple Double



Dimensions (mm)

Door drilling for external handle



S max	H max	L max	M	
			(Cu)	Nxm
500 A	2x150	2x5	35	M12 24
630 A	2x185	2x6	35	M12 24

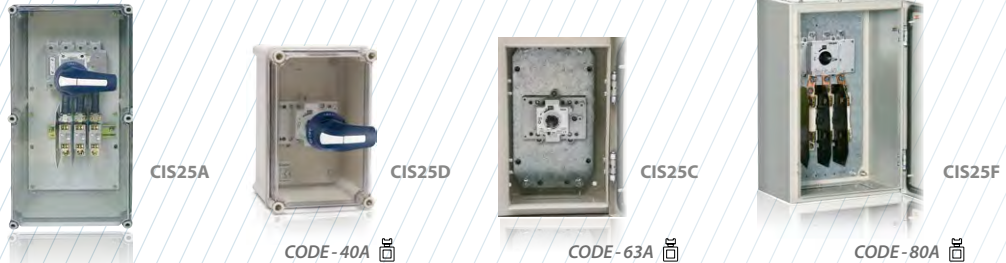
CIS25 - A - C - D - F

Enclosed switch - disconnecter

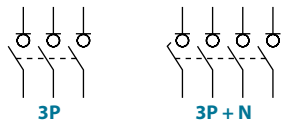
IP65 (with or without fuse holders) 3P - 3P+N

Size 00

A 40|63|80

Enclosure	Model	Code	3P	3P+N	3P	3P+N	3P	3P+N
polyester enclosure + fuse holders	CIS25A	CODE-40A	CIS25A00403PB	CIS25A00633PB	CIS25A00803PB	CIS25A00403NB	CIS25A00633NB	CIS25A00803NB
			CIS25D00403PB	CIS25D00633PB	CIS25D00803PB	CIS25D00403NB	CIS25D00633NB	CIS25D00803NB
polyester enclosure	CIS25D	CODE-63A	CIS25C00403PB	CIS25C00633PB	CIS25C00803PB	CIS25C00403NB	CIS25C00633NB	CIS25C00803NB
			CIS25F00403PB	CIS25F00633PB	CIS25F00803PB	CIS25F00403NB	CIS25F00633NB	CIS25F00803NB



Technical information

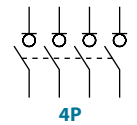


According to IEC 60947-3
IEC 61439-2

			40	63	80
Rated thermal current in ambient at	Ithe	40 °C	A 50	63	80
Rated insulation voltage	Ui	V	800	800	800
Rated impulse withstand voltage	Uimp	kV	8	8	8
AC rated operational current ^{*(1)}	Ie	Ue 400V AC21A	A 50	63	80
		Ue 400V AC22A	A 50	63	63
(Rated operational frequency 50/60 Hz)		Ue 400V AC23A	A 50	50	50
Rated breaking capacity		400V AC23	A 400	400	400
Rated making capacity		400V AC23	A 500	500	500

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

		40	63	80
Short - circuit behaviour				
Rated short-circuit making capacity ^{*(2)}	Icm kA (peak)	5	5	5
Rated short-time withstand current (1sec.)	Icw kA rms	3	3	3
Mechanical features				
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	10000	10000	10000
Maximum weight 3P	Kg	Consult		
Maximum weight 3P + N	Kg	Consult		



Also available 4P switches under request, please consult

Accessories



» External handle included
IP65



» Emergency external handle under request
IP65



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

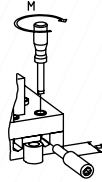
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Safety key lock device

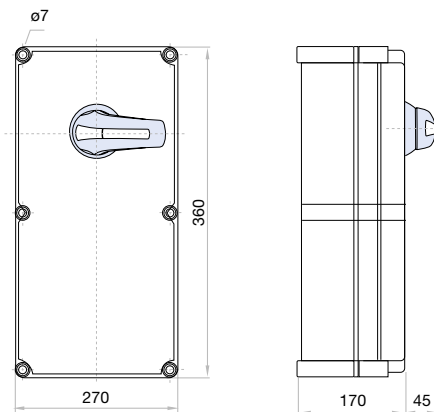
Simple CODE DS-CAB1
Double CODE DS-CEB1

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

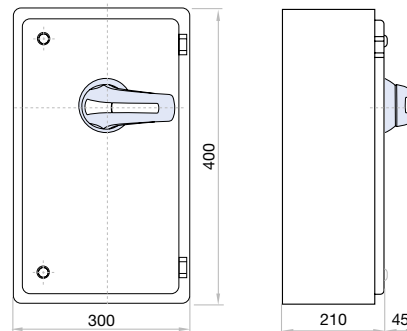


S max (Cu)	M
mm ²	Nxm
25	2

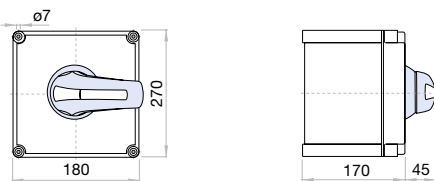
Dimensions (mm)



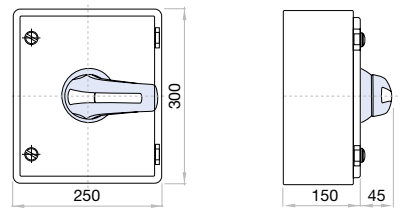
CIS25A
NH 00



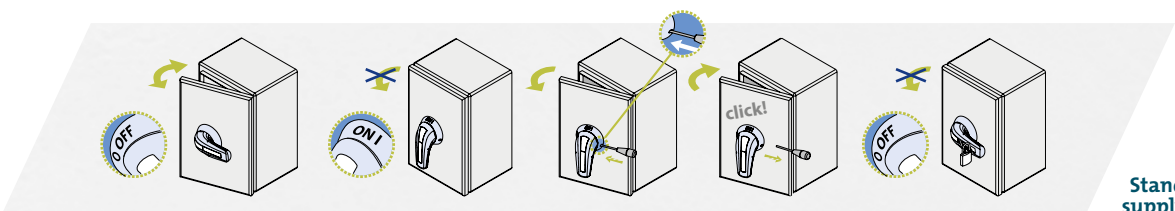
CIS25F
NH 00



CIS25D



CIS25C



Standard supply

series
CIS25

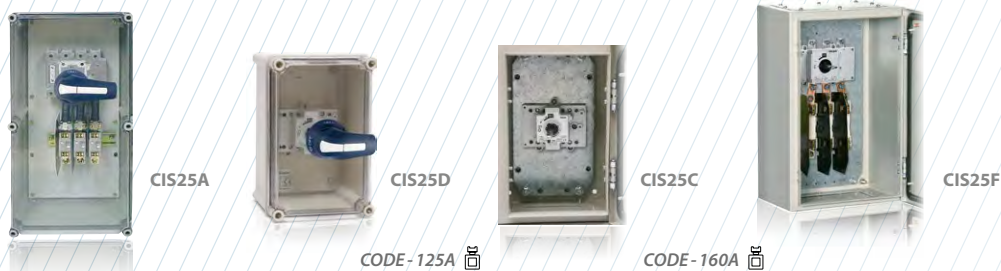
CIS25 - A - C - D - F

Enclosed switch - disconnecter

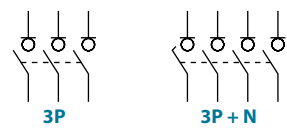
IP65 (with or without fuse holders) 3P - 3P+N

Size 0

A 125|160

Enclosure	Model	Poles	CODE - 125A		CODE - 160A	
			125	160	125	160
polyester enclosure + fuse holders	CIS25A	3P	CIS25A01253PB	CIS25A01603PB		
		3P + N	CIS25A01253NB	CIS25A01603NB		
polyester enclosure	CIS25D	3P	CIS25D01253PB	CIS25D01603PB		
		3P + N	CIS25D01253NB	CIS25D01603NB		
metal enclosure	CIS25C	3P	CIS25C01253PB	CIS25C01603PB		
		3P + N	CIS25C01253NB	CIS25C01603NB		
metal enclosure + fuse holders	CIS25F	3P	CIS25F01253PB	CIS25F01603PB		
		3P + N	CIS25F01253NB	CIS25F01603NB		



Technical information

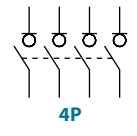


According to IEC 60947-3
IEC 61439-2

				125	160
Rated thermal current in ambient at	Ithe	40 °C	A	125	160
Rated insulation voltage	Ui	V		1000	1000
Rated impulse withstand voltage	Uimp	kV		8	8
AC rated operational current ^{*(1)}	Ie	Ue 400V AC21A	A	125	160
		Ue 400V AC22A	A	125	160
(Rated operational frequency 50/60 Hz)		Ue 400V AC23A	A	125	160
Rated breaking capacity		400V AC23	A	1000	1280
Rated making capacity		400V AC23	A	1250	1600

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

		125	160
Short - circuit behaviour			
Rated short-circuit making capacity ^{*(2)}	Icm kA (peak)	13	13
Rated short-time withstand current (1sec.)	Icw kA rms	7	7
Mechanical features			
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	8000	8000
Maximum weight 3P	Kg		Consult
Maximum weight 3P + N	Kg		Consult



Also available 4P switches under request, please consult

Accessories



» External handle included
IP65



» Emergency external handle under request
IP65



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

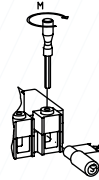
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Safety key lock device

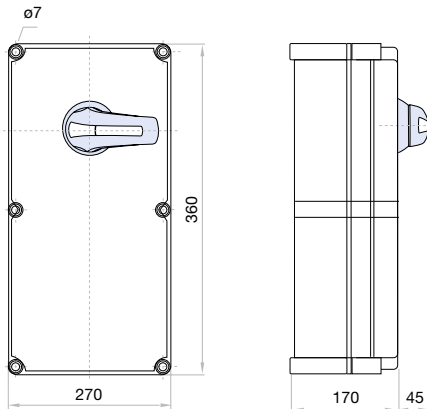
Simple CODE DS-CAB1
Double CODE DS-CEB1

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

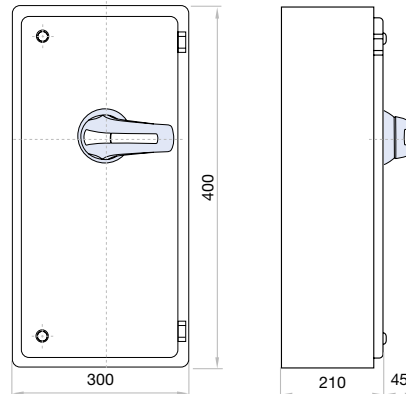


S max (Cu)	M
mm ²	Nxm
95	4

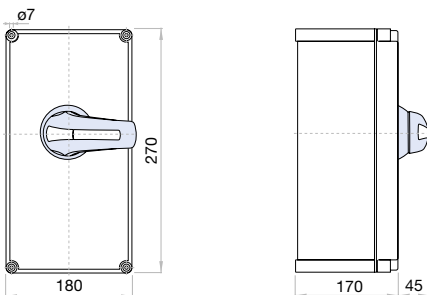
Dimensions (mm)



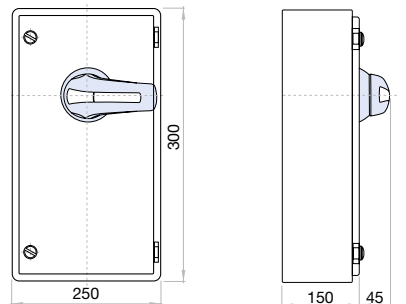
CIS25A
NH 00



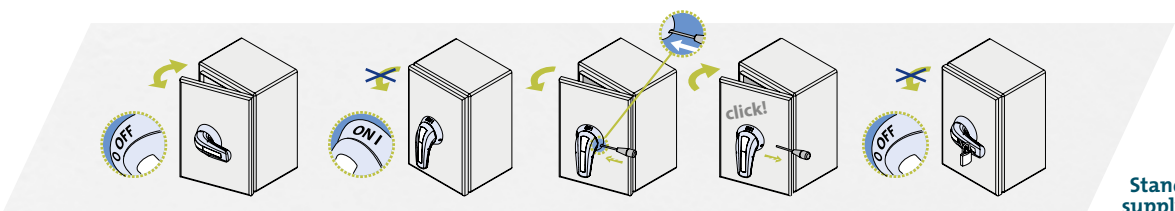
CIS25F
NH 00



CIS25D



CIS25C



Standard supply

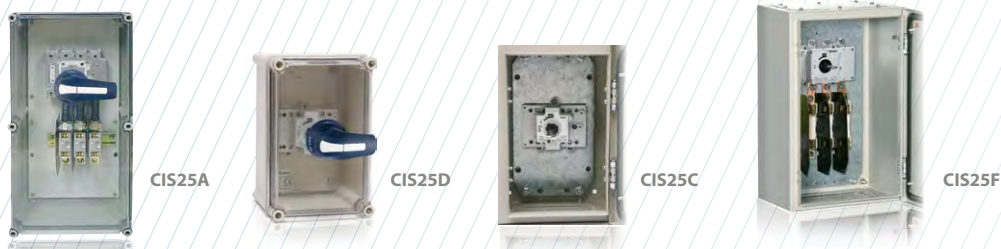
series
CIS25

CIS25 - A - C - D - F

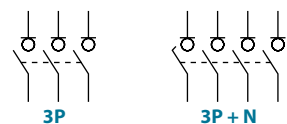
Enclosed switch - disconnecter

IP65 (with or without fuse holders) 3P - 3P+N

Size 1
A 200|250|315|400



			CODE - 200A	CODE - 250A	CODE - 315A	CODE - 400A
polyester enclosure + fuse holders	CIS25A	3P	CIS25A02003PR	CIS25A02503PR	CIS25A03153PR	-
		3P + N	CIS25A02003NR	CIS25A02503NR	CIS25A03153NR	-
polyester enclosure	CIS25D	3P	CIS25D02003PR	CIS25D02503PR	CIS25D03153PR	-
		3P + N	CIS25D02003NR	CIS25D02503NR	CIS25D03153NR	-
metal enclosure	CIS25C	3P	CIS25C02003PR	CIS25C02503PR	CIS25C03153PR	CIS25C04003PC
		3P + N	CIS25C02003NR	CIS25C02503NR	CIS25C03153NR	CIS25C04003NC
metal enclosure + fuse holders	CIS25F	3P	CIS25F02003PR	CIS25F02503PR	CIS25F03153PR	-
		3P + N	CIS25F02003NR	CIS25F02503NR	CIS25F03153NR	-



Technical information

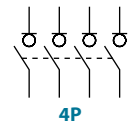


According to IEC 60947-3
IEC 61439-2

				200	250	315	400
Rated thermal current in ambient at	I _{the}	40 °C	A	200	250	315	400
Rated insulation voltage	U _i	V		1000	1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV		8	8	8	8
AC rated operational current ^{*(1)}	I _e	U _e 400V AC21A	A	200	250	315	400
		U _e 400V AC22A	A	200	250	315	400
(Rated operational frequency 50/60 Hz)		U _e 400V AC23A	A	200	250	315	400
Rated breaking capacity		400V AC23	A	1600	2000	2520	3200
Rated making capacity		400V AC23	A	2000	2500	3150	4000

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

				200	250	315	400
Short - circuit behaviour							
Rated short-circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		20	20	20	20
Rated short-time withstand current (1sec.)	I _{cw}	kA rms		12	12	12	12
Mechanical features							
Number of mechanical operations (according to the standards, for other values please consult)	Cycles			8000	8000	8000	5000
Maximum weight 3P		Kg		Consult			
Maximum weight 3P + N		Kg		Consult			



Also available 4P switches under request, please consult

Accessories



» External handle included
IP65



» Terminal protection
CODE DS-CU11
(1 kit for input or output)



» Emergency external handle under request
IP65



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

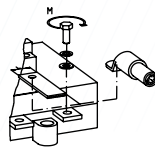
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Safety key lock device

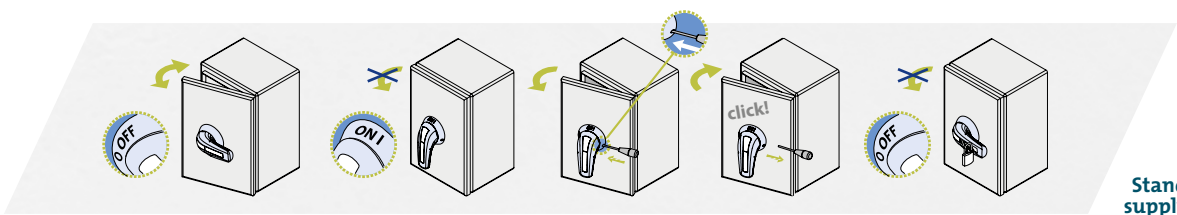
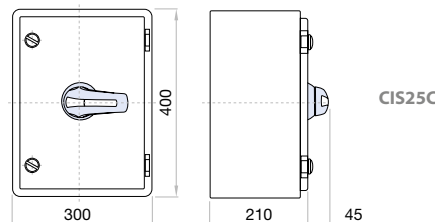
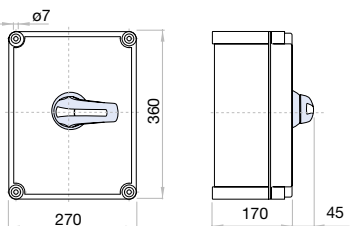
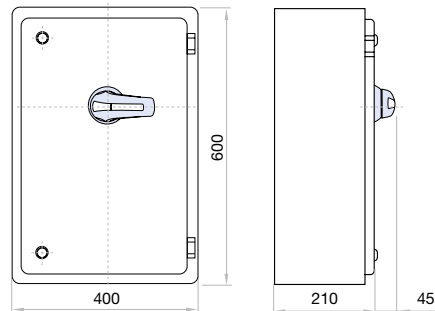
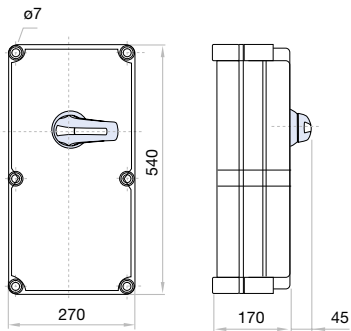
Simple CODE DS-CA11
Double CODE DS-CE11

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
200 A				M8	13
250 A	185	7	25	M10	18
315 A				M10	18
400 A	240	7	40	M10	24

Dimensions (mm)



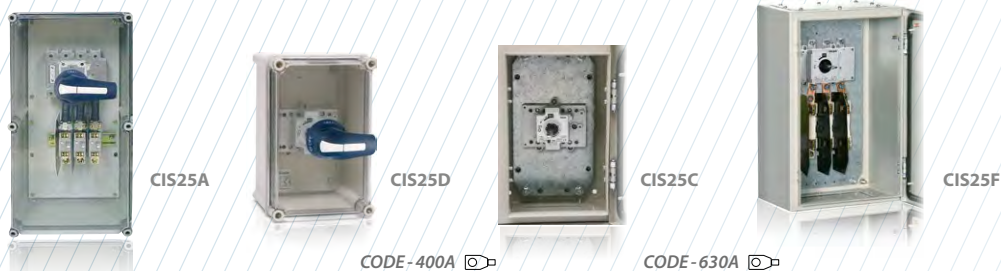
series
CIS25

CIS25 - A - C - D - F

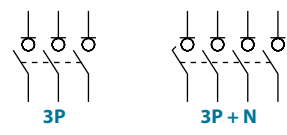
Enclosed switch - disconnecter

IP65 (with or without fuse holders) 3P - 3P+N

Size 2
A 400|630



Enclosure	Model	Poles	CODE - 400A		CODE - 630A	
			400	630	400	630
polyester enclosure + fuse holders	CIS25A	3P	CIS25A04003PR	CIS25A06303PR		
		3P + N	CIS25A04003NR	CIS25A06303NR		
polyester enclosure	CIS25D	3P	CIS25D04003PR	CIS25D06303PR		
		3P + N	CIS25D04003NR	CIS25D06303NR		
metal enclosure	CIS25C	3P	CIS25C04003PR	CIS25C06303PR		
		3P + N	CIS25C04003NR	CIS25C06303NR		
metal enclosure + fuse holders	CIS25F	3P	CIS25F04003PR	CIS25F06303PR		
		3P + N	CIS25F04003NR	CIS25F06303NR		



Technical information

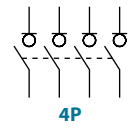


According to IEC 60947-3
IEC 61439-2

				400	630
Rated thermal current in ambient at	Ithe	40 °C	A	400	630
Rated insulation voltage	Ui	V		1000	1000
Rated impulse withstand voltage	Uimp	kV		12	12
AC rated operational current ^{*(1)}	Ie	Ue 400V AC21A	A	400	630
		Ue 400V AC22A	A	400	630
(Rated operational frequency 50/60 Hz)		Ue 400V AC23A	A	400	630
Rated breaking capacity		400V AC23	A	3200	5000
Rated making capacity		400V AC23	A	4000	6300

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

		400	630
Short - circuit behaviour			
Rated short-circuit making capacity ^{*(2)}	Icm kA (peak)	26	26
Rated short-time withstand current (1sec.)	Icw kA rms	16	16
Mechanical features			
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	5000	5000
Maximum weight 3P	Kg		Consult
Maximum weight 3P + N	Kg		Consult



Also available 4P switches under request, please consult

Accessories



» External handle included
IP65



» Terminal protection
CODE DS-CU21
(1 kit for input or output)



» Emergency external handle under request
IP65



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



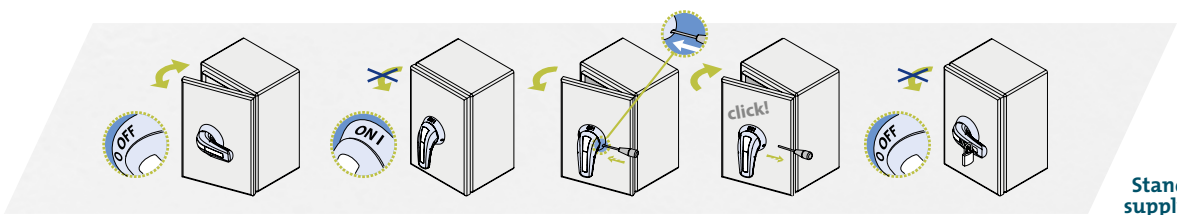
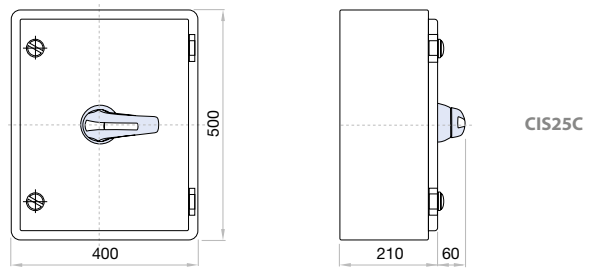
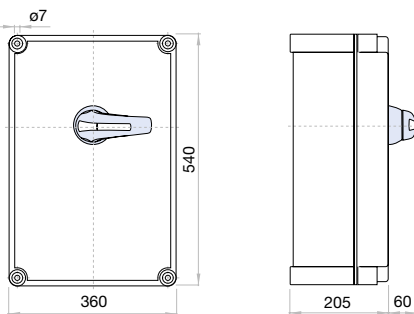
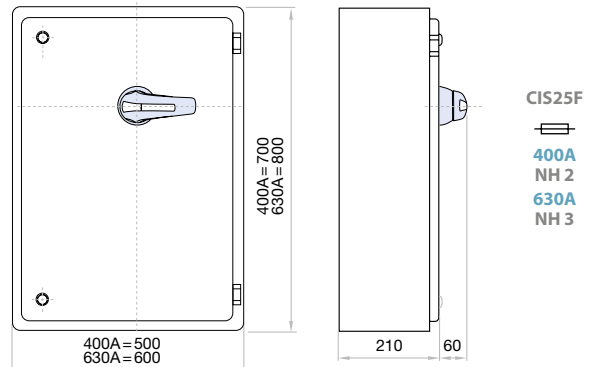
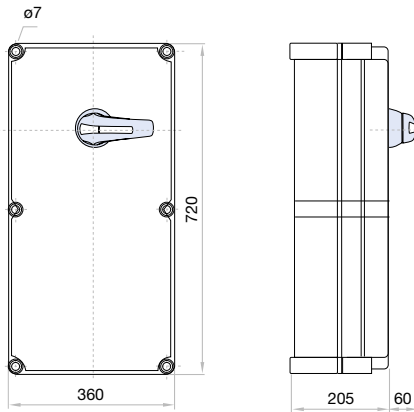
» Safety key lock device

Simple CODE DS-CB21
Double CODE DS-CF21

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
400 A	2x185	6	40	M10	24
630 A	2x240	2x5	40		

Dimensions (mm)



series
CIS25


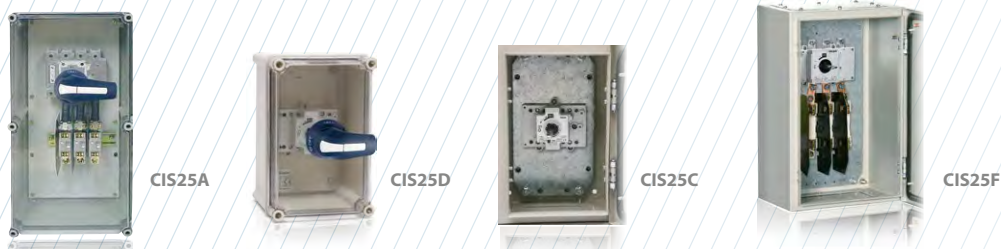
CIS25 - A - C - D - F

Enclosed switch - disconnecter

IP65 (with or without fuse holders) 3P - 3P+N

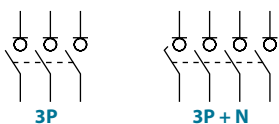
Size 3

A 800

Enclosure	Model	Configuration	Code
polyester enclosure + fuse holders	CIS25A	3P	CIS25A08003PR
		3P + N	CIS25A08003NR
polyester enclosure	CIS25D	3P	CIS25D08003PR
		3P + N	CIS25D08003NR
metal enclosure	CIS25C	3P	CIS25C08003PR
		3P + N	CIS25C08003NR
metal enclosure + fuse holders	CIS25F	3P	CIS25F08003PR
		3P + N	CIS25F08003NR

CODE - 800A 



Technical information

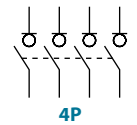


According to IEC 60947-3
IEC 61439-2

Parameter	Value	800
Rated thermal current in ambient at	I _{the} 40 °C A	800
Rated insulation voltage	U _i V	1000
Rated impulse withstand voltage	U _{imp} kV	12
AC rated operational current ^{*(1)}	U _e 400V AC21A A	800
	U _e 400V AC22A A	800
(Rated operational frequency 50/60 Hz)	U _e 400V AC23A A	800
Rated breaking capacity	400V AC23 A	6400
Rated making capacity	400V AC23 A	8000

Short - circuit behaviour		800
Rated short-circuit making capacity ^{*(2)}	I _{cm} kA (peak)	60
Rated short-time withstand current (1sec.)	I _{cw} kA rms	25
Mechanical features		
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000
Maximum weight 3P	Kg	Consult
Maximum weight 3P + N	Kg	Consult

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)



Also available 4P switches under request, please consult

Accessories



» External handle included
IP65



» Emergency external handle under request
IP65



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal protection

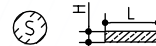
CODE DS-CU31
(1 kit for input or output)



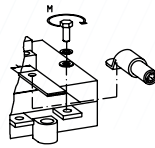
» Safety key lock device

Simple CODE DS-CB31
Double CODE DS-CF31

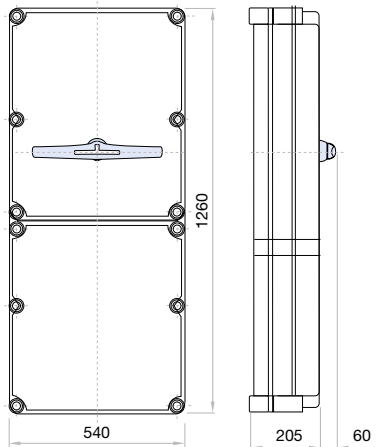
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



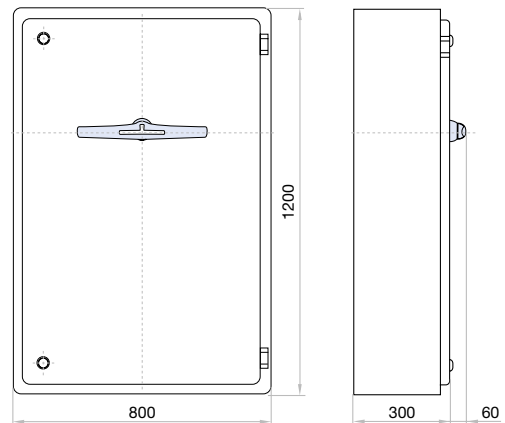
S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
2x240	2x10	50	M14	Nxm



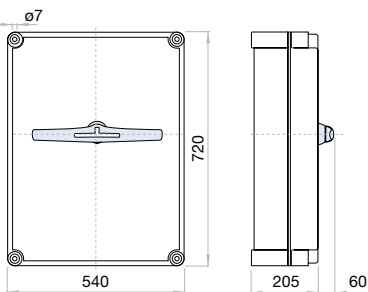
Dimensions (mm)



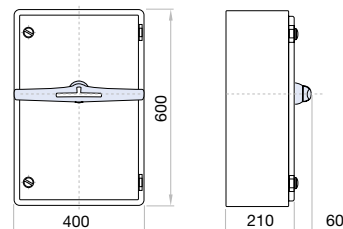
CIS25A
NH 4



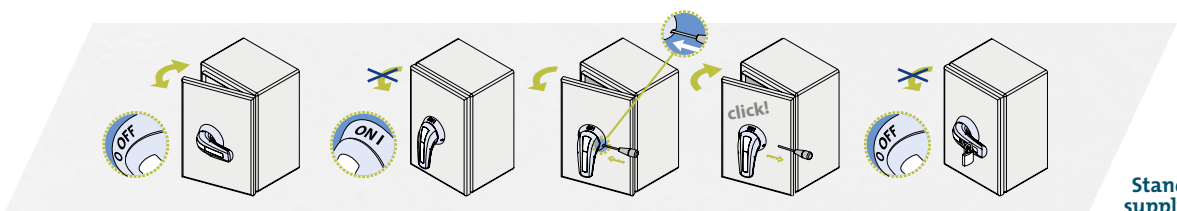
CIS25F
NH 4



CIS25D



CIS25C



Standard supply

series
CIS25

CIS25 - A - C - D - F

Enclosed switch - disconnecter

IP65 (with or without fuse holders) 3P - 3P+N

Size 4

*A 1000|1250|1600



*(A) Under request higher currents are available, please consult.



CIS25A



CIS25D

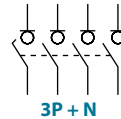
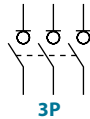


CIS25C



CIS25F

			CODE - 1000A	CODE - 1250A	CODE - 1600A
polyester enclosure + fuse holders	CIS25A ^{*(5)}	3P	CIS25A10003PS ^{*(5)}	CIS25A12503PS ^{*(5)}	CIS25A16003PS ^{*(5)}
		3P + N	CIS25A10003NS ^{*(5)}	CIS25A12503NS ^{*(5)}	CIS25A16003NS ^{*(5)}
polyester enclosure	CIS25D	3P	CIS25D10003PS	CIS25D12503PS	CIS25D16003PS
		3P + N	CIS25D10003NS	CIS25D12503NS	CIS25D16003NS
metal enclosure	CIS25C	3P	CIS25C10003PS	CIS25C12503PS	CIS25C16003PS
		3P + N	CIS25C10003NS	CIS25C12503NS	CIS25C16003NS
metal enclosure + fuse holders	CIS25F	3P	CIS25F10003PS	CIS25F12503PS	CIS25F16003PS
		3P + N	CIS25F10003NS	CIS25F12503NS	CIS25F16003NS



Technical information



According to IEC 60947-3
IEC 61439-2

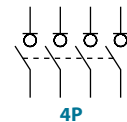
				1000	1250	1600
Rated thermal current in ambient at	I _{the}	40 °C	A	1000	1250	1600
Rated insulation voltage	U _i	V		1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV		12	12	12
AC rated operational current ^{*(1)}	I _e	U _e 400V AC21A	A	1000	1250	1600
		U _e 400V AC22A	A	1000	1250	1600
(Rated operational frequency 50/60 Hz)		U _e 400V AC23B	A	-	-	1600
Rated breaking capacity		400V AC23	A	3000	3750	4800
Rated making capacity		400V AC23	A	3000	3750	4800

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

^{*(3)} IP43

			1000	1250	1600
Short - circuit behaviour					
Rated short-circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	60	60	75
Rated short-time withstand current (1sec.)	I _{cw}	kA rms	25	25	50
Mechanical features					
Number of mechanical operations (according to the standards, for other values please consult) ^{*(3)}	Cycles		3000	3000	3000
Maximum weight 3P		Kg		Consult	
Maximum weight 3P + N		Kg		Consult	



Also available 4P switches under request, please consult

Accessories



» External handle included
IP65



» Emergency external handle under request
IP65



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal protection

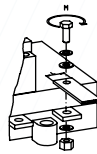
CODE DS-CU41
(1 kit for input or output)



» Safety key lock device

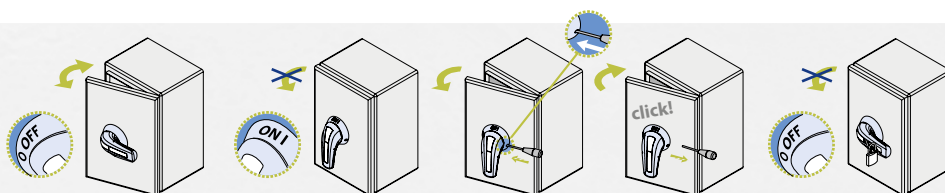
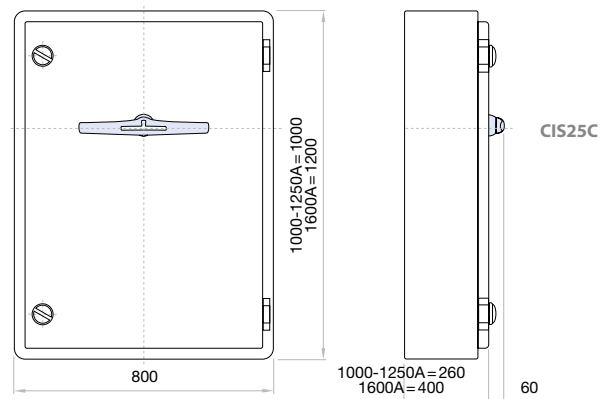
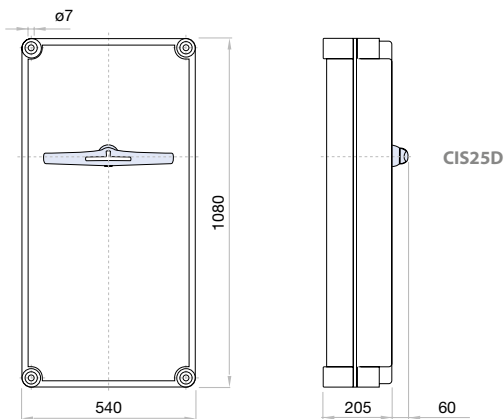
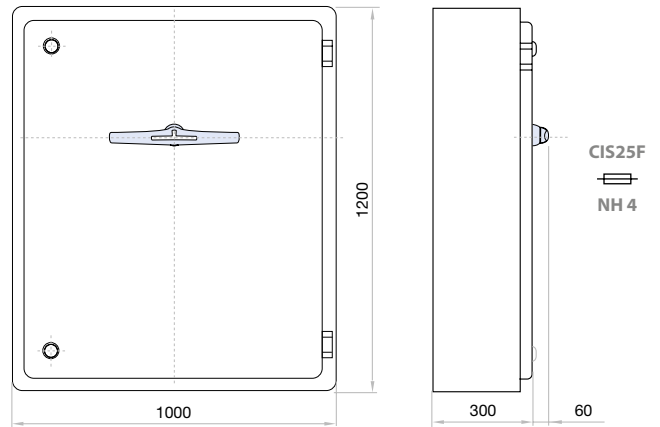
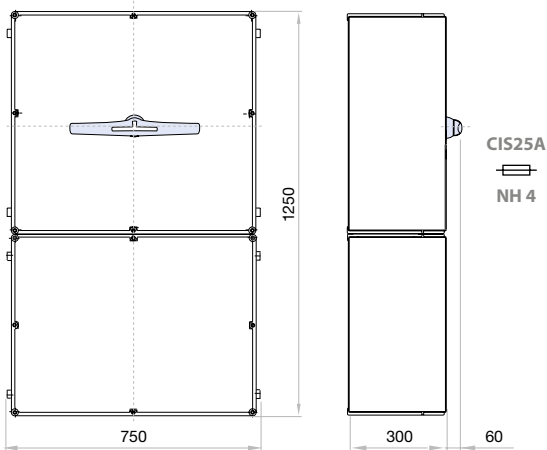
Simple CODE DS-CB41
Double CODE DS-CF41

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



	H max (Cu) mm	L max (Cu) mm	T M	M Nxm
1000 A		80	M16	80
1250 A	2x10			
1600 A			M14	55

Dimensions (mm)



Standard supply

IPTA | IPTR | IPTU

Switch disconnecter for transformer secondary protection

IP65 4P - 3P+N

A 40... 630



IPTA (IP65)
automatic



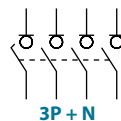
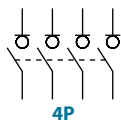
IPTR (IP65)
manual single module



IPTU (IP65)
manual double module



		CODE-40A	CODE-50...63A	CODE-80...100A	CODE-125...160A
IPTA	4P	IPTA00404PS0	IPTA00634PS0	IPTA01004PS0	IPTA01604PS0
		CODE-200A	CODE-250A	CODE-320...400A	CODE-630A
		IPTA02004PS0	IPTA02504PS0	IPTA04004PS0	IPTA06304PT0
IPTR	3P + N	CODE-160A	CODE-250A	CODE-400A	CODE-630A
		IPTR01603NB0	IPTR02503NB0	IPTR04003NB0	IPTR06303NT0
IPTU	3P + N	CODE-160A	CODE-250A	CODE-400A	CODE-630A
		IPTU01603NB0	IPTU02503NB0	IPTU04003NB0	IPTU06303NT0



Technical information



According to IEC 60947-3
IEC 61439-2

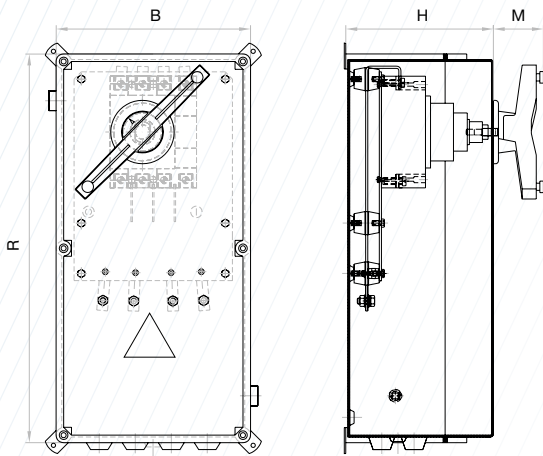
	Amps (Ith)	NH/DIN
IPTR	160	0
	250	1
	400	2
	630	3
IPTU	160	0
	250	1
	400	2
	630	3

Selection table

kVA	UF/UL (Vac)	In (A)
50	380 / 220	100
75	380 / 220	125
100	380 / 220	160
125	380 / 220	200
160	380 / 220	250
250	380 / 220	400
400	380 / 220	630

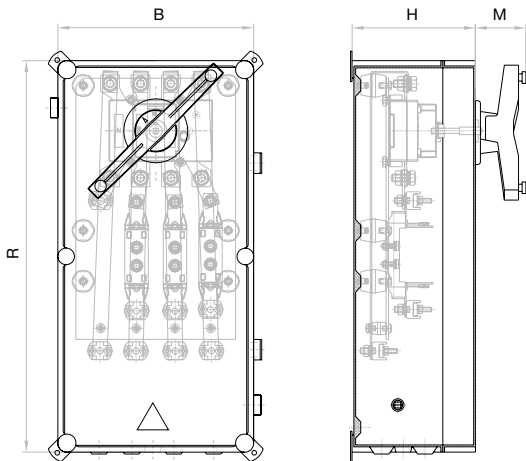


Dimensions (mm)



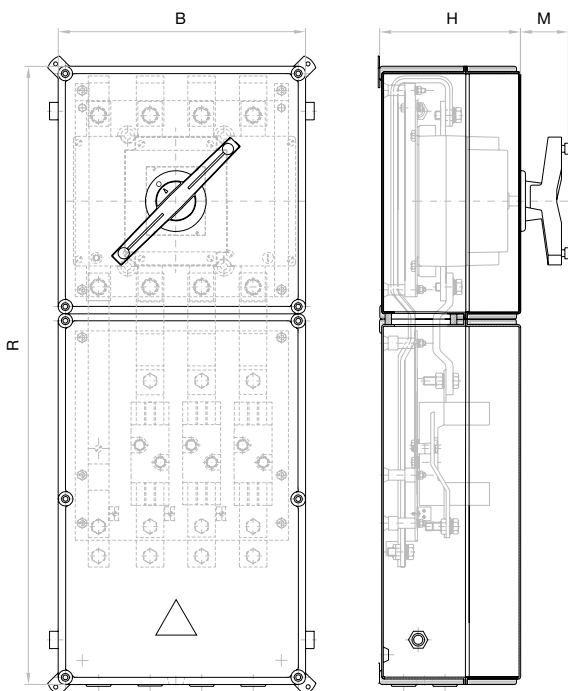
IPTA

	R	B	H	M
40 - 63 - 80 - 100 A 160 - 200 - 250 A	540	270	205	69,5
400 A	540	360	263	69,5
630 A	720	360	205	69,5



IPTR

	R	B	H	M
160 - 250 A	540	270	170	69,5
400 A	720	360	205	69,5
630 A	720	360	205	69,5



IPTU

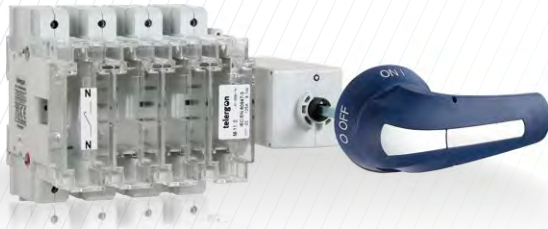
	R	B	H	M
160 - 250 A	810	270	170	69,5
400 A	810	360	205	69,5
630 A	900	360	205	69,5

AC Switch fuses

series
M11

series
M21

Switch fuses with high operating load capacity and a high level disconnection insulation; high reliability and safety in abnormal situations, available in two construction models, with a wide range of currents, fusible types and various accessories.



The switch fuses in its two series, are manufactured with high safety self-extinguishing materials, providing an excellent level of electrical insulation, low smoke emission and high resistance to electro-mechanical stress.

They combine in a compact unit the function of a switch - disconnecter with the protection against overloads and short - circuits given by the fuses, these once installed remain fixed in the switch, ensuring a long electrical and mechanical life and safe operations for the user.

They comply with environmental requirements and undergo strict quality controls for a reliable product that meets the most demanding requirements.

The M21 series consist of a sandwich-type body containing self-cleaning blade type contacts, with pre-arc zones to ensure long term, fault-free energy transmission and coated with silver alloy for long electromechanical life, externally has housings to insert fuses according to the appropriate format. The detent mechanism provides quick and independent switching due to the accumulation of elastic potential energy, which is transmitted at high speed to the contacts for arc extinction.

The M11 series is of modular construction, with the contacts being moved by a cross shaft with tripping being positive opening.

Functional and ergonomic handle

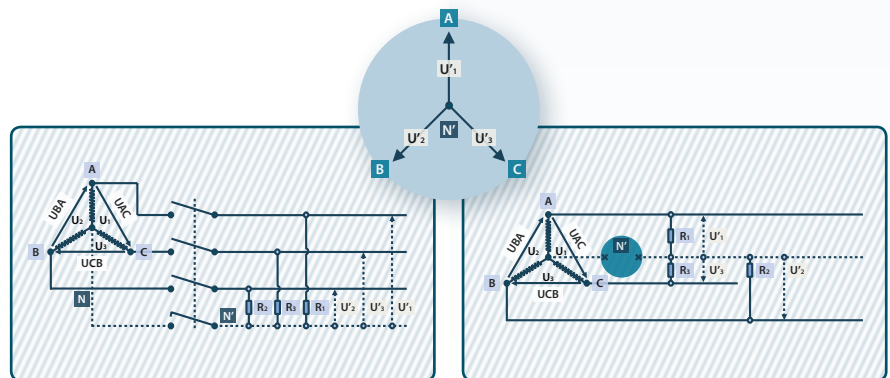
- > Good grip and excellent torque/resistance
- > Padlockable handle in **OFF** position (up to three locks Ø 5-8 mm)
- > Door interlock in **ON** position
- > When lock in **OFF** position, door is interlocked
- > Defeatable feature in **ON** position (with the use of a tool for maintenance operations). Handle interlock is restored when closing
- > Self-centering shaft for door handle



Neutral pole early make & late break

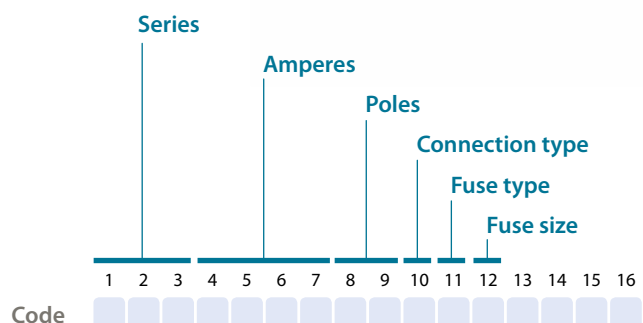
This safety feature prevents accidental overvoltage when making/breaking of loads connected between phase and neutral.

Due to the design in our 3P+N switch - disconnectors and changeover switches, the neutral contact closes before the main phases and opens later, thus ensuring this operation mode.



Range codification:

The **M11|M21** series, are identified by a code that describes their most important characteristics as described below



According to:
IEC 60947-3
IEC 61439-2
RoHs



Testing and approvals:



series
M11



Modular concept.
Fuse-links cylindrical,
NH/DIN,BS.
Fuse cover interlock in the
ON position.
Different handles depend
on the installation mode.

series
M21



Compact model.
Fuse-links NH/DIN,BS.
Fuse cover interlock in the
ON position.
Different handles depend
on the installation mode.

series
CIF21

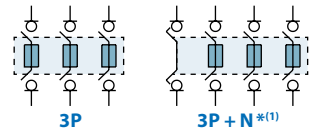


M11 metal enclosed fusible
switch.
External padlockable
handle with locking door in
ON I position.
Removing door blocked by
padlock when handle is in
0 OFF position.

series
CIF22



M21 metal enclosed fusible
switch.
External padlockable
handle with locking door in
ON I position.
Removing door blocked by
padlock when handle is in
0 OFF position.



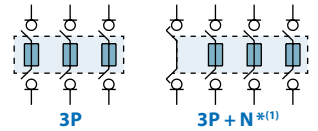
M11

Switches 2, 3 & 4 poles (32 - 160A) (O-I)
For fusibles BS - NFC 14x51 - NH00C ^{*(3)}

Manual handle



Amp.	Fuse	Size	Connection	Bipolar (2P)	3 pole (3P)	4 pole (3P + N) ^{*(1)}	External handle		Direct handle	
				Code	Code	Code	Frontal ^{*(2)}	Side	Frontal	Side
50	14 x 51	00		M1100502PBC20	M1100503PBC20	M1100503NBC20				
63	NH00C	00		M1100632PBDB0	M1100633PBDB0	M1100633NBDB0	DS-SA02	DM1SLB1	DM1SI01	DM1SYB1
100	NH00C			M1101002PBDB0	M1101003PBDB0	M1101003NBDB0				
32	BSA1	00		M1100322PBBA0	M1100323PBBA0	M1100323NBBA0	DS-SA02	DM1SAB1	DM1SI01	DM1SYB1
63	BSA2 BSA3			M1100632PBBB0	M1100633PBBB0	M1100633NBBB0				
125	22 x 58	0		M1101252PBC30	M1101253PBC30	M1101253NBC30	DS-SA02	DM1SLB1	DM1SI01	DM1SYB1
125	22 x 58			M1101252PTC30	M1101253PTC30	M1101253NTC30				
125	NH00	0		M1101252PBDB0	M1101253PBDB0	M1101253NBDB0	DS-SA02	DM1SLB1	DM1SI01	DM1SYB1
125	NH00			M1101252PTDB0	M1101253PTDB0	M1101253NTDB0				
160	NH00			M1101602PBDB0	M1101603PBDB0	M1101603NBDB0				
160	NH00			M1101602PTDB0	M1101603PTDB0	M1101603NTDB0				
100	BSA2 BSA3	0		M1101002PBB00	M1101003PBB00	M1101003NBB00	DS-SA02	DM1SAB1	DM1SI01	DM1SYB1
100	BSA2 BSA3			M1101002PTB00	M1101003PTB00	M1101003NTB00				



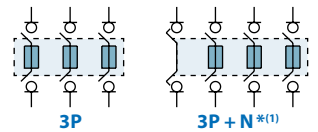
M21

Switches 3 & 4 poles (160 - 800A) (O-I)
For fusibles BS - NH ^{*(3)}

Manual handle



Amp.	Fuse	Size	Connection	3 pole (3P)	4 pole (3P + N) ^{*(1)}	External ^{*(2)}	Direct	Emergency external ^{*(2)}
				Code	Code	Code	Code	Code
160	Es NH0	1		M2101603PSD00	M2101603NSD00	DS-SA11	DM2SI11	DS-SR11
160	BSA4			M2101603PSB10	M2101603NSB10			
200	BSB1 BSB2	1		M2102003PSB20	M2102003NSB20	DS-SA11	DM2SI11	DS-SR11
250	BSB1 BSB2			M2102503PSB20	M2102503NSB20			
250	NH1	2		M2102503PSD10	M2102503NSD10	DS-LA22	DM2SI21	DS-LR22
400	NH2			M2104003PSD20	M2104003NSD20			
315	BSB1... BSB3	2		M2103153PSB40	M2103153NSB40	DS-LA22	DM2SI21	DS-LR22
400	BSB1... BSB4			M2104003PSB50	M2104003NSB50			
630	NH3	3		M2106303PSD30	M2106303NSD30	DS-LA31	DM2SI31	DS-LR31
800	NH3			M2108003PSD30	M2108003NSD30			
630	BSC1... BSC2	3		M2106303PSB70	M2106303NSB70	DS-LA31	DM2SI31	DS-LR31
800	BSC1... BSC3			M2108003PSB80	M2108003NSB80			



CIF

Metal enclosed model ^{*(2)} ^{*(3)} IP65



Amp.	Fuse	Size	Connection	Series	3 pole	4 pole (3P + N) ^{*(1)}
					Code	Code
63	NH00C	00		M-11	CIF21C00633PBDB	CIF21C00633NBDB
100	NH00C				CIF21C01003PBDB	CIF21C01003NBDB
125	NH00	0		M-11	CIF21C01253PBDB	CIF21C01253NBDB
125	NH00				CIF21C01253PTDB	CIF21C01253NTDB
160	NH00				CIF21C01603PBDB	CIF21C01603NBDB
160	NH00				CIF21C01603PTDB	CIF21C01603NTDB
160	NH0	1		M-21	CIF22C01603PSD0	CIF22C01603NSD0
250	NH1	2		M-21	CIF22C02503PSD1	CIF22C02503NSD1
400	NH2				CIF22C04003PSD2	CIF22C04003NSD2
630	NH3	3		M-21	CIF22C06303PSD3	CIF22C06303NSD3
800	NH3				CIF22C08003PSD3	CIF22C08003NSD3

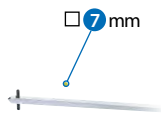
^{*(1)} Neutral pole early make-late break. Upon request also available 4P and 3P+NF.

^{*(2)} Padlockable handle in OFF 0 position. Possibility of unlocking the door in ON I position (with the use of a tool).
Also door interlock by a padlock in OFF 0 position.

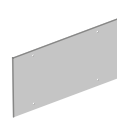
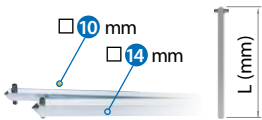
^{*(3)} Fuses are not supplied.



Please indicate in your order the switch code and the handle code, as these both products are managed separately.
A standard shaft is included with the handle.



Emergency external handle		Shaft extensions ^{*(4)}			Auxiliary contacts ^{*(5)}		Safety key lock device ^{*(6)}		Terminal shrouds ^{*(7)}		Full details in page	
Size	Front ^{*(2)} Code	Side Code	□	For external handle		1NO+1NC Code	2NO+2NC Code	Simple Code ^{*(e1)}	Double Code ^{*(e1)}	2 units Code		3 units Code
00	DS-SR02	DM1RLB1		7	387	Front DS-EP05	DM1AUB1	DM1AUB2	DS-CAB1	DS-CEB1	DM1CU01	DM1CU02
		DM1SRB1	347		Side DS-EP02							
0	DS-SR02	DM1RLB1	7	387	Front DS-EP05	DM1AUB1	DM1AUB2	DS-CAB1	DS-CEB1	DM1CU01	DM1CU02	126
				347	Side DS-EP02							



Shaft extensions ^{*(4)}			Auxiliary contacts ^{*(5)}		Safety key lock device ^{*(6)}		Rear protective plate		Terminal shrouds ^{*(7)}			Full details in page	
Size	□	Type 1 L Code ^{*(e1)}	1NO+1NC Code	2NO+2NC Code	Simple Code ^{*(e1)}	Double Code ^{*(e1)}	160-200A Code	250A Code	3P input Code	3P output Code	4P input or output Code		
1	10	375	DS-EP14	D5LAU01	D5LAU02	DS-CA11	DS-CEB1	3P DM2PP11	3P DM2PP21	DM2CU11	DM2CU12	DM2CU13	128
								4P DM2PP12	4P DM2PP22				
2	14	345	DS-EP23	D5LAU01	D5LAU02	DS-CB21	DS-CF21	3P DM2PP21		DM2CU21	DM2CU22	DM2CU23	130
								4P DM2PP22					
3	14	345	DS-EP23	D5LAU01	D5LAU02	DS-CB31	DS-CF31	3P DM2PP31		DM2CU31	DM2CU32	DM2CU33	132
								4P DM2PP32					




Auxiliary contacts ^{*(5)}		Safety key lock device ^{*(6)}		Terminal shrouds ^{*(7)}				Full details in page	
Size	1NO+1NC Code	2NO+2NC Code	Simple Code ^{*(e1)}	Double Code ^{*(e1)}	Code	3P input Code	3P output Code		4P input or output Code
00	DM1AUB1	DM1AUB2	DS-CAB1	DS-CEB1	-	-	-	-	134
0	DM1AUB1	DM1AUB2	DS-CAB1	DS-CEB1	2 units DM1CU01	-	-	-	136
					3 units DM1CU02				
1	D5LAU01	D5LAU02	DS-CA11	DS-CEB1	-	DM2CU11	DM2CU12	DM2CU13	138
2	D5LAU01	D5LAU02	DS-CB21	DS-CF21	-	DM2CU21	DM2CU22	DM2CU23	140
3	D5LAU01	D5LAU02	DS-CB31	DS-CF31	-	DM2CU31	DM2CU32	DM2CU33	142

^{*(4)} A standard shaft is included with the external handle.

^{*(5)} To be used as signalling or control contacts – I_e = 16A (resistive loads) 4A (inductive loads) at 250 Vac. Whilst closing, it switches after the main contacts. Whilst opening, it switches before the main contacts.

^{*(6)} For external handle lockable in OFF 0 position by means of a key, that only can be removed when the handle is unlocked. Interlocking in other positions available upon request.

^{*(7)} One set for input or output.

^{*(e1)} All these codes are related to the new handle , in case of replacements for old design handles, please consult.

M11 Switch fuses base mounting 2P - 3P - 3P+N

Size 00

A 32|50|63|100



NFC 14x51 NH 00C
BS A1-A2-A3



CODE-50A

CODE-63A

CODE-100A

2P M1100502PBC20

M1100632PBDB0

M1101002PBDB0

3P M1100503PBC20

M1100633PBDB0

M1101003PBDB0

3P+N M1100503NBC20

M1100633NBDB0

M1101003NBDB0

Fuses

NFC 14x51

NH 00C

NH 00C

CODE-32A

CODE-63A

2P M1100322PBBA0

M1100632PBBB0

3P M1100323PBBA0

M1100633PBBB0

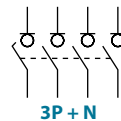
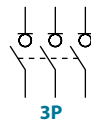
3P+N M1100323NBBA0

M1100633NBBB0

Fuses

BS A1

BS A2 - BS A3^{*(0)}



Technical information

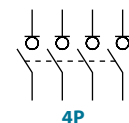


According to IEC 60947-3

			32	50	63	100
Fuses	NH/DIN		-	-	00C	00C
	BS		A1	-	A2-A3 ^{*(0)}	-
	NFC		-	14x51	-	-
Rated thermal current in ambient at 40 °C	I _{th}	A	32	50	63	100
Rated thermal current in enclosure	I _{the}	A	-	-	63	100
Rated insulation voltage	U _i	V	800	800	800	800
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	8
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	-	-	5,1	6,9
	BS		2,8	-	6,6	-
	NFC		-	4,7	-	-
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	U _e 400 V AC21A	A	32	50	63	100
	U _e 400 V AC22A	A	32	50	63	100
	U _e 400 V AC23A	A	32	50	63	100

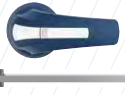
^{*(1)} Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation
^{*(2)} Other voltages and / or utilization categories. Please consult
^{*(3)} With a protective device limiting the cut - off current and the joule integral to the indicated values
^{*(0)} Only fuses with diameter < 25 mm

			32	50	63	100
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	256	400	504	800
Rated making capacity	400 V; cos φ = 0,45	A	320	500	630	1000
Short - circuit behaviour						
Rated conditional short-circuit current ^{*(3)}	I _q	kA rms	50	50	50	50
Rated conditional short-circuit making ^{*(3)}		kA rms	50	50	50	50
Maximum cut - off current		kA (peak)	13	13	13	13
Maximum power dissipation		A ² s (x 10 ³)	76	76	76	76
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		10000	10000	10000	10000
Maximum weight 2P		kg	0,7	0,7	0,7	0,7
Maximum weight 3P		kg	1,1	1,1	1,1	1,1
Maximum weight 3P+N		kg	1,5	1,5	1,5	1,5



Also available 4P switches under request, please consult

Accessories



» Frontal external handle included shaft*(e1)
IP65
 CODE DS-SA02



» Emergency frontal external handle included shaft*(e1)
IP65
 CODE DS-SR02



» Direct handle
 Frontal CODE DM1SI01
 Side CODE DM1SYB1



» Side handle included shaft*(e1)
IP65
 CODE DM1SLB1
 CODE DM1SAB1 BS



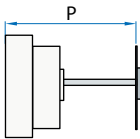
» Emergency side handle included shaft*(e1)
IP65
 CODE DM1RLB1
 CODE DM1SRB1 BS

» Shafts

Standard shaft included *(e1)
 L (mm) | P (mm)
 250 | 144... 270



Shaft extensions
 Frontal external handle
 L (mm) | P (mm) | CODE
 387 | 144... 407 | DS-EP05



Side handle
 L (mm) | P (mm) | CODE
 347 | 144... 367 | DS-EP02



» Terminal shrouds

2 UNITS | 3 UNITS
 DM1CU01 | DM1CU02
 (1 kit for input or output)



» Auxiliary contacts

1NO+1NC CODE DM1AUB1
 2NO+2NC CODE DM1AUB2

Ie = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.

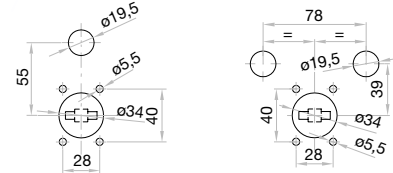


» Safety key lock device

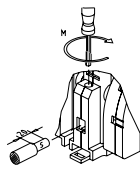
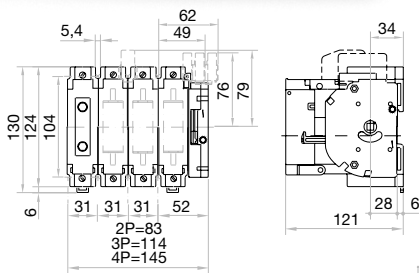
Simple CODE DS-CAB1
 Double CODE DS-CEB1

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

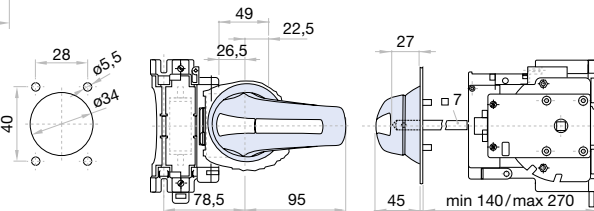
Door drilling for handle and key lock device
 Simple | Double



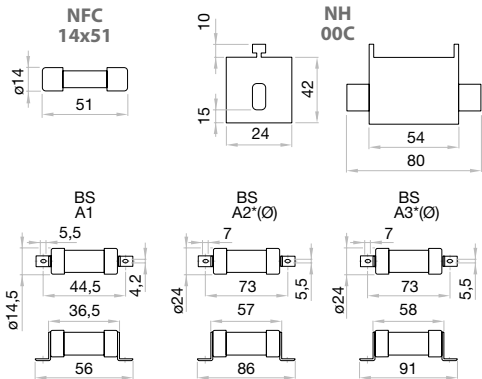
Dimensions (mm)



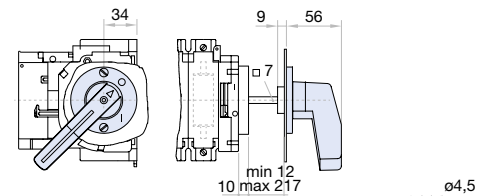
S max (Cu) mm ²	M Nxm
35	3



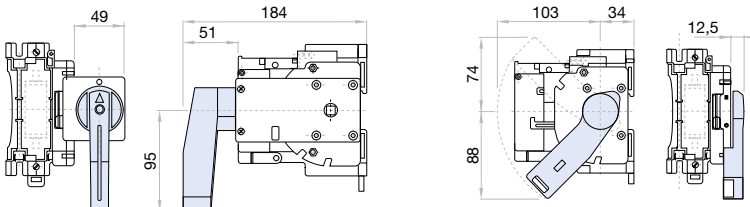
Frontal external handle



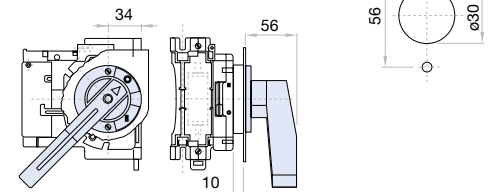
*Ø Only fuses with diameter < 25 mm



Side handle



Side direct handle



Side mounting

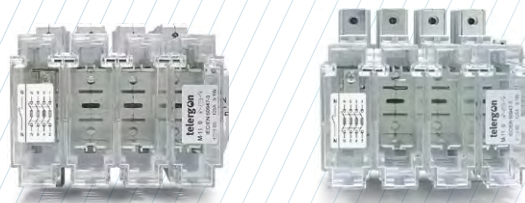
M11 Switch fuses base mounting 2P - 3P - 3P+N

Size 0

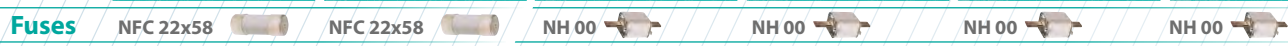
A 100|125|160



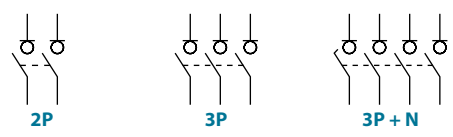
NFC 22x58 NH 00
BS A2-A3



	CODE-125A	CODE-125A	CODE-125A	CODE-125A	CODE-160A	CODE-160A
2P	M1101252PBC30	M1101252PTC30	M1101252PBDB0	M1101252PTDB0	M1101602PBDB0	M1101602PTDB0
3P	M1101253PBC30	M1101253PTC30	M1101253PBDB0	M1101253PTDB0	M1101603PBDB0	M1101603PTDB0
3P + N	M1101253NBC30	M1101253NTC30	M1101253NDB0	M1101253NTDB0	M1101603NDB0	M1101603NTDB0



	CODE-100A	CODE-100A
2P	M1101002PBB00	M1101002PTB00
3P	M1101003PBB00	M1101003PTB00
3P + N	M1101003NBB00	M1101003NTB00



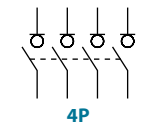
Technical information



According to IEC 60947-3

			100	125	160
Fuses	NH/DIN		-	00	00
	BS		A2-A3	-	-
	NFC		-	22x58	-
Rated thermal current in ambient at 40 °C	I _{th}	A	100	125	160
Rated thermal current in enclosure	I _{the}	A	-	125	160
Rated insulation voltage	U _i	V	800	800	800
Rated impulse withstand voltage	U _{imp}	kV	8	8	8
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	-	9,5	11,8
	BS		8,5	-	-
	NFC		-	12,5	-
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	Ue 400 V AC21A	A	100	125	160
	Ue 400 V AC22A	A	100	125	160
	Ue 400 V AC23A	A	100	125	160

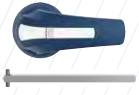
			100	125	160
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	800	1000	1280
Rated making capacity	400 V; cos φ = 0,45	A	1000	1250	1600
Short - circuit behaviour					
Rated conditional short-circuit current ^{*(3)}	I _q	kA rms	50	50	50
Rated conditional short-circuit making ^{*(3)}		kA rms	50	50	50
Maximum cut - off current		kA (peak)	17	17	17
Maximum power dissipation		A ² s (x 10 ³)	190	190	190
Number of mechanical operations (according to the standards, for other values please consult)		Cycles	10000	8000	8000
Maximum weight 2P		kg	1,2	1,2	1,2
Maximum weight 3P		kg	1,7	1,7	1,7
Maximum weight 3P+N		kg	2,2	2,2	2,2



Also available 4P switches under request, please consult

^{*(1)} Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation
^{*(2)} Other voltages and / or utilization categories. Please consult
^{*(3)} With a protective device limiting the cut - off current and the joule integral to the indicated values

Accessories



» **Frontal external handle** included shaft ^{*(e1)}
IP65
 CODE DS-SA02



» **Emergency frontal external handle** included shaft ^{*(e1)}
IP65
 CODE DS-SR02



» **Direct handle**
 Frontal CODE DM1SI01
 Side CODE DM1SYB1



» **Side handle** included shaft ^{*(e1)}
IP65
 CODE DM1SLB1



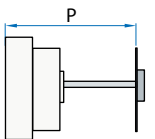
» **Emergency side handle** included shaft ^{*(e1)}
IP65
 CODE DM1RLB1

» **Shafts**

Standard shaft included ^{*(e1)}
 L (mm) | P (mm)
 250 | 144... 270



Shaft extensions
Frontal external handle
 L (mm) | P (mm) | CODE
 387 | 144... 407 | DS-EP05



Side handle
 L (mm) | P (mm) | CODE
 347 | 144... 367 | DS-EP02



» **Terminal shrouds**

2 UNITS | 3 UNITS
 DM1CU01 | DM1CU02
 (1 kit for input or output)



» **Auxiliary contacts**

1NO+1NC CODE DM1AUB1
 2NO+2NC CODE DM1AUB2

Ie = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.

