

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

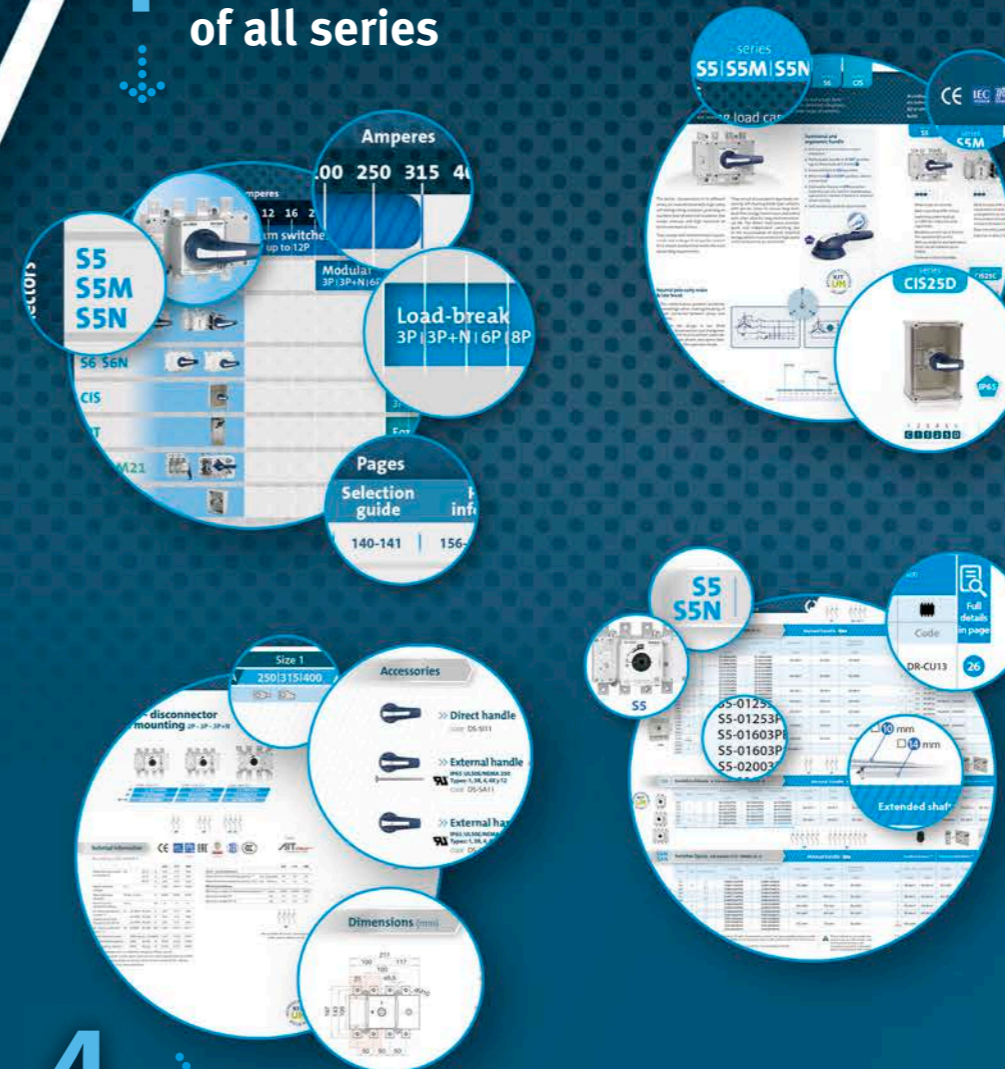


About the catalog

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



4 Full information of selected product

2 General information of the product range

3 Quick selection guide by series & index



This catalogue is printed on paper coming from sustainable certified forestry

INDEX OVERVIEW OF THE RANGE

Amperes

Amperes

Pages

10 12 16 20 25 32 40 50 63 80 100 125 160 200 250 315 400 500 630 800 1000 1250 1600 1800 2000 2500 3150 4000 5000 6300

Presentation Selection guide Product information

Switch - disconnectors

AC

Changeover switches

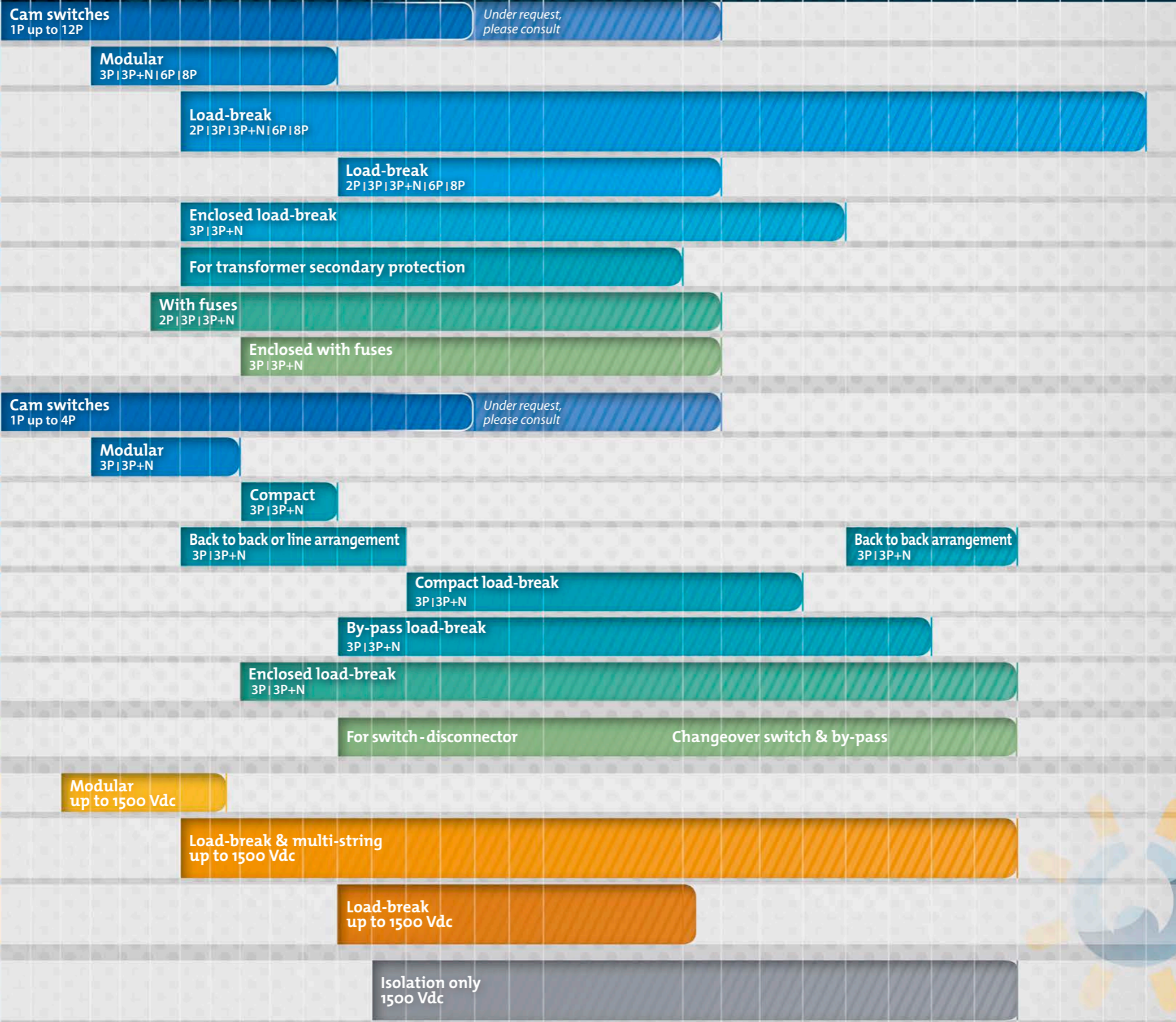
AC

UM

DC Switch - disconnectors

DC Disconnectors

T TB TF TP	
ZBK	
S5 S5M S5N	
S6 S6N	
CIS	
IPT	
M11 M21	
CIF	
T TB TF TP	
ZBK	
CEC	
S5F S5L	
CCF CCP	
S5B	
CTR	
Motorized Unit Kit	
ZFC ZFV	
S5 DC S5M DC S5N DC	
S6 DC S6N DC S6R DC	
S5 DC S6 DC	

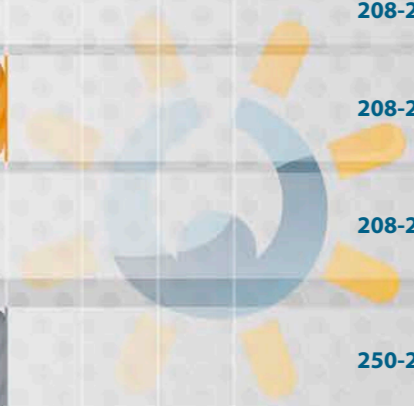


Under request, please consult

Under request, please consult

Product	Presentation	Selection guide	Product information
T TB TF TP	4-7	-	8-15 24-49
ZBK	50-51	-	52-61
S5 S5M S5N	62-63	64-67	70-87 92-101
S6 S6N	62-63	64-67	88-91 102-105
CIS	62-63	68-69	106-117
IPT	-	-	118-119
M11 M21	120-121	122-123	124-133
CIF	120-121	122-123	134-143
T TB TF TP	4-7	-	16-23 24-49
ZBK	50-51	-	58-59
CEC	144-145	146-147	150-151
S5F S5L	144-145	146-147	152-155 162-165
CCF CCP	144-145	146-147	156-161
S5B	144-145	146-147	166-175
CTR	144-145	148-149	176-191
Motorized Unit Kit	192-193	194-195	196-207
ZFC ZFV	208-209	210-213	214-215
S5 DC S5M DC S5N DC	208-209	210-213	216-233
S6 DC S6N DC S6R DC	208-209	210-213	234-249
S5 DC S6 DC	250-251	252-253	254-265

Reference-page index	General information
266-269	270-271



Cam switches

series
T|TB|TF|TP

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

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

Testing and approvals:



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.

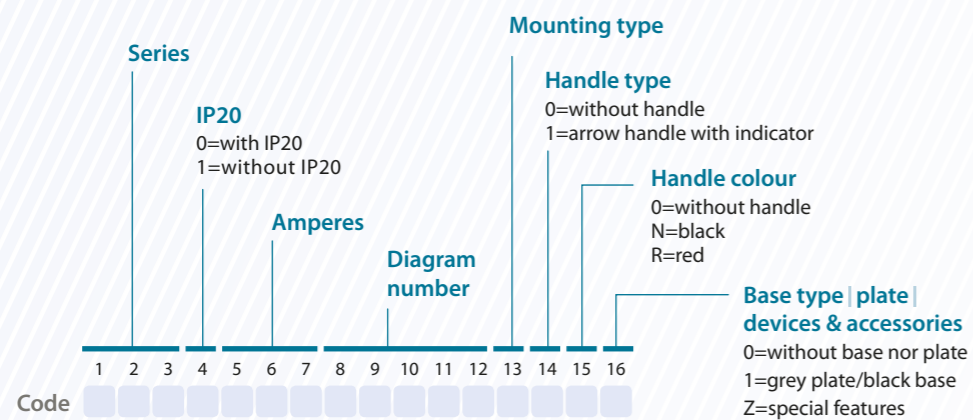
Range codification:

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 **T-0010000012E1N1**
T series | 100 amperes | 012 diagram | E fixing |
Standard handle | Black colour |
Grey plate/black base |

series **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**



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**



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**



Reduce-sized body. Door mounting only.
Wide range of devices and accessories.

series | type **TIP**



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

series | type **T-TFIR**



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

series | type **T-TBIA-C**



- > Cam switch in metal enclosure of cast aluminium
 - ⁴A From 12 up to 63 A.
- > In sheet steel enclosure
 - ⁴C From 100 A upwards.
- > Gland entry.
- > Several enclosure sizes.
- > Padlockable handle under request.

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

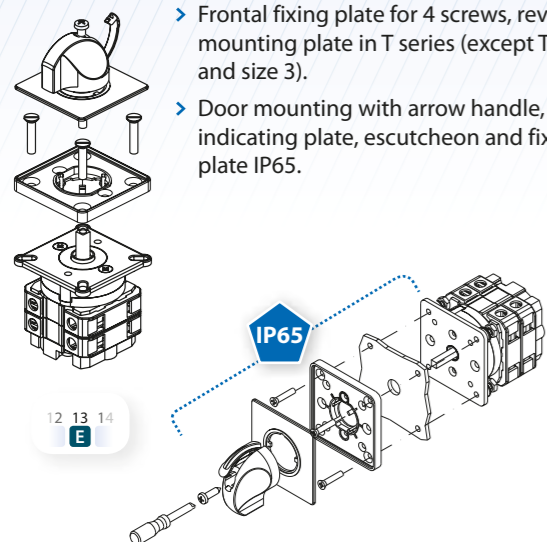
TP | T | TB | TF

Door mounting

Fixing with screws | E type

For T - TB - TF - TP series

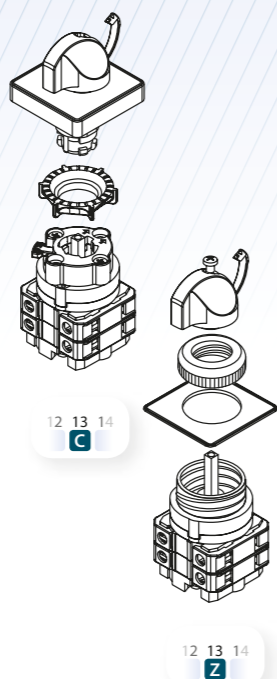
- > Frontal fixing plate for 4 screws, reversible mounting plate in T series (except T175 and size 3).
- > Door mounting with arrow handle, indicating plate, escutcheon and fixing plate IP65.



Central quick fixing $\varnothing 22$ | C type

For T - TB - TF series

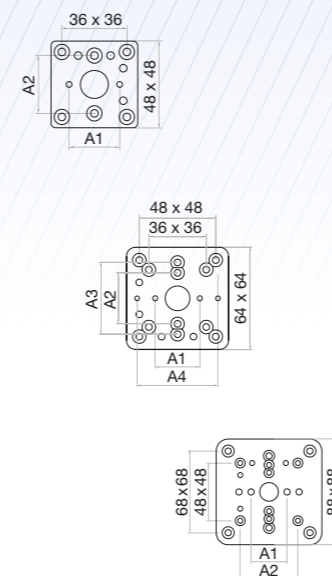
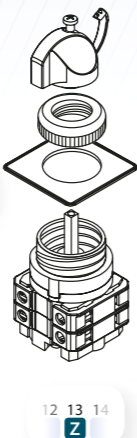
- > Door mounting for $\varnothing 22$ mm available for sizes 0 and 1.
- > For arrow handle with indicator or padlockable handle.
- > Maximum number of chambers supported
Size 0 = 6
Size 1 = 4



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).



Size	Models		13
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

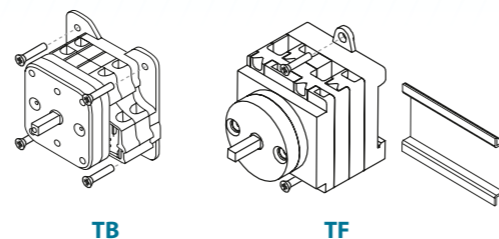
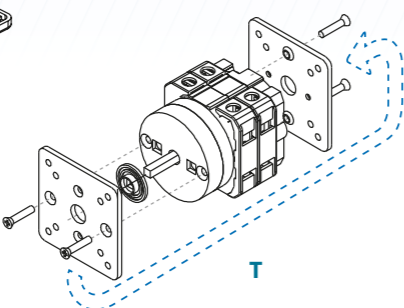
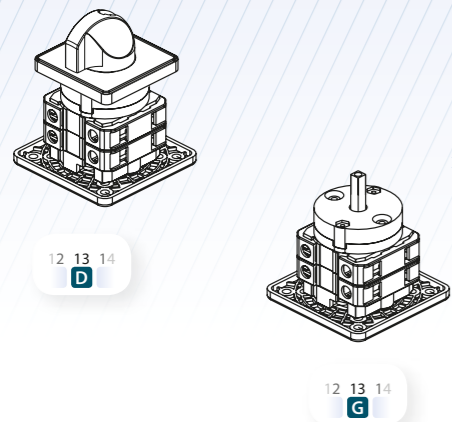
Base mounting by screws with direct handle | D type Base mounting by screws without plate nor handle | G type

For T series

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

For TB - TF series

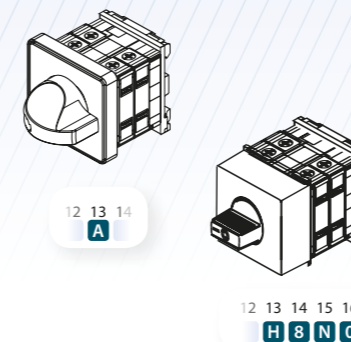
- > Fixed rear support plate as standard.
- > Serie TB for 4 screws.
- > Serie TF for two screws (also DIN rail).



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

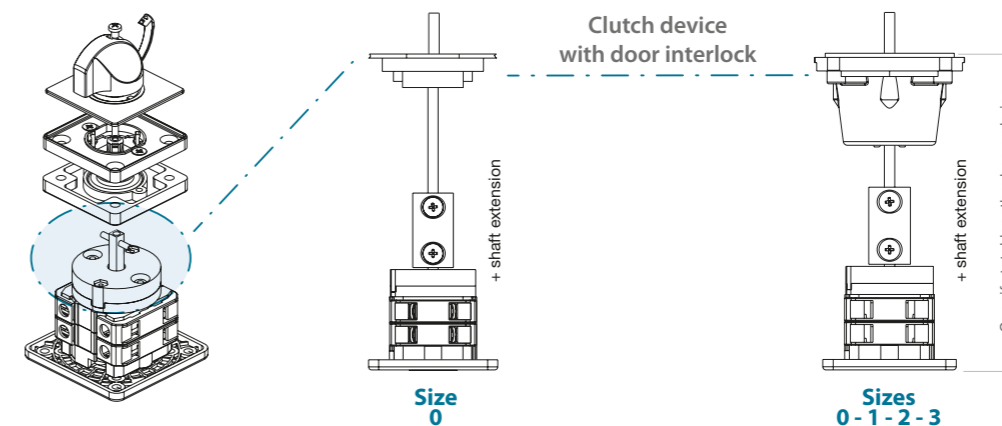
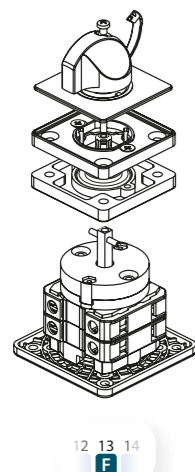
For TF series

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

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 serie.
- > 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.



TP|T|TB|TF Door mounting switch

1P up to 12P

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
Rated conditional short-circuit current	Ics	Ue 415V AC23A	A 10	10	25	20	25	32	8	16	20
		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	mm²	2x4	2x4	2x4	1x10 2x6	1x10 2x6	1x10 2x6	1x10	1x10	1x10	
Flexible copper conductor	mm²	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	12		
		3x600V	HP -	-	-	-	-	5	10	15	

Normal service conditions:

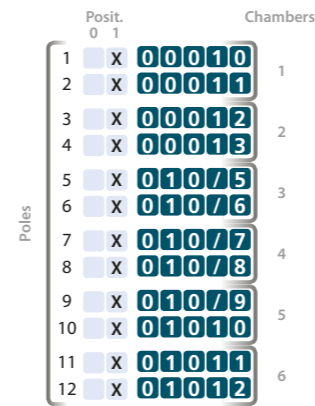
Ambient air temperature (°C): -5°...+40°. Maximum altitude: 2.000 m. Maximum humidity: 90%. Pollution degree: 3 (standard for industrial applications). Rated frequency at AC utilization categories: 50/60 Hz.
Rated duties at utilization categories AC21A, AC22A and AC23A: Continuing (8 hours); uninterrupted.



Series | Amp

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

Diagram



Type

Model or fixing

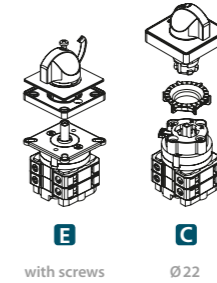


Plate and handle



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



Technical information



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

According to IEC 60947-3			T16	T25	T32	T40	
Rated thermal current	Ith	A	25	32	40	50	
Rated insulation voltage	Ui	V	690	690	690	690	
Rated impulse withstand voltage	Uimp	kV	6	6	8	8	
AC rated operational current	Ie	Ue 415V AC21A	A	25	32	40	50
		Ue 415V AC22A	A	25	32	40	50
		Ue 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	Ith	A	16	25	32	40	
General use rating		Vac	600	600	600	600	
AC rated operational power		3x240V	HP	5	7,5	10	15
		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-000116
- T-00025
- T-00032
- T-00040

Diagram

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

Type

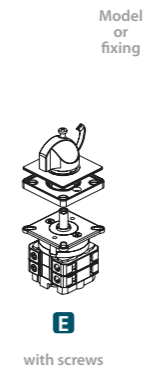
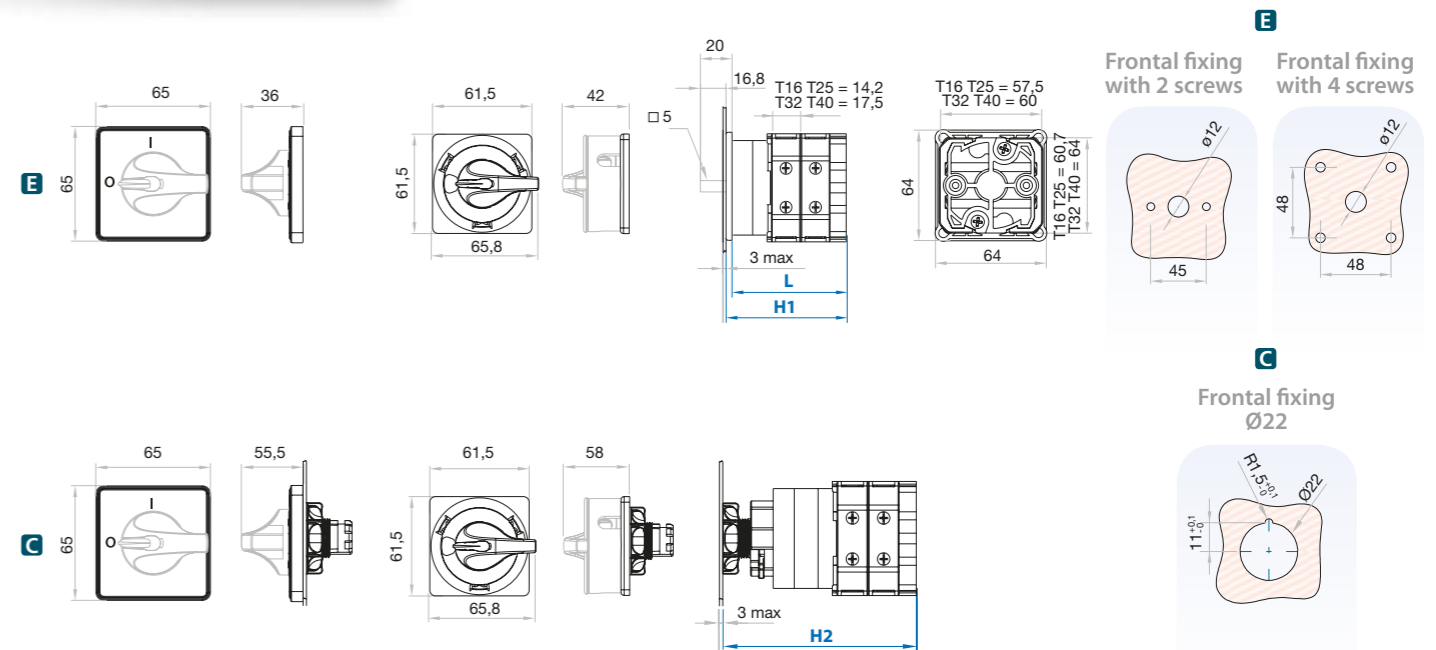


Plate and handle



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

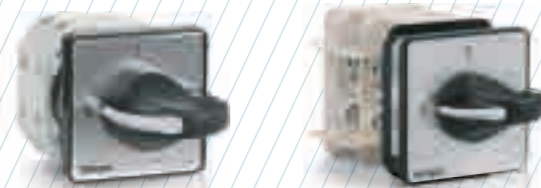
>> For more information of this serie; accessories see pages 24-31 | diagrams see pages 32-43

T Door mounting switch

1P up to 12P

Size 2
A 50|63|80|100|125|175

* Except T175



T

Technical information



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

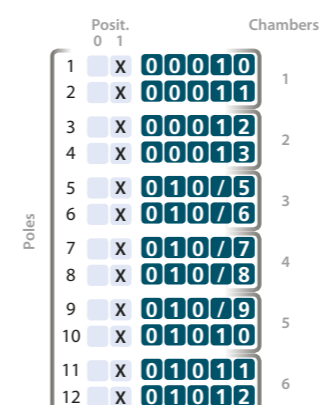
Rated duties at utilization categories AC21A, AC22A and AC23A: Continuing (8 hours); uninterrupted.



Series | Amp

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

Diagram



Type

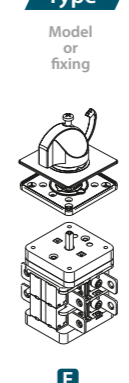
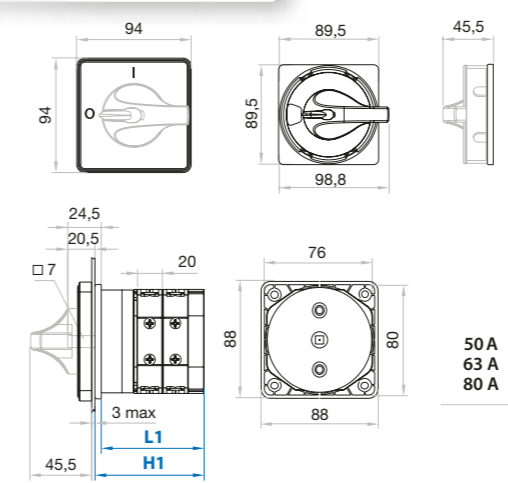


Plate and handle

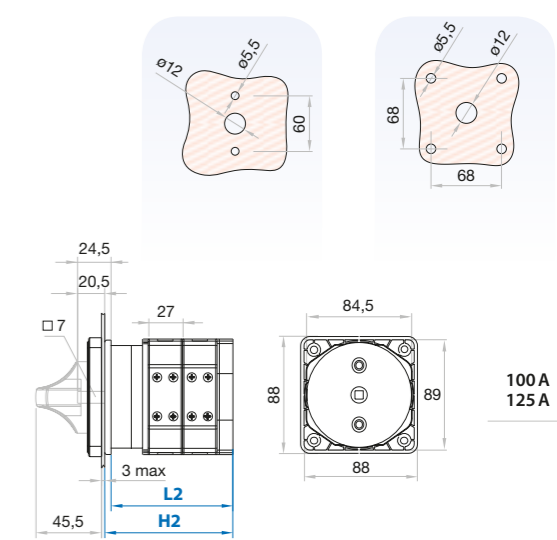


Dimensions (mm)



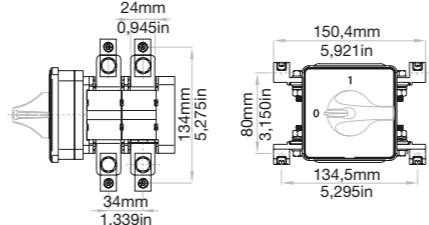
T series	Chambers	1	2	3	4	5	6
T50 T63 T80	L1	58,5	78,5	98,5	118,5	138,5	158,5
	H1	62,5	82,5	102,5	122,5	142,5	162,5

Frontal fixing with 2 screws Frontal fixing with 4 screws

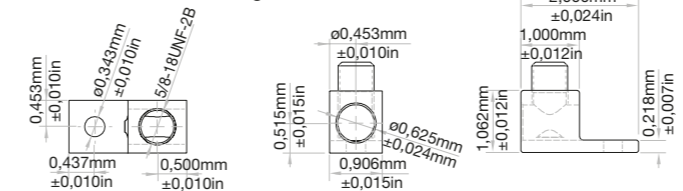


T series	Chambers	1	2	3	4	5	6
T100 T125	L2	67	94	121	148	175	202
	H2	71	98	125	152	179	206

UL Terminal Lug



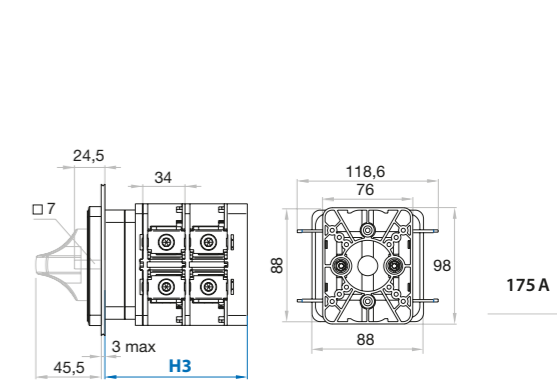
Terminal extensions according to UL.



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

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

UL Terminal Lug



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

>> 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



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	Ith	A	200	250	315
Rated insulation voltage	Ui	V	690	690	690
Rated impulse withstand voltage	Uimp	kV	8	8	8
	Ue 415V AC21A	A	200	250	315
AC rated operational current	le	A	200	250	315
	Ue 415V AC22A	A	200	250	315
	Ue 415V AC23A	A	200	200	200
Rated conditional short-circuit current		kA	15	15	15
Rated maximum current	gL-gG	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	Ith	A	200	200	200
General use rating		Vac	600	600	600
	3x240V	HP	60	60	60
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
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

Model or fixing

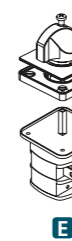
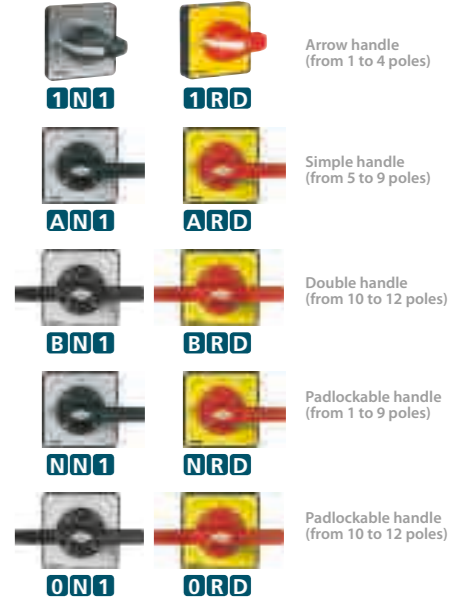
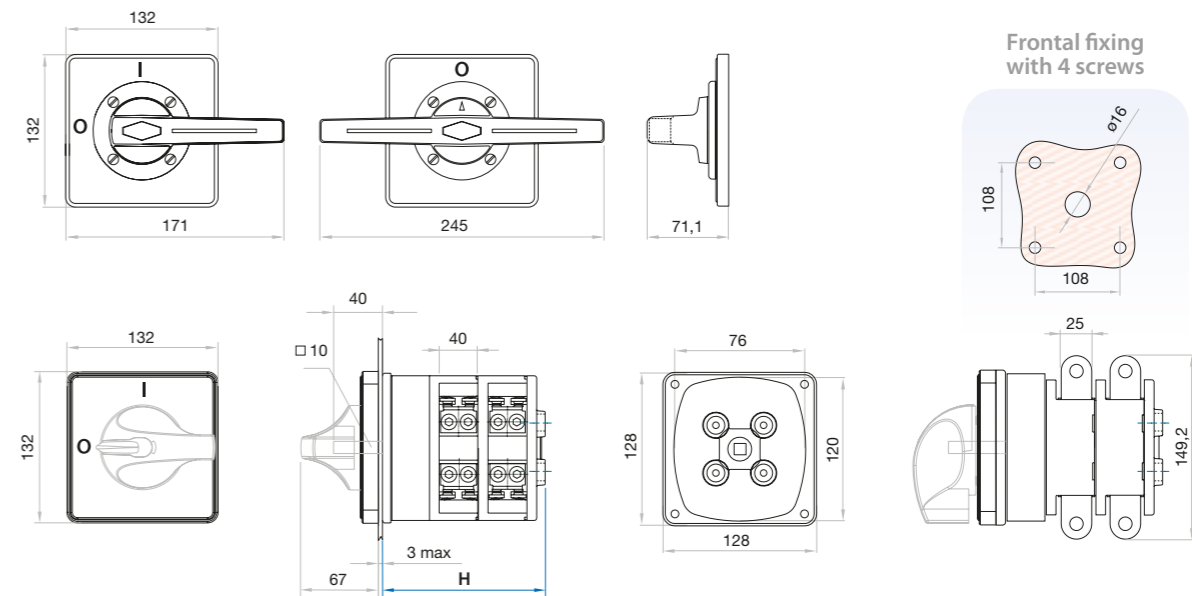


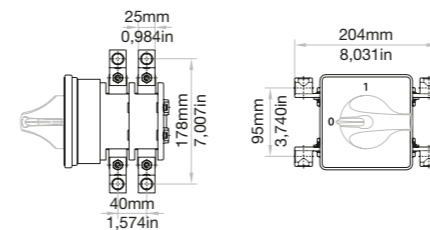
Plate and handle



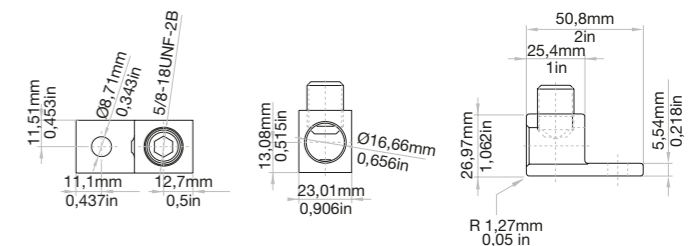
Dimensions (mm)



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.

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

TP|T|TB|TF Door mounting changeover 1P up to 4P

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



Technical information



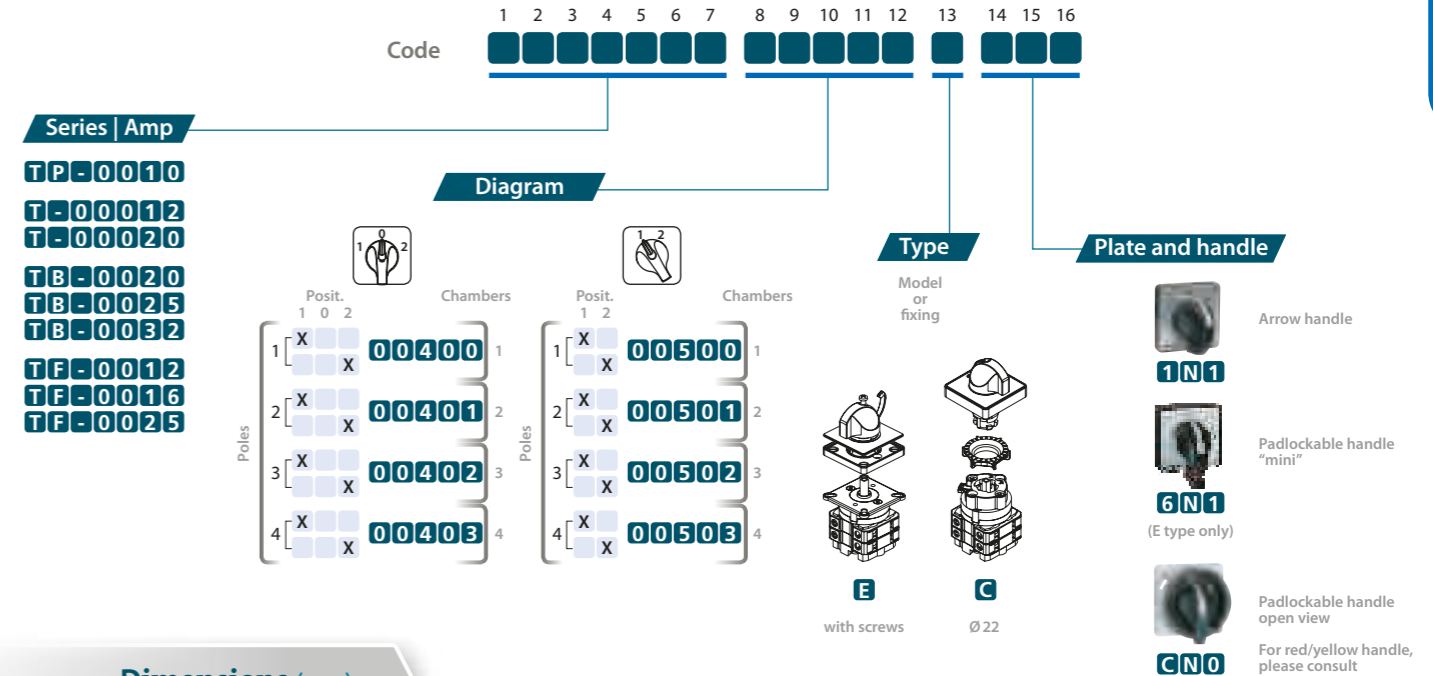
According to IEC 60947-3
UL508 - CAN/CSA C22.2 N° 14

According to IEC 60947-3		TP10	T12	T20	TB20	TB25	TB32	TF12	TF16	TF25		
Rated thermal current	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	6	6	6		
AC rated operational current	I _e	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
AC rated operational current	I _e	Ue 415V AC23A	A	10	10	25	20	25	32	8	16	20
			kA	5	10	10	5	5	5	5	5	5
Rated conditional short-circuit current		kA	5	10	10	5	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		
				2	5	-	-	2	5	7,5		
AC rated operational power		3x240V	HP	-	-	-	-	-	2	5	7,5	
		3x480V	HP	-	-	-	-	-	5	10	12	
		3x600V	HP	-	-	-	-	-	5	10	15	

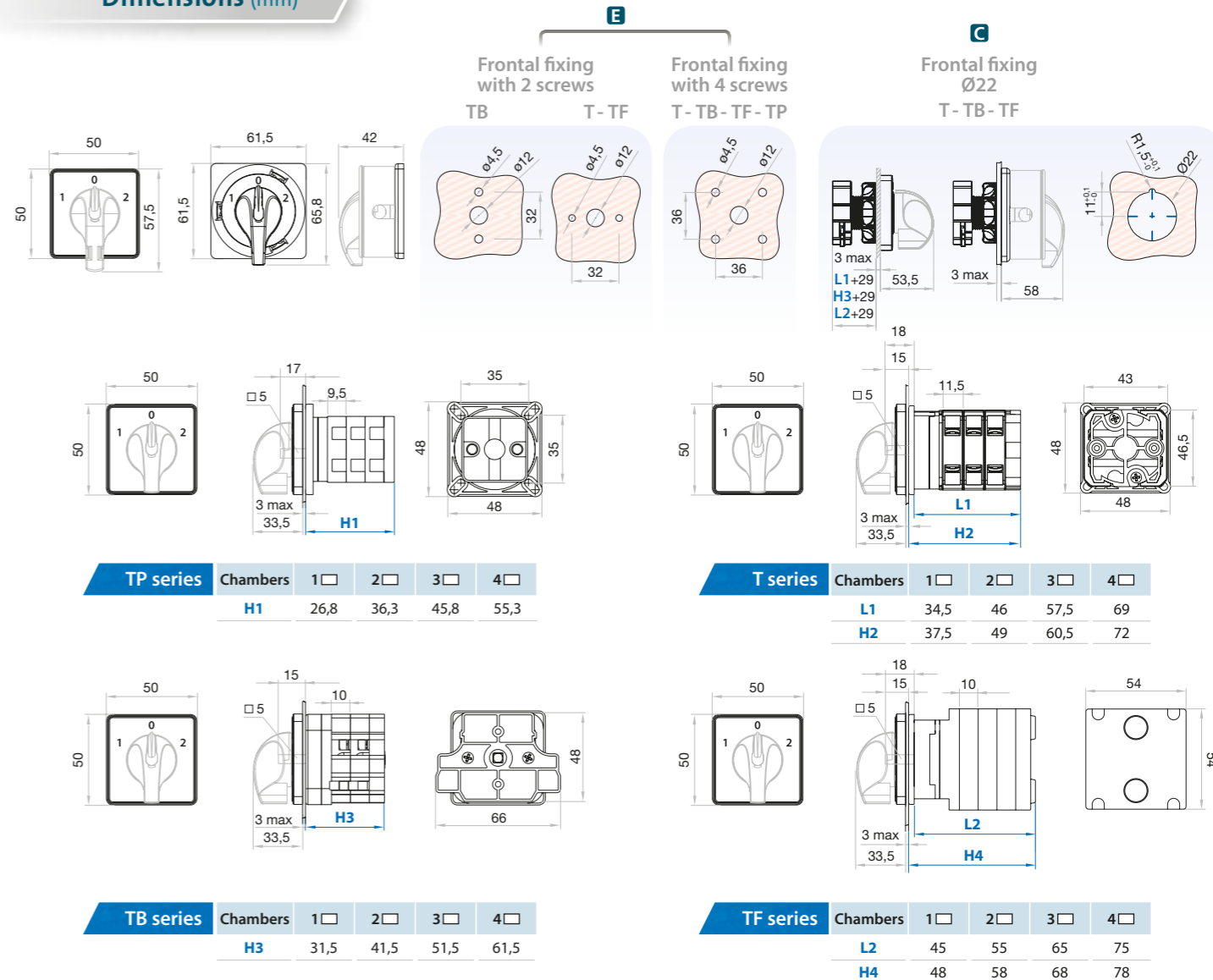
Normal service conditions:

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.



Dimensions (mm)



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

T Door mounting changeover

1P up to 4P

Size 1
A 16|25|32|40



Technical information



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	
		U _e 415V AC21A	A	25	32	40	50
AC rated operational current	I _e	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	3x240V	HP	5	7,5	10	15
		3x480V	HP	10	15	20	25
AC rated operational power	HP	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.

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

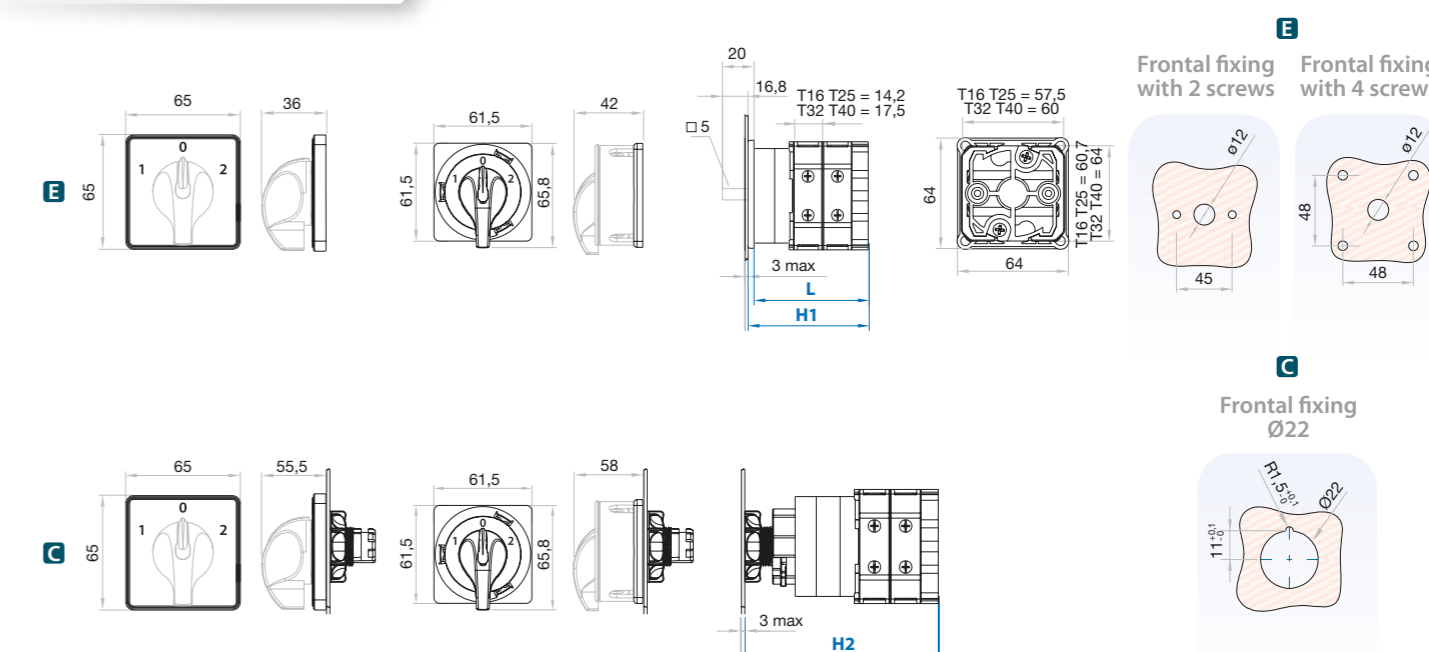
Series | Amp
 T-00016
 T-00025
 T-00032
 T-00040

Diagram

Type
 Model or fixing
 E with screws
 C Ø22

Plate and handle
 Arrow handle
1N1
 Padlockable handle open view
CN0
 For red/yellow handle, please consult

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 serie; 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



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	200	
Rated insulation voltage	U _i	V	690	690	690	690	1000	
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	8	8	
AC rated operational current	I _e	Ue 415V AC21A	A	63	80	80	125	200
		Ue 415V AC22A	A	63	80	80	115	200
		Ue 415V AC23A	A	63	63	63	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	160	
Rated breaking capacity	400V; cos φ=0,45	A	504	504	504	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	100	100	200	
General use rating	Vac	600	600	600	600	600	600	
AC rated operational power	3x240V	HP	20	20	30	30	25	
	3x480V	HP	40	40	40	50	60	
	3x600V	HP	40	40	40	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.

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

Series | Amp

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

Diagram

Posit.	1	0	2	Chambers
1	X		X	00400
2	X		X	00401
3	X		X	00402
4	X		X	00403

Posit.	1	2	Chambers
1	X		00500
2	X		00501
3	X		00502
4	X		00503

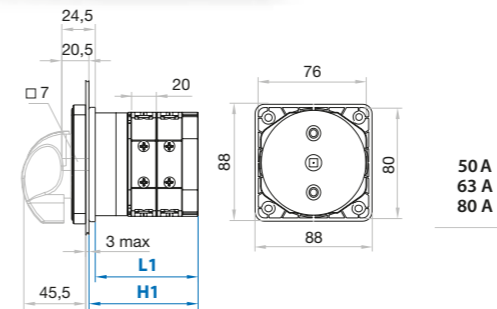
Type

Model or fixing

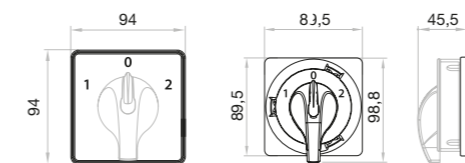
Plate and handle

- Arrow handle
- 1N1
- Padlockable handle open view
- CN0
- For red/yellow handle, please consult

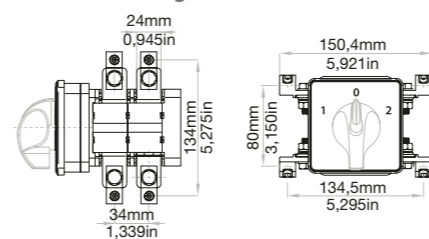
Dimensions (mm)



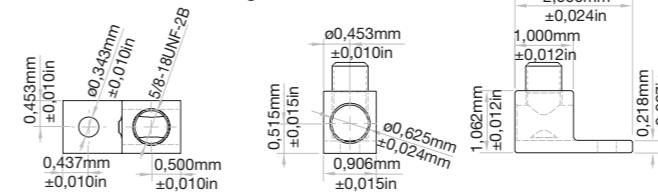
T series	Chambers	1	2	3	4
T50 T63 T80	L1	58,5	78,5	98,5	118,5
	H1	62,5	82,5	102,5	122,5



UL Terminal Lug



Terminal extensions according to UL.

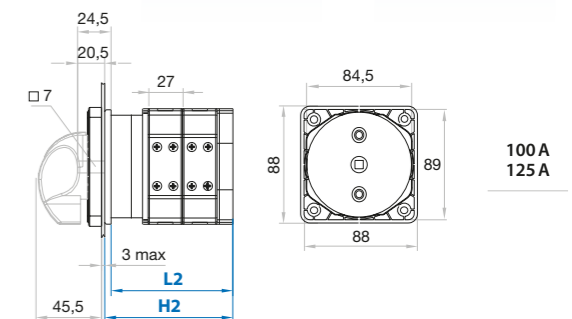
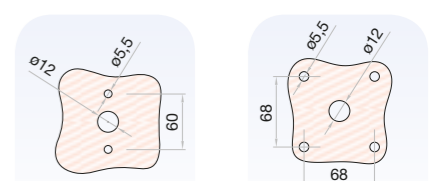


Wire size	Wires per lug	Wire type	Kit reference
120 mm ² / 250 kcmil	1	Cu	DS-TLU21 (2 pieces)

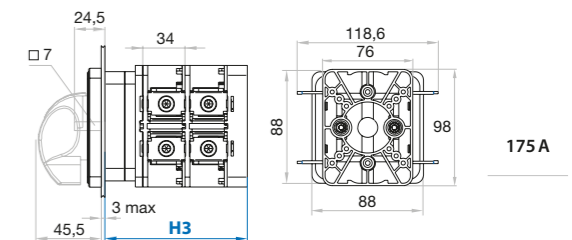
Note: The hardware needed to complete the wiring is supplied as standard.

Frontal fixing with 2 screws

Frontal fixing with 4 screws



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

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

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



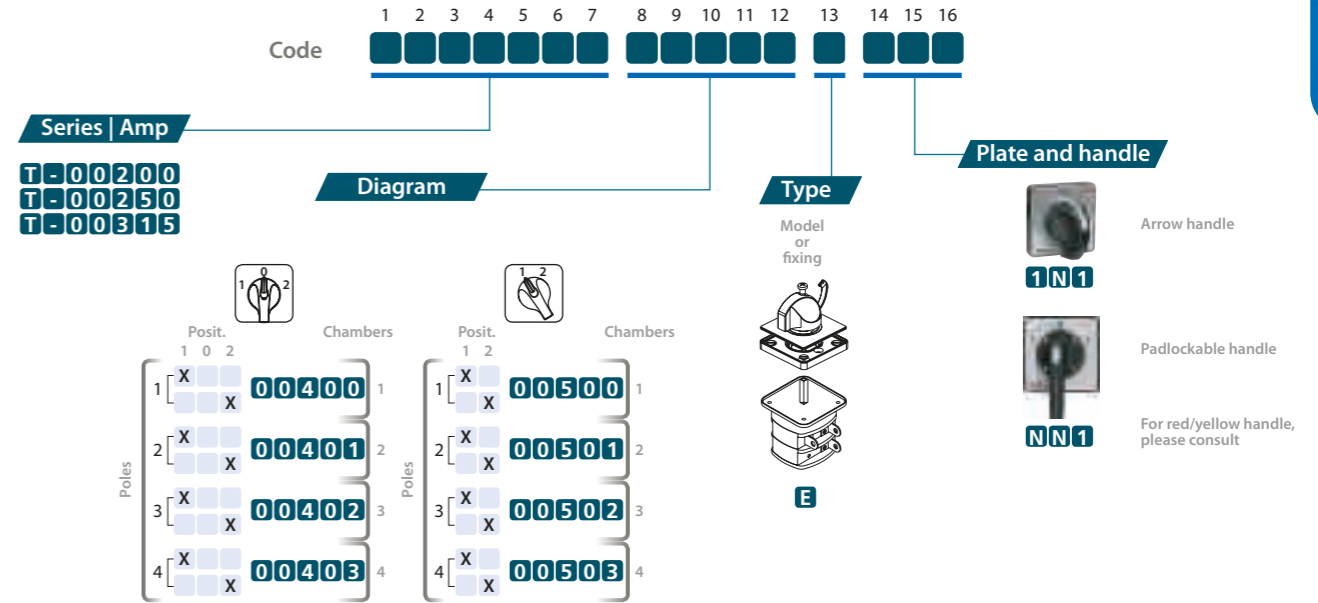
According to IEC 60947-3
UL508 - CAN/CSA C22.2 N° 14

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
		Ue 415V AC21A	A	200	250
AC rated operational current	I _e	Ue 415V AC22A	A	200	315
		Ue 415V AC23A	A	200	200
		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
AC rated operational power		3x480V	HP	75	75
		3x600V	HP	60	60

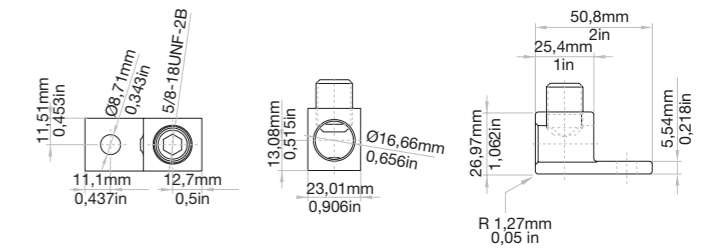
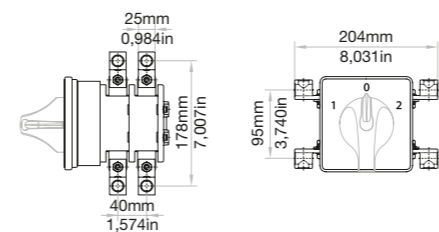
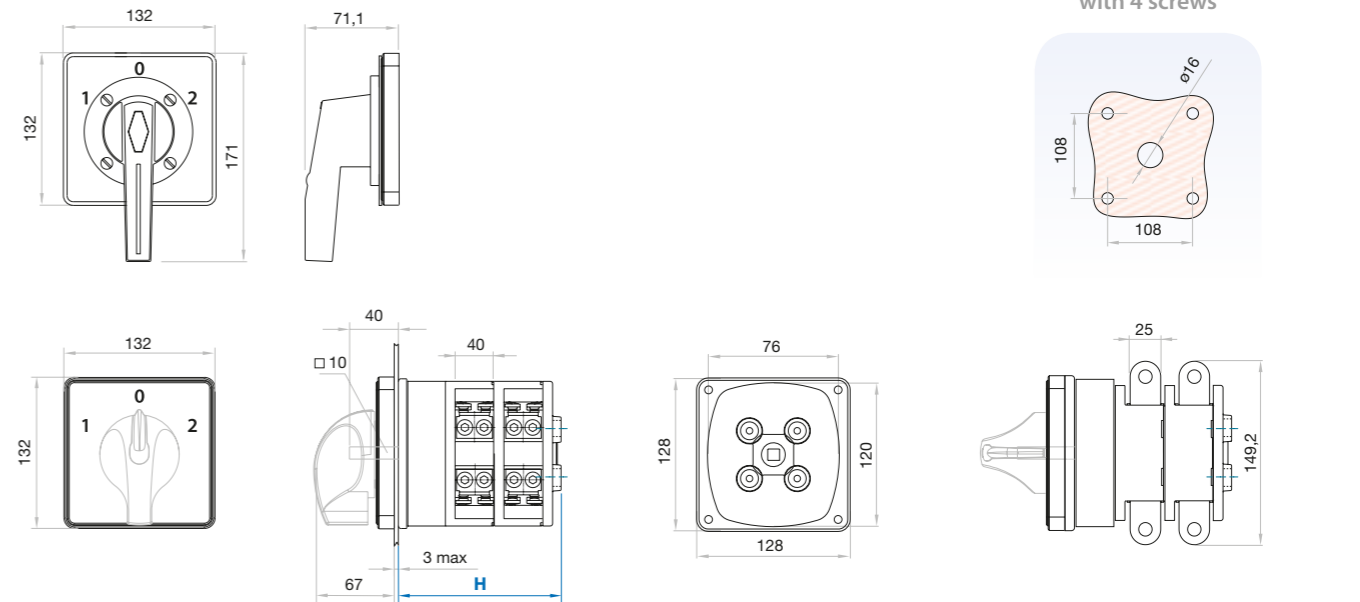
Normal service conditions:

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.



Dimensions (mm)



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)

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



14 15 16
D100 4



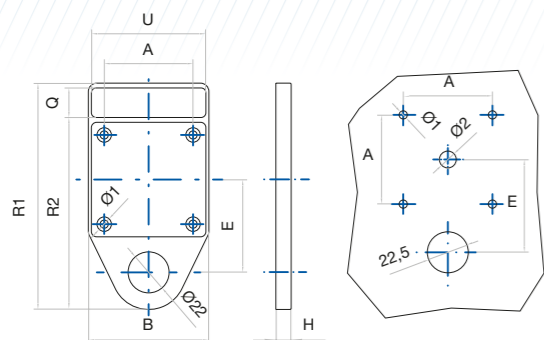
Light with white neon lamp
D100

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
D200 D



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

13 14 15 16
D301 G



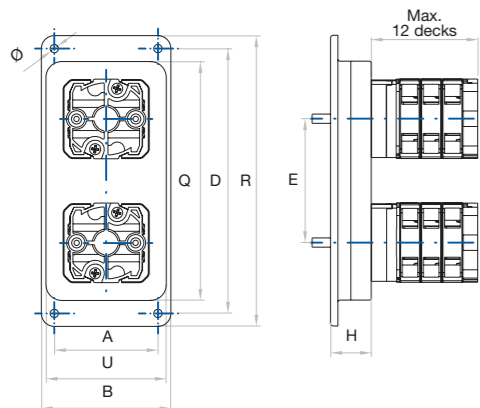
Blocking operation*
D300 with two columns
D301 with three columns

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.

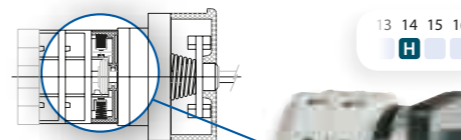
D300-301 For switching up to 29 positions with two handles and two columns, or 36 positions with three handles and three columns according to the electrical diagram.

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



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

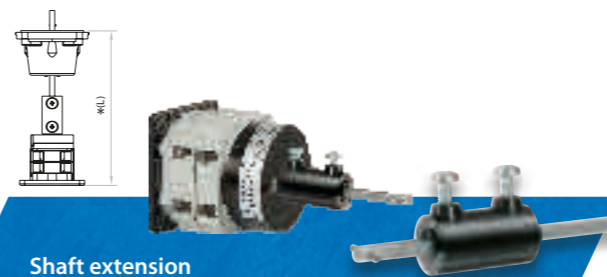


Dual voltage locking device
D420

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



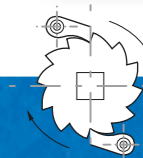
Shaft extension

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 TF12-TF16-TF25 T16-T25-T32-T40	DT-EPR11
	5 5	500	T16-T25-T32-T40	DT-EPR12
Spare or incorporated in the cam switch	2	200	T50-T63	DT-EPR21
	7 7	500	T100-T175	DT-EPR22
Only incorporated in the cam switch	3	upon request	T200	-

*L) Specify total length when ordering

13 14 15 16
I



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



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
Spare	D501 + 704 90°	0	T12-T20 TB20-TB25-TB32 TF12-TF16-TF25
			DT-75401N07 DT-75401R01 F 6 N 1 F 6 R D
Incorporated in the cam switch	90°	0	T12-T20 TB20-TB25-TB32 TF12-TF16-TF25
		1	T16-T25-T32-T40
		2	T50-T63-T100-T175
Spare	60°	0-1	T12-T20-TB20-TB25-TB32 TF12-TF16-TF25 T16-T25-T32-T40
		2	T50-T63-T100-T175
		3	T200
Spare	45°	0-1	T12-T20-TB20-TB25-TB32 TF12-TF16-TF25 T16-T25-T32-T40
		2	T50-T63-T100-T175
		3	T200
Incorporated in the cam switch			12 13 14 15 16 F

Coaxial coupling
D600



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

Key handle device
D701



D701 Supplied as standard with ø22mm fixing; ø30 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.

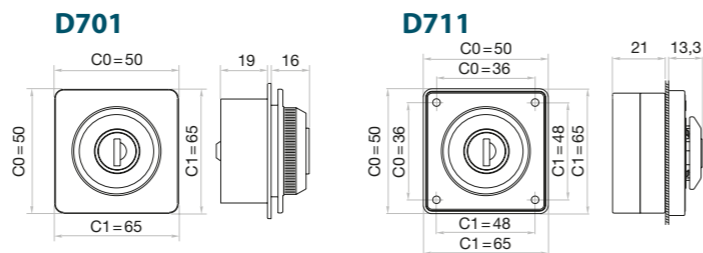
D711 Supplied as standard with screw mounting and different types of keys that can be locked and removed at 90°.

Assembly limitation:
4 contacts actuating simultaneously.

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



Key lock device
D702



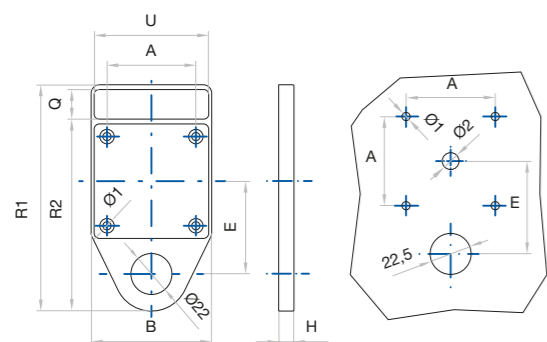
D702 The key lock device allows the adaptation of 1 or 2 auxiliary contacts (1NO + 1NC) operated by turning the key (like signalling or control contacts).

D703 Inscription plate included with text as requested.

Key lock device with inscription plate
D703



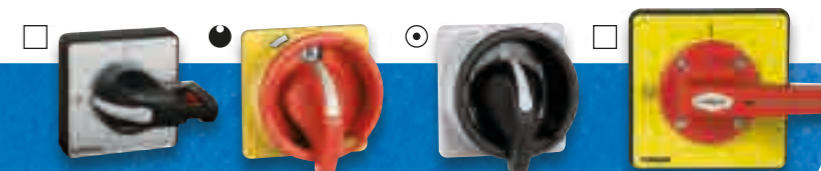
Supply	Size	For series
Only incorporated in the cam switch	0-1	T12-T20-TB20-TB25-TB32 TF12-TF16-TF25 T16-T25-T32-T40
	2	T50-T63 T100-T175
	3	T200



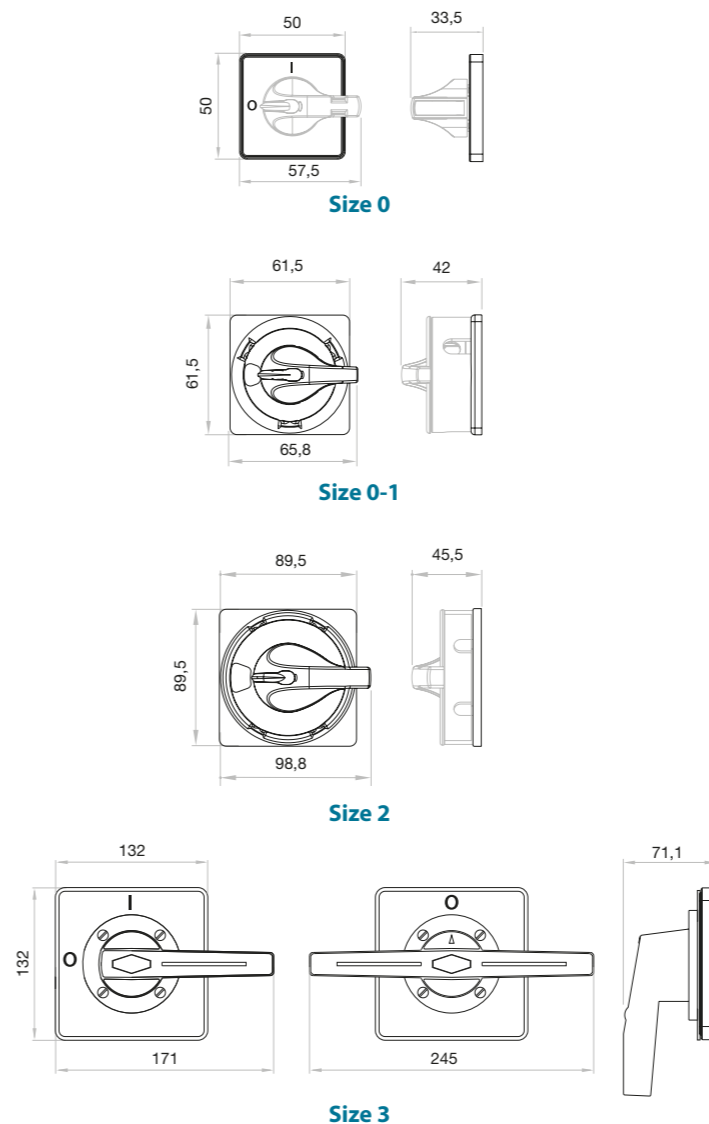
* Auxiliary contacts 1NO + 1NC

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).



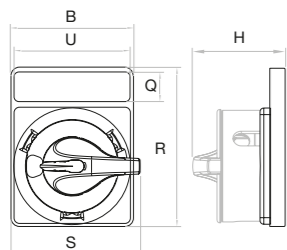
	Supply	Size	For series	Code
Square plate	Spare	0	T12-T20 TB20-TB25-TB32 TF12-TF16-TF25 TP10	DT-70401N07
	Incorporated in the cam switch			DT-70401R01*
Closed view	Spare	0-1	T12-T20 TB20-TB25-TB32 TF12-TF16-TF25 T16-T25-T32-T40	DT-7041CN02
	Incorporated in the cam switch			DT-7041CR02
Open view	Spare	0-1	T12-T20 TB20-TB25-TB32 TF12-TF16-TF25 T16-T25-T32-T40	DT-7041AN02
	Incorporated in the cam switch			DT-7041AR02
Closed view	Spare	2	T50-T63 T100-T175	DT-7042CN02
	Incorporated in the cam switch			DT-7042CR02
Open view	Spare	2	T50-T63 T100-T175	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

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	6,5	48,5	16	85	65,8	61
2	9,4	53,5	19	117	98,8	90
3	13,2	71,5	21	157	171,245	126

	Supply	Size	For series	Code
Closed view	Only incorporated in the cam switch	0-1	T12-T20	^{13 14 15 16} 7 N 2
			TB20-TB25-TB32	^{13 14 15 16} 7 R 2
Open view	Only incorporated in the cam switch	0-1	TF12-TF16-TF25	^{13 14 15 16} C N 2
			T16-T25	^{13 14 15 16} C R 2
Closed view	Only incorporated in the cam switch	2	T50-T63	^{13 14 15 16} 7 N 2
			T100-T175	^{13 14 15 16} 7 R 2
Open view	Only incorporated in the cam switch	2	T50-T63	^{13 14 15 16} C N 2
			T100-T175	^{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	3	T200	^{13 14 15 16} O N 2
				^{13 14 15 16} O R 2

^{14 15 16} D708 ⁸



Push button blocking system D708

D708 Available in two versions (specify when ordering):

- The handle is blocked in all positions.
- 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.

^{14 15 16} D709 ⁹



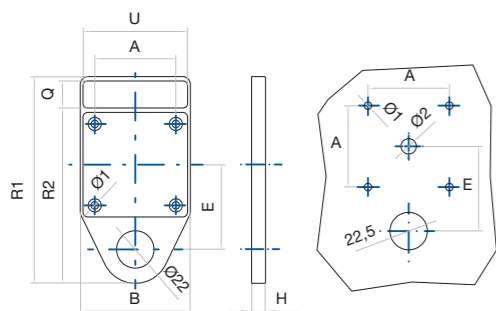
Push button blocking system with inscription plate D709

	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

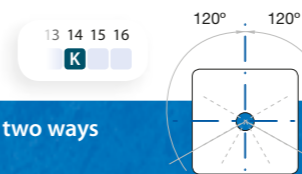
* Auxiliary contacts 1NO + 1NC 2NO + 2NC



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



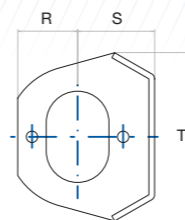
	Supply	Size	For series
Only incorporated in the cam switch		0-1	T12-T20-TB20-TB25-TB32 TF12-TF16-TF25 T16-T25-T32-T40

^{14 15 16} E



Terminal shrouds D900

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

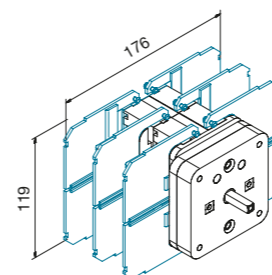


Series	R	S	S
T12 T20	21	27	59
T16 T25 T32 T40	28	34	72
T50 T63 T100	15	52	104
T200	40	155	130

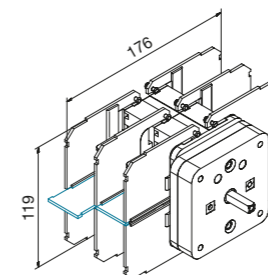
	Supply	Size	For series	Code
		0	T12-T20	DT-90002
		1	T16-T25-T32-T40	DT-90012
Spare		2	T50-T63	DT-90022
		3*	T200	DT-90031
			T400	DT-90032

* Max. 2 chambers

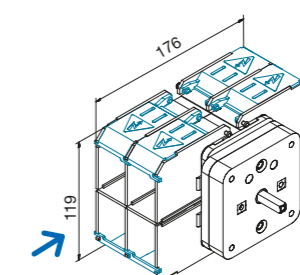
T175 terminal shrouds and phase barriers D900



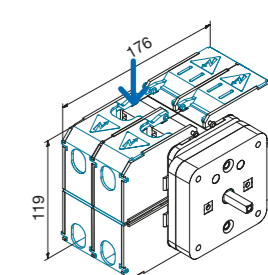
Phase barriers - Vertical
Code DT-90025 (4 units)



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

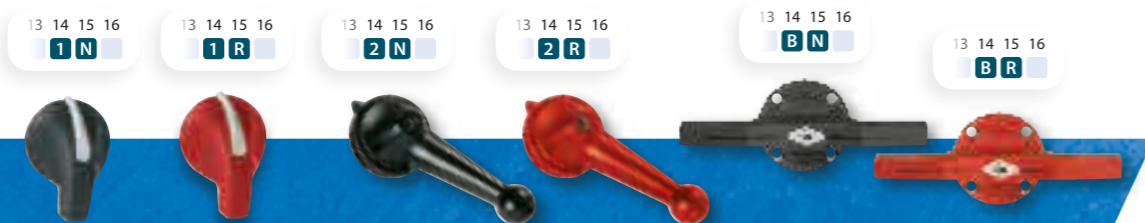
D904 Included as standard in D-F-G fixing types for TB-TF and T175 series.

D905 DIN rail mounting with frontal plate and handle for distribution boards.

Front plates for distribution boards D905

	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 3 N O

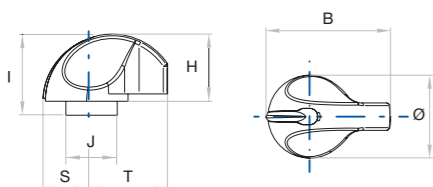
Handles (plastic)



- 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.

