

AC

DC

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

Presentation

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

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

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



www.telergon.com

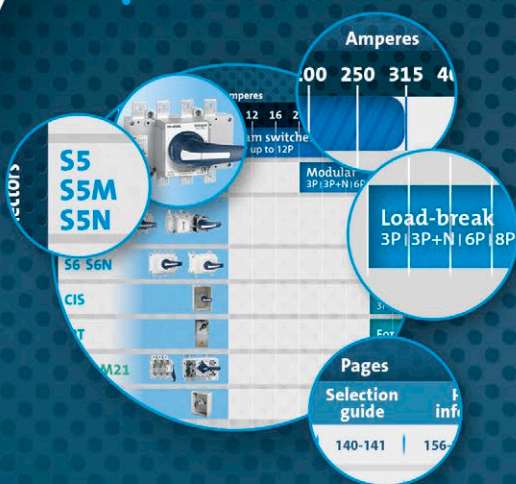


About the catalog

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

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

1 Index & overview of all series



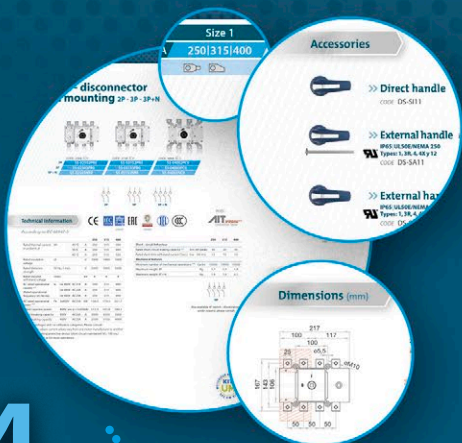
2 General information of the product range



3 Quick selection guide by series & index



4 Full information of selected product



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INDEX OVERVIEW OF THE RANGE

Amperes

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

Switch - disconnectors

AC

T TB TF TP



Cam switches
1P up to 12P

Under request,
please consult

ZBK



Modular
3P | 3P+N | 6P | 8P

S5
S5M
S5N



Load-break
2P | 3P | 3P+N | 6P | 8P

S6 S6N



Load-break
2P | 3P | 3P+N | 6P | 8P

CIS



Enclosed load-break
3P | 3P+N

IPT



For transformer secondary protection

M11 | M21



With fuses
2P | 3P | 3P+N

CIF



Enclosed with fuses
3P | 3P+N

Changeover switches

AC

T TB TF TP



Cam switches
1P up to 4P

Under request,
please consult

ZBK



Modular
3P | 3P+N

CEC



Compact
3P | 3P+N

S5F



Back to back or line arrangement
3P | 3P+N

CCF CCP



Compact load-break
3P | 3P+N

S5B



By-pass load-break
3P | 3P+N

CTR



Enclosed load-break
3P | 3P+N

UM

Motorized
Unit Kit



For switch - disconnector

Switch - disconnectors

DC

ZFC ZFV



Modular
up to 1500 Vdc

S5 DC
S5M DC
S5N DC



Load-break & multi-string
up to 1500 Vdc

S6 DC
S6N DC
S6R DC



Load-break
up to 1500 Vdc

Disconnectors

DC

S5 DC
S6 DC



Isolation only
1500 Vdc

Amperes													Pages		
630	800	1000	1250	1600	1800	2000	2500	3150	4000	5000	6300		Presentation	Selection guide	Product information
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Cam switches

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



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

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

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

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

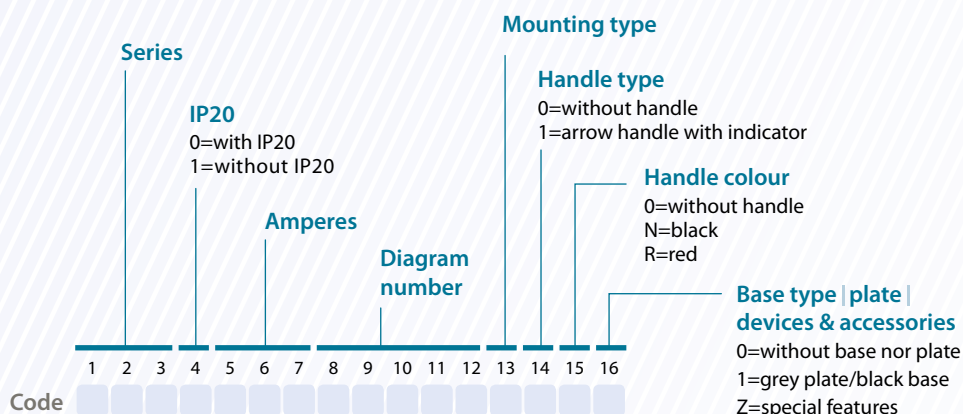
Range codification:

Standard products

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

Special products

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



Example **T - 0010000012E1N1**

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

According to:

IEC 60947-3

UL 60947-4-1 - CAN/CSA

C22.2 N° 14 RoHS



Testing and approvals:

series T



1 2 3 4 5 6
T - - - - -

Wide range of sizes and ratings.

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

Wide range of devices and accessories.

series TB



1 2 3 4 5 6
T B - - - -

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

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

Wide range of devices and accessories.

series TF



1 2 3 4 5 6
T F - - - -

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

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

Wide range of devices and accessories.

series TP



1 2 3 4 5 6
T P - - - -

Reduce-sized body.

Door mounting only.

Wide range of devices and accessories.

series | type T | P



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

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

series | type T - TF | R



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

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

series | type T - TB | A - C



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

- > Cam switch in metal enclosure of cast aluminium
 - 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.

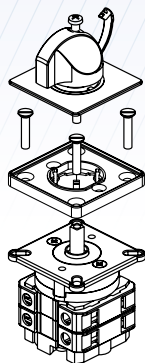
TP | T | TB | TF

series
T | TB | TF | TP

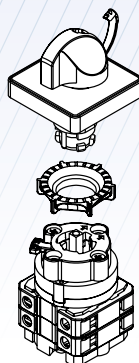
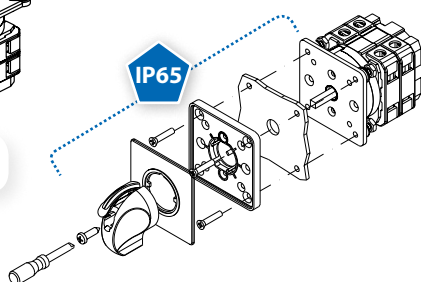
Fixing with screws | E type

For T - TB - TF - TP series

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



12 13 14
E

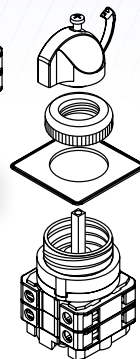


12 13 14
C

Central quick fixing Ø 22 | C type

For T - TB - TF series

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

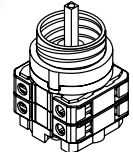


12 13 14
Z

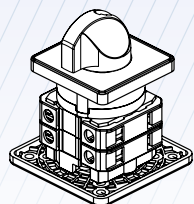
Central fixing with metal nut Ø 22 | Z type

For T - TF series

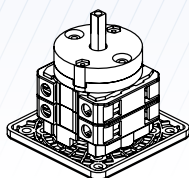
- Door mounting for metal nut Ø 22 mm available for sizes 0 and 1.
(also Ø 30 mm under request).



12 13 14
Z



12 13 14
D

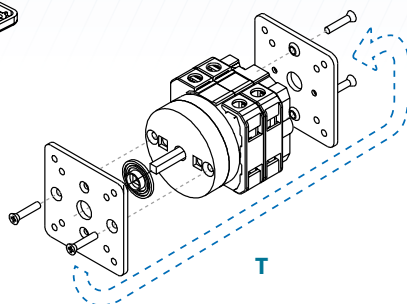


12 13 14
G

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

For T series

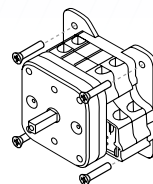
- Rear fixing plate for 4 screws, reversible mounting plate in T series (except T175 and size 3).



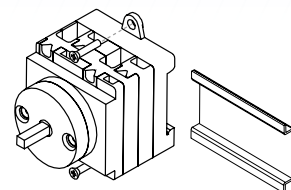
T

For TB - TF series

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



TB

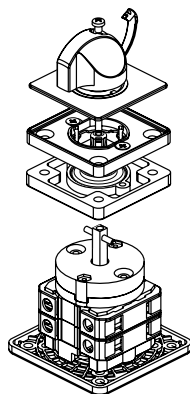


TF

Base mounting with clutch device and door handle | F type

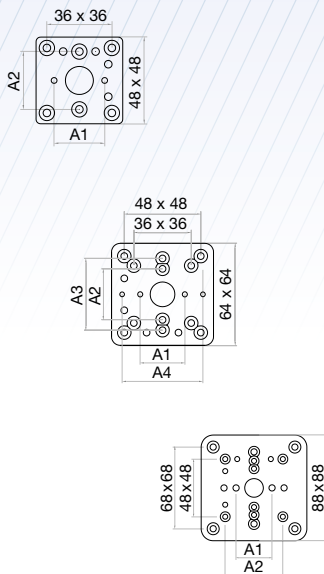
For T - TB - TF series

- 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.



12 13 14
F

Door mounting



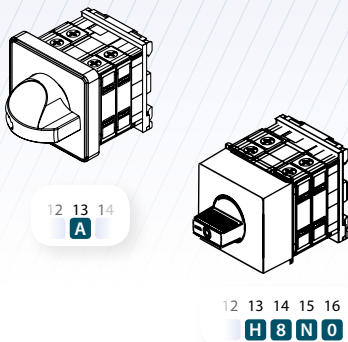
Size	Models	
0	A1 = 28 mm	A2 = 32 mm M
	A1 = 30 mm	A2 = 34 mm N
	A1 = 35 mm	A2 = 38 mm O
1	A1 = 28 mm A4 = 46 mm	A2 = 32 mm M
	A1 = 33 mm A3 = 47 mm	A2 = 30 mm A4 = 50 mm N
	A1 = 32 mm A3 = 45 mm	A2 = 32 mm A4 = 45 mm P
	A1 = 38 mm	A3 = 40 mm M
2	A1 = 30 mm	A2 = 50 mm P

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



DIN rail mounting with direct handle | A type

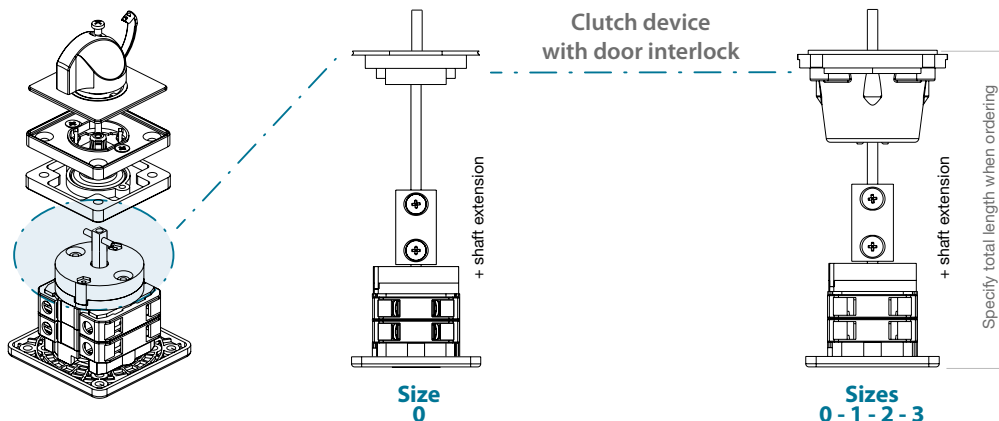
For T series

- > 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.



TP|T|TB|TF

Door mounting switch

1P up to 12P

Size 0

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



TP

T

TB

TF

Technical information



consult

consult

consult

consult

According to IEC 60947-3

UL 60947-4-1 - 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	500	690	690	690
Rated impulse withstand voltage	U _{imp}	kV	4	6	6	4	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
		Ue 415V AC22A	A	12	16	25	20	25	32	20	25
		Ue 415V AC23A	A	10	10	25	20	25	32	8	16
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 UL 60947-4-1 - CAN / CSA C22.2 N° 14				T12	T20				TF12	TF16	TF25
Rated thermal current	I _{th}	A	-	12	20	-	-	-	16	20	25
General use rating		Vac	-	300	300	-	-	-	600	600	600
AC rated operational power	3x240V	HP	-	2	5	-	-	-	2	5	7,5
	3x480V	HP	-	-	-	-	-	-	5	10	12
	3x600V	HP	-	-	-	-	-	-	5	10	15

Normal service conditions:

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

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

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

Series | Amp

TP-00010

T-00012

T-00020

TB-00020

TB-00025

TB-00032

TF-00012

TF-00016

TF-00025

Diagram

Posit. 0 1	Poles	Chambers	Diagram
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

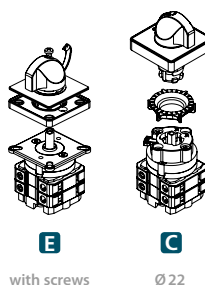
Model
or
fixing

Plate and handle



1N1



1RD

Arrow handle



6N1



6RD

Padlockable handle
"mini"

(E type only)



7N0



7R0

Padlockable handle

Dimensions (mm)

E

Frontal fixing
with 2 screws

TB

T- TF

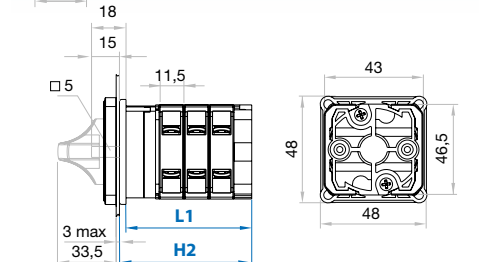
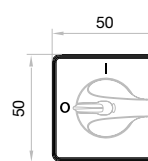
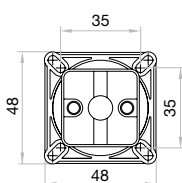
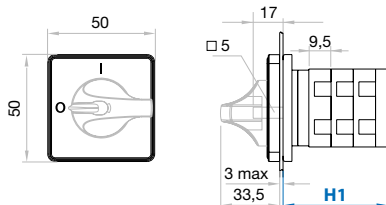
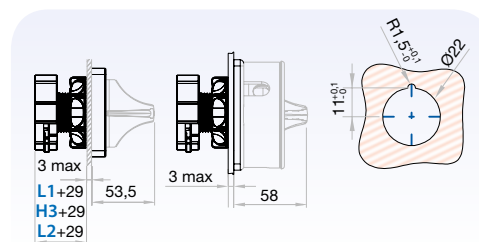
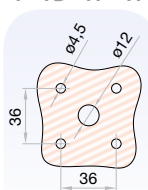
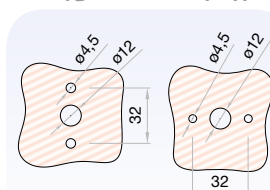
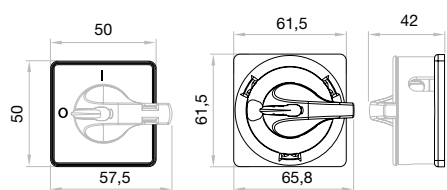
Frontal fixing
with 4 screws

T- TB- TF- TP

C

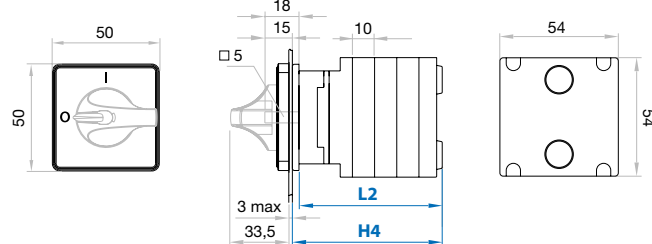
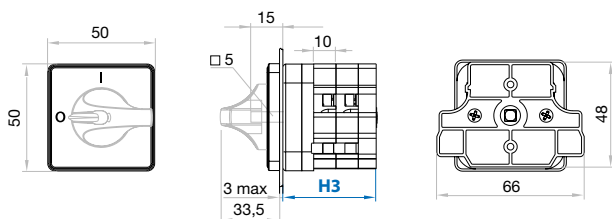
Frontal fixing
Ø22

T- TB- TF



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

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



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

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

T

Door mounting switch

1P up to 12P

Size 1

A 16|25|32|40



T

Technical information



consult

consult

According to IEC 60947-3

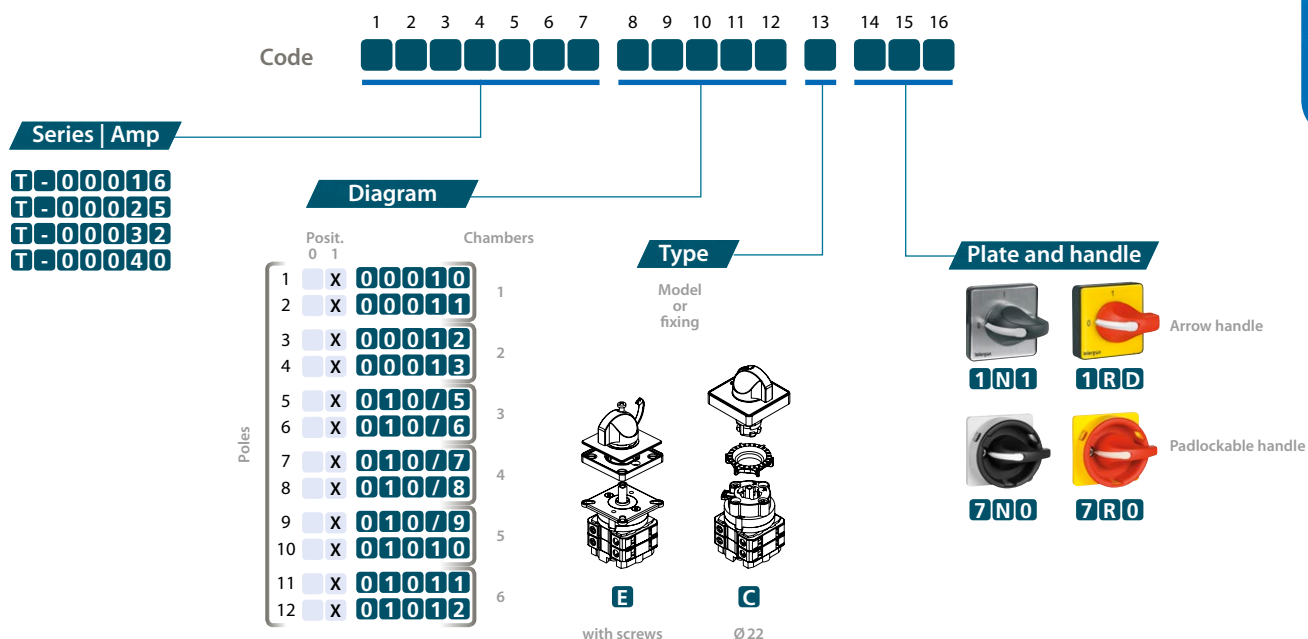
UL 60947-4-1 - CAN/CSA C22.2 N° 14

According to IEC 60947-3			T16	T25	T32	T40
Rated thermal current	I _{th}	A	25	32	40	50
Rated insulation voltage	U _i	V	690	690	690	690
Rated impulse withstand voltage	U _{imp}	kV	6	6	8	8
AC rated operational current	I _e	Ue 415V AC21A	A	25	32	40
		Ue 415V AC22A	A	25	32	40
		Ue 415V AC23A	A	16	20	25
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 UL 60947-4-1 - CAN / CSA C22.2 N° 14			T16	T25	T32	T40
Rated thermal current	I _{th}	A	16	25	32	40
General use rating		Vac	600	600	600	600
AC rated operational power	3x240V	HP	5	7,5	10	15
	3x480V	HP	10	15	20	25
	3x600V	HP	10	15	20	25

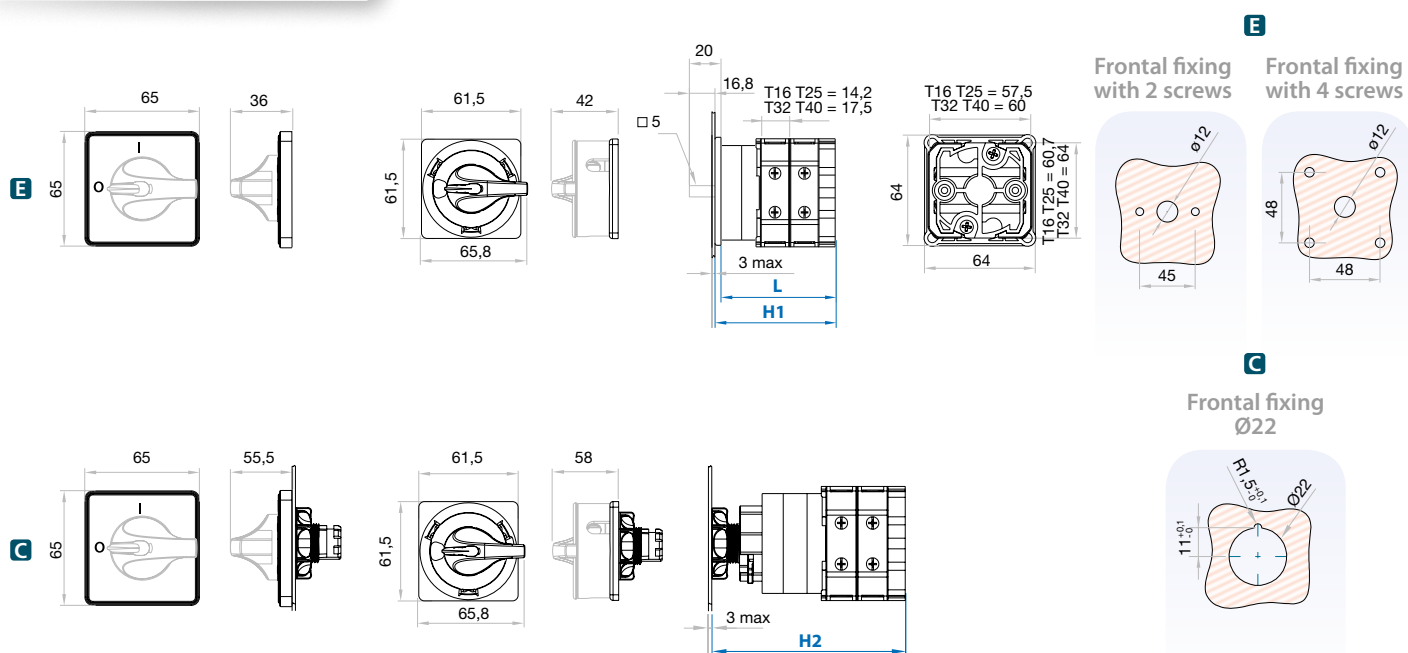
Normal service conditions:

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.



Dimensions (mm)



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

T

Door mounting switch

1P up to 12P

Size 2

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



* Except T175



T

Technical information



consult



consult



consult



consult

According to IEC 60947-3

UL 60947-4-1 - CAN/CSA C22.2 N° 14

According to IEC 60947-3			T50	T63	T80	T100	T125	T175
Rated thermal current	I _{th}	A	63	80	80	125	125	200
Rated insulation voltage	U _i	V	690	690	690	690	690	1000
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	8	8	8
AC rated operational current	Ue 415V AC21A	A	63	80	80	125	125	200
	Ue 415V AC22A	A	63	80	80	115	115	200
	Ue 415V AC23A	A	63	63	63	100	100	200
Rated conditional short-circuit current		kA	15	15	15	15	15	15 ^{*(2)}
Rated maximum current	g _L -g _G	A	80	80	80	125	125	160
Rated breaking capacity	400V; cos φ=0,45	A	504	504	504	640	640	1600
Rated short-time withstand current (1 sec)		A	1600	1600	1600	2500	2500	3500
Mechanical durability (according to the standards, for other values please consult)			10000	10000	10000	8000	8000	8000
Rigid copper conductor		mm ²	16/25 ^{*(1)}	16/25 ^{*(1)}	16/25 ^{*(1)}	35/50 ^{*(1)}	35/50 ^{*(1)}	95
Flexible copper conductor		mm ²	10/16 ^{*(1)}	10/16 ^{*(1)}	10/16 ^{*(1)}	16/35 ^{*(1)}	16/35 ^{*(1)}	95
According to UL 60947-4-1 - 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	30	25
	3x480V	HP	40	40	40	50	50	60
	3x600V	HP	40	40	40	50	50	50

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

Normal service conditions:

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

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

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

Series | Amp

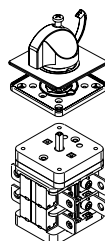
T-00050
T-00063
T-00080
T-00100
T-00125
T-00175

Diagram

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

Type

Model or fixing



E

Plate and handle



1N1



1RD

Arrow handle



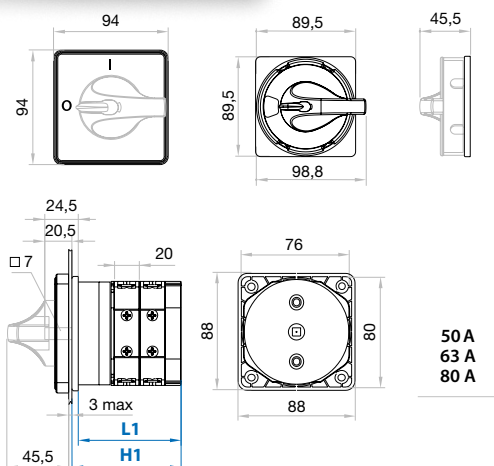
7N0



7R0

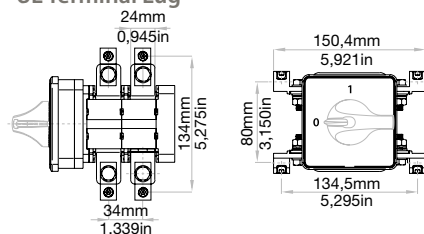
Padlockable handle

Dimensions (mm)

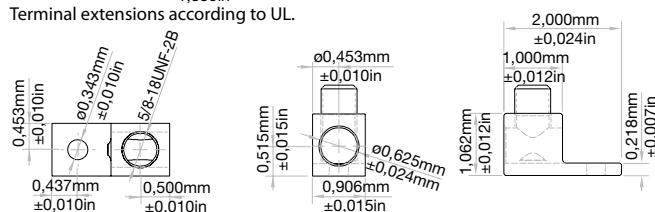


T series	Chambers	1	2	3	4	5	6
T50 T63 T80	L1	58,5	78,5	98,5	118,5	138,5	158,5
	H1	62,5	82,5	102,5	122,5	142,5	162,5

UL Terminal Lug

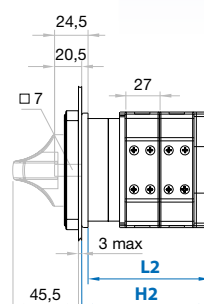
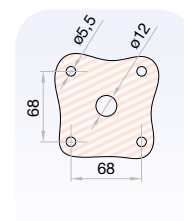
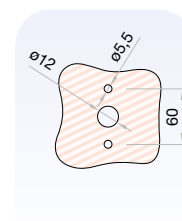


Terminal extensions according to UL.

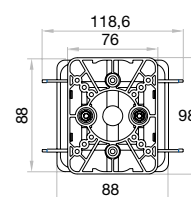
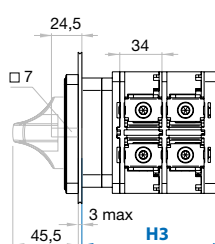


Wire size	Wires per lug	Wire type	Kit reference
120 mm ² / 250 kcmil	1	Cu	DS-TLU21 (2 pieces)

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

Frontal fixing
with 2 screwsFrontal 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



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



T

Technical information



According to IEC 60947-3
UL 60947-4-1 - CAN/CSA C22.2 N° 14

According to IEC 60947-3			T200	T250	T315
Rated thermal current	I _{th}	A	200	250	315
Rated insulation voltage	U _i	V	690	690	690
Rated impulse withstand voltage	U _{imp}	kV	8	8	8
AC rated operational current	I _e	Ue 415V AC21A	200	250	315
		Ue 415V AC22A	200	250	315
		Ue 415V AC23A	200	200	200
Rated conditional short-circuit current		kA	15	15	15
Rated maximum current	g _L -g _G	A	200	250	315
Rated breaking capacity	400V; cos φ=0,45	A	1450	2000	2240
Rated short-time withstand current (1 sec)		A	4400	4400	4400
Mechanical durability (according to the standards, for other values please consult)			8000	8000	8000
Rigid copper conductor		mm ²	95	120	185
Flexible copper conductor		mm ²	95	120	185
According to UL 60947-4-1 - CAN / CSA C22.2 N° 14			T200	T250	T315
Rated thermal current	I _{th}	A	200	200	200
General use rating		Vac	600	600	600
	3x240V	HP	60	60	60
	3x480V	HP	75	75	75
AC rated operational power	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.

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

Series | Amp

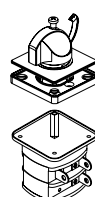
T-00200
T-00250
T-00315

Diagram

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

Type

Model
or
fixing



E

Plate and handle



1N1



1RD

Arrow handle
(from 1 to 4 poles)



AN1



ARD

Simple handle
(from 5 to 9 poles)



BN1



BRD

Double handle
(from 10 to 12 poles)



NN1



NRD

Padlockable handle
(from 1 to 9 poles)



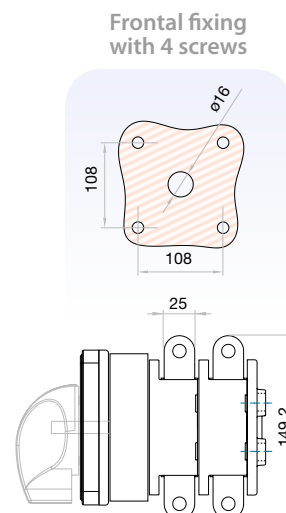
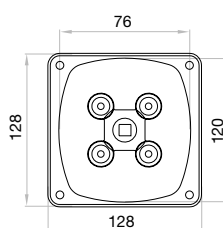
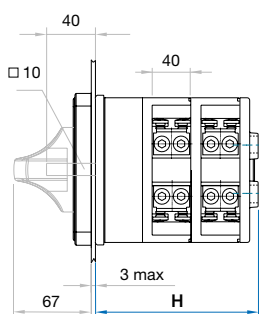
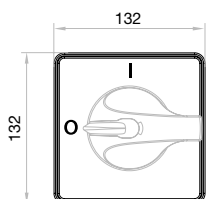
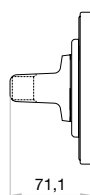
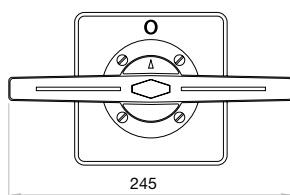
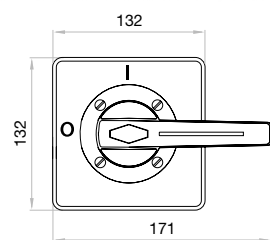
ON1



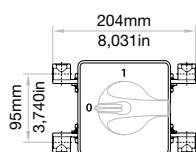
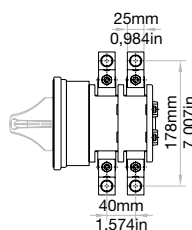
ORD

Padlockable handle
(from 10 to 12 poles)

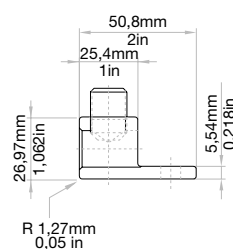
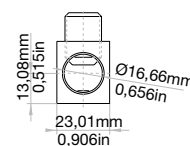
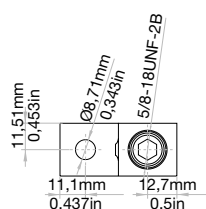
Dimensions (mm)



UL Terminal Lug



Terminal extensions according to UL.



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

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

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

TP|T|TB|TF

Door mounting changeover

1P up to 4P

Size 0

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



TP



T



TB



TF

Technical information



consult

consult

consult

consult

According to IEC 60947-3

UL 60947-4-1 - 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	500	690	690	690
Rated impulse withstand voltage	U _{imp}	kV	4	6	6	4	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
		Ue 415V AC22A	A	12	16	25	20	25	32	20	25
		Ue 415V AC23A	A	10	10	25	20	25	32	8	16
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 UL 60947-4-1 - CAN / CSA C22.2 N° 14				T12	T20				TF12	TF16	TF25
Rated thermal current	I _{th}	A	-	12	20	-	-	-	16	20	25
General use rating		Vac	-	300	300	-	-	-	600	600	600
AC rated operational power	3x240V	HP	-	2	5	-	-	-	2	5	7,5
	3x480V	HP	-	-	-	-	-	-	5	10	12
	3x600V	HP	-	-	-	-	-	-	5	10	15

Normal service conditions:

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

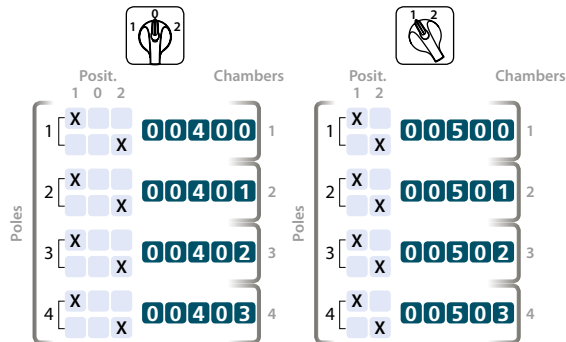
Rated duties at utilization categories AC21A, AC22A and AC23A: Continuing (8 hours); uninterrupted.

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

Series | Amp

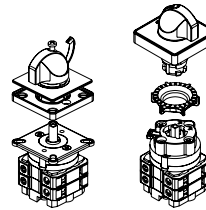
TP-0010
T-00012
T-00020
TB-0020
TB-0025
TB-0032
TF-0012
TF-0016
TF-0025

Diagram



Type

Model or fixing



E

with screws

C

Ø22

Plate and handle



Arrow handle

1N1



Padlockable handle "mini"

6N1

(E type only)



Padlockable handle open view

CN0

For red/yellow handle, please consult

Dimensions (mm)

E

Frontal fixing
with 2 screws

TB

T- TF

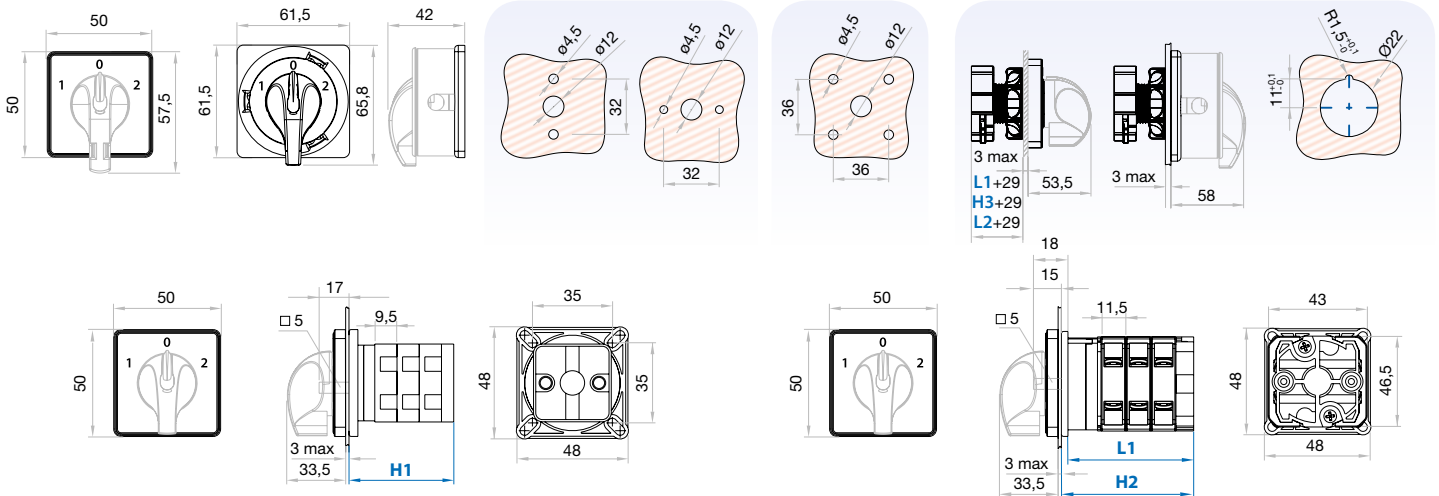
Frontal fixing
with 4 screws

T- TB- TF- TP

C

Frontal fixing
Ø22

T- TB- TF



TP series

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

T series

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

TB series

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

TF series

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

T

Door mounting changeover

1P up to 4P

Size 1

A 16|25|32|40



T

Technical information



consult

consult

consult

consult

According to IEC 60947-3

UL 60947-4-1 - 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		mm²	2x6	2x6	2x10	2x10	
Flexible copper conductor		mm²	2x4	2x4	2x6	2x6	
According to UL 60947-4-1 - 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.

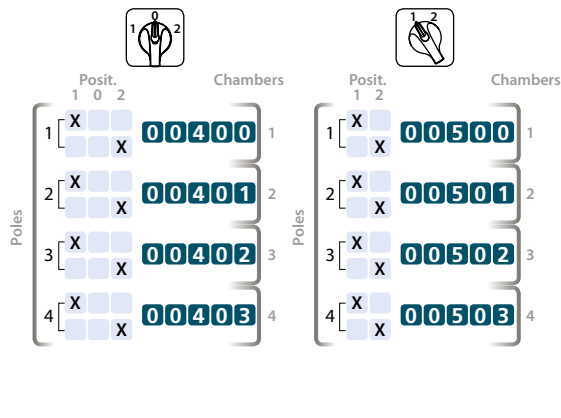
Rated duties at utilization categories AC21A, AC22A and AC23A: Continuing (8 hours); uninterrupted.

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

Series | Amp

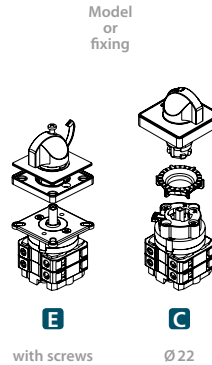
T-000016
T-000025
T-000032
T-000040

Diagram



Type

Plate and handle



Arrow handle

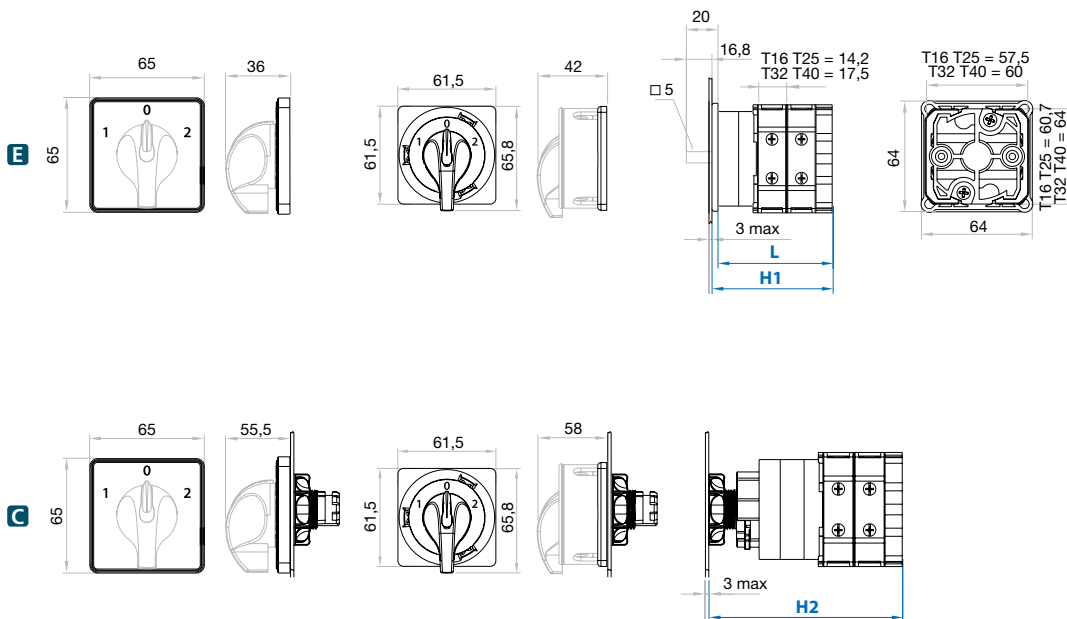
1N1

Padlockable handle
open view

CN0

For red/yellow handle,
please consult

Dimensions (mm)



E

Frontal fixing
with 2 screwsFrontal fixing
with 4 screws

C

Frontal fixing
Ø22

T series

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

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

UL 60947-4-1 - CAN/CSA C22.2 N° 14

According to IEC 60947-3			T50	T63	T80	T100	T125	T175
Rated thermal current	I _{th}	A	63	80	80	125	125	200
Rated insulation voltage	U _i	V	690	690	690	690	690	1000
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	8	8	8
AC rated operational current	Ue 415V AC21A	A	63	80	80	125	125	200
	Ue 415V AC22A	A	63	80	80	115	115	200
	Ue 415V AC23A	A	63	63	63	100	100	200
Rated conditional short-circuit current		kA	15	15	15	15	15	15 ^{*(2)}
Rated maximum current	g _L -g _G	A	80	80	80	125	125	160
Rated breaking capacity	400V; cos φ=0,45	A	504	504	504	640	640	1600
Rated short-time withstand current (1 sec)		A	1600	1600	1600	2500	2500	3500
Mechanical durability (according to the standards, for other values please consult)			10000	10000	10000	8000	8000	8000
Rigid copper conductor		mm ²	16/25 ^{*(1)}	16/25 ^{*(1)}	16/25 ^{*(1)}	35/50 ^{*(1)}	35/50 ^{*(1)}	95
Flexible copper conductor		mm ²	10/16 ^{*(1)}	10/16 ^{*(1)}	10/16 ^{*(1)}	16/35 ^{*(1)}	16/35 ^{*(1)}	95
According to UL 60947-4-1 - CAN / CSA C22.2 N° 14			T50	T63	T80	T100	T125	T175
Rated thermal current	I _{th}	A	63	63	63	100	100	200
General use rating		Vac	600	600	600	600	600	600
	3x240V	HP	20	20	20	30	30	25
	3x480V	HP	40	40	40	50	50	60
AC rated operational power	3x600V	HP	40	40	40	50	50	50

*(1) With terminals for connection

*(2) Mounting without connection terminals or terminals + phase barriers DT-90025

Normal service conditions:

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

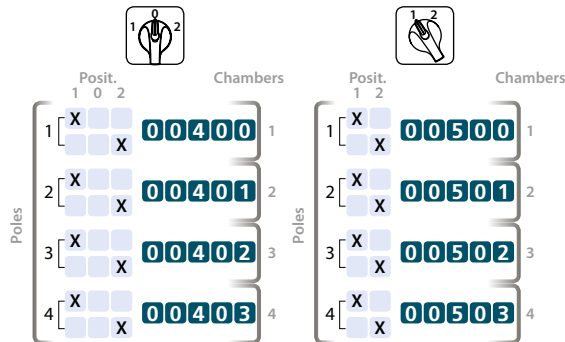
Rated duties at utilization categories AC21A, AC22A and AC23A: Continuing (8 hours); uninterrupted.

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

Series | Amp

T-000050
T-000063
T-000080
T-001000
T-001025
T-001175

Diagram



Type

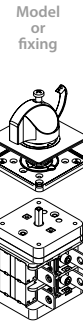


Plate and handle



Arrow handle

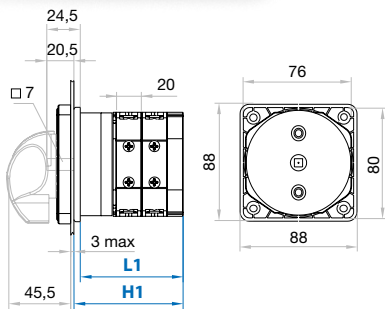


Padlockable handle open view



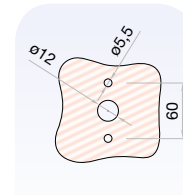
For red/yellow handle, please consult

Dimensions (mm)

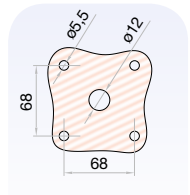


50 A
63 A
80 A

Frontal fixing with 2 screws

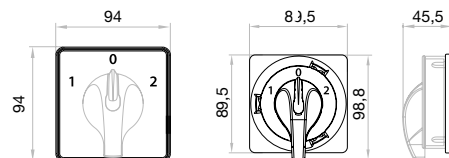


Frontal fixing with 4 screws

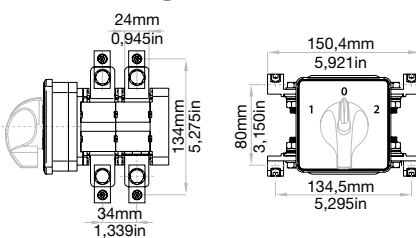


T series

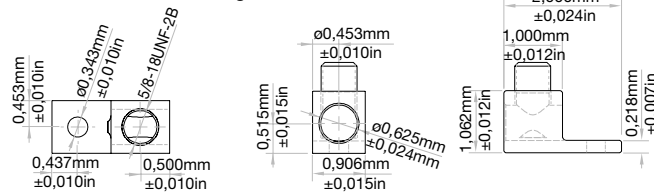
Chambers	1	2	3	4
L1	58,5	78,5	98,5	118,5
H1	62,5	82,5	102,5	122,5



UL Terminal Lug

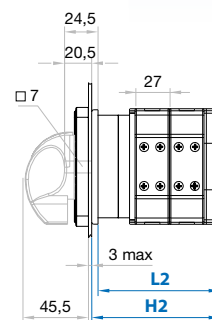


Terminal extensions according to UL.



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

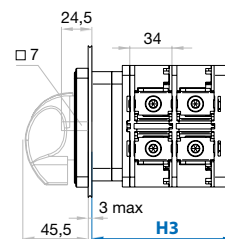
Note: The hardware needed to complete the wiring is supplied as standard.



100 A
125 A

T series

Chambers	1	2	3	4
L2	67	94	121	148
H2	71	98	125	152



175 A

T series

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

T

Door mounting changeover

1P up to 4P

Size 3

A* 200|250|315



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



T

Technical information



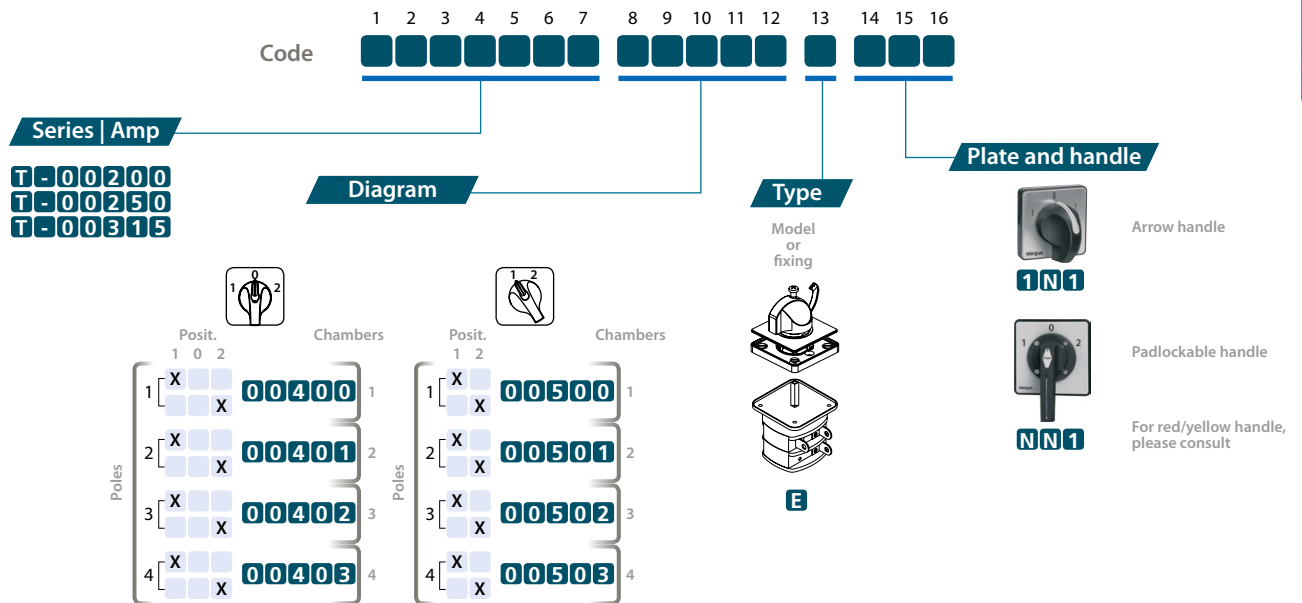
According to IEC 60947-3
UL 60947-4-1 - CAN/CSA C22.2 N° 14

According to IEC 60947-3			T200	T250	T315
Rated thermal current	I _{th}	A	200	250	315
Rated insulation voltage	U _i	V	690	690	690
Rated impulse withstand voltage	U _{imp}	kV	8	8	8
AC rated operational current	I _e	Ue 415V AC21A	200	250	315
		Ue 415V AC22A	200	250	315
		Ue 415V AC23A	200	200	200
Rated conditional short-circuit current		kA	15	15	15
Rated maximum current	gI-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 UL 60947-4-1 - CAN / CSA C22.2 N° 14			T200	T250	T315
Rated thermal current	I _{th}	A	200	200	200
General use rating		Vac	600	600	600
	3x240V	HP	60	60	60
	3x480V	HP	75	75	75
AC rated operational power		HP	60	60	60
	3x600V	HP	60	60	60

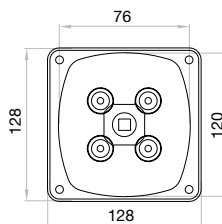
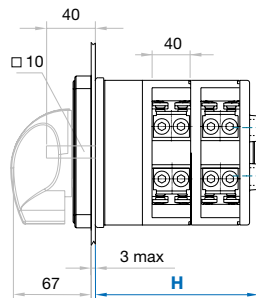
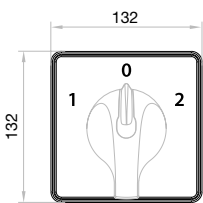
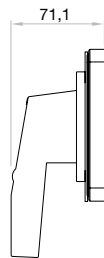
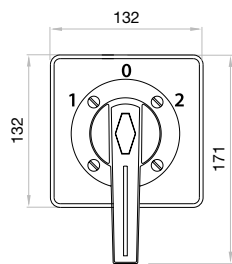
Normal service conditions:

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.

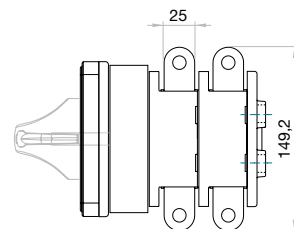
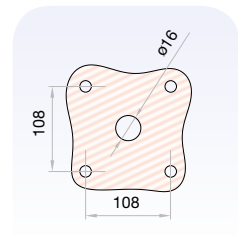
Rated duties at utilization categories AC21A, AC22A and AC23A: Continuing (8 hours); uninterrupted.



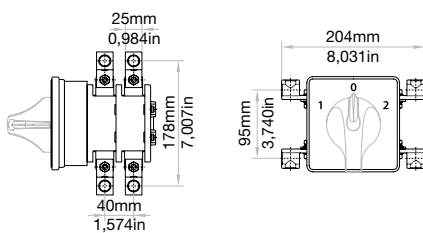
Dimensions (mm)



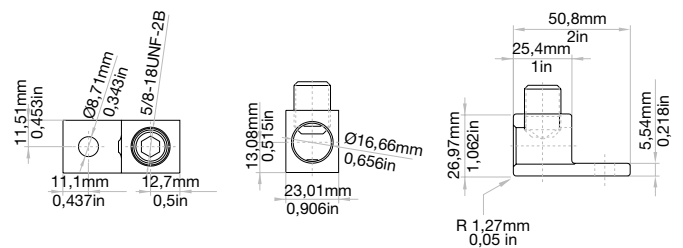
Frontal fixing with 4 screws



UL Terminal Lug



Terminal extensions according to UL.



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

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

14 15 16
D100 4



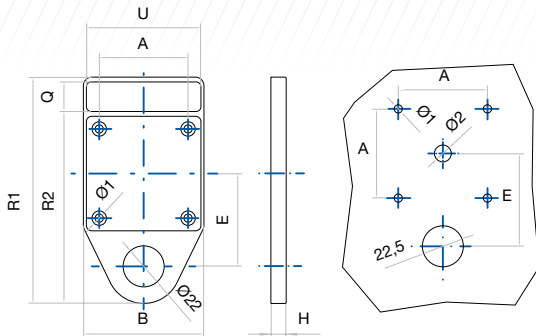
Light with white neon lamp
D100

14 15 16
D101 5



Light with white neon lamp
and inscription plate
D101

D101 Inscription plate included with text as requested.



Supply	Size	For series					Code D100	Code D101			
Spare or incorporated in the cam switch	0-1	T12-T20-TB20-TB25-TB32 TF12-TF16-TF25 T16-T25-T32-T40					DT-10011	DT-10111			
	2	T50-T63-T100-T175					DT-10021	DT-10121			
	3	T200					DT-10031	DT-10131			
Series		B	R1	R2	H	E	U	Q	A	Ø1	Ø2
T12 T20 T16 T25 T32 T40 TB20 TB32 TF12 TF25		65	123	102	6,5	50	61	16	48	4,5	9
T50 T63 T100 T175		94	160	137	7,5	70	90	19	68	5,5	12
T200 T800		132	198	173	10	85	126	21	108	6,5	16

13 14 15 16
D201 E

13 14 15 16
D200 D



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

13 14 15 16
D301 G

13 14 15 16
D300 F



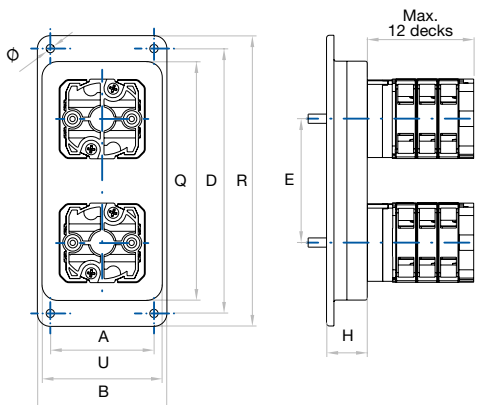
Blocking operation*
D300 with two columns
D301 with three columns

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

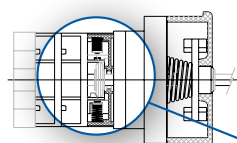
D300-301 For switching up to 29 positions with two handles and two columns, or 36 positions with three handles and three columns according to the electrical diagram.

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

*T Series (without IP20 protections).



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

13 14 15 16
H

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

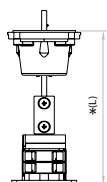
13 14 15 16
3

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

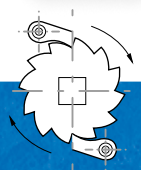


To extend the shaft length to the depth required.
To be complemented with the corresponding D501 device.

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		DT-EPR12
	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

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
①	D501 + 704 90°	0	DT-75401N07 DT-75401R01
		T12-T20 TB20-TB25-TB32 TF12-TF16-TF25	12 13 14 15 16 F 6 N 1 12 13 14 15 16 F 6 R D
②	90°	0	DT-50102
		1	DT-50101
		2	DT-50121
		3	DT-50131
	60°	0-1	DT-50104
		2	DT-50124
		3	DT-50134
	45°	0-1	DT-50103
		2	DT-50123
		3	DT-50133
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 $\varnothing 22\text{mm}$ fixing; $\varnothing 30\text{ mm}$ also available under request.

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

Assembly limitation:
4 contacts actuating simultaneously.

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

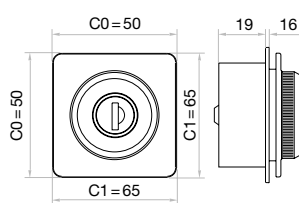
Assembly limitation:
4 contacts actuating simultaneously.

Key handle device D711

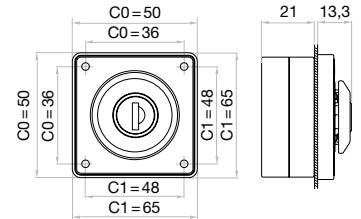


Supply	Size	For series
Only incorporated in the cam switch	0-1	T12-T20-TB20-TB25-TB32 TF12-TF16-TF25 T16-T25-T32-T40

D701



D711



Key lock device D702

D702 14 15 16 6



Key lock device with inscription plate D703

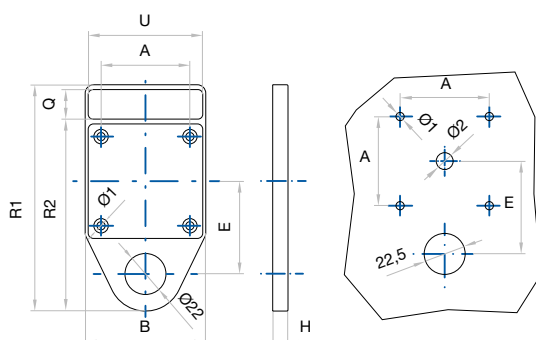
D703 14 15 16 7



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.

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

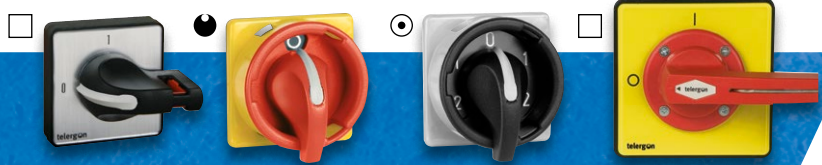


* Auxiliary contacts 1NO + 1NC

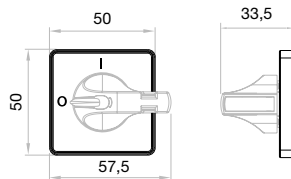


Series	B	R1	R2	H	E	U	Q	A	Ø1	Ø2
T12 T20 T16 T25 T32 T40 TB20 TB32 TF12 TF25	65	123	102	6,5	50	61	16	48	4,5	9
T50 T63 T100 T175	94	160	137	7,5	70	90	19	68	5,5	12
T200 T800	132	198	173	10	85	126	21	108	6,5	16

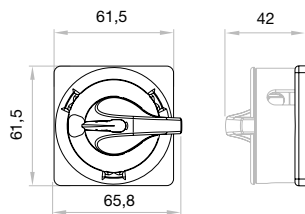
Padlockable handle D704



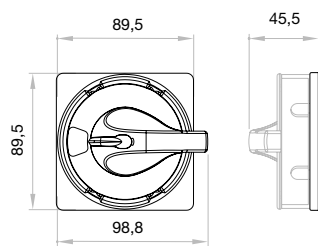
- Allows the blockade of the handle in OFF position using padlock.
- Available in red colour on yellow background ¹⁵R or black colour on grey background ¹⁵N
- According to the machinery directive and the european standards, red & yellow handles ¹⁵R are intended to be used only in ON-OFF safety switches.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



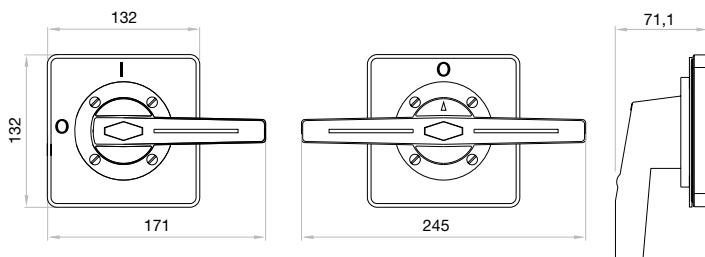
Size 0



Size 0-1



Size 2



Size 3

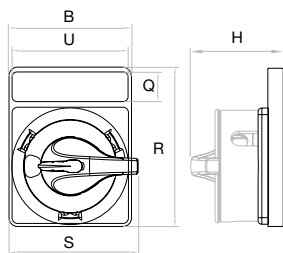
	Supply	Size	For series	Code
Square plate	Spare	0	T12-T20 TB20-TB25-TB32 TF12-TF16-TF25 TP10	DT-70401N07
	Incorporated in the cam switch			DT-70401R01*
				13 14 15 16 6 N 1
				13 14 15 16 6 R D
Closed view	Spare	0 - 1	T12-T20 TB20-TB25-TB32 TF12-TF16-TF25 T16-T25-T32-T40	DT-7041CN02
	Incorporated in the cam switch			DT-7041CR02
				13 14 15 16 7 N 0
				13 14 15 16 7 R 0
Open view	Spare	2	T50-T63 T100-T175	DT-7041AN02
	Incorporated in the cam switch			DT-7041AR02
				13 14 15 16 C N 0
				13 14 15 16 C R 0
Closed view	Spare	3	T200	DT-7042CN02
	Incorporated in the cam switch			DT-7042CR02
				13 14 15 16 7 N 0
				13 14 15 16 7 R 0
Open view	Spare	3	T200	DT-7042AN02
	Incorporated in the cam switch			DT-7042AR02
				13 14 15 16 C N 0
				13 14 15 16 C R 0
Square plate (single handle)	Spare	3	T200	DT-70431
	Incorporated in the cam switch			DT-70433*
				13 14 15 16 N N 1
				13 14 15 16 N R D
Square plate (double handle)	Spare	3	T200	DT-70432
	Incorporated in the cam switch			DT-70434*
				13 14 15 16 O N 1
				13 14 15 16 O R D

* 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	65	48,5	16	85	65,8	61
2	94	53,5	19	117	98,8	90
3	132	71,5	21	157	171 245	126

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

¹⁴ ¹⁵ ¹⁶
D709 9



Push button blocking system with inscription plate D709

D708 Available in two versions (specify when ordering):

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

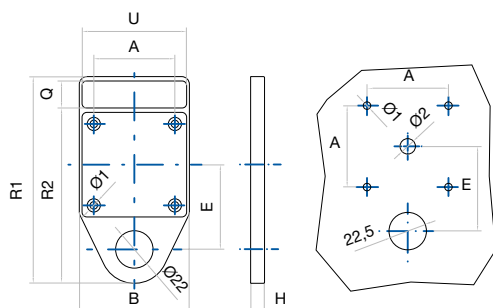
The switch in version 2 can be used for emergency operation since the handle is not blocked in ON position.

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.

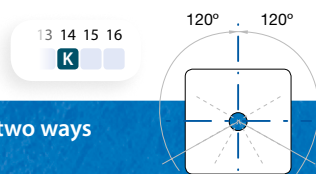
Supply	Size	For series
Only incorporated in the cam switch	0-1	T12-T20-TB20-TB25 TB32-TF12-TF16-TF25 T16-T25-T32-T40
	2	T50-T63-T100-T175
	3	T200

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



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

Return from one or two ways up to 120° D802

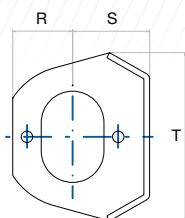


Supply	Size	For series
Only incorporated in the cam switch	0-1	T12-T20-TB20-TB25-TB32 TF12-TF16-TF25 T16-T25-T32-T40



Terminal shrouds D900

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

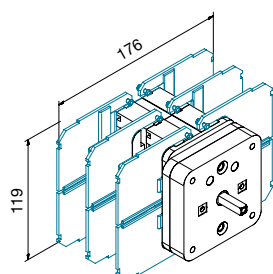


Series	R	S	S
T12 T20	21	27	59
T16 T25 T32 T40	28	34	72
T50 T63 T100	15	52	104
T200	40	155	130

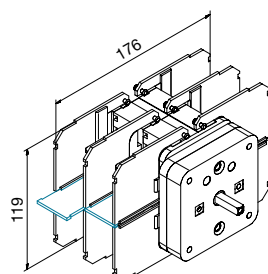
Supply	Size	For series	Code
Spare	0	T12-T20	DT-90002
	1	T16-T25-T32-T40	DT-90012
	2	T50-T63	DT-90022
		T100	DT-90024
	3*	T200	DT-90031
		T400	DT-90032

* Max. 2 chambers

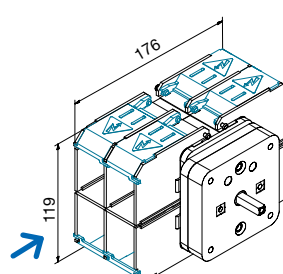
T175 terminal shrouds and phase barriers D900



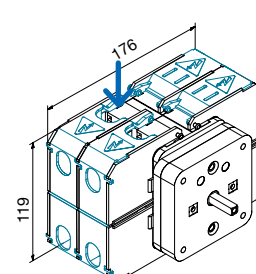
Phase barriers - Vertical
Code DT-90025 (4 units)



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



Front plates for distribution boards D905



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

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

	Supply	Size	For series	Code
D904	Spare or incorporated in the cam switch	0-1	T12-T20-T16 T25-T32-T40	DT-90401
		2	T50-T63-T100-T175	DT-90421
D905	Only incorporated in the cam switch	0	T12-T20 TF12-TF16-TF25	DT-90401 H8NO

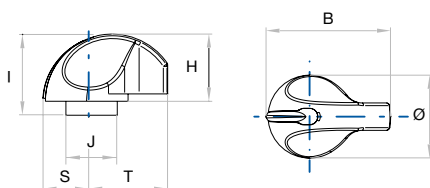
Handles
(plastic)



- > 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.

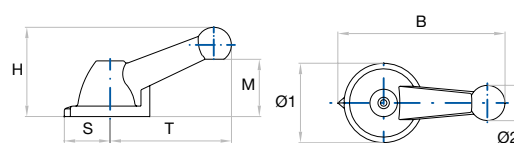
	Supply	Size		Code
Arrow handle with indicator	Spare or incorporated in the cam switch	0	●	40110030
			●	40110031
		1	●	40111034
			●	40111035
		2	●	40112028
			●	40112029
Ball lever	Spare or incorporated in the cam switch	1	●	40111002
			●	40111003
		3	●	40113002
			●	40113001
Double handle	Spare or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

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



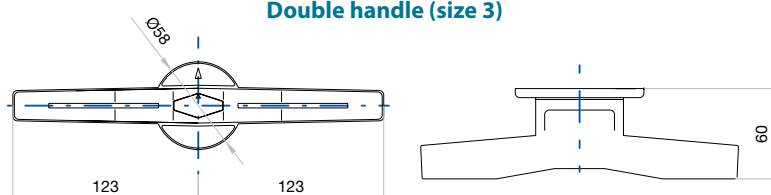
Size	B	H	I	J	S	T	Ø
0	39,3	26,8	30,5	14,5	13,5	24	27
1	50	28	33	14,5	18	32	36
2	66,5	36,5	-	-	22,5	44	45
3	100	54	-	-	38	62	76

Ball lever (sizes 1 - 3)

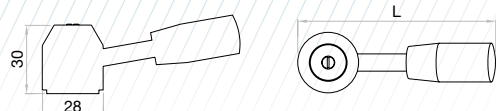


Size	B	H	S	T	M	Ø1	Ø2
1	89	48	24	65	32,5	37	18
3	151,5	81	41,5	110	52	72	32

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

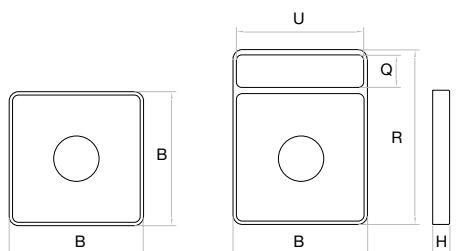


TP/TB/TF
series

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

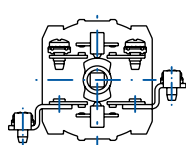
PRA

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

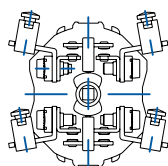
	Supply	Size	Code		
PPA (neutral plate)	Spare or incorporated in the cam switch	0	40140045	40140061	40110028
		1	40141039	40141053	40111032
		2	40142020	40142028	40142025
		3	40143020	40143028	40143084
PRA (neutral plate)	Spare or incorporated in the cam switch	0	40140203		40110029
		1	40141188		40111033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

Terminal extensions CP

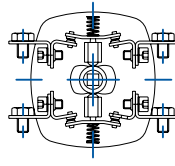
Supply	Size	For series
Only incorporated in the cam switch	0	T12-T20
	1	T16-T25-T32-T40
	2	T50-T63-T100



T12-T16-T20-T25



T32-T40-T63-T100



T200
standard
connection as per
drawing

Fast-on terminals 6,25 x 0,8

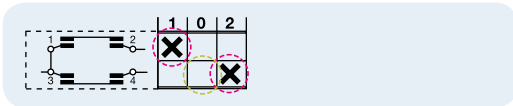


Supply	Size	For series
Only incorporated in the cam switch	0-1	T12-T20 T16-T25-T32-T40

TP | T | TB | TF

Standard diagrams

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

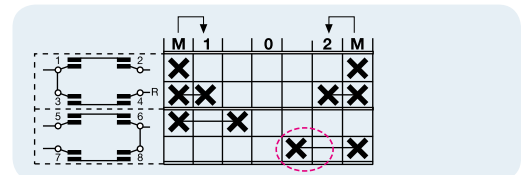


It represents "closed contact".

It represents "opened contact".

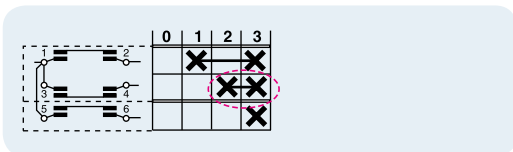
The contact 1/2 is closed in position 1 and opened in positions 0 & 2.

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



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

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

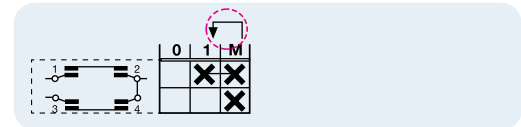


It represents closed contact "without interruption".

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

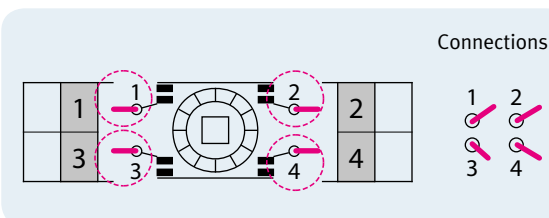
The contact 3/4 closes in position 2 and remains closed in position 3.

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

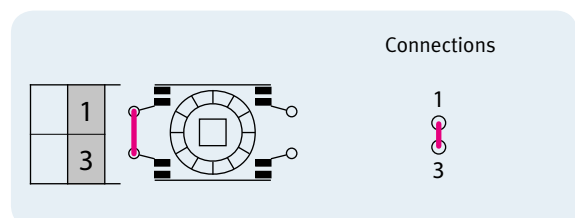


It represent "spring return" to previous position.

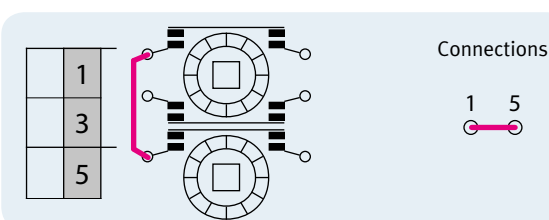
The M position is not fixed and it will return to position 1 when the handle is released.



Connection point.



Vertical bridging link.

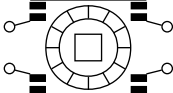
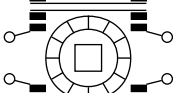
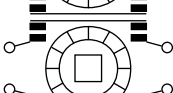
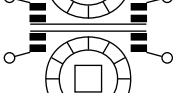
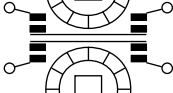
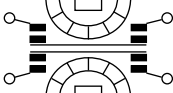
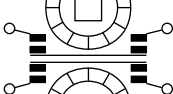
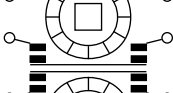
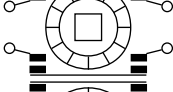
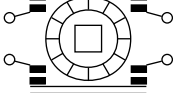
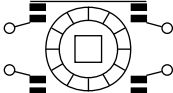
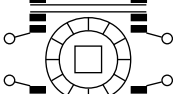
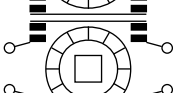
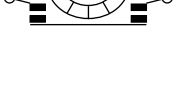


Horizontal bridging link.

Contact closed 
without interruption  
Late break contact 
Early-make contact 
Return from 30° 

Rev.