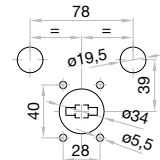
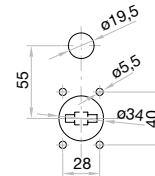


» **Safety key lock device**

Simple CODE DS-CAB1
 Double CODE DS-CEB1

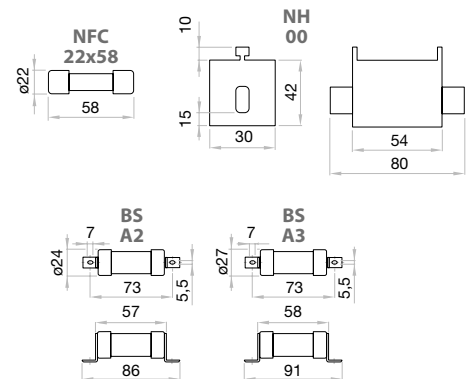
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
 Simple | Double

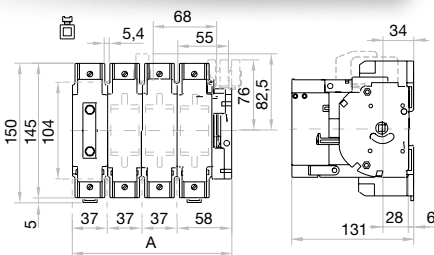


Fuses

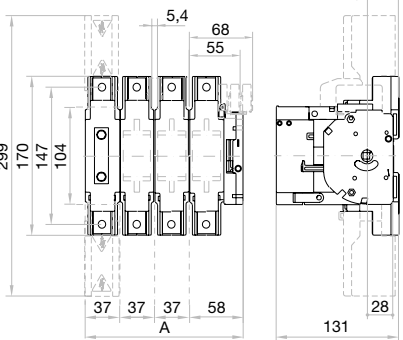
Maximum dimensions



Dimensions (mm)

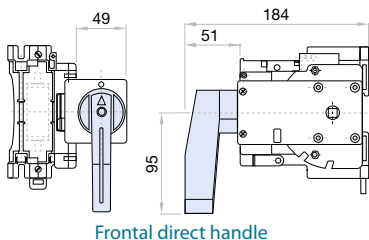
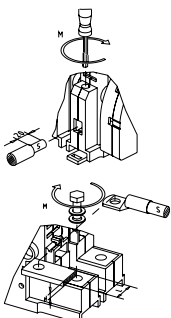
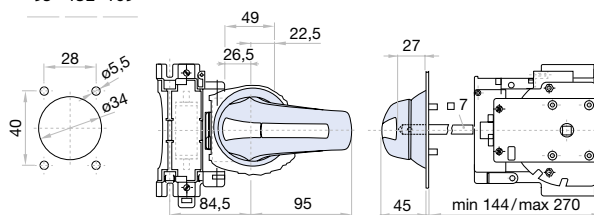


Fastening by screw only

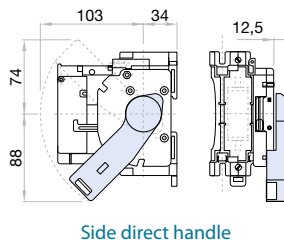


A		
2P	3P	4P
95	132	169

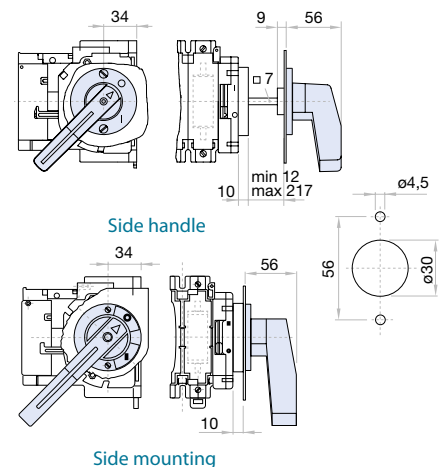
S	I		L	M
	S max (Cu)	H max (Cu)		
mm ²	mm	mm	mm	Nxm
95	-	-	-	4
95	3	25	M8	13



Frontal external handle



Side direct handle



Side mounting

M21 Switch fuses base mounting 3P - 3P+N

Size 1

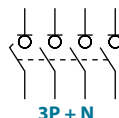
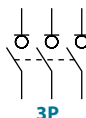
A 160|200|250



NH 0 BS A4
BS B1 BS B2



	CODE-160A	CODE-160A	CODE-200A	CODE-250A
3P	M2101603PSD00	M2101603PSB10	M2102003PSB20	M2102503PSB20
3P + N	M2101603NSD00	M2101603NSB10	M2102003NSB20	M2102503NSB20
Fuses	NH 0	BS A4	BS B1-BS B2	BS B1-BS B2



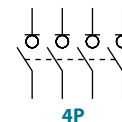
Technical information



According to IEC 60947-3

			160	200	250
Fuses	NH/DIN		0	-	0S
	BS		A4	B1-B2	B1-B2
Rated thermal current in ambient at 40 °C	Ith	A	160	200	250
Rated thermal current in enclosure	Ithe	A	160	-	250
Rated insulation voltage	Ui	V	800	800	800
Rated impulse withstand voltage	Uimp	kV	8	8	8
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	13,5	-	17,8
	BS		11	13	16
AC rated operational current ^{*(2)} (Rated frequency 50 / 60 Hz)	Ue 400 V AC21A	A	160	200	250
	Ue 400 V AC22A	A	160	200	250
	Ue 400 V AC23A	A	160	200	250

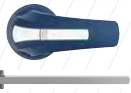
			160	200	250
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	1280	1600	2000
Rated making capacity	400 V; cos φ = 0,45	A	1600	2000	2500
Short - circuit behaviour					
Rated conditional short-circuit current ^{*(3)}	Iq	kA rms	100	100	100
Rated conditional short-circuit making ^{*(3)}		kA rms	100	100	100
Maximum cut - off current		kA (peak)	26,3	26,3	26,3
Maximum power dissipation		A ² s (x 10 ³)	478	478	478
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		8000	8000	8000
Maximum weight 3P		kg	3,1	3,1	3,1
Maximum weight 3P+N		kg	4	4	4



Also available 4P switches under request, please consult

^{*(1)} Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation
^{*(2)} Other voltages and / or utilization categories; please consult us
^{*(3)} With a protective device limiting the cut - off current and the joule integral to the indicated values

Accessories



» External handle included shaft ^{*(e1)}
IP65
 CODE DS-SA11

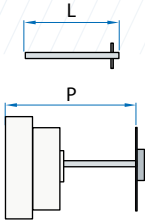


» Emergency external handle included shaft ^{*(e1)}
IP65
 CODE DS-SR11



» Direct handle
 CODE DM2SI11

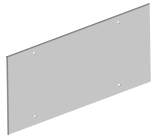
» Shafts



Standard shaft included ^{*(e1)}
 L (mm) | P (mm)
 227 | 180... 292

Shaft extensions
 Type 1
 L (mm) | P (mm) | CODE
 375 | 180... 441 | DS-EP14

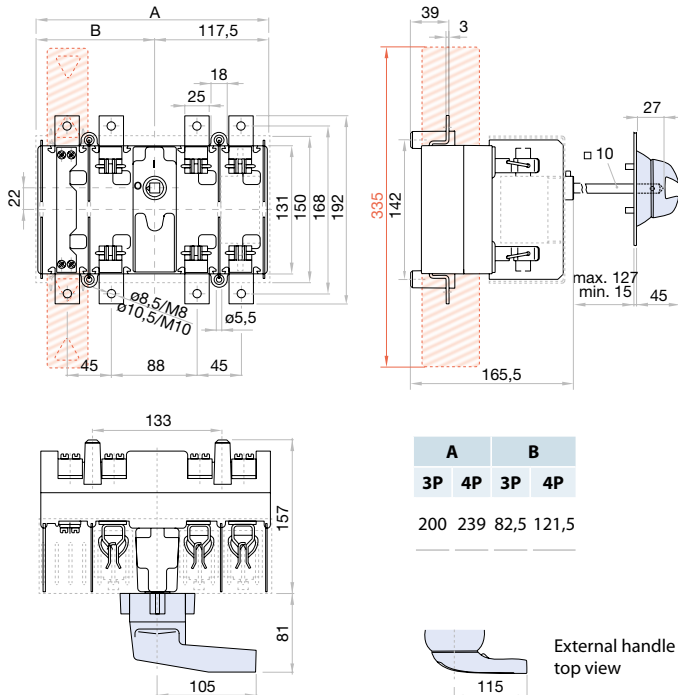
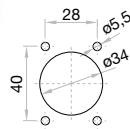
» Rear protective plate



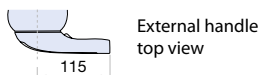
160-200 A | 250 A
 3P | 4P | 3P | 4P
 DM2PP11 | DM2PP12 | DM2PP21 | DM2PP22

Dimensions (mm)

Door drilling for external handle



A	B
3P	4P
200	239
82,5	121,5



» Terminal shrouds

3P INPUT | 3P OUTPUT | 4P INPUT/OUTPUT
 DM2CU11 | DM2CU12 | DM2CU13
 (1 kit for input or output)



» Auxiliary contacts

1NO+1NC CODE D5LAU01
 2NO+2NC CODE D5LAU02
 Ie = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.

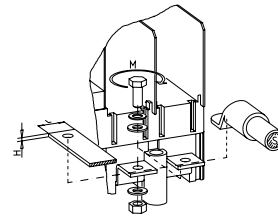
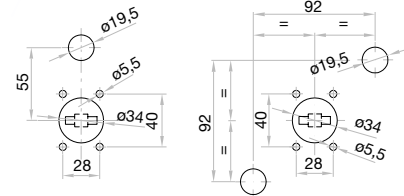


» Safety key lock device

Simple CODE DS-CA11
 Double CODE DS-CEB1

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

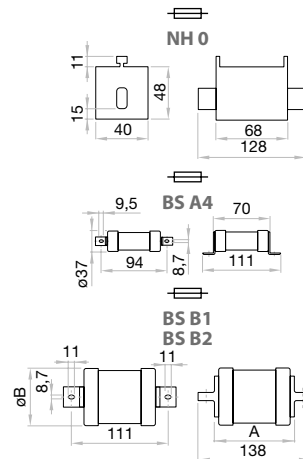
Door drilling for handle and key lock device
 Simple | Double



S max (Cu)	H max (Cu)	L max (Cu)	T	M	
mm ²	mm	mm		Nxm	
160 A	120	5	25	M8	13
200 A	120	5	25	M10	24
250 A	120	5	25	M10	24

Fuses

Maximum dimensions



	A	øB
	max	max
B1	70	37
B2	77	42

M21 Switch fuses base mounting 3P - 3P+N

Size 2

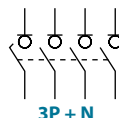
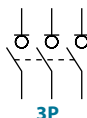
A 250|315|400



NH 1 NH 2 BS B1
BS B2 BS B3 BS B4



	CODE-250A	CODE-400A	CODE-315A	CODE-400A
3P	M2102503PSD10	M2104003PSD20	M2103153PSB40	M2104003PSB50
3P + N	M2102503NSD10	M2104003NSD20	M2103153NSB40	M2104003NSB50
Fuses	NH 1	NH 2	BS B1...BS B3	BS B1...BS B4



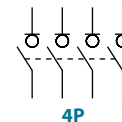
Technical information



According to IEC 60947-3

			250	315	400
Fuses	NH/DIN		1	-	2
	BS		-	B1-B3	B1-B4
Rated thermal current in ambient at 40 °C	I _{th}	A	250	315	400
Rated thermal current in enclosure	I _{the}	A	250	-	400
Rated insulation voltage	U _i	V	1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	12	12	12
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	18,7	-	30
	BS		-	24	29
AC rated operational current ^{*(2)} (Rated frequency 50 / 60 Hz)	U _e 400 V AC21A	A	250	315	400
	U _e 400 V AC22A	A	250	315	400
	U _e 400 V AC23A	A	250	315	400

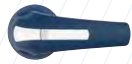
			250	315	400
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	2000	2520	3200
Rated making capacity	400 V; cos φ = 0,45	A	2500	3150	4000
Short - circuit behaviour					
Rated conditional short-circuit current ^{*(3)}	I _q kA rms		100	100	100
Rated conditional short-circuit making ^{*(3)}	kA rms		100	100	100
Maximum cut - off current	kA (peak)		43,3	43,3	43,3
Maximum power dissipation	A ² s (x 10 ³)		1600	1600	1600
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		8000	8000	5000
Maximum weight 3P	kg		6,6	6,6	6,6
Maximum weight 3P+N	kg		8	8	8



Also available 4P switches under request, please consult

^{*(1)} Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation
^{*(2)} Other voltages and / or utilization categories; please consult us
^{*(3)} With a protective device limiting the cut - off current and the joule integral to the indicated values

Accessories



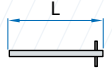
» **External handle** included shaft ^{*(e1)}
 IP65
 CODE DS-LA22



» **Emergency external handle** included shaft ^{*(e1)}
 IP65
 CODE DS-LR22

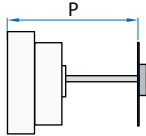


» **Direct handle**
 CODE DM2SI21

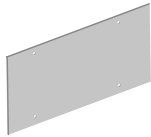


» **Shafts**

Standard shaft included ^{*(e1)}
 L (mm) | P (mm)
 239 | 216...286



Shaft extensions
 Type 1
 L (mm) | P (mm) | CODE
 345 | 216...392 | DS-EP23

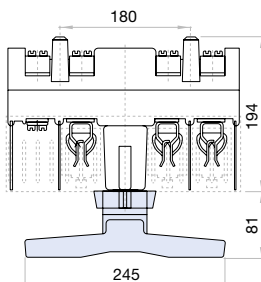
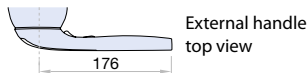
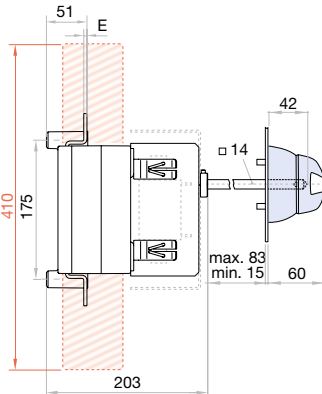
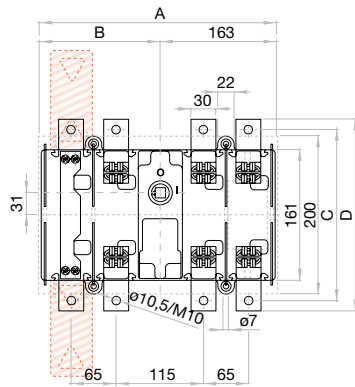
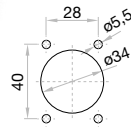


» **Rear protective plate**

3P | 4P
 DM2PP21 | DM2PP22

Dimensions (mm)

Door drilling for external handle



	A	B	C	D	E
	3P	4P	3P	4P	
250A			212	242	4
315A	274	329	111	166	
400A			216	246	5



» **Terminal shrouds**

3P INPUT | 3P OUTPUT | 4P INPUT/OUTPUT
 DM2CU21 | DM2CU22 | DM2CU23
 (1 kit for input or output)



» **Auxiliary contacts**

1NO+1NC CODE D5LAU01
 2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.

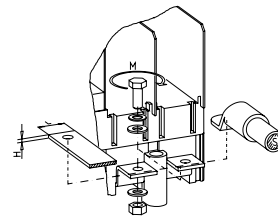
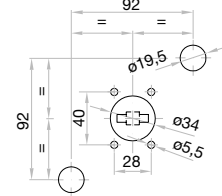
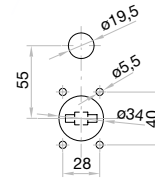


» **Safety key lock device**

Simple CODE DS-CB21
 Double CODE DS-CF21

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

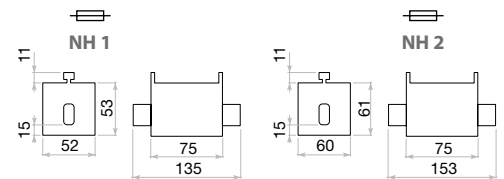
Door drilling for handle and key lock device
 Simple | Double



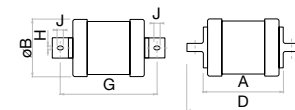
S max (Cu)	H max (Cu)	L max (Cu)	M
mm ²	mm	mm	Nxm
240	6	40	M10 24

Fuses

Maximum dimensions



BS B1
 BS B2
 BS B3
 BS B4



	A	øB	D	G	H	J
	max	max	max	nom	nom	min
B1	70	37				
B2	77	42	138	111	8,7	11
B3						
B4	83	66				

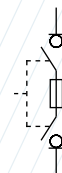
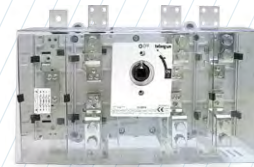
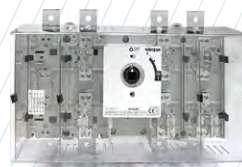
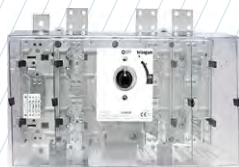
M21 Switch fuses base mounting 3P - 3P+N

Size 3

A 630|800



NH 3 BS C1 BS C2
BS C3



CODE-630A

3P
3P + N
M2106303PSD30
M2106303NSD30

Fuses

NH 3

CODE-800A

M2108003PSD30
M2108003NSD30

NH 3

CODE-630A

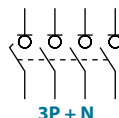
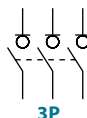
M2106303PSB70
M2106303NSB70

BS C1...BS C2

CODE-800A

M2108003PSB80
M2108003NSB80

BS C1...BS C3



Technical information



According to IEC 60947-3

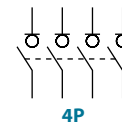
			630	800
Fuses	NH/DIN		3	3
	BS		C1-C2	C1-C3
Rated thermal current in ambient at 40 °C	I _{th}	A	630	800
Rated thermal current in enclosure	I _{the}	A	630	725
Rated insulation voltage	U _i	V	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	12	12
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	48	57
	BS		44	63
AC rated operational current ^{*(2)} (Rated frequency 50 / 60 Hz)	U _e 400 V AC21A	A	630	800
	U _e 400 V AC22A	A	630	800
	U _e 400 V AC23B	A	630	630

^{*(1)} Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation

^{*(2)} Other voltages and / or utilization categories; please consult us

^{*(3)} With a protective device limiting the cut - off current and the joule integral to the indicated values

			630	800
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	5040	5040
Rated making capacity	400 V; cos φ = 0,45	A	6300	6300
Short - circuit behaviour				
Rated conditional short-circuit current ^{*(3)}	I _q	kA rms	100	100
Rated conditional short-circuit making ^{*(3)}		kA rms	100	100
Maximum cut - off current		kA (peak)	60,8	60,8
Maximum power dissipation		A ² s (x 10 ³)	4600	4600
Number of mechanical operations (according to the standards, for other values please consult)		Cycles	5000	3000
Maximum weight 3P		kg	13	13
Maximum weight 3P+N		kg	15	15



Also available 4P switches under request, please consult

Accessories



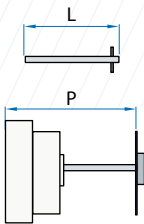
» **External handle** included shaft ^{*(e1)}
 IP65
 CODE DS-LA31



» **Emergency external handle** included shaft ^{*(e1)}
 IP65
 CODE DS-LR31

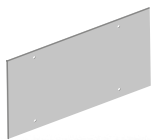


» **Direct handle**
 CODE DM2SI31



» **Shafts**
Standard shaft included ^{*(e1)}
 L (mm) | P (mm)
 186 | 235... 286

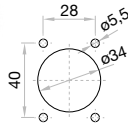
Shaft extensions
 Type 1
 L (mm) | P (mm) | CODE
 345 | 235... 445 | DS-EP23



» **Rear protective plate**
 3P | 4P
 DM2PP31 | DM2PP32

Dimensions (mm)

Door drilling for external handle



» **Terminal shrouds**

3P INPUT | 3P OUTPUT | 4P INPUT/OUTPUT
 DM2CU31 | DM2CU32 | DM2CU33
 (1 kit for input or output)



» **Auxiliary contacts**

1NO+1NC CODE D5LAU01
 2NO+2NC CODE D5LAU02

le = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.

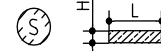
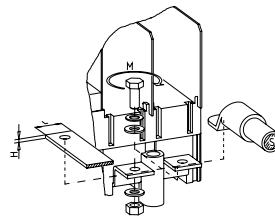
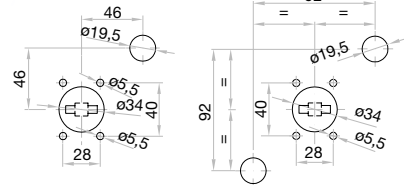


» **Safety key lock device**

Simple CODE DS-CB31
 Double CODE DS-CF31

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

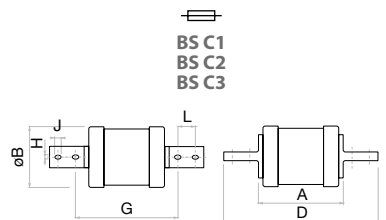
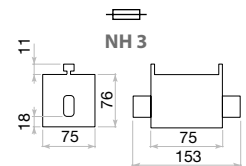
Door drilling for handle and key lock device
 Simple | Double



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M	M Nm
630 A	2x185	2x7	50	M12	45
800 A	2x240	2x7	50	M8	13

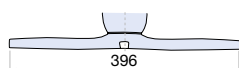
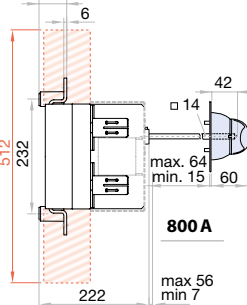
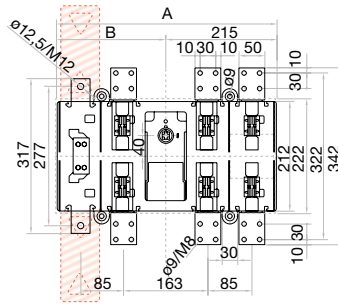
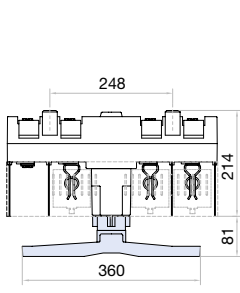
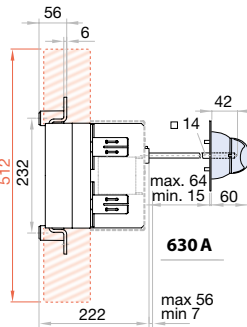
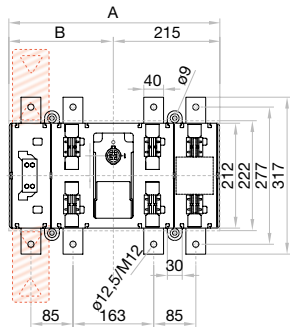
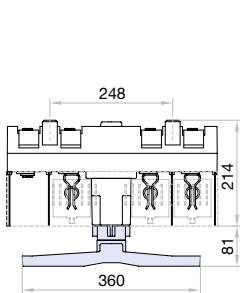
Fuses

Maximum dimensions



	A	B
3P	381	426
4P	166	211


	A	øB	D	G	H	J	L
	max	max	max	nom	nom	min	min
C1	83	66				11	25,4
C2	85	77	212	133	10,3		
C3	89	84				12,5	

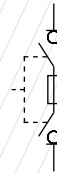


External handle top view

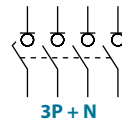
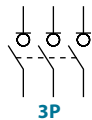
series
CIF21

CIF21 Metal enclosed switch fuses IP65 3P - 3P+N

Size 00
A 63|100




	CODE - 63A 	CODE - 100A 
3P	CIF21C00633PBDB	CIF21C01003PBDB
3P + N	CIF21C00633NBDB	CIF21C01003NBDB



Technical information

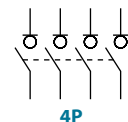


According to IEC 60947-3
IEC 61439-2

			63	100
Fuses	NH/DIN		00C	00C
Rated thermal current in enclosure 40°C	I _{the}	A	63	100
Rated insulation voltage	U _i	V	800	800
Rated impulse withstand voltage	U _{imp}	kV	8	8
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	5,1	6,9
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	Ue 400 V AC21A	A	63	100
	Ue 400 V AC22A	A	63	100
	Ue 400 V AC23A	A	63	100

^{*(1)} Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation
^{*(2)} Other voltages and / or utilization categories. Please consult
^{*(3)} With a protective device limiting the cut - off current and the joule integral to the indicated values

			63	100
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	504	800
Rated making capacity	400 V; cos φ = 0,45	A	630	1000
Short - circuit behaviour				
Rated conditional short-circuit current ^{*(3)}	I _q	kA rms	50	50
Rated conditional short-circuit making ^{*(3)}		kA rms	50	50
Maximum cut - off current		kA (peak)	13	13
Maximum power dissipation		A ² s (x 10 ³)	76	76
Number of mechanical operations (according to the standards, for other values please consult)		Cycles	10000	10000
Maximum weight 3P		kg	Consult	
Maximum weight 3P+N		kg	Consult	



Also available 4P switch - disconnectors under request, please consult

Accessories



» **External handle** included
IP65



» **Emergency external handle** under request
IP65



» **Auxiliary contacts**

1NO+1NC CODE DM1AUB1
2NO+2NC CODE DM1AUB2

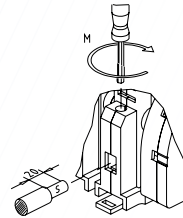
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» **Safety key lock device**

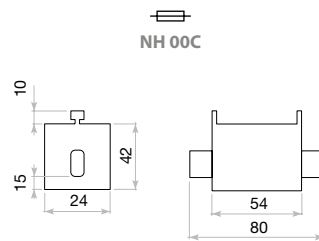
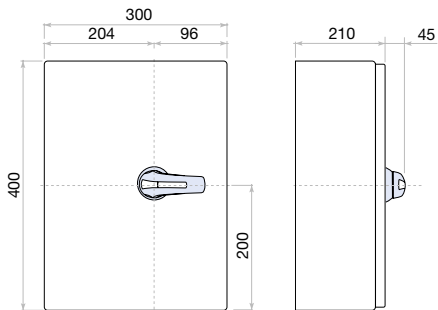
Simple CODE DS-CAB1
Double CODE DS-CEB1

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

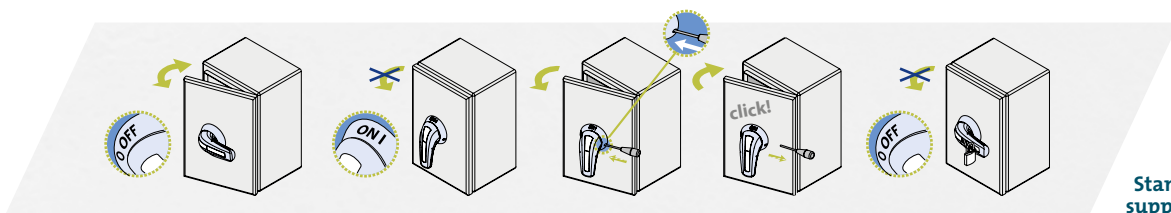


S max (Cu)	M
mm ²	Nxm
35	3

Dimensions (mm)



Fuse max dimensions



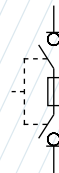
Standard supply

series
CIF21

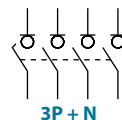
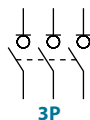
CIF21 Metal enclosed switch fuses IP65 3P - 3P+N

Size 0

A 125 | 160



	CODE - 125A	CODE - 160A	CODE - 125A	CODE - 160A
3P	CIF21C01253PBDB	CIF21C01603PBDB	CIF21C01253PTDB	CIF21C01603PTDB
3P + N	CIF21C01253NBDB	CIF21C01603NBDB	CIF21C01253NTDB	CIF21C01603NTDB



Technical information



According to IEC 60947-3
IEC 61439-2

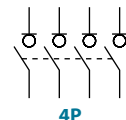
			125	160
Fuses	NH/DIN		00	00
Rated thermal current in enclosure 40°C	I _{the}	A	125	160
Rated insulation voltage	U _i	V	800	800
Rated impulse withstand voltage	U _{imp}	kV	8	8
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	9,5	11,8
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	U _e 400 V AC21A	A	125	160
	U _e 400 V AC22A	A	125	160
	U _e 400 V AC23A	A	125	160

				125	160
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A		1000	1280
Rated making capacity	400 V; cos φ = 0,45	A		1250	1600
Short - circuit behaviour					
Rated conditional short-circuit current ^{*(3)}	I _q	kA rms		50	50
Rated conditional short-circuit making ^{*(3)}		kA rms		50	50
Maximum cut - off current		kA (peak)		17	17
Maximum power dissipation		A ² s (x 10 ³)		190	190
Number of mechanical operations (according to the standards, for other values please consult)		Cycles		8000	8000
Maximum weight 3P		kg		Consult	
Maximum weight 3P+N		kg		Consult	

^{*(1)} Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation

^{*(2)} Other voltages and / or utilization categories. Please consult

^{*(3)} With a protective device limiting the cut - off current and the joule integral to the indicated values



Also available 4P switch - disconnectors under request, please consult

Accessories



» **External handle** included
IP65



» **Emergency external handle** under request
IP65



» **Auxiliary contacts**

1NO+1NC CODE DM1AUB1
2NO+2NC CODE DM1AUB2

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» **Terminal shrouds**

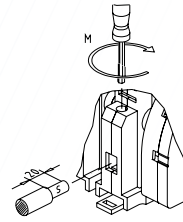
2 UNITS | 3 UNITS
DM1CU01 | DM1CU02
(1 kit for input or output)



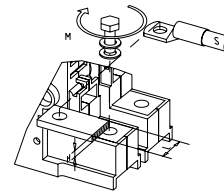
» **Safety key lock device**

Simple CODE DS-CAB1
Double CODE DS-CEB1

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

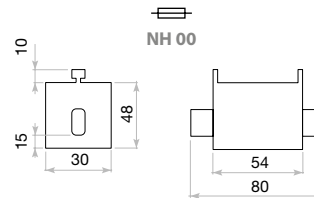
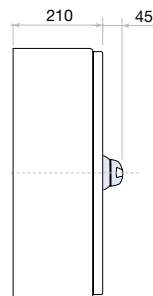
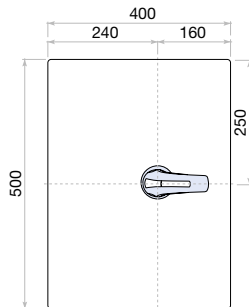


S max (Cu)	M	
	mm ²	Nxm
125 A	95	4
160 A		

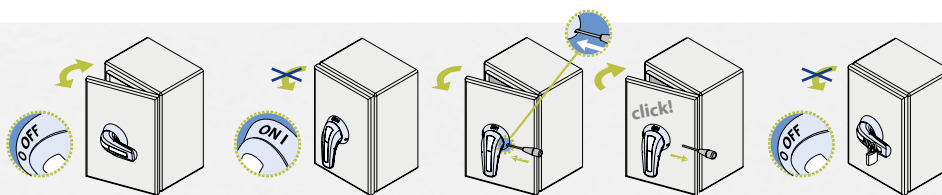


S max (Cu)	H max (Cu)	L max (Cu)	M	M
mm ²	mm	mm	mm	Nxm
125 A	95	3	25	M8
160 A				13

Dimensions (mm)




Fuse max dimensions




Standard supply

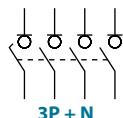
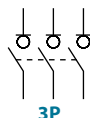
series
CIF22

CIF22 Metal enclosed switch fuses IP65 3P - 3P+N

Size 1
A 160




CODE-160A 
3P CIF22C01603PSD0
3P + N CIF22C01603NSD0



Technical information



According to IEC 60947-3
IEC 61439-2

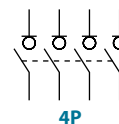
			160
Fuses	NH/DIN		0
Rated thermal current in enclosure 40°C	I _{the}	A	160
Rated insulation voltage	U _i	V	800
Rated impulse withstand voltage	U _{imp}	kV	8
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	13,5
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	U _e 400 V AC21A	A	160
	U _e 400 V AC22A	A	160
	U _e 400 V AC23A	A	160

^{*(1)} Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation

^{*(2)} Other voltages and / or utilization categories. Please consult

^{*(3)} With a protective device limiting the cut - off current and the joule integral to the indicated values

				160
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A		1280
Rated making capacity	400 V; cos φ = 0,45	A		1600
Conditional short - circuit current				
Rated conditional short-circuit current ^{*(3)}	I _q	kA rms		100
Rated conditional short-circuit making ^{*(3)}		kA rms		100
Maximum cut - off current		kA (peak)		26,3
Maximum power dissipation		A ² s (x 10 ³)		478
Number of mechanical operations (according to the standards, for other values please consult)		Cycles		8000
Maximum weight 3P		kg		Consult
Maximum weight 3P+N		kg		Consult



Also available 4P switch - disconnectors under request, please consult

Accessories



» **External handle** included
IP65



» **Emergency external handle** under request
IP65



» **Auxiliary contacts**

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» **Terminal shrouds**

INPUT 3P DM2CU11 | OUTPUT 3P DM2CU12 | INPUT/OUTPUT 4P DM2CU13

(1 kit for input or output)

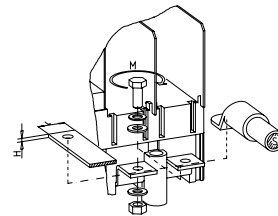
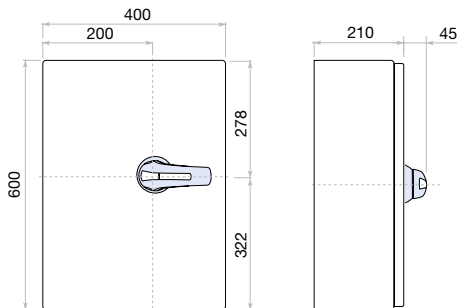


» **Safety key lock device**

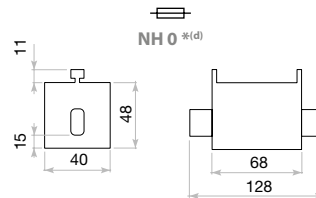
Simple CODE DS-CA11
Double CODE DS-CEB1

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Dimensions (mm)

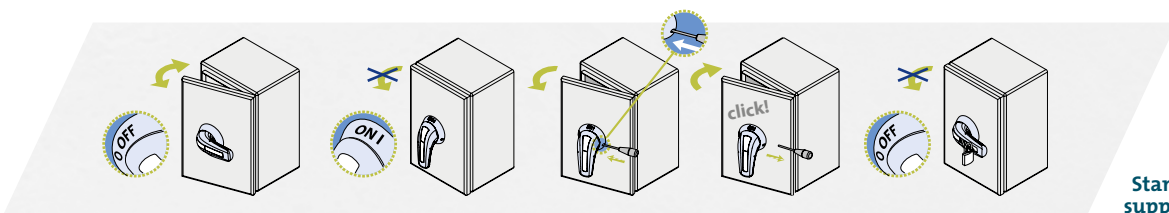


S max (Cu)	H max (Cu)	L max (Cu)	T	M
mm ²	mm	mm		Nxm
120	5	25	M8	13



Fuse max dimensions

*^(d) Other fuses type, may be required changing the dimensions, please consult



Standard supply

series
CIF22

CIF22

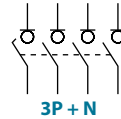
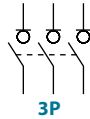
Metal enclosed switch fuses IP65 3P - 3P+N

Size 2

A 250 | 400



	CODE - 250A	CODE - 400A
3P	CIF22C02503PSD1	CIF22C04003PSD2
3P + N	CIF22C02503NSD1	CIF22C04003NSD2



Technical information

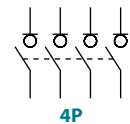


According to IEC 60947-3
IEC 61439-2

			250	400
Fuses	NH/DIN		1	2
Rated thermal current in enclosure 40°C	I _{the}	A	250	400
Rated insulation voltage	U _i	V	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	12	12
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	18,7	30
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	U _e 400 V AC21A	A	250	400
	U _e 400 V AC22A	A	250	400
	U _e 400 V AC23A	A	250	400

			250	400
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	2000	3200
Rated making capacity	400 V; cos φ = 0,45	A	2500	4000
Conditional short - circuit current				
Rated conditional short-circuit current ^{*(3)}	I _q	kA rms	100	100
Rated conditional short-circuit making ^{*(3)}		kA rms	100	100
Maximum cut - off current		kA (peak)	43,3	43,3
Maximum power dissipation		A ² s (x 10 ³)	1600	1600
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		8000	5000
Maximum weight 3P		kg		Consult
Maximum weight 3P+N		kg		Consult

^{*(1)} Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation
^{*(2)} Other voltages and / or utilization categories. Please consult
^{*(3)} With a protective device limiting the cut - off current and the joule integral to the indicated values



Also available 4P switch - disconnectors under request, please consult

Accessories



» External handle included
IP65



» Emergency external handle under request
IP65



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal shrouds

INPUT 3P DM2CU21 | OUTPUT 3P DM2CU22 | INPUT/OUTPUT 4P DM2CU23

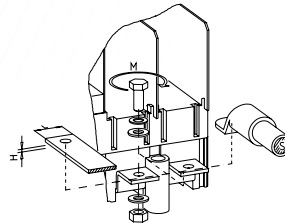
(1 kit for input or output)



» Safety key lock device

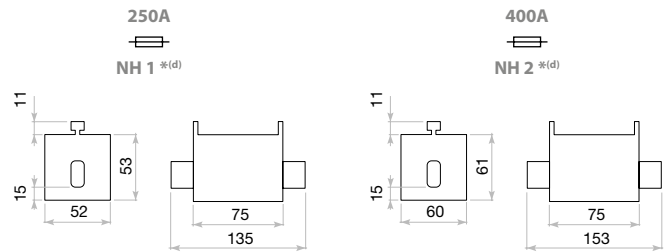
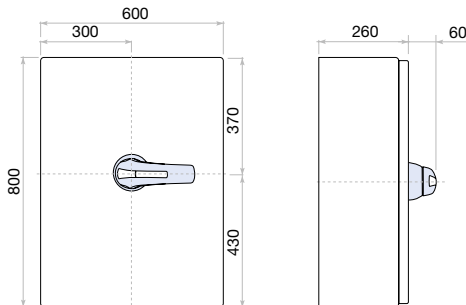
Simple CODE DS-CB21
Double CODE DS-CF21

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



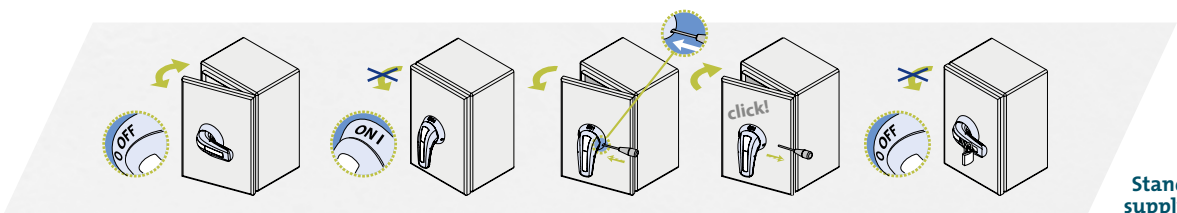
S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
240	6	40	M10	24

Dimensions (mm)



Fuse max dimensions

*^(d) Other fuses type, may be required changing the dimensions, please consult




Standard supply

series
CIF22

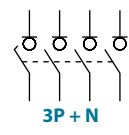
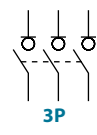
CIF22 Metal enclosed switch fuses IP65 3P - 3P+N

Size 3

A 630 | 800




	CODE-630A	CODE-800A
3P	CIF22C06303PSD3	CIF22C08003PSD3
3P + N	CIF22C06303NSD3	CIF22C08003NSD3



Technical information

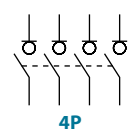


According to IEC 60947-3
IEC 61439-2

			630	800
Fuses	NH/DIN		3	3
Rated thermal current in enclosure 40°C	I _{the}	A	630	725
Rated insulation voltage	U _i	V	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	12	12
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	48	57
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	U _e 400 V AC21A	A	630	800
	U _e 400 V AC22A	A	630	800
	U _e 400 V AC23B	A	630	630

			630	800
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	5040	5040
Rated making capacity	400 V; cos φ = 0,45	A	6300	6300
Conditional short - circuit current				
Rated conditional short-circuit current ^{*(3)}	I _q	kA rms	100	100
Rated conditional short-circuit making ^{*(3)}		kA rms	100	100
Maximum cut - off current		kA (peak)	60,8	60,8
Maximum power dissipation		A ² s (x 10 ³)	4600	4600
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		5000	3000
Maximum weight 3P		kg	Consult	
Maximum weight 3P+N		kg	Consult	

^{*(1)} Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation
^{*(2)} Other voltages and / or utilization categories. Please consult
^{*(3)} With a protective device limiting the cut - off current and the joule integral to the indicated values



Also available 4P switch - disconnectors under request, please consult

Accessories



» External handle included
IP65



» Emergency external handle under request
IP65



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal shrouds

INPUT 3P
DM2CU31

OUTPUT 3P
DM2CU32

INPUT/OUTPUT 4P
DM2CU33

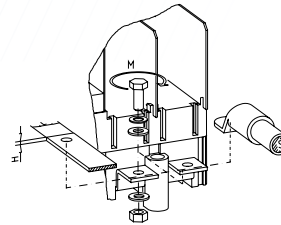
(1 kit for input or output)



» Safety key lock device

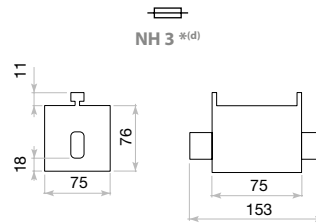
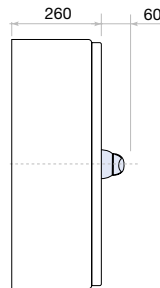
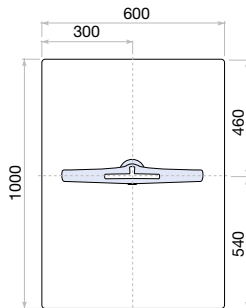
Simple CODE DS-CB31
Double CODE DS-CF31

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



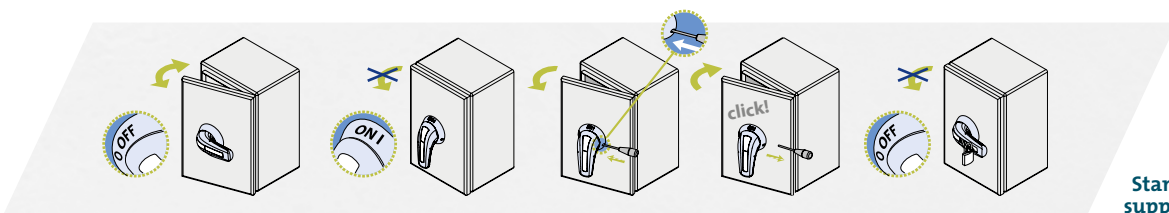
	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M	M Nm
630 A	2x185	2x7	50	M12	45
800 A	2x240	2x7	50	M8	13

Dimensions (mm)



Fuse max dimensions

*^(d) Other fuses type, may be required changing the dimensions, please consult



Standard supply

Changeover switches

Changeover switches with high operating load capacity and a high level disconnection insulation; high reliability and safety in abnormal situations, available in different construction models, with a wide range of currents, motorized units and various accessories.



The changeover switches in the series **CCF** | **CCP** | **S5F** | **S5B**, are manufactured with high safety self-extinguishing materials, providing an excellent level of electrical insulation, low smoke emission and high resistance to electromechanical stress.

They comply with environmental requirements and undergo strict quality controls for a reliable product that meets the most demanding requirements.

They consist of a sandwich-type body containing self-cleaning blade type contacts,

with pre-arc zones to ensure long term, fault-free energy transmission and coated with silver alloy for long electromechanical life. The detent mechanism provides quick and independent switching due to the accumulation of elastic potential energy, which is transmitted at high speed to the contacts for arc extinction.

The compact models are with visible cut-off and performed internally the common output without the need for external connections.

Functional and ergonomic handle

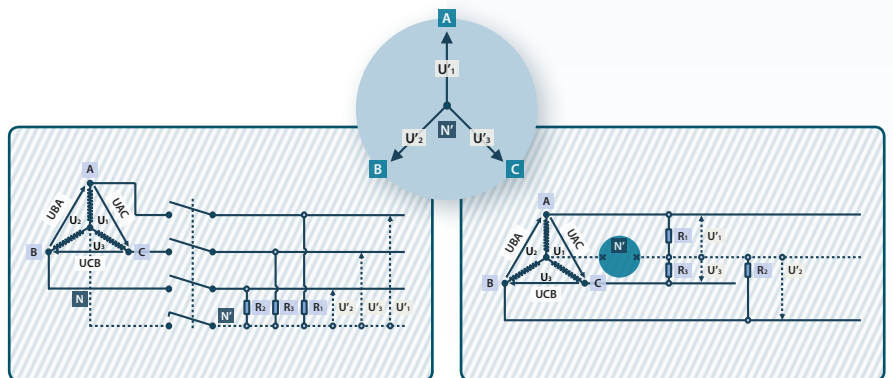
- > Good grip and excellent torque/resistance
- > Padlockable handle in **O OFF** position (up to three locks Ø 5-8 mm)
- > Door interlock in **ON I - ON II** position
- > Self-centering shaft for door handle



Neutral pole early make & late break

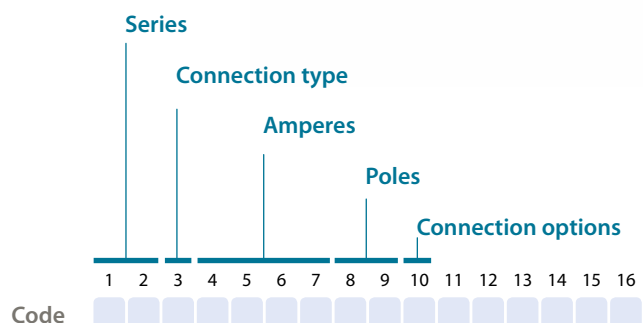
This safety feature prevents accidental overvoltage when making/breaking of loads connected between phase and neutral.

Due to the design in our 3P+N switch - disconnectors and changeover switches, the neutral contact closes before the main phases and opens later, thus ensuring this operation mode.



Range codification:

The **CCF** | **CCP** | **S5F** | **S5B** series, are identified by a code that describes their most important characteristics as described below.



According to:
IEC 60947-3
IEC 61439-2
RoHS



Testing and approvals:



series
CCF



1 2 3 4 5
CCF

Compact model.
Visible cut-off.
Common output from the front.
Wide range of currents.
Base mounting by screws.
External or direct handle.

series
CCP



1 2 3 4 5
CCP

Compact model.
Visible cut-off.
Common output from the rear.
Wide range of currents.
Base mounting by screws.
External or direct handle.

series
S5F



1 2 3 4 5
S5F

Back to back or line arrangement.
Base mounting by screws.
External or direct handle.

series
S5B



By-pass

1 2 3 4 5
S5B

Back to back arrangement.
Base mounting by screws.
External or direct handle.

series
CEC



1 2 3 4 5
CEC

Compact efficient changeover switches.
Reduced size.
Common output from the up.
Flexible mounting.
Innovative single mechanism for COS function.
Lower energy losses.
External or direct handle.

series
CTR2



1 2 3 4 5
CTR2

Manual changeover switch in metallic enclosure.
External padlockable handle with locking door in ON I - ON II positions.

IP65

series
CTRC



1 2 3 4 5
CTRC

Motorized changeover switch in metallic enclosure.
Outdoor lights position indicators (mains - 0 - generator).
Power connections on the bottom for direct access.
Power part protected against accidental contact.
Physical separation between power and control parts.
Including manual handle (for emergency operation or maintenance).
Other special combinations under request.

IP55

IP66

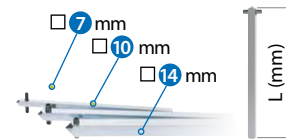
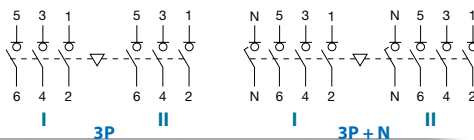
series
CTRC



1 2 3 4 5
CTRC

Motorized changeover switch in metallic enclosure with automatic transfer switch for the generator control with automated switching Main - Gen management.
Configurable through software programming.
Power part protected against accidental contact.
Including manual handle (for emergency operation or maintenance).

IP66



CEC **S5F** **S5L** **CCF** **CCP**

Changeover switches
3 & 4 poles (40 - 3150A) ^{*(2)} (I - O - II)

Manual handle

Shaft extensions ^{*(4)}



CEC



S5F

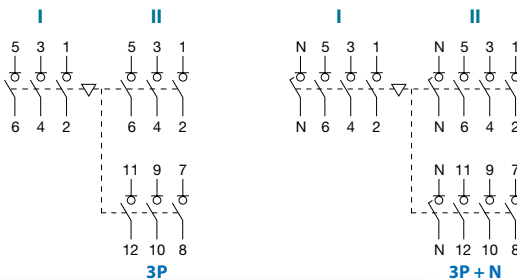


CCF



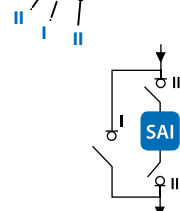
CCP

Amp.	Size	Connection	Series	3 pole (3P)	4 pole (3P + N) ^{*(1)}	External ^{*(3)}	Direct	□	Type 1 & 2															
				Code	Code	Code	Code		L	Code ^{*(e1)}														
63	00		CEC	CEC00633PB0	CEC00633NB0	DCELAB1	D5LSI01	7	250	DS-EP04														
63			CEC	CEC00633PS0	CEC00633NS0					DS-EP05														
80			CEC	CEC00803PB0	CEC00803NB0				D5LLA01	D5LSI01	7	250	DS-EP04											
80			CEC	CEC00803PS0	CEC00803NS0								DS-EP05											
100			CEC	CEC01003PS0	CEC01003NS0							D5LLA01	D5LSI01	7	250	DS-EP04								
125			CEC	CEC01253PS0	CEC01253NS0											DS-EP05								
125	0		S5F	S5F01253PS0	S5F01253NS0	D5LLA01	D5LSI01	7	250	DS-EP04														
160			S5F	S5F01603PS0	S5F01603NS0					DS-EP05														
200			S5F	S5F02003PS0	S5F02003NS0				DCCLA11	DCCLI11	10	375	DS-EP14											
200			CCF	CCF02003PS0	CCF02003NS0								DS-EP15											
200			CCP	CCP02003PS0	CCP02003NS0							DCCLA21	DCCLI21	14	345	DS-EP23								
250			CCF	CCF02503PS0	CCF02503NS0											DS-EP24								
250			CCP	CCP02503PS0	CCP02503NS0										DCCLA31	DCCLI31	14	345	DS-EP23					
315			CCF	CCF03153PS0	CCF03153NS0														DS-EP24					
315			CCP	CCP03153PS0	CCP03153NS0				D5LLA31	D5LLI32	-	-	-											
400			CCF	CCF04003PS0	CCF04003NS0								D5LLA31	D5LLI32	-	-	-							
400			CCP	CCP04003PS0	CCP04003NS0												D5LLA31	D5LLI32	-	-	-			
500			CCF	CCF05003PS0	CCF05003NS0																D5LLA31	D5LLI32	-	-
500	CCP	CCP05003PS0	CCP05003NS0	D5LLA31	D5LLI32	-	-	-																
630	CCF	CCF06303PS0	CCF06303NS0					D5LLA31																
630	CCP	CCP06303PS0	CCP06303NS0						D5LLA31	D5LLI32	-	-												
800	CCF	CCF08003PS0	CCF08003NS0										D5LLA31	D5LLI32	-	-								
800	CCP	CCP08003PS0	CCP08003NS0														D5LLA31	D5LLI32	-	-				
1000	CCF	CCF10003PS0	CCF10003NS0																		D5LLA31	D5LLI32	-	-
1000	CCP	CCP10003PS0	CCP10003NS0	D5LLA31	D5LLI32	-	-																	
1250	CCF	CCF12503PS0	CCF12503NS0					D5LLA31																
1250	CCP	CCP12503PS0	CCP12503NS0						D5LLA31	D5LLI32	-	-												
1600	S5F	S5F16003PS0	S5F16003NS0										D5LLA31	D5LLI32	-	-								
1800	S5F	S5F18003PS0	S5F18003NS0														D5LLA31	D5LLI32	-	-				
2000	S5F	S5F20003PD0	S5F20003ND0																		D5LLA31	D5LLI32	-	-
2000	S5F	S5F20003PP0	S5F20003NP0	D5LLA31	D5LLI32	-	-																	
2500	S5F	S5F25003PP0	S5F25003NP0					D5LLA31																
3150	S5F	S5F31503PP0	S5F31503NP0						D5LLA31	D5LLI32	-	-												



S5B **Bypass changeover switches S5**
3 & 4 poles (125 - 2000A) (I - O - II) ^{*(5)}

Manual handle



Amp.	Size	Connection	3 pole (3P)	4 pole (3P + N) ^{*(1)}	External ^{*(3)}	Direct
			Code	Code	Code	Code
125	0		S5B01253PS0	S5B01253NS0	D5LLA01	D5LSI02
160			S5B01603PS0	S5B01603NS0		
200			S5B02003PS0	S5B02003NS0		
250	1		S5B02503PR0	S5B02503NR0	D5LLA11	D5LLI12
315			S5B03153PR0	S5B03153NR0		
400			S5B04003PC0	S5B04003NC0		
500	2		S5B05003PR0	S5B05003NR0	D5LLA21	D5LLI22
630			S5B06303PR0	S5B06303NR0		
800			S5B08003PR0	S5B08003NR0		
1000	3		S5B10003PC0	S5B10003NC0	D5LLA31	D5LLI32
1250			S5B12503PS0	S5B12503NS0		
1600			S5B16003PS0	S5B16003NS0		
1800	4		S5B18003PS0	S5B18003NS0	D5LLA31	D5LLI32
2000			S5B20003PD0	S5B20003ND0		

^{*(1)} Neutral pole early make-late break - Versions 4P with "simultaneous contacts" are also available, please consult.

^{*(2)} There are versions of changeover switch without 0 - OFF position:

S5F (I - II) = **S5D** _____, please consult.

CCF "overlapped" (I - I+II - II) = **CCS** _____, please consult.

^{*(3)} Padlockable handle only in OFF 0 position.

^{*(4)} A standard shaft is included with the external handle.

^{*(5)} There are versions of bypass changeover switch without 0 - OFF position "overlapped":

SSB "overlapped" (I - I + II - II) = **SSS** _____, please consult.



Please indicate in your order the switch code and the handle code, as these both products are managed separately. A standard shaft is included with the handle.



Size	Auxiliary contacts ^{*(6)}		Safety key lock device ^{*(7)}		Rear protective plate	Bridging links	Terminal shrouds ^{*(8)}				Terminal shrouds ^{*(8)} (1 unit)			Phase barrier ^{*(8)}		Full details in page
	1NO+1NC	2NO+2NC	Simple	Double	Code	Code (4 units)	3P input	3P common output	4P input position I & II	4P common output	Up	Down	Up or Down	Only changeover switches		
	Code	Code	Code ^{*(e1)}	Code ^{*(e1)}			Code	Code	Code	Code	Code	Code	Code	Code	Code	Code
00	DCEAUB1	-	-	-	-	-	-	-	-	-	-	-	-	DCECUB1	DCECUB2	150
0	DS-AU11	DS-AU12	D5LCBB1	D5LCEB1	-	D5LPC03	-	-	-	-	DS-CU02	DS-CU03	DS-CU04	DS-PB01	DS-PB02	154
											DS-CU05	DS-CU06	DS-CU07	DS-PB04	DS-PB03	
1	D5LAU01	D5LAU02	D5LCB11	D5LCF11	3P DCCPP11	-	position I DM2CU12	DCCCU11	DM2CU13	DCCCU12	-	-	-	-	-	156
					4P DCCPP12		position II DM2CU11									
2	D5LAU01	D5LAU02	D5LCB21	D5LCF21	3P DCCPP21	-	position I DM2CU22	DCCCU21	DM2CU23	DCCCU22	-	-	-	-	-	158
					4P DCCPP22		position II DM2CU21									
3	D5LAU01	D5LAU02	D5LCB31	D5LCF31	3P DCCPP31	-	position I DM2CU32	DCCCU31	DM2CU33	DCCCU32	-	-	-	-	-	160
					4P DCCPP32		position II DM2CU31									
4	DS-AU11	DS-AU12	D5LCB41	D5LCF41	-	D5LPC42	-	-	DS-CU41	DS-CU41	-	-	-	-	-	162
5	DS-AU11	DS-AU12	D5LCB41	D5LCF41	-	-	-	-	-	-	-	-	-	-	-	164



Size	Auxiliary contacts ^{*(6)}		Safety key lock device ^{*(7)}		Terminal protection ^{*(8)}	Terminal shrouds ^{*(8)} (2 units)	Terminal shrouds ^{*(8)} (1 unit)			Full details in page
	1NO+1NC	2NO+2NC	Simple	Double	Code	Only changeover switches	Up	Down	Up or Down	
	Code	Code	Code ^{*(e1)}	Code ^{*(e1)}		Code	Code	Code	Code	
0	DS-AU11	DS-AU12	D5LCBB1	D5LCFB1	DS-CU01	-	DS-CU02	DS-CU03	DS-CU04	166
							DS-CU05	DS-CU06	DS-CU07	
1	DS-AU11	DS-AU12	D5LCB11	D5LCF11	DS-CU12	DS-CU11	-	-	-	168
2	DS-AU11	DS-AU12	D5LCB21	D5LCF21	-	DS-CU21	-	-	-	170
3	DS-AU11	DS-AU12	D5LCB31	D5LCF31	-	DS-CU31	-	-	-	172
4	DS-AU11	DS-AU12	D5LCB41	D5LCF41	-	DS-CU41	-	-	-	174

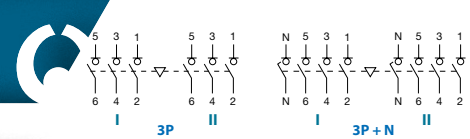
^{*(6)} To be used as signalling or control contacts - I_e = 16A (resistive loads) 4A (inductive loads) at 250 Vac.

Whilst closing, it switches after the main contacts. Whilst opening, it switches before the main contacts.

^{*(7)} Handle interlock in OFF 0 position by means of a key, that only can be removed when the handle is unlocked.

^{*(8)} One set or one unit for input or output. Terminals shrouds for **SSB** and **SSF** only for frontal switch. These accessories aren't compatible with each other.

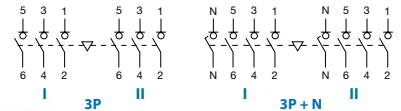
^{*(e1)} All these codes are related to the new handle , in case of replacements for old design handles, please consult.



CTR2 Metal enclosed manual changeover switches IP65
3 & 4 poles (63 - 3150A) (I - O - II)^{*(2)}



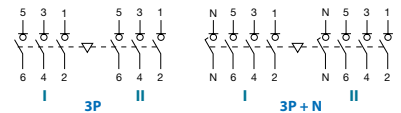
Amp.	Size	Connection	3 pole (3P)	4 pole (3P + N) ^{*(1)}
			Code	Code
63	00		CTR2EC00633PS	CTR2EC00633NS
80			CTR2EC00803PS	CTR2EC00803NS
100			CTR2EC01003PS	CTR2EC01003NS
125			CTR2EC01253PS	CTR2EC01253NS
125	0		CTR2FC01253PS	CTR2FC01253NS
160			CTR2FC01603PS	CTR2FC01603NS
200			CTR2FC02003PS	CTR2FC02003NS
200			CTR2CC02003PS	CTR2CC02003NS
250	1		CTR2CC02503PS	CTR2CC02503NS
315			CTR2CC03153PS	CTR2CC03153NS
400			CTR2CC04003PS	CTR2CC04003NS
500			CTR2CC05003PS	CTR2CC05003NS
630	2		CTR2CC06303PS	CTR2CC06303NS
800			CTR2CC08003PS	CTR2CC08003NS
1000	3		CTR2CC10003PS	CTR2CC10003NS
1250			CTR2CC12503PS	CTR2CC12503NS
1600	4		CTR2FC16003PS	CTR2FC16003NS
1800			CTR2FC18003PS	CTR2FC18003NS
2000			CTR2FC20003PD	CTR2FC20003ND
2000			CTR2FC20003PP ^{*(3)}	CTR2FC20003NP ^{*(3)}
2500	5		CTR2FC25003PP ^{*(3)}	CTR2FC25003NP ^{*(3)}
3150			CTR2FC31503PP ^{*(3)}	CTR2FC31503NP ^{*(3)}



CTRC Metal enclosed motorized changeover switches IP66
3 & 4 poles (125 - 3150A) (I - O - II)^{*(2)}



Amp.	Size	Connection	3 pole (3P)	4 pole (3P + N) ^{*(1)}
			Code	Code
125	0		CTRCFC01253PSAN	CTRCFC01253NSAN
160			CTRCFC01603PSAN	CTRCFC01603NSAN
200			CTRCFC02003PSAN	CTRCFC02003NSAN
200	1		CTRCCC02003PSAN	CTRCCC02003NSAN
250			CTRCCC02503PSAN	CTRCCC02503NSAN
315			CTRCCC03153PSAO	CTRCCC03153NSAO
400			CTRCCC04003PSAO	CTRCCC04003NSAO
500	2		CTRCCC05003PSAO	CTRCCC05003NSAO
630			CTRCCC06303PSAO	CTRCCC06303NSAO
800			CTRCCC08003PSAO	CTRCCC08003NSAO
1000			CTRCCC10003PSAP	CTRCCC10003NSAP
1250	3		CTRCCC12503PSAP	CTRCCC12503NSAP
1600			CTRCFC16003PSAP	CTRCFC16003NSAP
1800	4		CTRCFC18003PSAP	CTRCFC18003NSAP
2000			CTRCFC20003PDAP	CTRCFC20003NDAP
2000			CTRCFC20003PPAP ^{*(3)}	CTRCFC20003NPAP ^{*(3)}
2500			CTRCFC25003PPAP ^{*(3)}	CTRCFC25003NPAP ^{*(3)}
3150	5		CTRCFC31503PPAP ^{*(3)}	CTRCFC31503NPAP ^{*(3)}



CTRC+ CONTROL MODULE Metal enclosed changeover switches with motorized unit & control module IP54 4 poles (125 - 2000A) (I - O - II)



Amp.	Size	Connection	4 pole (3P + N) ^{*(1)}
			Code
125	0		CTRCFC01253NSBJ
200			CTRCFC02003NSBJ
250	1		CTRCCC02503NSBJ
400			CTRCCC04003NSBK
630	2		CTRCCC06303NSBK
1000	3		CTRCCC10003NSBK
1250			CTRCCC12503NSBK
1600	4		CTRCFC16003NSBK
2000			CTRCFC20003NSBK

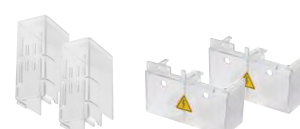
^{*(1)} Neutral pole early make-late break.
^{*(2)} External padlockable handle in OFF 0 position.
^{*(3)} IP55.
^{*(4)} Consult control module data.



Auxiliary contacts ^{*(5)}		Safety ^{*(6)} key lock device		Bridging links	Phase barrier ^{*(7)}		Terminal shrouds ^{*(7)} (1 unit)			Terminal shrouds ^{*(7)}				Full details in page		
Size	1NO+1NC	2NO+2NC	Simple	Double	Code (4 units)	3P	4P	Up	Down	Up or Down	Inputs		Common outputs			
	Code S5F	Code S5F	Code ^{*(e1)}	Code ^{*(e1)}		Code	Code	Code	Code	Code	Code	3P	4P		3P	4P
00	DCEAUB1	-	-	-	-	DCECUB1	DCECUB2	-	-	-	-	-	-	-	-	176
0	DS-AU11	DS-AU12	D5LCBB1	D5LCEB1	D5LPC03	DS-PB01 DS-PB04	DS-PB02 DS-PB03	DS-CU02 DS-CU05	DS-CU03 DS-CU06	DS-CU04 DS-CU07	-	-	-	-	-	180
1	D5LAU01	D5LAU02	D5LCBB1	D5LCEB1	-	-	-	-	-	-	Position I DM2CU12	Position I&II DM2CU13	DCCCU11	DCCCU12	-	182
2	D5LAU01	D5LAU02	D5LCB21	D5LCF21	-	-	-	-	-	-	Position I DM2CU22	Position I&II DM2CU23	DCCCU21	DCCCU22	-	184
3	D5LAU01	D5LAU02	D5LCB31	D5LCF31	-	-	-	-	-	-	Position I DM2CU32	Position I&II DM2CU33	DCCCU31	DCCCU32	-	186
4	DS-AU11	DS-AU12	D5LCB41	D5LCF41	D5LPC42	-	-	-	-	-	-	-	-	-	-	188
5	DS-AU11	DS-AU12	D5LCB41	D5LCF41	-	-	-	-	-	-	-	-	-	-	-	190



Auxiliary contacts ^{*(5)}		Safety ^{*(6)} key lock device		Bridging links	Phase barrier ^{*(7)}		Terminal shrouds ^{*(7)} (1 unit)			Terminal shrouds ^{*(7)}				Full details in page		
Size	1NO+1NC	2NO+2NC	Simple	Double	Code (4 units)	3P	4P	Up	Down	Up or Down	Inputs		Common outputs			
	Code S5F	Code S5F	Code ^{*(e1)}	Code ^{*(e1)}		Code	Code	Code	Code	Code	Code	3P	4P		3P	4P
0	DS-AU11 D5LAU01	DS-AU12 D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	-	180
1	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	-	182
2	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	-	184
3	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	-	186
4	DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-	-	188
5	DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-	-	190




Auxiliary contacts ^{*(5)}		Safety ^{*(6)} key lock device		Bridging links	Phase barrier ^{*(7)}		Terminal shrouds ^{*(7)} (1 unit)			Terminal shrouds ^{*(7)}				Full details in page		
Size	1NO+1NC	2NO+2NC	Simple	Double	Code (4 units)	3P	4P	Up	Down	Up or Down	Inputs		Common outputs			
	Code S5F	Code S5F	Code ^{*(e1)}	Code ^{*(e1)}		Code	Code	Code	Code	Code	Code	3P	4P		3P	4P
0	DS-AU11 D5LAU01	DS-AU12 D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	-	180
1	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	-	182
2	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	-	184
3	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	-	186
4	DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-	-	188

^{*(5)} To be used as signalling or control contacts - I_e = 16A (resistive loads) 4A (inductive loads) at 250 Vac.