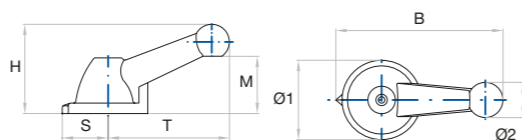
	Supply	Size	Code		
Arrow handle with indicator	Spare or incorporated in the cam switch	0	● 40110030 ● 40110031		
		1	● 40111034 ● 40111035		
		2	● 40112028 ● 40112029		
		3	● 40113023 ● 40113024		
		Ball lever	Spare or incorporated in the cam switch	1	● 40111002 ● 40111003
				3	● 40113002 ● 40113001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

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



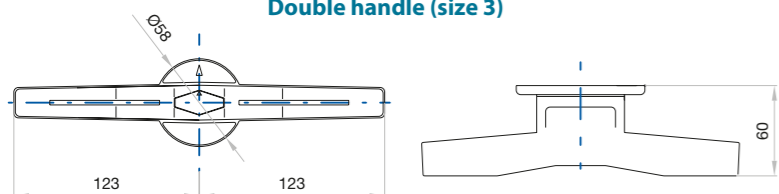
Size	B	H	I	J	S	T	Ø
0	39,3	26,8	30,5	14,5	13,5	24	27
1	50	28	33	14,5	18	32	36
2	66,5	36,5	-	-	22,5	44	45
3	100	54	-	-	38	62	76

Ball lever (sizes 1 - 3)

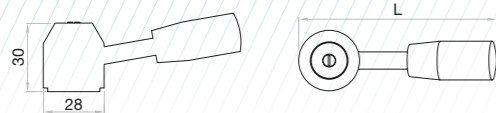


Size	B	H	S	T	M	Ø1	Ø2
1	89	48	24	65	32,5	37	18
3	151,5	81	41,5	110	52	72	32

Double handle (size 3)



Handles (metal & plastic)

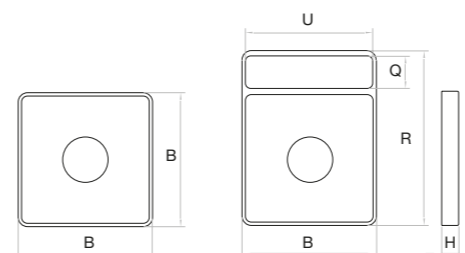


	Supply	Size	Code
Metal lever & plastic	Spare or incorporated in the cam switch	L=90mm	9-KN100146
		L=108mm	9-KN100145

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

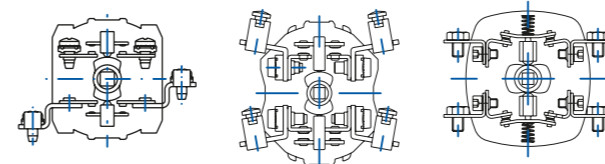
PRA

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
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



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
020 3 poles 1 preclosed pole 2 chambers

021 4 poles 1 preclosed pole 2 chambers
021 4 poles 1 preclosed pole 2 chambers

022 4 poles 3 preclosed poles 2 chambers
022 4 poles 3 preclosed poles 2 chambers

Reversing switches

102 3 poles 3 chambers
102 3 poles 3 chambers

Reversing switches with spring return

111 2 poles 2 chambers
111 2 poles 2 chambers

112 3 poles 2 chambers
112 3 poles 2 chambers

113 3 poles for use with reserving contactors 4 chambers
113 3 poles for use with reserving contactors 4 chambers

Reversing switches

101 2 poles 2 chambers
101 2 poles 2 chambers

Control switches with spring return

201 Start switch 1 pole 1 chamber
201 Start switch 1 pole 1 chamber

202 Stop switch 1 pole 1 chamber
202 Stop switch 1 pole 1 chamber

203 Start switch 2 poles 1 chamber
203 Start switch 2 poles 1 chamber

204 Stop switch 2 poles 1 chamber
204 Stop switch 2 poles 1 chamber

Stop-Start switches

205 With contactor 1 chamber
205 With contactor 1 chamber

206 With contactor and spring return 1 chamber
206 With contactor and spring return 1 chamber

207 With spring return to run for 2 units 2 chambers
207 With spring return to run for 2 units 2 chambers

Star delta switches

300 Normal type 4 chambers
300 Normal type 4 chambers

301 Auxiliary contact closed in "0" 5 chambers
301 Auxiliary contact closed in "0" 5 chambers

302 Reversing 5 chambers
302 Reversing 5 chambers

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

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

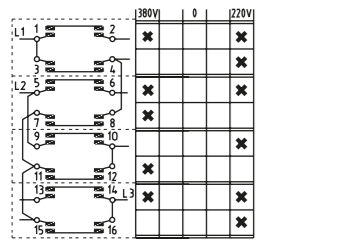
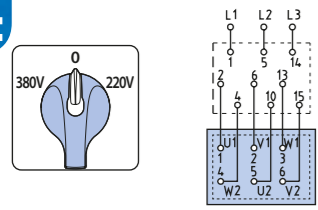
305 Reversing. Return from λ to 0 Δ-λ-0-λ-Δ 5 chambers
305 Reversing. Return from λ to 0 Δ-λ-0-λ-Δ 5 chambers

308 Use with contactor 0-λ-Δ 4 chambers
308 Use with contactor 0-λ-Δ 4 chambers

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

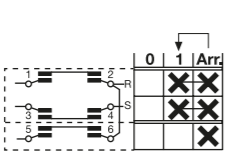
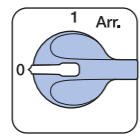
Star delta switches



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	0	0	3	1	0										

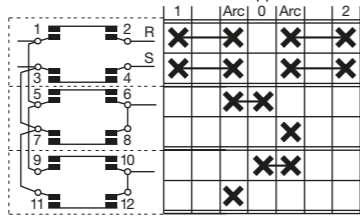
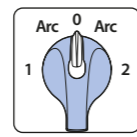
310
Selector $\lambda - \Delta$
380 - 0 - 220
4 chambers

Split phase starting switches



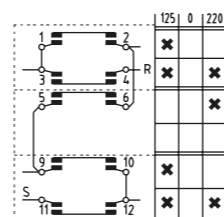
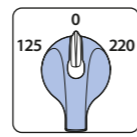
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	0	0	3	1	5										

315
Start return to 1
2 chambers



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	0	0	3	1	6										

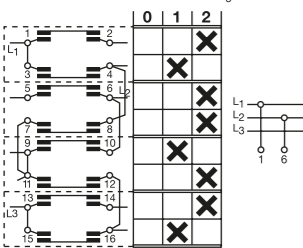
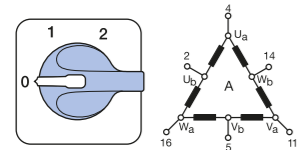
316
Reversing type of T315
1 - ARR - 0 - ARR - 2
3 chambers



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	0	0	3	1	7										

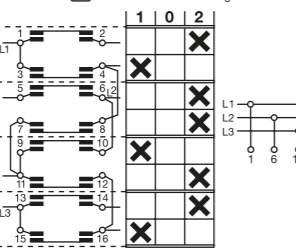
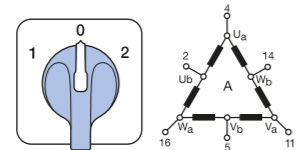
317
Start single phase 2 voltages
3 chambers

Dahlander multi-step switches



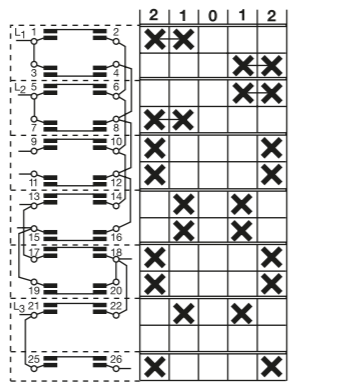
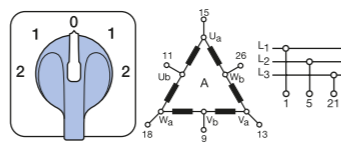
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	0	0	3	3	0										

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
0	0	0	3	3	1										

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
0	0	0	3	3	2										

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 - λ - 0 - λ - 1 - 2
8 chambers

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

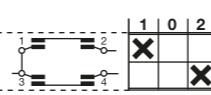
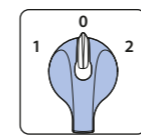
Separate winding to speed

- 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

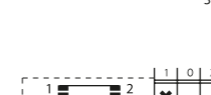
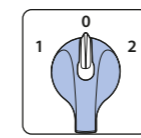
To view these wiring diagrams please visit our download area on www.telergon.com

Changeover switches with center "Off"



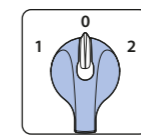
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	0	4	0	0											

400
1 pole
1 chamber



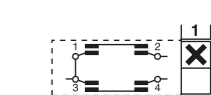
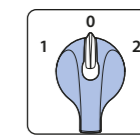
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	0	4	0	1											

401
2 poles
2 chambers



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	0	4	0	2											

402
3 poles
3 chambers



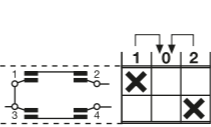
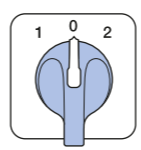
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	0	4	0	3											

403
4 poles
4 chambers

	Poles	Positions	Chambers		Poles	Positions	Chambers		Poles	Positions	Chambers		Poles	Positions	Chambers			
400/5	5	3	5		400/7	7	3	7		400/9	9	3	9		400/11	11	3	11
400/6	6	3	6		400/8	8	3	8		400/10	10	3	10		400/12	12	3	12

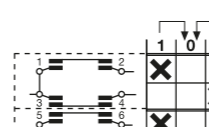
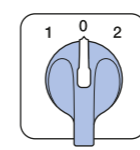
To view these wiring diagrams please visit our download area on www.telergon.com

Changeover switches with spring return to center



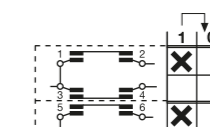
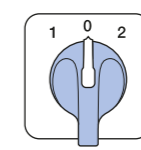
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	0	4	0	5											

405
1 pole
1 chamber



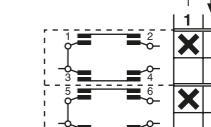
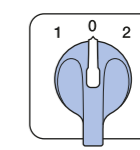
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	0	4	0	6											

406
2 poles
2 chambers



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	0	4	0	7											

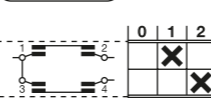
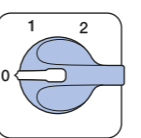
407
3 poles
3 chambers



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	0	4	0	8											

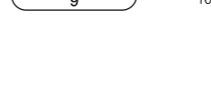
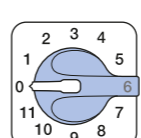
408
4 poles
4 chambers

Multi-step switches with "Off" position



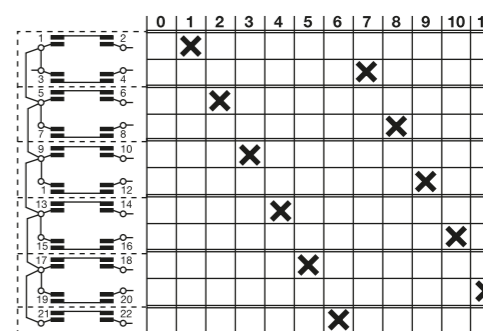
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	0	4	1	0											

410
1 pole 2 positions
1 chamber



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	0	4	1	9											

419
1 pole 11 positions
6 chambers

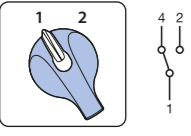
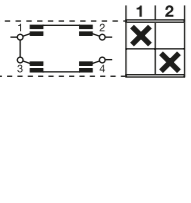


Multi-step switches with "Off" position

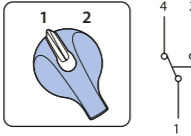
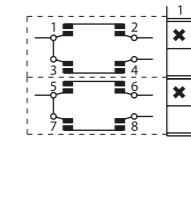
	Poles	Positions	Chambers		Poles	Positions	Chambers		Poles	Positions	Chambers		Poles	Positions	Chambers
411	1	3	2	422	2	4	4	432	3	4	6	452	5	4	10
412	1	4	2	423	2	5	5	433	3	5	9	460	6	2	6
413	1	5	3	424	2	6	7	434	3	6	12	461	6	3	9
414	1	6	4	425	2	7	8	435	3	7	12	462	6	4	12
415	1	7	4	426	2	8	9	440	4	2	4	470	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

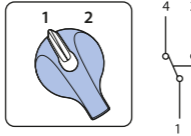
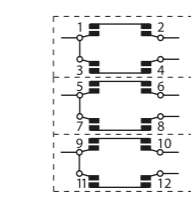
Changeover switches without "Off"

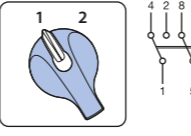
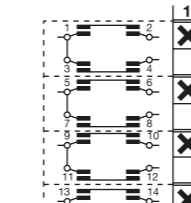
500
1 pole
1 chamber

501
2 poles
2 chambers

502
3 poles
3 chambers

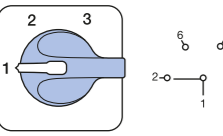
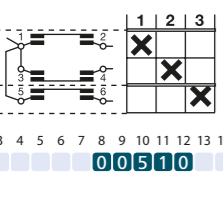



503
4 poles
4 chambers

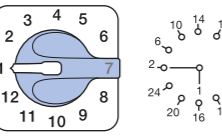
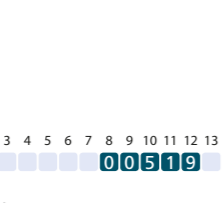
Poles	Positions	Chambers	Poles	Positions	Chambers	Poles	Positions	Chambers	Poles	Positions	Chambers
500/5	5	2	5	500/7	7	2	7	500/9	9	2	9
500/6	6	2	6	500/8	8	2	8	500/10	10	2	10
500/11	11	2	11	500/12	12	2	12				

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

Multi-step switches without "Off" position

510
1 pole 3 positions
2 chambers

519
1 pole 12 positions
6 chambers

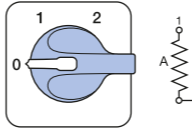
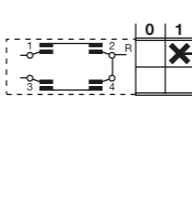
Poles	Positions	Chambers	Poles	Positions	Chambers
510	3	2	519	12	6

Multi-step switches without "Off" position

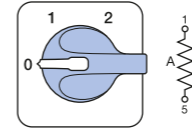
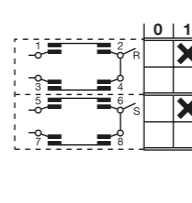
	Poles	Positions	Chambers		Poles	Positions	Chambers		Poles	Positions	Chambers		Poles	Positions	Chambers
511	1	4	2	521	2	4	4	530	3	3	5	543	4	6	12
512	1	5	3	522	2	5	5	531	3	4	6	550	5	3	8
513	1	6	3	523	2	6	6	532	3	5	8	551	5	4	10
514	1	7	4	524	2	7	7	533	3	6	9	552	5	5	13
515	1	8	4	525	2	8	8	534	3	7	11	560	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

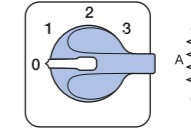
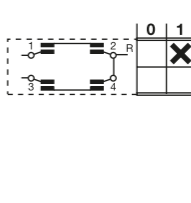
Gang switches

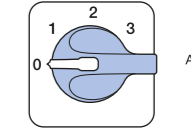
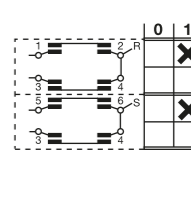
601
1 pole switching sequence
0 - A - (A+B)
1 chamber

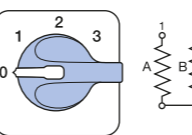
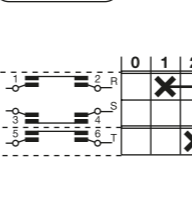
602
2 poles switching sequence
0 - A - B - (A+B)
2 chambers

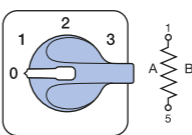
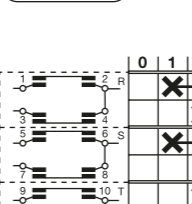
603
1 pole switching sequence
0 - A - B - (A+B)
1 chamber

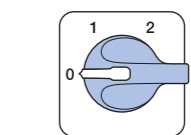
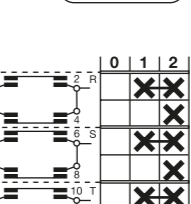
604
2 poles switching sequence
0 - A - B - (A+B)
2 chambers

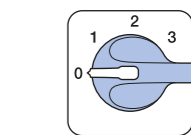
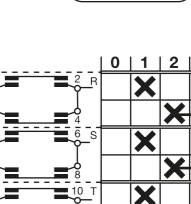
605
1 pole switching sequence
0 - A - (A+B) - (A+B+C)
2 chambers

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

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

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

Gang switches

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

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

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

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

626
3 phases, 6 points
5 chambers

630
Switching sequence
0 - A - (A+B) - (A+B+C)
2 chambers

631
Switching sequence
0 - A - (A+B) - (A+B+C) - (A+B+C+D)
2 chambers

632
Switching sequence
0 - A - (A+B) - (A+B+C) - (A+B+C+D) - (A+B+C+D+E)
3 chambers

Kitchen and heating switches

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

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

Resistance elimination switches

620
3 phases, 3 points
2 chambers

621
3 phases, 3 points
3 chambers
With auxiliary contact

622
3 phases, 4 points
3 chambers

624
3 phases, 5 points
4 chambers

Voltmeter switches

700
2 phases C.A. or 2 poles C.C.
2 chambers

701
3 phases
2 chambers

702
3 phases to neutral
2 chambers

704
3 phases and 1 phase to neutral
3 chambers

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

705
3 phases to phase and 3 phases to neutral
3 chambers

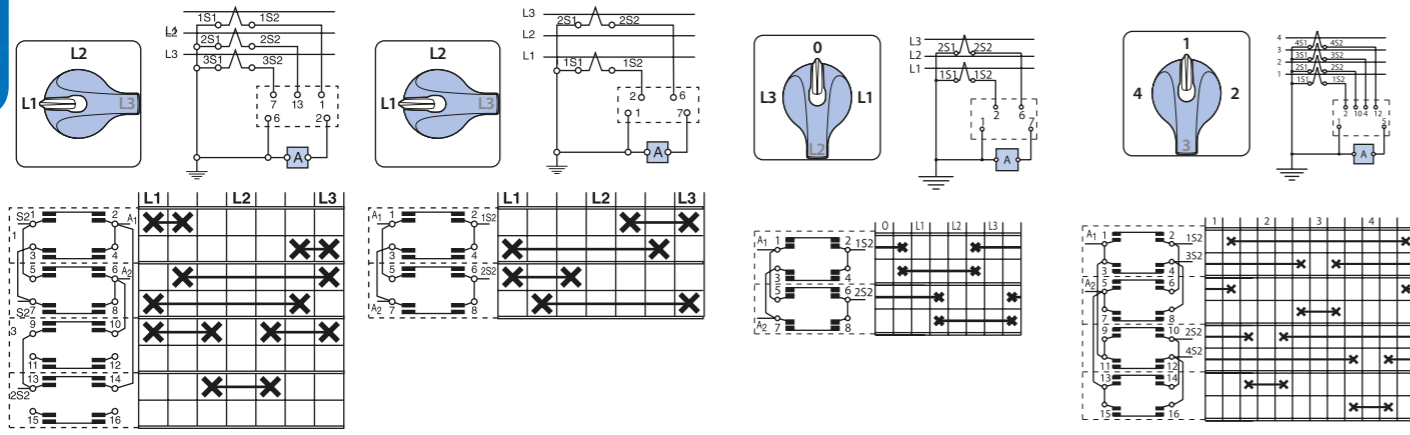
706
2 three-phase lines (phase to phase)
4 chambers/chambers

Tabla equivalencias

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

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

Ammeter switches

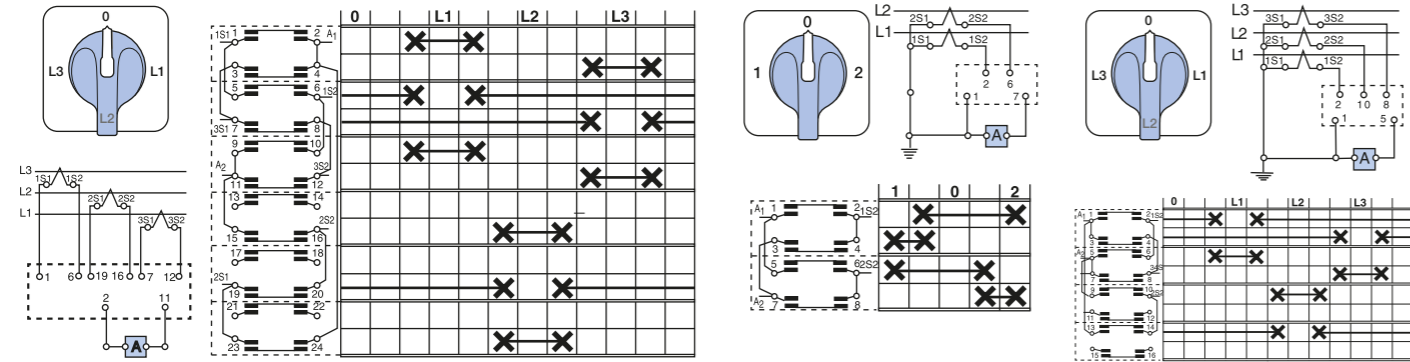


720*
3 phases, 3 current transformers,
1 pole
4 chambers
** New diagram 732*

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

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

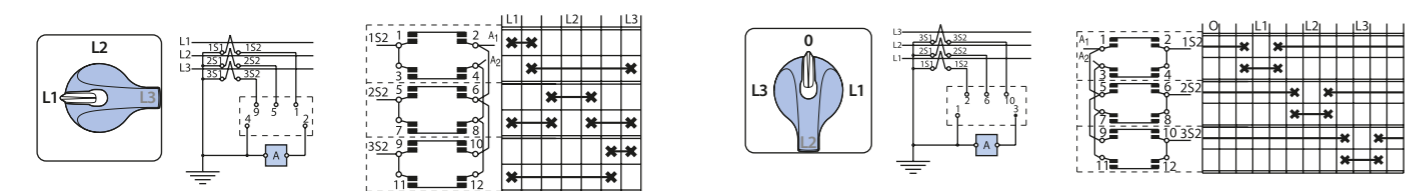
725
4 lines, 4 current transformers,
1 pole
4 chambers



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

730
2 current transformers,
1 pole
2 chambers

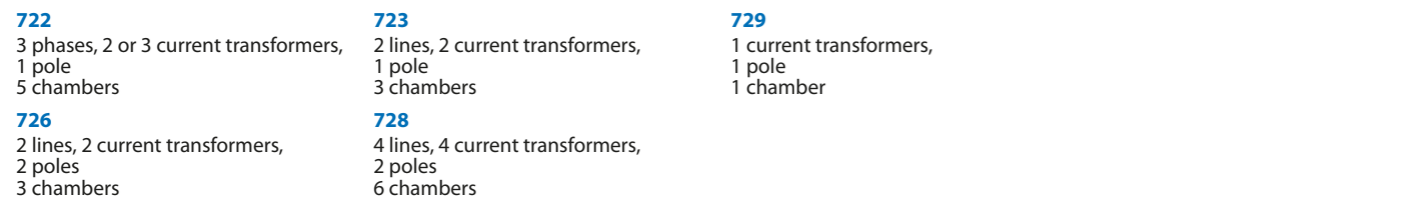
731*
3 current transformers,
1 pole
4 chambers
** New diagram 733*



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

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

729
1 current transformer,
1 pole
1 chamber



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

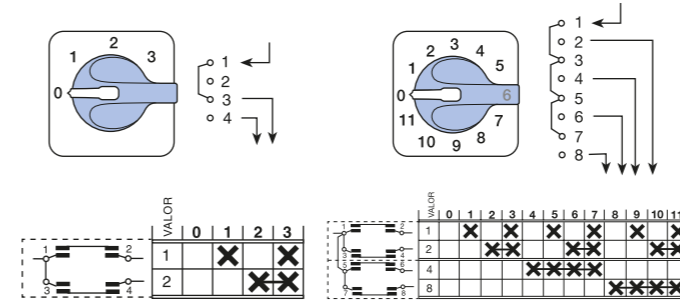
723
2 lines, 2 current transformers,
1 pole
3 chambers

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

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

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

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



0BCD3
3 positions
1 chamber

0BCD11
11 positions
2 chambers

0BCD4
4 positions
2 chambers

0BCD5
5 positions
2 chambers

0BCD6
6 positions
2 chambers

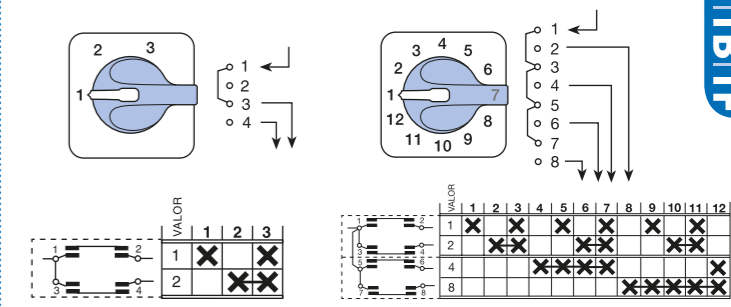
0BCD7
7 positions
2 chambers

0BCD8
8 positions
2 chambers

0BCD9
9 positions
2 chambers

0BCD10
10 positions
2 chambers

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



1BCD3
3 positions
1 chamber

1BCD12
12 positions
2 chambers

1BCD4
4 positions
2 chambers

1BCD5
5 positions
2 chambers

1BCD6
6 positions
2 chambers

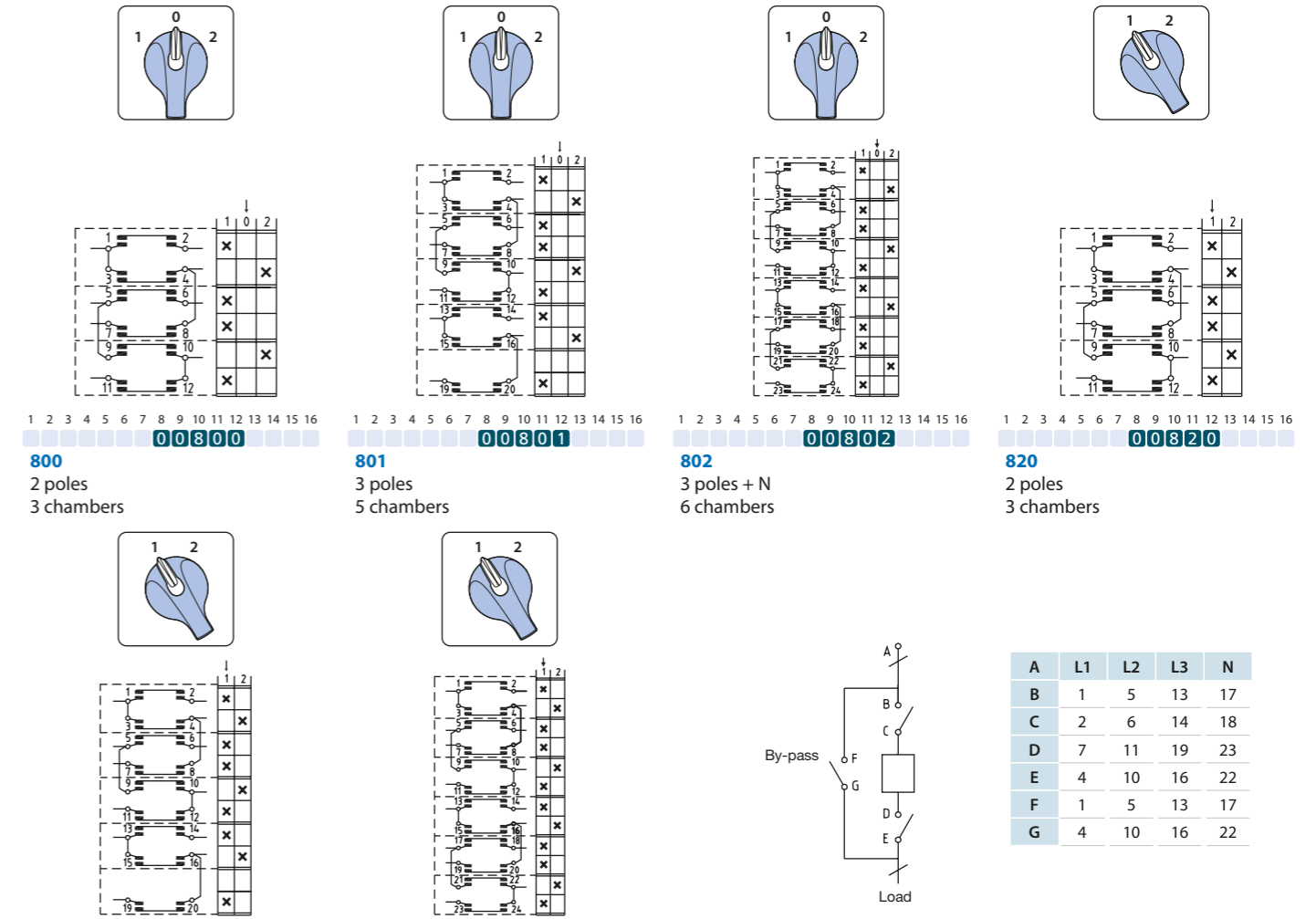
1BCD7
7 positions
2 chambers

1BCD8
8 positions
2 chambers

1BCD10
10 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

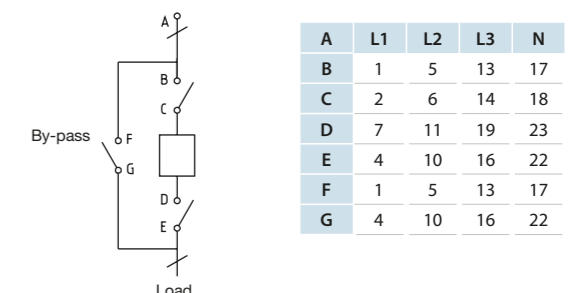
801
3 poles
5 chambers

802
3 poles + N
6 chambers

820
2 poles
3 chambers

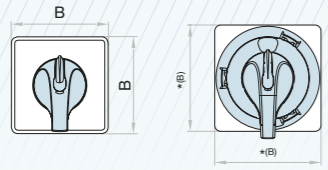
821
3 poles
5 chambers

822
3 poles + N
6 chambers

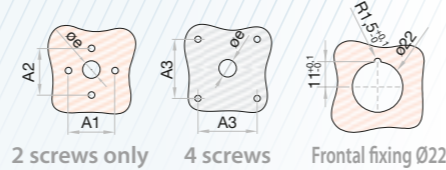


A	L1	L2	L3	N
B	1	5	13	17
C	2	6	14	18
D	7	11	19	23
E	4	10	16	22
F	1	5	13	17
G	4	10	16	22

T Door mounting



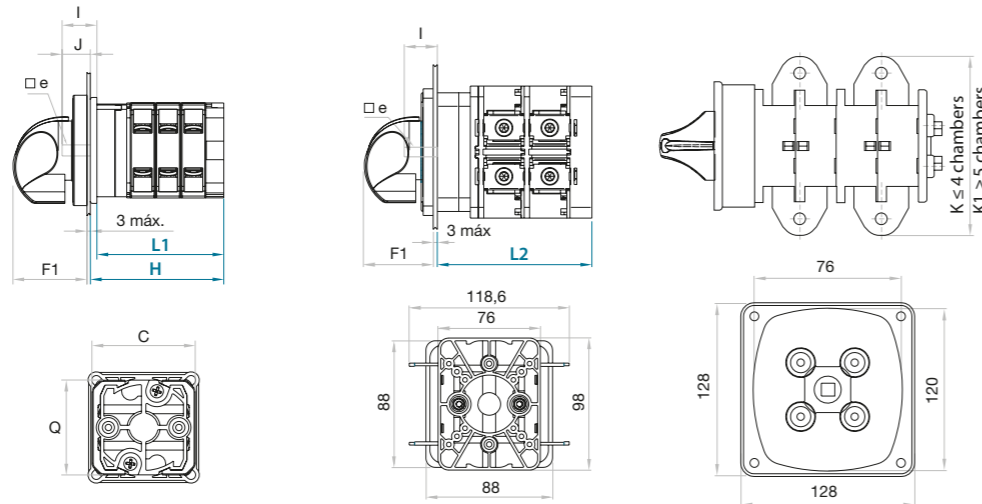
Door mounting drilling



2 screws only 4 screws Frontal fixing Ø22

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

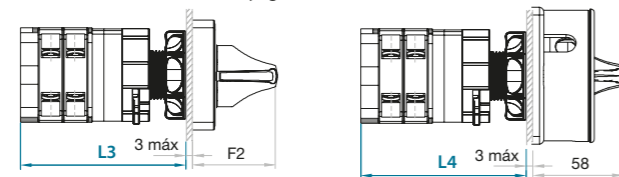
Note:
The cam switches allow a construction up to 12 chambers (24 contacts).
It's necessary to distribute in several columns (maximum three of 12 chambers each) when the number of contacts is higher than 24, so we use the tandem drives D200 or D201.
Depending on the number of contacts to be switched 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 T25 T32 T40	45	4,5	-	4,5	48	4,5	65	60,5	12	5	57,5 64,5	36	20	16,8	-	-
2	T50 T63 T80 T100 T125 T175	-	-	60	5,5	68	5,5	94	66 84,5	12	7	80 89	45	24,5	20,5	-	-
3	T200 T250 T315 T400 T500 T630 T800	-	-	-	-	108	6,5	128	76	16	10	120	67	-	40	150 176 218	-

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 T32 T40	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	T50 T63 T80 T100 T125 T175	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	T200 T250 T315 T400 T500 T630 T800	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)
3	T200 T250 T315 T400 T500 T630 T800	L2	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)
3	T200 T250 T315 T400 T500 T630 T800	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)
3	T400 T500 T630 T800	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)

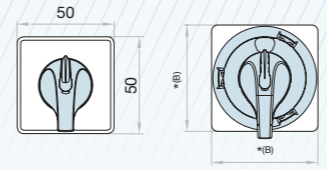
*⁽¹⁾ Tandem drive D200/D201- Features & dimensions in page 24.



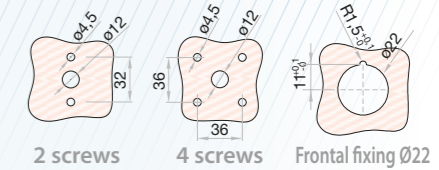
Size	Series	Chambers * ^(ch)							
		1□	2□	3□	4□	5□	6□	F2	
0	T12 T20	L3	63,5	75	86,5	98	109,5	121	53,5
1	T16 T25 T32 T40	L4	75,5	89,5	103,8	118	-	-	55,5
		H	78,8	96,3	116,8	131,3	-	-	55,5

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

TB Door mounting

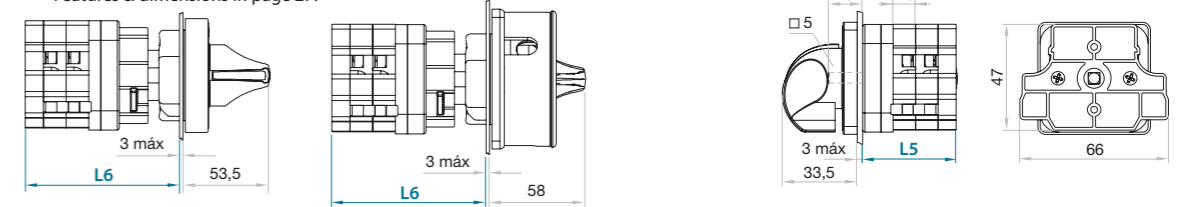


Door mounting drilling



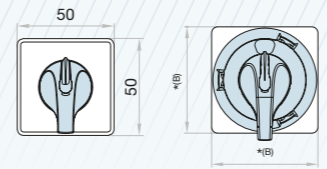
2 screws 4 screws Frontal fixing Ø22

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

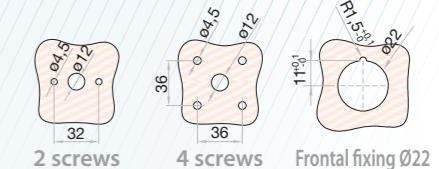


L5	Chambers											
	1□	2□	3□	4□	5□	6□	7□	8□	9□	10□	11□	12□
L5	31,5	41,5	51,5	61,5	71,5	81,5	91,5	101,5	111,5	121,5	131,5	141,5
L6	60,5	70,5	80,5	90,5	100,5	110,5	-	-	-	-	-	-

TF Door mounting

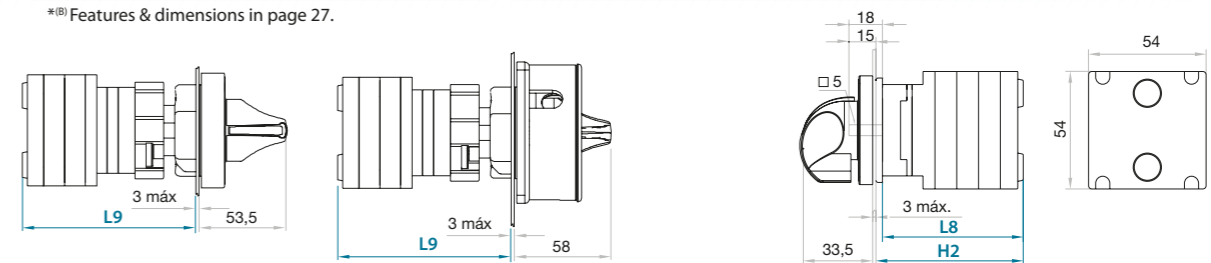


Door mounting drilling



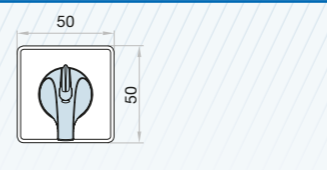
2 screws 4 screws Frontal fixing Ø22

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

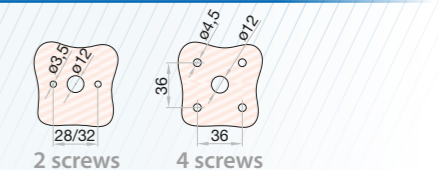


L8	Chambers											
	1□	2□	3□	4□	5□	6□	7□	8□	9□	10□	11□	12□
L8	45	55	65	75	85	95	105	115	125	135	145	155
L9	73,5	83,5	93,5	103,5	113,5	123,5	-	-	-	-	-	-
H2	48	58	68	78	88	98	108	118	128	138	148	158

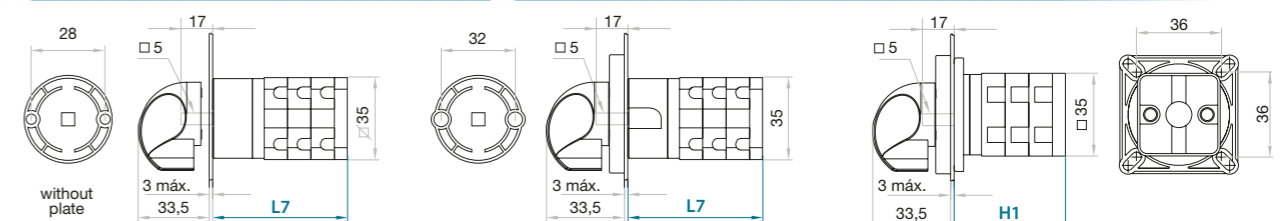
TP Door mounting



Door mounting drilling

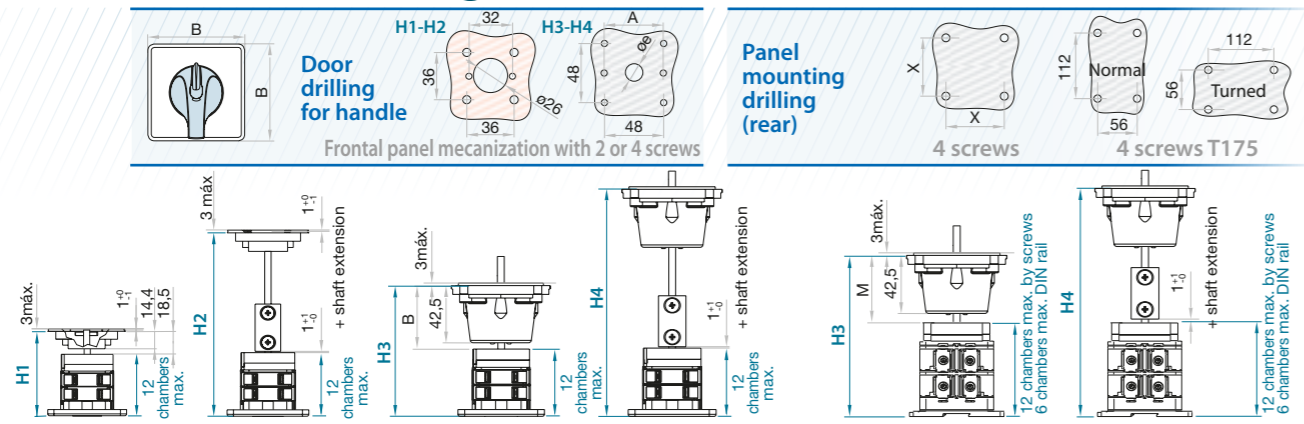


2 screws 4 screws



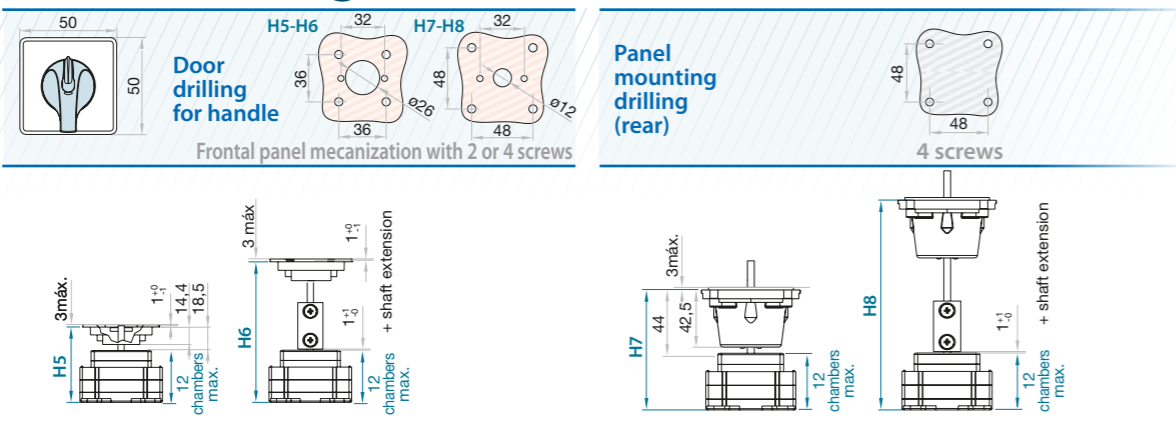
L7	Chambers											
	1□	2□	3□	4□	5□	6□	7□	8□	9□	10□	11□	12□
L7	37,5	47	56,5	66	75,5	85	94,5	104	113,5	123	132,5	142
H1	26,5	36	45,5	55	64,5	74	83,5	93	102,5	112	121,5	131

T Base mounting with clutch device



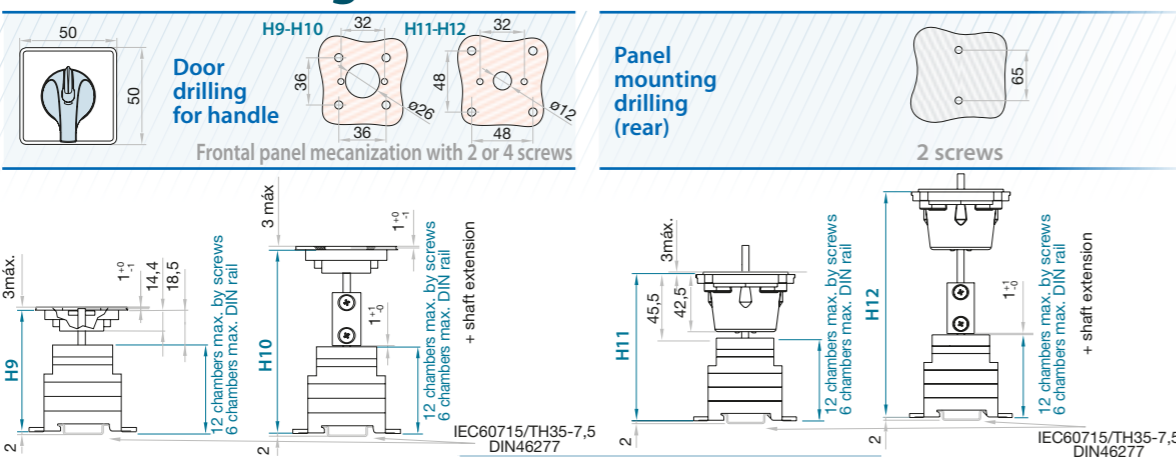
Size	Series	Chambers								A	B	øe	M	X	
		H1		H2		H3		H4							
0	T12 T20	min	56	+11,5	94	+11,5	83	+11,5	121	+11,5	32	50	12	45,5	43
		max	-	-	256	-	-	-	283	-	-	-	-	-	-
1	T16 T25	min	-	-	-	-	97,1	+14,2	135,1	+14,2	32	65	12	47,5	48
		max	-	-	-	-	-	-	297,1	-	-	-	-	-	-
2	T32 T40	min	-	-	-	-	100,5	+17,5	138,5	+17,5	32	65	12	47,5	48
		max	-	-	-	-	-	-	300,5	-	-	-	-	-	-
3	T100 T125	min	-	-	-	-	114,5	+20	152,5	+20	60	94	12	52	68
		max	-	-	-	-	-	-	314,5	-	-	-	-	-	-
3	T175	min	-	-	-	-	141,8	+34	179,8	+34	60	94	12	52	-
		max	-	-	-	-	-	-	341,8	-	-	-	-	-	-
3	T200	min	-	-	-	-	162,5	+40	-	-	48	16	67,5	108	
		max	-	-	-	-	-	-	-	-	-	-	-	-	-

TB Base mounting with clutch device



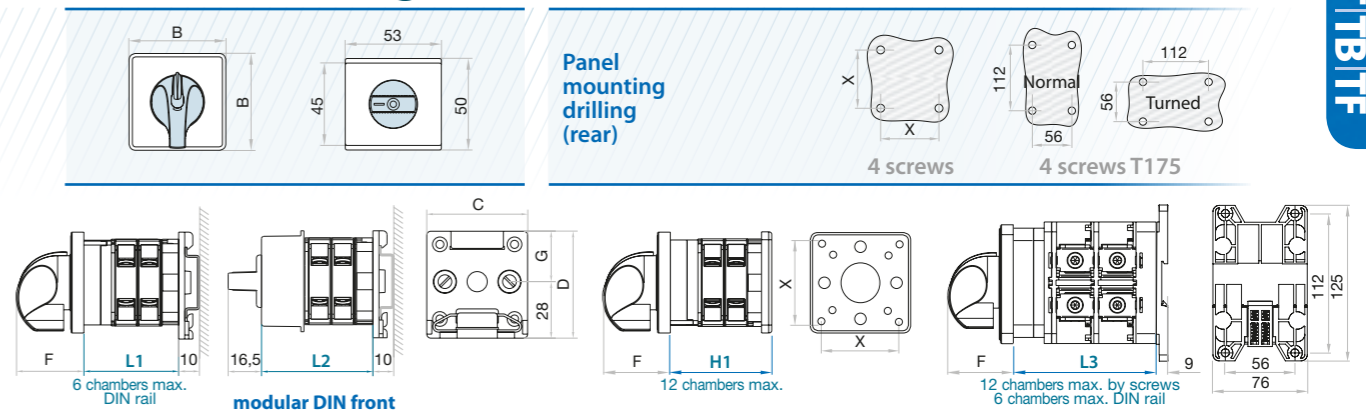
Size	Series	Chambers								
		H5		H6		H7		H8		
0	TB20 TB25 TB32	min	46	+10	84	+10	75,5	+10	113	+10
		max	-	-	246	-	-	-	275,5	-

TF Base mounting with clutch device



Size	Series	Chambers								
		H9		H10		H11		H12		
0	TF12 TF16 TF25	min	65,5	+10	103,5	+10	92,5	+10	130,5	+10
		max	-	-	265,5	-	-	-	292,5	-

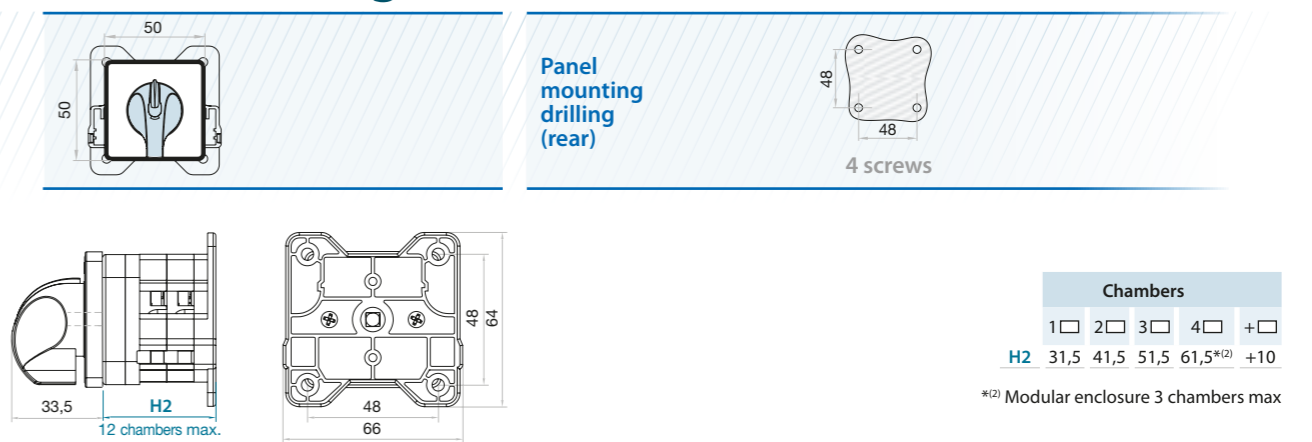
T Base mounting with screws or DIN rail (direct handle)



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 ^(*)	-	-	-	-	50	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	-	-	+17,5	65	-	-	36	-	-	
2	T32 T40	H1	53	70,5	88	105,5	123	140,5	-	-	65	-	-	36	-	48
		H1	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	
		H1	-	-	-	-	-	-	-	-	-	-	-	-	-	-

^(*) Modular enclosure 3 chambers max

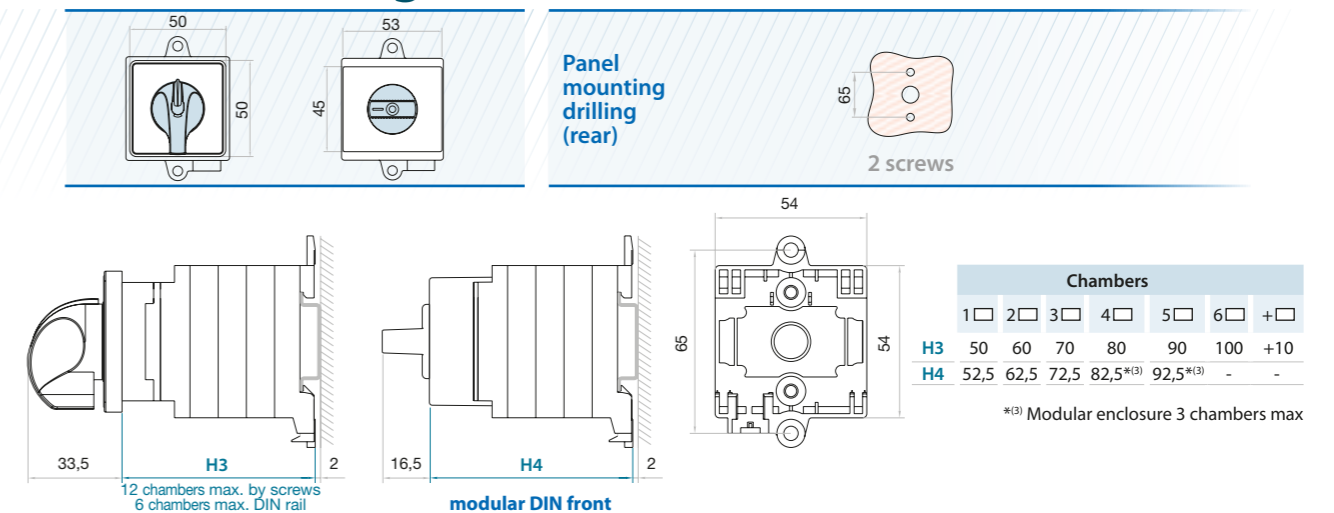
TB Base mounting with screws (direct handle)



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

^(*) Modular enclosure 3 chambers max

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



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

^(*) 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	Ith	A	16	25	25	32	40	50	63	80	80	125	125	200	200	250	315	400	630	800	1000	1600	
Rated insulation voltage	Ui	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	Uimp	kV	6	6	6	6	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
AC rated operational current	Ie	Ue																					
		Ue 415V AC21A	A	16	25	25	32	40	50	63	80	80	125	125	200	200	250	315	315	315	400	500	500
		Ue 415V AC22A	A	16	25	25	32	40	50	63	80	80	115	115	200	200	250	315	250	315	315	315	400
Ue 415V AC23A	A	10	25	16	20	25	32	63	63	63	100	100	200	200	200	200	-	-	-	-	-		
Rated conditional short-circuit current		kA	10	10	10	10	10	10	15	15	15	15	15	15 ^(*)	15	15	15	15	10	10	10	10	
Rated maximum current	gL-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)		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	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 ^(*)	16/25 ^(*)	16/25 ^(*)	35/50 ^(*)	35/50 ^(*)	95	95	120	185	-	-	-	-	-	
Flexible copper conductors		mm ²	2x2,5	2x2,5	2x4	2x4	2x6	2x6	10/16 ^(*)	10/16 ^(*)	10/16 ^(*)	16/35 ^(*)	16/35 ^(*)	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	Ith	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	-	-	-	-	-
AC rated operational power	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	60	60	60	60	-	-	-	-	-

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

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 (Ie) 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	
AC rated operational current	Ie	Ue							
		Ue 415V AC21A	A	20	25	32	20	25	32
		Ue 415V AC22A	A	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	-	-	-
General use rating		A	-	-	-
	Vac		600	600	600
AC rated operational power	3x240V	HP	-	-	-
	3x480V	HP	-	-	-
	3x600V	HP	-	-	-



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

Approvals TP:



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.

series
ZBK

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



Testing and approvals:
CE UL EAC



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.

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



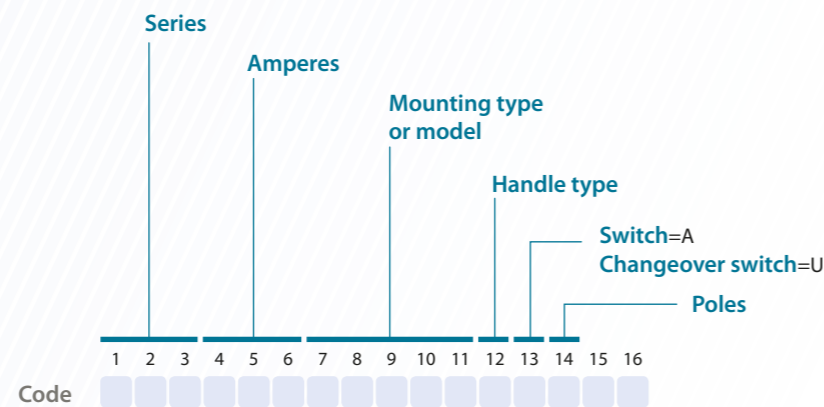
Modular switch in plastic enclosure (sealable).
Padlockable handles .



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

Range codification:

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



Accessories



ZBK

Switch door mounting with padlockable handle IP66

3P - 3P+N

Size 0

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



		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
48	3P	ZBK20EH4A3	ZBK25EH4A3	ZBK40EH4A3	ZBK63EH4A3	ZBK80EH4A3	ZBK125EH4A3
	3P + N	ZBK20EH4A4	ZBK25EH4A4	ZBK40EH4A4	ZBK63EH4A4	ZBK80EH4A4	ZBK125EH4A4
64	3P	ZBK20EHN1A3	ZBK25EHN1A3	ZBK40EHN1A3	ZBK63EHN1A3	ZBK80EHN1A3	-
	3P + N	ZBK20EHN1A4	ZBK25EHN1A4	ZBK40EHN1A4	ZBK63EHN1A4	ZBK80EHN1A4	-
48	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

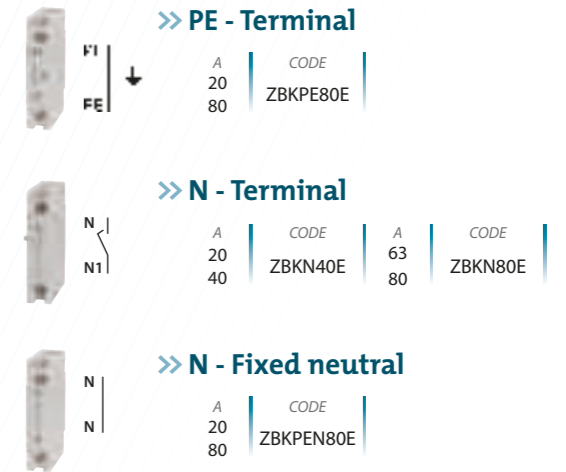
			20	25	40	63	80	125	
Rated thermal current	Ith	A	20	25	40	63	80	125	
Rated thermal current enclosed	Ithe	A	20	25	40	63	80	110	
Rated insulation voltage	Ui	V	690	690	690	690	690	1000	
Rated impulse withstand voltage	Uimp	kV	6	6	6	6	6	8	
AC rated operational current	Ie	AC21A	A	20	25	40	63	80	125
Making capacity	Ieff	3x380-440V	A	160	190	300	370	440	850
Breaking capacity		3x220-240V	A	160	180	250	330	380	680
		3x380-440V	A	160	180	250	330	380	680
Direct switching motors	AC3	3x660-690V	A	80	110	170	190	220	420
		3x400V	A	12	16	30	37	37	72
Main & safety switch	AC23	3x220-240V	kW	3	4	7,5	11	11	22
		3x380-440V	kW	5,5	7,5	15	18,5	18,5	37
		3x660-690V	kW	5,5	7,5	15	18,5	18,5	30
		3x400V	A	16	20	32	45	45	85
Rated conditional short-circuit current	kAeff	10	10	10	10	10	10	10	
		10	10	10	10	10	10	10	
Max. fuse size	gL(gG)	A	25	35	50	63	80	125	
Rated short-time withstand current (1sec.)	Icw	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	110-220V	1	1,5	2	3	5	15
		220-240V	3	5	5	10	10	30
		440-480V	7,5	10	10	20	20	60
		550-600V	10	10	15	25	25	60
DOL-Rating 1-phase	HP	110-120V	1	1	1	2	2	7,5
		200-208V	1	2	2	3	3	10
		220-240V	2	2	3	5	5	15
Fuse size (RK5)	A		40	50	70	90	110	125
5kA / 600V	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

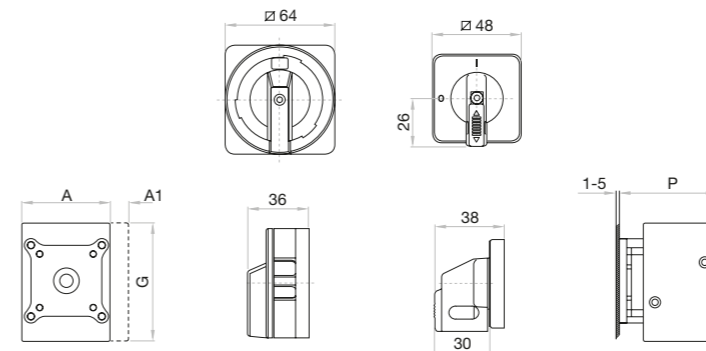


Auxiliary contacts technical information

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	

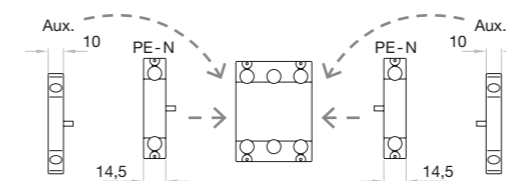
Connecting capacity		
Solid or stranded cable	mm ²	0,75-2,5
	AWG	14-12
Flexible cable (+ multicore cable end)	mm ²	0,75-2,5 (1,5)
	AWG	18-14

Dimensions (mm)



	3P		4P		P
	A	A	E	G	
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

3P - 3P+N

Size 0

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



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

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
Rated thermal current enclosed	I _{the}	A	20	25	40	63	80
Rated insulation voltage	U _i	V	690	690	690	690	1000
Rated impulse withstand voltage	U _{imp}	kV	6	6	6	6	8
AC rated operational current	I _e	AC21A	A	20	25	40	63
Making capacity	I _{eff}	3x380-440V	A	160	190	300	370
Breaking capacity	I _{eff}	3x220-240V	A	160	180	250	330
		3x380-440V	A	160	180	250	330
Direct switching motors	AC3	3x400V	A	12	16	30	37
		3x220-240V	kW	3	4	7,5	11
Main & safety switch	AC23	3x380-440V	kW	5,5	7,5	15	18,5
		3x660-690V	kW	5,5	7,5	15	18,5
		3x400V	A	16	20	32	45
		3x220-240V	kW	4	5,5	9	15
Rated conditional short-circuit current	kA _{eff}	3x380-440V	A	10	10	10	10
		3x660-690V	A	25	35	50	63
Max. fuse size	gL(gG)	A	25	35	50	63	
Rated short-time withstand current (1sec.)	I _{cw}	A	250	300	500	600	
Mechanical life	x10 ³		200	200	200	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
DOL-Rating 1-phase	110-120V	HP	1	1	1	2	2
	200-208V	HP	1	2	2	3	3
	220-240V	HP	2	2	3	5	5
Fuse size (RK5)	A	40	50	70	90	110	125
5kA / 600V	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

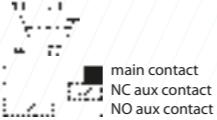
Accessories



Auxiliary contacts

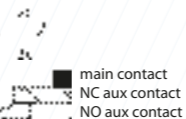
1NO+1NC
A 20
125

CODE
ZBKLN11



1NO+1NC overlapping
A 20
125

CODE
ZBKLN11X



PE - Terminal

A 20
80

CODE
ZBKPE80V



N - Terminal

A 20
40

CODE
ZBKN40V

A 63
80

CODE
ZBKN80V



N - Fixed neutral

A 20
80

CODE
ZBKPEN80V



Shaft extensions

A 20
125

CÓDIGO
ZBK-0002
ZBK-0003

L 200
300

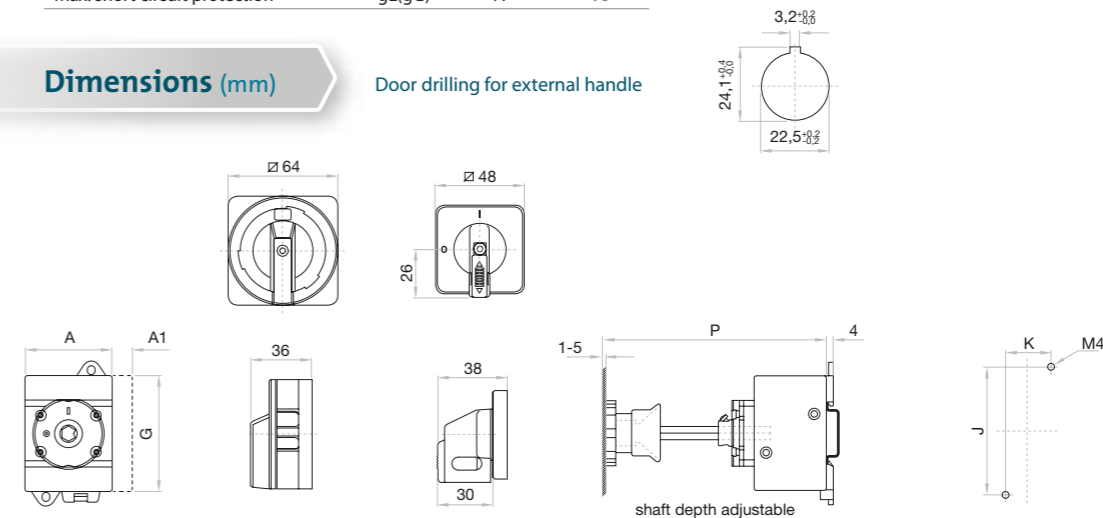
Auxiliary contacts technical information

Rated insulation voltage	U _i	V	690
Rated thermal current	I _{th} - I _{the}	A	10
Switching capacity	AC15	220-240V	A
	AC15	380-440V	A
Rated conditional short-circuit current	kA _{eff}	A	1,5
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

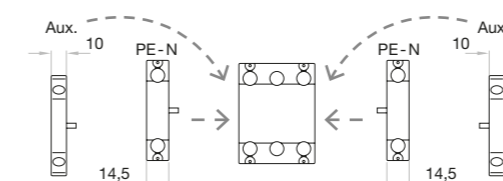
Dimensions (mm)

Door drilling for external handle



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

Auxiliary contacts A1



- 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



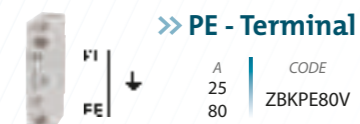
	CODE - 25A	CODE - 40A	CODE - 80A
6P	ZBK25VZVHN4A6	ZBK40VZVHN4A6	ZBK80VZVHN4A6
8P	ZBK25VZVHN4A8	ZBK40VZVHN4A8	ZBK80VZVHN4A8
6P	ZBK25VZVH4A6	ZBK40VZVH4A6	ZBK80VZVH4A6
8P	ZBK25VZVH4A8	ZBK40VZVH4A8	ZBK80VZVH4A8

Accessories

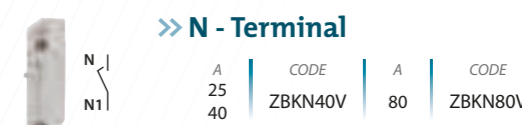
» Auxiliary contacts



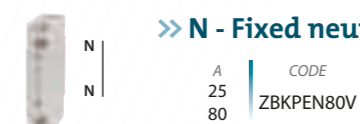
» PE - Terminal



» N - Terminal



» N - Fixed neutral



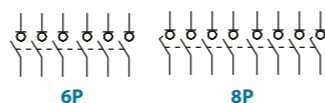
» Shaft extensions



Technical information



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



			25	40	80
Rated thermal current	Ith	A	25	40	80
Rated thermal current enclosed	Ithe	A	25	40	80
Rated insulation voltage	Ui	V	690	690	690
Rated impulse withstand voltage	Uimp	kV	6	6	6
AC rated operational current	Ie	AC21A A	25	40	80
Making capacity	Ieff	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		kAeff	10	10	10
Max. fuse size	gL(gG)	A	35	50	80
Rated short-time withstand current (1sec.)	Icw	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		Nm	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
DOL-Rating 1-phase	110-120V	HP	1	1	2
	200-208V	HP	2	2	3
	220-240V	HP	2	3	5
Fuse size (RK5)	Manual Motor Controller	A	50	70	110
5kA / 600V	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

Auxiliary contacts technical information

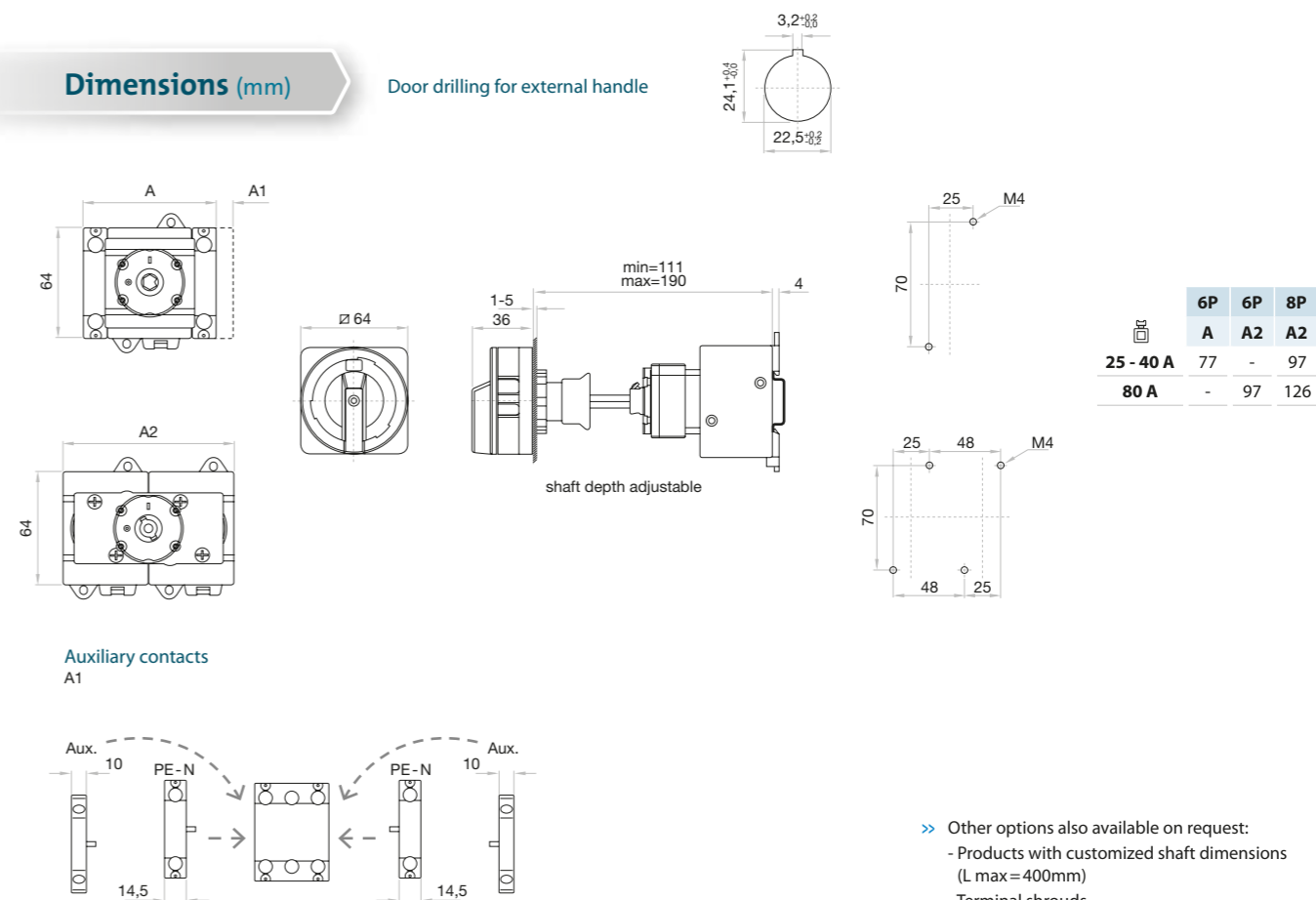
Rated insulation voltage	Ui	V	690
Rated thermal current	Ith - Ithe	A	10
Switching capacity	AC15	220-240V A	2,5
	AC15	380-440V A	1,5
Rated conditional short-circuit current		kAeff	3
Max. short circuit protection	gL(gG)	A	10

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



» 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



Accessories

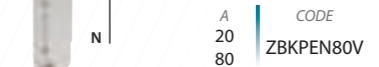
» Auxiliary contacts



» PE - Terminal



» N - Fixed neutral

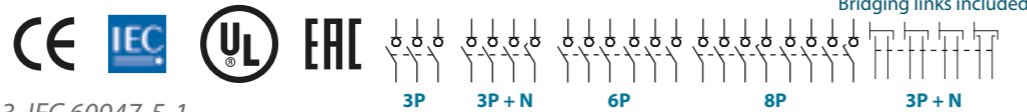


Auxiliary contacts technical information

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

Technical information



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

		20	25	40	63	80	125
Rated thermal current	Ith	A	20	25	40	63	80
Rated thermal current enclosed	Ithe	A	20	25	40	63	80
Rated insulation voltage	Ui	V	690	690	690	690	1000
Rated impulse withstand voltage	Uimp	kV	6	6	6	6	8
AC rated operational current	Ie	A	20	25	40	63	80
Making capacity	Ieff	kA	160	190	300	370	440
Breaking capacity		A	160	180	250	330	380
		A	160	180	250	330	380
		A	80	110	170	190	220
Direct switching motors	AC3	3x400V	A	12	16	30	37
	AC3	3x220-240V	kW	3	4	7,5	11
		3x380-440V	kW	5,5	7,5	15	18,5
		3x660-690V	kW	5,5	7,5	15	18,5
Main & safety switch	AC23	3x400V	A	16	20	32	45
	AC23A	3x220-240V	kW	4	5,5	9	15
	AC23B	3x380-440V	kW	7,5	10	16	22
		3x660-690V	kW	5,5	7,5	15	18,5
Rated conditional short-circuit current		kAeff	10	10	10	10	
Max. fuse size	gL(GG)	A	25	35	50	63	
Rated short-time withstand current (1sec.)	Icw	A	250	300	500	600	
Mechanical life	x10 ³		200	200	200	100	

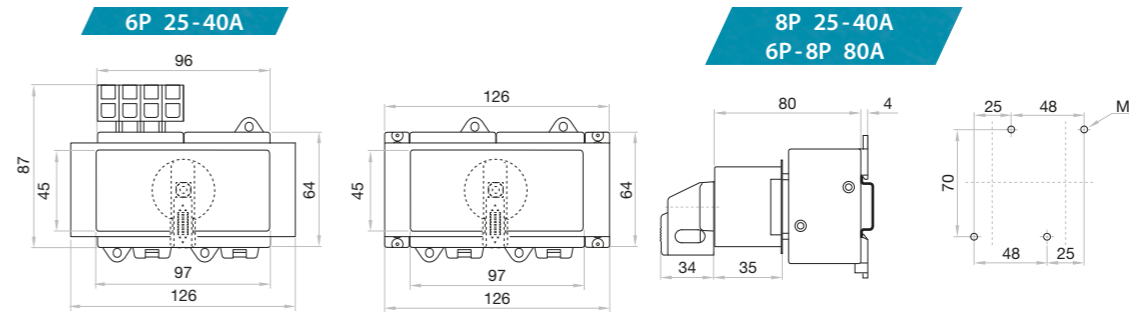
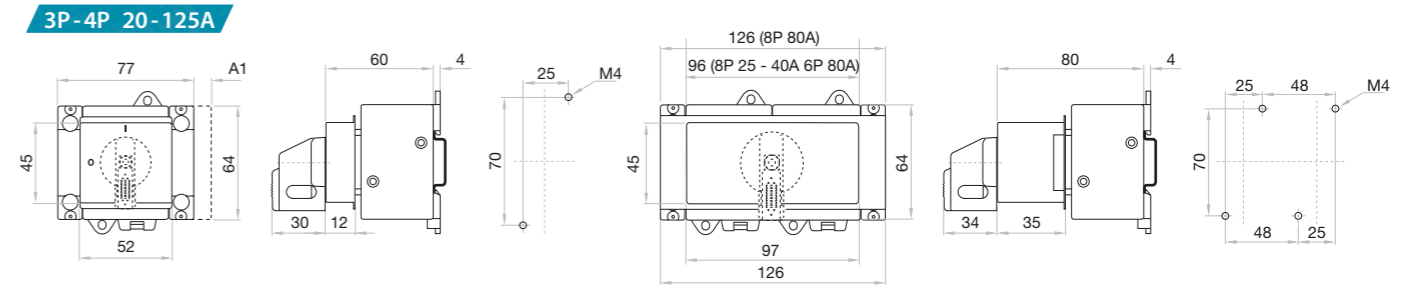
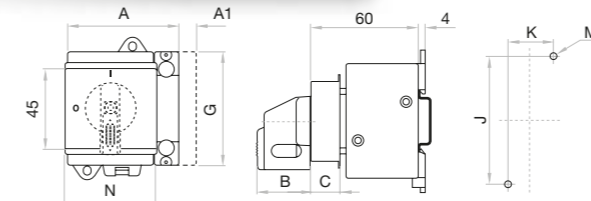
Connecting capacity		20	25	40	63	80	125
Solid or stranded cable	mm ²		0,5-10		1-25 ^{*(1)}		4-50
	AWG		20-8 (10)		16-4 (10)		10-0 (10)
Flexible cable	mm ²		0,5-6		4-16 ^{*(1)}		10-35
	AWG		20-10		16-6		8-2
Size of terminal screw			M3,5		M5		M6
Tightening torque	Nm		0,8-1,7		2-4		3,5-4,5

According to UL & cUL FILE NO. E123623

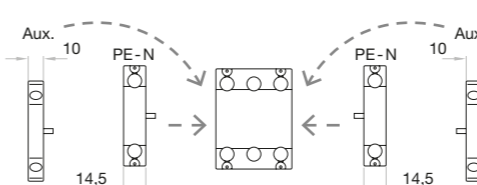
		20	25	40	63	80	125
Rated voltage	V	600	600	600	600	600	600
Ampere-Rating "General use"	A	20	25	40	63	80	125
DOL-Rating 3-phase	110-220V	HP	1	1,5	2	3	5
	220-240V	HP	3	5	5	10	30
	440-480V	HP	7,5	10	10	20	60
	550-600V	HP	10	10	15	25	60
	110-120V	HP	1	1	1	2	2
DOL-Rating 1-phase	110-120V	HP	1	1	1	2	7,5
	200-208V	HP	1	2	2	3	10
	220-240V	HP	2	2	3	5	15
Fuse size (RK5)	A	40	50	70	90	110	125
5kA / 600V	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

Dimensions (mm)



Auxiliary contacts A1



Switch

	3P	4P	A	B	C	G	J	K	N
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

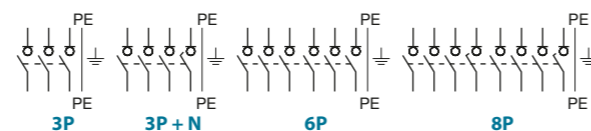
ZBK Switch plastic enclosure padlockable handle IP66

Size 0
A 20|25|40|63|80|125



	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	
Direct switching motors	AC3	3x400V	12	16	30	37	37	72	
	AC3	3x220-240V	kW	3	4	7,5	11	11	22
		3x380-440V	kW	5,5	7,5	15	18,5	18,5	37
		3x660-690V	kW	5,5	7,5	15	18,5	18,5	30
Main & safety switch	AC23	3x400V	A	16	20	32	45	45	85
	AC23A	3x220-240V	kW	4	5,5	9	15	15	30
	AC23B	3x380-440V	kW	7,5	10	16	22	22	45
		3x660-690V	kW	5,5	7,5	15	18,5	18,5	37
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
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
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

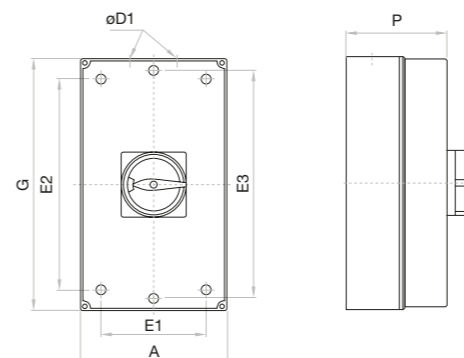


Auxiliary contacts technical information

Rated insulation voltage	U _i	V	690	
Rated thermal current	I _{th} - I _{the}	A	10	
Switching capacity	AC15	220-240V	A	2,5
	AC15	380-440V	A	1,5
Rated conditional short-circuit current		kA _{eff}	3	
Max. short circuit protection	gL(gG)	A	10	

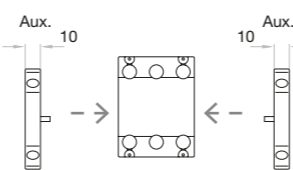
Connecting capacity		
Solid or stranded cable	mm ²	0,75-2,5
	AWG	14-12
Flexible cable (+ multicore cable end)	mm ²	0,75-2,5 (1,5)
	AWG	18-14

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	76
63-125 A	3/4P	140	40,5/32,5 + 16,5 + 12,5	100	160	188,5	200	86
25-40 A	6P	140	40,5/32,5 + 16,5 + 12,5	100	160	188,5	200	86
25-40 A	8P	176	2x40,5 / 32,5	120	200	228,5	240	120
80 A	6/8P	176	2x40,5 / 32,5	120	200	228,5	240	120

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

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.

series S5|S5M|S5N

series S6|S6N

series CIS

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



Testing and approvals:



Functional and ergonomic handle

- > Good grip and excellent torque/resistance
- > Padlockable handle in **0 OFF** position (up to three locks Ø 5-8 mm)
- > Door interlock in **ON I** position
- > When lock in **0 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



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.

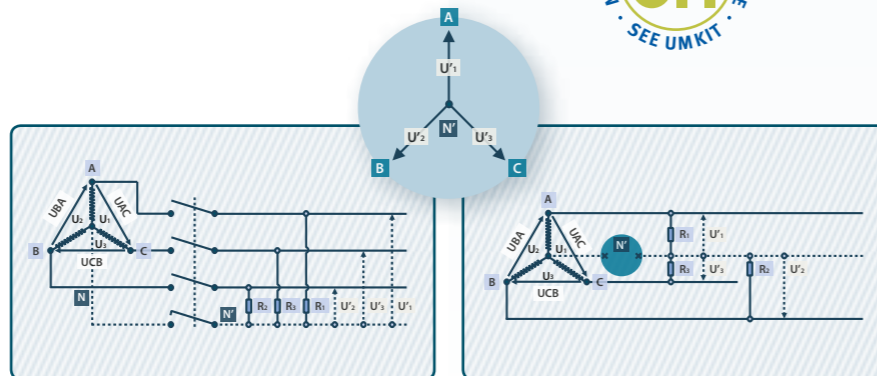
They comply with environmental requirements and undergo strict quality controls for a reliable product that meets the most demanding requirements.

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.

Neutral pole early make & late break

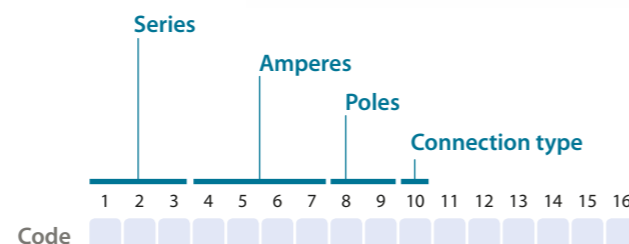
This safety feature prevents accidental overvoltage when making/breaking of loads connected between phase and neutral.

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.



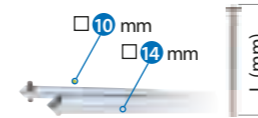
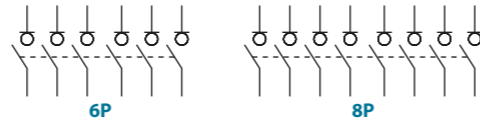
Range codification:

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



series S5	series S5M	series S5N	series S6	series S6N
1 2 3 4 5 6 S 5 -	1 2 3 4 5 6 S 5 M	1 2 3 4 5 6 S 5 N	1 2 3 4 5 6 S 6 -	1 2 3 4 5 6 S 6 N
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.	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.	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.	Switch - disconnectors with housings for 2P - 3P or 3P+N. Base mounting with screws. External or direct handles. Wide range of devices and accessories.	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	series CIS25C	series CIS25A	series CIS25F
1 2 3 4 5 6 7 C I S 2 5 D	1 2 3 4 5 6 7 C I S 2 5 C	1 2 3 4 5 6 7 C I S 2 5 A	1 2 3 4 5 6 7 C I S 2 5 F
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.	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.	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.	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.



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

Manual handle

Shaft extensions ^{*(2)}

Auxiliary contacts ^{*(3)}

Safety key lock device ^{*(4)}



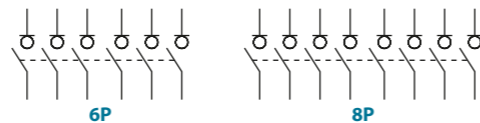
Full details in page

102

104



Amp.	Size	Connection	6 pole (6P)		8 pole (8P)		External ^{*(1)}	Direct	Emergency external ^{*(1)}	Size	□	Type 1 & 2		1NO+1NC	2NO+2NC	Safety key lock device ^{*(4)}	
			Code	Code	Code	Code						Code	Code	L	Code ^{*(e1)}	Code	Code
125	1		S6N01256PS0	S6N01258PS0	DS-SA11	DS-SI11	DS-SR11	1	10	375	DS-EP14	DS-EP15	D5LAU01	D5LAU02	DS-CA11	DS-CE11	102
160			S6N01606PS0	S6N01608PS0													
200			S6N02006PS0	S6N02008PS0													
250			S6N02506PS0	S6N02508PS0													
315			S6N03156PS0	S6N03158PS0													
400			S6N04006PDO	S6N04008PDO													
500	2		S6N05006PRO	S6N05008PRO	DS-LA21	DS-LI21	DS-LR21	2	14	345	DS-EP23	D5LAU01	D5LAU02	DS-CB21	DS-CF21	104	
630			S6N06306PRO	S6N06308PRO													355



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

Manual handle

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

92

94

96

98

100



Amp.	Size	Connection	6 pole (6P)		8 pole (8P)		External ^{*(1)}	Direct	Emergency external ^{*(1)}	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)					
			Code	Code	Code	Code					Code	Code	Code	Code	Code	Code		Code	Code	Code		Code	Code	Code	Code	
125	0		S5M01256PS0	S5M01258PS0	DS-LA01	DS-SI01	DS-LR01	0	DS-AU11	DS-AU12	DS-CAB1	DS-CEB1	DS-PB01	DS-PB02	DS-PB03	DS-PB04	DS-PB11	DS-PB12	DS-PB13	DS-CU02	DS-CU03	DS-CU04	-			
160			S5M01606PS0	S5M01608PS0																				DS-CU05	DS-CU06	DS-CU07
200			S5M02006PS0	S5M02008PS0																						
250	1		S5M02506PRO	S5M02508PRO	DS-LA12	DS-LI12	DS-LR12	1	DS-AU11	DS-AU12	DS-CB12	DS-CF11	DS-PB12	DS-PB11	DS-PB14	DS-PB13	DS-CU12	-	-	-	DS-CU11	94				
315			S5M03156PRO	S5M03158PRO																						
400			S5M04006PC0	S5M04008PC0																						
500	2		S5M05006PRO	S5M05008PRO	DS-LA22	DS-LI22	DS-LR22	2	DS-AU11	DS-AU12	DS-CB21	DS-CF21	DS-PB22	DS-PB21	-	-	-	-	-	-	DS-CU21	96				
630			S5M06306PRO	S5M06308PRO																						
800	3		S5M08006PRO	S5M08008PRO	DS-LA41	DS-LI41	DS-LR41	3	DS-AU11	DS-AU12	DS-CB41	DS-CF41	DS-PB32	DS-PB31	-	-	-	-	-	-	DS-CU31	98				
1000			S5M10006PC0	S5M10008PC0																						
1250	4 (S5N)		S5N12506PS0	S5N12508PS0	DS-LA41	DS-LI41	DS-LR41	4 (S5N)	D5LAU01	D5LAU02	DS-CB41	DS-CF41	-	-	-	-	-	-	-	-	-	-	100			
1600			S5N16006PS0	S5N16008PS0																						
1800			S5N18006PS0	S5N18008PS0																						
2000			S5N20006PDO	S5N20008PDO																						

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.

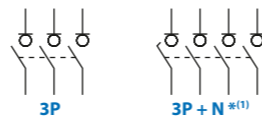
^{*(2)} A standard shaft is included with the external handle.

^{*(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 S5M or S5N 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.

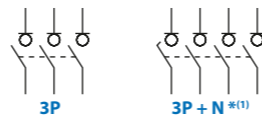


CIS25A | **S5 polyester enclosed switches** ^{*(2)} **IP65** ^{*(3)}
CIS25D | **3 & 4 poles (40 - 1600A) (O - I)**

Amp.	Size	CIS25D ___ Without fuse holders				CIS23A ___ With fuse holders NH ^{*(4)}				Auxiliary contacts ^{*(6)}		Safety key lock device ^{*(7)}		Terminal shrouds ^{*(8)} (2 unidades)	Full details in page.	
		3 pole (3P)		4 pole (3P + N) ^{*(1)}		3 pole (3P)		4 pole (3P + N) ^{*(1)}		1NO+1NC	2NO+2NC	Simple	Doble	Code		
		Code		Code		Code		Code		Code	Code	Code	Code			
40	00	CIS25D00403PB		CIS25D00403NB		CIS25A00403PB		CIS25A00403NB		00	D5LAU01	D5LAU02	DS-CAB1	DS-CEB1	-	106
63		CIS25D00633PB		CIS25D00633NB		CIS25A00633PB		CIS25A00633NB								
80		CIS25D00803PB		CIS25D00803NB		CIS25A00803PB		CIS25A00803NB								
125	0	CIS25D01253PB		CIS25D01253NB		CIS25A01253PB		CIS25A01253NB		0	D5LAU01	D5LAU02	DS-CAB1	DS-CEB1	-	108
160		CIS25D01603PB		CIS25D01603NB		CIS25A01603PB		CIS25A01603NB								
200		CIS25D02003PR		CIS25D02003NR		CIS25A02003PR		CIS25A02003NR								
250	1	CIS25D02503PR		CIS25D02503NR		CIS25A02503PR		CIS25A02503NR		1	D5LAU01	D5LAU02	DS-CA11	DS-CE11	DS-CU11	110
315		CIS25D03153PR		CIS25D03153NR		CIS25A03153PR		CIS25A03153NR								
400		CIS25D04003PR		CIS25D04003NR		CIS25A04003PR		CIS25A04003NR								
630	2	CIS25D06303PR		CIS25D06303NR		CIS25A06303PR		CIS25A06303NR		2	D5LAU01	D5LAU02	DS-CB21	DS-CF21	DS-CU21	112
800		CIS25D08003PR		CIS25D08003NR		CIS25A08003PR		CIS25A08003NR								
1000		CIS25D10003PS		CIS25D10003NS		CIS25A10003PS		CIS25A10003NS								
1250	4	CIS25D12503PS		CIS25D12503NS		CIS25A12503PS		CIS25A12503NS		4	D5LAU01	D5LAU02	DS-CB41	DS-CF41	DS-CU41	116
1600		CIS25D16003PS		CIS25D16003NS		CIS25A16003PS		CIS25A16003NS								

CIS25D

CIS25A



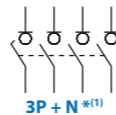
CIS25C | **S5 metal enclosed switches** ^{*(2)} **IP65**
CIS25F | **3 & 4 poles (40 - 1600A) (O - I)**

Amp.	Size	CIS25C ___ Without fuse holders				CIS25F ___ With fuse holders NH ^{*(4)}				Auxiliary contacts ^{*(6)}		Safety key lock device ^{*(7)}		Terminal shrouds ^{*(8)} (2 unidades)	Full details in page.	
		3 pole (3P)		4 pole (3P + N) ^{*(1)}		3 pole (3P)		4 pole (3P + N) ^{*(1)}		1NO+1NC	2NO+2NC	Simple	Doble	Code		
		Code		Code		Code		Code		Code	Code	Code	Code			
40	00	CIS25C00403PB		CIS25C00403NB		CIS25F00403PB		CIS25F00403NB		00	D5LAU01	D5LAU02	DS-CAB1	DS-CEB1	-	106
63		CIS25C00633PB		CIS25C00633NB		CIS25F00633PB		CIS25F00633NB								
80		CIS25C00803PB		CIS25C00803NB		CIS25F00803PB		CIS25F00803NB								
125	0	CIS25C01253PB		CIS25C01253NB		CIS25F01253PB		CIS25F01253NB		0	D5LAU01	D5LAU02	DS-CAB1	DS-CEB1	-	108
160		CIS25C01603PB		CIS25C01603NB		CIS25F01603PB		CIS25F01603NB								
200		CIS25C02003PR		CIS25C02003NR		CIS25F02003PR		CIS25F02003NR								
250	1	CIS25C02503PR		CIS25C02503NR		CIS25F02503PR		CIS25F02503NR		1	D5LAU01	D5LAU02	DS-CA11	DS-CE11	DS-CU11	110
315		CIS25C03153PR		CIS25C03153NR		CIS25F03153PR		CIS25F03153NR								
400		CIS25C04003PC		CIS25C04003NC		-		-								
400	2	CIS25C04003PR		CIS25C04003NR		CIS25F04003PR		CIS25F04003NR		2	D5LAU01	D5LAU02	DS-CB21	DS-CF21	DS-CU21	112
630		CIS25C06303PR		CIS25C06303NR		CIS25F06303PR		CIS25F06303NR								
800		CIS25C08003PR		CIS25C08003NR		CIS25F08003PR		CIS25F08003NR								
1000	4	CIS25C10003PS		CIS25C10003NS		CIS25F10003PS		CIS25F10003NS		4	D5LAU01	D5LAU02	DS-CB41	DS-CF41	DS-CU41	116
1250		CIS25C12503PS		CIS25C12503NS		CIS25F12503PS		CIS25F12503NS								
1600		CIS25C16003PS		CIS25C16003NS		CIS25F16003PS		CIS25F16003NS								

Under request higher currents are available, please consult.