Connections

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

1	5	9	13	17	21	25	29	33	37	41	45
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
3	7	11	15	19	23	27	31	35	39	43	47

46	42	38	34	30	26	22	18	14	10	6	2
○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○
48	44	40	36	32	28	24	20	16	12	8	4

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

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

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

10

E	C	Z	D	G	H	F
---	---	---	---	---	---	---

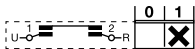
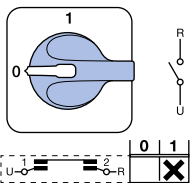
Indicator arrow	Black	mm
Ball lever handle	Red	
Double handle		
Key	Yellow	

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

[illegible]

Special devices

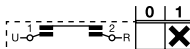
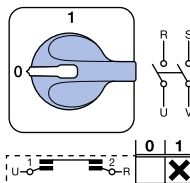
On-Off switches



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00010

010
1 pole
1 chamber

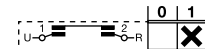
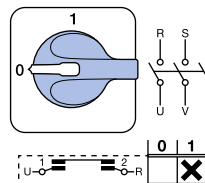
010/5 5 poles
010/6 6 poles
010/7 7 poles
010/8 8 poles
010/9 9 poles



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00011

011
2 poles
1 chamber

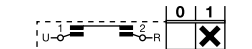
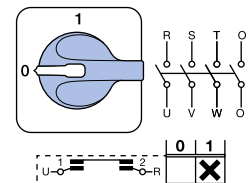
010/10 10 poles
010/11 11 poles
010/12 12 poles
010/13 13 poles
010/14 14 poles



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00012

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



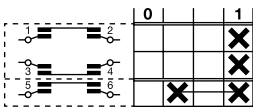
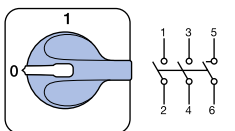
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00013

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

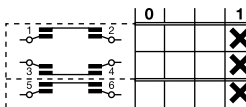
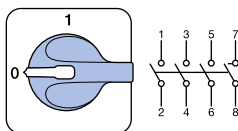
To view these wiring diagrams please visit our download area on www.telergon.com

On-Off switches with contacts leading when making



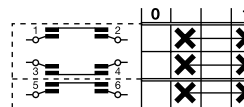
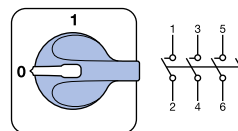
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00020

020
3 poles 1 preclosed pole
2 chambers



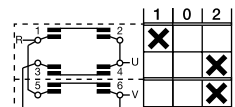
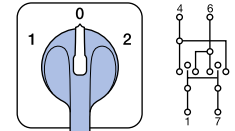
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00021

021
4 poles 1 preclosed pole
2 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00022

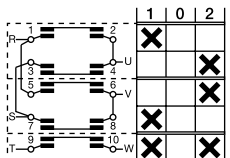
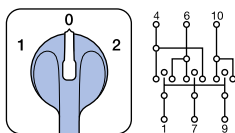
022
4 poles 3 preclosed poles
2 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00101

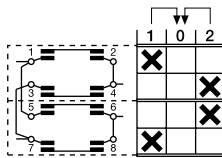
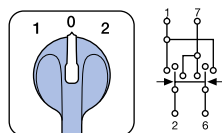
101
2 poles
2 chambers

Reversing switches



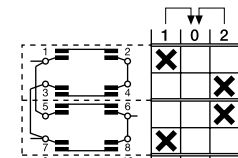
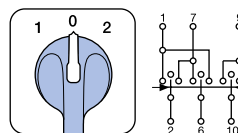
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00102

102
3 poles
3 chambers



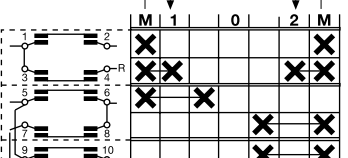
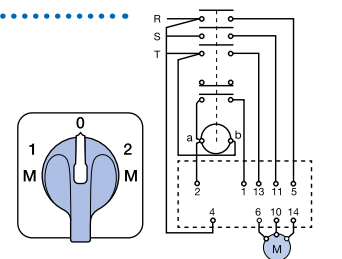
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00111

111
2 poles
2 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00112

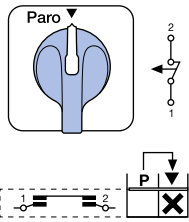
112
3 poles
3 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00113

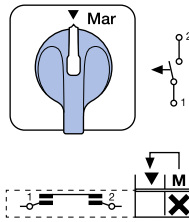
113
3 poles for use with reserving
contactors
4 chambers

Control switches with spring return



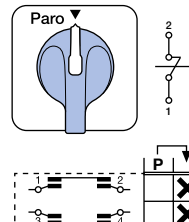
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
002001

201
Start switch 1 pole
1 chamber



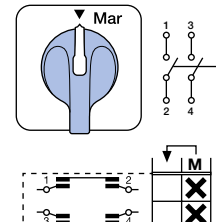
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
002002

202
Stop switch 1 pole
1 chamber



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

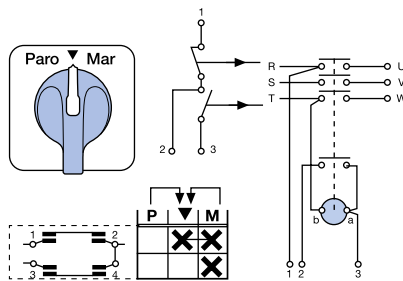
203
Start switch 2 poles
1 chamber



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

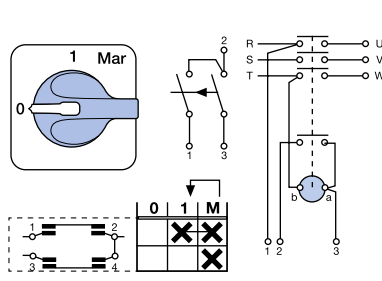
204
Stop switch 2 poles
1 chamber

Stop-Start switches



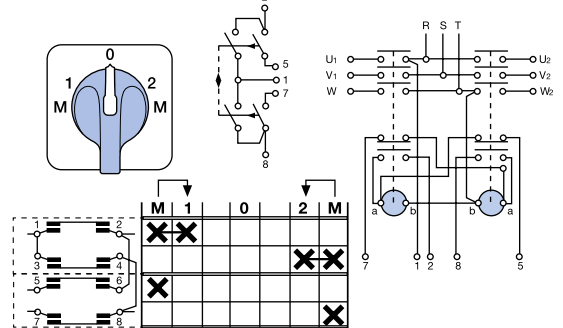
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
002005

205
With contactor
1 chamber



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

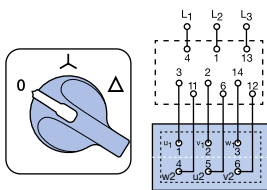
206
With contactor and spring return
1 chamber



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

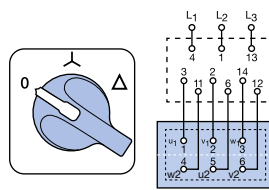
207
With spring return to run for 2 units
2 chambers

Star delta switches



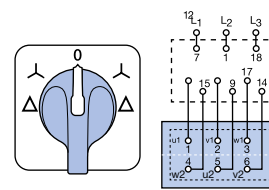
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
003000

300
Normal type
4 chambers



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

301
Auxiliary contact closed in "0"
5 chambers



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

302
Reversing
5 chambers

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

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

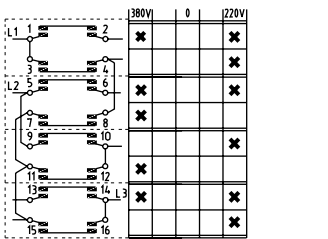
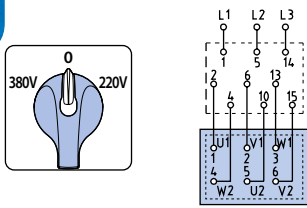
305
Reversing. Return from λ to 0
Δ - λ - 0 - λ - Δ
5 chambers

308
Use with contactor
0 - λ - Δ
4 chambers

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

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on www.telergon.com

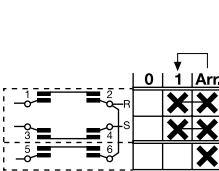
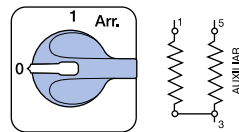
Star delta switches



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

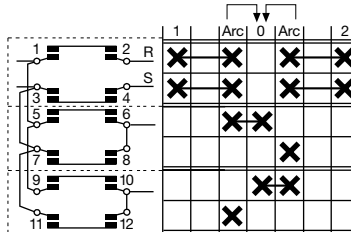
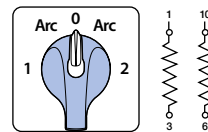
310
Selector $\lambda - \Delta$
380 - 0 - 220
4 chambers

Split phase starting switches



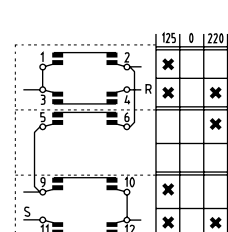
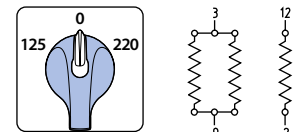
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00315

315
Start return to 1
2 chambers



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

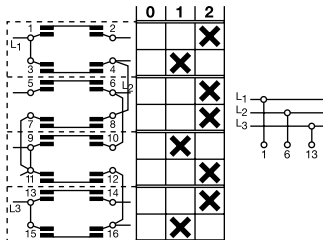
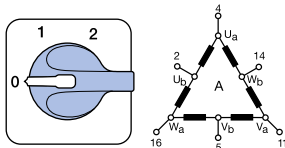
316
Reversing type of T315
1 - ARR - 0 - ARR - 2
3 chambers



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

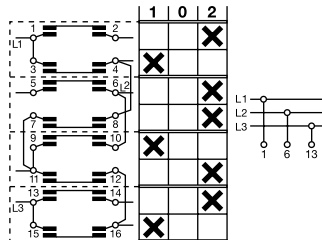
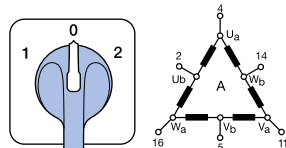
317
Start single phase 2 voltages
3 chambers

Dahlander multi-step switches



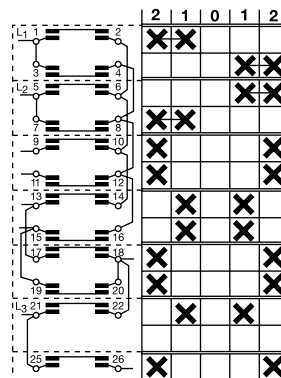
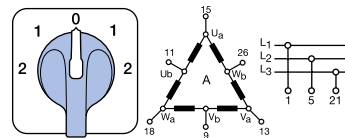
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00330

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



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

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



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

332
Reversing type of T330
7 chambers

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

334

For use with contactor
0 - 1 - 2
5 chambers

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

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

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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

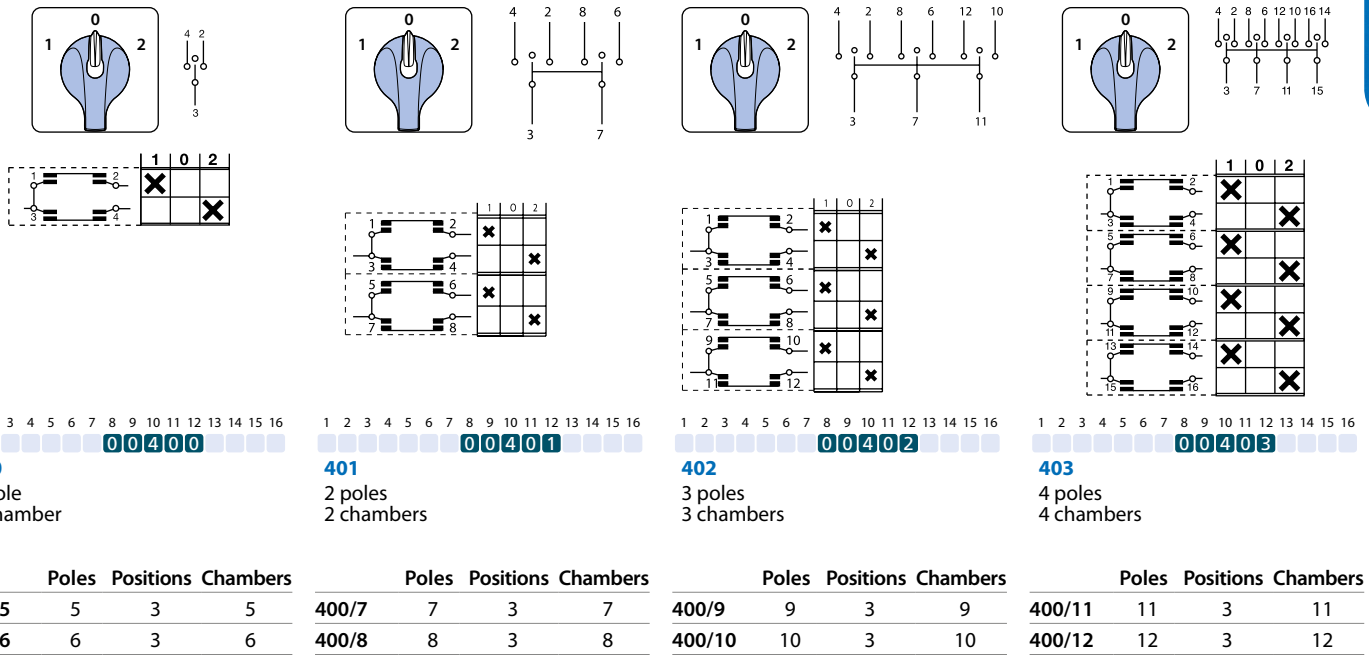
344
 $\Delta_B - \lambda_B - 0 - \lambda_A - \Delta_A$
 $1 - \lambda - 0 - \lambda - 2$
8 chambers

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

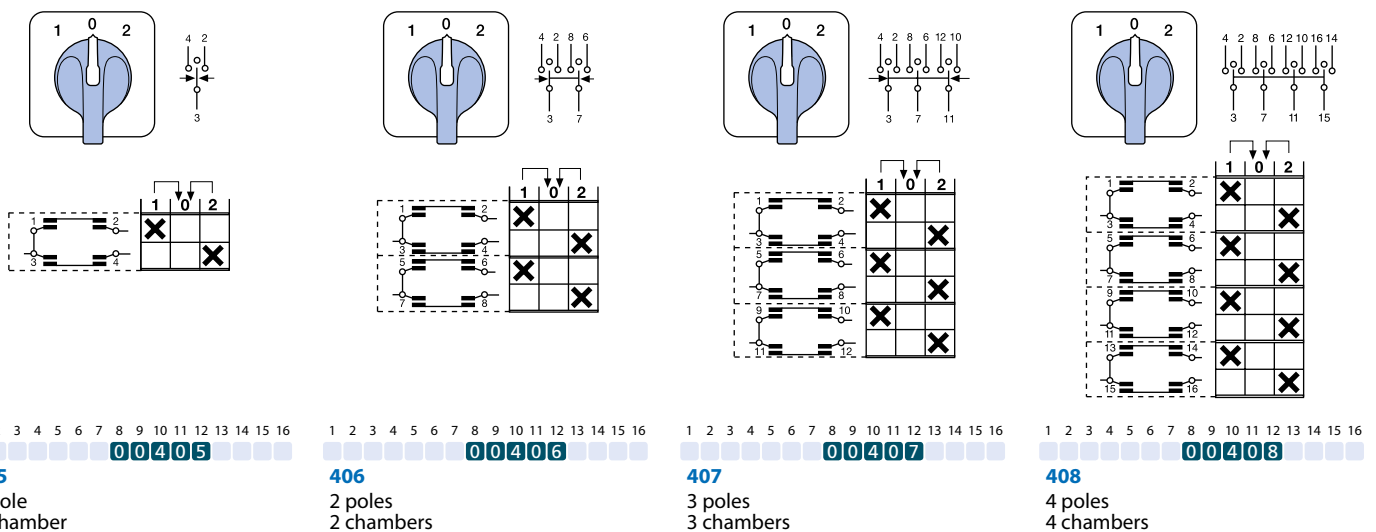
To view these wiring diagrams please visit our download area on www.telergon.com

Changeover switches with center "Off"

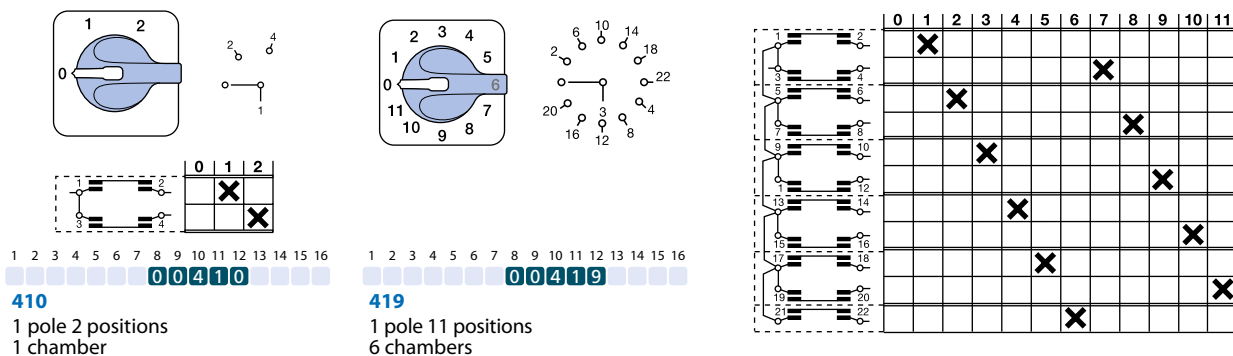


To view these wiring diagrams please visit our download area on www.telergon.com

Changeover switches with spring return to center



Multi-step switches with "Off" position

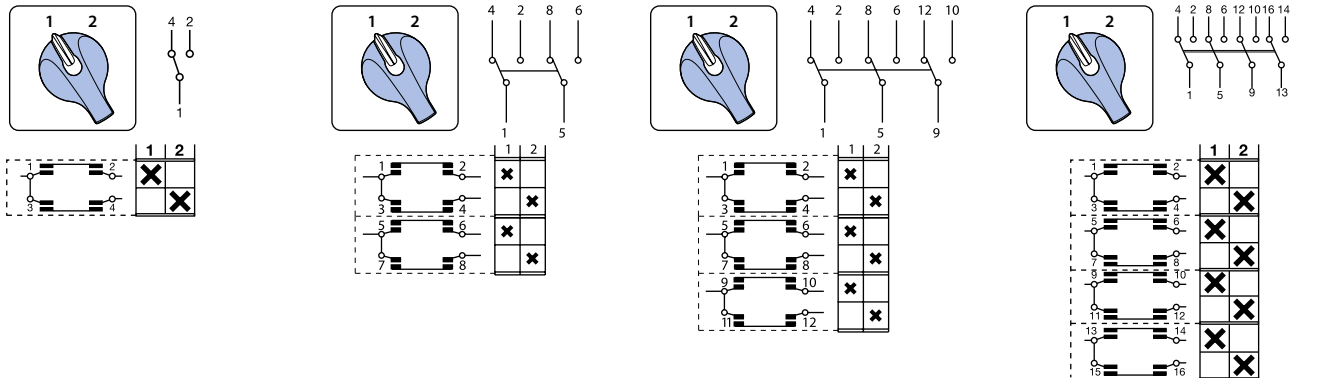


Multi-step switches with “Off” position

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

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

Changeover switches without “Off”

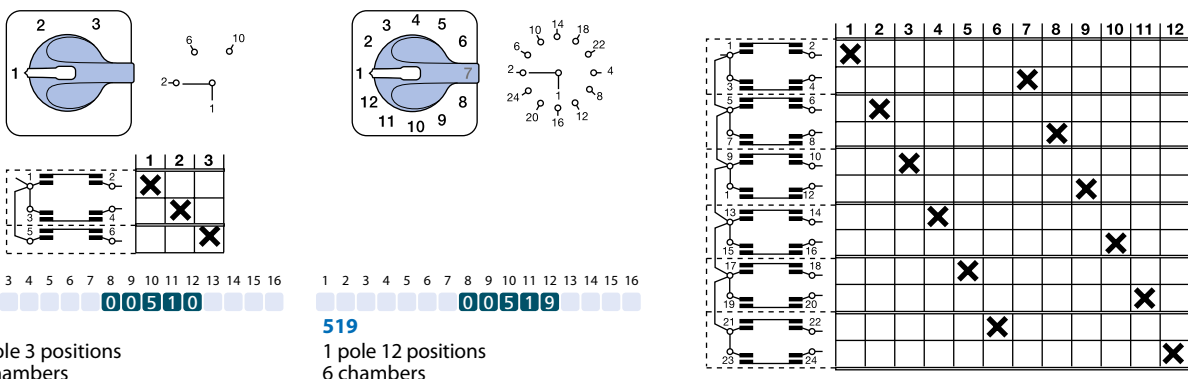


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 005000	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 005011	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 005022	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 005033
500 1 pole 1 chamber	501 2 poles 2 chambers	502 3 poles 3 chambers	503 4 poles 4 chambers

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



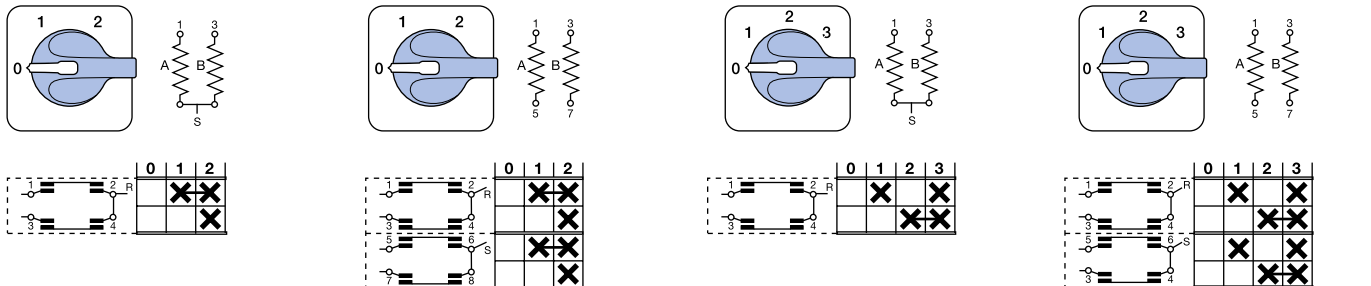
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 005110	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 005119
510 1 pole 3 positions 2 chambers	519 1 pole 12 positions 6 chambers

Multi-step switches without "Off" position

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

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Gang switches



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

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

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

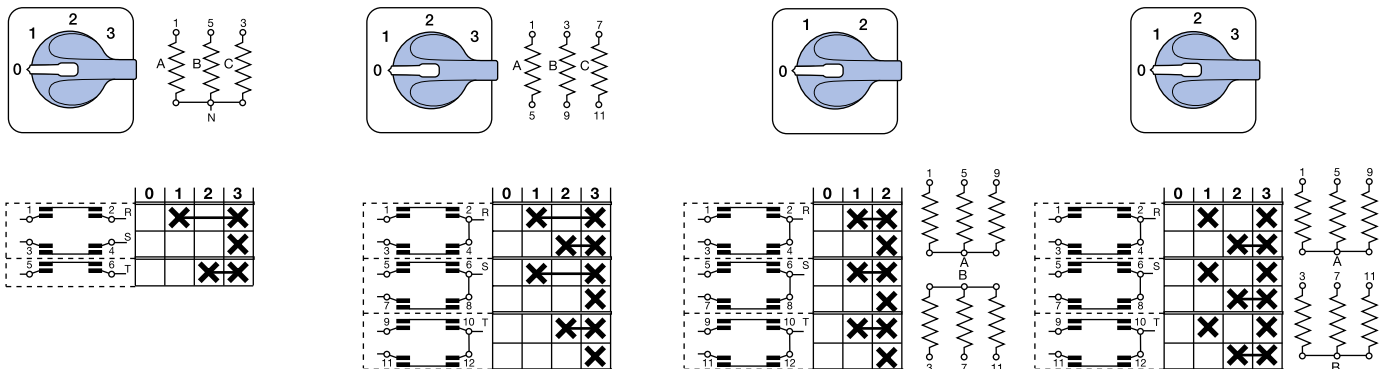
602
2 poles switching sequence
0 - A - (A+B)
2 chambers

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

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

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

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



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

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

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

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

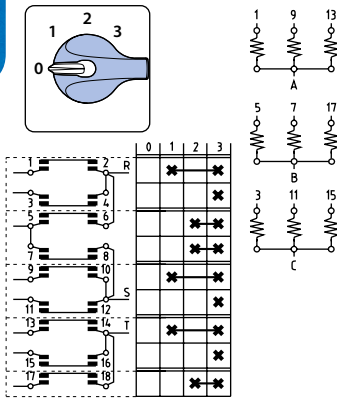
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
0 0 6 0 7

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

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

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

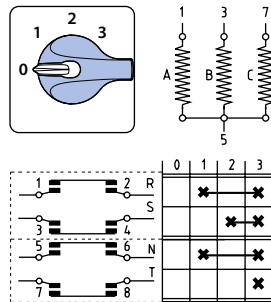
Gang switches



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

609

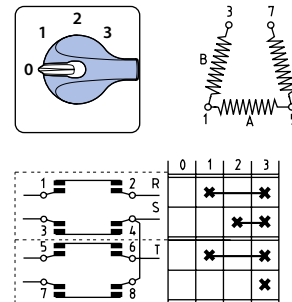
3 poles switching sequence
0 - A - (A+B) - (A+B+C)
5 chambers



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

610

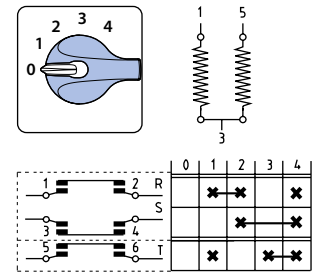
Switching sequence
 λ 0 - A - (A+B) - (A+B+C)
2 chambers



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

611

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

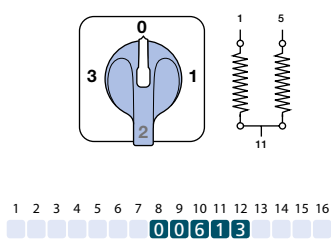


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00612

612

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

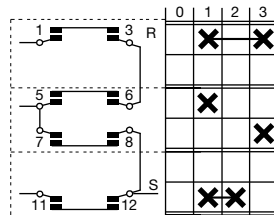
Kitchen and heating switches



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

613

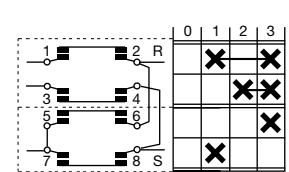
3 positions switching sequence
0-A+B parallell; A or B-A+B series -0
3 chambers



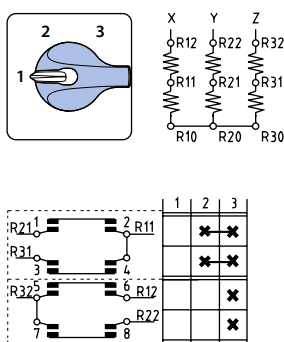
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00614

614

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



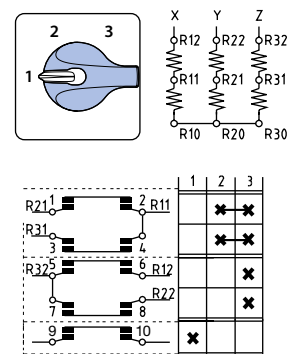
Resistance elimination switches



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

620

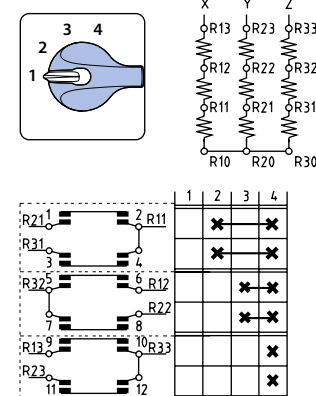
3 phases, 3 points
2 chambers



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

621

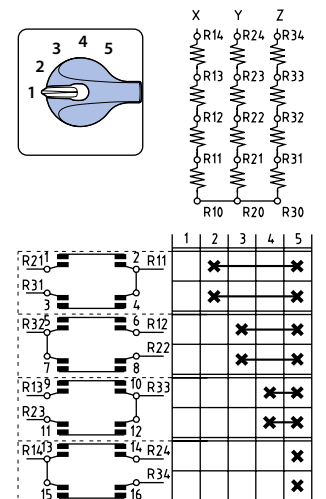
3 phases, 3 points
3 chambers
With auxiliary contact



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

622

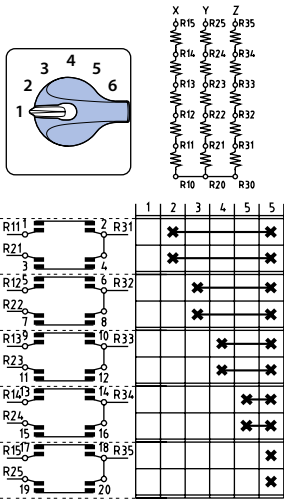
3 phases, 4 points
3 chambers



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

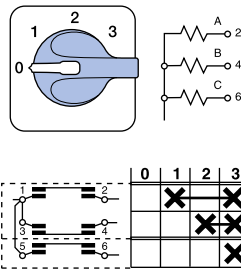
624

3 phases, 5 points
4 chambers



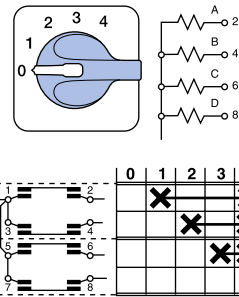
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00626

626
3 phases, 6 points
5 chambers



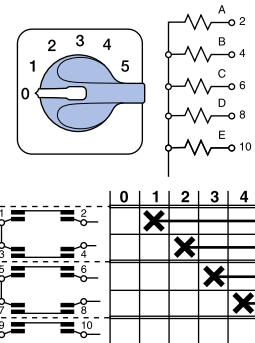
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00630

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



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00631

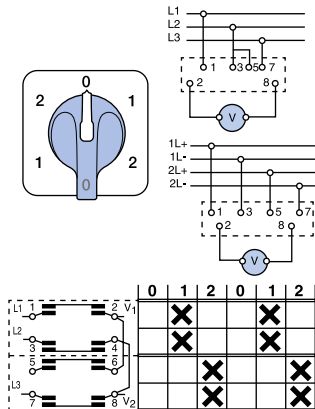
631
Switching sequence
0 - A - (A+B) - (A+B+C) - (A+B+C+D)
2 chambers



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00632

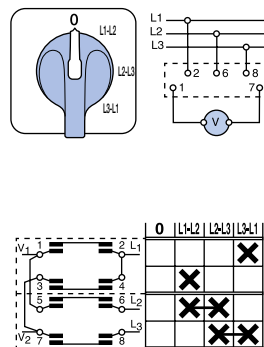
632
Switching sequence
0 - A - (A+B) - (A+B+C) - (A+B+C+D) - (A+B+C+D+E)
3 chambers

Voltmeter switches



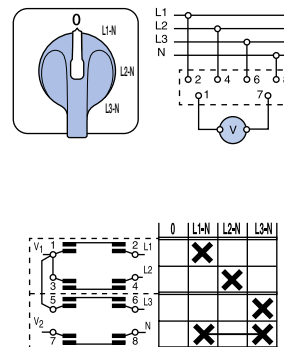
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00700

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



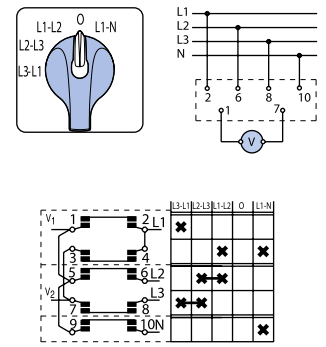
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00701

701
3 phases
2 chambers



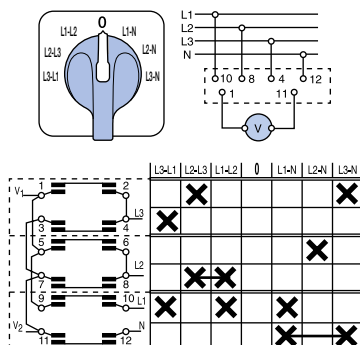
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00702

702
3 phases to neutral
2 chambers



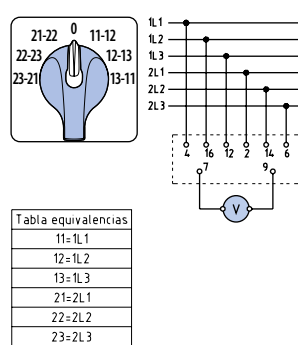
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00704

704
3 phases and 1 phase to neutral
3 chambers



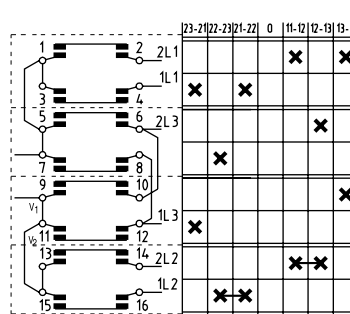
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00705

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



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00706

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

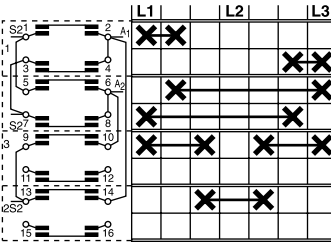
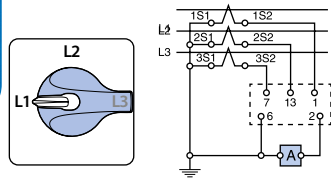


703
4 lines with 2 wires C.A. o C.C.
4 chambers

708
3 phases, 2 potencial transformers
1 pole
2 chambers

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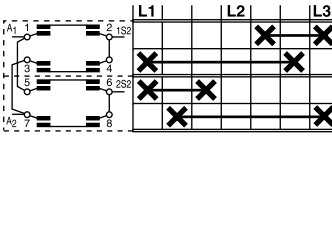
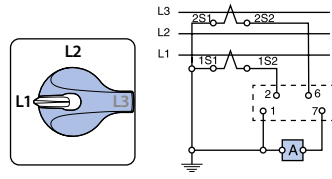
Ammeter switches



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

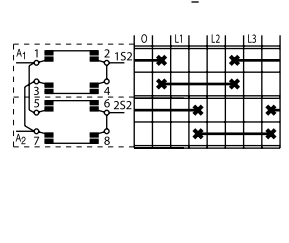
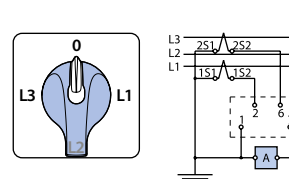
720*
3 phases, 3 current transformers,
1 pole
4 chambers

* New diagram 732



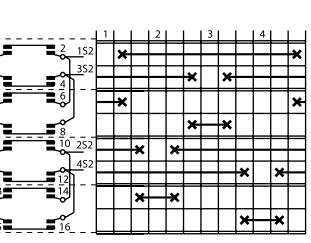
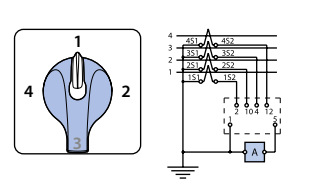
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00721

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



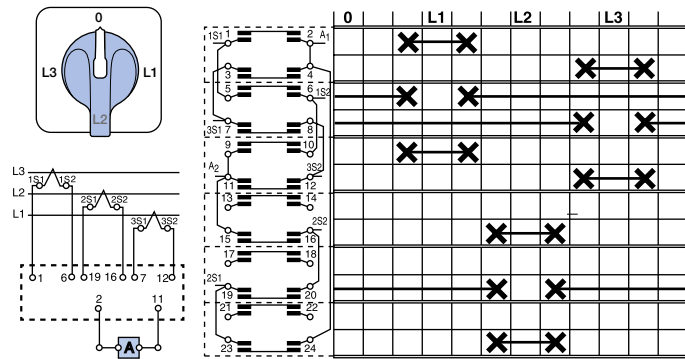
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00724

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



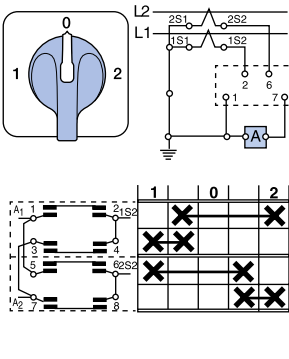
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00725

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



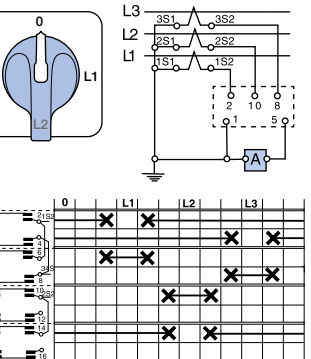
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
00727

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



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

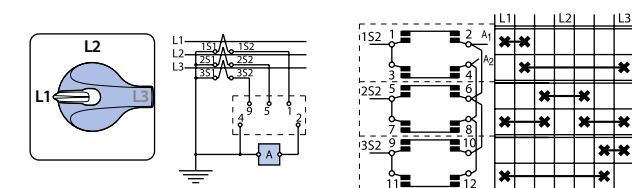
730
2 current transformers,
1 pole
2 chambers



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

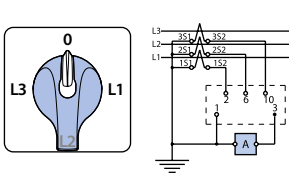
731*
3 current transformers,
1 pole
4 chambers

* New diagram 733



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

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



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

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

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

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

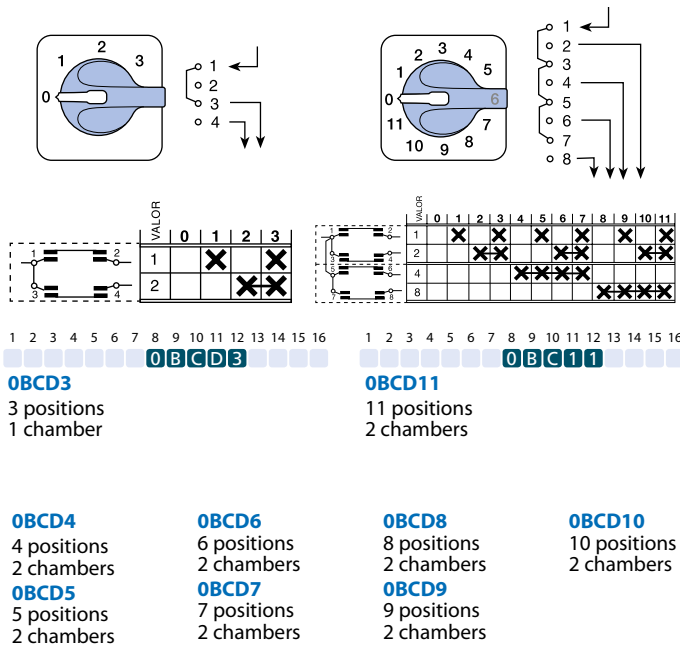
729
1 current transformers,
1 pole
1 chamber

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

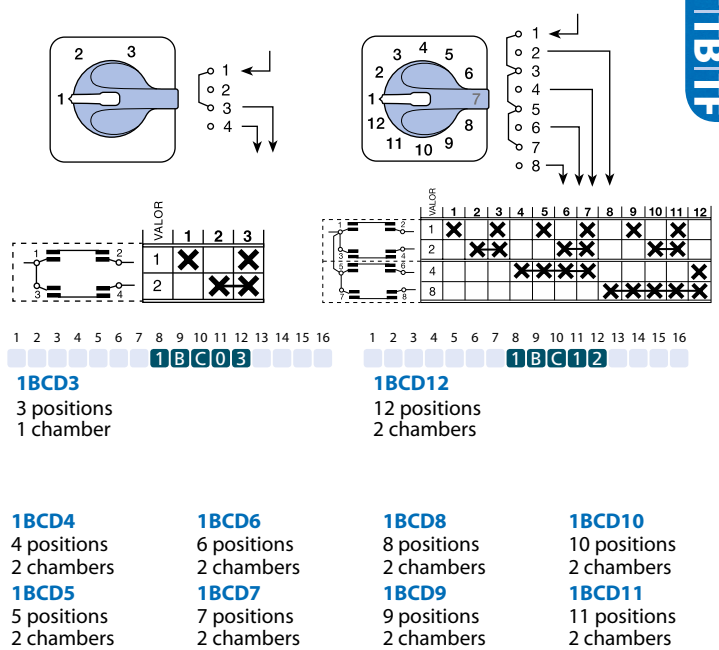
728
4 lines, 4 current transformers,
2 poles
6 chambers

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

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

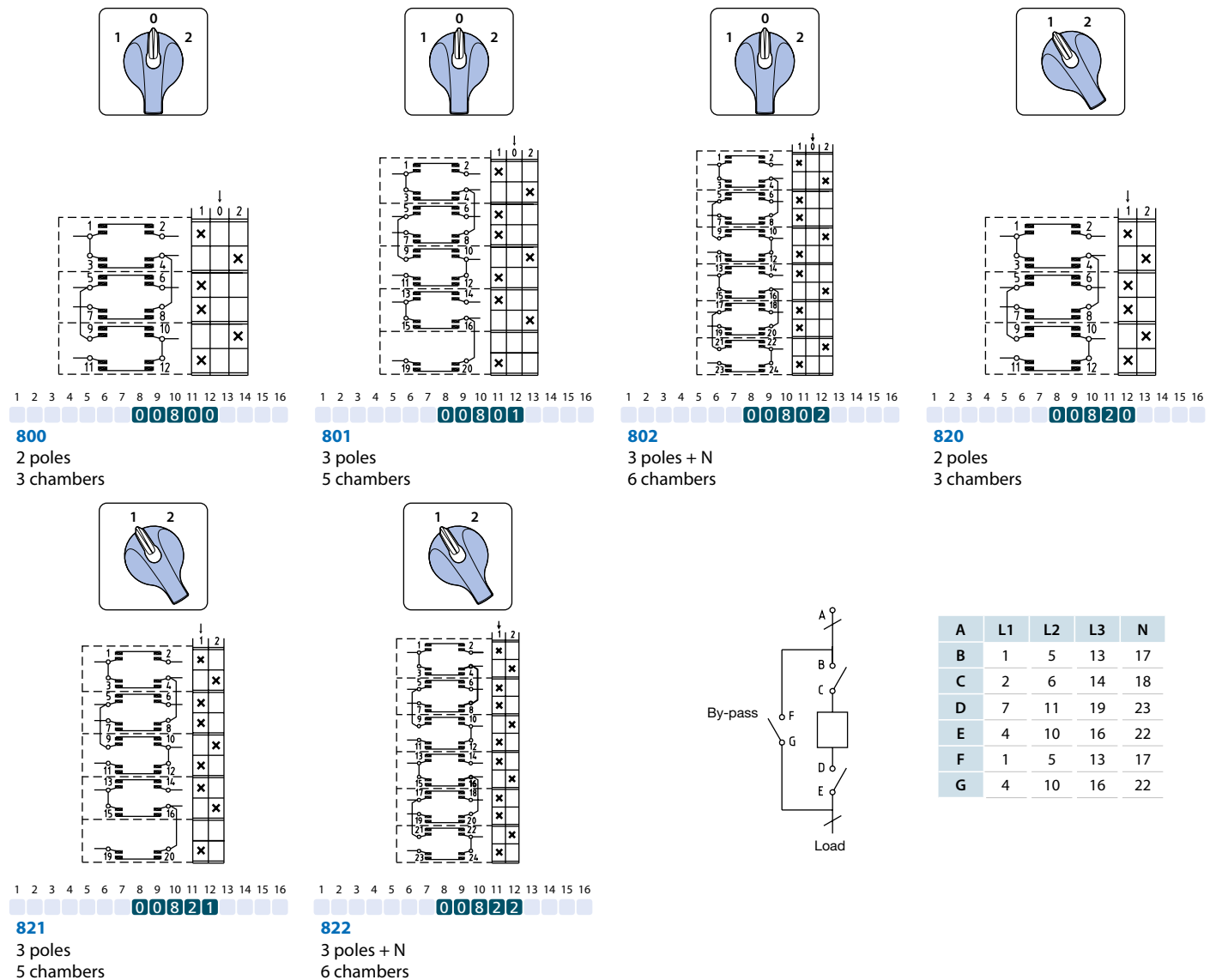


Switches for B.C.D. codification without "Off"

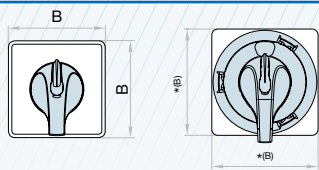


To view these wiring diagrams please visit our download area on www.telergon.com

By-pass switches

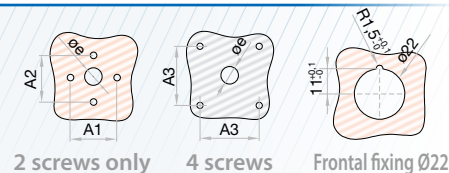


T Door mounting E



*(B) Features & dimensions in page 27.

Door mounting drilling

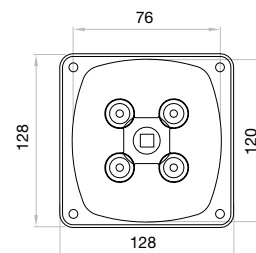
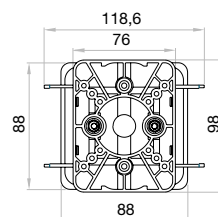
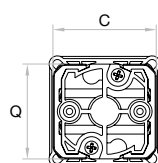
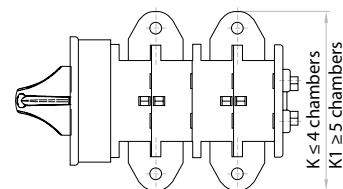
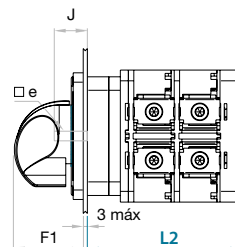
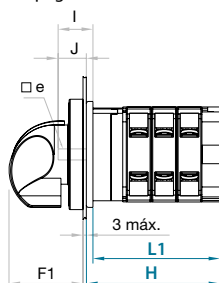


Note:

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.

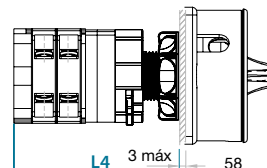
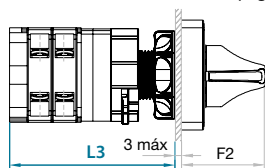
Depending on the number of contacts to be switched simultaneously, it's possible to supply up to 14 chambers switches in size 0.



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	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	-	-	60	5,5	68	5,5	94	66 84,5	12	7	80 89	45	24,5	20,5	-	-
3	T100 T125	-	-	60	5,5	68	5,5	94	-	12	7	-	45	-	20,5	-	-
	T200 T250 T315	-	-	-	-	108	6,5	128	76	16	10	120	67	-	40	150	-
	T400 T500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	176	-
	T630 T800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	218	256

		Chambers															
Size	Series	1□	2□	3□	4□	5□	6□	7□	8□	9□	10□	11□	12□	13□	14□		
0	T12 T20	L1	34,5	46	57,5	69	80,5	92	103,5	115	126,5	138	149,5	161	172,5	184	
		H	37,5	49	60,5	72	83,5	95	106,5	118	129,5	141	152,5	164	175,5	187	
1	T16 T25	L1	46,4	60,6	74,8	89	103,2	117,4	131,6	145,8	160	174,2	188,4	202,6	*(1)	*(1)	
		H	49,6	63,8	78	92,2	106,4	120,6	134,8	149	163,2	177,4	191,6	205,8	*(1)	*(1)	
	T32 T40	L1	49,8	67,3	84,8	102,3	119,8	137,3	154,8	172,3	189,8	207,3	224,8	242,3	*(1)	*(1)	
		H	53	70,5	88	105,5	123	140,5	158	175,5	193	210,5	228	245,5	*(1)	*(1)	
2	T50 T63 T80	L1	58,5	78,5	98,5	118,5	138,5	158,5	178,5	198,5	218,5	238,5	258,5	278,5	*(1)	*(1)	
		H	62,5	82,5	102,5	122,5	142,5	162,5	182,5	202,5	222,5	242,5	262,5	282,5	*(1)	*(1)	
	T100 T125	L1	67	94	121	147,5	174	201	227,5	254	281	307,5	334	361	*(1)	*(1)	
		H	71	98	125	151,5	178	205	231,5	258	285	311,5	338	365	*(1)	*(1)	
3	T175	L1	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)	
	T200 T250 T315	L1	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)	
	T400 T500	L1	175	295	415	535	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	
		H	215	375	535	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	
	T630 T800	L1	215	375	535	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	
		H	215	375	535	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	

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

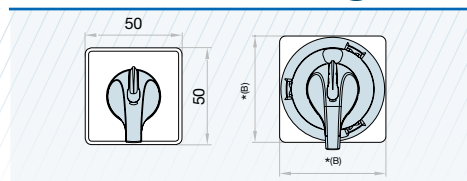


		Chambers *(ch)							
Size	Series	1□	2□	3□	4□	5□	6□	F2	
0	T12 T20	L3	63,5	75	86,5	98	109,5	121	53,5
1	T16 T25	L4	75,5	89,5	103,8	118	-	-	55,5
	T32 T40	L4	78,8	96,3	116,8	131,3	-	-	55,5

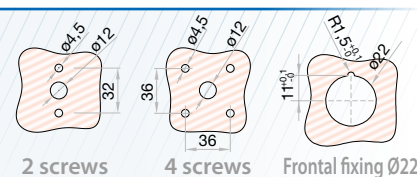
*(ch) Central quick fixing ø22 - maximum number of chambers supported.



TB Door mounting E



Door
mounting
drilling

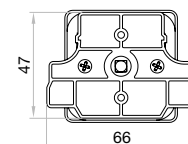
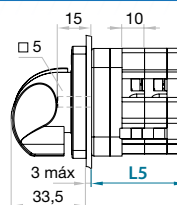
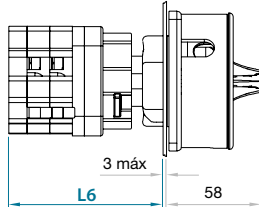
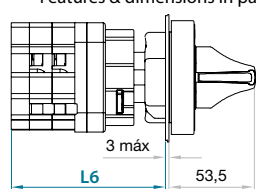


2 screws

4 screws

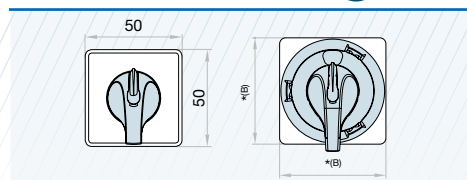
Frontal fixing Ø22

*(B) Features & dimensions in page 27.

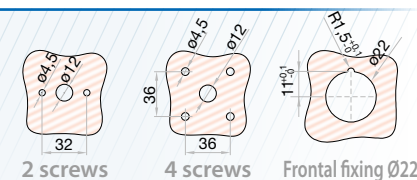


	Chambers											
	1□	2□	3□	4□	5□	6□	7□	8□	9□	10□	11□	12□
L5	31,5	41,5	51,5	61,5	71,5	81,5	91,5	101,5	111,5	121,5	131,5	141,5
L6	60,5	70,5	80,5	90,5	100,5	110,5	-	-	-	-	-	-

TF Door mounting E



Door
mounting
drilling

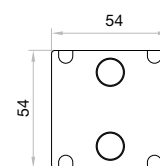
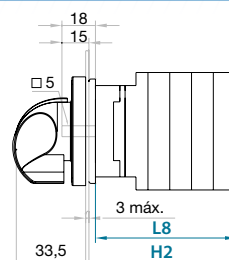
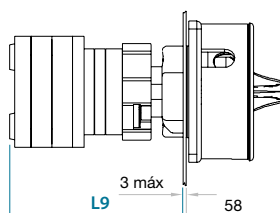
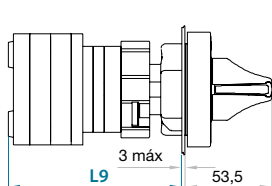


2 screws

4 screws

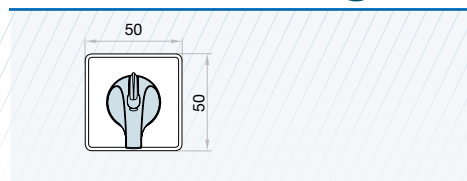
Frontal fixing Ø22

*(B) Features & dimensions in page 27.

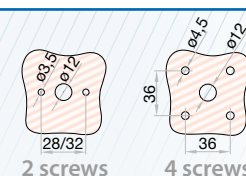


	Chambers											
	1□	2□	3□	4□	5□	6□	7□	8□	9□	10□	11□	12□
L8	45	55	65	75	85	95	105	115	125	135	145	155
L9	73,5	83,5	93,5	103,5	113,5	123,5	-	-	-	-	-	-
H2	48	58	68	78	88	98	108	118	128	138	148	158

TP Door mounting E

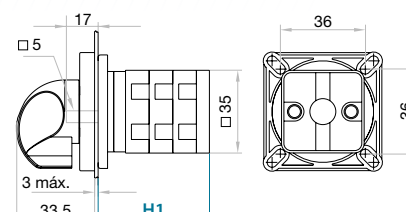
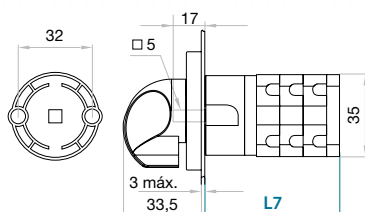
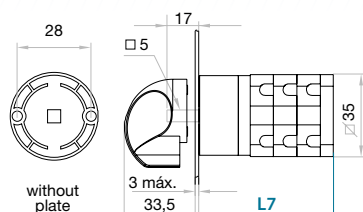


Door
mounting
drilling



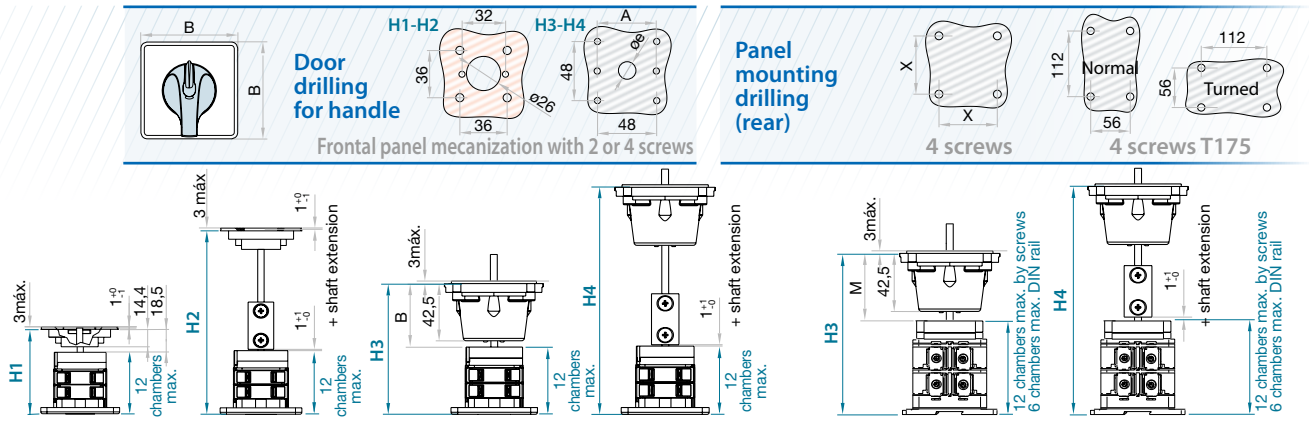
2 screws

4 screws



	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

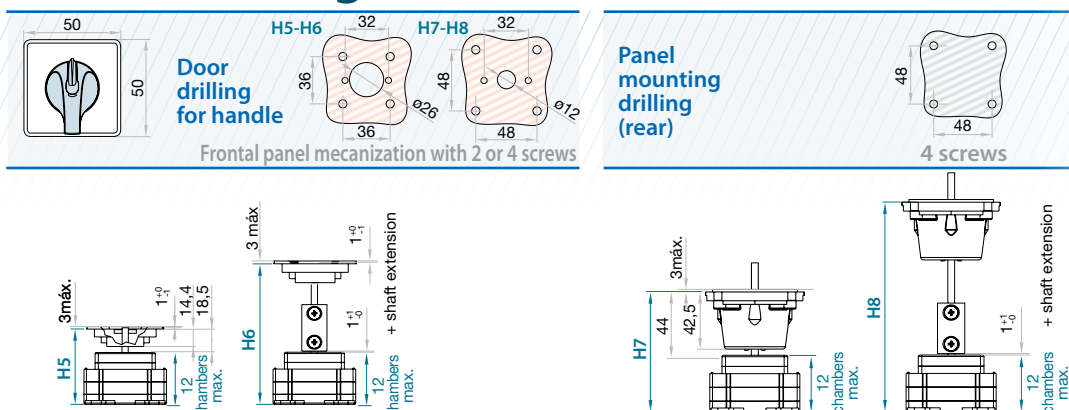


T12-T200

T175

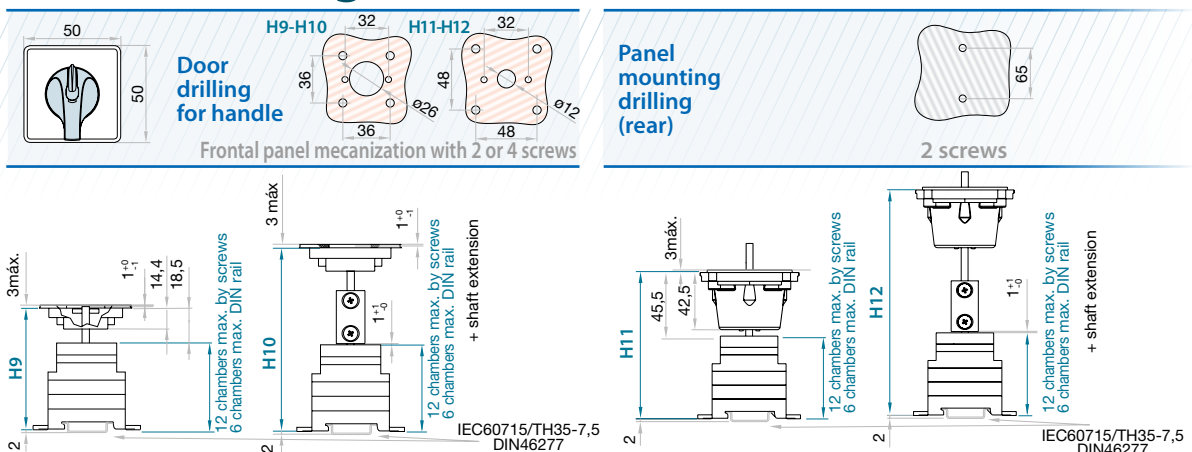
Size	Series		Chambers				A	B	øe	M	X
			H1	H2	H3	H4					
0	T12 T20	min	56	+11,5	83	+11,5	121	32	12	45,5	43
		max	-	-	-	-	283	50	12	-	-
1	T16 T25	min	-	-	97,1	+14,2	135,1	32	12	47,5	48
		max	-	-	-	-	297,1	65	12	-	-
	T32 T40	min	-	-	100,5	+17,5	138,5	32	12	47,5	48
		max	-	-	-	-	300,5	65	12	-	-
2	T50 T63 T80	min	-	-	114,5	+20	152,5	60	12	52	68
		max	-	-	-	-	314,5	94	12	-	-
	T100 T125	min	-	-	123	+27	161	94	12	52	68
		max	-	-	-	-	323	94	12	-	-
3	T175	min	-	-	141,8	+34	179,8	94	12	52	-
		max	-	-	-	-	341,8	94	12	-	-
3	T200	min	-	-	162,5	+40	-	48	16	67,5	108
		max	-	-	-	-	-	-	-	-	-

TB Base mounting with clutch device



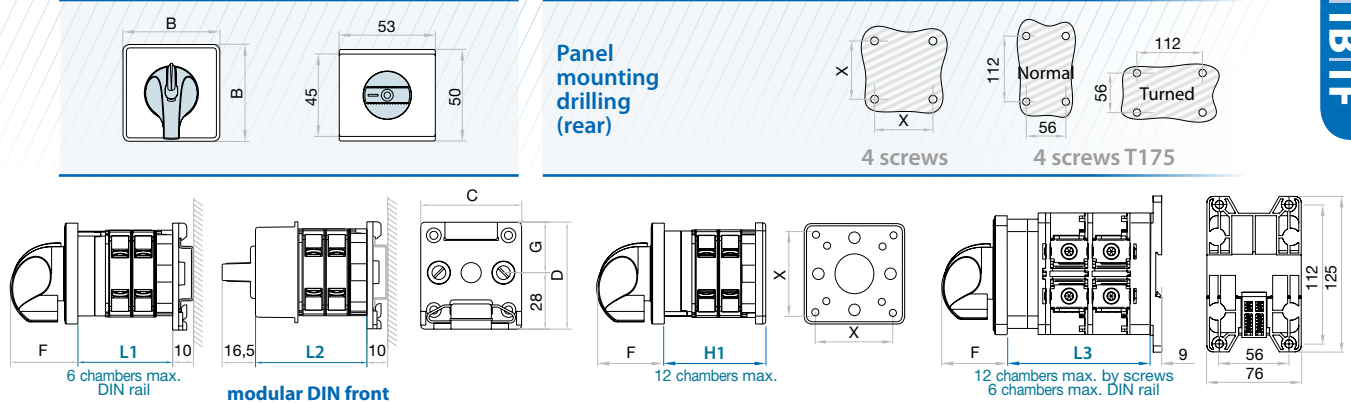
			Chambers							
			H5		H6		H7		H8	
Size	Series			1□ +□	1□ +□	1□ +□	1□ +□	1□ +□	1□ +□	
0	TB20	TB25	TB32	min	46	+10	84	+10	75,5	+10
				max	-	-	246	-	113	275,5

TF Base mounting with clutch device



			Chambers							
			H9		H10		H11		H12	
Size	Series			1□ +□	1□ +□	1□ +□	1□ +□	1□ +□	1□ +□	
0	TF12	TF16	TF25	min max	65,5 +10	103,5 265,5	+10	92,5 +10	130,5 292,5	+10

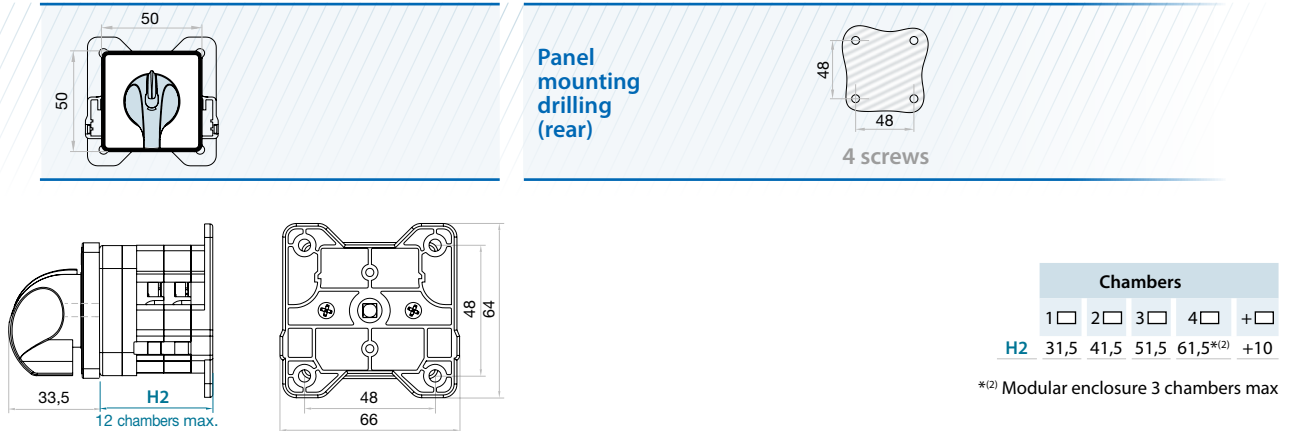
T Base mounting with screws or DIN rail (direct handle)



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	50	50	53	33,5	25	-
		L2	-	53,5	65	76,5 ^{*(1)}	-	-	-	50	53	-	25	-
		H1	37,5	49	60,5	72	83,5	95	+11,5	50	-	33,5	-	43
1	T16 T25	L1	46,4	60,6	74,8	89	-	-	65	50	53	36	25	-
		H1	49,6	63,8	78	92,2	106,4	120,6	+14,2	65	-	36	-	48
	T32 T40	L1	49,8	67,3	84,8	102,3	-	-	65	-	-	36	-	-
2	T50 T63 T80	H1	53	70,5	88	105,5	123	140,5	+17,5	65	-	36	-	48
		H1	62,5	82,5	102,5	122,5	142,5	162,5	+20	94	-	45,5	-	68
	T100 T125	H1	71	98	125	152	179	206	+27	94	-	45,5	-	68
3	T175	L3	80,8	114,8	148,8	-	-	-	+34	94	-	45,5	-	-
		H1	95	135	175	215	255	295	+40	132	-	67	-	108

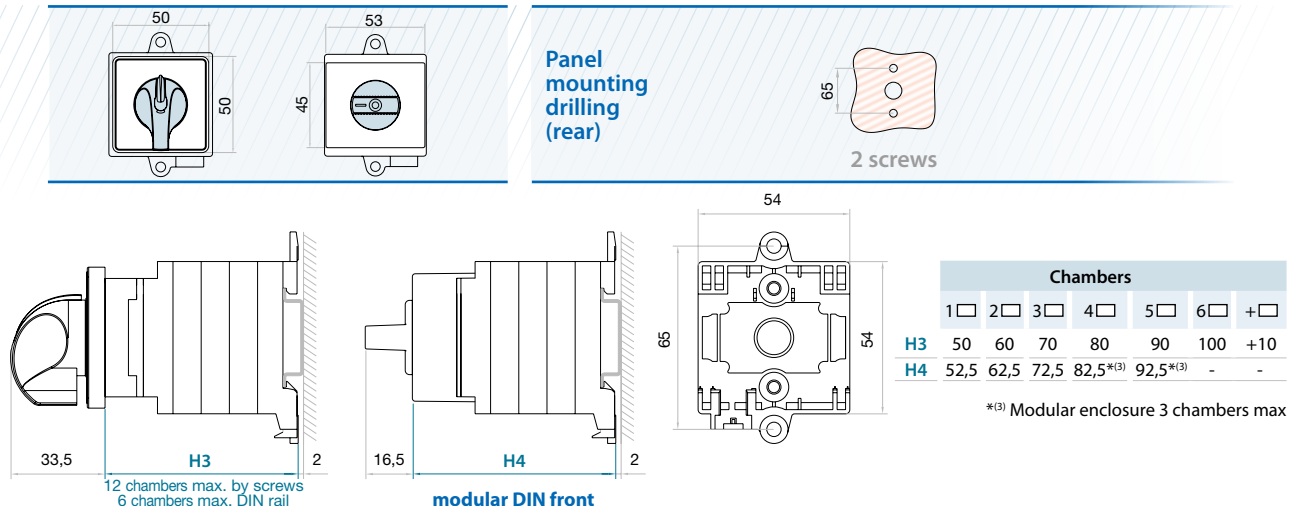
^{*(1)} Modular enclosure 3 chambers max

TB Base mounting with screws (direct handle)



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

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



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

Technical specifications

According to IEC 60947-3			Size 0		Size 1				Size 2					Size 3									
			T12	T20	T16	T25	T32	T40	T50	T63	T80	T100	T125	T175	T200	T250	T315	T400	T630	T800	T1250	T1600	
Rated thermal current	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	
		Ue																					
AC rated operational current	Ie	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 ⁽³⁾	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	10000	8000	8000	8000	8000	8000	8000	5000	5000	3000	3000	3000
Maximum connection capacity																							
Rigid copper conductor		mm ²	2x4	2x4	2x6	2x6	2x10	2x10	16/25 ⁽²⁾	16/25 ⁽²⁾	16/25 ⁽²⁾	35/50 ⁽²⁾	35/50 ⁽²⁾	95	95	120	185	-	-	-	-	-	
Flexible copper conductors		mm ²	2x2,5	2x2,5	2x4	2x4	2x6	2x6	10/16 ⁽²⁾	10/16 ⁽²⁾	10/16 ⁽²⁾	16/35 ⁽²⁾	16/35 ⁽²⁾	95	95	120	185	-	-	-	-	-	

According to UL 60947-4-1 - 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	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	50	60	60	60	-	-	-	-	-

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

Approvals T:



Normal service conditions*

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

- Rated duties at utilization categories AC21A, AC22A y AC23A: Continuing (8 hours); uninterrupted.
- Rated duties at utilization categories AC3 and AC4: Intermittent; temporary
- Switching direct currents: For L/R<50msg, rated operational current (I_e) can be dealt with up to 30Vdc. With higher voltages, several contacts have to be connected in series.

* Please consult for other service conditions.

According to IEC 60947-3				Size 0						
				TB20	TB25	TB32	TF12	TF16	TF25	
Rated thermal current	Ith	A		20	25	32	20	25	32	
Rated insulation voltage	Ui	V		500	500	500	690	690	690	
Rated impulse withstand voltage	Uimp	kV		4	4	4	6	6	6	
				Ue						
AC rated operational current	Ie	Ue 415V	AC21A	A	20	25	32	20	25	32
		Ue 415V	AC22A	A	20	25	32	20	25	32
		Ue 415V	AC23A	A	20	25	32	-	-	-
Rated conditional short-circuit current		kA		5	5	5	5	5	5	
Rated maximum current	gL-gG	A		35	35	35	20	25	32	
Rated breaking capacity	400V; cos φ=0,45	A		160	200	256	100	160	200	
Rated short-time withstand current (1 sec)		A		240	400	500	350	400	500	
Mechanical durability (according to the standards, for other values please consult)				10000	10000	10000	10000	10000	10000	
Maximum connection capacity										
Rigid copper conductor		mm²		1x10 2x6	1x10 2x6	1x10 2x6	1x10	1x10	1x10	
Flexible copper conductors		mm²		1x6 2x4	1x6 2x4	1x6 2x4	1x6	1x6	1x6	

According to UL 60947-4-1 - CAN / CSA C22.2 N° 14			Size 0					
						TF12	TF16	TF25
Rated thermal current	Ith	A	-	-	-	16	20	25
General use rating		A	-	-	-	16	20	25
		Vac	-	-	-	600	600	600
AC rated operational power	3x240V	HP	-	-	-	2	5	7,5
	3x480V	HP	-	-	-	5	10	12
	3x600V	HP	-	-	-	5	10	15

According to IEC 60947-3 / IEC 60947-5				Size 0	
				TP10	
Rated thermal current	Ith	A		12	
Rated insulation voltage	Ui	V		500	
Rated impulse withstand voltage	Uimp	kV		4	
				Ue	
AC rated operational current	Ie	Ue 415V	AC13A	A	10
		Ue 415V	AC21A	A	12
		Ue 415V	AC22A	A	12
		Ue 415V	AC23A	A	10
Rated conditional short-circuit current		kA		5	
Rated maximum current	gL-gG	A		16	
Rated breaking capacity	400V; cos φ=0,45	A		80	
Rated short-time withstand current (1 sec)		A		100	
Mechanical durability (thousand of operations)				1000	
Maximum connection capacity					
Rigid copper conductor		mm²		2x4	
Flexible copper conductors		mm²		2x2,5	

Approvals TP:



Approvals TB:

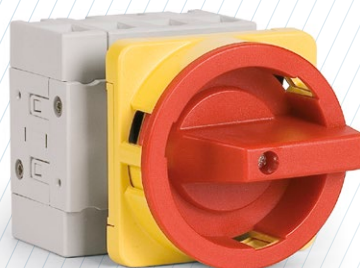


consult

Approvals TF:

AC Modular switch - disconnectors and changeover switches

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

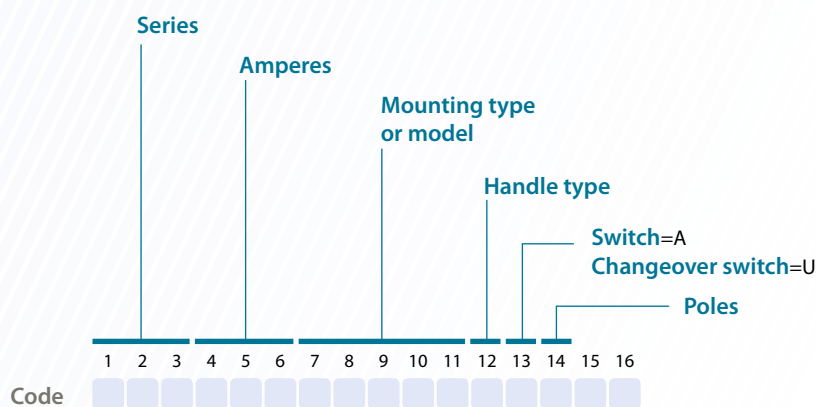


The ZBK switch - disconnectors are 3, 4, 6 and 8-pole modular devices with a high breaking capacity and contact pressure, which respond well to short circuits. They are designed for use in low voltage civil and industrial machines and facilities and made of different models depending on the type of mounting.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

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

Range codification:

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



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



Testing and approvals:



series ZBK O-I

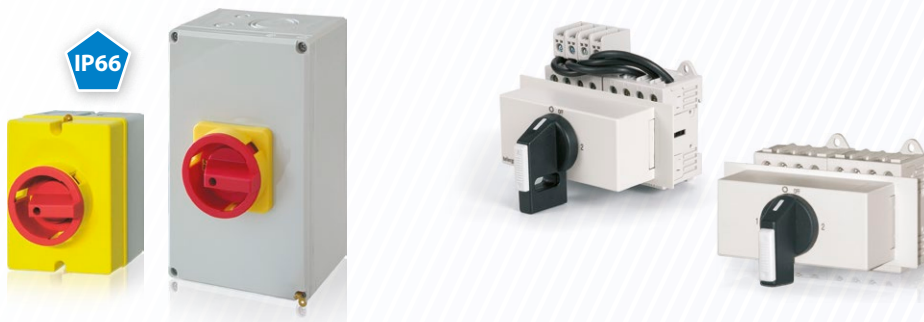


Door mounting fixing by screws.
Two sizes of padlockable handles .
Auxiliary terminals and other accessories.