Whilst closing, it switches after the main contacts. Whilst opening, it switches before the main contacts.

^{*(6)} Handle interlock in OFF 0 position by means of a key, that only can be removed when the handle is unlocked.

^{*(7)} One set or one unit for input or output. These accessories aren't compatible with each other.

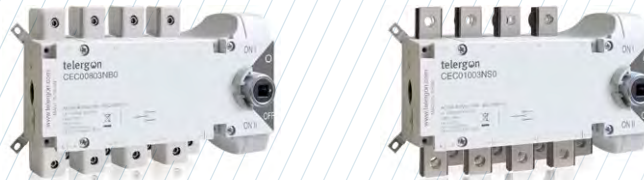
^{*(e1)} All these codes are related to the new handle , in case of replacements for old design handles, please consult.

CEC Changeover switch compact base mounting

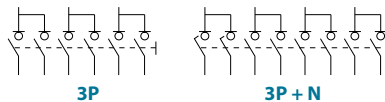
3P - 3P+N

Size 00

A 63|80|100|125



CEC	3P 3P + N	CODE-63A	CODE-80A		
		CEC00633PB0	CEC00803PB0		
		CEC00633NB0	CEC00803NB0		
CEC	3P 3P + N	CODE-63A	CODE-80A	CODE-100A	CODE-125A
		CEC00633PS0	CEC00803PS0	CEC01003PS0	CEC01253PS0
		CEC00633NS0	CEC00803NS0	CEC01003NS0	CEC01253NS0



Patent pending
EP18382154

Technical information



According to IEC 60947-3

		63 80 100 125					
Rated thermal current in ambient at	I _{th}	40°C	A	63	80	100	125
		50°C	A	63	80	100	125
		60°C	A	63	80	100	125
Rated insulation voltage	U _i	V	1000	1000	1000	1000	
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	8	
AC rated operational current ^{*(1)}	I _e	AC21A	A	63	80	100	125
		U _e 400V AC22A	A	63	80	100	125
		AC23A	A	63	80	100	125
Rated breaking capacity	63A-100A cos φ=0,45	400 V	A	504	640	800	1000
Rated making capacity	125A cos φ=0,35		A	630	800	1000	1250

		63 80 100 125				
Short-circuit behaviour						
Rated short-circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	1,5	1,5	2,9	2,9
Rated short-time withstand current (1s)	I _{cw}	kA rms	1	1	2	2
Connecting capacity						
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	10000	10000	10000	8000	
Maximum weight	3P	Kg	1,0	1,0	1,1	1,1
	3P+N	Kg	1,2	1,2	1,3	1,3

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

^{*(3)} Please consult us for more operations

Accessories



» Direct handle

CODE D5LSI01



» External handle included shaft ^{*(e1)}

IP65
CODE DCELAB1



» Auxiliary contacts **AU**

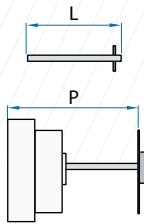
1NO+1NC CODE DCEAUB1
I_e = 0,1 A (resistive) at 125 Vac.



» Phase barrier

3P CODE DCECUB1
4P CODE DCECUB2

(1 kit for input or output)



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
137	15... 105

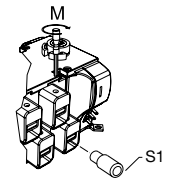
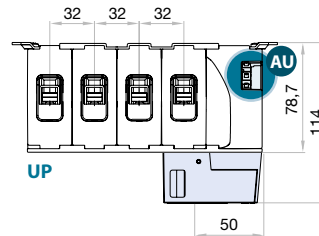
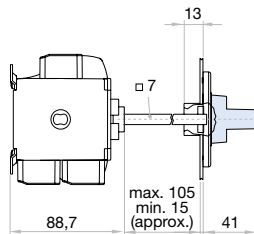
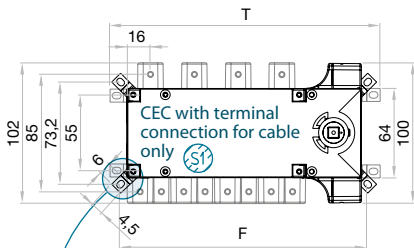
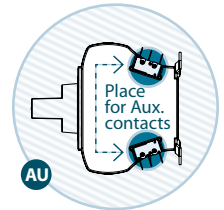
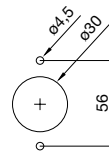
Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
250	85... 278	DS-EP04

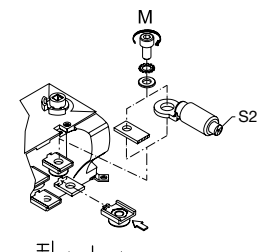
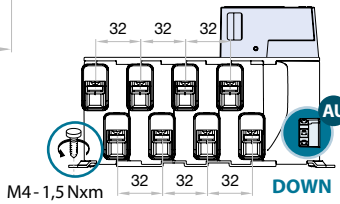
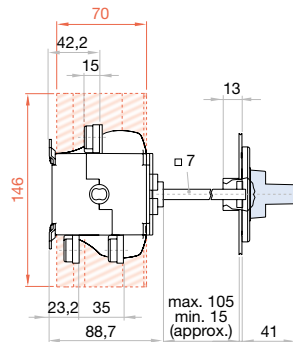
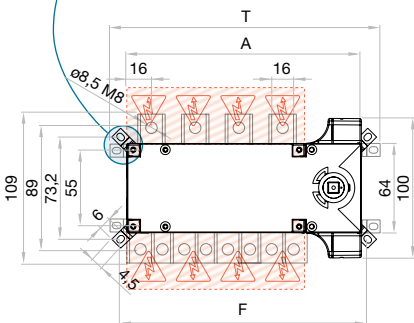
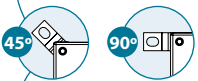
Type 2		
L (mm)	P (mm)	CODE
387	85... 415	DS-EP05

Dimensions (mm)

Door drilling for external handle



I _e	S1 max (Cu)		M
	mm ²	Allen	Nxm
63 A	25	M8	3
80 A			



	S2 max (Cu)	H max (Cu)	L max (Cu)		M
	mm ²	mm	mm	Allen	Nxm
63 A	35	3	16	M8	6
80 A					
100 A					
125 A	50 ^{*(5)}	3	19		

	F		T	
	45°	90°	45°	90°
mm	mm	mm	mm	mm
3P	136	151,8	152,7	158
4P	168	177,2	184,7	190

^{*(5)} Use phase barriers in order to keep the clearance in air distances.

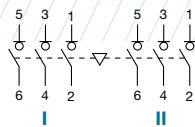
S5F Changeover switch base mounting 3P - 3P+N

Size 0

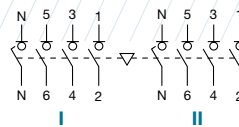
A 125|160|200



	CODE-125A	CODE-160A	CODE-200A
3P	S5F01253PS0	S5F01603PS0	S5F02003PS0
3P + N	S5F01253NS0	S5F01603NS0	S5F02003NS0



3P



3P + N

Technical information

According to IEC 60947-3



consult



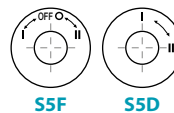
tests:

				125	160	200
Rated thermal current	I _{th} in ambient at 40° C	A		125	160	200
Rated insulation voltage	U _i	V		1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV		8	8	8
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	U _e 400V AC21A	A		125	160	200
	U _e 400V AC22A	A		125	160	200
	U _e 400V AC23A	A		125	160	160

^{*(1)} Other voltages and / or utilization categories. Please consult

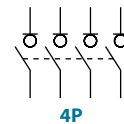
^{*(2)} Without limiting protective device (short-circuit maintained 50 ms. - 100 ms.)

				125	160	200
Rated breaking capacity	400V AC22	A		375	480	600
Rated making capacity	400V AC22	A		375	480	600
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		13	13	13
Short - time withstand current (1 sec.)	I _{cw}	kA rms		7	7	7
Number of mechanical operations (according to the standards, for other values please consult)	Cycles			8000	8000	8000
Maximum weight (3/4 poles)		Kg		1,8/2,1	1,8/2,1	1,9/2,2



SSF SSD

There are versions of changeover switches without OFF 0 position:
SSF (I - II) = SSD _____, please consult



4P

Also available 4P changeover switches under request, please consult



Accessories



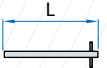
» Direct handle

CODE D5LSI01



» External handle included shaft^{*(e1)}

IP65
CODE D5LLA01



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)	
177	163... 250,5	

Shaft extensions

Type 1

L (mm)	P (mm)	CODE
250	163... 323,5	DS-EP04

Type 2

L (mm)	P (mm)	CODE
387	163... 460,5	DS-EP05



» Auxiliary contacts

1NO+1NC CODE^{55F} DS-AU11
2NO+2NC CODE^{55F} DS-AU12

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal shrouds^{*(T)}

	UP 3P (1 unit)	DOWN 3P (1 unit)	UP OR DOWN 4P (1 unit)
	DS-CU02	DS-CU03	DS-CU04
	DS-CU05	DS-CU06	DS-CU07

(Only frontal side)



» Phase barrier^{*(T)}

	3P	4P
	DS-PB01	DS-PB02
	DS-PB04	DS-PB03

(1 kit for input or output)

*^(T) These accessories aren't compatible with each other



» Bridging links

CODE D5LPC03 (4 units)



» Safety key lock devices

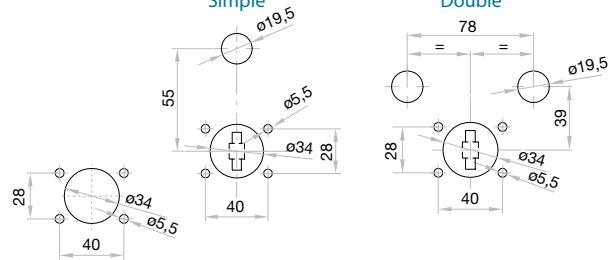
Simple CODE D5LCBB1
Double CODE D5LCEB1

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device

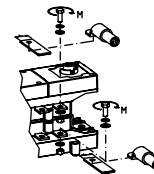
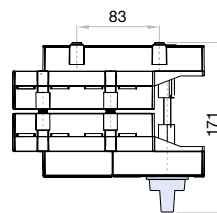
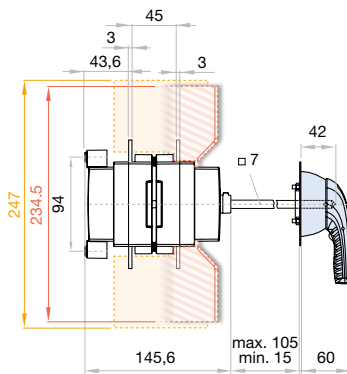
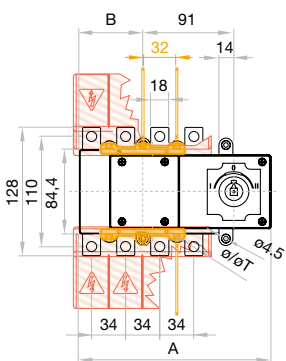
Simple

Double



Dimensions (mm)

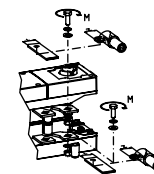
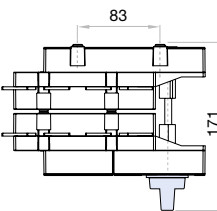
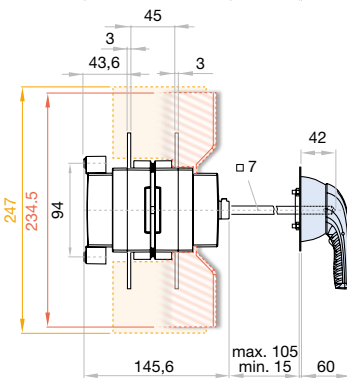
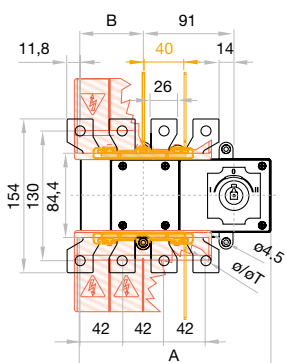
Door drilling for external handle



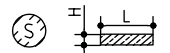
	A	B	ø	øT
	3P	4P	3P	4P
125 A	181	192	53	64
160 A			10	M8



S max (Cu)	H max (Cu)	L max (Cu)	M
mm ²	mm	mm	Nxm
95	5	25	M8 13



	A	B	ø	øT
	3P	4P	3P	4P
200 A	181	192	53	64
			10	M10



S max (Cu)	H max (Cu)	L max (Cu)	M
mm ²	mm	mm	Nxm
120	5	30	M10 18

CCF | CCP

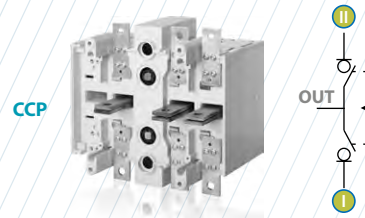
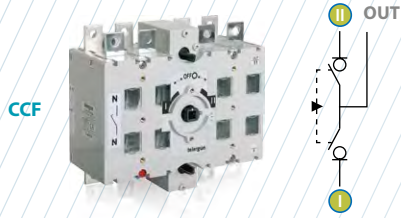
Changeover switch base mounting 3P - 3P+N

Size 1

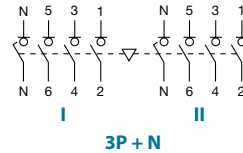
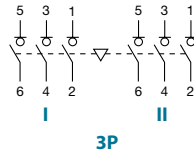
A 200|250|315|400



series CCF|CCP



		CODE-200A	CODE-250A	CODE-315A	CODE-400A
CCF	3P	CCF02003PS0	CCF02503PS0	CCF03153PS0	CCF04003PS0
	3P + N	CCF02003NS0	CCF02503NS0	CCF03153NS0	CCF04003NS0
CCP	3P	CCP02003PS0	CCP02503PS0	CCP03153PS0	CCP04003PS0
	3P + N	CCP02003NS0	CCP02503NS0	CCP03153NS0	CCP04003NS0



Technical information

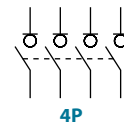
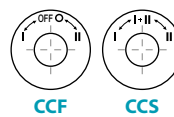


According to IEC 60947-3

			200	250	315	400
Rated thermal current	I _{th} in ambient at 40° C	A	200	250	315	400
Rated insulation voltage	U _i	V	1000	1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	8
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A	200	250	315	400
(Rated operational frequency 50/60 Hz)	U _e 400V AC22A	A	200	250	315	400 ^{*(3)}

^{*(1)} Other voltages and /or utilization categories; please consult
^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)
^{*(3)} AC22B

			200	250	315	400
Rated breaking capacity	400V AC22	A	600	750	945	1200
Rated making capacity	400V AC22	A	600	750	945	1200
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	12	12	12	12
Short - time withstand current (1 sec.)	I _{cw}	kA rms	8	8	8	8
Number of mechanical operations (according to the standards, for other values please consult) ^{*(3)}	Cycles		8000	8000	8000	5000
Maximum weight (3/4 poles)	CCF	Kg	4,8/5,3	4,8/5,3	5/5,5	5/5,5
	CCP	Kg	5,3/5,9	5,3/5,9	5,5/6	5,5/6



There are versions of changeover switches without OFF 0 position: "overlapped contacts":
CCF (I - I+II - II) = CCS please consult

Also available 4P changeover switches under request, please consult



Accessories



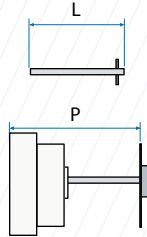
» Direct handle

CODE DCCL11



» External handle included shaft^{*(e1)}

IP65
CODE DCCLA11



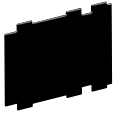
» Shafts

Standard shaft included ^{*(e1)}
L (mm) | P (mm) |
227 | 166... 293

Shaft extensions

Type 1
L (mm) | P (mm) | CODE
375 | 166... 442 | DS-EP14

Type 2
L (mm) | P (mm) | CODE
536 | 166... 602 | DS-EP15



» Rear protective plate

3P | 4P |
DCCPP11 | DCCPP12



» Terminal shrouds

Inputs		Common output	
POS. I 3P	POS. II 3P	POS. I&II 3P+N	3P 3P+N
DM2CU12	DM2CU11	DM2CU13	DCCCU11 DCCCU12



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

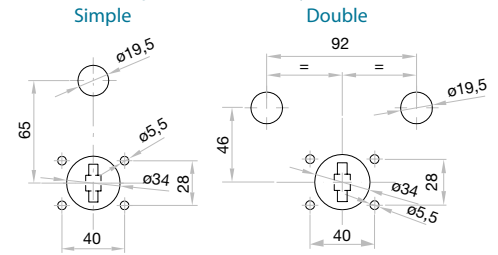


» Safety key lock device

Simple CODE D5LCB11
Double CODE D5LCF11

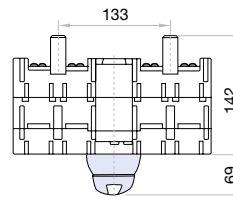
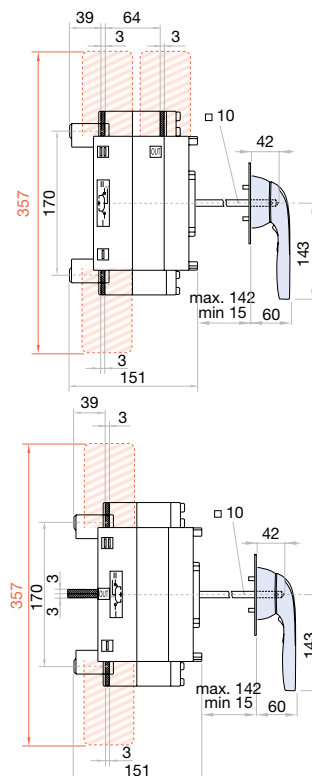
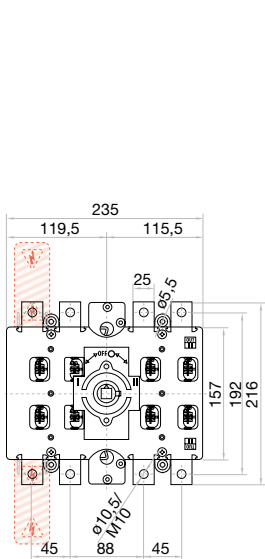
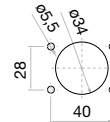
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device

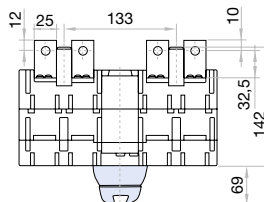


Dimensions (mm)

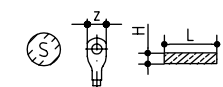
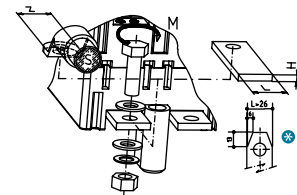
Door drilling for external handle



CCF



CCP

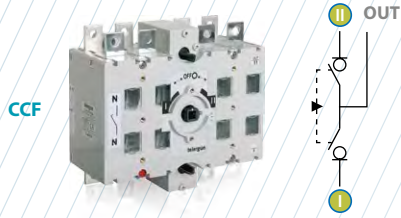


S max (Cu) mm ²	Z max	H max (Cu) mm	L max (Cu) mm	M
240	31	2x5	30	M10 24

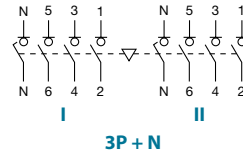
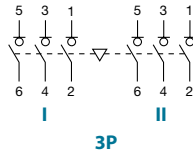
CCF | CCP Changeover switch base mounting 3P - 3P+N

Size 2

A 500|630|800



		CODE-500A	CODE-630A	CODE-800A
CCF	3P	CCF05003PS0	CCF06303PS0	CCF08003PS0
	3P + N	CCF05003NS0	CCF06303NS0	CCF08003NS0
CCP	3P	CCP05003PS0	CCP06303PS0	CCP08003PS0
	3P + N	CCP05003NS0	CCP06303NS0	CCP08003NS0



Technical information

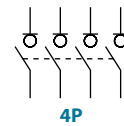
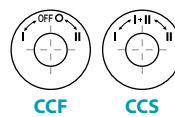


According to IEC 60947-3

				500	630	800
Rated thermal current	I _{th} in ambient at 40° C	A		500	630	800
Rated insulation voltage	U _i	V		1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV		12	12	12
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	U _e 400V AC21A	A		500	630	800
	U _e 400V AC22B	A		500	630	800

^{*(1)} Other voltages and/or utilization categories; please consult
^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)
^{*(3)} AC22B

				500	630	800
Rated breaking capacity	400V AC22	A		1500	1890	2400
Rated making capacity	400V AC22	A		1500	1890	2400
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		20	20	20
Short - time withstand current (1 sec.)	I _{cw}	kA rms		13	13	13
Number of mechanical operations (according to the standards, for other values please consult)	Cycles			5000	5000	3000
Maximum weight (3/4 poles)	CCF	Kg		11,5/12,6	11,5/12,6	11,9/13,2
	CCP	Kg		12,8/14,3	12,8/14,3	13/14,6



There are versions of changeover switches without OFF 0 position "overlapped contacts":
CCF (I - I+II - II) = CCS....., please consult

Also available 4P changeover switches under request, please consult



Accessories



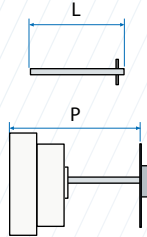
» Direct handle

CODE DCCL121



» External handle included shaft^{*(e1)}

IP65
CODE DCCLA21



» Shafts

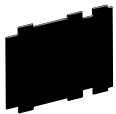
Standard shaft included ^{*(e1)}

L (mm)	P (mm)
195	195... 272

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
345	195... 422	DS-EP23

Type 2		
L (mm)	P (mm)	CODE
535	195... 612	DS-EP24



» Rear protective plate

3P	4P
DCCPP21	DCCPP22



» Terminal shrouds

Inputs		Common output		
POS. I 3P	POS. II 3P	POS. I&II 3P+N	3P	3P+N
DM2CU22	DM2CU21	DM2CU23	DCCCU21	DCCCU22



» Auxiliary contacts

1NO+1NC	CODE	D5LAU01
2NO+2NC	CODE	D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Safety key lock device

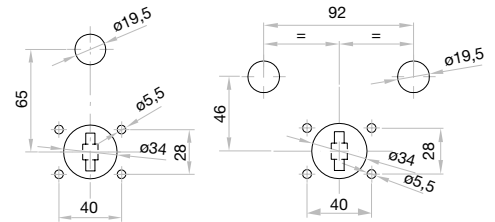
Simple	CODE	D5LCB21
Double	CODE	D5LCF21

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device

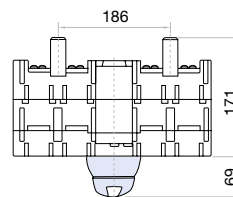
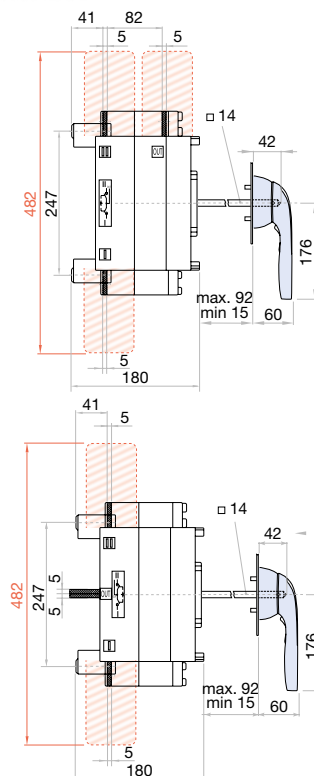
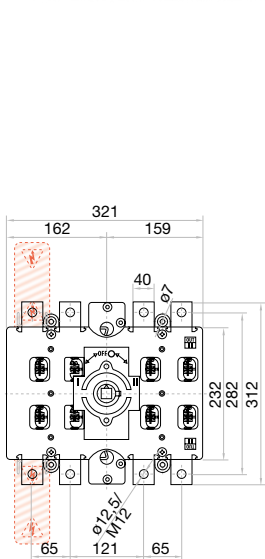
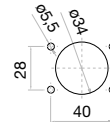
Simple

Double

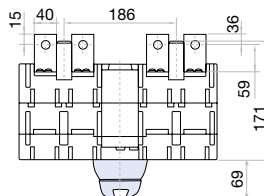


Dimensions (mm)

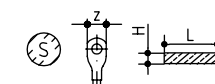
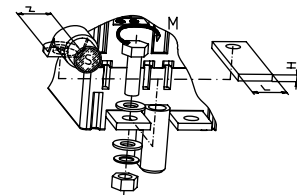
Door drilling for external handle



CCF



CCP



S max (Cu)	Z max	H max (Cu)	L max (Cu)	M
mm ²		mm	mm	Nxm
2x240	45	2x6	45	M12 45

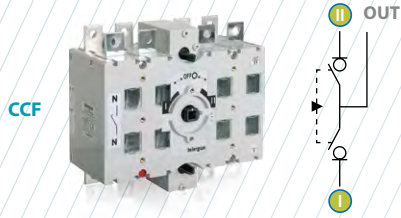
CCF | CCP Changeover switch base mounting 3P - 3P+N

Size 3

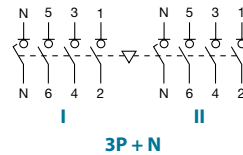
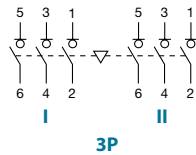
A 1000|1250



series
CCF|CCP



		CODE - 1000A	CODE - 1200A
CCF	3P	CCF10003PS0	CCF12503PS0
	3P + N	CCF10003NS0	CCF12503NS0
CCP	3P	CCP10003PS0	CCP12503PS0
	3P + N	CCP10003NS0	CCP12503NS0



Technical information



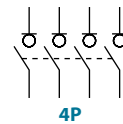
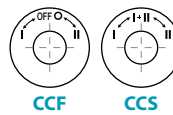
According to IEC 60947-3

				1000	1250
Rated thermal current	I _{th} in ambient at 40° C	A		1000	1250
Rated insulation voltage	U _i	V		1000	1000
Rated impulse withstand voltage	U _{imp}	kV		12	12
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	I _e U _e 400V AC21A	A		1000	1250
	U _e 400V AC22B	A		1000	1250

^{*(1)} Other voltages and/or utilization categories; please consult

^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)

				1000	1250
Rated breaking capacity	400V AC22	A		3000	3750
Rated making capacity	400V AC22	A		3000	3750
Short - circuit behaviour					
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		32	32
Short - time withstand current (1 sec.)	I _{cw}	kA rms		25	25
Number of mechanical operations (according to the standards, for other values please consult)		Cycles		3000	3000
Maximum weight (3/4 poles)	CCF	Kg		22,5 / 25	24,3 / 27,3
	CCP	Kg		25 / 28,3	26 / 29,7



There are versions of changeover switches without OFF 0 position: "overlapped contacts":
CCF (I - I+II - II) = CCS _____, please consult

Also available 4P changeover switches under request, please consult



Accessories



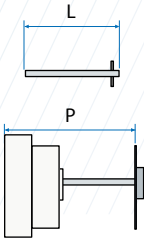
» Direct handle

CODE DCCLI31



» External handle included shaft ^{*(e1)}

IP65
CODE DCCLA31



» Shafts

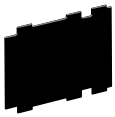
Standard shaft included ^{*(e1)}

L (mm)	P (mm)
186	223... 298

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
345	223... 457	DS-EP23

Type 2		
L (mm)	P (mm)	CODE
535	223... 645	DS-EP24



» Rear protective plate

3P	4P
DCCPP31	DCCPP32



» Terminal shrouds

Inputs		Common output	
POS. I 3P	POS. II 3P	POS. I&II 3P+N	3P
DM2CU32	DM2CU31	DM2CU33	DCCCU31
			DCCCU32



» Auxiliary contacts

1NO+1NC	CODE	D5LAU01
2NO+2NC	CODE	D5LAU02

Ie = 16A (resistive loads)
4A (inductive loads) at 250Vac.



» Safety key lock device

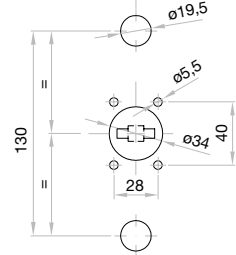
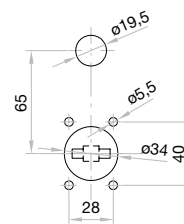
Simple	CODE	D5LCB31
Double	CODE	D5LCF31

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device

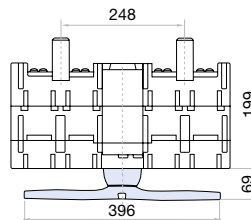
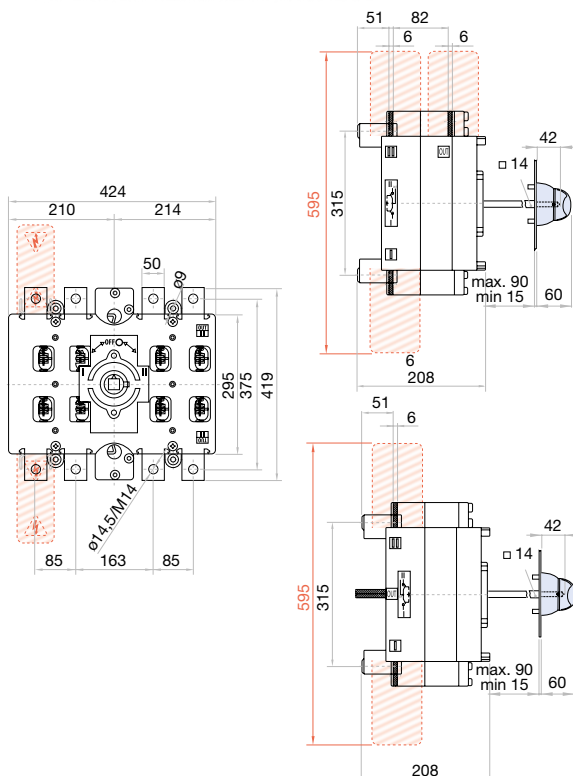
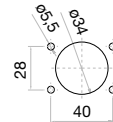
Simple

Double

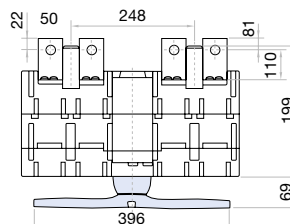
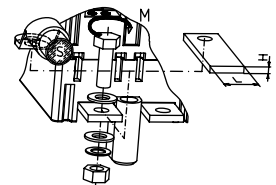


Dimensions (mm)

Door drilling for external handle



CCF



CCP

H max (Cu)	L max (Cu)	M
mm	mm	Nxm
2x10	60	M14 55

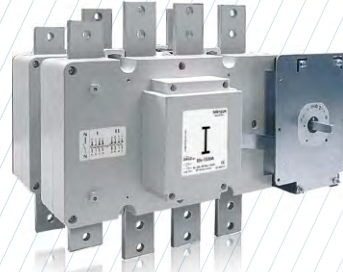
S5F Changeover switch base mounting 3P - 3P+N

Size 4

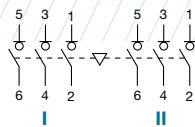
A 1600|1800|2000



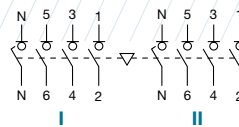
series S5F



	CODE-1600A	CODE-1800A	CODE-2000A
3P	S5F16003PS0	S5F18003PS0	S5F20003PD0
3P + N	S5F16003NS0	S5F18003NS0	S5F20003ND0



3P



3P + N

Technical information



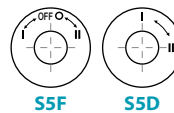
According to IEC 60947-3

				1600	1800	2000
Rated thermal current	I _{th} in ambient at 40° C	A		1600	1800	2000
Rated insulation voltage	U _i	V		1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV		12	12	12
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A		1600	1800	2000
(Rated operational frequency 50/60 Hz)	U _e 400V AC22A	A		1600	1800	2000

^{*(1)} Other voltages and/or utilization categories; please consult

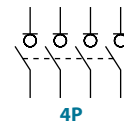
^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)

				1600	1800	2000
Rated breaking capacity	400V AC22	A		4800	5400	6000
Rated making capacity	400V AC22	A		4800	5400	6000
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		75	75	75
Short - time withstand current (1 sec.)	I _{cw}	kA rms		50	50	50
Number of mechanical operations (according to the standards, for other values please consult)		Cycles		3000	3000	3000
Maximum weight (3/4 poles) (without bridging links)		Kg		42,9/47,3	42,9/47,3	42,9/47,3



S5F

S5D



4P

There are versions of changeover switches without OFF 0 position: **S5F** (I +II) = **S5D** _____, please consult

Also available 4P changeover switches under request, please consult



Accessories



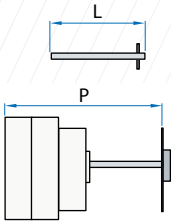
» Direct handle

CODE D5LLI32



» External handle included shaft*(e1)

IP65
CODE D5LLA31



» Shafts

Standard shaft included *(e1)

L (mm)	P (mm)
239	418... 573

Shaft extensions

Consult



» Terminal shrouds

CODE DS-CU41
(1 kit for input or output, only front side)



» Bridging links*(P2)

CODE D5LPC42 (4 units)



» Auxiliary contacts

1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Safety key lock device

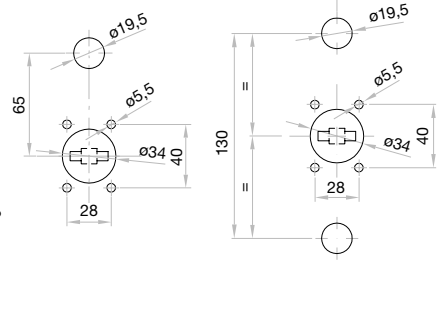
Simple CODE D5LCB41
Double CODE D5LCF41

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device

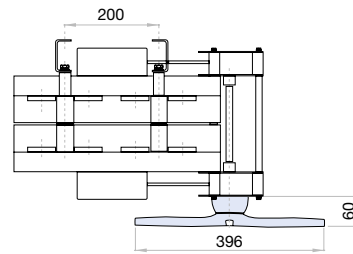
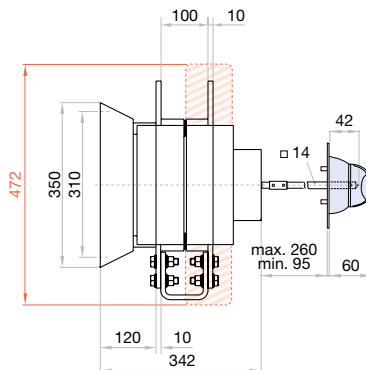
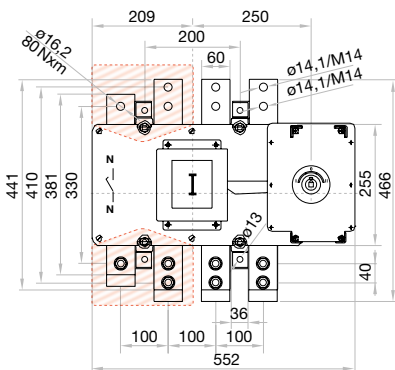
Simple

Double



Door drilling for external handle

Dimensions (mm)



②	H max (Cu)	L max (Cu)	M
	mm	mm	
1600 A			
1800 A	2x10	80	M14 55
2000 A			

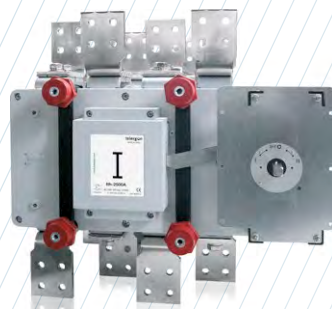
S5F Changeover switch base mounting 3P - 3P+N

Size 5

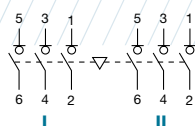
A 2000|2500|3150



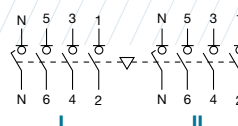
series
S5F



	CODE - 2000A	CODE - 2500A	CODE - 3150A
3P	S5F20003PP0	S5F25003PP0	S5F31503PP0
3P+N	S5F20003NP0	S5F25003NP0	S5F31503NP0



3P



3P+N

Technical information



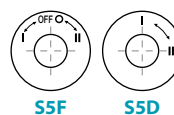
According to IEC 60947-3

				2000	2500	3150
Rated thermal current	I _{th} in ambient at 40° C	A		2000	2500	3150
Rated insulation voltage	U _i	V		1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV		8	8	8
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A		2000	2500	3150
(Rated operational frequency 50/60 Hz)	U _e 400V AC22B	A		2000	2500	2500

^{*(1)} Other voltages and /or utilization categories; please consult

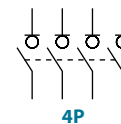
^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)

				2000	2500	3150
Rated breaking capacity	400V AC22	A		6000	7500	9450
Rated making capacity	400V AC22	A		6000	7500	9450
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		100	100	100
Short - time withstand current (1 sec.)	I _{cw}	kA rms		50	50	50
Number of mechanical operations (according to the standards, for other values please consult)		Cycles		600	600	600
Maximum weight (3/4 poles)		Kg		Consult		



S5F

S5D



4P

There are versions of changeover switches without OFF 0 position:

S5F (I +II) = S5D _____, please consult

Also available 4P changeover switches under request, please consult



Accessories



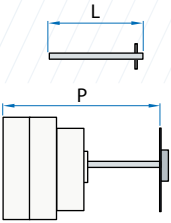
» Direct handle
(Slide bar)
CODE DS-EI61



» External handle included shaft^{*(e1)}
(Slide bar)
CODE D5LEN51



» Shafts



Standard shaft included^{*(e1)}
L (mm) P (mm)
333 788... 938

Shaft extensions
Consult



» Auxiliary contacts

1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

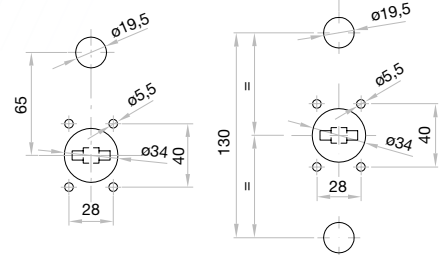


» Safety key lock device

Simple CODE D5LCB41
Double CODE D5LCF41

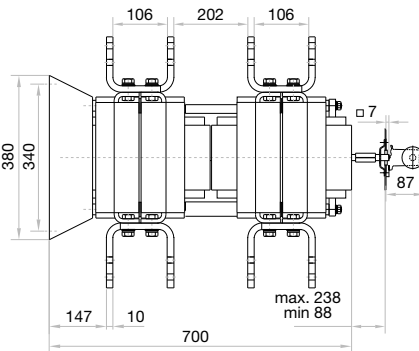
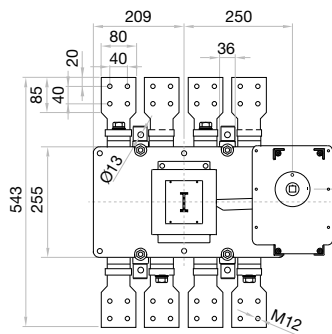
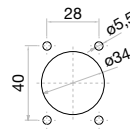
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
Simple Double

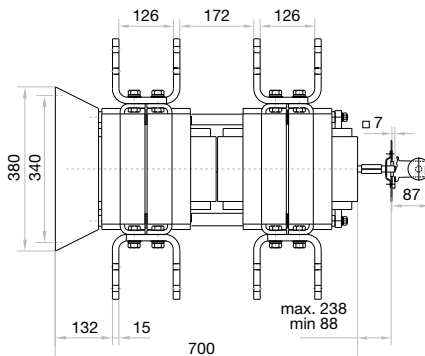
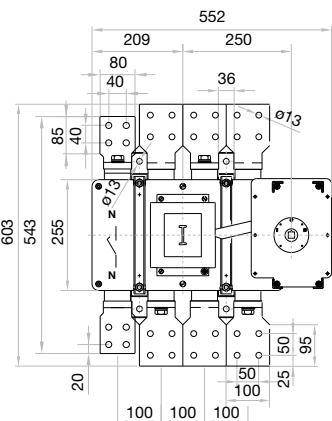
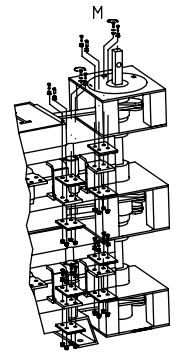


Dimensions (mm)

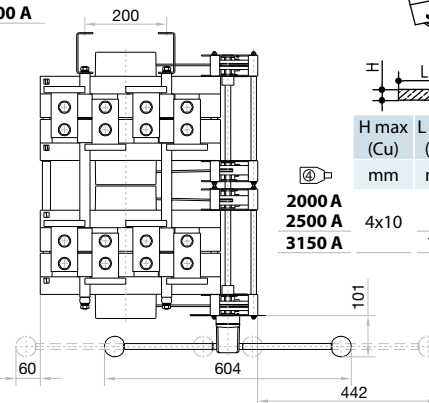
Door drilling for external handle



2000 A
2500 A



3150 A



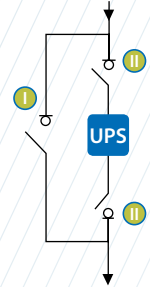
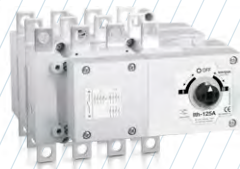
	H max (Cu) mm	L max (Cu) mm	M	M
2000 A	4x10	80	M12	45
2500 A				
3150 A		100		

S5B Bypass changeover switch base mounting 3P - 3P+N

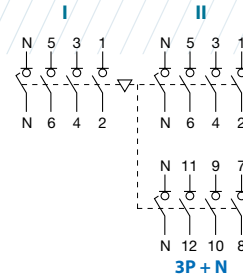
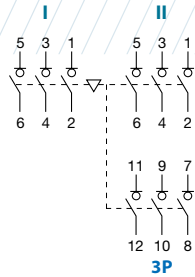
series S5B

Size 0

A 125|160|200



	CODE - 125A	CODE - 160A	CODE - 200A
3P	S5B01253PS0	S5B01603PS0	S5B02003PS0
3P + N	S5B01253NS0	S5B01603NS0	S5B02003NS0



Technical information



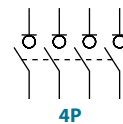
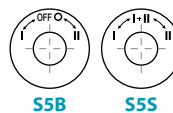
According to IEC 60947-3

				125	160	200
Rated thermal current	I _{th} in ambient at 40° C	A		125	160	200
Rated insulation voltage	U _i	V		1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV		8	8	8
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A		125	160	200
(Rated operational frequency 50/60 Hz)	U _e 400V AC22A	A		125	160	200

^{*(1)} Other voltages and/or utilization categories; please consult

^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)

				125	160	200
Rated breaking capacity	400V AC22	A		375	480	600
Rated making capacity	400V AC22	A		375	480	600
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		13	13	13
Short - time withstand current (1 sec.)	I _{cw}	kA rms		7	7	7
Number of mechanical operations (according to the standards, for other values please consult)	Cycles			8000	8000	8000
Maximum weight (3/4 poles)		Kg		2,4/2,8	2,4/2,8	2,5/2,9



There are versions of bypass changeover without OFF 0 position "overlapped contacts":

Also available 4P changeover switches under request, please consult

S5B (I - I + II - II) = S5S....., please consult

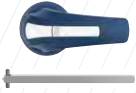


Accessories



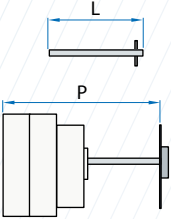
» Direct handle

CODE D5LSI02



» External handle included shaft^{*(e1)}

IP65
CODE D5LLA01



» Shafts

Standard shaft included ^{*(e1)}
L (mm) P (mm)
177 221... 346



» Auxiliary contacts

1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal shrouds

	UP 3P (1 unit)	DOWN 3P (1 unit)	UP OR DOWN 4P (1 unit)
	DS-CU02	DS-CU03	DS-CU04
	DS-CU05	DS-CU06	DS-CU07

(Only frontal side)



» Safety key lock device

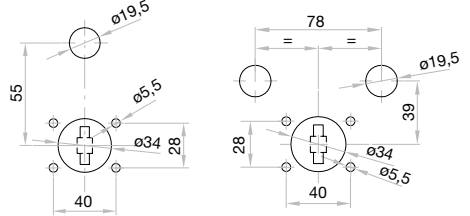
Simple CODE D5LCBB1
Double CODE D5LCFB1

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device

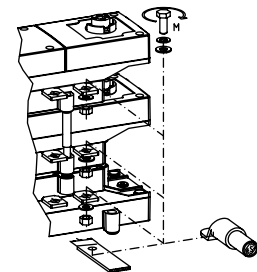
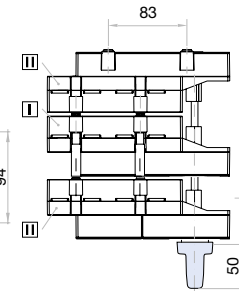
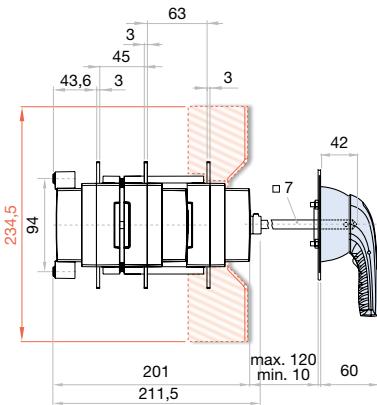
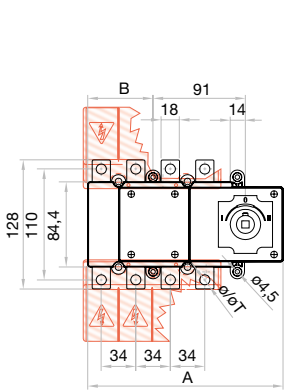
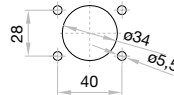
Simple

Double

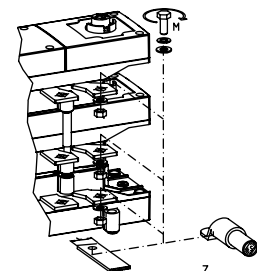
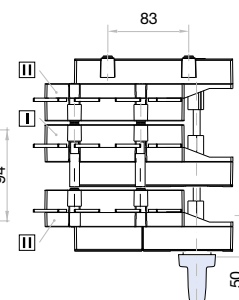
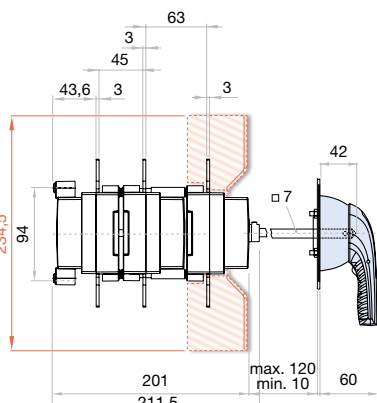
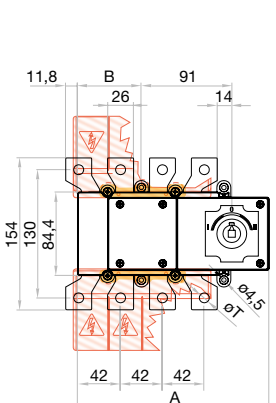


Dimensions (mm)

Door drilling for external handle



3P	4P	B		ø	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M		
		3P	4P							
125 A	181	192	53	64	10	95	5	25	M8	13



3P	4P	B		ø	S max (Cu) mm ²	Z max	H max (Cu) mm	L max (Cu) mm	M		
		3P	4P								
200 A	181	192	53	64	10	120	30	5	30	M10	18

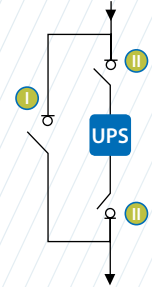
S5B Bypass changeover switch base mounting 3P - 3P+N

Size 1

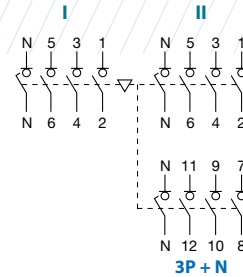
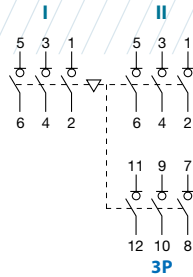
A 250|315|400



series
S5B



	CODE-250A	CODE-315A	CODE-400A
3P	S5B02503PR0	S5B03153PR0	S5B04003PC0
3P+N	S5B02503NR0	S5B03153NR0	S5B04003NC0



Technical information



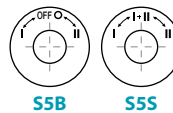
According to IEC 60947-3

				250	315	400
Rated thermal current	I _{th} in ambient at 40° C	A		250	315	400
Rated insulation voltage	U _i	V		1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV		8	8	8
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A		250	315	400
(Rated operational frequency 50/60 Hz)	U _e 400V AC22A	A		250	315	400

^{*(1)} Other voltages and/or utilization categories; please consult

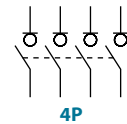
^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)

				250	315	400
Rated breaking capacity	400V AC22	A		750	945	1200
Rated making capacity	400V AC22	A		750	945	1200
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		20	20	20
Short - time withstand current (1 sec.)	I _{cw}	kA rms		12	12	12
Number of mechanical operations (according to the standards, for other values please consult)	Cycles			8000	8000	5000
Maximum weight (3/4 poles)		Kg		7,2/7,7	7,2/7,7	7,4/7,9



S5B

S5S



4P

There are versions of bypass changeover without OFF 0 position "overlapped contacts":

S5B (I - I + II - II) = S5S _____, please consult

Also available 4P changeover switches under request, please consult



Accessories



» Direct handle

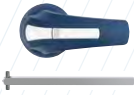
CODE D5LLI12



» Terminal protection

CODE DS-CU12

(1 unit for input or output only front side)



» External handle included shaft^{*(e1)}

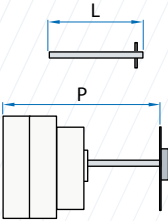
IP65
CODE D5LLA11



» Terminal shrouds

CODE DS-CU11

(1 kit for input or output only front side)



» Shafts

Standard shaft included^{*(e1)}

L (mm) | P (mm)
227 | 382... 516



» Safety key lock device

Simple CODE D5LCB11

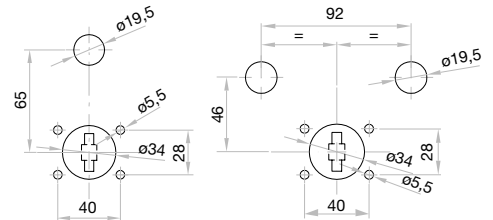
Double CODE D5LCF11

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device

Simple

Double



» Auxiliary contacts

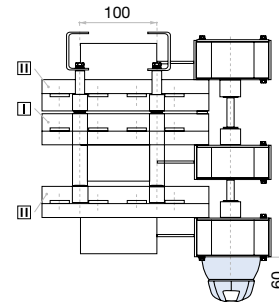
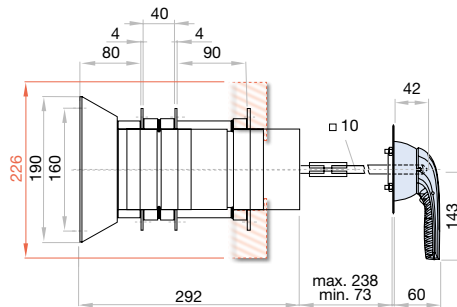
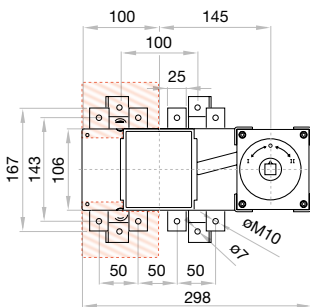
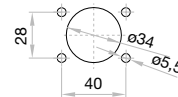
1NO+1NC CODE DS-AU11

2NO+2NC CODE DS-AU12

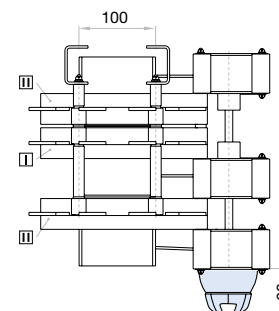
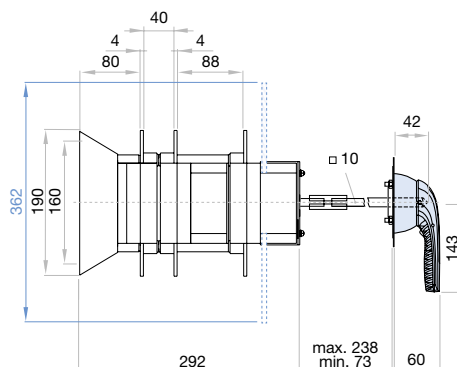
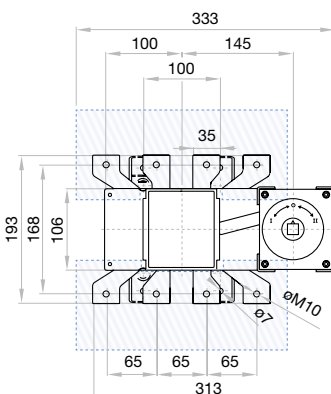
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

Dimensions (mm)

Door drilling for external handle



S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
185	7	25	M10	18



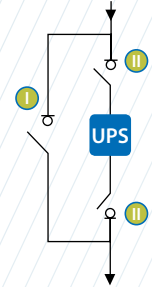
S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
240	7	40	M10	24

S5B Bypass changeover switch base mounting 3P - 3P+N

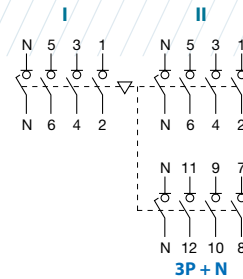
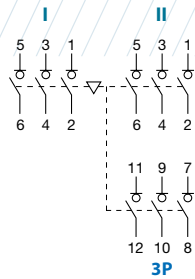
Size 2
A 500|630



series
S5B



	CODE-500A	CODE-630A
3P	S5B05003PR0	S5B06303PR0
3P + N	S5B05003NR0	S5B06303NR0



Technical information



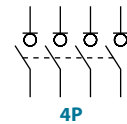
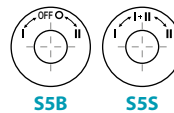
According to IEC 60947-3

				500	630
Rated thermal current	I _{th}	in ambient at 40° C	A	500	630
Rated insulation voltage	U _i		V	1000	1000
Rated impulse withstand voltage	U _{imp}		kV	12	12
AC Rated operational current ^{*(1)}	I _e	U _e 400V AC21A	A	500	630
(Rated operational frequency 50/60 Hz)		U _e 400V AC22A	A	500	630

^{*(1)} Other voltages and/or utilization categories; please consult

^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)

				500	630
Rated breaking capacity	400V	AC22	A	1500	1890
Rated making capacity	400V	AC22	A	1500	1890
Short - circuit behaviour					
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		26	26
Short - time withstand current (1 sec.)	I _{cw}	kA rms		16	16
Number of mechanical operations (according to the standards, for other values please consult)		Cycles		5000	5000
Number of electrical operations	400V	AC22A	Cycles	1000	1000
Maximum weight (3/4 poles)			Kg	16,5/17,5	16,5/17,5



There are versions of bypass changeover without OFF 0 position "overlapped contacts":

Also available 4P changeover switches under request, please consult

S5B (I - I + II - II) = **S5S** _____, please consult



Accessories



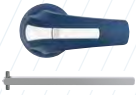
» Direct handle

CODE D5LLI22



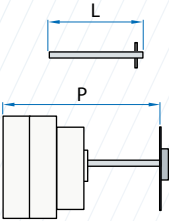
» Terminal shrouds

CODE DS-CU21
(1 kit for input or output only front side)



» External handle included shaft^{*(e1)}

IP65
CODE D5LLA21



» Shafts

Standard shaft included^{*(e1)}
L (mm) | P (mm)
239 | 448... 613



» Auxiliary contacts

1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

» Safety key lock device

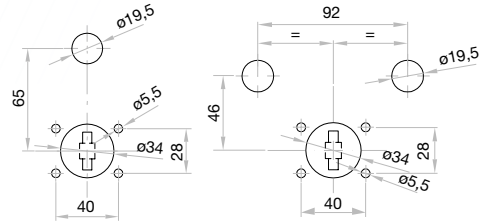
Simple CODE D5LCB21
Double CODE D5LCF21

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device

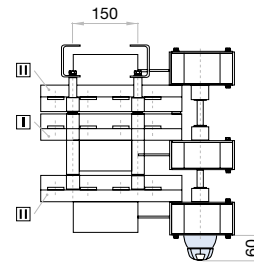
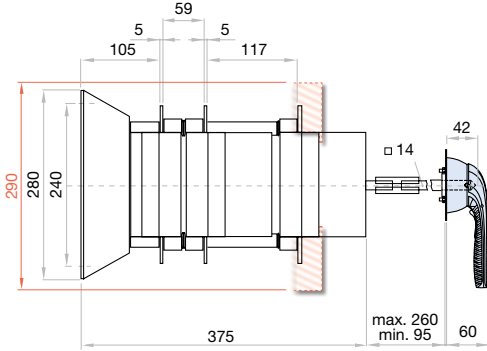
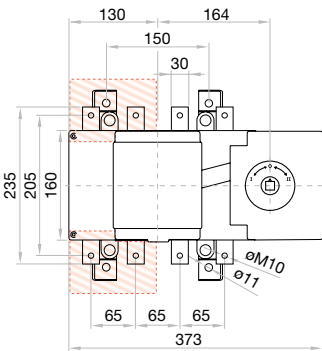
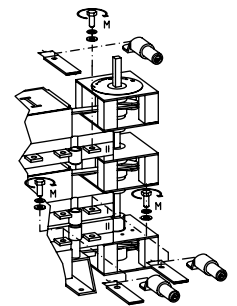
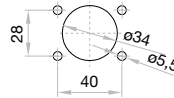
Simple

Double



Dimensions (mm)

Door drilling for external handle



	S max (Cu)	H max (Cu)	L max (Cu)	T	M
500 A	2x185 mm ²	6 mm	40 mm	M10	24 Nxm

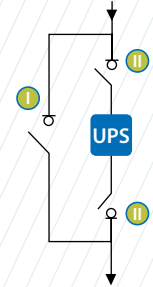
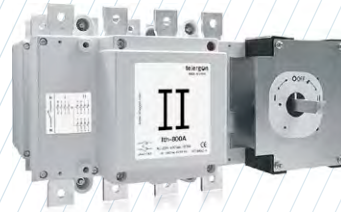
	S max (Cu)	H max (Cu)	L max (Cu)	T	M
630 A	2x240 mm ²	2x5 mm	40 mm	M10	24 Nxm

S5B Bypass changeover switch base mounting 3P - 3P+N

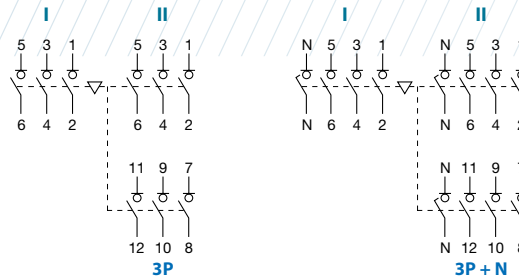
series
S5B

Size 3

A 800|1000



	CODE - 800A	CODE - 1000A
3P	S5B08003PR0	S5B10003PC0
3P + N	S5B08003NR0	S5B10003NC0



Technical information



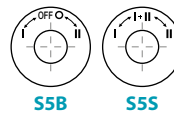
According to IEC 60947-3

			800	1000
Rated thermal current	I _{th} in ambient at 40° C	A	800	1000
Rated insulation voltage	U _i	V	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	12	12
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A	800	1000
(Rated operational frequency 50/60 Hz)	U _e 400V AC22A	A	800	1000

^{*(1)} Other voltages and/or utilization categories; please consult

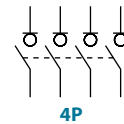
^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)

			800	1000
Rated breaking capacity	400V AC22	A	2400	3000
Rated making capacity	400V AC22	A	2400	3000
Short - circuit behaviour				
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	60	60
Short - time withstand current (1 sec.)	I _{cw}	kA rms	25	25
Number of mechanical operations (according to the standards, for other values please consult)		Cycles	3000	3000
Maximum weight (3/4 poles)		Kg	26,5/28,6	26,5/28,6



S5B

S5S



4P

There are versions of bypass changeover without OFF 0 position "overlapped contacts":

S5B (I - I + II - II) = S5S _____, please consult

Also available 4P changeover switches under request, please consult



Accessories



» Direct handle

CODE D5LLI32



» External handle included shaft*(e1)

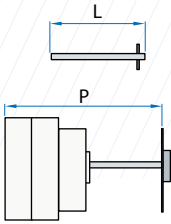
IP65
CODE D5LLA31



» Shafts

Standard shaft included *(e1)

L (mm)	P (mm)
239	480... 645



» Auxiliary contacts

1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12



Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal shrouds

CODE DS-CU31
(1 kit for input or output only front side)

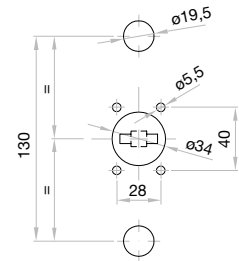
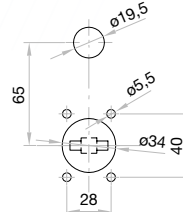


» Safety key lock device

Simple CODE D5LCB31
Double CODE D5LCF31

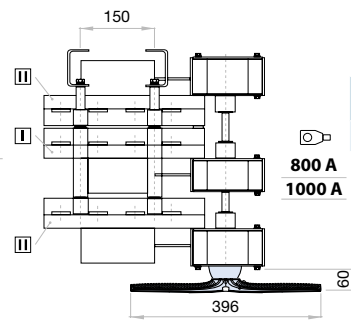
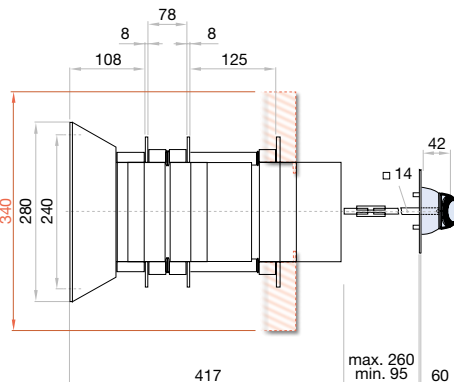
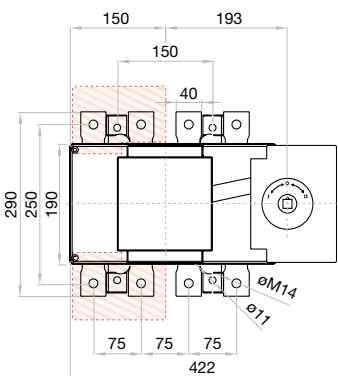
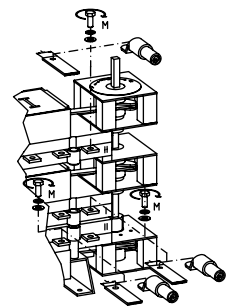
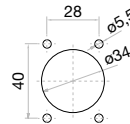
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
Simple Double



Dimensions (mm)

Door drilling for external handle

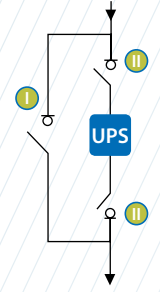


S max (Cu)	H max (Cu)	L max (Cu)	T	M	
mm ²	mm	mm		Nxm	
800 A	2x240	2x10	50	M14	45
1000 A	2x300	2x10			

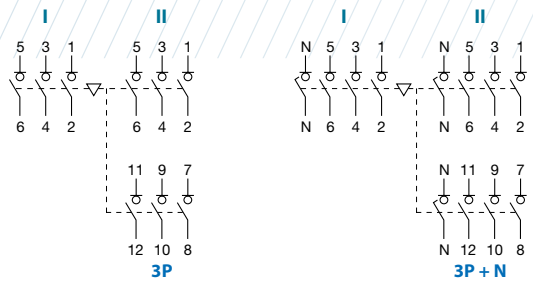
S5B Bypass changeover switch base mounting 3P - 3P+N

Size 4
A 1250|1600|1800|2000

series
S5B



	CODE-1250A	CODE-1600A	CODE-1800A	CODE-2000A
3P	S5B12503PS0	S5B16003PS0	S5B18003PS0	S5B20003PD0
3P+N	S5B12503NS0	S5B16003NS0	S5B18003NS0	S5B20003ND0



Technical information



tests:

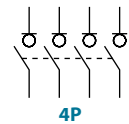
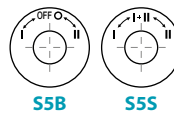
According to IEC 60947-3

			1250	1600	1800	2000
Rated thermal current	I _{th} in ambient at 40° C	A	1250	1600	1800	2000
Rated insulation voltage	U _i	V	1000	1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	12	12	12	12
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A	1250	1600	1800	2000
(Rated operational frequency 50/60 Hz)	U _e 400V AC22A	A	1250	1600	1800	2000

^{*(1)} Other voltages and/or utilization categories; please consult

^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)

			1250	1600	1800	2000
Rated breaking capacity	400V AC22	A	3750	4800	5400	6000
Rated making capacity	400V AC22	A	3750	4800	5400	6000
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	60	75	75	75
Short - time withstand current (1 sec.)	I _{cw}	kA rms	25	50	50	50
Number of mechanical operations (according to the standards, for other values please consult)		Cycles	3000	3000	3000	3000
Maximum weight (3/4 poles)		Kg	65,2/72,1	65,2/72,1	65,2/72,1	65,2/72,1



There are versions of bypass changeover without OFF 0 position "overlapped contacts":

Also available 4P changeover switches under request, please consult

S5B (I - I + II - II) = S5S _____, please consult



Accessories



» Direct handle

CODE D5LLI32



» External handle included shaft*(e1)

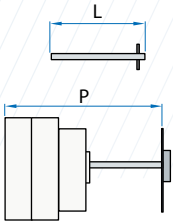
IP65
CODE D5LLA31



» Shafts

Standard shaft included *(e1)

L (mm) P (mm)
239 572... 645



» Auxiliary contacts

1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal shrouds

CODE DS-CU41
(1 kit for input or output only front side)

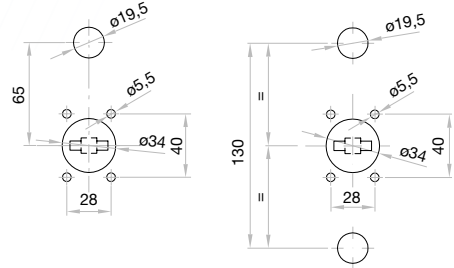


» Safety key lock device

Simple CODE D5LCB41
Double CODE D5LCF41

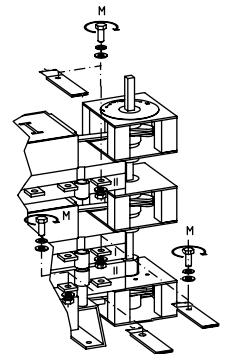
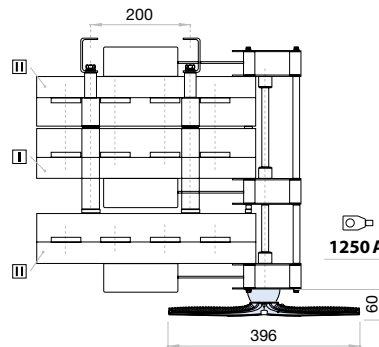
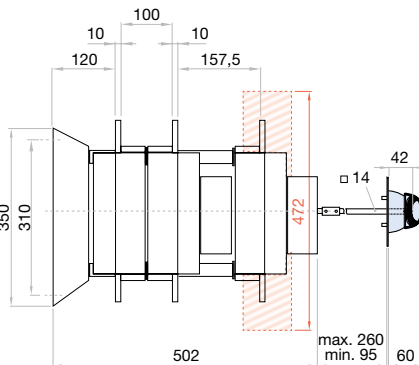
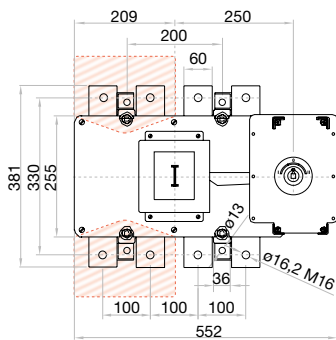
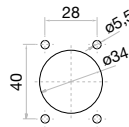
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
Simple Double

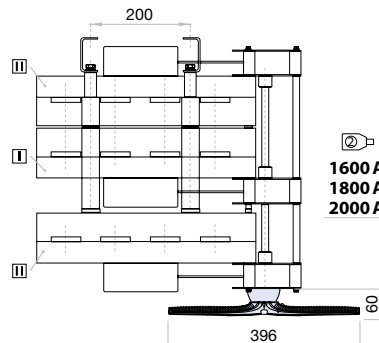
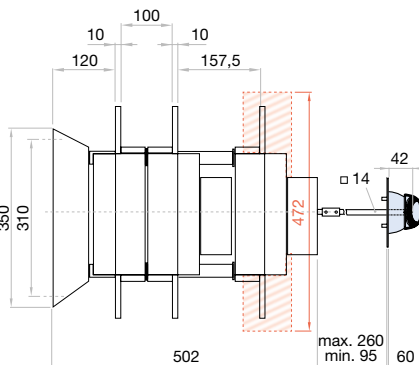
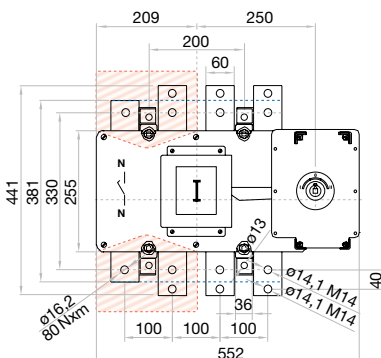


Dimensions (mm)

Door drilling for external handle



	H max (Cu)	L max (Cu)	M	M
	mm	mm	mm	Nxm
1250 A	2x10	80	M16	80



	H max (Cu)	L max (Cu)	M	M
	mm	mm	mm	Nxm
1600 A	2x10	80	M14	55
1800 A				
2000 A				

CTR₂ Metal enclosed compact changeover switch IP65

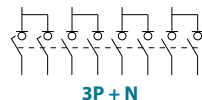
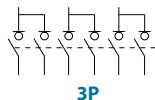
3P - 3P+N

Size 00

A 63|80|100|125



	CODE-63A	CODE-80A	CODE-100A	CODE-125A
3P	CTR2EC00633PB	CTR2EC00803PB	CTR2EC01003PS	CTR2EC01253PS
3P + N	CTR2EC00633NB	CTR2EC00803NB	CTR2EC01003NS	CTR2EC01253NS



Patent pending
EP18382154

Technical information



According to IEC 60947-3
IEC 61439-2

			63	80	100	125
Rated thermal current in ambient at	I _{th}	40°C	A 63	80	100	125
		50°C	A 63	80	100	125
		60°C	A 63	80	100	125
Rated insulation voltage	U _i	V	1000	1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	8
AC rated operational current ^{*(1)} (Rated operational frequency 50/60Hz)	I _e	AC21A	A 63	80	100	125
		AC22A	A 63	80	100	125
		AC23A	A 63	80	100	125
Rated breaking capacity	400V, cos φ = 0,35-0,45	A	320	640	800	800
		400V, cos φ = 0,45	400	800	1000	1000

^{*(1)} Please, inquire for other voltages and/or utilization categories
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100ms)

			63	80	100	125
Short-circuit behaviour						
Rated short-circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	1,5	1,5	2,9	2,9
Rated short-time withstand current (1s)	I _{cw}	kA rms	1	1	2	2
Connecting capacity						
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		10000	10000	10000	8000
Maximum weight (3/4 poles)		Kg	Consult			

Accessories



» External handle included shaft
CODE DCELAB1



» Auxiliary contacts
1NO+1NC CODE DCEAUB1
Ie = 0,1 A (resistive) at 125 Vac.