CIS25C

CIS25F



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

Amp.	IPTR ___ Manual single module ^{*(4)}		IPTU ___ Manual double module ^{*(4)}		IPTA ___ Automatic single module		Full details in page.
	4 pole (3P + N) ^{*(1)}		4 pole (3P + N) ^{*(1)}		4 pole		
	Code		Code		Amp.	Code	
160	IPTR01603NB0		IPTU01603NB0		40	IPTA00404PS0	118
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	

IPTR

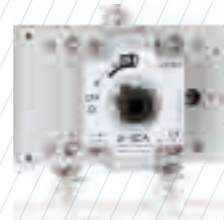
IPTU

IPTA

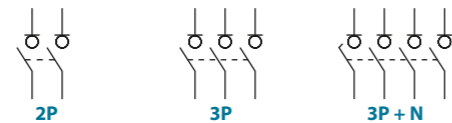
- ^{*(1)} Neutral pole early make-late break - Versions 4P with "simultaneous contacts" are also available, please consult.
- ^{*(2)} Padlockable handle in OFF 0 position. Possibility of unlocking the door in ON I position (with the use of a tool). Door interlock by a padlock in OFF 0 position.
- ^{*(3)}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



	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

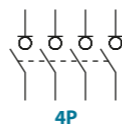


Technical information

According to IEC 60947-3

		40			63			80			
Rated thermal current in ambient at	Ith	40 °C	A	50	63	80	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.)



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

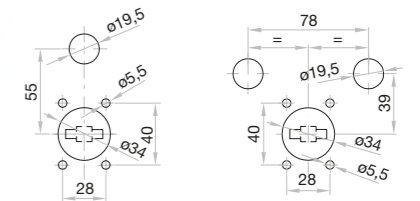
- Shafts**
Standard shaft included ^{*(e1)}
L (mm) | P (mm)
177 | 85... 195,5
- Shaft extensions**
Type 1
L (mm) | P (mm) | CODE
250 | 85... 278 | DS-EP04
- Type 2**
L (mm) | P (mm) | CODE
387 | 85... 415 | DS-EP05

- Auxiliary contacts**
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

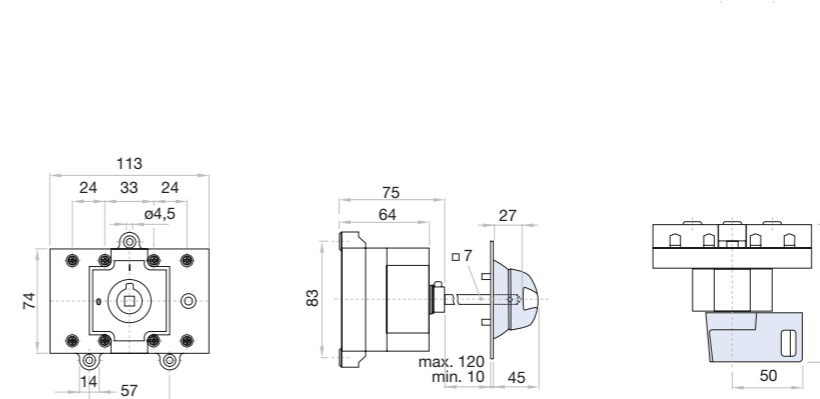
- Safety key lock device**
Simple CODE DS-CAB1
Double CODE DS-CEB1

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

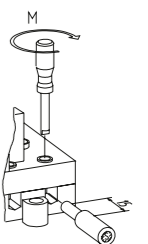
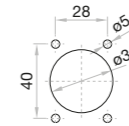
Door drilling for handle and key lock device
Simple Double



Dimensions (mm)



Door drilling for external handle

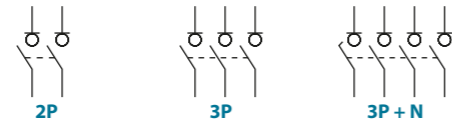


S max (Cu)	M
mm ²	Nxm
25	2

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

Size 0
A 125|160|200|250

	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

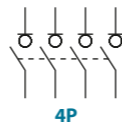
According to IEC 60947-3



			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)	le	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	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
- 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

le = 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

Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)	CODE
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

Dimensions (mm)

Door drilling for external handle

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

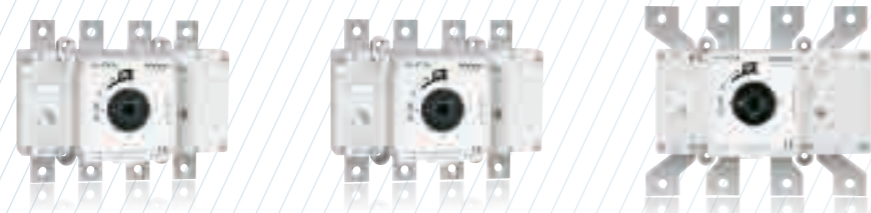
	A			B			C		
	2P	3P	4P	2P	3P	4P	2P	3P	4P
200 A 250 A	131	131	142	53	53	64	11,8		

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

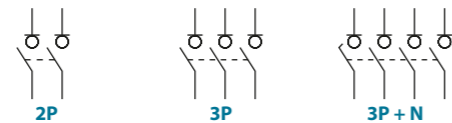
S max (Cu)	Z max	H max (Cu)	L max (Cu)	T	M
mm ²		mm	mm		Nxm
120	30	5	30	M10	18

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

Size 1
A 250|315|400



	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

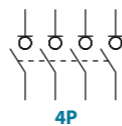
According to IEC 60947-3



			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)}	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 3P		Kg	1,7	1,7	1,9
Maximum weight 3P+N		Kg	1,9	1,9	2,1



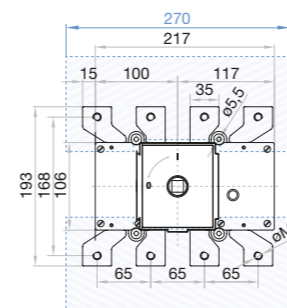
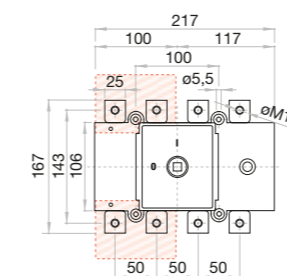
Also available 4P switch - disconnectors under request, please consult

Accessories

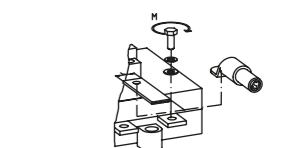
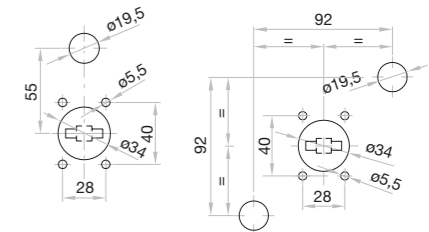
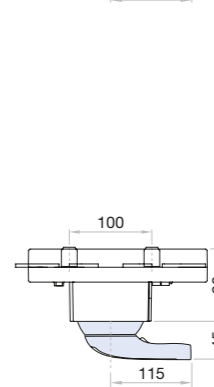
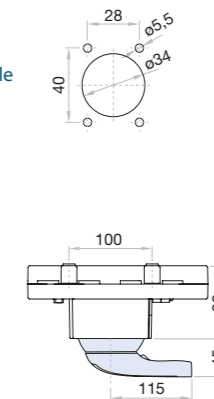
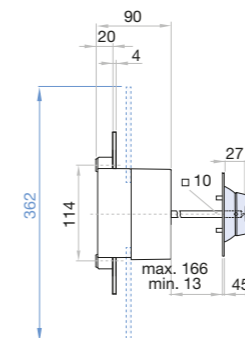
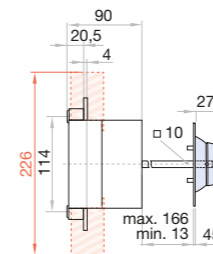
- Direct handle**
CODE DS-SI1
- External handle** included shaft^{*(e1)}
IP65
CODE DS-SA11
- External handle** without shaft
IP65
CODE DS-SA14
- Emergency external handle** included shaft^{*(e1)}
IP65
CODE DS-SR11
- Terminal protection**
CODE DS-CU12
⊞ (1 unit for input or output)
- Terminal shrouds**
CODE DS-CU11
⊞ (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-CE11

- Shafts**
Standard shaft included ^{*(e1)}
L (mm) | P (mm) | CODE
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

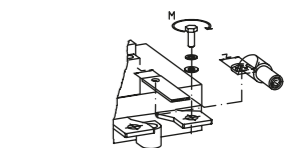
Dimensions (mm)



Door drilling for external handle



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T M Nxmm
250A 315A	185	7	25	M10 18

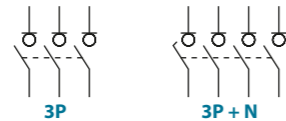
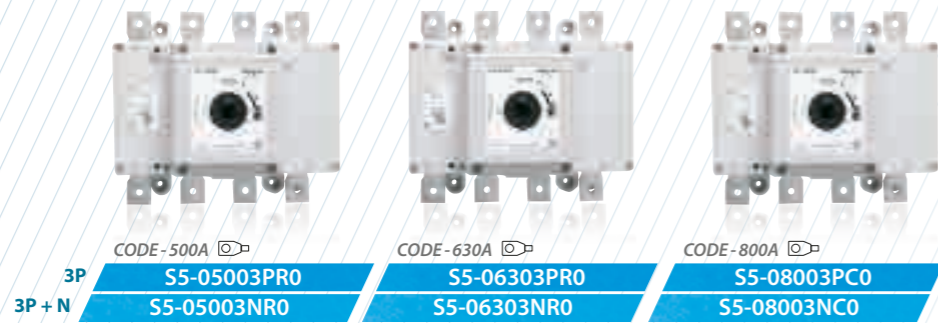


	S max (Cu) mm ²	Z max mm	H max (Cu) mm	L max (Cu) mm	T M Nxmm
400A	240	44	7	40	M10 24



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

Size 2
A 500|630|800



Technical information

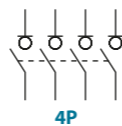
According to IEC 60947-3



		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)}	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						



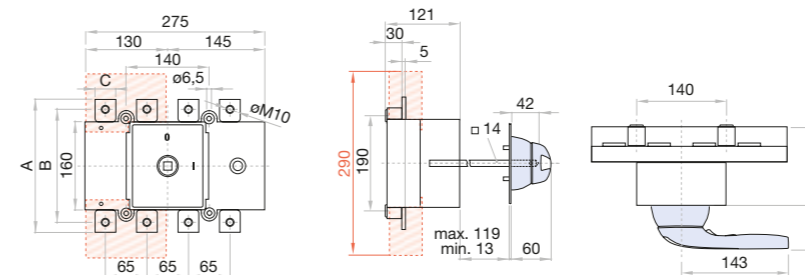
Also available 4P switch - disconnectors under request, please consult

Accessories

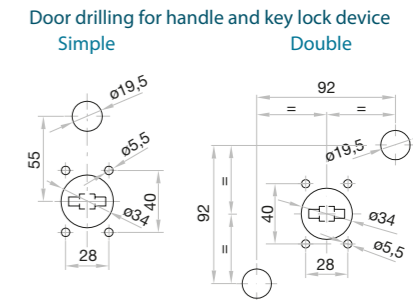
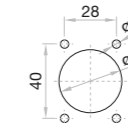
- Direct handle**
CODE DS-LI21
- External handle** included shaft ^{*(e1)}
IP65
CODE DS-LA21
- External handle** without shaft
IP65
CODE DS-LA24
- Emergency external handle** included shaft ^{*(e1)}
IP65
CODE DS-LR21
- Terminal protection**
CODE DS-CU22
(1 unit for input or output)
- Terminal shrouds**
CODE DS-CU21
(1 kit for input or output)
- Auxiliary contacts**
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.
- Safety key lock device**
Simple CODE DS-CB21
Double CODE DS-CF21

- Shafts**
Standard shaft included ^{*(e1)}
L (mm) | P (mm) | CODE
195 | 134... 240 | DS-EP23
- 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

Dimensions (mm)



Door drilling for external handle



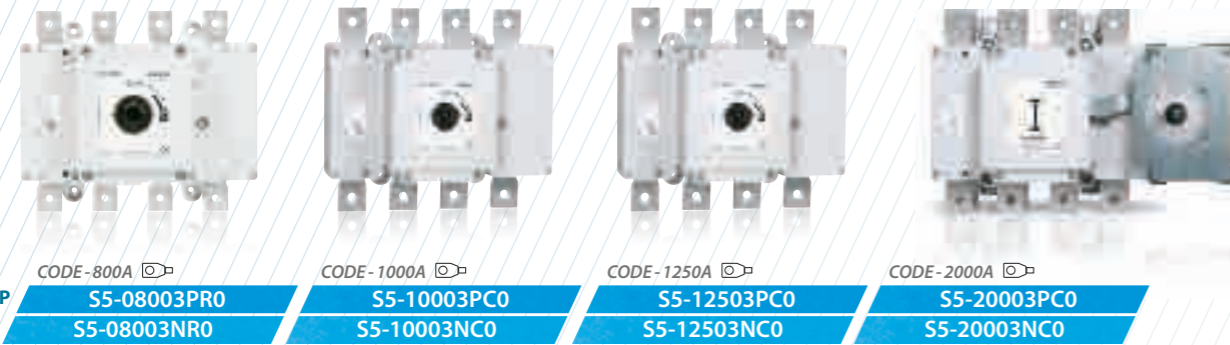
	A	B	C	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M
500 A	220	190	25	2x185	6	40	M10 24
630 A	235	205	30	2x240	2x5	40	M10 24
800 A						50	



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

Size 3

A 800|1000|1250|2000



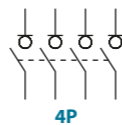
Technical information

According to IEC 60947-3



			800	1000	1250	2000
Rated thermal current in ambient at	I _{th}	40 °C	A 800	1000	1250	2000
		50 °C	A 800	1000	1125	1800
		60 °C	A 800	900	900	1600
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 800	1000	1250	2000
		U _e 400V AC22A	A 800	1000	1250	2000 ⁽³⁾
		U _e 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

			800	1000	1250	2000
Short - circuit behaviour						
Rated short-circuit making capacity ⁽²⁾	I _{cm} kA (peak)		60	60	60	80
Rated short-time withstand current (1sec.)	I _{cw} 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

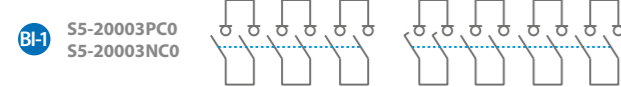


Also available 4P switch - disconnectors under request, please consult

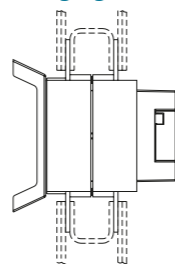
⁽¹⁾ Other voltages and / or utilization categories. Please consult
⁽²⁾ Without limiting protective device (short-circuit maintained 50... 100 ms.)
⁽³⁾ AC22B

Connection diagram

Connection diagram between front & rear



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)

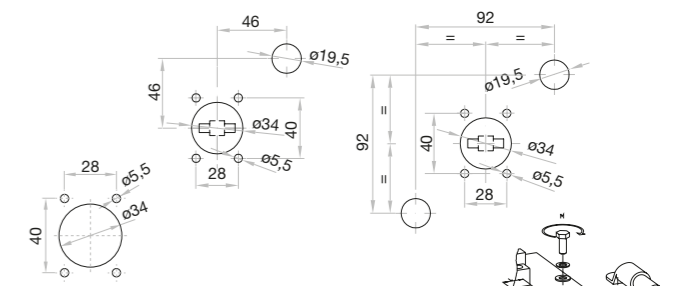
I_e = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.



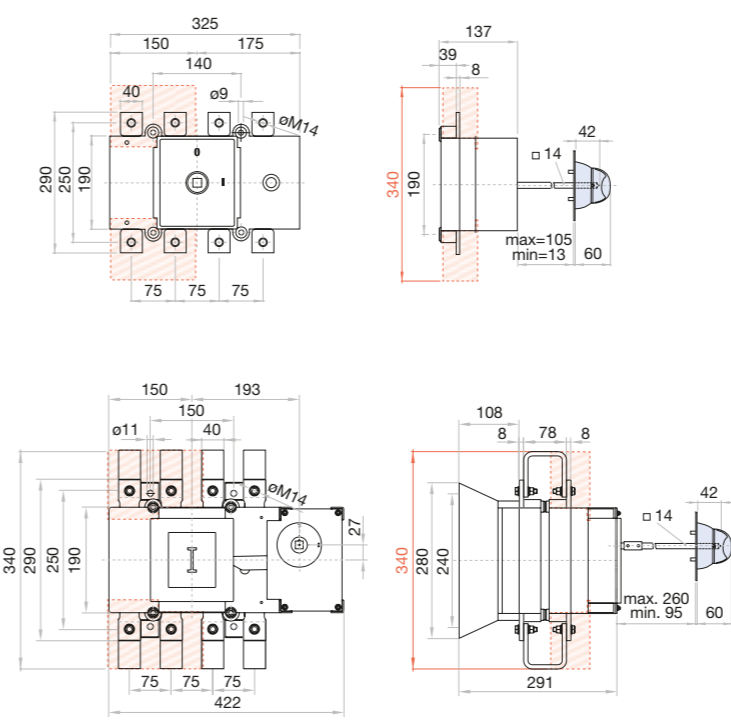
Safety key lock device
 Simple CODE DS-CB31
 Double CODE DS-CF31

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



Dimensions (mm)



Door drilling for external handle

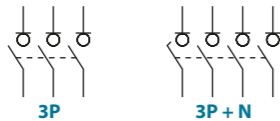
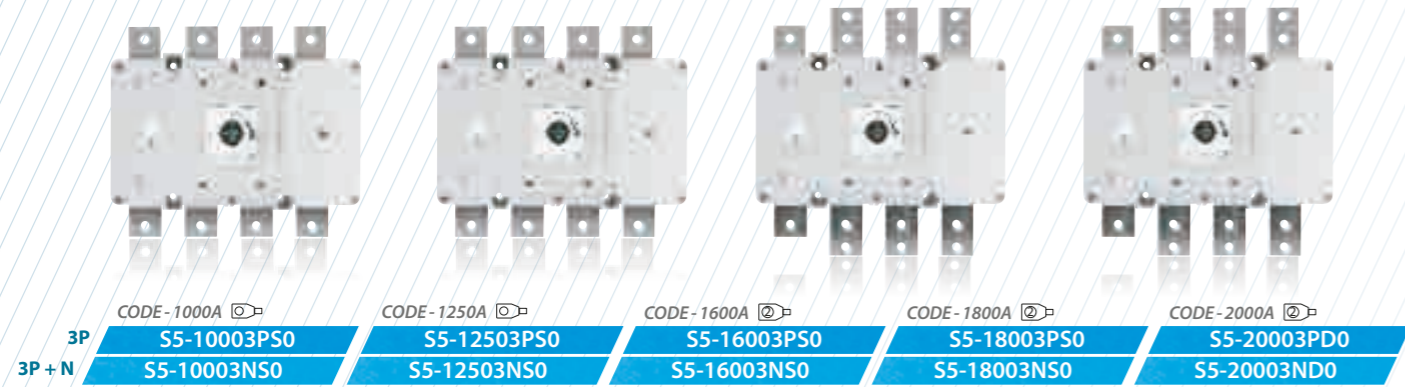
	S max (Cu)	H max (Cu)	L max (Cu)	M
800 A	2x240	2x10	50	M14
1000 A	2x240	2x10	50	M14
1250 A	2x300	2x10	50	M14

	S max (Cu)	H max (Cu)	L max (Cu)	M
2000 A	4x300	4x10	50	M14

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

Size 4

A 1000|1250|1600|1800|2000



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	-	-	-	1250	-	
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.)

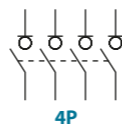


Short - circuit behaviour

		1000 1250 1600 1800 2000				
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

		1000 1250 1600 1800 2000				
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



» Shafts

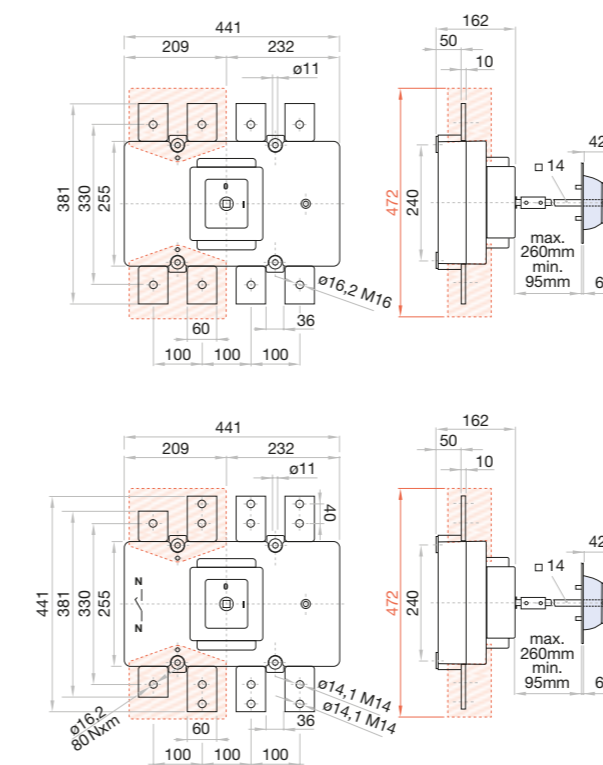
Standard shaft included ^{*(e1)}
L (mm) | P (mm) | CODE
239 | 235... 400 |

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



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



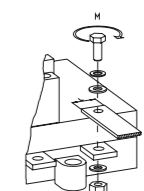
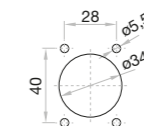
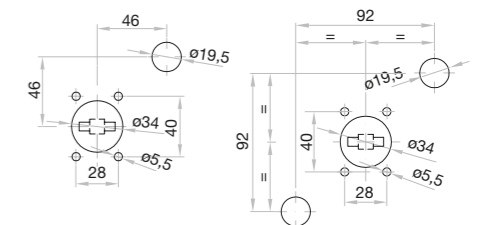
» Auxiliary contacts
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» 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

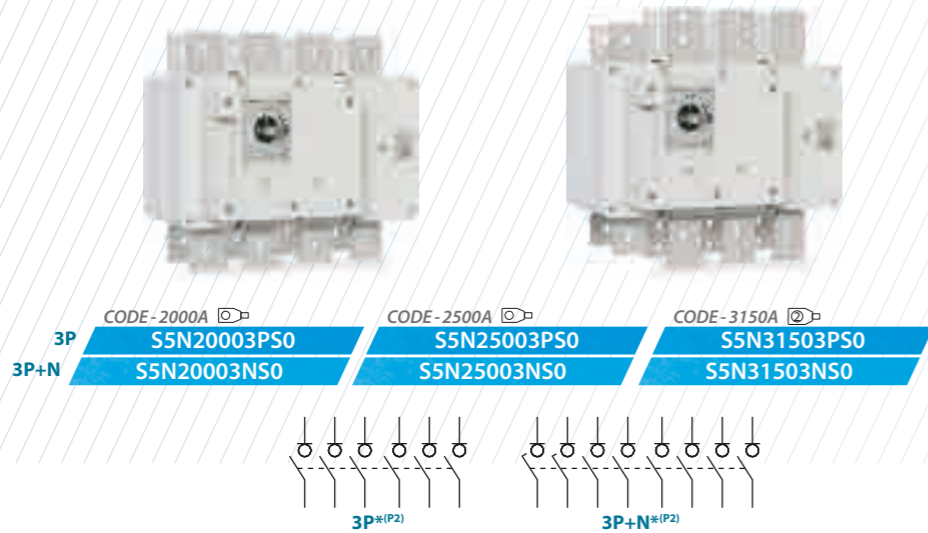


	H max (Cu)	L max (Cu)	M
1000 A	2x10	80	M16
1250 A	2x10	80	M16

	H max (Cu)	L max (Cu)	M
1600 A	2x10	80	M14
1800 A	2x10	80	M14
2000 A	2x10	80	M14

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

Size 5
A 2000|2500|3150



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				
(Rated operational frequency 50/60 Hz)		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.)

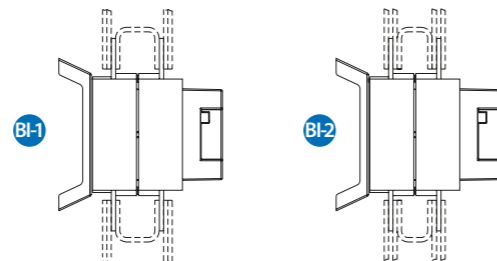
		2000			2500			3150		
Rated breaking capacity		400V AC21	A	-	-	4725				
		400V AC22	A	6000	7500	-				
Rated making capacity		400V AC21	A	-	-	4725				
		400V AC22	A	6000	7500	-				
Short - circuit behaviour										
Rated short-circuit making capacity ^{*(2)}	Icm	kA (peak)	60	60	60					
Rated short-time 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					

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

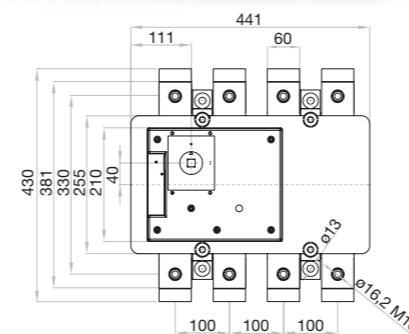


Emergency external handle included shaft ^{*(e1)}
IP65
CODE DS-LR41

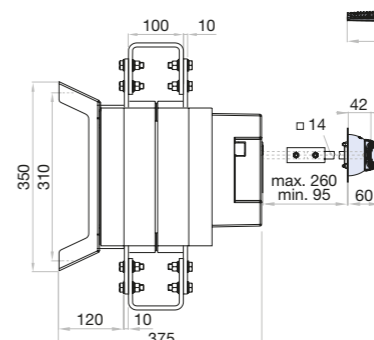
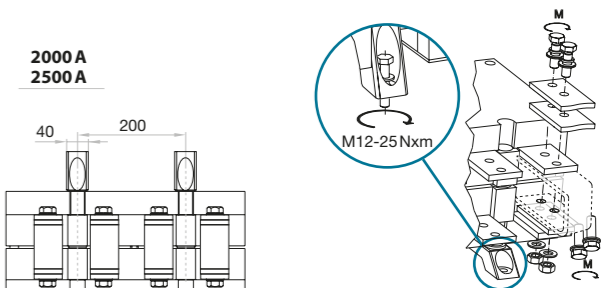
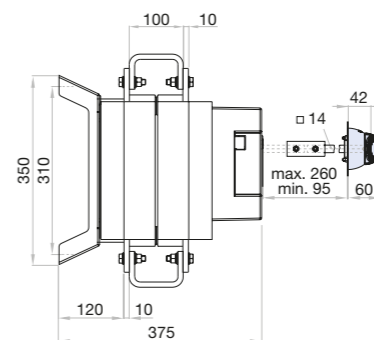


Shafts
Standard shaft included ^{*(e1)}
L (mm) P (mm)
239 458 ... 618

Dimensions (mm)



Door drilling for external handle



	H max (Cu) mm	L max (Cu) mm	M	M
BI-1	2x10	80	M16	80
BI-2	2x10	80	M14	55

» Bridging links ^{*(P2)}
BI-1 2000 A CODE x2 D5LPC41 (4 units)
2500 A CODE x2 D5LPC42 (4 units)
3150 A CODE x2 D5LPC42 (4 units)
BI-2 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

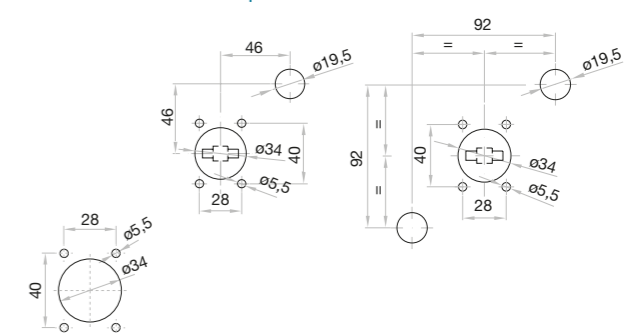
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

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

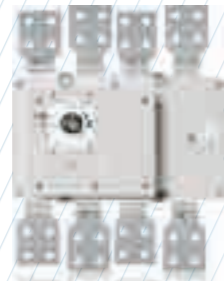
Door drilling for handle and key lock device
Simple Double



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

Size 5

A 2000|2500|3150



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



Technical information

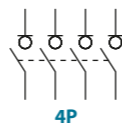


According to IEC 60947-3

		2000	2500	3150		
Rated thermal current in ambient at	lth	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 - 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

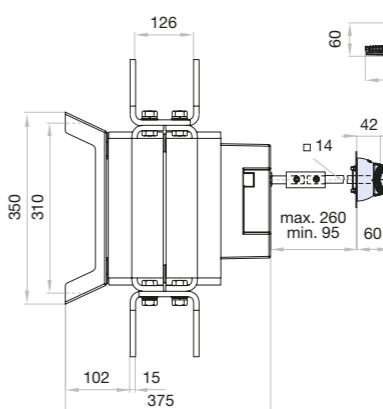
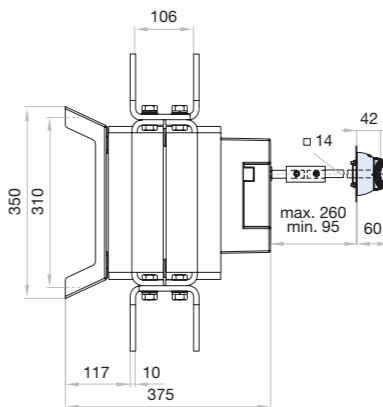
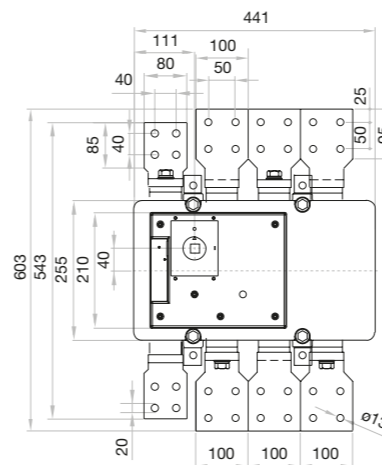
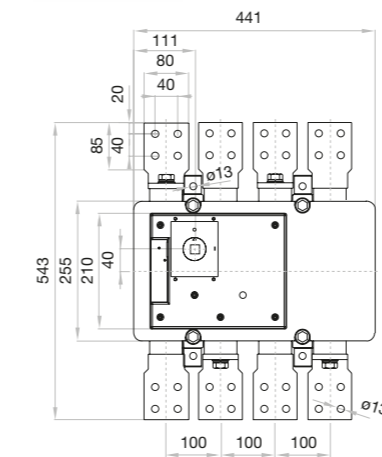


Emergency external handle included shaft ^{*(e1)}
IP65
CODE DS-LR41

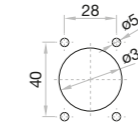


Shafts
Standard shaft included ^{*(e1)}
L (mm) | P (mm)
239 | 458 ... 618

Dimensions (mm)



Door drilling for external handle

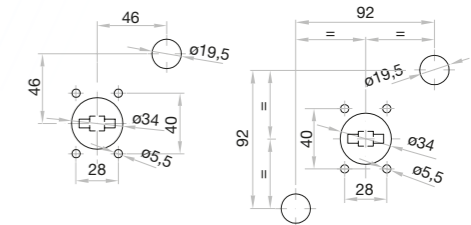


Auxiliary contacts
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

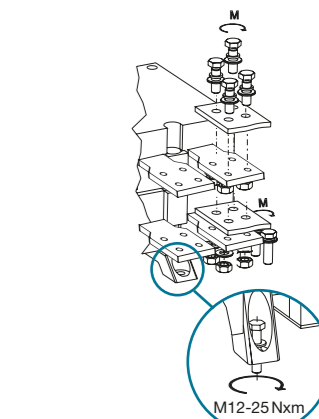
Safety key lock device
Simple CODE DS-CB41
Double CODE DS-CF41

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



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

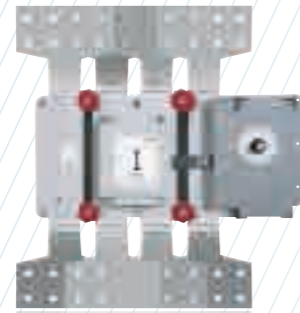


	H max (Cu) mm	L max (Cu) mm	M	M
3150 A	4x10	100	M12	45

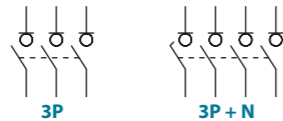
S5 AC Switch - disconnecter base mounting 3P - 3P+N

Size 6

A 4000|5000|6300



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



Technical information

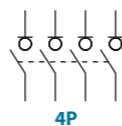


According to IEC 60947-3

			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 (1 sec.)	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

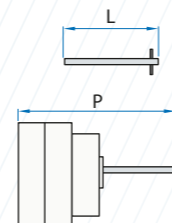
Accessories



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



Auxiliary contacts
 1NO+1NC CODE DS-AU11
 2NO+2NC CODE DS-AU12
 Ie = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.

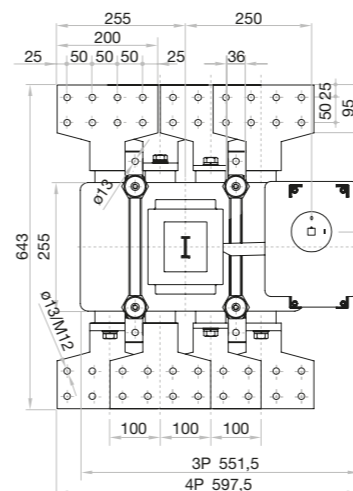


Shafts

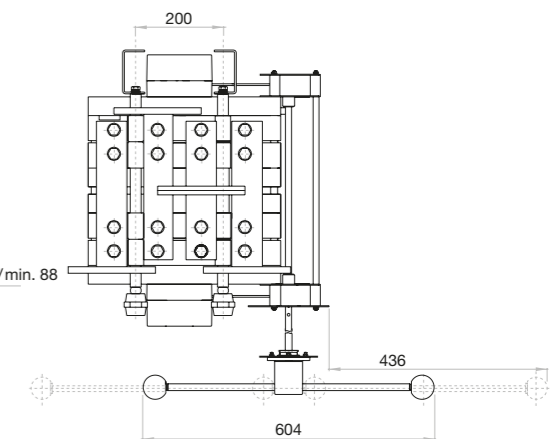
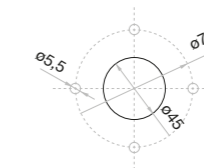
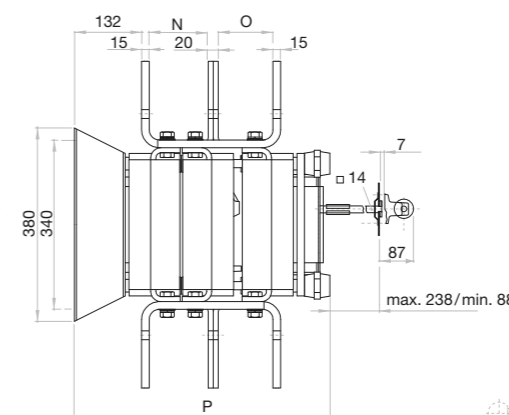
Standard shaft included ^{*(e1)}

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

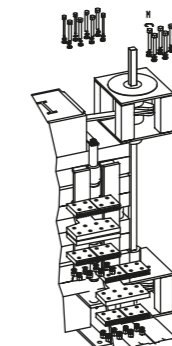
Dimensions (mm)



Door drilling for external handle



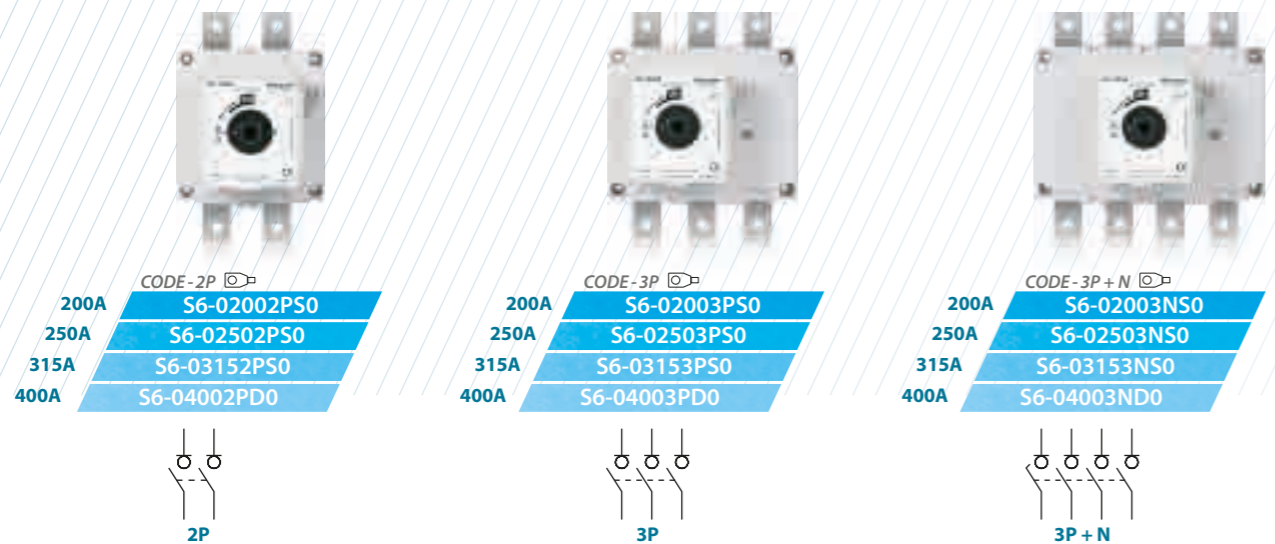
	N	O	P	ø
4000 A	116	107,5	502,5	13
5000 A	164,5	164,5	632	
6300 A				



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

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

Size 1
A 200|250|315|400



Technical information

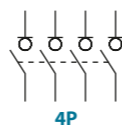
According to IEC 60947-3



		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

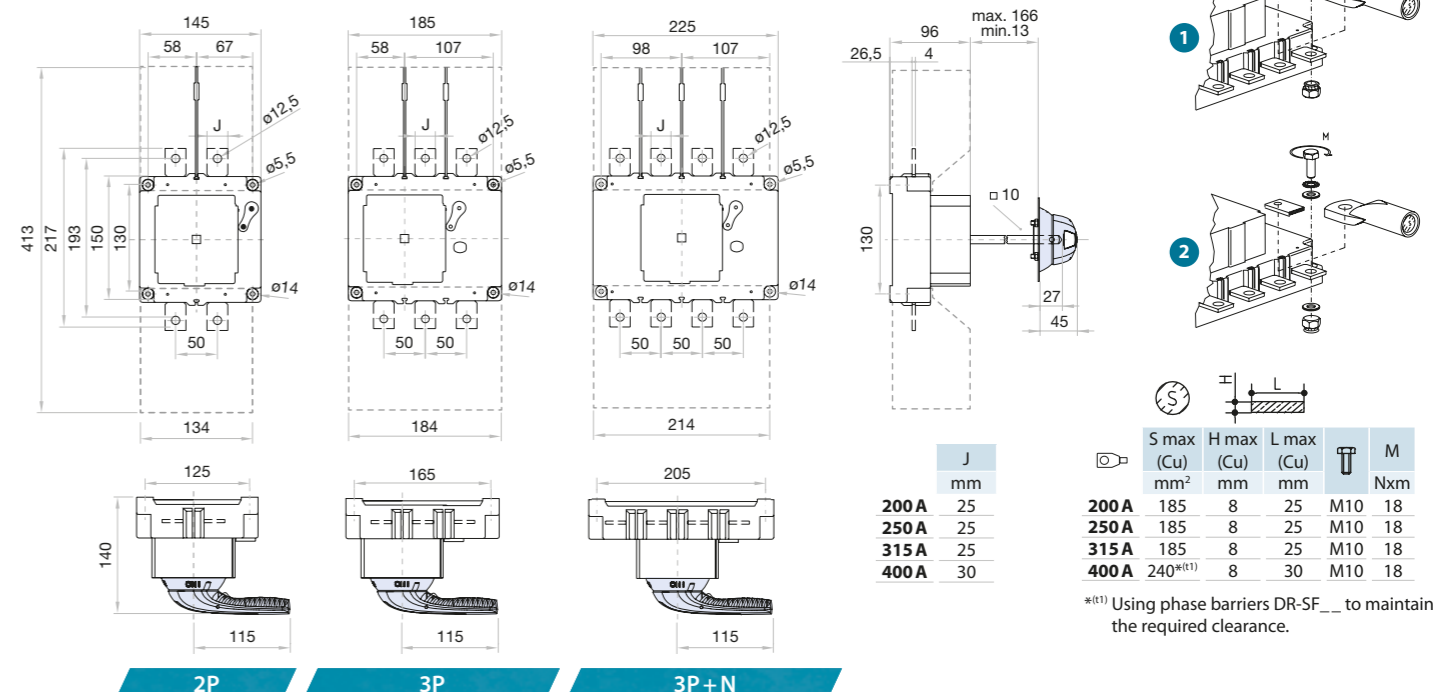


Also available 4P switch-disconnectors under request, please consult

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
- Shafts**
Standard shaft included ^(e1)
L (mm) | P (mm) | CODE
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)

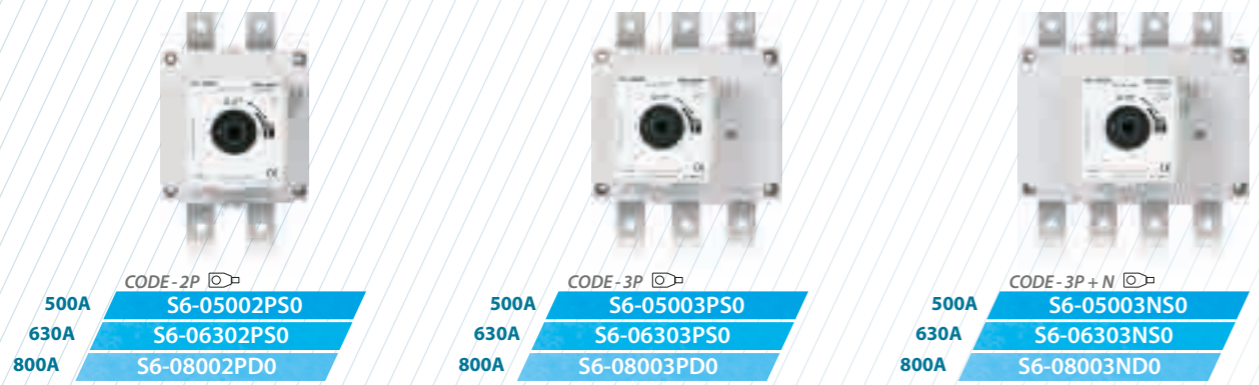


^(e1) Using phase barriers DR-SF... to maintain the required clearance.



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

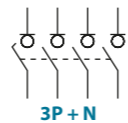
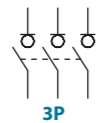
Size 2
A 500|630|800



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



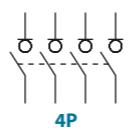
According to IEC 60947-3

		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

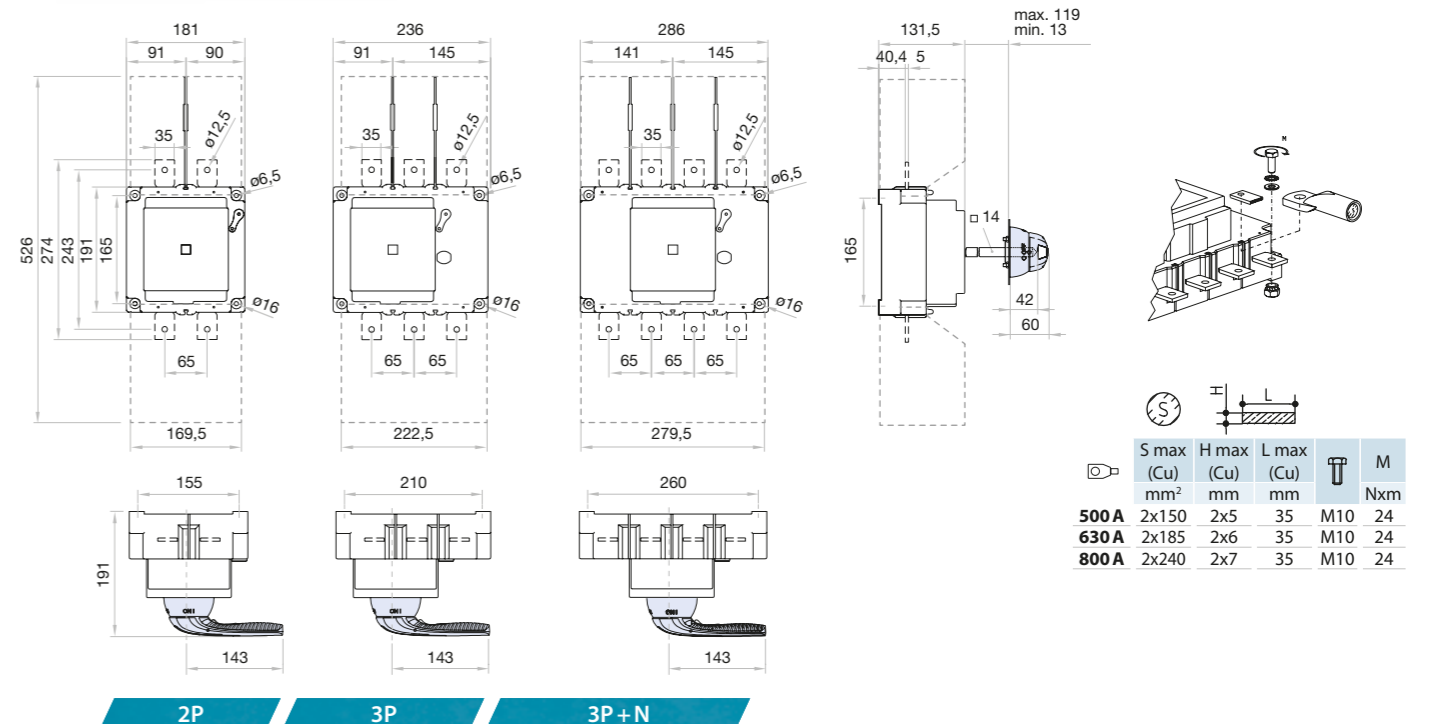


Also available 4P switch-disconnectors under request, please consult

Accessories

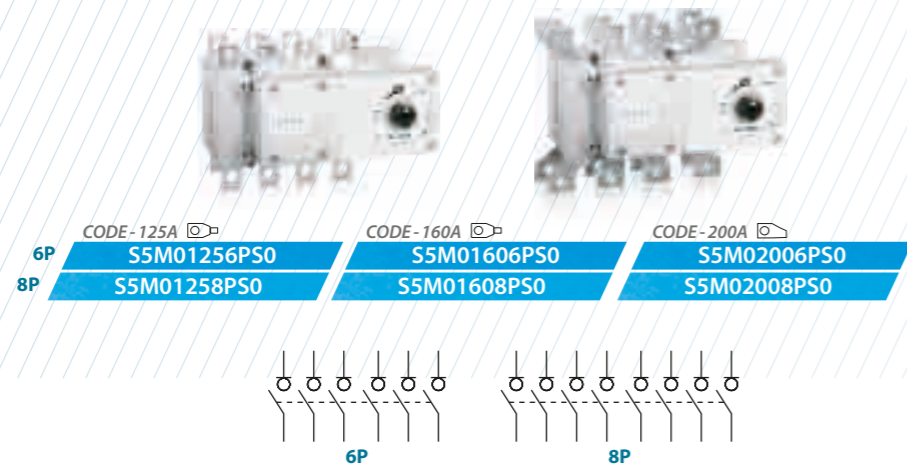
- Direct handle**
CODE DS-LI21
- External handle** included shaft ^(e1)
IP65
CODE DS-LA21
- External handle** without shaft
IP65
CODE DS-LA24
- Emergency external handle** included shaft ^(e1)
IP65
CODE DS-LR21
- Terminal shrouds**
CODE DR-CU21 (1 unit)
CODE DR-CU22 (1 unit)
CODE DR-CU23 (1 unit)
- Phase barriers**
CODE DR-SF21 (1 unit)
CODE DR-SF22 (2 units)
CODE DR-SF23 (3 units)
- Spacers**
CODE DR-EL21 (4 units)
- 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
- Shafts**
Standard shaft included ^(e1)
L (mm) | P (mm) | CODE
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.

Dimensions (mm)



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

Size 0
A 125|160|200



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

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
- Terminal shrouds** ^{*(f1)}

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** ^{*(f1)}

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

 (1 kit for input or output)
^{*(f1)} 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
- 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.

Technical information



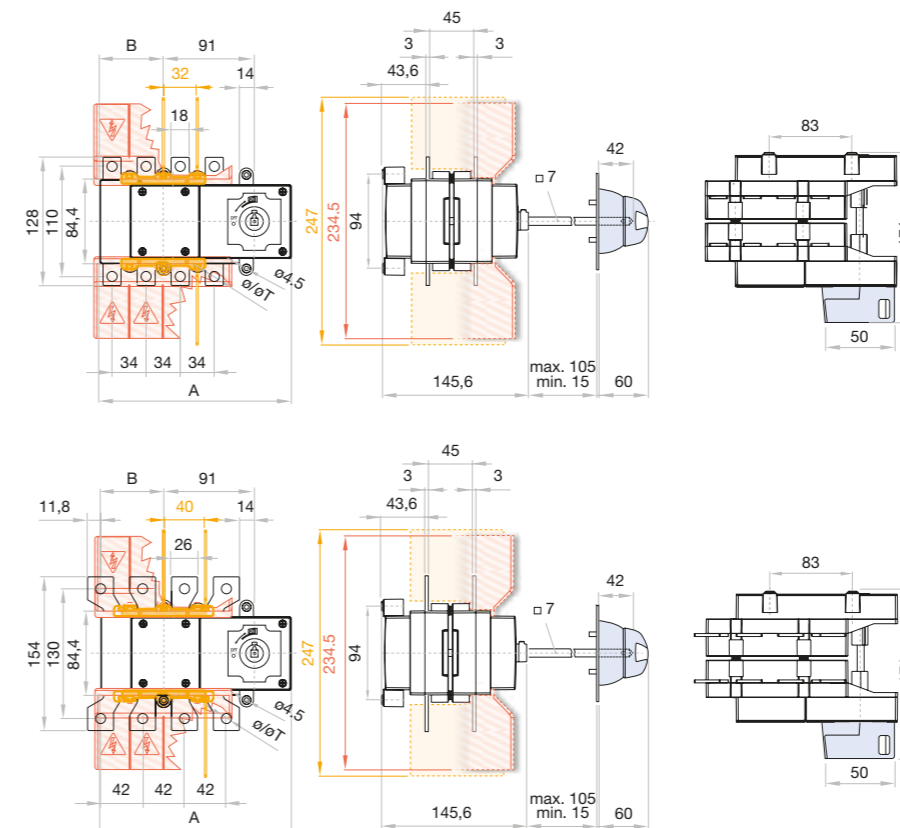
According to IEC 60947-3

		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.)

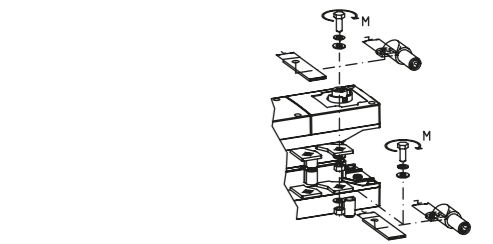
		125	160	200
Short - circuit behaviour				
Rated short-circuit making capacity ^{*(2)}	Icm kA (peak)	13	13	13
Rated short-time withstand current (1sec.)	Icw kA rms	7	7	7
Mechanical features				
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	8000	8000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

Dimensions (mm)

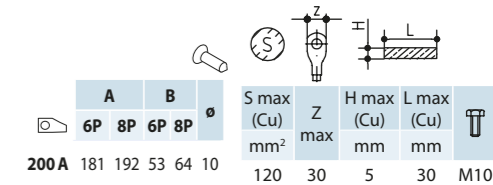


Door drilling for external handle

A	B	ø	S max	H max	L max	M				
			(Cu) mm ²	(Cu) mm	(Cu) mm					
125 A	6P	8P	6P	8P	10	95	5	25	M8	13



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



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

Size 1
A 250|315|400

6P CODE-250A S5M02506PRO S5M02508PRO
315 CODE-315A S5M03156PRO S5M03158PRO
400 CODE-400A S5M04006PC0 S5M04008PC0

Accessories

- Direct handle**
CODE DS-LI12
- External handle** included shaft^{*(e1)}
IP65
CODE DS-LA12
- External handle** without shaft
IP65
CODE DS-LA15
- Emergency external handle** included shaft^{*(e1)}
IP65
CODE DS-LR12
- Terminal protection** ^{*(T)}
CODE DS-CU12
(1 unit for input or output only frontal side)
- Terminal shrouds** ^{*(T)}
CODE DS-CU11
(1 kit for input or output only frontal side)
- Phase barrier** ^{*(T)}
6P DS-PB12 DS-PB11
8P DS-PB14 DS-PB13
(1 kit for input or output)
^{*(T)} These accessories aren't compatible with each other.
- Safety key lock devices**
Simple CODE DS-CB12
Double CODE DS-CF11

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)}	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					

Shafts

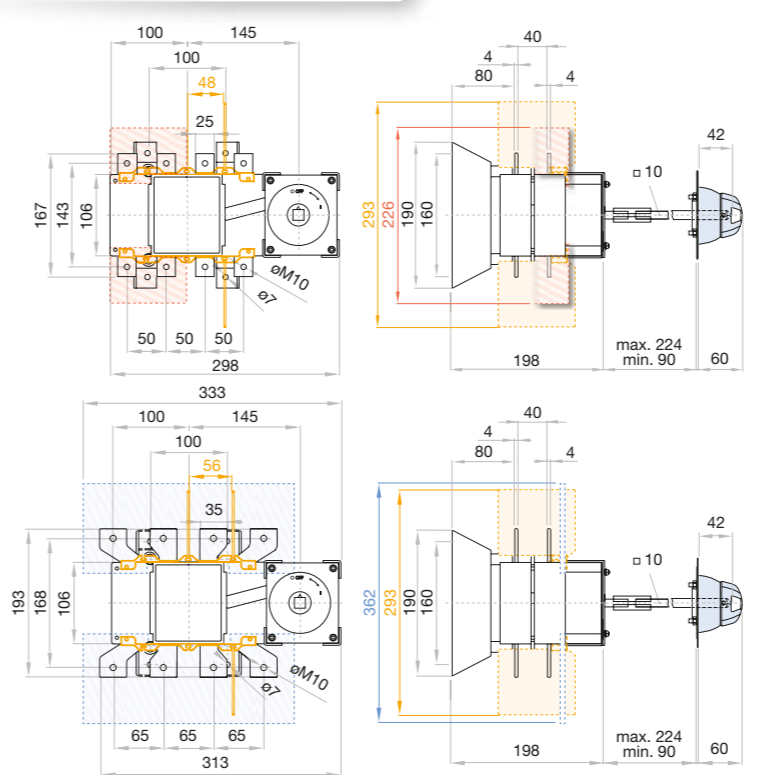
Standard shaft included ^{*(e1)}

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

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)

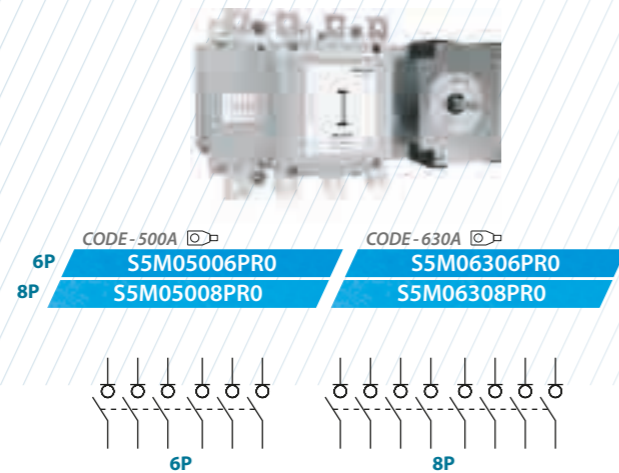


Door drilling for external handle

S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M	M	
250 A	185	7	25	M10	18
315 A					
400 A	240	7	40	M10	24

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

Size 2
A 500|630



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
- Terminal shrouds ^{*(f)}**
 CODE DS-CU21
 (1 kit for input or output only frontal side)
- Phase barrier ^{*(f)}**
 6P DS-PB22 | 8P DS-PB21
 (1 kit for input or output)
^{*(f)} 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
- Shafts**
 Standard shaft included ^{*(e1)}
 L (mm) | P (mm)
 239 | 325... 490
- Auxiliary contacts**
 1NO+1NC CODE DS-AU11
 2NO+2NC CODE DS-AU12
 Ie = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.

Technical information



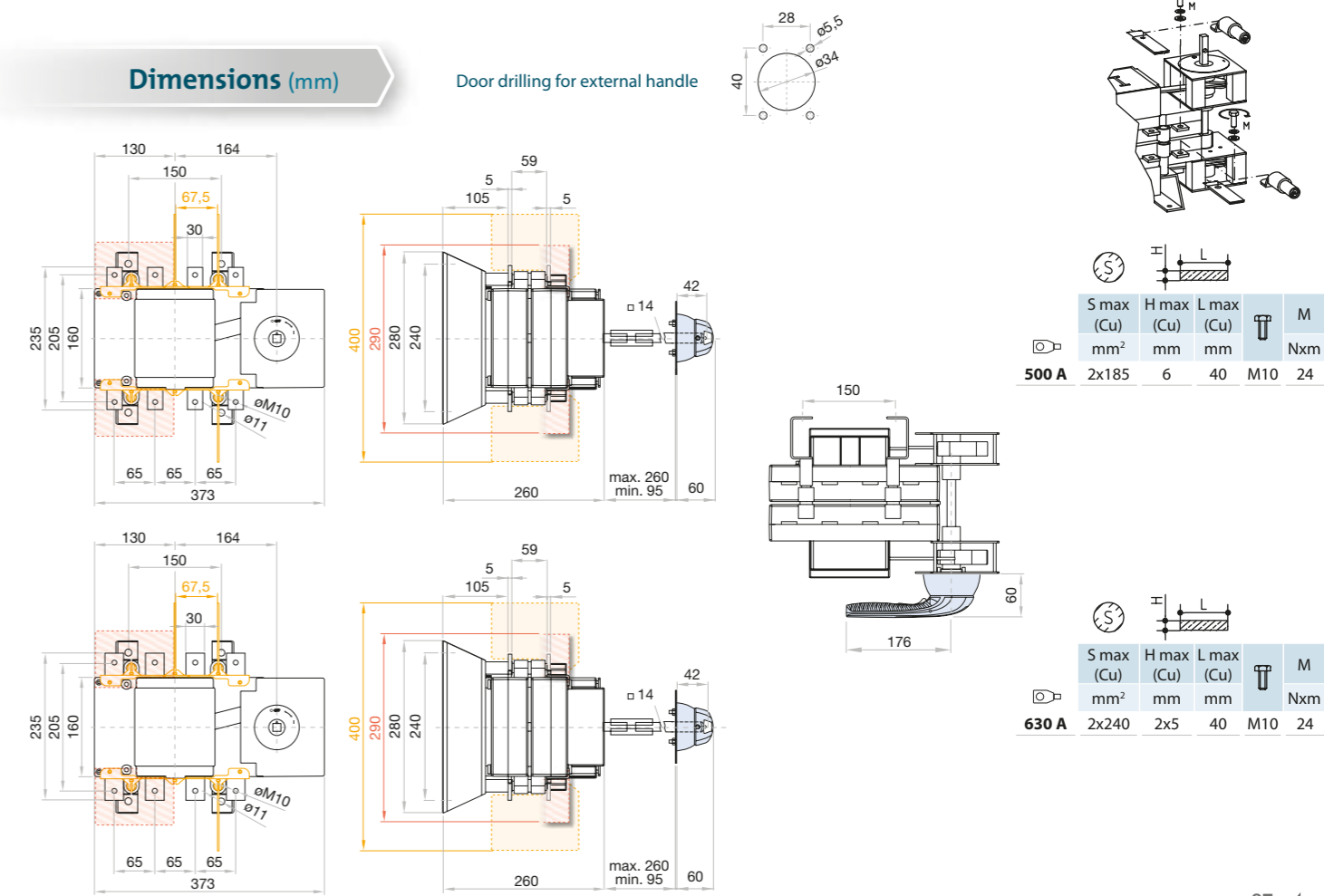
According to IEC 60947-3

		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	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.)

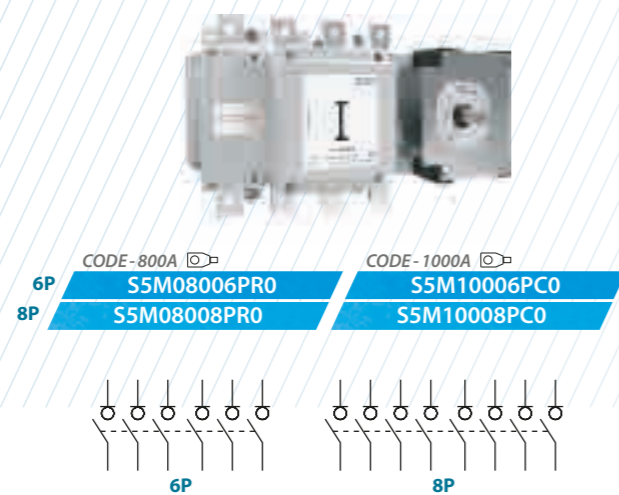
		500		630	
Short - circuit behaviour					
Rated short-circuit making capacity ^{*(2)}	Icm kA (peak)		26	26	
Rated short-time withstand current (1sec.)	Icw kA rms		16	16	
Mechanical features					
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		5000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

Dimensions (mm)

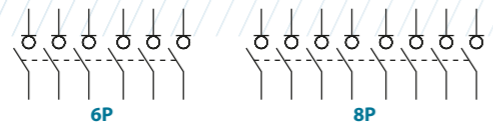


S5M AC Switch - disconnecter base mounting 6P - 8P

Size 3
A 800 | 1000



CODE-800A CODE-1000A
 6P S5M08006PRO S5M10006PC0
 8P S5M08008PRO S5M10008PC0



Technical information



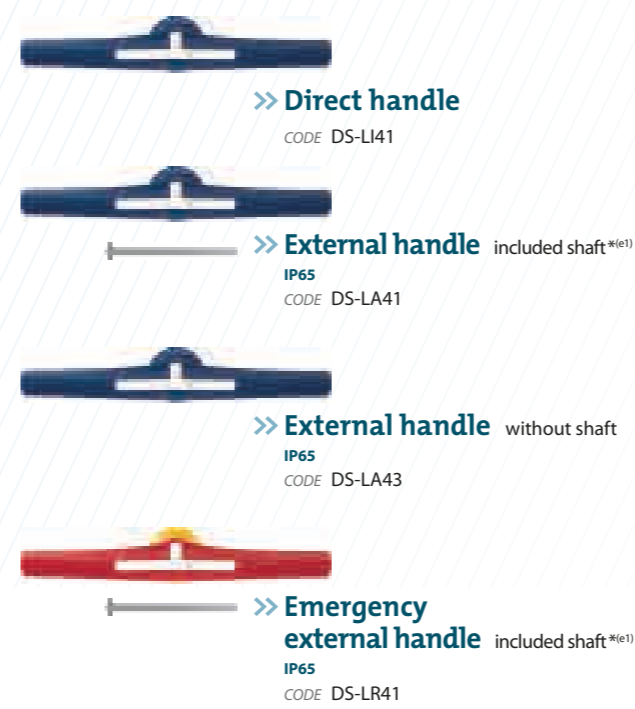
According to IEC 60947-3

		800		1000	
Rated thermal current in ambient at	Ith	40 °C	A	800	1000
		50 °C	A	800	1000
		60 °C	A	800	900
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	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)}	Icm kA (peak)	60	60		
Rated short-time withstand current (1sec.)	Icw 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		

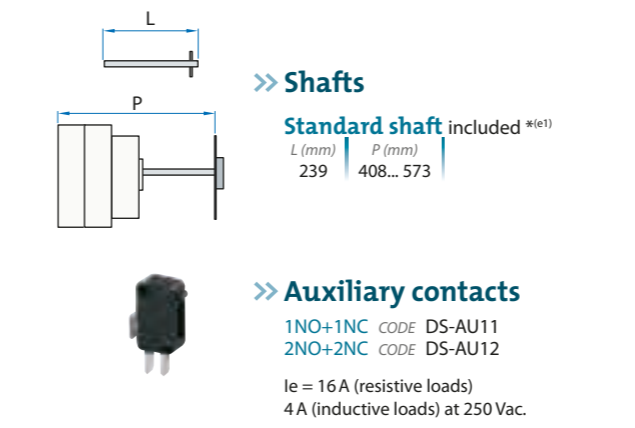
Accessories



Terminal shrouds ^{*(T)}
 CODE DS-CU31
 (1 kit for input or output only frontal side)

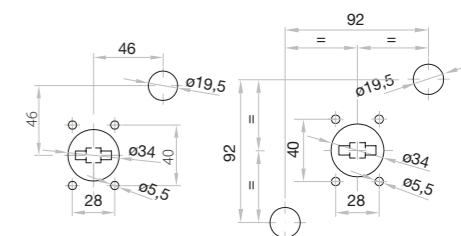
Phase barrier ^{*(T)}
 6P DS-PB32 | 8P DS-PB31
 (1 kit for input or output)
^{*(T)} These accessories aren't compatible with each other.

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

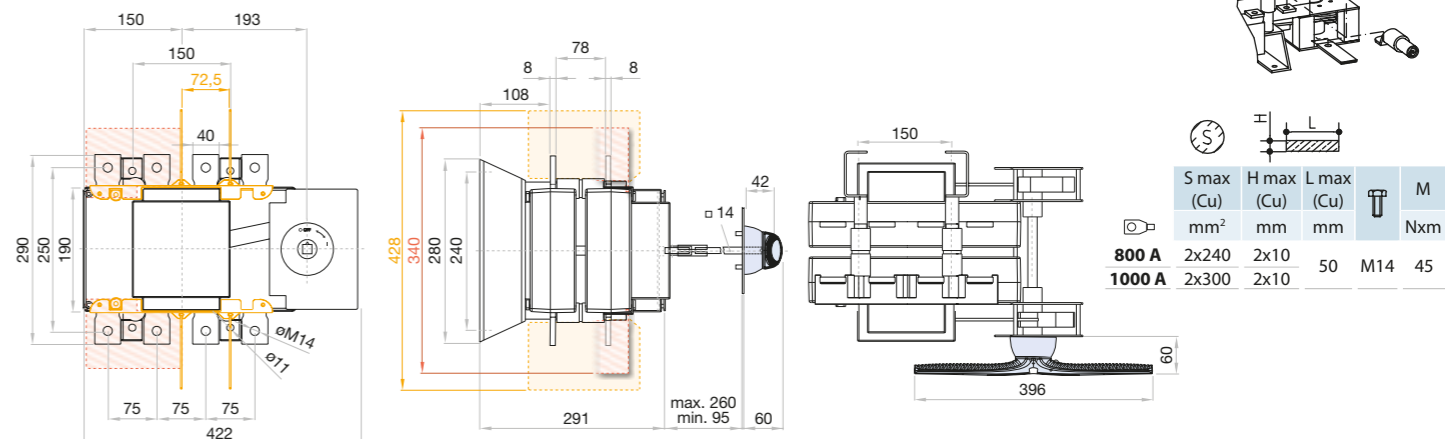


Shafts
 Standard shaft included ^{*(e1)}
 L (mm) | P (mm)
 239 | 408... 573

Auxiliary contacts
 1NO+1NC CODE DS-AU11
 2NO+2NC CODE DS-AU12
 Ie = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.



Dimensions (mm)



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

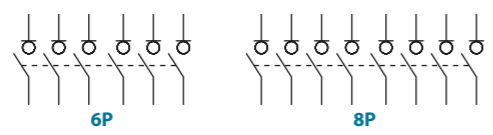


S5N AC Switch - disconnecter base mounting 6P - 8P

Size 4
A 1250|1600|1800|2000



	CODE-1250A	CODE-1600A	CODE-1800A	CODE-2000A
6P	S5N12506PS0	S5N16006PS0	S5N18006PS0	S5N20006PDS0
8P	S5N12508PS0	S5N16008PS0	S5N18008PS0	S5N20008PDS0



Technical information



According to IEC 60947-3

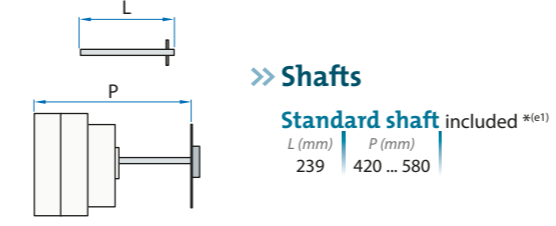
		1250 1600 1800 2000				
Rated thermal current in ambient at	I _{th} 40 °C	A	1250	1600	1800	2000
	50 °C	A	1250	1600	1800	1800
	60 °C	A	1000	1600	1600	1600
Rated insulation voltage	U _i	V	1000	1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	12	12	12	12
AC rated operational current ^{*(1)}	U _e 400V AC21B	A	1250	1600	1800	2000
(Rated operational frequency 50/60 Hz)	U _e 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)}	I _{cm}	kA (peak)	60	60	60	60
Rated short-time withstand current (1sec.)	I _{cw}	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.)

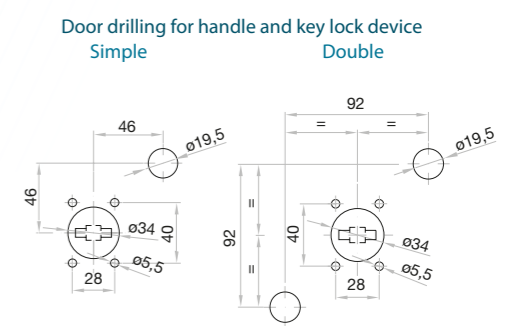
Accessories

- 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

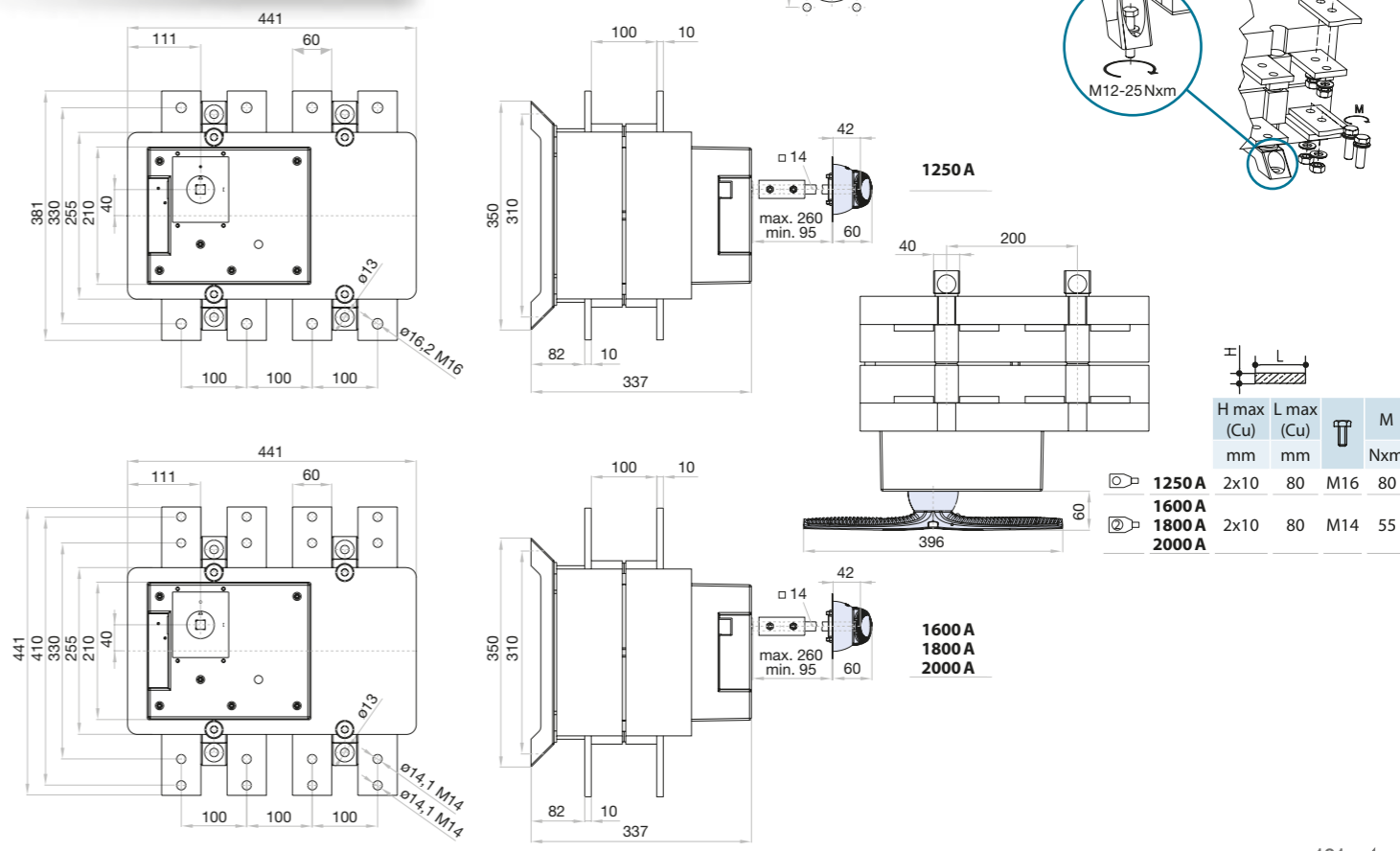


Auxiliary contacts
1NO+1NC CODE DS-LA101
2NO+2NC CODE DS-LA102
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

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



Dimensions (mm)



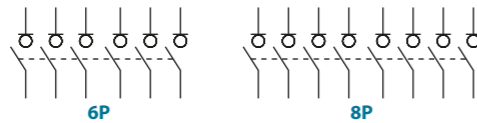
S6N AC Switch - disconnecter base mounting 6P - 8P

Size 1

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



6P	CODE-125A	CODE-160A	CODE-200A	CODE-250A	CODE-315A	CODE-400A
	S6N01256PS0	S6N01606PS0	S6N02006PS0	S6N02506PS0	S6N03156PS0	S6N04006PS0
8P	S6N01258PS0	S6N01608PS0	S6N02008PS0	S6N02508PS0	S6N03158PS0	S6N04008PS0



Accessories

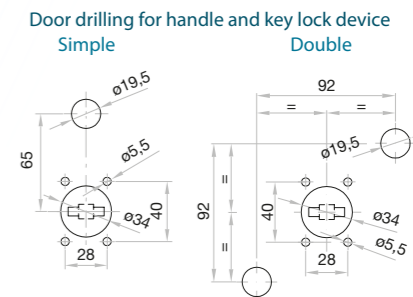
- Direct handle**
CODE DS-SI11
- External handle** included shaft ^{*(e1)}
IP65
CODE DS-SA11
- External handle** without shaft
IP65
CODE DS-SA14
- Emergency external handle** included shaft ^{*(e1)}
IP65
CODE DS-SR11



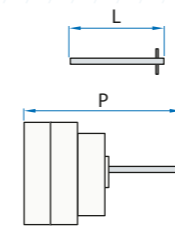
- Auxiliary contacts**
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



- 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



- 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



Technical information



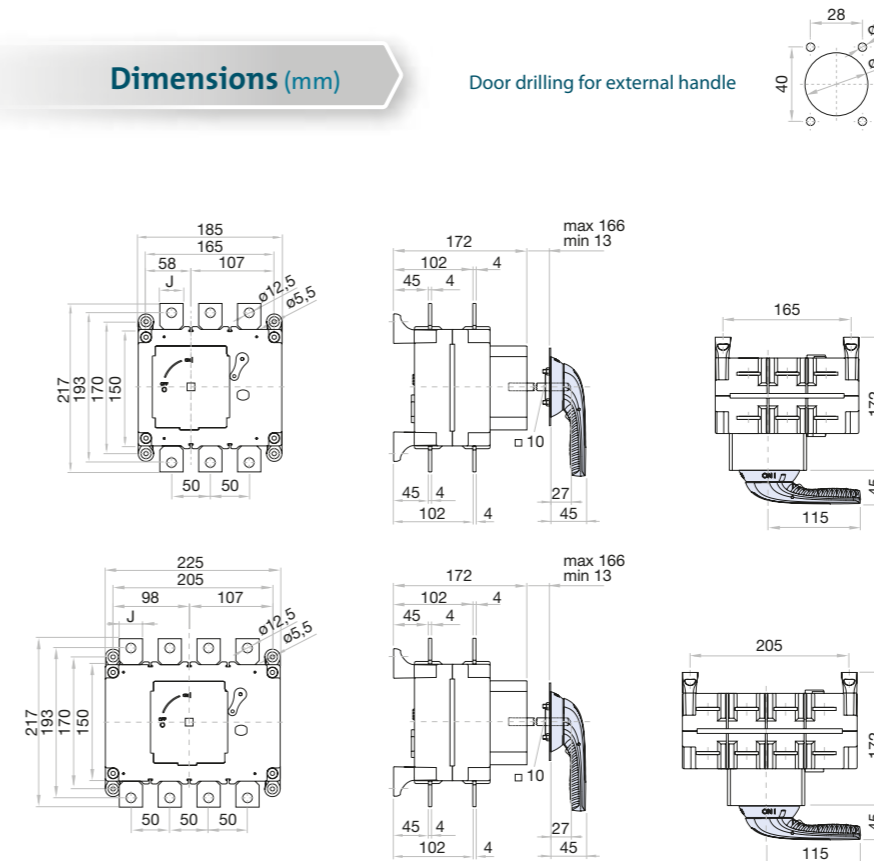
According to IEC/EN 60947-3

		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	
AC Rated operational current ^{*(1)}	I _e Triphasic	U _e AC21A	A	125	160	200	250	315	400
		400V 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	

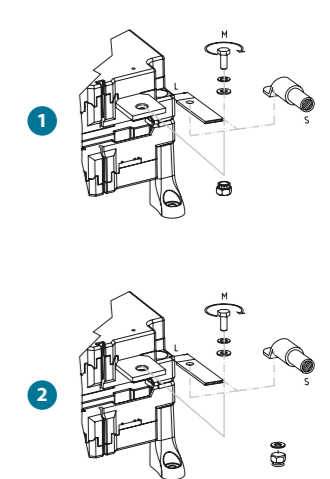
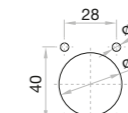
		125 160 200 250 315 400					
Short - circuit behaviour							
Rated short-circuit making capacity ^{*(2)}	I _{cm} kA (peak)	20	20	20	20	20	20
Rated short-time withstand current (1sec)	I _{cw} kA rms	12	12	12	12	12	12
Mechanical features							
Number of mechanical operations (according to the standards,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

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

Dimensions (mm)



Door drilling for external handle



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

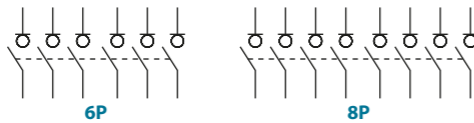


S6N AC Switch - disconnecter base mounting 6P - 8P

Size 2
A 500|630



CODE-500A CODE-630A
6P S6N05006PRO 6P S6N06306PRO
8P S6N05008PRO 8P S6N06308PRO



Accessories

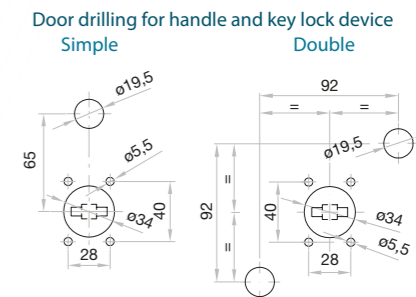
- Direct handle**
CODE DS-LI21
- External handle** included shaft ^{*(e1)}
IP65
CODE DS-LA21
- External handle** without shaft
IP65
CODE DS-LA24
- Emergency external handle** included shaft ^{*(e1)}
IP65
CODE DS-LR21



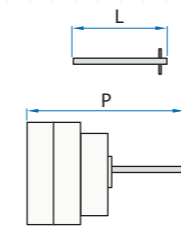
- Auxiliary contacts**
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



- 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



- 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



Technical information



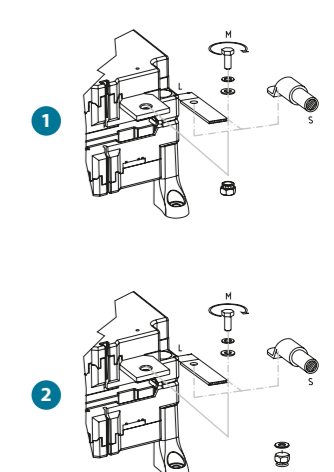
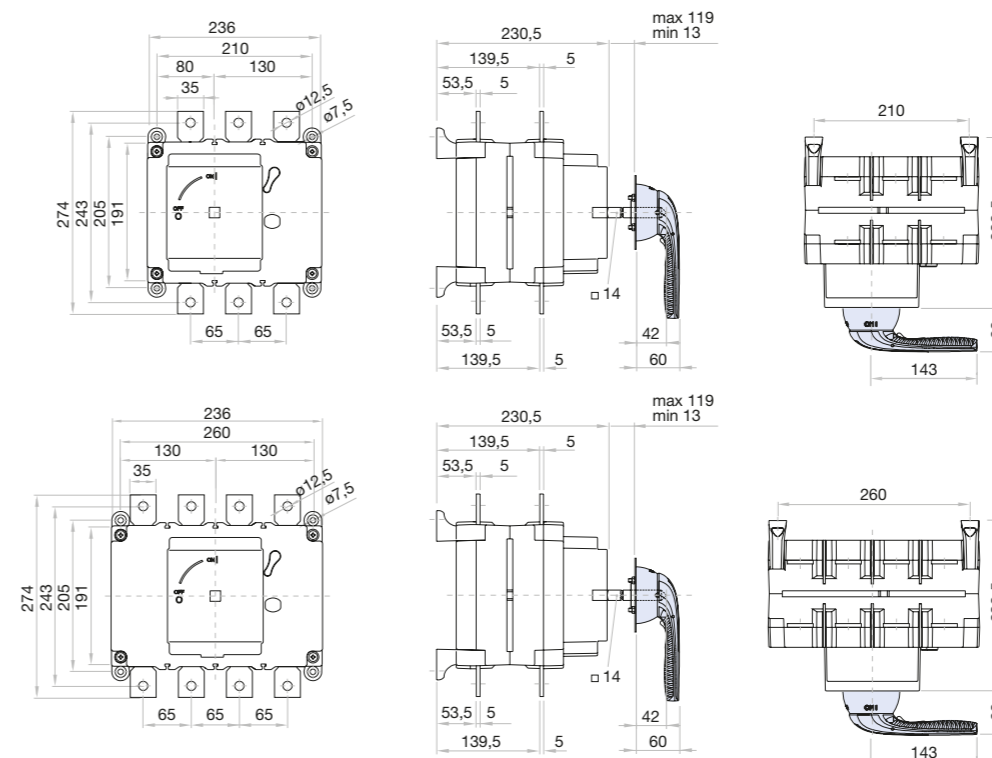
According to IEC/EN 60947-3

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

Dimensions (mm)



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T M	M Nxmm
500 A	2x150	2x5	35	M10	24
630 A	2x185	2x6	35	M10	24



CIS25 - A - C - D - F

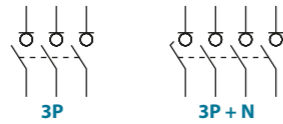
Enclosed switch - disconnecter

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

Size 00
A 40|63|80



Enclosure	Model	3P	3P+N	40	63	80
polyester enclosure + fuse holders	CIS25A	CIS25A00403PB	CIS25A00633PB	CIS25A00803PB		
		CIS25A00403NB	CIS25A00633NB	CIS25A00803NB		
polyester enclosure	CIS25D	CIS25D00403PB	CIS25D00633PB	CIS25D00803PB		
		CIS25D00403NB	CIS25D00633NB	CIS25D00803NB		
metal enclosure	CIS25C	CIS25C00403PB	CIS25C00633PB	CIS25C00803PB		
		CIS25C00403NB	CIS25C00633NB	CIS25C00803NB		
metal enclosure + fuse holders	CIS25F	CIS25F00403PB	CIS25F00633PB	CIS25F00803PB		
		CIS25F00403NB	CIS25F00633NB	CIS25F00803NB		



Technical information

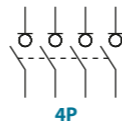


According to IEC 60947-3
IEC 61439-2

		40		63		80	
Rated thermal current in ambient at	I _{the}	40 °C	A	50	63	80	
Rated insulation voltage	U _i	V		800	800	800	
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		50	63	80	
	U _e 400V AC22A	A		50	63	63	
	U _e 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)}	I _{cm} kA (peak)		5	5	5		
Rated short-time withstand current (1sec.)	I _{cw} 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.