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

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

series ZBK I-O-II



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

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

Accessories



Auxiliary contacts



PE - Terminal



N - Terminal



N - Fixed neutral



Shaft extensions

ZBK

Switch door mounting with padlockable handle IP66

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
	3P	ZBK20EH4A3	ZBK25EH4A3	ZBK40EH4A3	ZBK63EH4A3	ZBK80EH4A3	ZBK125EH4A3
	3P + N	ZBK20EH4A4	ZBK25EH4A4	ZBK40EH4A4	ZBK63EH4A4	ZBK80EH4A4	ZBK125EH4A4
48	3P	ZBK20EHN1A3	ZBK25EHN1A3	ZBK40EHN1A3	ZBK63EHN1A3	ZBK80EHN1A3	-
	3P + N	ZBK20EHN1A4	ZBK25EHN1A4	ZBK40EHN1A4	ZBK63EHN1A4	ZBK80EHN1A4	-
	3P	ZBK20EH1A3	ZBK25EH1A3	ZBK40EH1A3	ZBK63EH1A3	ZBK80EH1A3	-
	3P + N	ZBK20EH1A4	ZBK25EH1A4	ZBK40EH1A4	ZBK63EH1A4	ZBK80EH1A4	-

Technical information



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

			20	25	40	63	80	125
Rated thermal current	I _{th}	A	20	25	40	63	80	125
Rated thermal current enclosed	I _{the}	A	20	25	40	63	80	110
Rated insulation voltage	U _i	V	690	690	690	690	690	1000
Rated impulse withstand voltage	U _{imp}	kV	6	6	6	6	6	8
AC rated operational current	I _e	AC21A	20	25	40	63	80	125
Making capacity	I _{eff}	3x380-440V	160	190	300	370	440	850
Breaking capacity		3x220-240V	160	180	250	330	380	680
		3x380-440V	160	180	250	330	380	680
		3x660-690V	80	110	170	190	220	420
Direct switching motors	AC3	3x400V	12	16	30	37	37	72
	AC3	3x220-240V	3	4	7,5	11	11	22
		3x380-440V	5,5	7,5	15	18,5	18,5	37
		3x660-690V	5,5	7,5	15	18,5	18,5	30
Main & safety switch	AC23	3x400V	16	20	32	45	45	85
	AC23A	3x220-240V	4	5,5	9	15	15	30
	AC23B	3x380-440V	7,5	10	16	22	22	45
		3x660-690V	5,5	7,5	15	18,5	18,5	37
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	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		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)	Manual Motor Controller	A	40	50	70	90	110	125
5kA / 600V	Motor Disconnect	A	40	50	50	70	70	125
Tightening torque		Nm	1,2-2,3	1,2-2,3	1,2-2,3	2,8-4	2,8-4	1,7-4,5
		lb.Inch	11-20	11-20	11-20	24-35	24-35	15-40

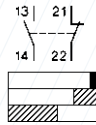
*(1) ZBK63___U stranded 16 mm² / flexible 10 mm²

Accessories

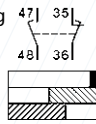


>> Auxiliary contacts

1NO+1NC

A
20
125CODE
ZBKLH11main contact
NC aux contact
NO aux contact

1NO+1NC overlapping

A
20
125CODE
ZBKLH11Xmain contact
NC aux contact
NO aux contact

>> PE - Terminal

PE
PEA
20
80CODE
ZBKPE80E

>> N - Terminal

N
N1A
20
40CODE
ZBKN40EA
63
80CODE
ZBKN80E

>> N - Fixed neutral

N
NA
20
80CODE
ZBKPEN80E

Auxiliary contacts technical information

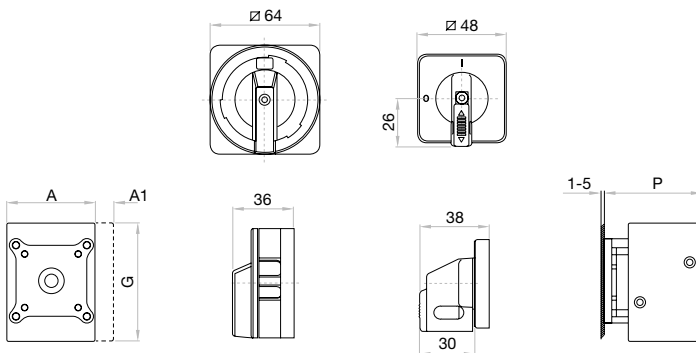
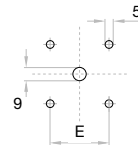
Rated insulation voltage	Ui	V	690	
Rated thermal current	Ith - Ithe	A	10	
Switching capacity	AC15	220-240V	A	2,5
	AC15	380-440V	A	1,5
Rated conditional short-circuit current		kAeff	3	
Max. short circuit protection	gL(gG)	A	10	

Connecting capacity

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

Dimensions (mm)

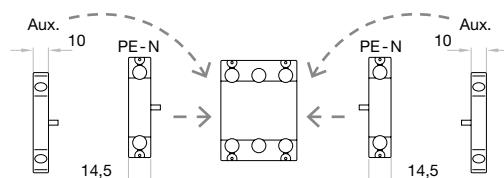
Door drilling for external handle



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

Auxiliary contacts

A1



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

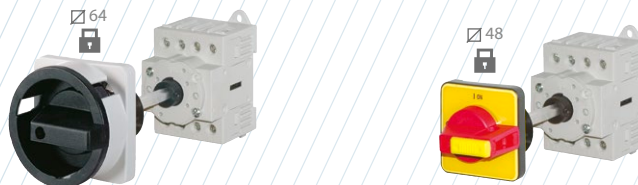
ZBK

Switch base mounting ø 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	ZBK125VZVHN4A3
	3P + N	ZBK20VZVHN4A4	ZBK25VZVHN4A4	ZBK40VZVHN4A4	ZBK63VZVHN4A4	ZBK80VZVHN4A4	ZBK125VZVHN4A4
	3P	ZBK20VZVH4A3	ZBK25VZVH4A3	ZBK40VZVH4A3	ZBK63VZVH4A3	ZBK80VZVH4A3	ZBK125VZVH4A3
	3P + N	ZBK20VZVH4A4	ZBK25VZVH4A4	ZBK40VZVH4A4	ZBK63VZVH4A4	ZBK80VZVH4A4	ZBK125VZVH4A4
48	3P	-	ZBK25VZVHN1A3	ZBK40VZVHN1A3	ZBK63VZVHN1A3	ZBK80VZVHN1A3	ZBK125VZVHN1A3
	3P + N	-	ZBK25VZVHN1A4	ZBK40VZVHN1A4	ZBK63VZVHN1A4	ZBK80VZVHN1A4	ZBK125VZVHN1A4
	3P	-	ZBK25VZVH1A3	ZBK40VZVH1A3	ZBK63VZVH1A3	ZBK80VZVH1A3	ZBK125VZVH1A3
	3P + N	-	ZBK25VZVH1A4	ZBK40VZVH1A4	ZBK63VZVH1A4	ZBK80VZVH1A4	ZBK125VZVH1A4

Technical information



3P

3P + N

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	3	4	7,5	11	11	22
		3x380-440V	5,5	7,5	15	18,5	18,5	37
		3x660-690V	5,5	7,5	15	18,5	18,5	30
Main & safety switch	AC23	3x400V	16	20	32	45	45	85
	AC23A	3x220-240V	4	5,5	9	15	15	30
	AC23B	3x380-440V	7,5	10	16	22	22	45
		3x660-690V	5,5	7,5	15	18,5	18,5	37
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	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		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)	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

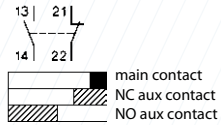
*(1) ZBK63__U stranded 16 mm² / flexible 10 mm²

Accessories

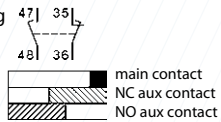
» Auxiliary contacts



A	CODE
20	ZBKLN11
125	



A	CODE
20	ZBKLN11X
125	



» PE - Terminal



A	CODE
20	ZBKPE80V
80	

» N - Terminal



A	CODE	A	CODE
20	ZBKN40V	63	ZBKN80V
40		80	

» N - Fixed neutral



A	CODE
20	ZBKPEN80V
80	

» Shaft extensions



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

Auxiliary contacts technical information

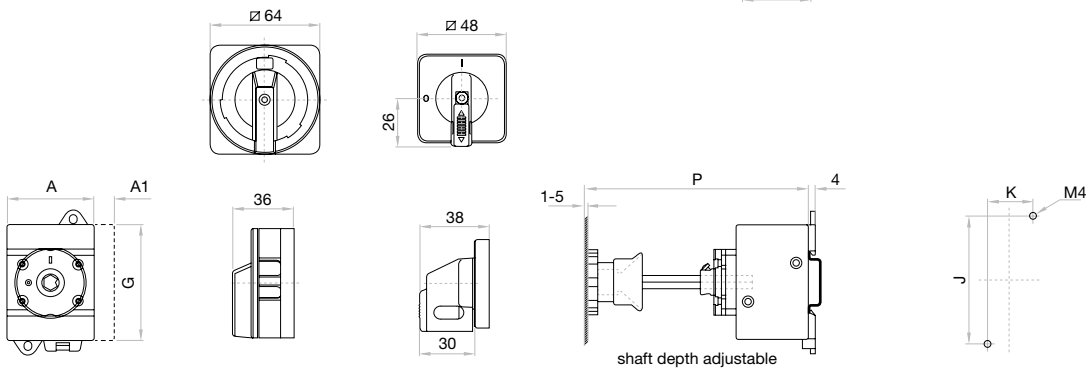
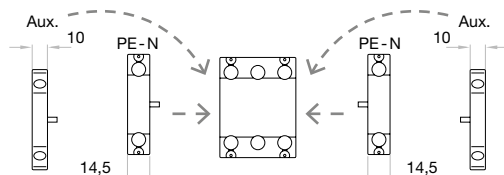
Rated insulation voltage	Ui	V	690
Rated thermal current	Ith - Ithe	A	10
Switching capacity	AC15	220-240V	A
	AC15	380-440V	A
Rated conditional short-circuit current		kAeff	3
Max. short circuit protection	gL(gG)	A	10

Connecting capacity

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

Dimensions (mm)

Door drilling for external handle

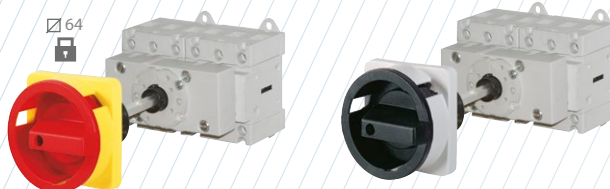
Auxiliary contacts
A1

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

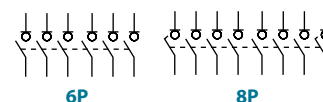
ZBK**Switch base mounting ø 22
door clutch padlockable handle IP66****6P - 8P**

Size 0

A 25|40|80



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

Technical information

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

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

According to UL & cUL FILE NO. E123623

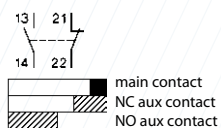
			25	40	80
Rated voltage		V	600	600	600
Ampere-Rating "General use"		A	25	40	80
DOL-Rating 3-phase	110-220V	HP	1,5	2	5
	220-240V	HP	5	5	10
	440-480V	HP	10	10	20
	550-600V	HP	10	15	25
	110-120V	HP	1	1	2
DOL-Rating 1-phase	200-208V	HP	2	2	3
	220-240V	HP	2	3	5
Fuse size (RK5)	Manual Motor Controller	A	50	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

Accessories

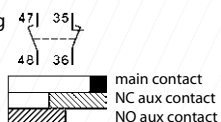
» Auxiliary contacts



1NO+1NC

A
25
80CODE
ZBKLH11

1NO+1NC overlapping

A
25
80CODE
ZBKLH11X

» PE - Terminal

PE
PEA
25
80CODE
ZBKPE80V

» N - Terminal

N
N1A
25
40CODE
ZBKN40VA
80CODE
ZBKN80V

» N - Fixed neutral

N
NA
25
80CODE
ZBKPEN80V

» Shaft extensions



L (mm)

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

Auxiliary contacts technical information

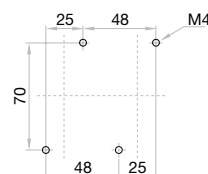
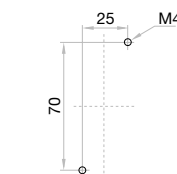
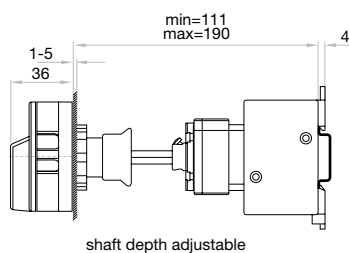
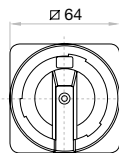
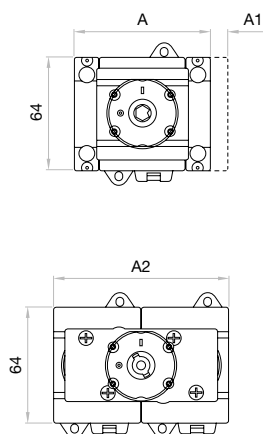
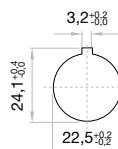
Rated insulation voltage	Ui	V	690	
Rated thermal current	Ith - Ithe	A	10	
Switching capacity	AC15	220-240V	A	2,5
	AC15	380-440V	A	1,5
Rated conditional short-circuit current		kAeff	3	
Max. short circuit protection	gL(qG)	A	10	

Connecting capacity

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

Dimensions (mm)

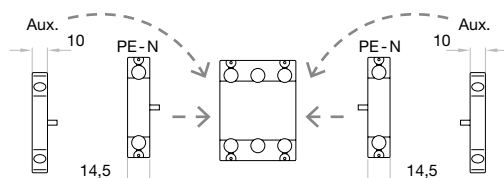
Door drilling for external handle



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

Auxiliary contacts

A1



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

ZBK

Switch & changeover

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

Size 0

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



Switch



Changeover

		CODE - 20A	CODE - 25A	CODE - 40A	CODE - 63A	CODE - 80A	CODE - 125A
Switch	3P	ZBK20SMAHN1A3	ZBK25SMAHN1A3	ZBK40SMAHN1A3	ZBK63SMAHN1A3	ZBK80SMAHN1A3	ZBK125SMAHN1A3
	3P + N	ZBK20SMAHN1A4	ZBK25SMAHN1A4	ZBK40SMAHN1A4	ZBK63SMAHN1A4	ZBK80SMAHN1A4	ZBK125SMAHN1A4
	3P	ZBK20SMAH1A3	ZBK25SMAH1A3	ZBK40SMAH1A3	ZBK63SMAH1A3	ZBK80SMAH1A3	ZBK125SMAH1A3
	3P + N	ZBK20SMAH1A4	ZBK25SMAH1A4	ZBK40SMAH1A4	ZBK63SMAH1A4	ZBK80SMAH1A4	ZBK125SMAH1A4
	6P	-	ZBK25SMAHN1A6	ZBK40SMAHN1A6	-	ZBK80SMAHN1A6	-
	8P	-	ZBK25SMAHN1A8	ZBK40SMAHN1A8	-	ZBK80SMAHN1A8	-
	6P	-	ZBK25SMAH1A6	ZBK40SMAH1A6	-	ZBK80SMAH1A6	-
	8P	-	ZBK25SMAH1A8	ZBK40SMAH1A8	-	ZBK80SMAH1A8	-
Changeover	3P + N	ZBK20SMAH1U4	ZBK25SMAH1U4	ZBK40SMAH1U4	ZBK63SMAH1U4	-	-

Technical information



Bridging links included

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

			20	25	40	63	80	125
Rated thermal current	I _{th}	A	20	25	40	63	80	125
Rated thermal current enclosed	I _{the}	A	20	25	40	63	80	110
Rated insulation voltage	U _i	V	690	690	690	690	690	1000
Rated impulse withstand voltage	U _{imp}	kV	6	6	6	6	6	8
AC rated operational current	I _e	A	20	25	40	63	80	125
Making capacity	I _{eff}	3x380-440V	A	160	190	300	370	440
Breaking capacity		3x220-240V	A	160	180	250	330	380
		3x380-440V	A	160	180	250	330	380
		3x660-690V	A	80	110	170	190	220
		3x400V	A	12	16	30	37	72
Direct switching motors	AC3	3x220-240V	kW	3	4	7,5	11	22
		3x380-440V	kW	5,5	7,5	15	18,5	37
		3x660-690V	kW	5,5	7,5	15	18,5	30
		3x400V	A	16	20	32	45	85
Main & safety switch	AC23A	3x220-240V	kW	4	5,5	9	15	30
		3x380-440V	kW	7,5	10	16	22	45
		3x660-690V	kW	5,5	7,5	15	18,5	37
		3x400V	A	16	20	32	45	85
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	15
		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
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
		220-240V	HP	2	2	3	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

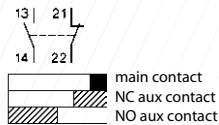
*⁽¹⁾ ZBK63___U stranded 16 mm² / flexible 10 mm²

Accessories

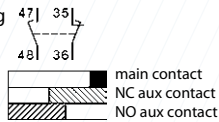


» Auxiliary contacts

1NO+1NC

A
20
125CODE
ZBKLH11

1NO+1NC overlapping

A
20
125CODE
ZBKLH11X

» PE - Terminal

A
20
80CODE
ZBKPE80V

» N - Fixed neutral

N
NA
20
80CODE
ZBKPEN80V

Auxiliary contacts technical information

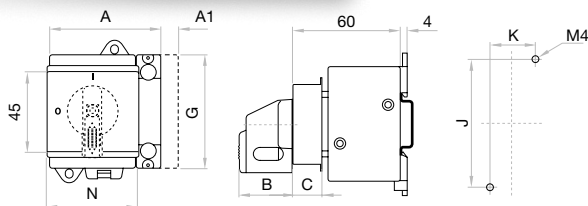
Rated insulation voltage	Ui	V	690
Rated thermal current	Ith - Ithe	A	10
Switching capacity	AC15	220-240V	A
	AC15	380-440V	A
Rated conditional short-circuit current		kAeff	3
Max. short circuit protection	gL(gG)	A	10

Connecting capacity

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

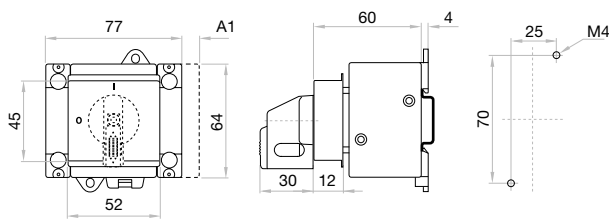
Dimensions (mm)

Switch

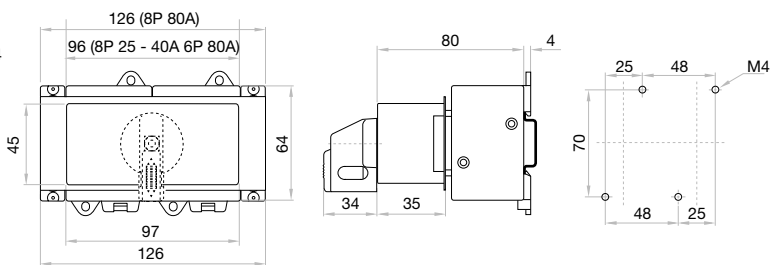
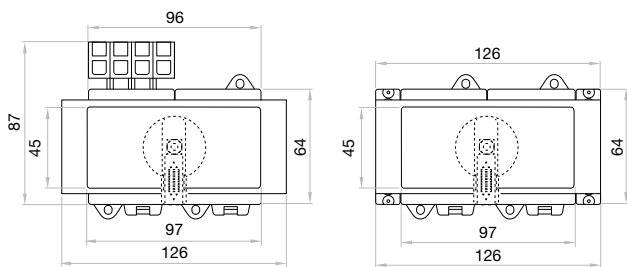


3P-4P 20-125A

	3P	4P							
	A	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	



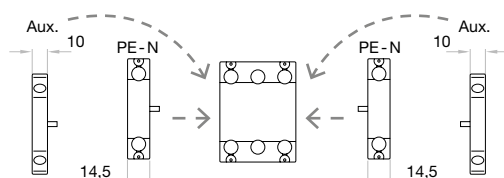
6P 25-40A

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

20-40A

63A

Changeover

Auxiliary contacts
A1

- » 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



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

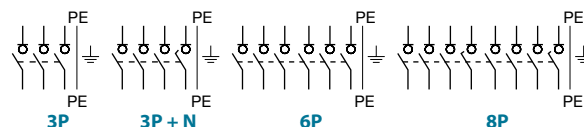


3P-3P+N

6P-8P

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

Technical information



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

			20	25	40	63	80	125
Rated thermal current	I _{th}	A	20	25	40	63	80	125
Rated thermal current enclosed	I _{the}	A	20	25	40	63	80	110
Rated insulation voltage	U _i	V	690	690	690	690	690	1000
Rated impulse withstand voltage	U _{imp}	kV	6	6	6	6	6	8
AC rated operational current	I _e	AC21A	20	25	40	63	80	125
Making capacity	I _{eff}	3x380-440V	160	190	300	370	440	850
Breaking capacity		3x220-240V	160	180	250	330	380	680
		3x380-440V	160	180	250	330	380	680
		3x660-690V	80	110	170	190	220	420
Direct switching motors	AC3	3x400V	12	16	30	37	37	72
	AC3	3x220-240V	3	4	7,5	11	11	22
		3x380-440V	5,5	7,5	15	18,5	18,5	37
		3x660-690V	5,5	7,5	15	18,5	18,5	30
Main & safety switch	AC23	3x400V	16	20	32	45	45	85
	AC23A	3x220-240V	4	5,5	9	15	15	30
	AC23B	3x380-440V	7,5	10	16	22	22	45
		3x660-690V	5,5	7,5	15	18,5	18,5	37
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

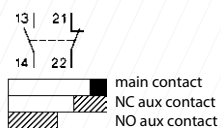
*(1) ZBK63___U stranded 16 mm² / flexible 10 mm²

Accessories

>> Auxiliary contacts ^{*(a1)}

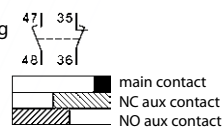
1NO+1NC
A
20
125

CODE
ZBKLH11

>> Auxiliary contacts ^{*(a1)}

1NO+1NC overlapping
A
20
125

CODE
ZBKLH11X



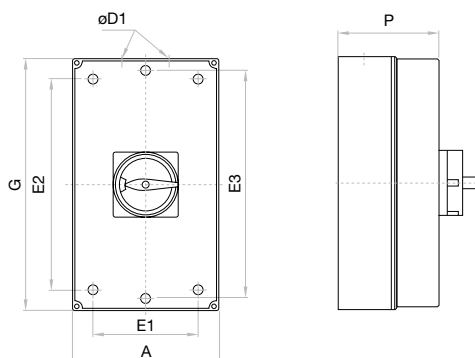
Auxiliary contacts technical information

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

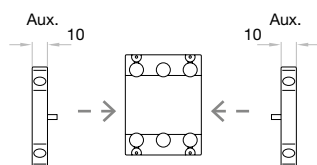
Connecting capacity

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

Dimensions (mm)



		A	D1	E1	E2	E3	G	P
20 - 40 A	3/4P	98	2 x 25,5/20,5/16,5/12,5	75	150	170	180	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 switch + 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



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

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

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

Functional and ergonomic handle

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

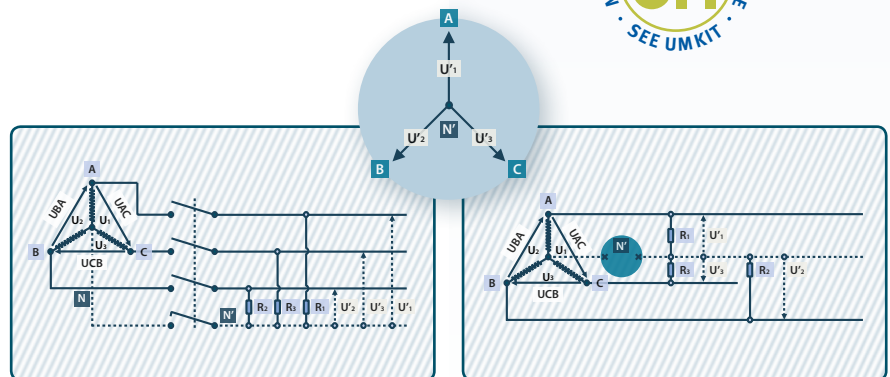


Neutral pole early make & late break

N
|
N

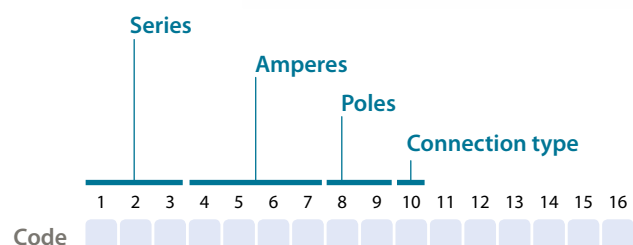
This safety feature prevents accidental overvoltage when making/breaking of loads connected between phase and neutral.

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



Range codification:

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



According to:

IEC 60947-3

IEC 61439-2

RoHS



Testing and approvals:

series S5



1 2 3 4 5 6
S 5 -

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

series S5M



1 2 3 4 5 6
S 5 M

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

series S5N



1 2 3 4 5 6
S 5 N

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

series S6



1 2 3 4 5 6
S 6 -

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

series S6N



1 2 3 4 5 6
S 6 N

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

series CIS25D



IP65

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

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

series CIS25C



IP65

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

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

series CIS25A



IP43

IP65

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

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

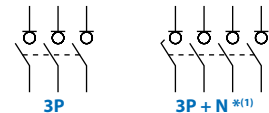
series CIS25F



IP65

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

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



S5
S5N

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

Manual handle



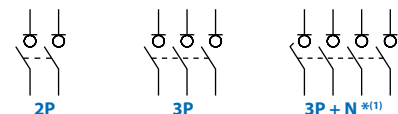
S5



S5N

Amp.	Size	Connection	2 pole (2P)	3 pole (3P)	4 pole (3P + N) ^{*(1)}	External ^{*(2)}	Direct	Emergency external ^{*(2)}
			Code	Code	Code	Code	Code	Code
40	00		S5-00402PB0	S5-00403PB0	S5-00403NB0	DS-SA01	DS-SI01	DS-SR01
63			S5-00632PB0	S5-00633PB0	S5-00633NB0			
80			S5-00802PB0	S5-00803PB0	S5-00803NB0			
125	0		S5-01252PB0	S5-01253PB0	S5-01253NB0	DS-SA01	DS-SI01	DS-SR01
125			S5-01252PS0	S5-01253PS0	S5-01253NS0			
160			S5-01602PB0	S5-01603PB0	S5-01603NB0			
160			S5-01602PS0	S5-01603PS0	S5-01603NS0			
200			S5-02002PS0	S5-02003PS0	S5-02003NS0			
250			S5-02502PD0	S5-02503PD0	S5-02503ND0			
250	1		S5-02502PR0	S5-02503PR0	S5-02503NR0	DS-SA11	DS-SI11	DS-SR11
315			S5-03152PR0	S5-03153PR0	S5-03153NR0			
400			S5-04002PC0	S5-04003PC0	S5-04003NC0			
500	2		-	S5-05003PR0	S5-05003NR0	DS-LA21	DS-LI21	DS-LR21
630			-	S5-06303PR0	S5-06303NR0			
800			-	S5-08003PC0	S5-08003NC0			
800	3		-	S5-08003PR0	S5-08003NR0	DS-LA31	DS-LI31	DS-LR31
1000			-	S5-10003PC0	S5-10003NC0			
1250			-	S5-12503PC0	S5-12503NC0			
2000	4		-	S5-20003PC0	S5-20003NC0	DS-LA41	DS-LI41	DS-LR41
1000			-	S5-10003PS0	S5-10003NS0			
1250			-	S5-12503PS0	S5-12503NS0			
1600			-	S5-16003PS0	S5-16003NS0			
1800			-	S5-18003PS0	S5-18003NS0			
2000			-	S5-20003PD0	S5-20003ND0			
2000	5 (S5N)		-	S5N20003PS0	S5N20003NS0	DS-LA41	DS-LI41	DS-LR41
2500			-	S5N25003PS0	S5N25003NS0			
3150			-	S5N31503PS0	S5N31503NS0			
2000			-	S5N20003PP0	S5N20003NP0			
2500			-	S5N25003PP0	S5N25003NP0			
3150			-	S5N31503PP0	S5N31503NP0			
4000	6		-	S5-40003PP0	S5-40003NP0	DS-EN61 ^{*(3)}	-	-
5000			-	S5-50003PP0	S5-50003NP0			
6300			-	S5-63003PP0	S5-63003NP0			

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



S6

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

Manual handle



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

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

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

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

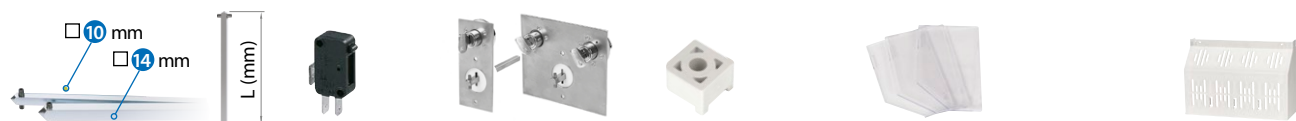
^{*(3)} Slide bar handle, only standard door interlock, please consult the corresponding full details.

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



Shaft extensions ^{*(4)}				Bridging links ^{*(P2)}	Auxiliary contacts ^{*(5)}		DIN rail mounting	Safety key lock device ^{*(6)}		Terminal protection ^{*(7)}	Terminal shrouds ^{*(7)} (1 unit)			Terminal shrouds ^{*(7)} (2 units)	 Full details in page
Size		Type 1 & 2		Code (4 units)	1NO+1NC	2NO+2NC	Code (2 units)	Simple	Double	Code	Up	Down	Up or Down	Code	
		L	Code ^{*(e1)}		Code	Code		Code ^{*(e1)}	Code ^{*(e1)}		3P	3P	4P		
											Code	Code	Code		
00	7	250	DS-EP04	-	D5LAU01	D5LAU02	-	DS-CAB1	DS-CEB1	-	-	-	-	-	70
0	7	250	DS-EP04	-	D5LAU01	D5LAU02	DS-DN01	DS-CAB1	DS-CEB1	DS-CU01	-	-	-	-	72
							-				DS-CU02	DS-CU03	DS-CU04		
		387	DS-EP05				DS-DN01				-	-	-		
							-				DS-CU02	DS-CU03	DS-CU04		
		-	DS-CU05				DS-CU06				DS-CU07				
		-	DS-CU05				DS-CU06				DS-CU07				
		-													
1	10	375	DS-EP14	-	D5LAU01	D5LAU02	-	DS-CA11	DS-CE11	DS-CU12	-	-	-	DS-CU11	74
		536	DS-EP15											DS-CU11	
		-													
2	14	345	DS-EP23	-	D5LAU01	D5LAU02	-	DS-CB21	DS-CF21	DS-CU22	-	-	-	DS-CU21	76
		535	DS-EP24												
3	14	345	DS-EP23	-	D5LAU01	D5LAU02	-	DS-CB31	DS-CF31	-	-	-	-	DS-CU31	78
		535	DS-EP24												
		345	DS-EP23												
		535	DS-EP24	D5LPC32	DS-AU11	DS-AU12									
4	14	485	DS-EP44	-	D5LAU01	D5LAU02	-	DS-CB41	DS-CF41	-	-	-	-	DS-CU41	80
		635	DS-EP45												
5 (S5N)	-	-	-	D5LPC41	D5LAU01	D5LAU02	-	DS-CB41	DS-CF41	-	-	-	-	-	82
				D5LPC41											84
				D5LPC42											
				-											
6	-	-	-	-	DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	86

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



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

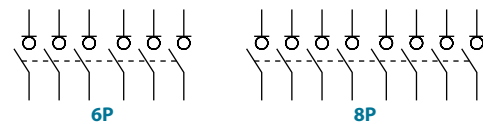
^{*(4)} A standard shaft is included with the external handle.

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

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

^{*(7)} One set or one unit for input or output. Terminals shrouds for **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.



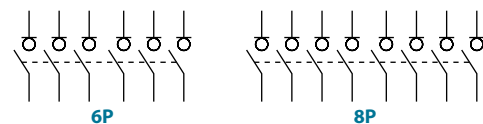
S6N

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

Manual handle



Amp.	Size	Connection	6 pole (6P)	8 pole (8P)	External ^{*(1)}	Direct	Emergency external ^{*(1)}
			Code	Code	Code	Code	Code
125	1		S6N01256PS0	S6N01258PS0	DS-SA11	DS-SI11	DS-SR11
160			S6N01606PS0	S6N01608PS0			
200			S6N02006PS0	S6N02008PS0			
250			S6N02506PS0	S6N02508PS0			
315			S6N03156PS0	S6N03158PS0			
400	2		S6N04006PD0	S6N04008PD0	DS-LA21	DS-LI21	DS-LR21
500			S6N05006PR0	S6N05008PR0			
630			S6N06306PS0	S6N06308PS0			



S5M S5N

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

Manual handle



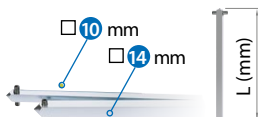
Amp.	Size	Connection	6 pole (6P)	8 pole (8P)	External ^{*(1)}	Direct	Emergency external ^{*(1)}
			Code	Code	Code	Code	Code
125	0		S5M01256PS0	S5M01258PS0	DS-LA01	DS-SI01	DS-LR01
160			S5M01606PS0	S5M01608PS0			
200			S5M02006PS0	S5M02008PS0			
250	1		S5M02506PR0	S5M02508PR0	DS-LA12	DS-LI12	DS-LR12
315			S5M03156PR0	S5M03158PR0			
400			S5M04006PC0	S5M04008PC0			
500	2		S5M05006PR0	S5M05008PR0	DS-LA22	DS-LI22	DS-LR22
630			S5M06306PR0	S5M06308PR0			
800	3		S5M08006PR0	S5M08008PR0	DS-LA41	DS-LI41	DS-LR41
1000			S5M10006PC0	S5M10008PC0			
1250	4 (S5N)		S5N12506PS0	S5N12508PS0	DS-LA41	DS-LI41	DS-LR41
1600			S5N16006PS0	S5N16008PS0			
1800			S5N18006PS0	S5N18008PS0			
2000			S5N20006PD0	S5N20008PD0			

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

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



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



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



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
Size	1NO+1NC	2NO+2NC	Simple	Double	6P	8P	Code	Up	Down	Up or Down	Only switches 	
								6P	6P	8P		
	Code	Code	Code ^{*(e1)}	Code ^{*(e1)}	Code	Code		Code	Code	Code		
0	DS-AU11	DS-AU12	DS-CAB1	DS-CEB1	DS-PB01	DS-PB02	-	DS-CU02	DS-CU03	DS-CU04	-	
					DS-PB01	DS-PB02		DS-CU02	DS-CU03	DS-CU04		
					DS-PB04	DS-PB03		DS-CU05	DS-CU06	DS-CU07		
1	DS-AU11	DS-AU12	DS-CB12	DS-CF11	DS-PB12	DS-PB11	DS-CU12	-	-	-	DS-CU11	
					DS-PB12	DS-PB11		-	-	-		
					DS-PB14	DS-PB13		-	-	-		
2	DS-AU11	DS-AU12	DS-CB21	DS-CF21	DS-PB22	DS-PB21	-	-	-	-	DS-CU21	
3	DS-AU11	DS-AU12	DS-CB41	DS-CF41	DS-PB32	DS-PB31	-	-	-	-	DS-CU31	
4 (SSN)	D5LAU01	D5LAU02	DS-CB41	DS-CF41	-	-	-	-	-	-	-	

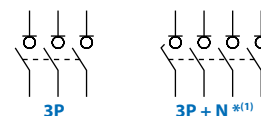
^{*(2)} A standard shaft is included with the external handle.

^{*(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. Terminals shrouds for **SSM** or **SSN** only for frontal switch. These accessories aren't compatible with each other.

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

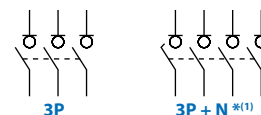

CIS25A
CIS25D
S5 polyester enclosed switches ^{*(2)} IP65 ^{*(3)}
3 & 4 poles (40 - 1600A) (O - I)


CIS25D



CIS25A

Amp.	Size	CIS25D ___ Without fuse holders		CIS25A ___ With fuse holders NH ^{*(4)}	
		3 pole (3P)	4 pole (3P + N) ^{*(1)}	3 pole (3P)	4 pole (3P + N) ^{*(1)}
		Code	Code	Code	Code
40	00	CIS25D00403PB	CIS25D00403NB	CIS25A00403PB	CIS25A00403NB
63		CIS25D00633PB	CIS25D00633NB	CIS25A00633PB	CIS25A00633NB
80		CIS25D00803PB	CIS25D00803NB	CIS25A00803PB	CIS25A00803NB
125	0	CIS25D01253PB	CIS25D01253NB	CIS25A01253PB	CIS25A01253NB
160		CIS25D01603PB	CIS25D01603NB	CIS25A01603PB	CIS25A01603NB
200		CIS25D02003PR	CIS25D02003NR	CIS25A02003PR	CIS25A02003NR
250	1	CIS25D02503PR	CIS25D02503NR	CIS25A02503PR	CIS25A02503NR
315		CIS25D03153PR	CIS25D03153NR	CIS25A03153PR	CIS25A03153NR
400		CIS25D04003PR	CIS25D04003NR	CIS25A04003PR	CIS25A04003NR
630	2	CIS25D06303PR	CIS25D06303NR	CIS25A06303PR	CIS25A06303NR
800		CIS25D08003PR	CIS25D08003NR	CIS25A08003PR	CIS25A08003NR
1000		CIS25D10003PS	CIS25D10003NS	CIS25A10003PS	CIS25A10003NS
1250	4	CIS25D12503PS	CIS25D12503NS	CIS25A12503PS	CIS25A12503NS
1600		CIS25D16003PS	CIS25D16003NS	CIS25A16003PS	CIS25A16003NS


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

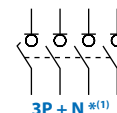

CIS25C



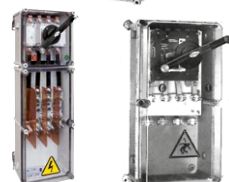
CIS25F

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

Under request higher currents are available, please consult.


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


IPTU



IPTA

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



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



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

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

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

^{*(3)} C1S25A size 4 - IP43.

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

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

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

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

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

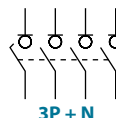
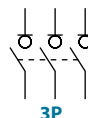
S5 AC Switch - disconnecter base mounting 2P - 3P - 3P+N

Size 00

A 40|63|80



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



Technical information

According to IEC 60947-3



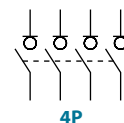
tests:
AIT
AUSTRIAN INSTITUTE
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TOMORROW TODAY

				40	63	80
Rated thermal current in ambient at	I _{th}	40 °C	A	50	63	80
		50 °C	A	50	63	80
		60 °C	A	40	63	64
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)	I _e	Ue 400V AC21A	A	50	63	80
		Ue 400V AC22A	A	50	63	63
		Ue 400V AC23A	A	50	63	63
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	Kg		0,4	0,4	0,4



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

Accessories



» Direct handle

CODE DS-SI01

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

IP65

CODE DS-SA01



» External handle without shaft

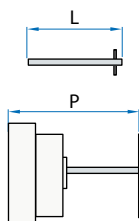
IP65

CODE DS-SA03

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

IP65

CODE DS-SR01



» Shafts

Standard shaft included ^{*(e1)}

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

Shaft extensions

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

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



» Auxiliary contacts

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

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


» Safety key lock device

Simple CODE DS-CAB1

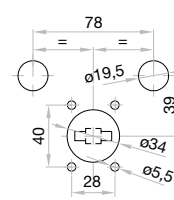
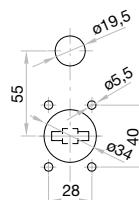
Double CODE DS-CEB1

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

Door drilling for handle and key lock device

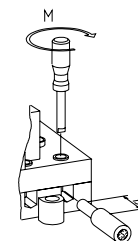
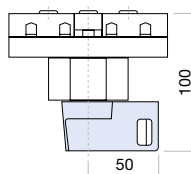
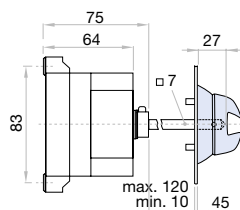
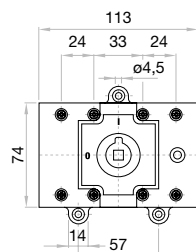
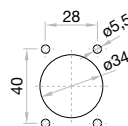
Simple

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

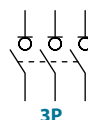
A 125|160|200|250



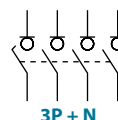
	CODE - 125A	CODE - 160A	CODE - 125A	CODE - 160A	CODE - 200A	CODE - 250A
2P	S5-01252PB0	S5-01602PB0	S5-01252PS0	S5-01602PS0	S5-02002PS0	S5-02502PD0
3P	S5-01253PB0	S5-01603PB0	S5-01253PS0	S5-01603PS0	S5-02003PS0	S5-02503PD0
3P + N	S5-01253NB0	S5-01603NB0	S5-01253NS0	S5-01603NS0	S5-02003NS0	S5-02503ND0



2P



3P



3P + N

Technical information

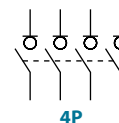
According to IEC 60947-3



			125	160	200	250
Rated thermal current I _{th} in ambient at	40 °C	A	125	160	200	250
	50 °C	A	125	160	200	250
	60 °C	A	125	160	200	200
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)	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)}	I _{cm} kA (peak)		13	13	13	13
Rated short-time withstand current (1sec.)	I _{cw} kA rms		7	7	7	7
Mechanical features						
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		8000	8000	8000	8000
Maximum weight 3P	Kg		0,85	0,85	0,9	0,9
Maximum weight 3P + N	Kg		1	1	1	1



4P

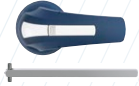
Also available 4P switch - disconnectors under request, please consult

Accessories



» Direct handle

CODE DS-SI01

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

IP65

CODE DS-SA01



» External handle without shaft

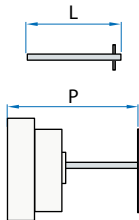
IP65

CODE DS-SA03

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

IP65

CODE DS-SR01



» Shafts

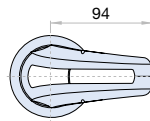
Standard shaft included ^{*(e1)}

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

Shaft extensions

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

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



Door drilling for external handle



» Terminal protection

CODE DS-CU01

☞ (1 unit for input or output)



» Terminal shrouds

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



» DIN rail mounting

CODE DS-DN01

☞ (1 kit for 125-160A switches)



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.



» Safety key lock device

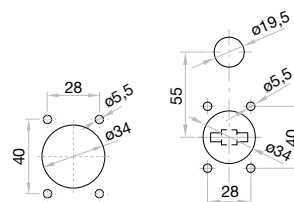
Simple CODE DS-CAB1

Double CODE DS-CEB1

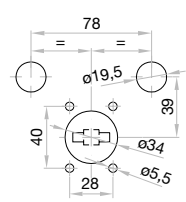
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device

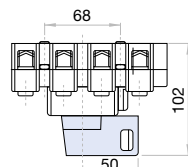
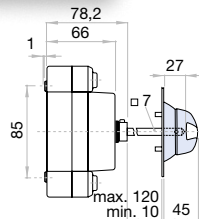
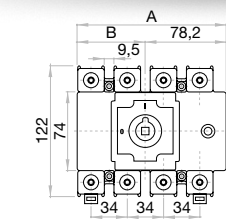
Simple



Double

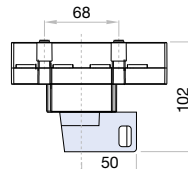
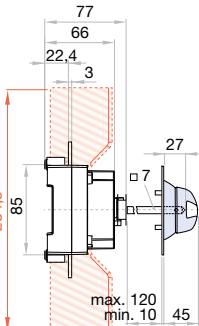
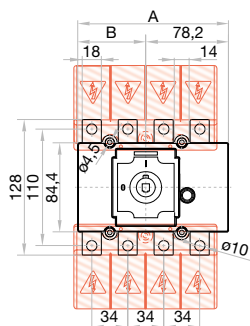


Dimensions (mm)



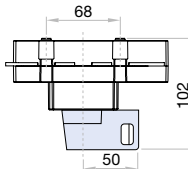
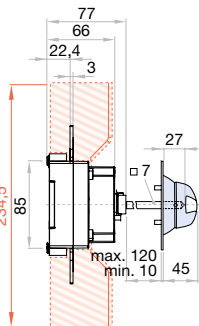
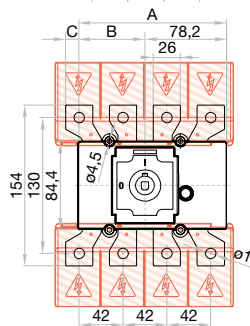
	A			B		
	2P	3P	4P	2P	3P	4P
125 A	131	131	140	53	53	64
160 A						

S max (Cu)	M
mm ²	Nxm
95	4



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

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



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

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

2P S5-02502PR0

3P S5-02503PR0

3P + N S5-02503NR0



CODE-315A

S5-03152PR0

S5-03153PR0

S5-03153NR0



CODE-400A

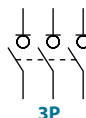
S5-04002PC0

S5-04003PC0

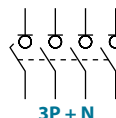
S5-04003NC0



2P



3P



3P + N

Technical information

According to IEC 60947-3



consult



consult



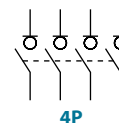
tests:



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

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

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



4P

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

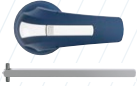


Accessories



» 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



» 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

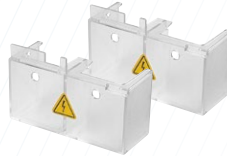
Type 2		
L (mm)	P (mm)	CODE
536	103... 576	DS-EP15



» 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

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.



» Safety key lock device

Simple CODE DS-CA11

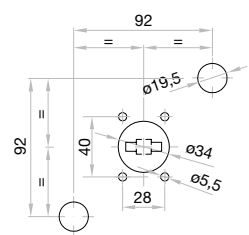
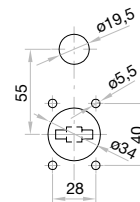
Double CODE DS-CE11

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

Door drilling for handle and key lock device

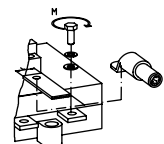
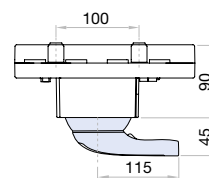
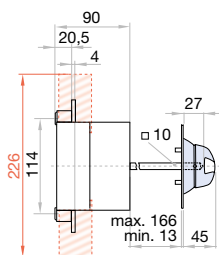
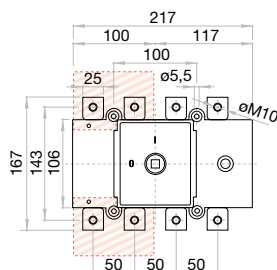
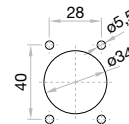
Simple

Double

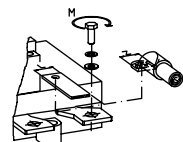
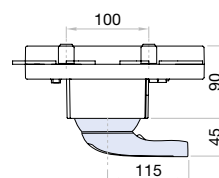
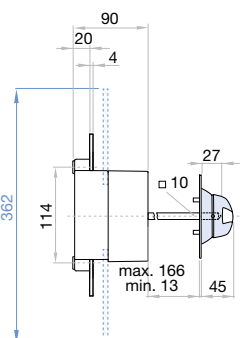
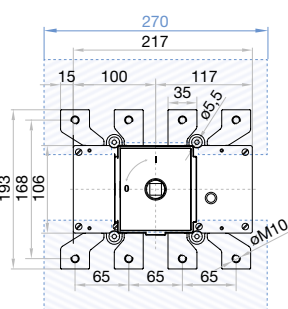


Dimensions (mm)

Door drilling for external handle



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



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

M
Nxm

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

Size 2

A 500|630|800



CODE-500A

3P

S5-05003PRO

3P + N

S5-05003NR0



CODE-630A

S5-06303PRO

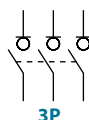
S5-06303NR0



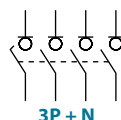
CODE-800A

S5-08003PC0

S5-08003NC0



3P



3P + N

Technical information

According to IEC 60947-3



consult



consult



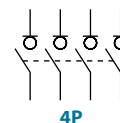
tests:
AIT
AUSTRIAN INSTITUTE
OF TECHNOLOGY
TOMORROW TODAY

				500	630	800
Rated thermal current I _{th} in ambient at	40 °C	A		500	630	800
	50 °C	A		500	630	720
	60 °C	A		500	630	640
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		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)}	I _{cm} kA (peak)	26	26	26
Rated short-time withstand current (1sec.)	I _{cw} kA rms	16	16	16
Mechanical features				
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	5000	5000	3000
Maximum weight 3P	Kg	4,2	4,2	4,2
Maximum weight 3P + N	Kg	4,5	4,5	4,5



4P

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

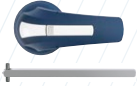


Accessories



» Direct handle

CODE DS-LI21

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

IP65

CODE DS-LA21



» External handle without shaft

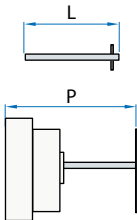
IP65

CODE DS-LA24

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

IP65

CODE DS-LR21



» Shafts

Standard shaft included ^{*(e1)}

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

Shaft extensions

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

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



» Terminal protection

CODE DS-CU22

(1 unit for input or output)



» Terminal shrouds

CODE DS-CU21

(1 kit for input or output)



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.



» Safety key lock device

Simple CODE DS-CB21

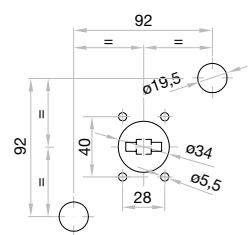
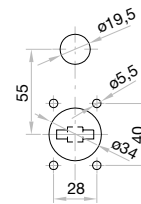
Double CODE DS-CF21

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

Door drilling for handle and key lock device

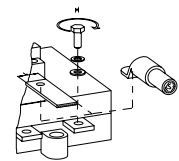
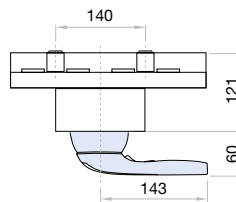
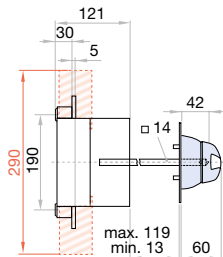
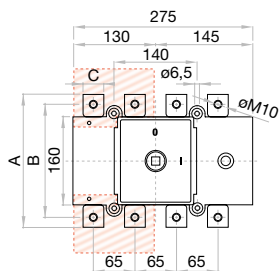
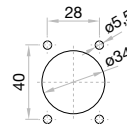
Simple

Double



Dimensions (mm)

Door drilling for external handle



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

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

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

Size 3

A 800|1000|1250|2000



CODE-800A

3P

S5-08003PR0

3P + N

S5-08003NR0



CODE-1000A

S5-10003PC0

S5-10003NC0



CODE-1250A

S5-12503PC0

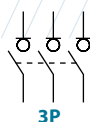
S5-12503NC0



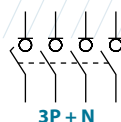
CODE-2000A

S5-20003PC0

S5-20003NC0



3P



3P + N

Technical information

According to IEC 60947-3



consult



consult

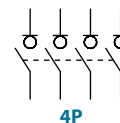
tests:



				800	1000	1250	2000
Rated thermal current I _{th} in ambient at	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)} (Rated operational frequency 50/60 Hz)	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

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

				800	1000	1250	2000
Short - circuit behaviour							
Rated short-circuit making capacity ^{*(2)}	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

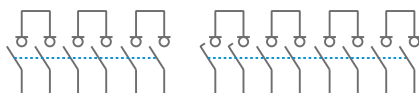


4P

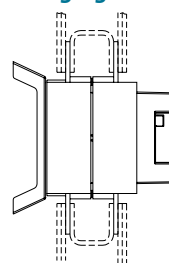
Also available 4P switch - disconnectors under request, please consult

Connection diagram

Connection diagram
between front & rear

S5-20003PC0
S5-20003NC0

Bridging links ^{*(P2)}



Accessories



» Direct handle

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

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

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

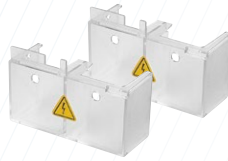


» External handle without shaft

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

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

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



» Terminal shrouds

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

» Bridging links ^{*(P2)}

BI-1 2000 A CODE x2 DS5LPC32 (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 DS5LAU01
2NO+2NC CODE DS5LAU02
1NO+1NC CODE DS-AU11 (2000 A)
2NO+2NC CODE DS-AU12 (2000 A)

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



» Safety key lock device

Simple CODE DS-CB31
Double CODE DS-CF31

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

Door drilling for handle and key lock device
Simple Double

» Shafts

Standard shaft included ^{*(e1)}

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

Shaft extensions

Type 1

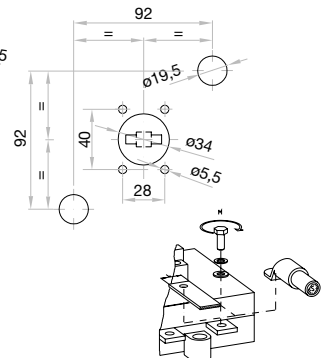
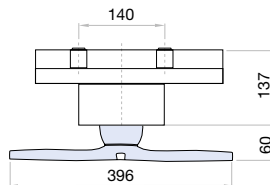
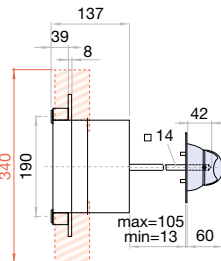
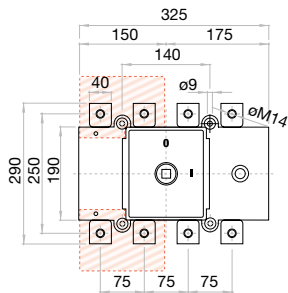
L (mm)	P (mm)	CODE
345	145... 411	DS-EP23
(2000 A) 485	145... 244	DS-EP44

Type 2

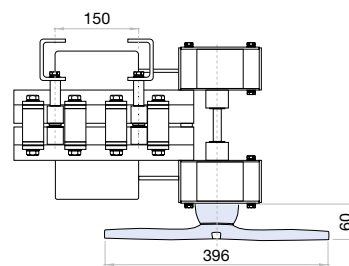
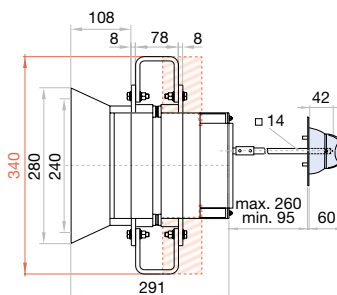
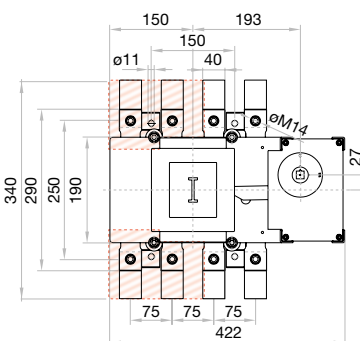
L (mm)	P (mm)	CODE
535	145... 600	DS-EP24
(2000 A) 635	145... 600	DS-EP45

Dimensions (mm)

Door drilling for external handle



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



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

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

Size 4

A 1000|1250|1600|1800|2000



CODE-1000A

S5-10003PS0

S5-10003NS0



CODE-1250A

S5-12503PS0

S5-12503NS0



CODE-1600A

S5-16003PS0

S5-16003NS0



CODE-1800A

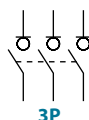
S5-18003PS0

S5-18003NS0

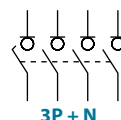
CODE-2000A

S5-20003PD0

S5-20003ND0



3P



3P + N

Technical information

According to IEC 60947-3



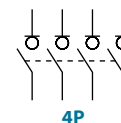
tests:
AIT
AUSTRIAN INSTITUTE
OF TECHNOLOGY
TOMORROW TODAY

		1000 1250 1600 1800 2000					
Rated thermal current I _{th} in ambient at	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 U _i	V	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage U _{imp}	kV	12	12	12	12	12	12
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	Ue 400V AC21A	A	1000	1250	1600	1800	2000
	Ue 400V AC22A	A	1000	1250	1600	1800	2000
	Ue 400V AC23B	A	-	-	1600	1600	1600
	Ue 800V AC21B	A	-	-	-	1600	-
Rated breaking capacity	400V AC23	A	3000	3750	4800	5400	6000
Rated making capacity	400V AC23	A	3000	3750	4800	5400	6000

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

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

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



4P

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

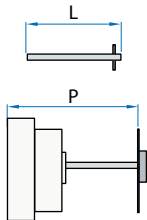
IP65

CODE DS-LA43

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

IP65

CODE DS-LR41



» Shafts

Standard shaft included^{*(e1)}

L (mm)	P (mm)
239	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



» Terminal shrouds

CODE DS-CU41

(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-CB41

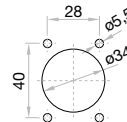
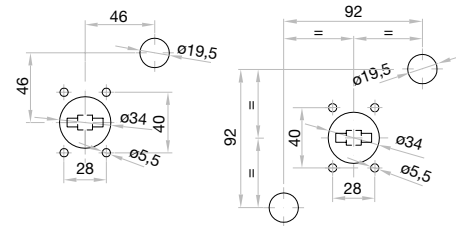
Double CODE DS-CF41

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

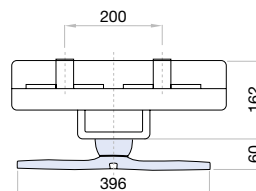
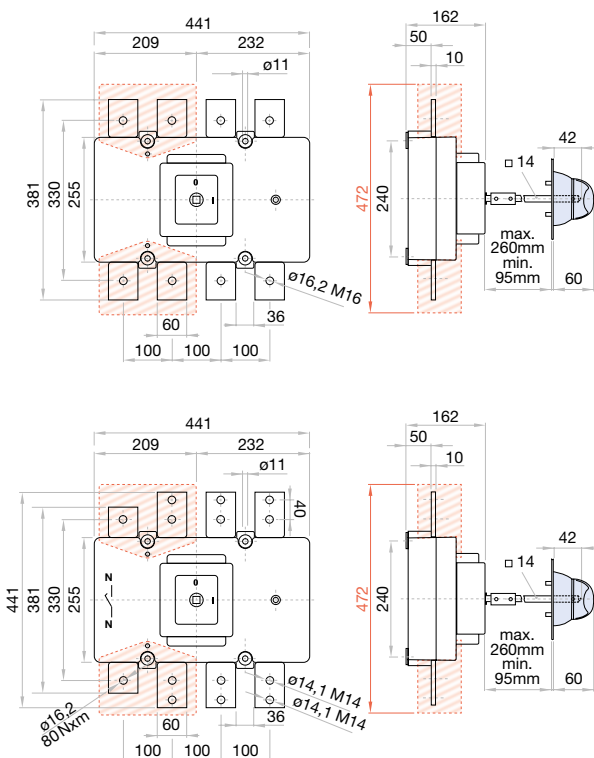
Simple

Double



Door drilling for external handle

Dimensions (mm)



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

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

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

Size 5

A

2000|2500|3150



CODE-2000A

3P

S5N20003PS0

CODE-2500A

3P

S5N25003PS0

CODE-3150A

3P

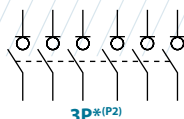
S5N31503PS0

3P+N

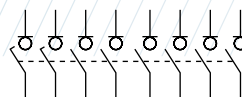
S5N20003NS0

S5N25003NS0

S5N31503NS0



3P*(P2)



3P+N*(P2)

Technical information



According to IEC 60947-3

			2000	2500	3150
Rated thermal current in ambient at	Ith	40 °C	A	2000	2500
		50 °C	A	2000	2500
		60 °C	A	2000	2500
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
(Rated operational frequency 50/60 Hz)		Ue 400V AC22B	A	2000	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	-	-
	400V	AC22	A	6000	7500
Rated making capacity	400V	AC21	A	-	-
	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

BI-1

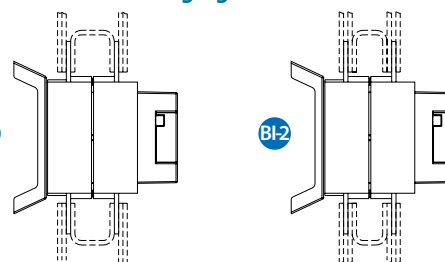
BI-2



Bridging links ^{*(P2)}

BI-1

BI-2



Accessories



» Direct handle

CODE DS-LI41

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

IP65

CODE DS-LA41



» External handle without shaft

IP65

CODE DS-LA43

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

IP65

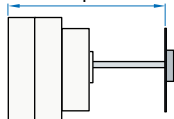
CODE DS-LR41



» Shafts

Standard shaft included ^{*(e1)}

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

» Bridging links ^{*(P2)}

BI-1 2000 A CODE x2 D5LPC41 (4 units)
2500 A
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

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



» Safety key lock devices

Simple CODE DS-CB41

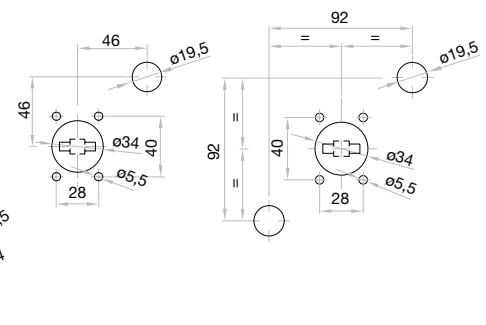
Double CODE DS-CF41

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

Door drilling for handle and key lock device

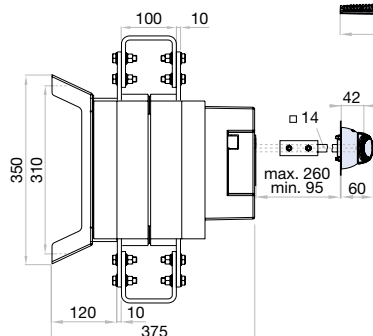
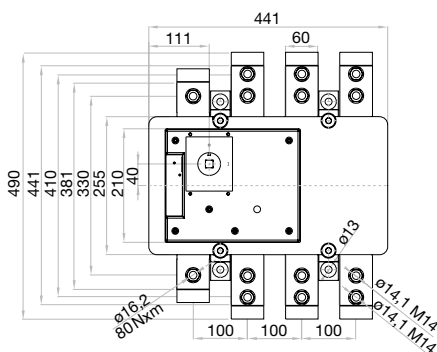
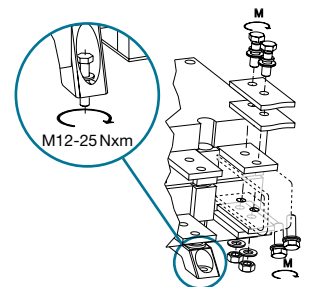
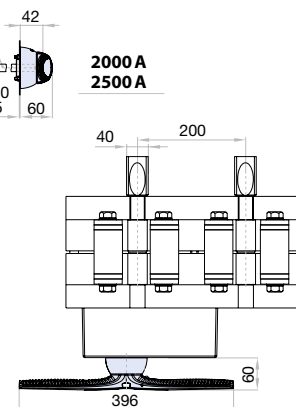
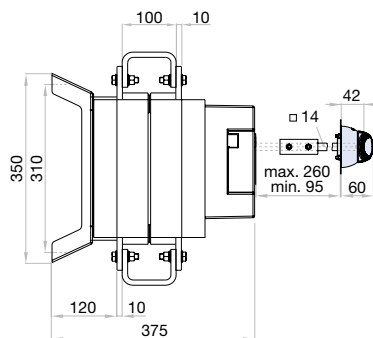
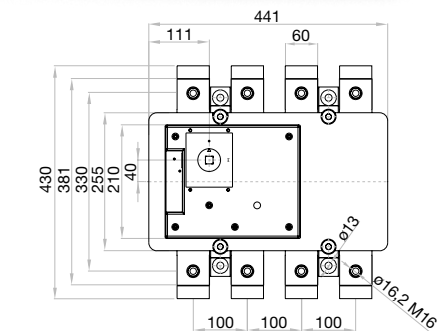
Simple

Double



Dimensions (mm)

Door drilling for external handle



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

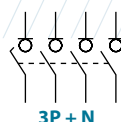
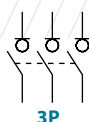
S₅N AC Switch - disconnecter base mounting 3P - 3P+N

Size 5

A 2000|2500|3150



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



Technical information



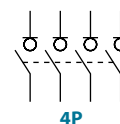
According to IEC 60947-3

			2000	2500	3150
Rated thermal current I _{th} in ambient at	40 °C	A	2000	2500	3150
	50 °C	A	2000	2500	2835
	60 °C	A	2000	2500	2520
Rated insulation voltage U _i	V		1000	1000	1000
Rated impulse withstand voltage U _{imp}	kV		12	12	12
AC rated operational current I _e	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⁾	I _{cm}	kA (peak)		60	60	60
Rated short-time withstand current (1sec.)	I _{cw}	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



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.