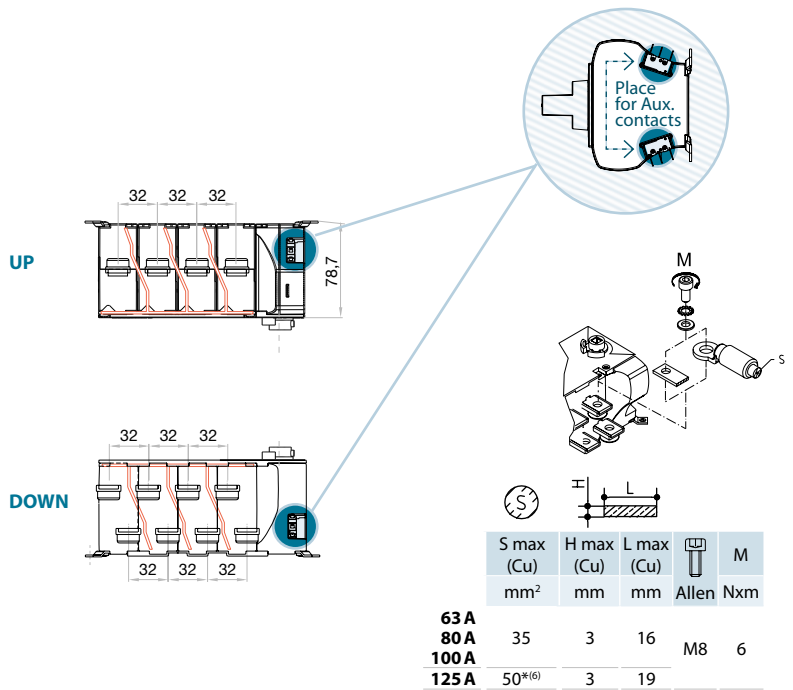
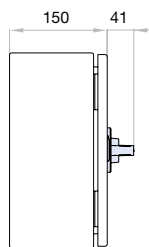
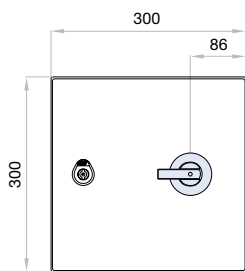


» Phase barrier

3P CODE DCECUB1
4P CODE DCECUB2

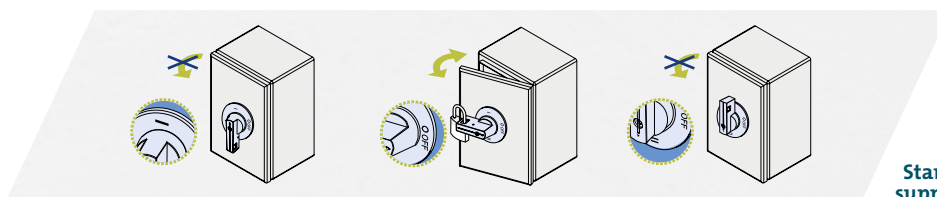
(1 kit for input or output)

Dimensions (mm)



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	Allen	M Nxmm
63 A					
80 A	35	3	16	M8	6
100 A					
125 A	50 ⁽⁶⁾	3	19		

⁽⁶⁾ Use phase barriers in order to keep the clearance in air distances.



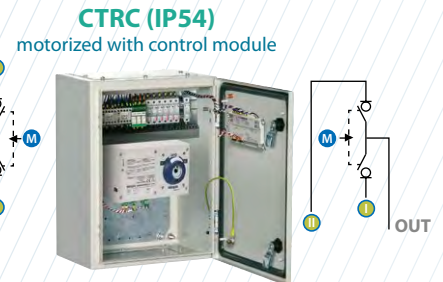
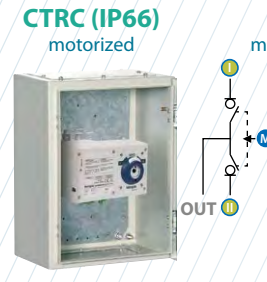
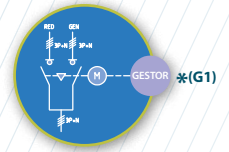
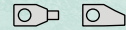
Standard supply CTR2

CTR₂ | CTRC Metal enclosed transfer switch IP54-IP66

3P - 3P+N

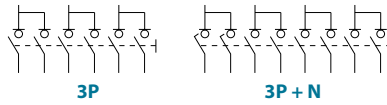
Size 0

A 125|160|200



		CODE - 125A	CODE - 160A	CODE - 200A	CODE - 200A
CTR2 (IP65) manual	3P	CTR2FC01253PS	CTR2FC01603PS	-	CTR2FC02003PS
	3P + N	CTR2FC01253NS	CTR2FC01603NS	-	CTR2FC02003NS
CTRC (IP66) motorized	3P	CTRCFC01253PSAN	CTRCFC01603PSAN	CTRCFC02003PSAN	-
	3P + N	CTRCFC01253NSAN	CTRCFC01603NSAN	CTRCFC02003NSAN	-
CTRC (IP54) with control module	3P + N	CTRCFC01253NSBJ	-	CTRCFC02003NSBJ	-

CTR2 bridging links included



Technical information

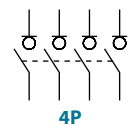


According to IEC 60947-3
IEC 61439-2

			125	160	200
Rated thermal current	I _{th} in ambient at 40° C	A	125	160	200
Rated insulation voltage	U _i	V	1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	8	8	8
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	I _e U _e 400V AC21A	A	125	160	200
		A	125	160	200
		A	125	160	160

			125	160	200
Rated breaking capacity	400V AC22	A	375	480	600
Rated making capacity	400V AC22	A	375	480	600
Short - circuit behaviour					
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	13	13	13
Short - time withstand current (1 sec.)	I _{cw}	kA rms	7	7	7
Number of mechanical operations (according to the standards, for other values please consult) CTR2 ^{*(3)}	Cycles		8000	8000	8000
Maximum weight (3/4 poles)		Kg	Consult		

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50 ms. - 100 ms.)
^{*(3)} Please consult us for **CTRC** motorized operations



Also available 4P changeover switches under request, please consult

Accessories



» External handle included in CTR2
 IP65
 CODE D5LAN01



» Auxiliary contacts
 1NO+1NC CODE DS-AU11
 2NO+2NC CODE DS-AU12
 I_e = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.



» Terminal shrouds^{*(T)} for CTR2

	UP 3P (1 unit)	DOWN 3P (1 unit)	UP OR DOWN 4P (1 unit)
	DS-CU02	DS-CU03	DS-CU04
	DS-CU05	DS-CU06	DS-CU07

(Only frontal side)



» Phase barrier^{*(T)} for CTR2

	3P	4P
	DS-PB01	DS-PB02
	DS-PB04	DS-PB03

(1 kit for input or output)

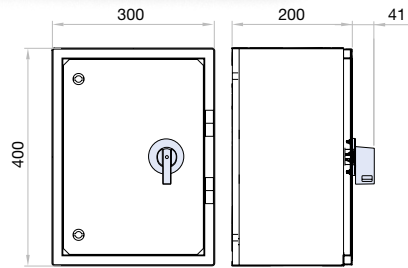
*^(T) These accessories aren't compatible with each other



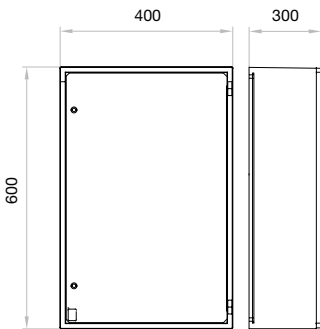
» Bridging links included

CODE D5LPC03 (4 units)

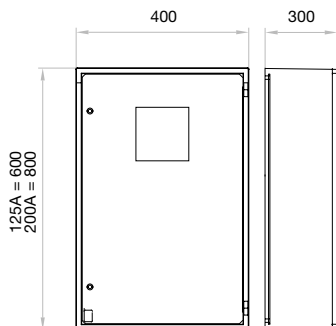
Dimensions (mm)



CTR2 manual



CTRC motorized



CTRC motorized with control module



» Safety key lock device for CTR2

Simple CODE D5LCBB1
 Double CODE D5LCEB1

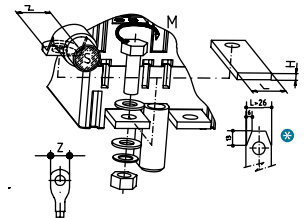
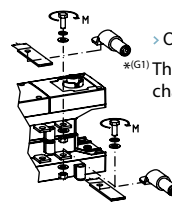
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



» Control module^{*(G1)}

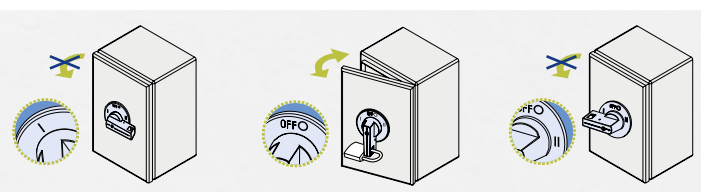
- > LCD graphic screen
- > 3 analog inputs for resistive sensors:
 - Oil pressure
 - Coolant temperature
 - Fuel level
- > 5 + 3 digital inputs:
 - 4 programmable, negative
 - 3 programmable, negative, alternative to resistive sensors
 - 1 emergency stop button, positive
- > 6 digital outputs:
 - 6 positive static outputs protected
- > Operation with universal battery 12-24 Vdc

*^(G1) The control module and its features are subject to change, please consult



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
CTR2					Nxm
	125 A	95	5	25	M8
	160 A				
	200 A	120	5	30	M10

	S max (Cu) mm ²	Z max	H max (Cu) mm	L max (Cu) mm	T	M
CTRC						Nxm
	125 A	240	31	2x5	30	M10
	200 A					24



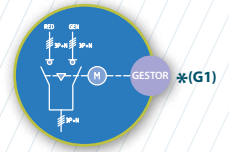
Standard supply CTR2

CTR₂ | CTRC Metal enclosed transfer switch IP54-IP66

3P - 3P+N

Size 1

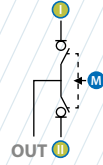
A 200|250|315|400



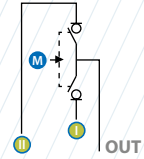
CTR₂ (IP65)
manual



CTRC (IP66)
motorized



CTRC (IP54)
motorized with control module



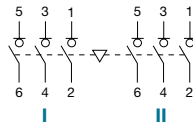
CODE - 200A

CODE - 250A

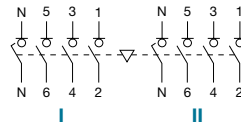
CODE - 315A

CODE - 400A

Model	Code	200A	250A	315A	400A
CTR₂ (IP65) manual	3P	CTR2CC02003PS	CTR2CC02503PS	CTR2CC03153PS	CTR2CC04003PS
	3P + N	CTR2CC02003NS	CTR2CC02503NS	CTR2CC03153NS	CTR2CC04003NS
CTRC (IP66) motorized	3P	CTRCCC02003PSAN	CTRCCC02503PSAN	CTRCCC03153PSAO	CTRCCC04003PSAO
	3P + N	CTRCCC02003NSAN	CTRCCC02503NSAN	CTRCCC03153NSAO	CTRCCC04003NSAO
CTRC (IP54) motorized with control module	3P	-	CTRCCC02503NSBJ	-	CTRCCC04003NSBK
	3P + N	-	-	-	-



3P



3P + N

Technical information



According to IEC 60947-3
IEC 61439-2

			200	250	315	400
Rated thermal current	I _{th} in ambient at 40° C	A	200	250	315	400
Rated insulation voltage	U _i	V	1000	1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	8
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A	200	250	315	400
(Rated operational frequency 50/60 Hz)	U _e 400V AC22A	A	200	250	315	400 ^{*(4)}

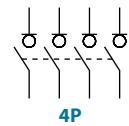
^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50 ms. - 100 ms.)

^{*(3)} Please consult us for **CTRC** motorized operations

^{*(4)} AC22B

			200	250	315	400
Rated breaking capacity	400V AC22	A	600	750	945	1200
Rated making capacity	400V AC22	A	600	750	945	1200
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	12	12	12	12
Short - time withstand current (1 sec.)	I _{cw}	kA rms	8	8	8	8
Number of mechanical operations (according to the standards, for other values please consult) CTR₂ ^{*(3)}	Cycles		8000	8000	8000	5000
Maximum weight (3/4 poles)		Kg	Consult			



4P

Also available 4P changeover switches under request, please consult

Accessories



» **External handle** included in CTR2
 IP65
 CODE DCCLA11



» **Terminal shrouds** for CTR2

Inputs			Common output	
POS. I 3P	POS. II 3P	POS. I&II 3P+N	3P	3P+N
DM2CU12	DM2CU11	DM2CU13	DCCCU11	DCCCU12

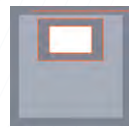


» **Auxiliary contacts**
 1NO+1NC CODE D5LAU01
 2NO+2NC CODE D5LAU02
 Ie = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.



» **Safety key lock device** for CTR2
 Simple CODE D5LCBB1
 Double CODE D5LCEB1

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

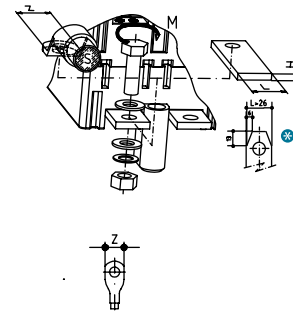
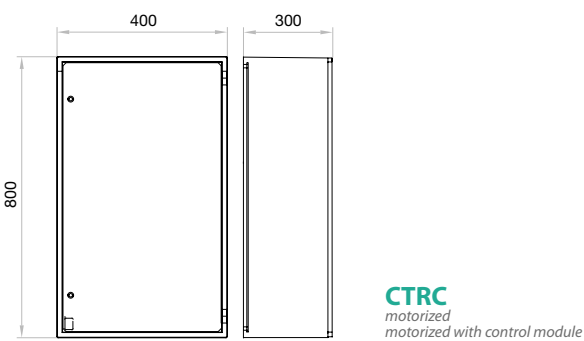
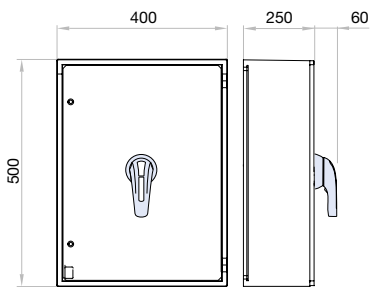


» **Control module***(G1)

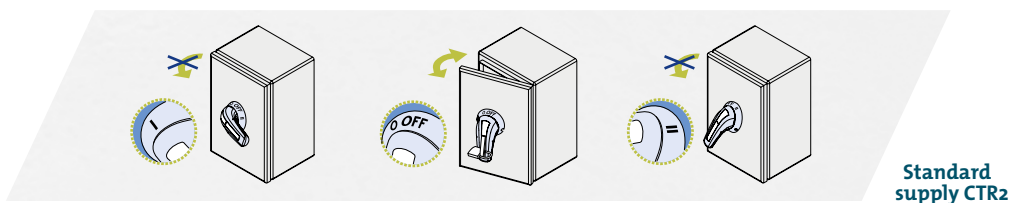
- » LCD graphic screen
- » **3 analog inputs** for resistive sensors:
 - Oil pressure
 - Coolant temperature
 - Fuel level
- » **5 + 3 digital inputs:**
 - 4 programmable, negative
 - 3 programmable, negative, alternative to resistive sensors
 - 1 emergency stop button, positive
- » **6 digital outputs:**
 - 6 positive static outputs protected
- » Operation with universal battery 12-24 Vdc

*(G1) The control module and its features are subject to change, please consult

Dimensions (mm)



S max (Cu) mm ²	Z max	H max (Cu) mm	L max (Cu) mm	T	M
240	31	2x5	30	M10	24



CTR₂ | CTRC Metal enclosed transfer switch IP54-IP66

3P - 3P+N

Size 2

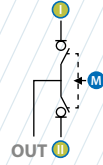
A 500|630|800



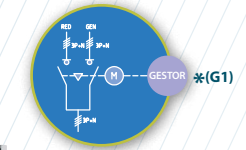
CTR2 (IP65)
manual



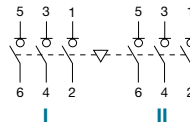
CTRC (IP66)
motorized



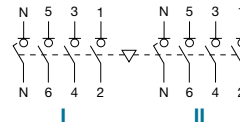
CTRC (IP54)
motorized with control module



		CODE-500A	CODE-630A	CODE-800A
CTR2 (IP65) manual	3P	CTR2CC05003PS	CTR2CC06303PS	CTR2CC08003PS
	3P + N	CTR2CC05003NS	CTR2CC06303NS	CTR2CC08003NS
CTRC (IP66) motorized	3P	CTRCCC05003PSAO	CTRCCC06303PSAO	CTRCCC08003PSAO
	3P + N	CTRCCC05003NSAO	CTRCCC06303NSAO	CTRCCC08003NSAO
CTRC (IP54) motorized with control module	3P + N	-	CTRCCC06303NSBK	-



3P



3P + N

Technical information



According to IEC 60947-3
IEC 61439-2

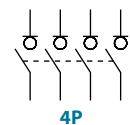
			500	630	800
Rated thermal current	I _{th} in ambient at 40° C	A	500	630	800
Rated insulation voltage	U _i	V	1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	12	12	12
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A	500	630	800
(Rated operational frequency 50/60 Hz)	U _e 400V AC22B	A	500	630	800

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50 ms. - 100 ms.)

^{*(3)} Please consult us for CTRC motorized operations

			500	630	800
Rated breaking capacity	400V AC22	A	1500	1890	2400
Rated making capacity	400V AC22	A	1500	1890	2400
Short - circuit behaviour					
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	20	20	20
Short - time withstand current (1 sec.)	I _{cw}	kA rms	13	13	13
Number of mechanical operations (according to the standards, for other values please consult) CTR2 ^{*(3)}	Cycles		5000	5000	3000
Maximum weight (3/4 poles)		Kg	Consult		



4P

Also available 4P changeover switches under request, please consult

Accessories



» **External handle** included in CTR2
 IP65
 CODE DCCLA21



» **Auxiliary contacts**
 1NO+1NC CODE D5LAU01
 2NO+2NC CODE D5LAU02
 Ie = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.



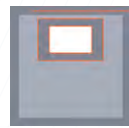
» **Terminal shrouds** for CTR2

Inputs		Common output	
POS. I 3P	POS. II 3P	POS. I&II 3P+N	3P+N
DM2CU22	DM2CU21	DM2CU23	DCCCU21
			DCCCU22



» **Safety key lock device** for CTR2
 Simple CODE D5LCB21
 Double CODE D5LCF21

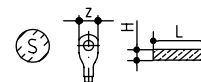
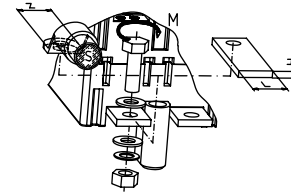
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



» **Control module***(G1)

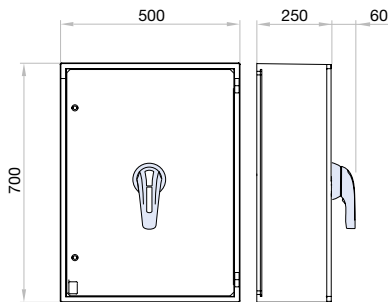
- » LCD graphic screen
- » **3 analog inputs** for resistive sensors:
 - Oil pressure
 - Coolant temperature
 - Fuel level
- » **5 + 3 digital inputs:**
 - 4 programmable, negative
 - 3 programmable, negative, alternative to resistive sensors
 - 1 emergency stop button, positive
- » **6 digital outputs:**
 - 6 positive static outputs protected
- » Operation with universal battery 12-24 Vdc

*(G1) The control module and its features are subject to change, please consult

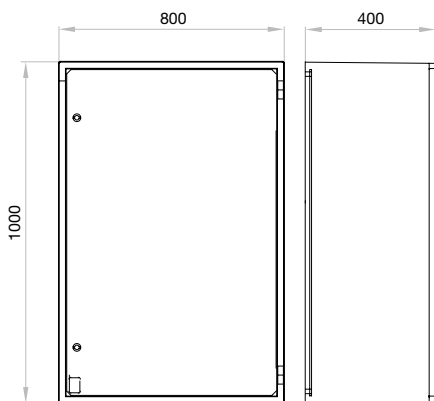


S max (Cu) mm ²	Z max	H max (Cu) mm	L max (Cu) mm	T	M Nxmm
2x240	45	2x6	45	M12	45

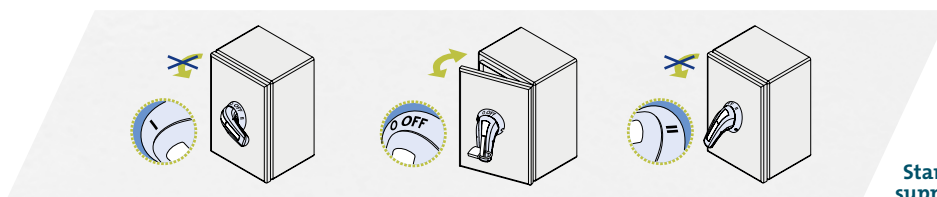
Dimensions (mm)



CTR2 manual



CTRC motorized motorized with control module



Standard supply CTR2

CTR₂ | CTRC Metal enclosed transfer switch IP54-IP66

3P - 3P+N

Size 3

A

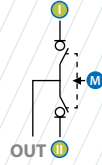
1000|1250



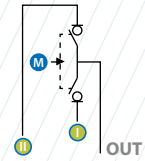
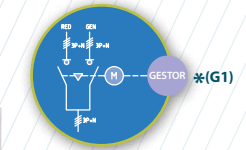
CTR₂ (IP65)
manual



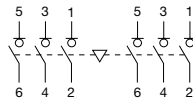
CTRC (IP66)
motorized



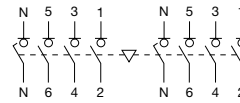
CTRC (IP54)
motorized with control module



		CODE-1000A	CODE-1250A
CTR₂ (IP65) manual	3P	CTR2CC10003PS	CTR2CC12503PS
	3P + N	CTR2CC10003NS	CTR2CC12503NS
CTRC (IP66) motorized	3P	CTRCCC10003PSAP	CTRCCC12503PSAP
	3P + N	CTRCCC10003NSAP	CTRCCC12503NSAP
CTRC (IP54) motorized with control module	3P	CTRCCC10003NSBK	CTRCCC12503NSBK
	3P + N		



3P



3P + N

Technical information



According to IEC 60947-3
IEC 61439-2

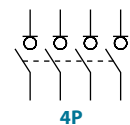
				1000	1250
Rated thermal current	I _{th}	in ambient at 40° C	A	1000	1250
Rated insulation voltage	U _i		V	1000	1000
Rated impulse withstand voltage	U _{imp}		kV	12	12
AC Rated operational current ^{*(1)}	I _e	U _e 400V AC21A	A	1000	1250
(Rated operational frequency 50/60 Hz)		U _e 400V AC22B	A	1000	1250

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50 ms. - 100 ms.)

^{*(3)} Please consult us for **CTRC** motorized operations

				1000	1250
Rated breaking capacity	400V	AC22	A	3000	3750
Rated making capacity	400V	AC22	A	3000	3750
Short - circuit behaviour					
Short - circuit making capacity ^{*(2)}	I _{cm}		kA (peak)	32	32
Short - time withstand current (1 sec.)	I _{cw}		kA rms	25	25
Number of mechanical operations (according to the standards, for other values please consult) CTR₂ ^{*(3)}			Cycles	3000	3000
Maximum weight (3/4 poles)			Kg		Consult



4P

Also available 4P changeover switches under request, please consult

Accessories



» External handle included in CTR2
 IP65
 CODE DCCLA31



» Auxiliary contacts
 1NO+1NC CODE D5LAU01
 2NO+2NC CODE D5LAU02
 Ie = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.



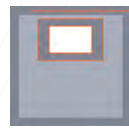
» Terminal shrouds for CTR2

Inputs		Common output	
POS. I	POS. II		
3P	3P	3P+N	3P+N
DM2CU32	DM2CU31	DM2CU33	DCCCU31 DCCCU32



» Safety key lock device for CTR2
 Simple CODE D5LCB31
 Double CODE D5LCF31

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

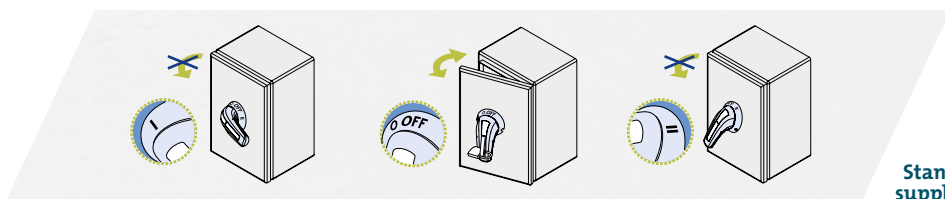
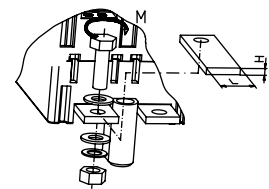
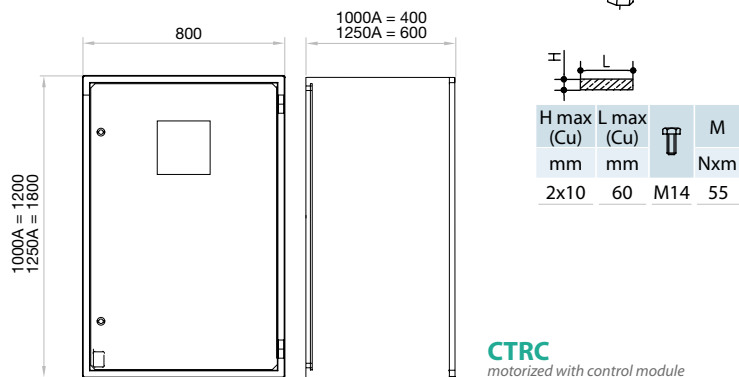
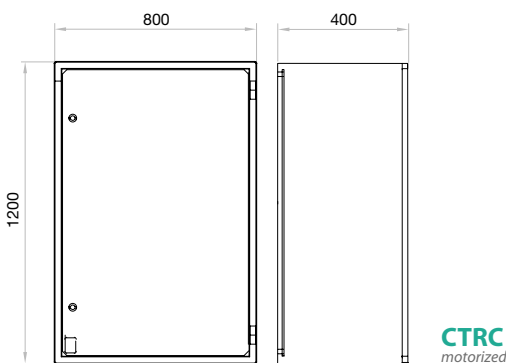
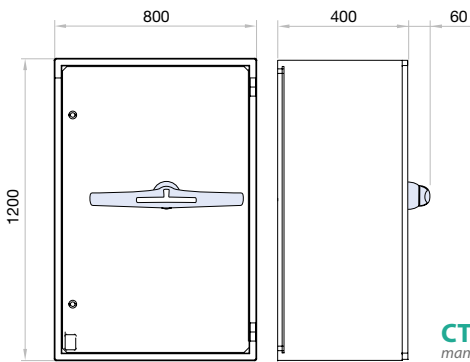


» Control module*(G1)

- » LCD graphic screen
- » 3 analog inputs for resistive sensors:
 - Oil pressure
 - Coolant temperature
 - Fuel level
- » 5 + 3 digital inputs:
 - 4 programmable, negative
 - 3 programmable, negative, alternative to resistive sensors
 - 1 emergency stop button, positive
- » 6 digital outputs:
 - 6 positive static outputs protected
- » Operation with universal battery 12-24 Vdc

*(G1) The control module and its features are subject to change, please consult

Dimensions (mm)

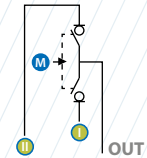
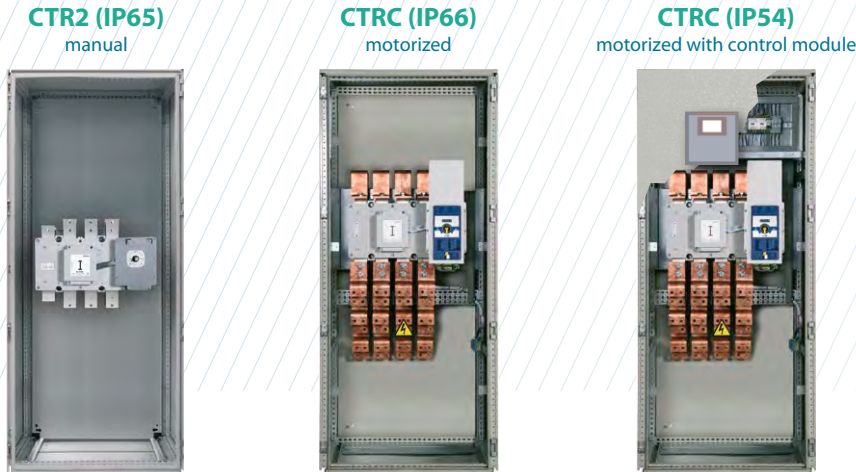
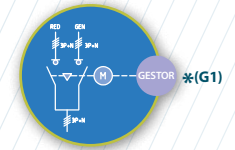


CTR₂ | CTRC Metal enclosed transfer switch IP54-IP66

3P - 3P+N

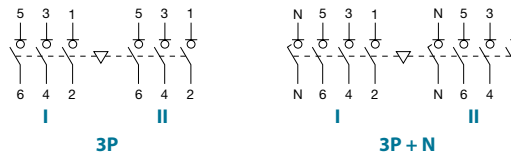
Size 4

A 1600|1800|2000



		CODE-1600A	CODE-1800A	CODE-2000A
CTR ₂ (IP65) manual	3P	CTR2FC16003PS	CTR2FC18003PS	CTR2FC20003PD
	3P + N	CTR2FC16003NS	CTR2FC18003NS	CTR2FC20003ND
CTRC (IP66) motorized	3P	CTRCFC16003PSAP	CTRCFC18003PSAP	CTRCFC20003PDAP
	3P + N	CTRCFC16003NSAP	CTRCFC18003NSAP	CTRCFC20003NDAP
CTRC (IP54) motorized with control module	3P + N	CTRCFC16003NSBK	-	CTRCFC20003NDBK

Technical information

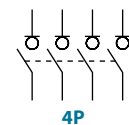


According to IEC 60947-3
IEC 61439-2

			1600	1800	2000
Rated thermal current	I _{th} in ambient at 40° C	A	1600	1800	2000
Rated insulation voltage	U _i	V	1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	12	12	12
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A	1600	1800	2000
(Rated operational frequency 50/60 Hz)	U _e 400V AC22A	A	1600	1800	2000

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50 ms. - 100 ms.)
^{*(3)} Please consult us for CTRC motorized operations

			1600	1800	2000
Rated breaking capacity	400V AC22	A	4800	5400	6000
Rated making capacity	400V AC22	A	4800	5400	6000
Short - circuit behaviour					
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	75	75	75
Short - time withstand current (1 sec.)	I _{cw}	kA rms	50	50	50
Number of mechanical operations (according to the standards, for other values please consult) CTR ₂ ^{*(3)}	Cycles		3000	3000	3000
Maximum weight (3/4 poles)		Kg	Consultar		



Also available 4P changeover switches under request, please consult

Accessories



» **External handle** included in CTR2
 IP65
 CODE D5LLA31



» **Auxiliary contacts**
 1NO+1NC CODE DS-AU11
 2NO+2NC CODE DS-AU12
 Ie = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.



» **Terminal shrouds** for CTR2
 CODE DS-CU41
 (1 kit for input or output only frontal side)



» **Bridging links** for CTR2
 CODE D5LPC42 (4 units)



» **Safety key lock device** for CTR2
 Simple CODE D5LCB41
 Double CODE D5LCF41

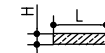
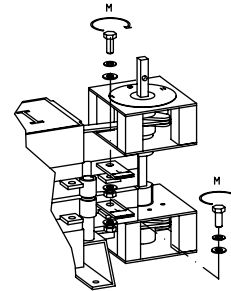
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



» **Control module*(G1)**

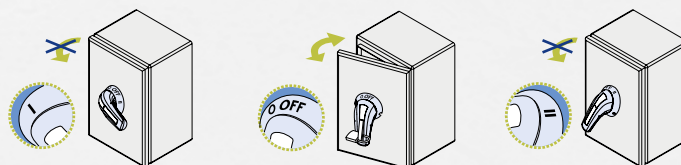
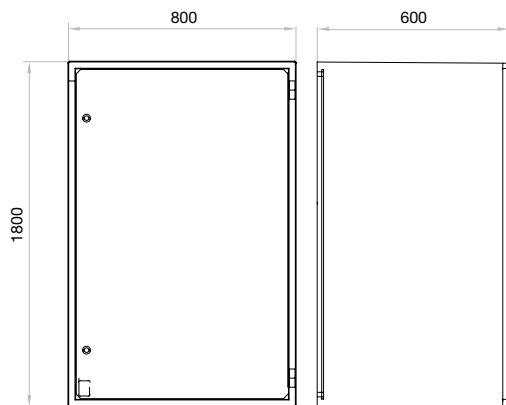
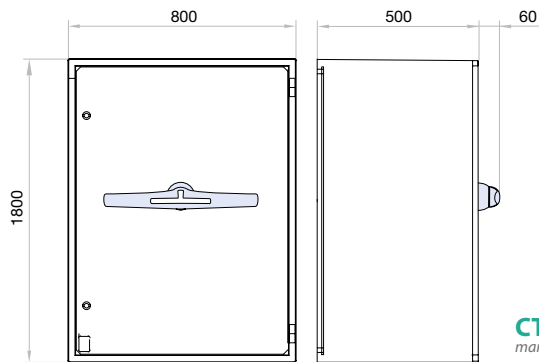
- » LCD graphic screen
- » **3 analog inputs** for resistive sensors:
 - Oil pressure
 - Coolant temperature
 - Fuel level
- » **5 + 3 digital inputs:**
 - 4 programmable, negative
 - 3 programmable, negative, alternative to resistive sensors
 - 1 emergency stop button, positive
- » **6 digital outputs:**
 - 6 positive static outputs protected
- » Operation with universal battery 12-24 Vdc

*(G1) The control module and its features are subject to change, please consult



H max (Cu)	L max (Cu)	T	M
mm	mm	Nxm	
2x10	80	M14	55

Dimensions (mm)



Standard supply CTR2

CTR₂ | CTRC Metal enclosed transfer switch IP55

3P - 3P+N

CTR₂ (IP55)
manual



CTRC (IP55)
motorized

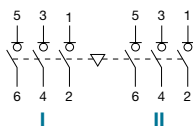


Size 5

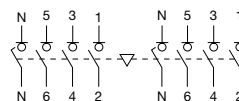
A 2000|2500|3150



	CODE-2000A	CODE-2500A	CODE-3150A
CTR ₂ (IP55) manual	3P CTR2FC20003PP	3P CTR2FC25003PP	3P CTR2FC31503PP
	3P+N CTR2FC20003NP	3P+N CTR2FC25003NP	3P+N CTR2FC31503NP
CTRC (IP55) motorized	3P CTRCFC20003PPAP	3P CTRCFC25003PPAP	3P CTRCFC31503PPAP
	3P+N CTRCFC20003NPAP	3P+N CTRCFC25003NPAP	3P+N CTRCFC31503NPAP



3P



3P+N

Technical information



According to IEC 60947-3
IEC 61439-2

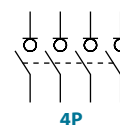
				2000	2500	3150
Rated thermal current	I _{th}	in ambient at 40° C	A	2000	2500	3150
Rated insulation voltage	U _i		V	1000	1000	1000
Rated impulse withstand voltage	U _{imp}		kV	8	8	8
AC Rated operational current ^{*(1)}	I _e	U _e 400V AC21A	A	2000	2500	3150
(Rated operational frequency 50/60 Hz)		U _e 400V AC22B	A	2000	2500	2500

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50 ms. - 100 ms.)

^{*(3)} Please consult us for CTRC motorized operations

				2000	2500	3150
Rated breaking capacity	400V	AC22	A	6000	7500	9450
Rated making capacity	400V	AC22	A	6000	7500	9450
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		100	100	100
Short - time withstand current (1 sec.)	I _{cw}	kA rms		50	50	50
Number of mechanical operations (according to the standards, for other values please consult) CTR ₂ ^{*(3)}		Cycles		600	600	600
Maximum weight (3/4 poles)		Kg		Consult		



4P

Also available 4P changeover switches under request, please consult

Accessories



» **External handle** included in CTR2
(Slider bar)
CODE D5LEN51

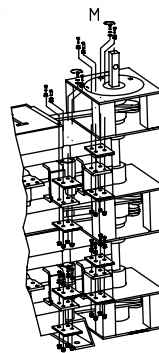


» **Safety key lock device** for CTR2
Simple CODE D5LCB41
Double CODE D5LCF41

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

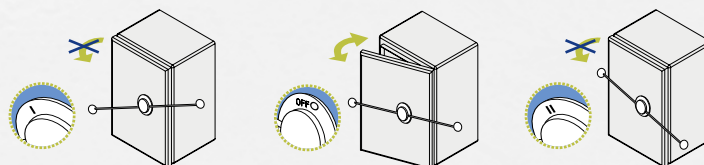
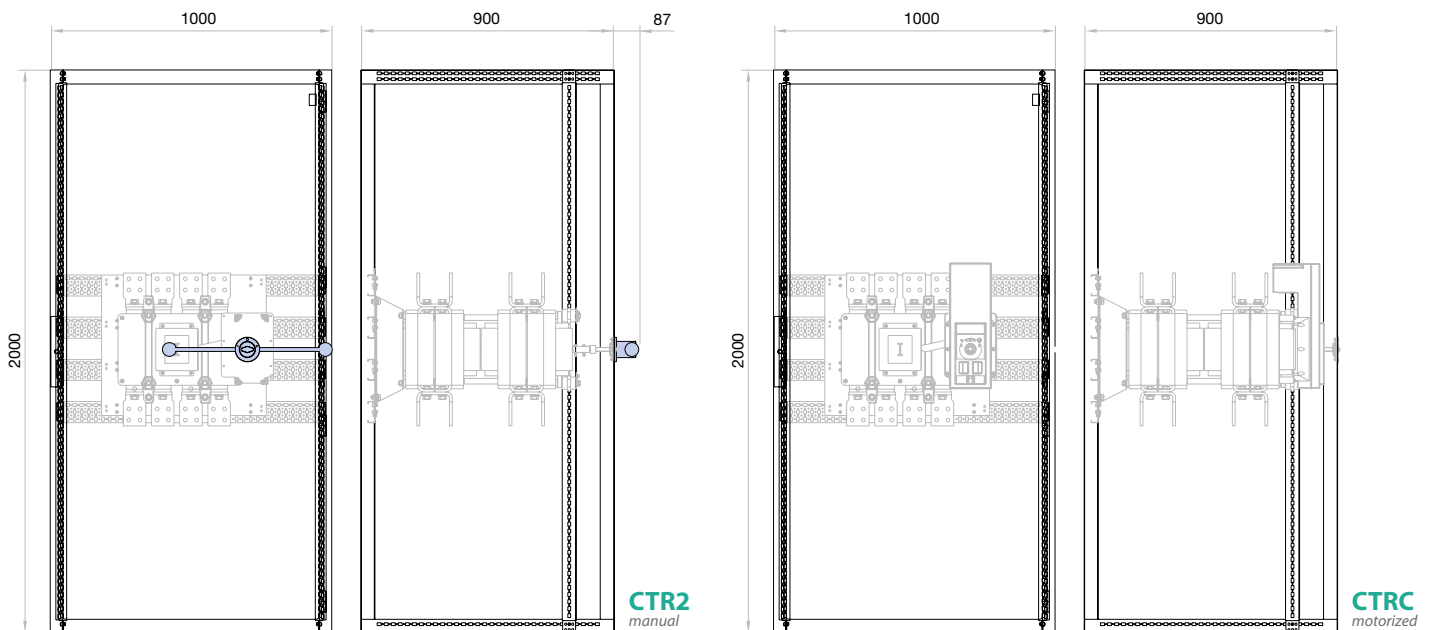


» **Auxiliary contacts**
1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



	H max (Cu) mm	L max (Cu) mm	T	M
2000 A	4x10	80	M12	45
2500 A		100		
3150 A				

Dimensions (mm)



Standard supply CTR2

Kit motorized unit for switch or changeover switch

Motorized units to automate the drive system of the switch-disconnectors, changeover switches and by-pass changeover switches, with a high level of reliability, safety and ease of operation even in extreme situations.

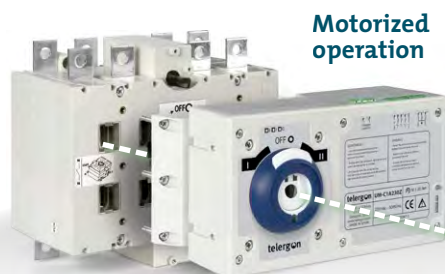


The motorized unit kits are manufactured with high safety self-extinguishing materials, providing an excellent level of electrical insulation, low smoke emission and high resistance to electromechanical stress.

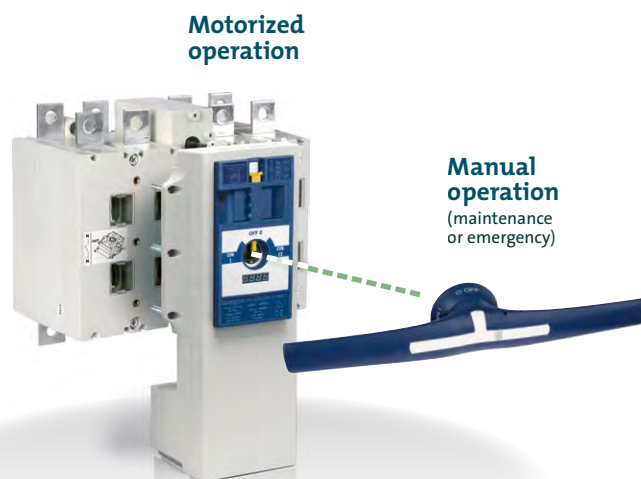
They comply with environmental requirements and undergo strict quality controls for a reliable product that meets the most demanding requirements.

They consist of a body housing the motor, gears, electronics to command and control. They are equipped with a selector for automatic-manual-lock operating modes.

The kit concept simplifies both logistics and maintenance, for easy and simple assembly on the changeover switch or switch - disconnector as required.



Manual operation
(maintenance or emergency)



Manual operation
(maintenance or emergency)

- › IEC60947-1 & 3. Low voltage devices. General part and switch - disconnectors.

- › According to European Standard 104/35/UE.
- › According to European standard 104/30/UE of EMC.

According to:
IEC 60947-1 & 3
RoHS



Testing and approvals:



series UM-S



1 2 3 4 5 6
U M - S

Supply voltage
230 Vac ^{*(1)}

For switch - disconnectors:

S5 Sizes 1-2 | 3P - 3P+N ready to motorize (250A... 800A)
S6 Sizes 1-2 | 2P - 3P - 3P+N ready to motorize (200A... 800A)
S6N Size 1 | 6P - 8P ready to motorize (125A... 400A)

^{*(1)} For DC values, consult please

series UM-S



1 2 3 4 5 6
U M - S

Supply voltage
120 - 230 Vac ^{*(1)}

with MODBUS **MB**

For switch - disconnectors:

S5 Sizes 3-4 | 3P - 3P+N ready to motorize (800A... 2000A)
S5N Size 5 | 3P - 3P+N ready to motorize (2000A... 3150A)
S6N Size 2 | 6P - 8P ready to motorize (500A... 630A)
S5M Size 3 | 6P - 8P ready to motorize (800A... 1000A)
S5N Size 4 | 6P - 8P ready to motorize (1250A... 2000A)

^{*(1)} For DC values, consult please

series UM-C



1 2 3 4 5 6
U M - C

Supply voltage
230 Vac ^{*(1)}

For changeover switches:

S5F Size 0 | 3P - 3P+N standard (125A... 200A)
CCF Sizes 1-2 | 3P - 3P + N standard (200A... 800A)
S5B Size 0 | 3P - 3P + N standard (125A... 200A)
S5B Size 1 | 3P - 3P + N ready to motorize (250A... 400A)

^{*(1)} For DC values, consult please

series UM-C



1 2 3 4 5 6
U M - C

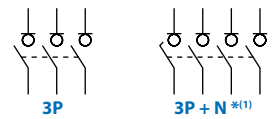
Supply voltage
120 - 230 Vac ^{*(1)}

with MODBUS **MB**

For changeover switches:

CCF Sizes 2-3 | 3P - 3P+N standard (500A... 1250A)
S5F Sizes 4-5 | 3P - 3P+N standard (1600A... 3150A)
S5B Sizes 2-3 | 3P - 3P+N ready to motorize (500A... 1000A)
S5B Size 4 | 3P - 3P+N standard (1250A... 2000A)

^{*(1)} For DC values, consult please



S5
S5N

S5 switches 3 & 4 poles (O-I) ready to motorize

UM-S Motorized unit kit (O - I) ^{*(2)}



S5



S5N

Amp.	Size	Connection	3 pole (3P)	4 pole (3P + N) ^{*(1)}	120Vac ^{*(3)}	230Vac ^{*(3)}	Full details in page
			Code	Code	Code	Code	
250	1		S5-02503PRC	S5-02503NRC	-	UM-S1A230Z	196
315			S5-03153PRC	S5-03153NRC			
400			S5-04003PCC	S5-04003NCC			
500	2		S5-05003PRC	S5-05003NRC	-	UM-S2A230Z	196
630			S5-06303PRC	S5-06303NRC			
800			S5-08003PCC	S5-08003NCC			
800	3		S5-08003PRC	S5-08003NRC	MB UM-S3120M	MB UM-S31230M	198
1000			S5-10003PCC	S5-10003NCC			
1250			S5-12503PCC	S5-12503NCC			
1000	4		S5-10003PSC	S5-10003NSC	MB UM-S4120M	MB UM-S41230M	198
1250			S5-12503PSC	S5-12503NSC			
1600			S5-16003PSC	S5-16003NSC			
1800			S5-18003PSC	S5-18003NSC			
2000			S5-20003PDC	S5-20003NDC			
2000		5 (S5N)		S5N20003PPC			
2500			S5N25003PPC	S5N25003NPC			
3150			S5N31503PPC	S5N31503NPC			

UM + S5 sizes 1 - 2 normal mounting
 UM + S5 size 3 normal mounting

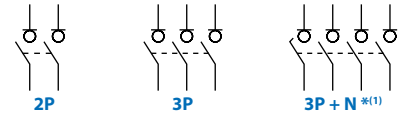
UM + S5 size 4 normal mounting
 UM + S5N size 5 normal mounting



UM



UM (MODBUS)
MB



S6

S6 switches 2, 3 & 4 poles (O-I) ready to motorize

UM-S Motorized unit kit (O - I) ^{*(2)}

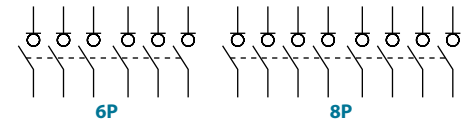


S6



UM

Amp.	Size	Connection	Bipolar (2P)	3 pole (3P)	4 pole (3P + N) ^{*(1)}	230Vac ^{*(3)}	Full details in page
			Code	Code	Code	Code	
200	1		S6-02002PSC	S6-02003PSC	S6-02003NSC	UM-S1A230Z	196
250			S6-02502PSC	S6-02503PSC	S6-02503NSC		
315			S6-03152PSC	S6-03153PSC	S6-03153NSC		
400			S6-04002PDC	S6-04003PDC	S6-04003NDC		
500	2		S6-05002PSC	S6-05003PSC	S6-05003NSC	UM-S2A230Z	196
630			S6-06302PSC	S6-06303PSC	S6-06303NSC		
800			S6-08002PDC	S6-08003PDC	S6-08003NDC		



S5M
S5N

S6N

S5 switches 6 & 8 poles (O-I) ready to motorize

UM-S Motorized unit kit (O - I) ^{*(2)}



S6N



S5M



S5N

Amp.	Size	Connection	6 pole (6P)	8 pole (8P)	120Vac ^{*(3)}	230Vac ^{*(3)}	Full details in page
			Code	Code	Code	Code	
125	1 (S6N)		S6N01256PSC	S6N01258PSC	-	UM-S2A230Z	196
160			S6N01606PSC	S6N01608PSC			
200			S6N02006PSC	S6N02008PSC			
250			S6N02506PSC	S6N02508PSC			
315			S6N03156PSC	S6N03158PSC			
400			S6N04006PDC	S6N04008PDC			
500	2 (S6N)		S6N05006PRC	S6N05008PRC	MB UM-S26120M	MB UM-S26230M	200
630			S6N06306PRC	S6N06308PRC			
800			S5M08006PRC	S5M08008PRC			
1000	3 (S5M)		S5M10006PCC	S5M10008PCC	MB UM-S35120M	MB UM-S35230M	200
1250			S5N12506PSC	S5N12508PSC			
1600			S5N16006PSC	S5N16008PSC			
1800			S5N18006PSC	S5N18008PSC			
2000	4 (S5N)		S5N20006PDC	S5N20008PDC	-	MB UM-S56230M	200
2000							

UM + S6N normal mounting
 UM + S5M size 3 normal mounting

UM + S5N size 4 normal mounting
 UM + S5M size 3 inverted mounting (please consult UM codes)



UM



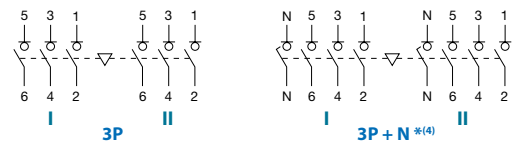
UM (MODBUS)
MB

^{*(1)} Neutral pole early make-late break - Versions 4P with "simultaneous contacts" are also available, please consult.

^{*(2)} UM Kit code is related to the code of switch from its section depending on size and it is for normal mounting. For different type of mounting or different code of switch or UM kit, please consult.

^{*(3)} For DC values, please consult.

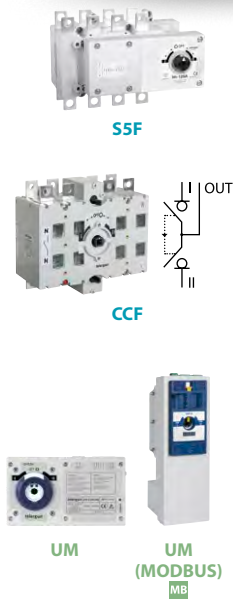
For all solutions, please indicate in your order the switch code and the UM Kit code, as these both products are managed separately.



S5F CC S5 changeover switches 3 & 4 poles (I - O - II) ready to motorize ^{*(5)}

UM-C Motorized unit kit (I - O - II) ^{*(6)}

Full details in page



Amp.	Size	Connection	Series	3 pole (3P)	4 pole (3P + N) ^{*(4)}	120Vac ^{*(8)}	230Vac ^{*(8)}	Full details in page
				Code	Code	Code	Code	
125	0	☐	S5F	S5F01253PS0	S5F01253NS0	-	UM-C0A230Z	202
160			S5F	S5F01603PS0	S5F01603NS0			
200			S5F	S5F02003PS0	S5F02003NS0			
200	1	☐	CCF	CCF02003PS0	CCF02003NS0	-	UM-C1A230Z	202
250			CCF	CCF02503PS0	CCF02503NS0			
315			CCF	CCF03153PS0	CCF03153NS0			
400			CCF	CCF04003PS0	CCF04003NS0			
500			CCF	CCF05003PS0	CCF05003NS0			
630	2	☐	CCF	CCF06303PS0	CCF06303NS0	ME UM-C21120M	UM-C2A230Z	202
800			CCF	CCF08003PS0	CCF08003NS0	ME UM-C21230M	UM-C21230M	204
1000	3	☐	CCF	CCF10003PS0	CCF10003NS0	ME UM-C31120M	ME UM-C31230M	204
1250			CCF	CCF12503PS0	CCF12503NS0	ME UM-C31230M	ME UM-C31230M	204
1600	4	☐	S5F	S5F16003PS0	S5F16003NS0	ME UM-C45120M	ME UM-C45230M	204
1800			S5F	S5F18003PS0	S5F18003NS0			
2000			S5F	S5F20003PD0	S5F20003ND0			
2000	5	☐	S5F	S5F20003PP0	S5F20003NP0	-	ME UM-C55230M	204
2500			S5F	S5F25003PP0	S5F25003NP0			
3150			S5F	S5F31503PP0	S5F31503NP0			

☐ UM + S5F size 0 normal mounting

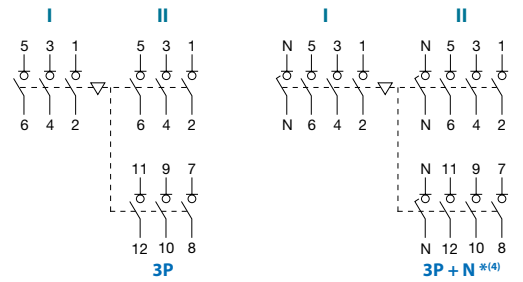
☐ UM + CCF sizes 1-2 normal mounting

☐ UM + CCF size 3 normal mounting

☐ UM + S5F sizes 4-5 normal mounting

☐ UM + CCF size 3 inverted mounting (please consult UM codes)

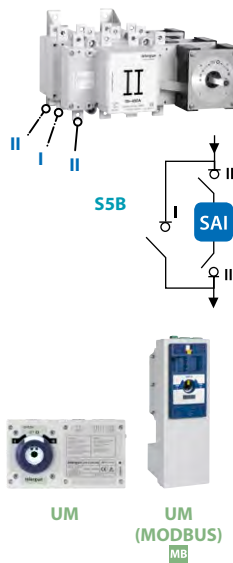
☐ UM + S5F sizes 4-5 inverted mounting (please consult UM codes)



S5B S5 bypass changeover switches 3 & 4 poles (I - O - II) ready to motorize ^{*(7)}

UM-C Motorized unit kit (I - O - II) ^{*(6)}

Full details in page



Amp.	Size	Connection	3 pole (3P)	4 pole (3P + N) ^{*(4)}	120Vac ^{*(8)}	230Vac ^{*(8)}	Full details in page
			Code	Code	Code	Code	
125	0	☐	S5B01253PS0	S5B01253NS0	-	UM-C0A230Z	202
160			S5B01603PS0	S5B01603NS0			
200			S5B02003PS0	S5B02003NS0			
250	1	☐	S5B02503PRC	S5B02503NRC	-	ME UMC14230Z	202
315			S5B03153PRC	S5B03153NRC			
400			S5B04003PCC	S5B04003NCC			
500			S5B05003PRC	S5B05003NRC			
630	2	☐	S5B06303PRC	S5B06303NRC	ME UM-C24120M	ME UM-C24230M	206
800			S5B08003PRC	S5B08003NRC	ME UM-C34120M	ME UM-C34230M	206
1000	3	☐	S5B10003PCC	S5B10003NCC	ME UM-C34120M	ME UM-C34230M	206
1250			S5B12503PS0	S5B12503NS0	-	ME UM-C44230M	206
1600	S5B16003PS0	S5B16003NS0					
1800	S5B18003PS0	S5B18003NS0					
2000	4	☐	S5B20003PD0	S5B20003ND0	ME UM-C44230M	ME UM-C44230M	206
2000			S5B20003PD0	S5B20003ND0			

☐ UM + S5B sizes 0-1 normal mounting

☐ UM + S5B sizes 2-3-4 normal mounting

☐ UM + S5B sizes 2-3-4 inverted mounting (please consult UM codes)

^{*(4)} Neutral pole early make-late break - Versions 4P with "simultaneous contacts" are also available, please consult.

^{*(5)} There are versions of changeover switch without 0 - OFF position:

S5F (I - II) = S5D _____

CCF "overlapped" (I - I+II - II) = CCS _____

Please consult.

^{*(6)} UM Kit code is related to the code of changeover from its section depending on size and it is for normal mounting.

For different type of mounting or different code of changeover or UM kit, please consult.

^{*(7)} There are versions of bypass changeover switch without 0 - OFF position "overlapped":

S5B "overlapped" (I - I + II - II) = S5S _____

Please consult.

^{*(8)} For DC values, please consult.

⚠ Please indicate in your order the changeover switch code and the UM Kit code, as these both products are managed separately.

UM-S Motorized unit kit for base mounting switches 2P - 3P - 3P+N | 6P - 8P

S5 Sizes 1-2 ready to motorize (250A... 800A)
S6 Sizes 1-2 ready to motorize (200A... 800A)
S6N Size 1 ready to motorize (125A... 400A)



		CODE - 2P ^{*(1)}	CODE - 3P ^{*(1)}	CODE - 3P+N ^{*(1)}	CODE - 230 Vac ^{*(1)}
Size 1 S5	250A	-	S5-02503PRC	S5-02503NRC	UM UM-S1A230Z
	315A	-	S5-03153PRC	S5-03153NRC	
	400A	-	S5-04003PCC	S5-04003NCC	
	500A	-	S5-05003PRC	S5-05003NRC	
	630A	-	S5-06303PRC	S5-06303NRC	
	800A	-	S5-08003PCC	S5-08003NCC	
Size 2 S5	200A	S6-02002PSC	S6-02003PSC	S6-02003NSC	UM UM-S2A230Z
	250A	S6-02502PSC	S6-02503PSC	S6-02503NSC	
	315A	S6-03152PSC	S6-03153PSC	S6-03153NSC	
	400A	S6-04002PDC	S6-04003PDC	S6-04003NDC	
	500A	S6-05002PSC	S6-05003PSC	S6-05003NSC	
	800A	S6-08002PDC	S6-08003PDC	S6-08003NDC	
Size 1 S6	250A	S6-02502PSC	S6-02503PSC	S6-02503NSC	UM UM-S1A230Z
	315A	S6-03152PSC	S6-03153PSC	S6-03153NSC	
	400A	S6-04002PDC	S6-04003PDC	S6-04003NDC	
	500A	S6-05002PSC	S6-05003PSC	S6-05003NSC	
	630A	S6-06302PSC	S6-06303PSC	S6-06303NSC	
	800A	S6-08002PDC	S6-08003PDC	S6-08003NDC	
Size 2 S6	200A	S6-02002PSC	S6-02003PSC	S6-02003NSC	UM UM-S2A230Z
	250A	S6-02502PSC	S6-02503PSC	S6-02503NSC	
	315A	S6-03152PSC	S6-03153PSC	S6-03153NSC	
	400A	S6-04002PDC	S6-04003PDC	S6-04003NDC	
	500A	S6-05002PSC	S6-05003PSC	S6-05003NSC	
	800A	S6-08002PDC	S6-08003PDC	S6-08003NDC	
Size 1 S6N	125A	-	S6N01256PSC	S6N01258PSC	UM UM-S2A230Z
	160A	-	S6N01606PSC	S6N01608PSC	
	200A	-	S6N02006PSC	S6N02008PSC	
	250A	-	S6N02506PSC	S6N02508PSC	
	315A	-	S6N03156PSC	S6N03158PSC	
	400A	-	S6N04006PDC	S6N04008PDC	

UM + S5|S6|S6N normal mounting

* Auxiliary manual handle supplied with the **UM**

Technical information



According to IEC 60947-3



UM

		UM for S5 S6 size 1	UM for S5 S6 size 2	UM for S6N size 1
Operational torque	Nm	20	30	30
Voltage supply	V	230 Vac ^{*(2)}	230 Vac ^{*(2)}	230 Vac ^{*(2)}
Operating voltage range ^{*(3)}	ΔV	0,95*V a 1,10*V	0,95*V a 1,10*V	0,95*V a 1,10*V
Operating voltage range according to IEC 60947-6	ΔV	0,95*V a 1,10*V	0,95*V a 1,10*V	0,95*V a 1,10*V
Cable section of voltage supply	mm ²	1,5 - 2,5	1,5 - 2,5	1,5 - 2,5
Cable section area Input Signals	mm ²	0,5 - 1,5	0,5 - 1,5	0,5 - 1,5
Cable section area Auto-Lock mode Outputs	mm ²	0,5 - 1,5	0,5 - 1,5	0,5 - 1,5
Inrush Current	A	1,1	1,5	1,5
Use current (I _{rms})	mA	45	45	45
Use current (I _{max})	mA	137	137	137
Protective Fuse Reference F1AL250 V (Littelfuse)	A	1	1	1
Operating angle		0-90° (0 - I)	0-90° (0 - I)	0-90° (0 - I)
Number of UM operations	Cycles	8000	5000	8000
Operation rate (0-I)	Cycles/hour	120	60/120	120
Working temperature range		- 25°C ... + 55°C	- 25°C ... + 55°C	- 25°C ... + 55°C
Transportation and storage temperature		- 40°C ... + 70°C	- 40°C ... + 70°C	- 40°C ... + 70°C
UM weight	Kg	1,8	1,8	1,8

Pos.	Direction	Pos.	Operating time ^{*(3)}
0	→	I	750 ms
I	→	0	750 ms

^{*(1)} **UM** Kit code is related to the code of switch from its section depending on size and it is for normal mounting. For different type of mounting or different code of switch or **UM** kit please consult.

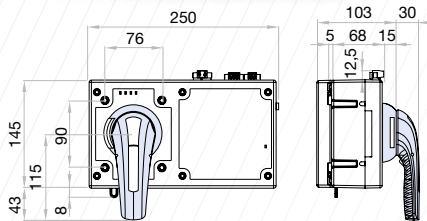
^{*(2)} For DC values, consult please.

^{*(3)} Based in our own tests.