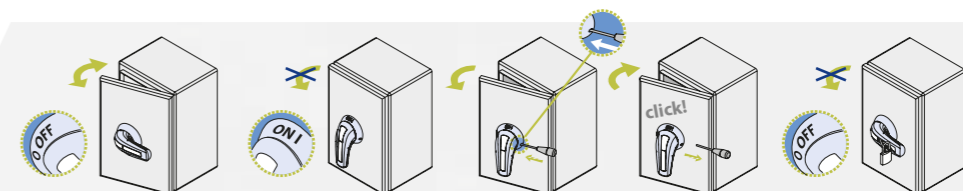
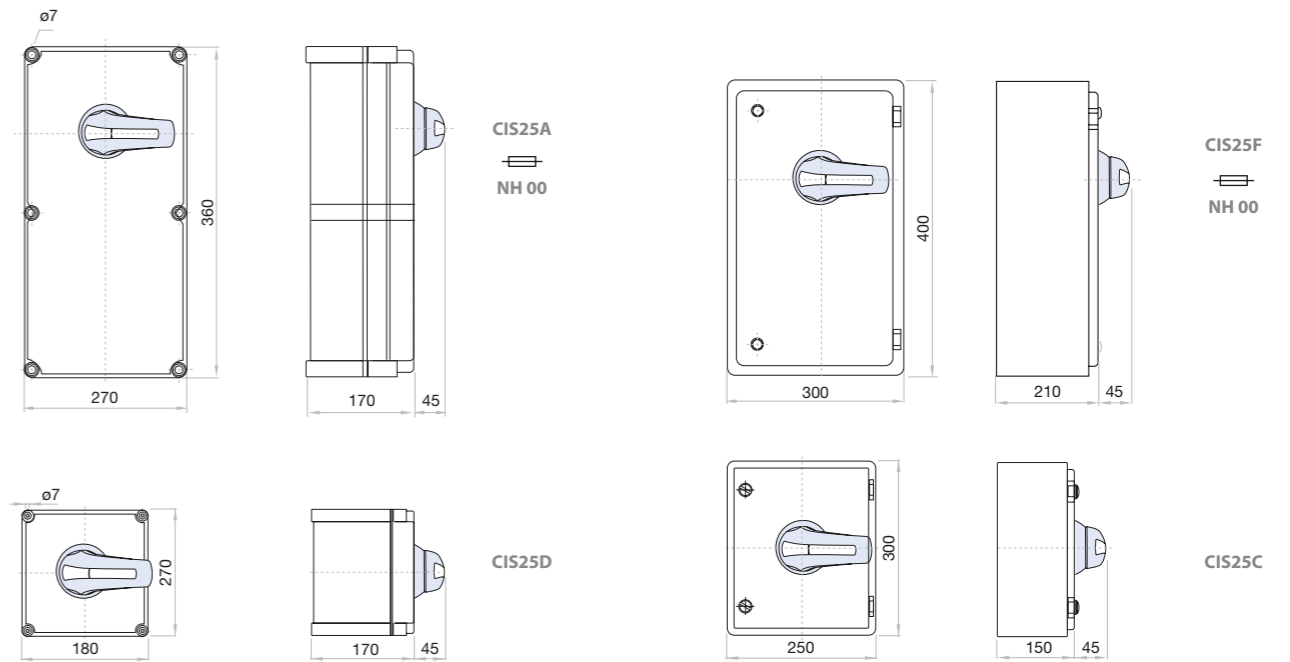
Safety key lock device

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)



Standard supply

CIS25 - A - C - D - F

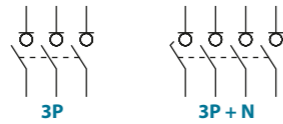
Enclosed switch - disconnecter

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

Size 0
A 125|160



Enclosure	Model	Code	125	160
polyester enclosure + fuse holders	CIS25A 3P 3P+N	CIS25A01253PB		
		CIS25A01253NB		
polyester enclosure	CIS25D 3P 3P+N	CIS25D01253PB		
		CIS25D01253NB		
metal enclosure	CIS25C 3P 3P+N	CIS25C01253PB		
		CIS25C01253NB		
metal enclosure + fuse holders	CIS25F 3P 3P+N	CIS25F01253PB		
		CIS25F01253NB		



Technical information

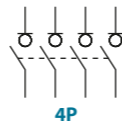


According to IEC 60947-3
IEC 61439-2

		125		160	
Rated thermal current in ambient at	I _{the}	40 °C	A	125	160
Rated insulation voltage	U _i	V		1000	1000
Rated impulse withstand voltage	U _{imp}	kV		8	8
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	I _e	U _e 400V AC21A	A	125	160
		U _e 400V AC22A	A	125	160
		U _e 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)}	I _{cm} kA (peak)		13	13	
Rated short-time withstand current (1sec.)	I _{cw} 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.

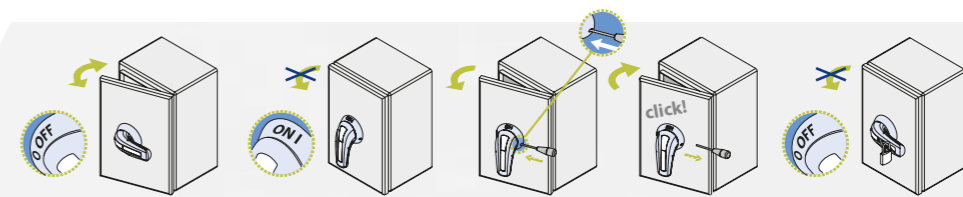
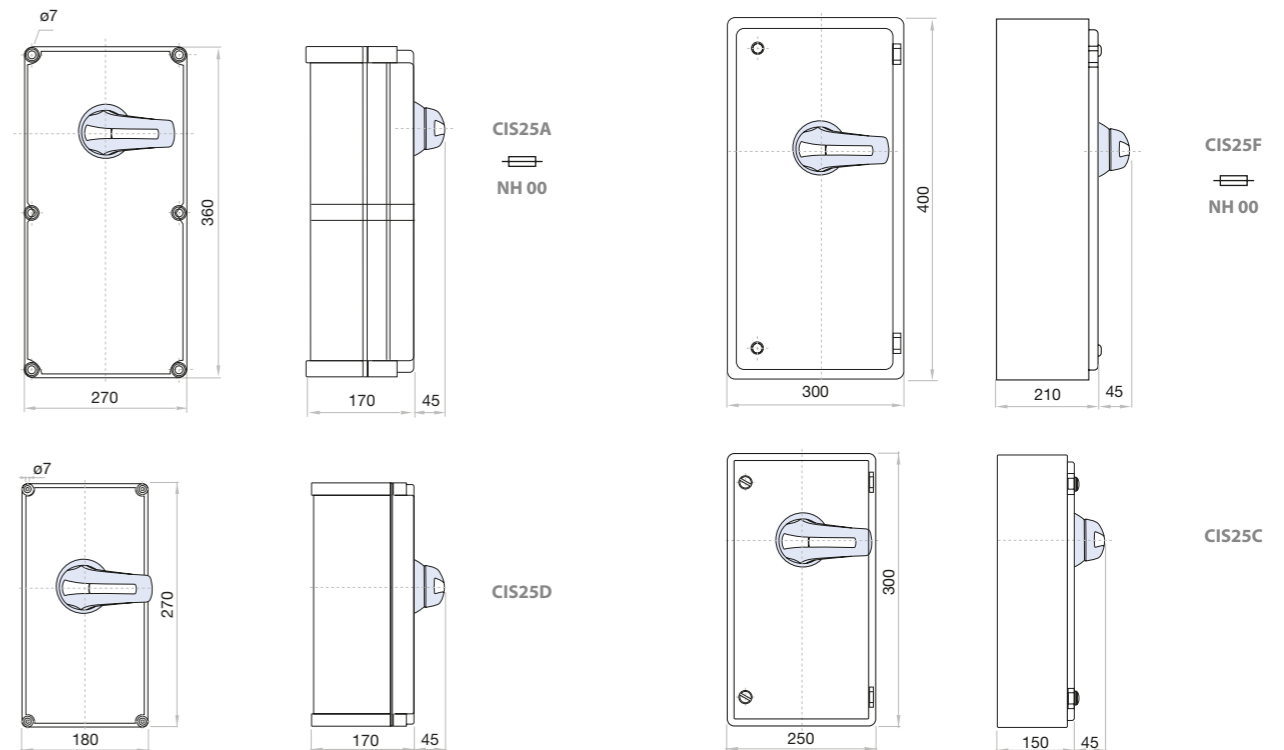
Safety key lock device

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)



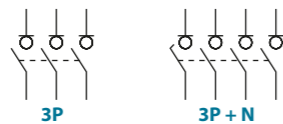
Standard supply

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 3P+N	CIS25A02003PR CIS25A02003NR	CIS25A02503PR CIS25A02503NR	CIS25A03153PR CIS25A03153NR	-
polyester enclosure	CIS25D 3P 3P+N	CIS25D02003PR CIS25D02003NR	CIS25D02503PR CIS25D02503NR	CIS25D03153PR CIS25D03153NR	-
metal enclosure	CIS25C 3P 3P+N	CIS25C02003PR CIS25C02003NR	CIS25C02503PR CIS25C02503NR	CIS25C03153PR CIS25C03153NR	CIS25C04003PC CIS25C04003NC
metal enclosure + fuse holders	CIS25F 3P 3P+N	CIS25F02003PR CIS25F02003NR	CIS25F02503PR CIS25F02503NR	CIS25F03153PR CIS25F03153NR	-



Technical information

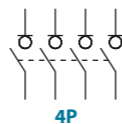


According to IEC 60947-3 IEC 61439-2

			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
(Rated operational frequency 50/60 Hz)		U _e 400V AC22A	A 200	250	315	400
		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



» 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.

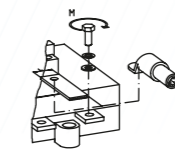


» Terminal protection
CODE DS-CU11
(1 kit for input or output)



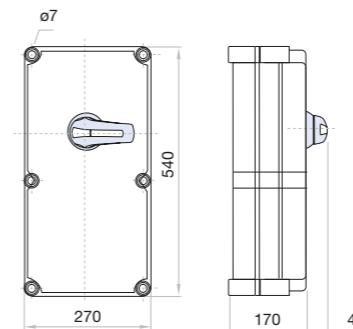
» Safety key lock device
Simple CODE DS-CA11
Double CODE DS-CE11

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

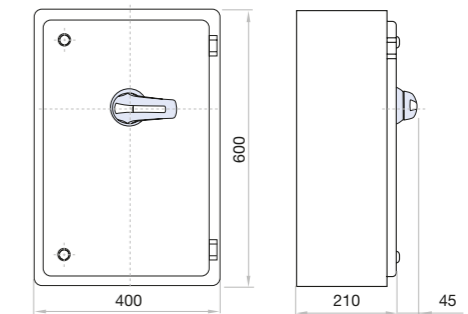


	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M
200 A	185	7	25	M8 13
250 A				M10 18
315 A				M10 24
400 A	240	7	40	M10 24

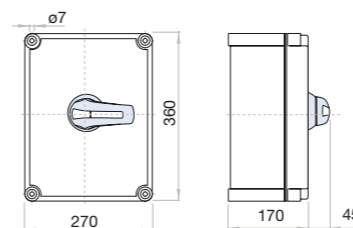
Dimensions (mm)



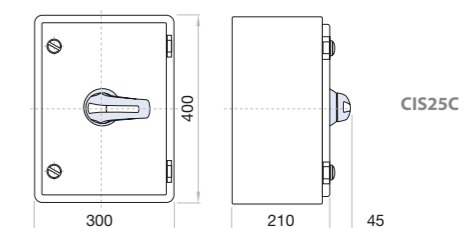
CIS25A
200A NH 0
250A-315A NH 1



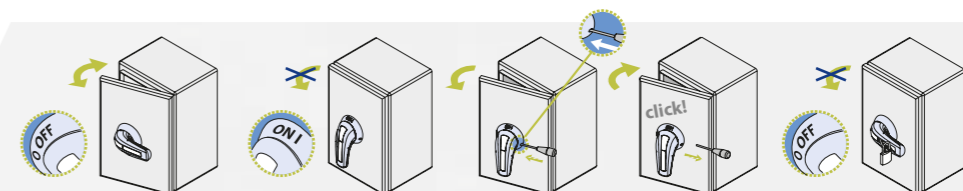
CIS25F
200A NH 0
250A-315A NH 1



CIS25D



CIS25C



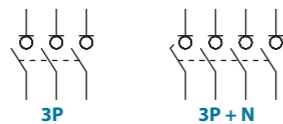
Standard supply

CIS25-A-C-D-F Enclosed switch - disconnecter IP65 (with or without fuse holders) 3P - 3P+N

Size 2
A 400|630



Enclosure	Model	Code	3P	3P+N
polyester enclosure + fuse holders	CIS25A	CODE-400A	CIS25A04003PR	CIS25A06303PR
			CIS25A04003NR	CIS25A06303NR
polyester enclosure	CIS25D	CODE-630A	CIS25D04003PR	CIS25D06303PR
			CIS25D04003NR	CIS25D06303NR
metal enclosure	CIS25C	CODE-630A	CIS25C04003PR	CIS25C06303PR
			CIS25C04003NR	CIS25C06303NR
metal enclosure + fuse holders	CIS25F	CODE-630A	CIS25F04003PR	CIS25F06303PR
			CIS25F04003NR	CIS25F06303NR



Technical information

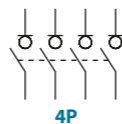


According to IEC 60947-3
IEC 61439-2

		400		630	
Rated thermal current in ambient at	I _{the}	40 °C	A	400	630
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	400	630
		U _e 400V AC22A	A	400	630
		U _e 400V AC23A	A	400	630
Rated breaking capacity		400V	AC23	A	3200
Rated making capacity		400V	AC23	A	4000

^{*(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)}	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		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

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.

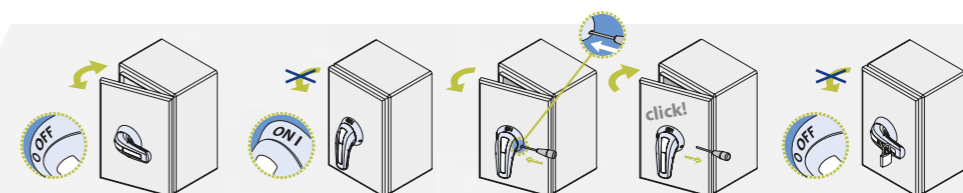
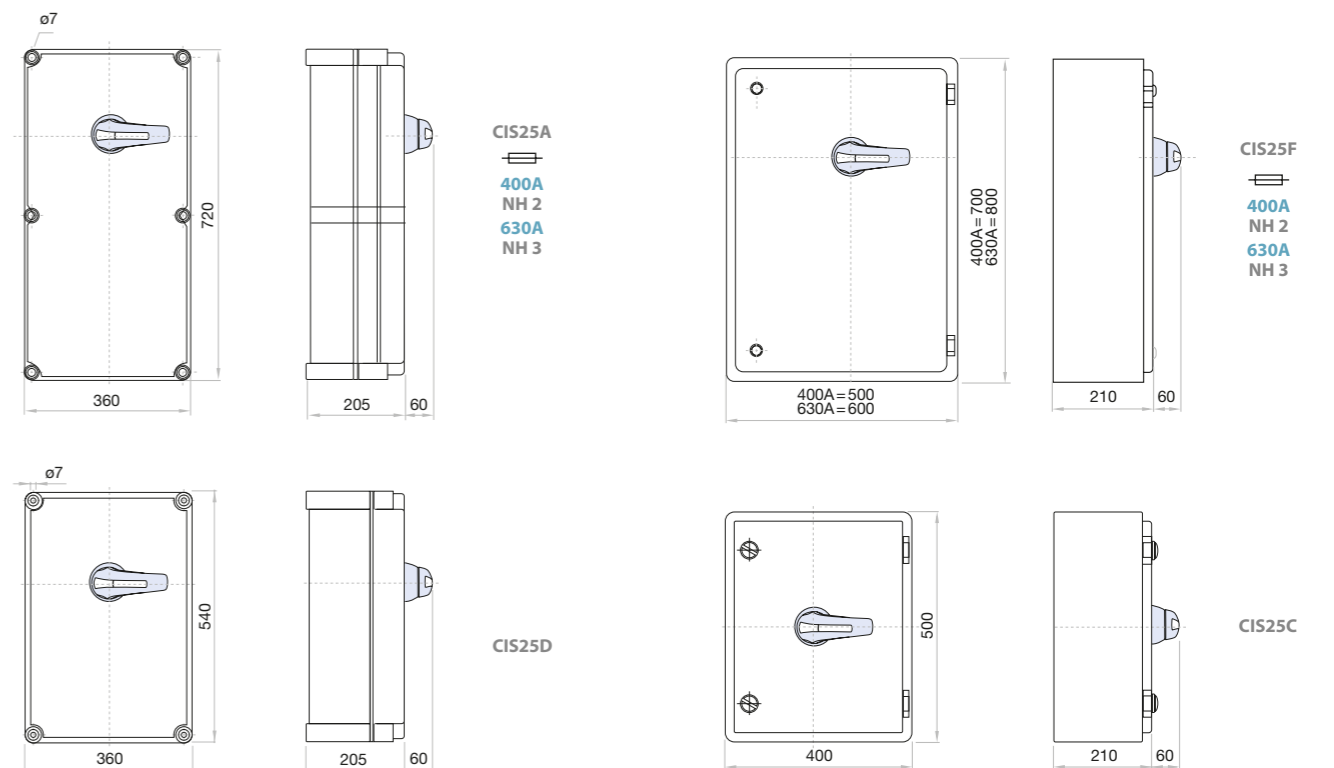
Terminal protection
CODE DS-CU21
(1 kit for input or output)

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)	H max (Cu)	L max (Cu)	M
mm ²	mm	mm	Nxm
400 A	2x185	6	40
630 A	2x240	2x5	40

Dimensions (mm)



Standard supply

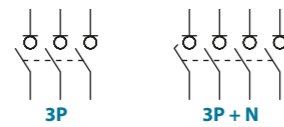
CIS25-A-C-D-F Enclosed switch - disconnecter IP65 (with or without fuse holders) 3P - 3P+N

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

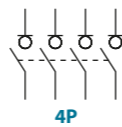


According to IEC 60947-3 IEC 61439-2

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)} (Rated operational frequency 50/60 Hz)	I_e Ue 400V AC21A A	800
	Ue 400V AC22A A	800
	Ue 400V AC23A A	800
Rated breaking capacity	400V AC23 A	6400
Rated making capacity	400V AC23 A	8000

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

Parameter	Value	800
Short - circuit behaviour		
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



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)

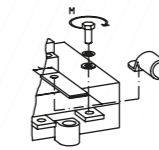


Safety key lock device
Simple CODE DS-CB31
Double CODE DS-CF31

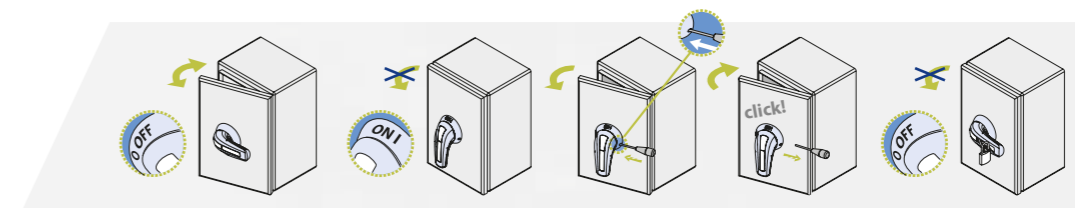
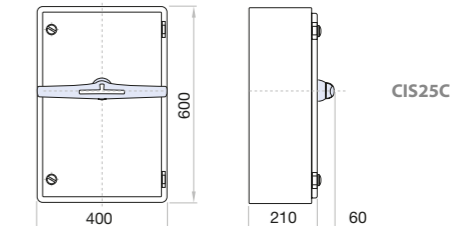
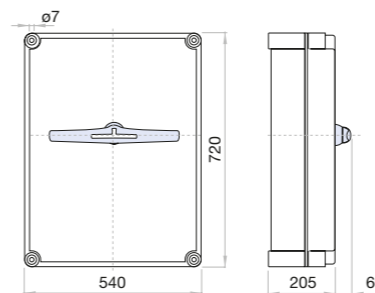
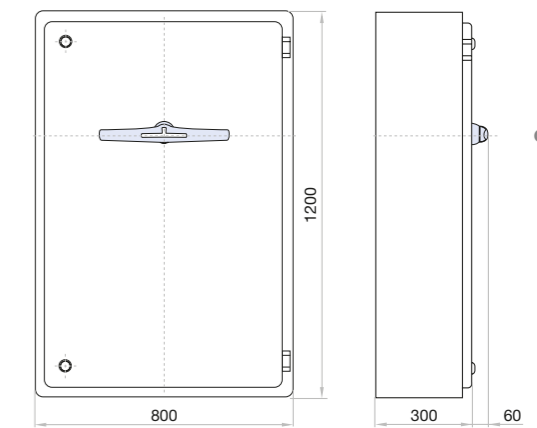
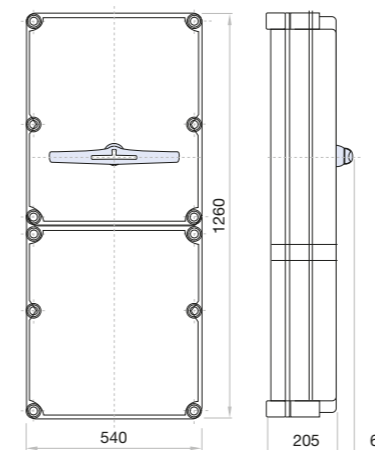
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



S max (Cu)	H max (Cu)	L max (Cu)	M
mm ²	mm	mm	Nxm
2x240	2x10	50	M14 45



Dimensions (mm)



Standard supply

CIS25-A-C-D-F Enclosed switch - disconnecter IP65 (with or without fuse holders) 3P - 3P+N

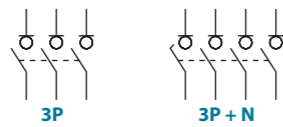
Size 4

*A 1000|1250|1600

*(A) Under request higher currents are available, please consult.



		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

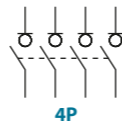


According to IEC 60947-3 IEC 61439-2

			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)} (Rated operational frequency 50/60 Hz)	Ue 400V AC21A	A	1000	1250	1600
	Ue 400V AC22A	A	1000	1250	1600
	Ue 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
 I_e = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.

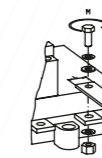


Terminal protection
 CODE DS-CU41
 (1 kit for input or output)



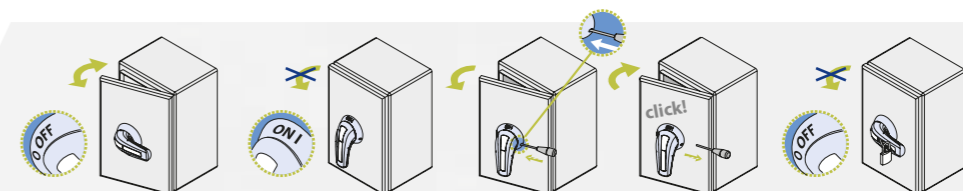
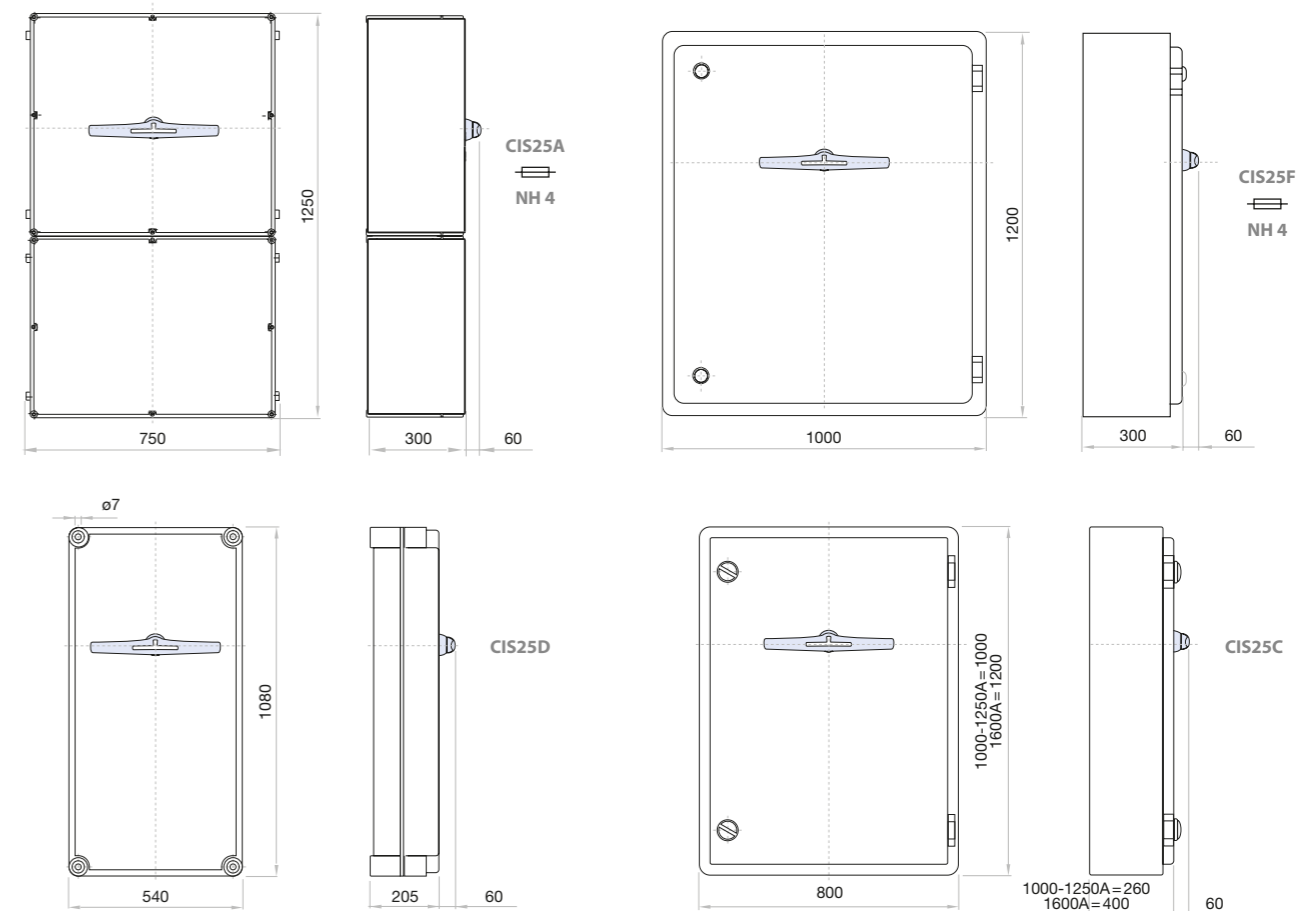
Safety key lock device
 Simple CODE DS-CB41
 Double CODE DS-CF41

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	M	M
1000 A			M16	80
1250 A	2x10	80	M16	80
1600 A			M14	55

Dimensions (mm)



Standard supply

IPTA | IPTR | IPTU

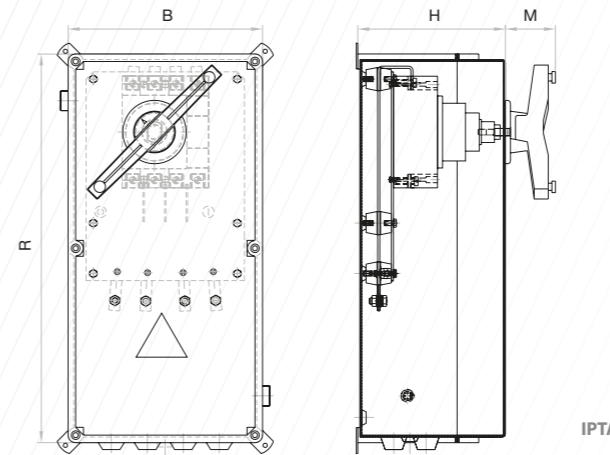
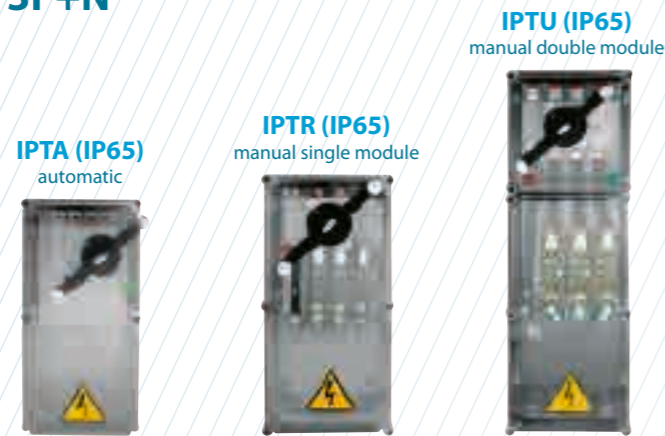
Switch disconnecter for transformer secondary protection

IP65 4P - 3P+N

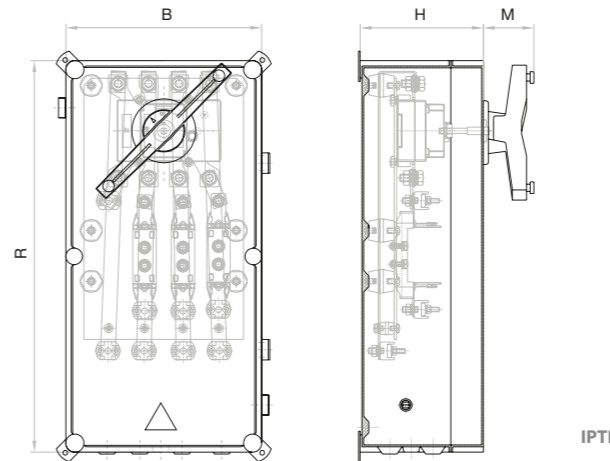
A 40...630



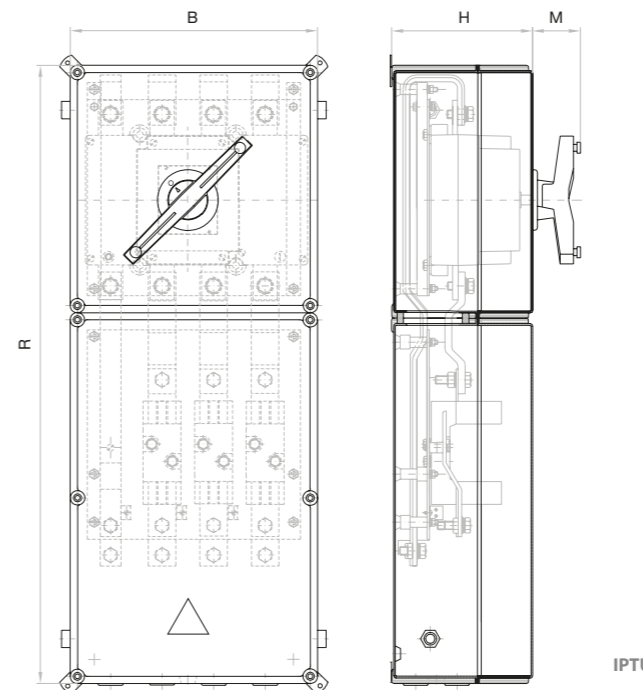
Dimensions (mm)



	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

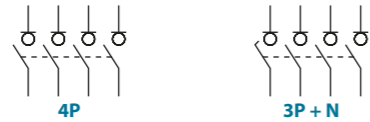


	R	B	H	M
160 - 250 A	540	270	170	69,5
400 A	720	360	205	69,5
630 A	720	360	205	69,5



	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

Series	Configuration	Code	Model
IPTA	4P	CODE-40A	IPTA00404PS0
		CODE-50...63A	IPTA00634PS0
		CODE-80...100A	IPTA01004PS0
		CODE-125...160A	IPTA01604PS0
IPTA	4P	CODE-200A	IPTA02004PS0
		CODE-250A	IPTA02504PS0
		CODE-320...400A	IPTA04004PS0
		CODE-630A	IPTA06304PT0
IPTR	3P+N	CODE-160A	IPTR01603NB0
		CODE-250A	IPTR02503NB0
		CODE-400A	IPTR04003NB0
		CODE-630A	IPTR06303NT0
IPTU	3P+N	CODE-160A	IPTU01603NB0
		CODE-250A	IPTU02503NB0
		CODE-400A	IPTU04003NB0
		CODE-630A	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

AC Switch fuses

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.

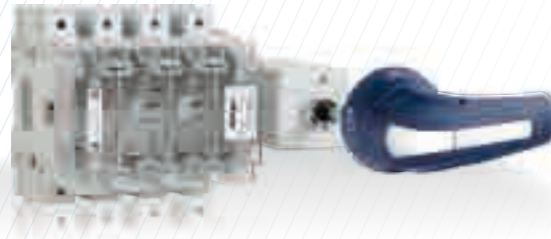
series
M11

series
M21

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



Testing and approvals:



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

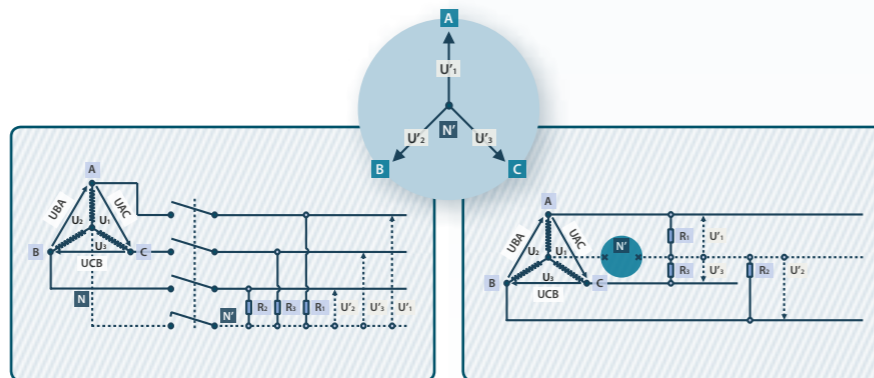
- > Good grip and excellent torque/resistance
- > Padlockable handle in **OFF** position (up to three locks Ø 5-8 mm)
- > Door interlock in **ON** position
- > When lock in **OFF** position, door is interlocked
- > Defeatable feature in **ON** position (with the use of a tool for maintenance operations).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



Neutral pole early make & late break

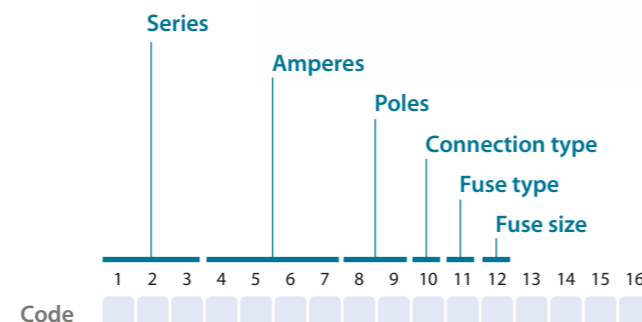
This safety feature prevents accidental overvoltage when making/breaking of loads connected between phase and neutral.

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



series
M11



1 2 3 4 5 6
M 1 1

Modular concept.
Fuse-links cylindrical, NH/DIN,BS.
Fuse cover interlock in the ON position.
Different handles depend on the installation mode.

series
M21



1 2 3 4 5 6
M 2 1

Compact model.
Fuse-links NH/DIN,BS.
Fuse cover interlock in the ON position.
Different handles depend on the installation mode.

series
CIF21



IP65

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

M11 metal enclosed fusible switch.
External padlockable handle with locking door in ON I position.
Removing door blocked by padlock when handle is in OFF position.

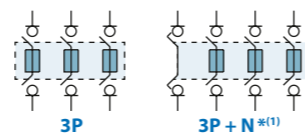
series
CIF22



IP65

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

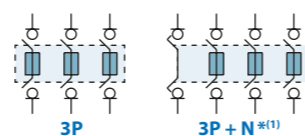
M21 metal enclosed fusible switch.
External padlockable handle with locking door in ON I position.
Removing door blocked by padlock when handle is in OFF position.



M11 Switches 2, 3 & 4 poles (32 - 160A) (O-I) For fusibles BS - NFC 14x51 - NH00C *⁽³⁾ Manual handle



Amp.	Fuse	Size	Connection				External handle		Direct handle	
				Bipolar (2P)	3 pole (3P)	4 pole (3P + N) * ⁽¹⁾	Frontal * ⁽²⁾	Side	Frontal	Side
				Code	Code	Code	Code	Code	Code	Code
50	14 x 51	00		M1100502PBC20	M1100503PBC20	M1100503NBC20				
63	NH00C	00		M1100632PBD80	M1100633PBD80	M1100633NBDB0	DS-SA02	DM1SLB1	DM1SI01	DM1SYB1
100	NH00C			M1101002PBD80	M1101003PBD80	M1101003NBDB0				
32	BSA1	00		M1100322PBBA0	M1100323PBBA0	M1100323NBBA0				
63	BSA2 BSA3	00		M1100632PBBB0	M1100633PBBB0	M1100633NBDB0	DS-SA02	DM1SAB1	DM1SI01	DM1SYB1
125	22 x 58	0		M1101252PBC30	M1101253PBC30	M1101253NBC30				
125	NH00	0		M1101252PBD80	M1101253PBD80	M1101253NBDB0	DS-SA02	DM1SLB1	DM1SI01	DM1SYB1
125	NH00	0		M1101252PTDB0	M1101253PTDB0	M1101253NTDB0				
160	NH00	0		M1101602PBD80	M1101603PBD80	M1101603NBDB0				
160	NH00	0		M1101602PTDB0	M1101603PTDB0	M1101603NTDB0				
100	BSA2 BSA3	0		M1101002PBB00	M1101003PBB00	M1101003NBDB0	DS-SA02	DM1SAB1	DM1SI01	DM1SYB1
100	BSA3	0		M1101002PTB00	M1101003PTB00	M1101003NTB00				



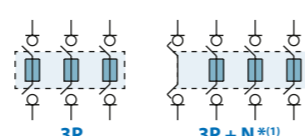
Emergency external handle		Shaft extensions * ⁽⁴⁾		Auxiliary contacts * ⁽⁵⁾		Safety key lock device * ⁽⁶⁾		Terminal shrouds * ⁽⁷⁾			
Size	Front * ⁽²⁾	Side	□	For external handle		1NO+1NC	2NO+2NC	Simple	Double	2 units	3 units
	Code	Code		L	Code * ^(e1)	Code	Code	Code * ^(e1)	Code * ^(e1)	Code	Code
00	DS-SR02	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
				347	Side DS-EP02						



M21 Switches 3 & 4 poles (160 - 800A) (O-I) For fusibles BS - NH *⁽³⁾ Manual handle



Amp.	Fuse	Size	Connection			External * ⁽²⁾	Direct	Emergency external * ⁽²⁾
				3 pole (3P)	4 pole (3P + N) * ⁽¹⁾			
				Code	Code	Code	Code	Code
160	Es NH0	1		M2101603PSD00	M2101603NSD00			
160	BSA4	1		M2101603PSB10	M2101603NSB10			
200	BSB1 BSB2	1		M2102003PSB20	M2102003NSB20	DS-SA11	DM2SI11	DS-SR11
250	BSB1 BSB2	1		M2102503PSB20	M2102503NSB20			
250	NH1	2		M2102503PSD10	M2102503NSD10			
400	NH2	2		M2104003PSD20	M2104003NSD20			
315	BSB1... BSB3	2		M2103153PSB40	M2103153NSB40	DS-LA22	DM2SI21	DS-LR22
400	BSB1... BSB4	2		M2104003PSB50	M2104003NSB50			
630	NH3	3		M2106303PSD30	M2106303NSD30			
800	NH3	3		M2108003PSD30	M2108003NSD30			
630	BSC1... BSC2	3		M2106303PSB70	M2106303NSB70	DS-LA31	DM2SI31	DS-LR31
800	BSC1... BSC3	3		M2108003PSB80	M2108003NSB80			



Shaft extensions * ⁽⁴⁾		Auxiliary contacts * ⁽⁵⁾		Safety key lock device * ⁽⁶⁾		Rear protective plate		Terminal shrouds * ⁽⁷⁾				
Size	□	Type 1		1NO+1NC	2NO+2NC	Simple	Double	160-200A	250A	3P input	3P output	4P input or output
		L	Code * ^(e1)	Code	Code	Code * ^(e1)	Code * ^(e1)	Code	Code	Code	Code	Code
1	10	375	DS-EP14	D5LAU01	D5LAU02	DS-CA11	DS-CEB1	3P DM2PP11	3P DM2PP21	DM2CU11	DM2CU12	DM2CU13
								4P DM2PP12	4P DM2PP22			
2	14	345	DS-EP23	D5LAU01	D5LAU02	DS-CB21	DS-CF21	3P DM2PP21		DM2CU21	DM2CU22	DM2CU23
								4P DM2PP22				
3	14	345	DS-EP23	D5LAU01	D5LAU02	DS-CB31	DS-CF31	3P DM2PP31		DM2CU31	DM2CU32	DM2CU33
								4P DM2PP32				



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			M-11	CIF21C01003PBDB	CIF21C01003NBDB
125	NH00	0		M-11	CIF21C01253PBDB	CIF21C01253NBDB
125	NH00			M-11	CIF21C01253PTDB	CIF21C01253NTDB
160	NH00			M-11	CIF21C01603PBDB	CIF21C01603NBDB
160	NH00			M-11	CIF21C01603PTDB	CIF21C01603NTDB
160	NH0	1		M-21	CIF22C01603PSD0	CIF22C01603NSD0
250	NH1			M-21	CIF22C02503PSD1	CIF22C02503NSD1
400	NH2	2		M-21	CIF22C04003PSD2	CIF22C04003NSD2
630	NH3	3		M-21	CIF22C06303PSD3	CIF22C06303NSD3
800	NH3			M-21	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.

Auxiliary contacts * ⁽⁵⁾		Safety key lock device * ⁽⁶⁾		Terminal shrouds * ⁽⁷⁾				
Size	1NO+1NC	2NO+2NC	Simple	Double	Code	3P input	3P output	4P input or output
	Code	Code	Code * ^(e1)	Code * ^(e1)		Code	Code	Code
00	DM1AUB1	DM1AUB2	DS-CAB1	DS-CEB1		-	-	-
0	DM1AUB1	DM1AUB2	DS-CAB1	DS-CEB1				
					2 units DM1CU01			
					3 units DM1CU02			
1	D5LAU01	D5LAU02	DS-CA11	DS-CEB1		DM2CU11	DM2CU12	DM2CU13
2	D5LAU01	D5LAU02	DS-CB21	DS-CF21		DM2CU21	DM2CU22	DM2CU23
3	D5LAU01	D5LAU02	DS-CB31	DS-CF31		DM2CU31	DM2CU32	DM2CU33

*⁽⁴⁾ A standard shaft is included with the external handle.
*⁽⁵⁾ To be used as signalling or control contacts - Ie = 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

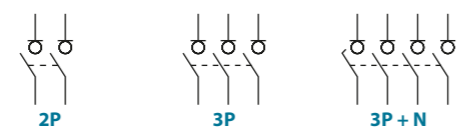


	CODE-50A	CODE-63A	CODE-100A
2P	M1100502PBC20	M1100632PBDB0	M1101002PBDB0
3P	M1100503PBC20	M1100633PBDB0	M1101003PBDB0
3P+N	M1100503NBC20	M1100633NBDB0	M1101003NBDB0

Fuses NFC 14x51 NH 00C NH 00C

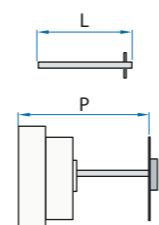
	CODE-32A	CODE-63A
2P	M1100322PBBA0	M1100632PBDB0
3P	M1100323PBBA0	M1100633PBDB0
3P+N	M1100323NBBA0	M1100633NBDB0

Fuses BS A1 BS A2-BS A3*(6)



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) 250 P (mm) 144... 270
- Shaft extensions**
Frontal external handle
L (mm) 387 P (mm) 144... 407 CODE DS-EP05
- Side handle**
L (mm) 347 P (mm) 144... 367 CODE DS-EP02

Terminal shrouds

2 UNITS DM1CU01 3 UNITS DM1CU02
(1 kit for input or output)

Auxiliary contacts

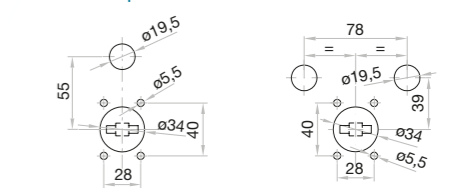
1NO+1NC CODE DM1AUB1
2NO+2NC CODE DM1AUB2
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

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



Technical information

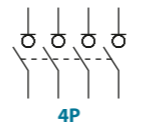


According to IEC 60947-3

		32	50	63	100	
Fuses	NH/DIN	-	-	00C	00C	
	BS	A1	-	A2-A3*(6)	-	
	NFC	-	14x51	-	-	
Rated thermal current in ambient at 40 °C	Ith	A	32	50	63	100
Rated thermal current in enclosure	Ithe	A	-	-	63	100
Rated insulation voltage	Ui	V	800	800	800	800
Rated impulse withstand voltage	Uimp	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)	Ue 400 V AC21A	A	32	50	63	100
	Ue 400 V AC22A	A	32	50	63	100
	Ue 400 V AC23A	A	32	50	63	100

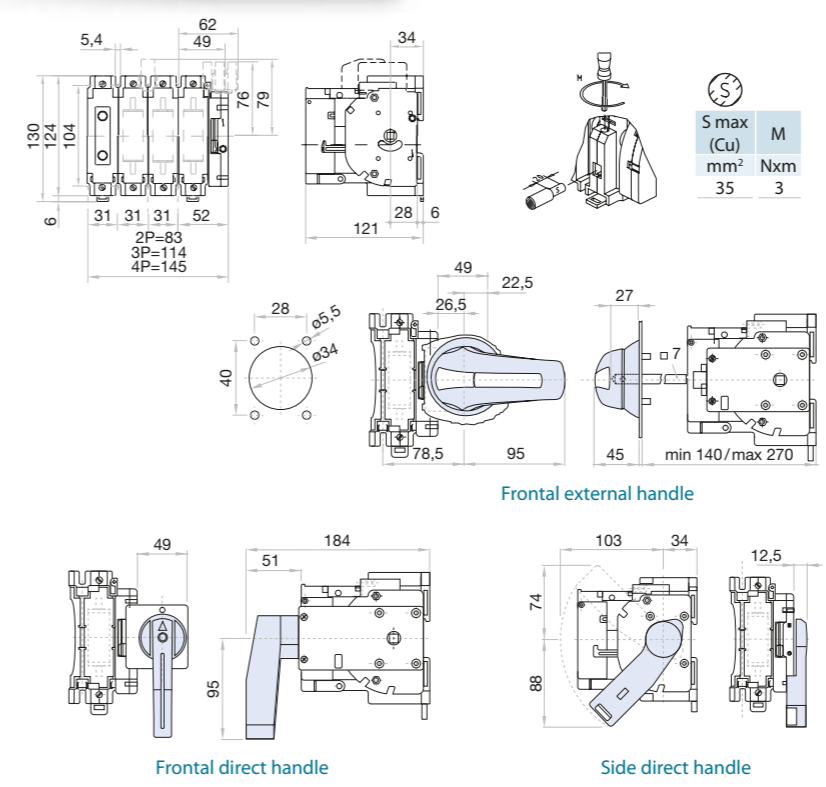
*(1) Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation
*(2) Other voltages and / or utilization categories. Please consult
*(3) With a protective device limiting the cut - off current and the joule integral to the indicated values
*(6) 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)	Iq 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	A²s (x 10³)	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	

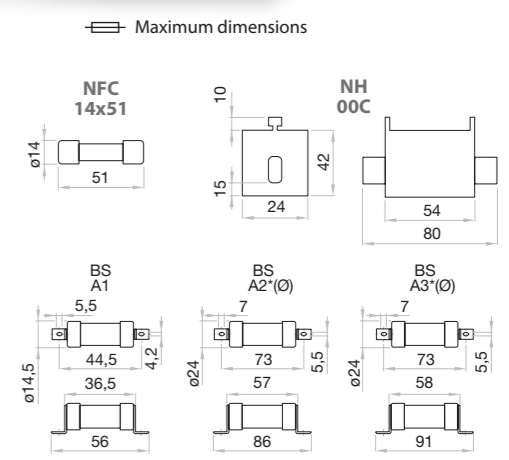


Also available 4P switches under request, please consult

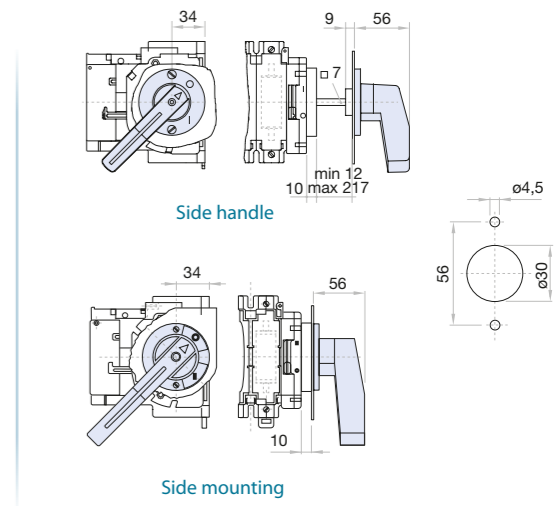
Dimensions (mm)



Fuses



*(6) Only fuses with diameter < 25 mm



M11 Switch fuses base mounting 2P - 3P - 3P+N

Size 0

A 100|125|160

NFC 22x58 NH 00
BS A2-A3

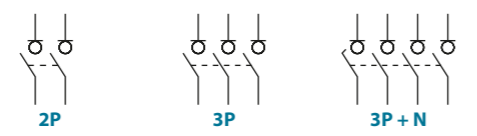


	CODE-125A	CODE-125A	CODE-125A	CODE-125A	CODE-160A	CODE-160A
2P	M1101252PBC30	M1101252PTC30	M1101252PBDB0	M1101252PTDB0	M1101602PBDB0	M1101602PTDB0
3P	M1101253PBC30	M1101253PTC30	M1101253PBDB0	M1101253PTDB0	M1101603PBDB0	M1101603PTDB0
3P+N	M1101253NBC30	M1101253NTC30	M1101253NBDB0	M1101253NTDB0	M1101603NBDB0	M1101603NTDB0

Fuses NFC 22x58 NH 00

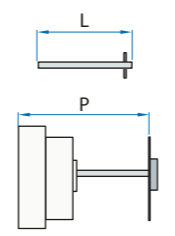
	CODE-100A	CODE-100A
2P	M1101002PBB00	M1101002PTB00
3P	M1101003PBB00	M1101003PTB00
3P+N	M1101003NBB00	M1101003NTB00

Fuses BS A2-BS A3



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) 250 | P (mm) 144... 270
- Shaft extensions**
Frontal external handle
L (mm) 387 | P (mm) 144... 407 | CODE DS-EP05
- Side handle**
L (mm) 347 | P (mm) 144... 367 | CODE DS-EP02



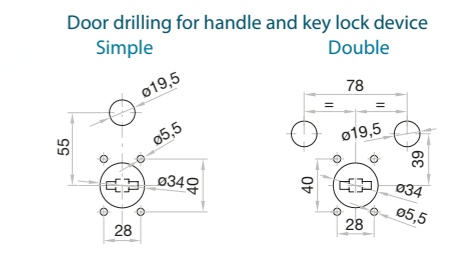
- Terminal shrouds**
- 2 UNITS DM1CU01 | 3 UNITS DM1CU02
(1 kit for input or output)



- 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



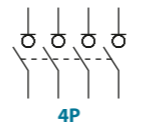
Technical information



According to IEC 60947-3

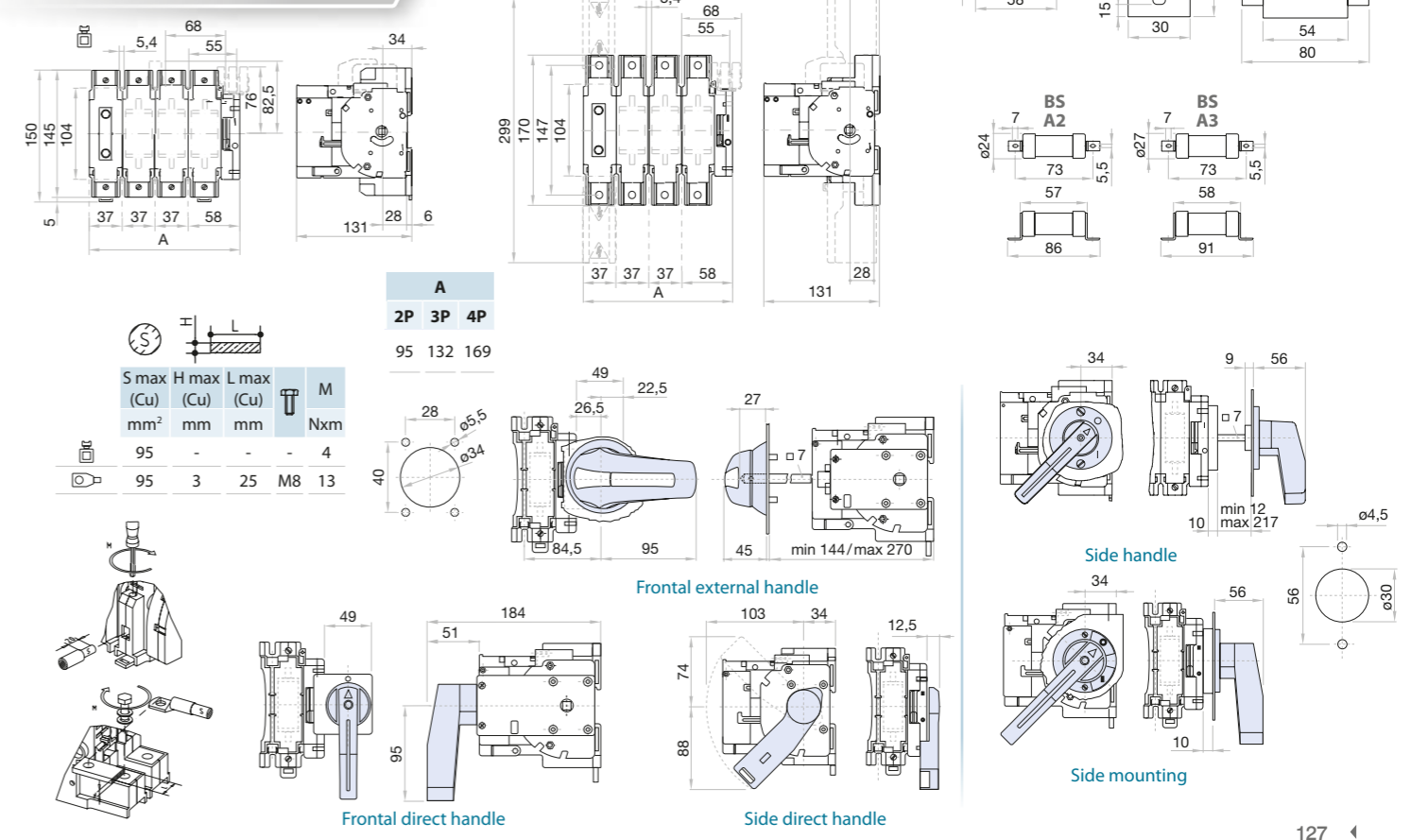
		100	125	160
Fuses	NH/DIN	-	00	00
	BS	A2-A3	-	-
	NFC	-	22x58	-
Rated thermal current in ambient at 40 °C	Ith	A	100	125
	Ithe	A	-	125
Rated thermal current in enclosure	Ith	A	-	125
	Ithe	A	-	160
Rated insulation voltage	Ui	V	800	800
Rated impulse withstand voltage	Uimp	kV	8	8
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	-	9,5
	BS		8,5	-
	NFC		-	12,5
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	Ue 400 V AC21A	A	100	125
	Ue 400 V AC22A	A	100	125
	Ue 400 V AC23A	A	100	125

		100	125	160
Rated breaking capacity	400 V; cos φ = 0,35+0,45	A	800	1000
Rated making capacity	400 V; cos φ = 0,45	A	1000	1250
Short - circuit behaviour				
Rated conditional short-circuit current ^{*(3)}	Iq	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		10000	8000
Maximum weight 2P		kg	1,2	1,2
Maximum weight 3P		kg	1,7	1,7
Maximum weight 3P+N		kg	2,2	2,2



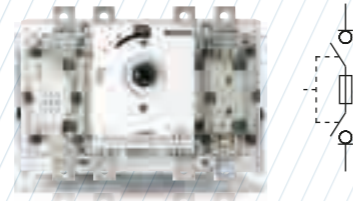
Also available 4P switches under request, please consult

Dimensions (mm)

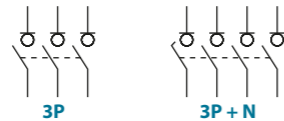


M21 Switch fuses base mounting 3P - 3P+N

Size 1	
A	160 200 250
NH 0 BS A4 BS B1 BS B2	



Fuses	NH 0	BS A4	BS B1-BS B2	BS B1-BS B2
3P	CODE-160A M2101603PSD00	CODE-160A M2101603PSB10	CODE-200A M2102003PSB20	CODE-250A M2102503PSB20
3P+N	M2101603NSD00	M2101603NSB10	M2102003NSB20	M2102503NSB20



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

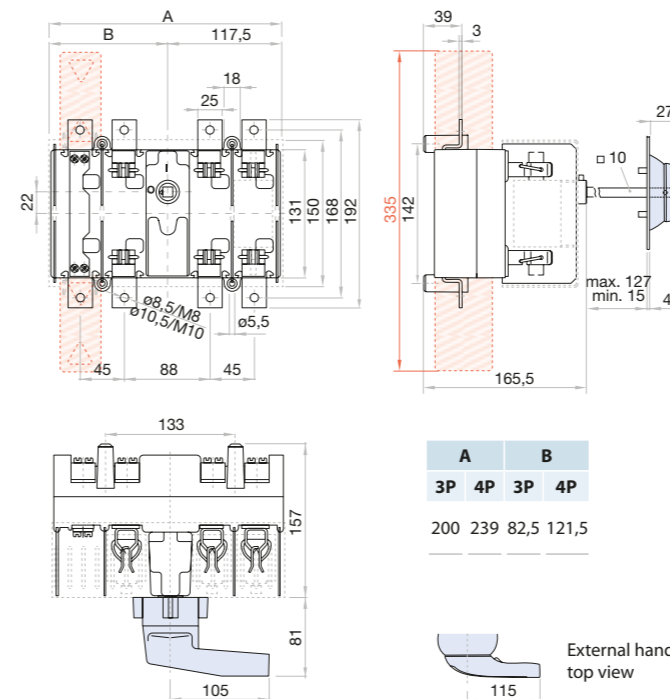
Shaft extensions
Type 1
L (mm) | P (mm) | CODE
375 | 180... 441 | DS-EP14

Rear protective plate

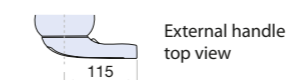
3P	160-200 A	4P	250 A	4P
DM2PP11	DM2PP12	DM2PP21	DM2PP22	

Dimensions (mm)

Door drilling for external handle



A	B
3P	4P
200	239
3P	4P
82,5	121,5



Terminal shrouds

3P INPUT DM2CU11	3P OUTPUT DM2CU12	4P INPUT/OUTPUT DM2CU13
---------------------	----------------------	----------------------------

(1 kit for input or output)

Auxiliary contacts

1NO+1NC CODE DSLAU01
2NO+2NC CODE DSLAU02

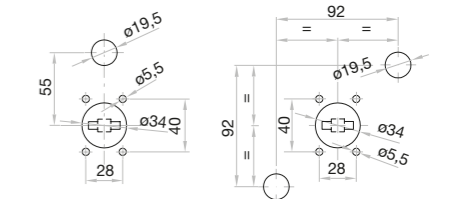
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

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



Technical information

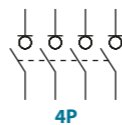


According to IEC 60947-3

Fuses	NH/DIN		160	200	250
	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)	Ue 400 V AC21A	A	160	200	250
	Ue 400 V AC22A	A	160	200	250
(Rated frequency 50/60 Hz)	Ue 400 V AC23A	A	160	200	250

*(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

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

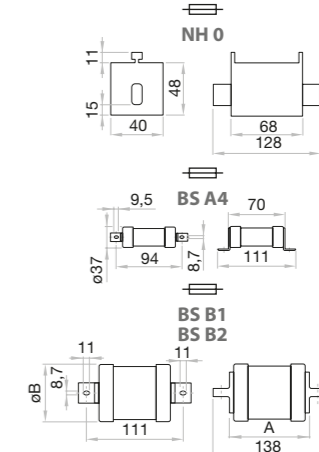


Also available 4P switches under request, please consult

	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



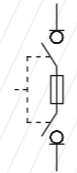
	A	øB
	max	max
B1	70	37
B2	77	42

M21 Switch fuses base mounting 3P - 3P+N

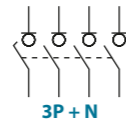
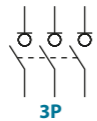
Size 2

A 250|315|400

NH 1 NH 2 BS B1
BS B2 BS B3 BS B4



Fuses	CODE-250A		CODE-400A		CODE-315A		CODE-400A	
	3P	3P+N						
	M2102503PSD10	M2102503NSD10	M2104003PSD20	M2104003NSD20	M2103153PSB40	M2103153NSB40	M2104003PSB50	M2104003NSB50
	NH 1	NH 2	BS B1...BS B3	BS B1...BS B4				



Technical information

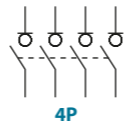


According to IEC 60947-3

Fuses	NH/DIN	BS	250	315	400
			1	-	2
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⁾	Ue 400 V AC21A	A	250	315	400
	Ue 400 V AC22A	A	250	315	400
(Rated frequency 50/60 Hz)	Ue 400 V AC23A	A	250	315	400

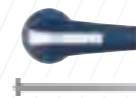
⁽¹⁾ Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation
⁽²⁾ Other voltages and / or utilization categories; please consult us
⁽³⁾ With a protective device limiting the cut - off current and the joule integral to the indicated values

Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	250	315	400
			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

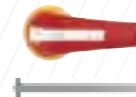


Also available 4P switches under request, please consult

Accessories



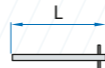
External handle included shaft ^(e1)
 IP65
 CODE DS-LA22



Emergency external handle included shaft ^(e1)
 IP65
 CODE DS-LR22



Direct handle
 CODE DM2S121



Shafts

Standard shaft included ^(e1)
 L (mm) 239 P (mm) 216... 286

Shaft extensions Type 1

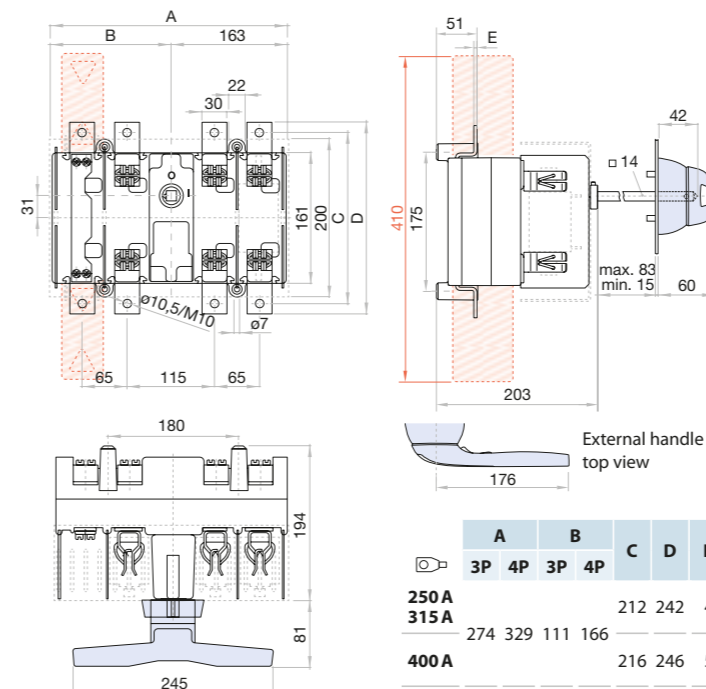
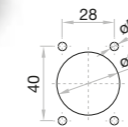
L (mm) 345 P (mm) 216... 392 CODE DS-EP23

Rear protective plate

3P DM2PP21 4P DM2PP22

Dimensions (mm)

Door drilling for external handle



A	B	C	D	E
250 A		212	242	4
315 A		274	329	111
400 A		166	216	246

Terminal shrouds

3P INPUT DM2CU21 3P OUTPUT DM2CU22 4P INPUT/OUTPUT DM2CU23
 (1 kit for input or output)

Auxiliary contacts

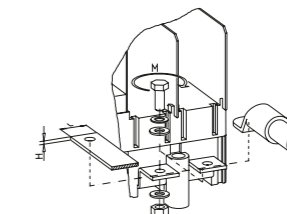
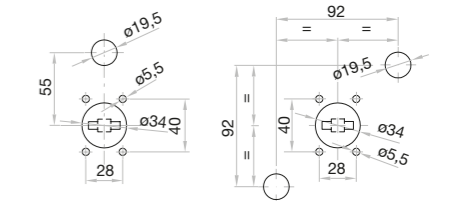
1NO+1NC CODE D5LAU01
 2NO+2NC CODE D5LAU02
 I_e = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.

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

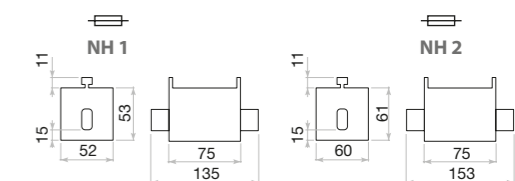
Door drilling for handle and key lock device
 Simple Double



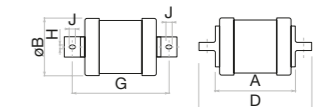
S max (Cu)	H max (Cu)	L max (Cu)	M
240	6	40	M10 24

Fuses

Maximum dimensions



BS B1
 BS B2
 BS B3
 BS B4



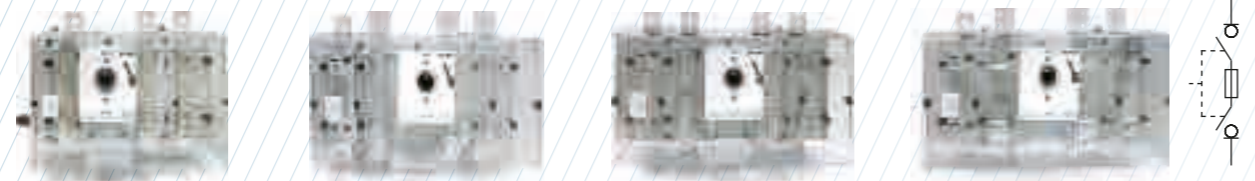
A	B	D	G	H	J
B1	70	37			
B2	77	42	138	111	8,7
B3					11
B4	83	66			

M21 Switch fuses base mounting 3P - 3P+N

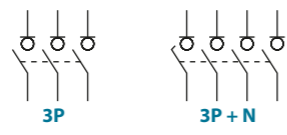
Size 3

A 630|800

NH 3 BS C1 BS C2 BS C3



	CODE-630A	CODE-800A	CODE-630A	CODE-800A
3P	M2106303PSD30	M2108003PSD30	M2106303PSB70	M2108003PSB80
3P+N	M2106303NSD30	M2108003NSD30	M2106303NSB70	M2108003NSB80
Fuses	NH 3	NH 3	BS C1...BS C2	BS C1...BS C3



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)	CODE
186	235... 286	

Shaft extensions

Type 1

L (mm)	P (mm)	CODE
345	235... 445	DS-EP23

Rear protective plate

3P	4P
DM2PP31	DM2PP32

Terminal shrouds

3P INPUT	3P OUTPUT	4P INPUT/OUTPUT
DM2CU31	DM2CU32	DM2CU33

(1 kit for input or output)

Auxiliary contacts

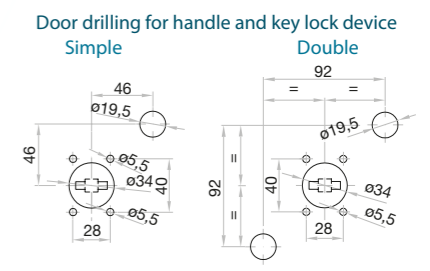
1NO+1NC	CODE	DSLAU01
2NO+2NC	CODE	DSLAU02

Ie = 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



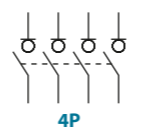
Technical information



According to IEC 60947-3

Fuses	NH/DIN	A	630	800
			C1-C2	C1-C3
Rated thermal current in ambient at 40 °C	Ith	A	630	800
Rated thermal current in enclosure	Ithe	A	630	725
Rated insulation voltage	Ui	V	1000	1000
Rated impulse withstand voltage	Uimp	kV	12	12
Power dissipation in fuse links *(1)	NH/DIN	W	48	57
	BS		44	63
AC rated operational current *(2)	Ue 400 V AC21A	A	630	800
	Ue 400 V AC22A	A	630	800
(Rated frequency 50/60 Hz)	Ue 400 V AC23B	A	630	630

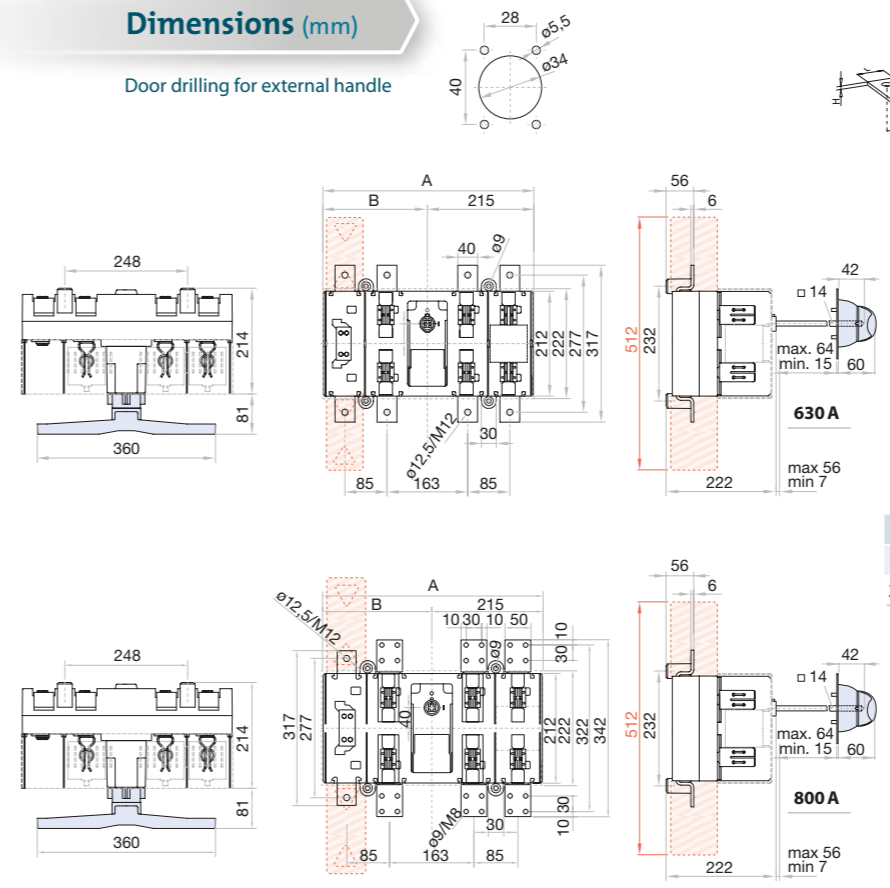
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	630	800
			5040	5040
Rated making capacity	400 V; cos φ = 0,45	A	6300	6300
Short - circuit behaviour				
Rated conditional short-circuit current *(3)	Iq	kA rms	100	100
Rated conditional short-circuit making *(3)		kA rms	100	100
Maximum cut - off current		kA (peak)	60,8	60,8
Maximum power dissipation		A ² s (x 10 ²)	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

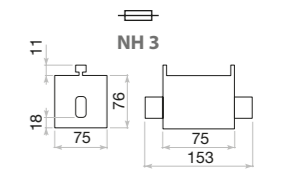
Dimensions (mm)

Door drilling for external handle

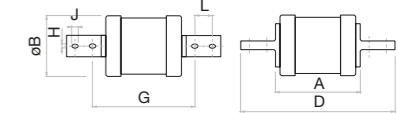


Fuses

Maximum dimensions



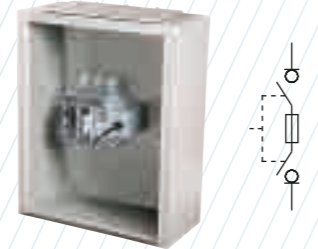
A		B	
3P	4P	3P	4P
381	426	166	211



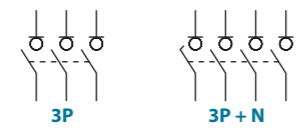
	A	øB	D	G	H	J	L
	max	max	max	nom	nom	min	min
C1	83	66				11	
C2	85	77	212	133	10,3		25,4
C3	89	84					12,5

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

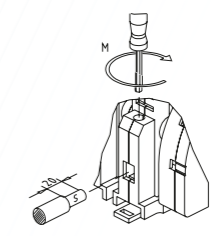


Accessories

- 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.