» Safety key lock device

Simple CODE DS-CB41

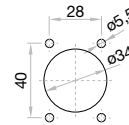
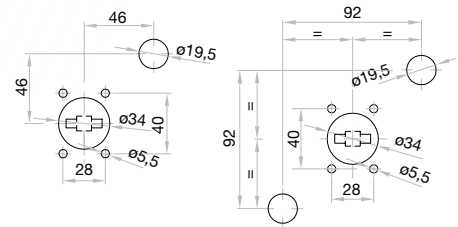
Double CODE DS-CF41

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

Door drilling for handle and key lock device

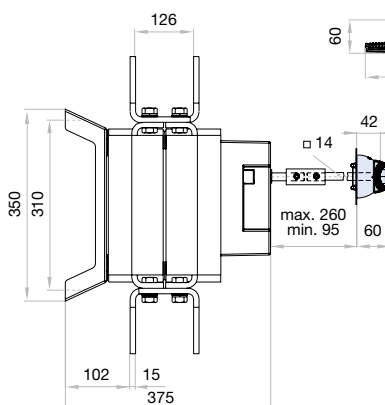
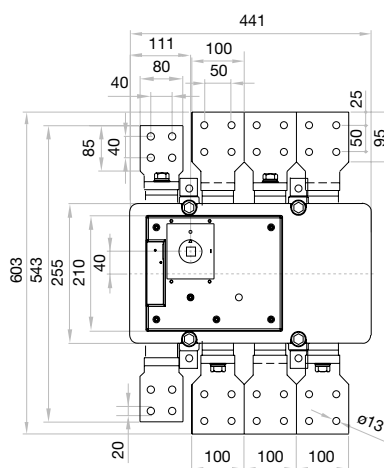
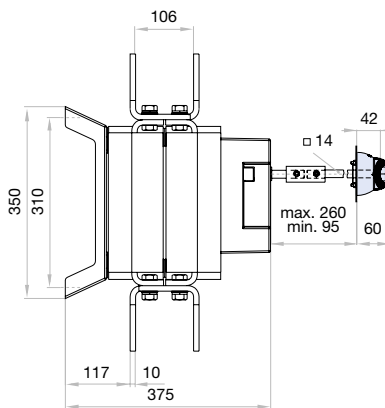
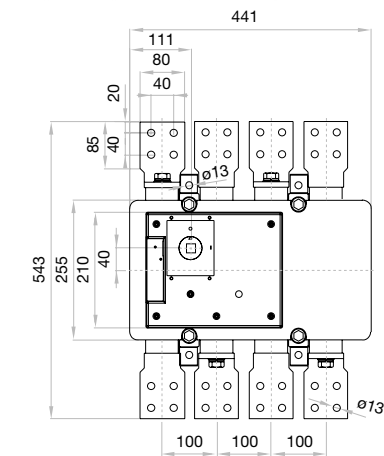
Simple

Double

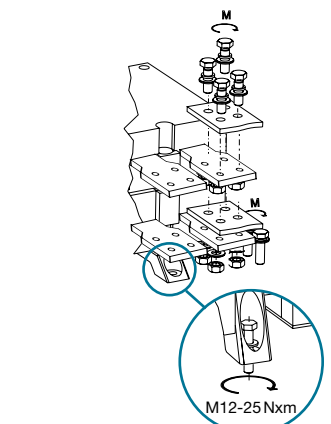


Door drilling for external handle

Dimensions (mm)



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

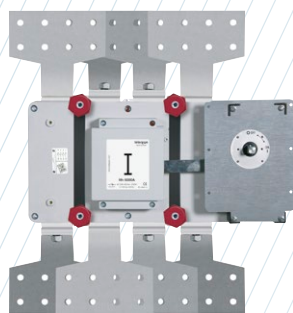


	H max (Cu) mm	L max (Cu) mm	M	M
			T	Nxm
3150 A	4x10	100	M12	45

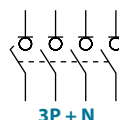
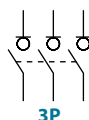
S5 AC Switch - disconnecter base mounting 3P - 3P+N

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

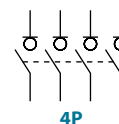


According to IEC 60947-3

				4000	5000	6300
Rated thermal current I _{th} in ambient at	40 °C	A		4000	5000	6300
	50 °C	A		4000	5000	5670
	60 °C	A		3500	4400	5040
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		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)}	I _{cm}	kA (peak)		100	100	100
Rated short-time withstand current (1sec.)	I _{cw}	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

S6 AC

Switch - disconnecter

base mounting 2P - 3P - 3P+N

Size 1

A 200|250|315|400



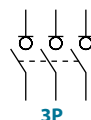
CODE - 2P

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



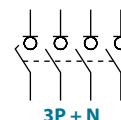
CODE - 3P

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



CODE - 3P + N

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



Technical information

According to IEC 60947-3



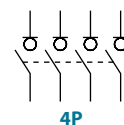
tests:



					200	250	315	400	
Rated thermal current in ambient at	Ith	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

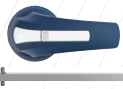
			200	250	315	400
Short - circuit behaviour						
Rated short-circuit making capacity ^{*(2)}	Icm kA (peak)		20	20	20	20
Rated short-time withstand current (1sec)	Icw kA rms		12	12	12	12
Mechanical features						
Number of mechanical operations (according to the standards, for other values please consult)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



CODE DS-SI11



IP65

CODE DS-SA11



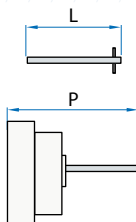
IP65

CODE DS-SA14



IP65

CODE DS-SR11



Standard shaft included ^{*(e1)}

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

Type 1

<i>L (mm)</i>	<i>P (mm)</i>	<i>CODE</i>
375	103... 415	DS-EP14

<i>L (mm)</i>	Type 2 <i>P (mm)</i>	<i>CODE</i>
536	103... 576	DS-EP15



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

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



 CODE DR-CU11 (1 unit)

 CODE DR-CU12 (1 unit)

 CODE DR-CU13 (1 unit)

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



CODE DR-EL11 (4 units)



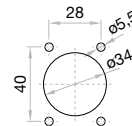
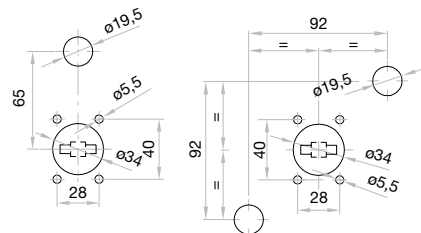
Simple *CODE* DS-CA11
Double *CODE* DS-CE11

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

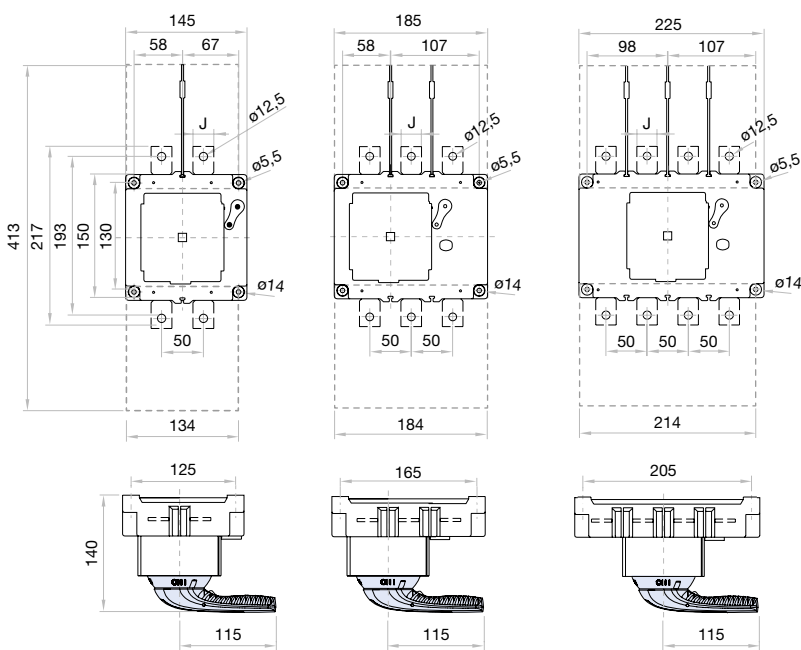
Door drilling for handle and key lock device

Simple

Double



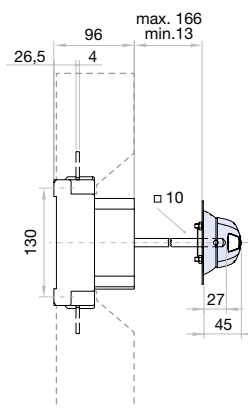
Door drilling for external handle



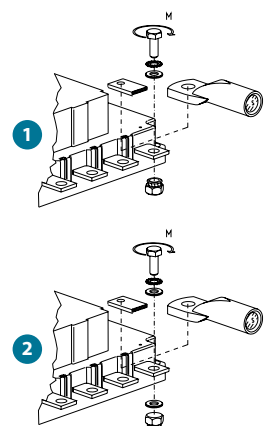
2P

3P

3P + N



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



				
	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M Nxm
200 A	185	8	25	M10 18
250 A	185	8	25	M10 18
315 A	185	8	25	M10 18
400 A	240 ^{st(1)}	8	30	M10 18

*(t1) 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



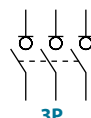
CODE - 2P

500A S6-05002PS0
630A S6-06302PS0
800A S6-08002PD0



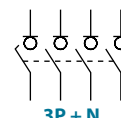
CODE - 3P

500A S6-05003PS0
630A S6-06303PS0
800A S6-08003PD0



CODE - 3P + N

500A S6-05003NS0
630A S6-06303NS0
800A S6-08003ND0



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	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

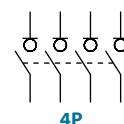
^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

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

tests:



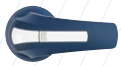
		500	630	800
Short - circuit behaviour				
Rated short-circuit making capacity ^{*(2)}	Icm kA (peak)	26	26	26
Rated short-time withstand current (1sec)	Icw kA rms	16	16	16
Mechanical features				
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	5000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

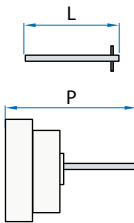
IP65

CODE DS-LA24

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

IP65

CODE DS-LR21



» Shafts

Standard shaft included ^{*(e1)}

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

» Shaft extensions

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

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



» 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

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

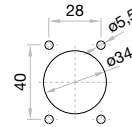
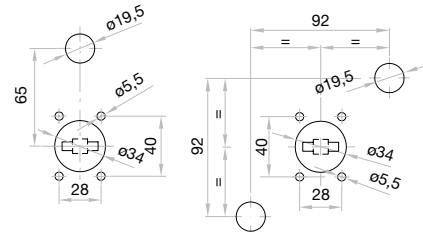
Double CODE DS-CF21

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

Door drilling for handle and key lock device

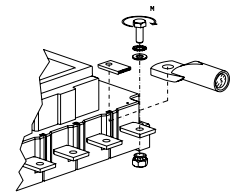
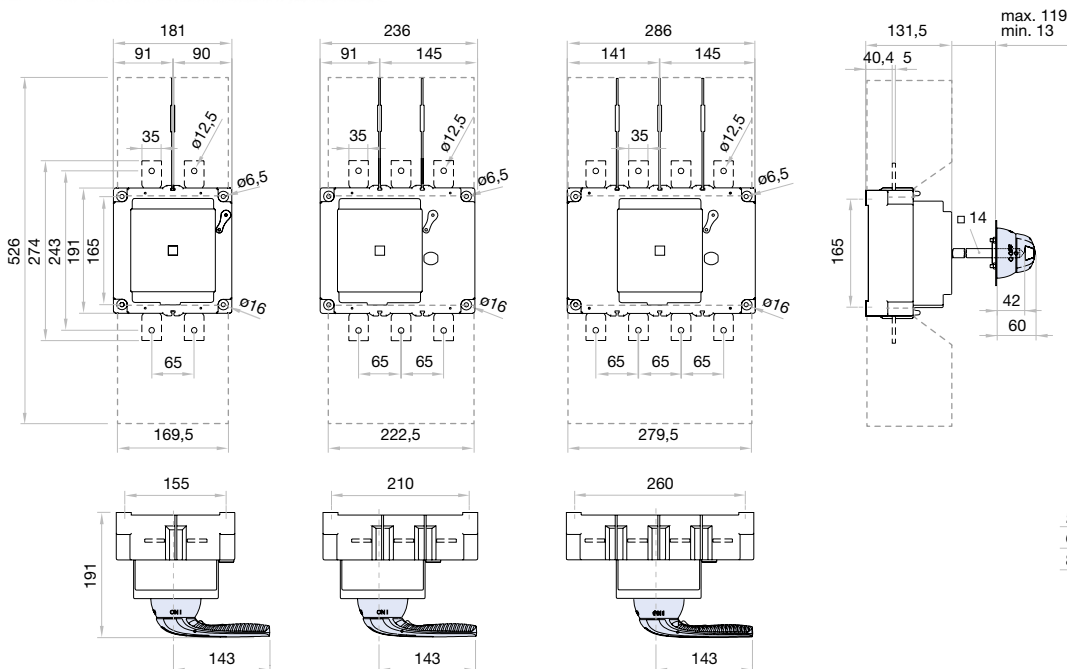
Simple

Double



Dimensions (mm)

Door drilling for external handle



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
					Nxm
500 A	2x150	2x5	35	M10	24
630 A	2x185	2x6	35	M10	24
800 A	2x240	2x7	35	M10	24

2P

3P

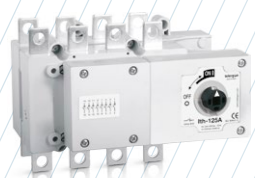
3P+N

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

Size 0

A

125|160|200



CODE - 125A

6P S5M01256PS0
8P S5M01258PS0



CODE - 160A

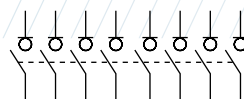
S5M01606PS0
S5M01608PS0

CODE - 200A

S5M02006PS0
S5M02008PS0



6P



8P

Technical information



According to IEC 60947-3

				125	160	200
Rated thermal current in ambient at	I _{th}	40 °C	A	125	160	200
		50 °C	A	125	160	200
		60 °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
		U _e 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)}	I _{cm} kA (peak)			13	13	13
Rated short-time withstand current (1sec.)	I _{cw} kA rms			7	7	7
Mechanical features						
Number of mechanical operations (according to the standards, for other values please consult)	Cycles			8000	8000	8000
Maximum weight 6P	Kg			1,8	1,8	1,9
Maximum weight 8P	Kg			2,1	2,1	2,2

Accessories



» Direct handle

CODE DS-SI01

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

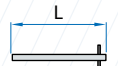
IP65

CODE DS-LA01

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

IP65

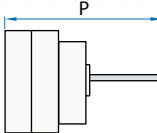
CODE DS-LR01



» Shafts

Standard shaft included ^{*(e1)}

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



» Auxiliary contacts

1NO+1NC CODE DS-AU11

2NO+2NC CODE DS-AU12

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.

» Terminal shrouds ^{*(T)}

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

(For frontal switch only)

» Phase barrier ^{*(T)}

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

(1 kit for input or output)

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

» Safety key lock devices

Simple CODE DS-CAB1

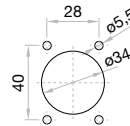
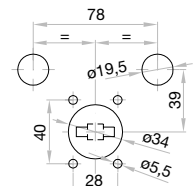
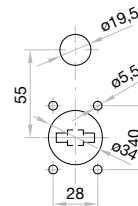
Double CODE DS-CEB1

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

Door drilling for handle and key lock device

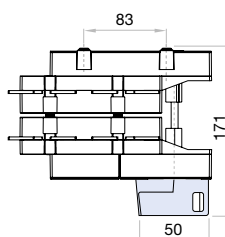
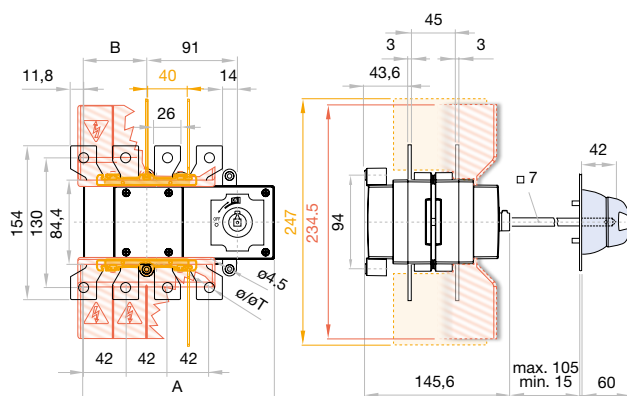
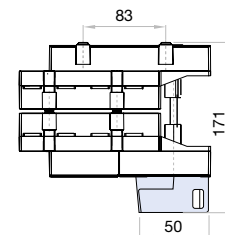
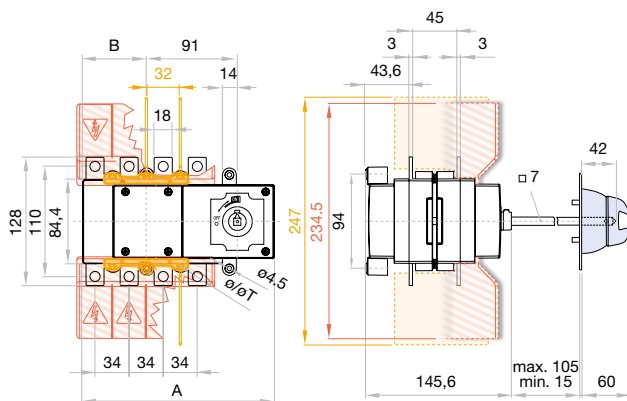
Simple

Double



Door drilling for external handle

Dimensions (mm)



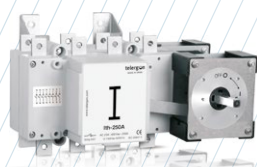
	A		B		Ø	S max (Cu)	H max (Cu)	L max (Cu)	M
	6P	8P	6P	8P		mm ²	mm	mm	Nxm
125 A	181	192	53	64	10	95	5	25	M8
160 A									13

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

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

Size 1

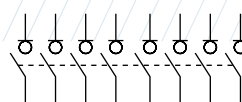
A 250|315|400



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



6P



8P

Technical information



According to IEC 60947-3

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

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

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

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

Accessories



» Direct handle

CODE DS-LI12

» 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



» Shafts

Standard shaft included ^{*(e1)}

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



» Auxiliary contacts

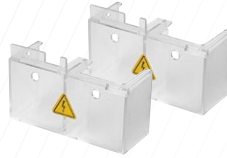
1NO+1NC	CODE DS-AU11
2NO+2NC	CODE DS-AU12

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

» Terminal 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	8P
DS-PB12	DS-PB11	
DS-PB14	DS-PB13	

(1 kit for input or output)

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

» Safety key lock devices

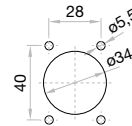
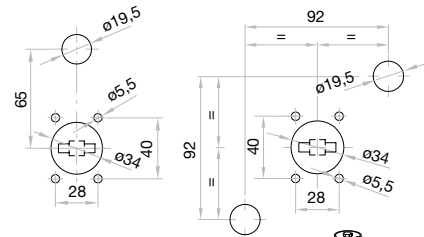
Simple CODE DS-CB12

Double CODE DS-CF11

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

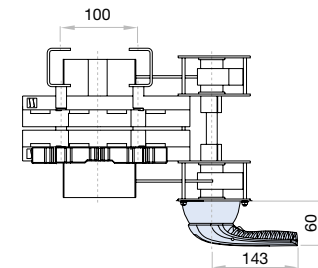
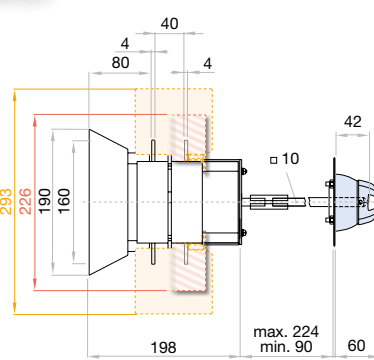
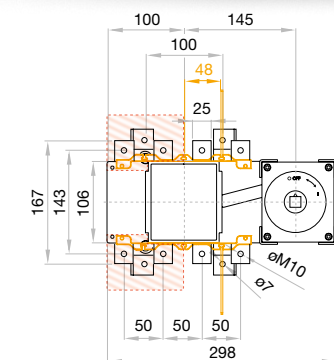
Door drilling for handle and key lock device

Simple Double

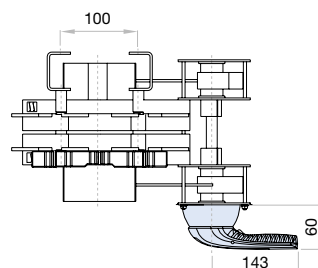
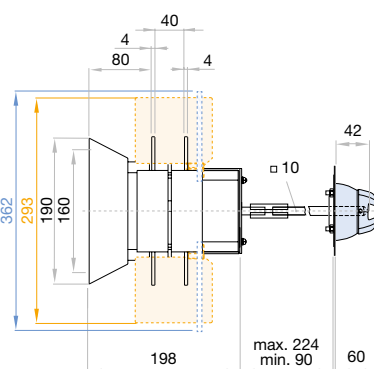
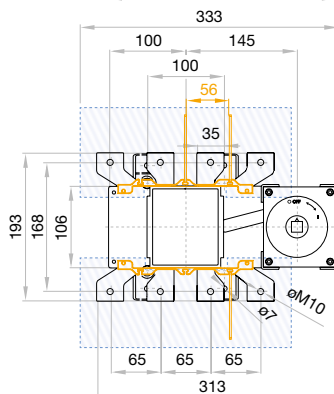


Door drilling for external handle

Dimensions (mm)



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



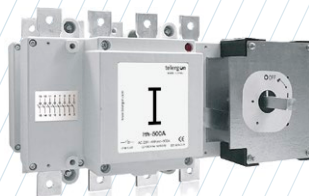
	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M	M
				Nxm	
400 A	240	7	40	M10	24

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

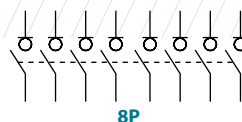
Size 2

A

500|630



	CODE-500A		CODE-630A	
6P	S5M05006PR0		S5M06306PR0	
8P	S5M05008PR0		S5M06308PR0	



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.)

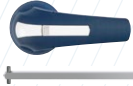
			500	630
Short - circuit behaviour				
Rated short-circuit making capacity ^{*(2)}	Icm kA (peak)		26	26
Rated short-time withstand current (1sec.)	Icw kA rms		16	16
Mechanical features				
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		5000	5000
Maximum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

Accessories



» Direct handle

CODE DS-LI22

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

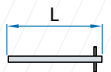
IP65

CODE DS-LA22

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

IP65

CODE DS-LR22



» Shafts

Standard shaft included ^{*(e1)}

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



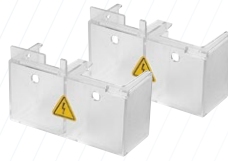
» Auxiliary contacts

1NO+1NC CODE DS-AU11

2NO+2NC CODE DS-AU12

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.

» Terminal shrouds ^{*(T)}

CODE DS-CU21

(1 kit for input or output frontal side)

» Phase barrier ^{*(T)}6P
DS-PB228P
DS-PB21

(1 kit for input or output)

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

» Safety key lock devices

Simple CODE DS-CB21

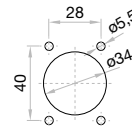
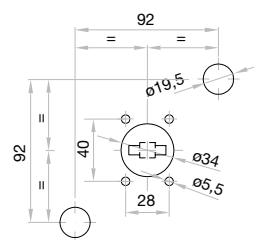
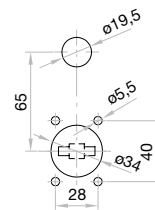
Double CODE DS-CF21

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

Door drilling for handle and key lock device

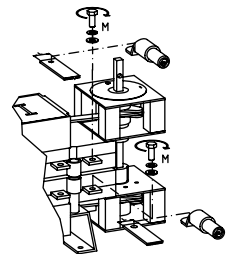
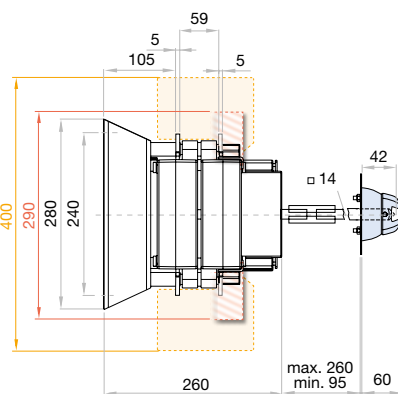
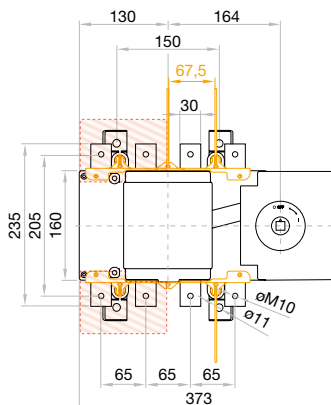
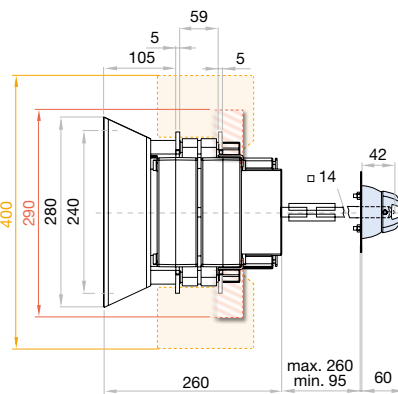
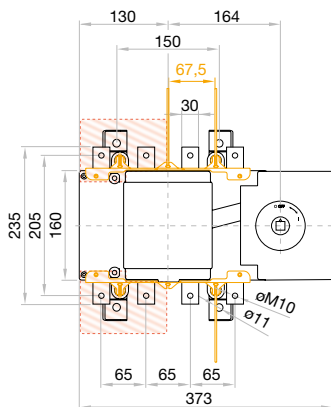
Simple

Double

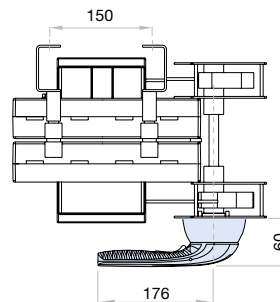


Door drilling for external handle

Dimensions (mm)



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



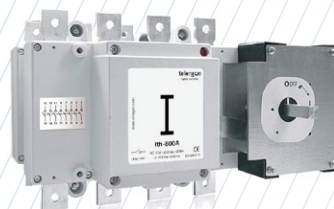
	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M	M
					Nxm
630 A	2x240	2x5	40	M10	24

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

Size 3

A

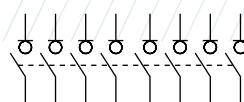
800|1000



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



6P



8P

Technical information



According to IEC 60947-3

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

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

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

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



Accessories



» Direct handle

CODE DS-LI41

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

IP65

CODE DS-LA41



» External handle without shaft

IP65

CODE DS-LA43

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

IP65

CODE DS-LR41

» Terminal shrouds ^{*(T)}

CODE DS-CU31

(1 kit for input or output only frontal side)

» Phase barrier ^{*(T)}6P
DS-PB328P
DS-PB31

(1 kit for input or output)

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

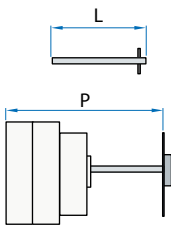
» Safety key lock devices

Simple CODE DS-CB41

Double CODE DS-CF41

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

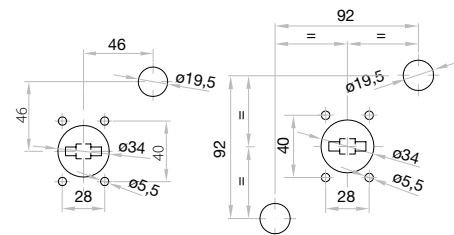
Door drilling for handle and key lock device
Simple Double



» Shafts

Standard shaft included ^{*(e1)}

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



» Auxiliary contacts

1NO+1NC CODE DS-AU11

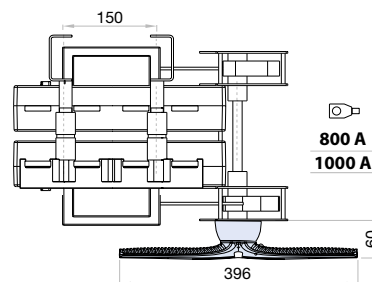
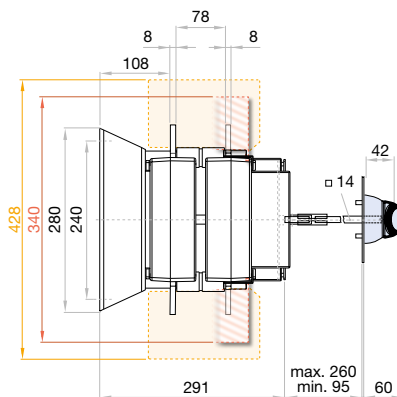
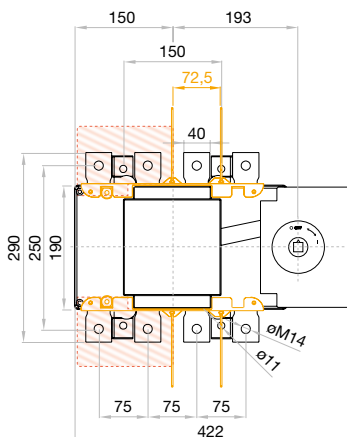
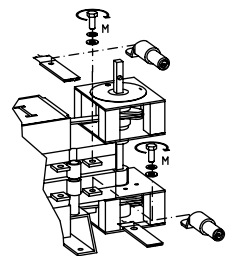
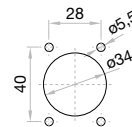
2NO+2NC CODE DS-AU12

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.

Dimensions (mm)

Door drilling for external handle



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

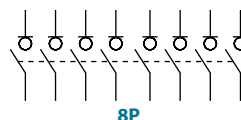
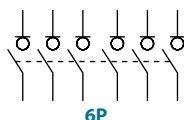
S₅N AC Switch - disconnecter base mounting 6P - 8P

Size 4

A 1250|1600|1800|2000



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



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)}	I _e	Ue 400V AC21B	A	1250	1600	1800	2000
(Rated operational frequency 50/ 60 Hz)		Ue 400V AC22B	A	1250	1600	1800	2000

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

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



Accessories



» Direct handle

CODE DS-LI41

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

IP65

CODE DS-LA41



» External handle without shaft

IP65

CODE DS-LA43

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

IP65

CODE DS-LR41



» Shafts

Standard shaft included ^{*(e1)}

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



» Auxiliary contacts

1NO+1NC CODE DS-LA101

2NO+2NC CODE DS-LA102

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.



» Safety key lock devices

Simple CODE DS-CB41

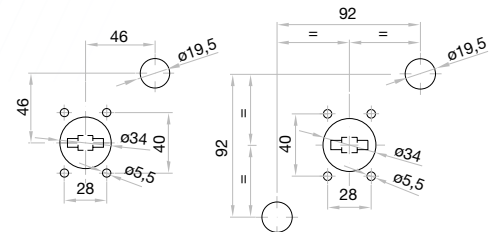
Double CODE DS-CF41

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

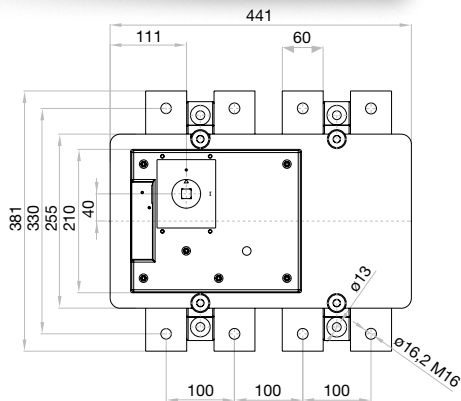
Door drilling for handle and key lock device

Simple

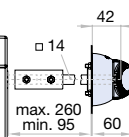
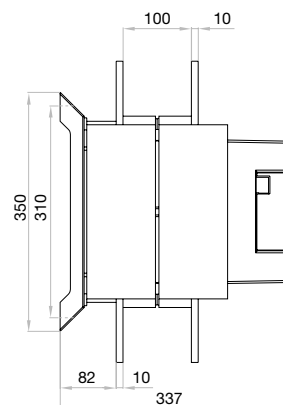
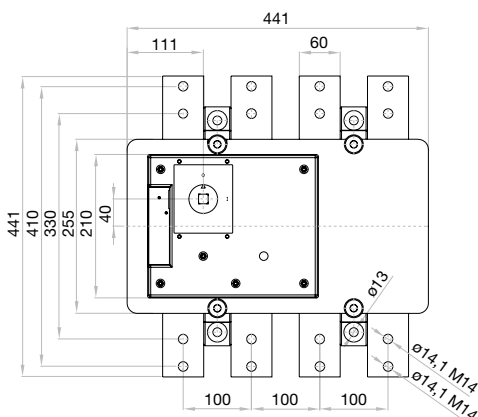
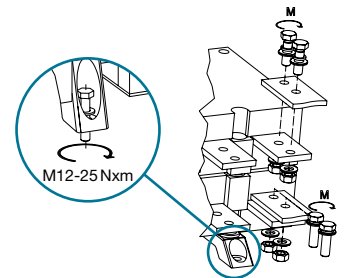
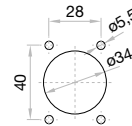
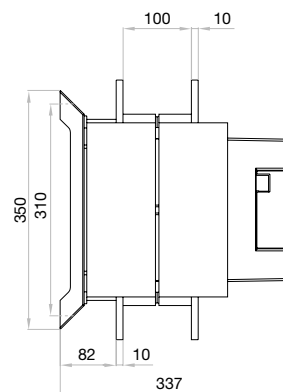
Double



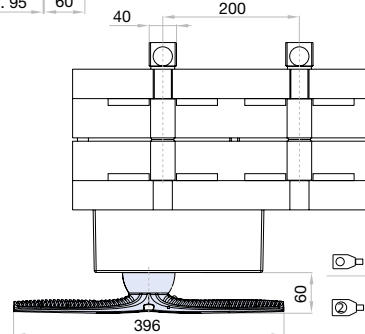
Dimensions (mm)



Door drilling for external handle



1250 A

1600 A
1800 A
2000 A

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

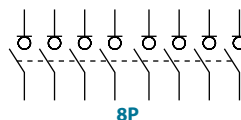
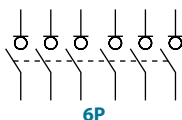
S6N AC Switch - disconnecter base mounting 6P - 8P

Size 1

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



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



Technical information



According to IEC/EN 60947-3

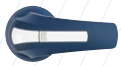
				125	160	200	250	315	400	
Rated thermal current in ambient at	Ith	40° C	A	125	160	200	250	315	400	
		50° C	A	125	160	200	250	315	400	
		60° C	A	125	160	200	250	315	400	
Rated insulation voltage	Ui		V	1000	1000	1000	1000	1000	1000	
Rated impulse withstand voltage	Uimp		kV	12	12	12	12	12	12	
AC Rated operational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

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

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



Accessories



» Direct handle

CODE DS-SI11

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

IP65

CODE DS-SA11



» External handle without shaft

IP65

CODE DS-SA14

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

IP65

CODE DS-SR11

» 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



» 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

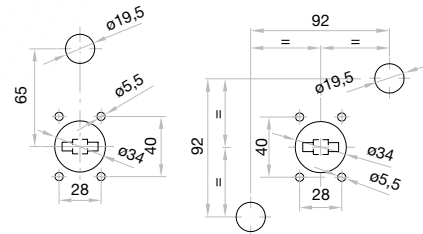
Double CODE DS-CE11

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

Door drilling for handle and key lock device

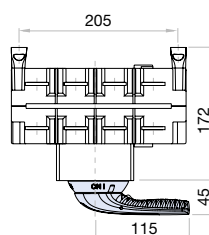
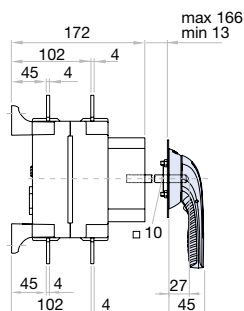
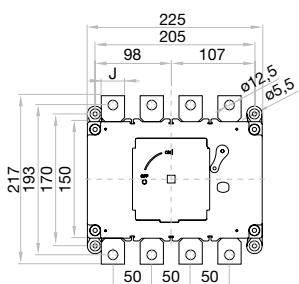
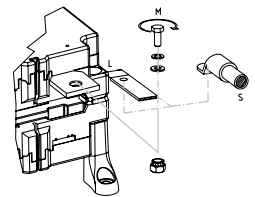
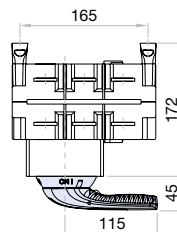
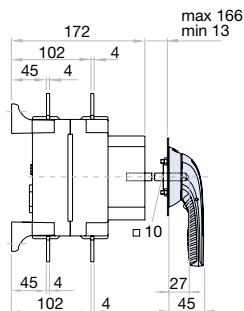
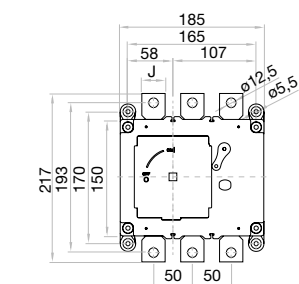
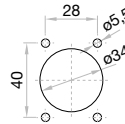
Simple

Double



Dimensions (mm)

Door drilling for external handle



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

S6N AC

Switch - disconnecter

base mounting 6P - 8P

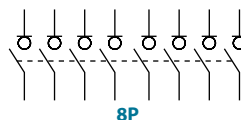
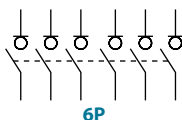
Size 2

A

500|630



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



Technical information



According to IEC/EN 60947-3

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

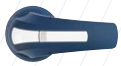
^{*(1)} Other voltages and / or utilization categories. Please consult

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

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

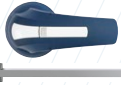


Accessories



» Direct handle

CODE DS-LI21

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

IP65

CODE DS-LA21



» External handle without shaft

IP65

CODE DS-LA24

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

IP65

CODE DS-LR21

» Shafts

Standard shaft included ^{*(e1)}

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

Shaft extensions

Type 1

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

Type 2

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



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.



» Safety key lock device

Simple CODE DS-CB21

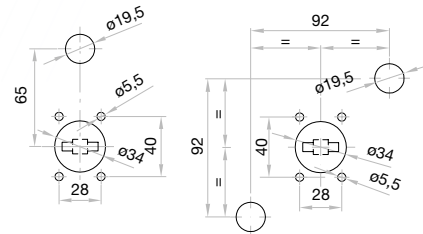
Double CODE DS-CF21

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

Door drilling for handle and key lock device

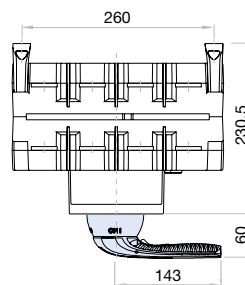
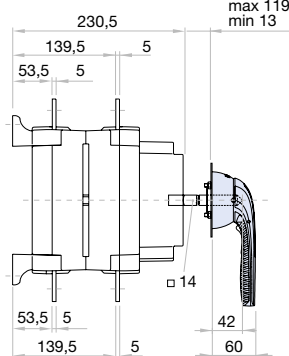
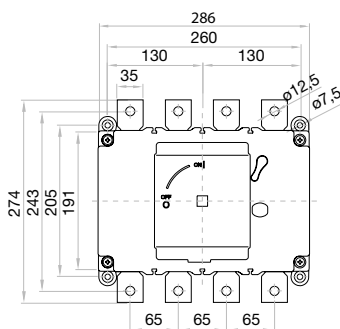
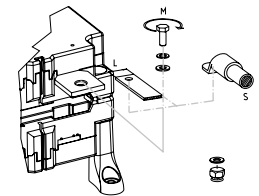
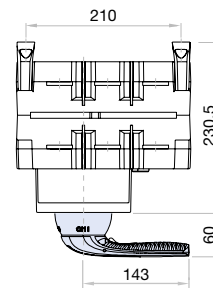
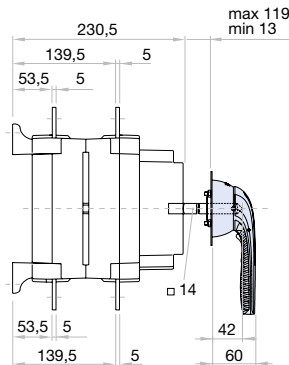
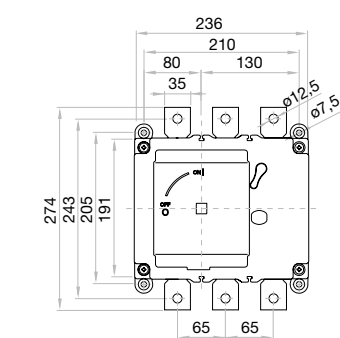
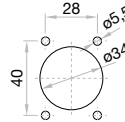
Simple

Double



Dimensions (mm)

Door drilling for external handle



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

CIS25 - A - C - D - F

Enclosed switch - disconnecter

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

Size 00

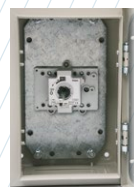
A 40|63|80



CIS25A



CIS25D

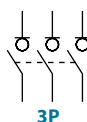


CIS25C

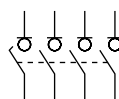


CIS25F

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



3P



3P + N

Technical information



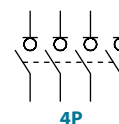
According to IEC 60947-3
IEC 61439-2

				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)	I _e	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		



4P

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

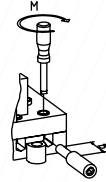
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



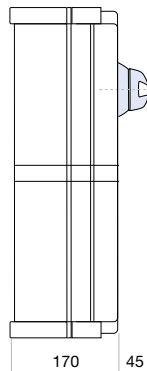
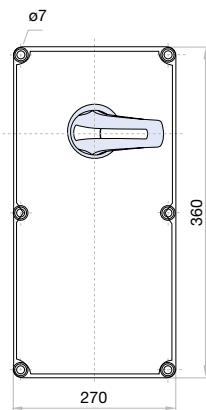
» **Safety key lock device**

Simple CODE D5-CAB1
Double CODE D5-CEB1

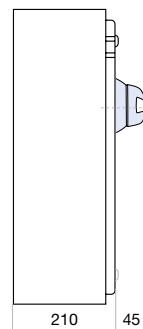
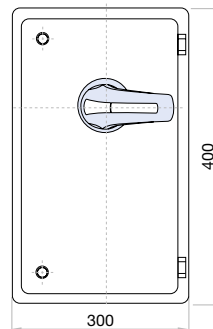
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON", the key can only be removed with the handle locked)



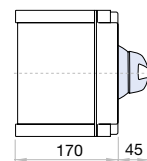
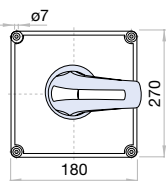
S max (Cu)	M
mm ²	Nxm
25	2

Dimensions (mm)

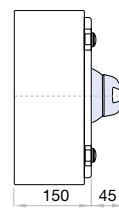
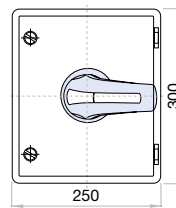
CIS25A
NH 00



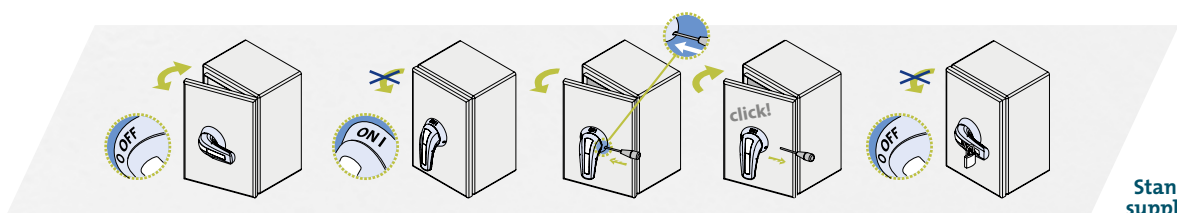
CIS25F
NH 00



CIS25D



CIS25C



Standard
supply

CIS25 - A - C - D - F

Enclosed switch - disconnecter

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

Size 0

A

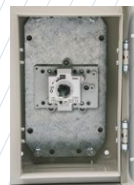
125|160



CIS25A



CIS25D

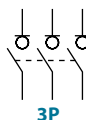


CIS25C

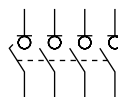


CIS25F

				CODE - 125A		CODE - 160A	
				125A		160A	
polyester enclosure + fuse holders	CIS25A	3P		CIS25A01253PB		CIS25A01603PB	
			3P + N	CIS25A01253NB		CIS25A01603NB	
polyester enclosure	CIS25D	3P		CIS25D01253PB		CIS25D01603PB	
			3P + N	CIS25D01253NB		CIS25D01603NB	
metal enclosure	CIS25C	3P		CIS25C01253PB		CIS25C01603PB	
			3P + N	CIS25C01253NB		CIS25C01603NB	
metal enclosure + fuse holders	CIS25F	3P		CIS25F01253PB		CIS25F01603PB	
			3P + N	CIS25F01253NB		CIS25F01603NB	



3P



3P + N

Technical information



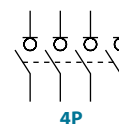
According to IEC 60947-3
IEC 61439-2

				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	



4P

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

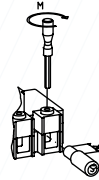
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



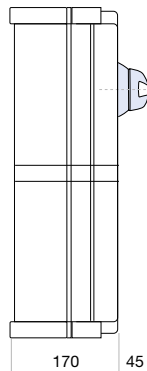
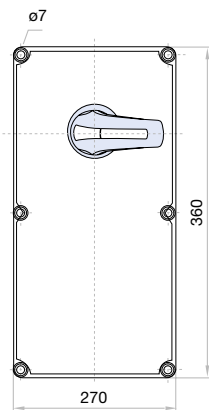
» **Safety key lock device**

Simple CODE D5-CAB1
Double CODE D5-CEB1

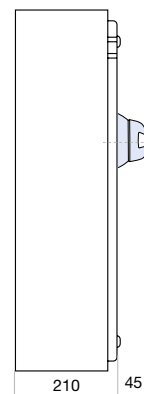
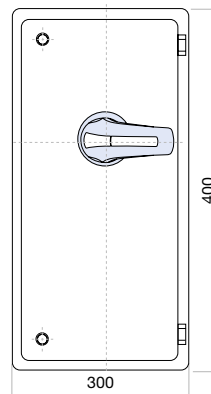
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



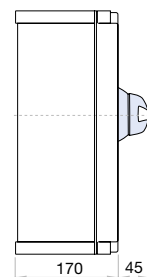
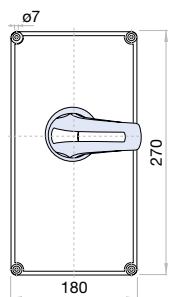
S max (Cu)	M
mm ²	Nxm
95	4

Dimensions (mm)

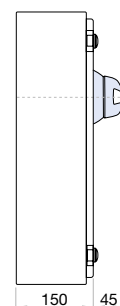
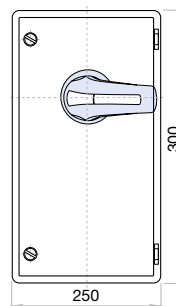
CIS25A
NH 00



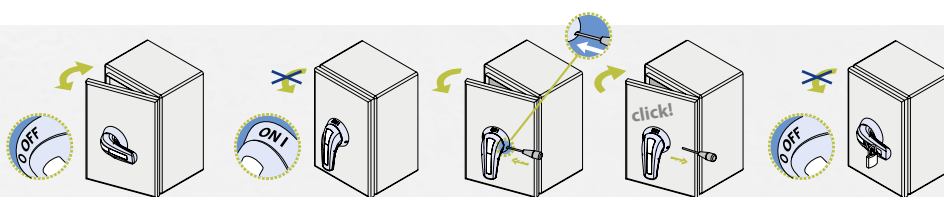
CIS25F
NH 00



CIS25D



CIS25C



Standard
supply

CIS25 - A - C - D - F

Enclosed switch - disconnecter

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

Size 1

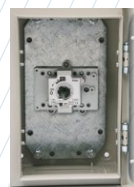
A 200|250|315|400



CIS25A



CIS25D



CIS25C



CIS25F

polyester enclosure
+ fuse holders**CIS25A**

3P

CODE - 200A

CIS25A02003PR

CODE - 250A

CIS25A02503PR

CODE - 315A

CIS25A03153PR

CODE - 400A

-

polyester enclosure

CIS25D

3P

CIS25D02003PR

CIS25D02503PR

CIS25D03153PR

-

metal enclosure

CIS25C

3P

CIS25C02003PR

CIS25C02503PR

CIS25C03153PR

CIS25C04003PC

metal enclosure
+ fuse holders**CIS25F**

3P

CIS25F02003PR

CIS25F02503PR

CIS25F03153PR

-

CIS25A02003NR

CIS25D02003NR

CIS25D02503NR

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CIS25C02003NR

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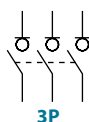
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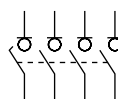
CIS25F02503NR

CIS25F03153NR

-



3P



3P + N

Technical information



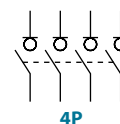
According to IEC 60947-3
IEC 61439-2

				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)} (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
		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			



4P

Also available 4P switches
under request, please consult

Accessories



» External handle included
IP65



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



» Emergency external handle under request
IP65



» Auxiliary contacts

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

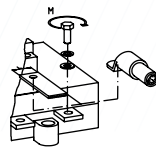
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Safety key lock device

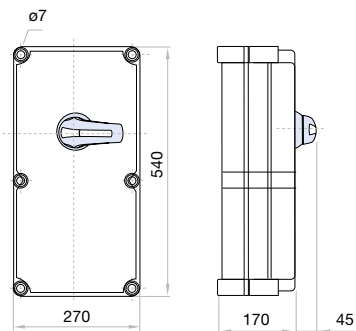
Simple CODE DS-CA11
Double CODE DS-CE11

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

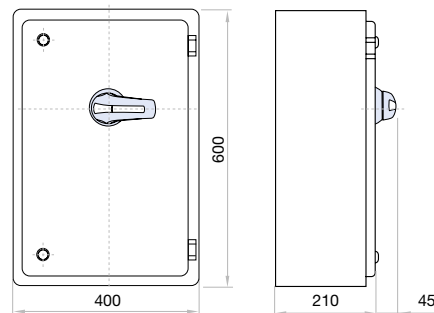


	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
				Nxm	
200 A				M8	13
250 A	185	7	25	M10	18
315 A					
400 A	240	7	40	M10	24

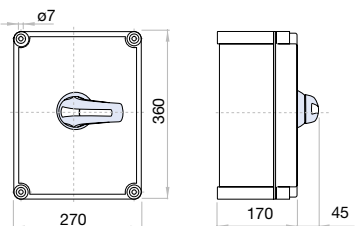
Dimensions (mm)



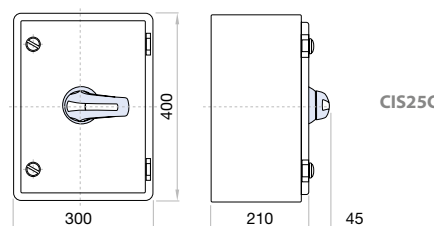
CIS25A
200A
NH 0
250A-315A
NH 1



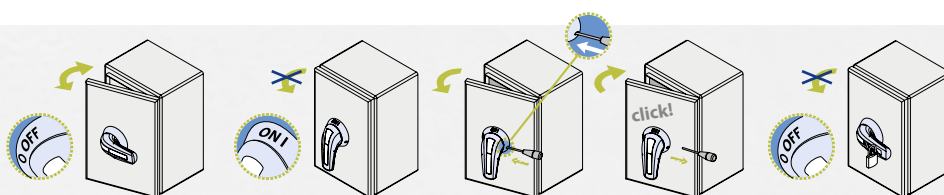
CIS25F
200A
NH 0
250A-315A
NH 1



CIS25D



CIS25C



Standard supply

CIS25 - A - C - D - F

Enclosed switch - disconnecter

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

Size 2

A

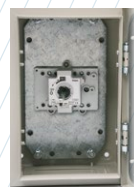
400|630



CIS25A



CIS25D

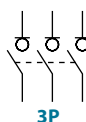


CIS25C

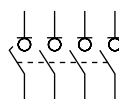


CIS25F

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



3P



3P + N

Technical information



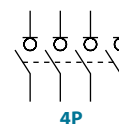
According to IEC 60947-3
IEC 61439-2

				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	5000
Rated making capacity		400V AC23	A	4000	6300

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

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

				400	630
Short - circuit behaviour					
Rated short-circuit making capacity ^{*(2)}	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	



4P

Also available 4P switches
under request, please consult

Accessories

» **External handle** included
IP65



» **Emergency external handle** under request
IP65



» **Auxiliary contacts**

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

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



» **Terminal protection**

CODE DS-CU21

(1 kit for input or output)

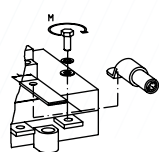


» **Safety key lock device**

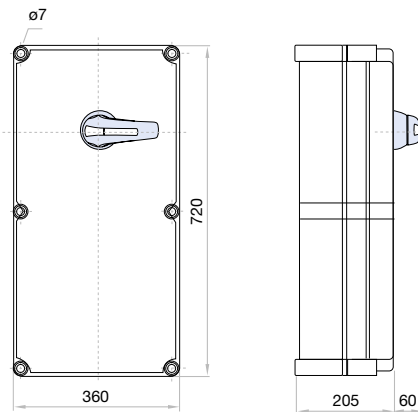
Simple CODE DS-CB21

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

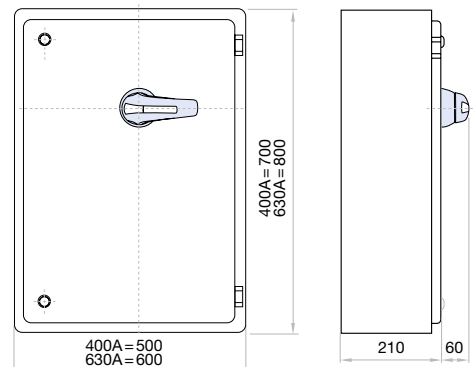


	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
400 A	2x185	6	40	M10	24
630 A	2x240	2x5	40		

Dimensions (mm)

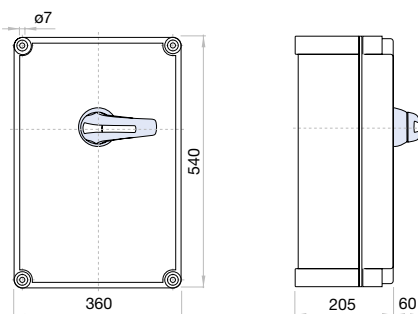
CIS25A

400A
NH 2
630A
NH 3

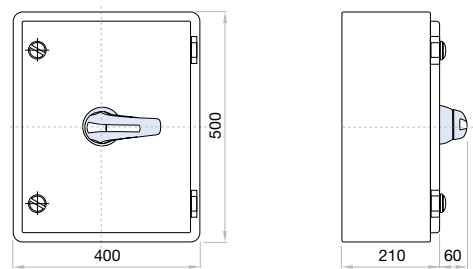


CIS25F

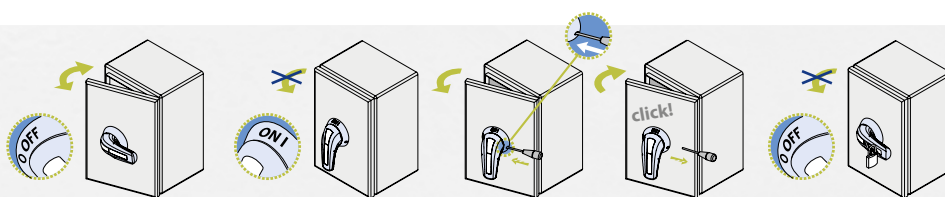
400A
NH 2
630A
NH 3



CIS25D



CIS25C



Standard
supply

CIS25 - A - C - D - F

Enclosed switch - disconnecter

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

Size 3

A

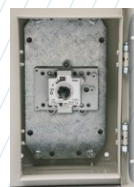
800



CIS25A



CIS25D



CIS25C



CIS25F

polyester enclosure
+ fuse holders

CIS25A

3P

3P + N

CODE - 800A

CIS25A08003PR

CIS25A08003NR

polyester enclosure

CIS25D

3P

3P + N

CIS25D08003PR

CIS25D08003NR

metal enclosure

CIS25C

3P

3P + N

CIS25C08003PR

CIS25C08003NR

metal enclosure
+ fuse holders

CIS25F

3P

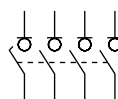
3P + N

CIS25F08003PR

CIS25F08003NR



3P



3P + N

Technical information



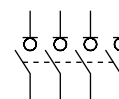
According to IEC 60947-3
IEC 61439-2

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	U _e 400V AC21A	A	800
		U _e 400V AC22A	A	800
		U _e 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.)

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



4P

Also available 4P switches
under request, please consult

Accessories

» **External handle** included
IP65



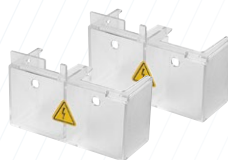
» **Emergency external handle** under request
IP65



» **Auxiliary contacts**

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

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



» **Terminal protection**

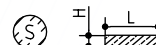
CODE DS-CU31
(1 kit for input or output)



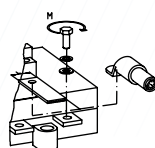
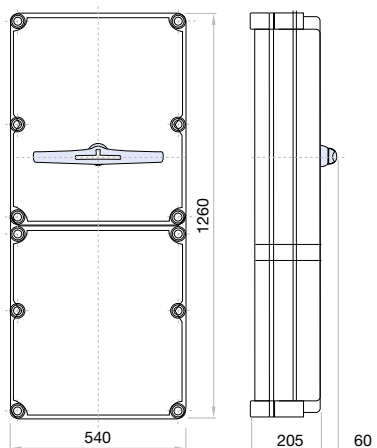
» **Safety key lock device**

Simple CODE DS-CB31
Double CODE DS-CF31

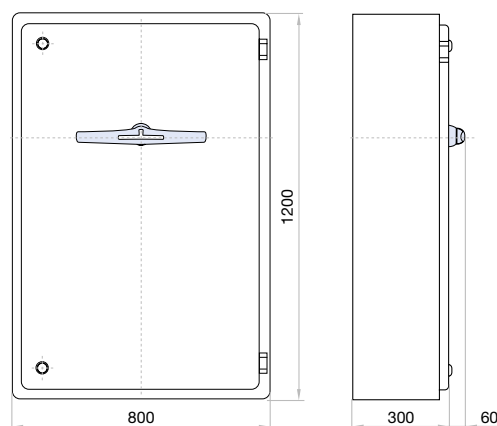
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



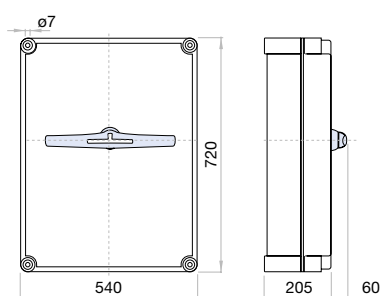
S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
2x240	2x10	50	M14	45

**Dimensions (mm)**

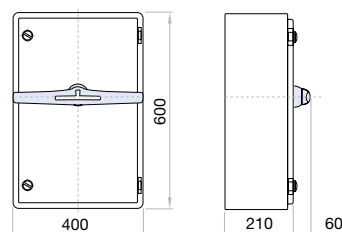
CIS25A
NH 4



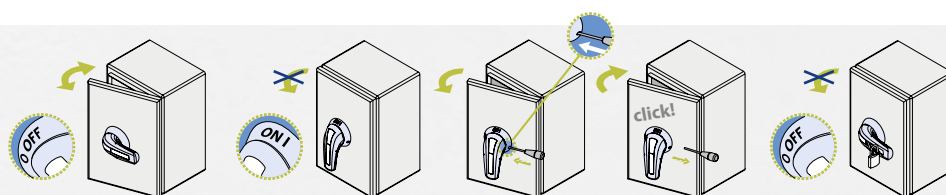
CIS25F
NH 4



CIS25D



CIS25C



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



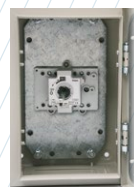
*(A) Under request higher currents are available, please consult.



CIS25A



CIS25D

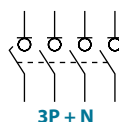
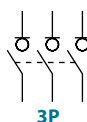


CIS25C



CIS25F

				CODE - 1000A			CODE - 1250A			CODE - 1600A		
				CIS25A10003PS ^{*(5)}			CIS25A12503PS ^{*(5)}			CIS25A16003PS ^{*(5)}		
polyester enclosure + fuse holders	CIS25A ^{*(5)}	3P	3P + N	CIS25A10003NS ^{*(5)}			CIS25A12503NS ^{*(5)}			CIS25A16003NS ^{*(5)}		
polyester enclosure	CIS25D	3P	3P + N	CIS25D10003PS			CIS25D12503PS			CIS25D16003PS		
				CIS25D10003NS			CIS25D12503NS			CIS25D16003NS		
metal enclosure	CIS25C	3P	3P + N	CIS25C10003PS			CIS25C12503PS			CIS25C16003PS		
				CIS25C10003NS			CIS25C12503NS			CIS25C16003NS		
metal enclosure + fuse holders	CIS25F	3P	3P + N	CIS25F10003PS			CIS25F12503PS			CIS25F16003PS		
				CIS25F10003NS			CIS25F12503NS			CIS25F16003NS		



Technical information



According to IEC 60947-3
IEC 61439-2

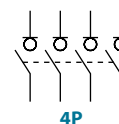
				1000	1250	1600
Rated thermal current in ambient at	I _{the}	40 °C	A	1000	1250	1600
Rated insulation voltage	U _i		V	1000	1000	1000
Rated impulse withstand voltage	U _{imp}		kV	12	12	12
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	I _e	U _e 400V AC21A	A	1000	1250	1600
		U _e 400V AC22A	A	1000	1250	1600
		U _e 400V AC23B	A	-	-	1600
Rated breaking capacity		400V AC23	A	3000	3750	4800
Rated making capacity		400V AC23	A	3000	3750	4800

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

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

^{*(3)} IP43

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



Also available 4P switches under request, please consult

Accessories

» **External handle** included
IP65



» **Emergency external handle** under request
IP65



» **Auxiliary contacts**

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

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



» **Terminal protection**

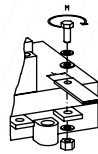
CODE D5-CU41
(1 kit for input or output)



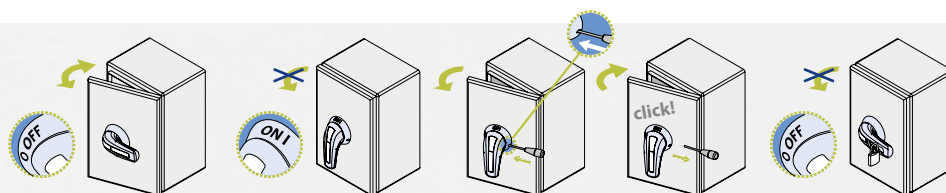
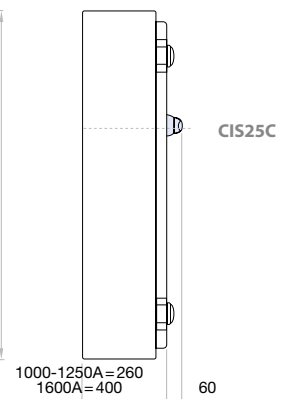
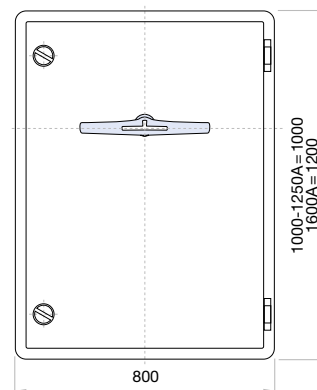
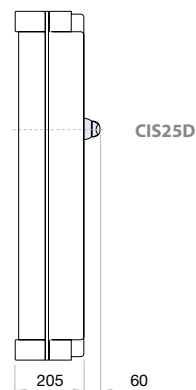
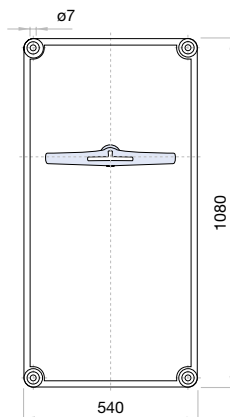
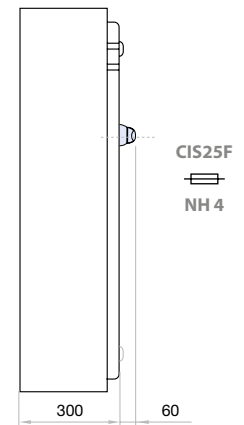
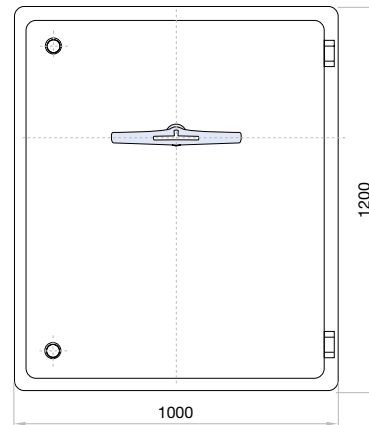
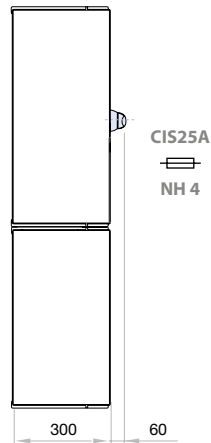
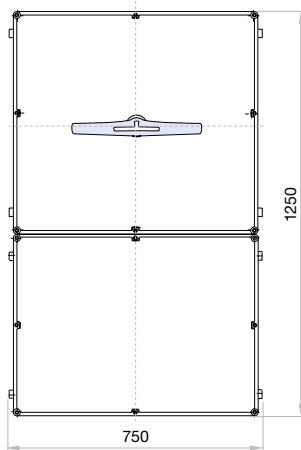
» **Safety key lock device**

Simple CODE D5-CB41
Double CODE D5-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
			Nxm	
1000 A			M16	80
1250 A	2x10	80	M14	55
1600 A			M14	55

Dimensions (mm)

Standard supply

IPTA | IPTR | IPTU

Switch disconnecter for transformer secondary protection

IP65 4P - 3P+N

A 40...630

series
IPT

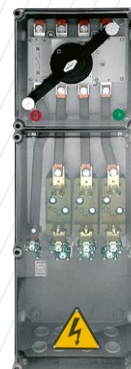
IPTA (IP65)
automatic



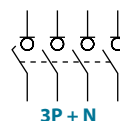
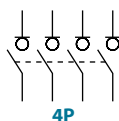
IPTR (IP65)
manual single module



IPTU (IP65)
manual double module



		CODE-40A	CODE-50...63A	CODE-80...100A	CODE-125...160A
		IPTA00404PS0	IPTA00634PS0	IPTA01004PS0	IPTA01604PS0
IPTA	4P	CODE-200A	CODE-250A	CODE-320...400A	CODE-630A
		IPTA02004PS0	IPTA02504PS0	IPTA04004PS0	IPTA06304PT0
IPTR	3P + N	CODE-160A	CODE-250A	CODE-400A	CODE-630A
		IPTR01603NB0	IPTR02503NB0	IPTR04003NB0	IPTR06303NT0
IPTU	3P + N	CODE-160A	CODE-250A	CODE-400A	CODE-630A
		IPTU01603NB0	IPTU02503NB0	IPTU04003NB0	IPTU06303NT0



Technical information



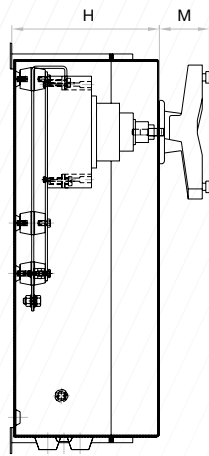
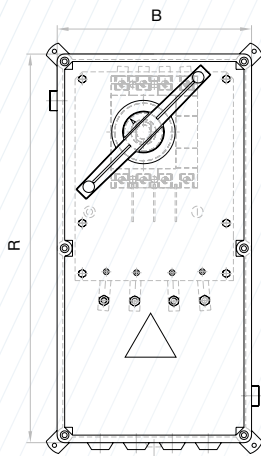
According to IEC 60947-3
IEC 61439-2

	Amps (Ith)	NH / DIN
IPTR	160	0
	250	1
	400	2
	630	3
IPTU	160	0
	250	1
	400	2
	630	3

Selection table

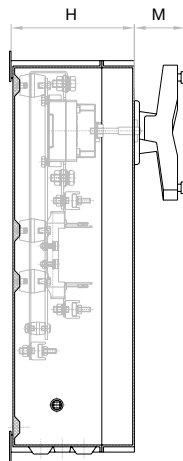
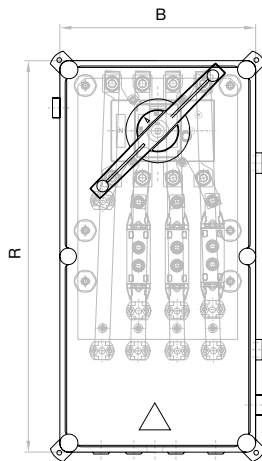
kVA	UF/UL (Vac)	In (A)
50	380 / 220	100
75	380 / 220	125
100	380 / 220	160
125	380 / 220	200
160	380 / 220	250
250	380 / 220	400
400	380 / 220	630

Dimensions (mm)



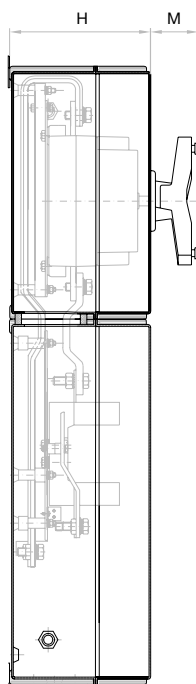
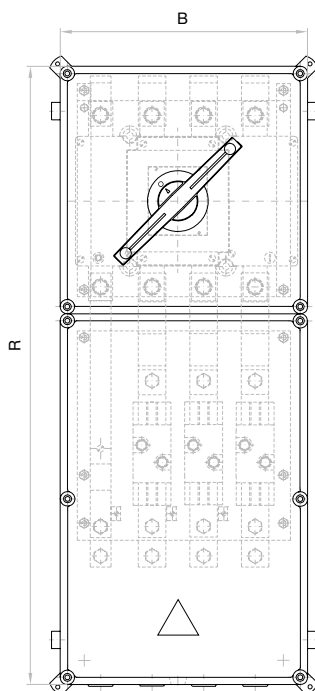
IPTA

	R	B	H	M
40 - 63 - 80 - 100 A 160 - 200 - 250 A	540	270	205	69,5
400 A	540	360	263	69,5
630 A	720	360	205	69,5



IPTR

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



IPTU

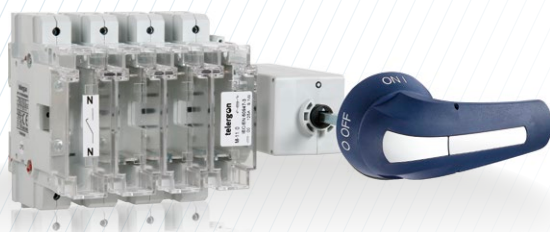
	R	B	H	M
160 - 250 A	810	270	170	69,5
400 A	810	360	205	69,5
630 A	900	360	205	69,5

AC Switch fuses

series
M11

series
M21

Switch fuses with high operating load capacity and a high level disconnection insulation; high reliability and safety in abnormal situations, available in two construction models, with a wide range of currents, fusible types and various accessories.



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

They combine in a compact unit the function of a switch - disconnecter with the protection against overloads and short - circuits given by the fuses, these once installed remain fixed in the switch, ensuring a long electrical and mechanical life and safe operations for the user.

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

The M21 series consist of a sandwich-type body containing self-cleaning blade type contacts, with pre-arc zones to ensure long term, fault-free energy transmission and coated with silver alloy for long electromechanical life, externally has housings to insert fuses according to the appropriate format. The detent mechanism provides quick and independent switching due to the accumulation of elastic potential energy, which is transmitted at high speed to the contacts for arc extinction.

The M11 series is of modular construction, with the contacts being moved by a cross shaft with tripping being positive opening.

Functional and ergonomic handle

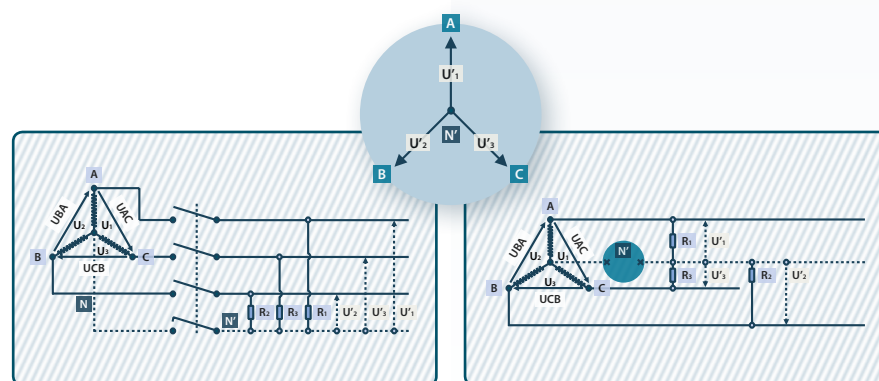
- > Good grip and excellent torque/resistance
- > Padlockable handle in **OFF** position (up to three locks Ø 5-8 mm)
- > Door interlock in **ON** position
- > When lock in **OFF** position, door is interlocked
- > Defeatable feature in **ON** position (with the use of a tool for maintenance operations).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



Neutral pole early make & late break

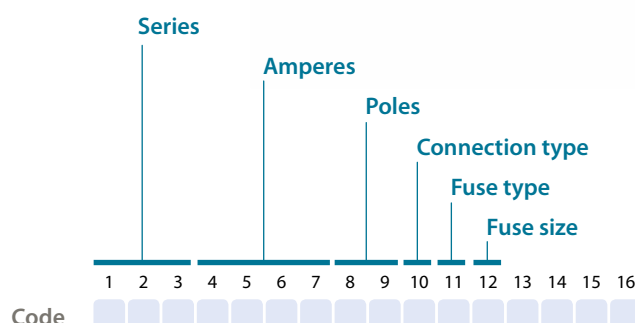
This safety feature prevents accidental overvoltage when making/breaking of loads connected between phase and neutral.

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



Range codification:

The **M11/M21** series, are identified by a code that describes their most important characteristics as described below



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



Testing and approvals:



series M11



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



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

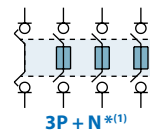
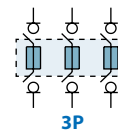
M11 metal enclosed fusible
switch.
External padlockable
handle with locking door in
ON I position.
Removing door blocked by
padlock when handle is in
0 OFF position.

series CIF22



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
0 OFF position.



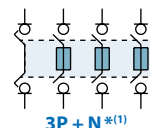
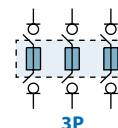
M11

Switches 2, 3 & 4 poles (32 - 160A) (O-I) For fusibles BS - NFC 14x51 - NH00C ^{*(3)}

Manual handle



Amp.	Fuse	Size	Connection	Bipolar (2P)	3 pole (3P)	4 pole (3P + N) ^{*(1)}	External handle		Direct handle	
				Code	Code	Code	Frontal ^{*(2)}	Side	Frontal	Side
50	14 x 51	00		M1100502PBC20	M1100503PBC20	M1100503NBC20	DS-SA02	DM1SLB1	DM1SI01	DM1SYB1
63	NH00C	00		M1100632PBD80	M1100633PBD80	M1100633NBDB0				
100	NH00C			M1101002PBD80	M1101003PBD80	M1101003NBDB0				
32	BSA1	00		M1100322PBBA0	M1100323PBBA0	M1100323NBBA0	DS-SA02	DM1SAB1	DM1SI01	DM1SYB1
63	BSA2 BSA3			M1100632PBB80	M1100633PBB80	M1100633NB80				
125	22 x 58	0		M1101252PBC30	M1101253PBC30	M1101253NBC30	DS-SA02	DM1SLB1	DM1SI01	DM1SYB1
125	22 x 58			M1101252PTC30	M1101253PTC30	M1101253NTC30				
125	NH00	0		M1101252PBD80	M1101253PBD80	M1101253NBDB0				
125	NH00			M1101252PTD80	M1101253PTD80	M1101253NTD80				
160	NH00			M1101602PBD80	M1101603PBD80	M1101603NBDB0				
160	NH00			M1101602PTD80	M1101603PTD80	M1101603NTD80				
100	BSA2 BSA3	0		M1101002PBB00	M1101003PBB00	M1101003NB800	DS-SA02	DM1SAB1	DM1SI01	DM1SYB1
100	BSA2 BSA3			M1101002PTB00	M1101003PTB00	M1101003NTB00				



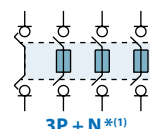
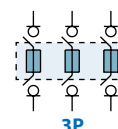
M21

Switches 3 & 4 poles (160 - 800A) (O-I) For fusibles BS - NH ^{*(3)}

Manual handle



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



CIF

Metal enclosed model ^{*(2)} ^{*(3)} IP65



Amp.	Fuse	Size	Connection	Series	3 pole	4 pole (3P + N) ^{*(1)}
					Code	Code
63	NH00C	00		M-11	CIF21C00633PBD8	CIF21C00633NBDB
100	NH00C			M-11	CIF21C01003PBD8	CIF21C01003NBDB
125	NH00	0		M-11	CIF21C01253PBD8	CIF21C01253NBDB
125	NH00			M-11	CIF21C01253PTD8	CIF21C01253NTD8
160	NH00			M-11	CIF21C01603PBD8	CIF21C01603NBDB
160	NH00			M-11	CIF21C01603PTD8	CIF21C01603NTD8
160	NH0	1		M-21	CIF22C01603PSD0	CIF22C01603NSD0
250	NH1	2		M-21	CIF22C02503PSD1	CIF22C02503NSD1
400	NH2			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.