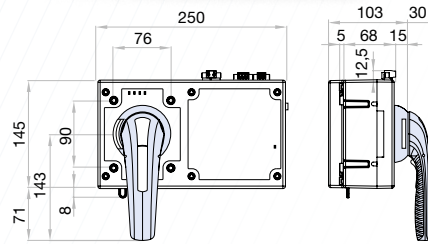


Dimensions (mm)

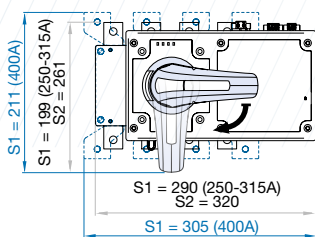
UM for size 1



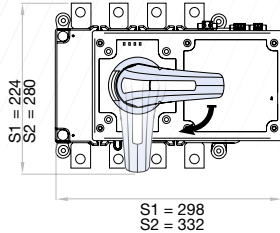
UM for size 2



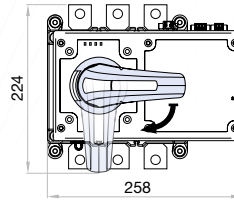
S5 size 1-2 + UM



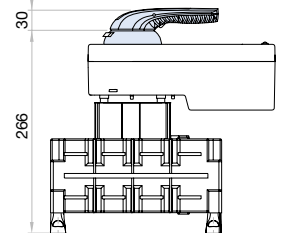
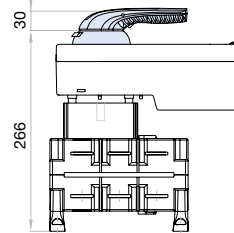
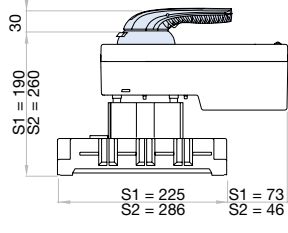
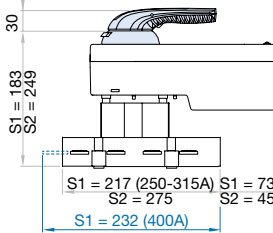
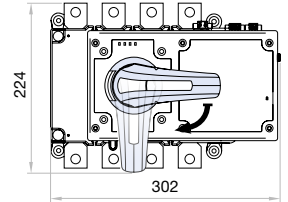
S6 size 1-2 + UM



S6N 6P size 1 + UM



S6N 8P size 1 + UM



EMC table (Electromagnetic compatibility)

Immunity					
Test	Standard	According to standard	According to standard	Results achieved	Values achieved in tests
		UNE/EN 61000	IEC 60947-6		
Electrostatic discharges	EN 61000-4-2	Special, B	Special, A	Special, A	±8KV air discharge ±4KV equipment discharge
Electromagnetic H.F. field	EN 61000-4-3	Level 3, A	Level 3, A	Level 3, A	10V/m. from 80MHz to 1 GHz
Fast transients (Burst)	EN 61000-4-4	Level 3, B	Level 3, A	Level 4, A	±4KV power supply, freq. Rep. 5kHz ±2KV signal supply, freq. Rep 5kHz
Fast transient (surge discharge)	EN 61000-4-5	Level 3, B	Level 3, A	Special, A	±4KV power supply L1-L2 Generator impedance 2Ω (wave 1,2/50 ms)
Conducted disturbances	EN 61000-4-6	Level 3, A	Level 3, A	Level 3, A	10V supply and signal
Electromagnetic field, industrial frequency	EN 61000-4-8	Level 4, A	-	Level 4, A	Field intensity 30A/m
Voltage dips, interruptions and voltage variations	EN 61000-4-11	Criterion B	-	Criterion A	30% Un - 1000 ms
		Criterion C	-	Criterion A	60% Un - 1000 ms
		Criterion C	-	Criterion B	95% Un - 5000 ms
Emission					
Test	Standard	According to standard	According to standard	Results achieved	Values achieved in tests
		UNE/EN 61000	IEC 60947-6		
Emission of harmonic current	EN 61000-3-2	Level 3	Level 3	Level 3	0,02A total current (manual mode) 0,04A total current (automatic mode)
Unwanted voltage	EN 55011	Level 3	Level 3	Level 3	Qualified
Radiated emission	EN 55011	Level 3	Level 3	Level 3	Qualified

NOTE: The installation of this device in a domestic environment can cause radiofrequency interference

EN 61000 is equivalent to IEC 61000 - EN 55011 is equivalent to CISPR11

CRITERION A: Normal service behaviour in determined limits

CRITERION B: Transient alteration of the service. The appliance gets back to the normal performing without the intervention of the operator

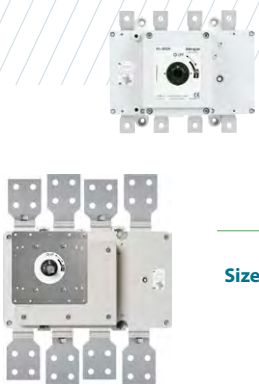
Test level 3: Typical industrial environment, without special installation measures

Test level 4: Severe industrial environment

Special level: Level of higher electromagnetic severe environment

UM-S (MODBUS) Motorized unit kit for base mounting switches 3P - 3P+N

S5 Sizes 3-4 ready to motorize (800A... 2000A)
S5N Size 5 ready to motorize (2000A... 3150A)



Size	Switch	CODE - 3P ^{*(1)}		CODE - 3P+N ^{*(1)}		UM	CODE - 120 Vac ^{*(1)}		CODE - 230 Vac ^{*(1)}	
		800A	1000A	1000A	1250A		UM	UM-S31120M	UM-S31230M	
Size 3	S5	S5-08003PRC	S5-08003NRC	UM	UM-S31120M	UM-S31230M				
		S5-10003PCC	S5-10003NCC	UM	UM-S31120M	UM-S31230M				
		S5-12503PCC	S5-12503NCC	UM	UM-S31120M	UM-S31230M				
Size 4	S5	S5-10003PSC	S5-10003NSC	UM	UM-S41120M	UM-S41230M				
		S5-12503PSC	S5-12503NSC	UM	UM-S41120M	UM-S41230M				
		S5-16003PSC	S5-16003NSC	UM	UM-S41120M	UM-S41230M				
		S5-18003PSC	S5-18003NSC	UM	UM-S41120M	UM-S41230M				
		S5-20003PDC	S5-20003NDC	UM	UM-S41120M	UM-S41230M				
Size 5	S5N	S5N20003PPC	S5N20003NPC	UM	-	UM-S56230M				
		S5N25003PPC	S5N25003NPC	UM	-	UM-S56230M				
		S5N31503PPC	S5N31503NPC	UM	-	UM-S56230M				

- UM + S5** size 3 normal mounting
- UM + S5** size 4 normal mounting
- UM + S5N** size 5 normal mounting

* Auxiliary manual handle supplied with the **UM**

Technical information



According to IEC 60947-3



Voltage supply		120Vac ^{*(2)}		230Vac ^{*(2)}	
Operating voltage range ^{*(3)}	ΔV			0,95*V to 1,10*V	
Cable of voltage supply	mm ²	1,5 - 2,5		1,5 - 2,5	
Cable section area Input & MODBUS Signals	mm ²	0,5 - 1,5		0,5 - 1,5	
Cable section area Outputs	mm ²	0,5 - 1,5		0,5 - 1,5	
Inrush Current	A	11		11	
Nominal Current during operation	A	-		3,9	
Use current (I _{rms})	A	0,041		0,041	
Use current (I _{max})	A	0,275		0,275	
Protection Fuse Reference F4AL250V (Littelfuse)	A	4		4	
Operating time	s	0,275		0,275	
Number of UM operations S5/3 - S5/4	Cycles	3000		3000	
Operation rate (0-I-0) ^{*(4)}	Cycles/hour	20		20	
Number of UM operations S5N/5	Cycles	600		600	
Operation rate (0-I-0) ^{*(4)}	Cycles/hour	20		20	
Working temperature range	T ^a 85%Un	- 25°C ... + 55°C			
	T ^a Un	- 25°C ... + 55°C			
	T ^a 115%Un	- 25°C ... + 55°C			
Transportation and storage temperature		- 40°C ... + 70°C			
UM weight	Kg	4,4			

^{*(1)} **UM** Kit code is related to the code of switch from its section depending on size and it is for normal mounting.

For different type of mounting or different code of switch or **UM** Kit please consult.

^{*(2)} For DC values, consult please.

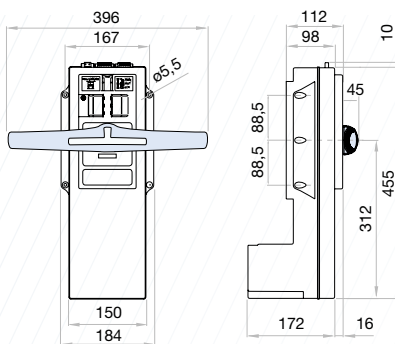
^{*(3)} Operating voltage range for the reference UM-S56230M is 0,9*V_n to 1,1*V_n

^{*(4)} According to IEC 60947-3.

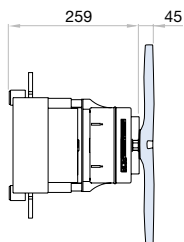
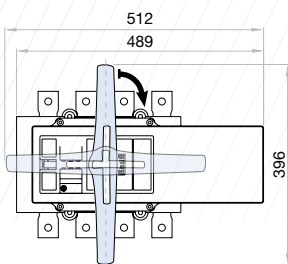


Dimensions (mm)

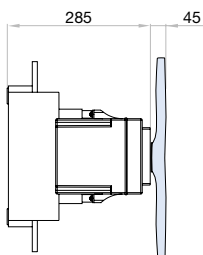
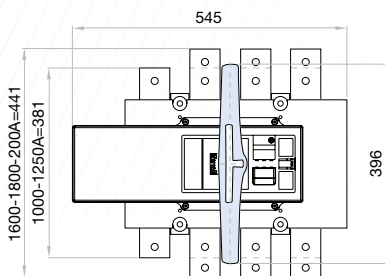
UM



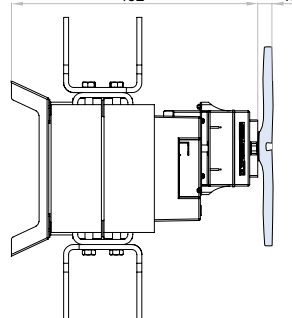
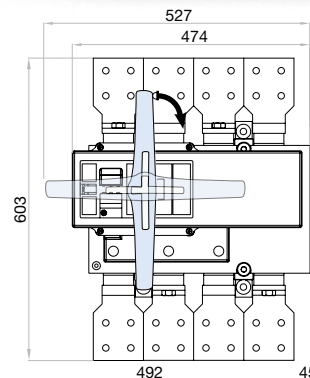
S5 size 3 + UM



S5 size 4 + UM



S5N size 5 + UM



EMC table (Electromagnetic compatibility)

Emission						
Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result
Unwanted voltage	EN 55011	150kHz-30MHz	N.A.	N.A.	N.A.	C
Radiated emission	EN 55011	30MHz-1GHz	N.A.	N.A.	N.A.	C
Emission of harmonic current	EN 61000-3-2	0,02A 0-2kHz	N.A.	N.A.	N.A.	C
Flicker	EN 61000-3-3	0-2kHz	N.A.	N.A.	N.A.	C
Immunity						
Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result
Electrostatic discharges	EN 61000-4-2	Special, A +/- 8KV air discharge	SPECIAL	B	A	C
Electromagnetic H.F. field	EN 61000-4-3	10V/m De 80MHz a 2,7 Ghz	SPECIAL	A	A	C
Fast transients (Burst)	EN 61000-4-4	+/- 2KV power supply +/- 1KV signal supply Rep 5kHz - 2min	3	B	A	C
Fast transient (surge discharge)	EN 61000-4-5	+/- 4KV power supply Generator impedance 2Ω Wave 1,2/50μs	5	B	A	C
Conducted disturbances	EN 61000-4-6	10V supply and signal 0,15-80MHz	3	A	A	C
Electromagnetic field, industrial frequency	EN 61000-4-8	Field intensity 30A/m	4	A	A	C
Voltage dips, interruptions and voltage variations	EN 61000-4-11	N.A.	100% Un - 10ms	B	A	C
		N.A.	100% Un - 20ms	B	A	C
		N.A.	60% Un - 200ms	C	A	C
		N.A.	30% Un - 500ms	C	A	C
		N.A.	20% Un - 5000ms	C	A	C
N.A.	100% Un - 5000ms	C	C	C		

CRITERION A: Normal service behaviour in determined limits

CRITERION B: Transient alteration of the service. The appliance gets back to the normal performing without the intervention of the operator

Test level 3: Typical industrial environment, without special installation measures

Test level 4: Severe industrial environment

Special level: Level of higher electromagnetic severe environment

UM-S (MODBUS) Motorized unit kit for base mounting switches 6P - 8P

S6N Size 2 ready to motorize (500A... 630A)
S5M Size 3 ready to motorize (800A... 1000A)
S5N Size 4 ready to motorize (1250A... 2000A)



Size	Switch Code	CODE - 6P ^{*(1)}		CODE - 8P ^{*(1)}		CODE - 120 Vac ^{*(1)}		CODE - 230 Vac ^{*(1)}	
		500A	630A	800A	1000A	1250A	1600A	1800A	2000A
Size 2 S6N		S6N05006PRC	S6N05008PRC	S6N06306SC	S6N06308PSC	UM	UM-S26120M	UM-S26230M	
						UM	UM-S35120M	UM-S35230M	
Size 3 S5M		S5M08006PRC	S5M08008PRC	S5M10006PCC	S5M10008PCC	UM			
						UM			
Size 4 S5N		S5N12506PSC	S5N12508PSC	S5N16006PSC	S5N16008PSC	UM			
		S5N18006PSC	S5N18008PSC	S5N20006PDC	S5N20008PDC				UM-S56230M

- UM + S6N** normal mounting
- UM + S5M** normal mounting
- UM + S5N** normal mounting

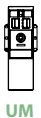
- UM + S5M** inverted mounting ^{*(5)}
(please consult **UM** codes)

* Auxiliary manual handle supplied with the **UM**

Technical information



According to IEC 60947-3



Voltage supply	120 Vac ^{*(2)}		230 Vac ^{*(2)}	
		ΔV		
Operating voltage range ^{*(3)}			0,95*V to 1,10*V	
Cable of voltage supply		mm ²	1,5 - 2,5	1,5 - 2,5
Cable section area Input & MODBUS Signals		mm ²	0,5 - 1,5	0,5 - 1,5
Cable section area Outputs		mm ²	0,5 - 1,5	0,5 - 1,5
Inrush Current	S6N	A	6,3	5,5
	S5M S5N	A	11	11
Nominal Current during operation	S6N	A	3	3
	S5M S5N	A	-	3,9
Use current (I _{rms})		A	0,041	0,041
Use current (I _{max})		A	0,275	0,275
Protection Fuse Reference F4AL250V (Littelfuse)		A	4	4
Operating time	S6N	s	0,25	0,25
	S5M S5N	s	0,275	0,275
Number of UM operations S6N/2		Cycles (category B)	1000	1000
Operation rate (0-I-0) ^{*(4)}		Cycles/hour	60	60
Number of UM operations S5M/3		Cycles	3000	3000
Operation rate (0-I-0) ^{*(4)}		Cycles/hour	20	20
Number of UM operations S5N/4		Cycles	600	600
Operation rate (0-I-0) ^{*(4)}		Cycles/hour	20	20
Working temperature range		T ^a 85%Un	- 25°C ... + 55°C	
		T ^a Un	- 25°C ... + 55°C	
		T ^a 115%Un	- 25°C ... + 55°C	
Transportation and storage temperature			- 40°C ... + 70°C	
UM weight		Kg	4,4	

^{*(1)} **UM** Kit code is related to the code of switch from its section depending on size and it is for normal mounting.

For different type of mounting or different code of switch or **UM** Kit please consult.

^{*(2)} For DC values, consult please.

^{*(3)} Operating voltage range for the reference UM-S56230M is 0,9*V_n to 1,1*V_n

^{*(4)} According to IEC 60947-3.

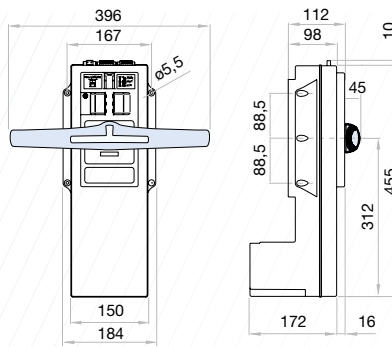
^{*(5)} For inverted mounting there are references for **UM** with inverted frontal plates. Supply under request.



S-WJ series

Dimensions (mm)

UM

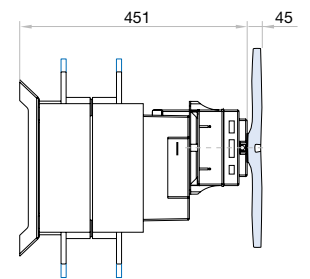
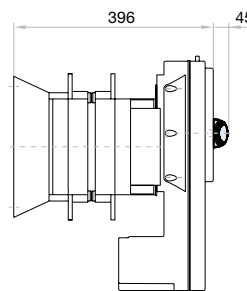
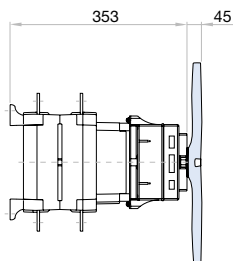
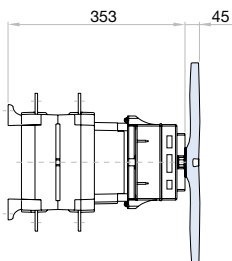
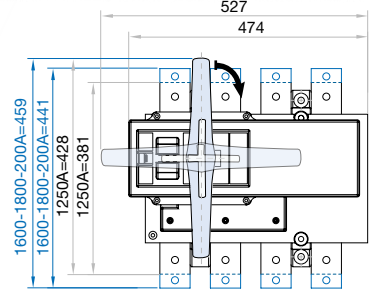
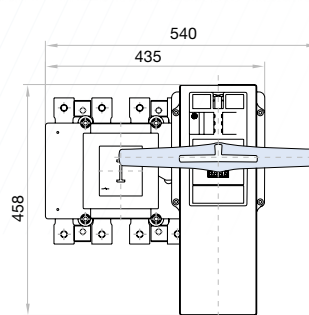
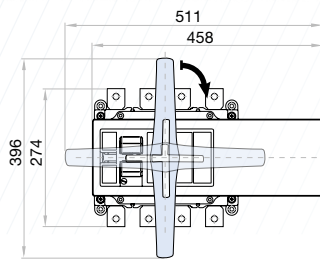
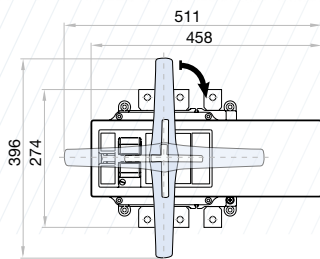


S6N 6P size 2 + UM

S6N 8P size 2 + UM

S5M size 3 + UM

S5N size 4 + UM



EMC table (Electromagnetic compatibility)

Emission						
Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result
Unwanted voltage	EN 55011	150kHz-30MHz	N.A.	N.A.	N.A.	C
Radiated emission	EN 55011	30MHz-1GHz	N.A.	N.A.	N.A.	C
Emission of harmonic current	EN 61000-3-2	0,02A 0-2kHz	N.A.	N.A.	N.A.	C
Flicker	EN 61000-3-3	0-2kHz	N.A.	N.A.	N.A.	C
Immunity						
Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result
Electrostatic discharges	EN 61000-4-2	Special, A +/- 8KV air discharge	SPECIAL	B	A	C
Electromagnetic H.F. field	EN 61000-4-3	10V/m De 80MHz a 2,7 Ghz	SPECIAL	A	A	C
Fast transients (Burst)	EN 61000-4-4	+/- 2KV power supply +/- 1KV signal supply Rep 5kHz - 2min	3	B	A	C
Fast transient (surge discharge)	EN 61000-4-5	+/- 4KV power supply Generator impedance 2Ω Wave 1,2/50μs	5	B	A	C
Conducted disturbances	EN 61000-4-6	10V supply and signal 0,15-80MHz	3	A	A	C
Electromagnetic field, industrial frequency	EN 61000-4-8	Field intensity 30A/m	4	A	A	C
Voltage dips, interruptions and voltage variations	EN 61000-4-11	N.A.	100% Un - 10ms	B	A	C
		N.A.	100% Un - 20ms	B	A	C
		N.A.	60% Un - 200ms	C	A	C
		N.A.	30% Un - 500ms	C	A	C
		N.A.	20% Un - 5000ms	C	A	C
N.A.	100% Un - 5000ms	C	C	C		

CRITERION A: Normal service behaviour in determined limits

CRITERION B: Transient alteration of the service. The appliance gets back to the normal performing without the intervention of the operator

Test level 3: Typical industrial environment, without special installation measures

Test level 4: Severe industrial environment

Special level: Level of higher electromagnetic severe environment

UM-C Motorized unit kit for base mounting changeover switches 3P - 3P+N

S5F Size 0 standard (125A... 200A)
CCF Sizes 1-2 standard (200A... 800A)
S5B Size 0 by-pass standard (125A... 200A)
S5B Size 1 by-pass ready to motorize (250A... 400A)



		CODE - 3P ^{*(1)}	CODE - 3P+N ^{*(1)}	CODE - 230 Vac ^{*(1)}
Size 0 S5F	125A	S5F01253PS0	S5F01253NS0	UM UM-C0A230Z
	160A	S5F01603PS0	S5F01603NS0	
	200A	S5F02003PS0	S5F02003NS0	
Size 1 CCF	200A	CCF02003PS0	CCF02003NS0	UM UM-C1A230Z
	250A	CCF02503PS0	CCF02503NS0	
	315A	CCF03153PS0	CCF03153NS0	
	400A	CCF04003PS0	CCF04003NS0	
	500A	CCF05003PS0	CCF05003NS0	
Size 2 CCF	630A	CCF06303PS0	CCF06303NS0	UM UM-C2A230Z
	800A	CCF08003PS0	CCF08003NS0	
	125A	S5B01253PS0	S5B01253NS0	
Size 0 S5B	160A	S5B01603PS0	S5B01603NS0	UM UM-C0A230Z
	200A	S5B02003PS0	S5B02003NS0	
Size 1 S5B	250A	S5B02503PRC	S5B02503NRC	UM UM-C14230Z
	315A	S5B03153PRC	S5B03153NRC	
	400A	S5B04003PCC	S5B04003NCC	

- UM + S5F & UM + S5B** normal mounting
- UM + CCF** normal mounting

* Auxiliary manual handle supplied with the **UM**

Technical information



According to IEC 60947-3



UM

		UM for sizes 0-1	UM for size 2
Operational torque	Nm	20	30
Voltage supply	V	230 Vac ^{*(2)}	230 Vac ^{*(2)}
Operating voltage range ^{*(3)}	ΔV	0,95*V to 1,10*V	0,95*V to 1,10*V
Operating voltage range according to IEC 60947-6	ΔV	0,95*V to 1,10*V	0,95*V to 1,10*V
Cable section of voltage supply	mm ²	1,5 - 2,5	1,5 - 2,5
Cable section area Input Signals	mm ²	0,5 - 1,5	0,5 - 1,5
Cable section area Auto-Lock mode Outputs	mm ²	0,5 - 1,5	0,5 - 1,5
Inrush Current	A	1,1	1,1
Use current (I _{rms})	mA	45	45
Use current (I _{max})	mA	137	137
Protective Fuse Reference F1AL250 V (Littelfuse)	A	1	1
Operating angle		- 70° / 0° / +70° (I - 0 - II)	- 70° / 0° / +70° (I - 0 - II)
Number of UM operations	Cycles	8000	5000
Operation rate (0-I-II-0)	Cycles/hour	120	60
Working temperature range		- 25°C ... + 55°C	- 25°C ... + 55°C
Transportation and storage temperature		- 40°C ... + 70°C	- 40°C ... + 70°C
UM weight	Kg	1,8	1,8

Pos.	Direction	Pos.	Operating time ^{*(3)}
0	→	I	750 ms
I	→	0	750 ms
0	→	II	750 ms
II	→	0	750 ms
I	→	II	1,5 sec
II	→	I	1,5 sec

^{*(1)} **UM** Kit code is related to the code of switch from its section depending on size and it is for normal mounting.

For different type of mounting or different code of switch or **UM** Kit please consult.

^{*(2)} For DC values, consult please.

^{*(3)} Based in our own tests.

There are changeover switch versions without 0 - OFF position:

S5F (I - II) = **SSD**_____.

CCF "overlapped" (I - I+II - II) = **CCS**_____.

CCP "overlapped" (I - I+II - II) = **CCT**_____.

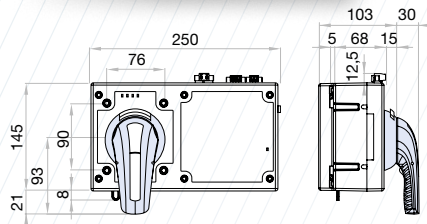
S5B "overlapped" (I - I + II - II) = **S5S**_____ Consult.



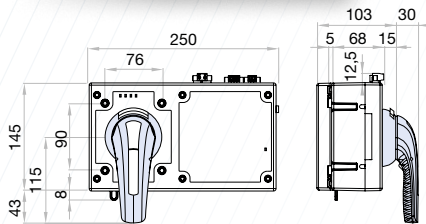
C-W-C series

Dimensions (mm)

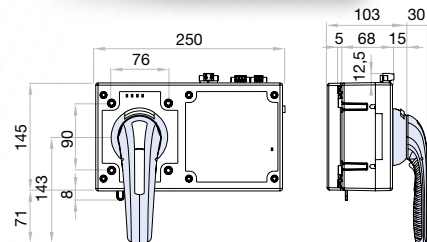
UM for size 0



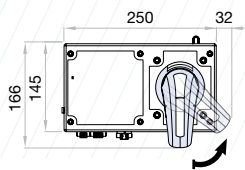
UM for size 1



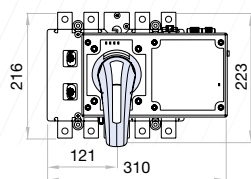
UM for size 2



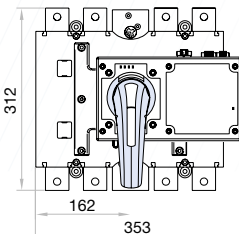
S5F size 0 + UM



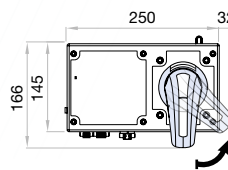
CCF size 1 + UM



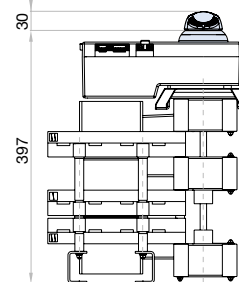
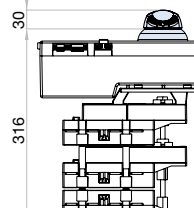
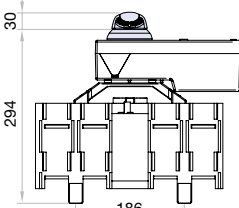
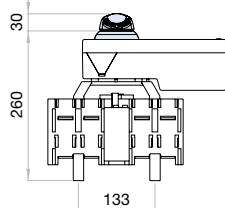
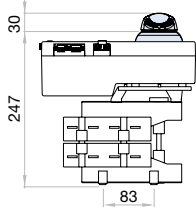
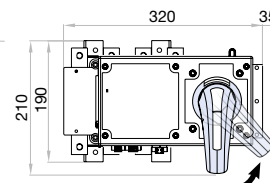
CCF size 2 + UM



S5B size 0 + UM



S5B size 1 + UM



EMC table (Electromagnetic compatibility)

Inmunity

Test	Standard	According to standard UNE/EN 61000	According to standard IEC 60947-6	Results achieved	Values achieved in tests
Electrostatic discharges	EN 61000-4-2	Special, B	Special, A	Special, A	±8KV air discharge ±4KV equipment discharge
Electromagnetic H.F. field	EN 61000-4-3	Level 3, A	Level 3, A	Level 3, A	10V/m. from 80MHz to 1 GHz
Fast transients (Burst)	EN 61000-4-4	Level 3, B	Level 3, A	Level 4, A	±4KV power supply, freq. Rep. 2,5kHz ±2KV signal supply, freq. Rep 5kHz
Fast transient (surge discharge)	EN 61000-4-5	Level 3, B	Level 3, A	Special, A	±4KV power supply L1-L2 Generator impedance 2Ω (wave 1,2/50 ms)
Conducted disturbances	EN 61000-4-6	Level 3, A	Level 3, A	Level 3, A	10V supply and signal
Electromagnetic field, industrial frequency	EN 61000-4-8	Level 4, A	-	Level 4, A	Field intensity 30A/m
Voltage dips, interruptions and voltage variations	EN 61000-4-11	Criterion B	-	Criterion A	30% Un - 1000 ms
		Criterion C	-	Criterion A	60% Un - 1000 ms
		Criterion C	-	Criterion B	95% Un - 5000 ms

Emission

Test	Standard	According to standard UNE/EN 61000	According to standard IEC 60947-6	Results achieved	Values achieved in tests
Emission of harmonic current	EN 61000-3-2	Level 3	Level 3	Level 3	0,02A total current (manual mode)
		Level 3	Level 3	Level 3	0,04A total current (automatic mode)
Unwanted voltage	EN 55011	Level 3	Level 3	Level 3	Qualified
Radiated emission	EN 55011	Level 3	Level 3	Level 3	Qualified

NOTE: The installation of this device in a domestic environment can cause radiofrequency interference

EN 61000 is equivalent to IEC 61000 - EN 55011 is equivalent to CISPR11

CRITERION A: Normal service behaviour in determined limits

CRITERION B: Transient alteration of the service. The appliance gets back to the normal performing without the intervention of the operator

Test level 3: Typical industrial environment, without special installation measures

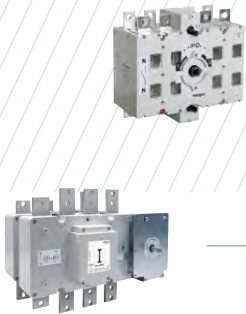
Test level 4: Severe industrial environment

Special level: Level of higher electromagnetic severe environment

series
UM-C

UM-C (MODBUS) Motorized unit kit for base mounting changeover switches 3P - 3P+N

CCF Sizes 2-3 standard (500A... 1250A)
S5F Sizes 4-5 standard (1600A... 3150A)



		CODE - 3P ^{*(1)}	CODE - 3P+N ^{*(1)}		CODE - 120 Vac ^{*(1)}	CODE - 230 Vac ^{*(1)}
Size 2 CCF	500A	CCF05003PS0	CCF05003NS0	UM	UM-C21120M	UM-C21230M
	630A	CCF06303PS0	CCF06303NS0			
	800A	CCF08003PS0	CCF08003NS0			
Size 3 CCF	1000A	CCF10003PS0	CCF10003NS0	UM	UM-C31120M	UM-C31230M
	1250A	CCF12503PS0	CCF12503NS0			
Size 4 S5F	1600A	S5F16003PS0	S5F16003NS0	UM	UM-C45120M	UM-C45230M
	1800A	S5F18003PS0	S5F18003NS0			
	2000A	S5F20003PD0	S5F20003ND0			
	2000A	S5F20003PP0	S5F20003NP0			
Size 5 S5F	2500A	S5F25003PP0	S5F25003NP0	UM	-	UM-C55230M
	3150A	S5F31503PP0	S5F31503NP0			

- UM + CCF size 3 normal mounting
- UM + S5F sizes 4 - 5 normal mounting

- UM + CCF size 3 inverted mounting ^{*(5)}
- UM + S5F sizes 4 - 5 inverted mounting ^{*(5)}
(please consult UM codes)

* Auxiliary manual handle supplied with the UM

Technical information



According to IEC 60947-3



		120Vac ^{*(2)}	230Vac ^{*(2)}
Voltage supply			
Operating voltage range ^{*(3)}	ΔV	0,95*V to 1,10*V	
Cable of voltage supply	mm ²	1,5 - 2,5	1,5 - 2,5
Cable section area Input & MODBUS Signals	mm ²	0,5 - 1,5	0,5 - 1,5
Cable section area Outputs	mm ²	0,5 - 1,5	0,5 - 1,5
Inrush Current	A	11	11
Nominal Current during operation	A	7,5	3,9
Use current (I _{rms})	A	0,041	0,041
Use current (I _{max})	A	0,275	0,275
Protection Fuse Reference F4AL250V (Littelfuse)	A	4	4
Operating time	s	0,166	0,15
Number of MU operations + CCF Size 2	Cycles	5000	5000
Operations frequency (0-I-0-II-0) ^{*(4)}	Cycles/hour	60	60
Number of UM operations + CCF size 3	Cycles	3000	3000
Operations frequency (0-I-0-II-0) ^{*(4)}	Cycles/hour	20	20
Number of UM operations + S5F size 4	Cycles	3000	3000
Operations frequency (0-I-0-II-0) ^{*(4)}	Cycles/hour	20	20
Number of UM operations + S5F size 5	Cycles	-	600
Operations frequency (0-I-0-II-0) ^{*(4)}	Cycles/hour	-	20
Working temperature range	T ^a 85%Un	- 25°C ... + 55°C	
	T ^a 115%Un	- 25°C ... + 55°C	
Transportation and storage temperature		- 40°C ... + 70°C	
UM weight	Kg	4,4	

^{*(1)} UM Kit code is related to the code of switch from its section depending on size and it is for normal mounting. For different type of mounting or different code of switch or UM Kit please consult.

^{*(2)} For DC values, consult please.

^{*(3)} Operating voltage range for the reference UM-C55230M is 0,9*V to 1,10*V.

^{*(4)} According to IEC 60947-3.

^{*(5)} For inverted mounting there are references for UM with inverted frontal plates.

Supply under request. There are changeover switches versions without 0 - OFF position:

S5F (I - II) = S5D_____.

CCF "overlapped" (I - I+II - II) = CCS_____.

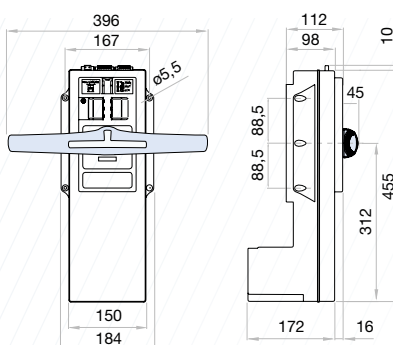
CCP "overlapped" (I - I+II - II) = CCT_____ Consult.



UM-C series

Dimensions (mm)

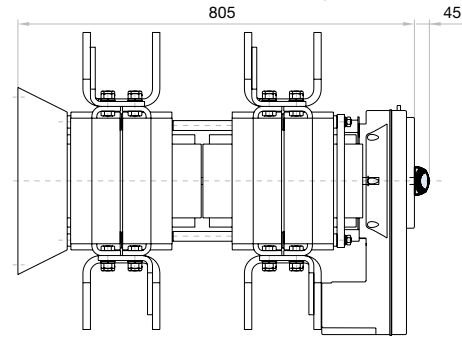
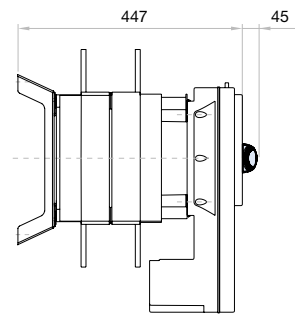
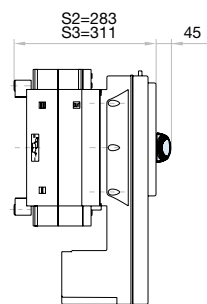
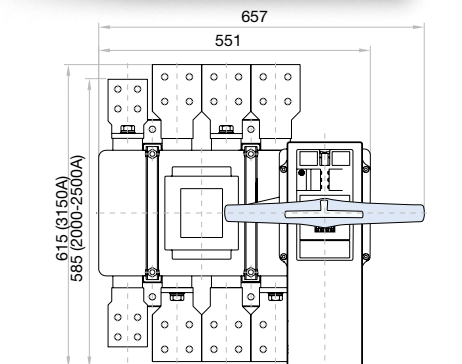
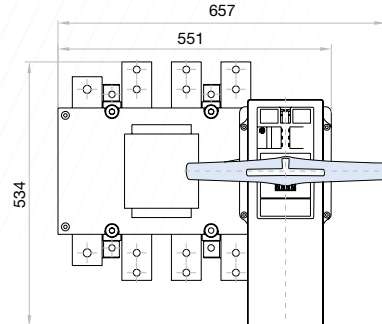
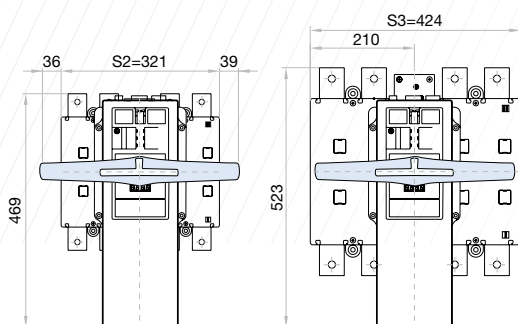
UM



CCF sizes 2-3 + UM

SSF size 4 + UM

SSF size 5 + UM



EMC table (Electromagnetic compatibility)

Emission							
Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result	
Unwanted voltage	EN 55011	150kHz-30MHz	N.A.	N.A.	N.A.	C	
Radiated emission	EN 55011	30MHz-1GHz	N.A.	N.A.	N.A.	C	
Emission of harmonic current	EN 61000-3-2	0,02A 0-2kHz	N.A.	N.A.	N.A.	C	
Flicker	EN 61000-3-3	0-2kHz	N.A.	N.A.	N.A.	C	
Immunity							
Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result	
Electrostatic discharges	EN 61000-4-2	Special, A +/- 8KV air discharge	SPECIAL	B	A	C	
Electromagnetic H.F. field	EN 61000-4-3	10V/m De 80MHz a 2,7 Ghz	SPECIAL	A	A	C	
Fast transients (Burst)	EN 61000-4-4	+/- 2KV power supply +/- 1KV signal supply Rep 5kHz - 2min	3	B	A	C	
Fast transient (surge discharge)	EN 61000-4-5	+/- 4KV power supply Generator impedance 2Ω Wave 1,2/50μs	5	B	A	C	
Conducted disturbances	EN 61000-4-6	10V supply and signal 0,15-80MHz	3	A	A	C	
Electromagnetic field, industrial frequency	EN 61000-4-8	Field intensity 30A/m	4	A	A	C	
		N.A.	100% Un - 10ms	B	A	C	
		N.A.	100% Un - 20ms	B	A	C	
Voltage dips, interruptions and voltage variations	EN 61000-4-11	N.A.	60% Un - 200ms	C	A	C	
		N.A.	30% Un - 500ms	C	A	C	
		N.A.	20% Un - 5000ms	C	A	C	
		N.A.	100% Un - 5000ms	C	C	C	

CRITERION A: Normal service behaviour in determined limits
 CRITERION B: Transient alteration of the service. The appliance gets back to the normal performing without the intervention of the operator
 Test level 3: Typical industrial environment, without special installation measures
 Test level 4: Severe industrial environment
 Special level: Level of higher electromagnetic severe environment

UM-C (MODBUS) Motorized unit kit for base mounting by-pass changeover switches 3P - 3P+N

S5B Sizes 2-3 ready to motorize (500A... 1000A)
S5B Size 4 standard (1250A... 2000A)



		CODE - 3P ^{*(1)}	CODE - 3P+N ^{*(1)}		CODE - 120 Vac ^{*(1)}	CODE - 230 Vac ^{*(1)}
Size 2 S5B	500A	S5B05003PRC	S5B05003NRC	UM	UM-C24120M	UM-C24230M
	630A	S5B06303PRC	S5B06303NRC			
Size 3 S5B	800A	S5B08003PRC	S5B08003NRC	UM	UM-C34120M	UM-C34230M
	1000A	S5B10003PCC	S5B10003NCC			
Size 4 S5B	1250A	S5B12503PS0	S5B12503NS0	UM	-	UM-C44230M
	1600A	S5B16003PS0	S5B16003NS0			
	1800A	S5B18003PS0	S5B18003NS0			
	2000A	S5B20003PDO	S5B20003NDO			

UM + S5B normal mounting

UM + S5B inverted mounting ^{*(5)}
(please consult UM codes)

* Auxiliary manual handle supplied with the UM

Technical information



According to IEC 60947-3



Voltage supply		120Vac ^{*(2)}	230Vac ^{*(2)}
Operating voltage range ^{*(3)}	ΔV		0,95*V to 1,10*V
Cable of voltage supply	mm ²	1,5 - 2,5	1,5 - 2,5
Cable section area Input & MODBUS Signals	mm ²	0,5 - 1,5	0,5 - 1,5
Cable section area Outputs	mm ²	0,5 - 1,5	0,5 - 1,5
Inrush Current	A	11	11
Nominal Current during operation	A	7,5	3,9
Use current (I _{rms})	A	0,041	0,041
Use current (I _{max})	A	0,275	0,275
Protection Fuse Reference F4AL250V (Littelfuse)	A	4	4
Operating time	s	0,166	0,15
Number of UM operations S5B size 2	Cycles	Consult	Consult
Operations frequency (0-I-0-II-0) ^{*(4)}	Cycles/hour	Consult	Consult
Number of UM operations S5B size 3	Cycles	Consult	Consult
Operations frequency (0-I-0-II-0) ^{*(4)}	Cycles/hour	Consult	Consult
Number of UM operations S5B size 4	Cycles	-	600
Operations frequency (0-I-0-II-0) ^{*(4)}	Cycles/hour	-	20
Working temperature range	T ^a 85%Un	- 25°C ... + 55°C	
	T ^a 115%Un	- 25°C ... + 55°C	
Transportation and storage temperature		- 40°C ... + 70°C	
UM weight	Kg	4,4	

^{*(1)} UM Kit code is related to the code of switch from its section depending on size and it is for normal mounting.

For different type of mounting or different code of switch or UM Kit please consult.

^{*(2)} For DC values, consult please.

^{*(3)} Operating voltage range for the reference UM-C44230M is 0,9*V to 1,10*V.

^{*(4)} According to IEC 60947-3.

^{*(5)} For inverted mounting there are references for UM with inverted frontal plates. Supply under request.

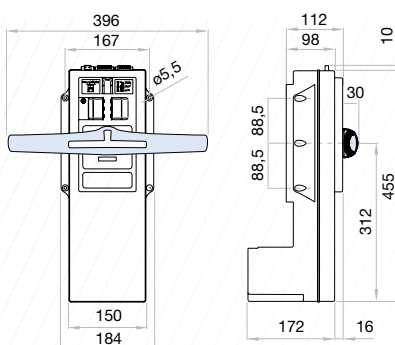
There are by-pass S5B versions without 0 - OFF "overlapped":

S5B "overlapped" (I - I + II - II) = S5S_..... Consult.

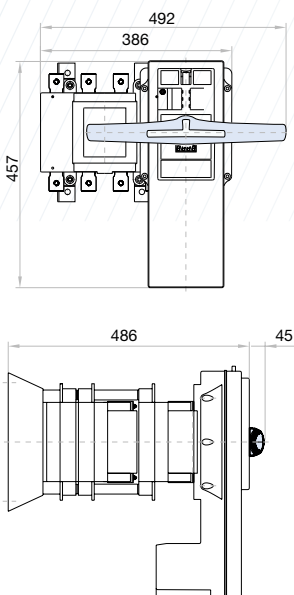


Dimensions (mm)

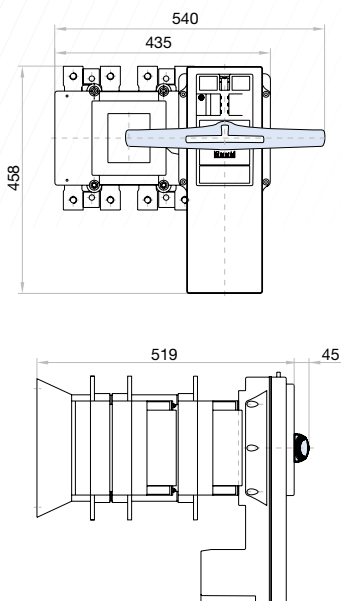
UM



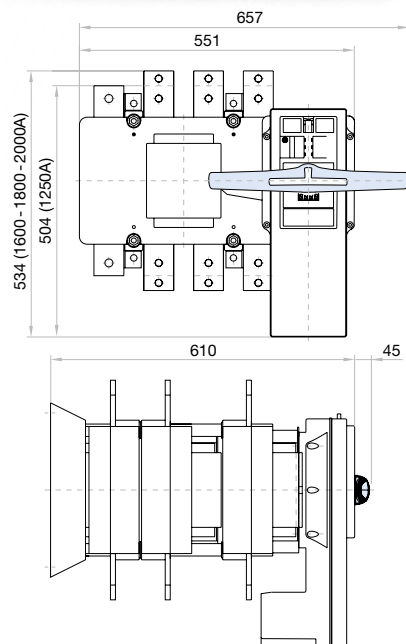
S5B size 2 + UM



S5B size 3 + UM



S5B size 4 + UM



EMC table (Electromagnetic compatibility)

Emission							
Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result	
Unwanted voltage	EN 55011	150kHz-30MHz	N.A.	N.A.	N.A.	C	
Radiated emission	EN 55011	30MHz-1GHz	N.A.	N.A.	N.A.	C	
Emission of harmonic current	EN 61000-3-2	0,02A 0-2kHz	N.A.	N.A.	N.A.	C	
Flicker	EN 61000-3-3	0-2kHz	N.A.	N.A.	N.A.	C	
Immunity							
Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result	
Electrostatic discharges	EN 61000-4-2	Special, A +/- 8KV air discharge	SPECIAL	B	A	C	
Electromagnetic H.F. field	EN 61000-4-3	10V/m De 80MHz a 2,7 Ghz	SPECIAL	A	A	C	
Fast transients (Burst)	EN 61000-4-4	+/- 2KV power supply +/- 1KV signal supply Rep 5kHz - 2min	3	B	A	C	
Fast transient (surge discharge)	EN 61000-4-5	+/- 4KV power supply Generator impedance 2Ω Wave 1,2/50μs	5	B	A	C	
Conducted disturbances	EN 61000-4-6	10V supply and signal 0,15-80MHz	3	A	A	C	
Electromagnetic field, industrial frequency	EN 61000-4-8	Field intensity 30A/m	4	A	A	C	
		N.A.	100% Un - 10ms	B	A	C	
		N.A.	100% Un - 20ms	B	A	C	
Voltage dips, interruptions and voltage variations	EN 61000-4-11	N.A.	60% Un - 200ms	C	A	C	
		N.A.	30% Un - 500ms	C	A	C	
		N.A.	20% Un - 5000ms	C	A	C	
		N.A.	100% Un - 5000ms	C	C	C	

CRITERION A: Normal service behaviour in determined limits

CRITERION B: Transient alteration of the service. The appliance gets back to the normal performing without the intervention of the operator

Test level 3: Typical industrial environment, without special installation measures

Test level 4: Severe industrial environment

Special level: Level of higher electromagnetic severe environment

series
ZFC|ZFV

series
S5 DC|S5M DC|S5N DC

series
S6 DC|S6N DC|S6R DC

DC Switch - disconnectors

DC switch – disconnectors with high operating load capacity and a high level disconnection insulation; high reliability and safety in abnormal situations, available in different construction models, with a wide range of currents in different DC voltages and a variety of accessories.



The DC switch – disconnectors in its different series, are manufactured with high safety self-extinguishing materials, providing an excellent level of electrical insulation, low smoke emission and high resistance to electromechanical stress.

They comply with environmental requirements and undergo strict quality controls for a reliable product that meets the most demanding requirements.

They consist of a sandwich-type body containing self-cleaning blade type contacts,

with pre-arc zones to ensure long term, fault-free energy transmission and coated with silver alloy for long electromechanical life. The jump mechanism provides quick and independent switching due to the accumulation of elastic potential energy, which is transmitted at high speed to the contacts for arc extinction.

The switch - disconnectors S6 DC do not require external bridging links; thus reducing installation time and simplifying subsequent maintenance operations.

Functional and ergonomic handle

- > Good grip and excellent torque/resistance
- > Padlockable handle in **O OFF** position (up to three locks Ø 5-8 mm)
- > Door interlock in **ON I** position
- > When lock in **O OFF** position, door is interlocked
- > Defeatable feature in **ON I** position (with the use of a tool for maintenance operations). Handle interlock is restored when closing
- > Self-centering shaft for door handle



Relevant characteristics for photovoltaic installations

- > U_i (V) Rated insulation voltage 1000 Vdc.
- > U_{oc} (V) Open circuit voltage of the photovoltaic system.
- > U_{ef} (V) Photovoltaic installation functioning voltage on load.
- > I_{ef} (A) Installation working current under load.

- > I_{sc} (A) Short-circuit current of the photovoltaic installation.
- > In certain places of Pv Systems, inductive component must be considered (cables, inverter, etc.).
- > The sizing of the switch must be done considering open circuit voltage as maximum operation voltage.

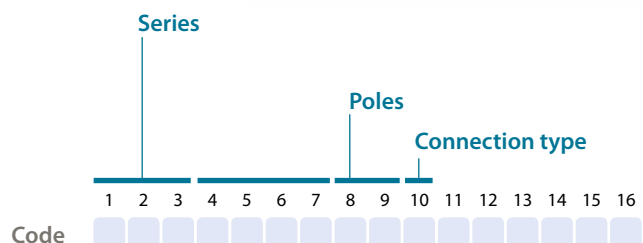
- > It is necessary to comply with:

$U_i \geq U_{oc}$
We recommend to set U_i between 10 and 15% over U_{oc} .

$U_e \geq U_{ef}$
 $I_e \geq I_{ef}$
 $I_e \geq I_{sc}$

Range codification:

The DC **ZFC|ZFV|S5|S5M|S5N|S6|S6N|S6R** series, are identified by a code that describes their most important characteristics as described below.



According to:
IEC 60947-1 y 3
UL508i
UL98B
RoHS



Testing and approvals:



series
ZFC|ZFV



1 2 3 4 5 6
ZFC

1 2 3 4 5 6
ZFV

Small design.
Base mounting by screws or
DIN rail.
Non polarized.
Up to 1500Vdc.

series
S5 DC



1 2 3 4 5 6
S5-

Wide range of currents.
Base mounting by screws.
Non polarized.
Up to 1000Vdc.

series
S5M DC



1 2 3 4 5 6
S5M

Back to back with operating
mechanism in side,
arrangement to increase the
number of available contacts.
Base mounting by screws.
Non polarized.
4P+4P 1000Vdc.
4P+4P 1500Vdc.

series
S5N DC



1 2 3 4 5 6
S5N

Back to back with operating
mechanism in front,
arrangement to increase the
number of available contacts.
Base mounting with screws.
External or direct handles.
Non polarized.
4P+4P 1000Vdc.
4P+4P 1500Vdc.

series
ZFC|ZFV



1 2 3 4 5 6
ZFC

1 2 3 4 5 6
ZFV

ZFV plastic enclosed switch.
Non polarized.
Up to 1500Vdc.

series
S6 DC



1 2 3 4 5 6
S6-

Wide range of currents.
Different configurations to
choose.
Base mounting by screws.
Non polarized.
Up to 1000Vdc.

series
S6N DC



1 2 3 4 5 6
S6N

Back to back arrangement.
Different configurations to
choose.
Base mounting by screws.
Non polarized.
Up to 1500Vdc.

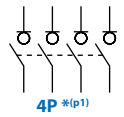
series
S6R DC



1 2 3 4 5 6
S6R

Back to back arrangement.
Different configurations to
choose.
Base mounting by screws.
Non polarized.
1500Vdc.





**S5 DC
S5N DC**

S5 switches 4 poles (40 - 3150A) (O - I)

Manual handle



S5 DC



S5N DC

4P *(p1)	Rated operational voltage	Rated operational current Ie (A)	Size	Connection	4 pole (4P) *(p1)	External*(1)	Direct
	Ue				Code	Code	Code
900V DC21B		40	0		S5-01604PB0	DS-SA01	DS-SI01
		40			S5-01604PS0		
		100			S5-01254PR0		
		160			S5-02004PR0		
		250			S5-03154PR0		
		400			S5-04004PC0		
1000V DC21B		500	2		S5-06304PR0	DS-LA21	DS-LI21
		630			S5-06302ER0		
		850	3		S5-12504PC0	DS-LA31	DS-LI31
		1250			S5-12502EC0		
		1250			S5-18004PS0		
		1800			S5-18002ES0		
		2000	S5-20002ED0	DS-LA41	DS-LI41		
		2000	S5N20002ES0				
		2500	S5N25002ES0				
		3150	S5N31502ES0	DS-LA41	DS-LI41		

S6 DC

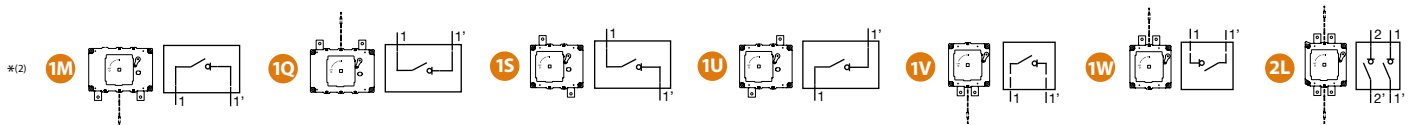
S6 switches 1 or 2 poles (125 - 630A) (O - I)

Manual handle



S6 DC

1P 2P *(2)	Rated operational voltage	Rated operational current Ie (A)	Size	Connection	Diagram *(2)	External*(1)	Direct
	Ue				Code	Code	Code
500 Vdc 750Vdc DC21B 1000Vdc		125	1		S6-0125__S0	DS-SA11	DS-SI11
		160			S6-0160__S0		
		200			S6-0200__S0		
		250			S6-0250__S0		
		315			S6-0315__S0		
		400			S6-0400__D0		
500 Vdc 750Vdc UL98B 1000Vdc		500	2		S6-0500__S0	DS-LA21	DS-LI21
		630			S6-0630__S0		
		250	1		S6-0250__S00L	DS-SA11	-
400	2		S6-0400__S00L	DS-LA21	-		



ZFC DC

DIN rail base mounting switches with direct handle - compact model 2 poles (16 - 25 A) (O - I)



2P	Rated operational voltage	Rated operational current Ie (A)	Size	Connection	Code
	Ue				
1500V DC21B		16	00		ZFC16SMAH1NA40
		25			ZFC25SMAH1NA40

Full details in page 214



A40



**ZFC DC
ZFV DC**

DIN rail base mounting switches with direct handle - compact model 2 poles (16 - 55 A) (O - I)

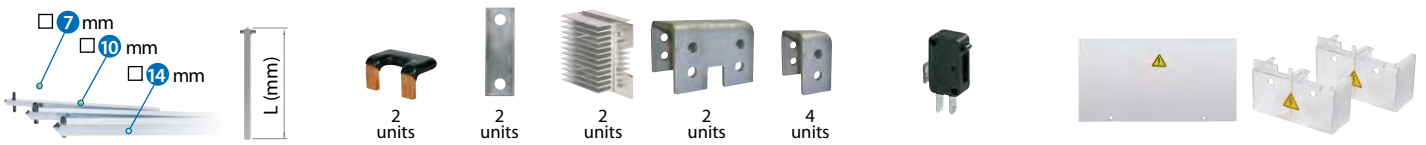


2P	Rated operational voltage	Rated operational current Ie (A)	Size	Connection	Code
	Ue				
1500V DC21B		16	00		ZFC16VZVH4A40
		25			ZFC25VZVH4A40
		32			ZFV32VZVH4A40
		40			ZFV40VZVH4A40
		55			ZFV55VZVH4A40

Full details in page 214

*(1) Padlockable handle in OFF 0 position. Possibility of unlocking the door in ON I position (with the use of a tool). Door interlock by a padlock in OFF 0 position.
 *(2) To complete the code according the specific diagram for IEC or UL versions and the possibility or not of grounding, see the full details pages of this catalogue. If you have any doubt about this, please do not hesitate to consult us.
 *(p1) To comply with the operation and electrical features, the bridging links must be assembled to the switch. See the full details pages of this catalogue, to choose the configuration needed and the possibility or not of grounding. If you have any doubt about this, please do not hesitate to consult us.

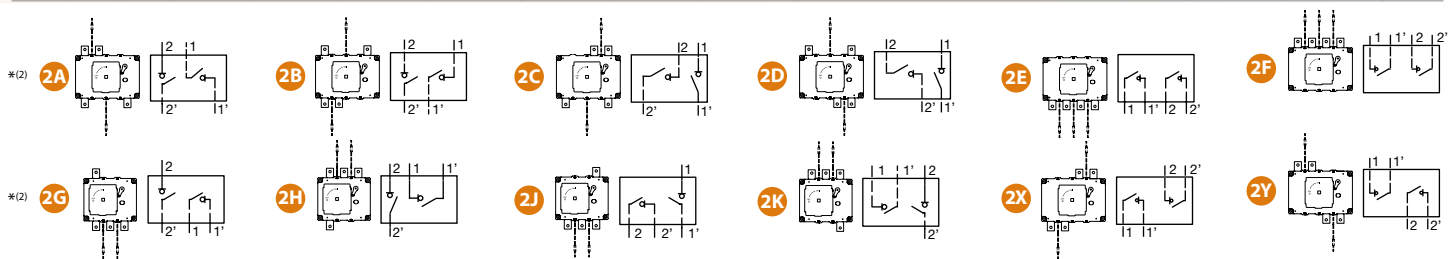
Please indicate in your order the switch code and the handle code, as these both products are managed separately. A standard shaft is included with the handle.



Shaft extensions ^{*(3)}				Bridging links ^{*(p1)}				Auxiliary contacts ^{*(5)}		Terminal protection		Terminal shrouds (2 units) ^{*(4)}	Full details in page
Size	□	Type 1 & 2	Code ^{*(e1)}	Code		1NO+1NC Code	2NO+2NC Code	Connection	Code	Code			
0	7	L 250	DS-EP04 DS-EP05	DS-PI05 DS-PI01	D5LAU01	D5LAU02	DS-CU01	-			216		
1	10	L 375	DS-EP14	DS-PI11 DS-PI11 DS-PI11 DS-PI14	D5LAU01	D5LAU02	DS-CU12	DS-CU10 DS-CU11 DS-CU18 DS-CU19			218		
2	14	L 345	DS-EP23	DS-PI21	D5LAU01	D5LAU02	DS-CU22	DS-CU20 DS-CU21 DS-CU28 DS-CU29			220		
3	14	L 535	DS-EP24	DS-PI2D	D5LAU01	D5LAU02	-	DS-CU30 DS-CU31 DS-CU38 DS-CU39			222		
4	14	L 485	DS-EP44	DS-PI41 (S5-18004P50)	D5LAU01	D5LAU02	-	DS-CU40 DS-CU41 DS-CU48 DS-CU49			224		
5 (SSN)	-	-	-	DS-PI4D (S5-18002E50-S5-20002ED0)	D5LAU01	D5LAU02	-	-			232		
				DS-PI51 + D5LPC45									
				DS-PI51 + D5LPC45									
				DS-PI4D + D5LPC45 (x2)									



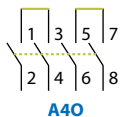
Shaft extensions ^{*(3)}				Auxiliary contacts ^{*(5)}		Safety key lock device ^{*(6)}		Spacers (4 units)	Terminal lug (2 units)	Terminal shrouds (1 unit) ^{*(4)}			Phase barriers			Full details in page
Size	□	Type 1 & 2	Code ^{*(e1)}	1NO+1NC Code	2NO+2NC Code	Simple Code ^{*(e1)}	Double Code ^{*(e1)}	Code	Code	Code	Code	Code	1 unit Code	2 units Code	3 units Code	
1	10	L 375	DS-EP14	D5LAU01	D5LAU02	DS-CA11	DS-CE11	DR-EL11	-	DR-CU11	DR-CU12	DR-CU13	DR-SF11	DR-SF12	DR-SF13	234
		L 536	DS-EP15													
2	14	L 345	DS-EP23	D5LAU01	D5LAU02	DS-CB21	DS-CF21	DR-EL21	-	DR-CU21	DR-CU22	DR-CU23	DR-SF21	DR-SF22	DR-SF23	238
		L 535	DS-EP24													
1	10	L 375	DS-EP14	D5LAU01	D5LAU02	-	-	DR-EL11	DR-TL11	DR-CU11	DR-CU12	DR-CU13	DR-SF11	DR-SF12	DR-SF13	236
		L 536	DS-EP15													
2	14	L 345	DS-EP23	D5LAU01	D5LAU02	-	-	DR-EL21	DR-TL22	DR-CU21	DR-CU22	DR-CU23	DR-SF21	DR-SF22	DR-SF23	240
		L 535	DS-EP24													



ZFV DC | DIN rail base mounting switches with direct handle 2 poles (32 - 55 A) (O-I)



2P	Rated operational voltage	Rated operational current I _e (A)	Size	Connection	Code	Full details in page
	U _e	I _e (A)				
	1500 V DC21B / DC-PV1	32 40 55	00		ZFV32SMAH1A40 ZFV40SMAH1A40 ZFV55SMAH1A40	214



ZFC DC ZFV DC | Plastic enclosed switches IP67 2 poles (16 - 55 A) (O-I)



2P	Rated operational voltage	Rated operational current I _e (A)	Size	Connection	Code	Full details in page
	U _e	I _e (A)				
	1000 Vdc DC21B	16 32 55	00		ZFC16PFLH4A40 ZFC32PFLH4A40 ZFC55PFLH4A40	214



^{*(3)} A standard shaft is included with the external handle.
^{*(4)} One set for input or output. Only for switches . See catalogue to choose the combination required.
^{*(5)} To be used as signalling or control contacts – I_e = 16A (resistive loads) 4A (inductive loads) at 250 Vac. Whilst closing, it switches after the main contacts. Whilst opening, it switches before the main contacts.
^{*(6)} Handle interlock in OFF 0 position by means of a key, that only can be removed when the handle is unlocked. Interlocking in other positions available upon request.
^{*(e1)} All these codes are related to the new handle , in case of replacements for old design handles, please consult.

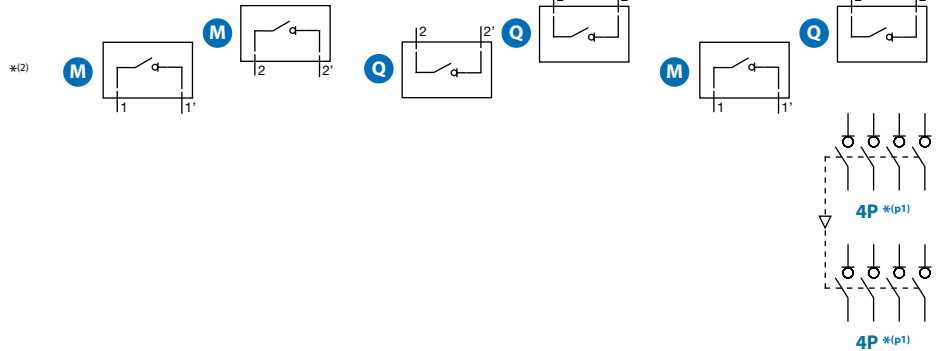


S6N DC | S6 switches 2 poles (125 - 400A) (O-I)



S6N DC

Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	2P *(2)					
				Code MM	Code QQ	Code MQ	Code US	Code UU	Code SS
1500V DC21B	125	1		S6N0125MMS0	S6N0125QQS0	S6N0125MQS0	S6N0125USS0	S6N0125UUS0	S6N0125SSS0
	160			S6N0160MMS0	S6N0160QQS0	S6N0160MQS0	S6N0160USS0	S6N0160UUS0	S6N0160SSS0
	200			S6N0200MMS0	S6N0200QQS0	S6N0200MQS0	S6N0200USS0	S6N0200UUS0	S6N0200SSS0
	250			S6N0250MMS0	S6N0250QQS0	S6N0250MQS0	S6N0250USS0	S6N0250UUS0	S6N0250SSS0
	315			S6N0315MMS0	S6N0315QQS0	S6N0315MQS0	S6N0315USS0	S6N0315UUS0	S6N0315SSS0
	400			S6N0400MMD0	S6N0400QQD0	S6N0400MQD0	S6N0400USD0	S6N0400UUD0	S6N0400SSD0



S5M DC | **S5N DC** | S5 switches 4+4 poles (500 - 1800 A) (O-I)

Manual handle



S5M DC



S5N DC

Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	4P + 4P *(p1)	External *(1)	Direct	
				Code	Code	Code	
1500V DC21B	500	2		S5M063044R0	DS-LA22	DS-LI22	
	630			S5M080044C0	DS-LA22	DS-LI22	
	800	3		S5M080044R0	DS-LA41	DS-LI41	
	1000			S5M125044C0	DS-LA41	DS-LI41	
	1000V DC21B	1250	4 (S5N)		S5N160044S0	DS-LA41	DS-LI41
		1800			S5N180044S0	DS-LA41	DS-LI41
1000V DC21B	2000	5 (S5N)		S5N20002ES0	DS-LA41	DS-LI41	
	2500			S5N25002ES0	DS-LA41	DS-LI41	
	3150			S5N31502ES0	DS-LA41	DS-LI41	

S6R DC | S6 switches 1 or 2 poles (160 - 400A) (O-I)

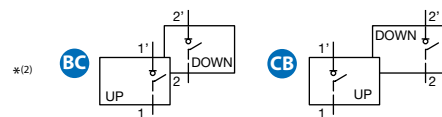


S6R DC

Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	2P *(2)	
				Code BC	Code CB
1500Vdc IEC	160	1		S6R0160BCS0	S6R0160CBS0
	200			S6R0200BCS0	S6R0200CBS0
	250			S6R0250BCS0	S6R0250CBS0
	315			S6R0315BCS0	S6R0315CBS0
	400			S6R0400BCS0	S6R0400CBD0
	1500Vdc UL98B			250	1
320		S6R0320BCS00L	S6R0320CBS00L		
400		S6R0400BCD00L	S6R0400CBD00L		



PATENTED TECHNOLOGY

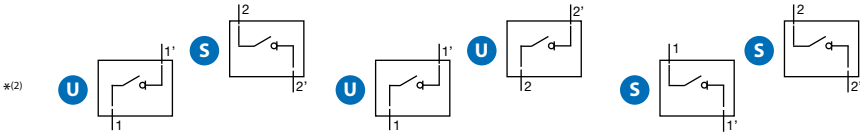


- *(1) Padlockable handle in OFF 0 position. Possibility of unlocking the door in ON I position (with the use of a tool). Door interlock by a padlock in OFF 0 position.
 - *(2) See the full details pages in this catalogue to see the possibility or not of grounding the switch selected. If you have any doubt about this, please do not hesitate to consult us.
 - *(p1) To comply with the operation and electrical features, the bridging links must be assembled to the switch. See the full details pages of this catalogue, to choose the configuration needed and the possibility or not of grounding. If you have any doubt about this, please do not hesitate to consult us.
- Please indicate in your order the switch code and the handle code, as these both products are managed separately.
A standard shaft is included with the handle.