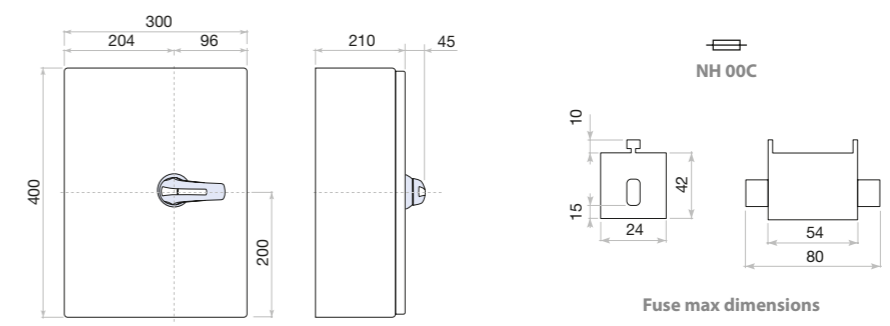


Safety key lock device
Simple CODE DS-CAB1
Double CODE DS-CEB1
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



S max (Cu)	M
mm ²	Nxm
35	3

Dimensions (mm)



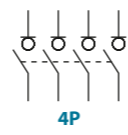
Technical information



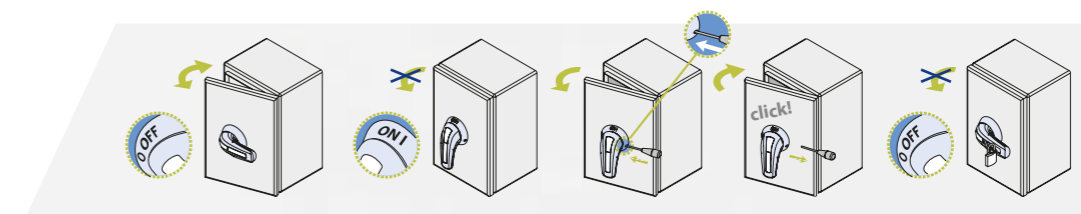
According to IEC 60947-3
IEC 61439-2

		63	100
Fuses	NH/DIN	00C	00C
Rated thermal current in enclosure 40°C	Ithe	A	63
Rated insulation voltage	Ui	V	800
Rated impulse withstand voltage	Uimp	kV	8
Power dissipation in fuse links ⁽¹⁾	NH/DIN	W	5,1
AC rated operational current ⁽²⁾ (Rated frequency 50/60 Hz)	Ue 400 V AC21A	A	63
	Ue 400 V AC22A	A	63
	Ue 400 V AC23A	A	63

		63	100
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	504
Rated making capacity	400 V; cos φ = 0,45	A	630
Short - circuit behaviour			
Rated conditional short-circuit current ⁽³⁾	Iq	kA rms	50
Rated conditional short-circuit making ⁽³⁾		kA rms	50
Maximum cut - off current		kA (peak)	13
Maximum power dissipation		A ² s (x 10 ⁻³)	76
Number of mechanical operations (according to the standards, for other values please consult)		Cycles	10000
Maximum weight 3P		kg	Consult
Maximum weight 3P+N		kg	Consult



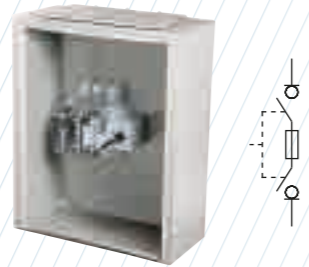
Also available 4P switch - disconnectors under request, please consult



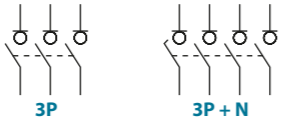
Standard supply

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

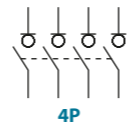


According to IEC 60947-3
IEC 61439-2

		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

⁽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

		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	



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

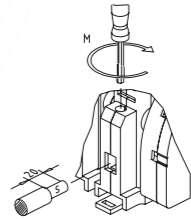
Terminal shrouds

2 UNITS | 3 UNITS
DM1CU01 | DM1CU02
(1 kit for input or output)

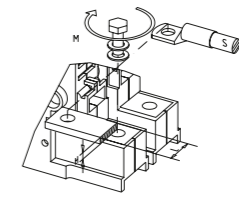
Safety key lock device

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

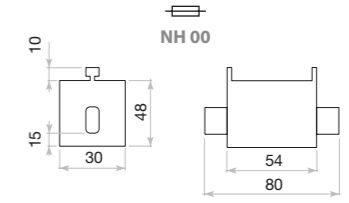
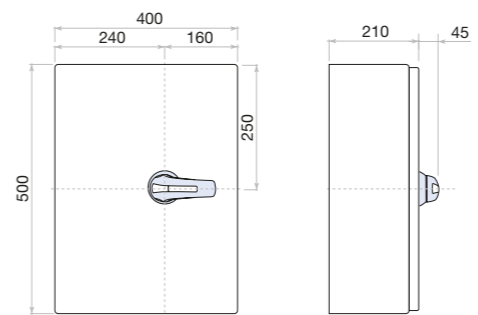


	S max (Cu) mm ²	M Nxm
125 A	95	4
160 A		

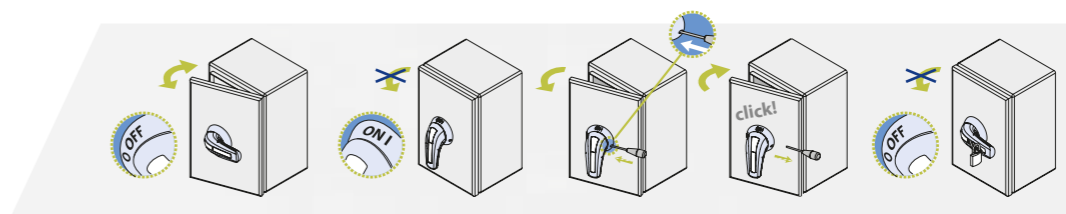


	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M Nxm
125 A	95	3	25	M8 13
160 A				

Dimensions (mm)




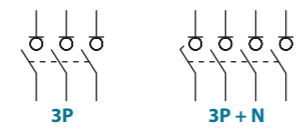
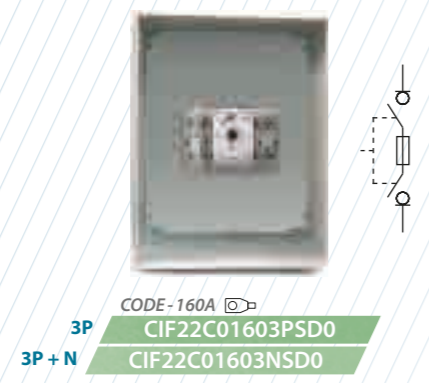
Fuse max dimensions



Standard supply

CIF22 Metal enclosed switch fuses IP65 3P - 3P+N

Size 1
A 160

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
---------------------	----------------------	----------------------------

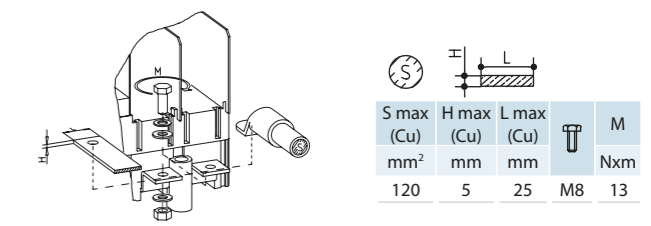
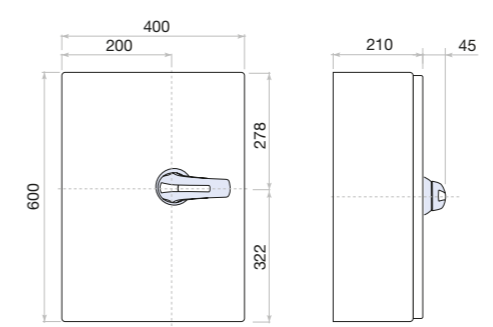
(1 kit for input or output)

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)



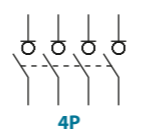
Technical information



According to IEC 60947-3 IEC 61439-2

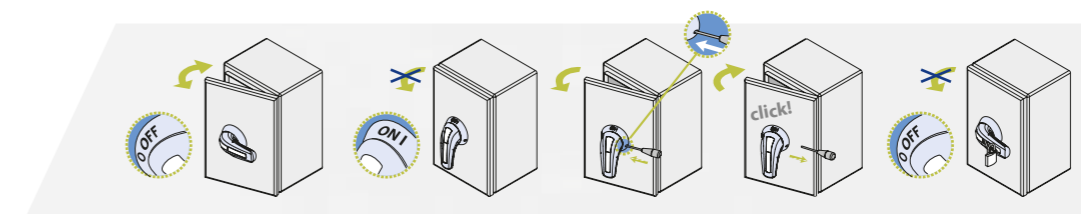
160			
Fuses	NH/DIN		0
Rated thermal current in enclosure 40°C	I _{the}	A	160
Rated insulation voltage	U _i	V	800
Rated impulse withstand voltage	U _{imp}	kV	8
Power dissipation in fuse links ⁽¹⁾	NH/DIN	W	13,5
AC rated operational current ⁽²⁾ (Rated frequency 50/60 Hz)	Ue 400 V AC21A	A	160
	Ue 400 V AC22A	A	160
	Ue 400 V AC23A	A	160

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



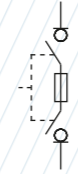
Also available 4P switch - disconnectors under request, please consult

Fuse max dimensions
^(d) Other fuses type, may be required changing the dimensions, please consult

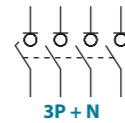
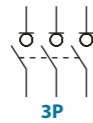


CIF22 Metal enclosed switch fuses IP65 3P - 3P+N

Size 2
A 250 | 400



	CODE-250A	CODE-400A
3P	CIF22C02503PSD1	CIF22C04003PSD2
3P+N	CIF22C02503NSD1	CIF22C04003NSD2



Accessories

External handle IP65 included

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.

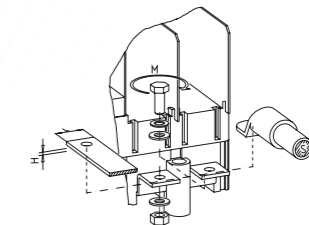
Terminal shrouds

INPUT 3P DM2CU21 | OUTPUT 3P DM2CU22 | INPUT/OUTPUT 4P DM2CU23
(1 kit for input or output)

Safety key lock device

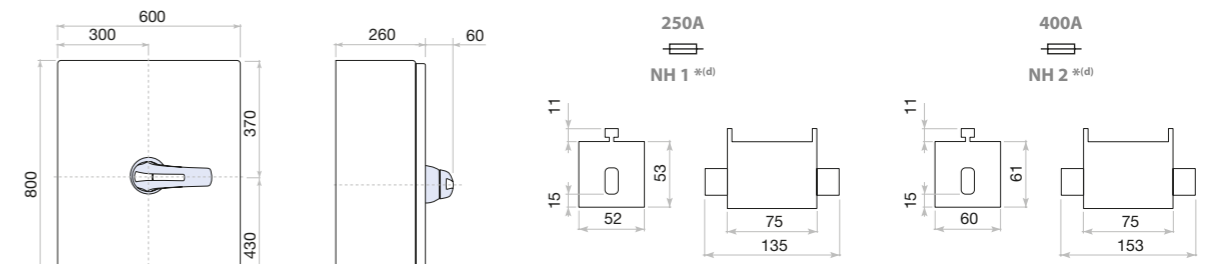
Simple CODE DS-CB21
Double CODE DS-CF21

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 Nxm	M
240	6	40	M10	24

Dimensions (mm)



Fuse max dimensions

*^(d) Other fuses type, may be required changing the dimensions, please consult

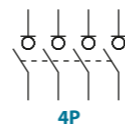
Technical information



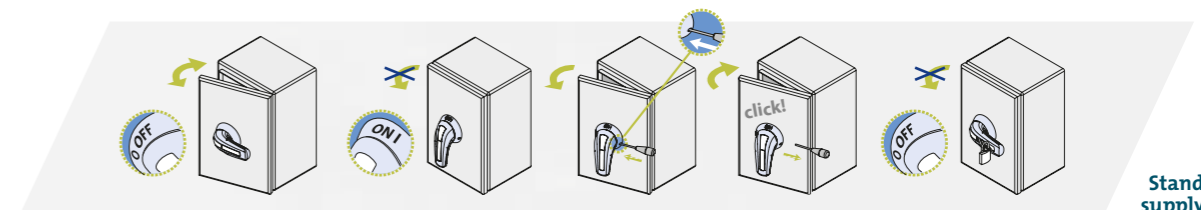
According to IEC 60947-3 IEC 61439-2

		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⁾	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	



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



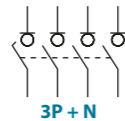
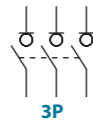
Standard supply

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



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

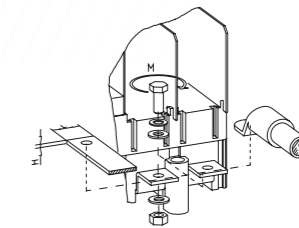
INPUT 3P DM2CU31	OUTPUT 3P DM2CU32	INPUT/OUTPUT 4P DM2CU33
---------------------	----------------------	----------------------------

(1 kit for input or output)

Safety key lock device

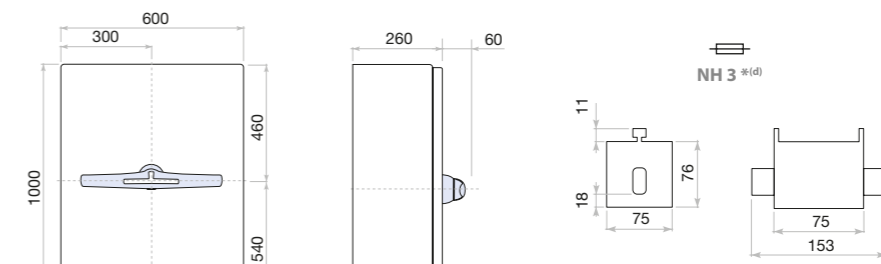
Simple CODE DS-CB31
Double CODE DS-CF31

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
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

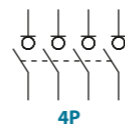
Technical information



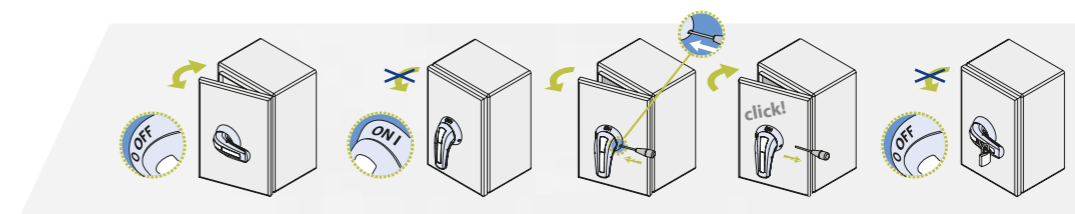
According to IEC 60947-3
IEC 61439-2

		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)	Ue 400 V AC21A	A 630	800
	Ue 400 V AC22A	A 630	800
	Ue 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



Also available 4P switch - disconnectors under request, 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.

series CCF|CCP|SSF|SSL|SSB series CEC

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



Testing and approvals:



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



The changeover switches in the series CCF|CCP|SSF|SSL|SSB, 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.

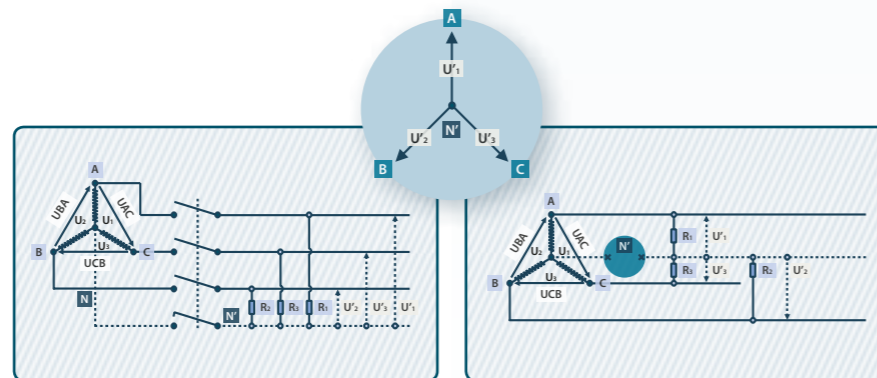
The compact models are with visible cut-off and performed internally the common output without the need for external connections.

Neutral pole early make & late break



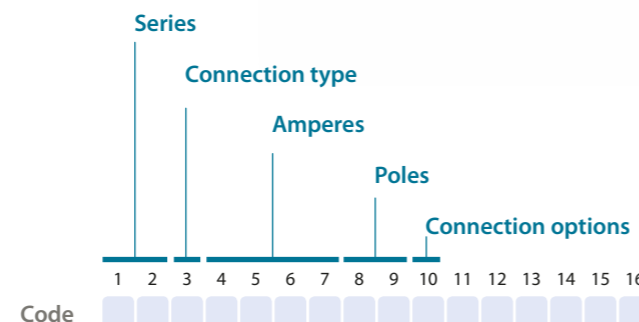
This safety feature prevents accidental overvoltage when making/breaking of loads connected between phase and neutral.

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.



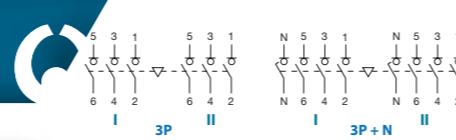
Range codification:

The CCF|CCP|SSF|SSL|SSB series, are identified by a code that describes their most important characteristics as described below.



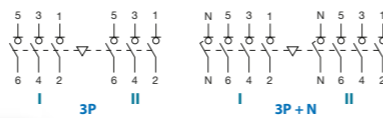
series CCF	series CCP	series SSF SSL	series SSB	series CEC
1 2 3 4 5 CCCF	1 2 3 4 5 CCCP	1 2 3 4 5 SSF SSL	1 2 3 4 5 SSB	1 2 3 4 5 CEC
Compact model. Visible cut-off. Common output from the front. Wide range of currents. Base mounting by screws. External or direct handle.	Compact model. Visible cut-off. Common output from the rear. Wide range of currents. Base mounting by screws. External or direct handle.	Back to back or line arrangement. Base mounting by screws. External or direct handle.	By-pass Back to back arrangement. Base mounting by screws. External or direct handle.	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	series CTRC	series CTRC
1 2 3 4 5 CTR2	1 2 3 4 5 CTR C	1 2 3 4 5 CTR C
Manual changeover switch in metallic enclosure. External padlockable handle with locking door in ON I - ON II positions.	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.	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).



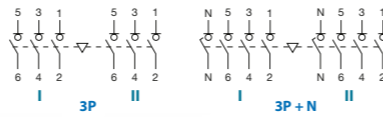
CTR2 Metal enclosed manual changeover switches IP65
3 & 4 poles (63 - 3150A) (I - O - II)^{*(2)}

Amp.	Size	Connection	3 pole (3P)		4 pole (3P + N) ^{*(1)}		Auxiliary contacts ^{*(5)}		Safety ^{*(6)} key lock device		Bridging links Code (4 units)	Phase barrier ^{*(7)}		Terminal shrouds ^{*(7)} (1 unit)			Terminal shrouds ^{*(7)}				Full details in page
			Code		Code		1NO+1NC Code S5F	2NO+2NC Code S5F	Simple Code ^{*(e1)}	Double Code ^{*(e1)}		3P	4P	Up	Down	Up or Down	Inputs		Common outputs		
			Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	
63	00	II	CTR2EC00633PS	CTR2EC00633NS	00	DCEAUB1	-	-	-	-	-	DCECUB1	DCECUB2	-	-	-	-	-	-	176	
80			CTR2EC00803PS	CTR2EC00803NS		00	D5LAU01	D5LAU02	D5LCBB1	D5LCEB1	D5LPCB1	-	-	-	-	-	-	-	-	-	178
100			CTR2EC01003PS	CTR2EC01003NS			DS-AU11	DS-AU12	D5LCBB1	D5LCEB1	D5LPC03	DS-PB01	DS-PB02	DS-CU02	DS-CU03	DS-CU04	-	-	-	-	-
125	0	II	CTR2EC01253PS	CTR2EC01253NS	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	182	
125			CTR2LC00633PB	CTR2LC00633NB		00	D5LAU01	D5LAU02	D5LCBB1	D5LCEB1	-	-	-	-	-	-	-	-	-	-	178
125			CTR2LC00803PB	CTR2LC00803NB			DS-AU11	DS-AU12	D5LCBB1	D5LCEB1	D5LPC03	DS-PB01	DS-PB02	DS-CU02	DS-CU03	DS-CU04	-	-	-	-	-
160	0	II	CTR2FC01253PS	CTR2FC01253NS	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	182	
160			CTR2FC01603PS	CTR2FC01603NS		0	D5LAU01	D5LAU02	D5LCBB1	D5LCEB1	-	-	-	-	-	-	-	-	-	-	178
200			CTR2FC02003PS	CTR2FC02003NS			DS-AU11	DS-AU12	D5LCBB1	D5LCEB1	D5LPC03	DS-PB01	DS-PB02	DS-CU02	DS-CU03	DS-CU04	-	-	-	-	-
200	1	II	CTR2CC02003PS	CTR2CC02003NS	1	D5LAU01	D5LAU02	D5LCBB1	D5LCEB1	-	-	-	-	-	-	-	-	-	-	182	
250			CTR2CC02503PS	CTR2CC02503NS		1	D5LAU01	D5LAU02	D5LCBB1	D5LCEB1	-	-	-	-	-	-	-	-	-	-	178
315			CTR2CC03153PS	CTR2CC03153NS			DS-AU11	DS-AU12	D5LCBB1	D5LCEB1	D5LPC03	DS-PB01	DS-PB02	DS-CU02	DS-CU03	DS-CU04	-	-	-	-	-
400	1	II	CTR2CC04003PS	CTR2CC04003NS	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	182	
500			CTR2CC05003PS	CTR2CC05003NS		2	D5LAU01	D5LAU02	D5LCB21	D5LCF21	-	-	-	-	-	-	-	-	-	-	184
630			CTR2CC06303PS	CTR2CC06303NS			DS-AU11	DS-AU12	D5LCB21	D5LCF21	D5LPC03	DS-PB01	DS-PB02	DS-CU02	DS-CU03	DS-CU04	-	-	-	-	-
800	2	II	CTR2CC08003PS	CTR2CC08003NS	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	182	
1000			CTR2CC10003PS	CTR2CC10003NS		3	D5LAU01	D5LAU02	D5LCB31	D5LCF31	-	-	-	-	-	-	-	-	-	-	184
1250			CTR2CC12503PS	CTR2CC12503NS			DS-AU11	DS-AU12	D5LCB31	D5LCF31	D5LPC42	DS-PB01	DS-PB02	DS-CU02	DS-CU03	DS-CU04	-	-	-	-	-
1600	4	II	CTR2FC16003PS	CTR2FC16003NS	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	182	
1800			CTR2FC18003PS	CTR2FC18003NS		4	DS-AU11	DS-AU12	D5LCB41	D5LCF41	D5LPC42	-	-	-	-	-	-	-	-	-	184
2000			CTR2FC20003PS	CTR2FC20003NS			DS-AU11	DS-AU12	D5LCB41	D5LCF41	D5LPC42	DS-PB01	DS-PB02	DS-CU02	DS-CU03	DS-CU04	-	-	-	-	-
2000	5	II	CTR2FC20003PP ^{*(3)}	CTR2FC20003NP ^{*(3)}	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	182	
2500			CTR2FC25003PP ^{*(3)}	CTR2FC25003NP ^{*(3)}		5	DS-AU11	DS-AU12	D5LCB41	D5LCF41	-	-	-	-	-	-	-	-	-	-	184
3150			CTR2FC31503PP ^{*(3)}	CTR2FC31503NP ^{*(3)}			DS-AU11	DS-AU12	D5LCB41	D5LCF41	-	-	-	-	-	-	-	-	-	-	-



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)}		Auxiliary contacts ^{*(5)}		Safety ^{*(6)} key lock device		Bridging links Code (4 units)	Phase barrier ^{*(7)}		Terminal shrouds ^{*(7)} (1 unit)			Terminal shrouds ^{*(7)}				Full details in page
			Code		Code		1NO+1NC Code S5F	2NO+2NC Code S5F	Simple Code ^{*(e1)}	Double Code ^{*(e1)}		3P	4P	Up	Down	Up or Down	Inputs		Common outputs		
			Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	
125	0	II	CTRCFC01253PSAN	CTRCFC01253NSAN	0	DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-	180	
160			CTRCFC01603PSAN	CTRCFC01603NSAN		0	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	182
200			CTRCFC02003PSAN	CTRCFC02003NSAN			DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-	-
250	1	II	CTRCFC02503PSAN	CTRCFC02503NSAN	1	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	182	
315			CTRCFC03153PSAN	CTRCFC03153NSAN		1	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	184
400			CTRCFC04003PSAN	CTRCFC04003NSAN			DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-	-
500	2	II	CTRCFC05003PSAN	CTRCFC05003NSAN	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	182	
630			CTRCFC06303PSAN	CTRCFC06303NSAN		2	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	184
800			CTRCFC08003PSAN	CTRCFC08003NSAN			DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-	-
1000	3	II	CTRCFC10003PSAN	CTRCFC10003NSAN	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	182	
1250			CTRCFC12503PSAN	CTRCFC12503NSAN		3	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	184
1600			CTRCFC16003PSAN	CTRCFC16003NSAN			DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	4	II	CTRCFC18003PSAN	CTRCFC18003NSAN	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	182	
2000			CTRCFC20003PSAN	CTRCFC20003NSAN		4	DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-	184
2500			CTRCFC25003PSAN	CTRCFC25003NSAN			DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-	-
3150	5	II	CTRCFC31503PSAN	CTRCFC31503NSAN	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	182	
1250			CTRCFC12503PPAP ^{*(3)}	CTRCFC12503NPAP ^{*(3)}		5	DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-	184
2500			CTRCFC25003PPAP ^{*(3)}	CTRCFC25003NPAP ^{*(3)}			DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-	-



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)}		Auxiliary contacts ^{*(5)}		Safety ^{*(6)} key lock device		Bridging links Code (4 units)	Phase barrier ^{*(7)}		Terminal shrouds ^{*(7)} (1 unit)			Terminal shrouds ^{*(7)}				Full details in page	
			Code		1NO+1NC Code S5F	2NO+2NC Code S5F	Simple Code ^{*(e1)}	Double Code ^{*(e1)}		3P	4P	Up	Down	Up or Down	Inputs		Common outputs			
			Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code		
125	0	II	CTRCFC01253NSBJ	CTRCFC01253NSBJ	0	DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	180	
200			CTRCFC02003NSBJ	CTRCFC02003NSBJ		0	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	182
250			CTRCFC02503NSBJ	CTRCFC02503NSBJ			DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-
400	1	II	CTRCFC04003NSBK	CTRCFC04003NSBK	1	-	-	-	-	-	-	-	-	-	-	-	-	-	182	
630			CTRCFC06303NSBK	CTRCFC06303NSBK		2	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	184
1000			CTRCFC10003NSBK	CTRCFC10003NSBK			DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-
1250	3	II	CTRCFC12503NSBK	CTRCFC12503NSBK	3	-	-	-	-	-	-	-	-	-	-	-	-	-	182	
1600			CTRCFC16003NSBK	CTRCFC16003NSBK		4	DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	184
2000			CTRCFC20003NSBK	CTRCFC20003NSBK			DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-

^{*(1)} Neutral pole early make-late break.

^{*(2)} External padlockable handle in OFF 0 position.

^{*(3)} IP55.

^{*(4)} Consult control module data.

^{*(5)} To be used as signalling or control contacts - Ie = 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.

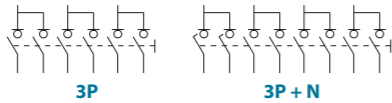
CEC Changeover switch compact base mounting

3P - 3P+N

Size 00
A 63|80|100|125



CEC	3P	CODE-63A	CEC00633PB0	CODE-80A	CEC00803PB0
		3P+N	CEC00633NB0	CEC00803NB0	
CEC	3P	CODE-63A	CEC00633PS0	CODE-80A	CEC00803PS0
		3P+N	CEC00633NS0	CEC00803NS0	CEC01003NS0
				CODE-100A	CEC01003PS0
				CODE-125A	CEC01253PS0
					CEC01003NS0
					CEC01253NS0



Patent pending
EP18382154

Technical information



According to IEC 60947-3

			63	80	100	125	
Rated thermal current in ambient at	Ith	40°C	A	63	80	100	125
		50°C	A	63	80	100	125
		60°C	A	63	80	100	125
Rated insulation voltage	Ui	V	1000	1000	1000	1000	
Rated impulse withstand voltage	Uimp	kV	8	8	8	8	
AC rated operational current ⁽¹⁾	Ie	AC21A	A	63	80	100	125
		Ue 400V AC22A	A	63	80	100	125
		AC23A	A	63	80	100	125
Rated breaking capacity	63A-100A		A	504	640	800	1000
Rated making capacity	cos φ=0,45	400 V	A	630	800	1000	1250
	125A cos φ=0,35						

⁽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

			63	80	100	125
Short-circuit behaviour						
Rated short-circuit making capacity ⁽²⁾	Icm	kA	1,5	1,5	2,9	2,9
		(peak)				
Rated short-time withstand current (1s)	Icw	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

Accessories

- Direct handle**
CODE D5LSI01
- External handle** included shaft ^(e1)
IP65
CODE DCELAB1
- Auxiliary contacts** AU
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)
- Shafts**
Standard shaft included ^(e1)
L (mm) 137 P (mm) 15... 105
Shaft extensions
Type 1
L (mm) 250 P (mm) 85... 278 CODE DS-EP04
Type 2
L (mm) 387 P (mm) 85... 415 CODE DS-EP05

Dimensions (mm)

Door drilling for external handle

	A	F	T
		45°	90°
		45°	90°
	mm	mm	mm
3P	136	151,8	152,7
4P	168	177,2	184,7

	S1 max (Cu)	M
	mm ²	Allen Nxmm
63 A	25	M8
80 A		3

	S2 max (Cu)	H max (Cu)	L max (Cu)	M
	mm ²	mm	mm	Allen Nxmm
63 A	35	3	16	M8
80 A				6
100 A				
125 A	50 ⁽⁵⁾	3	19	

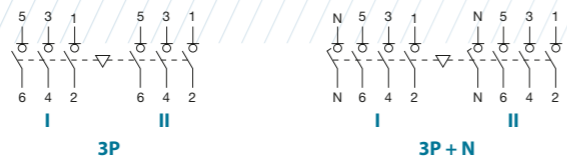
⁽⁵⁾ Use phase barriers in order to keep the clearance in air distances.

S5L Changeover switch base mounting 3P - 3P+N

Size 00
A 40|63|80



	CODE-40A	CODE-63A	CODE-80A
3P	S5L00403PB0	S5L00633PB0	S5L00803PB0
3P+N	S5L00403NB0	S5L00633NB0	S5L00803NB0



Technical information

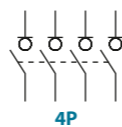


According to IEC 60947-3

			40	63	80
Rated thermal current I _{th} in ambient at 40° C	A		50	63	80
Rated insulation voltage U _i	V		800	800	800
Rated impulse withstand voltage U _{imp}	kV		8	8	8
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	400V AC21A	A	50	63	80
	400V AC22A	A	50	63	63
	400V AC23A	A	50	50	50

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

			40	63	80
Rated breaking capacity	400V AC22	A	150	189	189
Rated making capacity	400V AC22	A	150	189	189
Short - circuit behaviour					
Short - circuit making capacity ^{*(2)} I _{cm}	kA (peak)		5	5	5
Short - time withstand current (1 sec.) I _{cw}	kA rms		3	3	3
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		10000	10000	10000
Maximum weight (3/4 poles)	Kg		0,8/0,8	0,8/0,8	0,8/0,8



Also available 4P changeover switches under request, please consult

Accessories



Direct handle
CODE D5LSI01



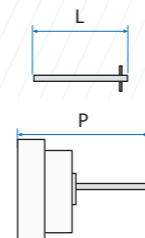
Bridging links (4 pieces)
CODE D5LPCB1



External handle included shaft ^{*(e1)}
IP65
CODE D5LLA01



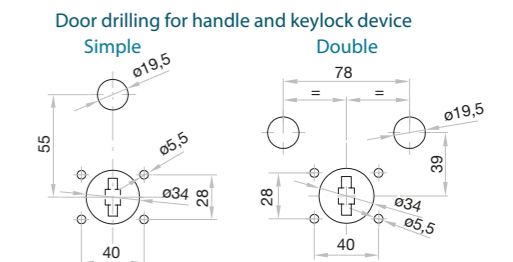
Auxiliary contacts
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



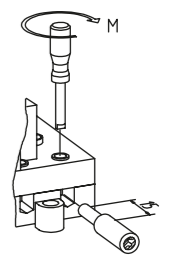
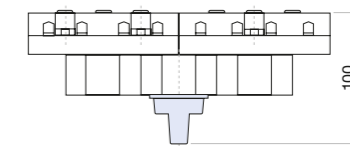
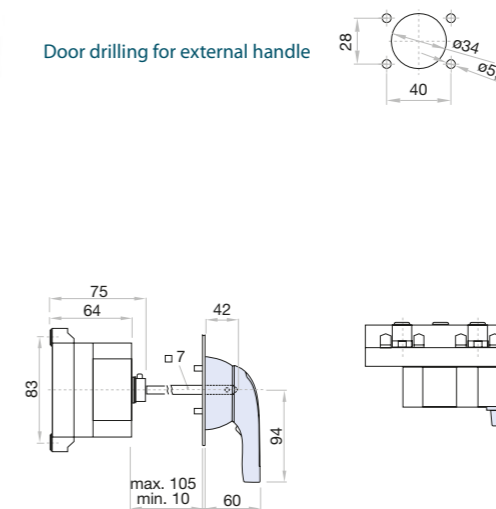
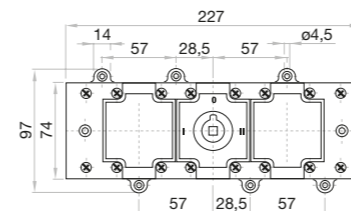
Shafts
Standard shaft included ^{*(e1)}
L (mm) | P (mm) | CODE
177 | 85... 180,5 |
Shaft extensions
Type 1
L (mm) | P (mm) | CODE
250 | 85... 253,5 | DS-EP04
Type 2
L (mm) | P (mm) | CODE
387 | 85... 390,5 | DS-EP05



Safety key lock devices
Simple CODE D5LCBB1
Double CODE D5LCBB1
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



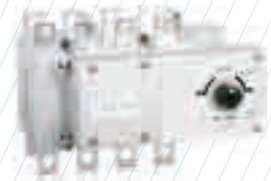
Dimensions (mm)



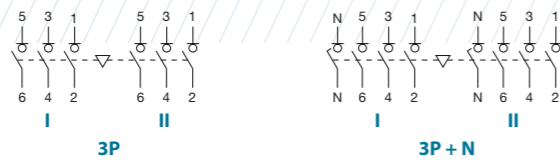
S max (Cu)	M
mm ²	Nxm
25	2

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



Technical information

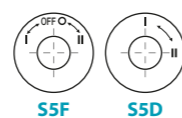


According to IEC 60947-3

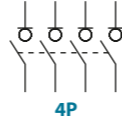
		125			160			200		
Rated thermal current	I _{th} in ambient at 40° C	A	125	160	200					
Rated insulation voltage	U _i	V	1000	1000	1000					
Rated impulse withstand voltage	U _{imp}	kV	8	8	8					
AC Rated operational current ⁽¹⁾	I _e U _e 400V AC21A	A	125	160	200					
(Rated operational frequency 50/60 Hz)	U _e 400V AC22A	A	125	160	200					
	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					



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 D5LSI01



External handle included shaft ^(e1)
IP65
CODE D5LLA01



Shafts

Standard shaft included ^(e1)
L (mm) 177 P (mm) 163... 250,5

Shaft extensions

Type 1
L (mm) 250 P (mm) 163... 323,5 CODE DS-EP04

Type 2
L (mm) 387 P (mm) 163... 460,5 CODE DS-EP05

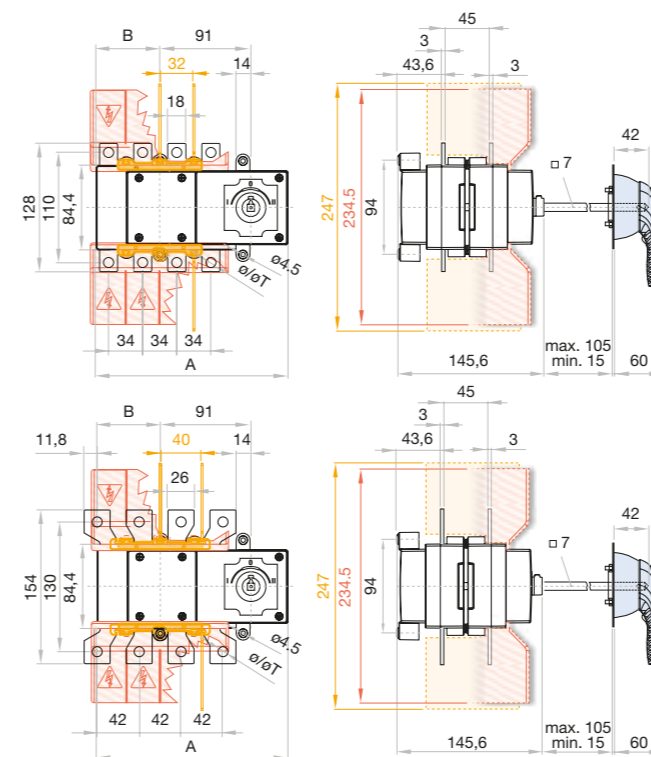


Auxiliary contacts

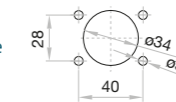
1NO+1NC CODE S5F DS-AU11
2NO+2NC CODE S5F DS-AU12

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

Dimensions (mm)



Door drilling for external handle



Terminal shrouds ^(T)

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

(Only frontal side)

Phase barrier ^(T)

3P	DS-PB01	4P	DS-PB02
	DS-PB04		DS-PB03

(1 kit for input or output)

^(T) These accessories aren't compatible with each other

Bridging links

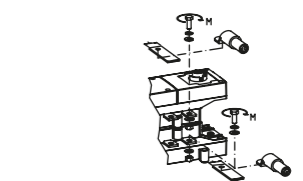
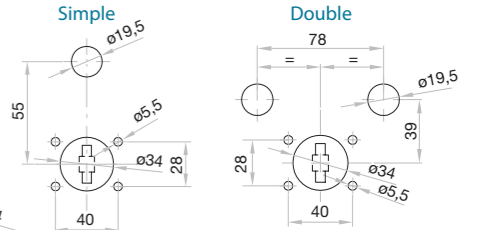
CODE D5LPC03 (4 units)

Safety key lock devices

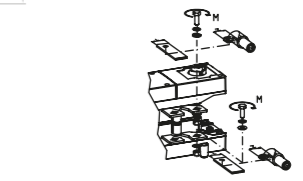
Simple CODE D5LCBB1
Double CODE D5LCBB1

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



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



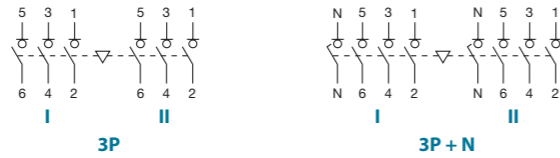
A	B	ø	øT	S max (Cu)		H max (Cu)		L max (Cu)		M	
				mm ²	mm	mm	mm	Nxm	M		
200 A	181	192	53	64	10	M10	120	5	30	M10	18

CCF|CCP Changeover switch base mounting 3P - 3P+N

Size 1
A 200|250|315|400



Type	Poles	Size (mm)			
		200A	250A	315A	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

		Size (mm)			
		200	250	315	400
Rated thermal current	I _{th} in ambient at 40°C	A 200	A 250	A 315	A 400
Rated insulation voltage	U _i	V 1000	V 1000	V 1000	V 1000
Rated impulse withstand voltage	U _{imp}	kV 8	kV 8	kV 8	kV 8
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A 200	A 250	A 315	A 400
(Rated operational frequency 50/60 Hz)	U _e 400V AC22A	A 200	A 250	A 315	A 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

		Size (mm)			
		200	250	315	400
Rated breaking capacity	400V AC22	A 600	A 750	A 945	A 1200
Rated making capacity	400V AC22	A 600	A 750	A 945	A 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

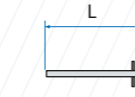
Accessories



Direct handle
CODE DCCLI1



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

POS. I	Inputs	POS. II/III	Common output
3P	3P	3P+N	3P 3P+N
DM2CU12	DM2CU11	DM2CU13	DCCCU11 DCCCU12



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

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

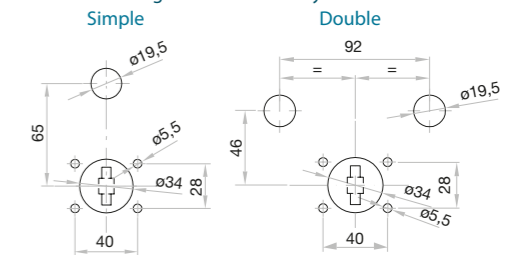


Safety key lock device

Simple CODE D5LCB11
Double CODE D5LCF11

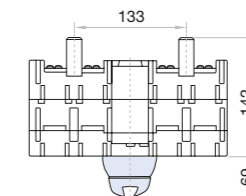
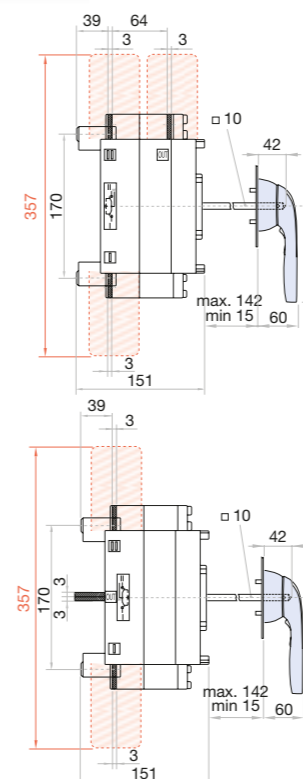
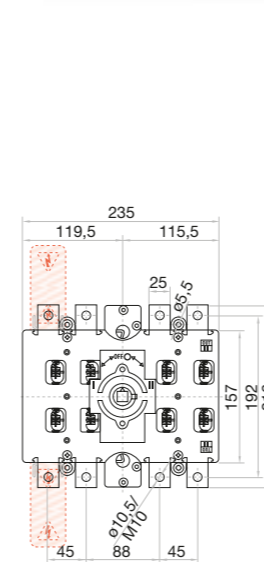
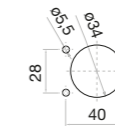
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device

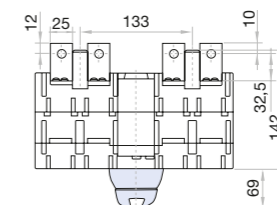


Dimensions (mm)

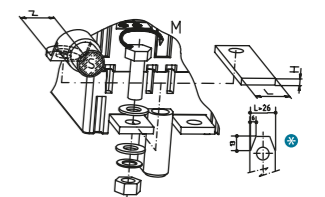
Door drilling for external handle



CCF



CCP

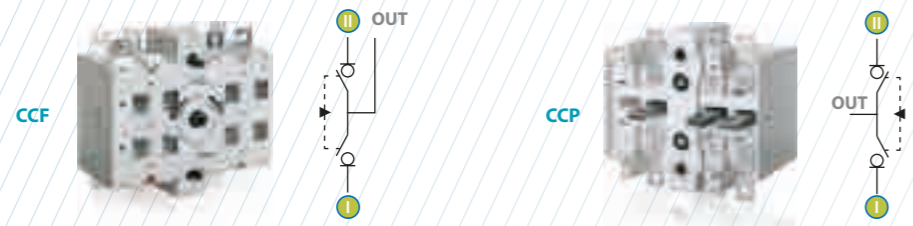


S max (Cu)	Z max	H max (Cu)	L max (Cu)	M
mm ²	mm	mm	mm	Nxm
240	31	2x5	30	M10 24

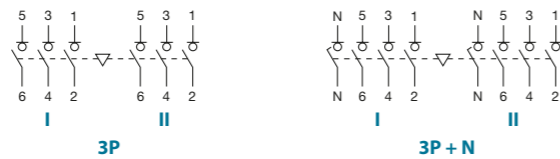


CCF|CCP Changeover switch base mounting 3P - 3P+N

Size 2
A 500|630|800



	CCF	3P 3P+N	CODE-500A	CODE-630A	CODE-800A
			CCF05003PS0	CCF06303PS0	CCF08003PS0
			CCF05003NS0	CCF06303NS0	CCF08003NS0
	CCP	3P 3P+N	CODE-500A	CODE-630A	CODE-800A
			CCP05003PS0	CCP06303PS0	CCP08003PS0
			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)}	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)} 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

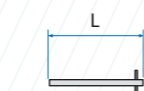
Accessories



Direct handle
CODE DCCLI21



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

POS. I	Inputs	POS. II	POS. I&II	Common output
3P	3P	3P+N	3P+N	3P 3P+N
DM2CU22	DM2CU21	DM2CU23	DCCCU21	DCCCU22



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

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

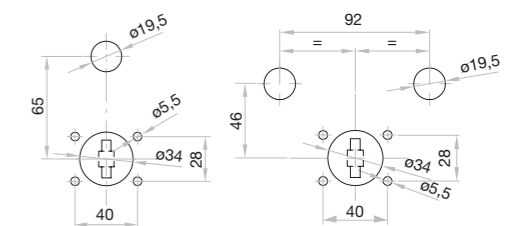


Safety key lock device

Simple CODE D5LCB21
Double CODE D5LCF21

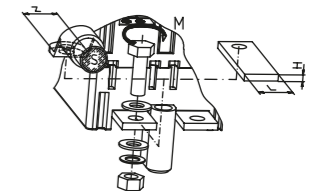
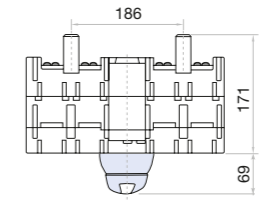
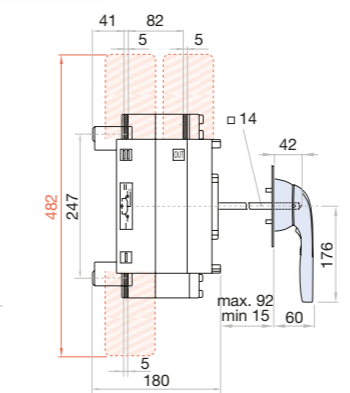
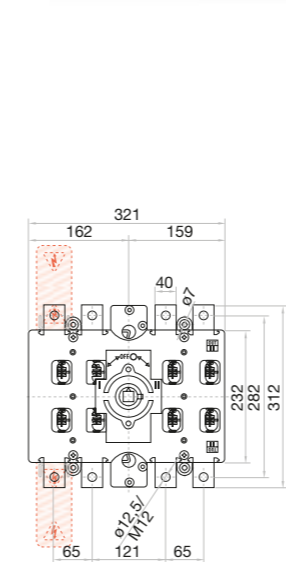
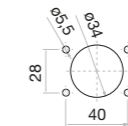
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
Simple | Double



Dimensions (mm)

Door drilling for external handle

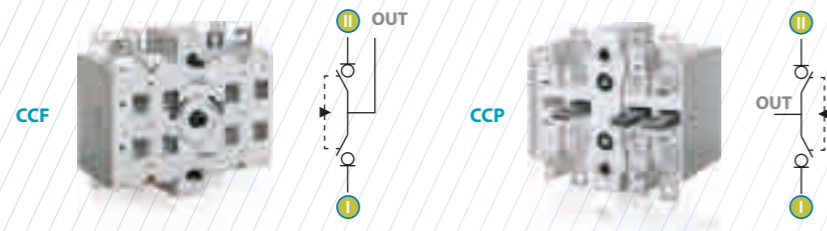


S max (Cu)	Z max	H max (Cu)	L max (Cu)	M
mm ²	mm	mm	mm	Nxm
2x240	45	2x6	45	M12 45

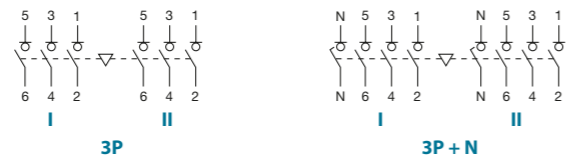


CCF|CCP Changeover switch base mounting 3P - 3P+N

Size 3
A 1000|1250



	CODE-1000A	CODE-1200A
CCF 3P	CCF10003PS0	CCF12503PS0
3P+N	CCF10003NS0	CCF12503NS0
CCP 3P	CCP10003PS0	CCP12503PS0
3P+N	CCP10003NS0	CCP12503NS0



Technical information

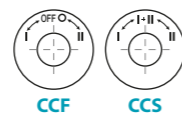


According to IEC 60947-3

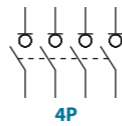
			1000	1250
Rated thermal current	I _{th} in ambient at 40° C	A	1000	1250
Rated insulation voltage	U _i	V	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	12	12
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A	1000	1250
(Rated operational frequency 50/60 Hz)	U _e 400V AC22B	A	1000	1250

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

			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)	CODE
186	223... 298	

Shaft extensions

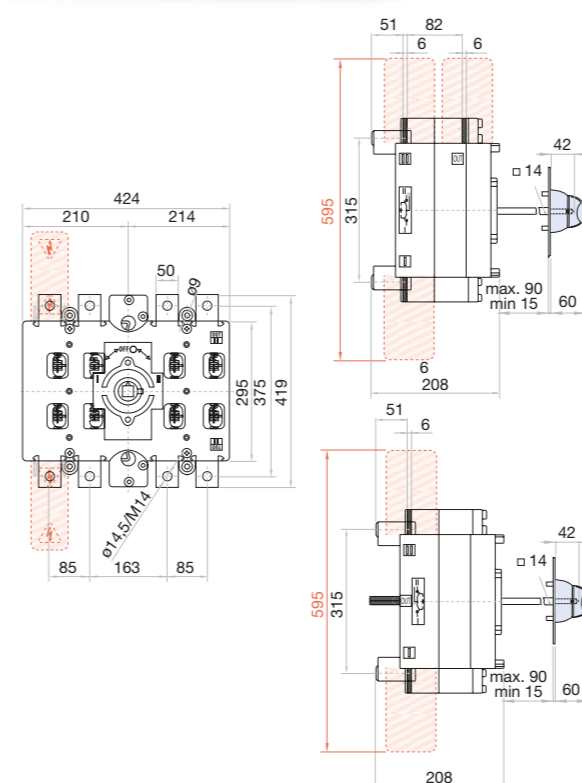
Type 1		
L (mm)	P (mm)	CODE
345	223... 457	DS-EP23

Type 2		
L (mm)	P (mm)	CODE
535	223... 645	DS-EP24

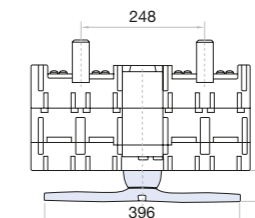
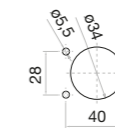
Rear protective plate

3P	4P
DCCPP31	DCCPP32

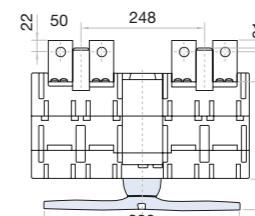
Dimensions (mm)



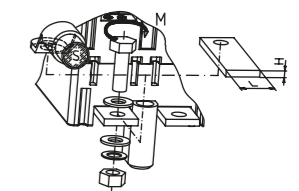
Door drilling for external handle



CCF



CCP



H max (Cu)	L max (Cu)	M
2x10	60	M14 55

Terminal shrouds

POS. I 3P	Inputs POS. II 3P	POS. I&II 3P+N	Common output 3P	3P+N
DM2CU32	DM2CU31	DM2CU33	DCCCU31	DCCCU32

Auxiliary contacts

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

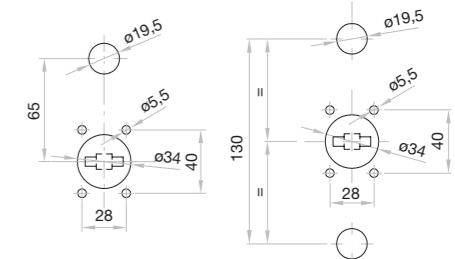
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

Safety key lock device

Simple CODE D5LCB31
Double CODE D5LCF31

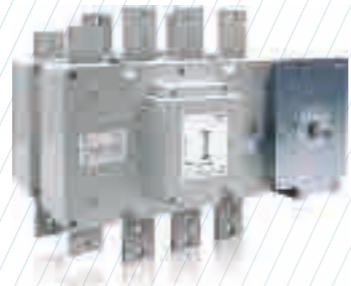
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
Simple Double

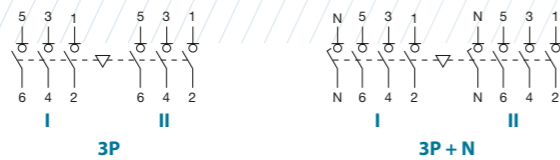


S5F Changeover switch base mounting 3P - 3P+N

Size 4
A 1600|1800|2000



	CODE-1600A	CODE-1800A	CODE-2000A
3P	S5F16003PS0	S5F18003PS0	S5F20003PD0
3P+N	S5F16003NS0	S5F18003NS0	S5F20003ND0



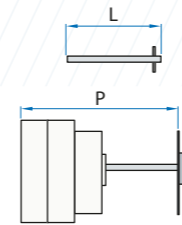
Accessories



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)

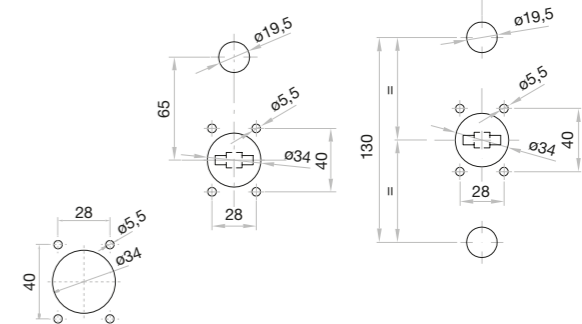


Auxiliary contacts
1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



Safety key lock device
Simple CODE D5LSCB41
Double CODE D5LSCF41
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



Technical information



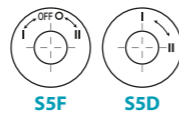
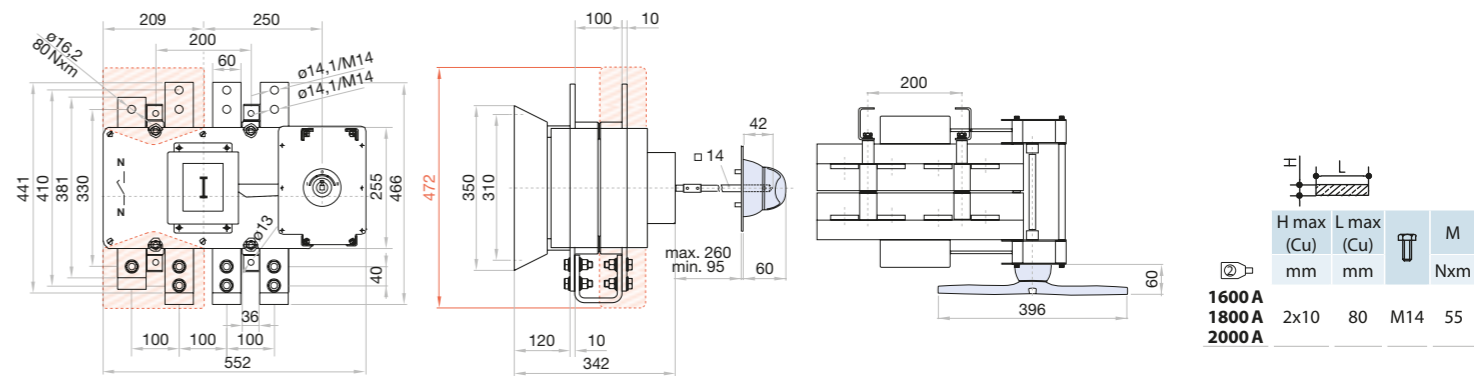
According to IEC 60947-3

			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)} (Rated operational frequency 50/60 Hz)	Ie	Ue 400V AC21A	A 1600	1800	2000
		Ue 400V AC22A	A 1600	1800	2000

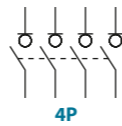
^{*(1)} Other voltages and / or utilization categories; please consult
^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)

			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

Dimensions (mm)



There are versions of changeover switches without OFF 0 position:
SSF (I + II) = SSD _____, please consult

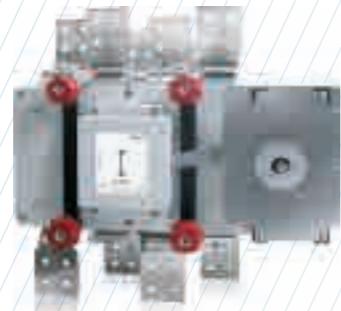


Also available 4P changeover switches under request, please consult

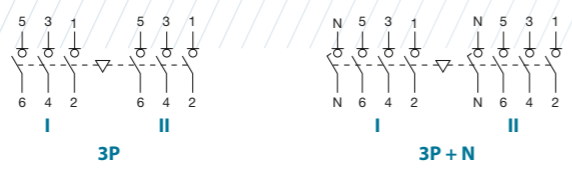


S5F Changeover switch base mounting 3P - 3P+N

Size 5
A 2000|2500|3150



	CODE-2000A	CODE-2500A	CODE-3150A
3P	S5F20003PP0	S5F25003PP0	S5F31503PP0
3P + N	S5F20003NP0	S5F25003NP0	S5F31503NP0



Accessories

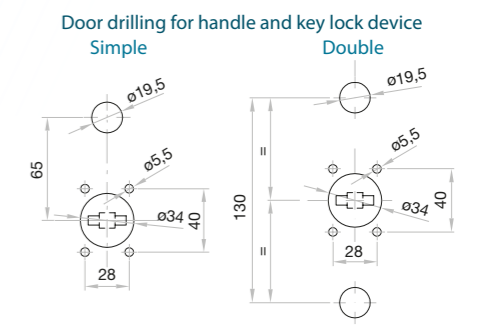
Direct handle
(Slide bar)
CODE DS-EI61

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
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



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)} (Rated operational frequency 50/60 Hz)	I _e U _e 400V AC21A	A	2000	2500	3150
	U _e 400V AC22B	A	2000	2500	2500

			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		

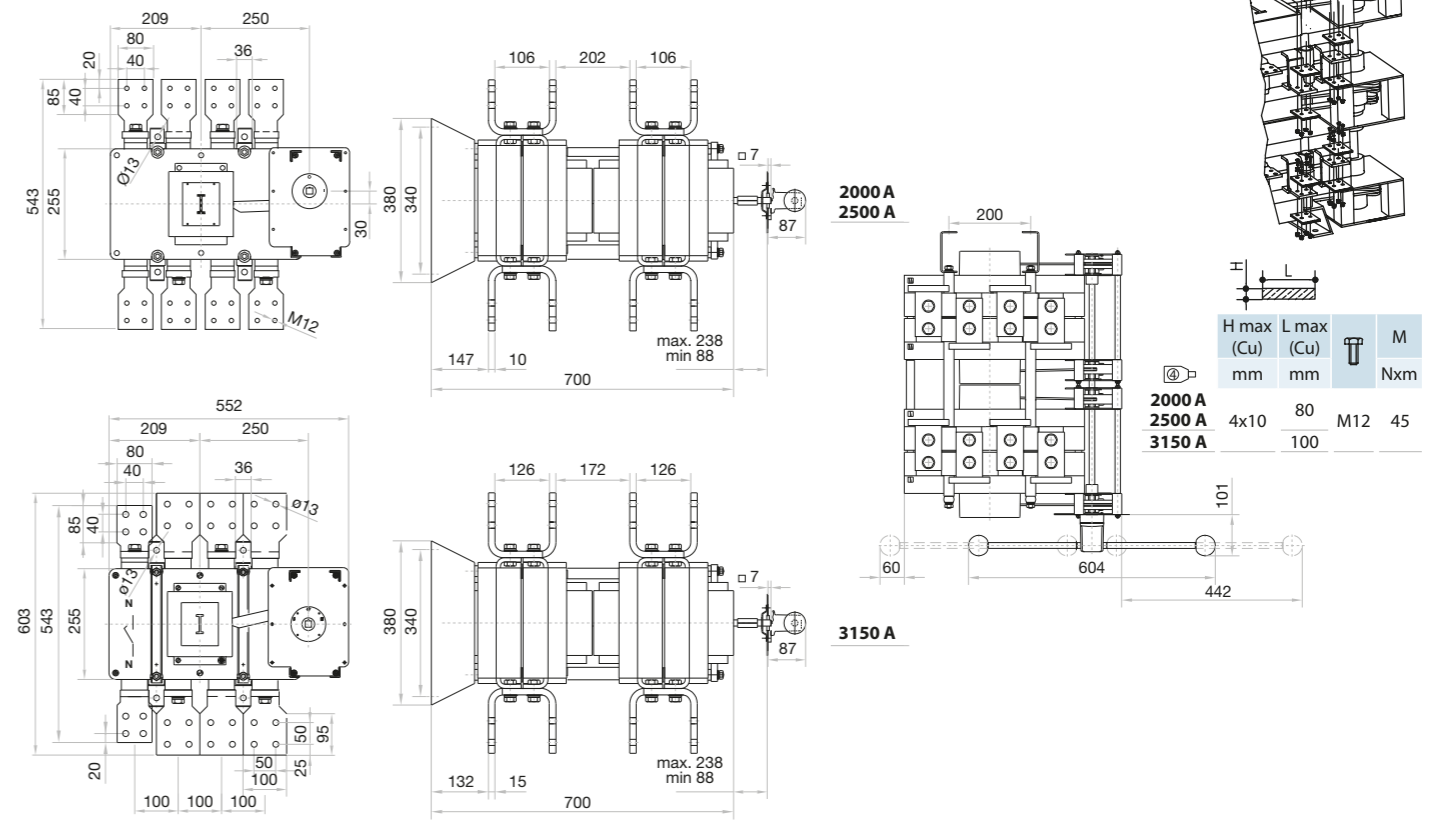
^{*(1)} Other voltages and / or utilization categories; please consult
^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)



There are versions of changeover switches without OFF 0 position:
SSF (I + II) = SSD, please consult

Also available 4P changeover switches under request, please consult

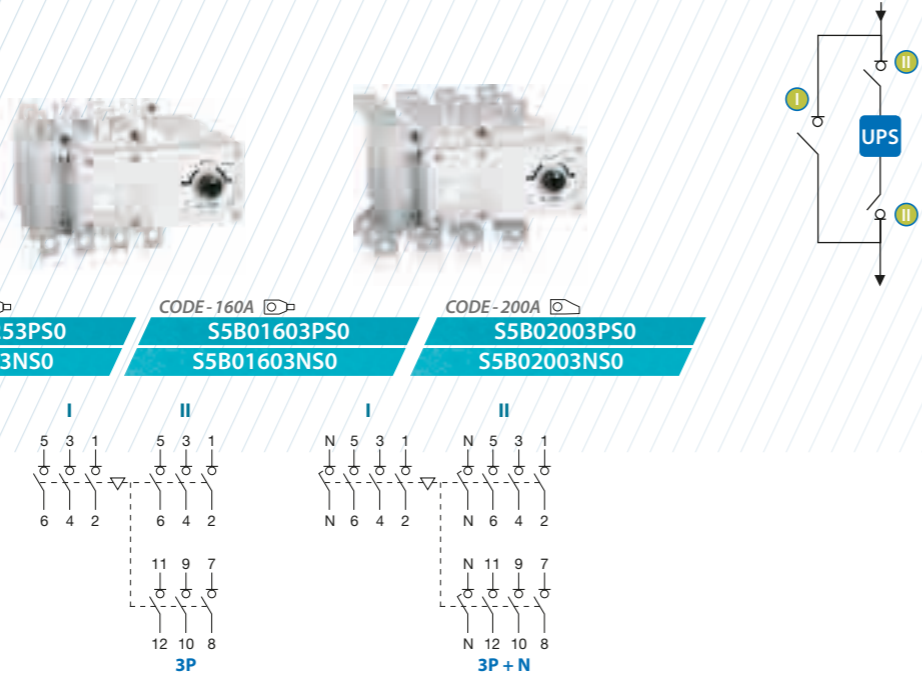
Dimensions (mm)



S5B Bypass changeover switch base mounting 3P - 3P+N

Size 0
A 125|160|200

3P	CODE-125A	CODE-160A	CODE-200A
3P + N	S5B01253PS0 S5B01253NS0	S5B01603PS0 S5B01603NS0	S5B02003PS0 S5B02003NS0



Accessories

- Direct handle**
CODE D5LSI02
- External handle** included shaft ^{*(e1)}
IP65
CODE D5LLA01
- Shafts**
Standard shaft included ^{*(e1)}
L (mm) 177 P (mm) 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) DS-CU02
DOWN 3P (1 unit) DS-CU03
UP OR DOWN 4P (1 unit) 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

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)} (Rated operational frequency 50/60 Hz)	I _e U _e 400V AC21A	A	125	160	200
	U _e 400V AC22A	A	125	160	200

			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

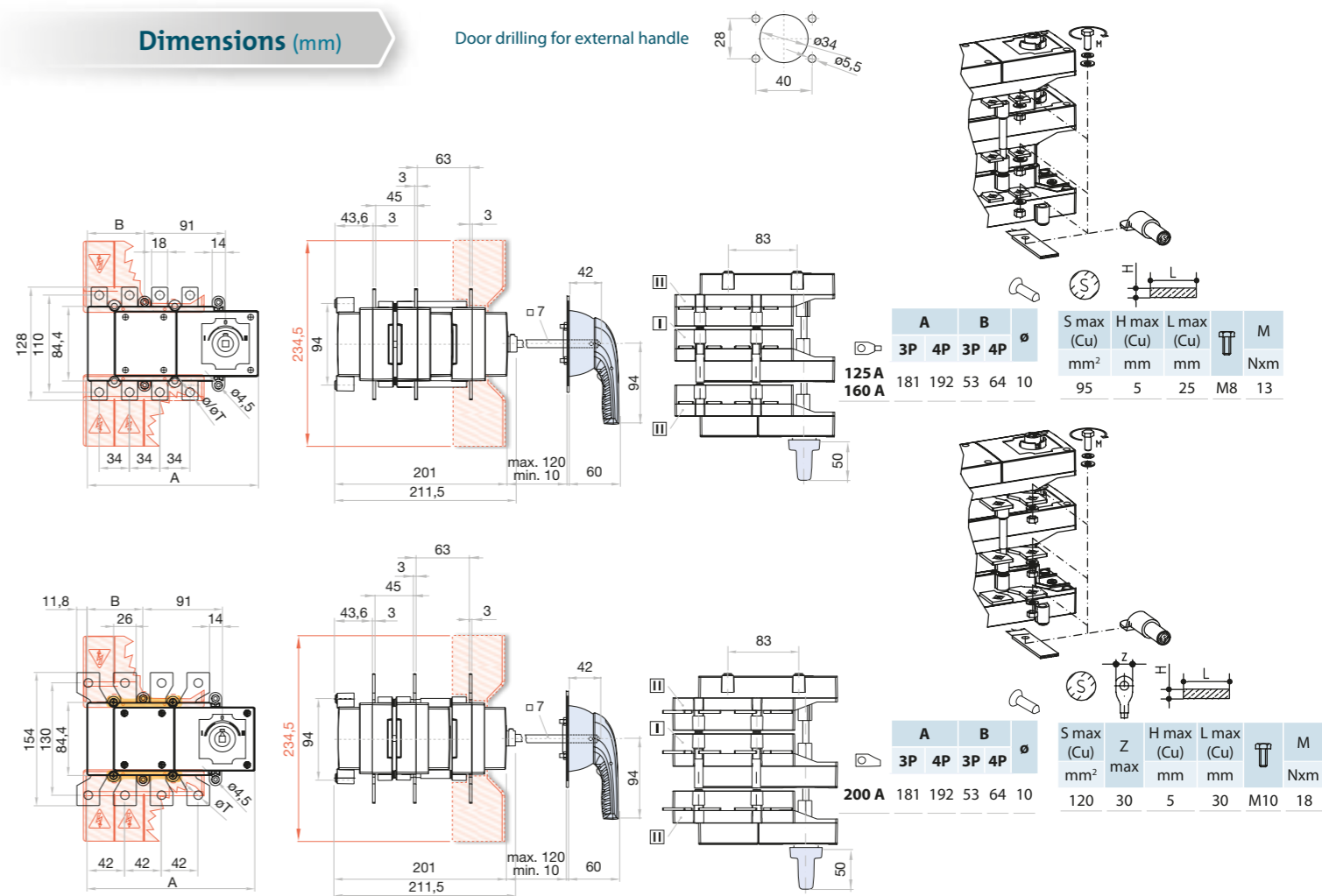
^{*(1)} Other voltages and/or utilization categories; please consult
^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)



There are versions of bypass changeover without OFF 0 position "overlapped contacts":
SSB (I - I + II - II) = SSS _____, please consult
Also available 4P changeover switches under request, please consult



Dimensions (mm)



A	B	ø	S max (Cu)	H max (Cu)	L max (Cu)	M
3P	4P	3P	4P			
125 A	181	192	53	64	10	95
160 A	181	192	53	64	10	95

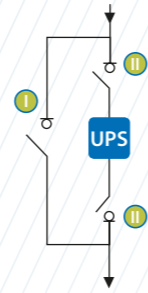
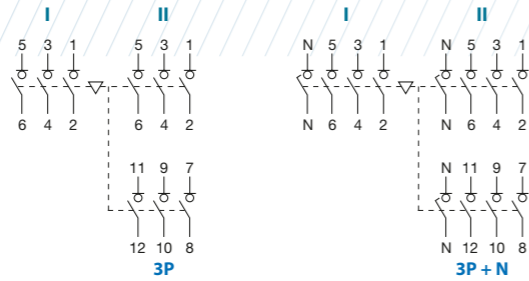
A	B	ø	S max (Cu)	Z max	H max (Cu)	L max (Cu)	M
3P	4P	3P	4P				
200 A	181	192	53	64	10	120	
							30

S5B Bypass changeover switch base mounting 3P - 3P+N

Size 1
A 250|315|400

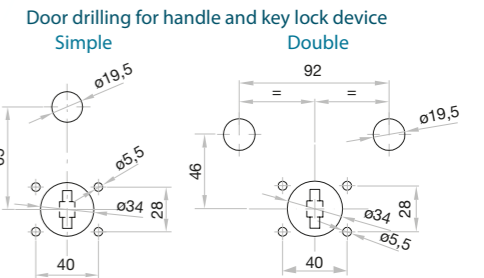


3P	CODE-250A	CODE-315A	CODE-400A
3P + N	S5B02503PRO S5B02503NR0	S5B03153PRO S5B03153NR0	S5B04003PC0 S5B04003NC0



Accessories

- Direct handle**
CODE D5LLI12
- External handle** included shaft^{*(e1)}
IP65
CODE D5LLA11
- Shafts**
Standard shaft included ^{*(e1)}
L (mm) | P (mm)
227 | 382... 516
- 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 protection**
CODE DS-CU12
(1 unit for input or output only front side)
- Terminal shrouds**
CODE DS-CU11
(1 kit for input or output only front side)
- 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



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)} (Rated operational frequency 50/60 Hz)	I _e U _e 400V AC21A	A	250	315	400
	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.)

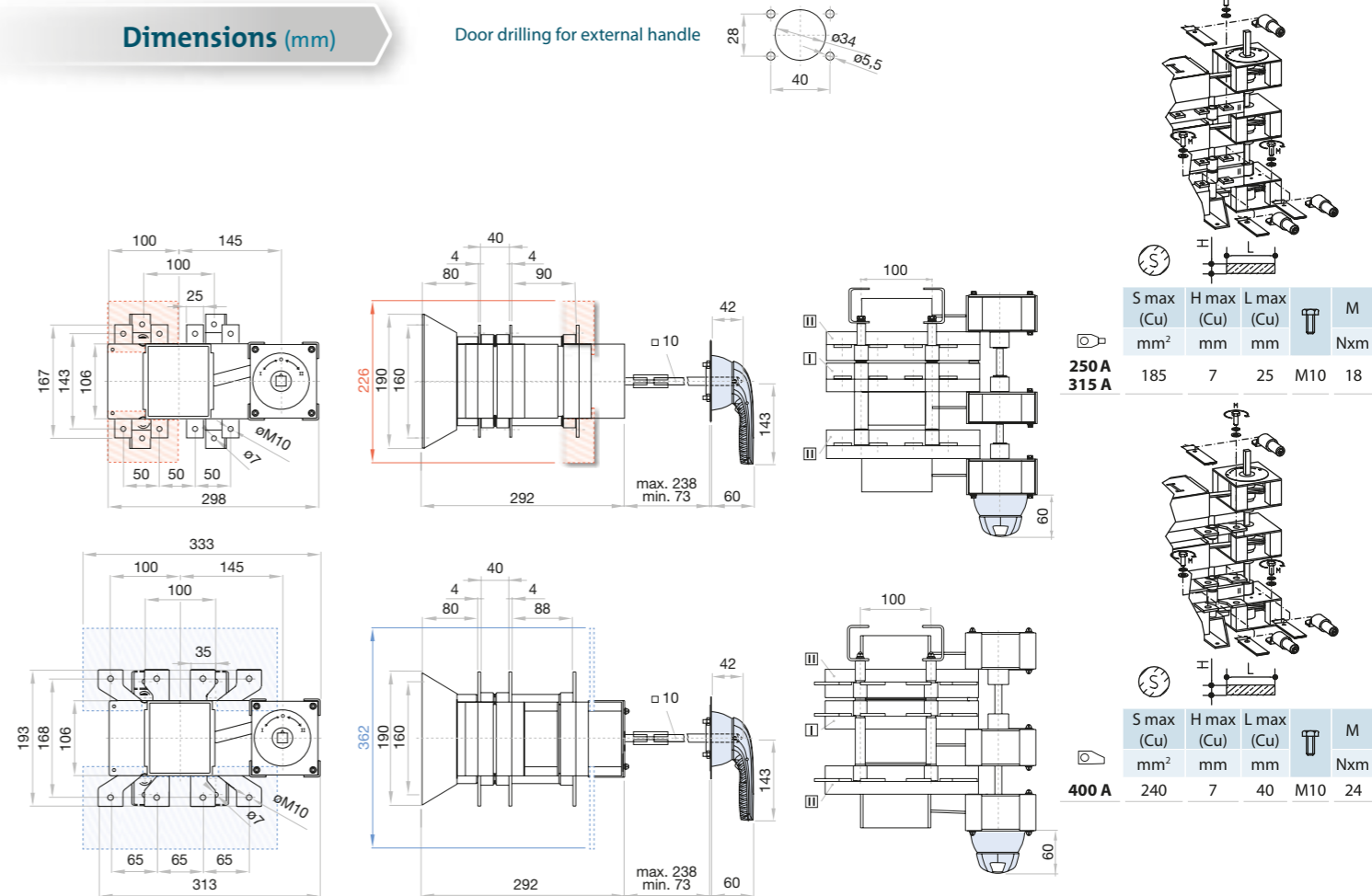
			250	315	400
Rated breaking capacity	400V AC22	A	750	945	1200
Rated making capacity	400V AC22	A	750	945	1200
Short - circuit behaviour					
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	20	20	20
Short - time withstand current (1 sec.)	I _{cw}	kA rms	12	12	12
Number of mechanical operations (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



There are versions of bypass changeover without OFF 0 position "overlapped contacts":
SSB (I - I + II - II) = SSS....., please consult
Also available 4P changeover switches under request, please consult



Dimensions (mm)



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

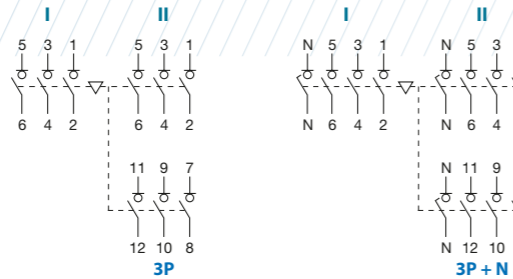
S max (Cu)	H max (Cu)	L max (Cu)	T	M
mm ²	mm	mm		Nxm
400 A	240	7	40	M10 24

S5B Bypass changeover switch base mounting 3P - 3P+N

Size 2
A 500|630



3P	CODE-500A	S5B05003PRO	CODE-630A	S5B06303PRO
3P+N		S5B05003NR0		S5B06303NR0



Technical information

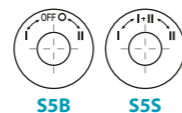


According to IEC 60947-3

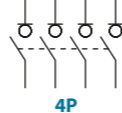
				500	630
Rated thermal current	I _{th} in ambient at 40° C	A		500	630
Rated insulation voltage	U _i	V		1000	1000
Rated impulse withstand voltage	U _{imp}	kV		12	12
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A		500	630
(Rated operational frequency 50/60 Hz)	U _e 400V AC22A	A		500	630

^{*(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":
SSB (I - I + II - II) = SSS....., please consult



Also available 4P changeover switches under request, please consult

Accessories



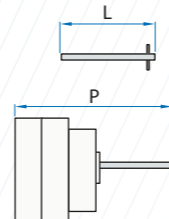
Direct handle
CODE D5LLI22



Terminal shrouds
CODE DS-CU21
(1 kit for input or output only front side)



External handle included shaft ^{*(e1)}
IP65
CODE D5LLA21



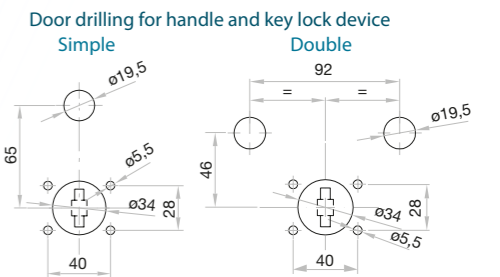
Shafts
Standard shaft included ^{*(e1)}
L (mm) | P (mm)
239 | 448... 613



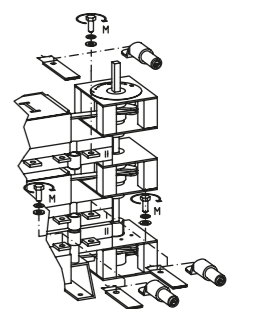
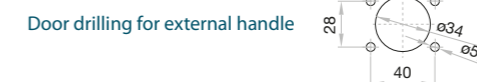
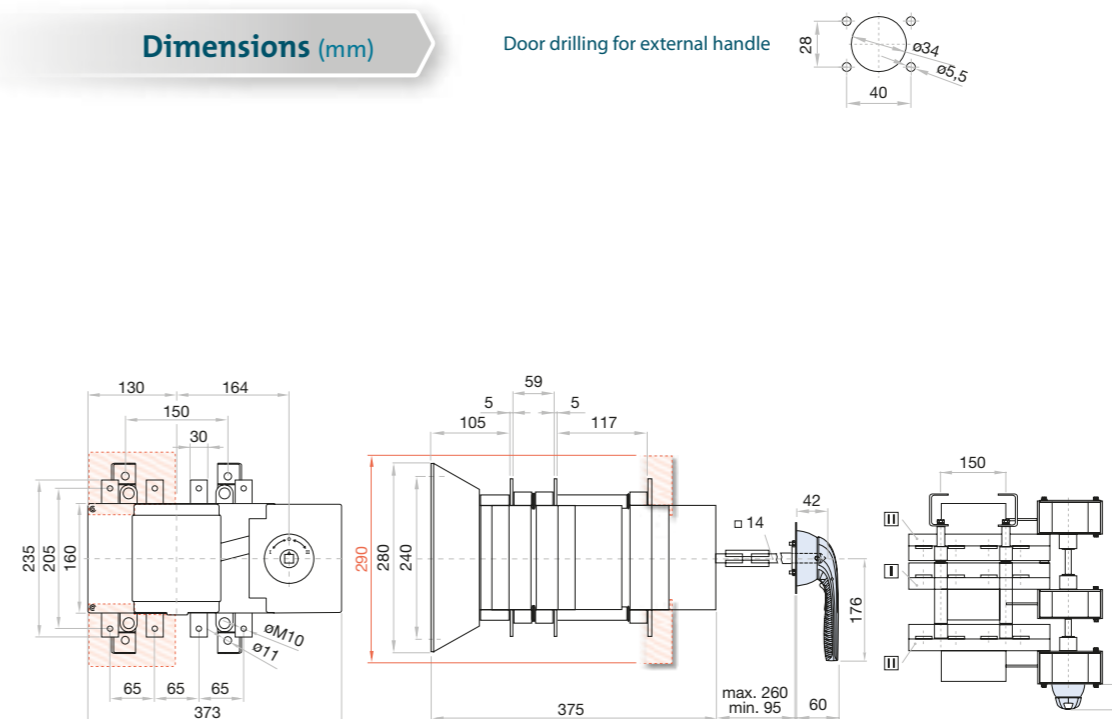
Auxiliary contacts
1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



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



Dimensions (mm)



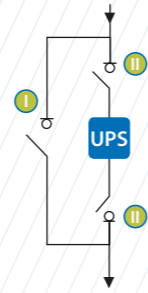
	S max (Cu)	H max (Cu)	L max (Cu)	T	M
500 A	2x185	6	40	M10	24

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

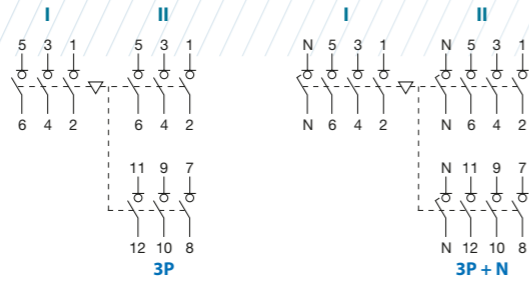


S5B Bypass changeover switch base mounting 3P - 3P+N

Size 3
A 800|1000



CODE-800A **S5B08003PRO** **S5B10003PCO**
3P **S5B08003NR0** **S5B10003NC0**
3P+N



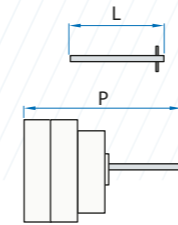
Accessories



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.