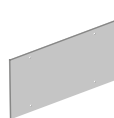
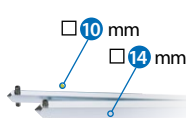
^{*(3)} Fuses are not supplied.



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.



Emergency external handle			Shaft extensions ^{*(4)}			Auxiliary contacts ^{*(5)}		Safety key lock device ^{*(6)}		Terminal shrouds ^{*(7)}		Full details in page
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	124
		DM1SRB1		347	Side DS-EP02							
0	DS-SR02	DM1RLB1	7	387	Front DS-EP05	DM1AUB1	DM1AUB2	DS-CAB1	DS-CEB1	DM1CU01	DM1CU02	126
				347	Side DS-EP02							



Shaft extensions ^{*(4)}				Auxiliary contacts ^{*(5)}		Safety key lock device ^{*(6)}		Rear protective plate		Terminal shrouds ^{*(7)}			 Full details in page
Size		Type 1		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	128
								4P DM2PP12	4P DM2PP22				
2	14	345	DS-EP23	D5LAU01	D5LAU02	DS-CB21	DS-CF21	3P DM2PP21		DM2CU21	DM2CU22	DM2CU23	130
								4P DM2PP22					
3	14	345	DS-EP23	D5LAU01	D5LAU02	DS-CB31	DS-CF31	3P DM2PP31		DM2CU31	DM2CU32	DM2CU33	132
								4P DM2PP32					



Auxiliary contacts ^{*(5)}			Safety key lock device ^{*(6)}		Terminal shrouds ^{*(7)}				Full details in page
Size	1NO+1NC	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		-	-	-	134
0	DM1AUB1	DM1AUB2	DS-CAB1	DS-CEB1	2 units DM1CU01 3 units DM1CU02	-	-	-	136
1	D5LAU01	D5LAU02	DS-CA11	DS-CEB1		DM2CU11	DM2CU12	DM2CU13	138
2	D5LAU01	D5LAU02	DS-CB21	DS-CF21		DM2CU21	DM2CU22	DM2CU23	140
3	D5LAU01	D5LAU02	DS-CB31	DS-CF31		DM2CU31	DM2CU32	DM2CU33	142

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

^{*(5)} To be used as signalling or control contacts – I_e = 16A (resistive loads) 4A (inductive loads) at 250 Vac.

Whilst closing, it switches after the main contacts. Whilst opening, it switches before the main contacts.

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

^{*(7)} One set for input or output.

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

M11

Switch fuses

base mounting 2P - 3P - 3P+N

Size 00

A 32|50|63|100



NFC 14x51 NH 00C
BS A1-A2-A3



CODE-50A

2P M1100502PBC20

3P M1100503PBC20

3P + N M1100503NBC20

CODE-63A

M1100632PBDB0

M1100633PBDB0

M1100633NBDB0

CODE-100A

M1101002PBDB0

M1101003PBDB0

M1101003NBDB0

Fuses

NFC 14x51

NH 00C

NH 00C

CODE-32A

2P M1100322PBBA0

3P M1100323PBBA0

3P + N M1100323NBBA0

CODE-63A

M1100632PBBA0

M1100633PBBA0

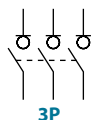
M1100633NBBA0

Fuses

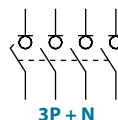
BS A1

BS A2 - BS A3^{*(0)}

2P



3P



3P + N

Technical information



According to IEC 60947-3

			32	50	63	100
Fuses	NH/DIN		-	-	00C	00C
	BS		A1	-	A2-A3 ^{*(0)}	-
	NFC		-	14x51	-	-
Rated thermal current in ambient at 40 °C	I _{th}	A	32	50	63	100
Rated thermal current in enclosure	I _{the}	A	-	-	63	100
Rated insulation voltage	U _i	V	800	800	800	800
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	8
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	-	-	5,1	6,9
	BS		2,8	-	6,6	-
	NFC		-	4,7	-	-
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	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

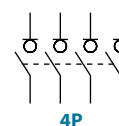
^{*(1)} Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation

^{*(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

^{*(0)} Only fuses with diameter < 25 mm

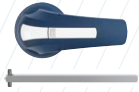
			32	50	63	100
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	256	400	504	800
Rated making capacity	400 V; cos φ = 0,45	A	320	500	630	1000
Short - circuit behaviour						
Rated conditional short-circuit current ^{*(3)}	I _q	kA rms	50	50	50	50
Rated conditional short-circuit making ^{*(3)}		kA rms	50	50	50	50
Maximum cut - off current		kA (peak)	13	13	13	13
Maximum power dissipation		A ² s (x 10 ³)	76	76	76	76
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		10000	10000	10000	10000
Maximum weight 2P		kg	0,7	0,7	0,7	0,7
Maximum weight 3P		kg	1,1	1,1	1,1	1,1
Maximum weight 3P+N		kg	1,5	1,5	1,5	1,5



4P

Also available 4P switches
under request, please consult

Accessories



» **Frontal external handle** included shaft ^{*(e1)}
IP65
 CODE DS-SA02



» **Emergency frontal external handle** included shaft ^{*(e1)}
IP65
 CODE DS-SR02



» **Direct handle**
 Frontal CODE DM1SI01
 Side CODE DM1SYB1



» **Side handle** included shaft ^{*(e1)}
IP65
 CODE DM1SLB1
 CODE DM1SAB1 BS



» **Emergency side handle** included shaft ^{*(e1)}
IP65
 CODE DM1RLB1
 CODE DM1SRB1 BS

» Shafts

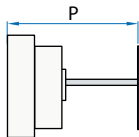
Standard shaft included ^{*(e1)}

L (mm)	P (mm)
250	144... 270

**Shaft extensions**

Frontal external handle

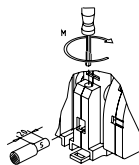
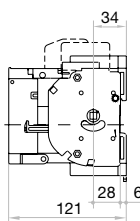
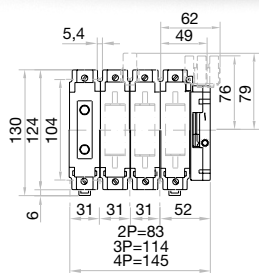
L (mm)	P (mm)	CODE
387	144... 407	DS-EP05



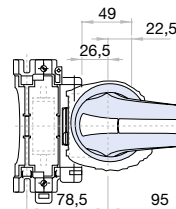
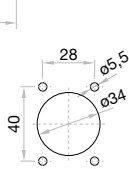
Side handle

L (mm)	P (mm)	CODE
347	144... 367	DS-EP02

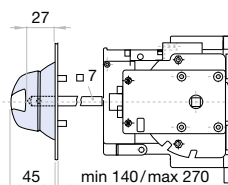
Dimensions (mm)



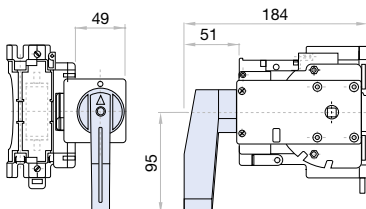
S max (Cu) mm ²	M Nxm
35	3



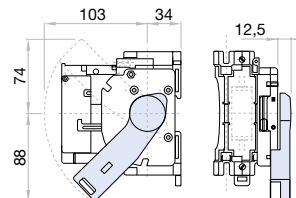
Frontal external handle



Side direct handle



Frontal direct handle



» Terminal shrouds



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

» Auxiliary contacts

1NO+1NC CODE DM1AUB1
 2NO+2NC CODE DM1AUB2

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

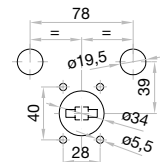
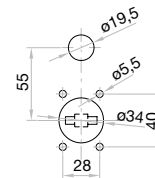


» Safety key lock device

Simple CODE DS-CAB1
 Double CODE DS-CEB1

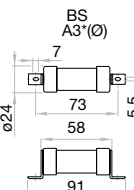
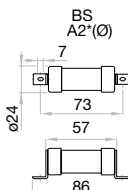
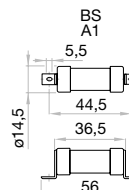
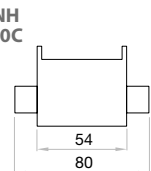
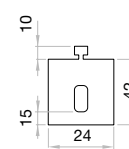
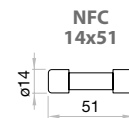
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
 Simple | Double

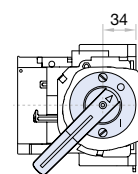


Fuses

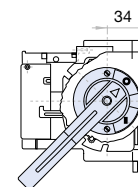
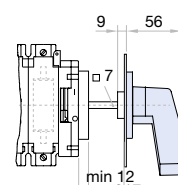
Maximum dimensions



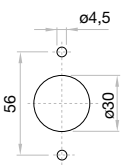
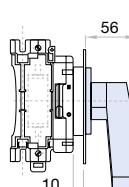
^{*(Ø)} Only fuses with diameter < 25 mm



Side handle



Side mounting



M11

Switch fuses

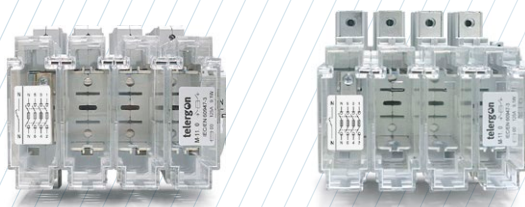
base mounting 2P - 3P - 3P+N

Size 0

A 100|125|160



NFC 22x58 NH 00
BS A2-A3

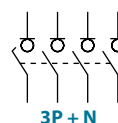
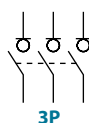


	CODE - 125A	CODE - 125A	CODE - 125A	CODE - 125A	CODE - 160A	CODE - 160A
2P	M1101252PBC30	M1101252PTC30	M1101252PBD0	M1101252PTDB0	M1101602PBD0	M1101602PTDB0
3P	M1101253PBC30	M1101253PTC30	M1101253PBD0	M1101253PTDB0	M1101603PBD0	M1101603PTDB0
3P + N	M1101253NBC30	M1101253NTC30	M1101253NBD0	M1101253NTDB0	M1101603NBD0	M1101603NTDB0

Fuses NFC 22x58 NFC 22x58 NH 00 NH 00 NH 00 NH 00

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

Fuses BS A2-BS A3 BS A2-BS A3



Technical information



According to IEC 60947-3

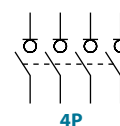
			100	125	160
Fuses	NH/DIN		-	00	00
	BS		A2-A3	-	-
	NFC		-	22x58	-
Rated thermal current in ambient at 40 °C	I _{th}	A	100	125	160
Rated thermal current in enclosure	I _{the}	A	-	125	160
Rated insulation voltage	U _i	V	800	800	800
Rated impulse withstand voltage	U _{imp}	kV	8	8	8
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	-	9,5	11,8
	BS		8,5	-	-
	NFC		-	12,5	-
AC rated operational current ^{*(2)}	U _e 400 V AC21A	A	100	125	160
(Rated frequency 50/60 Hz)	U _e 400 V AC22A	A	100	125	160
	U _e 400 V AC23A	A	100	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

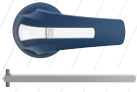
^{*(3)} With a protective device limiting the cut - off current and the joule integral to the indicated values

			100	125	160
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	800	1000	1280
Rated making capacity	400 V; cos φ = 0,45	A	1000	1250	1600
Short - circuit behaviour					
Rated conditional short-circuit current ^{*(3)}	I _q	kA rms	50	50	50
Rated conditional short-circuit making ^{*(3)}		kA rms	50	50	50
Maximum cut - off current		kA (peak)	17	17	17
Maximum power dissipation		A ² s (x 10 ³)	190	190	190
Number of mechanical operations (according to the standards, for other values please consult)		Cycles	10000	8000	8000
Maximum weight 2P		kg	1,2	1,2	1,2
Maximum weight 3P		kg	1,7	1,7	1,7
Maximum weight 3P+N		kg	2,2	2,2	2,2



Also available 4P switches under request, please consult

Accessories



» **Frontal external handle** included shaft ^{*(e1)}
IP65
 CODE DS-SA02



» **Emergency frontal external handle** included shaft ^{*(e1)}
IP65
 CODE DS-SR02



» **Direct handle**
 Frontal CODE DM1SI01
 Side CODE DM1SYB1



» **Side handle** included shaft ^{*(e1)}
IP65
 CODE DM1SLB1



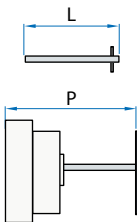
» **Emergency side handle** included shaft ^{*(e1)}
IP65
 CODE DM1RLB1

» Shafts

Standard shaft included ^{*(e1)}
 L (mm) | P (mm)
 250 | 144... 270

Shaft extensions
Frontal external handle
 L (mm) | P (mm) | CODE
 387 | 144... 407 | DS-EP05

Side handle
 L (mm) | P (mm) | CODE
 347 | 144... 367 | DS-EP02



» Terminal shrouds

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



» Auxiliary contacts

1NO+1NC CODE DM1AUB1
 2NO+2NC CODE DM1AUB2

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

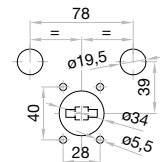
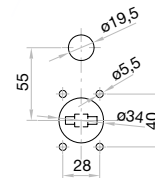


» Safety key lock device

Simple CODE DS-CAB1
 Double CODE DS-CEB1

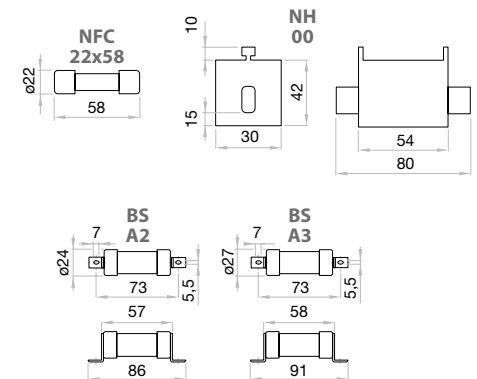
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
 Simple | Double

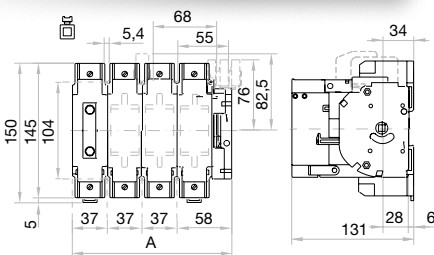


Fuses

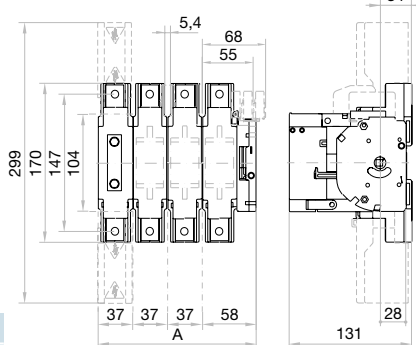
Maximum dimensions



Dimensions (mm)

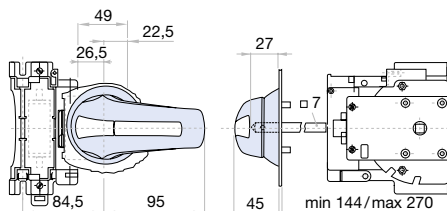
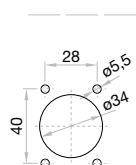


Fastening by screw only

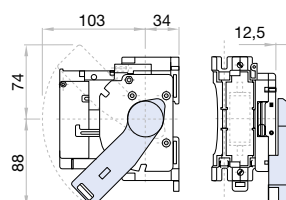


A
2P 3P 4P
95 132 169

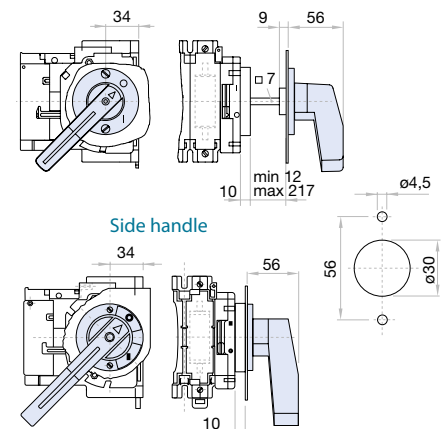
S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M
95	-	-	4
95	3	25	M8 13



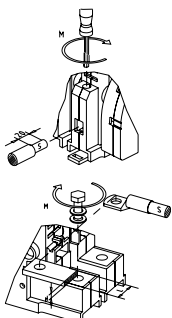
Frontal external handle



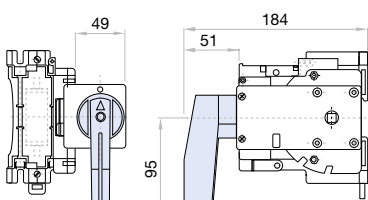
Side direct handle



Side mounting



Frontal direct handle



M21

Switch fuses

base mounting 3P - 3P+N

Size 1

A 160|200|250


 NH 0 BS A4
 BS B1 BS B2


CODE-160A

 3P
 3P + N
M2101603PSD00
M2101603NSD00

Fuses

NH 0

CODE-160A

M2101603PSB10
M2101603NSB10

BS A4

CODE-200A

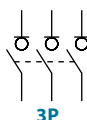
M2102003PSB20
M2102003NSB20

BS B1-BS B2

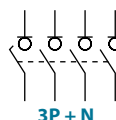
CODE-250A

M2102503PSB20
M2102503NSB20

BS B1-BS B2



3P



3P + N

Technical information



According to IEC 60947-3

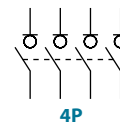
			160	200	250
Fuses	NH/DIN		0	-	05
	BS		A4	B1-B2	B1-B2
Rated thermal current in ambient at 40 °C	Ith	A	160	200	250
Rated thermal current in enclosure	Ithe	A	160	-	250
Rated insulation voltage	Ui	V	800	800	800
Rated impulse withstand voltage	Uimp	kV	8	8	8
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	13,5	-	17,8
	BS		11	13	16
AC rated operational current ^{*(2)}	Ie	A	160	200	250
	Ue 400 V AC21A				
	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

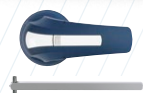
			160	200	250
Rated breaking capacity	400 V; $\cos \varphi = 0,35 \div 0,45$	A	1280	1600	2000
Rated making capacity	400 V; $\cos \varphi = 0,45$	A	1600	2000	2500
Short - circuit behaviour					
Rated conditional short-circuit current ^{*(3)}	Iq	kA rms	100	100	100
Rated conditional short-circuit making ^{*(3)}		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



4P

Also available 4P switches under request, please consult

Accessories



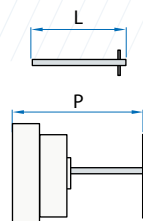
» **External handle** included shaft ^{*(e1)}
IP65
CODE DS-SA11



» **Emergency external handle** included shaft ^{*(e1)}
IP65
CODE DS-SR11



» **Direct handle**
CODE DM2SI11

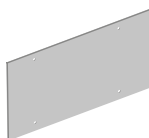


» Shafts

Standard shaft included ^{*(e1)}
L (mm) | P (mm)
227 | 180... 292

» Shaft extensions

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

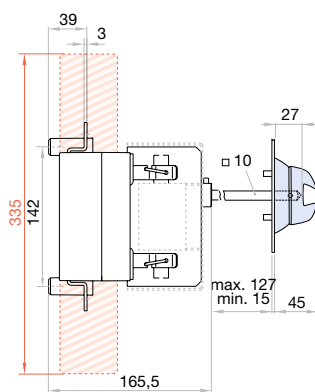
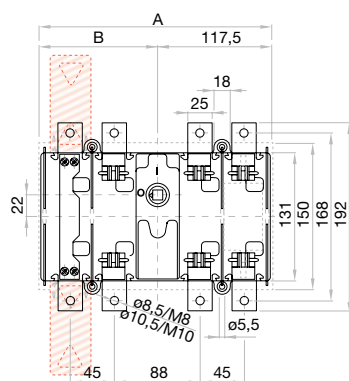
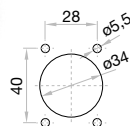


» Rear protective plate

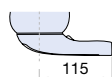
160-200 A | 250 A
3P | 4P | 3P | 4P
DM2PP11 | DM2PP12 | DM2PP21 | DM2PP22

Dimensions (mm)

Door drilling for external handle



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



External handle top view

» Terminal shrouds



3P INPUT | 3P OUTPUT | 4P INPUT/OUTPUT
DM2CU11 | DM2CU12 | DM2CU13
(1 kit for input or output)



» Auxiliary contacts

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

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

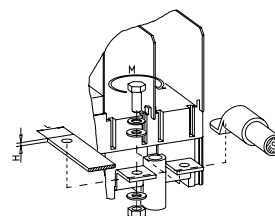
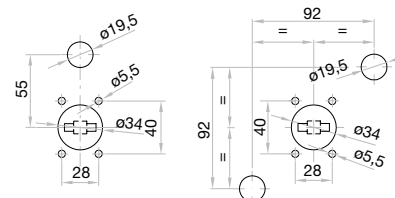


» Safety key lock device

Simple CODE DS-CA11
Double CODE DS-CEB1

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

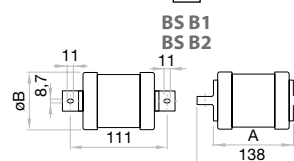
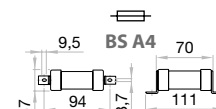
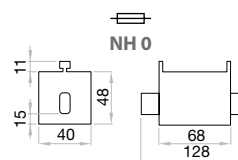
Door drilling for handle and key lock device
Simple | Double



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
160 A	120	5	25	M8	13
200 A	120	5	25	M10	24
250 A	120	5	25	M10	24

Fuses

Maximum dimensions



	A	øB
	max	max
B1	70	37
B2	77	42

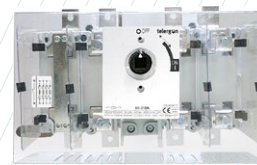
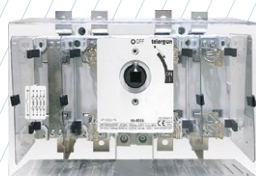
M21

Switch fuses

base mounting 3P - 3P+N

Size 2

A 250|315|400


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


CODE-250A

 3P
 3P + N
M2102503PSD10
M2102503NSD10

Fuses

NH 1

CODE-400A

M2104003PSD20
M2104003NSD20

NH 2

CODE-315A

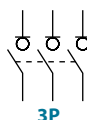
M2103153PSB40
M2103153NSB40

BS B1...BS B3

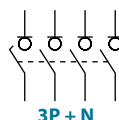
CODE-400A

M2104003PSB50
M2104003NSB50

BS B1...BS B4



3P



3P + N

Technical information



According to IEC 60947-3

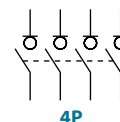
			250	315	400
Fuses	NH/DIN		1	-	2
	BS		-	B1-B3	B1-B4
Rated thermal current in ambient at 40 °C	Ith	A	250	315	400
Rated thermal current in enclosure	Ithe	A	250	-	400
Rated insulation voltage	Ui	V	1000	1000	1000
Rated impulse withstand voltage	Uimp	kV	12	12	12
Power dissipation in fuse links ^{*(1)}	NH/DIN	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

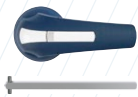
			250	315	400
Rated breaking capacity	400 V; $\cos \varphi = 0,35 \div 0,45$	A	2000	2520	3200
Rated making capacity	400 V; $\cos \varphi = 0,45$	A	2500	3150	4000
Short - circuit behaviour					
Rated conditional short-circuit current ^{*(3)}	Iq	kA rms	100	100	100
Rated conditional short-circuit making ^{*(3)}		kA rms	100	100	100
Maximum cut - off current		kA (peak)	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



4P

Also available 4P switches
under request, please consult

Accessories

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

IP65

CODE DS-LA22

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

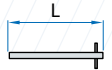
IP65

CODE DS-LR22



» Direct handle

CODE DM2SI21



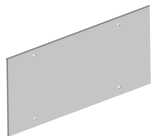
» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
239	216... 286

Shaft extensions
Type 1

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

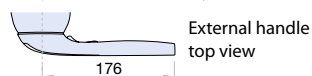
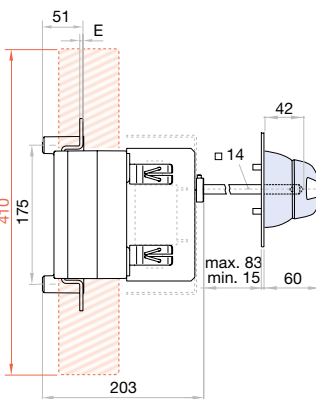
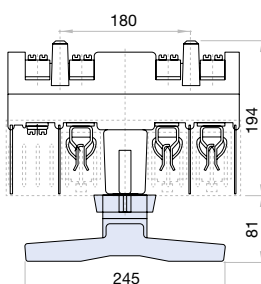
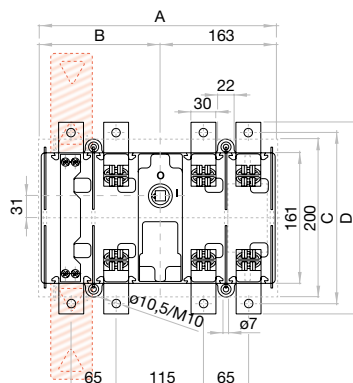
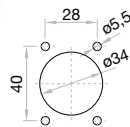


» Rear protective plate

3P	4P
DM2PP21	DM2PP22

Dimensions (mm)

Door drilling for external handle



	A	B	C	D	E
	3P	4P	3P	4P	
250 A					
315 A	274	329	111	166	
400 A			216	246	5



» Terminal shrouds

3P INPUT	3P OUTPUT	4P INPUT/OUTPUT
DM2CU21	DM2CU22	DM2CU23

(1 kit for input or output)



» Auxiliary contacts

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

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



» Safety key lock device

Simple CODE DS-CB21

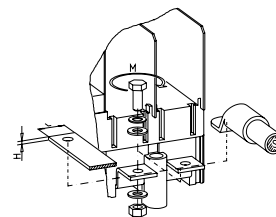
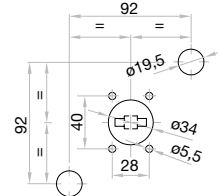
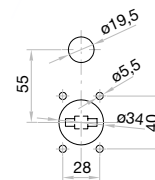
Double CODE DS-CF21

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

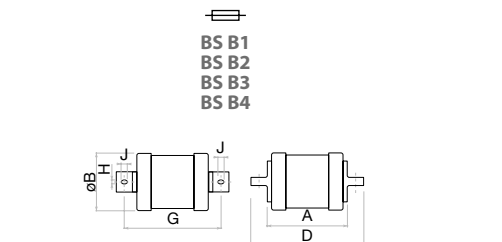
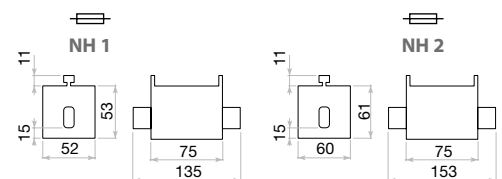
Double



S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M Nxm
240	6	40	M10 24

Fuses

Maximum dimensions



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

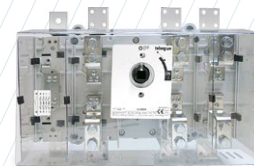
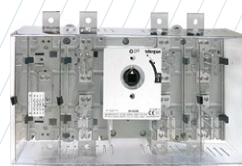
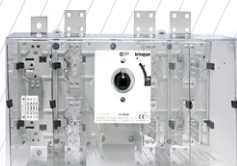
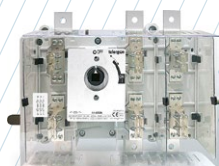
M21

Switch fuses

base mounting 3P - 3P+N

Size 3

A 630|800


 NH 3 BS C1 BS C2
BS C3


CODE-630A

 3P
3P + N
M2106303PSD30
M2106303NSD30

CODE-800A

 M2108003PSD30
M2108003NSD30

CODE-630A

 M2106303PSB70
M2106303NSB70

CODE-800A

 M2108003PSB80
M2108003NSB80

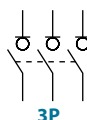
Fuses

NH 3

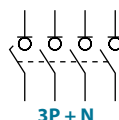
NH 3

BS C1...BS C2

BS C1...BS C3



3P



3P + N

Technical information



According to IEC 60947-3

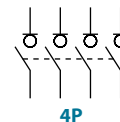
			630	800
Fuses	NH/DIN		3	3
	BS		C1-C2	C1-C3
Rated thermal current in ambient at 40 °C	I _{th}	A	630	800
Rated thermal current in enclosure	I _{the}	A	630	725
Rated insulation voltage	U _i	V	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	12	12
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	48	57
	BS		44	63
AC rated operational current ^{*(2)} (Rated frequency 50 / 60 Hz)	Ue 400 V AC21A	A	630	800
	Ue 400 V AC22A	A	630	800
	Ue 400 V AC23B	A	630	630

^{*(1)} Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation

^{*(2)} Other voltages and / or utilization categories; please consult us

^{*(3)} With a protective device limiting the cut - off current and the joule integral to the indicated values

			630	800
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	5040	5040
Rated making capacity	400 V; cos φ = 0,45	A	6300	6300
Short - circuit behaviour				
Rated conditional short-circuit current ^{*(3)}	I _q	kA rms	100	100
Rated conditional short-circuit making ^{*(3)}		kA rms	100	100
Maximum cut - off current		kA (peak)	60,8	60,8
Maximum power dissipation		A ² s (x 10 ³)	4600	4600
Number of mechanical operations (according to the standards, for other values please consult)		Cycles	5000	3000
Maximum weight 3P		kg	13	13
Maximum weight 3P+N		kg	15	15



4P

Also available 4P switches
under request, please consult

Accessories



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

IP65

CODE DS-LA31



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

IP65

CODE DS-LR31



» **Direct handle**

CODE DM2SI31

» **Shafts**

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
186	235... 286

Shaft extensions

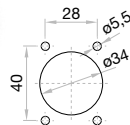
Type 1		CODE
L (mm)	P (mm)	
345	235... 445	DS-EP23

» **Rear protective plate**

3P	4P
DM2PP31	DM2PP32

Dimensions (mm)

Door drilling for external handle



» **Terminal shrouds**

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

(1 kit for input or output)



» **Auxiliary contacts**

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

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



» **Safety key lock device**

Simple CODE DS-CB31

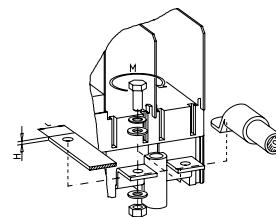
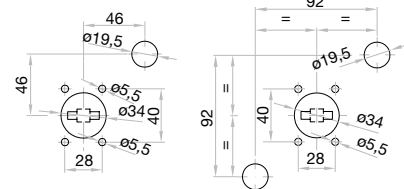
Double CODE DS-CF31

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

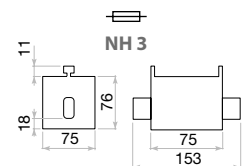
Double



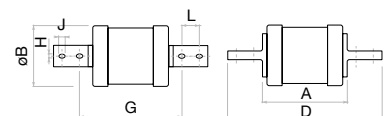
	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M	M
				Nxm	
630 A	2x185	2x7	50	M12	45
800 A	2x240	2x7	50	M8	13

Fuses

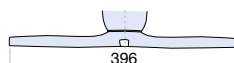
Maximum dimensions



BS C1
BS C2
BS C3



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



External handle
top view

CIF21

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

Size 00

A

63|100



CODE - 63A



3P

CIF21C00633PBDB

3P + N

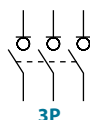
CIF21C00633NBDB

CODE - 100A

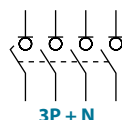


CIF21C01003PBDB

CIF21C01003NBDB



3P



3P + N

Technical information



According to IEC 60947-3
IEC 61439-2

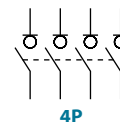
			63	100
Fuses	NH/DIN		00C	00C
Rated thermal current in enclosure 40°C	I _{the}	A	63	100
Rated insulation voltage	U _i	V	800	800
Rated impulse withstand voltage	U _{imp}	kV	8	8
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	5,1	6,9
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	Ue 400 V AC21A	A	63	100
	Ue 400 V AC22A	A	63	100
	Ue 400 V AC23A	A	63	100

^{*(1)} Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation

^{*(2)} Other voltages and / or utilization categories. Please consult

^{*(3)} With a protective device limiting the cut - off current and the joule integral to the indicated values

			63	100
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	504	800
Rated making capacity	400 V; cos φ = 0,45	A	630	1000
Short - circuit behaviour				
Rated conditional short-circuit current ^{*(3)}	I _q	kA rms	50	50
Rated conditional short-circuit making ^{*(3)}		kA rms	50	50
Maximum cut - off current		kA (peak)	13	13
Maximum power dissipation		A ² s (x 10 ³)	76	76
Number of mechanical operations (according to the standards, for other values please consult)		Cycles	10000	10000
Maximum weight 3P		kg	Consult	
Maximum weight 3P+N		kg	Consult	



4P

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

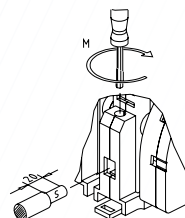
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



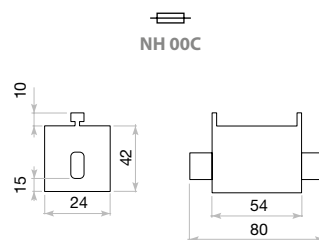
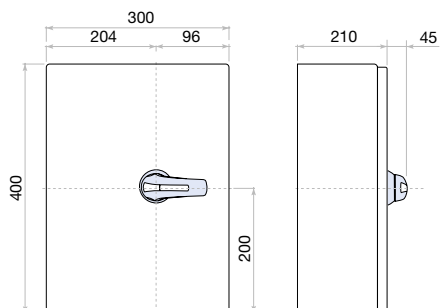
» **Safety key lock device**

Simple CODE DS-CAB1
Double CODE DS-CEB1

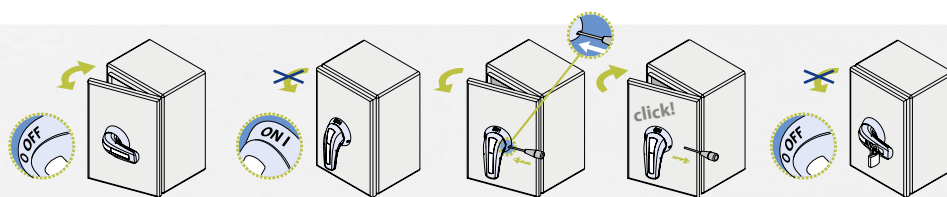
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON", the key can only be removed with the handle locked)



S max (Cu) mm ²	M Nxm
35	3

Dimensions (mm)

Fuse max dimensions



Standard supply

CIF21

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

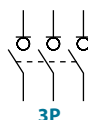
Size 0

A

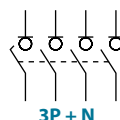
125 | 160



	CODE - 125A	CODE - 160A	CODE - 125A	CODE - 160A
3P	CIF21C01253PBDB	CIF21C01603PBDB	CIF21C01253PTDB	CIF21C01603PTDB
3P + N	CIF21C01253NBDB	CIF21C01603NBDB	CIF21C01253NTDB	CIF21C01603NTDB



3P



3P + N

Technical information



According to IEC 60947-3
IEC 61439-2

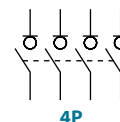
			125	160
Fuses	NH/DIN		00	00
Rated thermal current in enclosure 40°C	I _{the}	A	125	160
Rated insulation voltage	U _i	V	800	800
Rated impulse withstand voltage	U _{imp}	kV	8	8
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	9,5	11,8
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	I _e 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	



4P

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

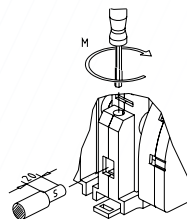
2 UNITS | 3 UNITS
DM1CU01 | DM1CU02
(1 kit for input or output)



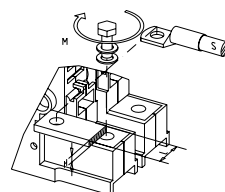
» Safety key lock device

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

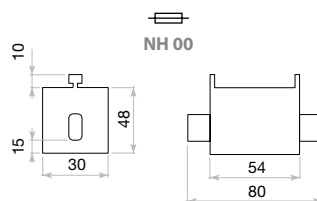
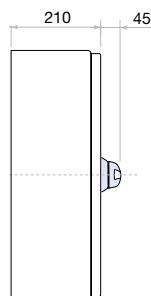
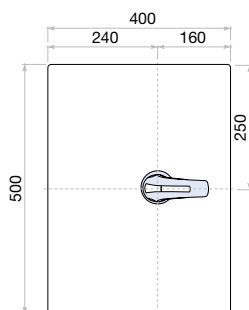


	S max (Cu) mm ²	M Nxmm
125 A	95	4
160 A		

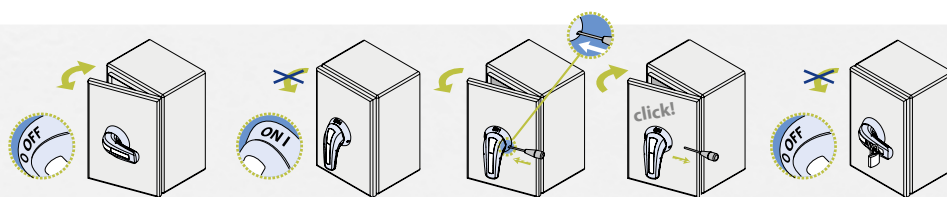


	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M Nxmm
125 A	95	3	25	M8
160 A				13

Dimensions (mm)



Fuse max dimensions



Standard supply

CIF22

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

Size 1

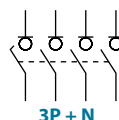
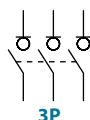
A

160



CODE - 160A

3P CIF22C01603PSD0
3P + N CIF22C01603NSD0



Technical information



According to IEC 60947-3
IEC 61439-2

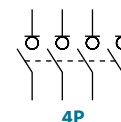
			160
Fuses	NH/DIN		0
Rated thermal current in enclosure 40°C	I _{the}	A	160
Rated insulation voltage	U _i	V	800
Rated impulse withstand voltage	U _{imp}	kV	8
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	13,5
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	Ue 400 V AC21A	A	160
	Ue 400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

^{*(1)} Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation

^{*(2)} Other voltages and / or utilization categories. Please consult

^{*(3)} With a protective device limiting the cut - off current and the joule integral to the indicated values

			160
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	1280
Rated making capacity	400 V; cos φ = 0,45	A	1600
Conditional short - circuit current			
Rated conditional short-circuit current ^{*(3)}	I _q	kA rms	100
Rated conditional short-circuit making ^{*(3)}		kA rms	100
Maximum cut - off current		kA (peak)	26,3
Maximum power dissipation		A ² s (x 10 ³)	478
Number of mechanical operations (according to the standards, for other values please consult)		Cycles	8000
Maximum weight 3P		kg	Consult
Maximum weight 3P+N		kg	Consult



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

Accessories



» **External handle** included
IP65



» **Emergency external handle** under request
IP65



» **Auxiliary contacts**

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

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



» **Terminal shrouds**

INPUT
3P
DM2CU11

OUTPUT
3P
DM2CU12

INPUT/OUTPUT
4P
DM2CU13

(1 kit for input or output)



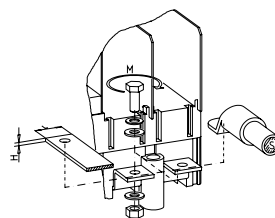
» **Safety key lock device**

Simple CODE DS-CA11

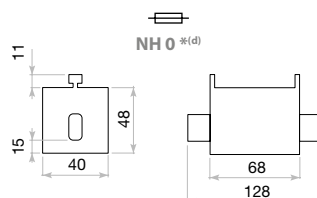
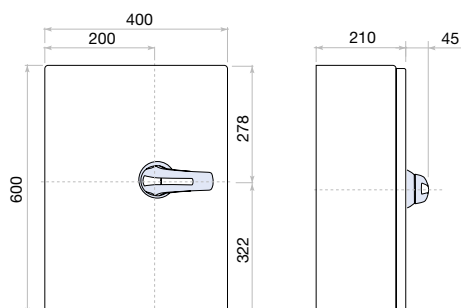
Double CODE DS-CEB1

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

Dimensions (mm)

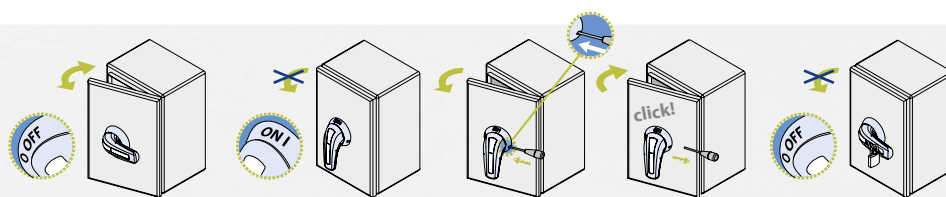


S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M	M
120	5	25	M8	13



Fuse max dimensions

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



Standard supply

CIF22

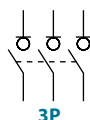
Metal enclosed switch fuses IP65 3P - 3P+N

Size 2

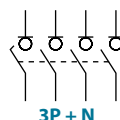
A 250 | 400



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



3P



3P + N

Technical information



According to IEC 60947-3
IEC 61439-2

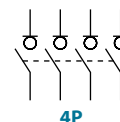
			250	400
Fuses	NH/DIN		1	2
Rated thermal current in enclosure 40°C	I _{the}	A	250	400
Rated insulation voltage	U _i	V	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	12	12
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	18,7	30
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	Ue 400 V AC21A	A	250	400
	Ue 400 V AC22A	A	250	400
	Ue 400 V AC23A	A	250	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

^{*(3)} With a protective device limiting the cut - off current and the joule integral to the indicated values

			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	



4P

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

Accessories



» **External handle** included
IP65



» **Emergency external handle** under request
IP65



» **Auxiliary contacts**

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

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



» **Terminal shrouds**

INPUT
3P
DM2CU21

OUTPUT
3P
DM2CU22

INPUT/OUTPUT
4P
DM2CU23

(1 kit for input or output)

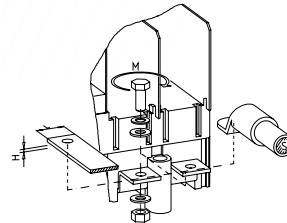


» **Safety key lock device**

Simple CODE DS-CB21

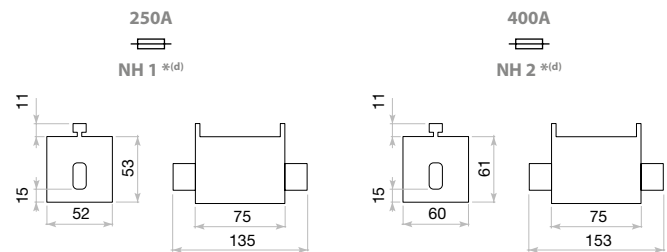
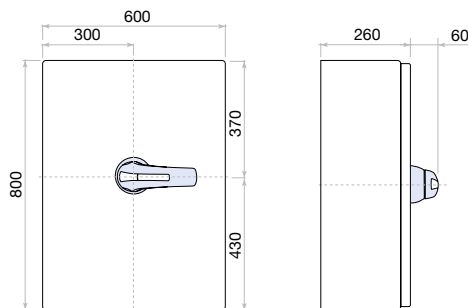
Double CODE DS-CF21

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



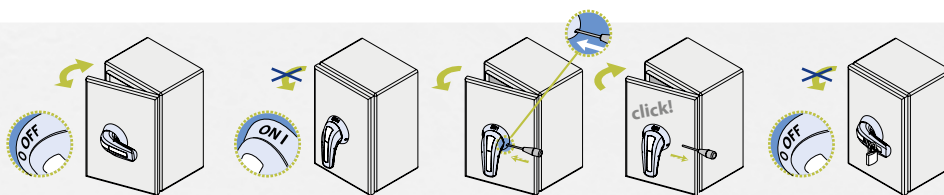
S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T mm	M Nxm
240	6	40	M10	24

Dimensions (mm)



Fuse max dimensions

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



Standard supply

CIF22

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

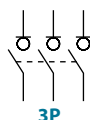
Size 3

A

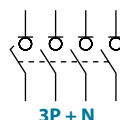
630 | 800



	CODE - 630A		CODE - 800A
3P	CIF22C06303PSD3		CIF22C08003PSD3
3P + N	CIF22C06303NSD3		CIF22C08003NSD3



3P



3P + N

Technical information



According to IEC 60947-3
IEC 61439-2

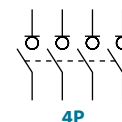
			630	800
Fuses	NH/DIN		3	3
Rated thermal current in enclosure 40°C	I _{the}	A	630	725
Rated insulation voltage	U _i	V	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	12	12
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	48	57
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	Ue 400 V AC21A	A	630	800
	Ue 400 V AC22A	A	630	800
	Ue 400 V AC23B	A	630	630

^{*(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

			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	



4P

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

Accessories



» **External handle** included
IP65



» **Emergency external handle** under request
IP65



» **Auxiliary contacts**

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

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



» **Terminal shrouds**

INPUT
3P
DM2CU31

OUTPUT
3P
DM2CU32

INPUT/OUTPUT
4P
DM2CU33

(1 kit for input or output)

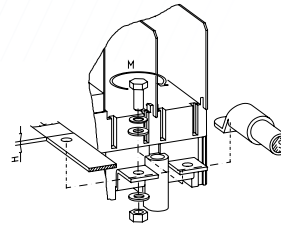


» **Safety key lock device**

Simple CODE DS-CB31

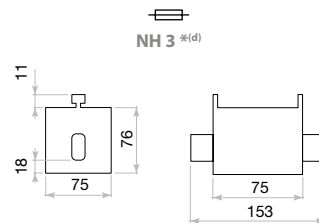
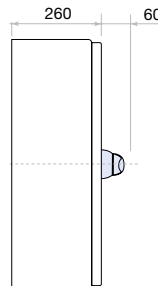
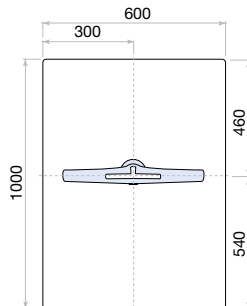
Double CODE DS-CF31

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



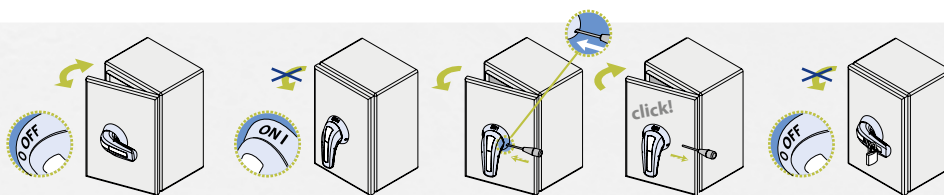
	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M	M
				Nxm	
630 A	2x185	2x7	50	M12	45
800 A	2x240	2x7	50	M8	13

Dimensions (mm)



Fuse max dimensions

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



Standard
supply

Changeover switches

Changeover switches with high operating load capacity and a high level disconnection insulation; high reliability and safety in abnormal situations, available in different construction models, with a wide range of currents, motorized units and various accessories.

series
CCF|CCP|S5F|S5B

series
CEC



The changeover switches in the series **CCF** | **CCP** | **S5F** | **S5B**, are manufactured with high safety self-extinguishing materials, providing an excellent level of electrical insulation, low smoke emission and high resistance to electromechanical stress.

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

They consist of a sandwich-type body containing self-cleaning blade type contacts,

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

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

Functional and ergonomic handle

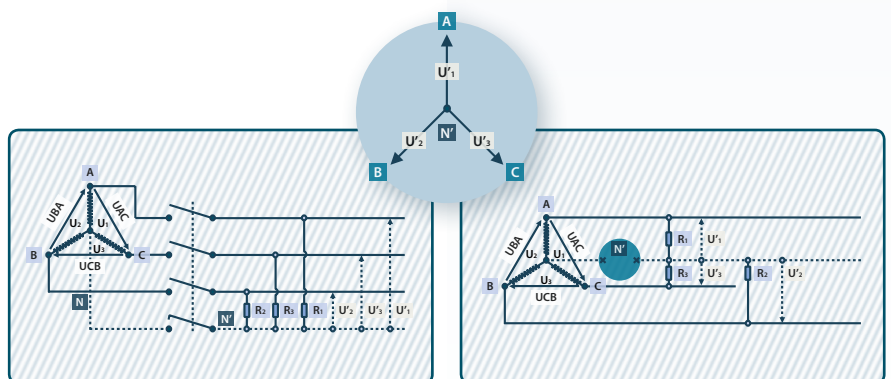
- > Good grip and excellent torque/resistance
- > Padlockable handle in **OFF** position (up to three locks Ø 5-8 mm)
- > Door interlock in **ON I - ON II** position
- > Self-centering shaft for door handle



Neutral pole early make & late break

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

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



Series

Connection type

Amperes

Poles

Connection options

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

Code

□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □

Range codification:

The **CCF** | **CCP** | **S5F** | **S5B** series, are identified by a code that describes their most important characteristics as described below.

According to:

IEC 60947-3

IEC 61439-2

RoHS



Testing and approvals:



series CCF



1 2 3 4 5
C C F

Compact model.
Visible cut-off.
Common output from the front.
Wide range of currents.
Base mounting by screws.
External or direct handle.

series CCP



1 2 3 4 5
C C P

Compact model.
Visible cut-off.
Common output from the rear.
Wide range of currents.
Base mounting by screws.
External or direct handle.

series S5F



1 2 3 4 5
S S F

Back to back or line arrangement.
Base mounting by screws.
External or direct handle.

series S5B



By-pass

1 2 3 4 5
S S B

Back to back arrangement.
Base mounting by screws.
External or direct handle.

series CEC



1 2 3 4 5
C E C

Compact efficient changeover switches.
Reduced size.
Common output from the up.
Flexible mounting.
Innovative single mechanism for COS function.
Lower energy losses.
External or direct handle.

series CTR2



1 2 3 4 5
C T R 2

Manual changeover switch in metallic enclosure.
External padlockable handle with locking door in ON I - ON II positions.

IP65

series CTRC



1 2 3 4 5
C T R C

Motorized changeover switch in metallic enclosure.
Outdoor lights position indicators (mains - 0 - generator).
Power connections on the bottom for direct access.
Power part protected against accidental contact.
Physical separation between power and control parts.
Including manual handle (for emergency operation or maintenance).
Other special combinations under request.

IP55

IP66

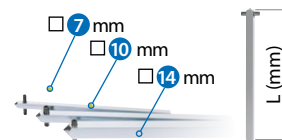
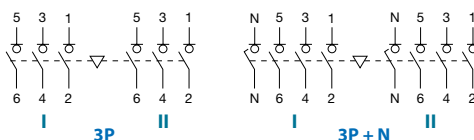
series CTRC



1 2 3 4 5
C T R C

Motorized changeover switch in metallic enclosure with automatic transfer switch for the generator control with automated switching Main - Gen management.
Configurable through software programming.
Power part protected against accidental contact.
Including manual handle (for emergency operation or maintenance).

IP66



CEC S5F S5L CCF CCP

Changeover switches 3 & 4 poles (40 - 3150A) (I-O-II) ^{*(2)}

Manual handle

Shaft extensions ^{*(4)}



CEC



S5F

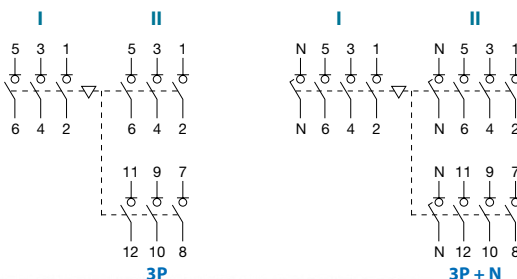


CCF



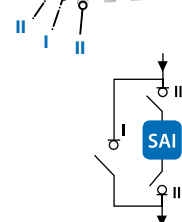
CCP

Amp.	Size	Connection	Series	3 pole (3P)	4 pole (3P + N) ^{*(1)}	External ^{*(3)}	Direct	Type 1 & 2	Type 1 & 2	
				Code	Code	Code	Code		L	Code ^{*(e1)}
63	00		CEC	CEC00633PB0	CEC00633NB0	DCELAB1	D5LSI01	7	250	DS-EP04
63			CEC	CEC00633PS0	CEC00633NS0					DS-EP05
80			CEC	CEC00803PB0	CEC00803NB0				387	DS-EP05
80			CEC	CEC00803PS0	CEC00803NS0					DS-EP05
100			CEC	CEC01003PS0	CEC01003NS0					DS-EP05
125	0		CEC	CEC01253PS0	CEC01253NS0	D5LLA01	D5LSI01	7	250	DS-EP04
125			S5F	S5F01253PS0	S5F01253NS0					DS-EP05
160			S5F	S5F01603PS0	S5F01603NS0				387	DS-EP05
200			S5F	S5F02003PS0	S5F02003NS0					DS-EP05
200			CCF	CCF02003PS0	CCF02003NS0					DS-EP05
200	1		CCP	CCP02003PS0	CCP02003NS0	DCCLA11	DCCLI11	10	375	DS-EP14
250			CCP	CCP02503PS0	CCP02503NS0					DS-EP15
250			CCP	CCP02503PS0	CCP02503NS0				536	DS-EP15
315			CCF	CCF03153PS0	CCF03153NS0					DS-EP15
315			CCP	CCP03153PS0	CCP03153NS0					DS-EP15
400	2		CCF	CCF04003PS0	CCF04003NS0	DCCLA21	DCCLI21	14	345	DS-EP23
400			CCP	CCP04003PS0	CCP04003NS0					DS-EP24
500			CCF	CCF05003PS0	CCF05003NS0				535	DS-EP24
500			CCP	CCP05003PS0	CCP05003NS0					DS-EP24
630			CCF	CCF06303PS0	CCF06303NS0				535	DS-EP24
630			CCP	CCP06303PS0	CCP06303NS0					DS-EP24
800	3		CCF	CCF08003PS0	CCF08003NS0	DCCLA31	DCCLI31	14	345	DS-EP23
800			CCP	CCP08003PS0	CCP08003NS0					DS-EP24
1000			CCF	CCF10003PS0	CCF10003NS0				535	DS-EP24
1000			CCP	CCP10003PS0	CCP10003NS0					DS-EP24
1250			CCF	CCF12503PS0	CCF12503NS0					DS-EP24
1250	4		CCP	CCP12503PS0	CCP12503NS0	D5LLA31	D5LLI32	-	-	-
1600			S5F	S5F16003PS0	S5F16003NS0					
1800			S5F	S5F18003PS0	S5F18003NS0					
2000			S5F	S5F20003PD0	S5F20003ND0					
2000			S5F	S5F20003PP0	S5F20003NP0					
2500	5		S5F	S5F25003PP0	S5F25003NP0	D5LEN51	DS-EI61	-	-	-
3150			S5F	S5F31503PP0	S5F31503NP0					



S5B Bypass changeover switches S5 3 & 4 poles (125 - 2000A) (I-O-II) ^{*(5)}

Manual handle



Amp.	Size	Connection	3 pole (3P)	4 pole (3P + N) ^{*(1)}	External ^{*(3)}	Direct
			Code	Code	Code	Code
125	0		S5B01253PS0	S5B01253NS0	D5LLA01	D5LSI02
160			S5B01603PS0	S5B01603NS0		
200			S5B02003PS0	S5B02003NS0		
250	1		S5B02503PR0	S5B02503NR0	D5LLA11	D5LLI12
315			S5B03153PR0	S5B03153NR0		
400			S5B04003PC0	S5B04003NC0		
500	2		S5B05003PR0	S5B05003NR0	D5LLA21	D5LLI22
630			S5B06303PR0	S5B06303NR0		
800			S5B08003PR0	S5B08003NR0		
1000	3		S5B10003PC0	S5B10003NC0	D5LLA31	D5LLI32
1250			S5B12503PS0	S5B12503NS0		
1600			S5B16003PS0	S5B16003NS0		
1800	4		S5B18003PS0	S5B18003NS0	D5LLA31	D5LLI32
2000			S5B20003PD0	S5B20003ND0		

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

^{*(2)} There are versions of changeover switch without 0 - OFF position:

S5F (I - II) = S5D _____, please consult.

CCF "overlapped" (I - I+II - II) = CCS _____, please consult.

^{*(3)} Padlockable handle only in OFF 0 position.

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

^{*(5)} There are versions of bypass changeover switch without 0 - OFF position "overlapped":

S5B "overlapped" (I - I + II - II) = S5S _____, please consult.



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



Auxiliary contacts ^{*(6)}			Safety ^{*(7)} key lock device		Rear protective plate	Bridging links	Terminal shrouds ^{*(8)}				Terminal shrouds ^{*(8)} (1 unit)			Phase barrier ^{*(8)}		 Full details in page
Size	1NO+1NC	2NO+2NC	Simple	Double	Code	Code (4 units)	3P input	3P common output	4P input position I & II	4P common output	Up	Down	Up or Down	Only changeover switches 		
	Code	Code	Code ^{*(e1)}	Code ^{*(e1)}			Code	Code	Code	Code	Code	Code	Code	Code	Code	
00	DCEAUB1	-	-	-	-	-	-	-	-	-	-	-	-	DCECUB1	DCECUB2	150
0	DS-AU11	DS-AU12	D5LCBB1	D5LCEB1	-	D5LPC03	-	-	-	-	DS-CU02	DS-CU03	DS-CU04	DS-PB01	DS-PB02	154
											DS-CU02	DS-CU03	DS-CU04	DS-PB01	DS-PB02	
											DS-CU05	DS-CU06	DS-CU07	DS-PB04	DS-PB03	
1	D5LAU01	D5LAU02	D5LCB11	D5LCF11	3P DCCPP11	-	position I DM2CU12 position II DM2CU11	DCCCU11	DM2CU13	DCCCU12	-	-	-	-	-	156
					4P DCCPP12											
2	D5LAU01	D5LAU02	D5LCB21	D5LCF21	3P DCCPP21	-	position I DM2CU22 position II DM2CU21	DCCCU21	DM2CU23	DCCCU22	-	-	-	-	-	
					4P DCCPP22											
3	D5LAU01	D5LAU02	D5LCB31	D5LCF31	3P DCCPP31	-	position I DM2CU32 position II DM2CU31	DCCCU31	DM2CU33	DCCCU32	-	-	-	-	-	160
					4P DCCPP32											
4	DS-AU11	DS-AU12	D5LCB41	D5LCF41	-	D5LPC42	-	-	DS-CU41	DS-CU41	-	-	-	-	-	
5	DS-AU11	DS-AU12	D5LCB41	D5LCF41	-	-	-	-	-	-	-	-	-	-	-	164



Auxiliary contacts ^{*(6)}			Safety key lock device ^{*(7)}		Terminal ^{*(8)} protection	Terminal shrouds ^{*(8)} (2 units)	Terminal shrouds ^{*(8)} (1 unit)			 Full details in page
Size	1NO+1NC	2NO+2NC	Simple	Double	Code	Only changeover switches 	Up	Down	Up or Down	
	Code	Code	Code ^{*(e1)}	Code ^{*(e1)}		Code	Code	Code	Code	
0	DS-AU11	DS-AU12	D5LCBB1	D5LCFB1	DS-CU01	-	DS-CU02	DS-CU03	DS-CU04	
							DS-CU05	DS-CU06	DS-CU07	
1	DS-AU11	DS-AU12	D5LCB11	D5LCF11	DS-CU12	DS-CU11	-	-	-	168
2	DS-AU11	DS-AU12	D5LCB21	D5LCF21	-	DS-CU21	-	-	-	170
3	DS-AU11	DS-AU12	D5LCB31	D5LCF31	-	DS-CU31	-	-	-	172
4	DS-AU11	DS-AU12	D5LCB41	D5LCF41	-	DS-CU41	-	-	-	174

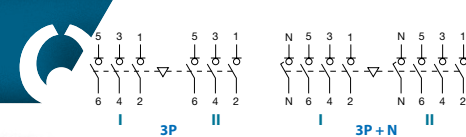
^{*(6)} To be used as signalling or control contacts - I_e = 16A (resistive loads) 4A (inductive loads) at 250 Vac.

Whilst closing, it switches after the main contacts. Whilst opening, it switches before the main contacts.

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

^{*(8)} One set or one unit for input or output. Terminals shrouds for **S5B** and **S5F** only for frontal switch. These accessories aren't compatible with each other.

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

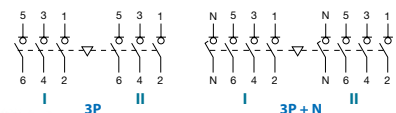


CTR2

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



Amp.	Size	Connection	3 pole (3P)	4 pole (3P + N) ^{*(1)}
			Code	Code
63	00		CTR2EC00633PS	CTR2EC00633NS
80			CTR2EC00803PS	CTR2EC00803NS
100			CTR2EC01003PS	CTR2EC01003NS
125			CTR2EC01253PS	CTR2EC01253NS
125	0		CTR2FC01253PS	CTR2FC01253NS
160			CTR2FC01603PS	CTR2FC01603NS
200			CTR2FC02003PS	CTR2FC02003NS
200			CTR2CC02003PS	CTR2CC02003NS
250	1		CTR2CC02503PS	CTR2CC02503NS
315			CTR2CC03153PS	CTR2CC03153NS
400			CTR2CC04003PS	CTR2CC04003NS
500			CTR2CC05003PS	CTR2CC05003NS
630	2		CTR2CC06303PS	CTR2CC06303NS
800			CTR2CC08003PS	CTR2CC08003NS
1000			CTR2CC10003PS	CTR2CC10003NS
1250	3		CTR2CC12503PS	CTR2CC12503NS
1600	4		CTR2FC16003PS	CTR2FC16003NS
1800			CTR2FC18003PS	CTR2FC18003NS
2000			CTR2FC20003PD	CTR2FC20003ND
2000			CTR2FC20003PP ^{*(3)}	CTR2FC20003NP ^{*(3)}
2500	5		CTR2FC25003PP ^{*(3)}	CTR2FC25003NP ^{*(3)}
3150			CTR2FC31503PP ^{*(3)}	CTR2FC31503NP ^{*(3)}

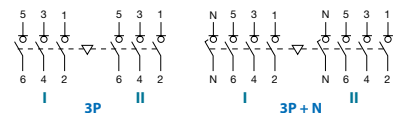


CTRC

Metal enclosed motorized changeover switches IP66 3 & 4 poles (125 - 3150A) (I - O - II)^{*(2)}



Amp.	Size	Connection	3 pole (3P)	4 pole (3P + N) ^{*(1)}
			Code	Code
125	0		CTRCFC01253PSAN	CTRCFC01253NSAN
160			CTRCFC01603PSAN	CTRCFC01603NSAN
200			CTRCFC02003PSAN	CTRCFC02003NSAN
200	1		CTRCCC02003PSAN	CTRCCC02003NSAN
250			CTRCCC02503PSAN	CTRCCC02503NSAN
315			CTRCCC03153PSAO	CTRCCC03153NSAO
400			CTRCCC04003PSAO	CTRCCC04003NSAO
500	2		CTRCCC05003PSAO	CTRCCC05003NSAO
630			CTRCCC06303PSAO	CTRCCC06303NSAO
800			CTRCCC08003PSAO	CTRCCC08003NSAO
1000	3		CTRCCC10003PSAP	CTRCCC10003NSAP
1250			CTRCCC12503PSAP	CTRCCC12503NSAP
1600	4		CTRCFC16003PSAP	CTRCFC16003NSAP
1800			CTRCFC18003PSAP	CTRCFC18003NSAP
2000			CTRCFC20003PDAP	CTRCFC20003NDAP
2000	5		CTRCFC20003PPAP ^{*(3)}	CTRCFC20003NPAP ^{*(3)}
2500			CTRCFC25003PPAP ^{*(3)}	CTRCFC25003NPAP ^{*(3)}
3150			CTRCFC31503PPAP ^{*(3)}	CTRCFC31503NPAP ^{*(3)}



CTRC+ CONTROL MODULE

Metal enclosed changeover switches with motorized unit & control module IP54 4 poles (125 - 2000A) (I - O - II)



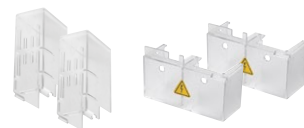
Amp.	Size	Connection	4 pole (3P + N) ^{*(1)}
			Code
125	0		CTRCFC01253NSBJ
200			CTRCFC02003NSBJ
250	1		CTRCCC02503NSBJ
400			CTRCCC04003NSBK
630	2		CTRCCC06303NSBK
1000	3		CTRCCC10003NSBK
1250			CTRCCC12503NSBK
1600	4		CTRCFC16003NSBK
2000			CTRCFC20003NDBK

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

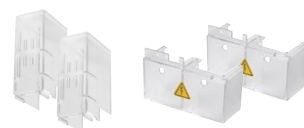
^{*(2)} External padlockable handle in OFF 0 position.

^{*(3)} IP55.

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



Auxiliary contacts ^{*(5)}			Safety ^{*(6)} key lock device		Bridging links	Phase barrier ^{*(7)}		Terminal shrouds ^{*(7)} (1 unit)			Terminal shrouds ^{*(7)}				 Full details in page
Size	1NO+1NC	2NO+2NC	Simple	Double	Code (4 units)	3P	4P	Up	Down	Up or Down	Inputs		Common outputs		
	Code S5F	Code S5F	Code ^{*(e1)}	Code ^{*(e1)}		Code	Code	Code	Code	Code	3P	4P	3P	4P	
00	DCEAUB1	-	-	-	-	DCECUB1	DCECUB2	-	-	-	-	-	-	-	176
0	DS-AU11	DS-AU12	D5LCBB1	D5LCEB1	D5LPC03	 DS-PB01  DS-PB04	 DS-PB02  DS-PB03	 DS-CU02  DS-CU05	 DS-CU03  DS-CU06	 DS-CU04  DS-CU07	-	-	-	-	180
1	D5LAU01	D5LAU02	D5LCBB1	D5LCEB1	-	-	-	-	-	-	Position I DM2CU12 Position II DM2CU11	Position I&II DM2CU13	DCCCU11	DCCCU12	182
2	D5LAU01	D5LAU02	D5LCB21	D5LCF21	-	-	-	-	-	-	Position I DM2CU22 Position II DM2CU21	Position I&II DM2CU23	DCCCU21	DCCCU22	184
3	D5LAU01	D5LAU02	D5LCB31	D5LCF31	-	-	-	-	-	-	Position I DM2CU32 Position II DM2CU31	Position I&II DM2CU33	DCCCU31	DCCCU32	186
4	DS-AU11	DS-AU12	D5LCB41	D5LCF41	D5LPC42	-	-	-	-	-	-	-	-	-	188
5	DS-AU11	DS-AU12	D5LCB41	D5LCF41	-	-	-	-	-	-	-	-	-	-	190



Auxiliary contacts ^{*(5)}			Safety ^{*(6)} key lock device		Bridging links	Phase barrier ^{*(7)}		Terminal shrouds ^{*(7)} (1 unit)			Terminal shrouds ^{*(7)}				 Full details in page
Size	1NO+1NC	2NO+2NC	Simple	Double	Code (4 units)	3P	4P	Up	Down	Up or Down	Inputs		Common outputs		
	Code S5F	Code S5F	Code ^{*(e1)}	Code ^{*(e1)}		Code	Code	Code	Code	Code	3P	4P	3P	4P	
0	 DS-AU11	 DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-	
	D5LAU01	D5LAU02													
1	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	
2	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	
3	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	
4	DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-	
5	DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-	



Auxiliary contacts ^{*(5)}			Safety ^{*(6)} key lock device		Bridging links	Phase barrier ^{*(7)}		Terminal shrouds ^{*(7)} (1 unit)			Terminal shrouds ^{*(7)}				 Full details in page
Size	1NO+1NC	2NO+2NC	Simple	Double	Code (4 units)	3P	4P	Up	Down	Up or Down	Inputs		Common outputs		
	Code S5F	Code S5F	Code ^{*(e1)}	Code ^{*(e1)}		Code	Code	Code	Code	Code	3P	4P	3P	4P	
											Code	Code	Code	Code	
0	 DS-AU11 D5LAU01	 DS-AU12 D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	180
1	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	182
2	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	184
3	D5LAU01	D5LAU02	-	-	-	-	-	-	-	-	-	-	-	-	186
4	DS-AU11	DS-AU12	-	-	-	-	-	-	-	-	-	-	-	-	188

^{*(5)} To be used as signalling or control contacts - I_e = 16A (resistive loads) 4A (inductive loads) at 250 Vac.

Whilst closing, it switches after the main contacts. Whilst opening, it switches before the main contacts.

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

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

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

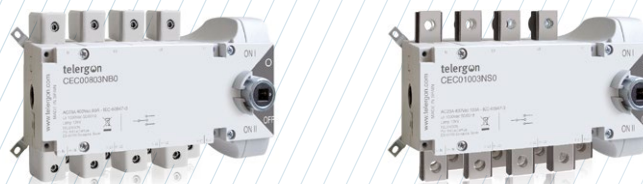
CEC

Changeover switch compact base mounting

3P - 3P+N

Size 00

A 63|80|100|125



CEC

With terminal connection for cable only

3P

3P + N

CODE - 63A

CEC00633PB0

CEC00633NB0

CODE - 80A

CEC00803PB0

CEC00803NB0

CODE - 63A

CEC00633PS0

CEC00633NS0

CODE - 80A

CEC00803PS0

CEC00803NS0

CODE - 100A

CEC01003PS0

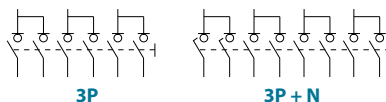
CEC01003NS0

CODE - 125A

CEC01253PS0

CEC01253NS0

CEC

3P
3P + N

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 operational frequency 50/60Hz)							
Rated breaking capacity	63A-100A cos φ=0,45	400 V	A	504	640	800	1000
Rated making capacity	125A cos φ=0,35		A	630	800	1000	1250

^{*(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 (peak)	1,5	1,5	2,9	2,9
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



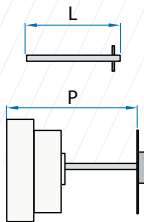
» Direct handle

CODE D5LSI01

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

IP65

CODE DCELAB1



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
137	15... 105

Shaft extensions

Type 1

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

Type 2

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

» Auxiliary contacts ^{AU}

1NO+1NC CODE DCEAUB1
I_e = 0,1 A (resistive) at 125 Vac.



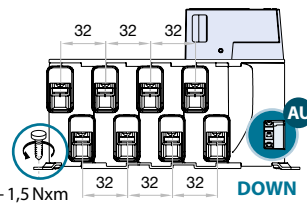
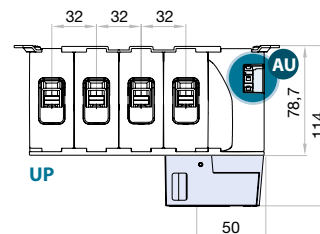
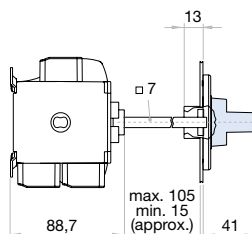
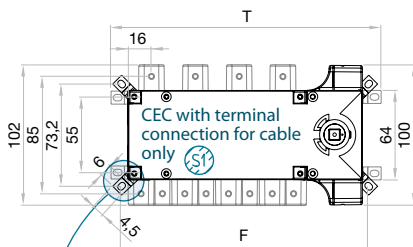
» Phase barrier

3P CODE DCECUB1
4P CODE DCECUB2

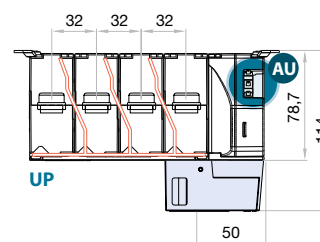
(1 kit for input or output)

Dimensions (mm)

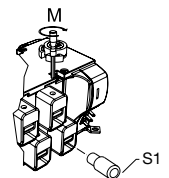
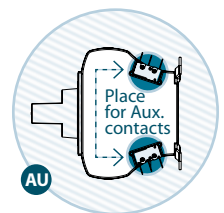
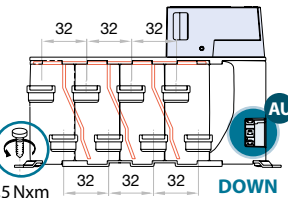
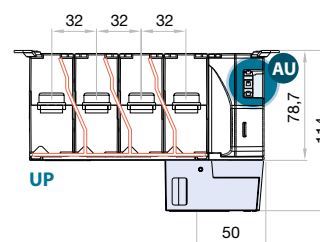
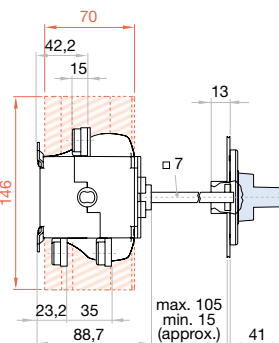
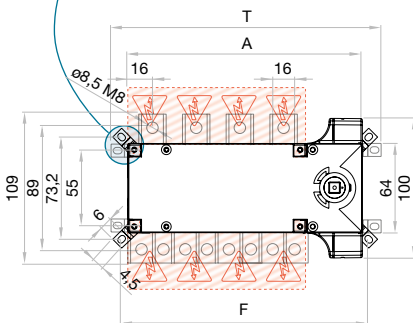
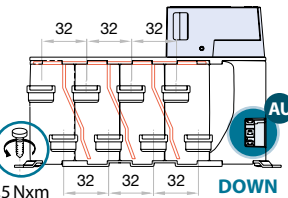
Door drilling for external handle



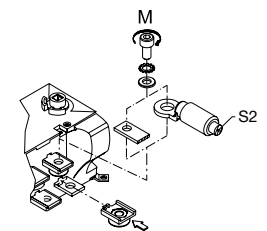
M4 - 1,5 Nxm



M4 - 1,5 Nxm



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



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

^{*(5)} Use phase barriers in order to keep the clearance in air distances.