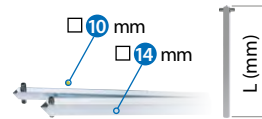
Manual handle **Auxiliary contacts** ^{*(2)}

Size	External ^{*(1)}	Direct	1NO+1NC	2NO+2NC	Full details in page
	Code	Code	Code	Code	
1	DS-SA11	DS-SI11	D5LAU01	D5LAU02	242 244



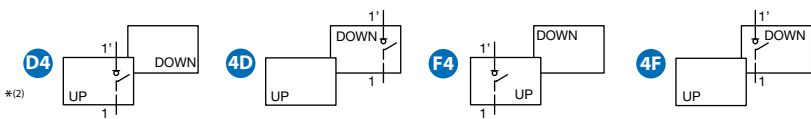
Bridging links ^{*(p1)} **Auxiliary contacts** ^{*(2)}

Size	Code	1NO+1NC	2NO+2NC	Full details in page
		Code	Code	
2		DS-AU11	DS-AU12	226
		DS-AU11	DS-AU12	228
3		D5LAU01	D5LAU02	230
4 (S5N)		DS-AU11	DS-AU12	232
		D5LAU01	D5LAU02	232
5 (S5N)		D5LAU01	D5LAU02	232



Manual handle **Shaft extensions** ^{*(4)} **Auxiliary contacts** ^{*(2)}

Size	1P ^{*(2)}				Panel ^{*(3)}	Type 1 & 2	1NO+1NC	2NO+2NC	Full details in page		
	Code D4	Code 4D	Code F4	Code 4F			Code	L		Code ^{*(e1)}	Code
1	S6R0160D450 S6R0200D450 S6R0250D450 S6R0315D450 S6R0400D4D0	S6R01604DS0 S6R02004DS0 S6R02504DS0 S6R03154DS0 S6R04004DD0	S6R0160F450 S6R0200F450 S6R0250F450 S6R0315F450 S6R0400F4D0	S6R01604FS0 S6R02004FS0 S6R02504FS0 S6R03154FS0 S6R04004FS0	DS-SA11	10	375	DS-EP14	D5LAU01	D5LAU02	246
1	S6R0250D4S00L S6R0320D4S00L S6R0400D4D00L	S6R02504DS00L S6R03204DS00L S6R04004DD00L	S6R0250F4S00L S6R0320F4S00L S6R0400F4D00L	S6R02504FS00L S6R03204FS00L S6R04004FD00L							



^{*(2)} To be used as signalling or control contacts – I_e = 16A (resistive loads) 4A (inductive loads) at 250 Vac. Whilst closing, it switches after the main contacts. Whilst opening, it switches before the main contacts.

^{*(3)} Padlockable handle in OFF 0 position. Possibility of unlocking the door in ON I position (with the use of a tool). Door interlock by a padlock in OFF 0 position.

^{*(4)} A standard shaft is included with the external handle.

^{*(e1)} All these codes are related to the new handle , in case of replacements for old design handles, please consult.



ZFC | ZFV

Switch - disconnecter for DC current 2P

Size 00

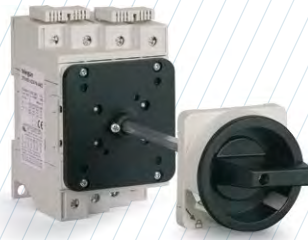
A 16|25|32|40|55



600 - 1000 - 1500Vdc



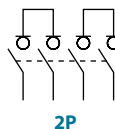
CODE 2P	
16A	ZFC16SMAH1A40
25A	ZFC25SMAH1A40
32A	ZFV32SMAH1A40
40A	ZFV40SMAH1A40
55A	ZFV55SMAH1A40



CODE 2P	
16A	ZFC16VZH4A40
25A	ZFC25VZH4A40
32A	ZFV32VZH4A40
40A	ZFV40VZH4A40
55A	ZFV55VZH4A40



CODE 2P	
16A	ZFC16PFLH4A40
25A	-
32A	ZFV32PFLH4A40
40A	-
55A	ZFV55PFLH4A40



DO NOT USE IN GROUNDED INSTALLATIONS

Technical information



According to IEC 60947-3
DC-PV1
UL508i

IEC 60947-3

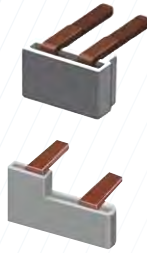
			ZFC16	ZFC25	ZFV32	ZFV40	ZFV55		
Rated operational current	le 2 Poles in series	IEC	1000Vdc	A	9 DC21A	11 DC21A	13 DC21B	29 DC21B	36 DC21B
		IEC	1500Vdc	A	3 DC21A	4 DC21A	6 DC21B	7,5 DC21B	10 DC21B
	le 4 Poles in series	IEC	1000Vdc	A	16 DC21A	25 DC21A	32 DC21B	40 DC21B	55 DC21B
		IEC	1500Vdc	A	16 DC21A	20 DC21A	32 DC21B	40 DC21B	55 DC21B
Rated conditional short-circuit current	le 2 Poles in series	IEC	1000Vdc	A	10 DCPV1	11,5 DCPV1	13 DCPV1	29 DCPV1	36 DCPV1
		IEC	1500Vdc	A	3 DCPV1	5 DCPV1	6 DCPV1	7,5 DCPV1	10 DCPV1
	le 4 Poles in series	IEC	1000Vdc	A	16 DCPV1	25 DCPV1	32 DCPV1	40 DCPV1	55 DCPV1
		IEC	1500Vdc	A	16 DCPV1	25 DCPV1	32 DCPV1	40 DCPV1	55 DCPV1
Max. fuse size		kAeff		5	5	5	10	10	
Maximum cable cross sections (included jumper)		gL (gG)	A	40	63	80	125	160	
Solid or stranded		mm ²		1,5 - 10	1,5 - 10	4 - 16	2,5 - 25	2,5 - 25	
Flexible		mm ²		1,5 - 6	1,5 - 6	4 - 10	2,5 - 16	2,5 - 16	
Flexible (+ multicore cable end)		mm ²		1,5 - 6	1,5 - 6	4 - 10	1,5 - 16	1,5 - 16	
Size of terminal screw				M3,5 Pz1	M3,5 Pz1	M4 Pz2	M5Pz2	M5Pz2	
Tightening torque		Nxm		1,4	1,4	1,7 - 1,8	2,5 - 2,8	2,5 - 2,8	

UL508i LISTED E362647

			ZFC16	ZFC25	ZFV32	ZFV40	ZFV55		
Ampere-Rating "General use"	2 Poles in series	UL	600Vdc	A	16	25	32	40	55
		UL	1000Vdc	A	-	-	-	16	20
	4 Poles in series	UL	600Vdc	A	16	25	32	40	55
		UL	1000Vdc	A	-	-	-	40	55
Fuse size (RK5) Industrial Control Switch	5 kA / 600 V	A	40	60	80	-	-		
Fuse size (RK5) Industrial Control Switch	5 kA / 1000 V	A	-	-	-	160	160		
Maximum cable cross sections (included jumper)		AWG		16 - 10	16 - 10	12 - 10	16 - 10	16 - 10	
Solid or stranded		AWG		20 - 6	20 - 6	12 - 6	14 - 4	14 - 4	
Flexible		AWG		20 - 6	20 - 6	12 - 6	-	-	
Flexible (+ multicore cable end)		AWG		20 - 6	20 - 6	12 - 6	-	-	
Size of terminal screw				M3,5 Pz1	M3,5 Pz1	M4 Pz2	M5Pz2	M5Pz2	
Tightening torque		Nxm		1,7 - 1,8	1,7 - 1,8	1,7 - 1,8	2,5 - 2,8	2,5 - 2,8	



Accessories

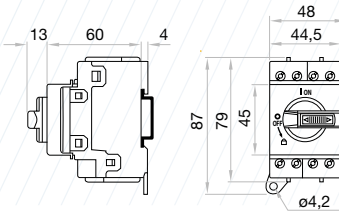


» Insulated bridging links included

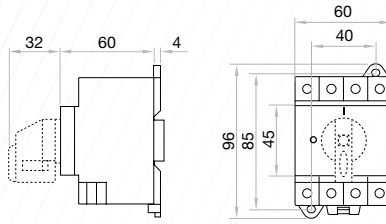
CODE ZTC-B1 16-25 A
 ZFU-B1 32 A
 ZFU-B2 40-55 A

Dimensions (mm)

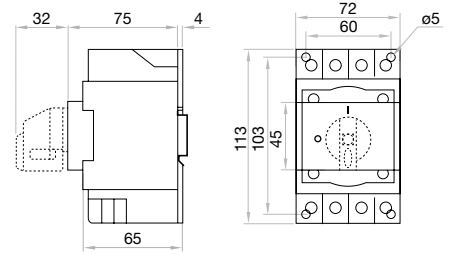
ZFC16-25



ZFU32

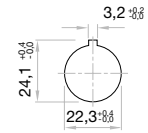
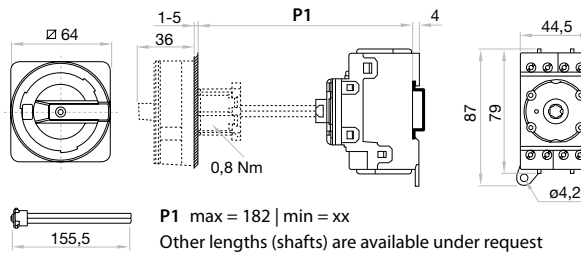


ZFU40-55



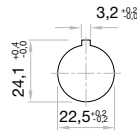
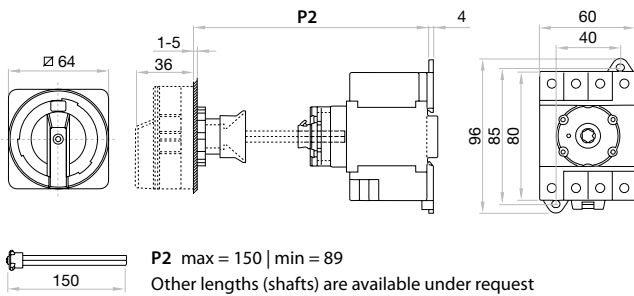
ZFC16-25

Door drilling for external handle

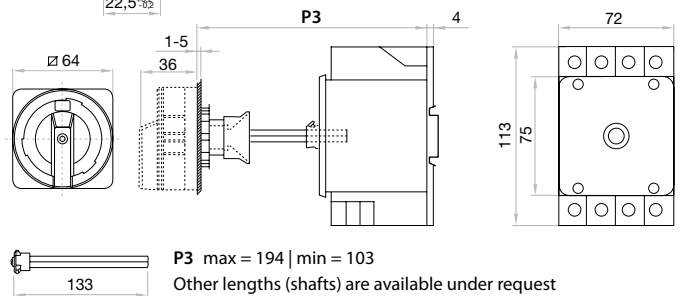


ZFU32

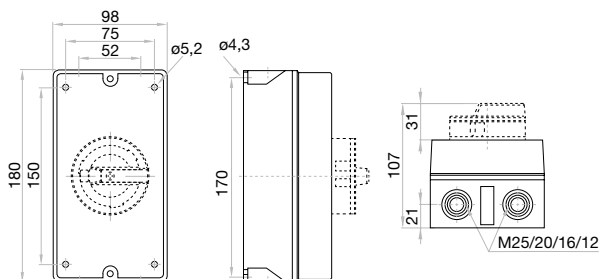
Door drilling for external handle



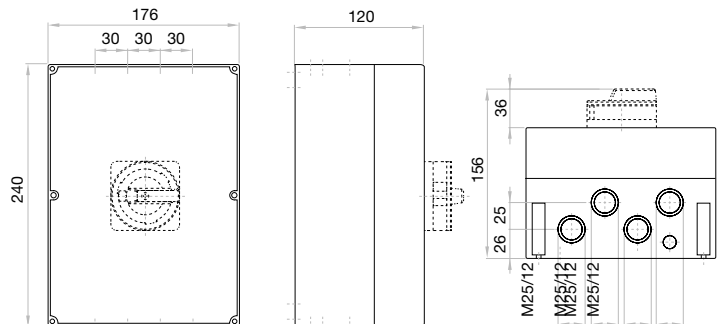
ZFU40-55



ZFC16 - ZFU32



ZFU55



series
S5 DC



S5 DC Switch - disconnecter for DC current 4P

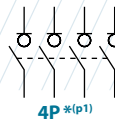
	Size 0
A	40
	900 Vdc



CODE-40A **S5-01604PB0**



CODE-40A **S5-01604PS0**



Technical information



According to IEC 60947-1
IEC 60947-3

			40
Rated thermal current in ambient at	Ith	40° C	A
		50° C	A
		60° C	A
Rated insulation voltage DC20	Ui	V	1000
Rated impulse withstand voltage	Uimp	kV	8
Rated operational current ^{*(1)} DC21B	Ue		
	Ie	900 Vdc	A

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

Short - circuit behaviour

Short - circuit making capacity ^{*(2)}	Icm	kA (peak)	13
Rated short-time withstand current (1sec.)	Icw	kA rms	7
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		10000
Maximum weight (without bridging links)	Kg		1

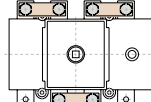
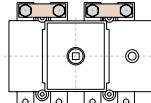
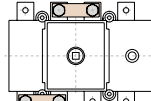
tests:

Connection diagram

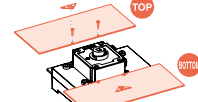
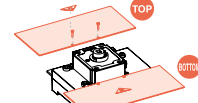
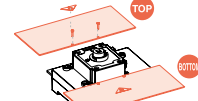
Connection diagram



Bridging links^{*(p1)}



Terminal protection



DO NOT USE IN GROUNDED INSTALLATIONS

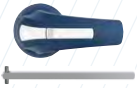


Accessories



» Direct handle

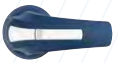
CODE DS-SI01



» External handle included shaft^{*(e1)}

IP65

CODE DS-SA01



» External handle without shaft

IP65

CODE DS-SA03



» Terminal protection

CODE DS-CU01

(1 unit for input or output)



» Bridging links^{*(p1)}

A B CODE DS-PI05 (2 units)

A B CODE DS-PI01 (2 units)

C CONSULT

^{*(p1)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.

» Shafts

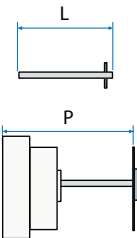
Standard shaft included ^{*(e1)}

L (mm)	P (mm)
177	87... 197,5

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
250	87... 278	DS-EP04

Type 2		
L (mm)	P (mm)	CODE
387	87... 415	DS-EP05



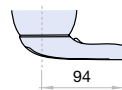
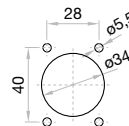
» DIN rail mounting

CODE DS-DN01

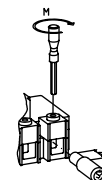
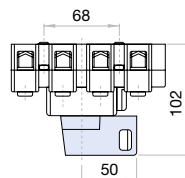
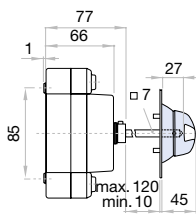
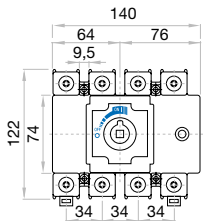
(1 kit)

Dimensions (mm)

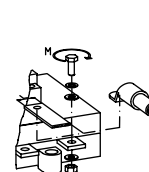
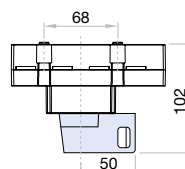
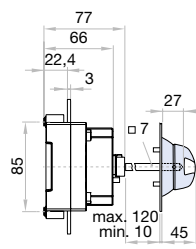
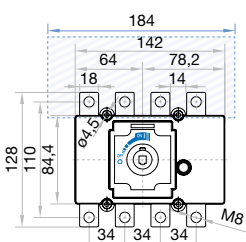
Door drilling for external handle



For handle



	S max (Cu)	M
	mm ²	Nxm
	95	4



	S max (Cu)	H max (Cu)	L max (Cu)		M
	mm ²	mm	mm		Nxm
	95	5	25	M8	13

series
S5 DC



S5 DC Switch - disconnecter for DC current 4P

Size 1

A 100|160|250|400



1000Vdc



CODE - 100A **S5-01254PRO**



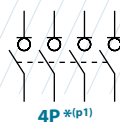
CODE - 160A **S5-02004PRO**



CODE - 250A **S5-03154PRO**



CODE - 400A **S5-04004PCO**



Technical information

According to IEC 60947-1
IEC 60947-3



tests:



			100	160	250	400	
Rated thermal current in ambient at	I _{th}	40° C	A	125	200	315	400
		50° C	A	125	200	315	400
		60° C	A	125	200	280	320
Rated insulation voltage DC20	U _i	V	1500	1500	1500	1500	
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	8	
Rated operational current ^{*(1)} DC21B	I _e	U _e					
		1000 Vdc	A	100	160	250	400

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

			100	160	250	400
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	20	20	20	20
Rated short-time withstand current (1sec.)	I _{cw}	kA rms	12	12	12	12
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		10000	8000	8000	5000
Maximum weight (without bridging links)	Kg		1,9	1,9	1,9	2,1



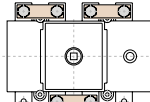
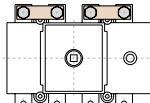
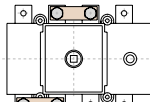
DO NOT USE IN GROUNDING INSTALLATIONS

Connection diagram

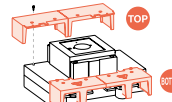
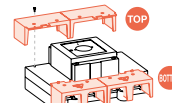
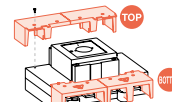
Connection diagram



Bridging links^{*(p1)}



Terminal shrouds



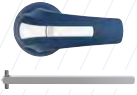


Accessories



» Direct handle

CODE DS-SI11



» External handle included shaft*(e1)

IP65
CODE DS-SA11



» External handle without shaft

IP65
CODE DS-SA14

» Shafts

Standard shaft included *(e1)

L (mm)	P (mm)
227	103... 256

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
375	103... 415	DS-EP14

Type 2		
L (mm)	P (mm)	CODE
536	103... 576	DS-EP15



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal protection

CODE DS-CU12

(1 unit for input or output)



» Terminal shrouds (2 units)

	A	B	C
TOP	DS-CU18	DS-CU10	DS-CU10
BOTTOM	DS-CU19	DS-CU11	DS-CU18



» Bridging links*(p1)

A **B** CODE DS-PI11 (2 units)

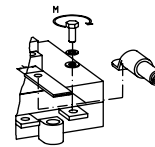
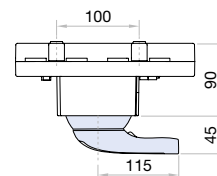
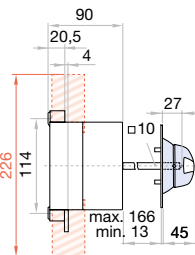
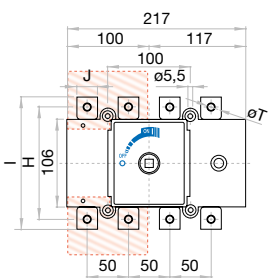
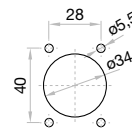
A **B** CODE DS-PI14 (2 units)

C CODE CONSULT

*(p1) To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.

Dimensions (mm)

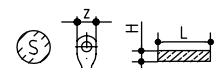
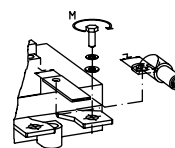
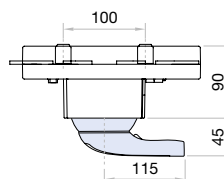
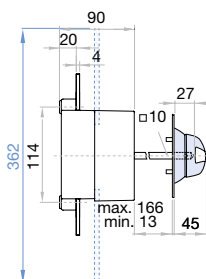
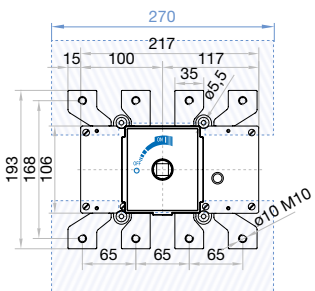
Door drilling for external handle



	H	I	J	øT
100 A	130	150	20	M8
160 A	143	167	25	M10



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
100 A					13
160 A	185	7	25	M8	13
250 A				M10	18



	S max (Cu) mm ²	Z max	H max (Cu) mm	L max (Cu) mm	T	M
400 A	240	44	7	40	M10	24

series
S5 DC



S5 DC Switch - disconnecter for DC current 4P

Size 2

A 500|630



1000Vdc

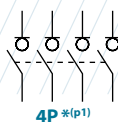


CODE-500A

S5-06304PRO

CODE-630A

S5-06302ERO



Technical information

According to IEC 60947-1
IEC 60947-3



tests:

			500	630
Rated thermal current in ambient at	Ith	40° C	A 500	630
		50° C	A 500	630
		60° C	A 400	500
Rated insulation voltage DC20	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12
Rated operational current ^{*(1)} DC21B	Ie	Ue		
		1000 Vdc	A 500	630

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

			500	630
Short - circuit behaviour				
Short - circuit making capacity ^{*(2)}	Icm	kA (peak)	26	26
Rated short-time withstand current (1sec.)	Icw	kA rms	16	16
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		5000	5000
Maximum weight (without bridging links)	Kg		4,5	4,5



DO NOT USE IN GROUNDED INSTALLATIONS

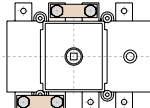
Connection diagram

Connection diagram

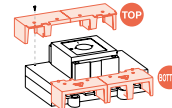
A



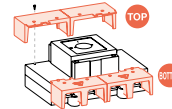
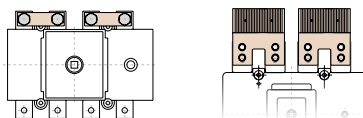
Bridging links ^{*(p1)}



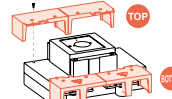
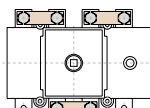
Terminal shrouds



B



C





Accessories



» Direct handle

CODE DS-LI21



» External handle included shaft^{*(e1)}

IP65
CODE DS-LA21



» External handle without shaft

IP65
CODE DS-LA24

» Shafts

Standard shaft included^{*(e1)}

L (mm)	P (mm)
195	134... 240

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
345	134... 400	DS-EP23

Type 2		
L (mm)	P (mm)	CODE
535	134... 560	DS-EP24



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal protection

CODE DS-CU22
(1 unit for input or output)



» Terminal shrouds (2 units - only for 500A)

	A	B	C
TOP	DS-CU28	DS-CU20	DS-CU20
BOTTOM	DS-CU29	DS-CU21	DS-CU28



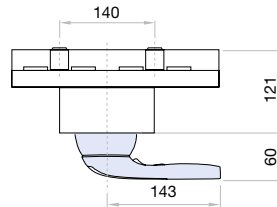
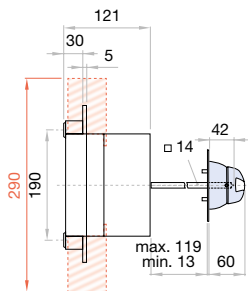
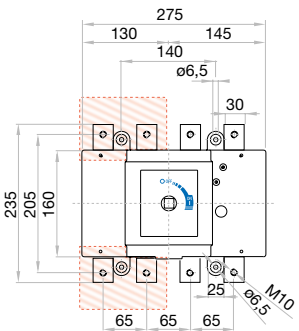
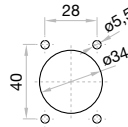
» Bridging links^{*(p1)}

A	B	500A CODE DS-PI21 (2 units)
C		CODE CONSULT
B		630A CODE DS-PI2D (2 units)

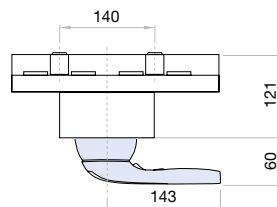
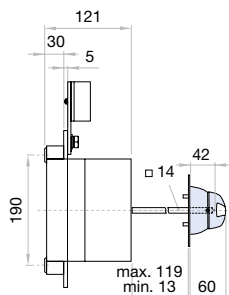
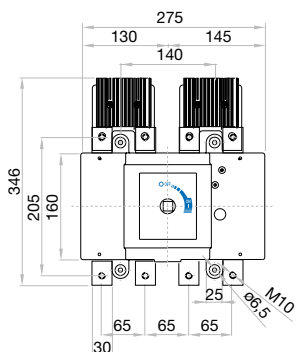
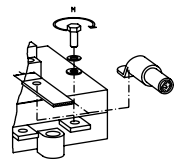
^{*(p1)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.

Dimensions (mm)

Door drilling for external handle



500 A



630 A

	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
500A	2x240	2x5	40	M10	24
630A			50		

series
S5 DC



S5 DC Switch - disconnecter for DC current 4P

Size 3

A 850|1250



1000Vdc

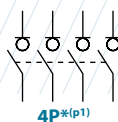


CODE-850A

S5-12504PC0

CODE-1250A

S5-12502EC0



Technical information

According to IEC 60947-1
IEC 60947-3



tests:

			850	1250	
Rated thermal current in ambient at	Ith	40° C	A	850	1250
		50° C	A	850	1250
		60° C	A	700	1000
Rated insulation voltage DC20	Ui		V	1500	1500
Rated impulse withstand voltage	Uimp		kV	12	12
Rated operational current ^{*(1)} DC21B	Ie	Ue			
		1000 Vdc	A	850	1250

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

			850	1250
Short - circuit behaviour				
Short - circuit making capacity ^{*(2)}	Icm	kA (peak)	60	60
Rated short-time withstand current (1sec.)	Icw	kA rms	25	25
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		3000	3000
Maximum weight (without bridging links)		Kg	7,6	7,6



DO NOT USE IN GROUNDED INSTALLATIONS

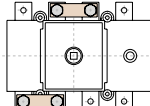
Connection diagram

Connection diagram

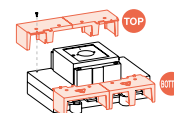
A



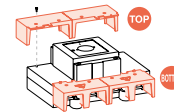
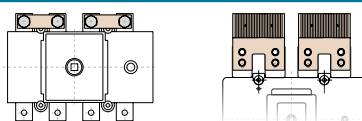
Bridging links^{*(p1)}



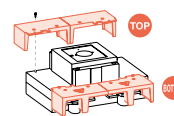
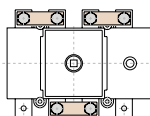
Terminal shrouds



B



C





Accessories



» Direct handle

CODE DS-LI31



» External handle included shaft ^{*(e1)}

IP65
CODE DS-LA31



» External handle without shaft

IP65
CODE DS-LA33



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal shrouds (2 units - only for 850A)

	A	B	C
TOP	DS-CU38	DS-CU30	DS-CU30
BOTTOM	DS-CU39	DS-CU31	DS-CU38

» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
186	145... 242

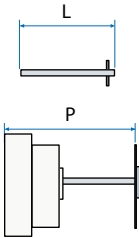
Shaft extensions

Type 1

L (mm)	P (mm)	CODE
345	145... 411	DS-EP23

Type 2

L (mm)	P (mm)	CODE
535	145... 600	DS-EP24



» Bridging links ^{*(p1)}



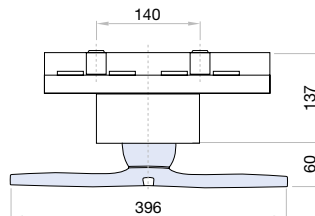
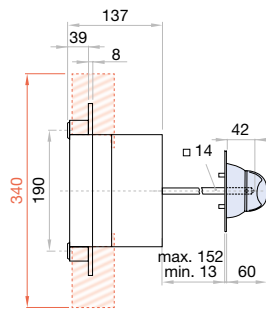
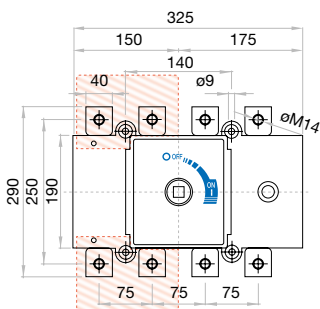
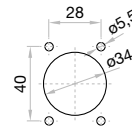
A **B** 850A CODE DS-PI31 (2 units)
C CODE CONSULT

B 1250A CODE DS-PI3D (2 units)

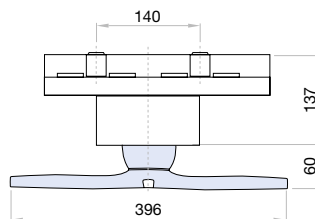
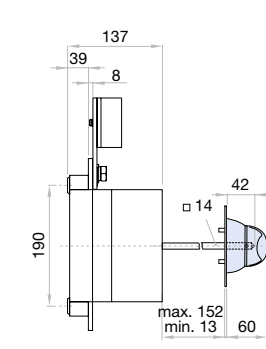
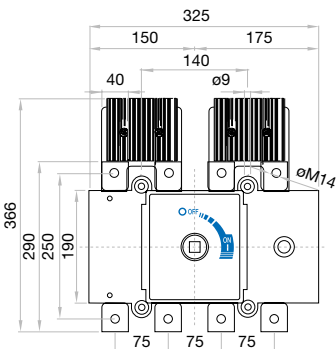
^{*(p1)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.

Dimensions (mm)

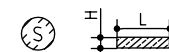
Door drilling for external handle



850 A



1250 A



S max (Cu)	H max (Cu)	L max (Cu)	M	M
mm ²	mm	mm	⌀	Nxm
2x300	2x10	50	M14	45

series
S5 DC



S5 DC Switch - disconnecter for DC current 4P

Size 4

A 1250|1800|2000



1000Vdc

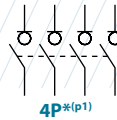


CODE-1250A **S5-18004PS0**



CODE-1800A **S5-18002ES0**

CODE-2000A **S5-20002ED0**



Technical information

According to IEC 60947-1
IEC 60947-3



tests:

			1250	1800	2000
Rated thermal current in ambient at	Ith	40° C	A 1250	1800	2000
		50° C	A 1250	1620	1800
		60° C	A 1250	1400	1600
Rated insulation voltage DC20	Ui	V	1500	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12	12
Rated operational current ^{*(1)} DC21B	Ie	Ue			
		1000 Vdc	A 1250	1800	2000

^{*(1)} Other voltages and/or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

			1250	1800	2000
Short - circuit behaviour					
Short - circuit making capacity ^{*(2)}	Icm	kA (peak)	60	60	60
Number of mechanical operations (according to the standards, for other values please consult)		Cycles	3000	3000	3000
Maximum weight (without jumpers)		Kg	20,8	20,8	20,8



DO NOT USE IN GROUNDING INSTALLATIONS

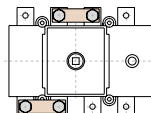
Connection diagram

Connection diagram

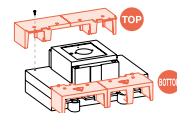
A S5-18004PS0



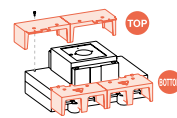
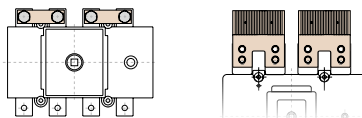
Bridging links^{*(p1)}



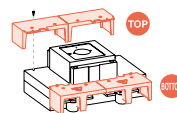
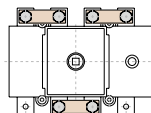
Terminal shrouds



B S5-18004PS0
S5-18002ES0
S5-20002ED0



C S5-18004PS0





Accessories



» Direct handle

CODE DS-LI41



» External handle included shaft^{*(e1)}

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LA41



» External handle without shaft

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LA43



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal shrouds (2 units)

	A	B	C
TOP	DS-CU48	DS-CU40	DS-CU40
BOTTOM	DS-CU49	DS-CU41	DS-CU48

» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
239	235... 400

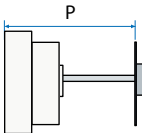
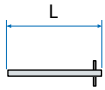
Shaft extensions

Type 1

L (mm)	P (mm)	CODE
485	235... 686	DS-EP44

Type 2

L (mm)	P (mm)	CODE
635	235... 836	DS-EP45



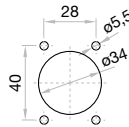
» Bridging links^{*(p1)}

For S5-18004PS0 A B CODE DS-PI41 (2 units)
C CONSULT

For S5-18002ES0 S5-20002EDO B CODE DS-PI4D (2 units)

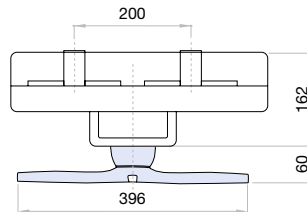
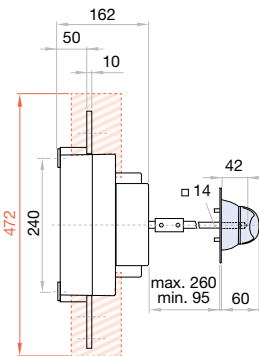
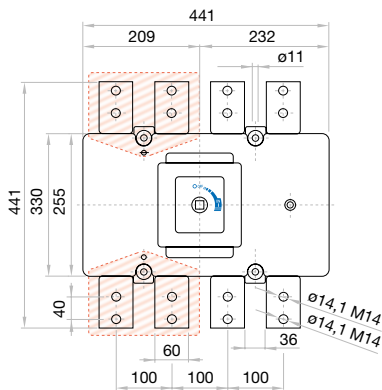
C CONSULT

^{*(p1)} To meet the operation and electrical features, the product installed must be incorporate these bridging links. Please consult.

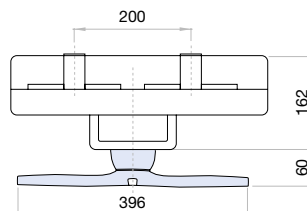
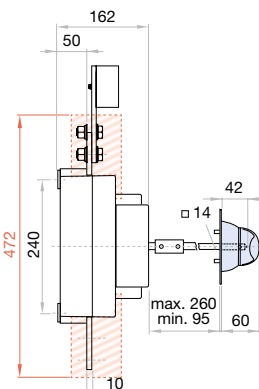
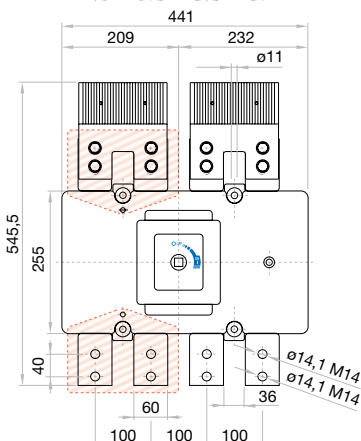
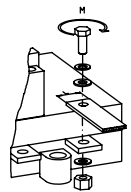


Dimensions (mm)

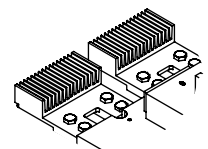
Door drilling for external handle



1250 A



1800 A
2000 A



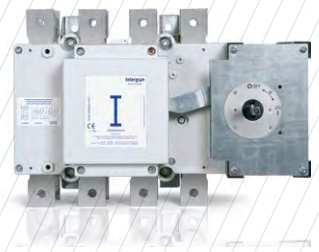
H max (Cu)	L max (Cu)	M	M
mm	mm		Nxm
2x7	80	M14	55



S5M DC Switch - disconnecter for DC current 4P + 4P

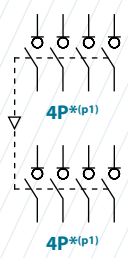
Size 2
A 500|630

1500Vdc



CODE-500A **S5M063044R0**

CODE-630A **S5M080044C0**



Technical information



According to IEC60947-1
IEC60947-3

		500		630	
Rated thermal current in ambient at	Ith	40° C	A	500	630
		50° C	A	500	630
		60° C	A	500	630
Rated insulation voltage DC20	Ui	V	1500	1500	
Rated impulse withstand voltage	Uimp	kV	12	12	
Rated operational current DC21B	le	Ue 1500 Vdc	A	500	630

Short - circuit behaviour			
Maximum cut - off current ^{*(1)}	Icm	kA (peak)	26
Short - time withstand current (1 sec.)	Icw	kA rms	16
Mechanical features			
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		5000
Maximum weight (without jumpers)	Kg		13

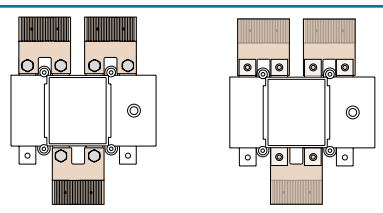
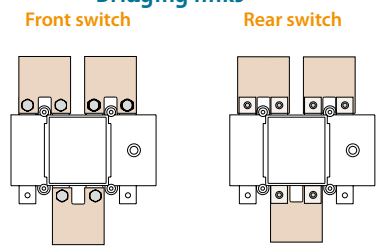
^{*(1)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

Connection diagram

DO NOT USE IN GROUNDED INSTALLATIONS

Connection diagram

Bridging links^{*(p1)}



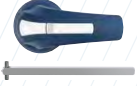


Accessories



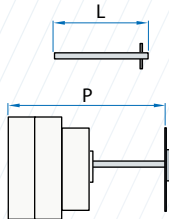
» Direct handle

CODE DS-LI22



» External handle included shaft ^{*(e1)}

IP65
CODE DS-LA22



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
239	325... 490



» Auxiliary contacts

1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Bridging links ^{*(p1)}

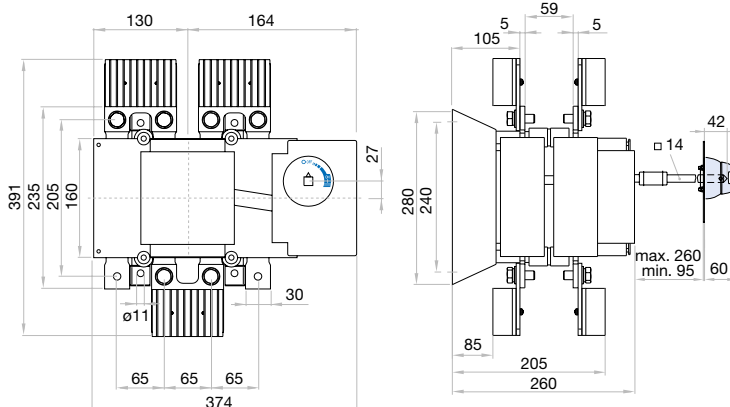
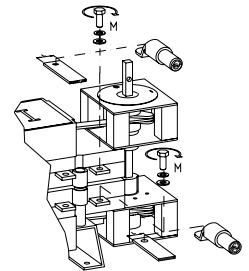
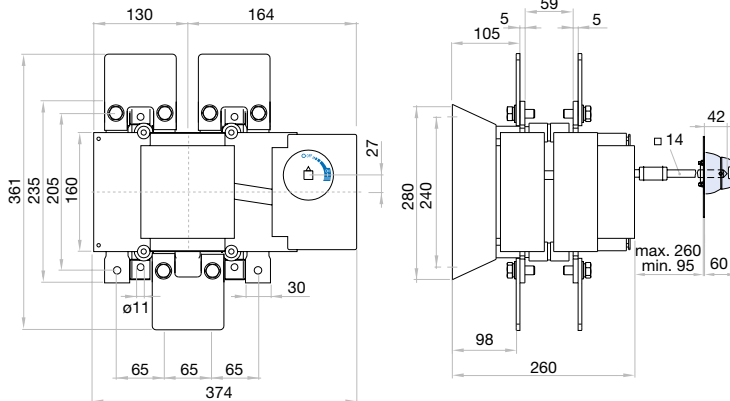
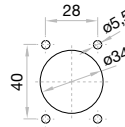


- A 500A CODE DS-PI230L (2 units)
- B 630A CODE DS-PI2D (2 units)

^{*(p1)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.

Dimensions (mm)

Door drilling for external handle



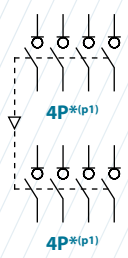
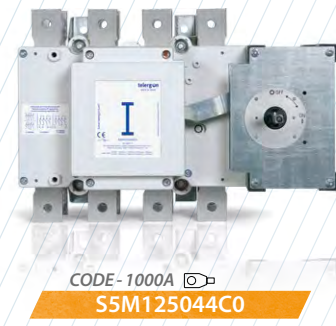
S max (Cu)	H max (Cu)	L max (Cu)	T	M
mm ²	mm	mm		Nxm
2x240	2x5	40	M10	24



S5M DC Switch - disconnecter for DC current 4P+4P

Size 3
A 800|1000

1500Vdc



Technical information



According to IEC60947-1
IEC60947-3

		800		1000	
Rated thermal current in ambient at	Ith	40° C	A	800	1000
		50° C	A	800	1000
		60° C	A	800	1000
Rated insulation voltage DC20	Ui	V	1500	1500	
Rated impulse withstand voltage	Uimp	kV	12	12	
Rated operational current DC21B	le	Ue 1500 Vdc	A	800	1000

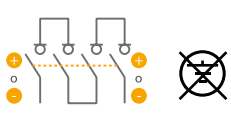
*⁽¹⁾ Without limiting protective device (short-circuit maintained 50... 100 ms.)

Short - circuit behaviour			
Maximum cut - off current * ⁽¹⁾	Icm	kA (peak)	60
Short - time withstand current (1 sec.)	Icw	kA rms	25
Mechanical features			
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		3000
Maximum weight (without jumpers)	Kg		28,6

DO NOT USE IN GROUNDED INSTALLATIONS

Connection diagram

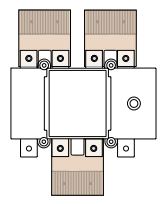
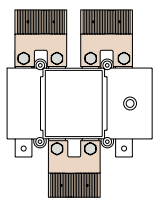
Connection diagram



Bridging links*^(p1)

Front switch

Rear switch





Accessories



» Direct handle

CODE DS-LI41



» External handle included shaft^{*(e1)}

IP65
CODE DS-LA41



» External handle without shaft

IP65
CODE DS-LA43



» Auxiliary contacts

1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12

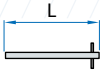
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Bridging links^{*(p1)}

CODE DS-PI3D (2 units)

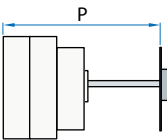
^{*(p1)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.



» Shafts

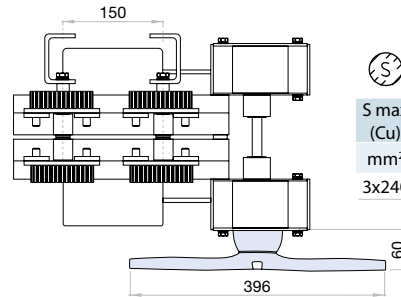
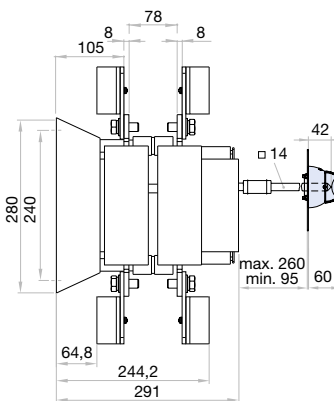
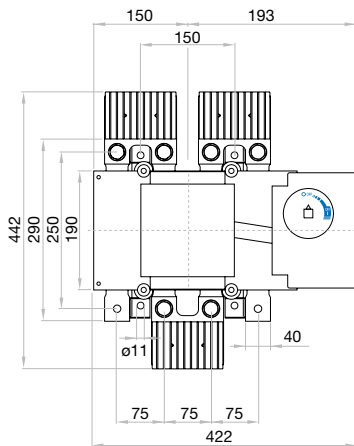
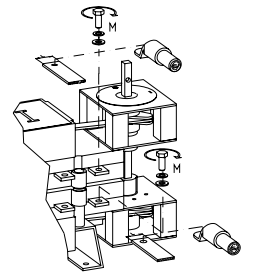
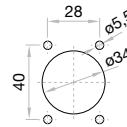
Standard shaft included ^{*(e1)}

L (mm)	P (mm)
239	408... 573



Dimensions (mm)

Door drilling for external handle



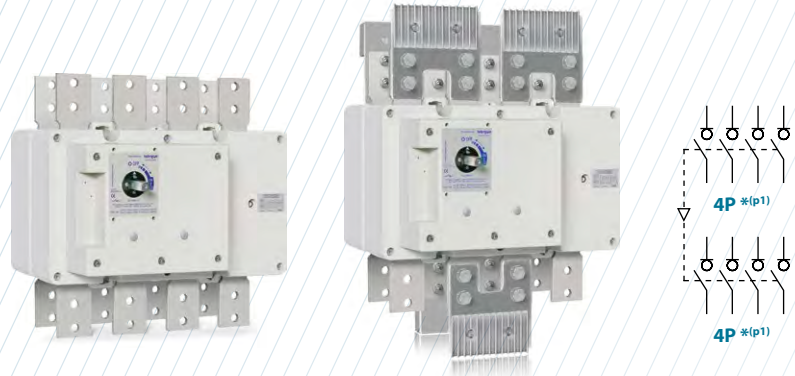
S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M	M
3x240	2x10	50	M14	45



S5N DC Switch - disconnecter for DC current 4P + 4P

Size 4
A 1250|1800

1500Vdc



CODE - 1250A **S5N160044S0** CODE - 1800A **S5N180044S0**

Technical information



According to IEC 60947-1
IEC 60947-3

			1250	1800
Rated thermal current in ambient at	I _{th}	40° C	A 1250	1800
		50° C	A 1250	1800
		60° C	A 1250	1800
Rated insulation voltage DC20	U _i	V	1500	1500
Rated impulse withstand voltage	U _{imp}	kV	12	12
Rated operational current DC21B ^{*(1)}	I _e	U _e		
		1500 Vdc	A 1250	1800

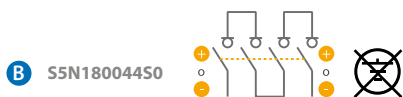
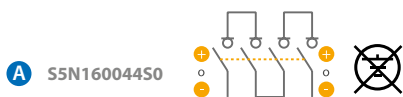
^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

Short - circuit behaviour			
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	60
Short - time withstand current (1 sec.)	I _{cw}	kA rms	50
Mechanical features			
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		600
Maximum weight (without bridging links)	Kg		44,3

DO NOT USE IN GROUNDED INSTALLATIONS

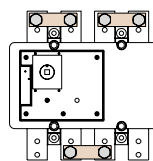
Connection diagram

Connection diagram

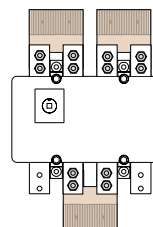
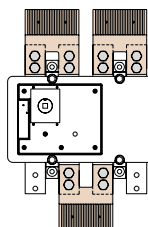
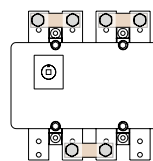


Bridging links ^{*(p1)}

Front switch



Rear switch





Accessories



» Direct handle

CODE DS-LI41



» External handle included shaft*(e1)

IP65
CODE DS-LA41



» External handle without shaft

IP65
CODE DS-LA43



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac

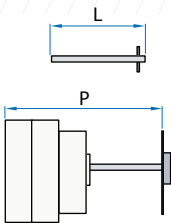


» Bridging links*(p1)

A 1250A CODE DS-PI430U (3 units)

B 1800A CODE DS-PI4D (2 units)

*(p1) To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult



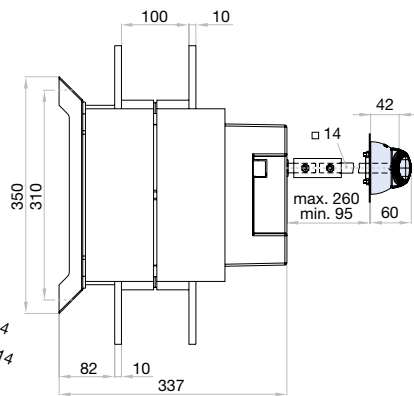
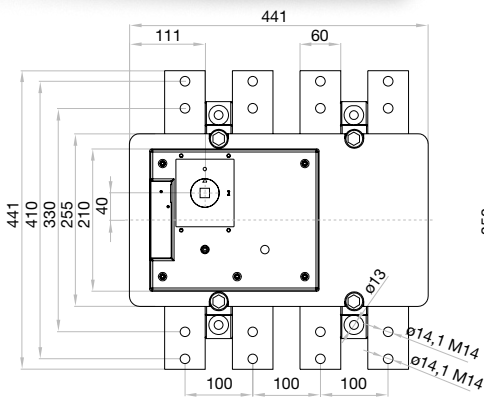
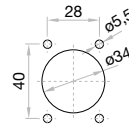
» Shafts

Standard shaft included *(e1)

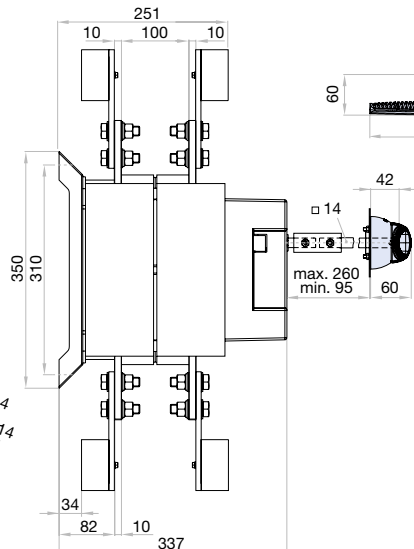
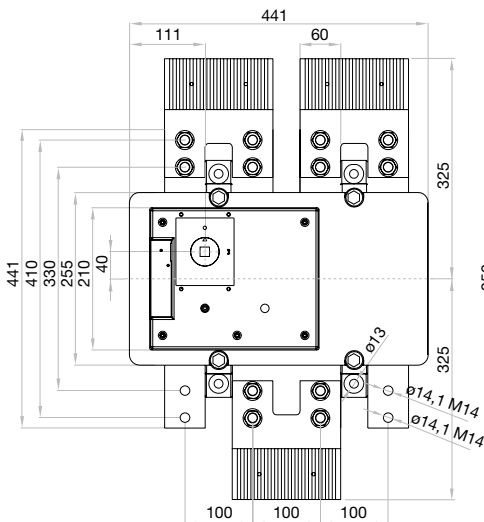
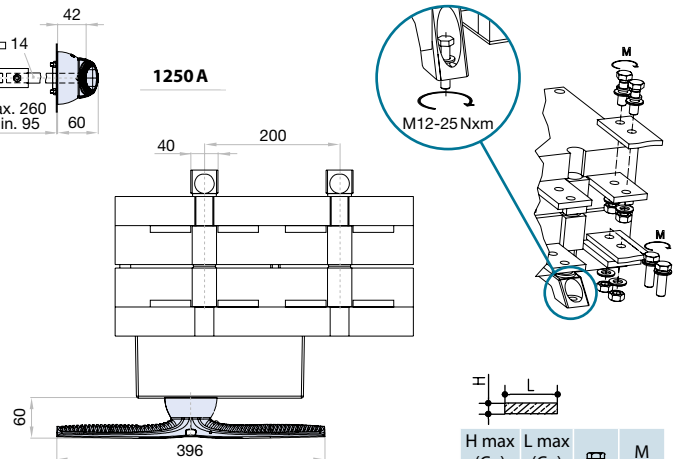
L (mm)	P (mm)
239	420 ... 580

Dimensions (mm)

Door drilling for external handle



1250 A



1800 A

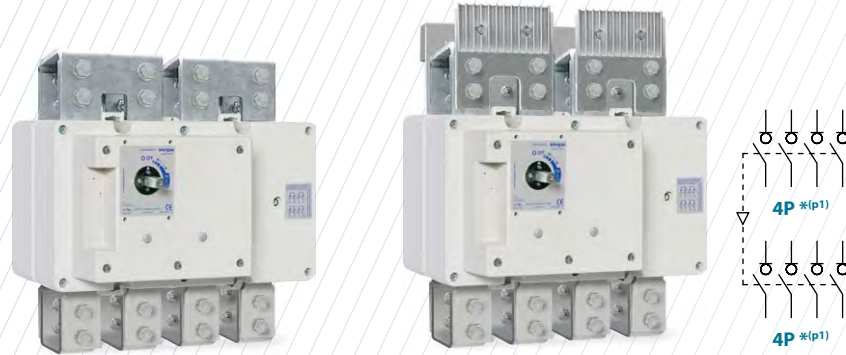
H max (Cu)	L max (Cu)	M	M
mm	mm	T	Nxm
2x10	80	M14	55



S5N DC Switch - disconnecter for DC current 4P+4P

Size 5
A 2000|2500|3150

1000Vdc



CODE-2000A **S5N20002ES0** CODE-2500A **S5N25002ES0** CODE-3150A **S5N31502ES0**

Technical information



According to IEC 60947-1
IEC 60947-3

			2000	2500	3150
Rated thermal current in ambient at	Ith	40° C	A 2000	2500	3150
		50° C	A 2000	2500	2850
		60° C	A 2000	2500	2500
Rated insulation voltage DC20	Ui	V	1500	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12	12
Rated operational current DC21B ^{*(1)}	Ue				
	Ie	1000 Vdc	A 2000	2500	3150

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

Short - circuit behaviour			
Short - circuit making capacity ^{*(2)}	Icm	kA (peak)	60
Rated short-time withstand current (1sec.)	Icw	kA rms	50
Mechanical features			
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		600
Maximum weight (without bridging links)	Kg		55

DO NOT USE IN GROUNDED INSTALLATIONS

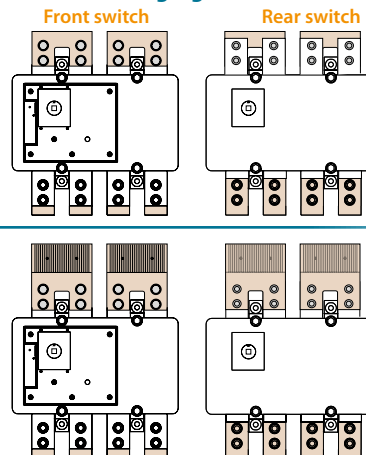
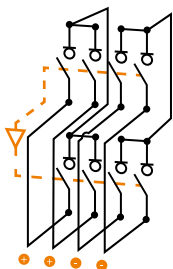
Connection diagram

Connection diagram

Bridging links ^{*(p1)}

A S5N20002ES0
S5N25002ES0

B S5N31502ES0





Accessories



» Direct handle

CODE DS-LI41

» External handle included shaft^{*(e1)}

IP65

CODE DS-LA41



» External handle without shaft

IP65

CODE DS-LA43



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac

» Bridging links^{*(p1)}

A 2000A CODE DS-PI51 (2 units) + D5LPC45 (4 units)

2500A CODE DS-PI51 (2 units) + D5LPC45 (4 units)

B 3150A CODE x2 DS-PI4D (2 units) + x2 D5LPC45 (4 units)



DS-PI4D



DS-PI51

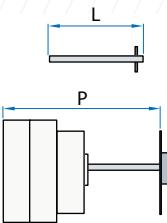


D5LPC45

» Shafts

Standard shaft included^{*(e1)}

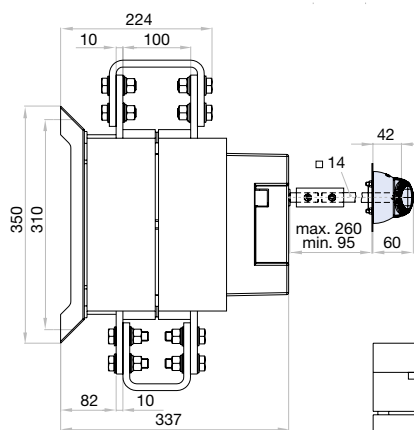
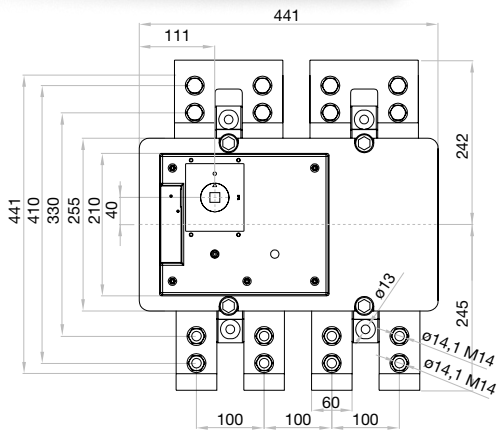
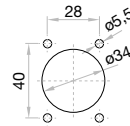
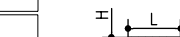
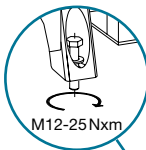
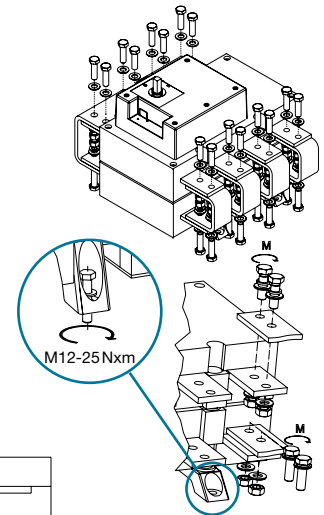
L (mm)	P (mm)
239	420 ... 580



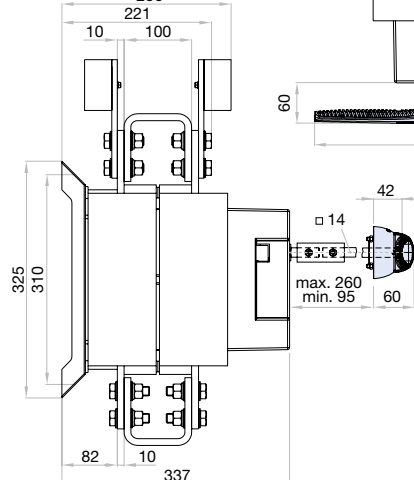
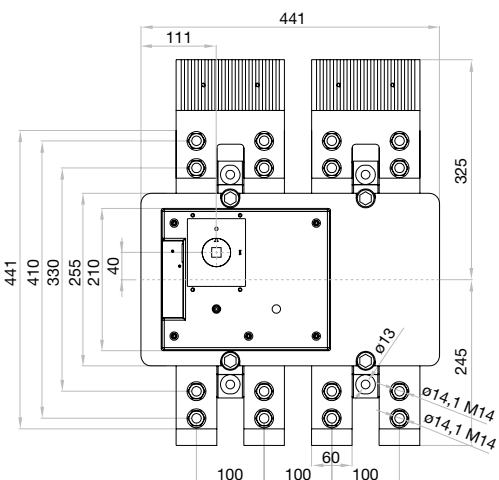
^{*(p1)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult

Dimensions (mm)

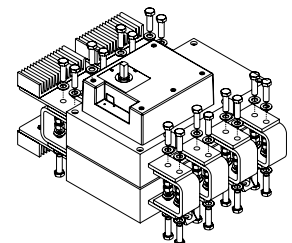
Door drilling for external handle

2000 A
2500 A

	H max (Cu) mm	L max (Cu) mm	M T	M Nxm
2000 A	2x10	80	M14	55
2500 A	4x10	80	M14	55
3150 A	4x10	80	M14	55



3150 A





S6 DC Switch - disconnecter for DC current 1P - 2P

Size 1

A 125|160|200|250|315|400

500 - 750 - 1000Vdc



CODE-500 Vdc

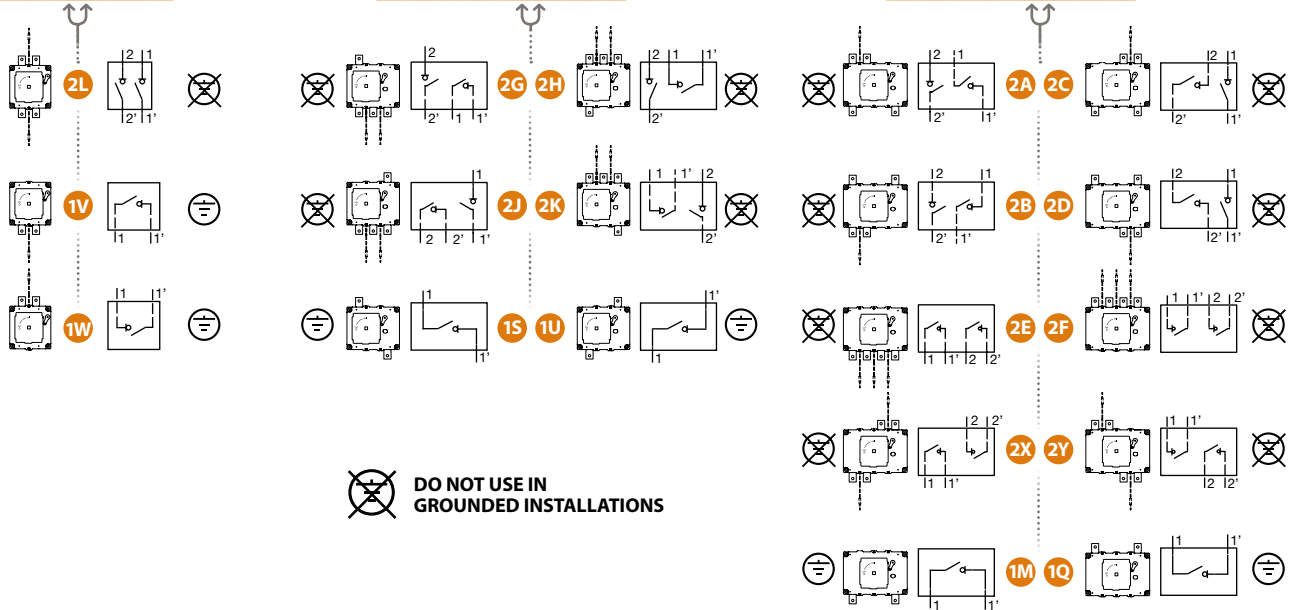
125A	S6-0125 __ S0
160A	S6-0160 __ S0
200A	S6-0200 __ S0
250A	S6-0250 __ S0
315A	S6-0315 __ S0
400A	S6-0400 __ D0

CODE-750 Vdc

125A	S6-0125 __ S0
160A	S6-0160 __ S0
200A	S6-0200 __ S0
250A	S6-0250 __ S0
315A	S6-0315 __ S0
400A	S6-0400 __ D0

CODE-1000 Vdc

125A	S6-0125 __ S0
160A	S6-0160 __ S0
200A	S6-0200 __ S0
250A	S6-0250 __ S0
315A	S6-0315 __ S0
400A	S6-0400 __ D0



Technical information



According to IEC 60947-1
IEC 60947-3

			125	160	200	250	315	400	
Rated thermal current in ambient at	I _{th}	40° C	A	125	160	200	250	315	400
		50° C	A	125	160	200	250	315	400
		60° C	A	125	160	200	250	315	400
Rated insulation voltage (DC)	U _i	V	1500	1500	1500	1500	1500	1500	
Rated impulse withstand voltage	U _{imp}	kV	12	12	12	12	12	12	
Rated operational current ^{*(1)}	I _e	Code 500Vdc	A	125	160	200	250	315	400
		Code 750Vdc	A	125	160	200	250	315	400
		Code 1000Vdc	A	125	160	200	250	315	400

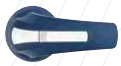
			125	160	200	250	315	400
Short - circuit behaviour								
Rated short-circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	10	10	10	10	10	10
Rated short-time withstand current (1sec)	I _{cw}	kA rms	10	10	10	10	10	10
Mechanical features								
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		8000	8000	8000	8000	8000	5000
Maximum weight	Consult according to code							

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)



Accessories



» Direct handle

CODE DS-SI11



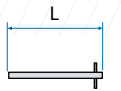
» External handle included shaft^{*(e1)}

IP65
CODE DS-SA11



» External handle without shaft

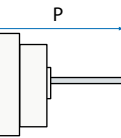
IP65
CODE DS-SA14



» Shafts

Standard shaft included^{*(e1)}

L (mm)	P (mm)
227	103... 256



Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
375	103... 415	DS-EP14

Type 2		
L (mm)	P (mm)	CODE
536	103... 576	DS-EP15



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal shrouds

CODE DR-CU11 (1 unit)
CODE DR-CU12 (1 unit)
CODE DR-CU13 (1 unit)



» Phase barriers

CODE DR-SF11 (1 unit)
CODE DR-SF12 (2 units)
CODE DR-SF13 (3 units)



» Spacers

CODE DR-EL11 (4 units)



» Safety key lock device

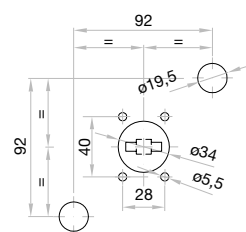
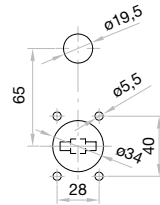
Simple CODE DS-CA11
Double CODE DS-CE11

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device

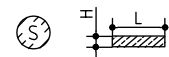
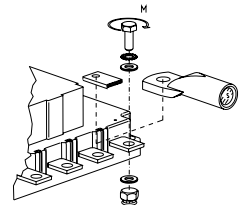
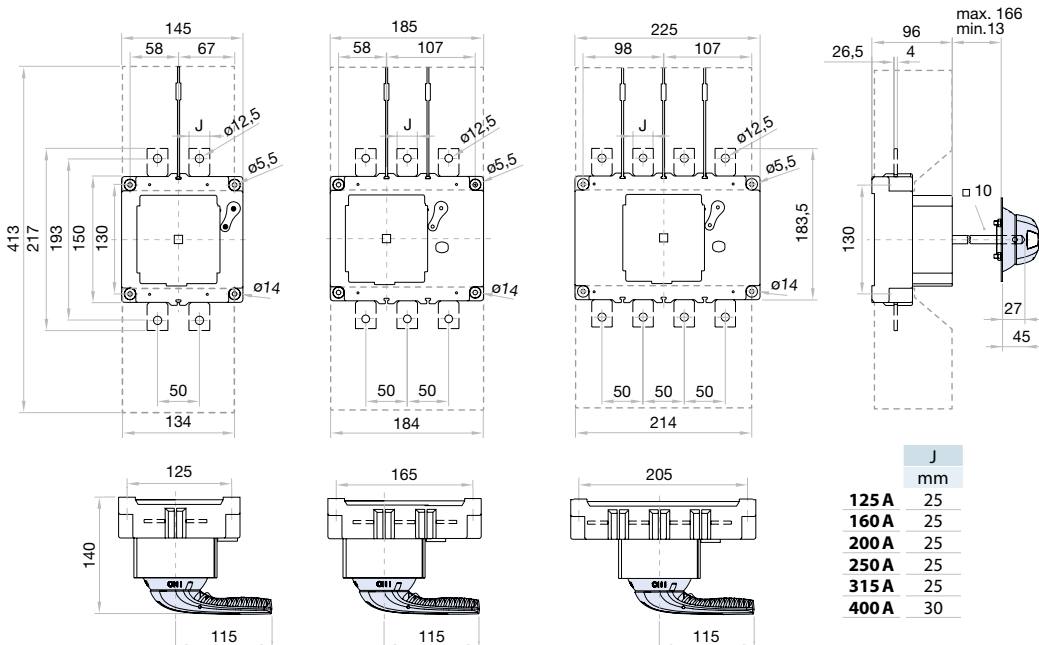
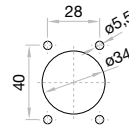
Simple

Double



Dimensions (mm)

Door drilling for external handle



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
125 A	185	8	25	M12	24
160 A	185	8	25	M12	24
200 A	185	8	25	M12	24
250 A	185	8	25	M12	24
315 A	185	8	25	M12	24
400 A	240 ^{*(t1)}	8	30	M12	24

^{*(t1)} Using phase barriers DR-SF__ to maintain the required clearance.