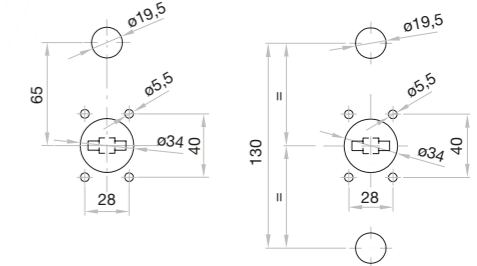


Terminal shrouds
CODE DS-CU31
(1 kit for input or output only front side)



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



Technical information

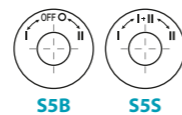


According to IEC 60947-3

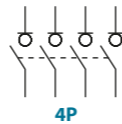
				800	1000
Rated thermal current I _{th} in ambient at 40° C	A			800	1000
Rated insulation voltage U _i	V			1000	1000
Rated impulse withstand voltage U _{imp}	kV			12	12
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	I _e U _e 400V AC21A	A		800	1000
	I _e U _e 400V AC22A	A		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

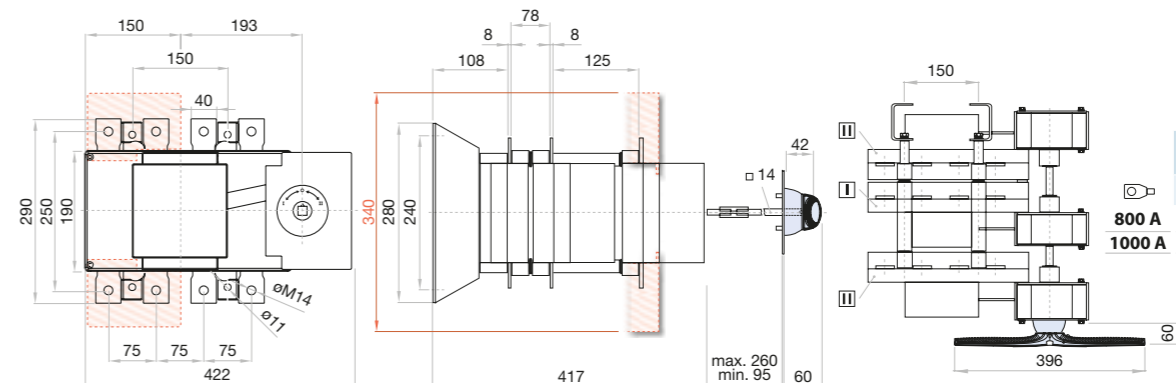


There are versions of bypass changeover without OFF 0 position "overlapped contacts":
SSB (I - I + II - II) = SSS....., please consult

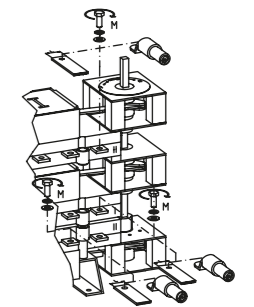
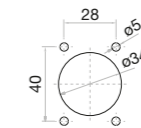


Also available 4P changeover switches under request, please consult

Dimensions (mm)



Door drilling for external handle



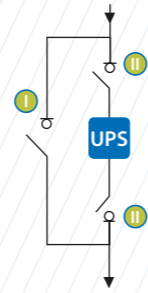
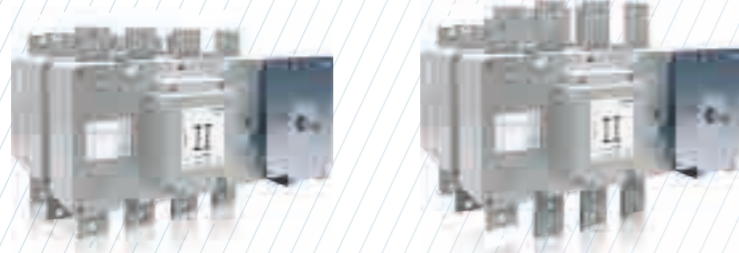
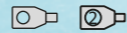
	S max (Cu)	H max (Cu)	L max (Cu)	T	M
	mm ²	mm	mm		Nxm
800 A	2x240	2x10	50	M14	45
1000 A	2x300	2x10			



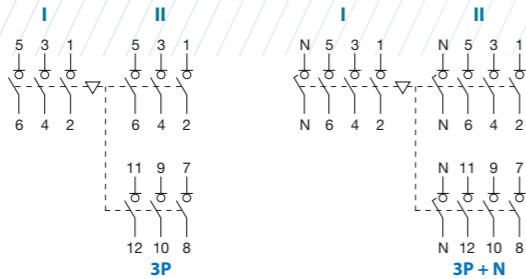
S5B Bypass changeover switch base mounting 3P - 3P+N

Size 4

A 1250|1600|1800|2000



3P	CODE-1250A	CODE-1600A	CODE-1800A	CODE-2000A
	S5B12503PS0	S5B16003PS0	S5B18003PS0	S5B20003PD0
3P + N	S5B12503NS0	S5B16003NS0	S5B18003NS0	S5B20003ND0



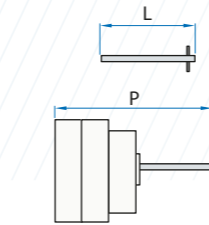
Accessories



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.

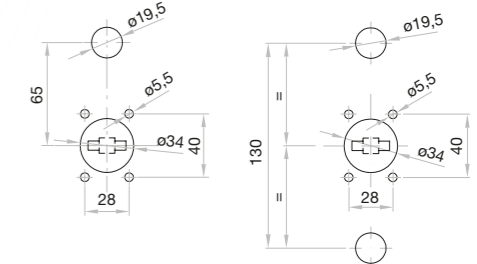


Terminal shrouds
CODE DS-CU41
(1 kit for input or output only front side)



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



Technical information

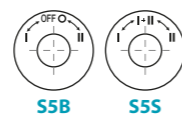


According to IEC 60947-3

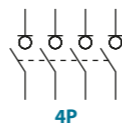
			1250	1600	1800	2000
Rated thermal current I _{th} in ambient at 40° C	A		1250	1600	1800	2000
Rated insulation voltage U _i	V		1000	1000	1000	1000
Rated impulse withstand voltage U _{imp}	kV		12	12	12	12
AC Rated operational current ⁽¹⁾	I _e U _e 400V AC21A	A	1250	1600	1800	2000
(Rated operational frequency 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":
SSB (I - I + II - II) = SSS, please consult

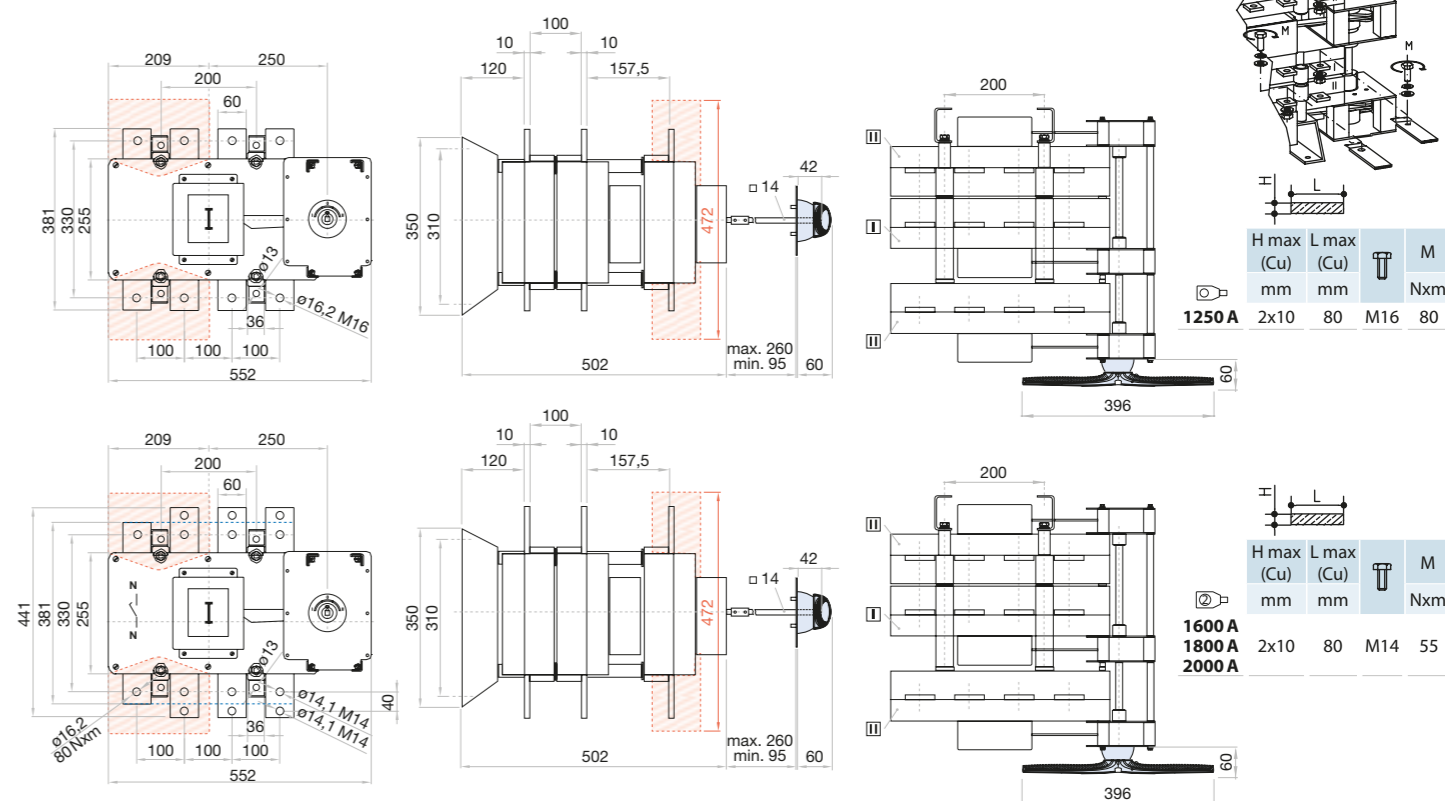


Also available 4P changeover switches under request, please consult



tests:

Dimensions (mm)



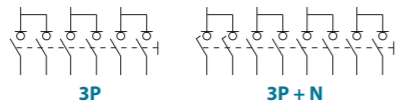
CTR₂ Metal enclosed compact changeover switch IP65

3P - 3P+N

Size 00
A 63|80|100|125



	CODE-63A	CODE-80A	CODE-100A	CODE-125A
3P	CTR2EC00633PS	CTR2EC00803PS	CTR2EC01003PS	CTR2EC01253PS
3P+N	CTR2EC00633NS	CTR2EC00803NS	CTR2EC01003NS	CTR2EC01253NS



Accessories



External handle included shaft
CODE DCELAB1



Auxiliary contacts
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)

Patent pending
EP18382154

Technical information



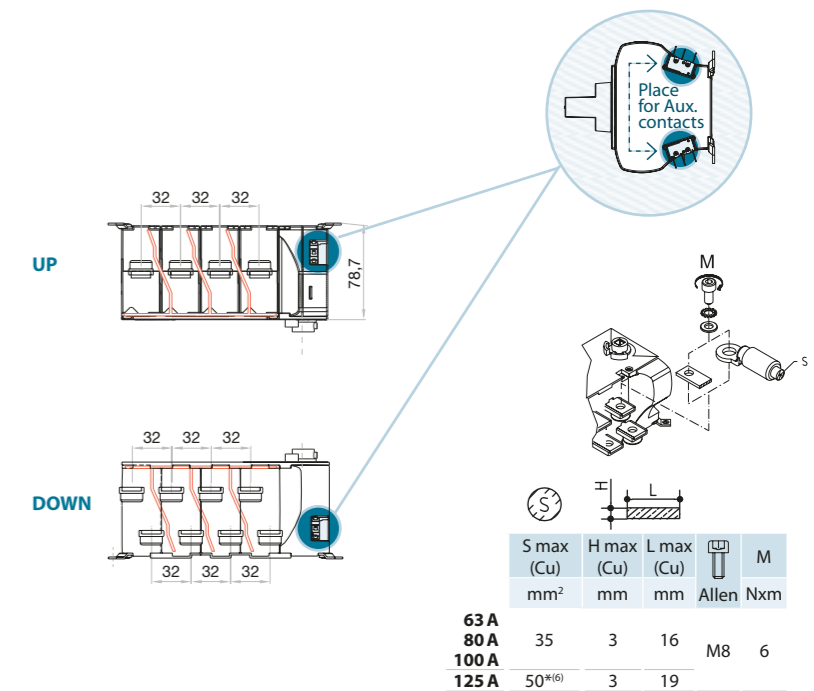
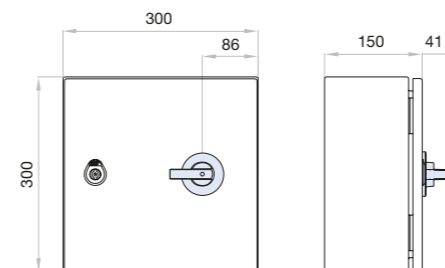
According to IEC 60947-3
IEC 61439-2

		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)}	I _e	AC21A	A	63	80	100	125
		U _e 400V AC22A	A	50	80	100	125
		AC23A	A	40	80	100	125
Rated breaking capacity	400V, cos φ = 0,35-0,45	A		320	640	800	800
				400	800	1000	1000

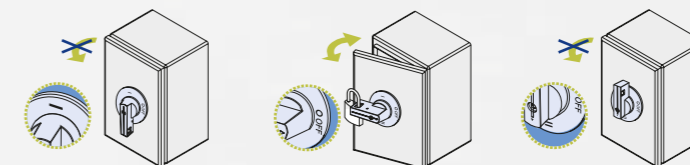
^{*(1)} Please, inquire for other voltages and/or utilization categories
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100ms)

		63 80 100 125				
Short-circuit behaviour						
Rated short-circuit making capacity ^{*(2)}	I _{cm}	kA	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			

Dimensions (mm)



^{*(6)} Use phase barriers in order to keep the clearance in air distances.



Standard supply CTR₂

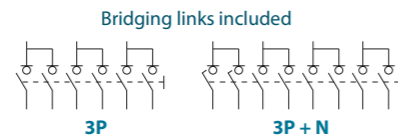
CTR₂ Metal enclosed transfer switch IP65

3P - 3P+N

Size 00
A 63|80



CODE-63A **3P** CTR2LC00633PB **CODE-80A** CTR2LC00803PB
3P + N CTR2LC00633NB CTR2LC00803NB



Accessories



>> **External handle** included
IP65



>> **Bridging links** included
CODE D5LPCB1



>> **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 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

Technical information

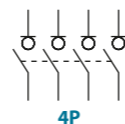


According to IEC 60947-3
IEC 61439-1

			63	80
Rated thermal current	I _{th} in ambient at 40° C	A	63	80
Rated insulation voltage	U _i	V	800	800
Rated impulse withstand voltage	U _{imp}	kV	8	8
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	400V AC21A	A	63	80
	400V AC22A	A	63	63
	400V AC23A	A	50	50

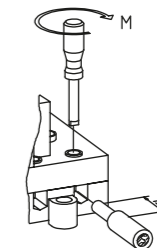
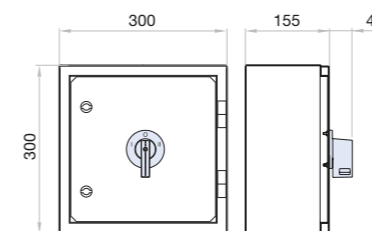
^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50 ms. - 100 ms.)

			63	80
Rated breaking capacity	400V AC22	A	189	189
Rated making capacity	400V AC22	A	189	189
Short - circuit behaviour				
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	5	5
Short - time withstand current (1 sec.)	I _{cw}	kA rms	3	3
Number of mechanical operations (according to the standards, for other values please consult)		Cycles	10000	10000
Maximum weight (3/4 poles)		Kg	Consult	

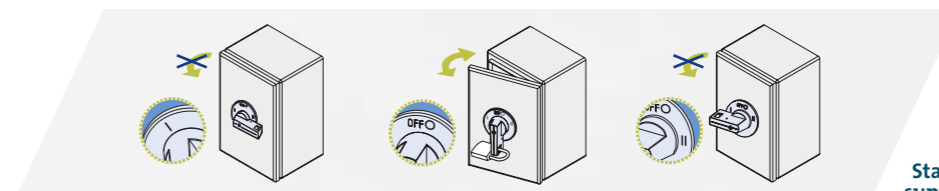


Also available 4P changeover switches under request, please consult

Dimensions (mm)



S max (Cu)	M
mm ²	Nxm
25	2

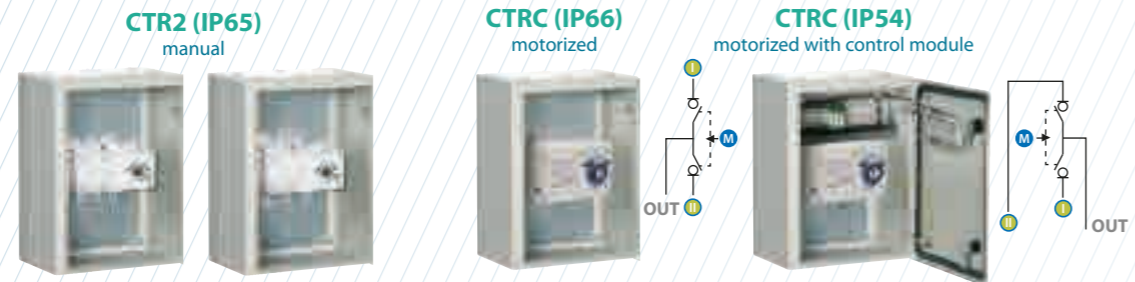


Standard supply

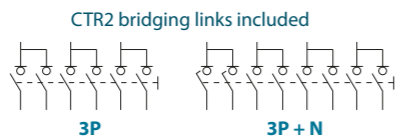
CTR₂ | CTRC Metal enclosed transfer switch IP54-IP66

3P - 3P+N

Size 0
A 125|160|200



	CODE-125A	CODE-160A	CODE-200A	CODE-200A
CTR2 (IP65) manual 3P + N	CTR2FC01253PS CTR2FC01253NS	CTR2FC01603PS CTR2FC01603NS	-	CTR2FC02003PS CTR2FC02003NS
CTRC (IP66) motorized 3P + N	CTRCFC01253PSAN CTRCFC01253NSAN	CTRCFC01603PSAN CTRCFC01603NSAN	CTRCFC02003PSAN CTRCFC02003NSAN	-
CTRC (IP54) with control module 3P + N	CTRCFC01253NSBJ	-	CTRCFC02003NSBJ	-



Technical information

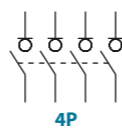


According to IEC 60947-3
IEC 61439-2

			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⁾	I _e U _e 400V AC21A	A	125	160	200
(Rated operational frequency 50/60 Hz)	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.)
⁽³⁾ Please consult us for CTRC motorized operations

			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) CTR ₂ ⁽³⁾	Cycles		8000	8000	8000
Maximum weight (3/4 poles)		Kg	Consult		



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** ⁽¹⁾ 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** ⁽¹⁾ for CTR2

3P	4P
DS-PB01	DS-PB02
DS-PB04	DS-PB03

(1 kit for input or output)
⁽¹⁾ These accessories aren't compatible with each other



» **Bridging links** included
CODE D5LPC03 (4 units)



» **Safety key lock device** for CTR2
Simple CODE D5LCBB1
Double CODE D5LCBB1
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

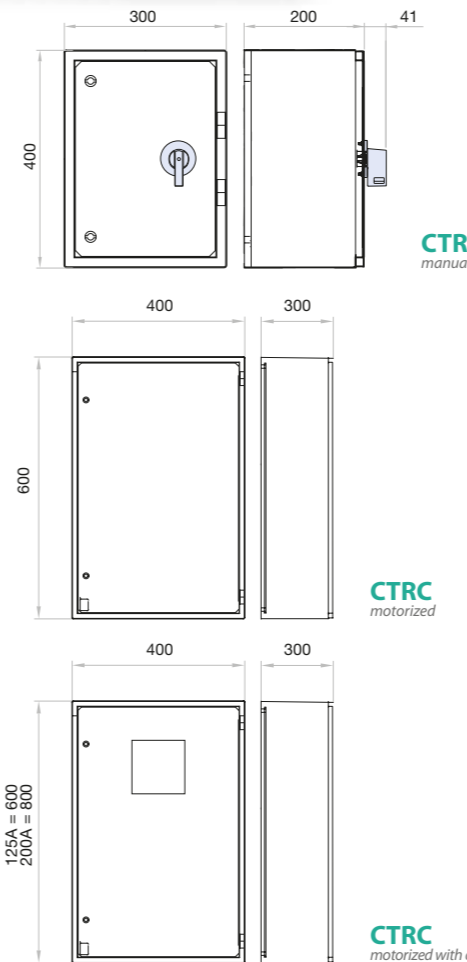


» **Control module** ^(G1)

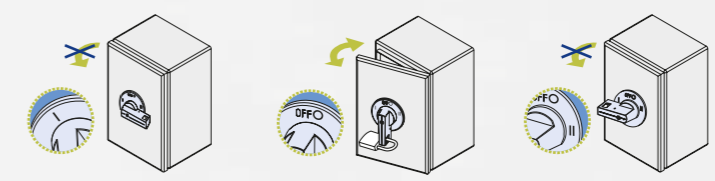
- > LCD graphic screen
- > 3 analog inputs for resistive sensors:
 - Oil pressure
 - Coolant temperature
 - Fuel level
- > 5 + 3 digital inputs:
 - 4 programmable, negative
 - 3 programmable, negative, alternative to resistive sensors
 - 1 emergency stop button, positive
- > 6 digital outputs:
 - 6 positive 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)	H max (Cu)	L max (Cu)	T	M	
CTR2	mm ²	mm	mm		Nxm	
125 A	95	5	25	M8	13	
160 A						
CTRC	mm ²	Z max	H max (Cu)	L max (Cu)	T	M
125 A			mm	mm		Nxm
200 A	120	5	30	M10	18	
CTRC	mm ²	Z max	H max (Cu) <th>L max (Cu)</th> <th>T</th> <th>M</th>	L max (Cu)	T	M
125 A			mm	mm		Nxm
200 A	240	31	2x5	30	M10	24



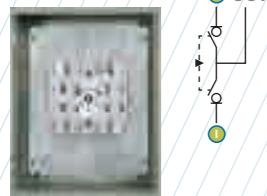
Standard supply CTR₂

CTR₂ | CTRC Metal enclosed transfer switch IP54-IP66

3P - 3P+N

Size 1
A 200|250|315|400

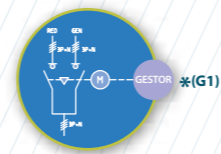
CTR₂ (IP65)
manual



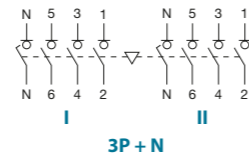
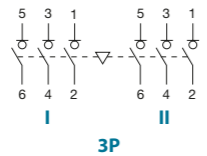
CTRC (IP66)
motorized



CTRC (IP54)
motorized with control module



	CODE-200A	CODE-250A	CODE-315A	CODE-400A
CTR₂ (IP65) manual 3P 3P+N	CTR2CC02003PS CTR2CC02003NS	CTR2CC02503PS CTR2CC02503NS	CTR2CC03153PS CTR2CC03153NS	CTR2CC04003PS CTR2CC04003NS
CTRC (IP66) motorized 3P 3P+N	CTRCCC02003PSAN CTRCCC02003NSAN	CTRCCC02503PSAN CTRCCC02503NSAN	CTRCCC03153PSAO CTRCCC03153NSAO	CTRCCC04003PSAO CTRCCC04003NSAO
CTRC (IP54) motorized with control module 3P+N	-	CTRCCC02503NSBJ	-	CTRCCC04003NSBK



Technical information

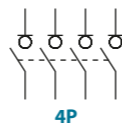


According to IEC 60947-3
IEC 61439-2

		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⁾ (Rated operational frequency 50/60 Hz)	I _e U _e 400V AC21A	A 200	250	315	400
	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) CTR ₂ ⁽³⁾	Cycles	8000	8000	8000	5000
Maximum weight (3/4 poles)	Kg	Consult			



Also available 4P changeover switches under request, please consult

Accessories



» **External handle** included in CTR₂
IP65
CODE DCCLA11



» **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** for CTR₂

POS. I	Inputs	POS. II	POS. I&II	Common output
3P	3P	3P+N	3P+N	3P 3P+N
DM2CU12	DM2CU11	DM2CU13	DCCCU11	DCCCU12



» **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

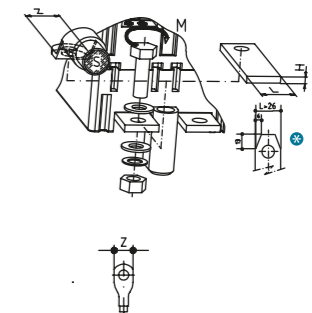
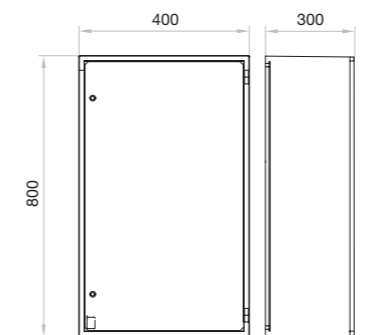
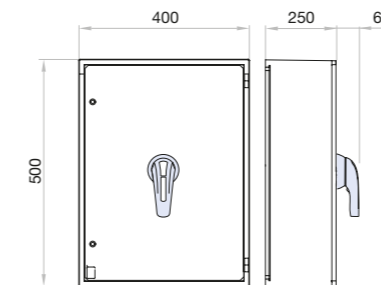


» **Control module^(G1)**

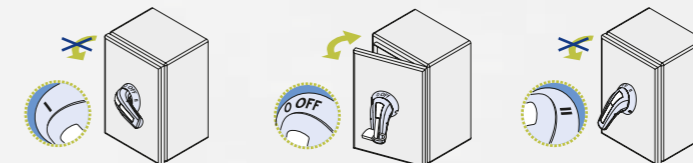
- » LCD graphic screen
- » 3 analog inputs for resistive sensors:
 - Oil pressure
 - Coolant temperature
 - Fuel level
- » 5 + 3 digital inputs:
 - 4 programmable, negative
 - 3 programmable, negative, alternative to resistive sensors
 - 1 emergency stop button, positive
- » 6 digital outputs:
 - 6 positive 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)	Z max	H max (Cu)	L max (Cu)	T	M
mm ²	mm	mm	mm	mm	Nxm
240	31	2x5	30	M10	24



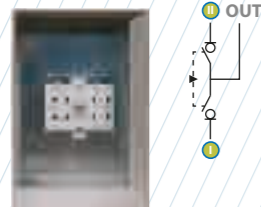
Standard supply CTR₂

CTR₂ | CTRC Metal enclosed transfer switch IP54-IP66

3P - 3P+N

Size 2
A 500|630|800

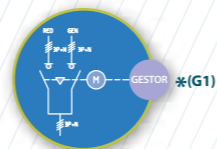
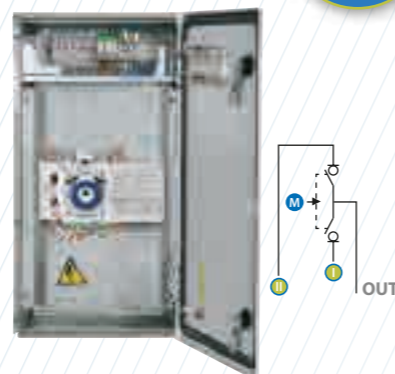
CTR₂ (IP65)
manual



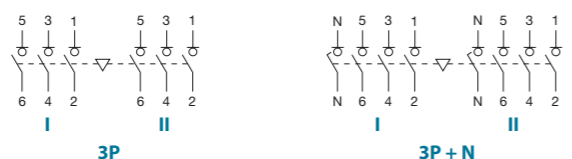
CTRC (IP66)
motorized



CTRC (IP54)
motorized with control module



	CODE-500A	CODE-630A	CODE-800A
CTR₂ (IP65) manual 3P 3P+N	CTR2CC05003PS CTR2CC05003NS	CTR2CC06303PS CTR2CC06303NS	CTR2CC08003PS CTR2CC08003NS
CTRC (IP66) motorized 3P 3P+N	CTRCCC05003PSAO CTRCCC05003NSAO	CTRCCC06303PSAO CTRCCC06303NSAO	CTRCCC08003PSAO CTRCCC08003NSAO
CTRC (IP54) motorized with control module 3P+N	-	CTRCCC06303NSBK	-



Technical information

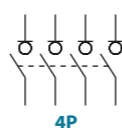


According to IEC 60947-3
IEC 61439-2

			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) CTR ₂ ^{*(3)}	Cycles		5000	5000	3000
Maximum weight (3/4 poles)		Kg	Consult		



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



» **Terminal shrouds** for CTR₂

POS. I	Inputs	POS. II	POS. I&II	Common output
3P	3P	3P+N	3P+N	3P+N
DM2CU22	DM2CU21	DM2CU23	DCCCU21	DCCCU22



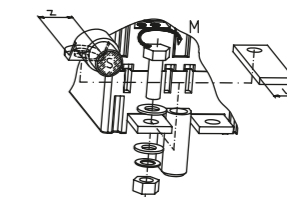
» **Safety key lock device** for CTR₂
Simple CODE D5LCB21
Double CODE D5LCF21

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

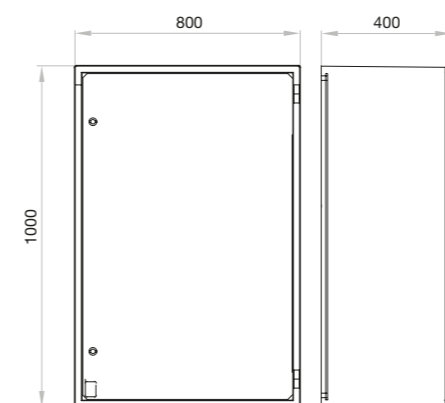
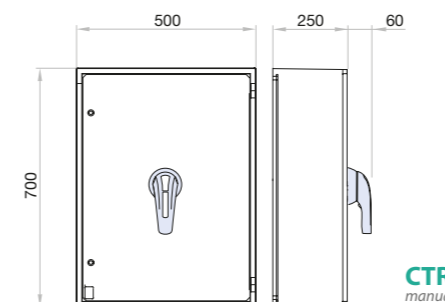


- » **Control module** ^{*(G1)}
- » LCD graphic screen
 - » 3 analog inputs for resistive sensors:
 - Oil pressure
 - Coolant temperature
 - Fuel level
 - » 5 + 3 digital inputs:
 - 4 programmable, negative
 - 3 programmable, negative, alternative to resistive sensors
 - 1 emergency stop button, positive
 - » 6 digital outputs:
 - 6 positive static outputs protected
 - » Operation with universal battery 12-24 Vdc

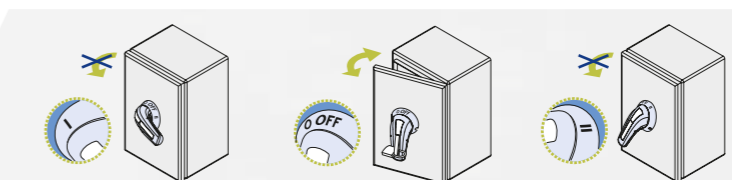
^{*(G1)} The control module and its features are subject to change, please consult



Dimensions (mm)



S max (Cu)	Z max	H max (Cu)	L max (Cu)	T	M
mm ²		mm	mm		Nxm
2x240	45	2x6	45	M12	45



Standard supply CTR₂

CTR₂ | CTRC Metal enclosed transfer switch IP54-IP66

3P - 3P+N

Size 3

A 1000 | 1250



Accessories



» External handle included in CTR2
IP65
CODE DCCLA31



» 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 for CTR2

POS. I	Inputs	POS. II	POS. I&II	Common output
3P	3P	3P+N	3P+N	3P 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

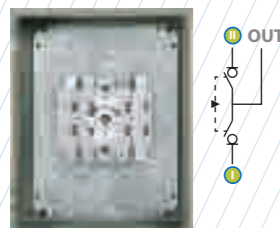


» Control module^{*(G1)}

- > 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

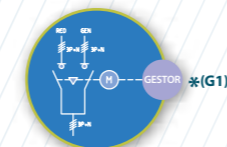
CTR2 (IP65)
manual



CTR2 (IP66)
motorized



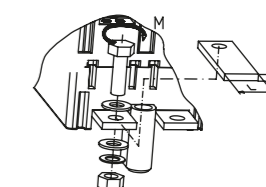
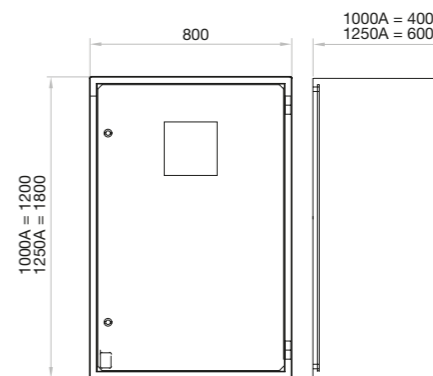
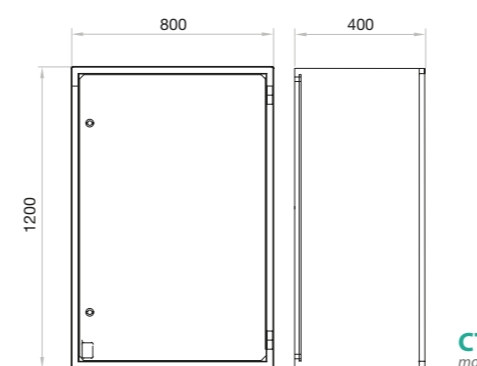
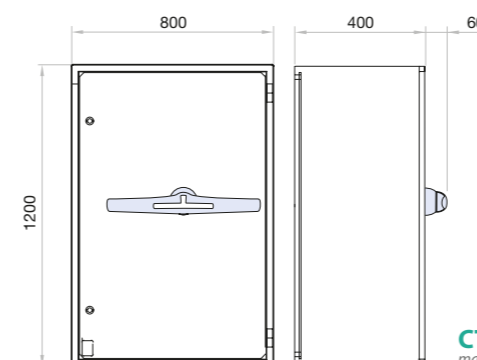
CTR2 (IP54)
motorized with control module



	CODE-1000A	CODE-1250A
CTR2 (IP65) manual 3P	CTR2CC10003PS	CTR2CC12503PS
CTR2 (IP65) manual 3P+N	CTR2CC10003NS	CTR2CC12503NS
CTR2 (IP66) motorized 3P	CTRCCC10003PSAP	CTRCCC12503PSAP
CTR2 (IP66) motorized 3P+N	CTRCCC10003NSAP	CTRCCC12503NSAP
CTR2 (IP54) motorized with control module 3P+N	CTRCCC10003NSBK	CTRCCC12503NSBK

	3P	3P+N
Terminal arrangement I	5 3 1 6 4 2	5 3 1 6 4 2
Terminal arrangement II	5 3 1 6 4 2	5 3 1 6 4 2

Dimensions (mm)



H max (Cu)	L max (Cu)	M
2x10 mm	60 mm	M14

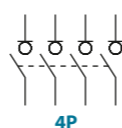
Technical information



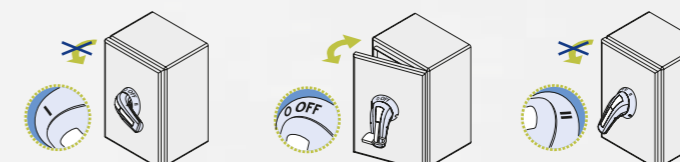
According to IEC 60947-3
IEC 61439-2

			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

			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	



Also available 4P changeover switches under request, please consult

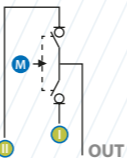
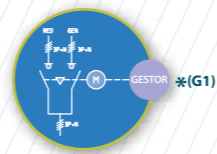
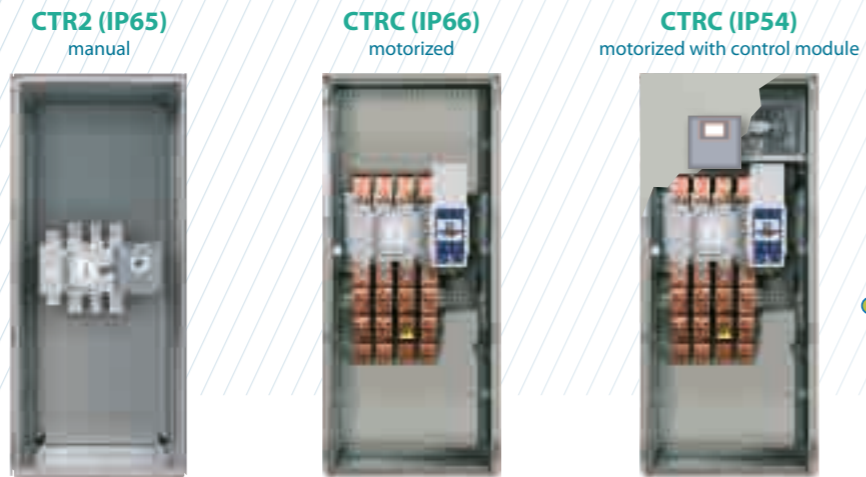


Standard supply CTR2

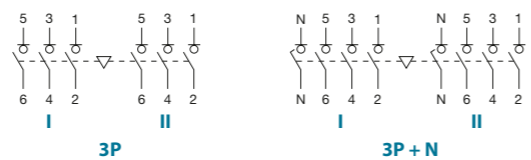
CTR₂ | CTRC Metal enclosed transfer switch IP54-IP66

3P - 3P+N

Size 4
A 1600|1800|2000



	CODE-1600A	CODE-1800A	CODE-2000A
CTR2 (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

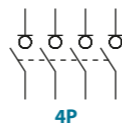


According to IEC 60947-3
IEC 61439-2

			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
I_e = 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)

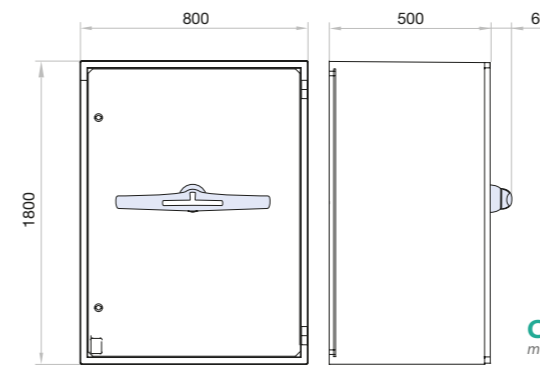


» Safety key lock device for CTR2
Simple CODE D5LCB41
Double CODE D5LCF41
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

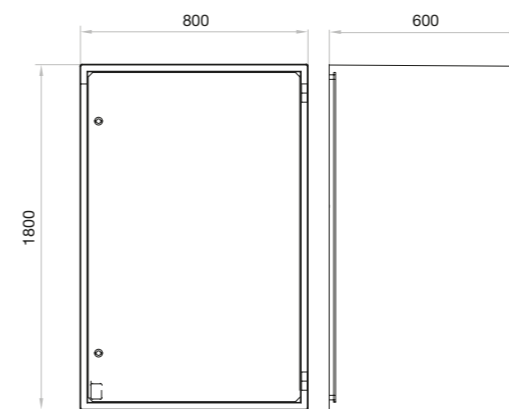


» Control module ^{*(G1)}
» LCD graphic screen
» 3 analog inputs for resistive sensors:
- Oil pressure
- Coolant temperature
- Fuel level
» 5 + 3 digital inputs:
- 4 programmable, negative
- 3 programmable, negative, alternative to resistive sensors
- 1 emergency stop button, positive
» 6 digital outputs:
- 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

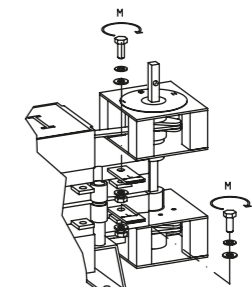
Dimensions (mm)



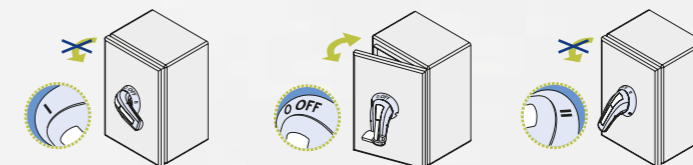
CTR2 manual



CTRC motorized with control module



H max (Cu)	L max (Cu)	M
mm	mm	Nxm
2x10	80	M14 55



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



Accessories



» **External handle** included in CTR₂
(Slider bar)
CODE D5LEN51



» **Safety key lock device** for CTR₂
Simple CODE D5LCB41
Double CODE D5LCF41

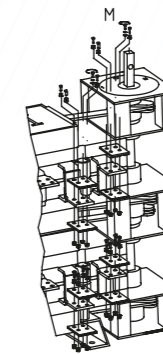
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



» **Auxiliary contacts**

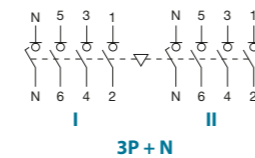
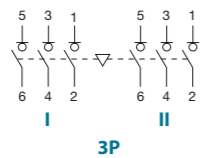
1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12

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



	H max (Cu) mm	L max (Cu) mm	T M	M Nxm
2000 A	4x10	80	M12	45
2500 A		100		
3150 A				

	CODE-2000A	CODE-2500A	CODE-3150A
CTR₂ (IP55) manual 3P	CTR2FC20003PP	CTR2FC25003PP	CTR2FC31503PP
3P+N	CTR2FC20003NP	CTR2FC25003NP	CTR2FC31503NP
CTRC (IP55) motorized 3P	CTRCFC20003PPAP	CTRCFC25003PPAP	CTRCFC31503PPAP
3P+N	CTRCFC20003NPAP	CTRCFC25003NPAP	CTRCFC31503NPAP



Technical information

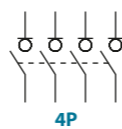


According to IEC 60947-3
IEC 61439-2

			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

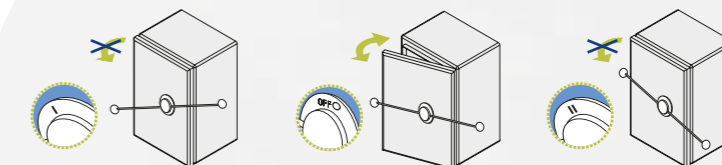
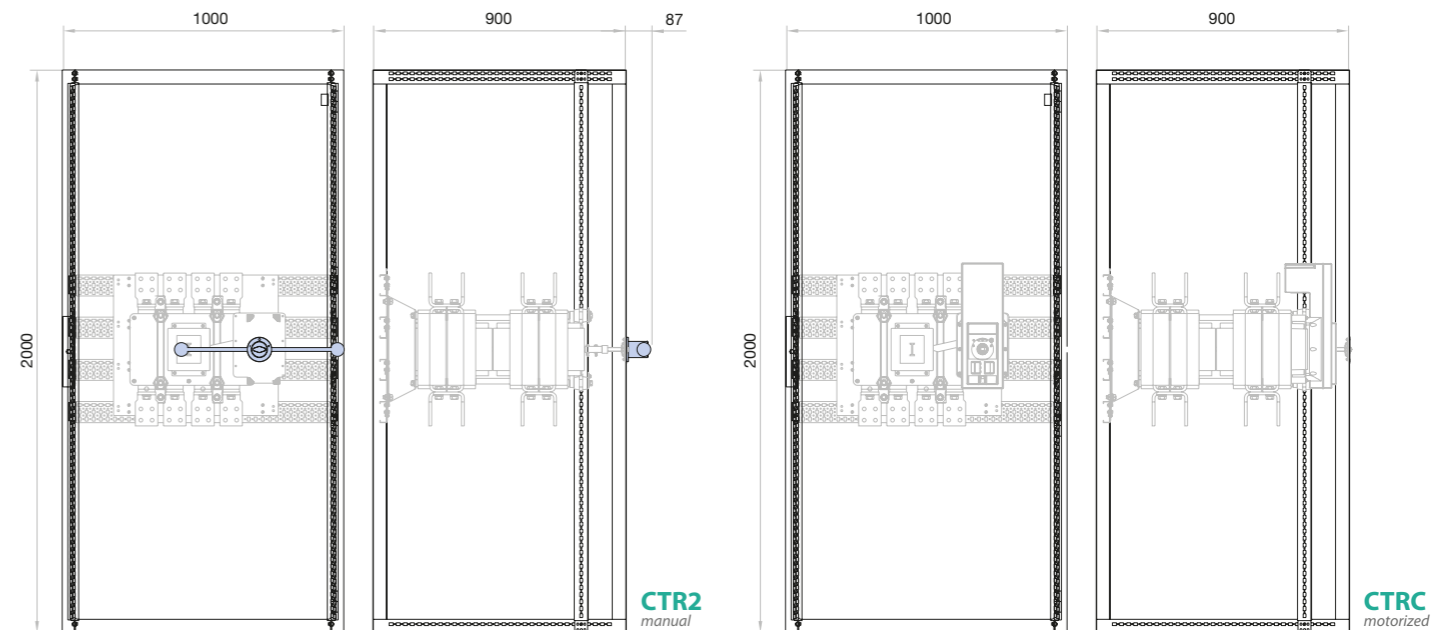
^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50 ms. - 100 ms.)
^{*(3)} Please consult us for CTRC motorized operations

			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		



Also available 4P changeover switches under request, please consult

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.

series
UM

According to:
IEC 60947-1 & 3
RoHS



Testing and approvals:



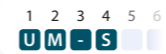
The motorized unit kits are manufactured with high safety self-extinguishing materials, providing an excellent level of electrical insulation, low smoke emission and high resistance to electromechanical stress.

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.

series
UM-S



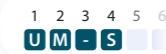
Supply voltage
230 Vac ^{*(1)}

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



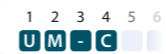
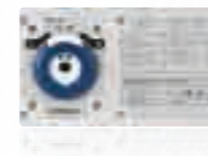
Supply voltage
120 - 230 Vac ^{*(1)}
with MODBUS ^{MB}

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



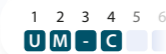
Supply voltage
230 Vac ^{*(1)}

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



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

Motorized operation

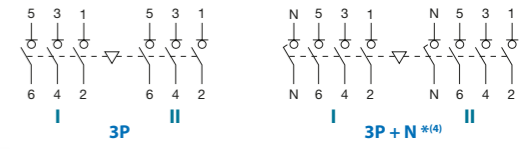
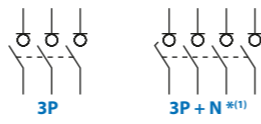
Manual operation
(maintenance or emergency)

Motorized operation

Manual operation
(maintenance or emergency)

> IEC60947-1 & 3. Low voltage devices.
General part and switch - disconnectors.

> According to European Standard 2014/35/UE.
> According to European standard 2014/30/UE of EMC.



S5 S5N S5 switches 3 & 4 poles (O-I) ready to motorize

Amp.	Size	Connection	3 pole (3P)		4 pole (3P + N) ^{*(1)}		120Vac ^{*(3)}		230Vac ^{*(3)}		Full details in page
			Code	Code	Code	Code	Code	Code			
250	1	I	S5-02503PRC	S5-02503NRC	-	-	-	UM-S1A230Z	196		
315	1		S5-03153PRC	S5-03153NRC	-	-	-	UM-S1A230Z	196		
400			S5-04003PCC	S5-04003NCC	-	-	-	UM-S2A230Z	196		
500	2	I	S5-05003PRC	S5-05003NRC	-	-	-	UM-S2A230Z	196		
630			S5-06303PRC	S5-06303NRC	-	-	-	UM-S2A230Z	196		
800		S5-08003PCC	S5-08003NCC	-	-	-	UM-S2A230Z	196			
1000		3	S5-10003PRC	S5-10003NRC	MB UM-S31120M	MB UM-S31230M	198				
1250			S5-12503PCC	S5-12503NCC	-	-	-	UM-S31230M	198		
1000	4	I	S5-10003PSC	S5-10003NSC	-	-	-	UM-S41120M	198		
1250			S5-12503PSC	S5-12503NSC	-	-	-	UM-S41120M	198		
1600		S5-16003PSC	S5-16003NSC	-	-	-	UM-S41230M	198			
1800		S5-18003PSC	S5-18003NSC	-	-	-	UM-S41230M	198			
2000		S5-20003PDC	S5-20003NDC	-	-	-	UM-S56230M	198			
2000		5 (S5N)	I	S5N20003PPC	S5N20003NPC	-	-	-	UM-S56230M	198	
2500				S5N25003PPC	S5N25003NPC	-	-	-	UM-S56230M	198	
3150				S5N31503PPC	S5N31503NPC	-	-	-	UM-S56230M	198	

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

S5F CC S5 changeover switches 3 & 4 poles (I-O-II) ready to motorize ^{*(5)}

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	I	S5F	S5F01253PS0	S5F01253NS0	-	-	-	UM-C0A230Z	202		
160			S5F	S5F01603PS0	S5F01603NS0	-	-	-	UM-C1A230Z	202		
200			S5F	S5F02003PS0	S5F02003NS0	-	-	-	UM-C2A230Z	202		
200	1	I	CCF	CCF02003PS0	CCF02003NS0	-	-	-	UM-C2A230Z	202		
250			CCF	CCF02503PS0	CCF02503NS0	-	-	-	UM-C2A230Z	202		
315		CCF	CCF03153PS0	CCF03153NS0	-	-	-	UM-C2A230Z	202			
400		CCF	CCF04003PS0	CCF04003NS0	-	-	-	UM-C2A230Z	202			
500		2	CCF	CCF05003PS0	CCF05003NS0	MB UM-C21120M	MB UM-C21230M	204				
630			CCF	CCF06303PS0	CCF06303NS0	-	-	-	UM-C21230M	204		
800		CCF	CCF08003PS0	CCF08003NS0	-	-	-	UM-C31120M	204			
1000		3	CCF	CCF10003PS0	CCF10003NS0	MB UM-C31120M	MB UM-C31230M	204				
1250			CCF	CCF12503PS0	CCF12503NS0	-	-	-	UM-C45120M	204		
1600		4	S5F	S5F16003PS0	S5F16003NS0	-	-	-	UM-C45230M	204		
1800	S5F		S5F18003PS0	S5F18003NS0	-	-	-	UM-C55230M	204			
2000	5	S5F	S5F20003PD0	S5F20003ND0	-	-	-	UM-C55230M	204			
2000		S5F	S5F20003PP0	S5F20003NP0	-	-	-	UM-C55230M	204			
2500		S5F	S5F25003PP0	S5F25003NP0	-	-	-	UM-C55230M	204			
3150	S5F	S5F31503PP0	S5F31503NP0	-	-	-	UM-C55230M	204				

UM + SSF size 0 normal mounting
 UM + CCF sizes 1-2 normal mounting
 UM + CCF size 3 normal mounting
 UM + SSF sizes 4-5 normal mounting
 UM + CCF size 3 inverted mounting (please consult UM codes)
 UM + SSF sizes 4-5 inverted mounting (please consult UM codes)

S6 S6 switches 2, 3 & 4 poles (O-I) ready to motorize

Amp.	Size	Connection	Bipolar (2P)		3 pole (3P)		4 pole (3P + N) ^{*(1)}		230Vac ^{*(3)}		Full details in page
			Code	Code	Code	Code	Code	Code			
200	1	I	S6-02002PSC	S6-02003PSC	S6-02003NSC	-	-	-	UM-S1A230Z	196	
250			S6-02502PSC	S6-02503PSC	S6-02503NSC	-	-	-	UM-S1A230Z	196	
315			S6-03152PSC	S6-03153PSC	S6-03153NSC	-	-	-	UM-S2A230Z	196	
400			S6-04002PDC	S6-04003PDC	S6-04003NDC	-	-	-	UM-S2A230Z	196	
500			S6-05002PSC	S6-05003PSC	S6-05003NSC	-	-	-	UM-S2A230Z	196	
630	2	I	S6-06302PSC	S6-06303PSC	S6-06303NSC	-	-	-	UM-S2A230Z	196	
800			S6-08002PDC	S6-08003PDC	S6-08003NDC	-	-	-	UM-S2A230Z	196	

S5M S5N S6N S5 switches 6 & 8 poles (O-I) ready to motorize

Amp.	Size	Connection	6 pole (6P)		8 pole (8P)		120Vac ^{*(3)}		230Vac ^{*(3)}		Full details in page
			Code	Code	Code	Code	Code	Code			
125	1 (S6N)	I	S6N01256PSC	S6N01258PSC	-	-	-	UM-S2A230Z	196		
160			S6N01606PSC	S6N01608PSC	-	-	-	UM-S2A230Z	196		
200			S6N02006PSC	S6N02008PSC	-	-	-	UM-S2A230Z	196		
250			S6N02506PSC	S6N02508PSC	-	-	-	UM-S26120M	200		
315			S6N03156PSC	S6N03158PSC	-	-	-	UM-S26230M	200		
400			S6N04006PDC	S6N04008PDC	-	-	-	UM-S35120M	200		
500	2 (S5M)	I	S6N05006PRC	S6N05008PRC	MB UM-S26120M	MB UM-S26230M	200				
630			S6N06306PRC	S6N06308PRC	-	-	-	UM-S35230M	200		
800	3 (S5M)	I	S5M08006PRC	S5M08008PRC	MB UM-S35120M	MB UM-S35230M	200				
1000			S5M10006PCC	S5M10008PCC	-	-	-	UM-S56230M	200		
1250	4 (S5N)	I	S5N12506PSC	S5N12508PSC	-	-	-	UM-S56230M	200		
1600			S5N16006PSC	S5N16008PSC	-	-	-	UM-S56230M	200		
1800			S5N18006PSC	S5N18008PSC	-	-	-	UM-S56230M	200		
2000			S5N20006PDC	S5N20008PDC	-	-	-	UM-S56230M	200		

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)

^{*(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.

S5B S5 bypass changeover switches 3 & 4 poles (I-O-II) ready to motorize ^{*(7)}

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	I	S5B01253PS0	S5B01253NS0	-	-	-	UM-C0A230Z	202		
160			S5B01603PS0	S5B01603NS0	-	-	-	UM-C1A230Z	202		
200			S5B02003PS0	S5B02003NS0	-	-	-	UM-C2A230Z	202		
250	1	I	S5B02503PRC	S5B02503NRC	-	-	-	UM-C2A230Z	202		
315			S5B03153PRC	S5B03153NRC	-	-	-	UM-C2A230Z	202		
400		S5B04003PCC	S5B04003NCC	-	-	-	UM-C2A230Z	202			
500		2	S5B05003PRC	S5B05003NRC	MB UM-C24120M	MB UM-C24230M	206				
630			S5B06303PRC	S5B06303NRC	-	-	-	UM-C34120M	206		
800		3	S5B08003PRC	S5B08003NRC	MB UM-C34120M	MB UM-C34230M	206				
1000	S5B10003PCC		S5B10003NCC	-	-	-	UM-C44230M	206			
1250	4	I	S5B12503PS0	S5B12503NS0	-	-	-	UM-C44230M	206		
1600			S5B16003PS0	S5B16003NS0	-	-	-	UM-C44230M	206		
1800			S5B18003PS0	S5B18003NS0	-	-	-	UM-C44230M	206		
2000			S5B20003PD0	S5B20003ND0	-	-	-	UM-C44230M	206		

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.

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)

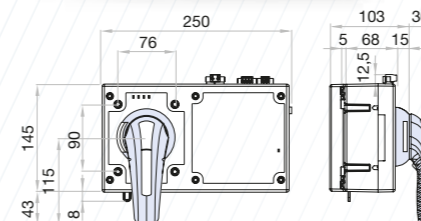


		CODE - 2P ^{*(1)}	CODE - 3P ^{*(1)}	CODE - 3P+N ^{*(1)}	CODE - 230 Vac ^{*(1)}
Size 1 S5	250A	-	S5-02503PRC	S5-02503NRC	UM UM-S1A230Z
	315A	-	S5-03153PRC	S5-03153NRC	UM UM-S1A230Z
	400A	-	S5-04003PCC	S5-04003NCC	UM UM-S1A230Z
	500A	-	S5-05003PRC	S5-05003NRC	UM UM-S1A230Z
Size 2 S5	630A	-	S5-06303PRC	S5-06303NRC	UM UM-S2A230Z
	800A	-	S5-08003PCC	S5-08003NCC	UM UM-S2A230Z
	200A	S6-02002PSC	S6-02003PSC	S6-02003NSC	UM UM-S1A230Z
Size 1 S6	250A	S6-02502PSC	S6-02503PSC	S6-02503NSC	UM UM-S1A230Z
	315A	S6-03152PSC	S6-03153PSC	S6-03153NSC	UM UM-S1A230Z
	400A	S6-04002PDC	S6-04003PDC	S6-04003NDC	UM UM-S1A230Z
	500A	S6-05002PSC	S6-05003PSC	S6-05003NSC	UM UM-S1A230Z
Size 2 S6	630A	S6-06302PSC	S6-06303PSC	S6-06303NSC	UM UM-S2A230Z
	800A	S6-08002PDC	S6-08003PDC	S6-08003NDC	UM UM-S2A230Z
Size 1 S6N	125A	-	S6N01256PSC	S6N01258PSC	UM UM-S2A230Z
	160A	-	S6N01606PSC	S6N01608PSC	UM UM-S2A230Z
	200A	-	S6N02006PSC	S6N02008PSC	UM UM-S2A230Z
	250A	-	S6N02506PSC	S6N02508PSC	UM UM-S2A230Z
	315A	-	S6N03156PSC	S6N03158PSC	UM UM-S2A230Z
	400A	-	S6N04006PDC	S6N04008PDC	UM UM-S2A230Z

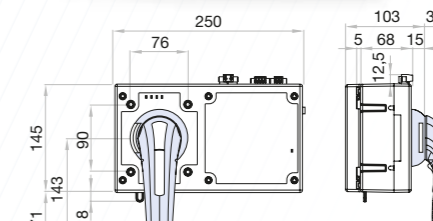
UM + S5/S6/S6N normal mounting
 * Auxiliary manual handle supplied with the UM

Dimensions (mm)

UM for size 1



UM for size 2

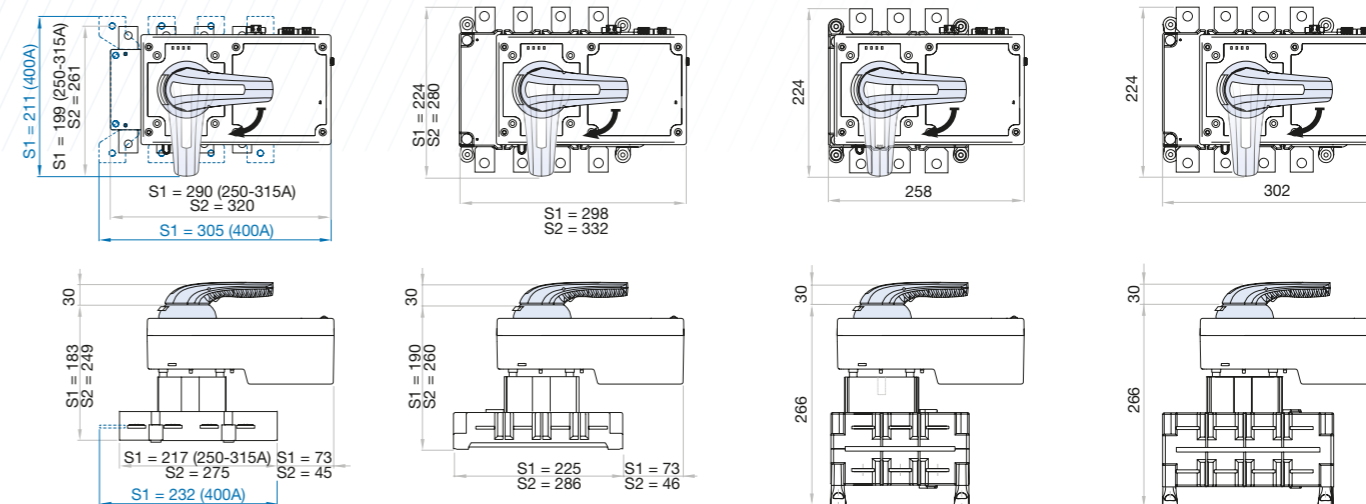


S5 size 1-2 + UM

S6 size 1-2 + UM

S6N 6P size 1 + UM

S6N 8P size 1 + UM



EMC table (Electromagnetic compatibility)

Test	Standard	According to standard		Results achieved	Values achieved in tests
		UNE/EN 61000	IEC 60947-6		
Immunity					
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 B	60% Un - 1000 ms 95% Un - 5000 ms
Emission					
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

Technical information



According to IEC 60947-3

		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	0,85*V a 1,15*V	0,85*V a 1,10*V	0,85*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

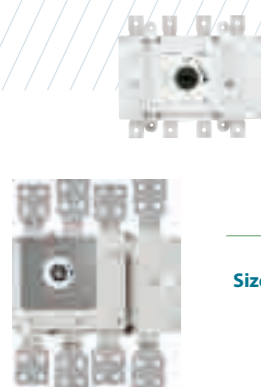
Pos.	Direction	Pos.	Operating time ^{*(3)}
0	→	I	750 ms
I	→	0	750 ms

^{*(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.

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)



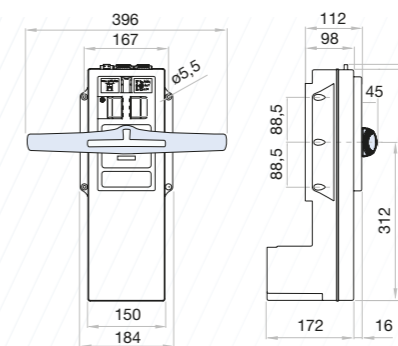
		CODE - 3P ^{*(1)}	CODE - 3P+N ^{*(1)}		CODE - 120 Vac ^{*(1)}	CODE - 230 Vac ^{*(1)}
Size 3 S5	800A	S5-08003PRC	S5-08003NRC	UM	UM-S31120M	UM-S31230M
	1000A	S5-10003PCC	S5-10003NCC			
	1250A	S5-12503PCC	S5-12503NCC			
Size 4 S5	1000A	S5-10003PSC	S5-10003NSC	UM	UM-S41120M	UM-S41230M
	1250A	S5-12503PSC	S5-12503NSC			
	1600A	S5-16003PSC	S5-16003NSC			
	1800A	S5-18003PSC	S5-18003NSC			
Size 5 S5N	2000A	S5N20003PPC	S5N20003NPC	UM	UM-S56230M	
	2500A	S5N25003PPC	S5N25003NPC			
	3150A	S5N31503PPC	S5N31503NPC			

- UM + S5 size 3 normal mounting
- UM + S5 size 4 normal mounting
- UM + S5N size 5 normal mounting

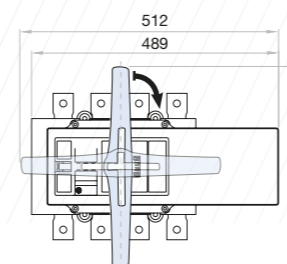
* Auxiliary manual handle supplied with the UM

Dimensions (mm)

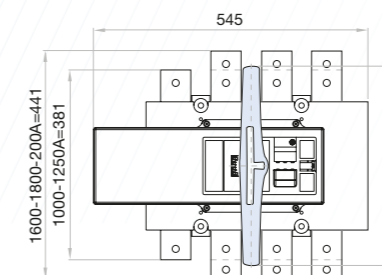
UM



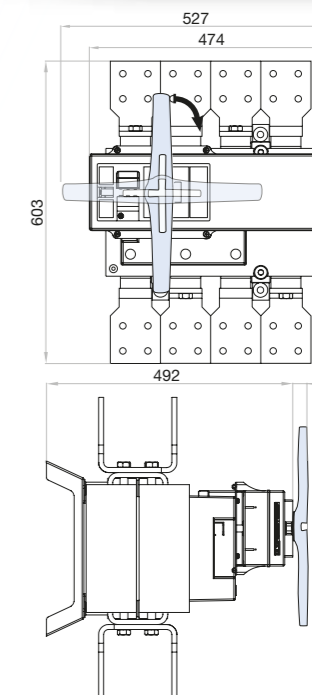
S5 size 3 + UM



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		
				N.A.	100% Un - 10ms	B	A	C
				N.A.	100% Un - 20ms	B	A	C
				N.A.	60% Un - 200ms	C	A	C
Voltage dips, interruptions and voltage variations	EN 61000-4-11			N.A.	30% Un - 500ms	C	A	C
				N.A.	20% Un - 5000ms	C	A	C
				N.A.	100% Un - 5000ms	C	C	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

Technical information



According to IEC 60947-3



		120 Vac ^{*(2)}	230 Vac ^{*(2)}
Voltage supply			
Operating voltage range ^{*(3)}	ΔV		0,85*V to 1,15*V
Operating voltage range according to IEC 60947-6	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*Vn to 1,1*Vn

^{*(4)} According to IEC 60947-3.

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	Code	CODE - 6P ⁽¹⁾		CODE - 8P ⁽¹⁾		UM	CODE - 120 Vac ⁽¹⁾		CODE - 230 Vac ⁽¹⁾		
		500A	630A	800A	1000A		1250A	1600A	1800A	2000A	500A
Size 2 S6N		S6N05006PRC	S6N05008PRC	S6N06306PRC	S6N06308PRC	UM	UM-S26120M	UM-S26230M			
		S5M08006PRC	S5M08008PRC	S5M10006PCC	S5M10008PCC	UM	UM-S35120M	UM-S35230M			
Size 3 S5M		S5N12506PSC	S5N12508PSC	S5N16006PSC	S5N16008PSC	UM					
		S5N18006PSC	S5N18008PSC	S5N20006PDC	S5N20008PDC	UM		UM-S56230M			

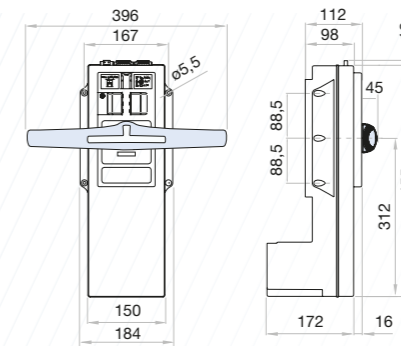
- UM + S6N normal mounting
- UM + S5M normal mounting
- UM + S5N normal mounting

UM + S5M inverted mounting ⁽⁵⁾
 (please consult UM codes)

* Auxiliary manual handle supplied with the UM

Dimensions (mm)

UM

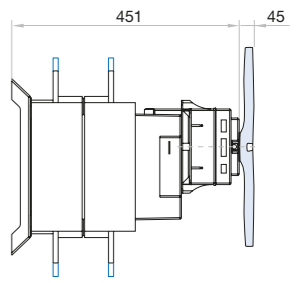
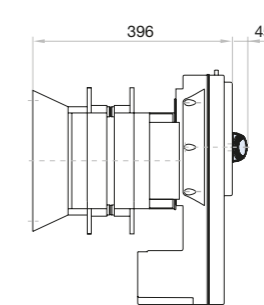
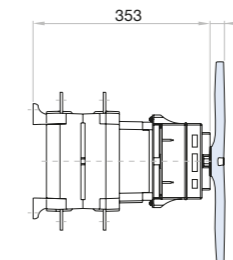
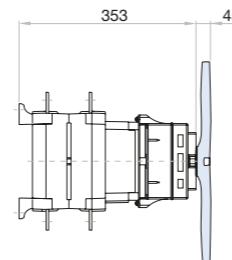
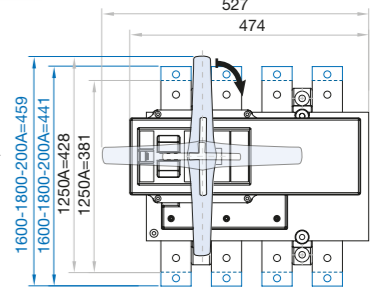
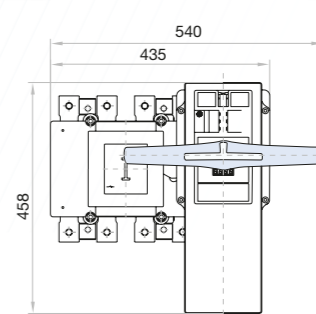
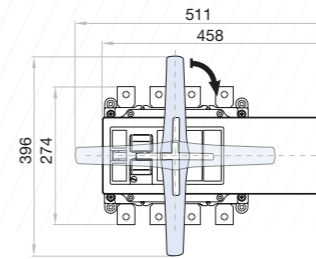
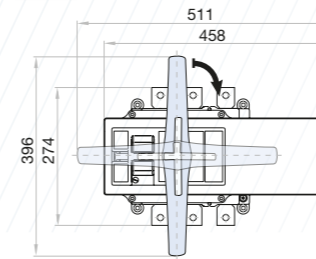


S6N 6P size 2 + UM

S6N 8P size 2 + UM

S5M size 3 + UM

S5N size 4 + UM



Technical information



According to IEC 60947-3



Voltage supply	120Vac ⁽²⁾		230Vac ⁽²⁾	
	Operating voltage range ⁽³⁾	ΔV	0,85*V to 1,15*V	
Operating voltage range according to IEC 60947-6	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		
Cable section area Outputs	mm ²	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*Vn to 1,1*Vn

⁽⁴⁾ According to IEC 60947-3.

⁽⁵⁾ For inverted mounting there are references for UM with inverted frontal plates. Supply under request.

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
				N.A.	60% Un - 200ms	C	A	C
Voltage dips, interruptions and voltage variations	EN 61000-4-11			N.A.	30% Un - 500ms	C	A	C
				N.A.	20% Un - 5000ms	C	A	C
				N.A.	100% Un - 5000ms	C	C	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	
Size 2 CCF	500A	CCF05003PS0	CCF05003NS0	UM UM-C2A230Z
	630A	CCF06303PS0	CCF06303NS0	
	800A	CCF08003PS0	CCF08003NS0	
Size 0 S5B	125A	S5B01253PS0	S5B01253NS0	UM UM-C0A230Z
	160A	S5B01603PS0	S5B01603NS0	
Size 1 S5B	200A	S5B02003PS0	S5B02003NS0	UM UM-C1A230Z
	250A	S5B02503PRC	S5B02503NRC	
	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 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	0,85*V to 1,15*V	0,85*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:

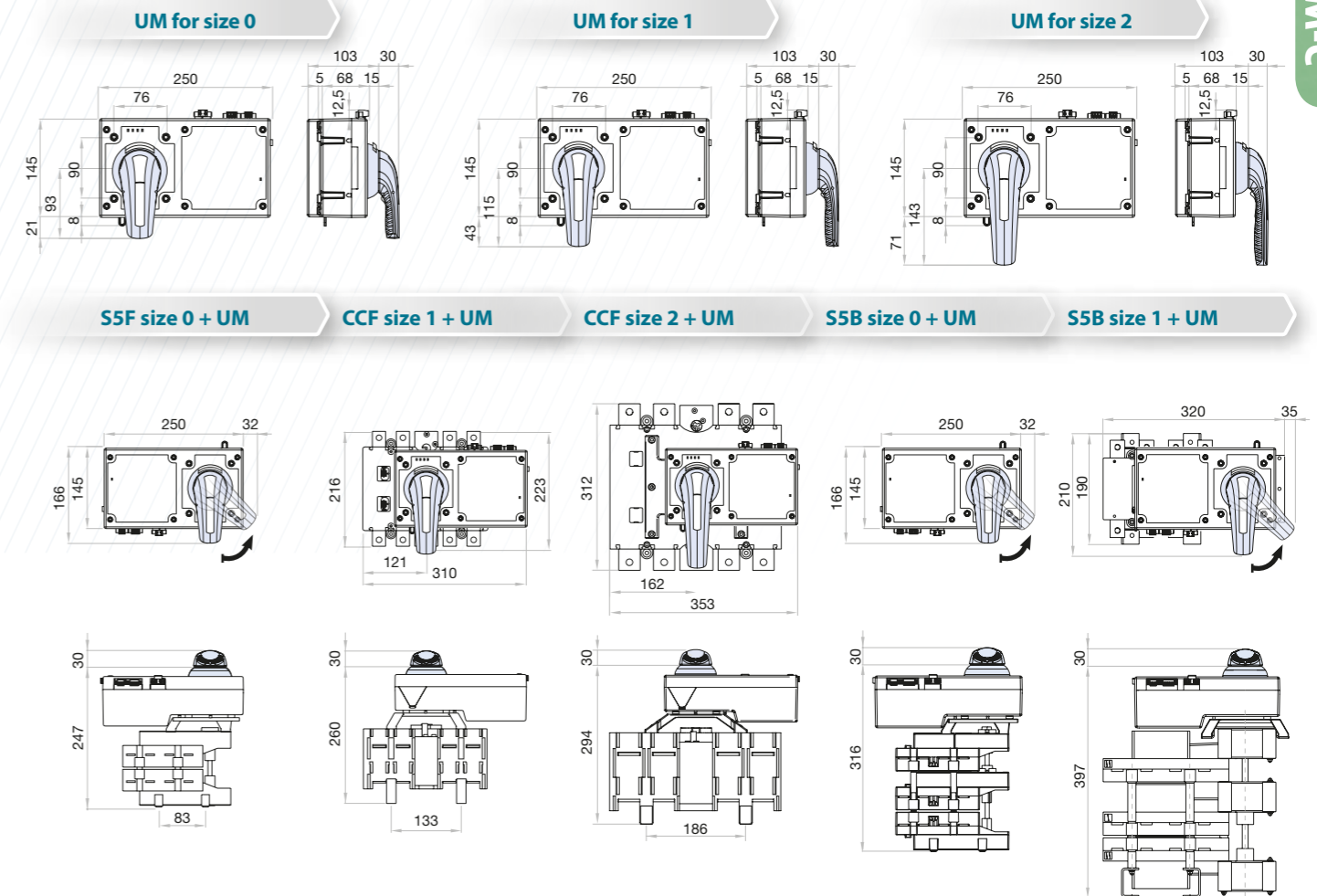
S5F (I - II) = S5D

CCF "overlapped" (I - I+II - II) = CCS

CCP "overlapped" (I - I+II - II) = CCT

S5B "overlapped" (I - I + II - II) = S5S. Consult.

Dimensions (mm)



EMC table (Electromagnetic compatibility)

Test	Standard	According to standard		Results achieved	Values achieved in tests
		UNE/EN 61000	IEC 60947-6		
Inmunity					
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					
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

UM-C (MODBUS) Motorized unit kit for base mounting changeover switches 3P - 3P+N

CCF Sizes 2-3 standard (500A... 1250A)
SSF 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
	630A	CCF06303PS0	CCF06303NS0	UM	UM-C21230M
	800A	CCF08003PS0	CCF08003NS0	UM	UM-C21230M
Size 3 CCF	1000A	CCF10003PS0	CCF10003NS0	UM	UM-C31120M
	1250A	CCF12503PS0	CCF12503NS0	UM	UM-C31230M
	1600A	S5F16003PS0	S5F16003NS0	UM	UM-C45120M
Size 4 SSF	1800A	S5F18003PS0	S5F18003NS0	UM	UM-C45230M
	2000A	S5F20003PD0	S5F20003ND0	UM	UM-C45230M
	2000A	S5F20003PP0	S5F20003NP0	UM	UM-C55230M
Size 5 SSF	2500A	S5F25003PP0	S5F25003NP0	UM	UM-C55230M
	3150A	S5F31503PP0	S5F31503NP0	UM	UM-C55230M

UM + CCF size 3 normal mounting
 UM + SSF sizes 4 - 5 normal mounting

UM + CCF size 3 inverted mounting ⁽⁵⁾
 UM + SSF 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		0,85*V to 1,15*V
Operating voltage range according to IEC 60947-6	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 + SSF size 4	Cycles	3000	3000
Operations frequency (0-I-0-II-0) ⁽⁴⁾	Cycles/hour	20	20
Number of UM operations + SSF size 5	Cycles	-	600
Operations frequency (0-I-0-II-0) ⁽⁴⁾	Cycles/hour	-	20
Working temperature range	T° 85%Un	- 25°C ... + 55°C	- 25°C ... + 55°C
	T° 115%Un	- 25°C ... + 55°C	- 25°C ... + 55°C
Transportation and storage temperature		- 40°C ... + 70°C	- 40°C ... + 70°C
UM weight	Kg	4,4	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:

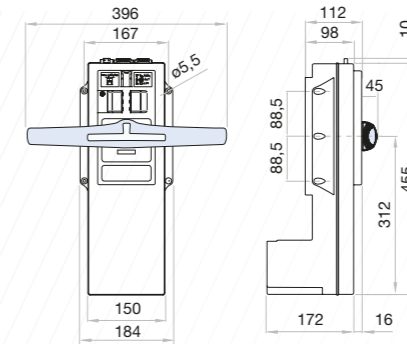
SSF (I - II) = SSD

CCF "overlapped" (I - I+II - II) = CCS

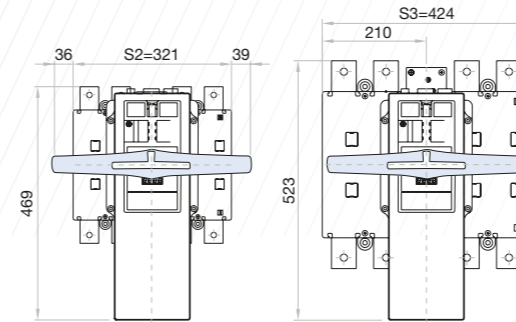
CCP "overlapped" (I - I+II - II) = CCT. Consult.