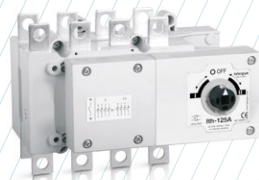
	A		F		T	
	45°	90°	45°	90°	45°	90°
mm	mm	mm	mm	mm	mm	mm
3P	136	151,8	152,7	158	161,7	
4P	168	177,2	184,7	190	193,7	

S5F

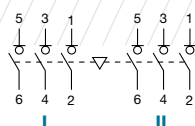
Changeover switch base mounting 3P - 3P+N

Size 0

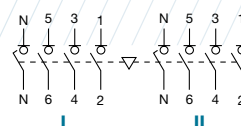
A 125|160|200



	CODE-125A	CODE-160A	CODE-200A
3P	S5F01253PS0	S5F01603PS0	S5F02003PS0
3P + N	S5F01253NS0	S5F01603NS0	S5F02003NS0



3P



3P + N

Technical information

According to IEC 60947-3



consult



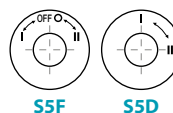
tests:



				125	160	200
Rated thermal current	I _{th} in ambient at 40° C	A		125	160	200
Rated insulation voltage	U _i	V		1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV		8	8	8
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	U _e 400V AC21A	A		125	160	200
	U _e 400V AC22A	A		125	160	200
	U _e 400V AC23A	A		125	160	160

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

				125	160	200
Rated breaking capacity	400V AC22	A		375	480	600
Rated making capacity	400V AC22	A		375	480	600
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		13	13	13
Short - time withstand current (1 sec.)	I _{cw}	kA rms		7	7	7
Number of mechanical operations (according to the standards, for other values please consult)				Cycles	8000	8000
Maximum weight (3/4 poles)				Kg	1,8/2,1	1,8/2,1

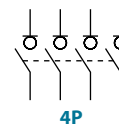


S5F

S5D

There are versions of changeover switches without OFF 0 position:

S5F (I - II) = S5D _____, please consult



4P

Also available 4P changeover switches under request, please consult



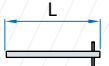
Accessories**» Direct handle**

CODE D5LSI01

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

IP65

CODE D5LLA01

**» Shafts****Standard shaft** included ^{*(e1)}

L (mm)	P (mm)
177	163... 250,5

Shaft extensions

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

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

**» Auxiliary contacts**

1NO+1NC CODE SSF DS-AU11

2NO+2NC CODE SSF DS-AU12

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.

**» Terminal shrouds^{*(T)}**

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

(Only frontal side)

**» Phase barrier^{*(T)}**

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

(1 kit for input or output)

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

CODE D5LPC03 (4 units)

**» Safety key lock devices**

Simple CODE D5LCBB1

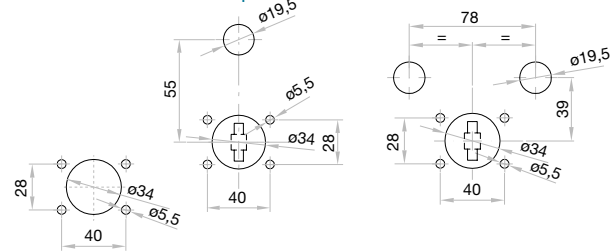
Double CODE D5LCEB1

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

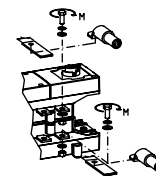
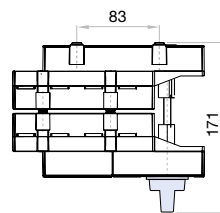
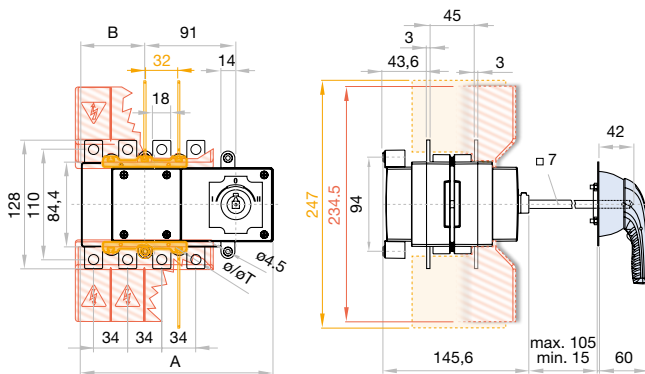
Door drilling for handle and key lock device

Simple

Double

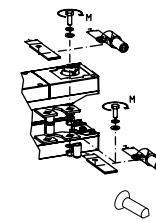
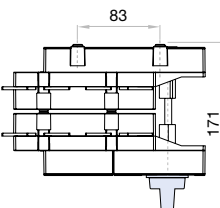
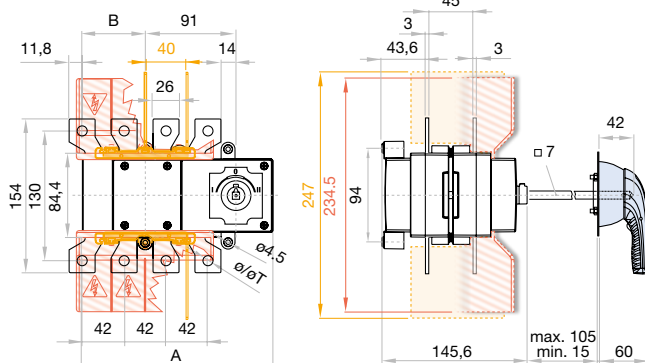
**Dimensions (mm)**

Door drilling for external handle



	A		B		ø	øT
	3P	4P	3P	4P		
125 A	181	192	53	64	10	M8
160 A						

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



	A		B		ø	øT
	3P	4P	3P	4P		
200 A	181	192	53	64	10	M10

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

CCF | CCP

Changeover switch

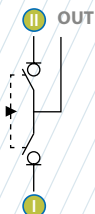
base mounting 3P - 3P+N

Size 1

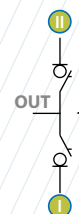
A 200|250|315|400



CCF



CCP



CODE-200A

CODE-250A

CODE-315A

CODE-400A

CCF

3P

CCF02003PS0

CCF02503PS0

CCF03153PS0

CCF04003PS0

3P + N

CCF02003NS0

CCF02503NS0

CCF03153NS0

CCF04003NS0

CCP

3P

CCP02003PS0

CCP02503PS0

CCP03153PS0

CCP04003PS0

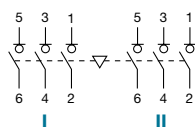
3P + N

CCP02003NS0

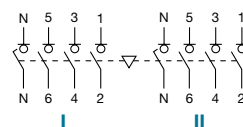
CCP02503NS0

CCP03153NS0

CCP04003NS0



3P



3P + N

Technical information



consult

According to IEC 60947-3

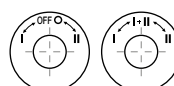
			200	250	315	400
Rated thermal current	I _{th} in ambient at 40° C	A	200	250	315	400
Rated insulation voltage	U _i	V	1000	1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	8
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A	200	250	315	400
(Rated operational frequency 50/60 Hz)	U _e 400V AC22A	A	200	250	315	400 ^{*(3)}

^{*(1)} Other voltages and / or utilization categories; please consult

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

^{*(3)} AC22B

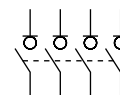
			200	250	315	400
Rated breaking capacity	400V AC22	A	600	750	945	1200
Rated making capacity	400V AC22	A	600	750	945	1200
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	12	12	12	12
Short - time withstand current (1 sec.)	I _{cw}	kA rms	8	8	8	8
Number of mechanical operations (according to the standards, for other values please consult) ^{*(3)}	Cycles		8000	8000	8000	5000
Maximum weight (3/4 poles)	CCF	Kg	4,8/5,3	4,8/5,3	5/5,5	5/5,5
	CCP	Kg	5,3/5,9	5,3/5,9	5,5/6	5,5/6



CCF



CCS



4P

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

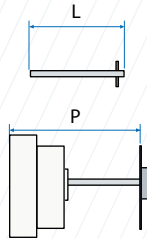
CODE DCCLI11



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

IP65

CODE DCCLA11



» Shafts

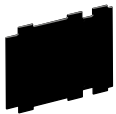
Standard shaft included^{*(e1)}

L (mm)	P (mm)
227	166... 293

Shaft extensions

Type 1		CODE
L (mm)	P (mm)	DS-EP14
375	166... 442	

Type 2		CODE
L (mm)	P (mm)	DS-EP15
536	166... 602	



» Rear protective plate

3P	4P
DCCPP11	DCCPP12



» Terminal shrouds

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

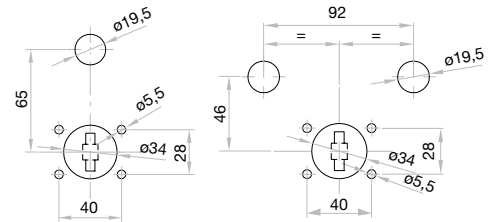
Double CODE D5LCF11

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

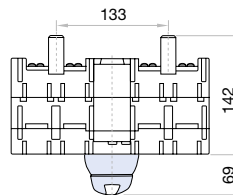
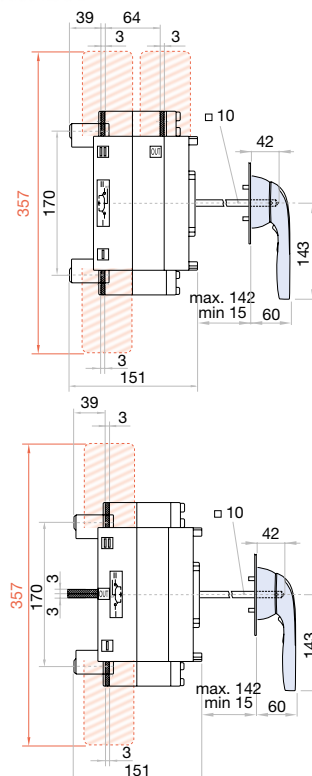
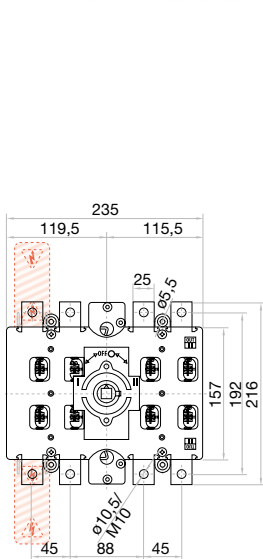
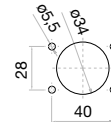
Simple

Double

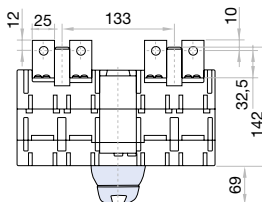


Dimensions (mm)

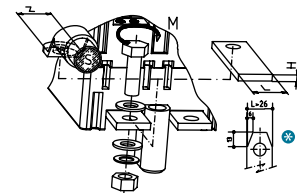
Door drilling for external handle



CCF



CCP



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

CCF | CCP

Changeover switch

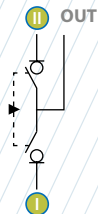
base mounting 3P - 3P+N

Size 2

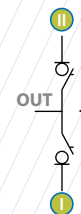
A 500|630|800



CCF



CCP



CODE-500A

CODE-630A

CODE-800A

CCF

3P

CCF05003PS0

CCF06303PS0

CCF08003PS0

3P + N

CCF05003NS0

CCF06303NS0

CCF08003NS0

CCP

3P

CCP05003PS0

CCP06303PS0

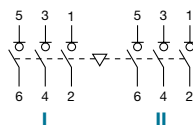
CCP08003PS0

3P + N

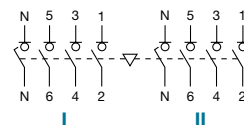
CCP05003NS0

CCP06303NS0

CCP08003NS0



3P



3P + N

Technical information



consult

According to IEC 60947-3

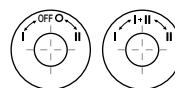
				500	630	800
Rated thermal current	I _{th}	in ambient at 40° C	A	500	630	800
Rated insulation voltage	U _i		V	1000	1000	1000
Rated impulse withstand voltage	U _{imp}		kV	12	12	12
AC Rated operational current ^{*(1)}	I _e	U _e 400V AC21A	A	500	630	800
(Rated operational frequency 50/60 Hz)		U _e 400V AC22B	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

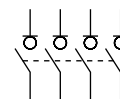
				500	630	800
Rated breaking capacity	400V	AC22	A	1500	1890	2400
Rated making capacity	400V	AC22	A	1500	1890	2400
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		20	20	20
Short - time withstand current (1 sec.)	I _{cw}	kA rms		13	13	13
Number of mechanical operations (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	11,5/12,6
	CCP	Kg		12,8/14,3	12,8/14,3	13/14,6



CCF



CCS



4P

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

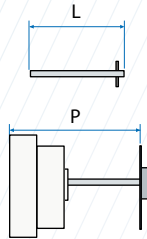
CODE DCCLI21



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

IP65

CODE DCCLA21



» Shafts

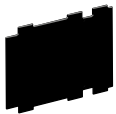
Standard shaft included ^{*(e1)}

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 DCCPP21 4P DCCPP22



» Terminal shrouds

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



» Auxiliary contacts

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

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



» Safety key lock device

Simple CODE D5LCB21

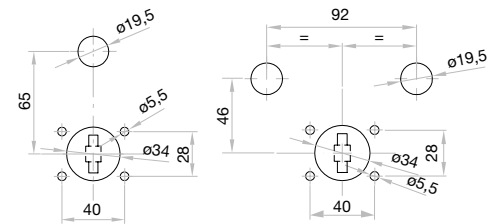
Double CODE D5LCF21

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

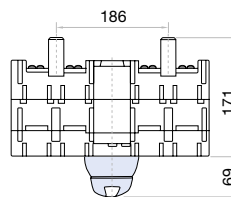
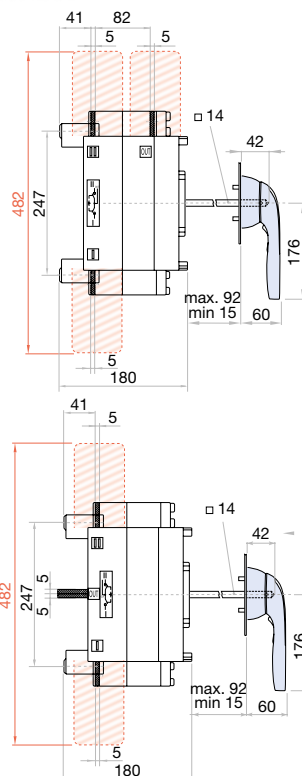
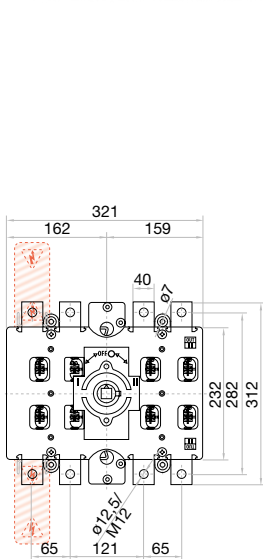
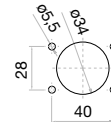
Simple

Double

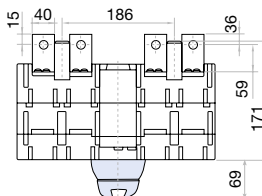


Dimensions (mm)

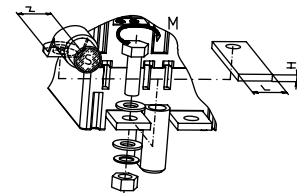
Door drilling for external handle



CCF



CCP



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

CCF | CCP

Changeover switch

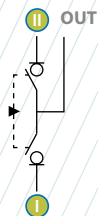
base mounting 3P - 3P+N

Size 3

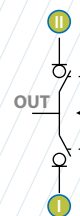
A 1000|1250



CCF



CCP



CODE - 1000A

CODE - 1200A

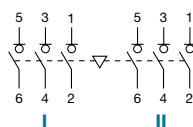
CCF 3P
3P + N

CCF10003PS0
CCF10003NS0

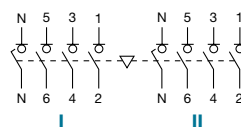
CCF12503PS0
CCF12503NS0

CCP 3P
3P + N

CCP10003PS0
CCP10003NS0

CCP12503PS0
CCP12503NS0


3P



3P + N

Technical information



consult

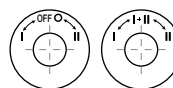
According to IEC 60947-3

				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.)

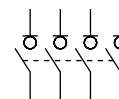
				1000	1250
Rated breaking capacity	400V	AC22	A	3000	3750
Rated making capacity	400V	AC22	A	3000	3750
Short - circuit behaviour					
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		32	32
Short - time withstand current (1 sec.)	I _{cw}	kA rms		25	25
Number of mechanical operations (according 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



CCF



CCS



4P

There are versions of changeover switches without OFF 0 position: "overlapped contacts":

CCF (I - I+II - II) = CCS _____, please consult

Also available 4P changeover switches under request, please consult



Accessories



» Direct handle

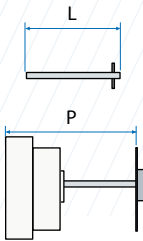
CODE DCCLI31



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

IP65

CODE DCCLA31



» Shafts

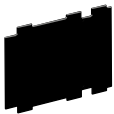
Standard shaft included ^{*(e1)}

L (mm)	P (mm)
186	223... 298

Shaft extensions

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

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



» Rear protective plate

3P	4P
DCCPP31	DCCPP32



» Terminal shrouds

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

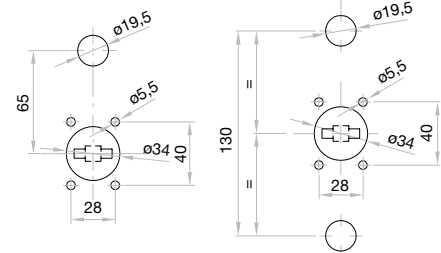
Simple	CODE D5LCB31
Double	CODE D5LCF31

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

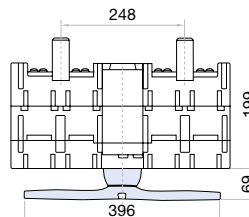
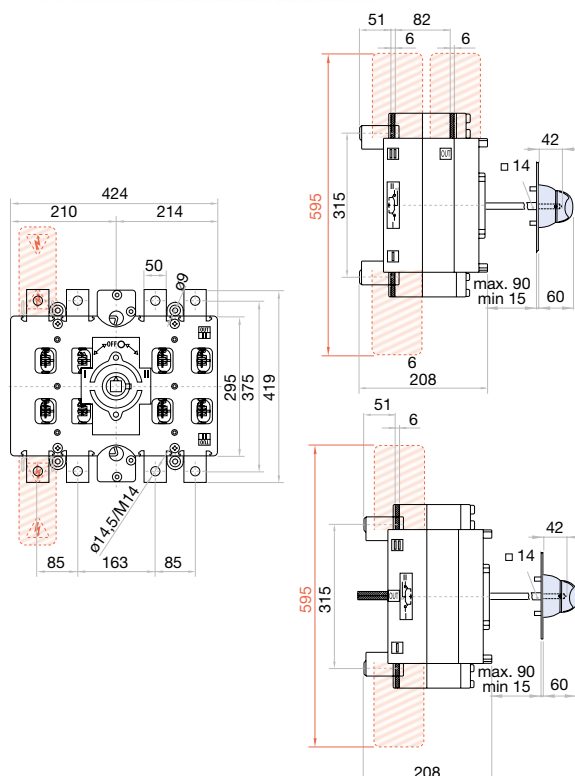
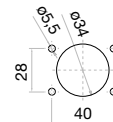
Simple

Double

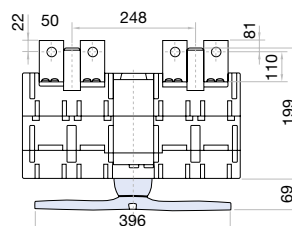


Dimensions (mm)

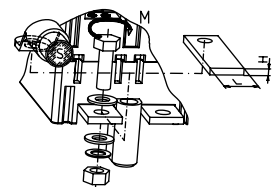
Door drilling for external handle



CCF



CCP



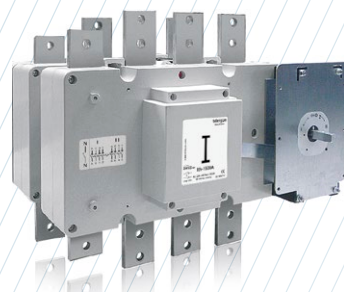
H max (Cu)	L max (Cu)	M
2x10	60	M14
		Nxm
		55

S5F

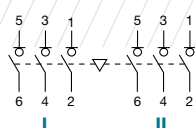
Changeover switch base mounting 3P - 3P+N

Size 4

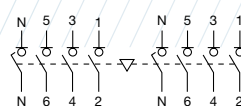
A 1600|1800|2000



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



3P



3P + N

Technical information



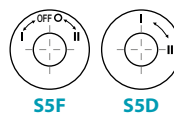
consult

According to IEC 60947-3

				1600	1800	2000
Rated thermal current	I _{th}	in ambient at 40° C	A	1600	1800	2000
Rated insulation voltage	U _i		V	1000	1000	1000
Rated impulse withstand voltage	U _{imp}		kV	12	12	12
AC Rated operational current ^{*(1)}	I _e	U _e 400V AC21A	A	1600	1800	2000
(Rated operational frequency 50/60 Hz)		U _e 400V AC22A	A	1600	1800	2000

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

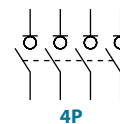
				1600	1800	2000
Rated breaking capacity	400V	AC22	A	4800	5400	6000
Rated making capacity	400V	AC22	A	4800	5400	6000
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		75	75	75
Short - time withstand current (1 sec.)	I _{cw}	kA rms		50	50	50
Number of mechanical operations (according to the standards, for other values please consult)		Cycles		3000	3000	3000
Maximum weight (3/4 poles) (without bridging links)		Kg		42,9/47,3	42,9/47,3	42,9/47,3



S5F

S5D

There are versions of changeover switches without OFF 0 position:
S5F (I + II) = S5D _____, please consult



4P

Also available 4P changeover switches under request, please consult



Accessories



» Direct handle

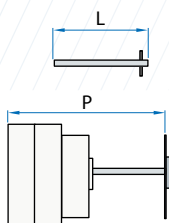
CODE D5LLI32



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

IP65

CODE D5LLA31



» Shafts

Standard shaft included ^{*(e1)}

L (mm) P (mm)
239 418... 573

» Shaft extensions

Consult



» Terminal shrouds

CODE DS-CU41

(1 kit for input or output, only front side)



» Bridging links ^{*(P2)}

CODE D5LPC42 (4 units)



» Auxiliary contacts

1NO+1NC CODE DS-AU11

2NO+2NC CODE DS-AU12

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.



» Safety key lock device

Simple CODE D5LCB41

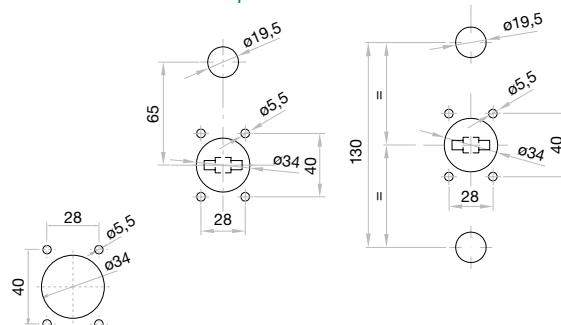
Double CODE D5LCF41

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

Door drilling for handle and key lock device

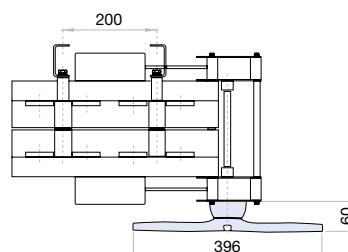
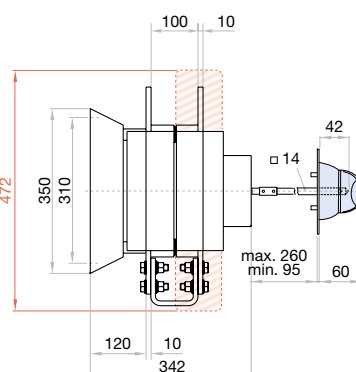
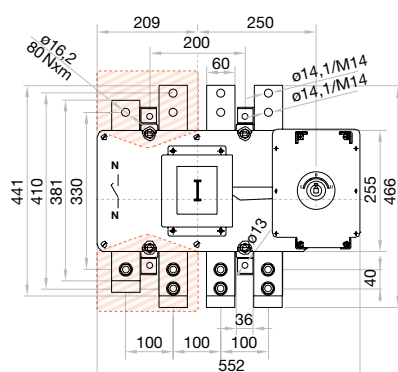
Simple

Double



Dimensions (mm)

Door drilling for external handle



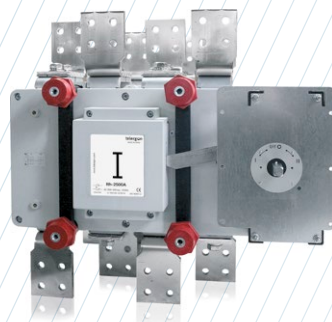
	H max (Cu) mm	L max (Cu) mm	M	M
			Nxm	
1600 A				
1800 A	2x10	80	M14	55
2000 A				

S5F

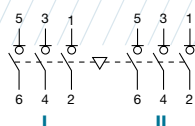
Changeover switch base mounting 3P - 3P+N

Size 5

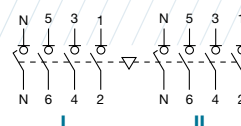
A 2000|2500|3150



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



3P



3P + N

Technical information



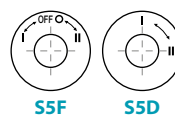
According to IEC 60947-3

				2000	2500	3150
Rated thermal current	I _{th} in ambient at 40° C	A		2000	2500	3150
Rated insulation voltage	U _i	V		1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV		8	8	8
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A		2000	2500	3150
(Rated operational frequency 50/60 Hz)	U _e 400V AC22B	A		2000	2500	2500

^{*(1)} Other voltages and / or utilization categories; please consult

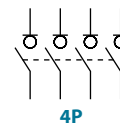
^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)

				2000	2500	3150
Rated breaking capacity	400V AC22	A		6000	7500	9450
Rated making capacity	400V AC22	A		6000	7500	9450
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		100	100	100
Short - time withstand current (1 sec.)	I _{cw}	kA rms		50	50	50
Number of mechanical operations (according to the standards, for other values please consult)		Cycles		600	600	600
Maximum weight (3/4 poles)		Kg		Consult		



S5F

S5D



4P

There are versions of changeover switches without OFF 0 position:

S5F (I + II) = S5D _____, please consult

Also available 4P changeover switches under request, please consult



Accessories



» Direct handle

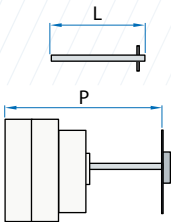
(Slide bar)

CODE DS-EI61

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

(Slide bar)

CODE D5LEN51



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
333	788... 938

Shaft extensions

Consult



» Auxiliary contacts

1NO+1NC CODE DS-AU11

2NO+2NC CODE DS-AU12

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.



» Safety key lock device

Simple CODE D5LCB41

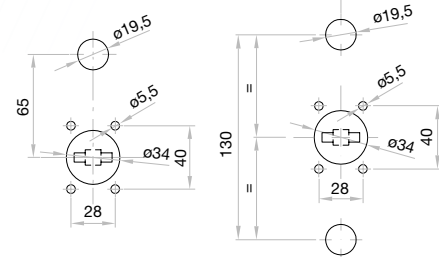
Double CODE D5LCF41

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

Door drilling for handle and key lock device

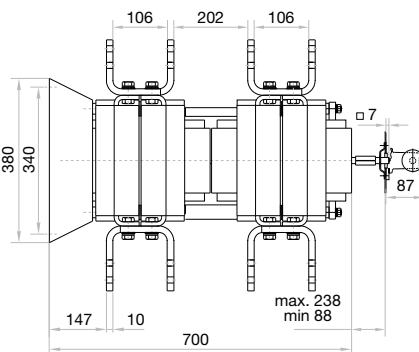
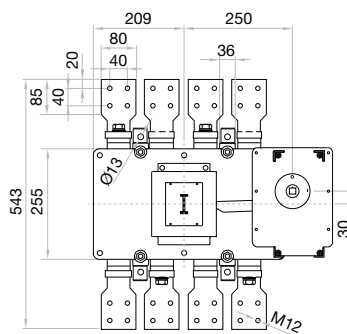
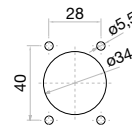
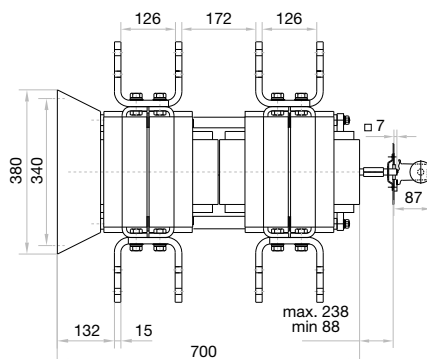
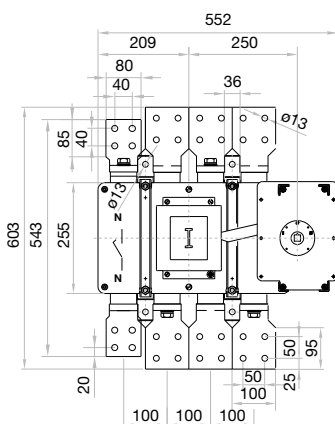
Simple

Double

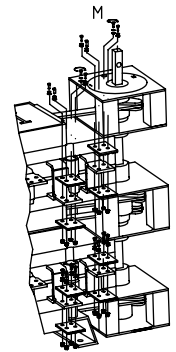


Dimensions (mm)

Door drilling for external handle

2000 A
2500 A

3150 A



H max (Cu) mm	L max (Cu) mm	M	M
		Nxm	

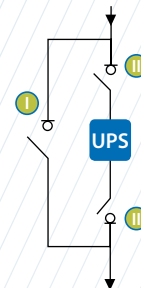
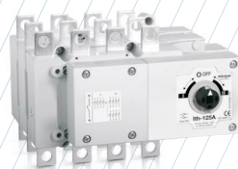
2000 A	4x10	80	M12	45
2500 A				
3150 A		100		

S5B

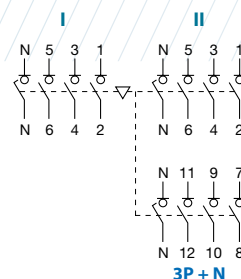
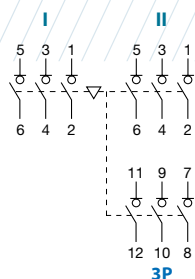
Bypass changeover switch base mounting 3P - 3P+N

Size 0

A 125|160|200



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



Technical information



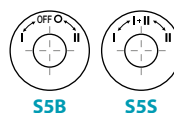
According to IEC 60947-3

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

^{*(1)} Other voltages and/or utilization categories; please consult

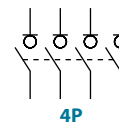
^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)

				125	160	200
Rated breaking capacity	400V AC22	A		375	480	600
Rated making capacity	400V AC22	A		375	480	600
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		13	13	13
Short - time withstand current (1 sec.)	I _{cw}	kA rms		7	7	7
Number of mechanical operations (according to the standards, for other values please consult)		Cycles		8000	8000	8000
Maximum weight (3/4 poles)		Kg		2,4/2,8	2,4/2,8	2,5/2,9



SSB

SSS



4P

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

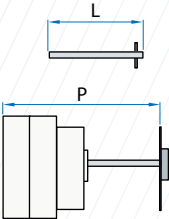
CODE D5LSI02



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

(Only frontal side)



Safety key lock device

Simple CODE D5LCBB1

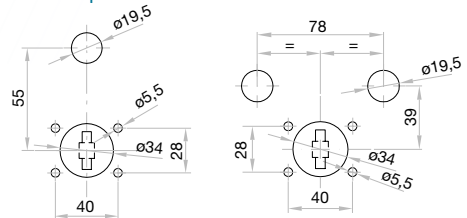
Double CODE D5LCFB1

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

Door drilling for handle and key lock device

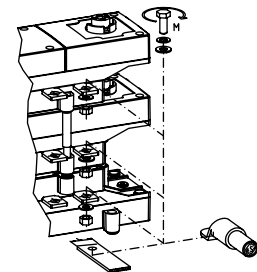
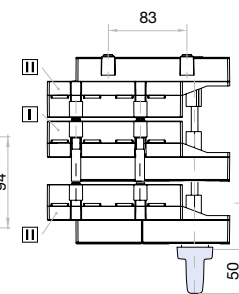
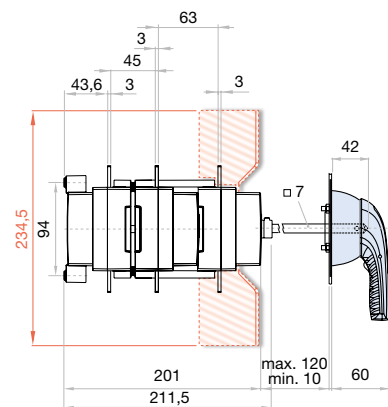
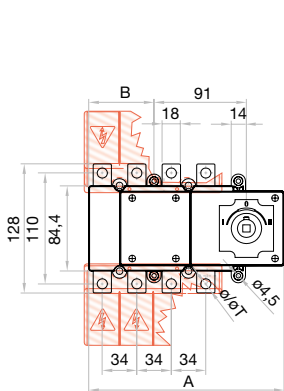
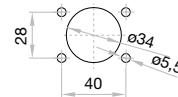
Simple

Double

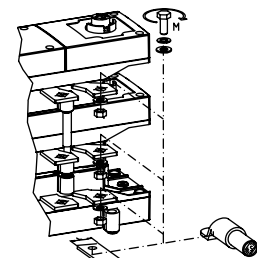
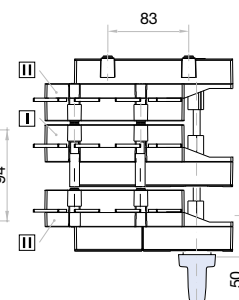
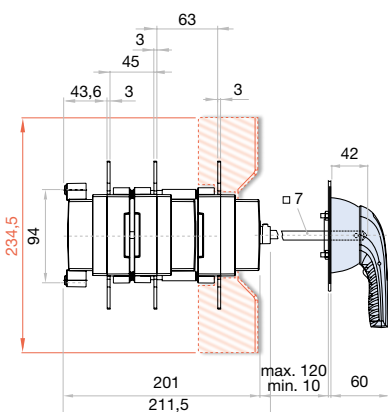
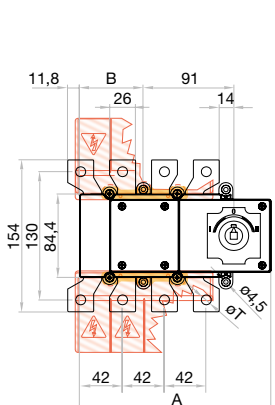


Dimensions (mm)

Door drilling for external handle



	A	B		S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M
	3P	4P	3P 4P				Nxm
125 A	181	192	53	95	5	25	M8
160 A			64				13



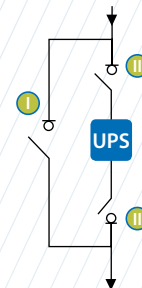
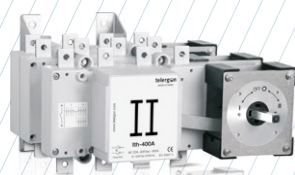
	A	B		S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M
	3P	4P	3P 4P				Nxm
200 A	181	192	53	120	30	30	M10
			64				18

S5B

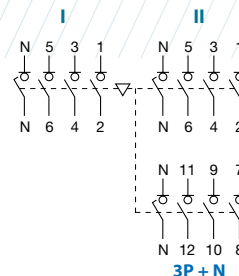
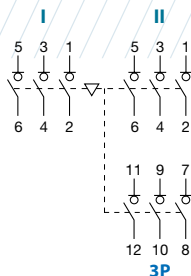
Bypass changeover switch base mounting 3P - 3P+N

Size 1

A 250|315|400



	CODE-250A	CODE-315A	CODE-400A
3P	S5B02503PR0	S5B03153PR0	S5B04003PC0
3P + N	S5B02503NR0	S5B03153NR0	S5B04003NC0



Technical information

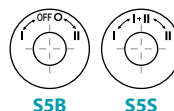


According to IEC 60947-3

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

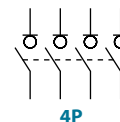
⁽¹⁾ Other voltages and/or utilization categories; please consult⁽²⁾ Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)

				250	315	400
Rated breaking capacity	400V	AC22	A	750	945	1200
Rated making capacity	400V	AC22	A	750	945	1200
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		20	20	20
Short - time withstand current (1 sec.)	I _{cw}	kA rms		12	12	12
Number of mechanical operations (according to the standards, for other values please consult)		Cycles		8000	8000	5000
Maximum weight (3/4 poles)		Kg		7,2/7,7	7,2/7,7	7,4/7,9



There are versions of bypass changeover without OFF 0 position "overlapped contacts":

S5B (I - I + II - II) = S5S _____, please consult



Also available 4P changeover switches under request, please consult



Accessories



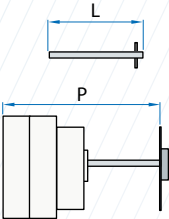
» Direct handle

CODE D5LLI12



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

IP65
CODE D5LLA11



» Shafts

Standard shaft included ^{*(e1)}

L (mm) 227
P (mm) 382... 516



» Auxiliary contacts

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

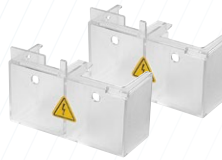
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal 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

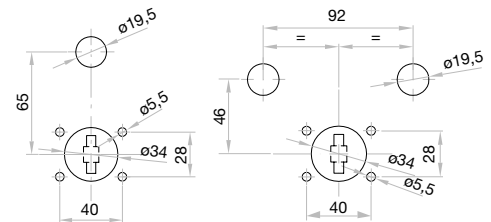
Double CODE D5LCF11

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

Door drilling for handle and key lock device

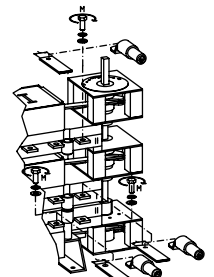
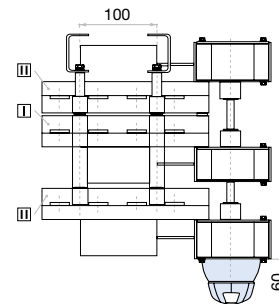
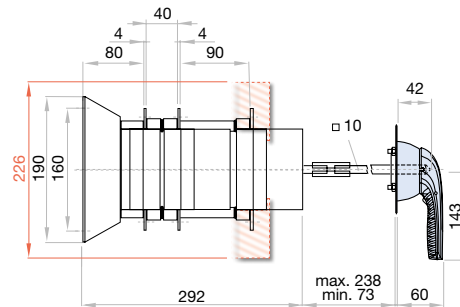
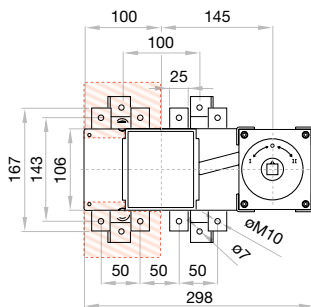
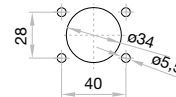
Simple

Double

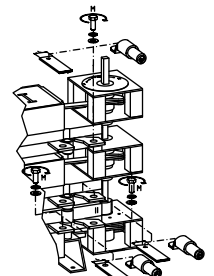
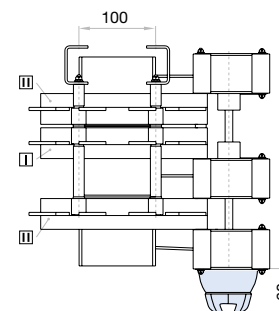
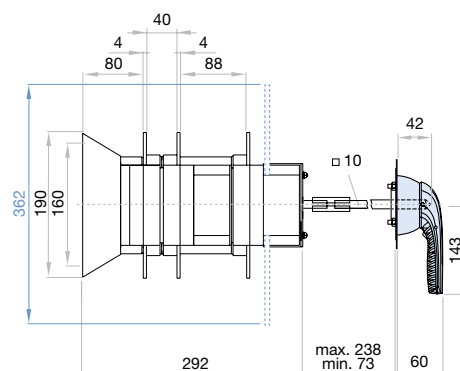
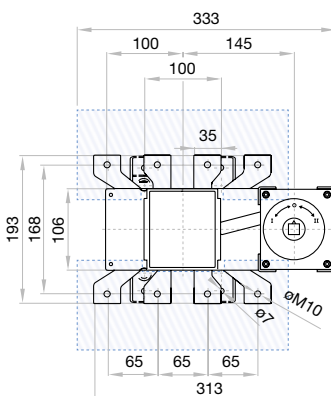


Dimensions (mm)

Door drilling for external handle



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



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

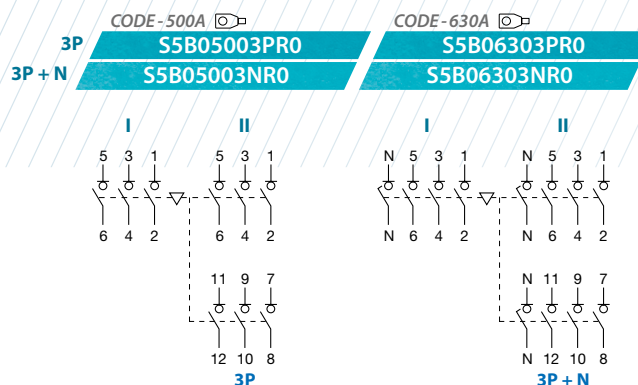
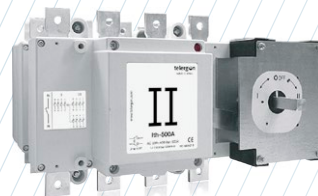
S5B

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

series
S5B

Size 2

A 500|630



Technical information



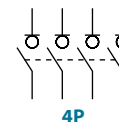
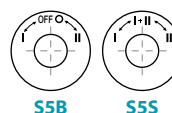
According to IEC 60947-3

				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":

S5B (I - I + II - II) = **S5S** _____, please consult

Also available 4P changeover switches under request, please consult



Accessories



» Direct handle

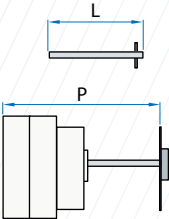
CODE D5LLI22



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

IP65

CODE D5LLA21



» Shafts

Standard shaft included ^{*(e1)}

L (mm) 239 P (mm) 448... 613



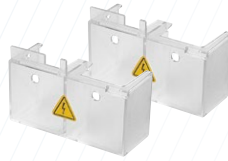
» Auxiliary contacts

1NO+1NC CODE DS-AU11

2NO+2NC CODE DS-AU12

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.



» Terminal shrouds

CODE DS-CU21

(1 kit for input or output only front side)



» Safety key lock device

Simple CODE D5LCB21

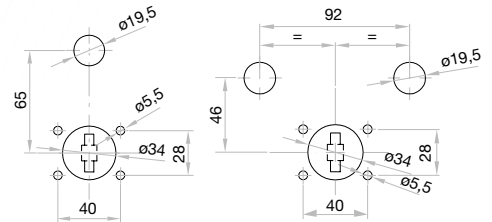
Double CODE D5LCF21

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

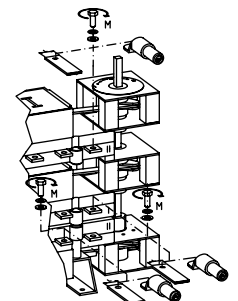
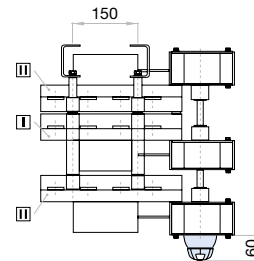
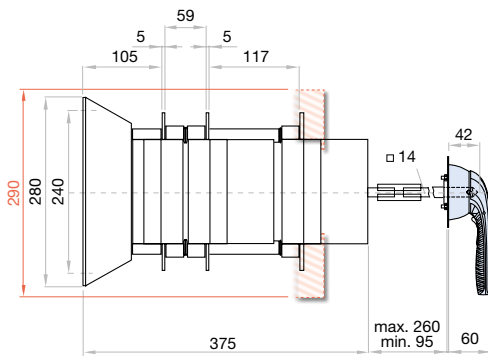
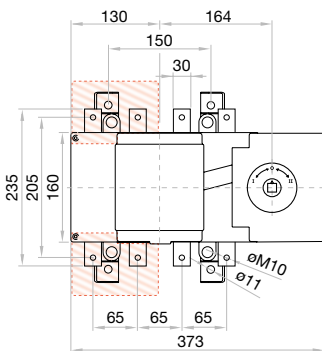
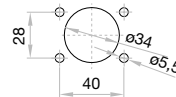
Simple

Double

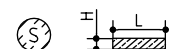


Dimensions (mm)

Door drilling for external handle



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



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

S5B

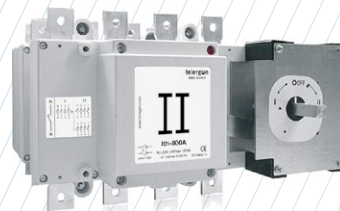
Bypass changeover switch

base mounting 3P - 3P+N

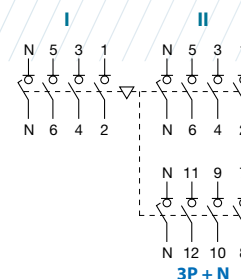
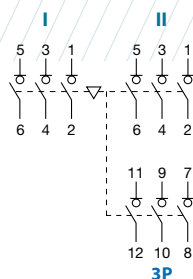
Size 3

A

800|1000



	CODE - 800A	CODE - 1000A
3P	S5B08003PR0	S5B10003PC0
3P + N	S5B08003NR0	S5B10003NC0



Technical information



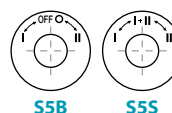
According to IEC 60947-3

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

^{*(1)} Other voltages and/or utilization categories; please consult

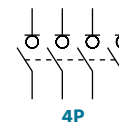
^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)

				800	1000
Rated breaking capacity	400V	AC22	A	2400	3000
Rated making capacity	400V	AC22	A	2400	3000
Short - circuit behaviour					
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		60	60
Short - time withstand current (1 sec.)	I _{cw}	kA rms		25	25
Number of mechanical operations (according to the standards, for other values please consult)		Cycles		3000	3000
Maximum weight (3/4 poles)		Kg		26,5/28,6	26,5/28,6



S5B

S5S



4P

There are versions of bypass changeover without OFF 0 position "overlapped contacts":

S5B (I - I + II - II) = S5S _____, please consult

Also available 4P changeover switches under request, please consult



Accessories



» Direct handle

CODE D5LLI32



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

IP65

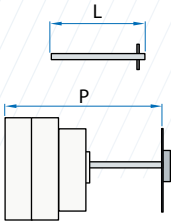
CODE D5LLA31



» Shafts

Standard shaft included ^{*(e1)}

L (mm) 239
P (mm) 480... 645



» 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

CODE DS-CU31

(1 kit for input or output only front side)



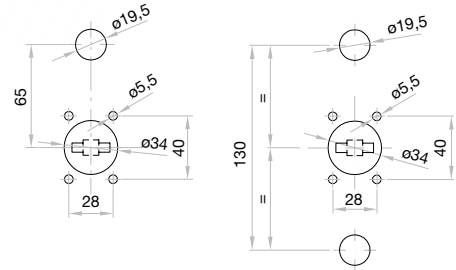
» Safety key lock device

Simple CODE D5LCB31

Double CODE D5LCF31

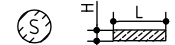
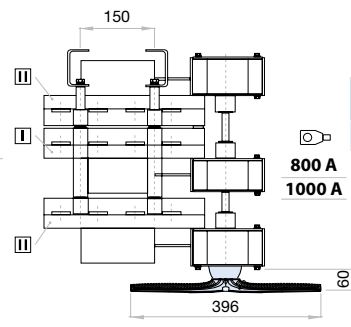
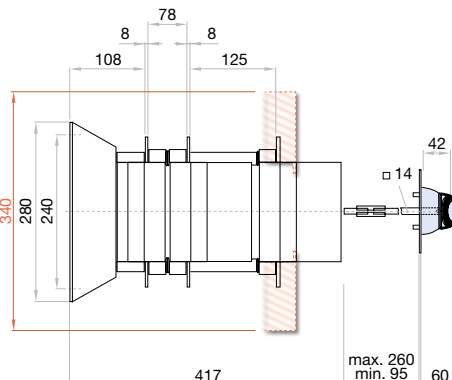
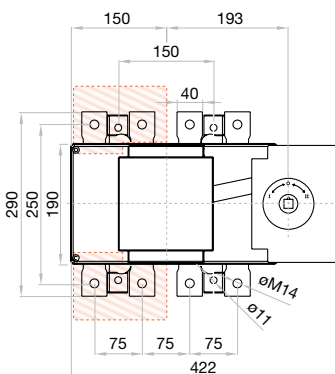
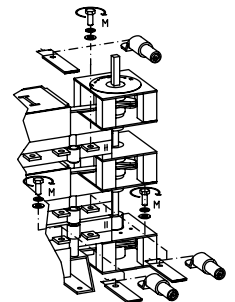
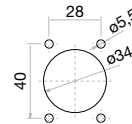
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
Simple Double



Dimensions (mm)

Door drilling for external handle



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

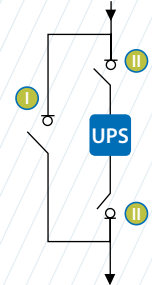
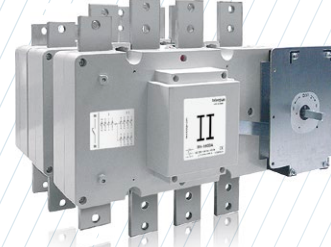
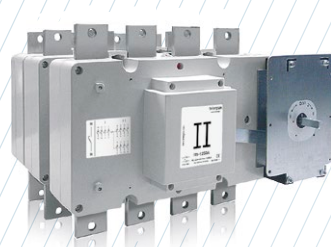
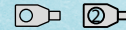
S5B

Bypass changeover switch

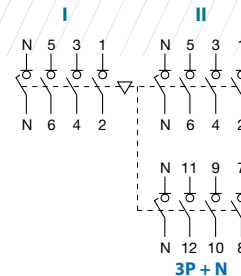
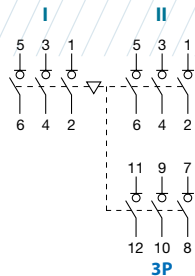
base mounting 3P - 3P+N

Size 4

A 1250|1600|1800|2000



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



Technical information



tests:

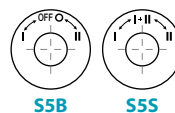
According to IEC 60947-3

			1250	1600	1800	2000
Rated thermal current	I _{th} in ambient at 40° C	A	1250	1600	1800	2000
Rated insulation voltage	U _i	V	1000	1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	12	12	12	12
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A	1250	1600	1800	2000
(Rated operational frequency 50/60 Hz)	U _e 400V AC22A	A	1250	1600	1800	2000

^{*(1)} Other voltages and/or utilization categories; please consult

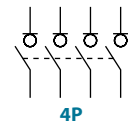
^{*(2)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)

			1250	1600	1800	2000
Rated breaking capacity	400V AC22	A	3750	4800	5400	6000
Rated making capacity	400V AC22	A	3750	4800	5400	6000
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	60	75	75	75
Short - time withstand current (1 sec.)	I _{cw}	kA rms	25	50	50	50
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		3000	3000	3000	3000
Maximum weight (3/4 poles)	Kg		65,2/72,1	65,2/72,1	65,2/72,1	65,2/72,1



S5B

S5S



4P

There are versions of bypass changeover without OFF 0 position "overlapped contacts":

S5B (I - I + II - II) = S5S....., please consult

Also available 4P changeover switches under request, please consult



Accessories



» Direct handle

CODE D5LLI32



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

IP65

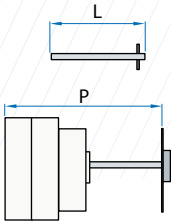
CODE D5LLA31



» Shafts

Standard shaft included ^{*(e1)}

L (mm) 239 P (mm) 572... 645



» 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

CODE DS-CU41

(1 kit for input or output only front side)

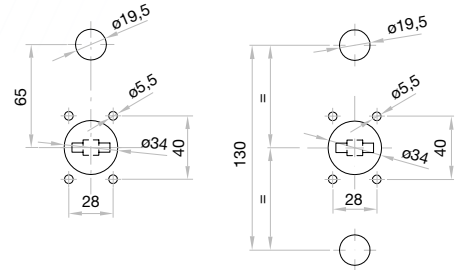
» Safety key lock device

Simple CODE D5LCB41

Double CODE D5LCF41

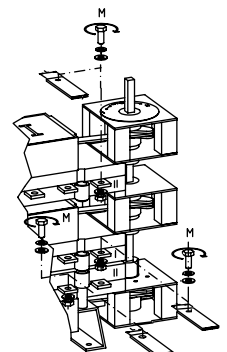
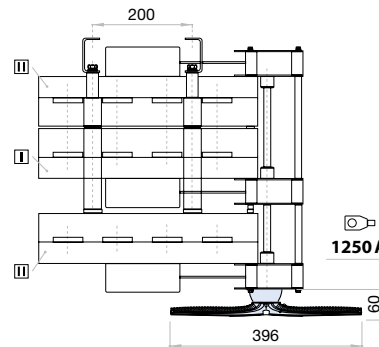
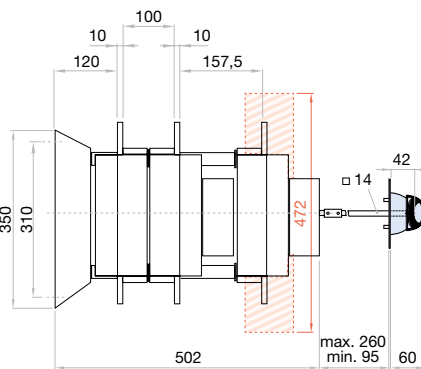
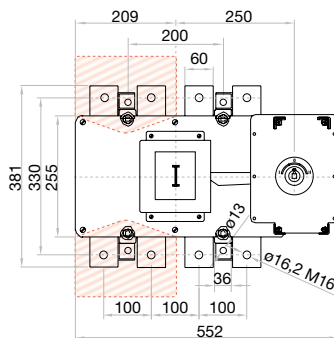
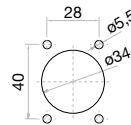
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
Simple Double

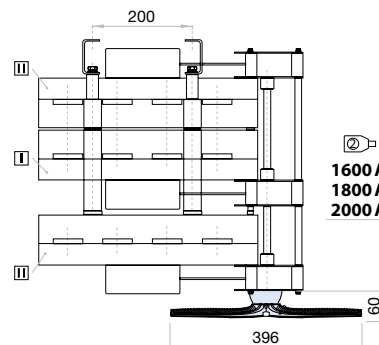
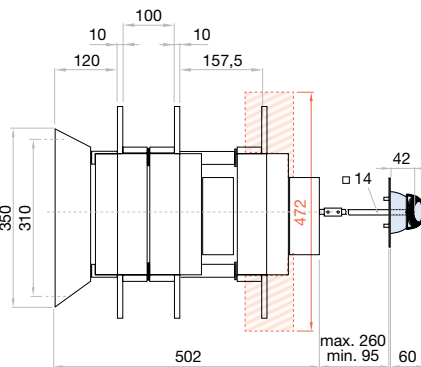
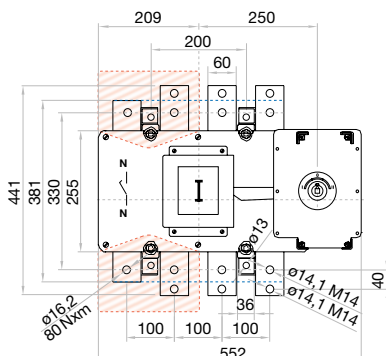


Dimensions (mm)

Door drilling for external handle



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



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

CTR₂ Metal enclosed compact changeover switch IP65

3P - 3P+N

Size 00

A 63|80|100|125



CODE-63A

3P

CTR2EC00633PB

3P + N

CTR2EC00633NB

CODE-80A

CTR2EC00803PB

CTR2EC00803NB

CODE-100A

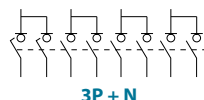
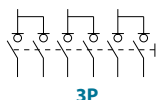
CTR2EC01003PS

CTR2EC01003NS

CODE-125A

CTR2EC01253PS

CTR2EC01253NS



Patent pending
EP18382154

Technical information



According to IEC 60947-3
IEC 61439-2

				63	80	100	125
Rated thermal current in ambient at	I _{th}	40°C	A	63	80	100	125
		50°C	A	63	80	100	125
		60°C	A	63	80	100	125
Rated insulation voltage	U _i	V		1000	1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV		8	8	8	8
AC rated operational current ^{*(1)} (Rated operational frequency 50/60Hz)	I _e	AC21A	A	63	80	100	125
		U _e 400V AC22A	A	63	80	100	125
		AC23A	A	63	80	100	125
Rated breaking capacity	400V, cos φ = 0,35-0,45	A		320	640	800	800
		400V, cos φ = 0,45		400	800	1000	1000

^{*(1)} Please, inquire for other voltages and/or utilization categories

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

			63	80	100	125
Short-circuit behaviour						
Rated short-circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	1,5	1,5	2,9	2,9
Rated short-time withstand current (1s)	I _{cw}	kA rms	1	1	2	2
Connecting capacity						
Number of mechanical operations (according to the standards, for other values please consult)		Cycles	10000	10000	10000	8000
Maximum weight (3/4 poles)		Kg	Consult			

Accessories



» External handle included shaft
CODE DCELAB1



» Auxiliary contacts
1NO+1NC CODE DCEAUB1
I_e = 0,1 A (resistive) at 125 Vac.

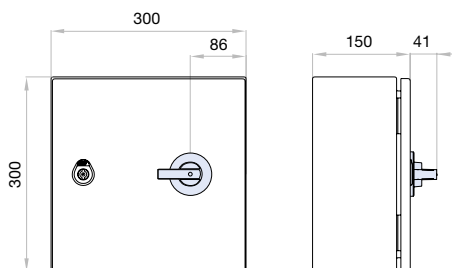


» Phase barrier

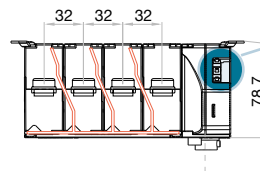
3P CODE DCECUB1
4P CODE DCECUB2

(1 kit for input or output)

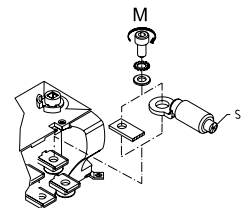
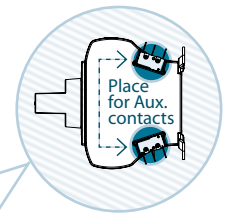
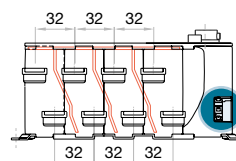
Dimensions (mm)



UP

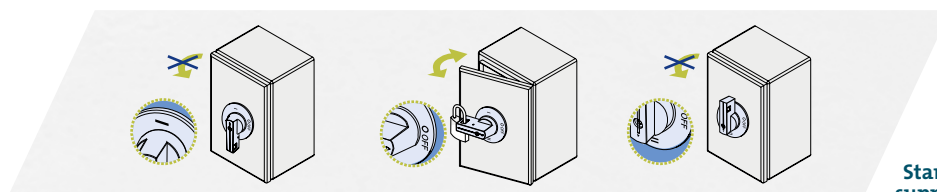


DOWN



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	Allen	M
63 A					
80 A					
100 A					
125 A					

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



Standard supply CTR2

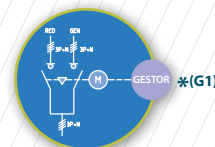
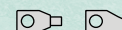
CTR₂ | CTRC Metal enclosed transfer switch IP54-IP66

3P - 3P+N

Size 0

A

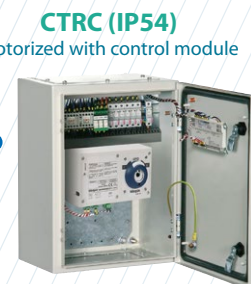
125|160|200



CTR2 (IP65)
manual



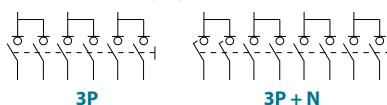
CTRC (IP66)
motorized



CTRC (IP54)
motorized with control module

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

CTR2 bridging links included



Technical information



According to IEC 60947-3
IEC 61439-2

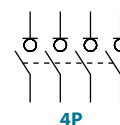
			125	160	200
Rated thermal current	I _{th} in ambient at 40° C	A	125	160	200
Rated insulation voltage	U _i	V	1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	8	8	8
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	U _e 400V AC21A	A	125	160	200
	U _e 400V AC22A	A	125	160	200
	U _e 400V AC23A	A	125	160	160

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

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

^{*(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) CTR2 ^{*(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***(T) for CTR2

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

(Only frontal side)



» **Phase barrier***(T) for CTR2

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

(1 kit for input or output)

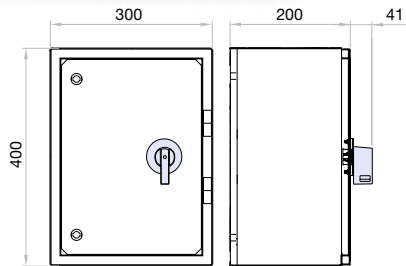
*(T) These accessories aren't compatible with each other



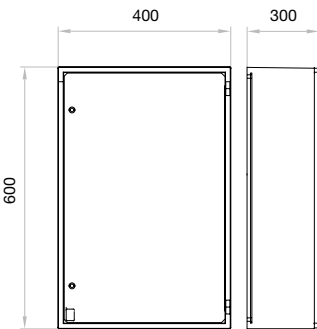
» **Bridging links** included

CODE D5LPC03 (4 units)

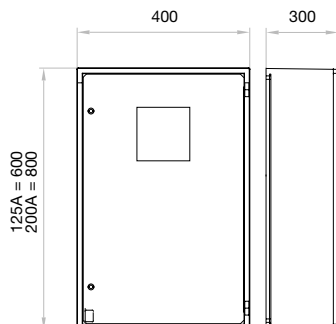
Dimensions (mm)



CTR2
manual



CTRC
motorized



CTRC
motorized with control module

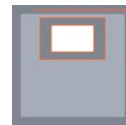


» **Safety key lock device** for CTR2

Simple CODE D5LCBB1

Double CODE D5LCEB1

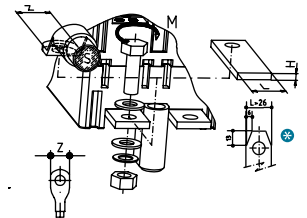
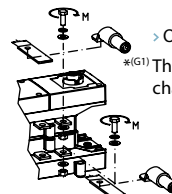
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



» **Control module***(G1)

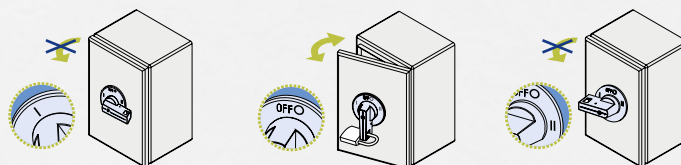
- > LCD graphic screen
- > **3 analog inputs** for resistive sensors:
 - Oil pressure
 - Coolant temperature
 - Fuel level
- > **5 + 3 digital inputs**:
 - 4 programmable, negative
 - 3 programmable, negative, alternative to resistive sensors
 - 1 emergency stop button, positive
- > **6 digital outputs**: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

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



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
CTR2					Nxm
125 A 160 A	95	5	25	M8	13
200 A	120	5	30	M10	18

	S max (Cu) mm ²	Z max	H max (Cu) mm	L max (Cu) mm	T	M
CTRC						Nxm
125 A 200 A	240	31	2x5	30	M10	24



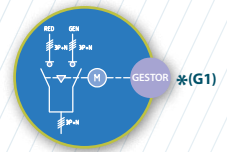
Standard
supply CTR2

CTR₂ | CTRC Metal enclosed transfer switch IP54-IP66

3P - 3P+N

Size 1

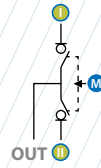
A 200|250|315|400



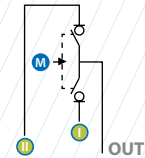
CTR₂ (IP65)
manual



CTRC (IP66)
motorized



CTRC (IP54)
motorized with control module



CODE - 200A

CODE - 250A

CODE - 315A

CODE - 400A

CTR₂ (IP65)
manual

3P
3P + NCTR2CC02003PS
CTR2CC02003NSCTR2CC02503PS
CTR2CC02503NSCTR2CC03153PS
CTR2CC03153NSCTR2CC04003PS
CTR2CC04003NS

CTRC (IP66)
motorized

3P
3P + NCTRCCC02003PSAN
CTRCCC02003NSANCTRCCC02503PSAN
CTRCCC02503NSANCTRCCC03153PSAO
CTRCCC03153NSAOCTRCCC04003PSAO
CTRCCC04003NSAO

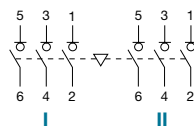
CTRC (IP54)
motorized with control module

3P + N

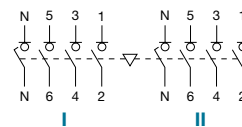
CTRCCC02503NSBJ

-

CTRCCC04003NSBK



3P



3P + N

Technical information



According to IEC 60947-3
IEC 61439-2

			200	250	315	400
Rated thermal current	I _{th} in ambient at 40° C	A	200	250	315	400
Rated insulation voltage	U _i	V	1000	1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	8
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A	200	250	315	400
(Rated operational frequency 50/60 Hz)	U _e 400V AC22A	A	200	250	315	400 ^{*(4)}

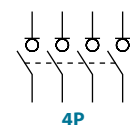
^{*(1)} Other voltages and / or utilization categories. Please consult

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

^{*(3)} Please consult us for CTRC motorized operations

^{*(4)} AC22B

			200	250	315	400
Rated breaking capacity	400V AC22	A	600	750	945	1200
Rated making capacity	400V AC22	A	600	750	945	1200
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	12	12	12	12
Short - time withstand current (1 sec.)	I _{cw}	kA rms	8	8	8	8
Number of mechanical operations (according to the standards, for other values please consult) CTR2 ^{*(3)}	Cycles		8000	8000	8000	5000
Maximum weight (3/4 poles)		Kg	Consult			



4P

Also available 4P changeover switches
under request, please consult

Accessories



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



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



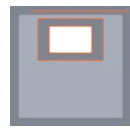
- » **Terminal shrouds** for CTR2

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

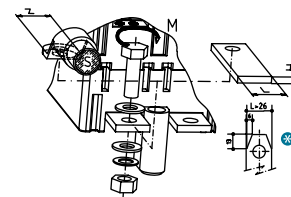
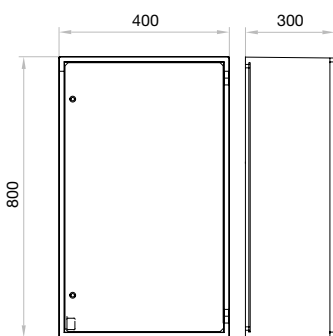
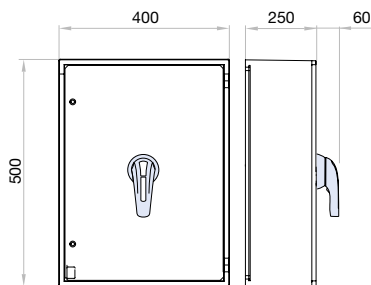


- » **Control module***(G1)

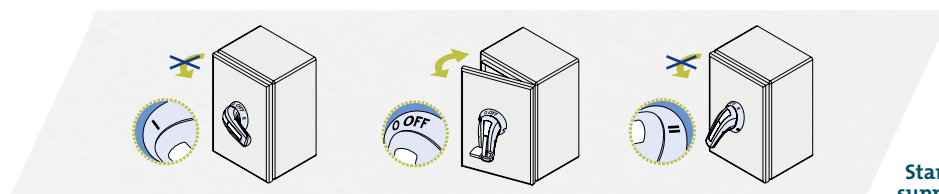
- » LCD graphic screen
- » **3 analog inputs** for resistive sensors:
 - Oil pressure
 - Coolant temperature
 - Fuel level
- » **5 + 3 digital inputs**:
 - 4 programmable, negative
 - 3 programmable, negative, alternative to resistive sensors
 - 1 emergency stop button, positive
- » **6 digital outputs**: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



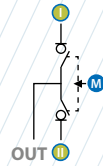
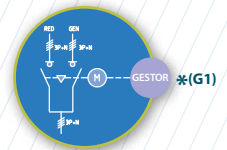
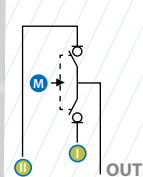
CTR₂ | CTRC Metal enclosed transfer switch IP54-IP66

3P - 3P+N

Size 2

A

500|630|800

CTR₂ (IP65)
manualCTRC (IP66)
motorizedCTRC (IP54)
motorized with control moduleCTR₂ (IP65)
manual3P
3P + N

CODE-500A

CTR2CC05003PS

CTR2CC05003NS

CODE-630A

CTR2CC06303PS

CTR2CC06303NS

CODE-800A

CTR2CC08003PS

CTR2CC08003NS

CTRC (IP66)
motorized3P
3P + N

CTRCCC05003PSAO

CTRCCC05003NSAO

CTRCCC06303PSAO

CTRCCC06303NSAO

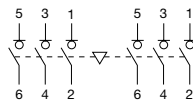
CTRCCC08003PSAO

CTRCCC08003NSAO

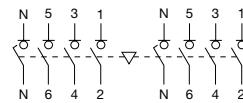
CTRC (IP54)
motorized with control module

3P + N

CTRCCC06303NSBK



3P



3P + N

Technical information



According to IEC 60947-3
IEC 61439-2

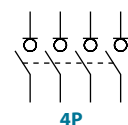
			500	630	800
Rated thermal current	I _{th} in ambient at 40° C	A	500	630	800
Rated insulation voltage	U _i	V	1000	1000	1000
Rated impulse withstand voltage	U _{imp}	kV	12	12	12
AC Rated operational current ^{*(1)}	I _e U _e 400V AC21A	A	500	630	800
(Rated operational frequency 50/60 Hz)	U _e 400V AC22B	A	500	630	800

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

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

^{*(3)} Please consult us for CTRC motorized operations

			500	630	800
Rated breaking capacity	400V AC22	A	1500	1890	2400
Rated making capacity	400V AC22	A	1500	1890	2400
Short - circuit behaviour					
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	20	20	20
Short - time withstand current (1 sec.)	I _{cw}	kA rms	13	13	13
Number of mechanical operations (according to the standards, for other values please consult) CTR ₂ ^{*(3)}	Cycles		5000	5000	3000
Maximum weight (3/4 poles)		Kg	Consult		



4P

Also available 4P changeover switches
under request, please consult

Accessories



- » **External handle** included in CTR2
IP65
CODE DCCLA21



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



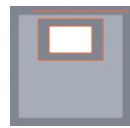
- » **Terminal shrouds** for CTR2

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



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

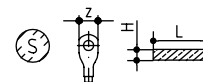
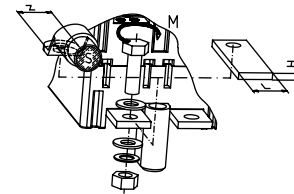
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



- » **Control module***(G1)

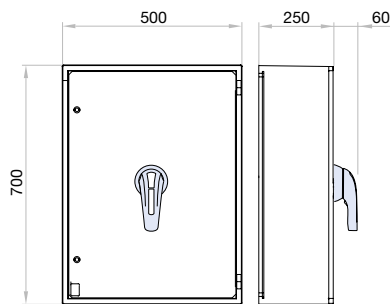
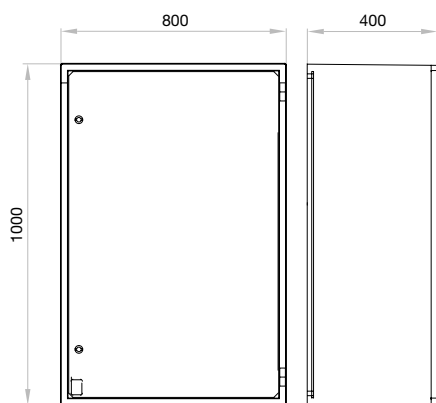
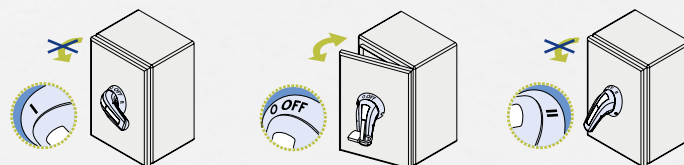
- » LCD graphic screen
- » **3 analog inputs** for resistive sensors:
 - Oil pressure
 - Coolant temperature
 - Fuel level
- » **5 + 3 digital inputs**:
 - 4 programmable, negative
 - 3 programmable, negative, alternative to resistive sensors
 - 1 emergency stop button, positive
- » **6 digital outputs**: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

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



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

Dimensions (mm)

CTR2
manualCTRC
motorized
motorized with control moduleStandard
supply CTR2

CTR₂ | CTRC Metal enclosed transfer switch IP54-IP66

3P - 3P+N

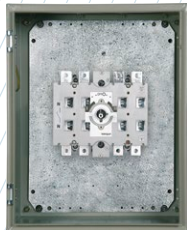
Size 3

A

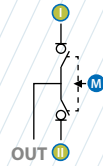
1000|1250



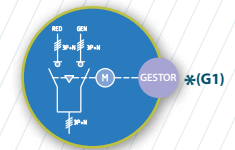
CTR₂ (IP65)
manual



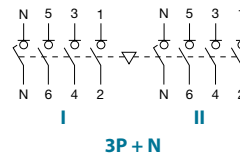
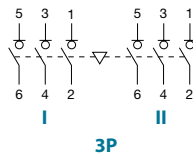
CTRC (IP66)
motorized



CTRC (IP54)
motorized with control module



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



Technical information



According to IEC 60947-3
IEC 61439-2

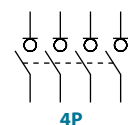
				1000	1250
Rated thermal current	I _{th}	in ambient at 40° C	A	1000	1250
Rated insulation voltage	U _i		V	1000	1000
Rated impulse withstand voltage	U _{imp}		kV	12	12
AC Rated operational current ⁽¹⁾	I _e	U _e 400V AC21A	A	1000	1250
(Rated operational frequency 50/60 Hz)		U _e 400V AC22B	A	1000	1250

⁽¹⁾ Other voltages and / or utilization categories. Please consult

⁽²⁾ Without limiting protective device (short-circuit maintained 50 ms. - 100 ms.)