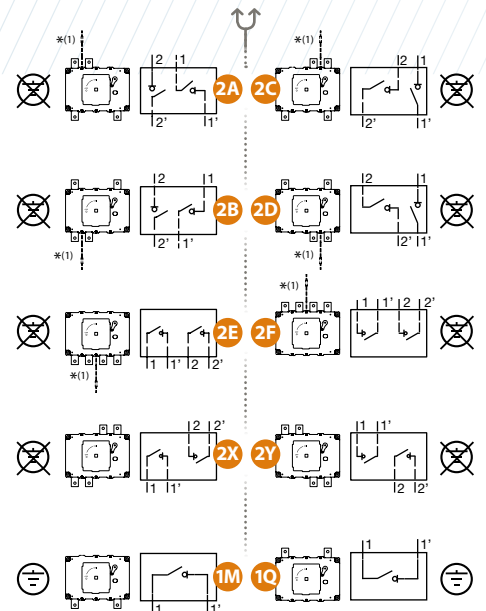
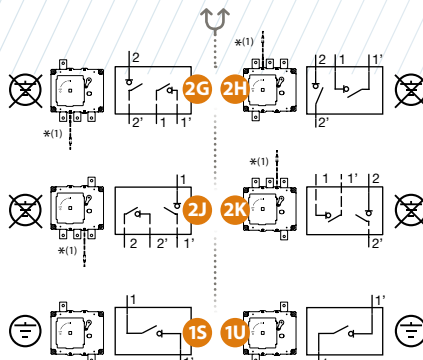
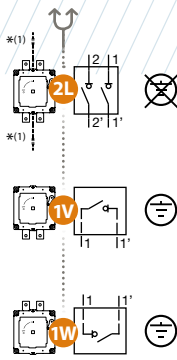
S6 DC UL Switch - disconnecter for DC current 1P - 2P

Size 1
A 250
500 - 750 - 1000Vdc

250A CODE - 500 Vdc **S6-0250 S00L**

250A CODE - 750 Vdc **S6-0250 S00L**

250A CODE - 1000 Vdc **S6-0250 S00L**



DO NOT USE IN GROUNDED INSTALLATIONS

Technical information



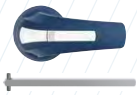
According to UL98B

LISTED E333311			250
Rated thermal current	I _{th}	-20°C to +50°C	A 250
Rated operational current	I _e	Code 500Vdc	A 250
		Code 750Vdc	A 250
		Code 1000Vdc	A 250
Rated short-circuit current	I _{cc}	kA	10
Maximum weight	Consult according to code		
Wiring capacity			
Minimum connection wire range/AWG	MCM		400
Maximum connection wire range/AWG	MCM		400

250 A
Conforms to UL98B. Minus 20 to +50°C. PV disconnects switch. Location Category B 1000Vdc 250 A Torque: 159 lbf-in. Short circuit rating: 10 kA
Suitable for Use in PV Systems in accordance with Article 690 of the NEC
IEC-60947-3 Uimp 12 kV DC21B-1000Vdc-250 A Ui 1500Vdc Ith 250 A



Accessories



» External handle included shaft^{*(e1)}
 IP65
 CODE DS-SA11



» Terminal shrouds
 CODE DR-CU11 (1 unit)
 CODE DR-CU12 (1 unit)
 CODE DR-CU13 (1 unit)

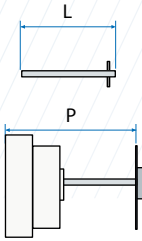


» External handle without shaft
 IP65
 CODE DS-SA14



» Phase barriers
 CODE DR-SF11 (1 unit)
 CODE DR-SF12 (2 units)
 CODE DR-SF13 (3 units)

» Shafts



Standard shaft included^{*(e1)}
 L (mm) | P (mm)
 227 | 103... 256

Shaft extensions
 Type 1
 L (mm) | P (mm) | CODE
 375 | 103... 415 | DS-EP14

Type 2
 L (mm) | P (mm) | CODE
 536 | 103... 576 | DS-EP15



» Spacers
 CODE DR-EL11 (4 units)



» Auxiliary contacts
 1NO+1NC CODE D5LAU01
 2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.

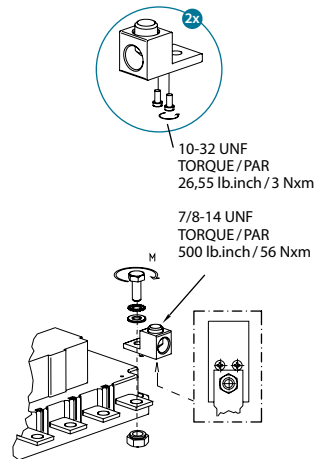
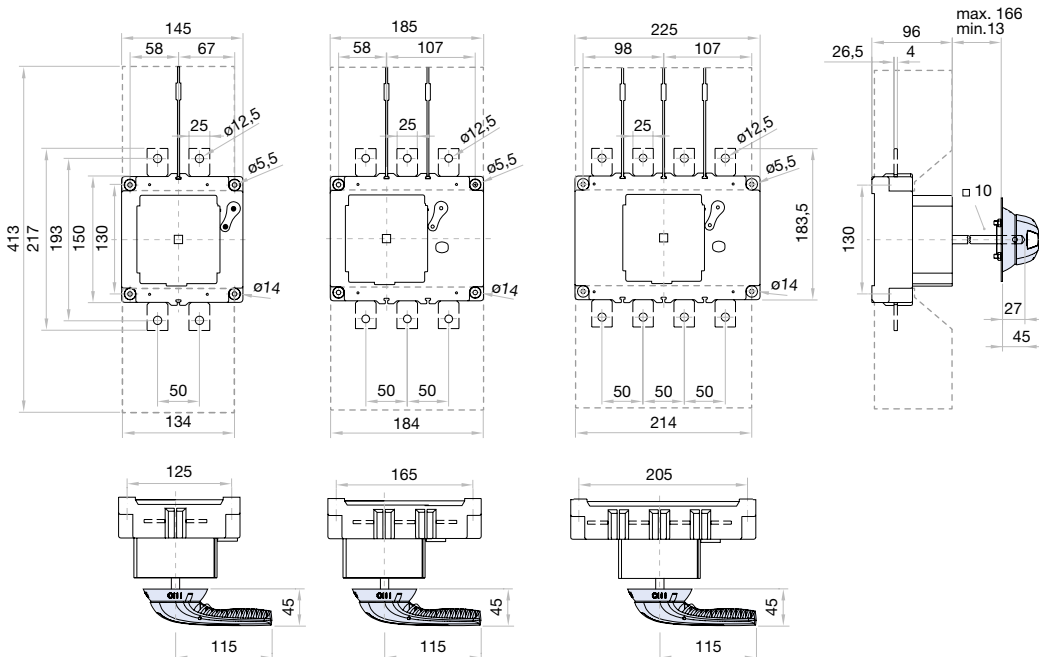
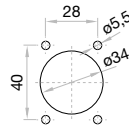


» Terminal lug
 CODE DR-TL11 (2 units)

*⁽¹⁾ With Terminal lug use phase barriers DR-SF_ _ to maintain the required clearance. Mandatory in these models

Dimensions (mm)

Door drilling for external handle



3/0 85 mm ² min	Temperature rating	Copper wire only M ^{+5%} -10%		
400 kcmil 240 mm ² max			Nxm lb.inch	
75 °C		M10	18	159



S6 DC Switch - disconnecter for DC current 1P - 2P

Size 2
A 500|630
500 - 750 - 1000Vdc



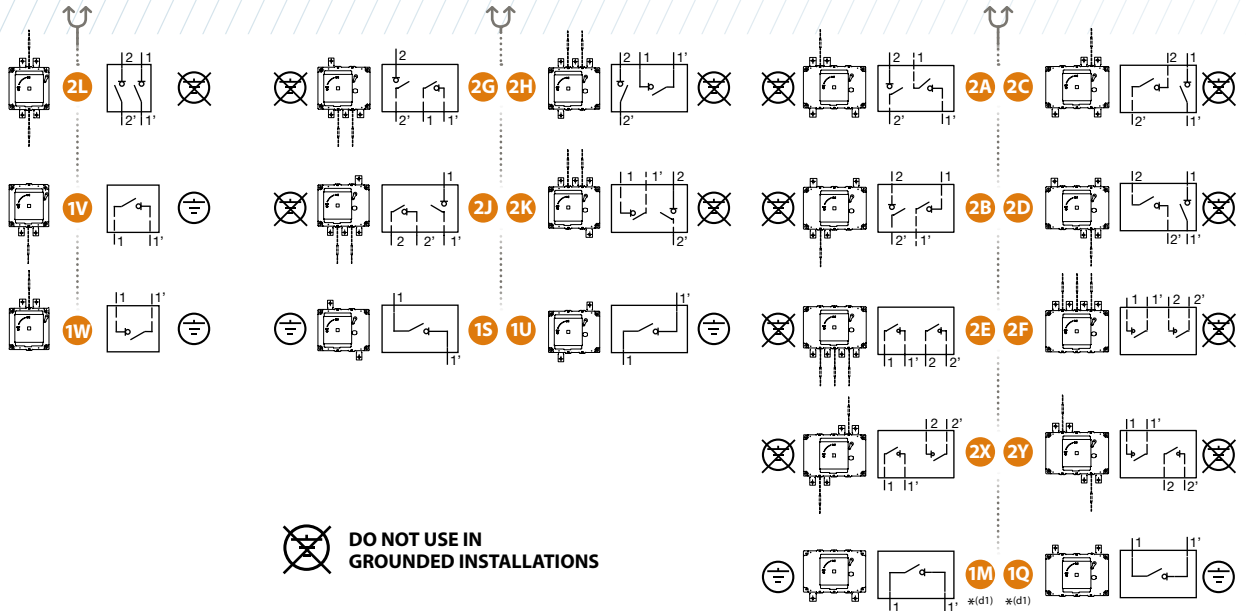
500A
630A
CODE-500 Vdc
S6-0500 __ S0
S6-0630 __ S0



500A
630A
CODE-750 Vdc
S6-0500 __ S0
S6-0630 __ S0



500A
630A
CODE-1000 Vdc
S6-0500 __ S0
S6-0630 __ S0



*(d1) Only for 500A.

Technical information



According to IEC 60947-1
IEC 60947-3

		500	630
Rated thermal current in ambient at	I _{th} 40° C	A 500	630
	50° C	A 500	630
	60° C	A 500	630
Rated insulation voltage (DC)	U _i	V 1500	1500
Rated impulse withstand voltage	U _{imp}	kV 12	12
Rated operational current ^{*(1)}	Code 500Vdc	A 500	630
	Code 750Vdc	A 500	630
	Code 1000Vdc	A 500	630

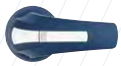
		500	630
Short - circuit behaviour			
Rated short-circuit making capacity ^{*(2)}	I _{cm} kA (peak)	10	10
Rated short-time withstand current (1 sec)	I _{cw} kA rms	10	10
Mechanical features			
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	5000	5000
Maximum weight	Consult according to code		

*(1) Other voltages and / or utilization categories. Please consult

*(2) Without limiting protective device (short-circuit maintained 50... 100 ms.)

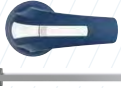


Accessories



» Direct handle

CODE DS-LI21



» External handle included shaft^{*(e1)}

IP65

CODE DS-LA21



» External handle without shaft

IP65

CODE DS-LA24



» Terminal shrouds

CODE DR-CU21 (1 unit)

CODE DR-CU22 (1 unit)

CODE DR-CU23 (1 unit)



» Phase barriers

CODE DR-SF21 (1 unit)

CODE DR-SF22 (2 units)

CODE DR-SF23 (3 units)



» Spacers

CODE DR-EL21 (4 units)

» Shafts

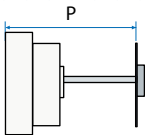
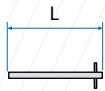
Standard shaft included ^{*(e1)}

L (mm)	P (mm)
195	134... 240

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
345	134... 400	DS-EP23

Type 2		
L (mm)	P (mm)	CODE
535	134... 560	DS-EP24



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.

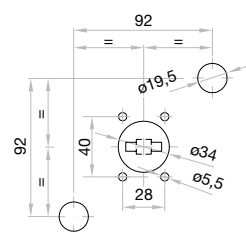
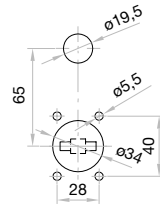
» Safety key lock device

Simple CODE DS-CB21

Double CODE DS-CF21

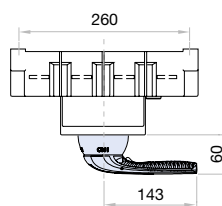
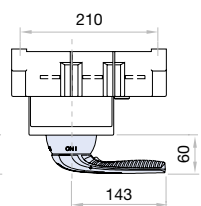
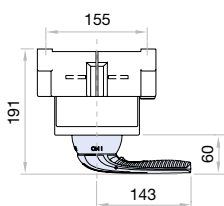
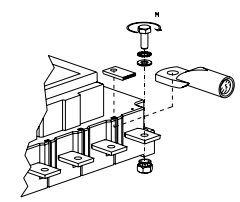
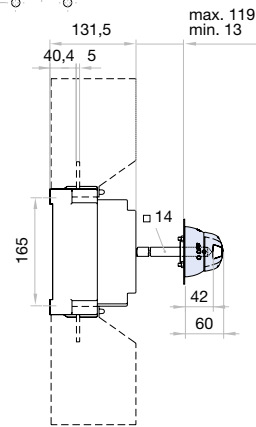
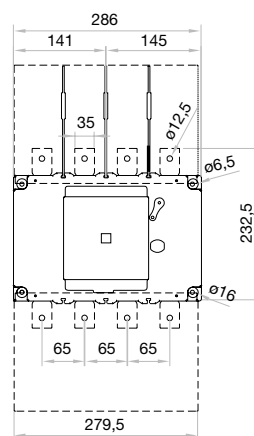
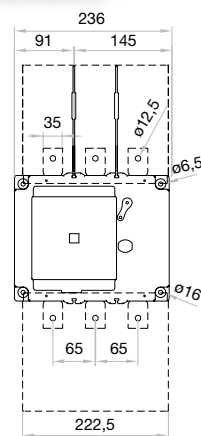
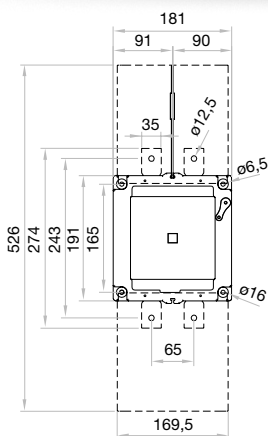
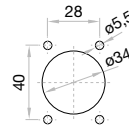
(Using phase barriers DR-SF_ to maintain the required clearance)

Door drilling for handle and key lock device



Dimensions (mm)

Door drilling for external handle



	S max (Cu)	H max (Cu)	L max (Cu)	T	M
	mm ²	mm	mm		Nxm
500 A	2x150	2x5	35	M12	24
630 A	2x185	2x6	35	M12	24



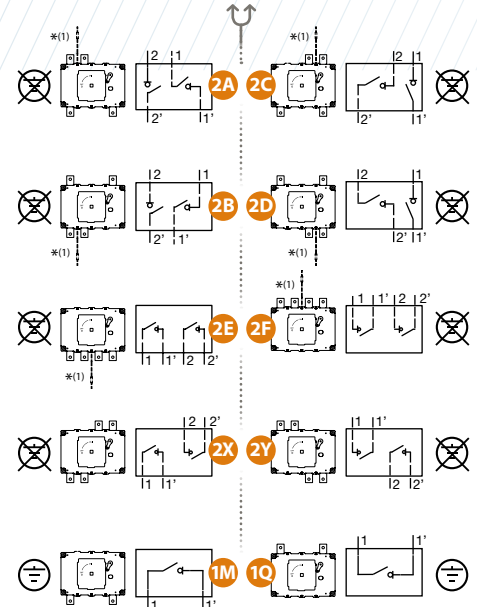
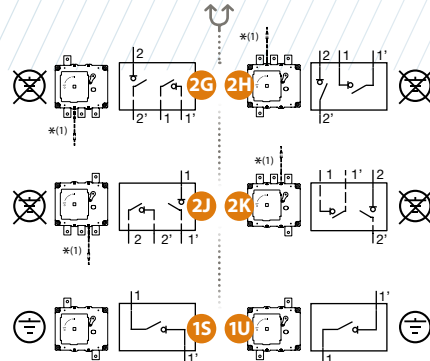
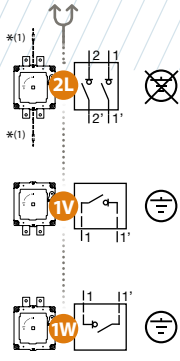
S6 DC UL Switch - disconnecter for DC current 1P - 2P

Size 2
A
400
500 - 750 - 1000 Vdc

400A CODE-500 Vdc **S6-0400 S00L**

400A CODE-750 Vdc **S6-0400 S00L**

400A CODE-1000 Vdc **S6-0400 S00L**



DO NOT USE IN GROUNDED INSTALLATIONS

Technical information

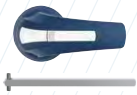


According to UL98 B

LISTED E333311			400
Rated thermal current	I _{th}	-20°C to +50°C	A 400
Rated operational current	I _e	Code 500Vdc	A 400
		Code 750Vdc	A 400
		Code 1000Vdc	A 400
Rated short-circuit current	I _{cc}	kA	10
Maximum weight	Consult according to code		
Wiring capacity			
Minimum connection wire range/AWG	MCM		2x300
Maximum connection wire range/AWG	MCM		2x350

400 A
Conforms to UL98B. Minus 20 to +50°C. PV disconnects switch. Location Category B 1000 Vdc 400 A Torque: 212 lbf-in. Short circuit rating: 10 kA
Suitable for Use in PV Systems in accordance with Article 690 of the NEC IEC-60947-3 Uimp 12 kV DC21B - 1000 Vdc - 400 A Ui 1500 Vdc Ith 400 A

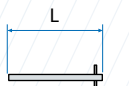
Accessories



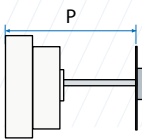
» External handle included shaft ^{*(e1)}
 IP65
 CODE DS-LA21



» External handle without shaft
 IP65
 CODE DS-LA24



» Shafts
Standard shaft included ^{*(e1)}
 L (mm) | P (mm)
 195 | 134... 240



» Shaft extensions
Type 1
 L (mm) | P (mm) | CODE
 345 | 134... 400 | DS-EP23
Type 2
 L (mm) | P (mm) | CODE
 535 | 134... 560 | DS-EP24



» Terminal shrouds
 CODE DR-CU21 (1 unit)
 CODE DR-CU22 (1 unit)
 CODE DR-CU23 (1 unit)



» Phase barriers
 CODE DR-SF21 (1 unit)
 CODE DR-SF22 (2 units)
 CODE DR-SF23 (3 units)



» Spacers
 CODE DR-EL21 (4 units)



» Terminal lug
 CODE DR-TL22 (2 units)

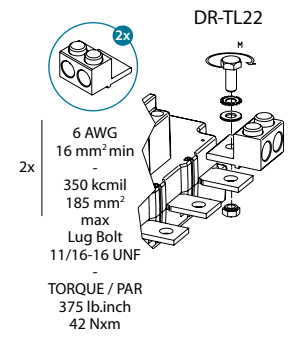
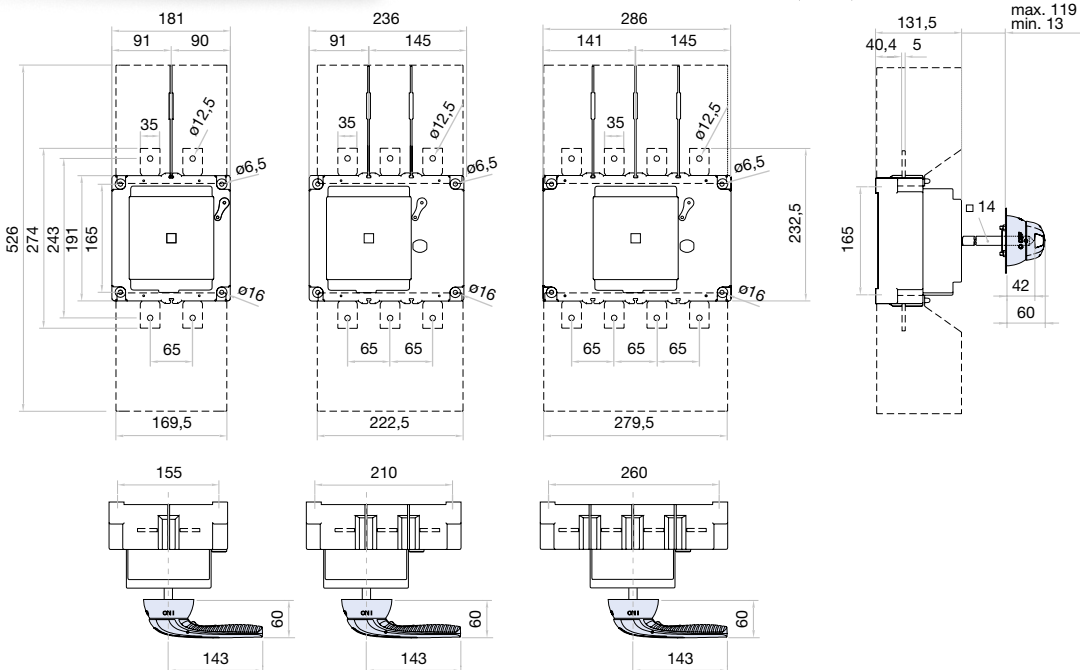
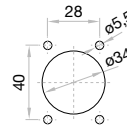
* (1) With Terminal lug use phase barriers DR-SF__ to maintain the required clearance. Mandatory in these models



» Auxiliary contacts
 1NO+1NC CODE D5LAU01
 2NO+2NC CODE D5LAU02
 Ie = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.

Dimensions (mm)

Door drilling for external handle



Temperature rating	T	Copper wire only	
		M _{+5%}	M _{-10%}
75 °C	M10	24	212



S6N DC

Switch - disconnecter for DC current 2P

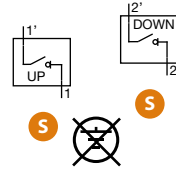
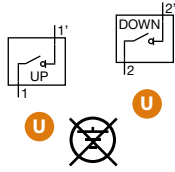
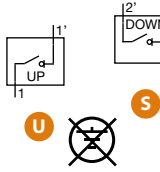
Size 1

A 125|160|200|250|315|400

1500Vdc



Current (A)	Code - 1500 Vdc
125A	S6N0125USS0
160A	S6N0160USS0
200A	S6N0200USS0
250A	S6N0250USS0
315A	S6N0315USS0
400A	S6N0400USS0



Technical information



DO NOT USE IN GROUNDED INSTALLATIONS

According to IEC 60947-1
IEC 60947-3

		125 160 200 250 315 400								
Rated thermal current in ambient at	I _{th}	40°C	A	125	160	200	250	315	400	
		50°C		125	160	200	250	315	400	
		60°C		125	160	200	250	315	360	
		70°C		125	160	200	250	315	315	
Rated insulation voltage (DC)	U _i	V	1500	1500	1500	1500	1500	1500		
Rated impulse withstand voltage	U _{imp}	kV	12	12	12	12	12	12		
Rated operational current DC21B	I _e	U _e	1500Vdc	A	125	160	200	250	315	400

Short - circuit behaviour

Rated short-circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	10
Rated short-time withstand current (1sec)	I _{cw}	kA rms	10

Mechanical features

Number of mechanical operations (according to the standards, for other values please consult)	Cycles	8000
Maximum weight	kg	4,25

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

Terminals location



Accessories



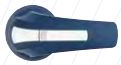
» Direct handle

CODE DS-SI11



» External handle included shaft^{*(e1)}

IP65
CODE DS-SA11



» External handle without shaft

IP65
CODE DS-SA14



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Shafts

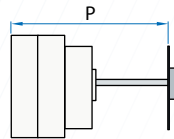
Standard shaft included ^{*(e1)}

L (mm)	P (mm)
227	185... 336

Shaft extensions

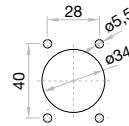
Type 1		
L (mm)	P (mm)	CODE
375	185... 497,5	DS-EP14

Type 2		
L (mm)	P (mm)	CODE
536	185... 647	DS-EP15

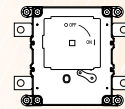
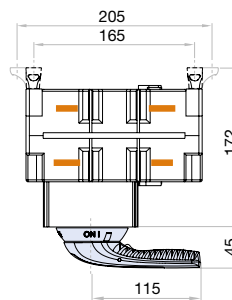
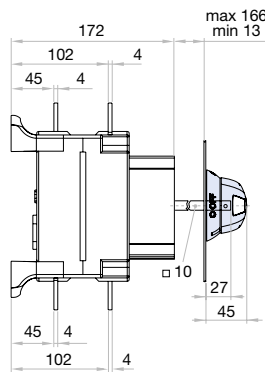
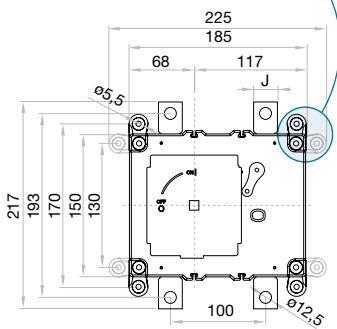


Dimensions (mm)

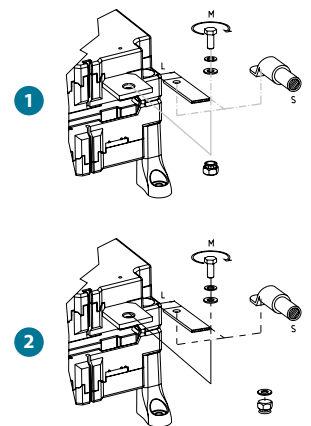
Door drilling for external handle



Standard fixing



For rotated mounting there are **S6N** references with front plate rotated (supply under request).



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
125 A	185	8	25	M10	18
160 A	185	8	25	M10	18
200 A	185	8	25	M10	18
250 A	185	8	25	M10	18
315 A	185	8	25	M10	18
400 A	240	8	30	M10	18

J	
125 A	25
315 A	30
400 A	30



S6N DC

Switch - disconnecter for DC current 2P

Size 1

A 125|160|200|250|315|400

1500Vdc

Current (A)	Code	Model
125A	CODE - 1500 Vdc	S6N0125MMS0
160A	CODE - 1500 Vdc	S6N0160MMS0
200A	CODE - 1500 Vdc	S6N0200MMS0
250A	CODE - 1500 Vdc	S6N0250MMS0
315A	CODE - 1500 Vdc	S6N0315MMS0
400A	CODE - 1500 Vdc	S6N0400MMD0
125A	CODE - 1500 Vdc	S6N0125QQS0
160A	CODE - 1500 Vdc	S6N0160QQS0
200A	CODE - 1500 Vdc	S6N0200QQS0
250A	CODE - 1500 Vdc	S6N0250QQS0
315A	CODE - 1500 Vdc	S6N0315QQS0
400A	CODE - 1500 Vdc	S6N0400QQD0
125A	CODE - 1500 Vdc	S6N0125MQS0
160A	CODE - 1500 Vdc	S6N0160MQS0
200A	CODE - 1500 Vdc	S6N0200MQS0
250A	CODE - 1500 Vdc	S6N0250MQS0
315A	CODE - 1500 Vdc	S6N0315MQS0
400A	CODE - 1500 Vdc	S6N0400MQD0

Technical information



According to IEC 60947-1
IEC 60947-3

DO NOT USE IN GROUNDED INSTALLATIONS

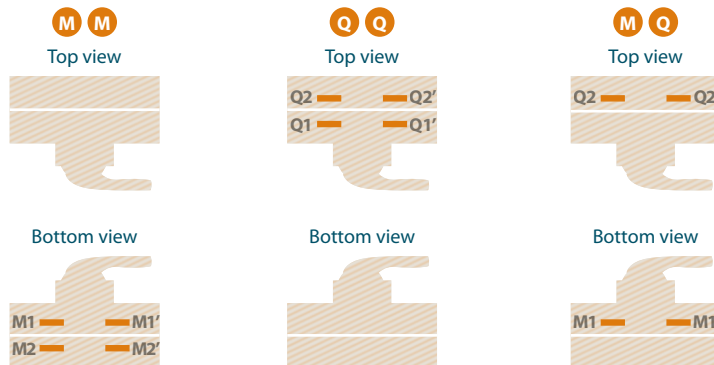
		125 160 200 250 315 400						
Rated thermal current in ambient at	I _{th} 40°C	A	125	160	200	250	315	400
	50°C		125	160	200	250	315	400
	60°C		125	160	200	250	315	360
	70°C		125	160	200	250	315	315
Rated insulation voltage (DC)	U _i	V	1500	1500	1500	1500	1500	1500
Rated impulse withstand voltage	U _{imp}	kV	12	12	12	12	12	12
Rated operational current ^{*(1)} DC21B	I _e	A	125	160	200	250	315	400

Short - circuit behaviour			
Rated short-circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	10
Rated short-time withstand current (1sec)	I _{cw}	kA rms	10
Mechanical features			
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		8000
Maximum weight	kg		4,29

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

Terminals location



Accessories



» Direct handle

CODE DS-SI11



» External handle included shaft^{*(e1)}

IP65
CODE DS-SA11



» External handle without shaft

IP65
CODE DS-SA14



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

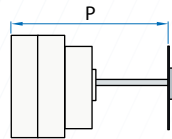
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Shafts

Standard shaft included ^{*(e1)}

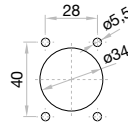
L (mm)	P (mm)
227	185... 336



Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
375	185... 497,5	DS-EP14

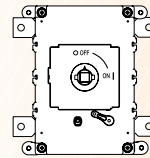
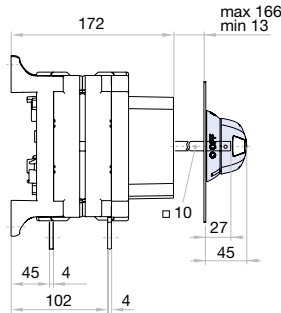
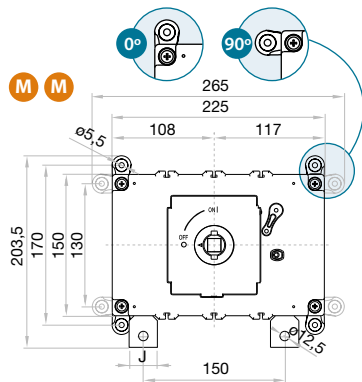
Type 2		
L (mm)	P (mm)	CODE
536	185... 647	DS-EP15



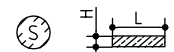
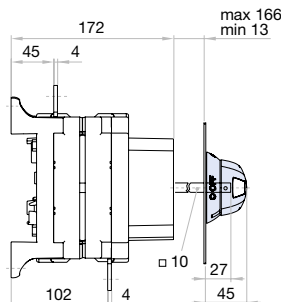
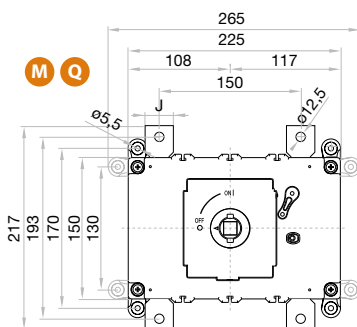
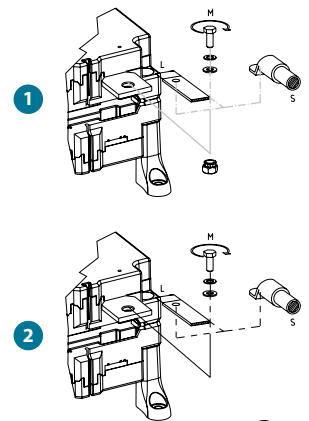
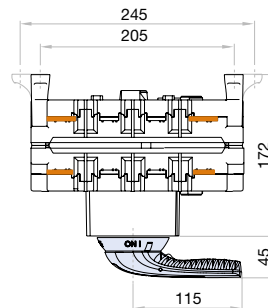
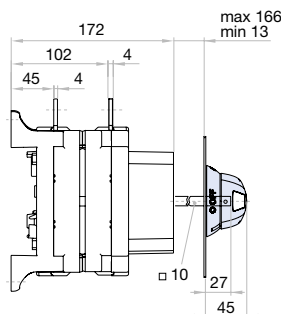
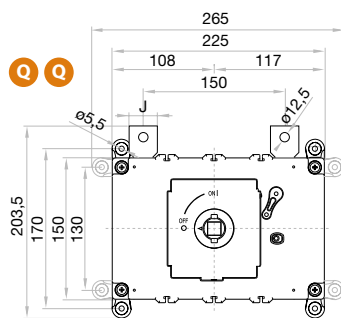
Door drilling for external handle

Dimensions (mm)

Standard fixing



For rotated mounting there are **S6N** references with front plate rotated (supply under request).



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
125 A	185	8	25	M10	18
160 A	185	8	25	M10	18
200 A	185	8	25	M10	18
250 A	185	8	25	M10	18
315 A	185	8	25	M10	18
400 A	240	8	30	M10	18

	J
125 A	25
315 A	30
400 A	30



S6R DC

Switch - disconnecter

base mounting 1P - 2P

Size 1

A 160|200|250|315|400

1500Vdc



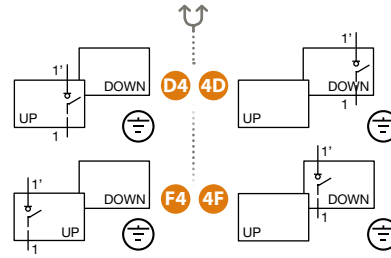
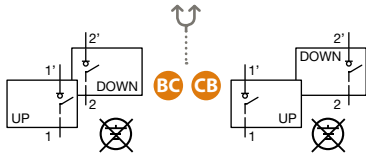
CODE-2P

160 A	S6R0160_S0
200 A	S6R0200_S0
250 A	S6R0250_S0
315 A	S6R0315_S0
400 A	S6R0400_D0



CODE-1P

160 A	S6R0160_S0
200 A	S6R0200_S0
250 A	S6R0250_S0
315 A	S6R0315_S0
400 A	S6R0400_D0



Technical information



According to IEC 60947-1
IEC 60947-3

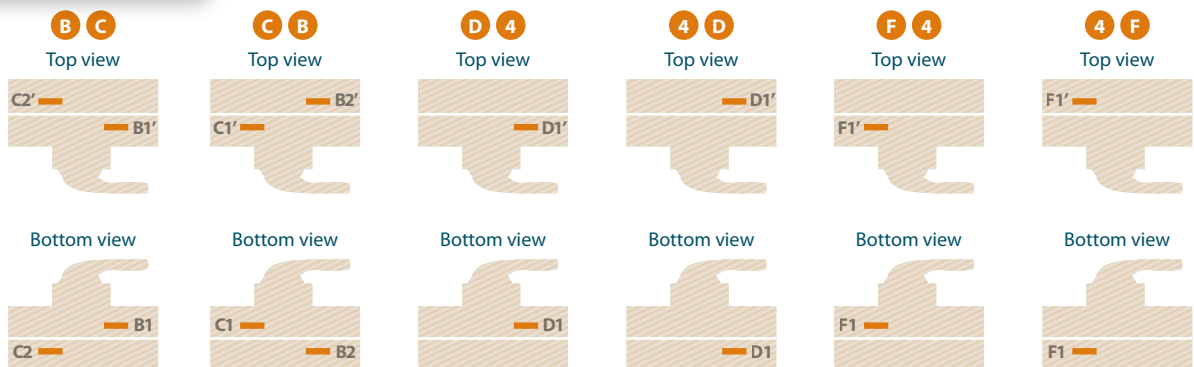
		160	200	250	315	400	
Rated thermal current in ambient at 40°C up to 80°C	I _{th}	A	160	200	250	315	400
Rated insulation voltage (DC)	U _i	V	1500	1500	1500	1500	1500
Rated impulse withstand voltage	U _{imp}	kV	12	12	12	12	12
Rated operational current DC21B	U _e I _e	1500Vdc A	160	200	250	315	400

*⁽¹⁾ Other voltages and / or utilization categories. Please consult
*⁽²⁾ Without limiting protective device (short-circuit maintained 50... 100 ms.)

DO NOT USE IN GROUNDED INSTALLATIONS

Short - circuit behaviour			
Rated short-circuit making capacity * ⁽²⁾	I _{cm}	kA (peak)	10
Rated short-time withstand current (1sec)	I _{cw}	kA rms	10
Mechanical features			
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		8000

Terminals location

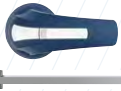


Accessories



» Direct handle

CODE DS-SI11



» External handle included shaft *(e1)

IP65
CODE DS-SA11



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

» Shafts

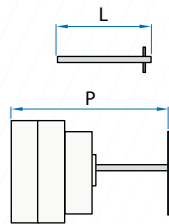
Standard shaft included *(e1)

L (mm)	P (mm)
227	179... 398,5

Shaft extensions

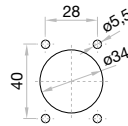
Type 1		
L (mm)	P (mm)	CODE
375	179... 546,5	DS-EP14

Type 2		
L (mm)	P (mm)	CODE
536	179... 707,5	DS-EP15

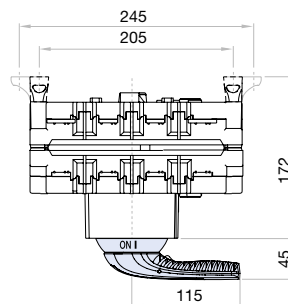
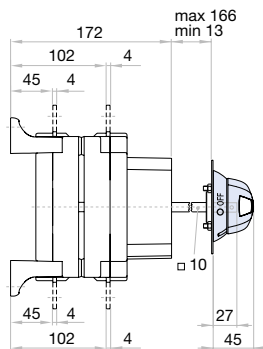
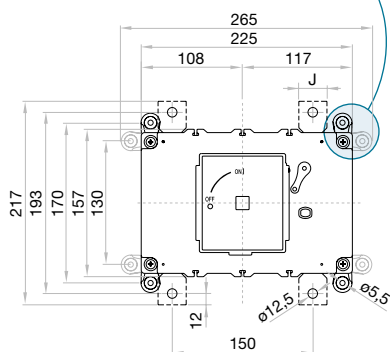
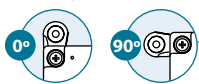


Dimensions (mm)

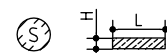
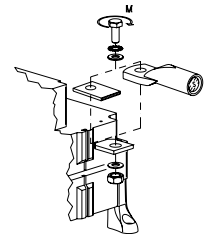
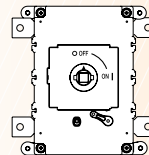
Door drilling for external handle



Standard fixing



For rotated mounting there are **S6R** references with front plate rotated (supply under request).



	J	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M ^{+5%} -10%	Nxm
160 A	25	160 A 185	8	25	M12	24	
200 A	25	200 A 185	8	25	M12	24	
250 A	25	250 A 185	8	25	M12	24	
315 A	25	315 A 185	8	25	M12	24	
400 A	30	400 A 240	8	30	M12	24	



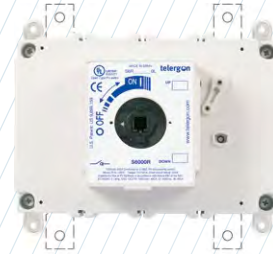
S6R DC UL

Switch - disconnecter for DC current 1P - 2P

Size 1

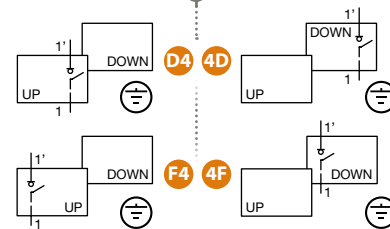
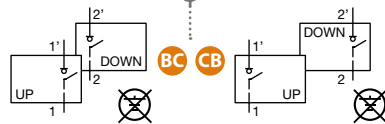
A 250|320|400

1500Vdc



- CODE - 2P**
- 250 A S6R0250 __ S00L
 - 320 A S6R0320 __ S00L
 - 400 A S6R0400 __ D00L

- CODE - 1P**
- 250 A S6R0250 __ S00L
 - 320 A S6R0320 __ S00L
 - 400 A S6R0400 __ D00L



Technical information



According to UL98 B

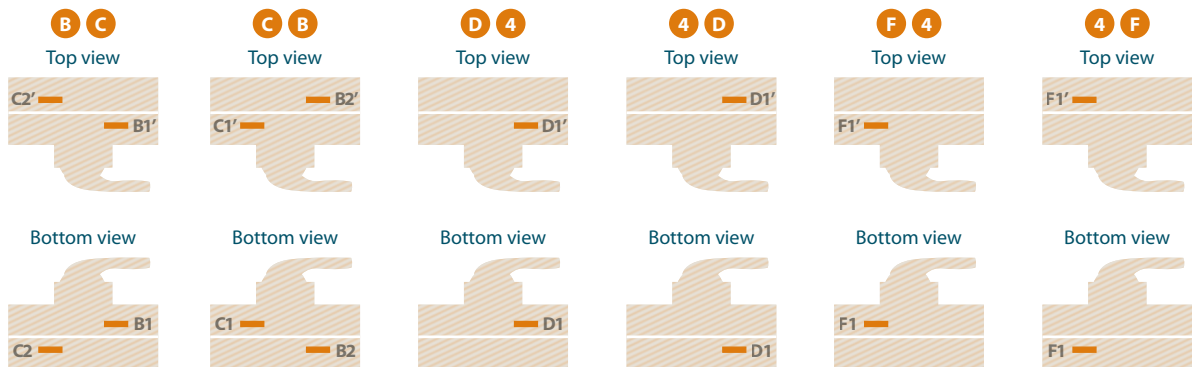
LISTED E333311	250 320 400		
	Rated thermal current I _{th} -20°C to 50°C	A	250
Rated operational current I _e 1500Vdc	A	250	320 400
Rated short-time withstand current (0,05 sec) I _{cw}	kA	10	10 10
Maximum weight	Consult according to code		
Wiring capacity			
Minimum busbar connection range	mm ²	2x 4x30	2x 4x32 2x 4x32

DO NOT USE IN GROUNDED INSTALLATIONS

Conforms to UL98B. Minus -20 to 50°C. PV disconnect switch. Location Category B
Suitable for use in PV Systems in accordance with Article 690 of the NEC

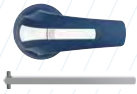
Patent USA
N.º 9,899,159 B2

Terminals location





Accessories



» External handle included shaft ^{*(e1)}
IP65
 CODE DS-SA11



» Auxiliary contacts

1NO+1NC CODE D5LAU01
 2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.

» Shafts

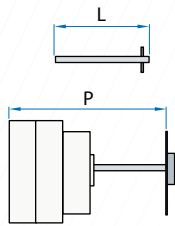
Standard shaft included ^{*(e1)}

L (mm)	P (mm)
227	185... 336

Shaft extensions

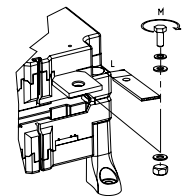
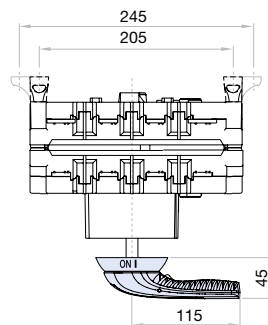
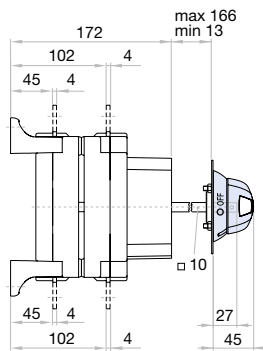
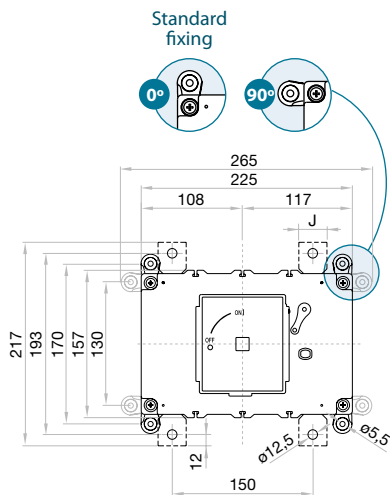
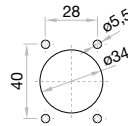
Type 1		
L (mm)	P (mm)	CODE
375	185... 486	DS-EP14

Type 2		
L (mm)	P (mm)	CODE
536	185... 647	DS-EP15



Dimensions (mm)

Door drilling for external handle



	J	H max (Cu)	L max (Cu)		T	M		
			mm	lb.inch		mm	lb.inch	Nxm
250 A	25	4	5/32	30	1-3/16	M12	24	212
320 A	30	4	5/32	32	1-1/4	M12	24	212
400 A								

DC Disconnectors - ISOLATION ONLY 1500 Vdc

DC disconnectors with high level of insulation and safety, available in different construction models, with a wide range of currents and variety of accessories



The DC Disconnectors in their different series are manufactured with high safety self-extinguishing materials, providing an excellent level of electrical insulation, low smoke emission and high resistance to electromechanical stress.



They comply with environmental requirements and undergo strict quality controls for a reliable product that meets the most demanding requirements.

They consist of a sandwich-type body containing self-cleaning blade type con-

tacts, to ensure long term, fault-free energy transmission and coated with silver alloy for long electromechanical life. The jump mechanism provides quick and independent switching due to the accumulation of elastic potential energy, which is transmitted at high speed to the contacts for arc extinction.

The DC Disconnectors S6 DC do not require external bridging links.

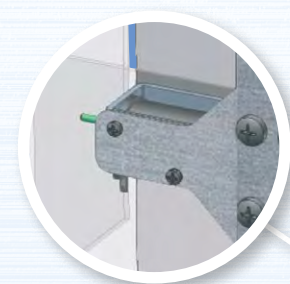
Functional and ergonomic handle

- > Good grip and excellent torque/resistance balance
- > Padlockable handle in **O OFF** position (up to three locks Ø 5-8 mm) 
- > Door interlock in **ON I** position
- > When lock  in **O OFF** position, door is interlocked
- > Possibility of unlocking the door in **ON I** position (with the use of a tool for maintenance operations). Handle interlock is restored when closing
- > Self-centering shaft for door handle



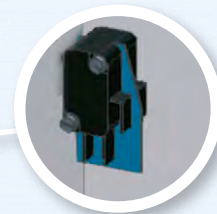
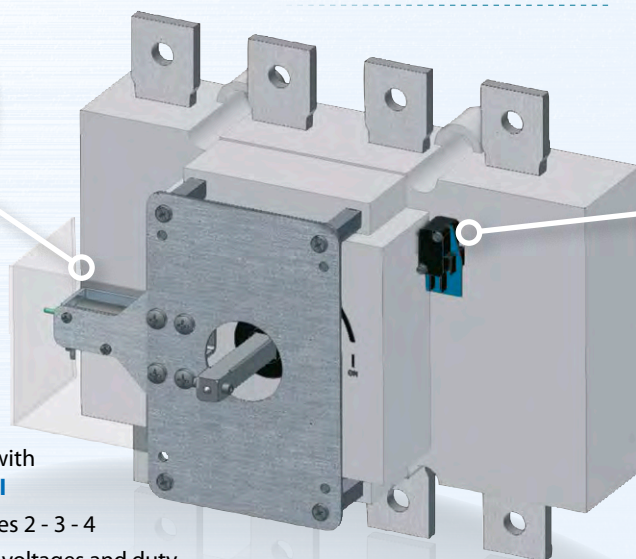
IP65

Safety devices



Locking by electric coil

- > Locked in the rest position with two options - **O** or **I | O** and **I**
- > For DC disconnectors **S5** Sizes 2 - 3 - 4
- > Coils available with different voltages and duty cycles according to requirements (please consult)



Signaling and control by auxiliary contacts

According to IEC 60947-1 section 7.1.7.2

- > 1NO + 1 NC (up to two micros can be installed)
- > In the closing operation, switching after the main contacts
- > In the opening operation, switching before the main contacts
- > Ie= 16 (4) A (250V)

According to:
IEC 60947- 1 & 3
UL98
RoHS



Testing and approvals:



Main advantages

Modular and flexible solution

Multi-circuit switching (from 1 up to 8 circuits can be isolated with only one handle), a great solution for recombiner and inverter applications

Single or dual polarity switching, for grounded or floating networks

Wide range of accessories, including additional safety devices like:

Auxiliary contacts (late close, early break)

Padlockable handle

Lock device by electric coil

Optimized dimensions and weight

To reduce the cost and the environmental impact

Easy to install

Time saving

Customised solutions

For specific OEM applications

Motorised control

For remote or automatic operation

Suitable for isolation

(disconnecter)
As per IEC 60947-3

The range

	Amp.	Size	Code	Diagram	Direct handle	External handle	Bridging links ^{*(p2)}
	1 Pole	160	1	S6-01601VS0P38	1V	DS-SI11T DS-SA14T	*
	1 Pole	200	1	S6-02001VS0P38	1V	DS-SI11T DS-SA14T	*
	1 Pole	250	1	S6-02501VS0P38	1V	DS-SI11T DS-SA14T	*
	1 Pole	400	1	S6-04001VD0P38	1V	DS-SI11T DS-SA14T	*
	1 Pole	630	2	S6-06301VS0P38	1V	DS-LI21T DS-LA24T	*
	1 Pole	800	1	S5-04003ZC0P38	3Z	DS-SI11T DS-SA14T	DS-PI1G
	1 Pole	1000	1	S5-04004ZC0P38	4Z	DS-SI11T DS-SA14T	DS-PI1H
	1 Pole	1600	2	S5-08004ZC0P38	4Z	DS-LI21T DS-LA24T	DS-PI2H
	1 Pole	2000	3	S5-12504ZC0P38	4Z	DS-LI31T DS-LA33T	DS-PI3H
	Amp.	Size	Code	Diagram	Direct handle	External handle	Bridging links ^{*(p2)}
	2 Poles	160	1	S6-01602LS0P38	2L	DS-SI11T DS-SA14T	*
	2 Poles	200	1	S6-02002LS0P38	2L	DS-SI11T DS-SA14T	*
	2 Poles	250	1	S6-02502LS0P38	2L	DS-SI11T DS-SA14T	*
	2 Poles	400	1	S6-04002LD0P38	2L	DS-SI11T DS-SA14T	*
	2 Poles	630	2	S6-06302LS0P38	2L	DS-LI21T DS-LA24T	*
	2 Poles	800	2	S6-08002LD0P38	2L	DS-LI21T DS-LA24T	*
	2 Poles	1600	3	S5-12504ZC0P38	2Z	DS-LI31T DS-LA33T	DS-PI3L x 2
	2 Poles	2500	4	S5-16004ZS0P38	2Z	DS-LI41T DS-LA43T	DS-PI4K x 2
	2 Poles	3150	4	S5-18004ZS0P38	2Z	DS-LI41T DS-LA43T	DS-PI4K x 2

^{*(p2)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.



S5 DC
S6 DC

Disconnectors 1 pole (160 - 2000A) (O-I) ISOLATION ONLY




Manual handle 
ISOLATION ONLY

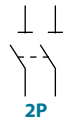
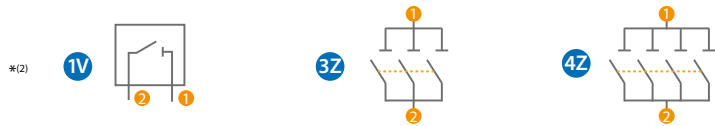


S5 DC
ISOLATION ONLY



S6 DC
ISOLATION ONLY

1P *(p1)	Rated operational voltage	Rated operational current le (A)	Size	Connection	Unipolar (1P) *(p1)		External*(1)	Direct
	Ue				Code	Diagram	Code	Code
1500V DC20A	160 200 250 400	1	1		S6-01601VS0P38	1V	DS-SA11T	DS-SI11T
					S6-02001VS0P38	1V		
					S6-02501VS0P38	1V		
					S6-04001VD0P38	1V		
	800 1000	1	1		S5-04003ZC0P38	3Z	DS-SA11T	DS-SI11T
					S5-04004ZC0P38	4Z		
630 1600 2000	2	2		S6-06301VS0P38	1V	DS-LA21T	DS-LI21T	
				S5-08004ZC0P38	4Z			
				S5-12504ZC0P38	4Z			DS-LA31T



S5 DC
S6 DC

Disconnectors 2 poles (160 - 3150A) (O-I) ISOLATION ONLY





Manual handle 
ISOLATION ONLY

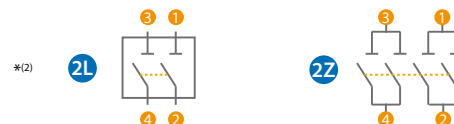


S5 DC
ISOLATION ONLY



S6 DC
ISOLATION ONLY


2P *(p1)	Rated operational voltage	Rated operational current le (A)	Size	Connection	Bipolar (2P) *(p1)		External*(1)	Direct
	Ue				Code	Diagram	Code	Code
1500V DC20A	160 200 250 400	1	1		S6-01602LS0P38	2L	DS-SA11T	DS-SI11T
					S6-02002LS0P38	2L		
					S6-02502LS0P38	2L		
					S6-04002LD0P38	2L		
	630 800	2	2		S6-06302LS0P38	2L	DS-LA21T	DS-LI21T
					S6-08002LD0P38	2L		
1600 3150	3	3		S5-12504ZC0P38	2Z	DS-LA31T	DS-LI31T	
				S5-16004ZS0P38	2Z			
					2Z	DS-LA41T	DS-LI41T	



*⁽¹⁾ Padlockable handle in OFF 0 position. Possibility of unlocking the door in ON I position (with the use of a tool). Door interlock by a padlock in OFF 0 position.

*⁽²⁾ Other configurations are available, please consult.

*^(p1) To comply with the operation and electrical features, the bridging links must be assembled to the switch. See the full details pages of this catalogue, to choose the configuration needed and the possibility or not of grounding. If you have any doubt about this, please do not hesitate to consult us.

 Please indicate in your order the switch code and the handle code, as these both products are managed separately. A standard shaft is included with the handle.



Shaft extensions ^{*(3)}				Bridging links ^{*(p1)}	Auxiliary contacts ^{*(4)}		Phase barriers		Spacers (4 units)	Terminal protection ^{*(5)}	Terminal shrouds ^{*(5)}	Full details in page
Size	□	Type 1 & 2		Code	1NO+1NC	2NO+2NC	1 unit	2 units	Code	Code	Code	
		L	Code		Code	Code	Code					
1	10	375	DS-EP14	-	D5LAU01	D5LAU02	DR-SF11	DR-SF12	DR-EL11	-	DR-CU11	254
		536	DS-EP15									254
1	10	375	DS-EP14	DS-PI1G	D5LAU01	D5LAU02	-	-	-	DS-CU12	-	258
		536	DS-EP15	DS-PI1H								258
2	14	345	DS-EP23	-	D5LAU01	D5LAU02	DR-SF21	DR-SF22	DR-EL21	-	DR-CU21	256
		535	DS-EP24	DS-PI2H								260
3	14	345	DS-EP23	DS-PI3H	D5LAU01	D5LAU02	-	-	-	-	-	262
		535	DS-EP24									262



Shaft extensions ^{*(3)}				Bridging links ^{*(p1)}	Auxiliary contacts ^{*(4)}		Phase barriers		Spacers (4 units)	Terminal shrouds ^{*(5)}	Full details in page
Size	□	Type 1 & 2		Code	1NO+1NC	2NO+2NC	1 unit	2 units	Code	Code	
		L	Code		Code	Code	Code				
1	10	375	DS-EP14	-	D5LAU01	D5LAU02	DR-SF11	DR-SF12	DR-EL11	DR-CU11	254
		536	DS-EP15								254
2	14	345	DS-EP23	-	D5LAU01	D5LAU02	DR-SF21	DR-SF22	DR-EL21	DR-CU21	256
		535	DS-EP24								256
3	14	345	DS-EP23	DS-PI3Lx2	D5LAU01	D5LAU02	-	-	-	-	262
		535	DS-EP24								262
4	14	485	DS-EP44	DS-PI4Kx2	D5LAU01	D5LAU02	-	-	-	-	264
		635	DS-EP45								264

^{*(3)} A standard shaft is included with the external handle.

^{*(4)} To be used as signalling or control contacts - I_e = 16A (resistive loads) 4A (inductive loads) at 250 Vac. Whilst closing, it switches after the main contacts. Whilst opening, it switches before the main contacts.

^{*(5)} One unit for input or output.

S6 DC ISOLATION ONLY DC Disconnectors

1P - 2P

Size 1

A 160|200|250|400



1500Vdc



1V

160A	CODE-1P	S6-01601VS0P38
200A		S6-02001VS0P38
250A		S6-02501VS0P38
400A		S6-04001VD0P38

2L

160A	CODE-2P	S6-01602LS0P38
200A		S6-02002LS0P38
250A		S6-02502LS0P38
400A		S6-04002LD0P38



Technical information



consult for
UL codes



**DO NOT OPERATE
UNDER LOAD**

According to IEC 60947-1
IEC 60947-3

			160	200	250	400	
Rated insulation voltage DC	Ui	V	1500	1500	1500	1500	
Rated impulse withstand voltage	Uimp	kV	12	12	12	12	
Rated operational current DC20A	Ie	Ue 1500Vdc	A	160	200	250	400

			160	200	250	400
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		8000	8000	8000	5000
Maximum weight 1P		Kg	1,22	1,22	1,22	1,22
Maximum weight 2P		Kg	1,35	1,35	1,35	1,35

Connection diagram

Connection diagram



Accessories



» Direct handle

CODE DS-SI11T



» External handle included shaft^{*(e1)}

IP65
CODE DS-SA11T



» External handle without shaft

IP65
CODE DS-SA14T



» Terminal shrouds

CODE DR-CU11 (1 unit)



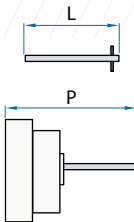
» Phase barriers

CODE DR-SF11 (1 unit)
CODE DR-SF12 (2 units)



» Spacers

CODE DR-EL11 (4 units)



» Shafts

Standard shaft included^{*(e1)}

L (mm)	P (mm)
227	103... 256

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
375	103... 415	DS-EP14

Type 2		
L (mm)	P (mm)	CODE
536	103... 576	DS-EP15



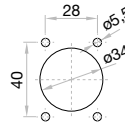
» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

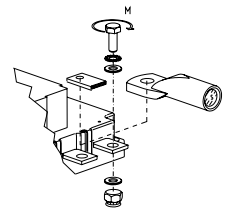
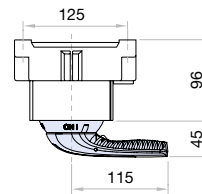
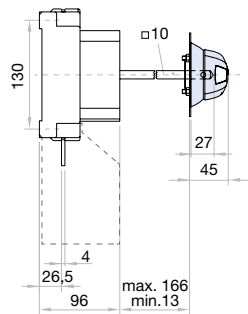
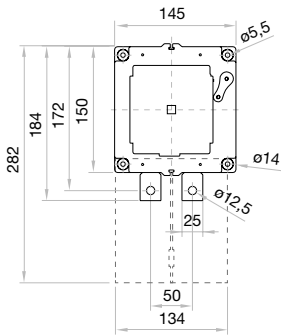
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

Dimensions (mm)

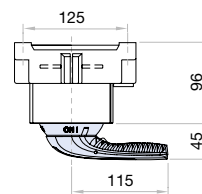
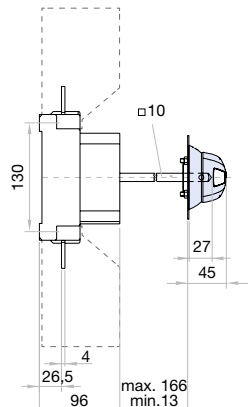
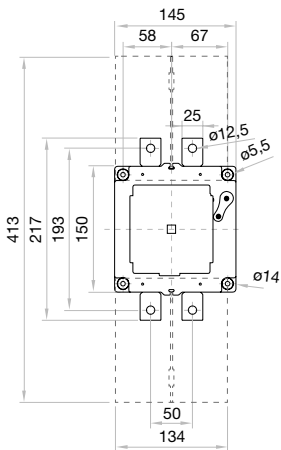
Door drilling for external handle



1V



2L



S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T		
			M	Nxm	
160 A	185	8	25	M12	24
200 A	185	8	25	M12	24
250 A	185	8	25	M12	24
400 A	240 ^{*(e1)}	8	30	M12	24

^{*(e1)} Using phase barriers DR-SF__ to maintain the required clearance.

S6 DC ISOLATION ONLY DC Disconnectors

1P - 2P


Size 2

A 630|800




1500Vdc



1V 630A
CODE-1P 
S6-06301VS0P38



2L 630A
800A
CODE-2P 
S6-06302LS0P38
S6-08002LD0P38



Technical information



consult for
UL codes



**DO NOT OPERATE
UNDER LOAD**

According to IEC 60947-1
IEC 60947-3

			630	800
Rated insulation voltage DC	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12
Rated operational current DC20A	le	Ue 1500Vdc	A 630	A 800

			630	800
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		5000	3000
Maximum weight 1P	Kg		3,40	3,40
Maximum weight 2P	Kg		3,80	3,80

Connection diagram

Connection diagram



Accessories



» Direct handle

CODE DS-LI21T



» External handle included shaft ^{*(e1)}

IP65

CODE DS-LA21T



» External handle without shaft

IP65

CODE DS-LA24T



» Terminal shrouds

CODE DR-CU21 (1 unit)



» Phase barriers

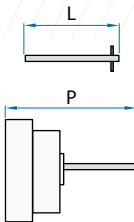
CODE DR-SF21 (1 unit)

CODE DR-SF22 (2 units)



» Spacers

CODE DR-EL21 (4 units)



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
195	134... 240

Shaft extensions

Type 1

L (mm)	P (mm)	CODE
345	134... 400	DS-EP23

Type 2

L (mm)	P (mm)	CODE
535	134... 560	DS-EP24



» Auxiliary contacts

1NO+1NC CODE D5LAU01

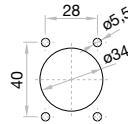
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

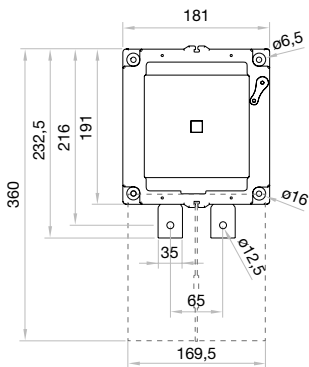
4 A (inductive loads) at 250 Vac.

Dimensions (mm)

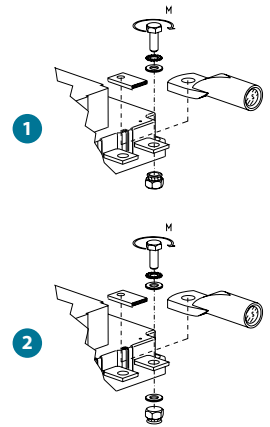
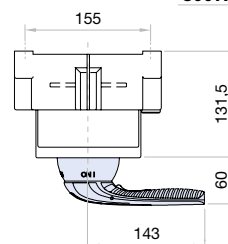
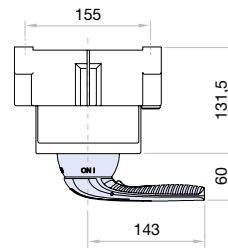
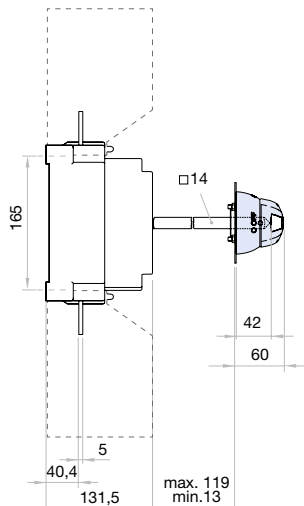
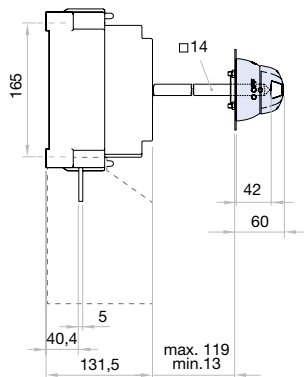
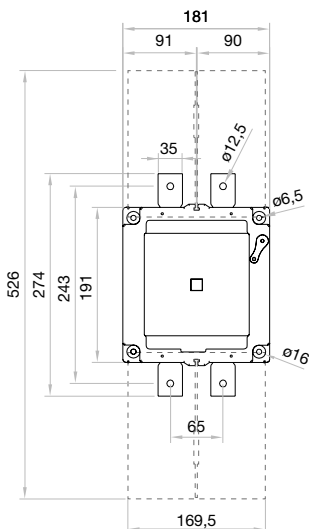
Door drilling for external handle



1V



2L



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
630 A	2x185	2x6	35	M12	24
800 A	2x240	2x7	35	M12	24


DC Disconnectors

1P

Size 1
A 800|1000

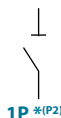
 1500Vdc



3Z CODE-800A  S5-04003ZCOP38



4Z CODE-1000A  S5-04004ZCOP38



Technical information



According to IEC 60947-1
IEC 60947-3

			800	1000	
Rated insulation voltage DC	U _i	V	1500	1500	
Rated impulse withstand voltage	U _{imp}	kV	8	8	
Rated operational current DC20A	I _e	U _e 1500 Vdc	A	800	1000

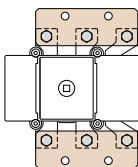
			800	1000
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		3000	3000
Maximum weight 3Z (without bridging links)	Kg		1,9	1,9
Maximum weight 4Z (without bridging links)	Kg		2,1	2,1

Connection diagram

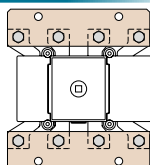
Connection diagram

Bridging links ^{*(P2)}

3Z



4Z



Accessories



» Direct handle

CODE DS-SI11T



» External handle included shaft^{*(e1)}

IP65
CODE DS-SA11T



» External handle without shaft

IP65
CODE DS-SA14T



» Auxiliary contacts

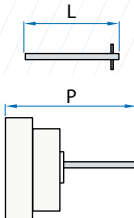
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal protection

CODE DS-CU12
(1 unit for input or output)



» Shafts

Standard shaft included^{*(e1)}

L (mm)	P (mm)
227	103... 256

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
375	103... 415	DS-EP14

Type 2		
L (mm)	P (mm)	CODE
536	103... 576	DS-EP15



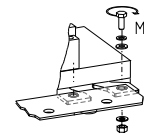
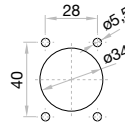
» Bridging links^{*(P2)}

- 37 800A CODE DS-PI1G (2 units)
- 47 1000A CODE DS-PI1H (2 units)

^{*(P2)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.