Dimensions (mm)

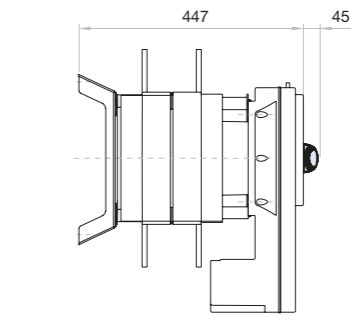
UM



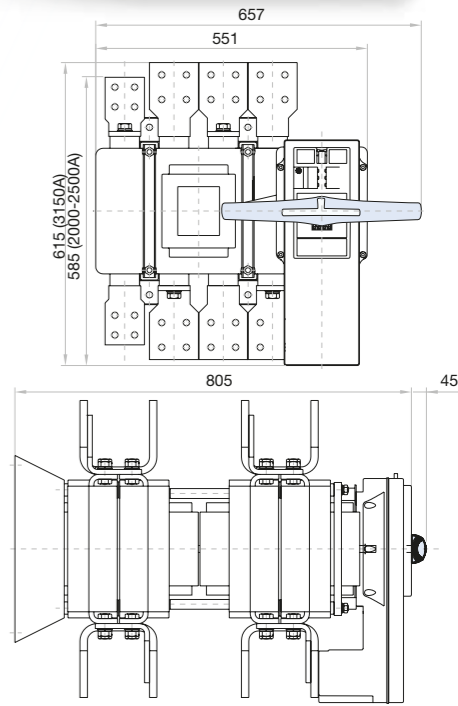
CCF sizes 2-3 + UM



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
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 (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	UM		
Size 3 S5B	800A	S5B08003PRC	S5B08003NRC	UM	UM-C34120M	UM-C34230M
	1000A	S5B10003PCC	S5B10003NCC	UM		
	1250A	S5B12503PS0	S5B12503NS0	UM		
Size 4 S5B	1600A	S5B16003PS0	S5B16003NS0	UM		UM-C44230M
	1800A	S5B18003PS0	S5B18003NS0	UM		
	2000A	S5B20003PD0	S5B20003ND0	UM		

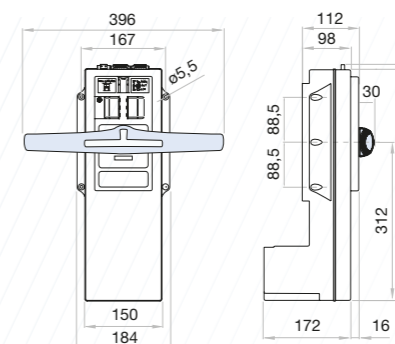
UM + S5B normal mounting

UM + S5B inverted mounting^{*(5)}
(please consult UM codes)

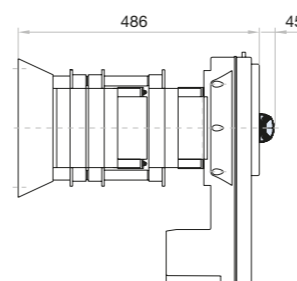
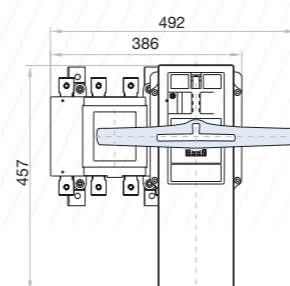
* Auxiliary manual handle supplied with the UM

Dimensions (mm)

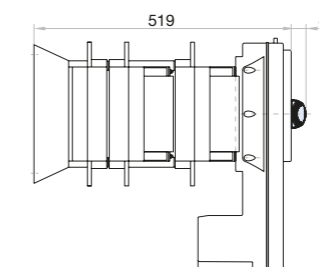
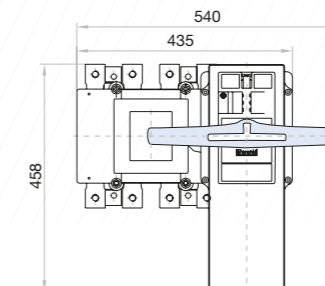
UM



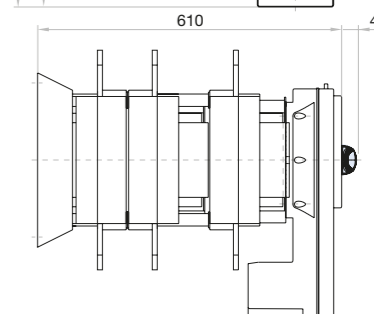
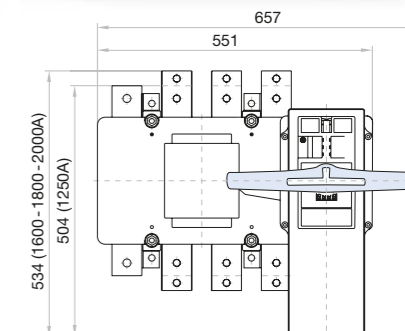
S5B size 2 + UM



S5B size 3 + UM



S5B size 4 + UM



Technical information



According to IEC 60947-3

Voltage supply		120Vac ^{*(2)}	230Vac ^{*(2)}
Operating voltage range ^{*(3)}	ΔV		0,85*V to 1,15*V
Operating voltage range according to IEC 60947-6	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	- 25°C ... + 55°C
	T ^a 115%Un	- 25°C ... + 55°C	- 25°C ... + 55°C
Transportation and storage temperature		- 40°C ... + 70°C	- 40°C ... + 70°C
UM weight	Kg	4,4	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.

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

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.

According to:
IEC 60947-1 y 3
UL508i
UL98B
RoHS



Testing and approvals:



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 **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



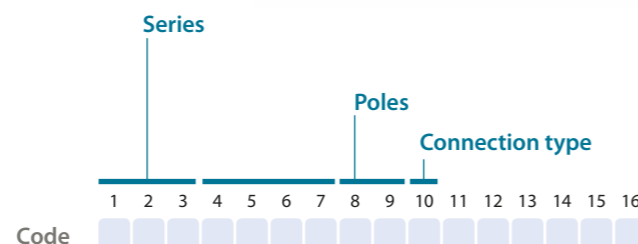
Relevant characteristics for photovoltaic installations

- > 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.



series
ZFC|ZFV



IP66

1 2 3 4 5 6
Z F C

1 2 3 4 5 6
Z F V

Small design.
Base mounting by screws or DIN rail.
Non polarized.
Up to 1500Vdc.

series
S5 DC



1 2 3 4 5 6
S 5 -

Wide range of currents.
Base mounting by screws.
Non polarized.
Up to 1000Vdc.

series
S5M DC



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.
Base mounting by screws.
Non polarized.
4P+4P 1000Vdc.
4P+4P 1500Vdc.

series
S5N DC



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.
Base mounting with screws.
External or direct handles.
Non polarized.
4P+4P 1000Vdc.
4P+4P 1500Vdc.

series
ZFC|ZFV



IP67

1 2 3 4 5 6
Z F C

1 2 3 4 5 6
Z F V

ZFV plastic enclosed switch.
Non polarized.
Up to 1500Vdc.

series
S6 DC



1 2 3 4 5 6
S 6 -

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
S 6 N

Back to back arrangement.
Different configurations to choose.
Base mounting by screws.
Non polarized.
Up to 1500Vdc.

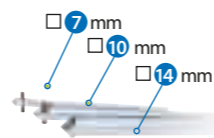
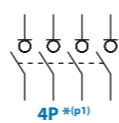
series
S6R DC



1 2 3 4 5 6
S 6 R

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

Shaft extensions ^{*(3)}

Bridging links ^{*(p1)}

Auxiliary contacts ^{*(5)}

Terminal protection

Terminal shrouds (2 units) ^{*(4)}



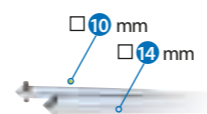
Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	4 pole (4P) ^{*(p1)}			Size	Type 1 & 2		Code	Auxiliary contacts ^{*(5)}		Terminal protection	Terminal shrouds (2 units) ^{*(4)}						
				Code	External ^{*(1)} Code	Direct Code		L	Code ^{*(e1)}		1NO+1NC Code	2NO+2NC Code			Code					
900V DC21B	40	0	☐	S5-01604PB0	DS-SA01	DS-SI01	0	7	250	DS-PI05	DS-PI01	D5LAU01	D5LAU02	DS-CU01	-	216				
	40			387					DS-EP04								DS-EP05			
	100	1	☐	S5-01254PR0	DS-SA11	DS-SI11	1	10	375	DS-EP14	DS-PI11	D5LAU01	D5LAU02	DS-CU12	DS-CU10	DS-CU11	DS-CU18	DS-CU19		
	160			536					DS-EP15										DS-PI11	DS-PI14
	250			536					DS-EP15										DS-PI11	DS-PI14
400	500	2	☐	S5-06304PR0	DS-LA21	DS-LI21	2	14	345	DS-EP23	DS-PI21	D5LAU01	D5LAU02	-	DS-CU22	DS-CU20	DS-CU21	DS-CU28	DS-CU29	
630	535			DS-EP24					DS-PI2D											
1000V DC21B	850	3	☐	S5-12504PC0	DS-LA31	DS-LI31	3	14	345	DS-EP23	DS-PI31	D5LAU01	D5LAU02	-	-	DS-CU30	DS-CU31	DS-CU38	DS-CU39	
	1250			535					DS-EP24											DS-PI3D
	1250	4	☐	S5-18004PS0	DS-LA41	DS-LI41	4	14	485	DS-EP44	DS-PI41 (S5-18004PS0)	D5LAU01	D5LAU02	-	-	DS-CU40	DS-CU41	DS-CU48	DS-CU49	
	1800			635					DS-EP45											DS-PI4D (S5-18002E50 - S5-20002ED0)
	2000			-					-											-
2000	2000	5 (S5N)	☐	SSN20002E50	DS-LA41	DS-LI41	5 (SSN)	-	-	-	DS-PI51 + D5LPC45	D5LAU01	D5LAU02	-	-	-	-	-		
2500	-			-															-	-
3150	-			-															-	-



S5 DC



S5N DC



S6 DC | S6 switches 1 or 2 poles (125 - 630A) (O-I)

Manual handle

Shaft extensions ^{*(3)}

Auxiliary contacts ^{*(5)}

Safety key lock device ^{*(6)}

Spacers (4 units)

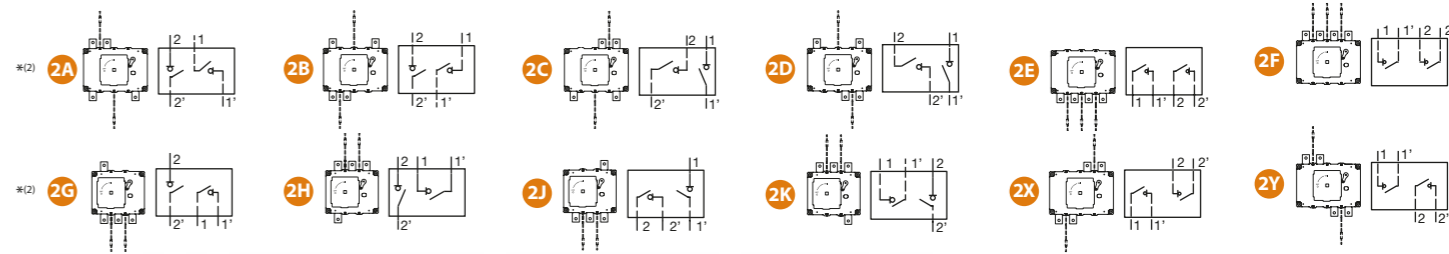
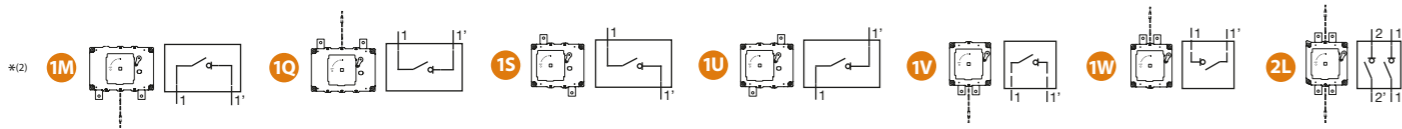
Terminal lug (2 units)

Terminal shrouds (1 unit) ^{*(4)}

Phase barriers

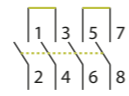


Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	Diagram ^{*(2)}			Size	Type 1 & 2		Auxiliary contacts ^{*(5)}		Safety key lock device ^{*(6)}		Code	Terminal lug (2 units)	Terminal shrouds (1 unit) ^{*(4)}			Phase barriers					
				Code	External ^{*(1)} Code	Direct Code		L	Code ^{*(e1)}	1NO+1NC Code	2NO+2NC Code	Simple Code ^{*(e1)}	Double Code ^{*(e1)}			Code	Code	Code	Code	Code	Code	Code	Code	
500 Vdc 750Vdc DC21B 1000Vdc	125	1	☐	S6-0125_S0	DS-SA11	DS-SI11	1	10	375	DS-EP14	D5LAU01	D5LAU02	DS-CA11	DS-CE11	DR-EL11	-	DR-CU11	DR-CU12	DR-CU13	DR-SF11	DR-SF12	DR-SF13	234	
	160								536															DS-EP15
	200								345															DS-EP23
	250								535															DS-EP24
	315								375															DS-EP14
315	536	DS-EP15																						
400	536	DS-EP15																						
400	536	DS-EP15																						
500	536	DS-EP15																						
630	536	DS-EP15																						
500 Vdc 750Vdc UL98B 1000Vdc	250	1	☐	S6-0250_S00L	DS-SA11	-	1	10	375	DS-EP14	D5LAU01	D5LAU02	-	-	DR-EL11	DR-TL11	DR-CU11	DR-CU12	DR-CU13	DR-SF11	DR-SF12	DR-SF13	236	
	400			536					DS-EP15															
500 Vdc 750Vdc UL98B 1000Vdc	250	2	☐	S6-0400_S00L	DS-LA21	-	2	14	345	DS-EP23	D5LAU01	D5LAU02	-	-	DR-EL21	DR-TL22	DR-CU21	DR-CU22	DR-CU23	DR-SF21	DR-SF22	DR-SF23	240	
	400			535					DS-EP24															



ZFC DC | DIN rail base mounting switches with direct handle - compact model 2 poles (16 - 25 A) (O-I)

Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	Code
1500V DC21B	16	00	☐	ZFC16SMAH1NA40
	25			ZFC25SMAH1NA40



A40

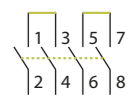


ZFC DC | DIN rail base mounting switches with direct handle - compact model 2 poles (16 - 55 A) (O-I)

Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	Code
1500V DC21B	16	00	☐	ZFC16ZVH4A40
	25			ZFC25ZVH4A40
	32			ZFC32ZVH4A40
	40			ZFC40ZVH4A40
	55			ZFC55ZVH4A40

ZFV DC | DIN rail base mounting switches with direct handle 2 poles (32 - 55 A) (O-I)

Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	Code
1500 V DC21B / DC-PV1	32	00	☐	ZFV32SMAH1A40
	40			ZFV40SMAH1A40
	55			ZFV55SMAH1A40



A40



ZFC DC | Plastic enclosed switches IP67 2 poles (16 - 55 A) (O-I)

Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	Code
1000Vdc DC21B	16	00	☐	ZFC16PFLH4A40
	32			ZFC32PFLH4A40
	55			ZFC55PFLH4A40



^{*(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 to 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.

^{*(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 - Ie = 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.

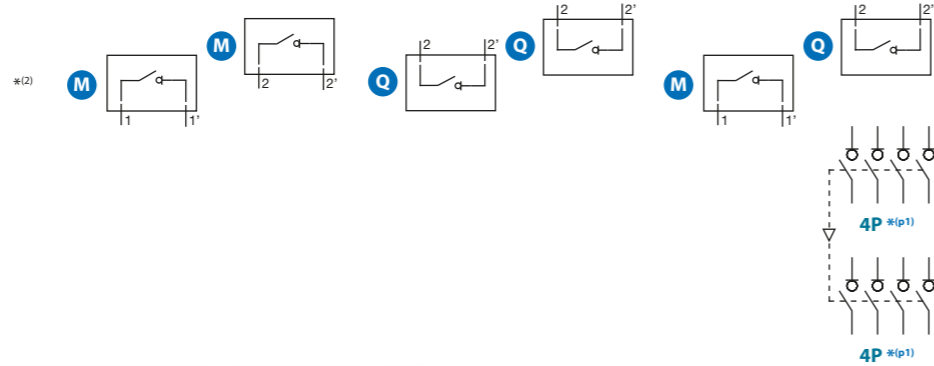


S6N DC | S6 switches 2 poles (125 - 400A) (O-I)



S6N DC

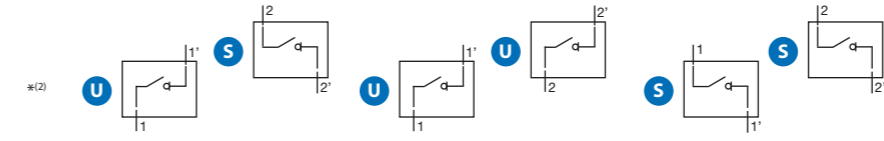
Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	2P ^{*(2)}					
				Code MM	Code QQ	Code MQ	Code US	Code UU	Code SS
1500V DC21B	125	1		S6N0125MMSO	S6N0125QQSO	S6N0125MQSO	S6N0125USSO	S6N0125UUSO	S6N0125SSSO
	160			S6N0160MMSO	S6N0160QQSO	S6N0160MQSO	S6N0160USSO	S6N0160UUSO	S6N0160SSSO
	200			S6N0200MMSO	S6N0200QQSO	S6N0200MQSO	S6N0200USSO	S6N0200UUSO	S6N0200SSSO
	250			S6N0250MMSO	S6N0250QQSO	S6N0250MQSO	S6N0250USSO	S6N0250UUSO	S6N0250SSSO
	315			S6N0315MMSO	S6N0315QQSO	S6N0315MQSO	S6N0315USSO	S6N0315UUSO	S6N0315SSSO
	400			S6N0400MMSO	S6N0400QQSO	S6N0400MQSO	S6N0400USSO	S6N0400UUSO	S6N0400SSSO



Manual handle

Auxiliary contacts ^{*(2)}

Size	External ^{*(1)} Code	Direct Code	Auxiliary contacts ^{*(2)}	
			1NO+1NC Code	2NO+2NC Code
1	DS-SA11	DS-SI11	D5LAU01	D5LAU02



Full details in page

242
244

S5M DC | S5 switches 4+4 poles (500 - 1800 A) (O-I)



S5M DC



S5N DC

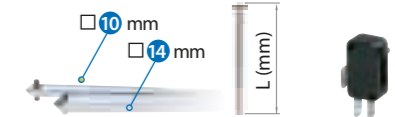
Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	4P + 4P ^{*(p1)}		
				Code	External ^{*(1)} Code	Direct Code
1500V DC21B	500	2		S5M063044R0	DS-LA22	DS-LI22
	630			S5M080044C0	DS-LA22	DS-LI22
	800	3		S5M080044R0	DS-LA41	DS-LI41
	1000			S5M125044C0	DS-LA41	DS-LI41
	1250	4 (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

Manual handle

Bridging links ^{*(p1)}

Auxiliary contacts ^{*(2)}

Size	Code	Auxiliary contacts ^{*(2)}	
		1NO+1NC Code	2NO+2NC Code
2	DS-PI230L	DS-AU11	DS-AU12
	DS-PI2D	DS-AU11	DS-AU12
3	DS-PI3D	DS-AU11	DS-AU12
	DS-PI430U	D5LAU01	D5LAU02
4 (S5N)	DS-PI4D	D5LAU01	D5LAU02
	DS-PI51 + D5LPC45	D5LAU01	D5LAU02
5 (S5N)	DS-PI51 + D5LPC45	D5LAU01	D5LAU02
	DS-PI4D + D5LPC45 (x2)	D5LAU01	D5LAU02



Full details in page

226
228
230
232

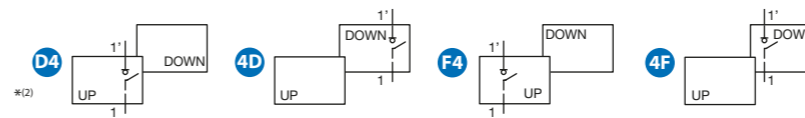
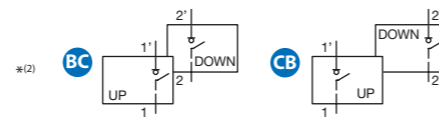
S6R DC | S6 switches 1 or 2 poles (160 - 400A) (O-I)



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	S6R0400CBS0
	400			S6R0400BCD0L	S6R0400CBD0L
1500Vdc UL98B	250	1		S6R0250BCS00L	S6R0250CBS00L
	320			S6R0320BCS00L	S6R0320CBS00L
	400			S6R0400BCD00L	S6R0400CBD00L

Size	1P ^{*(2)}				Panel ^{*(3)} Code	Shaft extensions ^{*(4)}		Auxiliary contacts ^{*(2)}		
	Code D4	Code 4D	Code F4	Code 4F		Type 1 & 2 Code ^{*(e1)}	1NO+1NC Code	2NO+2NC Code		
1	S6R0160D4S0	S6R01604DS0	S6R0160F4S0	S6R01604FS0	DS-SA11	10	375	DS-EP14	D5LAU01	D5LAU02
	S6R0200D4S0	S6R02004DS0	S6R0200F4S0	S6R02004FS0						
	S6R0250D4S0	S6R02504DS0	S6R0250F4S0	S6R02504FS0						
	S6R0315D4S0	S6R03154DS0	S6R0315F4S0	S6R03154FS0						
	S6R0400D4D0	S6R04004DD0	S6R0400F4D0	S6R04004FD0						
	S6R0400D4D00L	S6R04004DD00L	S6R0400F4D00L	S6R04004FD00L						
1	S6R0250D4S00L	S6R02504DS00L	S6R0250F4S00L	S6R02504FS00L	DS-SA11	10	536	DS-EP15	D5LAU01	D5LAU02
	S6R0320D4S00L	S6R03204DS00L	S6R0320F4S00L	S6R03204FS00L						
	S6R0400D4D00L	S6R04004DD00L	S6R0400F4D00L	S6R04004FD00L						



Full details in page

246
248



PATENTED TECHNOLOGY

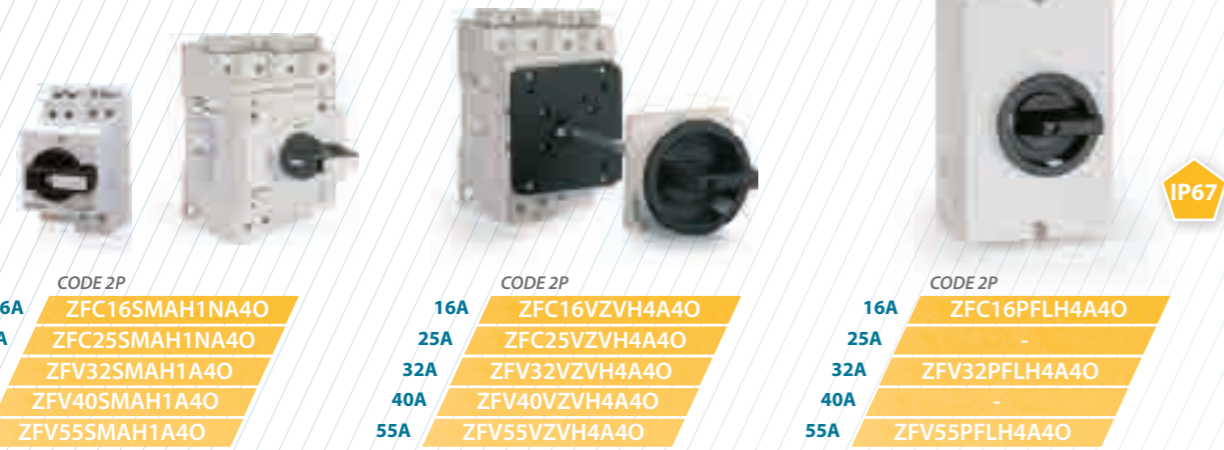
^{*(1)} Padlockable handle in OFF 0 position. Possibility of unlocking the door in ON I position (with the use of a tool). Door interlock by a padlock in OFF 0 position.
^{*(2)} See the full details pages in this catalogue to see the possibility or not of grounding the switch selected. If you have any 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.

^{*(2)} To be used as signalling or control contacts – Ie = 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 - 1500 Vdc



IP67

CODE 2P

16A	ZFC16SMAH1NA4O
25A	ZFC25SMAH1NA4O
32A	ZFV32SMAH1A4O
40A	ZFV40SMAH1A4O
55A	ZFV55SMAH1A4O

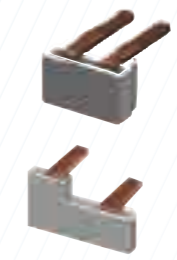
CODE 2P

16A	ZFC16VZVH4A4O
25A	ZFC25VZVH4A4O
32A	ZFV32VZVH4A4O
40A	ZFV40VZVH4A4O
55A	ZFV55VZVH4A4O

CODE 2P

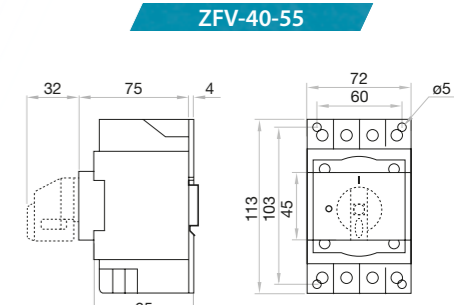
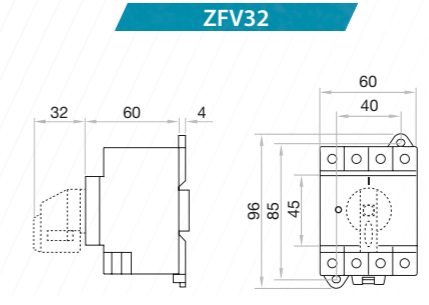
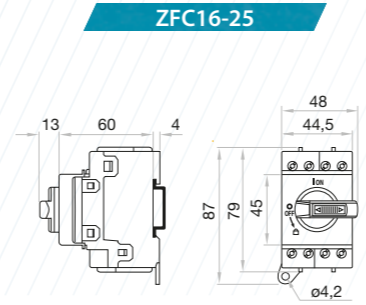
16A	ZFC16PFLH4A4O
25A	-
32A	ZFV32PFLH4A4O
40A	-
55A	ZFV55PFLH4A4O

Accessories



» Insulated bridging links included
CODE ZTC-B1 16-25 A
ZFV-B1 32 A
ZFV-B2 40-55 A

Dimensions (mm)



Technical information



According to IEC 60947-3
DC-PV1
UL508i

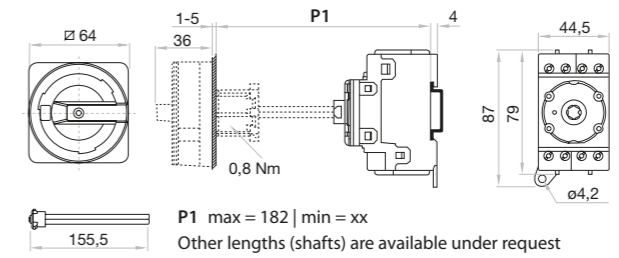
IEC 60947-3

			ZFC16	ZFC25	ZFV32	ZFV40	ZFV55
le 2 Poles in series	IEC	1000Vdc	A 9 DC21A	11 DC21A	13 DC21B	29 DC21B	36 DC21B
		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
		1500Vdc	A 16 DC21A	20 DC21A	32 DC21B	40 DC21B	55 DC21B
le 2 Poles in series	IEC	1000Vdc	A 10 DCPV1	11,5 DCPV1	13 DCPV1	29 DCPV1	36 DCPV1
		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
		1500Vdc	A 16 DCPV1	25 DCPV1	32 DCPV1	40 DCPV1	55 DCPV1
Rated conditional short-circuit current			kAeff 5	5	5	10	10
Max. fuse size			gL (gG) A 40	63	80	125	160
Maximum cable cross sections (included jumper)							
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

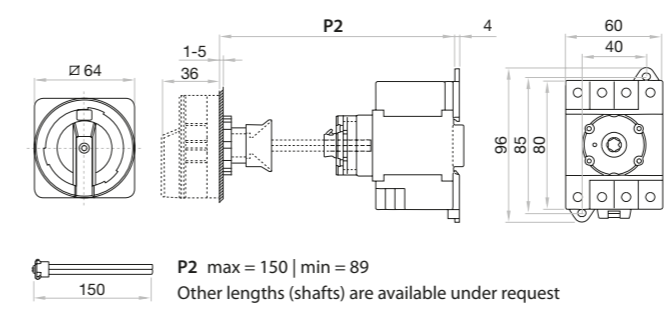
UL508i LISTED E362647

			ZFC16	ZFC25	ZFV32	ZFV40	ZFV55
2 Poles in series	UL	600Vdc	A 16	25	32	40	55
		1000Vdc	A -	-	-	16	20
4 Poles in series	UL	600Vdc	A 16	25	32	40	55
		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)							
Solid or stranded			AWG 16 - 10	16 - 10	12 - 10	16 - 10	16 - 10
Flexible			AWG 20 - 6	20 - 6	12 - 6	14 - 4	14 - 4
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

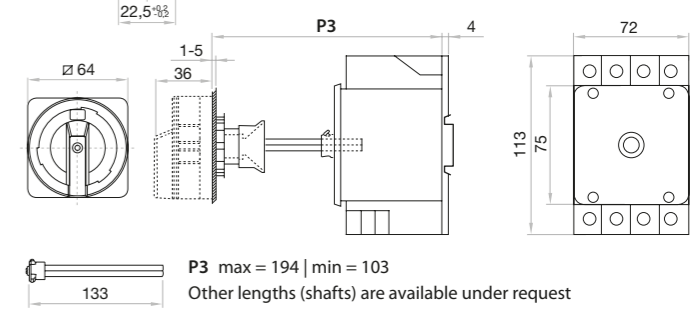
ZFC16-25 Door drilling for external handle



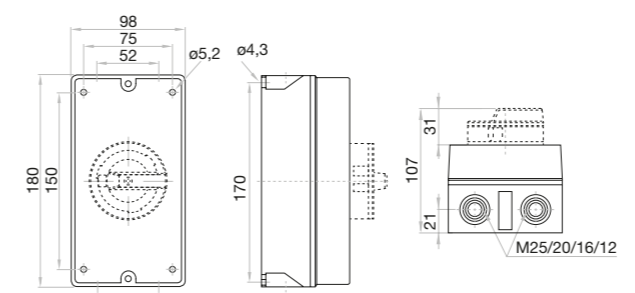
ZFV32 Door drilling for external handle



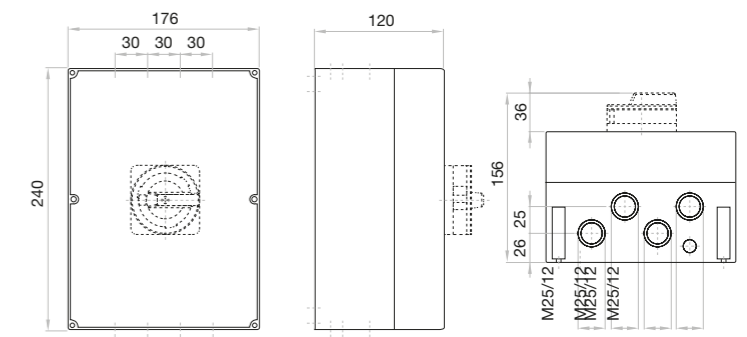
ZFV40-55 Door drilling for external handle



ZFC16 - ZFV32



ZFV55



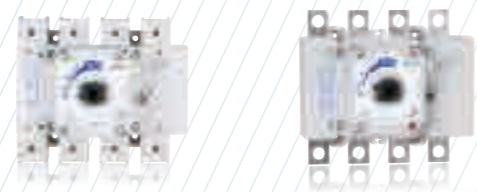


S5 DC Switch - disconnecter for DC current 4P

Size 0

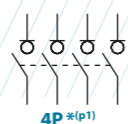
A 40

900Vdc



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	40
		50° C	A	40
		60° C	A	40
Rated insulation voltage DC20	Ui		V	1000
Rated impulse withstand voltage	Uimp		kV	8
Rated operational current ^{*(1)} DC21B	Ie	900 Vdc	A	40

^{*(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



Accessories



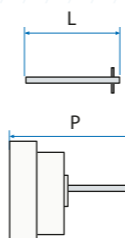
» **Direct handle**
CODE DS-SI01



» **External handle** included shaft ^{*(e1)}
IP65
CODE DS-SA01



» **External handle** without shaft
IP65
CODE DS-SA03



» **Shafts**

Standard shaft included ^{*(e1)}

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

Shaft extensions

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

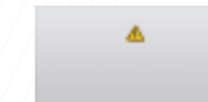
Type 2		CODE
L (mm)	P (mm)	DS-EP05
387	87... 415	



» **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-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

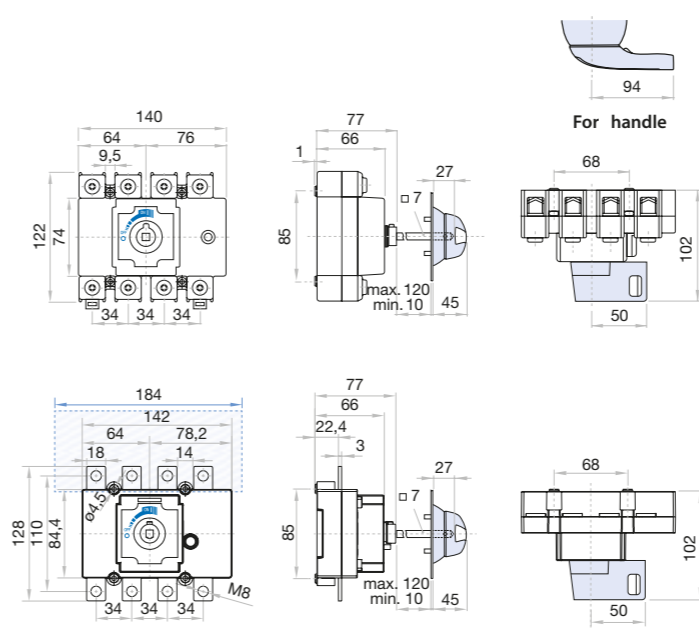
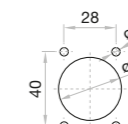
^{*(p1)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.



» **DIN rail mounting**
CODE DS-DN01
 (1 kit)

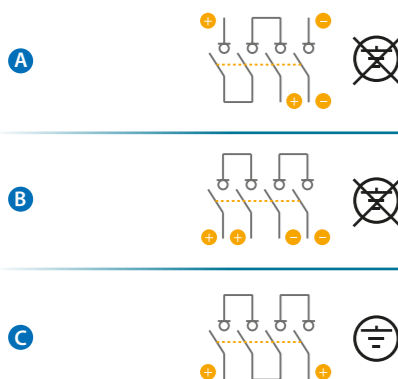
Dimensions (mm)

Door drilling for external handle

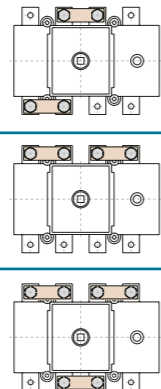


Connection diagram

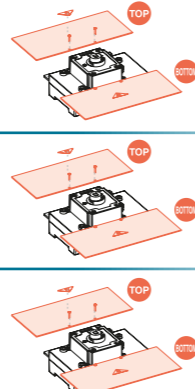
Connection diagram



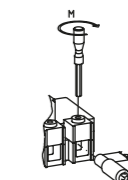
Bridging links ^{*(p1)}



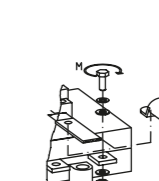
Terminal protection



DO NOT USE IN GROUNDED INSTALLATIONS



S max (Cu)	M
mm ²	Nxm
95	4

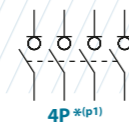


S max (Cu)	H max (Cu)	L max (Cu)	M
mm ²	mm	mm	Nxm
95	5	25	M8 13



S5 DC Switch - disconnecter for DC current 4P

Size 1
A 100|160|250|400
 1000 Vdc



Technical information

According to IEC 60947-1
IEC 60947-3



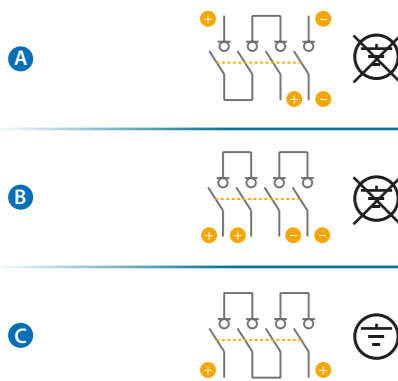
			100	160	250	400
Rated thermal current in ambient at	lth	40° C	A 125	200	315	400
		50° C	A 125	200	315	400
		60° C	A 125	200	280	320
Rated insulation voltage DC20	Ui	V	1500	1500	1500	1500
Rated impulse withstand voltage	Uimp	kV	8	8	8	8
Rated operational current ^{*(1)} DC21B	le	1000 Vdc	A 100	160	250	400

			100	160	250	400
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	lcm	kA (peak)	20	20	20	20
Rated short-time withstand current (1sec.)	lcw	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

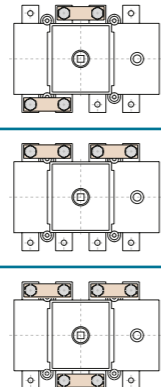
^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

Connection diagram

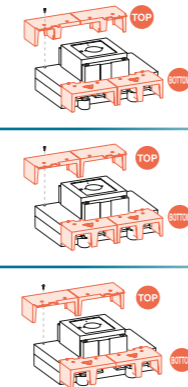
Connection diagram



Bridging links ^{*(p1)}



Terminal shrouds



DO NOT USE IN GROUNDED INSTALLATIONS

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)	CODE
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

 le = 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) ^(p1)

	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

Dimensions (mm)

Door drilling for external handle

	H	I	J	øT
100 A	130	150	20	M8
160 A	143	167	25	M10

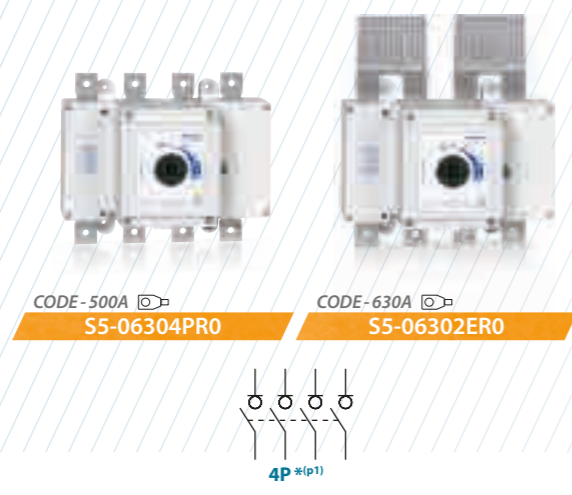
	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M
100 A	185	7	25	M8
160 A				M10
250 A				M10

	S max (Cu) mm ²	Z max	H max (Cu) mm	L max (Cu) mm	M
400 A	240	44	7	40	M10

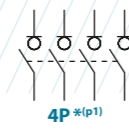


S5 DC Switch - disconnecter for DC current 4P

Size 2
A 500|630
 1000 Vdc



CODE-500A S5-06304PRO
 CODE-630A S5-06302ERO



Technical information

According to IEC 60947-1
 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	400	500
Rated insulation voltage DC20	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12
Rated operational current ^{*(1)} DC21B	le 1000 Vdc	A	500	630

tests:

			500	630
Short - circuit behaviour				
Short - circuit making capacity ^{*(2)}	lcm	kA (peak)	26	26
Rated short-time withstand current (1sec.)	lcw	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

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

Connection diagram

Connection diagram

Bridging links ^{*(p1)}

Terminal shrouds

DO NOT USE IN GROUNDED INSTALLATIONS

Accessories

- Direct handle**
CODE DS-LI21
- External handle** included shaft ^{*(e1)}
IP65
CODE DS-LA21
- External handle** without shaft
IP65
CODE DS-LA24
- Auxiliary contacts**
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02
le = 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
- Shafts**

Standard shaft included ^{*(e1)}

L (mm)	P (mm)	CODE
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
- Bridging links ^{*(p1)}**

	A	B	C
500A	DS-PI21 (2 units)	CODE CONSULT	
630A	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

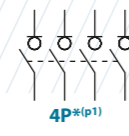
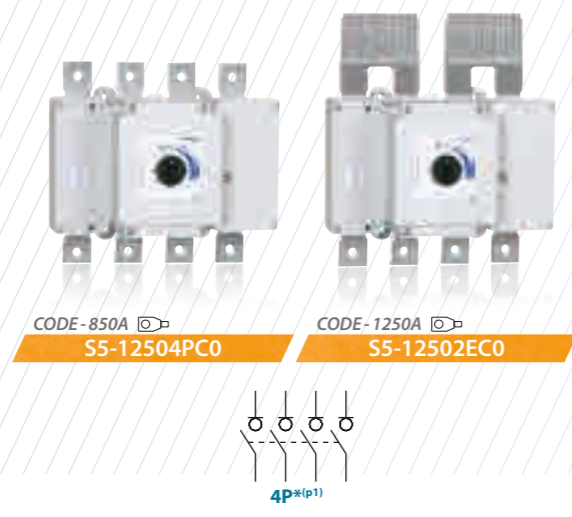
	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
500A	2x240	2x5	40	M10	24
630A			50		

S5 DC Switch - disconnecter for DC current 4P

Size 3

A 850|1250

1000 Vdc



Technical information



According to IEC 60947-1
IEC 60947-3

		850		1250	
Rated thermal current in ambient at	lth 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	le 1000 Vdc	A	850	1250	

		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	

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

Connection diagram

Connection diagram

Bridging links ^{*(p1)}

Terminal shrouds

DO NOT USE IN GROUNDED INSTALLATIONS

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
le = 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)	CODE
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	C
850A	DS-PI31 (2 units)	CODE CONSULT	
1250A	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)

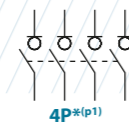
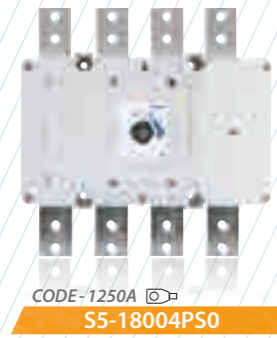
Door drilling for external handle

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



S5 DC Switch - disconnecter for DC current 4P

Size 4
A 1250|1800|2000
 1000 Vdc



Technical information



According to IEC 60947-1
 IEC 60947-3

		1250	1800	2000
Rated thermal current in ambient at	lth 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	Ue			
	le 1000 Vdc	A 1250	1800	2000

		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

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

Connection diagram

Connection diagram

A S5-18004PS0

B S5-18004PS0
S5-18002ES0
S5-20002ED0

C

Bridging links*(p1)

Terminal shrouds

DO NOT USE IN GROUNDED INSTALLATIONS

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

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

Auxiliary contacts
 1NO+1NC CODE D5LAU01
 2NO+2NC CODE D5LAU02
 Ie = 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

Bridging links*(p1)
 For S5-18004PS0 A B CODE DS-PI41 (2 units)
 C CONSULT
 For S5-18002ES0 S5-20002ED0 B CODE DS-PI4D (2 units)
 C CONSULT

*(p1) To meet the operation and electrical features, the product installed must incorporate these bridging links. Please consult.

Dimensions (mm)

Door drilling for external handle

1250 A

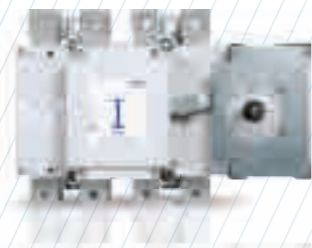
**1800 A
2000 A**

H max (Cu)	L max (Cu)	T	M
2x7	80	M14	55



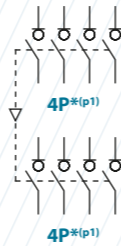
S5M DC Switch - disconnecter for DC current 4P+4P

Size 2
A 500|630
 1500Vdc



CODE-500A **S5M063044R0**

CODE-630A **S5M080044C0**



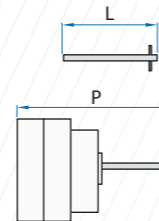
Accessories



» **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.

Technical information



According to IEC60947-1
 IEC60947-3

		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 DC20	U _i	V	1500	1500	
Rated impulse withstand voltage	U _{imp}	kV	12	12	
Rated operational current DC21B	I _e U _e	A	500	630	1500 Vdc

^{*(1)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

tests:

Short - circuit behaviour			
Maximum cut - off current ^{*(1)}	I _{cm}	kA (peak)	26
Short - time withstand current (1 sec.)	I _{cw}	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

DO NOT USE IN GROUNDED INSTALLATIONS

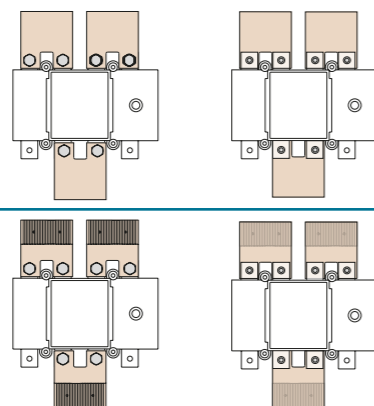
Connection diagram

Connection diagram



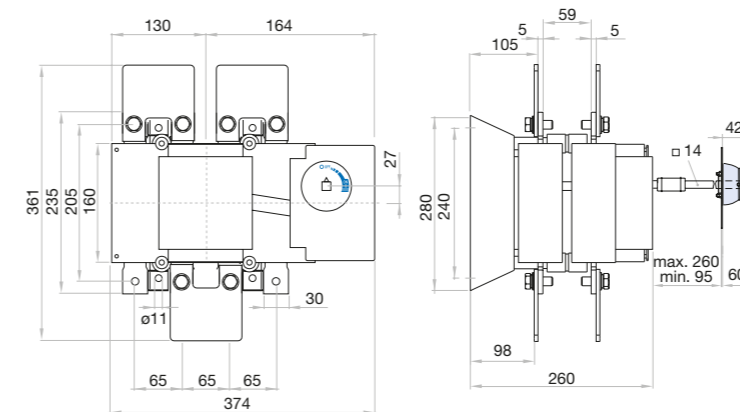
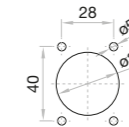
Bridging links^{*(p1)}

Front switch Rear switch

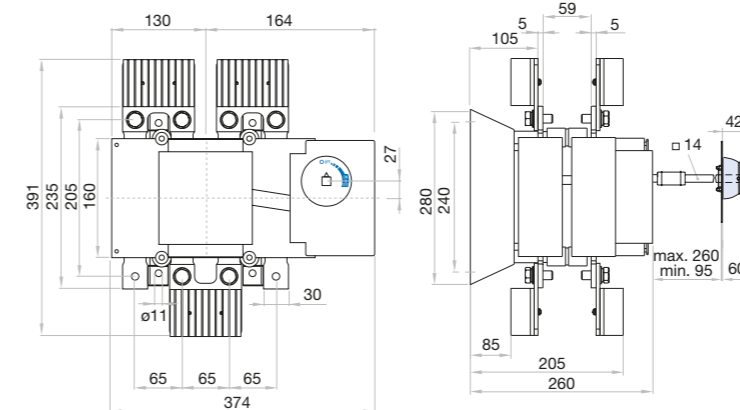


Dimensions (mm)

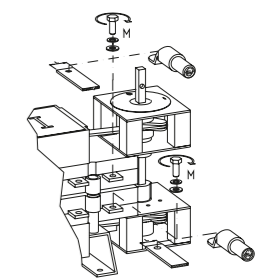
Door drilling for external handle



500A



630A

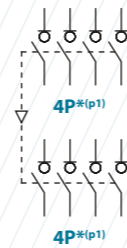
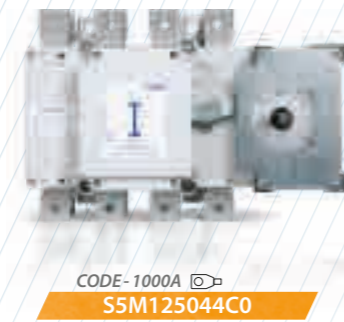
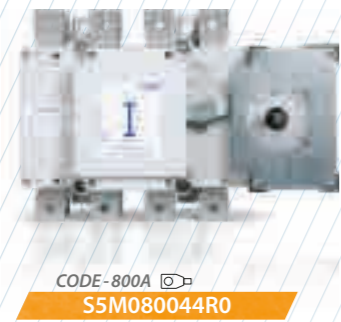


S max (Cu)	H max (Cu)	L max (Cu)	T	M
mm ²	mm	mm		Nxm
2x240	2x5	40	M10	24



S5M DC Switch - disconnecter for DC current 4P+4P

Size 3
A 800|1000
 1500Vdc



Accessories



Direct handle
CODE DS-LI41



External handle included shaft*(p1)
IP65
CODE DS-LA41



External handle without shaft
IP65
CODE DS-LA43



Auxiliary contacts
1NO+1NC CODE DS-AU11
2NO+2NC CODE DS-AU12
Ie = 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.

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	Ie Ue 1500Vdc	A	800	1000	

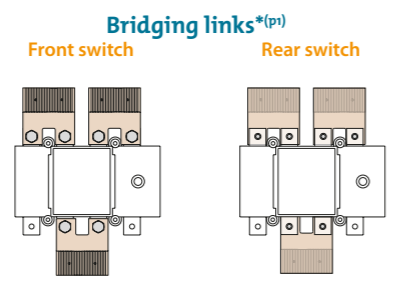
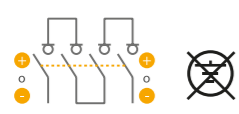
Short - circuit behaviour			
Maximum cut - off current *(1)	Icm	kA (peak)	60
Short - time withstand current (1 sec.)	Icw	kA rms	25
Mechanical features			
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		3000
Maximum weight (without jumpers)	Kg		28,6

*(1) Without limiting protective device (short-circuit maintained 50... 100 ms.)

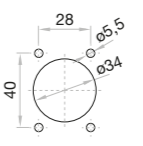
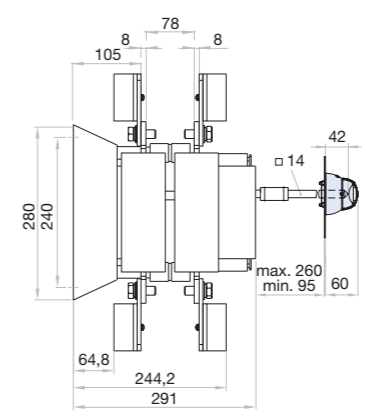
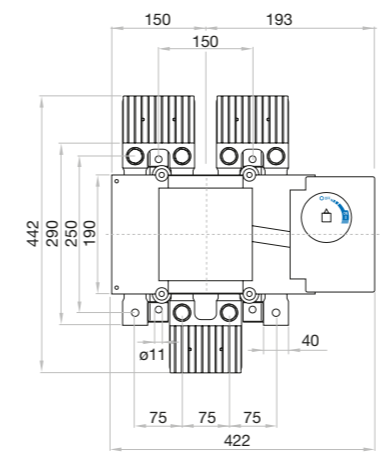
DO NOT USE IN GROUNDED INSTALLATIONS

Connection diagram

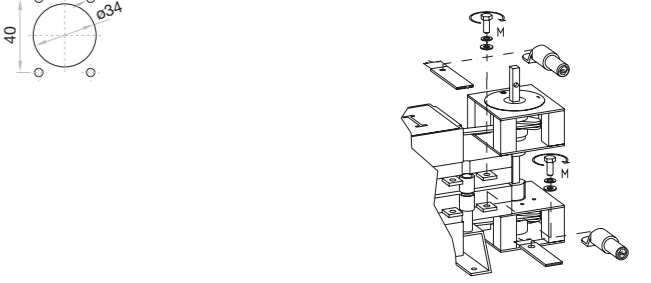
Connection diagram



Dimensions (mm)



Door drilling for external handle

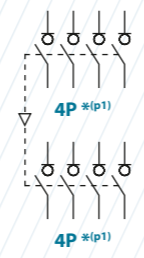


S max (Cu)	H max (Cu)	L max (Cu)	M
mm²	mm	mm	Nxm
3x240	2x10	50	M14 45



S5N DC Switch - disconnecter for DC current 4P+4P

Size 4
A 1250|1800
 1500Vdc



Technical information



According to IEC 60947-1
IEC 60947-3

		1250		1800	
Rated thermal current in ambient at	lth	40° C	A	1250	1800
		50° C	A	1250	1800
		60° C	A	1250	1800
Rated insulation voltage DC20	Ui	V	1500	1500	
Rated impulse withstand voltage	Uimp	kV	12	12	
Rated operational current DC21B ^{*(1)}	Ue				
	le	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)}	lcm	kA (peak)	60
Short - time withstand current (1 sec.)	lcw	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

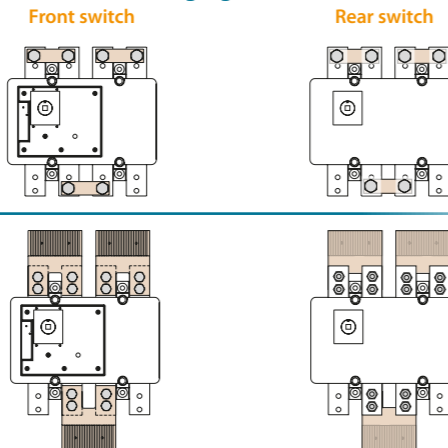
DO NOT USE IN GROUNDED INSTALLATIONS

Connection diagram

Connection diagram



Bridging links ^{*(p1)}



Accessories



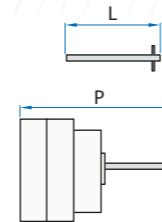
Direct handle
CODE DS-LI41



External handle included shaft ^{*(e1)}
IP65
CODE DS-LA41



External handle without shaft
IP65
CODE DS-LA43



Shafts
Standard shaft included ^{*(e1)}
L (mm) | P (mm)
239 | 420 ... 580



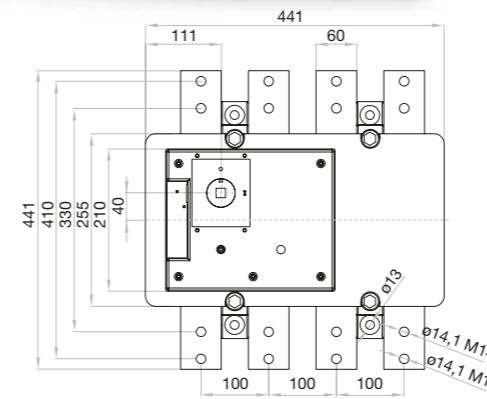
Auxiliary contacts
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac



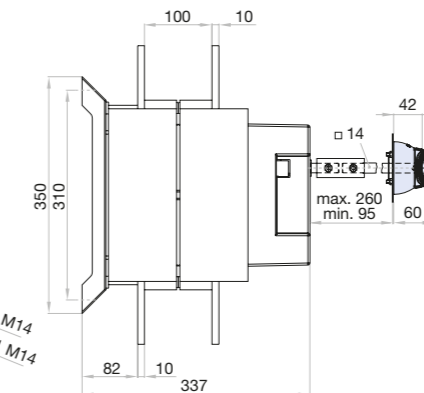
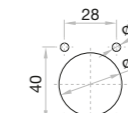
Bridging links ^{*(p1)}
A 1250A CODE DS-PI430U (3 units)
B 1800A CODE DS-PI4D (2 units)

^{*(p1)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult

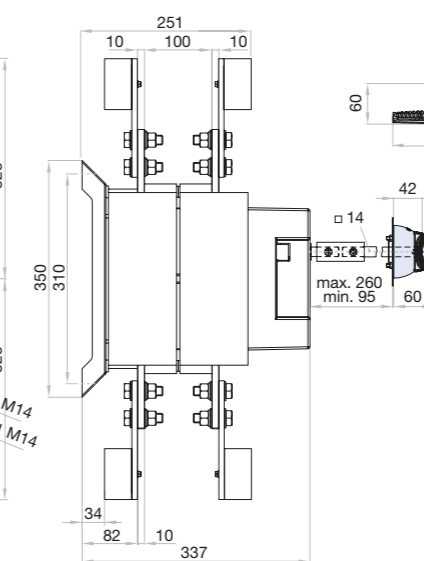
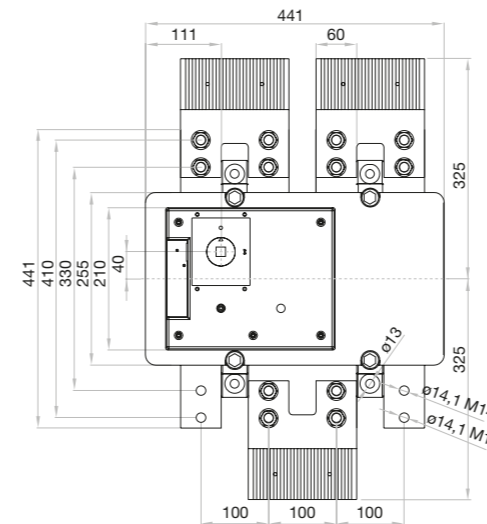
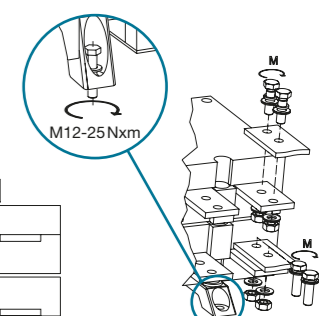
Dimensions (mm)



Door drilling for external handle



1250 A



1800 A

H max (Cu)	L max (Cu)	M
mm	mm	Nxm
2x10	80	M14 55





S5N DC Switch - disconnecter for DC current 4P+4P

Size 5
A 2000|2500|3150
 1000 Vdc



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	lth 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⁾	le 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⁾	lcm	kA (peak)	60
Rated short-time withstand current (1sec.)	lcw	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

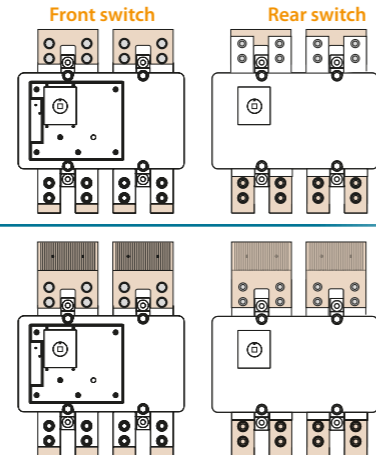
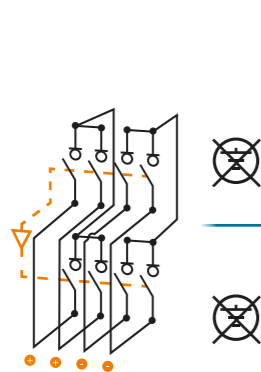
Connection diagram

Connection diagram

Bridging links ^(p1)

A S5N20002ES0
 S5N25002ES0

B S5N31502ES0



Accessories



Direct handle

CODE DS-LI41



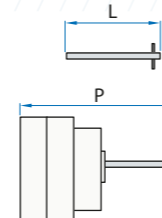
External handle included shaft ^(e1)

IP65
 CODE DS-LA41



External handle without shaft

IP65
 CODE DS-LA43



Shafts

Standard shaft included ^(e1)

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

Auxiliary contacts

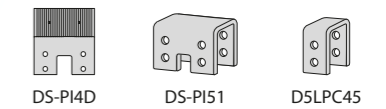
1NO+1NC CODE D5LAU01
 2NO+2NC CODE D5LAU02

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

Bridging links ^(p1)

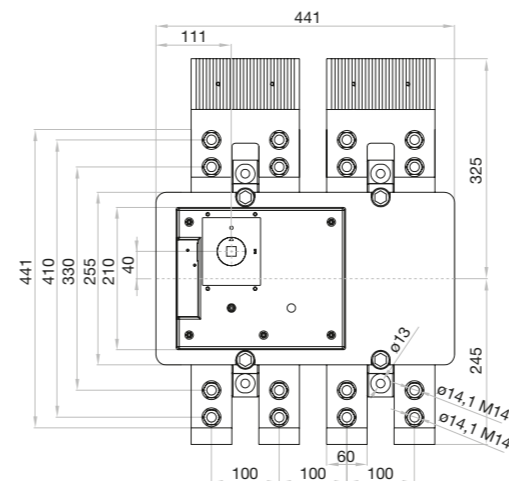
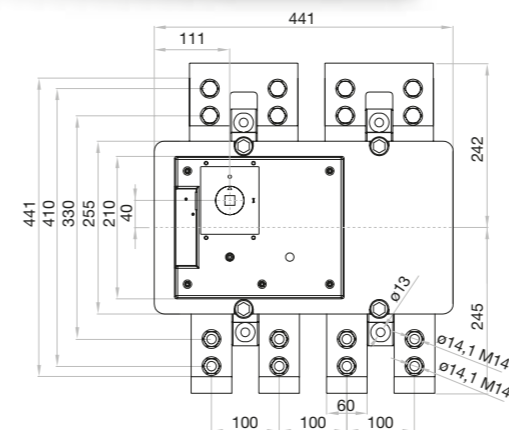
A 2000A CODE DS-PI51 (2 units) + D5LPC45 (4 units)
 2500A CODE DS-PI51 (2 units) + D5LPC45 (4 units)

B 3150A CODE x2 DS-PI4D (2 units) + x2 D5LPC45 (4 units)

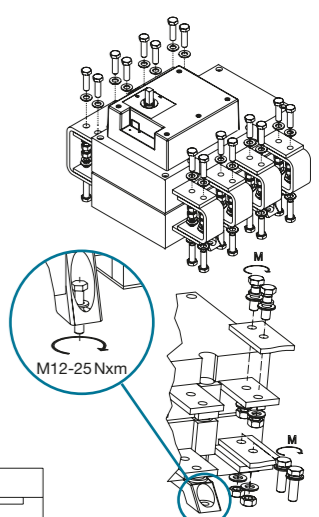
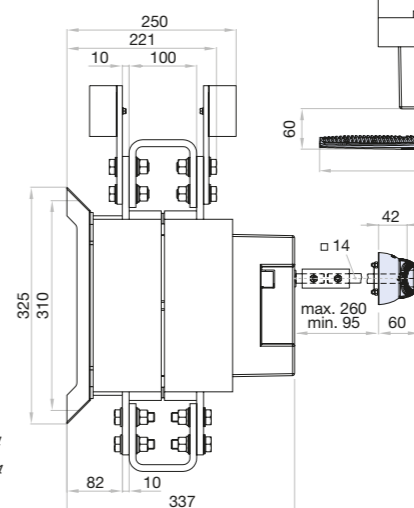
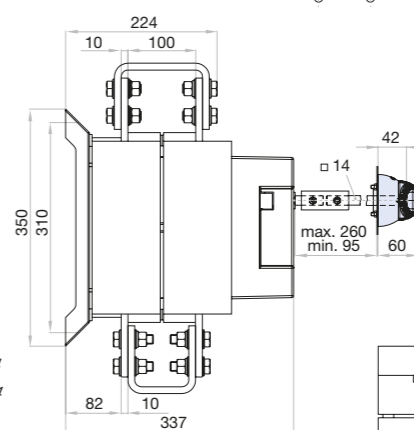
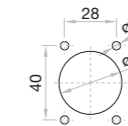


^(p1) To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult

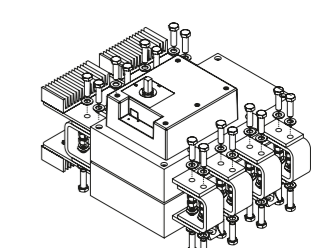
Dimensions (mm)



Door drilling for external handle



	H max (Cu) mm	L max (Cu) mm	T mm	M Nxmm
2000 A	2x10	80	M14	55
2500 A	4x10	80	M14	55
3150 A	4x10	80	M14	55





S6 DC

Switch - disconnecter for DC current 1P - 2P

Size 1

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

500 - 750 - 1000Vdc

CODE-500Vdc

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-750Vdc

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-1000Vdc

125A	S6-0125__S0
160A	S6-0160__S0
200A	S6-0200__S0
250A	S6-0250__S0
315A	S6-0315__S0
400A	S6-0400__D0

2L

2G 2H

2A 2C

1V

2J 2K

2B 2D

1W

1S 1U

2E 2F

2X 2Y

1M 1Q

DO NOT USE IN GROUNDED INSTALLATIONS

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)

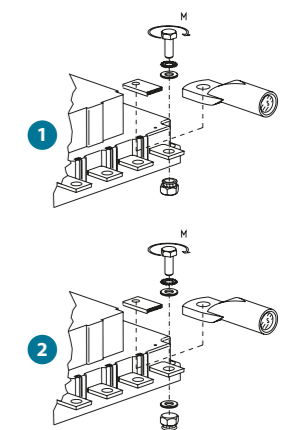
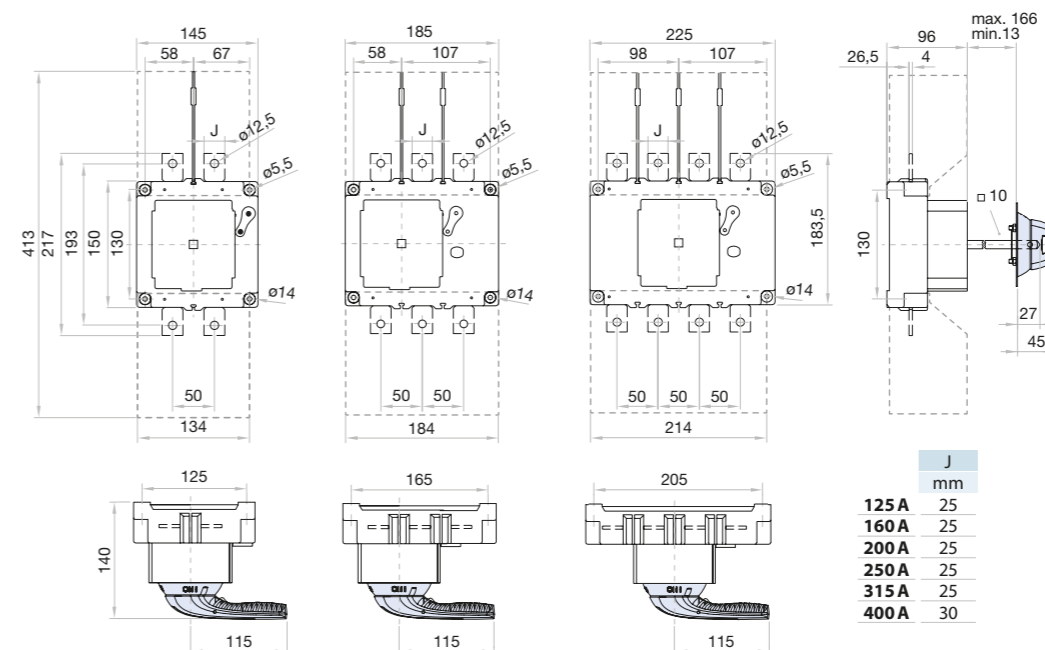
Phase barriers
CODE DR-SF11 (1 unit)
CODE DR-SF12 (2 units)
CODE DR-SF13 (3 units)

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)



	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 ^{*(e1)}	8	30	M10	18

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

Technical information



tests: **AIT** AUSTRIAN INSTITUTE OF TECHNOLOGY TOMORROW TODAY

According to IEC 60947-1
IEC 60947-3

		125	160	200	250	315	400	
Rated thermal current in ambient at	Ith 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)	Ui	V	1500	1500	1500	1500	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12	12	12	12	12
Rated operational current ^{*(1)}	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

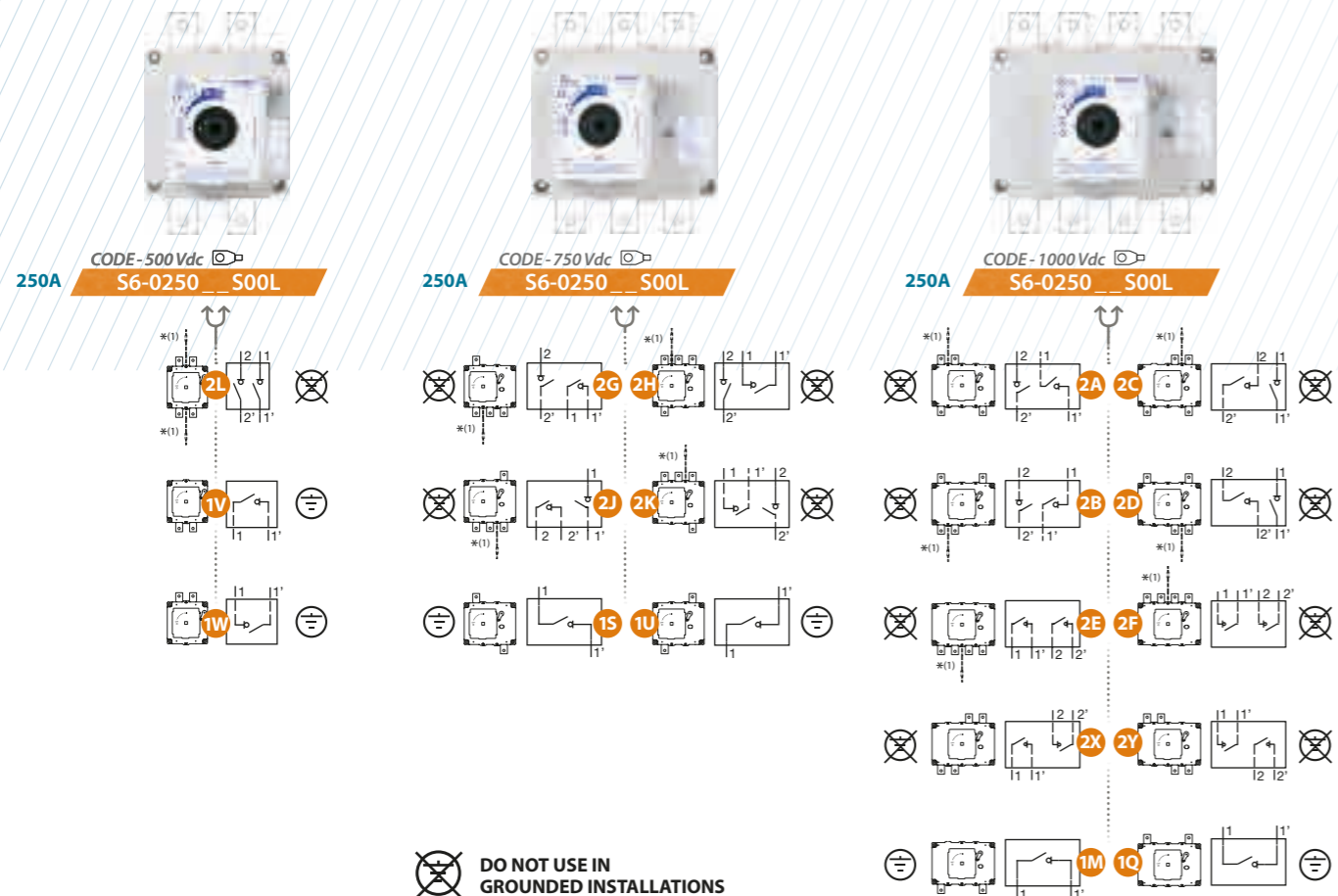
		125	160	200	250	315	400
Short - circuit behaviour							
Rated short-circuit making capacity ^{*(2)}	Icm kA (peak)	10	10	10	10	10	10
Rated short-time withstand current (1sec)	Icw kA rms	10	10	10	10	10	10
Mechanical features							
Number of mechanical operations (according to the standards, for other 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.)

S6 DC UL Switch - disconnecter for DC current 1P - 2P

Size 1
A 250
 500 - 750 - 1000Vdc



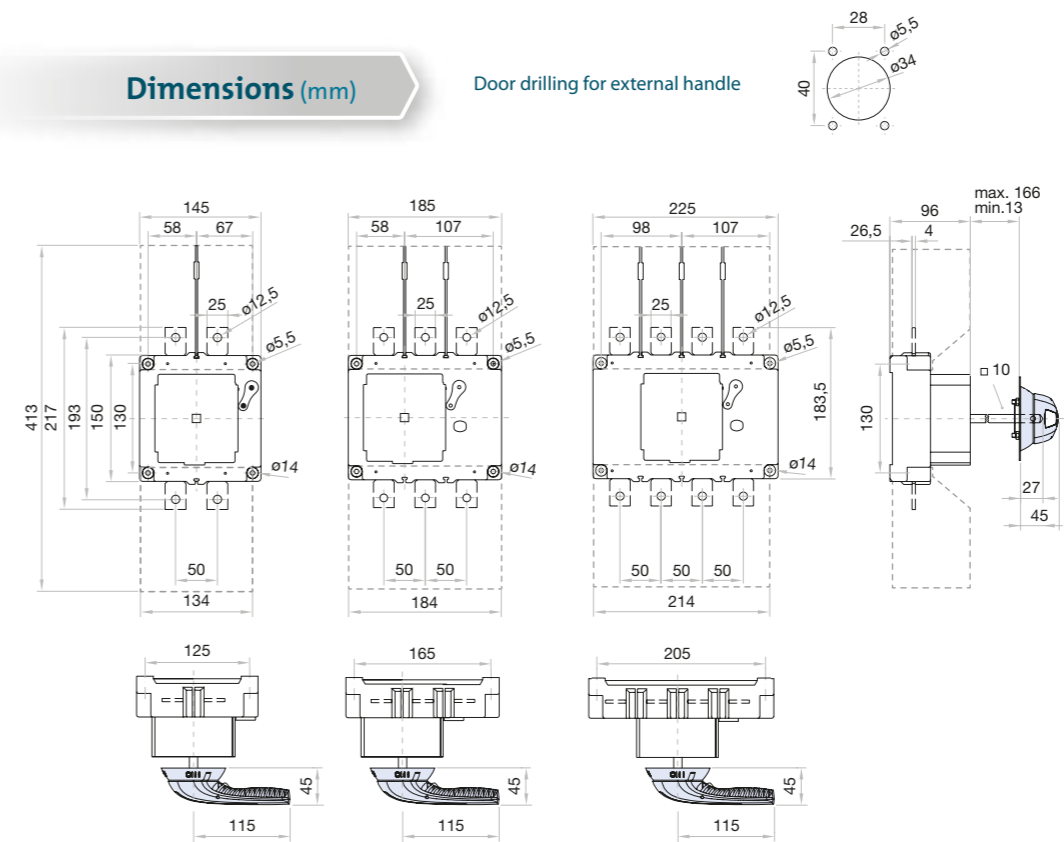
DO NOT USE IN GROUNDED INSTALLATIONS

Accessories

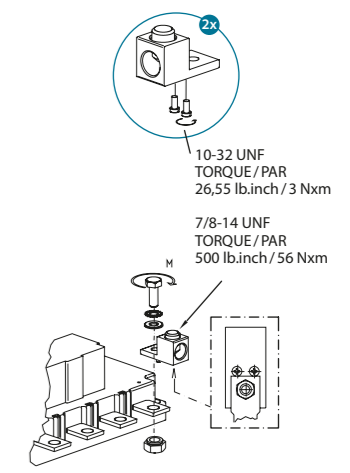
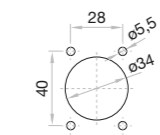
- External handle** included shaft ^(e1)
 IP65
 CODE DS-SA11
- External handle** without shaft
 IP65
 CODE DS-SA14
- Shafts**
Standard shaft included ^(e1)
 L (mm) | P (mm) | CODE
 227 | 103... 256 |
Shaft extensions
 Type 1
 L (mm) | P (mm) | CODE
 375 | 103... 415 | DS-EP14
 Type 2
 L (mm) | P (mm) | 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)
- Terminal lug**
 CODE DR-TL11 (2 units)

^(e1) With Terminal lug use phase barriers DR-SF__ to maintain the required clearance. Mandatory in these models

Dimensions (mm)



Door drilling for external handle



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: 10kA
 Suitable for Use in PV Systems in accordance with Article 690 of the NEC IEC-60947-3 Uimp 12kV DC21B-1000Vdc-250 A Ui 1500Vdc Ith 250 A


3/0 85 mm ² min	Temperature rating	Copper wire only M ^{+5%} M ^{-10%}
400 kcmil 240 mm ² max		
	75°C	M10 18 159

S6 DC Switch - disconnecter for DC current 1P - 2P


Size 2
A 500|630
500 - 750 - 1000Vdc



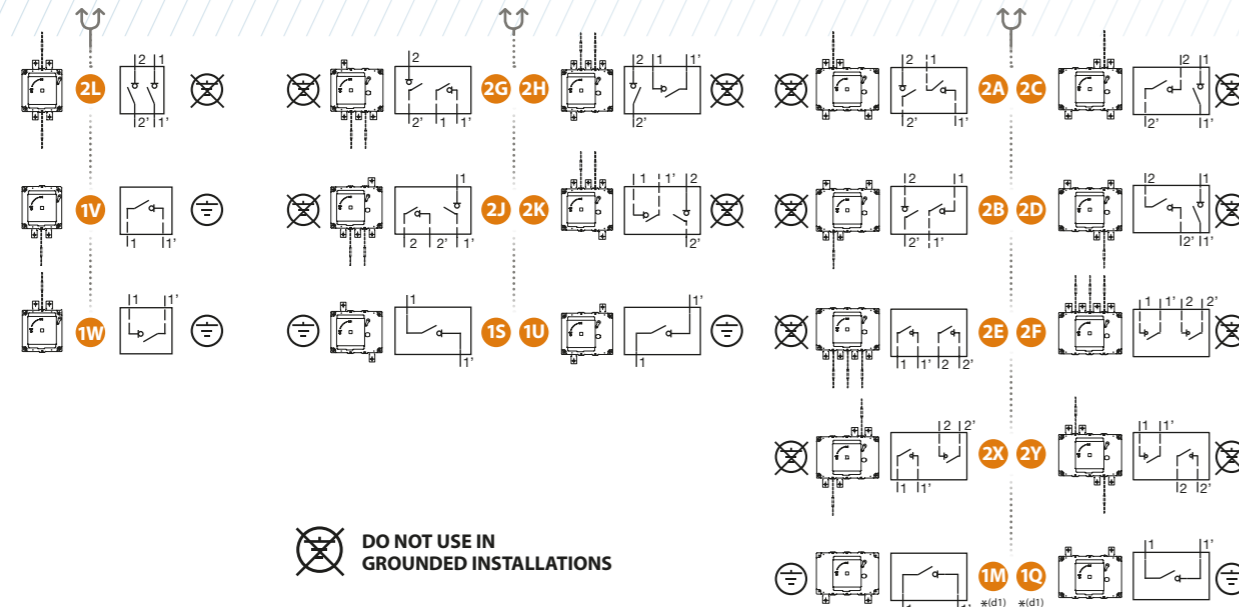
CODE - 500 Vdc
500A S6-0500 __ S0
630A S6-0630 __ S0



CODE - 750 Vdc
500A S6-0500 __ S0
630A S6-0630 __ S0




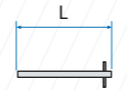
CODE - 1000 Vdc
500A S6-0500 __ S0
630A S6-0630 __ S0



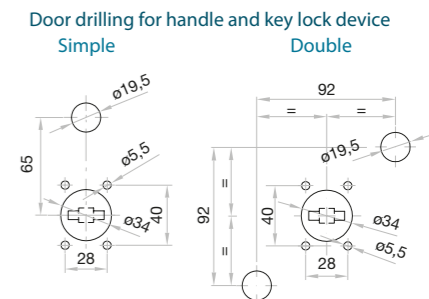
DO NOT USE IN GROUNDED INSTALLATIONS

*(id1) Only for 500 A.

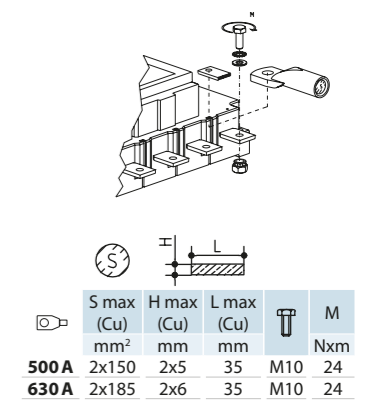
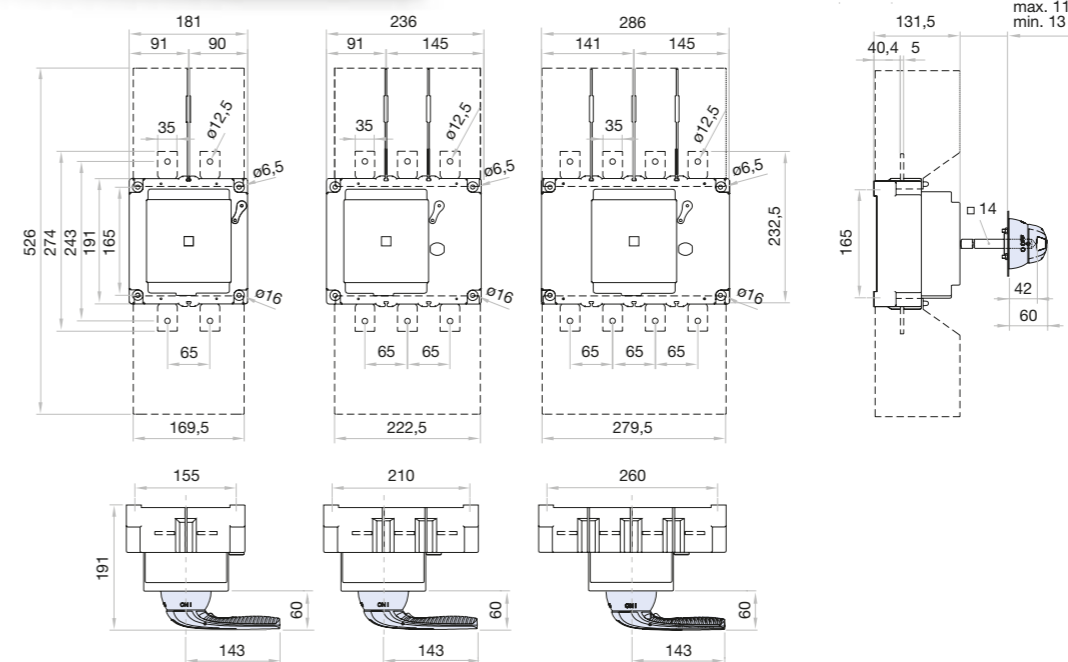
Accessories

-  **>> 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)
-  **>> Safety key lock device**
Simple CODE DS-CB21
Double CODE DS-CF21
(Using phase barriers DR-SF__ to maintain the required clearance)
-  **>> 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.