⁽³⁾ Please consult us for CTRC motorized operations

				1000	1250
Rated breaking capacity	400V	AC22	A	3000	3750
Rated making capacity	400V	AC22	A	3000	3750
Short - circuit behaviour					
Short - circuit making capacity ⁽²⁾	I _{cm}	kA (peak)		32	32
Short - time withstand current (1 sec.)	I _{cw}	kA rms		25	25
Number of mechanical operations (according to the standards, for other values please consult) CTR ₂ ⁽³⁾		Cycles		3000	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 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

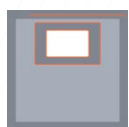
POS. I 3P	Inputs POS. II 3P	POS. I&II 3P+N	Common output	
DM2CU32	DM2CU31	DM2CU33	DCCCU31	DCCCU32



» **Safety key lock device** for CTR2

Simple CODE D5LCB31
Double CODE D5LCF31

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

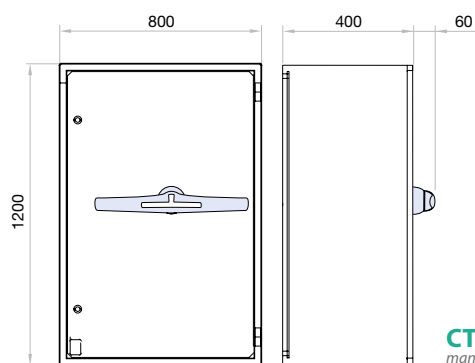


» **Control module***(G1)

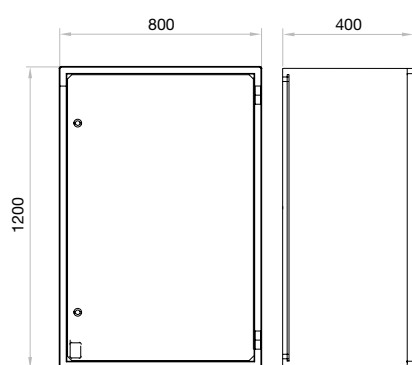
- » LCD graphic screen
- » **3 analog inputs** for resistive sensors:
 - Oil pressure
 - Coolant temperature
 - Fuel level
- » **5 + 3 digital inputs**:
 - 4 programmable, negative
 - 3 programmable, negative, alternative to resistive sensors
 - 1 emergency stop button, positive
- » **6 digital outputs**: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

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

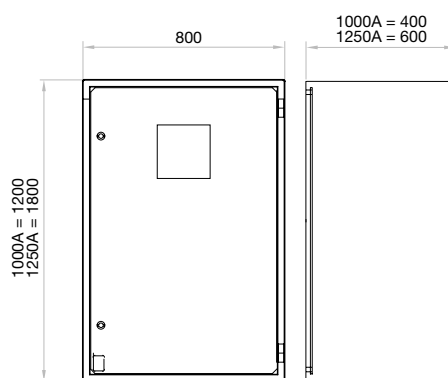
Dimensions (mm)



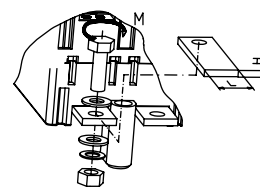
CTR2
manual



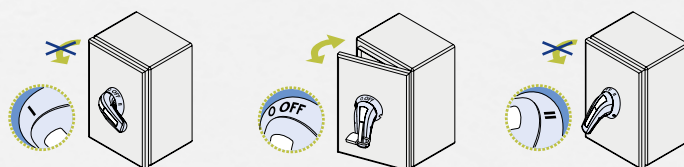
CTRC
motorized



CTRC
motorized with control module



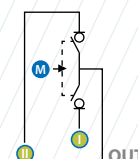
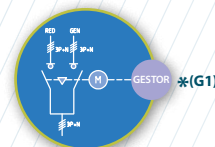
H max (Cu) mm	L max (Cu) mm	M	M
2x10	60	M14	55



Standard
supply CTR2

3P - 3P+N

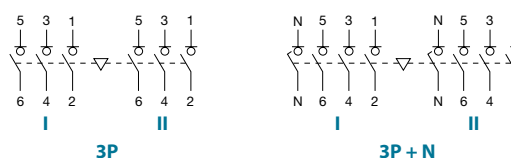
A 1600|1800|2000



A photograph of a 19-inch rack-mounted power distribution unit (PDU). The unit is silver and features a digital display on the right side showing '1.00' and '0.00'. Below the display are several outlets, including a large IEC C13 outlet and several smaller outlets. A yellow warning label with a lightning bolt symbol is visible on the right side of the unit.

A photograph of a rack-mounted power distribution unit (PDU). The unit is silver and features a digital display at the top left, a row of four large blue outlets at the top right, and a grid of 16 smaller orange outlets below. A yellow warning triangle is visible on the right side of the orange outlets. The unit is mounted in a rack, and a power cable is connected to the top right.

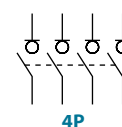
Technical information



					1600	1800	2000
Rated thermal current	Ith	in ambient at 40° C		A	1600	1800	2000
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	1600	1800	2000
		Ue 400V	AC22A	A	1600	1800	2000

*⁽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)}	Icm	kA (peak)	75	75	75	
Short - time withstand current (1 sec.)	Icw	kA rms	50	50	50	
Number of mechanical operations (according to the standards, for other values please consult) CTR2 ^{*(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

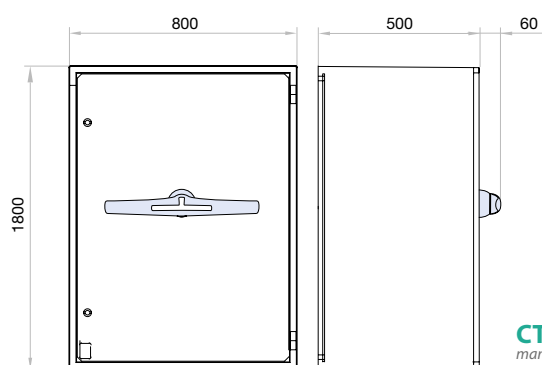
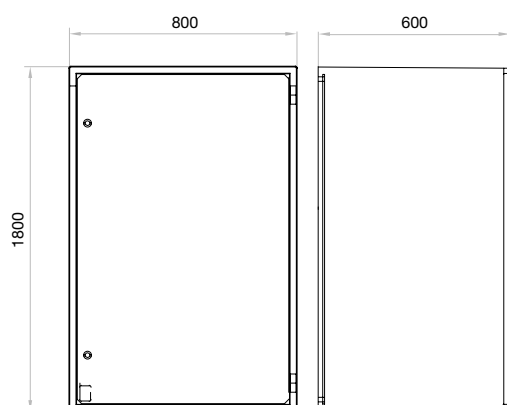
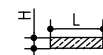
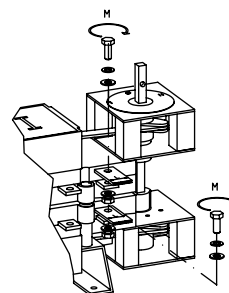
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

» Control module^{*(G1)}

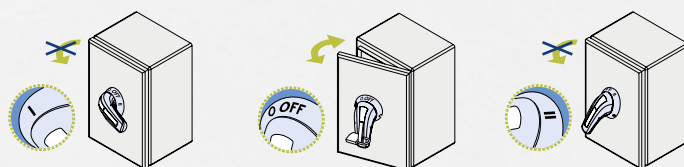
- › LCD graphic screen
- › 3 analog inputs for resistive sensors:
 - Oil pressure
 - Coolant temperature
 - Fuel level
- › 5 + 3 digital inputs:
 - 4 programmable, negative
 - 3 programmable, negative, alternative to resistive sensors
 - 1 emergency stop button, positive
- › 6 digital outputs:
 - 6 positive 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
manualCTRc
motorized
motorized with control module

H max (Cu)	L max (Cu)	T	M
mm	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

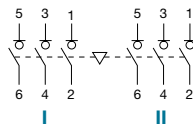


Size 5

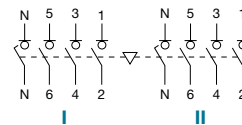
A 2000|2500|3150



	3P	3P + N	CODE - 2000A			CODE - 2500A			CODE - 3150A		
			CTR ₂ (IP55) manual			CTR ₂ (IP55) manual			CTR ₂ (IP55) manual		
			CTR2FC20003PP			CTR2FC25003PP			CTR2FC31503PP		
			CTR2FC20003NP			CTR2FC25003NP			CTR2FC31503NP		
			CTRCFC20003PPAP			CTRCFC25003PPAP			CTRCFC31503PPAP		
			CTRCFC20003NPAP			CTRCFC25003NPAP			CTRCFC31503NPAP		



3P



3P + N

Technical information



According to IEC 60947-3
IEC 61439-2

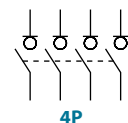
			2000			2500			3150		
Rated thermal current	I _{th}	in ambient at 40° C	A	2000	2500	3150					
Rated insulation voltage	U _i		V	1000	1000	1000					
Rated impulse withstand voltage	U _{imp}		kV	8	8	8					
AC Rated operational current ^{*(1)}	I _e	U _e 400V AC21A	A	2000	2500	3150					
(Rated operational frequency 50/60 Hz)		U _e 400V AC22B	A	2000	2500	2500					

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

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

^{*(3)} Please consult us for CTRC motorized operations

			2000			2500			3150		
Rated breaking capacity	400V	AC22	A	6000	7500	9450					
Rated making capacity	400V	AC22	A	6000	7500	9450					
Short - circuit behaviour											
Short - circuit making capacity ^{*(2)}	I _{cm}	kA (peak)		100	100	100					
Short - time withstand current (1 sec.)	I _{cw}	kA rms		50	50	50					
Number of mechanical operations (according to the standards, for other values please consult) CTR ₂ ^{*(3)}		Cycles		600	600	600					
Maximum weight (3/4 poles)		Kg		Consult							



4P

Also available 4P changeover switches under request, please consult

Accessories



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



- » **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.

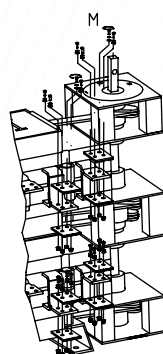


- » **Safety key lock device** for CTR2

Simple CODE D5LCB41

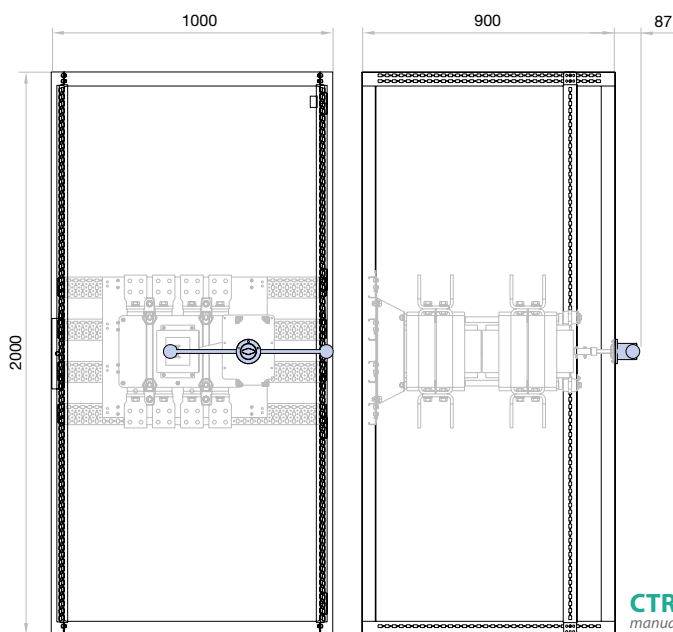
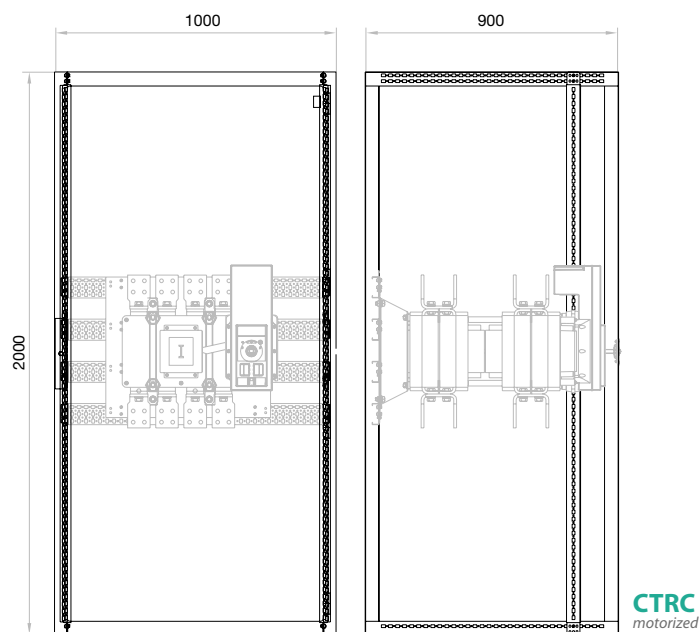
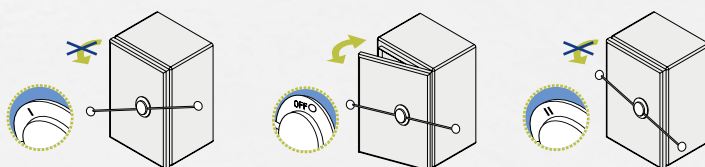
Double CODE D5LCF41

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



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

Dimensions (mm)

CTR2
manualCTRC
motorizedStandard
supply CTR2

Kit motorized unit for switch or changeover switch

Motorized units to automate the drive system of the switch-disconnectors, changeover switches and by-pass changeover switches, with a high level of reliability, safety and ease of operation even in extreme situations.

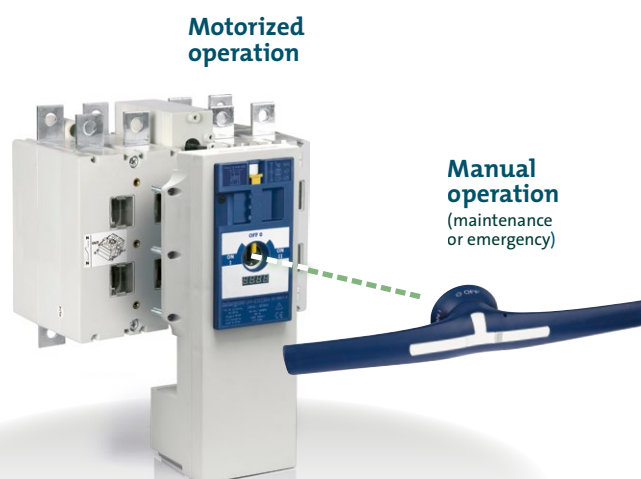
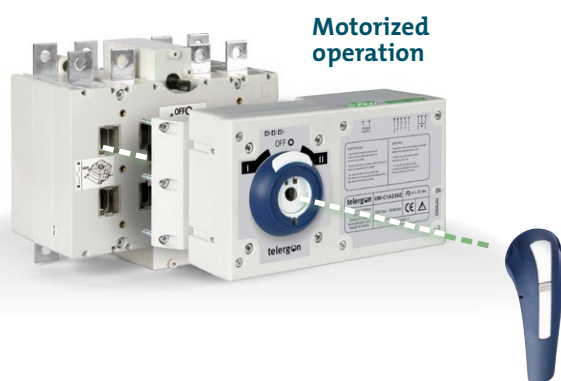


The motorized unit kits are manufactured with high safety self-extinguishing materials, providing an excellent level of electrical insulation, low smoke emission and high resistance to electromechanical stress.

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

They consist of a body housing the motor, gears, electronics to command and control. They are equipped with a selector for automatic-manual-lock operating modes.

The kit concept simplifies both logistics and maintenance, for easy and simple assembly on the changeover switch or switch - disconnector as required.



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

- According to European Standard 1204/35/UE.
- According to European standard 1204/30/UE of EMC.

According to:
IEC 60947-1 & 3
RoHS



Testing and approvals:



series UM-S



1 2 3 4 5 6
U M - S

Supply voltage
230 Vac ^{*(1)}

For switch - disconnectors:

S5 Sizes 1-2 | 3P - 3P+N ready to motorize (250A... 800A)

S6 Sizes 1-2 | 2P - 3P - 3P+N ready to motorize (200A... 800A)

S6N Size 1 | 6P - 8P ready to motorize (125A... 400A)

^{*(1)} For DC values, consult please

series UM-S



1 2 3 4 5 6
U M - S

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

For switch - disconnectors:

S5 Sizes 3-4 | 3P - 3P+N ready to motorize (800A... 2000A)

S5N Size 5 | 3P - 3P+N ready to motorize (2000A... 3150A)

S6N Size 2 | 6P - 8P ready to motorize (500A... 630A)

S5M Size 3 | 6P - 8P ready to motorize (800A... 1000A)

S5N Size 4 | 6P - 8P ready to motorize (1250A... 2000A)

^{*(1)} For DC values, consult please

series UM-C



1 2 3 4 5 6
U M - C

Supply voltage
230 Vac ^{*(1)}

For changeover switches:

S5F Size 0 | 3P - 3P+N standard (125A... 200A)

CCF Sizes 1-2 | 3P - 3P + N standard (200A... 800A)

S5B Size 0 | 3P - 3P + N standard (125A... 200A)

S5B Size 1 | 3P - 3P + N ready to motorize (250A... 400A)

^{*(1)} For DC values, consult please

series UM-C



1 2 3 4 5 6
U M - C

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

For changeover switches:

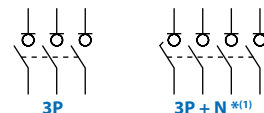
CCF Sizes 2-3 | 3P - 3P+N standard (500A... 1250A)

S5F Sizes 4-5 | 3P - 3P+N standard (1600A... 3150A)

S5B Sizes 2-3 | 3P - 3P+N ready to motorize (500A... 1000A)

S5B Size 4 | 3P - 3P+N standard (1250A... 2000A)

^{*(1)} For DC values, consult please



S5 S5N

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

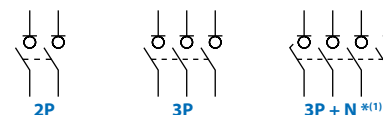
UM-S Motorized unit kit (O-I) ^{*(2)}



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

UM + S5 sizes 1 - 2 normal mounting
 UM + S5 size 3 normal mounting

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



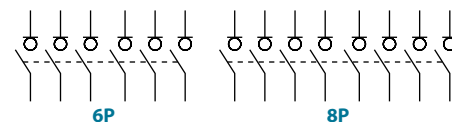
S6

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

UM-S Motorized unit kit (O-I) ^{*(2)}



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



S5M S5N

S6N

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

UM-S Motorized unit kit (O-I) ^{*(2)}



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

UM + S6N normal mounting
 UM + S5M size 3 normal mounting

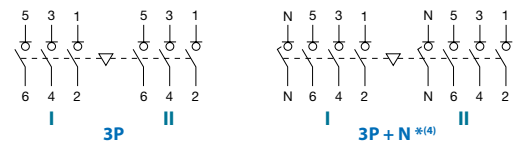
UM + S5N size 4 normal mounting
 UM + S5M size 3 inverted mounting (please consult UM codes)

^{*(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.

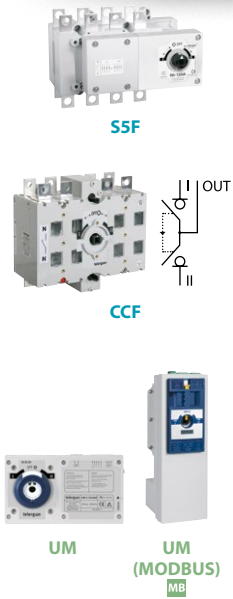
^{*(3)} For DC values, please consult.

For all solutions, please indicate in your order the switch code and the UM Kit code, as these both products are managed separately.



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

UM-C Motorized unit kit (I - O - II) ^{*(6)}



Amp.	Size	Connection	Series	3 pole (3P)	4 pole (3P + N) ^{*(4)}	120Vac ^{*(8)}	230Vac ^{*(8)}	Full details in page
				Code	Code	Code	Code	
125	0		S5F	S5F01253PS0	S5F01253NS0	-	UM-C0A230Z	202
160			S5F	S5F01603PS0	S5F01603NS0			
200			S5F	S5F02003PS0	S5F02003NS0			
200	1		CCF	CCF02003PS0	CCF02003NS0	-	UM-C1A230Z	202
250			CCF	CCF02503PS0	CCF02503NS0			
315			CCF	CCF03153PS0	CCF03153NS0			
400			CCF	CCF04003PS0	CCF04003NS0			
500			CCF	CCF05003PS0	CCF05003NS0			
630	2		CCF	CCF06303PS0	CCF06303NS0	MB UM-C21120M	UM-C2A230Z	202
800			CCF	CCF08003PS0	CCF08003NS0		MB UM-C21230M	204
1000	3		CCF	CCF10003PS0	CCF10003NS0	MB UM-C31120M	MB UM-C31230M	204
1250			CCF	CCF12503PS0	CCF12503NS0		MB UM-C31230M	204
1600	4		S5F	S5F16003PS0	S5F16003NS0	MB UM-C45120M	MB UM-C45230M	204
1800			S5F	S5F18003PS0	S5F18003NS0			
2000			S5F	S5F20003PD0	S5F20003ND0			
2000			S5F	S5F20003PP0	S5F20003NP0			
2500	5		S5F	S5F25003PP0	S5F25003NP0	-	MB UM-C55230M	204
3150			S5F	S5F31503PP0	S5F31503NP0			

UM + S5F size 0 normal mounting

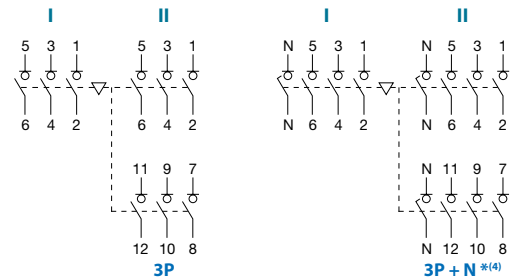
UM + CCF sizes 1 - 2 normal mounting

UM + CCF size 3 normal mounting

UM + S5F sizes 4 - 5 normal mounting

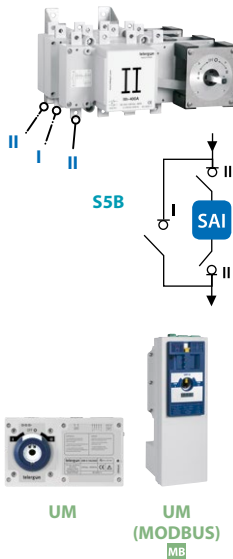
UM + CCF size 3 inverted mounting (please consult UM codes)

UM + S5F sizes 4 - 5 inverted mounting (please consult UM codes)



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

UM-C Motorized unit kit (I - O - II) ^{*(6)}



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		S5B	S5B01253PS0	S5B01253NS0	-	UM-C0A230Z	202
160			S5B	S5B01603PS0	S5B01603NS0			
200			S5B	S5B02003PS0	S5B02003NS0			
250	1		S5B	S5B02503PRC	S5B02503NRC	-	MB UMC14230Z	202
315			S5B	S5B03153PRC	S5B03153NRC			
400			S5B	S5B04003PCC	S5B04003NCC			
500	2		S5B	S5B05003PRC	S5B05003NRC	MB UM-C24120M	MB UM-C24230M	206
630			S5B	S5B06303PRC	S5B06303NRC			
800	3		S5B	S5B08003PRC	S5B08003NRC	MB UM-C34120M	MB UM-C34230M	206
1000			S5B	S5B10003PCC	S5B10003NCC			
1250			S5B	S5B12503PS0	S5B12503NS0			
1600	4		S5B	S5B16003PS0	S5B16003NS0	-	MB UM-C44230M	206
1800			S5B	S5B18003PS0	S5B18003NS0			
2000			S5B	S5B20003PD0	S5B20003ND0			

UM + S5B sizes 0 - 1 normal mounting

UM + S5B sizes 2 - 3 - 4 normal mounting

UM + S5B sizes 2 - 3 - 4 inverted mounting (please consult UM codes)

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

^{*(5)} There are versions of changeover switch without 0 - OFF position:

S5F (I - II) = S5D _____
CCF "overlapped" (I - I+II - II) = CCS _____
Please consult.

^{*(6)} UM Kit code is related to the code of changeover from its section depending on size and it is for normal mounting. For different type of mounting or different code of changeover or UM kit, please consult.

^{*(7)} There are versions of bypass changeover switch without 0 - OFF position "overlapped":

S5B "overlapped" (I - I + II - II) = S5S _____
Please consult.

^{*(8)} For DC values, please consult.



Please indicate in your order the changeover switch code and the UM Kit code, as these both products are managed separately.

UM-S

Motorized unit kit for base mounting switches 2P - 3P - 3P+N | 6P - 8P

S5 Sizes 1-2 ready to motorize (250A... 800A)

S6 Sizes 1-2 ready to motorize (200A... 800A)

S6N Size 1 ready to motorize (125A... 400A)



		CODE - 2P ^{*(1)}	CODE - 3P ^{*(1)}	CODE - 3P+N ^{*(1)}	CODE - 230 Vac ^{*(1)}
Size 1 S5	250A	-	S5-02503PRC	S5-02503NRC	UM UM-S1A230Z
	315A	-	S5-03153PRC	S5-03153NRC	
	400A	-	S5-04003PCC	S5-04003NCC	
	500A	-	S5-05003PRC	S5-05003NRC	
Size 2 S5	630A	-	S5-06303PRC	S5-06303NRC	UM UM-S2A230Z
	800A	-	S5-08003PCC	S5-08003NCC	
Size 1 S6	200A	S6-02002PSC	S6-02003PSC	S6-02003NSC	UM UM-S1A230Z
	250A	S6-02502PSC	S6-02503PSC	S6-02503NSC	
	315A	S6-03152PSC	S6-03153PSC	S6-03153NSC	
	400A	S6-04002PDC	S6-04003PDC	S6-04003NDC	
Size 2 S6	500A	S6-05002PSC	S6-05003PSC	S6-05003NSC	UM UM-S2A230Z
	630A	S6-06302PSC	S6-06303PSC	S6-06303NSC	
	800A	S6-08002PDC	S6-08003PDC	S6-08003NDC	
Size 1 S6N		CODE - 6P ^{*(1)}	CODE - 8P ^{*(1)}		UM UM-S2A230Z
	125A	-	S6N01256PSC	S6N01258PSC	
	160A	-	S6N01606PSC	S6N01608PSC	
	200A	-	S6N02006PSC	S6N02008PSC	
	250A	-	S6N02506PSC	S6N02508PSC	
	315A	-	S6N03156PSC	S6N03158PSC	
	400A	-	S6N04006PDC	S6N04008PDC	

UM + S5|S6|S6N normal mounting

* Auxiliary manual handle supplied with the UM

Technical information



According to IEC 60947-3



UM

		UM for S5 S6 size 1	UM for S5 S6 size 2	UM for S6N size 1
Operational torque	Nm	20	30	30
Voltage supply	V	230 Vac ^{*(2)}	230 Vac ^{*(2)}	230 Vac ^{*(2)}
Operating voltage range ^{*(3)}	ΔV	0,95*V a 1,10*V	0,95*V a 1,10*V	0,95*V a 1,10*V
Operating voltage range according to IEC 60947-6	ΔV	0,95*V a 1,10*V	0,95*V a 1,10*V	0,95*V a 1,10*V
Cable section of voltage supply	mm ²	1,5 - 2,5	1,5 - 2,5	1,5 - 2,5
Cable section area Input Signals	mm ²	0,5 - 1,5	0,5 - 1,5	0,5 - 1,5
Cable section area Auto-Lock mode Outputs	mm ²	0,5 - 1,5	0,5 - 1,5	0,5 - 1,5
Inrush Current	A	1,1	1,5	1,5
Use current (I _{rms})	mA	45	45	45
Use current (I _{max})	mA	137	137	137
Protective Fuse Reference F1AL250 V (Littelfuse)	A	1	1	1
Operating angle		0-90° (0 - I)	0-90° (0 - I)	0-90° (0 - I)
Number of UM operations	Cycles	8000	5000	8000
Operation rate (0-I)	Cycles/hour	120	60/120	120
Working temperature range		- 25°C ... + 55°C	- 25°C ... + 55°C	- 25°C ... + 55°C
Transportation and storage temperature		- 40°C ... + 70°C	- 40°C ... + 70°C	- 40°C ... + 70°C
UM weight	Kg	1,8	1,8	1,8

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

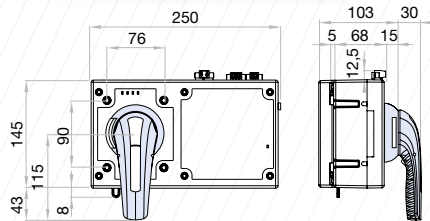
*⁽¹⁾ UM Kit code is related to the code of switch from its section depending on size and it is for normal mounting.

For different type of mounting or different code of switch or UM kit please consult.

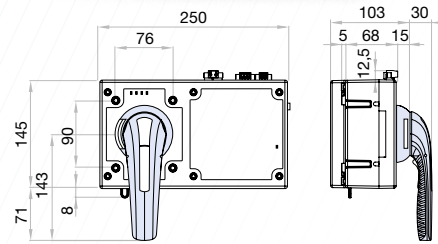
⁽²⁾ For DC values, consult please.⁽³⁾ Based in our own tests.

Dimensions (mm)

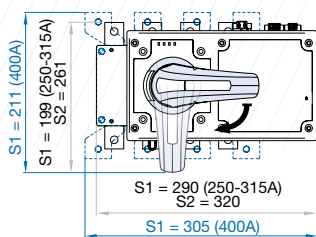
UM for size 1



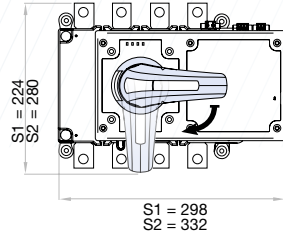
UM for size 2



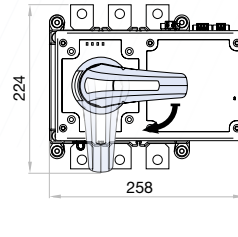
S5 size 1-2 + UM



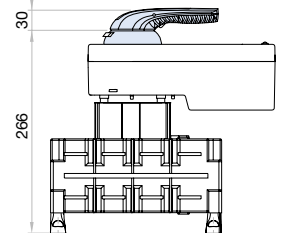
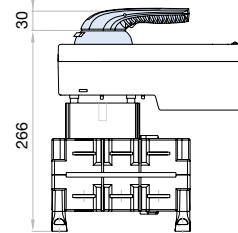
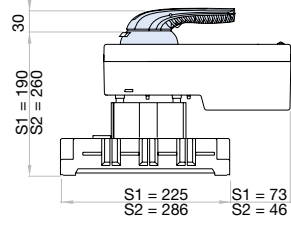
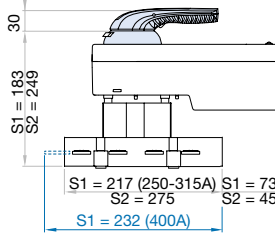
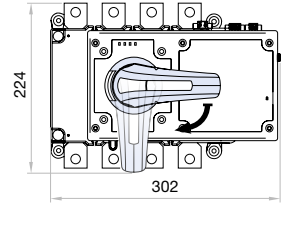
S6 size 1-2 + UM



S6N 6P size 1 + UM



S6N 8P size 1 + UM



EMC table (Electromagnetic compatibility)

Inmunity

Test	Standard	According to standard UNE/EN 61000	According to standard IEC 60947-6	Results achieved	Values achieved in tests
Electrostatic discharges	EN 61000-4-2	Special, B	Special, A	Special, A	±8KV air discharge ±4KV equipment discharge
Electromagnetic H.F. field	EN 61000-4-3	Level 3, A	Level 3, A	Level 3, A	10V/m. from 80MHz to 1 GHz
Fast transients (Burst)	EN 61000-4-4	Level 3, B	Level 3, A	Level 4, A	±4KV power supply, freq. Rep. 2,5kHz ±2KV signal supply, freq. Rep 5kHz
Fast transient (surge discharge)	EN 61000-4-5	Level 3, B	Level 3, A	Special, A	±4KV power supply L1-L2 Generator impedance 2Ω (wave 1,2/50 ms)
Conducted disturbances	EN 61000-4-6	Level 3, A	Level 3, A	Level 3, A	10V supply and signal
Electromagnetic field, industrial frequency	EN 61000-4-8	Level 4, A	-	Level 4, A	Field intensity 30A/m
Voltage dips, interruptions and voltage variations	EN 61000-4-11	Criterion B	-	Criterion A	30% Un - 1000 ms
		Criterion C	-	Criterion A	60% Un - 1000 ms
		Criterion C	-	Criterion B	95% Un - 5000 ms

Emission

Test	Standard	According to standard UNE/EN 61000	According to standard IEC 60947-6	Results achieved	Values achieved in tests
Emission of harmonic current	EN 61000-3-2	Level 3	Level 3	Level 3	0,02A total current (manual mode)
Unwanted voltage	EN 55011	Level 3	Level 3	Level 3	0,04A total current (automatic mode)
Radiated emission	EN 55011	Level 3	Level 3	Level 3	Qualified

NOTE: The installation of this device in a domestic environment can cause radiofrequency interference

EN 61000 is equivalent to IEC 61000 - EN 55011 is equivalent to CISPR11

CRITERION A: Normal service behaviour in determined limits

CRITERION B: Transient alteration of the service. The appliance gets back to the normal performing without the intervention of the operator

Test level 3: Typical industrial environment, without special installation measures

Test level 4: Severe industrial environment

Special level: Level of higher electromagnetic severe environment

UM-S (MODBUS)

Motorized unit kit for base mounting switches 3P - 3P+N

S5 Sizes 3-4 ready to motorize (800A... 2000A)

S5N Size 5 ready to motorize (2000A... 3150A)



		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			
	2000A	S5-20003PDC	S5-20003NDC			
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

Technical information



According to IEC 60947-3



UM

Voltage supply		120Vac ^{*(2)}	230Vac ^{*(2)}
Operating voltage range ^{*(3)}	ΔV	0,95*V to 1,10*V	
Cable of voltage supply	mm ²	1,5 - 2,5	1,5 - 2,5
Cable section area Input & MODBUS Signals	mm ²	0,5 - 1,5	0,5 - 1,5
Cable section area Outputs	mm ²	0,5 - 1,5	0,5 - 1,5
Inrush Current	A	11	11
Nominal Current during operation	A	-	3,9
Use current (I _{rms})	A	0,041	0,041
Use current (I _{max})	A	0,275	0,275
Protection Fuse Reference F4AL250V (Littelfuse)	A	4	4
Operating time	s	0,275	0,275
Number of UM operations S5/3 - S5/4	Cycles	3000	3000
Operation rate (0-I-0) ^{*(4)}	Cycles/hour	20	20
Number of UM operations S5N/5	Cycles	600	600
Operation rate (0-I-0) ^{*(4)}	Cycles/hour	20	20
Working temperature range	T ^a 85%Un	- 25°C ... + 55°C	
	T ^a Un	- 25°C ... + 55°C	
	T ^a 115%Un	- 25°C ... + 55°C	
Transportation and storage temperature		- 40°C ... + 70°C	
UM weight	Kg	4,4	

*⁽¹⁾ UM Kit code is related to the code of switch from its section depending on size and it is for normal mounting.

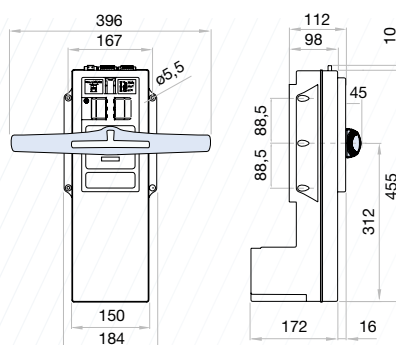
For different type of mounting or different code of switch or UM Kit please consult.

⁽²⁾ For DC values, consult please.⁽³⁾ Operating voltage range for the reference UM-S56230M is 0,9*V_n to 1,1*V_n*⁽⁴⁾ According to IEC 60947-3.

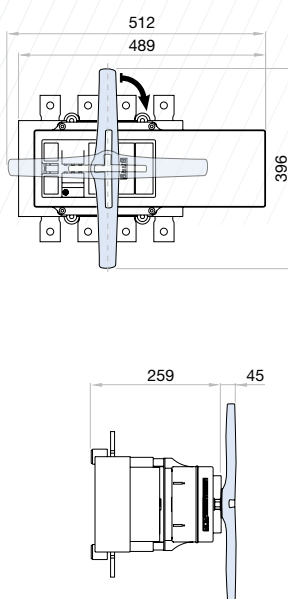


Dimensions (mm)

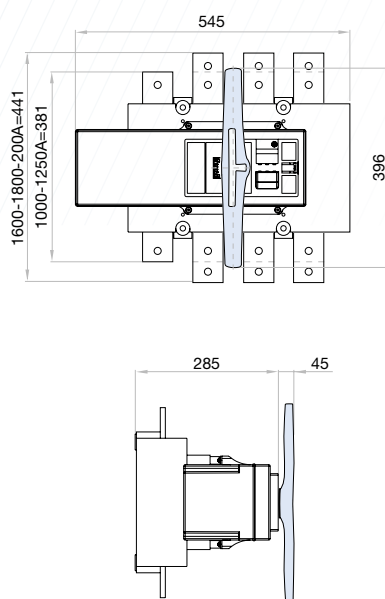
UM



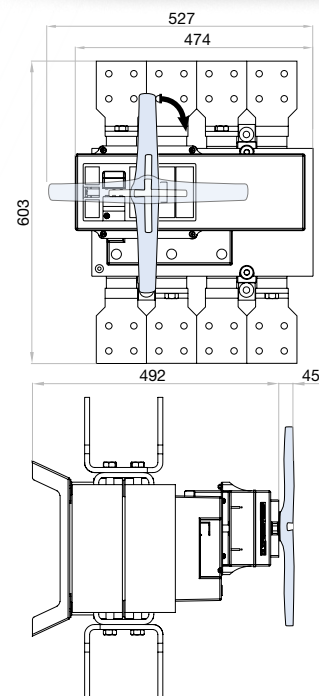
S5 size 3 + UM



S5 size 4 + UM



S5N size 5 + UM



EMC table (Electromagnetic compatibility)

Emission						
Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result
Unwanted voltage	EN 55011	150kHz-30MHz	N.A.	N.A.	N.A.	C
Radiated emission	EN 55011	30MHz-1GHz	N.A.	N.A.	N.A.	C
Emission of harmonic current	EN 61000-3-2	0,02A 0-2kHz	N.A.	N.A.	N.A.	C
Flicker	EN 61000-3-3	0-2kHz	N.A.	N.A.	N.A.	C
Immunity						
Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result
Electrostatic discharges	EN 61000-4-2	Special, A +/- 8KV air discharge	SPECIAL	B	A	C
Electromagnetic H.F. field	EN 61000-4-3	10V/m De 80MHz a 2,7 Ghz	SPECIAL	A	A	C
Fast transients (Burst)	EN 61000-4-4	+/- 2KV power supply +/- 1KV signal supply Rep 5kHz - 2min	3	B	A	C
Fast transient (surge discharge)	EN 61000-4-5	+/- 4KV power supply Generator impedance 2Ω Wave 1,2/50μs	5	B	A	C
Conducted disturbances	EN 61000-4-6	10V supply and signal 0,15-80MHz	3	A	A	C
Electromagnetic field, industrial frequency	EN 61000-4-8	Field intensity 30A/m	4	A	A	C
Voltage dips, interruptions and voltage variations	EN 61000-4-11	N.A.	100% Un - 10ms	B	A	C
		N.A.	100% Un - 20ms	B	A	C
		N.A.	60% Un - 200ms	C	A	C
		N.A.	30% Un - 500ms	C	A	C
		N.A.	20% Un - 5000ms	C	A	C
		N.A.	100% Un - 5000ms	C	C	C

CRITERION A: Normal service behaviour in determined limits

CRITERION B: Transient alteration of the service. The appliance gets back to the normal performing without the intervention of the operator

Test level 3: Typical industrial environment, without special installation measures

Test level 4: Severe industrial environment

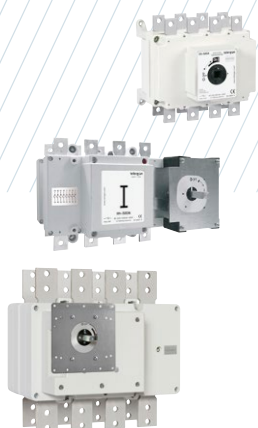
Special level: Level of higher electromagnetic severe environment

UM-S (MODBUS) Motorized unit kit for base mounting switches 6P - 8P

S6N Size 2 ready to motorize (500A... 630A)

S5M Size 3 ready to motorize (800A... 1000A)

S5N Size 4 ready to motorize (1250A... 2000A)



		CODE - 6P ^{*(1)}	CODE - 8P ^{*(1)}		CODE - 120 Vac ^{*(1)}	CODE - 230 Vac ^{*(1)}
Size 2 S6N	500A	S6N05006PRC	S6N05008PRC	UM	UM-S26120M	UM-S26230M
	630A	S6N06306PSC	S6N06308PSC	UM	UM-S35120M	UM-S35230M
Size 3 S5M	800A	S5M08006PRC	S5M08008PRC	UM	UM-S35120M	UM-S35230M
	1000A	S5M10006PCC	S5M10008PCC	UM	UM-S35120M	UM-S35230M
	1250A	S5N12506PSC	S5N12508PSC	UM	-	UM-S56230M
	1600A	S5N16006PSC	S5N16008PSC	UM	-	UM-S56230M
Size 4 S5N	1800A	S5N18006PSC	S5N18008PSC	UM	-	UM-S56230M
	2000A	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**

Technical information



According to IEC 60947-3



UM

Voltage supply			120 Vac ^{*(2)}	230 Vac ^{*(2)}
Operating voltage range ^{*(3)}	ΔV		0,95*V to 1,10*V	
Cable of voltage supply	mm ²		1,5 - 2,5	1,5 - 2,5
Cable section area Input & MODBUS Signals	mm ²		0,5 - 1,5	0,5 - 1,5
Cable section area Outputs	mm ²		0,5 - 1,5	0,5 - 1,5
Inrush Current				
	S6N	A	6,3	5,5
	S5M S5N	A	11	11
Nominal Current during operation				
	S6N	A	3	3
	S5M S5N	A	-	3,9
Use current (I _{rms})	A		0,041	0,041
Use current (I _{max})	A		0,275	0,275
Protection Fuse Reference F4AL250V (Littelfuse)	A		4	4
Operating time				
	S6N	s	0,25	0,25
	S5M S5N	s	0,275	0,275
Number of UM operations S6N/2	Cycles (category B)		1000	1000
Operation rate (0-I-0) ^{*(4)}	Cycles/hour		60	60
Number of UM operations S5M/3	Cycles		3000	3000
Operation rate (0-I-0) ^{*(4)}	Cycles/hour		20	20
Number of UM operations S5N/4	Cycles		600	600
Operation rate (0-I-0) ^{*(4)}	Cycles/hour		20	20
Working temperature range				
	T ^a 85%Un		- 25°C ... + 55°C	
	T ^a Un		- 25°C ... + 55°C	
	T ^a 115%Un		- 25°C ... + 55°C	
Transportation and storage temperature			- 40°C ... + 70°C	
UM weight	Kg		4,4	

^{*(1)} **UM** Kit code is related to the code of switch from its section depending on size and it is for normal mounting.

For different type of mounting or different code of switch or **UM** Kit please consult.

^{*(2)} For DC values, consult please.

^{*(3)} Operating voltage range for the reference UM-S56230M is 0,9*V_n to 1,1*V_n

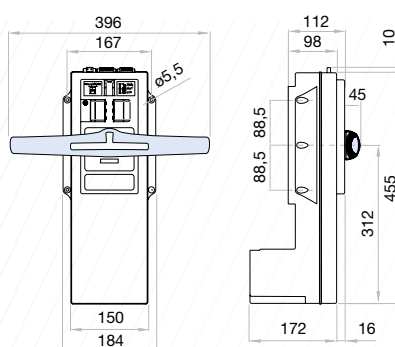
^{*(4)} According to IEC 60947-3.

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



Dimensions (mm)

UM

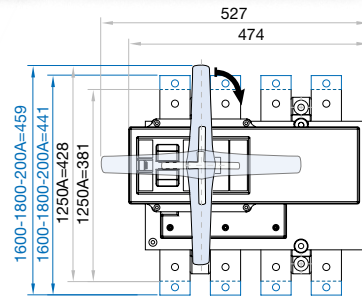
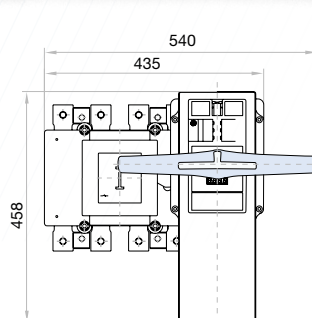
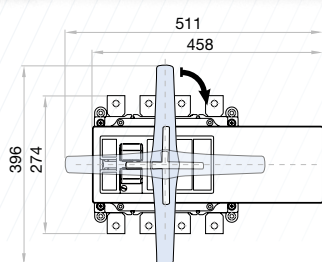
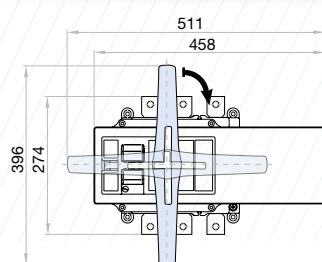


S6N 6P size 2 + UM

S6N 8P size 2 + UM

S5M size 3 + UM

S5N size 4 + UM



EMC table (Electromagnetic compatibility)

Emission						
Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result
Unwanted voltage	EN 55011	150kHz-30MHz	N.A.	N.A.	N.A.	C
Radiated emission	EN 55011	30MHz-1GHz	N.A.	N.A.	N.A.	C
Emission of harmonic current	EN 61000-3-2	0,02A 0-2kHz	N.A.	N.A.	N.A.	C
Flicker	EN 61000-3-3	0-2kHz	N.A.	N.A.	N.A.	C
Immunity						
Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result
Electrostatic discharges	EN 61000-4-2	Special, A +/- 8KV air discharge	SPECIAL	B	A	C
Electromagnetic H.F. field	EN 61000-4-3	10V/m De 80MHz a 2,7 Ghz	SPECIAL	A	A	C
Fast transients (Burst)	EN 61000-4-4	+/- 2KV power supply +/- 1KV signal supply Rep 5kHz - 2min	3	B	A	C
Fast transient (surge discharge)	EN 61000-4-5	+/- 4KV power supply Generator impedance 2Ω Wave 1,2/50μs	5	B	A	C
Conducted disturbances	EN 61000-4-6	10V supply and signal 0,15-80MHz	3	A	A	C
Electromagnetic field, industrial frequency	EN 61000-4-8	Field intensity 30A/m	4	A	A	C
Voltage dips, interruptions and voltage variations	EN 61000-4-11	N.A.	100% Un - 10ms	B	A	C
		N.A.	100% Un - 20ms	B	A	C
		N.A.	60% Un - 200ms	C	A	C
		N.A.	30% Un - 500ms	C	A	C
		N.A.	20% Un - 5000ms	C	A	C
		N.A.	100% Un - 5000ms	C	C	C

CRITERION A: Normal service behaviour in determined limits

CRITERION B: Transient alteration of the service. The appliance gets back to the normal performing without the intervention of the operator

Test level 3: Typical industrial environment, without special installation measures

Test level 4: Severe industrial environment

Special level: Level of higher electromagnetic severe environment

UM-C

Motorized unit kit for base mounting changeover switches 3P - 3P+N

S5F Size 0 standard (125A... 200A)

CCF Sizes 1-2 standard (200A... 800A)

S5B Size 0 by-pass standard (125A... 200A)

S5B Size 1 by-pass ready to motorize (250A... 400A)





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		
200A	S5B02003PS0	S5B02003NS0		

Size 1 | S5B

250A	S5B02503PRC	S5B02503NRC	UM	UM-C1A230Z
315A	S5B03153PRC	S5B03153NRC		
400A	S5B04003PCC	S5B04003NCC		

CODE - 3P ^{*(1)}

CODE - 3P+N ^{*(1)}

CODE - 230 Vac ^{*(1)}

UM + S5F & UM + S5B normal mounting

UM + CCF normal mounting

* Auxiliary manual handle supplied with the UM

Technical information



According to IEC 60947-3



UM

		UM for sizes 0-1	UM for size 2
Operational torque	Nm	20	30
Voltage supply	V	230 Vac ^{*(2)}	230 Vac ^{*(2)}
Operating voltage range ^{*(3)}	ΔV	0,95*V to 1,10*V	0,95*V to 1,10*V
Operating voltage range according to IEC 60947-6	ΔV	0,95*V to 1,10*V	0,95*V to 1,10*V
Cable section of voltage supply	mm ²	1,5 - 2,5	1,5 - 2,5
Cable section area Input Signals	mm ²	0,5 - 1,5	0,5 - 1,5
Cable section area Auto-Lock mode Outputs	mm ²	0,5 - 1,5	0,5 - 1,5
Inrush Current	A	1,1	1,1
Use current (I _{rms})	mA	45	45
Use current (I _{max})	mA	137	137
Protective Fuse Reference F1AL250 V (Littelfuse)	A	1	1
Operating angle		- 70° / 0° / +70° (I - 0 - II)	- 70° / 0° / +70° (I - 0 - II)
Number of 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

^{*(1)} UM Kit code is related to the code of switch from its section depending on size and it is for normal mounting.

For different type of mounting or different code of switch or UM Kit please consult.

^{*(2)} For DC values, consult please.

^{*(3)} Based in our own tests.

There are changeover switch versions without 0 - OFF position:

S5F (I - II) = SSD_ _ _ _ _

CCF "overlapped" (I - I+II - II) = CCS_ _ _ _ _

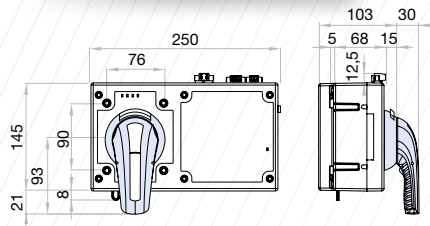
CCP "overlapped" (I - I+II - II) = CCT_ _ _ _ _

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

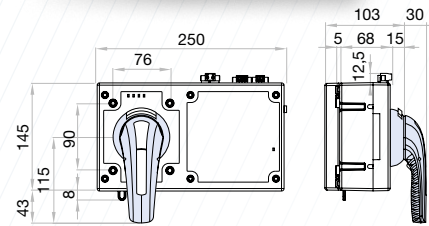
Pos.	Direction	Pos.	Operating time ^{*(3)}
0	→	I	750 ms
I	→	0	750 ms
0	→	II	750 ms
II	→	0	750 ms
I	→	II	1,5 sec
II	→	I	1,5 sec

Dimensions (mm)

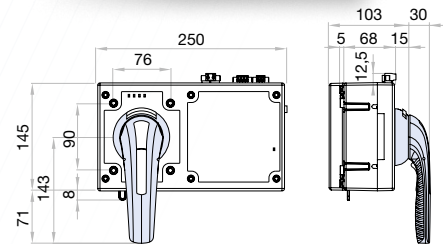
UM for size 0



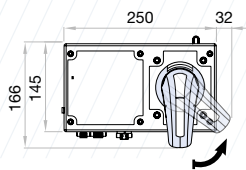
UM for size 1



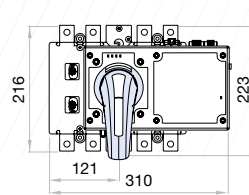
UM for size 2



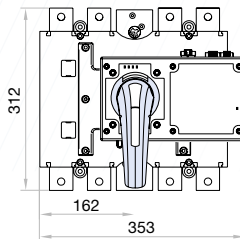
S5F size 0 + UM



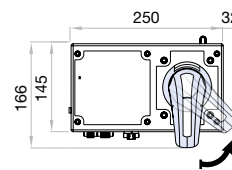
CCF size 1 + UM



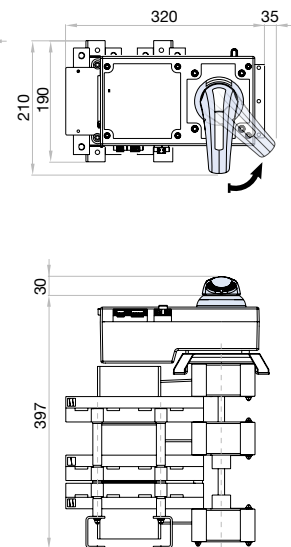
CCF size 2 + UM



S5B size 0 + UM



S5B size 1 + UM



EMC table (Electromagnetic compatibility)

Immunity

Test	Standard	According to standard UNE/EN 61000	According to standard IEC 60947-6	Results achieved	Values achieved in tests
Electrostatic discharges	EN 61000-4-2	Special, B	Special, A	Special, A	±8KV air discharge ±4KV equipment discharge
Electromagnetic H.F. field	EN 61000-4-3	Level 3, A	Level 3, A	Level 3, A	10V/m. from 80MHz to 1 GHz
Fast transients (Burst)	EN 61000-4-4	Level 3, B	Level 3, A	Level 4, A	±4KV power supply, freq. Rep. 2,5kHz ±2KV signal supply, freq. Rep 5kHz
Fast transient (surge discharge)	EN 61000-4-5	Level 3, B	Level 3, A	Special, A	±4KV power supply L1-L2 Generator impedance 2Ω (wave 1,2/50 ms)
Conducted disturbances	EN 61000-4-6	Level 3, A	Level 3, A	Level 3, A	10V supply and signal
Electromagnetic field, industrial frequency	EN 61000-4-8	Level 4, A	-	Level 4, A	Field intensity 30A/m
Voltage dips, interruptions and voltage variations	EN 61000-4-11	Criterion B	-	Criterion A	30% Un - 1000 ms
		Criterion C	-	Criterion A	60% Un - 1000 ms
		Criterion C	-	Criterion B	95% Un - 5000 ms

Emission

Test	Standard	According to standard UNE/EN 61000	According to standard IEC 60947-6	Results achieved	Values achieved in tests
Emission of harmonic current	EN 61000-3-2	Level 3	Level 3	Level 3	0,02A total current (manual mode)
Unwanted voltage	EN 55011	Level 3	Level 3	Level 3	0,04A total current (automatic mode)
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)

S5F Sizes 4-5 standard (1600A... 3150A)



		CODE - 3P ^{*(1)}	CODE - 3P+N ^{*(1)}		CODE - 120 Vac ^{*(1)}	CODE - 230 Vac ^{*(1)}
Size 2 CCF	500A	CCF05003PS0	CCF05003NS0	UM	UM-C21120M	UM-C21230M
	630A	CCF06303PS0	CCF06303NS0			
	800A	CCF08003PS0	CCF08003NS0			
Size 3 CCF	1000A	CCF10003PS0	CCF10003NS0	UM	UM-C31120M	UM-C31230M
	1250A	CCF12503PS0	CCF12503NS0			
Size 4 S5F	1600A	S5F16003PS0	S5F16003NS0	UM	UM-C45120M	UM-C45230M
	1800A	S5F18003PS0	S5F18003NS0			
	2000A	S5F20003PD0	S5F20003ND0			
	2000A	S5F20003PP0	S5F20003NP0			
Size 5 S5F	2500A	S5F25003PP0	S5F25003NP0	UM	-	UM-C55230M
	3150A	S5F31503PP0	S5F31503NP0			



UM + CCF size 3 normal mounting



UM + S5F sizes 4 - 5 normal mounting

UM + CCF size 3 inverted mounting ^{*(5)}UM + S5F sizes 4 - 5 inverted mounting ^{*(5)}
(please consult UM codes)

* Auxiliary manual handle supplied with the UM

Technical information



According to IEC 60947-3



UM

Voltage supply		120Vac ^{*(2)}	230Vac ^{*(2)}
Operating voltage range ^{*(3)}	ΔV	0,95*V to 1,10*V	
Cable of voltage supply	mm ²	1,5 - 2,5	1,5 - 2,5
Cable section area Input & MODBUS Signals	mm ²	0,5 - 1,5	0,5 - 1,5
Cable section area Outputs	mm ²	0,5 - 1,5	0,5 - 1,5
Inrush Current	A	11	11
Nominal Current during operation	A	7,5	3,9
Use current (I _{rms})	A	0,041	0,041
Use current (I _{max})	A	0,275	0,275
Protection Fuse Reference F4AL250V (Littelfuse)	A	4	4
Operating time	s	0,166	0,15
Number of MU operations + CCF Size 2	Cycles	5000	5000
Operations frequency (0-I-0-II-0) ^{*(4)}	Cycles/hour	60	60
Number of UM operations + CCF size 3	Cycles	3000	3000
Operations frequency (0-I-0-II-0) ^{*(4)}	Cycles/hour	20	20
Number of UM operations + S5F size 4	Cycles	3000	3000
Operations frequency (0-I-0-II-0) ^{*(4)}	Cycles/hour	20	20
Number of UM operations + S5F size 5	Cycles	-	600
Operations frequency (0-I-0-II-0) ^{*(4)}	Cycles/hour	-	20
Working temperature range	T ^a 85%Un	- 25°C ... + 55°C	
	T ^a 115%Un	- 25°C ... + 55°C	
Transportation and storage temperature		- 40°C ... + 70°C	
UM weight	Kg	4,4	

*⁽¹⁾ UM Kit code is related to the code of switch from its section depending on size and it is for normal mounting.

For different type of mounting or different code of switch or UM Kit please consult.

⁽²⁾ For DC values, consult please.⁽³⁾ Operating voltage range for the reference UM-C55230M is 0,9*V to 1,10*V.*⁽⁴⁾ According to IEC 60947-3.*⁽⁵⁾ For inverted mounting there are references for UM with inverted frontal plates.

Supply under request. There are changeover switches versions without 0 - OFF position:

S5F (I - II) = S5D_ _ _ _ _.

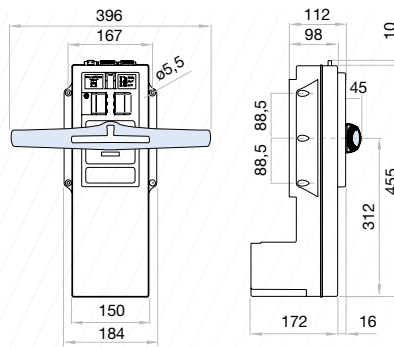
CCF "overlapped" (I - I+II - II) = CCS_ _ _ _ _.

CCP "overlapped" (I - I+II - II) = CCT_ _ _ _ _.

Consult.

Dimensions (mm)

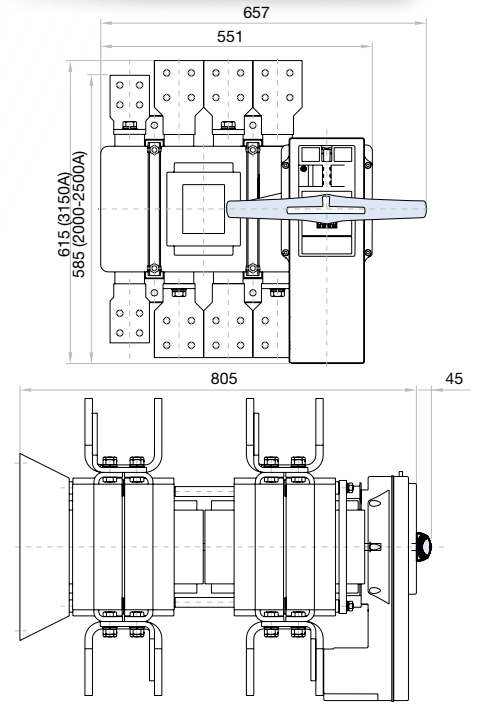
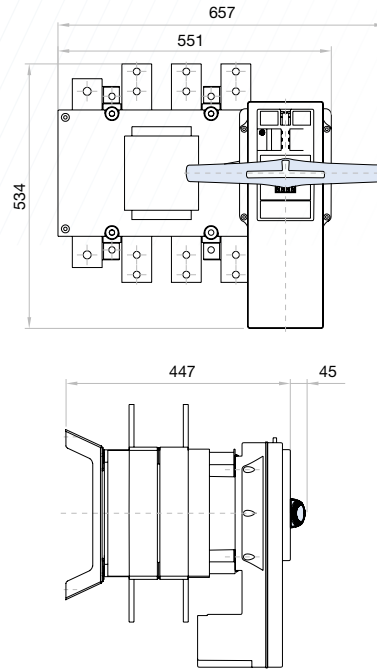
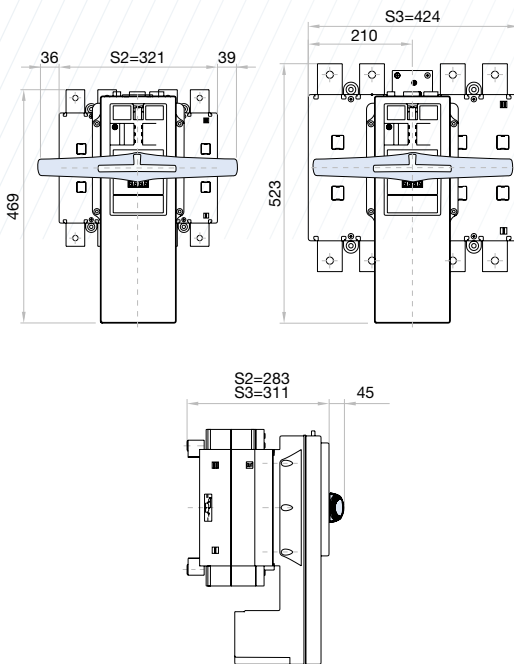
UM



CCF sizes 2-3 + UM

S5F size 4 + UM

S5F 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

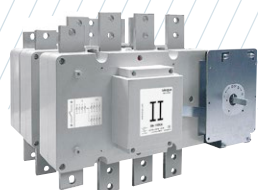
Special level: Level of higher electromagnetic severe environment

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



UM + S5B normal mounting

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

* Auxiliary manual handle supplied with the UM

Technical information



According to IEC 60947-3



UM

Voltage supply		120Vac ^{*(2)}	230Vac ^{*(2)}
Operating voltage range ^{*(3)}	ΔV	0,95*V to 1,10*V	
Cable of voltage supply	mm ²	1,5 - 2,5	1,5 - 2,5
Cable section area Input & MODBUS Signals	mm ²	0,5 - 1,5	0,5 - 1,5
Cable section area Outputs	mm ²	0,5 - 1,5	0,5 - 1,5
Inrush Current	A	11	11
Nominal Current during operation	A	7,5	3,9
Use current (I _{rms})	A	0,041	0,041
Use current (I _{max})	A	0,275	0,275
Protection Fuse Reference F4AL250V (Littelfuse)	A	4	4
Operating time	s	0,166	0,15
Number of UM operations S5B size 2	Cycles	Consult	Consult
Operations frequency (0-I-O-II-O) ^{*(4)}	Cycles/hour	Consult	Consult
Number of UM operations S5B size 3	Cycles	Consult	Consult
Operations frequency (0-I-O-II-O) ^{*(4)}	Cycles/hour	Consult	Consult
Number of UM operations S5B size 4	Cycles	-	600
Operations frequency (0-I-O-II-O) ^{*(4)}	Cycles/hour	-	20
Working temperature range	T ^a 85%Un	- 25°C ... + 55°C	
	T ^a 115%Un	- 25°C ... + 55°C	
Transportation and storage temperature		- 40°C ... + 70°C	
UM weight	Kg	4,4	

^{*(1)} UM Kit code is related to the code of switch from its section depending on size and it is for normal mounting.

For different type of mounting or different code of switch or UM Kit please consult.

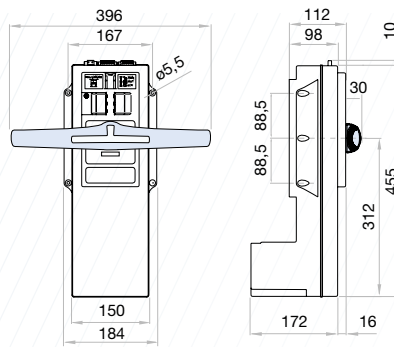
^{*(2)} For DC values, consult please.^{*(3)} Operating voltage range for the reference UM-C44230M is 0,9*V to 1,10*V.^{*(4)} According to IEC 60947-3.^{*(5)} For inverted mounting there are references for UM with inverted frontal plates. Supply under request.

There are by-pass S5B versions without 0 - OFF "overlapped":

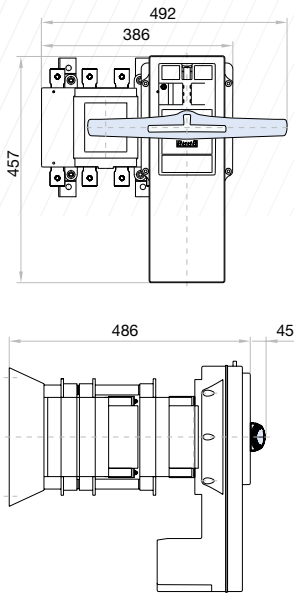
S5B "overlapped" (I - I + II - II) = S5S_____. Consult.

Dimensions (mm)

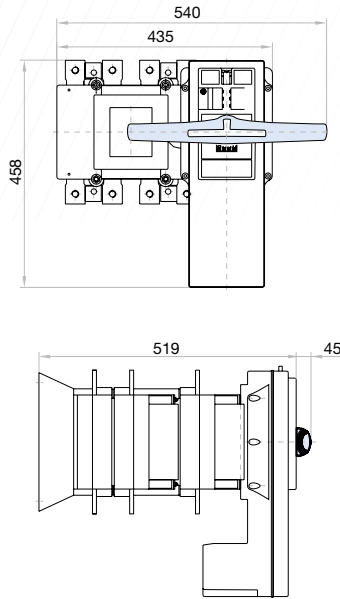
UM



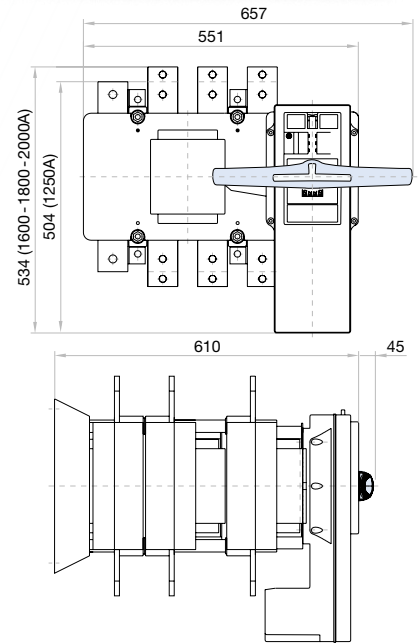
S5B size 2 + UM



S5B size 3 + UM



S5B size 4 + UM



EMC table (Electromagnetic compatibility)

Emission						
Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result
Unwanted voltage	EN 55011	150kHz-30MHz	N.A.	N.A.	N.A.	C
Radiated emission	EN 55011	30MHz-1GHz	N.A.	N.A.	N.A.	C
Emission of harmonic current	EN 61000-3-2	0,02A 0-2kHz	N.A.	N.A.	N.A.	C
Flicker	EN 61000-3-3	0-2kHz	N.A.	N.A.	N.A.	C
Immunity						
Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result
Electrostatic discharges	EN 61000-4-2	Special, A +/- 8KV air discharge	SPECIAL	B	A	C
Electromagnetic H.F. field	EN 61000-4-3	10V/m De 80MHz a 2,7 Ghz	SPECIAL	A	A	C
Fast transients (Burst)	EN 61000-4-4	+/- 2KV power supply +/- 1KV signal supply Rep 5kHz - 2min	3	B	A	C
Fast transient (surge discharge)	EN 61000-4-5	+/- 4KV power supply Generator impedance 2Ω Wave 1,2/50μs	5	B	A	C
Conducted disturbances	EN 61000-4-6	10V supply and signal 0,15-80MHz	3	A	A	C
Electromagnetic field, industrial frequency	EN 61000-4-8	Field intensity 30A/m	4	A	A	C
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|S5MDC|S5NDC

series
S6 DC|S6N DC|S6RDC

DC Switch - disconnectors

DC switch – disconnectors with high operating load capacity and a high level disconnection insulation; high reliability and safety in abnormal situations, available in different construction models, with a wide range of currents in different DC voltages and a variety of accessories.



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

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

They consist of a sandwich-type body containing self-cleaning blade type contacts,

with pre-arc zones to ensure long term, fault-free energy transmission and coated with silver alloy for long electromechanical life. The jump mechanism provides quick and independent switching due to the accumulation of elastic potential energy, which is transmitted at high speed to the contacts for arc extinction.

The switch - disconnectors S6 DC do not require external bridging links; thus reducing installation time and simplifying subsequent maintenance operations.