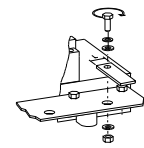
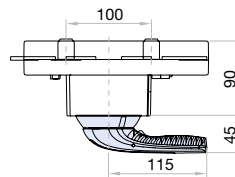
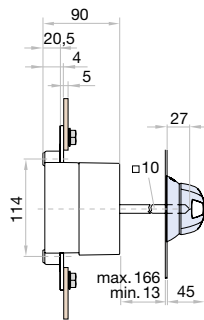
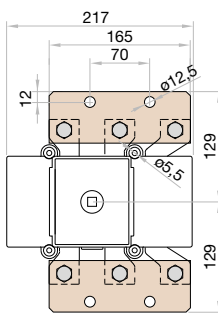
Dimensions (mm)

Door drilling for external handle



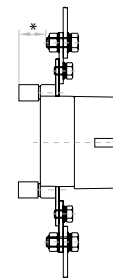
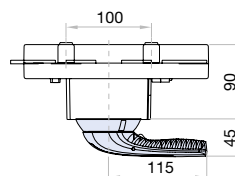
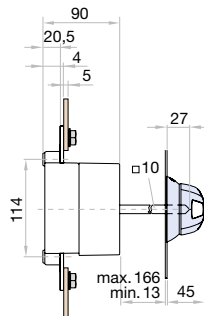
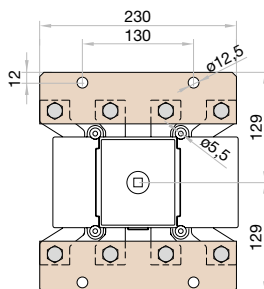
T	M
Nxm	Nxm
M10	24

37



	H max (Cu) mm	L max (Cu) mm
800A	2x5	50
1000A	2x5	60


47



* Please keep 14 mm of clearance if assemble plate is metallic

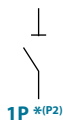
DC Disconnectors

1P

Size 2
A 1600

1500Vdc



CODE - 1600A 
S5-08004ZC0P38



Technical information



 **DO NOT OPERATE UNDER LOAD**

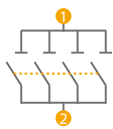
According to IEC 60947-1
 IEC 60947-3

			1600
Rated insulation voltage DC	Ui	V	1500
Rated impulse withstand voltage	Uimp	kV	12
Rated operational current DC20A	Ie	Ue 1500 Vdc A	1600

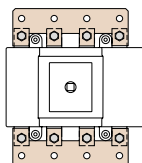
		1600
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000
Maximum weight (without bridging links)	Kg	4,5

Connection diagram

Connection diagram



Bridging links *(P2)



Accessories



» Direct handle

CODE DS-LI21T



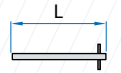
» External handle included shaft^{*(e1)}

IP65
CODE DS-LA21T



» External handle without shaft

IP65
CODE DS-LA24T



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
195	134... 240

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
345	134... 400	DS-EP23

Type 2		
L (mm)	P (mm)	CODE
535	134... 560	DS-EP24



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal protection

CODE DS-CU22
(1 unit for input or output)



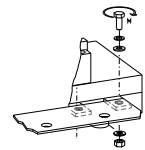
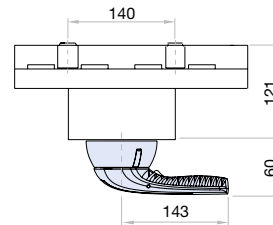
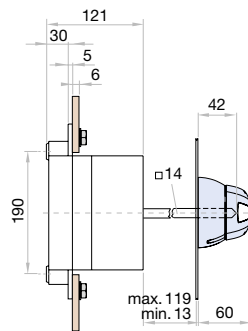
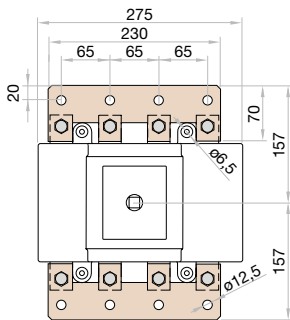
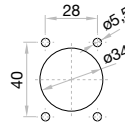
» Bridging links^{*(P2)}

CODE DS-PI2H (2 units)

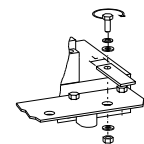
^{*(P2)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.

Dimensions (mm)

Door drilling for external handle



	M
M10	Nxm 24



	L
H max (Cu)	L max (Cu)
2x5	50

series
S5 DC

S5 DC ISOLATION ONLY DC Disconnectors

1P - 2P

Size 3

A 2200|2500



1500 Vdc



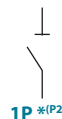
CODE-2P-2200A **S5-12504ZCOP38**

2Z



CODE-1P-2500A **S5-12504ZCOP38**

4Z



Technical information



DO NOT OPERATE UNDER LOAD

According to IEC 60947-1
IEC 60947-3

		2200	2500		
Rated insulation voltage DC	Ui	V	1500	1500	
Rated impulse withstand voltage	Uimp	kV	12	12	
Rated operational current DC20A	Ie	Ue 1500 Vdc	A	2200	2500

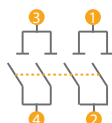
		2200	2500
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000	3000
Maximum weight (without bridging links)	Kg	7,6	7,6

Connection diagram

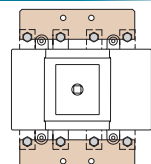
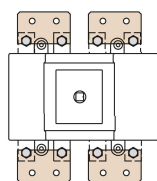
Connection diagram

Bridging links *(P2)

2Z



4Z



Accessories



» Direct handle

CODE DS-LI31T



» External handle included shaft ^{*(e1)}

IP65
CODE DS-LA31T



» External handle without shaft

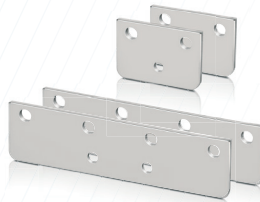
IP65
CODE DS-LA33T



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

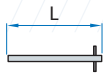
le = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Bridging links ^{*(P2)}

2Z 2200A CODE x2 DS-PI3L (2 units)
4Z 2500A CODE DS-PI3H (2 units)

^{*(P2)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
186	145... 242

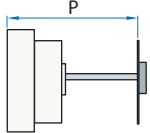
Shaft extensions

Type 1

L (mm)	P (mm)	CODE
345	145... 411	DS-EP23

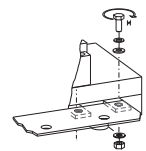
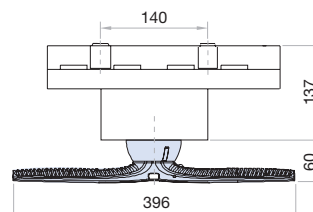
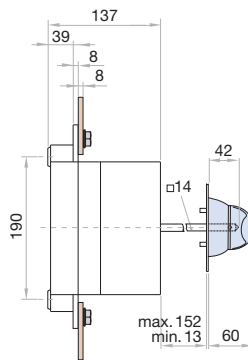
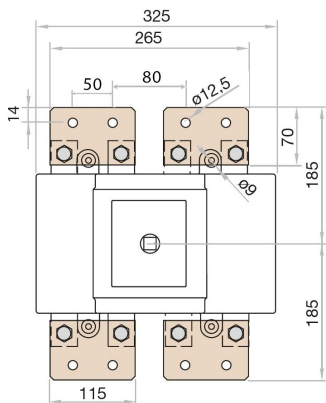
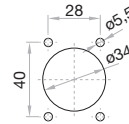
Type 2

L (mm)	P (mm)	CODE
535	145... 600	DS-EP24

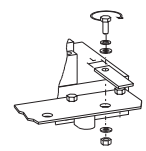


Dimensions (mm)

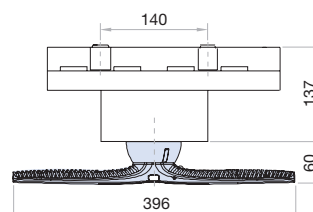
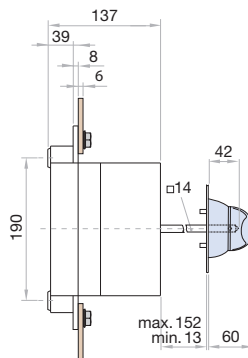
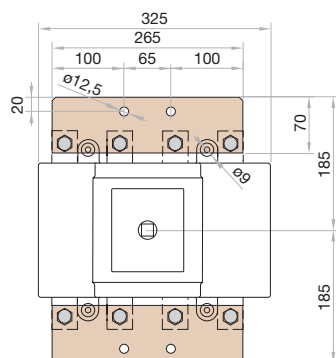
Door drilling for external handle



M	Nxm
M14	45



	H max (Cu) mm	L max (Cu) mm
2200A	2x10	100
2500A	3x10	100




DC Disconnectors

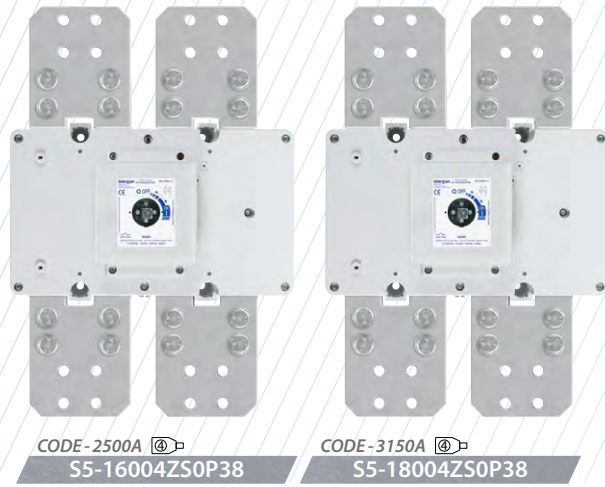
2P

Size 4

A 2500 3150



1500Vdc



Technical information



 **DO NOT OPERATE UNDER LOAD**

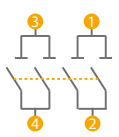
According to IEC 60947-1
IEC 60947-3

			2500	3150
Rated insulation voltage DC	U _i	V	1500	1500
Rated impulse withstand voltage	U _{imp}	kV	12	12
Rated operational current DC20A	I _e	U _e		
		1500 Vdc	A	2500

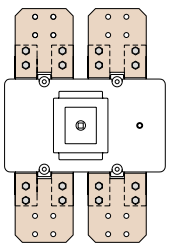
		2500	3150
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000	2000
Maximum weight (without bridging links)	Kg	20,8	20,8

Connection diagram

Connection diagram



Bridging links ^{*(P2)}



Accessories



» Direct handle

CODE DS-LI41T



» External handle included shaft^{*(e1)}

IP65
CODE DS-LA41T



» External handle without shaft

IP65
CODE DS-LA43T



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

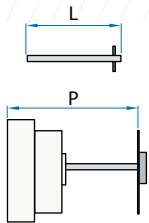
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Bridging links^{*(P2)}

CODE x2 DS-PI4K (2 units)

^{*(P2)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
239	235... 400

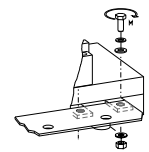
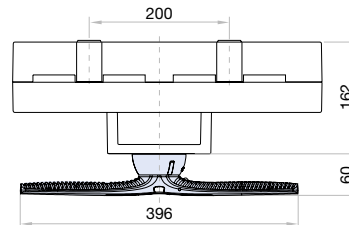
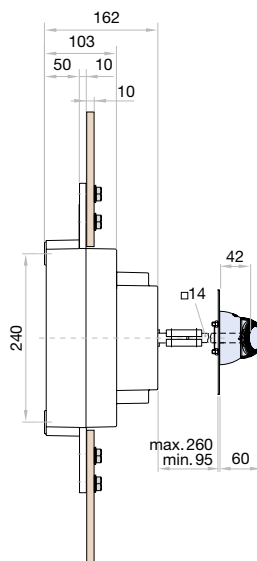
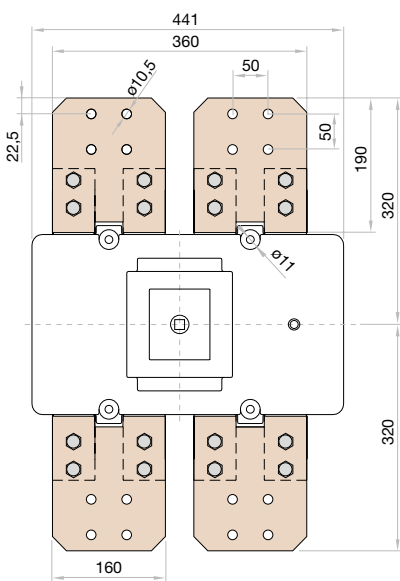
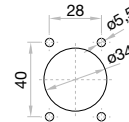
Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
485	235... 686	DS-EP44

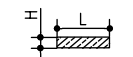
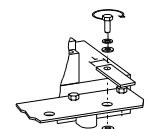
Type 2		
L (mm)	P (mm)	CODE
635	235... 836	DS-EP45

Dimensions (mm)

Door drilling for external handle



	M
	Nxm
M14	55



	H max (Cu) mm	L max (Cu) mm
2500A	2x5	100
3150A	3x5	100

REFERENCE - PAGE INDEX

Code	Page	Code	Page	Code	Page	Code	Page	Code	Page
40110028	31	CCP06303NS0	146/158	CIS25C02003PR	68/110	CTR2CC05003NS	148/184	CTRFC25003NPAP	148/190
40110029	31	CCP06303PS0	146/158	CIS25C02503NR	68/110	CTR2CC05003PS	148/184	CTRFC25003PPAP	148/190
40110030	30	CCP08003NS0	146/158	CIS25C02503PR	68/110	CTR2CC06303NS	148/184	CTRFC31503NPAP	148/190
40110031	30	CCP08003PS0	146/158	CIS25C03153NR	68/110	CTR2CC06303PS	148/184	CTRFC31503PPAP	148/190
40111002	30	CCP10003NS0	146/160	CIS25C03153PR	68/110	CTR2CC08003NS	148/184	D5LAN01	181
40111003	30	CCP10003PS0	146/160	CIS25C04003NR	68/112	CTR2CC08003PS	148/184	D5LAU01	65/67/69/71 73/75/77/79 81/85/89/91 103/105/107 109/111/113 115/117/123 129/131/133 139/141/143 147/149/153 159/161/179 183/185/187 211/213/217 219/221/223 225/231/233 235/237/239 241/243/245 247/249/253 255/257/259 261/263/265
40111032	31	CCP12503NS0	146/160	CIS25C04003PR	68/112	CTR2CC10003NS	148/186	D5LAU02	65/67/69/71 73/75/77/79 81/85/89/91 103/105/107 109/111/113 115/117/123 129/131/133 139/141/143 147/149/153 157/159/161 179/183/185 187/211/213 217/219/221 223/225/231 233/235/237 239/241/243 245/247/249 253/255/257 259/261/263 265
40111033	31	CCP12503PS0	146/160	CIS25C06303NR	68/112	CTR2CC10003PS	148/186	D5LCB11	147/157/169
40111034	30	CEC00633NB0	146/150	CIS25C06303PR	68/112	CTR2CC12503NS	148/186	D5LCB21	147/149/159 171/185
40111035	30	CEC00633NS0	146/150	CIS25C08003NR	68/114	CTR2CC12503PS	148/186	D5LCB31	147/149/161 173/187
40112026	31	CEC00633PB0	146/150	CIS25C08003PR	68/114	CTR2EC00633NS	148/176	D5LCB41	147/149/163 165/175/189 191
40112028	30	CEC00633PS0	146/150	CIS25C10003NS	68/116	CTR2EC00633PS	148/176	D5LCBB1	147/149/153 155/167/179 181/183
40112029	30	CEC00803NB0	146/150	CIS25C10003PS	68/116	CTR2EC00803NS	148/176	D5LCEB1	147/149/153 155/179/181 183
40113001	30	CEC00803NS0	146/150	CIS25C12503NS	68/116	CTR2EC00803PS	148/176	D5LCF11	147/149/157
40113002	30	CEC00803PB0	146/150	CIS25C12503PS	68/116	CTR2EC01003NS	148/176	D5LCF21	147/149/159 171/185
40113007	30	CEC00803PS0	146/150	CIS25C16003NS	68/116	CTR2EC01003PS	148/176	D5LCF31	147/149/161 173/187
40113008	30	CEC01003NS0	146/150	CIS25C16003PS	68/116	CTR2EC01253NS	148/176	D5LCF41	147/149/163/165/175/189 191
40113023	30	CEC01003PS0	146/150	CIS25D00403NB	68/106	CTR2EC01253PS	148/176	D5LLI12	146/169
40113024	30	CEC01253NS0	146/150	CIS25D00403PB	68/106	CTR2EC01253NS	148/180	D5LLI22	146/171
40140045	31	CEC01253PS0	146/150	CIS25D00633NB	68/106	CTR2FC01253PS	148/180	D5LLI32	146/163/173 175
40140061	31	CIF21C00633NBDB	122/134	CIS25D00633PB	68/106	CTR2FC01603NS	148/180	D5LPC03	147/149/155 181
40140203	31	CIF21C00633PBDB	122/134	CIS25D00803NB	68/106	CTR2FC01603PS	148/180	D5LPC32	65/79
40141039	31	CIF21C01003NBDB	122/134	CIS25D00803PB	68/106	CTR2FC02003NS	148/180	D5LPC41	65/83
40141053	31	CIF21C01003PBDB	122/134	CIS25D01253NB	68	CTR2FC02003PS	148/180	D5LPC42	65/83/149 163/189
40141188	31	CIF21C01253NBDB	122/136	CIS25D01253PB	68	CTR2FC16003NS	148/188	D5LPC45	211/213/233
40142020	31	CIF21C01253NTDB	122/136	CIS25D01603NB	68	CTR2FC16003PS	148/188	D5LPCB1	147/149/153 179
40142025	31	CIF21C01253PBDB	122/136	CIS25D01603PB	68	CTR2FC18003NS	148/188	D5LSI01	146/151/153 155
40142028	31	CIF21C01253PTDB	122/136	CIS25D02003NR	68/110	CTR2FC18003PS	148/188		
40142095	31	CIF21C01603NBDB	122/136	CIS25D02003PR	68/110	CTR2FC20003ND	148/188		
40143020	31	CIF21C01603NTDB	122/136	CIS25D02503NR	68/110	CTR2FC20003NP	148/190		
40143028	31	CIF21C01603PBDB	122/136	CIS25D02503PR	68/110	CTR2FC20003PD	148/188		
40143084	31	CIF21C01603PTDB	122/136	CIS25D03153NR	68/110	CTR2FC20003PP	148/190		
40143086	31	CIF22C01603NSD0	122/138	CIS25D03153PR	68/110	CTR2FC25003NP	148/190		
40143088	31	CIF22C01603PSD0	122/138	CIS25D04003NR	68/112	CTR2FC25003PP	148/190		
9-KN100145	30	CIF22C02503NSD1	122	CIS25D04003PR	68/112	CTR2FC31503NP	148/190		
9-KN100146	30	CIF22C02503PSD1	122	CIS25D06303NR	68/112	CTR2FC31503PP	148/190		
CCF02003NS0	146/156/195 202	CIF22C04003NSD2	122	CIS25D06303PR	68/112	CTR2LC00633NB	148/178		
CCF02003PS0	146/156/195 202	CIF22C04003PSD2	122	CIS25D08003NR	68/114	CTR2LC00633PB	148/178		
CCF02503NS0	146/156/195 202	CIF22C06303NSD3	122/142	CIS25D08003PR	68/114	CTR2LC00803NB	148/178		
CCF02503PS0	146/156/195 202	CIF22C06303PSD3	122/142	CIS25D10003NS	68/116	CTR2LC00803PB	148/178		
CCF03153NS0	146/156/195 202	CIF22C08003NSD3	122/142	CIS25D10003PS	68/116	CTR2LC00803PS	148/182		
CCF03153PS0	146/156/195 202	CIF22C08003PSD3	122/142	CIS25D12503NS	68/116	CTR2LC00803SAN	148/182		
CCF04003NS0	146/156/195 202	CIS25A00403NB	68/106	CIS25D12503PS	68/116	CTRCCC02003PSAN	148/182		
CCF04003PS0	146/156/195 202	CIS25A00403PB	68/106	CIS25D16003NS	68/116	CTRCCC02503NSAN	148/182		
CCF05003NS0	146/158/195 202/204	CIS25A00633NB	68/106	CIS25D16003PS	68/116	CTRCCC02503NSBJ	148/182		
CCF05003PS0	146/158/195 202/204	CIS25A00633PB	68/106	CIS25F00403NB	68/106	CTRCCC02503PSAN	148/182		
CCF06303NS0	146/158/195 202/204	CIS25A00803NB	68/106	CIS25F00403PB	68/106	CTRCCC03153NSAO	148/182		
CCF06303PS0	146/158/195 202/204	CIS25A00803PB	68/106	CIS25F00403PS	68/106	CTRCCC03153PSAO	148/182		
CCF08003NS0	146/158/195 202/204	CIS25A01253NB	68	CIS25F00803NB	68/106	CTRCCC04003NSAO	148/182		
CCF08003PS0	146/158/195 202/204	CIS25A01253PB	68	CIS25F00803PB	68/106	CTRCCC04003NSBK	148/182		
CCF10003NS0	146/160/195 204	CIS25A01603NB	68	CIS25F00803PS	68/106	CTRCCC05003NSAO	148/184		
CCF10003PS0	146/160/195 204	CIS25A01603PB	68	CIS25F01253NB	68	CTRCCC05003PSAO	148/184		
CCF12503NS0	146/160/195 204	CIS25A02003NR	68/110	CIS25F01253PB	68	CTRCCC06303NSAO	148/184		
CCF12503PS0	146/160/195 204	CIS25A02003PR	68/110	CIS25F01603NB	68	CTRCCC06303NSBK	148/184		
CCP02003NS0	146/156	CIS25A02503NR	68/110	CIS25F01603PB	68	CTRCCC06303PSAO	148/184		
CCP02003PS0	146/156	CIS25A02503PR	68/110	CIS25F02003NR	68/110	CTRCCC08003NSAO	148/184		
CCP02503NS0	146/156	CIS25A03153NR	68/110	CIS25F02003PR	68/110	CTRCCC8003NSAO	148/184		
CCP02503PS0	146/156	CIS25A03153PR	68/110	CIS25F02503NR	68/110	CTRCCC10003NSAP	148/186		
CCP03153NS0	146/156	CIS25A04003NR	68/112	CIS25F02503PR	68/110	CTRCCC10003NSBK	148/186		
CCP03153PS0	146/156	CIS25A04003PR	68/112	CIS25F03153NR	68/110	CTRCCC10003PSAP	148/186		
CCP04003NS0	146/156	CIS25A06303NR	68/112	CIS25F03153PR	68/110	CTRCCC12503NSAP	148/186		
CCP04003PS0	146/156	CIS25A06303PR	68/112	CIS25F04003NR	68/112	CTRCCC12503NSBK	148/186		
CCP05003NS0	146/158	CIS25A08003NR	68/114	CIS25F04003PR	68/112	CTRCCC12503PSAP	148/186		
CCP05003PS0	146/158	CIS25A08003PR	68/114	CIS25F06303NR	68/112	CTRCCF01253NSAN	148/180		
CCP05003NS0	146/158	CIS25A10003NS	68/116	CIS25F06303PR	68/112	CTRCCF01253NSBJ	148/180		
CCP05003PS0	146/158	CIS25A10003PB	68/116	CIS25F08003NR	68/114	CTRCCF01253PSAN	148/180		
		CIS25A12503NS	68/116	CIS25F08003PR	68/114	CTRCCF01603NSAN	148/180		
		CIS25A12503PS	68/116	CIS25F10003NS	68/116	CTRCCF01603PSAN	148/180		
		CIS25A16003NS	68/116	CIS25F10003PS	68/116	CTRCCF02003NSAN	148/180		
		CIS25A16003PS	68/116	CIS25F12503NS	68/116	CTRCCF02003NSBJ	148/180		
		CIS25C00403NB	68/106	CIS25F12503PS	68/116	CTRCCF02003PSAN	148/180		
		CIS25C00403PB	68/106	CIS25F16003NS	68/116	CTRCCF16003NSAP	148/188		
		CIS25C00633NB	68/106	CIS25F16003PS	68/116	CTRCCF16003NSBK	148/188		
		CIS25C00633PB	68/106	CTR2CC02003NS	148/182	CTRCCF16003PSAP	148/188		
		CIS25C00803NB	68/106	CTR2CC02003PS	148/182	CTRCCF18003NSAP	148/188		
		CIS25C01253PB	68	CTR2CC02503NS	148/182	CTRCCF18003PSAP	148/188		
		CIS25C01253PS	68	CTR2CC02503PS	148/182	CTRCCF20003NDAP	148/188		
		CIS25C01603NB	68	CTR2CC03153NS	148/182	CTRCCF20003NDBK	148/188		
		CIS25C01603PB	68	CTR2CC03153PS	148/182	CTRCCF20003NPAP	148/190		
		CIS25C02003NR	68/110	CTR2CC04003NS	148/182	CTRCCF20003PDAP	148/188		
				CTR2CC04003PS	148/182	CTRCCF20003PPAP	148/190		

You will find references of accessories that being common, they may appear on several pages of this catalogue.

Code	Page	Code	Page	Code	Page	Code	Page	Code	Page
D5LSI02	146/167	DR-CU13	65/89/211 235/237/253	DS-CF41	65/67/69 81/83/85 99/101/117 213	DS-EP24	65/67/77 79/105/146 159/161/211 241/253/257 261/263	DS-PI1H	253/259
DCCCU11	147/149/157 183	DR-CU21	65/91/211 239/241/253 257	DS-CS41	65/87	DS-EP44	65/79/81 211/253/265	DS-PI2I	211/221
DCCCU12	147/149/157 183	DR-CU22	65/91/211 239/241/253 257	DS-CU01	65/73/93 147/155/167 181/211/217	DS-EP45	65/79/81 211/253/265	DS-PI230L	213/227
DCCCU21	147/149/159 185	DR-CU23	65/91/211 239/241	DS-CU02	65/67/147 149	DS-LA01	66/93	DS-PI2D	211/213/221 227
DCCCU22	147/149/159 185	DR-EL11	65/89/211 235/237/253 255	DS-CU03	65/67/73 93/147/149 155/167/181	DS-LA101	83/101	DS-PI2H	253/261
DCCCU31	147/149/161 187	DR-EL21	65/91/211 239/241/253 257	DS-CU04	65/67/73 93/147/149 155/167/181	DS-LA102	83/101	DS-PI3I	211/223
DCCCU32	147/149	DR-SF11	65/89/211 235/237/253 255	DS-CU05	65/67/73 93/147/149 155/167/181	DS-LA12	66/95	DS-PI3D	211/213/223 229
DCCLA11	146/157/183	DR-SF12	65/89/211 235/237/253 255	DS-CU06	65/67/73 93/147/149 155/167/181	DS-LA15	95	DS-PI3H	253/263
DCCLA21	146/159/185	DR-SF13	65/89/211 235/237	DS-CU07	65/67/73 93/147/149 155/167/181	DS-LA21	64/66/77 91/105/210 221/239/241 252/257/261	DS-PI3L	253/263
DCCLA31	146/161/187	DR-SF21	65/91/211 239/241/253 257	DS-CU10	211/219	DS-LA21T	66/97/131 122/212/227	DS-PI41	225
DCCLI11	146/157	DR-SF22	65/91/211 239/241/253 257	DS-CU11	65/67/69 75/95/111 147/169/211 219	DS-LA22	66/97/131 122/212/227	DS-PI430U	213/231
DCCLI21	146/159	DR-SF23	65/91/211 239/241 211/237	DS-CU12	65/67/75 95/147/169 211/219/253 259	DS-LA24	77/91/105 221/239/241	DS-PI4D	211/213/225 231/233
DCCLI31	146/161	DR-TL11	211/241	DS-CU18	211/219	DS-LA24T	257/261	DS-PI4K	253/265
DCCPP11	147/157	DR-TL22	211/241	DS-CU19	211/219	DS-LA31	64/79/122 133/210/223	DS-PI5I	211/213/233
DCCPP12	147/157	DS-AU11	65/67/79 87/93/95 97/99/147	DS-CU20	211/221	DS-LA31T	252/263	DS-SA01	64/71/210 217
DCCPP21	147/159	DM1AUB1	123/125/127 135/137	DS-CU21	65/67/69 77/97/113 147/171/211 221	DS-LA33	79/223	DS-SA02	122/125/127
DCCPP22	147/159	DM1AUB2	123/125/127 137	DS-CU22	65/77/211 221/253/261	DS-LA33T	263	DS-SA03	71/73/217
DCCPP31	147/161	DM1CU01	123/125/127 137	DS-CU28	211/221	DS-LA41	64/66/79 81/83/85 99/101/210 212/225/229 231/233	DS-SA11	64/66/75 89/103/122 129/210/213 129/235/237 243/245/247 249
DCCPP32	147/161	DM1CU02	123/125/127 137	DS-CU29	211/221	DS-LA41T	252/265	DS-SA14	75/89/103 219/235/237 243/245
DCEAUB1	147/149/151 177	DM1RLB1	123/125/127	DS-CU30	211/223	DS-LA43	81/83/85 99/101/225 229/231/233	DS-SA14T	255/259
DCECUB2	147/149/151 177	DM1SAB1	122/125/127	DS-CU31	65/67/69 79/99/115 147/211/173 223	DS-LA43T	265	DS-SI01	64/66/71 73/93/210 213/217
DCELAB1	146/151/177	DM1SAB1	122/125/127	DS-CU38	211/223	DS-LI02	66/95	DS-SI11	75/89/103 219/235/243 245/247
DM1AUB1	123/125/127 135/137	DM1SAB1	122/125/127	DS-CU39	211/223	DS-LI12	64/66/77 91/105/210 221/239	DS-SI11T	252/255/259
DM1AUB2	123/125/127 137	DM1SAB1	122/125	DS-CU41	65/69/81 117/147/163 175/189	DS-LI21	64/66/77 91/105/210 221/239	DS-SR01	64/71/73
DM1CU01	123/125/127 137	DM1SI01	122/125	DS-DN01	65/73/217	DS-LI21T	252/257/261	DS-SR02	123/125/127
DM1CU02	123/125/127 137	DM1SLB1	122/125/127	DS-EI61	146	DS-LI22	66/97/212 227	DS-SR11	64/66/75 89/103/122 129
DM1RLB1	123/125/127	DM1SRB1	123/125	DS-EN61	64/87	DS-LI31	64/78/79 210/223/264	DT-10011	24
DM1SAB1	122/125/127	DM1SYB1	122/125/127	DS-EP02	123/125/127	DS-LI31T	252/263	DT-10021	24
DM1SI01	122/125	DM2CU11	123/129/139 147/149/157 183	DS-EP04	65/71/73 123/146/151 155/211/217	DS-LI41	64/66/81 83/85/99 101/210/212 225/229/231 233	DT-10031	24
DM1SLB1	122/125/127	DM2CU12	123/129/139 147/149/157 183	DS-EP05	65/71/73 123/125/127 146/151/155 211/217	DS-LI41T	252/265	DT-10111	24
DM1SRB1	123/125	DM2CU13	123/129/139 147/149/157 183	DS-EP14	65/67/75 89/103/123 129/146/157 211/213/219 235/237/243 245/249/253 255/259	DS-LR01	66/93	DT-10121	24
DM1SYB1	122/125/127	DM2CU21	123/131/141 147/149/159 185	DS-EP15	65/67/75 89/103/123 129/146/157 211/213/219 235/237/243 245/249/253 255/259	DS-LR12	66/95	DT-10131	24
DM2CU11	123/129/139 147/149/157 183	DM2CU22	123/131/141 147/149/159 185	DS-CB12	65/67/95 123/211/213	DS-LR21	64/66/77 91	DT-50101	25
DM2CU12	123/129/139 147/149/157 183	DM2CU23	123/131/141 147/149/159 185	DS-CB21	77/91/97 105/113/131 141/239	DS-LR22	66/97/122 131	DT-50102	25
DM2CU13	123/129/139 147/149/157 183	DM2CU31	123/133/143 147/149/161 187	DS-CB21	77/91/97 105/113/131 141/239	DS-LR31	64/79/122 133	DT-50103	25
DM2CU21	123/131/141 147/149/159 185	DM2CU32	123/133/143 147/149/161 187	DS-CB31	65/69/79 115/123/133 143	DS-LR41	64/66/79 81/83/85 99/101	DT-50104	25
DM2CU22	123/131/141 147/149/159 185	DM2CU33	123/133/143 147/149/161 187	DS-CB41	65/67/69 81/83/85 99/101/117 123/213	DS-PB01	67/93/147 149/155/181	DT-50105	25
DM2CU23	123/131/141 147/149/159 185	DS-CD41	65/87	DS-EP14	65/67/75 89/103/123 129/146/157 211/213/219 235/237/243 245/249/253 255/259	DS-PB02	67/93/147 149/155/181	DT-50106	25
DM2CU31	123/133/143 147/149/161 187	DS-CE11	65/67/69 75/89/103 111/211/235	DS-EP15	65/67/75 89/103/123 129/146/157 211/213/219 235/237/243 245/249/253 255/259	DS-PB03	67/93/147 149/155/181	DT-50107	25
DM2CU32	123/133/143 147/149/161 187	DS-CEB1	65/67/69 71/73/93 107/109/123 125/127/129 135/137/139	DS-EP15	65/67/75 89/103/123 129/146/157 211/213/219 235/237/243 245/249/253 255/259	DS-PB04	67/93/147 149/155/181	DT-70401N07	27
DM2PP11	123/129	DS-CF11	67/95	DS-EP23	65/67/77 79/91/105 123/131/133 146/159/161 211/223/239 241/253/257 261/263	DS-PB11	67/95	DT-70401R01	27
DM2PP12	123/129	DS-CF21	65/67/69 77/91/97			DS-PB12	67/95	DT-7041AN02	27
DM2PP21	123/129					DS-PB13	67/95	DT-7041AR02	27
DM2PP22	123/129/131					DS-PB14	67/95	DT-7041AR02	27
DM2PP31	123/133					DS-PB21	67/97	DT-7041CN02	27
DM2PP32	123/133					DS-PB22	67/97	DT-7041CR02	27
DM2SI11	122/129					DS-PB31	67/99	DT-7041CR02	27
DM2SI21	122/131					DS-PB32	67/99	DT-70431	27
DM2SI31	122/133					DS-PI01	211/217	DT-70432	27
DR-CU11	65/89/211 235/237/253 255	DS-CF31	65/69/79 115/123/133 143/213			DS-PI05	211/217	DT-70433	27
DR-CU12	65/89/211 235/237/253 255					DS-PI11	211/219	DT-70434	27
						DS-PI14	211/219	DT-75401N07	25
						DS-PI1G	253/259	DT-75401R01	25
								DT-90002	29
								DT-90012	29
								DT-90022	29
								DT-90024	29
								DT-90031	29
								DT-90032	29
								DT-90401	29
								DT-90421	29

REFERENCE - PAGE INDEX

Code	Page	Code	Page	Code	Page	Code	Page	Code	Page
IPTA00404P50	68/118	S5-00403PB0	64/70	S5-12503PCC	194/198	S5B20003NDO	146/174/195 206	S5N18006P50	66/100
IPTA00634P50	68/118	S5-00632PB0	64/70	S5-12503PS0	64/80	S5B20003PDO	146/174/195 206	S5N18006P5C	194/200
IPTA01004P50	68/118	S5-00633NB0	64/70	S5-12503PSC	194/198	S5F01253NS0	146/154/195 202	S5N18008P50	66/100
IPTA01604P50	68/118	S5-00633PB0	64/70	S5-12504PC0	210/222	S5F01253PS0	146/154/195 202	S5N18008P5C	194/200
IPTA02004P50	68/118	S5-00802PB0	64/70	S5-12504ZC0P38	252/262	S5F01603NS0	146/154/195 202	S5N20002ES0	210/212/232
IPTA02504P50	68/118	S5-00803NB0	64/70	S5-16003NS0	64/80	S5F01603PS0	146/154/195 202	S5N20003NP0	64/84
IPTA04004P50	68/118	S5-00803PB0	64/70	S5-16003NSC	194/198	S5F02003NS0	146/154/195 202	S5N20003NPC	194/198
IPTA06304PT0	68/118	S5-01252PB0	64/72	S5-16003PS0	64/80	S5F16003NS0	146/162/195 204	S5N20003NS0	64/82
IPTR01603NB0	68/118	S5-01252PS0	64/72	S5-16003PSC	194/198	S5F16003PS0	146/162/195 204	S5N20003PP0	64/84
IPTR02503NB0	68/118	S5-01253NB0	64/72	S5-16004ZS0P38	252/264	S5F18003NS0	146/162/195 204	S5N20003PPC	194/198
IPTR04003NB0	68/118	S5-01253NS0	64/72	S5-18002ES0	210/224	S5F18003PS0	146/162/195 204	S5N20003P50	64/82
IPTR06303NT0	68/118	S5-01253PB0	64/72	S5-18003NS0	64/80	S5F20003NS0	146/162/195 204	S5N20006PDO	66/100
IPTU01603NB0	68/118	S5-01253PS0	64/72	S5-18003NSC	194/198	S5F20003P50	146/162/195 204	S5N20006PDC	194/200
IPTU02503NB0	68/118	S5-01254PR0	210/218	S5-18003PS0	64/80	S5F20003PP0	146/164/195 204	S5N20008PDO	66/100
IPTU04003NB0	68/118	S5-01602PB0	64/72	S5-18003PSC	194/198	S5F25003NP0	146/164/195 204	S5N20008PDC	194/200
IPTU06303NT0	68/118	S5-01602PS0	64/72	S5-18004PS0	210/224	S5F31503NP0	146/164/195 204	S5N25002ES0	210/212/232
M11003222PBBA0	122/124	S5-01603NB0	64/72	S5-18004ZS0P38	252/264	S5L00403NB0	146/152	S5N25003NP0	64/84
M1100323NBBA0	122/124	S5-01603NS0	64/72	S5-20002ED0	210/224	S5L00403PB0	146/152	S5N25003NPC	194/198
M1100323PBBA0	122/124	S5-01603PB0	64/72	S5-20003NCO	64/78	S5L00633NB0	146/152	S5N25003NS0	64/82
M1100502PBC20	122/124	S5-01603PS0	64/72	S5-20003NDO	64/80	S5L00633PB0	146/152	S5N25003PP0	64/84
M1100503NBC20	122/124	S5-01604PB0	210/216	S5-20003NDC	194/198	S5L00803NB0	146/152	S5N25003PPC	194/198
M1100503PBC20	122/124	S5-01604PS0	210/216	S5-20003PDC	194/198	S5M01256PS0	66/92	S5N25003P50	64/82
M1100632PBBB0	122/124	S5-02002PS0	64/72	S5-20003PDO	64/80	S5M01258PS0	66/92	S5N25006P50	210/212/232
M1100632PDB0	122/124	S5-02003NS0	64/72	S5-20003PDC	194/198	S5M01606PS0	66/92	S5N31502ES0	210/212/232
M1100633NB0	122/124	S5-02003PS0	64/72	S5-40003NP0	64/86	S5M01608PS0	66/92	S5N31503NP0	64/84
M1100633NBDB0	122/124	S5-02004PR0	210/218	S5-40003PP0	64/86	S5M02006PS0	66/92	S5N31503NPC	194/198
M1100633PBBB0	122/124	S5-02502PDO	64/72	S5-50003NP0	64/86	S5M02506PR0	66/94	S5N31503NS0	64/82
M1100633PBD0	122/124	S5-02502PR0	64/74	S5-50003PP0	64/86	S5M02508PR0	66/94	S5N31503PP0	64/84
M1101002PBB00	122/126	S5-02503NDO	64/72	S5-63003NP0	64/86	S5M03156PR0	66/94	S5N31503PPC	194/198
M1101002PDB0	122/124	S5-02503NR0	64/74	S5-63003PP0	64/86	S5M03158PR0	66/94	S5N31503PS0	64/82
M1101002PTB00	122/126	S5-02503NRC	194/196	S5B01253NS0	146/166/195 202	S5M04006PC0	66/94	S6-0125_ _S0	210/234
M1101003NB00	122/126	S5-02503PDO	64/72	S5B01253PS0	146/166/195 202	S5M04008PC0	66/94	S6-0160_ _S0	210/234
M1101003NBDB0	122/124	S5-02503PR0	64/74	S5B01603NS0	146/166/195 202	S5M05006PR0	66/96	S6-01601V50P38	252/234
M1101003NTB00	122/126	S5-02503PRC	194/196	S5B01603PS0	146/166/195 202	S5M05008PR0	66/96	S6-0200_ _S0	210/234
M1101003PBB00	122/126	S5-03152PR0	64/74	S5B02003NS0	146/166/195 202	S5M06306PR0	66/96	S6-02001V50P38	252/254
M1101003PDB00	122/124	S5-03153NR0	64/74	S5B02503NDO	146/168	S5M06308PR0	66/96	S6-02002L50P38	252/254
M1101003PTB00	122/126	S5-03153NRC	194/196	S5B02503NRC	195/202	S5M080044C0	212	S6-02002P50	64/88
M1101252PBC30	122/126	S5-03153PR0	64/74	S5B02503PCC	146/168	S5M080044R0	212	S6-02002P5C	194/196
M1101252PDB00	122/126	S5-03153PRC	194/196	S5B02503PC0	146/168	S5M08006PR0	66/98	S6-02002PSC	194/196
M1101252PTC30	122/126	S5-03154PR0	210/218	S5B04003NCO	146/170	S5M08008PR0	66/98	S6-02003NS0	64/88
M1101253NTB00	122/126	S5-04002PC0	64/74	S5B04003NCC	195/202	S5M08008PRC	194/200	S6-02003PS0	64/88
M1101253NBC30	122/126	S5-04003NCO	64/74	S5B05003NRC	195/206	S5M08008PRC	194/200	S6-02003P5C	194/196
M1101253NBDB0	122/126	S5-04003NCC	194/196	S5B05003NRC	195/206	S5M10006PC0	66/98	S6-02003PSC	194/196
M1101253NTC30	122/126	S5-04003PC0	64/74	S5B05003PRO	146/170	S5M10006PCC	194/200	S6-0250_ _S0	210/236
M1101253NTDB0	122/126	S5-04003PCC	194/196	S5B05003PRC	195/202	S5M125044C0	212	S6-02501V50P38	252/254
M1101253PBC30	122/126	S5-04003ZC0P38	252/258	S5B05003PRC	195/202	S5M12506PS0	66/100	S6-02502L50P38	252/254
M1101253PDB00	122/126	S5-04004PC0	210/218	S5B06303NR0	146/170	S5N12506PSC	194/200	S6-02502PS0	64/88
M1101253PTC30	122/126	S5-04004ZC0P38	252/258	S5B06303NRC	195/206	S5N12508PS0	66/100	S6-02502PSC	194/196
M1101253PTDB0	122/126	S5-05003NR0	64/76	S5B06303PR0	146/170	S5N12508PSC	194/200	S6-02503NS0	64/88
M1101602PDB00	122/126	S5-05003NRC	194/196	S5B06303PRC	195/206	S5N160044S0	212/230	S6-02503NSC	194/196
M1101602PTDB0	122/126	S5-05003PRO	64/76	S5B06303PRC	195/206	S5N16006PS0	66/100	S6-02503PS0	64/88
M1101603NBDB0	122/126	S5-05003PRC	194/196	S5B08003NCO	146/172	S5N16006P5C	194/200	S6-02503P5C	194/196
M1101603NTDB0	122/126	S5-06302ER0	210/220	S5B08003NRC	195/202	S5N16008P50	66/100	S6-02503PSC	194/196
M1101603PBBDB0	122/126	S5-06303NR0	64/76	S5B08003PRC	195/202	S5N16008P5C	194/200	S6-0315_ _S0	210/234
M1101603PTDB0	122/126	S5-06303NRC	194/196	S5B08003PRC	195/202	S5N16008PSC	194/200	S6-03152P50	64/88
M2101603NSB10	122/128	S5-06303PR0	64/76	S5B10003NCO	146/172	S5N16008PSC	194/200	S6-03152P5C	194/196
M2101603NSD00	122/128	S5-06303PRC	194/196	S5B10003NCC	195/206	S5N16008PSC	194/200	S6-03153NS0	64/88
M2101603PSB10	122/128	S5-06304PR0	210/220	S5B10003PCC	195/206	S5N16008PSC	194/200	S6-03153NSC	194/196
M2101603PSD00	122/128	S5-08003NCO	64/76	S5B10003PC0	146/172	S5N16008PSC	194/200	S6-03153P50	64/88
M2102003NSB20	122/128	S5-08003NCC	194/196	S5B10003PCC	195/206	S5N16008PSC	194/200	S6-0400_ _DO	210/234
M2102003PSB20	122/128	S5-08003NR0	64/78	S5B10003PCC	195/206	S5N16008PSC	194/200	S6-0400_ _S0	210/234
M2102503NSB20	122/128	S5-08003NRC	194/198	S5B12503NS0	146/174/195 206	S5N12506PS0	66/100	S6-04001VD0P38	252/240
M2102503NSD10	122/130	S5-08003PC0	64/76	S5B12503PS0	146/174/195 206	S5N12506PSC	194/200	S6-04002LD0P38	252/254
M2102503PSB20	122/128	S5-08003PCC	194/196	S5B16003NS0	146/174/195 206	S5N12506PSC	194/200	S6-04002PDO	64/88
M2102503PSD10	122/130	S5-08003PR0	64/78	S5B16003PS0	146/174/195 206	S5N12508P50	66/100	S6-04002PDC	194/196
M2103153NSB40	122/130	S5-08003PRC	194/198	S5B18003NS0	146/174/195 206	S5N12508P5C	194/200	S6-04003NDO	64/88
M2103153PSB40	122/130	S5-08004ZC0P38	252/260	S5B18003NS0	146/174/195 206	S5N160044S0	212/230	S6-04003NDC	194/196
M2104003NSB50	122/130	S5-10003NCO	64/78	S5B18003NS0	146/174/195 206	S5N16006PS0	66/100	S6-04003PDO	64/88
M2104003NSD20	122/130	S5-10003NCC	194/198	S5B18003NS0	146/174/195 206	S5N16006P5C	194/200	S6-04003PDC	194/196
M2104003PSB50	122/130	S5-10003NS0	64/80	S5B18003NS0	146/174/195 206	S5N16006PSC	194/200	S6-0500_ _S0	210/238
M2104003PSD20	122/130	S5-10003NSC	194/198	S5B18003NS0	146/174/195 206	S5N16008P50	66/100	S6-05002PS0	64/90
M2106303NSB70	122/132	S5-10003PC0	64/78	S5B18003NS0	146/174/195 206	S5N16008P5C	194/200	S6-05002PSC	194/196
M2106303NSD30	122/132	S5-10003PCC	194/198	S5B20003NS0	146/174/195 206	S5N180044S0	212/230	S6-05003NS0	64/90
M2106303PSB70	122/132	S5-10003PS0	64/80	S5B20003NS0	146/174/195 206	S5N180044S0	212/230	S6-05003NSC	194/196
M2106303PSD30	122/132	S5-10003PSC	194/198	S5B20003NS0	146/174/195 206	S5N180044S0	212/230	S6-05003P50	64/90
M2108003NSB80	122/132	S5-12502EC0	210/222	S5B20003NS0	146/174/195 206	S5N180044S0	212/230	S6-05003PSC	194/196
M2108003NSD30	122/132	S5-12503NCO	64/78	S5B20003NS0	146/174/195 206	S5N180044S0	212/230	S6-0630_ _S0	210/238
M2108003PSB80	122/132	S5-12503NCC	194/198	S5B20003NS0	146/174/195 206	S5N180044S0	212/230	S6-06301V50P38	252/256
M2108003PSD30	122/132	S5-12503NS0	64/80	S5B20003NS0	146/174/195 206	S5N180044S0	212/230	S6-06302L50P38	252/256
S5-00402PB0	64/70	S5-12503NSC	194/198	S5B20003NS0	146/174/195 206	S5N180044S0	212/230	S6-06302PS0	64/90
S5-00403NB0	64/70	S5-12503PC0	64/78	S5B20003NS0	146/174/195 206	S5N180044S0	212/230	S6-06302PSC	

Code	Page	Code	Page	Code	Page	Code	Page	Code	Page
S6-06303NS0	64/90	S6R01604DS0	213/246	ZBK125SMAHN1A4	58	ZBK40SMAHN1A8	58	ZBKPEN80E	53
S6-06303NSC	194/196	S6R01604FS0	213/246	ZBK125VZVH1A3	54	ZBK40VZVH1A3	54	ZBKPEN80V	55/57/59
S6-06303P50	64/90	S6R0160BCS0	212/246	ZBK125VZVH1A4	54	ZBK40VZVH1A4	54	ZFC16PFLH4A40	211/214
S6-06303PSC	194/196	S6R0160CBS0	212/246	ZBK125VZVH4A3	54	ZBK40VZVH4A3	54	ZFC16SMAH1NA40	210/214
S6-08002LD0P38	252/256	S6R0160D4S0	213/246	ZBK125VZVH4A4	54	ZBK40VZVH4A4	54	ZFC16VZVH4A40	211/214
S6-08002PD0	64/90	S6R0160F4S0	213/246	ZBK125VZVHN1A3	54	ZBK40VZVH4A6	56	ZFC25SMAH1NA40	210/214
S6-08002PDC	194/196	S6R02004DS0	213/246	ZBK125VZVHN1A4	54	ZBK40VZVH4A8	56	ZFC25VZVH4A40	211/214
S6-08003ND0	64/90	S6R02004FS0	213/246	ZBK125VZVHN4A3	54	ZBK40VZVHN1A3	54	ZFV-B1	215
S6-08003NDC	194/196	S6R0200BCS0	212/246	ZBK125VZVHN4A4	54	ZBK40VZVHN1A4	54	ZFV-B2	215
S6-08003PD0	64/90	S6R0200CBS0	212/246	ZBK20EH1A3	52	ZBK40VZVHN4A3	54	ZFV32PFLH4A40	210/214
S6-08003PDC	194/196	S6R0200D4S0	213/246	ZBK20EH1A4	52	ZBK40VZVHN4A4	54	ZFV32SMAH1A40	211/214
S6N01256P50	66/102	S6R0200F4S0	213/246	ZBK20EH4A3	52	ZBK40VZVHN4A6	56	ZFV32VZVH4A40	211/214
S6N01256P5C	194/196	S6R02504DS0	213/246	ZBK20EH4A4	52	ZBK40VZVHN4A8	56	ZFV40SMAH1A40	211/214
S6N01258P50	66/102	S6R02504DS00L	213/248	ZBK20EHN1A3	52	ZBK63EH1A3	52	ZFV40VZVH4A40	211/214
S6N01258P5C	194/196	S6R02504FS0	213/246	ZBK20EHN1A4	52	ZBK63EH1A4	52	ZFV55PFLH4A40	211/214
S6N0125MMS0	212/242	S6R02504FS00L	213/248	ZBK20EHN4A3	52	ZBK63EH4A3	52	ZFV55SMAH1A40	211/214
S6N0125MQS0	212/242	S6R0250BCS0	212/246	ZBK20EHN4A4	52	ZBK63EH4A4	52	ZFV55VZVH4A40	211/214
S6N0125QQS0	212/242	S6R0250BCS00L	212/248	ZBK20PFHN4A3	60	ZBK63EHN1A3	52	ZTC-B1	215
S6N0125SSS0	212/242	S6R0250CBS0	212/246	ZBK20PFHN4A4	60	ZBK63EHN1A4	52		
S6N0125USU0	212/242	S6R0250CBS00L	212/248	ZBK20SMAH1A3	58	ZBK63EHN4A3	52		
S6N0125UUS0	212/242	S6R0250D4S0	213/246	ZBK20SMAH1A4	58	ZBK63EHN4A4	52		
S6N01606P50	66/102	S6R0250F4S0	213/246	ZBK20SMAH1U4	58	ZBK63PFLHN4A3	60		
S6N01606P5C	194/196	S6R03154DS0	213/246	ZBK20SMAH1A3	58	ZBK63PFLHN4A4	60		
S6N01608P50	66/102	S6R03154FS0	213/246	ZBK20SMAH1A4	58	ZBK63SMAH1A3	58		
S6N01608P5C	194/196	S6R0315BCS0	212/246	ZBK20VZVH4A3	54	ZBK63SMAH1A4	58		
S6N0160MMS0	212/242	S6R0315CBS0	212/246	ZBK20VZVH4A4	54	ZBK63SMAH1U4	58		
S6N0160MQS0	212/242	S6R0315D4S0	213/246	ZBK20VZVHN4A3	54	ZBK63SMAH1A3	58		
S6N0160QQS0	212/242	S6R0315F4S0	213/246	ZBK20VZVHN4A4	54	ZBK63SMAH1A4	58		
S6N0160SSS0	212/242	S6R03204DS00L	213/248	ZBK25EH1A3	52	ZBK63VZVH1A3	54		
S6N0160UUS0	212/242	S6R03204FS00L	213/248	ZBK25EH1A4	52	ZBK63VZVH1A4	54		
S6N0160UUS0	212	S6R0320BCS00L	212/248	ZBK25EH4A3	52	ZBK63VZVH4A3	54		
S6N02006P50	66/102	S6R0320CBS00L	212/248	ZBK25EH4A4	52	ZBK63VZVH4A4	54		
S6N02006P5C	194/196	S6R04004DD0	213/246	ZBK25EHN1A3	52	ZBK63VZVHN1A3	54		
S6N02008P50	66/102	S6R04004DD00L	213/248	ZBK25EHN1A4	52	ZBK63VZVHN1A4	54		
S6N02008P5C	194/196	S6R04004FD00L	213/248	ZBK25EHN4A3	52	ZBK63VZVHN4A3	54		
S6N0200MMS0	212/242	S6R04004FS0	213/246	ZBK25EHN4A4	52	ZBK63VZVHN4A4	54		
S6N0200MQS0	212/242	S6R0400BCD00L	212/248	ZBK25PFHN4A3	60	ZBK80EH1A3	52		
S6N0200QQS0	212/242	S6R0400BCS0	212/246	ZBK25PFHN4A4	60	ZBK80EH1A4	52		
S6N0200SSS0	212/242	S6R0400CBDO	212/248	ZBK25PFLHN4A6	60	ZBK80EH4A3	52		
S6N0200USU0	212/242	S6R0400CBD00L	212/248	ZBK25PFLHN4A8	60	ZBK80EH4A4	52		
S6N0200UUS0	212/242	S6R0400D4D0	213/246	ZBK25SMAH1A3	58	ZBK80EHN1A3	52		
S6N02506P50	66/102	S6R0400F4D0	213/246	ZBK25SMAH1A4	58	ZBK80EHN1A4	52		
S6N02506P5C	194/196	UM-C0A230Z	195/202	ZBK25SMAH1A6	58	ZBK80EHN4A3	52		
S6N02508P50	66/102	UM-C1A230Z	195/202	ZBK25SMAH1A8	58	ZBK80EHN4A4	52		
S6N02508P5C	194/196	UM-C21120M	195/204	ZBK25SMAH1U4	58	ZBK80PFLHN4A3	60		
S6N0250MMS0	212/242	UM-C21230M	195/204	ZBK25SMAH1A3	58	ZBK80PFLHN4A4	60		
S6N0250MQS0	212/242	UM-C24120M	195/206	ZBK25SMAH1A4	58	ZBK80PFLHN4A6	60		
S6N0250QQS0	212/242	UM-C24230M	195/206	ZBK25SMAH1A6	58	ZBK80PFLHN4A8	60		
S6N0250SSS0	212/242	UM-C2A230Z	195/202	ZBK25SMAH1A8	58	ZBK80SMAH1A3	58		
S6N0250UUS0	212/242	UM-C31120M	195/204	ZBK25SMAH1A3	54	ZBK80SMAH1A4	58		
S6N0250UUS0	212/242	UM-C31230M	195/204	ZBK25VZVH1A3	54	ZBK80SMAH1A6	58		
S6N03156P50	66/102	UM-C34120M	195/206	ZBK25VZVH1A4	54	ZBK80SMAH1A8	58		
S6N03156P5C	194/196	UM-C34230M	195/206	ZBK25VZVH4A3	54	ZBK80SMAH1A3	58		
S6N03158P50	66/102	UM-C44230M	195/206	ZBK25VZVH4A4	54	ZBK80SMAH1A4	58		
S6N03158P5C	194/196	UM-C45120M	195/204	ZBK25VZVH4A6	56	ZBK80SMAH1A6	58		
S6N0315MMS0	212/244	UM-C45230M	195/204	ZBK25VZVHN1A3	54	ZBK80SMAH1A8	58		
S6N0315MQS0	212/244	UM-C55230M	195/204	ZBK25VZVHN1A4	54	ZBK80VZVH1A3	54		
S6N0315QQS0	212/244	UM-S1A230Z	194/196	ZBK25VZVHN4A3	54	ZBK80VZVH1A4	54		
S6N0315QUS0	244/242	UM-S26120M	194/200	ZBK25VZVHN4A4	54	ZBK80VZVH4A3	54		
S6N0315SSS0	212/242	UM-S26230M	194/200	ZBK25VZVHN4A6	56	ZBK80VZVH4A4	54		
S6N0315USU0	212/242	UM-S2A230Z	194/196	ZBK25VZVHN4A8	56	ZBK80VZVH4A6	56		
S6N0315UUS0	212/242	UM-S31120M	194/198	ZBK40EH1A3	52	ZBK80VZVH4A8	56		
S6N04006PD0	66/102	UM-S31230M	194/198	ZBK40EH1A4	52	ZBK80VZVHN1A3	54		
S6N04006PDC	194/196	UM-S35120M	194/200	ZBK40EH4A3	52	ZBK80VZVHN1A4	54		
S6N04008PD0	66/102	UM-S35230M	194/200	ZBK40EH4A4	52	ZBK80VZVHN4A3	54		
S6N04008PDC	194/196	UM-S41120M	194/198	ZBK40EHN1A3	52	ZBK80VZVHN4A4	54		
S6N0400MMD0	212/244	UM-S41230M	194/198	ZBK40EHN1A4	52	ZBK80VZVHN4A6	56		
S6N0400MQD0	212/244	UM-S56230M	194/198/200	ZBK40EHN4A3	52	ZBK80VZVHN4A8	56		
S6N0400QQD0	212/244	UMC14230Z	195	ZBK40EHN4A4	52	ZBKLNH11	53/55/57 59/61		
S6N0400QUS0	212/244	ZBK-0002	55/57	ZBK40PFHN4A3	60	ZBKLNH11X	53/55/57 59/61		
S6N0400SSD0	212/242	ZBK-0002	55/57	ZBK40PFHN4A4	60	ZBKN40E	53		
S6N0400USD0	212/242	ZBK-0003	55/57	ZBK40PFLHN4A6	60	ZBKN40V	55		
S6N0400UUD0	212/242	ZBK125EH4A3	52	ZBK40PFLHN4A8	60	ZBKN40V	57		
S6N05006P50	66/104	ZBK125EH4A4	52	ZBK40SMAH1A3	58	ZBKN80E	53		
S6N05006P5C	194/200	ZBK125EHN4A3	52	ZBK40SMAH1A4	58	ZBKN80V	55		
S6N05008P50	66/104	ZBK125EHN4A4	52	ZBK40SMAH1A6	58	ZBKN80V	57		
S6N05008P5C	194/200	ZBK125PFLHN4A3	60	ZBK40SMAH1A8	58	ZBKPE80E	53		
S6N06306P50	66/104	ZBK125PFLHN4A4	60	ZBK40SMAH1U4	58	ZBKPE80V	55		
S6N06306P5C	194/200	ZBK125SMAH1A3	58	ZBK40SMAH1A3	58	ZBKPE80V	57		
S6N06308P50	66/104	ZBK125SMAH1A4	58	ZBK40SMAH1A4	58	ZBKPE80V	59		
S6N06308P5C	194/200	ZBK125SMAH1A3	58	ZBK40SMAH1A6	58				

Utilization categories

Utilization categories according to IEC 60947-3			
Nature of current	Utilization category		Typical applications
	Category A ^{*(2)}	Category B ^{*(3)}	
AC	AC-20A ^{*(1)}	AC-20B ^{*(1)}	Connecting and disconnecting under no-load conditions
	AC-21A	AC-21B	Switching of resistive loads including moderate overloads
	AC-22A	AC-22B	Switching of mixed resistive and inductive loads, including moderate overloads
	AC-23A	AC-23B	Switching of motor loads or other highly inductive loads
DC	DC-20A ^{*(1)}	DC-20B ^{*(1)}	Connecting and disconnecting under no-load conditions
	DC-21A	DC-21B	Switching of resistive loads including moderate overloads
	DC-22A	DC-22B	Switching of mixed resistive and inductive loads, including moderate overloads (e.g.: motores shunt)
	DC-23A	DC-23B	Switching of highly inductive loads (e.g. series motors)

^{*(1)} The use of these utilization categories is not permitted in the EE.UU.

^{*(2)} **A** Repeatedly operation

^{*(3)} **B** Not very repeatedly operation

Category AC-23 includes occasional switching of individual motors. The switching of capacitors or of tungsten filament lamps shall be subject to agreement between manufacturer and user.

The utilization categories referred do not apply to an equipment normally used to start, accelerate and / or stop individual motors. The utilization categories for such equipment are explained next:

Utilization category	Typical applications	
AC	AC-2	Slip-ring motors: starting, plugging ^{a)} , switching off
	AC-3	Squirrel-cage motors: starting, switching off of motors during running
	AC-4	Squirrel-cage motors: starting, plugging ^{a)} , inching ^{b)}
DC	DC-3	Shunt motors: starting, plugging ^{a)} , inching ^{b)} , dynamic breaking of d.c. motors
	DC-5	Serie-motors: starting, plugging ^{a)} inching ^{b)} , dynamic breaking of d.c. motors

NOTE - The switching of motor circuits, capacitors or tungsten filament lamps shall be subject to special agreement between manufacturer and user.

^{a)} Plugging means stopping or reversing the motor rapidly by reversing motor primary connections while the motor is running.

^{b)} Inching (jogging) means energizing a motor once or repeatedly for short periods to obtain small movements of the driven mechanism.

The previous information is only advisory, it does not replace the specifications of the standard which will be consulted for its exact knowledge.



» MAINTENANCE RECOMMENDATIONS:

Electrical installations and their components should be periodically inspected to check they are in good condition. Operability of switches should be checked after an incident, during maintenance or due to ageing.

Tightening torque of electrical connections should be revised as vibrations in the environment and electrical conductivity may loose them affecting to the performance and durability of all components as well.

Not performing preventive maintenance may damage and spoil parts, systems and machines. Moreover it can also cause accidents and to injure people.

Before working on equipment or components which may be electrically live, the appropriate safety cautions must be taken by operators, end-users or other staff. Right personal protective equipment (e.g. safety clothes, gloves, goggles, helmet, insulating footwear) should be used, and the appropriate tools for the operation. At the same time, caution measures should be taken to prevent damages to third parties such as warning signs, barriers, mechanical locks, etc.

Prior to use any protective equipment or tools, they must be checked to be in good condition.

Maintenance or repair works should be performed in areas not electrically live by qualified and authorized staff following the applicable regulations and good practices.

Telergon, S.A.U. reserves the right to modify the products herein illustrated without prior notice. Technical data and description in the catalogue are accurate at the printing date, but no liabilities for errors or omissions are accepted. No danger or hazard to health and safety will be caused when products are installed, maintained and used in applications for which it is designed, in accordance with "professional practices" and manufacturer's instructions.

Products supplied by TELERGON are warranted for a period of 2 years against any manufacturing defect. TELERGON's guarantee is limited to the repair or replacement of the defective goods in the shortest possible time. This warranty does not cover the abuse or improper use by the user according to the technical instructions included in the sale by TELERGON, according to the current legislation, or their tampering or misuse. This warranty does not reach in any way third parties, being only applicable to the Customer.

April 2019

© Telergon, S.A.U. 2019 all rights reserved

Upgrades, changes or corrections to this document at www.telergon.com, until new edition of the same.

gorlan



telergon

Telergon is one of the leading companies in the field of the switchgear engineering.

Ctra. Castellón (Pgno. La Cartuja)
50720 La Cartuja Baja
Zaragoza-Spain
Tel.: (+34) 976 50 08 76
Fax: (+34) 976 50 03 14

comercial@telergon.com
www.telergon.com



pronutec

Pronutec is considered one of the leading companies specialised in the fabrication and marketing of capital goods for the low voltage switchgear sector.

Parque Empresarial Boroa,
Parcela 2C-1
48340 Amorebieta
Vizcaya-Spain
Tel.: (+ 34) 94 631 32 34
Fax: (+ 34) 94 631 39 22

pnt@pronutec.com
www.pronutec.com



otripus

Tripus has become the leading manufacturer of complete switch-plug combinations for do-it-yourself and construction industries in Europe.

Am Hohen Rain 2
89347 Bubesheim
Tel.: (+ 49) 8221 9016-0
Fax: (+ 49) 8221 3073

sales@tripus.de
www.tripus.de



merytronic

Merytronic is a company with a high added value in research, development and production of electronic equipment, both fixed and portable, for monitoring, control and indication of electronic distribution networks.

Parque Empresarial Boroa,
Parcela 2C-1
48340 Amorebieta, Vizcaya-Spain
Tel.: (+34) 94 605 24 62

merytronic@merytronic.com
www.merytronic.com



pronutec GmbH

Pronutec GmbH. After many years of experience in the German market, Pronutec GmbH was established to provide customers a more personalized and direct service.

Am Hohen Rain 2
89347 Bubesheim-Germany
Tel.: (+49) 8221 901 677
Fax: (+49) 8221 901 6777

germany@gorlanteam.com
www.germany.gorlanteam.com



plastibor

Dedicated to plastics injection moulding, Plastibor separates production into two different sections: The thermosetting polymers section and thermoplastic materials section. In the first section thermoset polyester parts are moulded from moist polyester, and in the second section, thermoplastic materials such as polyamides, polycarbonates, PBT, PPS, PEI, PP, PARA, etc. are injected.

Parque Empresarial Boroa,
Parcela 2C-1
48340 Amorebieta
Vizcaya-Spain
Tel.: (+34) 94 648 26 87
Fax: (+34) 94 648 26 88

ptb@plastibor.com
www.plastibor.com



inaselec

Inaselec Assembly is a recent established Company within Gorlan group, is devoted to the manufacturing activity. As a result of this exclusive dedication to the manufacture and assembly by means of the most developed and modern systems, as well as rigorous quality controls, Inaselec offers an excellent end-product.

Pol. Fuente Ciega-C/Encinas, 40
26200 Haro, La Rioja-Spain
Tel.: (+34) 941 89 49 00

inaselec@inaselec.com
www.inaselec.com



gorlan

Gorlan Polska was established to spread the group's solutions and attend local customers needs in the Polish market.

uL. Zeromskiego 18
56-420 Bierutow-Polska
Tel.: (+48) 71 315-63-21
Fax: (+48) 71 314-62-35

polska@gorlanteam.com
www.polska.gorlanteam.com



gorlan

Gorlan Electric Shanghai was established to offer its group's solutions to the Chinese market in order to attend to this market's needs in the most customised and efficient fashion possible.

Office 1505, Sino Life Tower
No. 707 Zhangyang Road
Pudong, Shanghai 200120-China
Tel.: (+86) 21 58 88 92 86

shanghai@gorlanteam.com
www.shanghai.gorlanteam.com



gorlan

Gorlan India Switchgears Private Limited was formed as a result of the merger of Gem Telergon Switchgears Pvt Ltd and Gorlan Technologies Pvt Ltd.

24, Textool Feeder Industrial
Estate, Ganapathy
Coimbatore-641 006-India
Tel.: (+91) 422 253 7041
Fax: (+91) 422 253 2890

india@gorlanteam.com
www.india.gorlanteam.com





Telergón, S.A.U.
Ctra. Castellón (Pol. La Cartuja)
50720 La Cartuja Baja
Zaragoza / Spain



Tel.: + 34 976 500 876
Fax: + 34 976 500 314
comercial@telergon.es