Dimensions (mm)



Technical information



tests: **AIT** AUSTRIAN INSTITUTE OF TECHNOLOGY TOMORROW TODAY

According to IEC 60947-1
IEC 60947-3

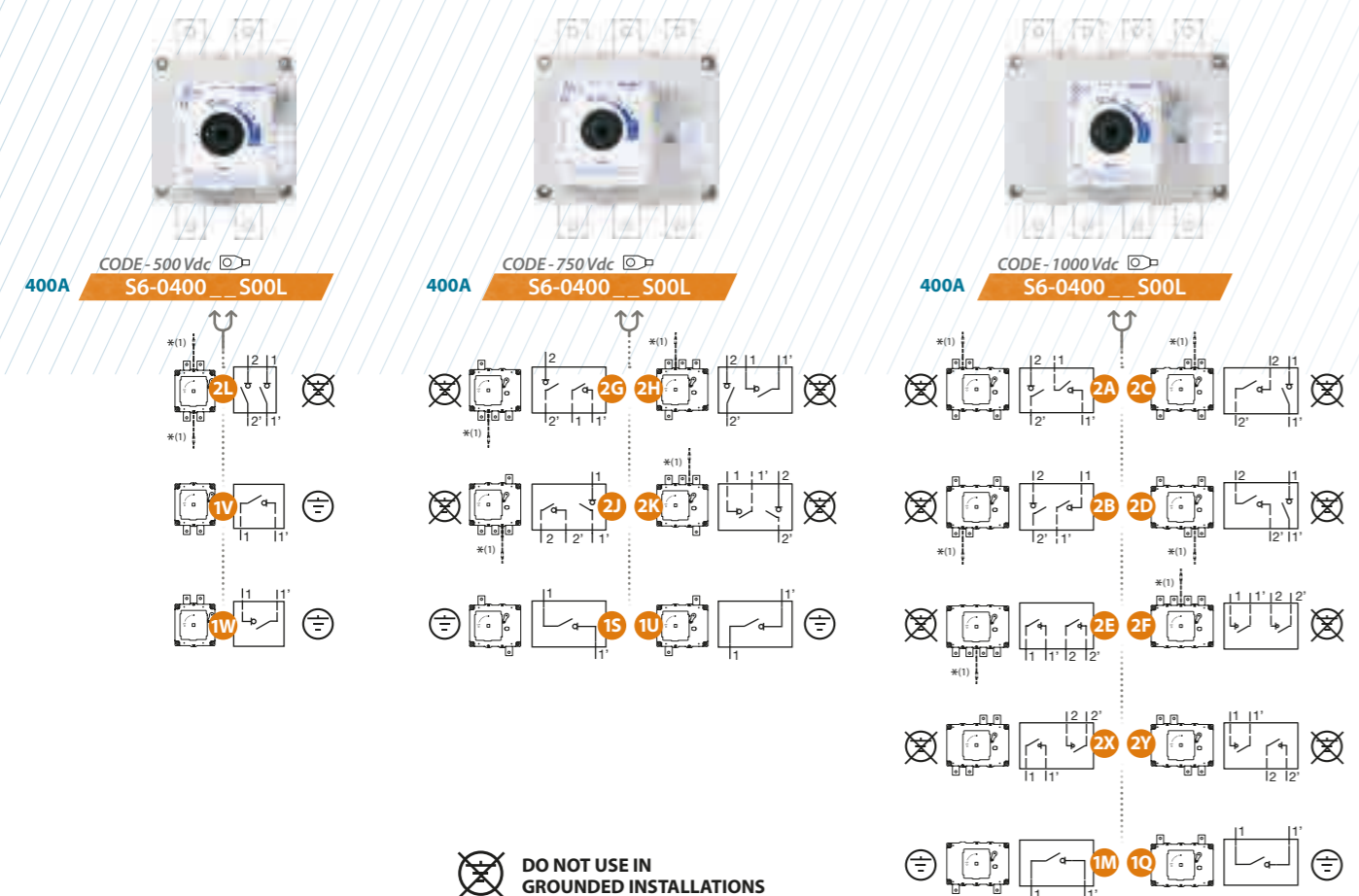
			500	630
Rated thermal current in ambient at	Ith	40° C	A 500	630
		50° C	A 500	630
		60° C	A 500	630
Rated insulation voltage (DC)	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12
Rated operational current ^{*(1)}	Ie	Code 500Vdc	A 500	630
		Code 750Vdc	A 500	630
		Code 1000Vdc	A 500	630

			500	630
Short - circuit behaviour				
Rated short-circuit making capacity ^{*(2)}	Icm	kA (peak)	10	10
Rated short-time withstand current (1sec)	Icw	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.)

S6 DC UL Switch - disconnecter for DC current 1P - 2P

Size 2
A 400
500 - 750 - 1000Vdc



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

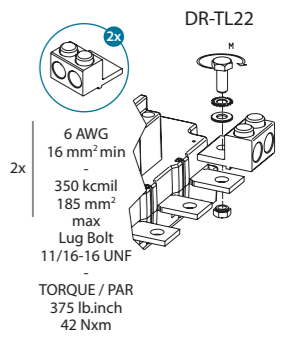
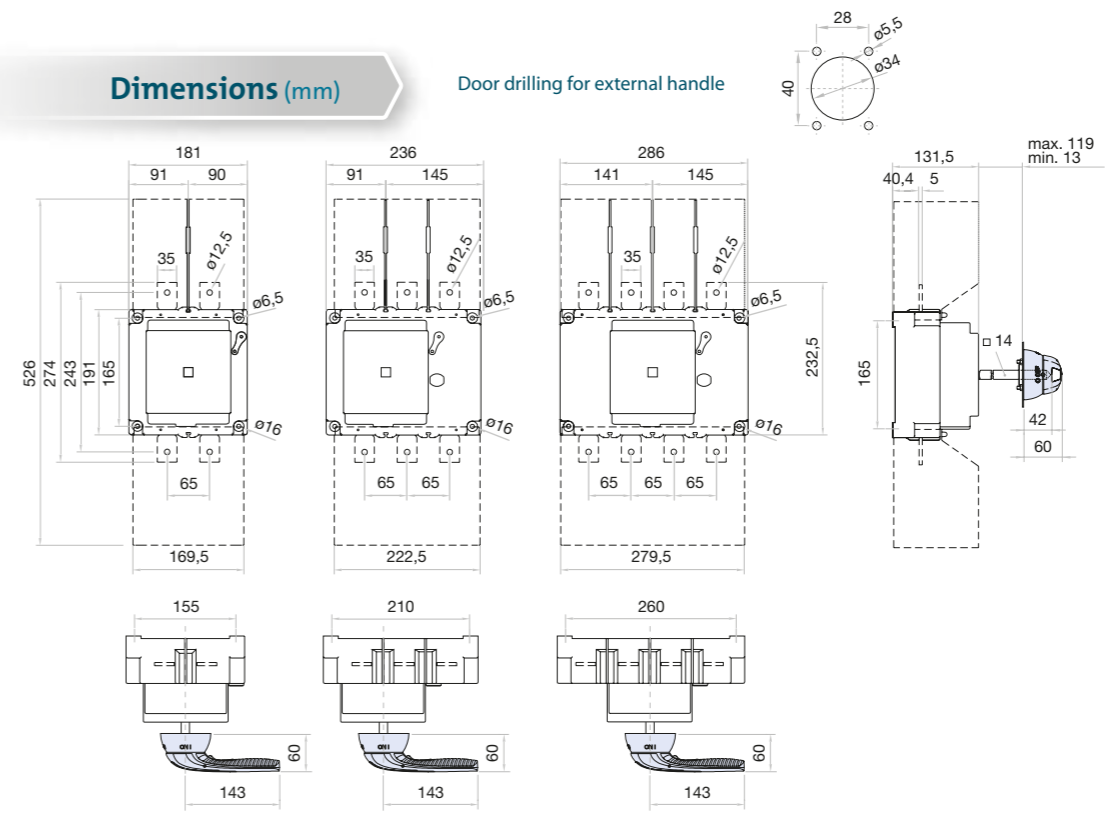
400 A
Conforms to UL98B. Minus 20 to +50°C. PV disconnects switch. Location Category B
1000 Vdc 400 A Torque: 212 lbf-in. Short circuit rating: 10 kA
Suitable for Use in PV Systems in accordance with Article 690 of the NEC
IEC-60947-3 Uimp 12 kV DC21B - 1000 Vdc - 400 A Ui 1500 Vdc I_{th} 400 A



Accessories

- 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)
- Shafts**
Standard shaft included ^{*(e1)}
L (mm) | P (mm) | CODE
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
- 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
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

Dimensions (mm)

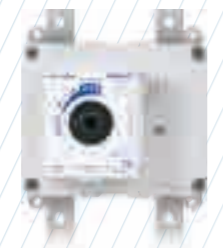


Temperature rating	75°C
Copper wire only	M10 24 212

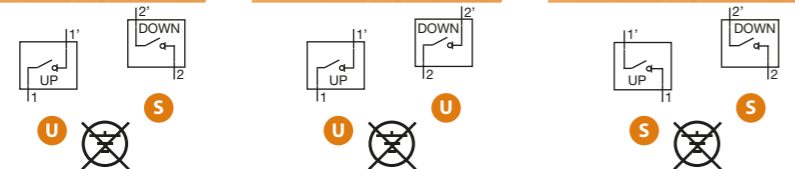


S6N DC Switch - disconnecter for DC current 2P

Size 1
A 125|160|200|250|315|400
1500Vdc



Current (A)	Code	Model
125A	S6N0125USS0	S6N0125UUS0
160A	S6N0160USS0	S6N0160UUS0
200A	S6N0200USS0	S6N0200UUS0
250A	S6N0250USS0	S6N0250UUS0
315A	S6N0315USS0	S6N0315UUS0
400A	S6N0400USD0	S6N0400UUD0



Technical information



DO NOT USE IN GROUNDED INSTALLATIONS

According to IEC 60947-1
IEC 60947-3

Rated thermal current in ambient at	lth	40°C	A							
			125	160	200	250	315	400		
Rated insulation voltage (DC)	Ui	V	1500	1500	1500	1500	1500	1500		
	Rated impulse withstand voltage	Uimp	kV	12	12	12	12	12	12	
		Rated operational current ⁽¹⁾	Ue	le	1500Vdc	A	125	160	200	250

Short - circuit behaviour

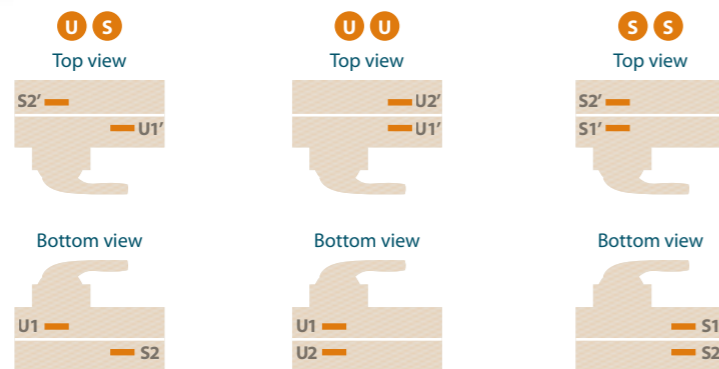
Rated short-circuit making capacity ⁽²⁾	lcm	kA (peak)	10
Rated short-time withstand current (1sec)	lcw	kA rms	10

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

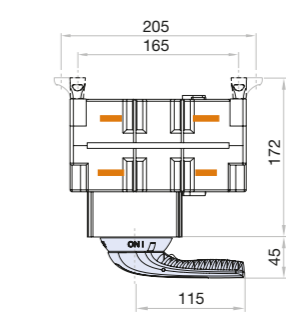
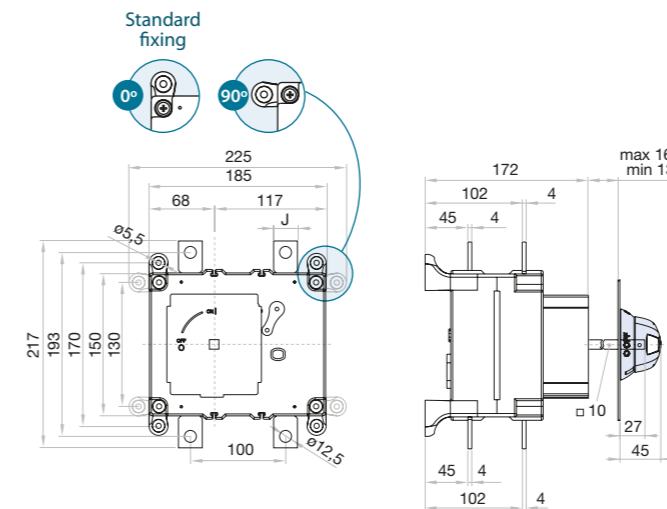
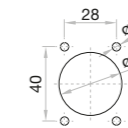
- Direct handle**
CODE DS-SI11
- External handle** included shaft ^(e1)
IP65
CODE DS-SA11
- External handle** without shaft
IP65
CODE DS-SA14

- Auxiliary contacts**
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

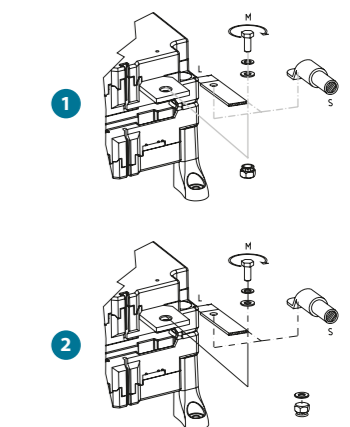
- Shafts**
Standard shaft included ^(e1)
L (mm) 227 P (mm) 185... 336
- Shaft extensions**
Type 1
L (mm) 375 P (mm) 185... 497,5 CODE DS-EP14
Type 2
L (mm) 536 P (mm) 185... 647 CODE DS-EP15

Dimensions (mm)

Door drilling for external handle



For rotated mounting there are **S6N** references with front plate rotated (supply under request).



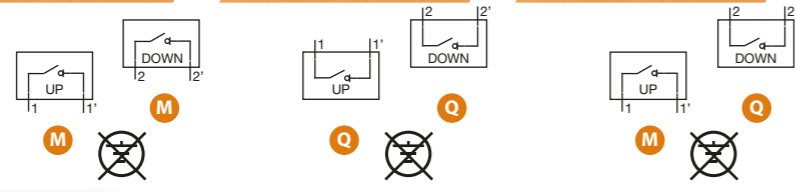
Current (A)	J		S max (Cu)		H max (Cu)		L max (Cu)		M
	mm²	mm	mm	mm	mm	mm	Nxm		
125 A	25	8	25	8	25	8	M10	18	
160 A	30	8	25	8	25	8	M10	18	
200 A	30	8	25	8	25	8	M10	18	
250 A	30	8	25	8	25	8	M10	18	
315 A	30	8	25	8	25	8	M10	18	
400 A	30	8	30	8	30	8	M10	18	



S6N DC Switch - disconnecter for DC current 2P

Size 1
A 125|160|200|250|315|400
1500Vdc

Rated current (A)	Code	Model
125A	S6N0125MMS0	S6N0125MQS0
160A	S6N0160MMS0	S6N0160MQS0
200A	S6N0200MMS0	S6N0200MQS0
250A	S6N0250MMS0	S6N0250MQS0
315A	S6N0315MMS0	S6N0315MQS0
400A	S6N0400MMD0	S6N0400MQD0



Technical information



According to IEC 60947-1
IEC 60947-3

Rated thermal current in ambient at	lth	40°C	Rated current (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)	Ui	V	1500	1500	1500	1500	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12	12	12	12	12

Rated operational current ⁽¹⁾	Ue	le	1500Vdc	A	125	160	200	250	315	400
DC21B										

DO NOT USE IN GROUNDED INSTALLATIONS

Short - circuit behaviour

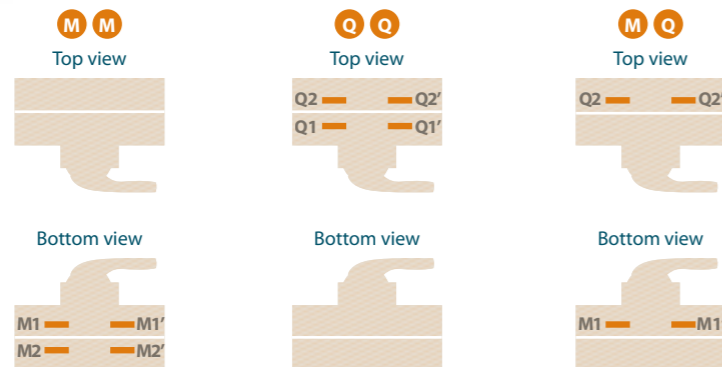
Rated short-circuit making capacity ⁽²⁾	lcm	kA (peak)	10
Rated short-time withstand current (1sec)	l _{cw}	kA rms	10

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



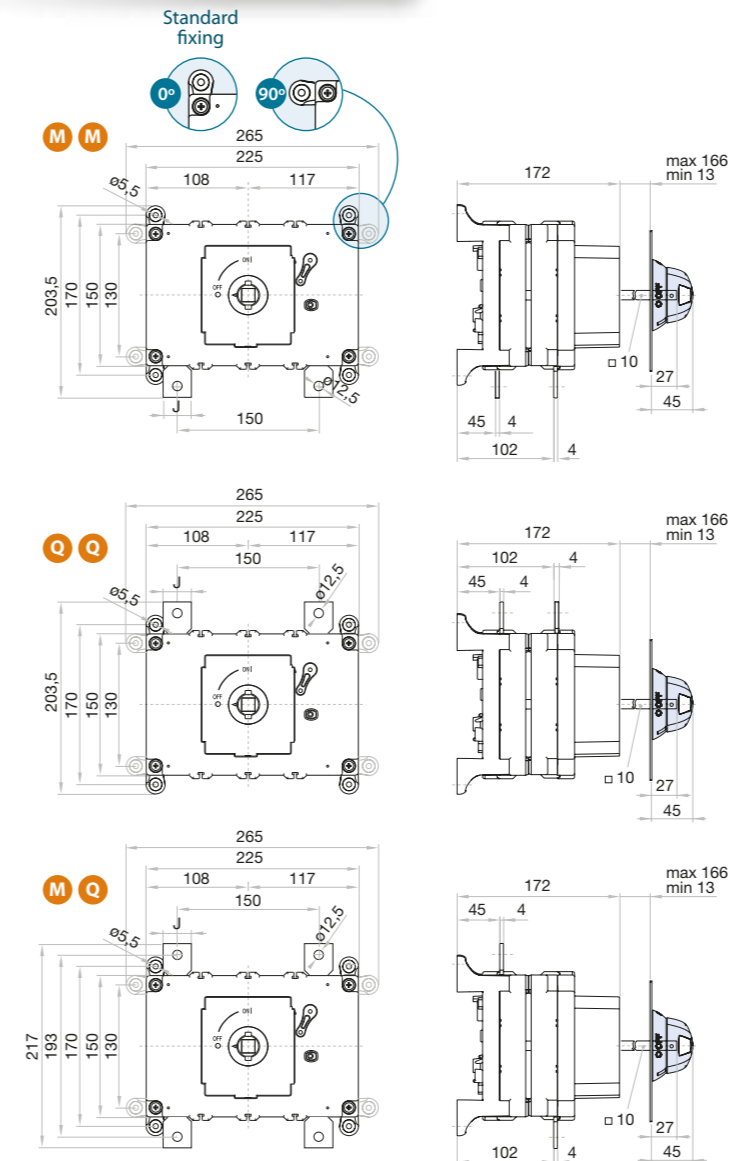
Accessories

- Direct handle**
CODE DS-SI11
- External handle** included shaft^(e1)
IP65
CODE DS-SA11
- External handle** without shaft
IP65
CODE DS-SA14

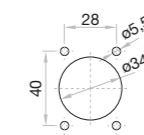
Auxiliary contacts
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

Shafts
Standard shaft included^(e1)
L (mm) 227 P (mm) 185... 336
Shaft extensions
Type 1
L (mm) 375 P (mm) 185... 497,5 CODE DS-EP14
Type 2
L (mm) 536 P (mm) 185... 647 CODE DS-EP15

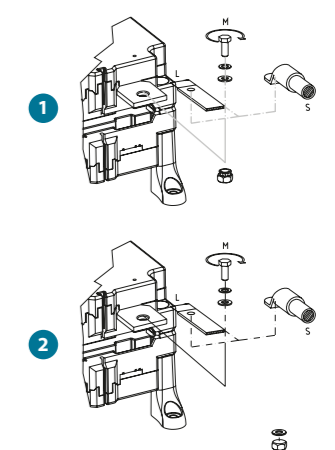
Dimensions (mm)



Door drilling for external handle



For rotated mounting there are **S6N** references with front plate rotated (supply under request).



J	S max (Cu)		H max (Cu)		L max (Cu)		M
	mm ²	mm	mm	mm	mm	Nxm	
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		



S6R DC Switch - disconnecter base mounting 1P - 2P

Size 1
A 160|200|250|315|400
 1500Vdc

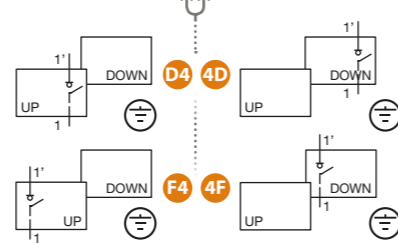
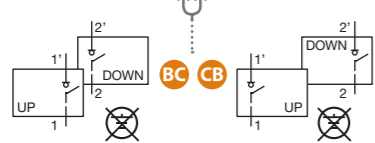


CODE - 2P

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

DO NOT USE IN GROUNDED INSTALLATIONS

	160	200	250	315	400
Rated thermal current I _{th} in ambient at 40°C up to 80°C	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 ⁽¹⁾ I _e	160	200	250	315	400
DC21B	1500Vdc	A			

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

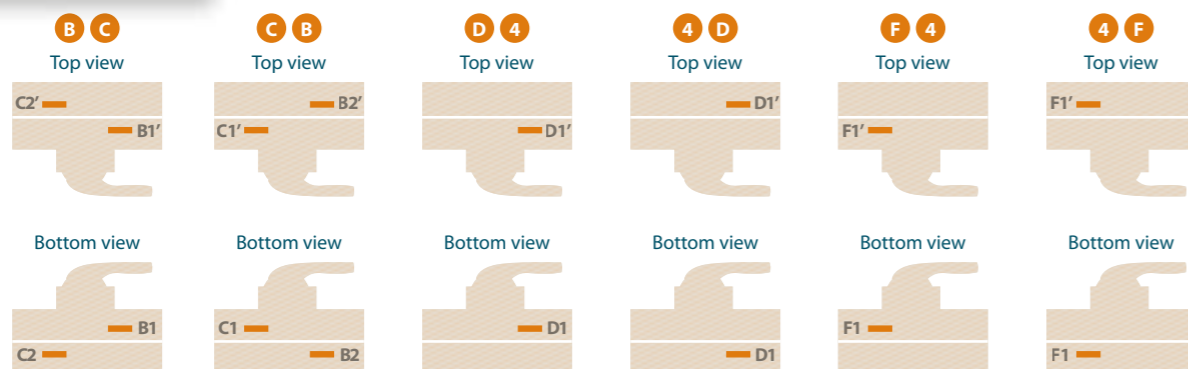
Short - circuit behaviour

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

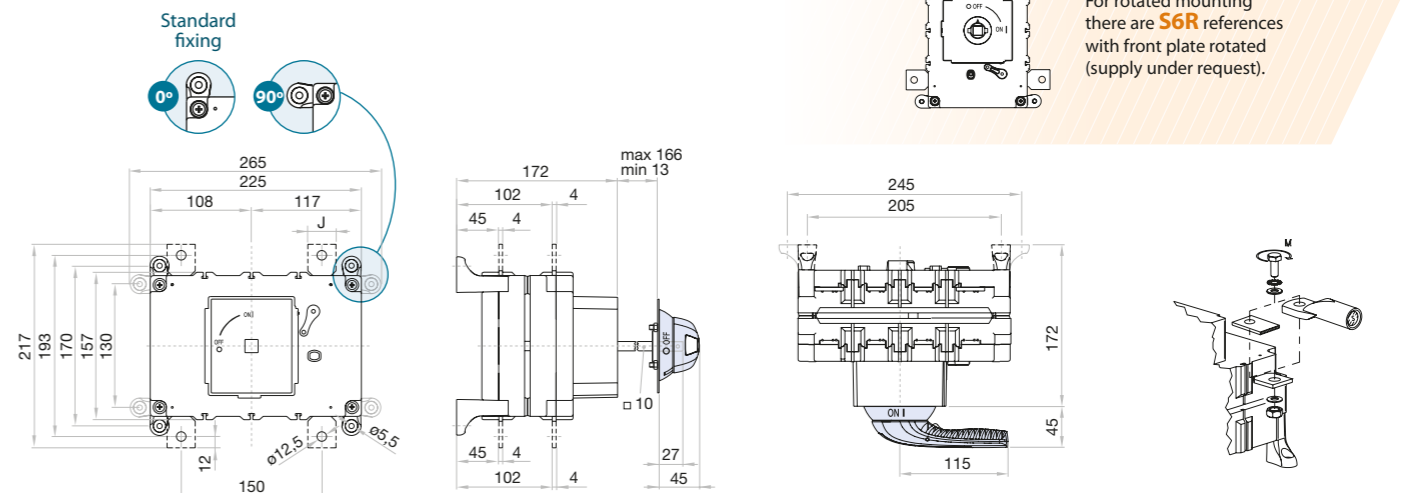
Direct handle
CODE DS-SI11

External handle included shaft ^(e1)
IP65
CODE DS-SA11

Auxiliary contacts
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02
I_e = 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)



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%} M _{-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

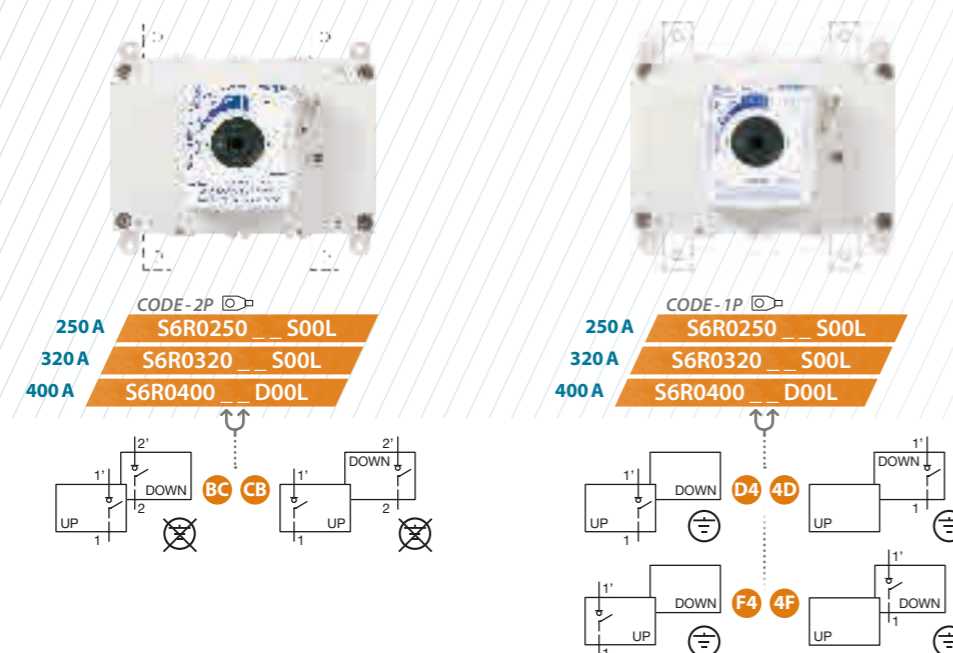
Size 1	
A	250 320 400
1500Vdc	

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



Technical information



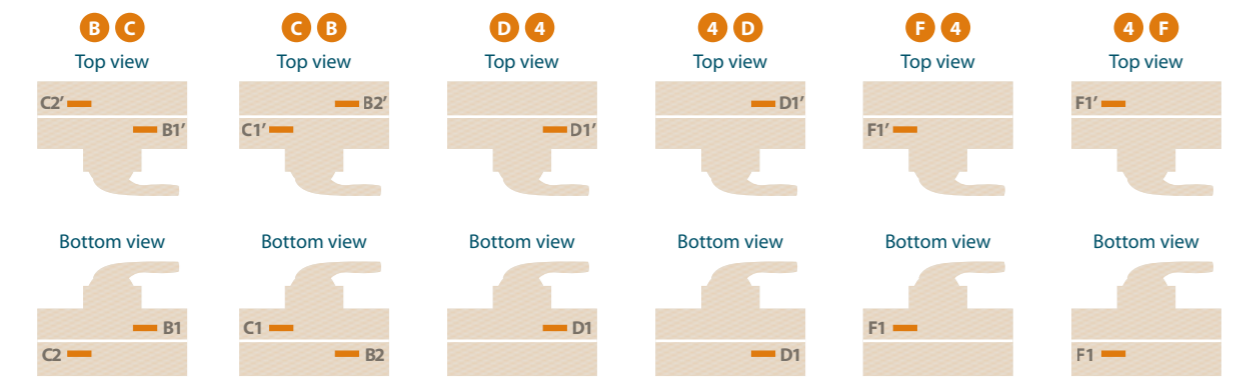
According to UL98 B

LISTED E333311	250	320	400
Rated thermal current I _{th} -20°C to 50°C	A 250	A 320	A 400
Rated operational current I _e 1500Vdc	A 250	A 320	A 400
Rated short-time withstand current (0,05 sec) I _{cw}	kA 10	kA 10	kA 10
Maximum weight	Consult according to code		
Wiring capacity			
Minimum busbar connection range	mm ² 2x 4x30	2x 4x32	2x 4x32

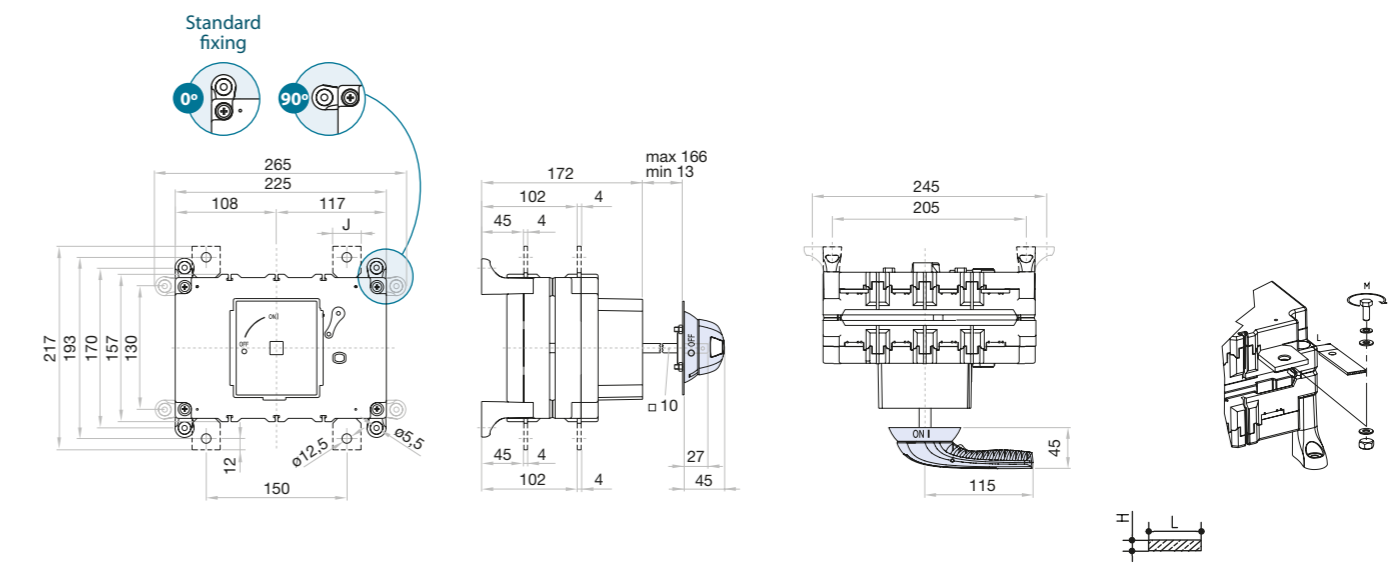
DO NOT USE IN GROUNDED INSTALLATIONS

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



Dimensions (mm)



J	H max (Cu)	L max (Cu)		T	M			
		mm	lb.inch					
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	30	4	5/32	32	1-1/4	M12	24	212

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

series
S5-S6

According to:
IEC 60947- 1 & 3
UL98
RoHS



Testing and approvals:



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.

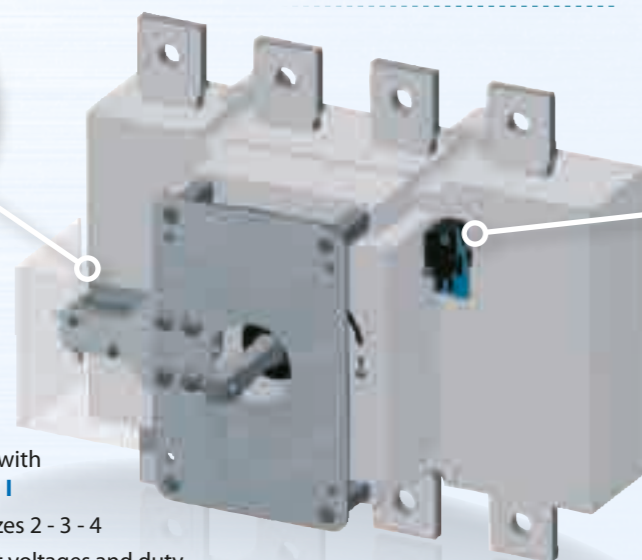
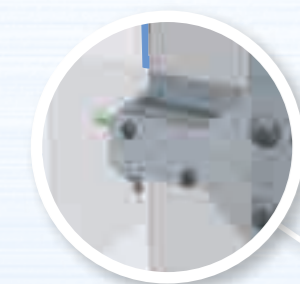
They comply with environmental requirements and undergo strict quality controls for a reliable product that meets the most demanding requirements.

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.

Safety devices



Locking by electric coil

- > Locked in the rest position with two options - 0 or 1 | 0 and 1
- > For DC disconnectors S5 Sizes 2 - 3 - 4
- > Coils available with different voltages and duty cycles according to requirements (please consult)

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 is 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



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 (250 V)

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 recombinaer 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
	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.



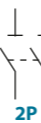
S5 DC
S6 DC

Disconnectors 1 pole (160 - 2000A) (O-I) ISOLATION ONLY

Manual handle
ISOLATION ONLY



Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	Unipolar (1P) ^{*(p1)}		External ^{*(1)} Code	Direct Code	Size	□	Shaft extensions ^{*(3)}		Bridging links ^{*(p1)} Code	Auxiliary contacts ^{*(4)}		Phase barriers		Spacers (4 units) Code	Terminal protection ^{*(5)} Code	Terminal shrouds ^{*(5)} Code	Full details in page	
				Code	Diagram					Type 1 & 2			1NO+1NC Code	2NO+2NC Code	1 unit Code	2 units Code					
										L	Code										
1500V DC20A	160	1		S6-01601VS0P38	1V	DS-SA11T	DS-SI11T	1	10	375	DS-EP14	-	D5LAU01	D5LAU02	DR-SF11	DR-SF12	DR-EL11	-	DR-CU11	254	
	200			536	DS-EP15					258											
	250			375	DS-EP14					DS-PI1G	258										
	400			536	DS-EP15					DS-PI1H	258										
	800	1		S5-04003ZC0P38	3Z	DS-SA11T	DS-SI11T	1	10	375	DS-EP14	DS-PI1G	D5LAU01	D5LAU02	-	-	-	DS-CU12	-	-	258
	1000			536	DS-EP15					DS-PI1H	258										
630	2		S6-06301VS0P38	1V	DS-LA21T	DS-LI21T	2	14	345	DS-EP23	-	D5LAU01	D5LAU02	DR-SF21	DR-SF22	DR-EL21	-	DR-CU21	256		
1600			535	DS-EP24					DS-PI2H	D5LAU01									D5LAU02	-	-
2000	3		S5-12504ZC0P38	4Z	DS-LA31T	DS-LI31T	3	14	345	DS-EP23	DS-PI3H	D5LAU01	D5LAU02	-	-	-	-	-	-	262	
										535	DS-EP24										262



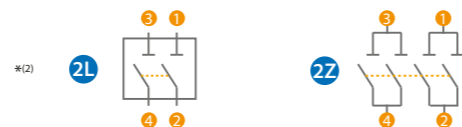
S5 DC
S6 DC

Disconnectors 2 poles (160 - 3150A) (O-I) ISOLATION ONLY

Manual handle
ISOLATION ONLY



Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	Bipolar (2P) ^{*(p1)}		External ^{*(1)} Code	Direct Code	Size	□	Shaft extensions ^{*(3)}		Bridging links ^{*(p1)} Code	Auxiliary contacts ^{*(4)}		Phase barriers		Spacers (4 units) Code	Terminal protection ^{*(5)} Code	Terminal shrouds ^{*(5)} Code	Full details in page				
				Code	Diagram					Type 1 & 2			1NO+1NC Code	2NO+2NC Code	1 unit Code	2 units Code								
										L	Code													
1500V DC20A	160	1		S6-01602LS0P38	2L	DS-SA11T	DS-SI11T	1	10	375	DS-EP14	-	D5LAU01	D5LAU02	DR-SF11	DR-SF12	DR-EL11	DR-CU11	254					
	200			536	DS-EP15					256														
	250			345	DS-EP23					-	D5LAU01								D5LAU02	DR-SF21	DR-SF22	DR-EL21	DR-CU21	256
	400			535	DS-EP24																			256
	630	2		S6-06302LS0P38	2L	DS-LA21T	DS-LI21T	2	14	345	DS-EP23	DS-PI3Lx2	D5LAU01	D5LAU02	-	-	-	-	-	-	262			
	800			535	DS-EP24					262														
1600	3		S5-12504ZC0P38	2Z	DS-LA31T	DS-LI31T	3	14	345	DS-EP23	DS-PI4Kx2	D5LAU01	D5LAU02	-	-	-	-	-	-	264				
2500	4		S5-16004ZS0P38	2Z	DS-LA41T	DS-LI41T	4	14	485	DS-EP44	DS-PI4Kx2	D5LAU01	D5LAU02	-	-	-	-	-	-	-	264			
3150			635	DS-EP45					264															



^{*(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.

^{*(3)} A standard shaft is included with the external handle.

^{*(4)} To be used as signalling or control contacts - Ie = 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.

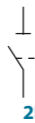
S6 DC ISOLATION ONLY DC Disconnectors

1P - 2P

Size 1
A 160|200|250|400
1500Vdc



TV	160A	200A	250A	400A	CODE-1P	CODE-2P
					S6-01601VS0P38	S6-01602LS0P38
					S6-02001VS0P38	S6-02002LS0P38
					S6-02501VS0P38	S6-02502LS0P38
					S6-04001VD0P38	S6-04002LD0P38



Technical information



DO NOT OPERATE UNDER LOAD

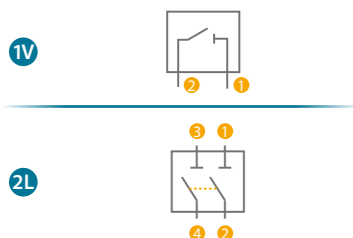
According to IEC 60947-1
IEC 60947-3

		160	200	250	400	
Rated insulation voltage DC	Ui	V	1500	1500	1500	
Rated impulse withstand voltage	Uimp	kV	12	12	12	
Rated operational current DC20A	Ie	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

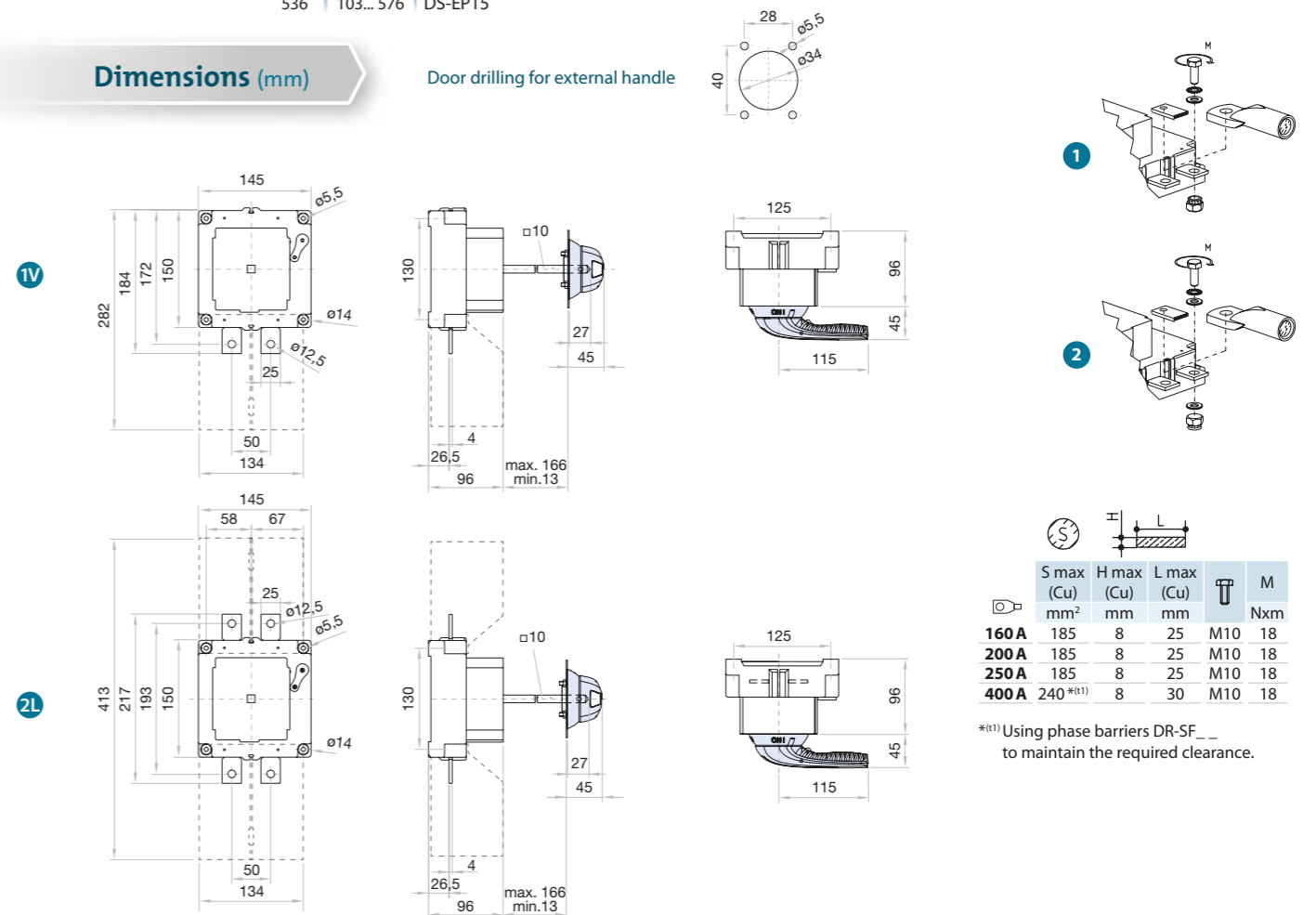


Accessories

- 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)
- 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 | 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

Dimensions (mm)



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T M	M Nxmm
160 A	185	8	25	M10	18
200 A	185	8	25	M10	18
250 A	185	8	25	M10	18
400 A	240*(e1)	8	30	M10	18

*(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



DO NOT OPERATE UNDER LOAD

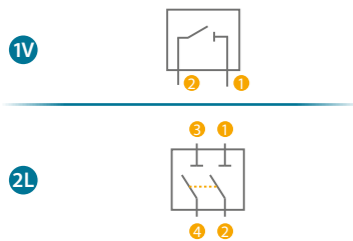
According to IEC 60947-1 IEC 60947-3

		630	800
Rated insulation voltage DC U_i	V	1500	1500
Rated impulse withstand voltage	U_{imp} kV	12	12
Rated operational current DC20A	I_e Ue 1500 Vdc A	630	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

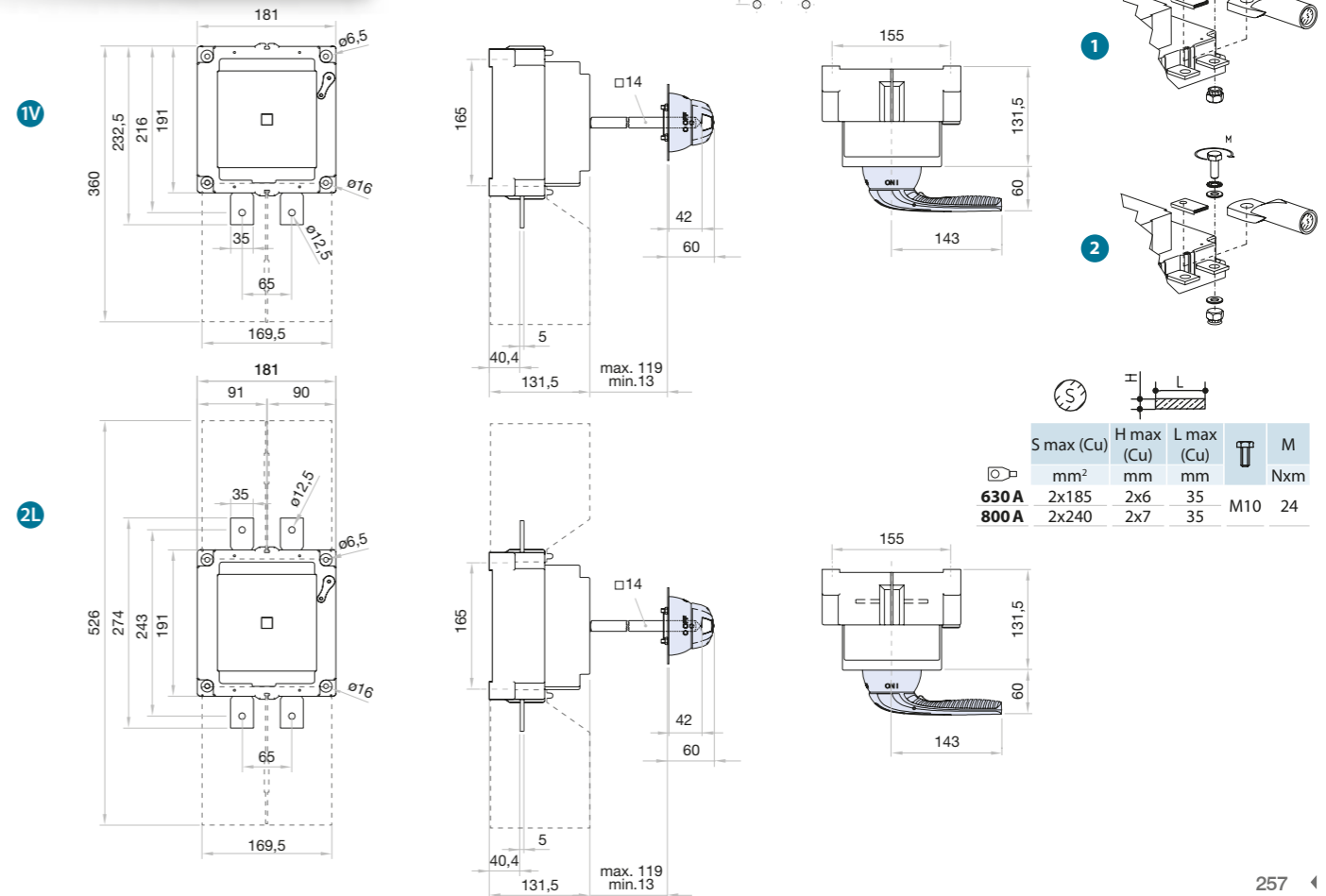
- Direct handle**
CODE DS-LI21T
- External handle** included shaft*(e1)
IP65
CODE DS-LA21T
- External handle** without shaft
IP65
CODE DS-LA24T
- Terminal shrouds**
CODE DR-CU21 (1 unit)
- Phase barriers**
CODE DR-SF21 (1 unit)
CODE DR-SF22 (2 units)
- Spacers**
CODE DR-EL21 (4 units)
- Auxiliary contacts**
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)	CODE
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

Dimensions (mm)

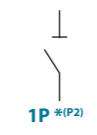
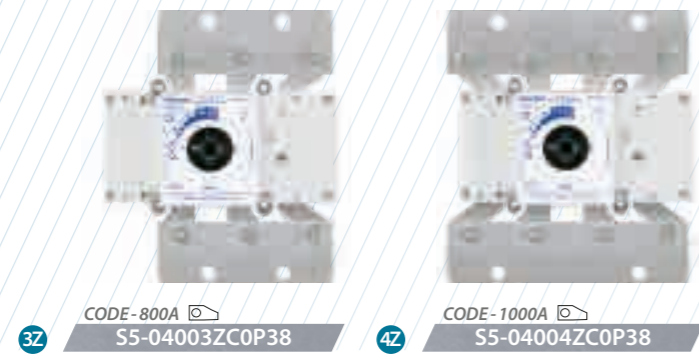


S5 DC ISOLATION ONLY DC Disconnectors 1P

Size 1

A 800 | 1000

1500 Vdc



Accessories

- Direct handle**
 CODE DS-SI11T
- Auxiliary contacts**
 1NO+1NC CODE D5LAU01
 2NO+2NC CODE D5LAU02
 I_e = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.
- External handle** included shaft*(e1)
 IP65
 CODE DS-SA11T
- External handle** without shaft
 IP65
 CODE DS-SA14T
- Terminal protection**
 CODE DS-CU12
 (1 unit for input or output)
- Bridging links*(P2)**
 3Z 800A CODE DS-PI1G (2 units)
 4Z 1000A CODE DS-PI1H (2 units)

- Shafts**
Standard shaft included *(e1)
 L (mm) | P (mm) | CODE
 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

Technical information



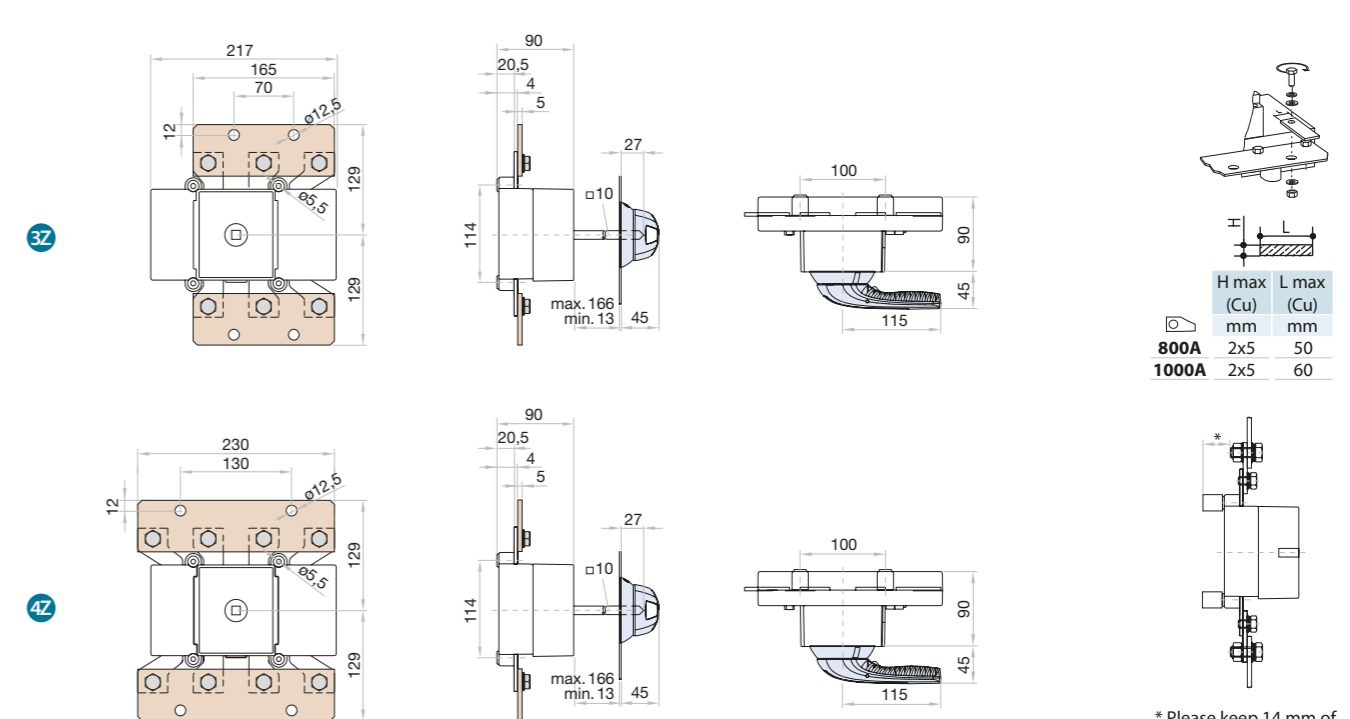
DO NOT OPERATE UNDER LOAD

According to IEC 60947-1
IEC 60947-3

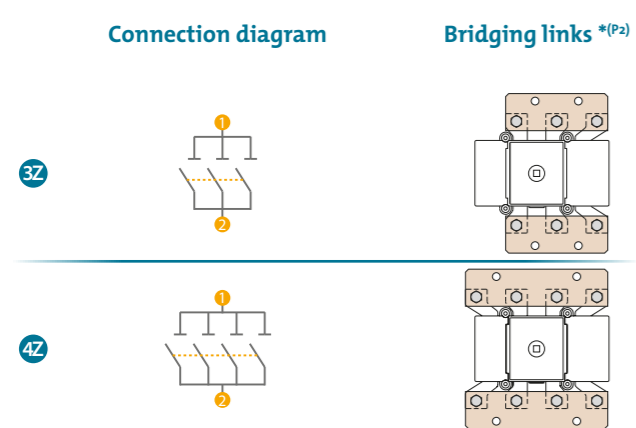
		800	1000
Rated insulation voltage DC U _i	V	1500	1500
Rated impulse withstand voltage	U _{imp} kV	8	8
Rated operational current DC20A	I _e U _e 1500 Vdc A	800	1000

		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

Dimensions (mm)



Connection diagram



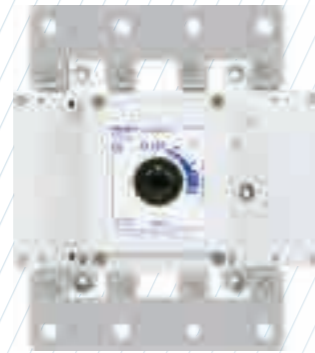
	H max (Cu) mm	L max (Cu) mm
800A	2x5	50
1000A	2x5	60

* Please keep 14 mm of clearance if assemble plate is metallic

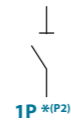
S5 DC ISOLATION ONLY DC Disconnectors

1P

Size 2	
A	1600
1500 Vdc	



CODE-1600A S5-08004ZCOP38



Technical information



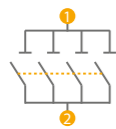
According to IEC 60947-1
IEC 60947-3

Rated insulation voltage DC U_i	V	1600
Rated impulse withstand voltage	U_{imp} kV	12
Rated operational current DC20A	I_e 1500 Vdc A	1600

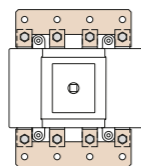
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	1600
Maximum weight (without bridging links)	Kg	3000
		4,5

Connection diagram

Connection diagram



Bridging links ^{*(P2)}



Accessories



» Direct handle
CODE DS-LI21T



» Auxiliary contacts
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02
 $I_e = 16$ A (resistive loads)
4 A (inductive loads) at 250 Vac.



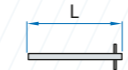
» External handle included shaft ^{*(e1)}
IP65
CODE DS-LA21T



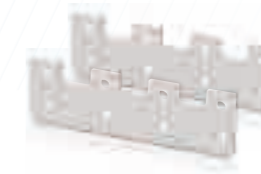
» Terminal protection
CODE DS-CU22
(1 unit for input or output)



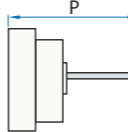
» External handle without shaft
IP65
CODE DS-LA24T



» Shafts
Standard shaft included ^{*(e1)}
 L (mm) | P (mm) | CODE
195 | 134... 240 |



» Bridging links ^{*(P2)}
CODE DS-PI2H (2 units)



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

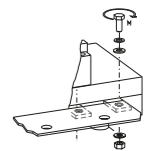
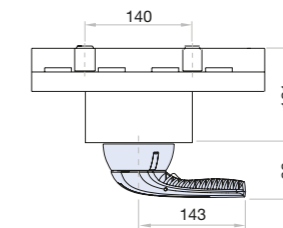
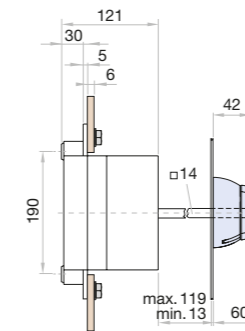
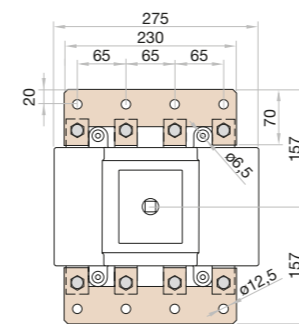
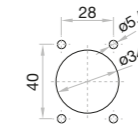
^{*(P2)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.



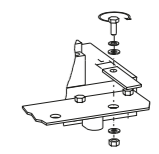
Type 2
 L (mm) | P (mm) | CODE
535 | 134... 560 | DS-EP24

Dimensions (mm)

Door drilling for external handle



T	M
Nxm	
M10	24



H max (Cu)	L max (Cu)
mm	mm
2x5	50

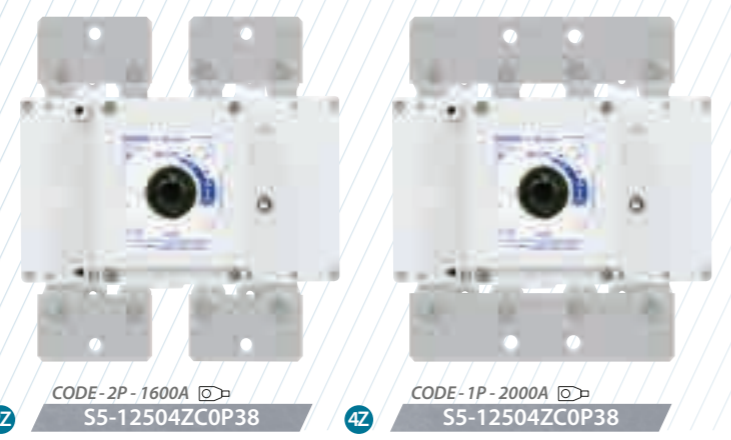
S5 DC ISOLATION ONLY DC Disconnectors

1P - 2P

Size 3

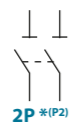
A 1600|2000

1500Vdc



2Z CODE-2P-1600A S5-12504ZCOP38

4Z CODE-1P-2000A S5-12504ZCOP38



Accessories



» Direct handle
CODE DS-LI31T



» External handle included shaft*(P2)
IP65
CODE DS-LA31T



» External handle without shaft
IP65
CODE DS-LA33T

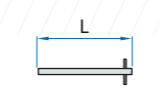


» Auxiliary contacts
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

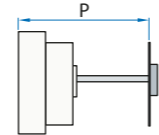


» Bridging links*(P2)
2Z 1600A CODE x2 DS-PI3L (2 units)
4Z 2000A CODE DS-PI3H (2 units)

*(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

Technical information



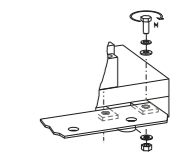
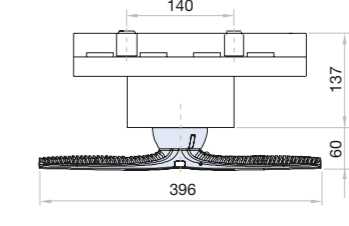
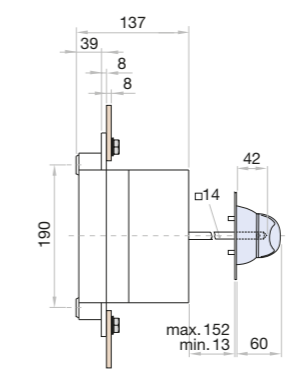
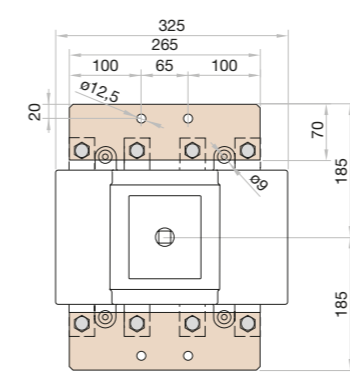
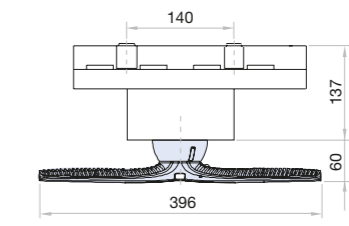
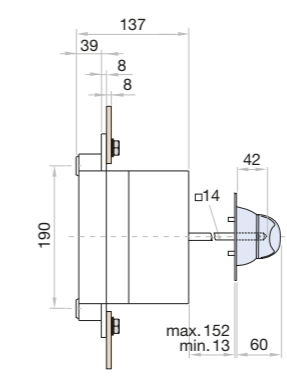
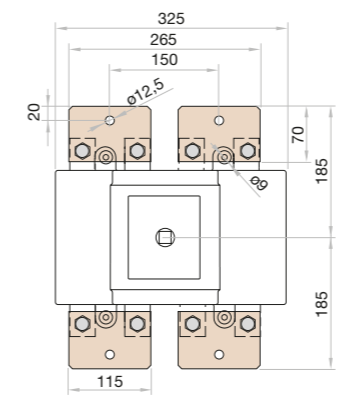
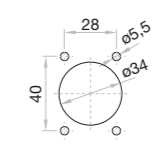
According to IEC 60947-1
IEC 60947-3

	1600	2000
Rated insulation voltage DC Ui	V 1500	1500
Rated impulse withstand voltage Uimp	kV 12	12
Rated operational current DC20A Ie	A 1600	2000

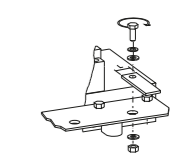
	1600	2000
Number of mechanical operations (according to the standards, for other values please consult) Cycles	3000	3000
Maximum weight (without bridging links) Kg	7,6	7,6

Dimensions (mm)

Door drilling for external handle



M Nxmm
M14 45

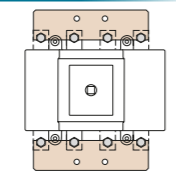
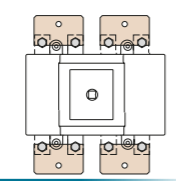
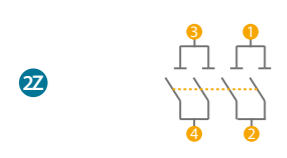


H max (Cu) mm	L max (Cu) mm
1600A 2x5	80
2000A 3x5	100

Connection diagram

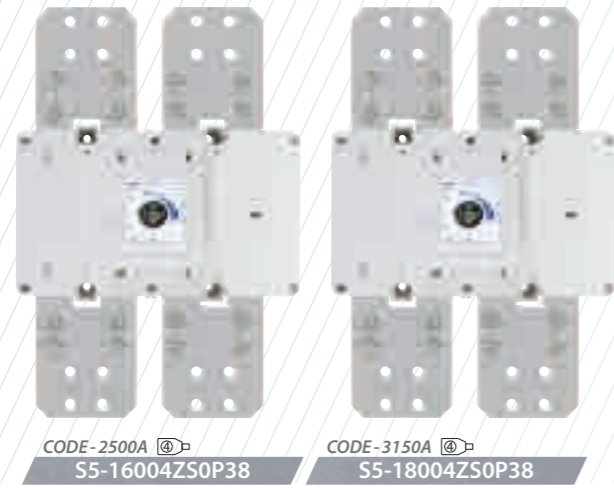
Connection diagram

Bridging links *(P2)



S5 DC ISOLATION ONLY DC Disconnectors 2P

Size 4	
A	2500 3150
	1500Vdc



Accessories



» Direct handle
CODE DS-LI41T



» External handle included shaft^{*(P2)}
IP65
CODE DS-LA41T



» External handle without shaft
IP65
CODE DS-LA43T

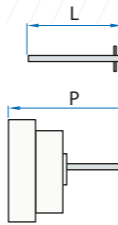


» Auxiliary contacts
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» 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^{*(P2)}
L (mm) | P (mm) | CODE
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

Technical information



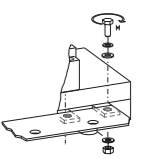
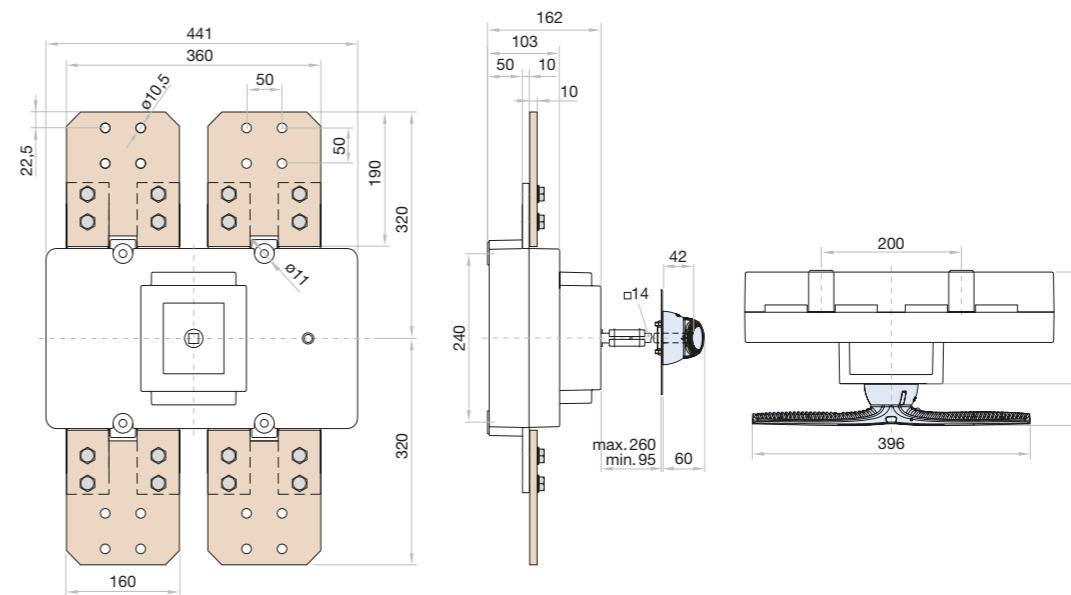
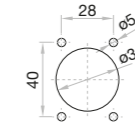
According to IEC 60947-1
IEC 60947-3

		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	3150

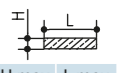
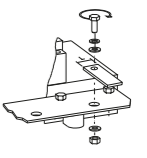
		2500	3150
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000	2000
Maximum weight (without bridging links)	Kg	20,8	20,8

Dimensions (mm)

Door drilling for external handle



M
Nxm
M14 55

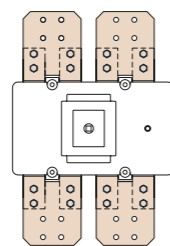
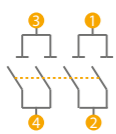


	H max (Cu) mm	L max (Cu) mm
2500A	2x5	100
3150A	3x5	100

Connection diagram

Connection diagram

Bridging links^{*(P2)}



Code	Page	Code	Page	Code	Page	Code	Page	Code	Page
40110028	31	CCP06303NSO	146/158	CIS25C02003PR	68/110	CTR2CC05003NS	148/184	CTRCFC25003NPAP	148/190
40110029	31	CCP06303PSO	146/158	CIS25C02503NR	68/110	CTR2CC05003PS	148/184	CTRCFC25003PPAP	148/190
40110030	30	CCP08003NSO	146/158	CIS25C02503PR	68/110	CTR2CC06303NS	148/184	CTRCFC31503NPAP	148/190
40110031	30	CCP08003PSO	146/158	CIS25C03153NR	68/110	CTR2CC06303PS	148/184	CTRCFC31503PPAP	148/190
40111002	30	CCP10003NSO	146/160	CIS25C03153PR	68/110	CTR2CC08003NS	148/184	D5LAN01	181
40111003	30	CCP10003PSO	146/160	CIS25C04003NR	68/112	CTR2CC08003PS	148/184	D5LAU01	65/67/69/71 73/75/77/79
40111032	31	CCP12503NSO	146/160	CIS25C04003PR	68/112	CTR2CC10003NS	148/186		81/85/89/91
40111033	31	CCP12503PSO	146/160	CIS25C06303NR	68/112	CTR2CC10003PS	148/186		103/105/107
40111034	30	CEC00633NBO	146/150	CIS25C06303PR	68/112	CTR2CC12503NS	148/186		109/111/113
40111035	30	CEC00633NSO	146/150	CIS25C08003NR	68/114	CTR2CC12503PS	148/186		115/117/123
40112026	31	CEC00633PBO	146/150	CIS25C08003PR	68/114	CTR2EC00633NS	148/176		129/131/133
40112028	30	CEC00633PSO	146/150	CIS25C10003NS	68/116	CTR2EC00633PS	148/176		139/141/143
40112029	30	CEC00803NBO	146/150	CIS25C10003PS	68/116	CTR2EC00803NS	148/176		147/149/153
40113001	30	CEC00803NSO	146/150	CIS25C12503NS	68/116	CTR2EC00803PS	148/176		159/161/179
40113002	30	CEC00803PBO	146/150	CIS25C12503PS	68/116	CTR2EC01003NS	148/176		183/185/187
40113007	30	CEC00803PSO	146/150	CIS25C16003NS	68/116	CTR2EC01003PS	148/176		211/213/217
40113008	30	CEC01003NSO	146/150	CIS25C16003PS	68/116	CTR2EC01253NS	148/176		219/221/223
40113023	30	CEC01003PSO	146/150	CIS25D00403NB	68/106	CTR2EC01253PS	148/176		225/231/233
40113024	30	CEC01253NSO	146/150	CIS25D00403PB	68/106	CTR2FC01253NS	148/180		235/237/239
40140045	31	CEC01253PSO	146/150	CIS25D00633NB	68/106	CTR2FC01253PS	148/180		241/243/245
40140061	31	CIF21C00633NBDB	122/134	CIS25D00633PB	68/106	CTR2FC01603NS	148/180		247/249/253
40140203	31	CIF21C00633PBDB	122/134	CIS25D00803NB	68/106	CTR2FC01603PS	148/180	D5LAU02	255/257/259
40141039	31	CIF21C01003NBDB	122/134	CIS25D00803PB	68/106	CTR2FC02003NS	148/180		261/263/265
40141053	31	CIF21C01003PBDB	122/134	CIS25D01253NB	68	CTR2FC02003PS	148/180		65/67/69/71
40141188	31	CIF21C01253NBDB	122/136	CIS25D01253PB	68	CTR2FC16003NS	148/188		73/75/77/79
40142020	31	CIF21C01253NTDB	122/136	CIS25D01603NB	68	CTR2FC16003PS	148/188		81/85/89/91
40142025	31	CIF21C01253PBDB	122/136	CIS25D01603PB	68	CTR2FC18003NS	148/188		103/105/107
40142028	31	CIF21C01253PTDB	122/136	CIS25D02003NR	68/110	CTR2FC18003PS	148/188		109/111/113
40142095	31	CIF21C01603NBDB	122/136	CIS25D02003PR	68/110	CTR2FC20003ND	148/188		129/131/133
40143020	31	CIF21C01603NTDB	122/136	CIS25D02503NR	68/110	CTR2FC20003NP	148/190		139/141/143
40143028	31	CIF21C01603PBDB	122/136	CIS25D02503PR	68/110	CTR2FC20003PD	148/188		147/149/153
40143084	31	CIF21C01603PTDB	122/136	CIS25D03153NR	68/110	CTR2FC20003PP	148/190		157/159/161
40143086	31	CIF22C01603NSDO	122/138	CIS25D03153PR	68/110	CTR2FC25003NP	148/190		179/183/185
40143088	31	CIF22C01603PSDO	122/138	CIS25D04003NR	68/112	CTR2FC25003PP	148/190		187/211/213
9-KN100145	30	CIF22C02503NSD1	122	CIS25D04003PR	68/112	CTR2FC31503NP	148/190		217/219/221
9-KN100146	30	CIF22C02503PSD1	122	CIS25D06303NR	68/112	CTR2FC31503PP	148/190		223/225/231
CCF02003NSO	146/156/195 202	CIF22C04003NSD2	122	CIS25D06303PR	68/112	CTR2LC00633NB	148/178		233/235/237
CCF02003PSO	146/156/195 202	CIF22C04003PSD2	122	CIS25D08003NR	68/114	CTR2LC00633PB	148/178		239/241/243
CCF02503NSO	146/156/195 202	CIF22C06303NSD3	122/142	CIS25D08003PR	68/114	CTR2LC00803NB	148/178		245/247/249
CCF02503PSO	146/156/195 202	CIF22C06303PSD3	122/142	CIS25D10003NS	68/116	CTR2LC00803PB	148/178		253/255/257
CCF03153NSO	146/156/195 202	CIF22C08003NSD3	122/142	CIS25D10003PS	68/116	CTR2LC00803SAN	148/182	D5LCB11	259/261/263
CCF03153PSO	146/156/195 202	CIF22C08003PSD3	122/142	CIS25D12503NS	68/116	CTR2LC00803SAN	148/182	D5LCB21	265
CCF04003NSO	146/156/195 202	CIS25A00403NB	68/106	CIS25D12503PS	68/116	CTR2LC00803SAN	148/182		147/157/169
CCF04003PSO	146/156/195 202	CIS25A00403PB	68/106	CIS25D16003NS	68/116	CTR2LC00803SAN	148/182	D5LCB31	147/149/159 171/185
CCF05003NSO	146/158/195 202/204	CIS25A00633NB	68/106	CIS25D16003PS	68/116	CTR2LC00803SAN	148/182		147/149/161
CCF05003PSO	146/158/195 202/204	CIS25A00633PB	68/106	CIS25F00403NB	68/106	CTR2LC00803SAN	148/182	D5LCB41	147/149/163 165/175/189
CCF06303NSO	146/158/195 202/204	CIS25A00803NB	68/106	CIS25F00633PB	68/106	CTR2LC00803SAN	148/182		191
CCF06303PSO	146/158/195 202/204	CIS25A00803PB	68/106	CIS25F00803NB	68/106	CTR2LC00803SAN	148/182	D5LCBB1	147/149/153 155/167/179
CCF08003NSO	146/158/195 202/204	CIS25A01253NB	68	CIS25F00803PB	68/106	CTR2LC00803SAN	148/182		181/183
CCF08003PSO	146/158/195 202/204	CIS25A01603NB	68	CIS25F00803PS	68/106	CTR2LC00803SAN	148/182	D5LCEB1	147/149/153 155/179/181
CCF10003NSO	146/160/195 204	CIS25A02003NR	68/110	CIS25F01253PB	68	CTR2LC00803SAN	148/182		183
CCF10003PSO	146/160/195 204	CIS25A02003PR	68/110	CIS25F01253PS	68	CTR2LC00803SAN	148/182	D5LCF11	147/149/157
CCF12503NSO	146/160/195 204	CIS25A02503NR	68/110	CIS25F01603NB	68	CTR2LC00803SAN	148/182	D5LCF21	147/149/159 171/185
CCF12503PSO	146/160/195 204	CIS25A02503PR	68/110	CIS25F01603PB	68	CTR2LC00803SAN	148/182		147/149/161
CCP02003NSO	146/156	CIS25A03153NR	68/110	CIS25F02003NR	68/110	CTR2LC00803SAN	148/182	D5LCF31	147/149/161 173/187
CCP02003PSO	146/156	CIS25A03153PR	68/110	CIS25F02003PR	68/110	CTR2LC00803SAN	148/182		147/149/159
CCP02503NSO	146/156	CIS25A03153NR	68/110	CIS25F02503NR	68/110	CTR2LC00803SAN	148/182	D5LCF41	147/149/159 171/185
CCP02503PSO	146/156	CIS25A03153PR	68/110	CIS25F02503PR	68/110	CTR2LC00803SAN	148/182		147/149/161
CCP03153NSO	146/156	CIS25A04003NR	68/112	CIS25F03153NR	68/110	CTR2LC00803SAN	148/182	D5LCF81	147/149/157
CCP03153PSO	146/156	CIS25A04003PR	68/112	CIS25F03153PR	68/110	CTR2LC00803SAN	148/182	D5LCF21	147/149/159 171/185
CCP04003NSO	146/156	CIS25A06303NR	68/112	CIS25F03153PR	68/110	CTR2LC00803SAN	148/182		147/149/161
CCP04003PSO	146/156	CIS25A06303PR	68/112	CIS25F04003NR	68/112	CTR2LC00803SAN	148/182	D5LCF81	147/149/161 147/149/159
CCP05003NSO	146/158	CIS25A08003NR	68/114	CIS25F04003PR	68/112	CTR2LC00803SAN	148/182	D5LEN51	146/191
CCP05003PSO	146/158	CIS25A08003PR	68/114	CIS25F06303NR	68/112	CTR2LC00803SAN	148/182	D5LLA01	146/153/155 167
		CIS25A10003NS	68/116	CIS25F06303PR	68/112	CTR2LC00803SAN	148/182		146/169
		CIS25A10003PS	68/116	CIS25F08003NR	68/114	CTR2LC00803SAN	148/182	D5LLA11	146/171
		CIS25A12503NS	68/116	CIS25F08003PR	68/114	CTR2LC00803SAN	148/182	D5LLA21	146/171
		CIS25A12503PS	68/116	CIS25F10003NS	68/116	CTR2LC00803SAN	148/182	D5LLA31	146/163/173 175/189
		CIS25A16003NS	68/116	CIS25F10003PS	68/116	CTR2LC00803SAN	148/182		146/169
		CIS25A16003PS	68/116	CIS25F12503NS	68/116	CTR2LC00803SAN	148/182	D5LLI12	146/171
		CIS25C00403NB	68/106	CIS25F12503PS	68/116	CTR2LC00803SAN	148/182	D5LLI22	146/171
		CIS25C00403PB	68/106	CIS25F16003NS	68/116	CTR2LC00803SAN	148/182	D5LLI32	146/163/173 175
		CIS25C00633NB	68/106	CIS25F16003PS	68/116	CTR2LC00803SAN	148/182		147/149/155
		CIS25C00633PB	68/106	CTR2CC02003NS	148/182	CTR2LC00803SAN	148/182	D5LPC03	147/149/155 181
		CIS25C00803NB	68/106	CTR2CC02003PS	148/182	CTR2LC00803SAN	148/182		65/79
		CIS25C00803PB	68/106	CTR2CC02503NS	148/182	CTR2LC00803SAN	148/182	D5LPC41	65/83
		CIS25C01253NB	68	CTR2CC03153NR	148/182	CTR2LC00803SAN	148/182	D5LPC42	65/83/149 163/189
		CIS25C01253PB	68	CTR2CC03153PR	148/182	CTR2LC00803SAN	148/182		211/213/233
		CIS25C01603NB	68	CTR2CC03153PS	148/182	CTR2LC00803SAN	148/182	D5LPC45	147/149/153 179
		CIS25C01603PB	68	CTR2CC03153PR	148/182	CTR2LC00803SAN	148/182	D5LPCB1	146/151/153 155
		CIS25C02003NR	68/110	CTR2CC04003NS	148/182	CTR2LC00803SAN	148/182		
				CTR2CC04003PS	148/182	CTR2LC00803SAN	148/182		

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-CU01	65/73/93 147/155/167 181/211/217	DS-EP44	65/79/81 211/253/265	DS-PI21	211/221
DCCCU12	147/149/157 183	DR-CU22	65/91/211 239/241/253 257	DS-CU02	65/67/73 93/147/149 155/167/181	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-CU03	65/67/73 93/147/149 155/167/181	DS-LA01	66/93	DS-PI2D	211/213/221
DCCCU22	147/149/159 185	DR-EL11	65/89/211 235/237/253 255	DS-CU04	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-CU05	65/67/73 93/147/149 155/167/181	DS-LA102	83/101	DS-PI31	211/223
DCCCU32	147/149	DR-SF11	65/89/211 235/237/253 255	DS-CU06	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-CU07	65/67/73 93/147/149 155/167/181	DS-LA15	95	DS-PI3H	253/263
DCCLA21	146/159/185	DR-SF13	65/89/211 235/237/253 255	DS-CU10	211/219	DS-LA21	64/66/77 91/105/210 221/239/241	DS-PI3L	253/263
DCCLA31	146/161/187	DR-SF21	65/91/211 239/241/253 257						

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.

» 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.es
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



tripus

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 the local customers needs in the Polish market.

ul. Zeromskiego 18
56-420 Bierutów-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