Functional and ergonomic handle

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

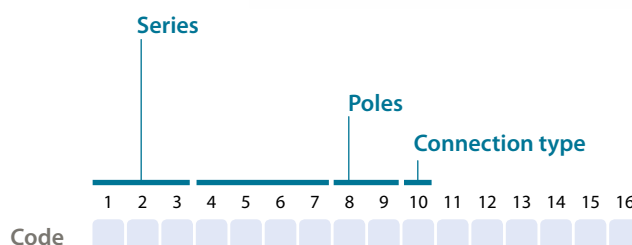


Relevant characteristics for photovoltaic installations

- > U_i (V) Rated insulation voltage 1000 Vdc.
- > U_{oc} (V) Open circuit voltage of the photovoltaic system.
- > U_{ef} (V) Photovoltaic installation functioning voltage on load.
- > I_{ef} (A) Installation working current under load.
- > I_{sc} (A) Short-circuit current of the photovoltaic installation.
- > In certain places of Pv Systems, inductive component must be considered (cables, inverter, etc.).
- > The sizing of the switch must be done considering open circuit voltage as maximum operation voltage.
- > It is necessary to comply with:
 - $U_i \geq U_{oc}$
We recommend to set U_i between 10 and 15% over U_{oc} .
 - $U_e \geq U_{ef}$
 - $I_e \geq I_{ef}$
 - $I_e \geq I_{sc}$

Range codification:

The DC **ZFC|ZFV|S5|S5M|S5N|S6|S6N|S6R** series, are identified by a code that describes their most important characteristics as described below.



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



Testing and approvals:

series ZFC|ZFV



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.

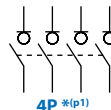
series S6R DC



1 2 3 4 5 6
S 6 R

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

SERPA TEC
PATENTED TECHNOLOGY



S5 DC
S5N DC

S5 switches 4 poles (40 - 3150A) (O - I)

Manual handle



S5 DC



S5N DC

Rated operational voltage U _e	Rated operational current I _e (A)	Size	Connection	4 pole (4P) ^{*(p1)} Code	External ^{*(1)} Code	Direct Code
900V DC21B	40 40	0		S5-01604PB0 S5-01604PS0	DS-SA01	DS-SI01
1000V DC21B	100 160 250 400	1		S5-01254PR0 S5-02004PR0 S5-03154PR0 S5-04004PC0	DS-SA11	DS-SI11
	500 630	2		S5-06304PR0 S5-06302ER0	DS-LA21	DS-LI21
	850 1250	3		S5-12504PC0 S5-12502EC0	DS-LA31	DS-LI31
	1250 1800 2000	4		S5-18004PS0 S5-18002ES0 S5-20002ED0	DS-LA41	DS-LI41
	2000 2500 3150	5 (S5N)		S5N20002ES0 S5N25002ES0 S5N31502ES0	DS-LA41	DS-LI41

S6 DC

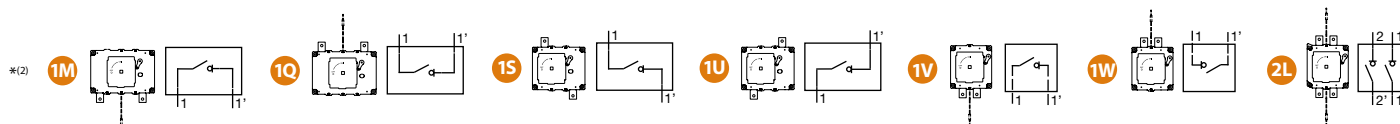
S6 switches 1 or 2 poles (125 - 630A) (O - I)

Manual handle



S6 DC

Rated operational voltage U _e	Rated operational current I _e (A)	Size	Connection	Diagram ^{*(2)} Code	External ^{*(1)} Code	Direct Code
500 Vdc 750Vdc DC21B 1000Vdc	125 160 200 250 315 400	1		S6-0125__S0 S6-0160__S0 S6-0200__S0 S6-0250__S0 S6-0315__S0 S6-0400__D0	DS-SA11	DS-SI11
	500 630	2		S6-0500__S0 S6-0630__S0	DS-LA21	DS-LI21
500 Vdc 750Vdc UL98B 1000Vdc	250 400	1 2		S6-0250__S00L S6-0400__S00L	DS-SA11 DS-LA21	- -



ZFC DC

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



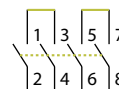
Rated operational voltage U _e	Rated operational current I _e (A)	Size	Connection	Code	Full details in page
1500V DC21B	16 25	00		ZFC16SMAH1NA40 ZFC25SMAH1NA40	214

ZFC DC
ZFV DC

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



Rated operational voltage U _e	Rated operational current I _e (A)	Size	Connection	Code	Full details in page
1500V DC21B	16 25 32 40 55	00		ZFC16VZVH4A40 ZFC25VZVH4A40 ZFV32VZVH4A40 ZFV40VZVH4A40 ZFV55VZVH4A40	214



A40



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

^{*(2)} To complete the code according the specific diagram for IEC or UL versions and the possibility or not of grounding, see the full details pages of this catalogue. If you have any doubt about this, please do not hesitate to consult us.

^{*(p1)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. See the full details pages of this catalogue, to choose the configuration needed and the possibility or not of grounding. If you have any doubt about this, please do not hesitate to consult us.



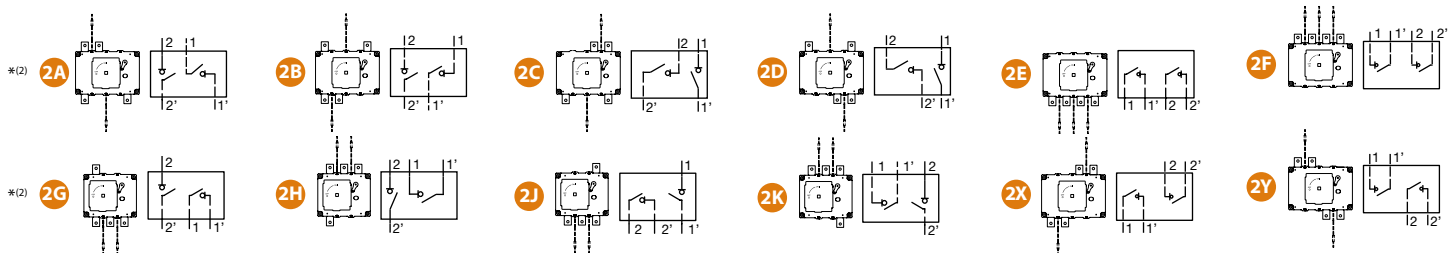
Please indicate in your order the switch code and the handle code, as these both products are managed separately.
A standard shaft is included with the handle.



Shaft extensions ^{*(3)}				Bridging links ^{*(p1)}		Auxiliary contacts ^{*(5)}		Terminal protection		Terminal shrouds (2 units) ^{*(4)}	Full details in page
Size		Type 1 & 2	Code ^{*(e1)}		Code	1NO+1NC Code	2NO+2NC Code	Connection	Code	Code	
0	7	L 250	DS-EP04		DS-PI05 DS-PI01	D5LAU01	D5LAU02		DS-CU01	-	216
		387	DS-EP05							-	
1	10	375	DS-EP14		DS-PI11 DS-PI11 DS-PI11 DS-PI14	D5LAU01	D5LAU02		DS-CU12	DS-CU10 DS-CU11 DS-CU18 DS-CU19	218
		536	DS-EP15							DS-CU20 DS-CU21 DS-CU28 DS-CU29	
2	14	345	DS-EP23		DS-PI21 DS-PI2D	D5LAU01	D5LAU02	-	DS-CU22	-	220
		535	DS-EP24							-	
3	14	345	DS-EP23		DS-PI31 DS-PI3D	D5LAU01	D5LAU02	-	-	DS-CU30 DS-CU31 DS-CU38 DS-CU39	222
		535	DS-EP24							-	
4	14	485	DS-EP44		DS-PI41 (S5-18004P50) DS-PI4D (S5-18002E50-S5-20002ED0)	D5LAU01	D5LAU02	-	-	DS-CU40 DS-CU41 DS-CU48 DS-CU49	224
		635	DS-EP45							-	
5 (S5N)	-	-	-		DS-PI51 + D5LPC45 DS-PI51 + D5LPC45 DS-PI4D + D5LPC45 (x2)	D5LAU01	D5LAU02	-	-	-	232
		-	-							-	



Shaft extensions ^{*(3)}				Auxiliary contacts ^{*(5)}		Safety key lock device ^{*(6)}		Spacers (4 units)	Terminal lug (2 units)	Terminal shrouds (1 unit) ^{*(4)}			Phase barriers			Full details in page
Size		Type 1 & 2	Code ^{*(e1)}	1NO+1NC Code	2NO+2NC Code	Simple Code ^{*(e1)}	Double Code ^{*(e1)}	Code	Code	Code	Code	Code	1 unit Code	2 units Code	3 units Code	
1	10	375 DS-EP14	DS-EP15	D5LAU01	D5LAU02	DS-CA11	DS-CE11	DR-EL11	-	DR-CU11	DR-CU12	DR-CU13	DR-SF11	DR-SF12	DR-SF13	234
		536														
2	14	345 DS-EP23	DS-EP24	D5LAU01	D5LAU02	DS-CB21	DS-CF21	DR-EL21	-	DR-CU21	DR-CU22	DR-CU23	DR-SF21	DR-SF22	DR-SF23	238
		535														
1	10	375 DS-EP14	DS-EP15	D5LAU01	D5LAU02	-	-	DR-EL11	DR-TL11	DR-CU11	DR-CU12	DR-CU13	DR-SF11	DR-SF12	DR-SF13	236
		536														
2	14	345 DS-EP23	DS-EP24	D5LAU01	D5LAU02	-	-	DR-EL21	DR-TL22	DR-CU21	DR-CU22	DR-CU23	DR-SF21	DR-SF22	DR-SF23	240
		535														

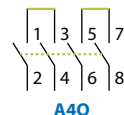


ZFV DC

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



2P	Rated operational voltage	Rated operational current I _e (A)	Size	Connection	Code	Full details in page
	U _e	I _e (A)				
	1500 V DC21B / DC-PV1	32 40 55	00		ZFV32SMAH1A40 ZFV40SMAH1A40 ZFV55SMAH1A40	214



ZFC DC ZFV DC

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



2P	Rated operational voltage	Rated operational current I _e (A)	Size	Connection	Code	Full details in page
	U _e	I _e (A)				
	1000 Vdc DC21B	16 32 55	00		ZFC16PFLH4A40 ZFV32PFLH4A40 ZFV55PFLH4A40	214



- ^{*(3)} A standard shaft is included with the external handle.
- ^{*(4)} One set for input or output. Only for switches . See catalogue to choose the combination required.
- ^{*(5)} To be used as signalling or control contacts – I_e = 16A (resistive loads) 4A (inductive loads) at 250 Vac. Whilst closing, it switches after the main contacts. Whilst opening, it switches before the main contacts.
- ^{*(6)} Handle interlock in OFF 0 position by means of a key, that only can be removed when the handle is unlocked. Interlocking in other positions available upon request.
- ^{*(e1)} All these codes are related to the new handle , in case of replacements for old design handles, please consult.



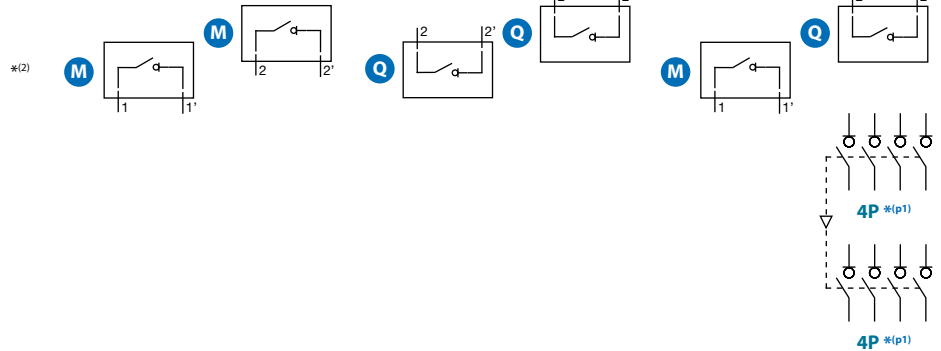
S6N DC

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



S6N DC

Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	2P *(2)					
				Code MM	Code QQ	Code MQ	Code US	Code UU	Code SS
1500V DC21B	125	1		S6N0125MMS0	S6N0125QQS0	S6N0125MQS0	S6N0125USS0	S6N0125UUS0	S6N0125SSS0
	160			S6N0160MMS0	S6N0160QQS0	S6N0160MQS0	S6N0160USS0	S6N0160UUS0	S6N0160SSS0
	200			S6N0200MMS0	S6N0200QQS0	S6N0200MQS0	S6N0200USS0	S6N0200UUS0	S6N0200SSS0
	250			S6N0250MMS0	S6N0250QQS0	S6N0250MQS0	S6N0250USS0	S6N0250UUS0	S6N0250SSS0
	315			S6N0315MMS0	S6N0315QQS0	S6N0315MQS0	S6N0315USS0	S6N0315UUS0	S6N0315SSS0
	400			S6N0400MMD0	S6N0400QSD0	S6N0400MQD0	S6N0400USD0	S6N0400UUD0	S6N0400SSD0

S5M DC
S5N DC

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

Manual handle



S5M DC



S5N DC

Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	4P + 4P *(p1)	External *(1)	Direct
				Code	Code	Code
1500V DC21B	500	2		S5M063044R0	DS-LA22	DS-LI22
	630			S5M080044C0	DS-LA22	DS-LI22
	800	3		S5M080044R0	DS-LA41	DS-LI41
	1000			S5M125044C0	DS-LA41	DS-LI41
	1250	4 (S5N)		S5N160044S0	DS-LA41	DS-LI41
	1800			S5N180044S0	DS-LA41	DS-LI41
1000V DC21B	2000	5 (S5N)		S5N20002ES0	DS-LA41	DS-LI41
	2500			S5N25002ES0	DS-LA41	DS-LI41
	3150			S5N31502ES0	DS-LA41	DS-LI41

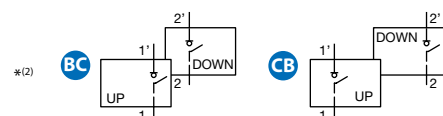
S6R DC

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



S6R DC

Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	2P *(2)	
				Code BC	Code CB
1500Vdc IEC	160	1		S6R0160BCS0	S6R0160CBS0
	200			S6R0200BCS0	S6R0200CBS0
	250			S6R0250BCS0	S6R0250CBS0
	315			S6R0315BCS0	S6R0315CBS0
	400			S6R0400BCS0	S6R0400CBD0
1500Vdc UL98B	250	1		S6R0250BCS00L	S6R0250CBS00L
	320			S6R0320BCS00L	S6R0320CBS00L
	400			S6R0400BCD00L	S6R0400CBD00L



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

*(2) See the full details pages in this catalogue to see the possibility or not of grounding the switch selected. If you have any doubt about this, please do not hesitate to consult us.

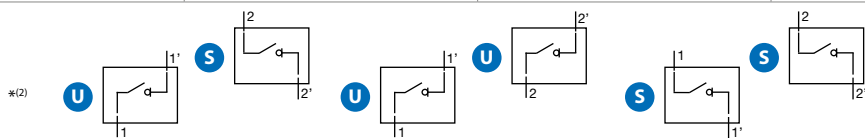
*(p1) To comply with the operation and electrical features, the bridging links must be assembled to the switch. See the full details pages of this catalogue, to choose the configuration needed and the possibility or not of grounding. If you have any doubt about this, please do not hesitate to consult us.



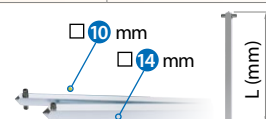
Please indicate in your order the switch code and the handle code, as these both products are managed separately.
A standard shaft is included with the handle.



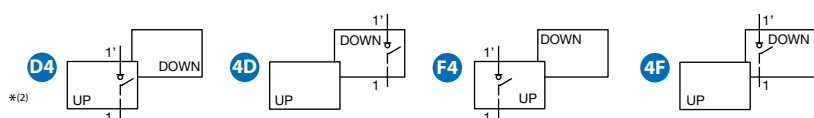
Manual handle 				Auxiliary contacts ^{*(2)}	Full details in page 
Size	External ^{*(1)}	Direct	1NO+1NC	2NO+2NC	
	Code	Code	Code	Code	
1	DS-SA11	DS-SI11	D5LAU01	D5LAU02	242 244



Bridging links ^{*(p1)}			Auxiliary contacts ^{*(2)}		Full details in page 
Size		Code	1NO+1NC	2NO+2NC	
		Code	Code	Code	
2		DS-PI230L DS-PI2D	DS-AU11	DS-AU12	226
3		DS-PI3D	DS-AU11	DS-AU12	228
4 (S5N)		DS-PI430U DS-PI4D	D5LAU01	D5LAU02	230
5 (S5N)		DS-PI51 + D5LPC45 DS-PI51 + D5LPC45 DS-PI4D + D5LPC45 (x2)	D5LAU01	D5LAU02	232



Manual handle 					Shaft extensions ^{*(4)}		Auxiliary contacts ^{*(2)}		Full details in page 
Size	1P ^{*(2)}				Panel ^{*(3)}	Type 1 & 2	1NO+1NC	2NO+2NC	
	Code D4	Code 4D	Code F4	Code 4F		L Code ^{*(e1)}	Code	Code	
1	S6R0160D4S0 S6R0200D4S0 S6R0250D4S0 S6R0315D4S0 S6R0400D4D0	S6R01604DS0 S6R02004DS0 S6R02504DS0 S6R03154DS0 S6R04004DD0	S6R0160F4S0 S6R0200F4S0 S6R0250F4S0 S6R0315F4S0 S6R0400F4D0	S6R01604FS0 S6R02004FS0 S6R02504FS0 S6R03154FS0 S6R04004FS0	DS-SA11	10 375 DS-EP14 536 DS-EP15	D5LAU01	D5LAU02	246 248
1	S6R0250D4S00L S6R0320D4S00L S6R0400D4D00L	S6R02504DS00L S6R03204DS00L S6R04004DD00L	S6R0250F4S00L S6R0320F4S00L S6R0400F4D00L	S6R02504FS00L S6R03204FS00L S6R04004FD00L					



- ^{*(2)} To be used as signalling or control contacts – I_e = 16A (resistive loads) 4A (inductive loads) at 250 Vac. Whilst closing, it switches after the main contacts. Whilst opening, it switches before the main contacts.
- ^{*(3)} Padlockable handle in OFF 0 position. Possibility of unlocking the door in ON I position (with the use of a tool). Door interlock by a padlock in OFF 0 position.
- ^{*(4)} A standard shaft is included with the external handle.
- ^{*(e1)} All these codes are related to the new handle , in case of replacements for old design handles, please consult.



ZFC | ZFV

Switch - disconnecter for DC current 2P

Size 00

A 16|25|32|40|55



600 - 1000 - 1500Vdc

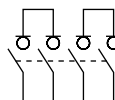


IP67

CODE 2P	
16A	ZFC16SMAH1A40
25A	ZFC25SMAH1A40
32A	ZFV32SMAH1A40
40A	ZFV40SMAH1A40
55A	ZFV55SMAH1A40

CODE 2P	
16A	ZFC16VZVH4A40
25A	ZFC25VZVH4A40
32A	ZFV32VZVH4A40
40A	ZFV40VZVH4A40
55A	ZFV55VZVH4A40

CODE 2P	
16A	ZFC16PFLH4A40
25A	-
32A	ZFV32PFLH4A40
40A	-
55A	ZFV55PFLH4A40



2P

DO NOT USE IN
GROUNDED INSTALLATIONS

Technical information



According to IEC 60947-3
DC-PV1
UL508i

IEC 60947-3

IEC 60947-3

				ZFC16	ZFC25	ZFV32	ZFV40	ZFV55			
Rated operational current	le 2 Poles in series		IEC	1000Vdc	A	9 DC21A	11 DC21A	13 DC21B	29 DC21B	36 DC21B	
				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)	40	63	80	125	160
Maximum cable cross sections (included jumper)											
Solid or stranded					mm²	1,5 - 10	1,5 - 10	4 - 16	2,5 - 25	2,5 - 25	
Flexible					mm²	1,5 - 6	1,5 - 6	4 - 10	2,5 - 16	2,5 - 16	
Flexible (+ multicore cable end)					mm²	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	

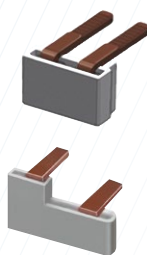
UL508i

LISTED
E362647

UL508i		LISTED E362647																			
Ampere-Rating "General use"				2 Poles in series				UL		600Vdc		A		ZFC16	ZFC25	ZFV32	ZFV40	ZFV55			
										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										Nxmm		1,7 - 1,8		1,7 - 1,8		1,7 - 1,8		2,5 - 2,8		2,5 - 2,8	



Accessories



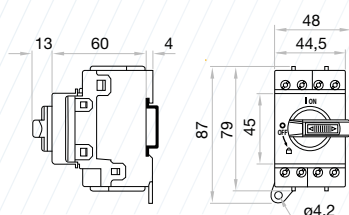
» Insulated bridging links included

CODE ZTC-B1 16-25 A
ZFB-B1 32 A
ZFB-B2 40-55 A

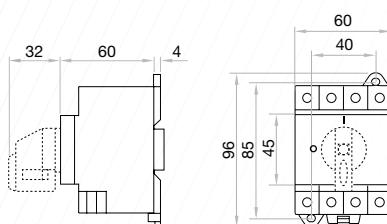


Dimensions (mm)

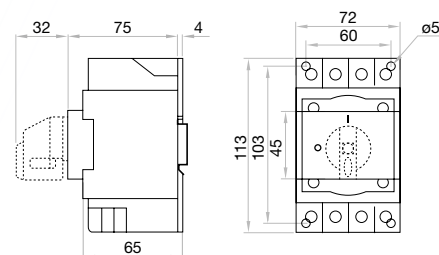
ZFC16-25



ZFB32

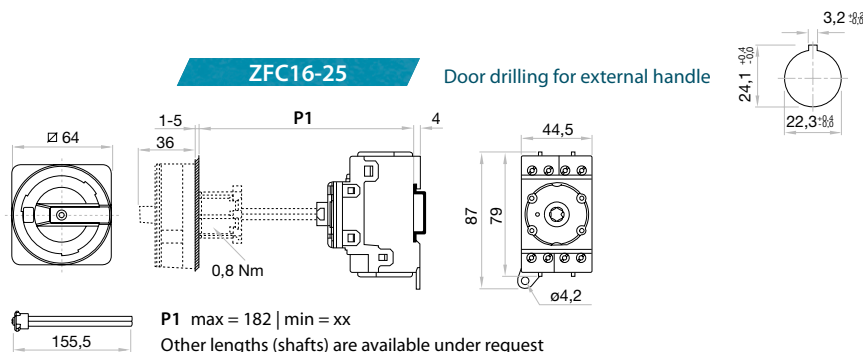


ZFB40-55



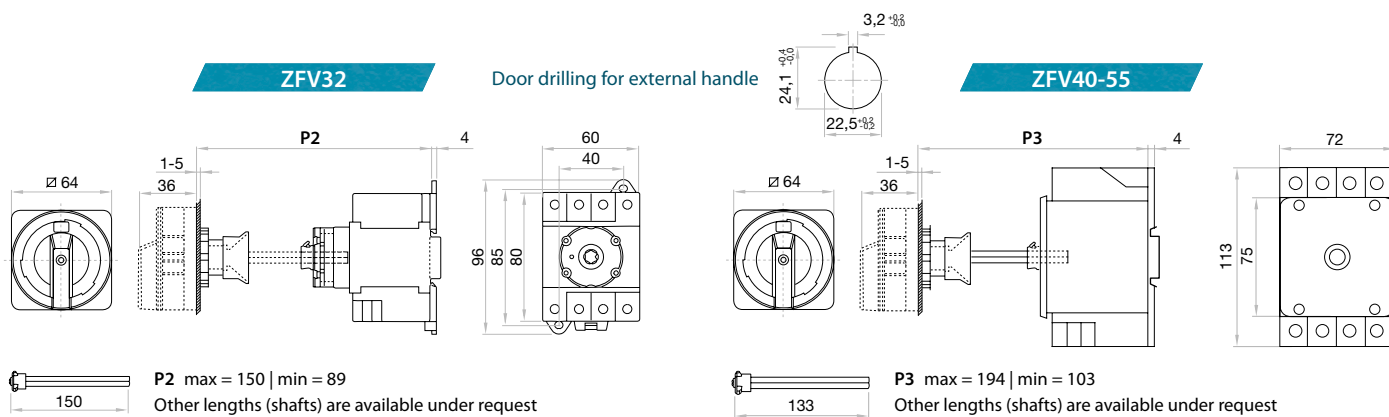
ZFC16-25

Door drilling for external handle

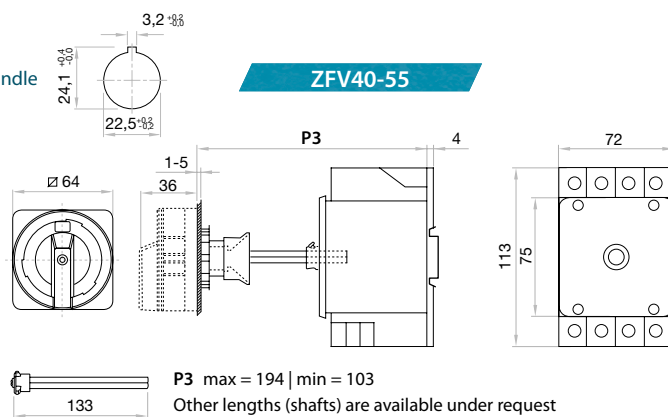


ZFB32

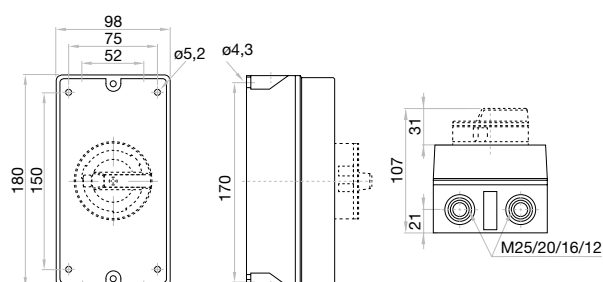
Door drilling for external handle



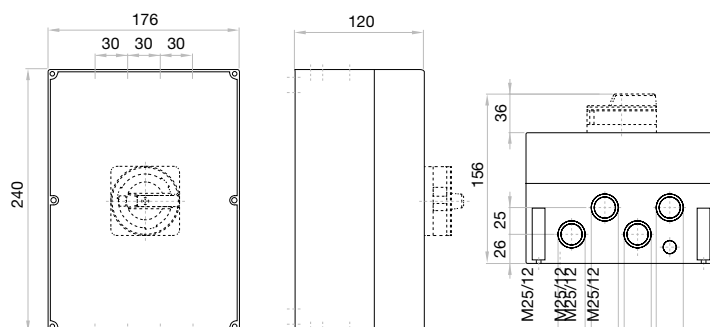
ZFB40-55



ZFC16 - ZFB32



ZFB55



series
S5 DC

S5 DC

Switch - disconnecter for DC current 4P

Size 0

A

40



900 Vdc



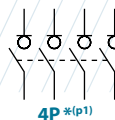
CODE-40A

S5-01604PB0



CODE-40A

S5-01604PS0



tests:

AIT
AUSTRIAN INSTITUTE
OF TECHNOLOGY
TOMORROW TODAY

Technical information



According to IEC 60947-1
IEC 60947-3

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



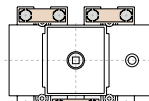
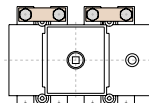
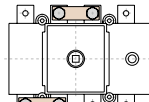
**DO NOT USE IN
GROUNDED INSTALLATIONS**

Connection diagram

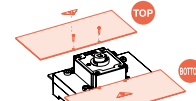
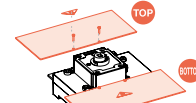
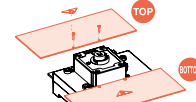
Connection diagram



Bridging links^{*(p1)}



Terminal protection



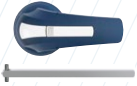


Accessories



» 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)
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



» 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.



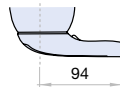
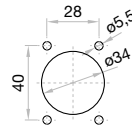
» DIN rail mounting

CODE DS-DN01

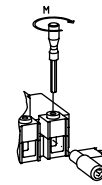
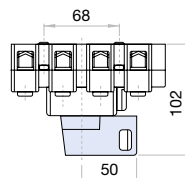
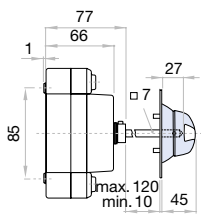
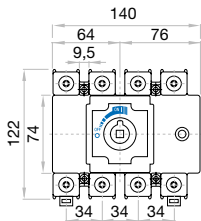
(1 kit)

Dimensions (mm)

Door drilling for external handle

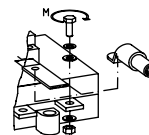
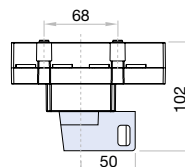
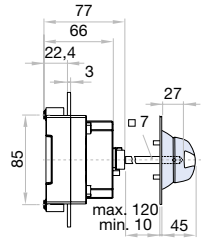
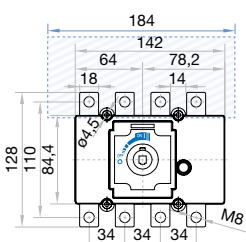


For handle



S max (Cu)	M
mm ²	Nxm

	95	4
--	----	---



S max (Cu)	H max (Cu)	L max (Cu)	T	M
mm ²	mm	mm		Nxm

	95	5	25	M8	13
--	----	---	----	----	----

series
S5 DC

S5 DC Switch - disconnecter for DC current 4P

Size 1

A 100|160|250|400



1000 Vdc



CODE - 100A

S5-01254PR0



CODE - 160A

S5-02004PR0



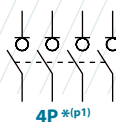
CODE - 250A

S5-03154PR0



CODE - 400A

S5-04004PC0



Technical information

According to IEC 60947-1
IEC 60947-3



consult



consult



consult

tests:



			100	160	250	400	
Rated thermal current in ambient at	Ith	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	Ie	Ue					
		1000 Vdc	A	100	160	250	400

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

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

			100	160	250	400
Short - circuit behaviour						
Short - circuit making capacity ^{*(2)}	Icm	kA (peak)	20	20	20	20
Rated short-time withstand current (1sec.)	Icw	kA rms	12	12	12	12
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		10000	8000	8000	5000
Maximum weight (without bridging links)	Kg		1,9	1,9	1,9	2,1



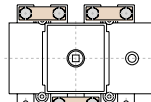
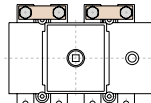
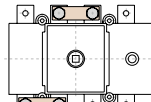
**DO NOT USE IN
GROUNDED INSTALLATIONS**

Connection diagram

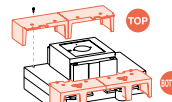
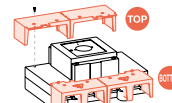
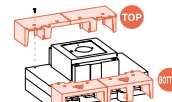
Connection diagram



Bridging links ^{*(p1)}



Terminal shrouds



Accessories



» Direct handle

CODE DS-SI11

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

IP65

CODE DS-SA11



» External handle without shaft

IP65

CODE DS-SA14

» Shafts

Standard shaft included ^{*(e1)}

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

Shaft extensions

Type 1

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

Type 2

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



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.



» Terminal protection

CODE DS-CU12

(1 unit for input or output)



» Terminal shrouds (2 units)

	A	B	C
TOP	DS-CU18	DS-CU10	DS-CU10
BOTTOM	DS-CU19	DS-CU11	DS-CU18

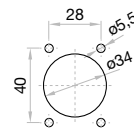
» Bridging links ^{*(p1)}

A B CODE DS-PI11 (2 units)

A B CODE DS-PI14 (2 units)

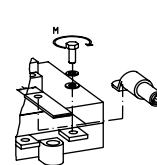
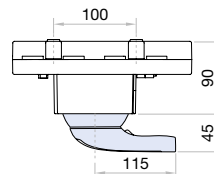
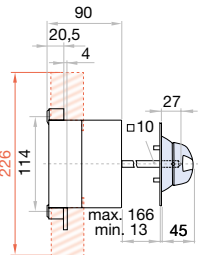
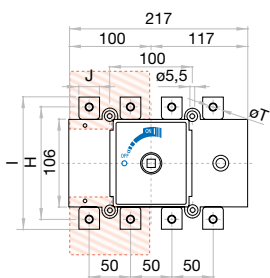
C CODE CONSULT

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

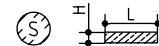


Door drilling for external handle

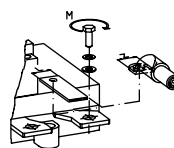
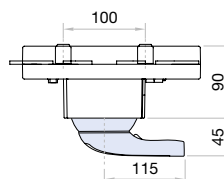
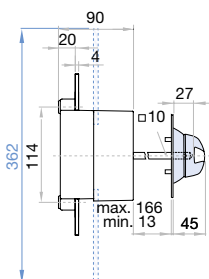
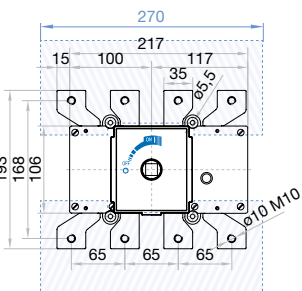
Dimensions (mm)



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



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
100 A					Nxm
160 A	185	7	25	M8	13
250 A				M10	18



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

series
S5 DC

S5 DC

Switch - disconnecter for DC current 4P

Size 2

A 500|630



1000 Vdc



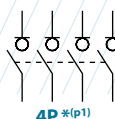
CODE-500A

S5-06304PRO



CODE-630A

S5-06302ERO



tests:

Technical information

According to IEC 60947-1
IEC 60947-3



consult



consult



consult



TOMORROW TODAY

			500	630
Rated thermal current in ambient at	Ith 40° C	A	500	630
	50° C	A	500	630
	60° C	A	400	500
Rated insulation voltage DC20	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12
Rated operational current ^{*(1)} DC21B	Ue Ie 1000 Vdc	A	500	630

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

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

			500	630
Short - circuit behaviour				
Short - circuit making capacity ^{*(2)}	Icm	kA (peak)	26	26
Rated short-time withstand current (1sec.)	Icw	kA rms	16	16
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		5000	5000
Maximum weight (without bridging links)	Kg		4,5	4,5



**DO NOT USE IN
GROUNDED INSTALLATIONS**

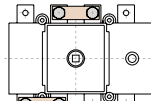
Connection diagram

Connection diagram

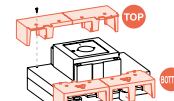
A



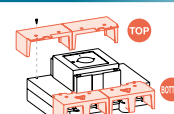
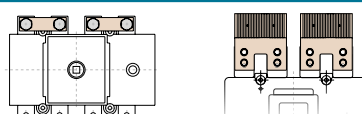
Bridging links ^{*(p1)}



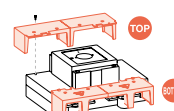
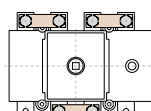
Terminal shrouds



B



C



Accessories



» Direct handle

CODE DS-LI21

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

IP65

CODE DS-LA21



» External handle without shaft

IP65

CODE DS-LA24

» Shafts

Standard shaft included ^{*(e1)}

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

Shaft extensions

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

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



» Auxiliary contacts

1NO+1NC	CODE DS-LAU01
2NO+2NC	CODE DS-LAU02

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



» Terminal protection

CODE DS-CU22

(1 unit for input or output)



» Terminal shrouds (2 units - only for 500A))

	A	B	C
TOP	DS-CU28	DS-CU20	DS-CU20
BOTTOM	DS-CU29	DS-CU21	DS-CU28

» Bridging links ^{*(p1)}

A B 500A CODE DS-PI21 (2 units)

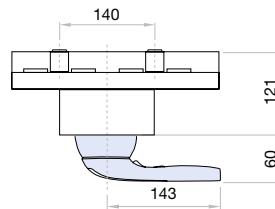
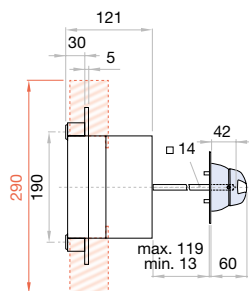
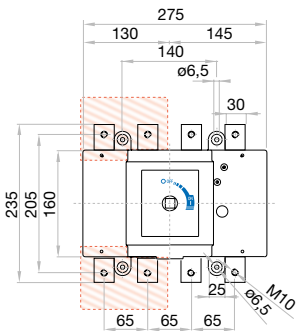
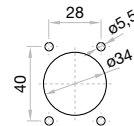
C CODE CONSULT

B 630A CODE DS-PI2D (2 units)

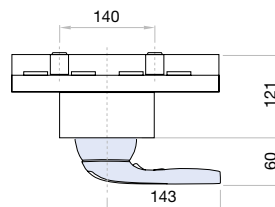
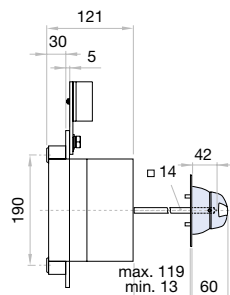
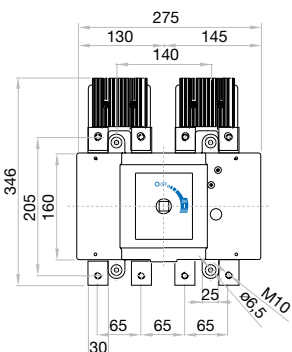
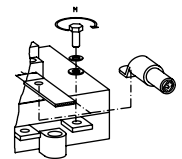
^{*(p1)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.

Dimensions (mm)

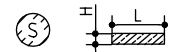
Door drilling for external handle



500 A



630 A



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

series
S5 DC

S5 DC

Switch - disconnecter for DC current 4P

Size 3

A 850|1250



1000 Vdc

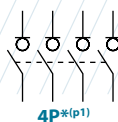


CODE-850A

S5-12504PC0

CODE-1250A

S5-12502EC0



Technical information

According to IEC 60947-1
IEC 60947-3



consult



consult



consult

tests:



			850	1250
Rated thermal current in ambient at	Ith	40° C	A	850
		50° C	A	850
		60° C	A	700
Rated insulation voltage DC20	Ui		V	1500
Rated impulse withstand voltage	Uimp		kV	12
Rated operational current ^{*(1)} DC21B	Ie	Ue 1000 Vdc	A	850
				1250

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

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

			850	1250
Short - circuit behaviour				
Short - circuit making capacity ^{*(2)}	Icm	kA (peak)	60	60
Rated short-time withstand current (1sec.)	Icw	kA rms	25	25
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		3000	3000
Maximum weight (without bridging links)	Kg		7,6	7,6



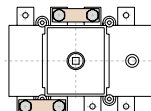
**DO NOT USE IN
GROUNDED INSTALLATIONS**

Connection diagram

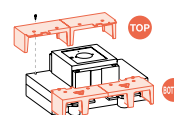
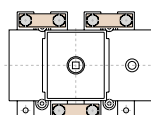
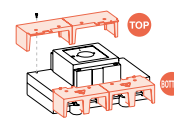
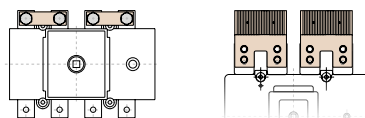
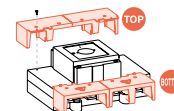
Connection diagram



Bridging links^{*(p1)}



Terminal shrouds



Accessories



» Direct handle

CODE DS-LI31

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

IP65

CODE DS-LA31



» External handle without shaft

IP65

CODE DS-LA33



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.



» Terminal shrouds (2 units - only for 850A)

	A	B	C
TOP	DS-CU38	DS-CU30	DS-CU30
BOTTOM	DS-CU39	DS-CU31	DS-CU38

» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
186	145... 242

Shaft extensions

Type 1

L (mm)	P (mm)	CODE
345	145... 411	DS-EP23

Type 2

L (mm)	P (mm)	CODE
535	145... 600	DS-EP24

» Bridging links ^{*(p1)}

A B 850A CODE DS-PI31 (2 units)

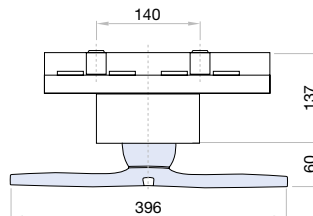
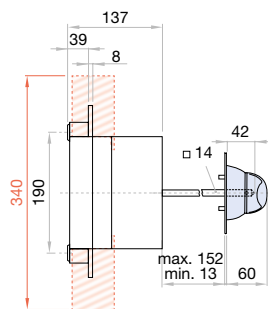
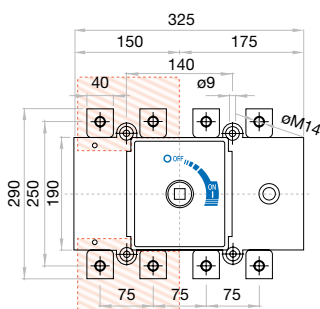
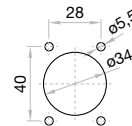
C CODE CONSULT

B 1250A CODE DS-PI3D (2 units)

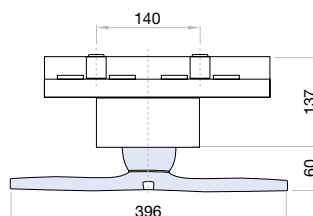
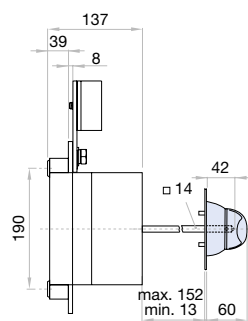
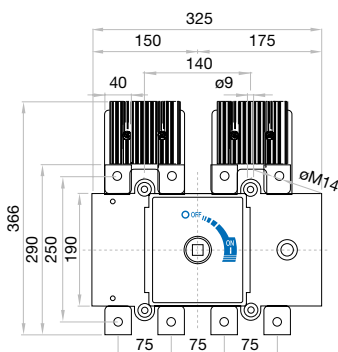
^{*(p1)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.

Dimensions (mm)

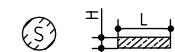
Door drilling for external handle



850 A



1250 A



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

series
S5 DC

S5 DC

Switch - disconnecter for DC current 4P

Size 4

A 1250|1800|2000



1000 Vdc



CODE - 1250A

S5-18004PS0

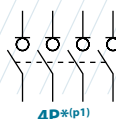


CODE - 1800A

S5-18002ES0

CODE - 2000A

S5-20002ED0



Technical information

According to IEC 60947-1
IEC 60947-3



consult



consult



consult

tests:



			1250	1800	2000
Rated thermal current in ambient at	Ith	40° C	A	1250	1800
		50° C	A	1250	1620
		60° C	A	1250	1400
Rated insulation voltage DC20	Ui	V	1500	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12	12
Rated operational current ^{*(1)} DC21B	Ue Ie	1000 Vdc	A	1250	1800

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

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

			1250	1800	2000
Short - circuit behaviour					
Short - circuit making capacity ^{*(2)}	Icm	kA (peak)	60	60	60
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		3000	3000	3000
Maximum weight (without jumpers)	Kg		20,8	20,8	20,8



**DO NOT USE IN
GROUNDED INSTALLATIONS**

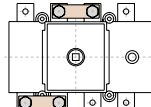
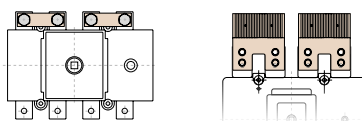
Connection diagram

Connection diagram

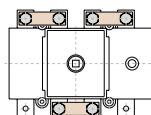
A S5-18004PS0



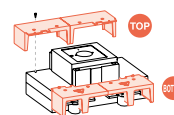
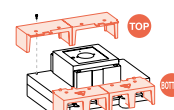
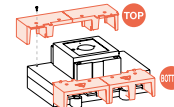
Bridging links^{*(p1)}

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

C S5-18004PS0



Terminal shrouds



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

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



» Terminal shrouds (2 units)

	A	B	C
TOP	DS-CU48	DS-CU40	DS-CU40
BOTTOM	DS-CU49	DS-CU41	DS-CU48

» Bridging links ^{*(p1)}

For S5-18004PSO A B CODE DS-PI41 (2 units)
C CONSULT

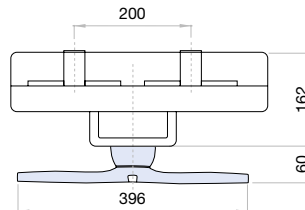
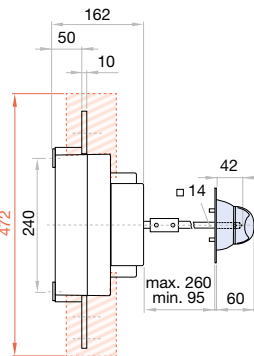
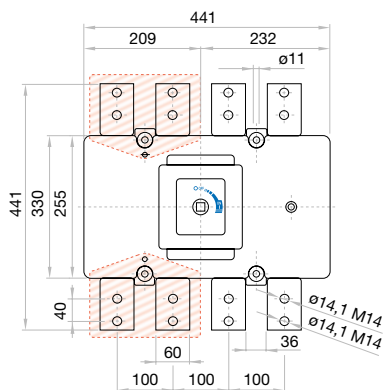
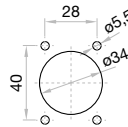
For S5-18002ESO S5-20002EDO B CODE DS-PI4D (2 units)

C CONSULT

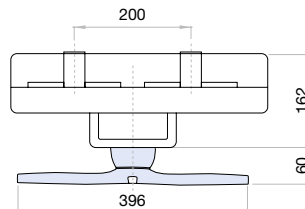
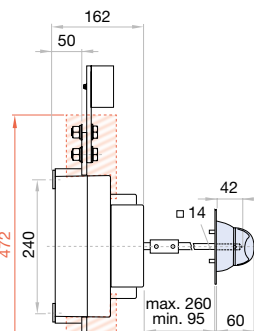
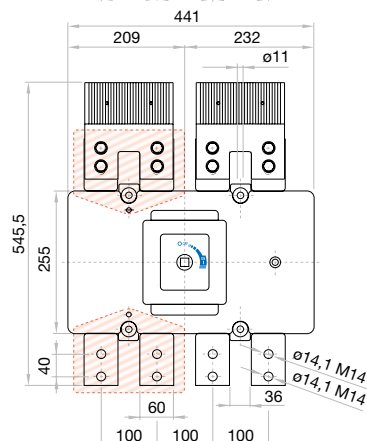
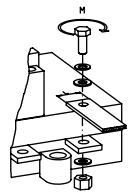
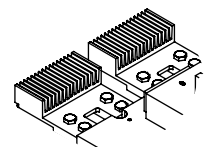
^{*(p1)} To meet the operation and electrical features, the product installed must incorporate these bridging links. Please consult.

Dimensions (mm)

Door drilling for external handle



1250 A

1800 A
2000 A

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



S5M DC

Switch - disconnecter

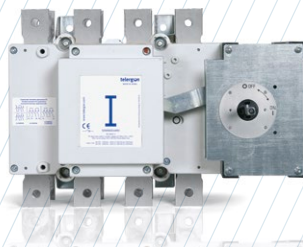
for DC current 4P + 4P

Size 2

A 500|630



1500 Vdc

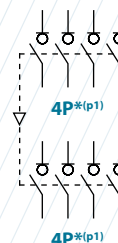


CODE-500A

S5M063044R0

CODE-630A

S5M080044C0



Technical information



tests:



According to IEC60947-1
IEC60947-3

			500	630
Rated thermal current in ambient at	Ith 40° C	A	500	630
	50° C	A	500	630
	60° C	A	500	630
Rated insulation voltage DC20	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12
Rated operational current DC21B	Ue Ie 1500 Vdc	A	500	630

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

Short - circuit behaviour

Maximum cut - off current ^{*(1)}	Icm	kA (peak)	26
Short - time withstand current (1 sec.)	Icw	kA rms	16

Mechanical features

Number of mechanical operations (according to the standards, for other values please consult)	Cycles	5000
Maximum weight (without jumpers)	Kg	13



DO NOT USE IN
GROUNDED INSTALLATIONS

Connection diagram

Connection diagram

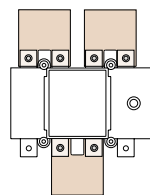
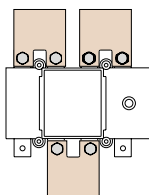
A S5M063044R0



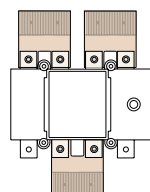
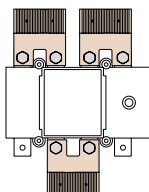
Bridging links^{*(p1)}

Front switch

Rear switch



B S5M080044C0





Accessories



» Direct handle

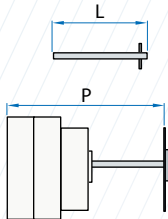
CODE DS-LI22



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

IP65

CODE DS-LA22



» Shafts

Standard shaft included ^{*(e1)}

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



» Auxiliary contacts

1NO+1NC CODE DS-AU11

2NO+2NC CODE DS-AU12

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.



» Bridging links ^{*(p1)}



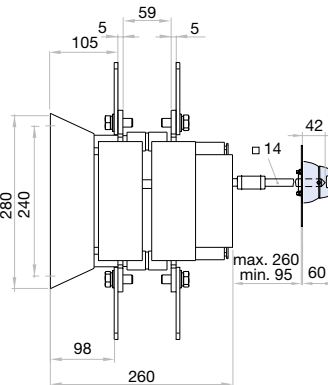
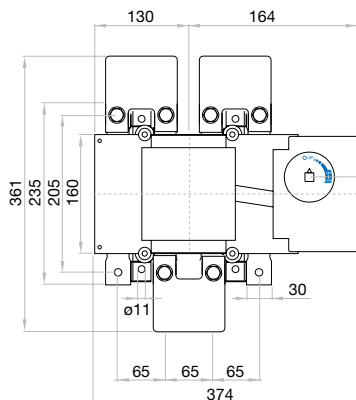
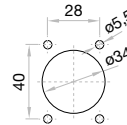
A 500A CODE DS-PI230L (2 units)

B 630A CODE DS-PI2D (2 units)

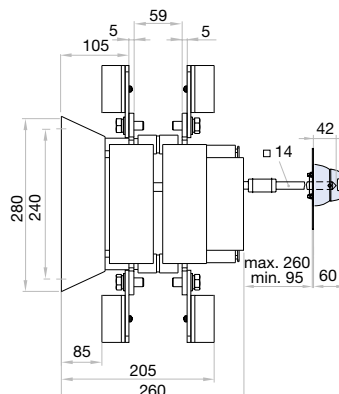
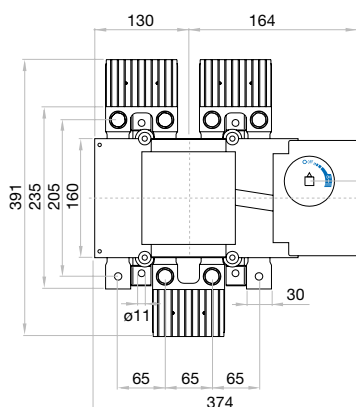
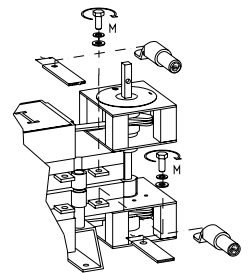
^{*(p1)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.

Dimensions (mm)

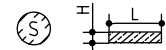
Door drilling for external handle



500A



630A



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

series
S5M DC

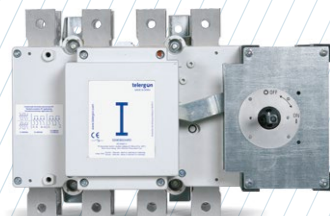
S5M DC Switch - disconnecter for DC current 4P+4P

Size 3

A 800|1000

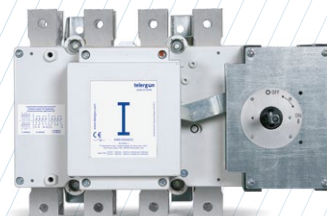


1500 Vdc



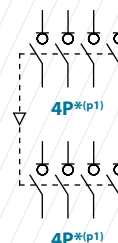
CODE-800A

S5M080044R0



CODE-1000A

S5M125044C0



Technical information



AIT
AUSTRIAN INSTITUTE
OF TECHNOLOGY
TOMORROW TODAY

According to IEC60947-1
IEC60947-3

			800	1000
Rated thermal current in ambient at	Ith	40° C	A	800
		50° C	A	800
		60° C	A	800
Rated insulation voltage DC20	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12
Rated operational current DC21B	Ue			
	Ie	1500 Vdc	A	800
				1000

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

Short - circuit behaviour

Maximum cut - off current ^{*(1)}	Icm	kA (peak)	60
Short - time withstand current (1 sec.)	Icw	kA rms	25

Mechanical features

Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000
Maximum weight (without jumpers)	Kg	28,6

tests:



**DO NOT USE IN
GROUNDED INSTALLATIONS**

Connection diagram

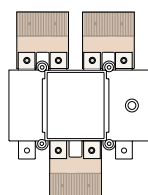
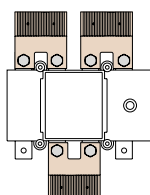
Connection diagram



Bridging links^{*(p1)}

Front switch

Rear switch





Accessories



» Direct handle

CODE DS-LI41



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

IP65

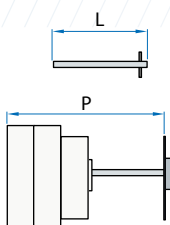
CODE DS-LA41



» External handle without shaft

IP65

CODE DS-LA43



» Shafts

Standard shaft included ^{*(e1)}

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



» Auxiliary contacts

1NO+1NC CODE DS-AU11

2NO+2NC CODE DS-AU12

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.



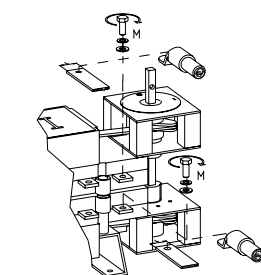
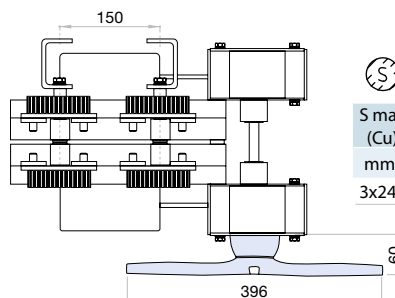
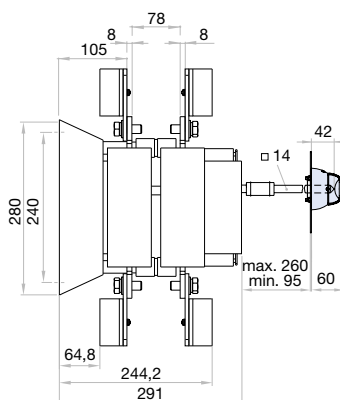
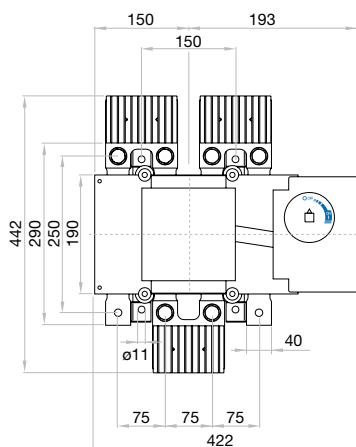
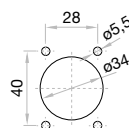
» Bridging links ^{*(p1)}

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.

Dimensions (mm)

Door drilling for external handle



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



S5N DC

Switch - disconnecter

for DC current 4P + 4P

Size 4

A 1250|1800



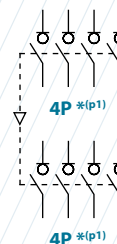
1500 Vdc



CODE - 1250A **S5N160044S0**



CODE - 1800A **S5N180044S0**



Technical information



According to IEC 60947-1
IEC 60947-3

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

Mechanical features

Number of mechanical operations (according to the standards, for other values please consult)	Cycles	600
Maximum weight (without bridging links)	Kg	44,3



**DO NOT USE IN
GROUNDED INSTALLATIONS**

Connection diagram

Connection diagram

A S5N160044S0

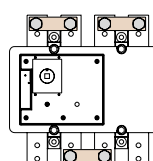


B S5N180044S0

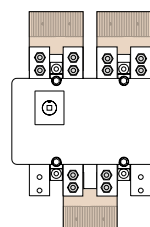
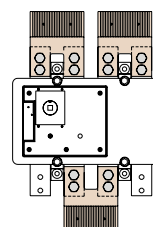
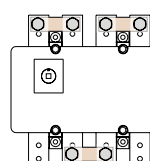


Bridging links ^{*(p1)}

Front switch



Rear switch





Accessories



» Direct handle

CODE DS-LI41

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

IP65

CODE DS-LA41



» External handle without shaft

IP65

CODE DS-LA43



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac

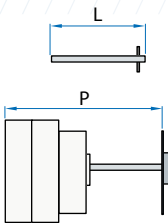
» Bridging links ^{*(p1)}

A 1250A CODE DS-PI430U (3 units)



B 1800A CODE DS-PI4D (2 units)

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



» Shafts

Standard shaft included ^{*(e1)}

L (mm)

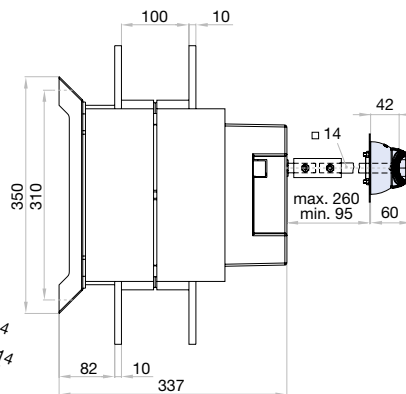
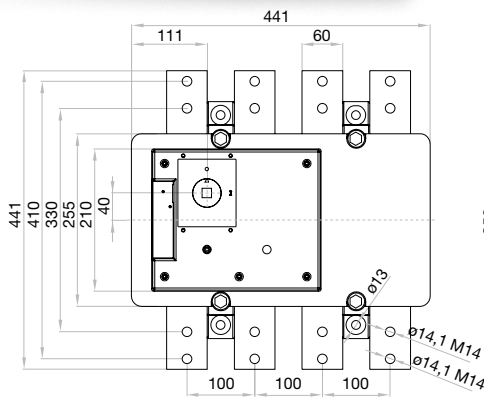
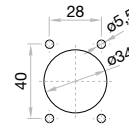
239

P (mm)

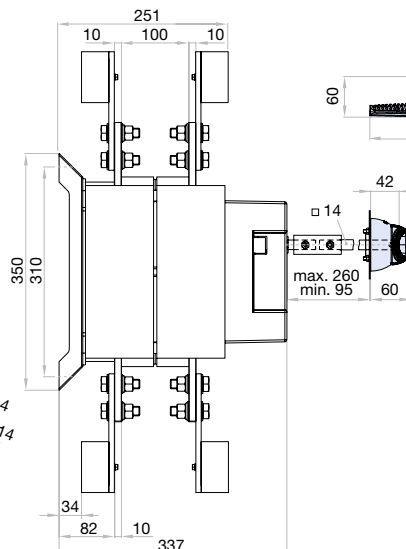
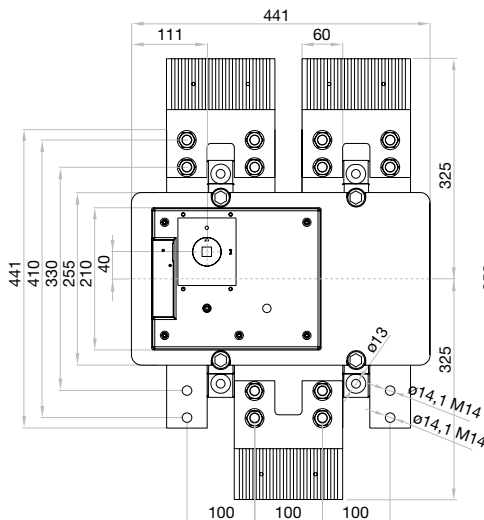
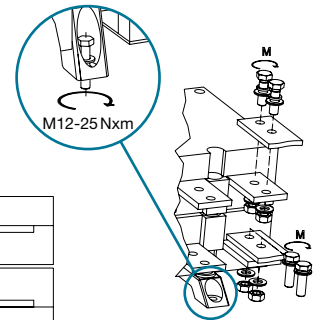
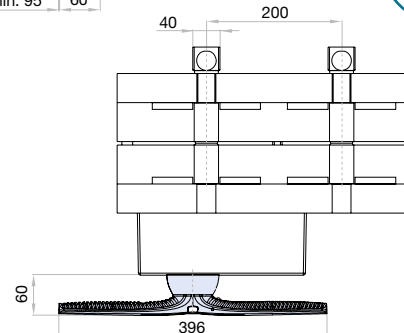
420 ... 580

Dimensions (mm)

Door drilling for external handle



1250 A



1800 A

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

series
S5N DC

S5N DC

Switch - disconnecter for DC current 4P+4P

Size 5

A 2000|2500|3150



1000 Vdc



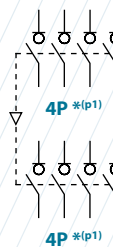
CODE-2000A

S5N2000ES0



CODE-2500A

S5N2500ES0



CODE-3150A

S5N3150ES0

Technical information



According to IEC 60947-1
IEC 60947-3

			2000	2500	3150
Rated thermal current in ambient at	Ith	40° C	A	2000	2500
		50° C	A	2000	2500
		60° C	A	2000	2500
Rated insulation voltage DC20	Ui	V	1500	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12	12
Rated operational current DC21B ^{*(1)}	Ie	Ue 1000 Vdc	A	2000	2500
				2500	3150

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

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

Short - circuit behaviour

Short - circuit making capacity ^{*(2)}	Icm	kA (peak)	60
Rated short-time withstand current (1sec.)	Icw	kA rms	50

Mechanical features

Number of mechanical operations (according to the standards, for other values please consult)	Cycles	600
Maximum weight (without bridging links)	Kg	55



**DO NOT USE IN
GROUNDED INSTALLATIONS**

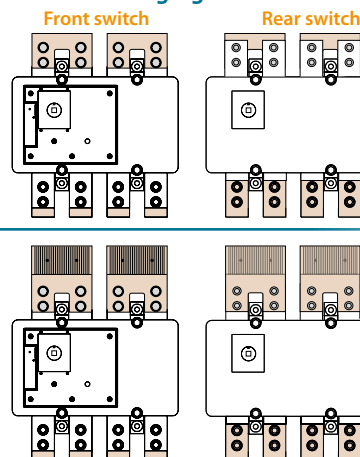
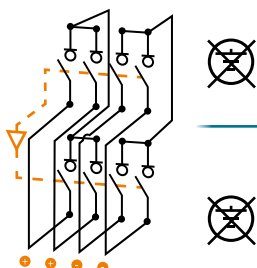
Connection diagram

Connection diagram

Bridging links ^{*(p1)}

A S5N2000ES0
S5N2500ES0

B S5N3150ES0





Accessories



» Direct handle

CODE DS-LI41

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

IP65

CODE DS-LA41



» External handle without shaft

IP65

CODE DS-LA43



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac

» Bridging links ^{*(p1)}

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

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

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



DS-PI4D



DS-PI51



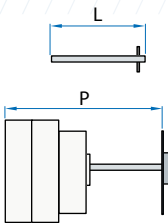
D5LPC45

^{*(p1)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult

» Shafts

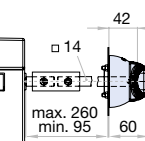
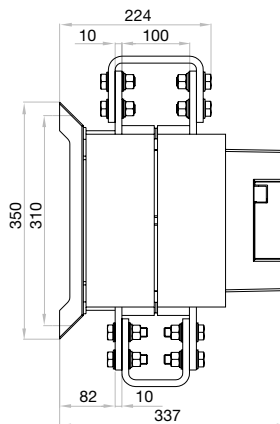
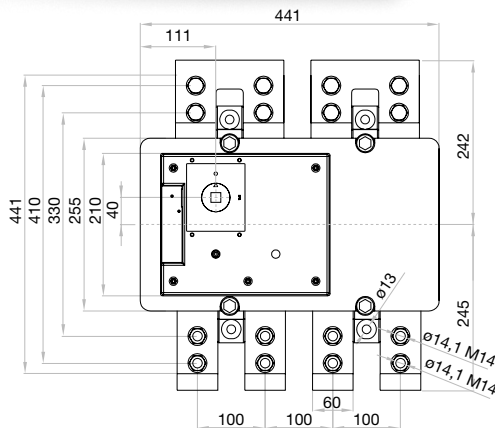
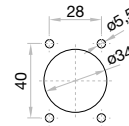
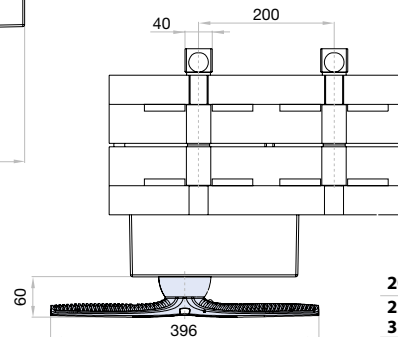
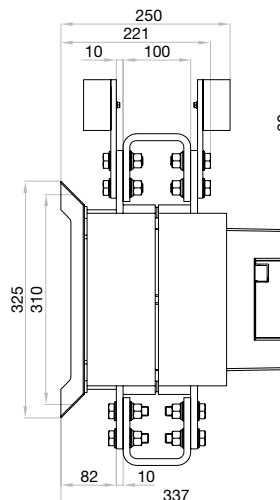
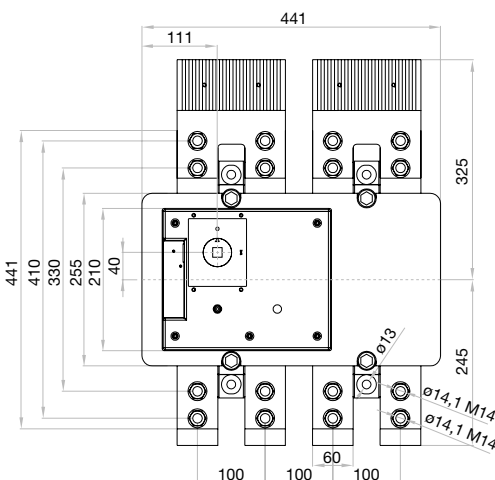
Standard shaft included ^{*(e1)}

L (mm)	P (mm)
239	420 ... 580

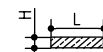
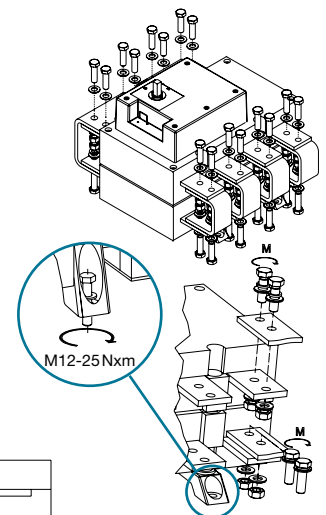


Dimensions (mm)

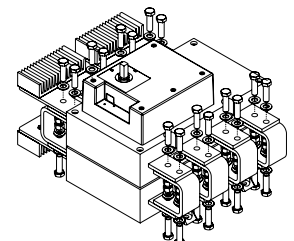
Door drilling for external handle

2000 A
2500 A

3150 A



	H max (Cu) mm	L max (Cu) mm	M Nxm
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-500 Vdc

125A	S6-0125 __ S0
160A	S6-0160 __ S0
200A	S6-0200 __ S0
250A	S6-0250 __ S0
315A	S6-0315 __ S0
400A	S6-0400 __ D0



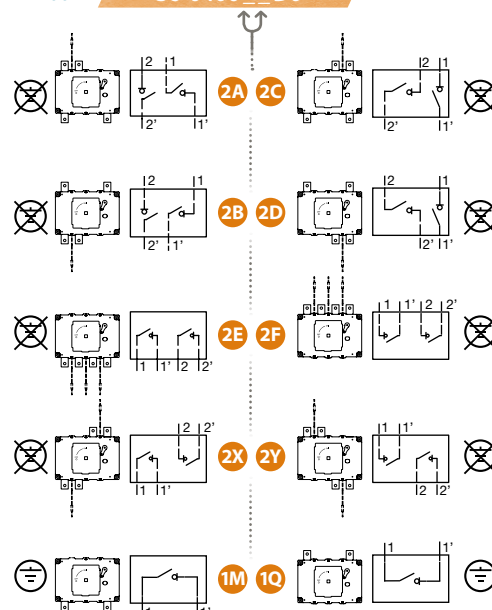
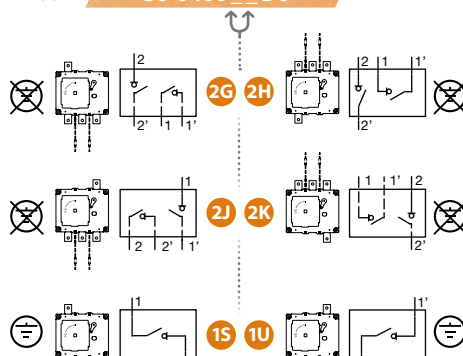
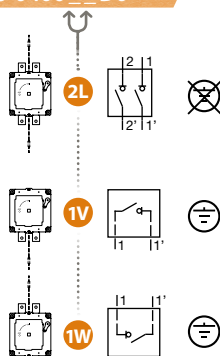
CODE-750 Vdc

125A	S6-0125 __ S0
160A	S6-0160 __ S0
200A	S6-0200 __ S0
250A	S6-0250 __ S0
315A	S6-0315 __ S0
400A	S6-0400 __ D0



CODE-1000 Vdc

125A	S6-0125 __ S0
160A	S6-0160 __ S0
200A	S6-0200 __ S0
250A	S6-0250 __ S0
315A	S6-0315 __ S0
400A	S6-0400 __ D0

DO NOT USE IN
GROUNDED INSTALLATIONS

Technical information



tests:



According to IEC 60947-1
IEC 60947-3

				125	160	200	250	315	400	
Rated thermal current in ambient at	I _{th}	40° C	A	125	160	200	250	315	400	
		50° C	A	125	160	200	250	315	400	
		60° C	A	125	160	200	250	315	400	
Rated insulation voltage (DC)	U _i		V	1500	1500	1500	1500	1500	1500	
Rated impulse withstand voltage	U _{imp}		kV	12	12	12	12	12	12	
Rated operational current ^{*(1)}	I _e	Code 500Vdc	DC21B	A	125	160	200	250	315	400
		Code 750Vdc		A	125	160	200	250	315	400
		Code 1000Vdc		A	125	160	200	250	315	400

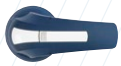
			125	160	200	250	315	400
Short - circuit behaviour								
Rated short-circuit making capacity ^{*(2)}	I _{cm}	kA (peak)	10	10	10	10	10	10
Rated short-time withstand current (1sec)	I _{cw}	kA rms	10	10	10	10	10	10
Mechanical features								
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		8000	8000	8000	8000	8000	5000
Maximum weight	Consult according to code							

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)



Accessories



» Direct handle

CODE DS-SI11



» External handle included shaft ^{*(e1)}

IP65

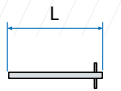
CODE DS-SA11



» External handle without shaft

IP65

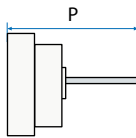
CODE DS-SA14



» Shafts

Standard shaft included ^{*(e1)}

L (mm) 227 P (mm) 103... 256



» Shaft extensions

Type 1
L (mm) 375 P (mm) 103... 415 CODE DS-EP14

Type 2
L (mm) 536 P (mm) 103... 576 CODE DS-EP15



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal shrouds

CODE DR-CU11 (1 unit)
CODE DR-CU12 (1 unit)
CODE DR-CU13 (1 unit)



» Phase barriers

CODE DR-SF11 (1 unit)
CODE DR-SF12 (2 units)
CODE DR-SF13 (3 units)



» Spacers

CODE DR-EL11 (4 units)



» Safety key lock device

Simple CODE DS-CA11

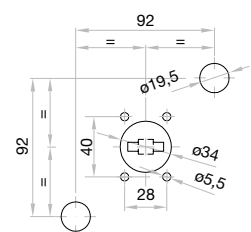
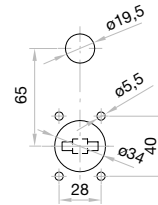
Double CODE DS-CE11

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device

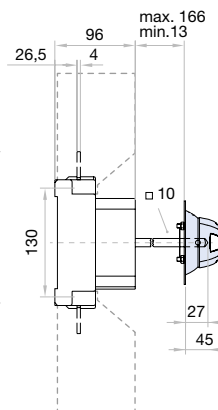
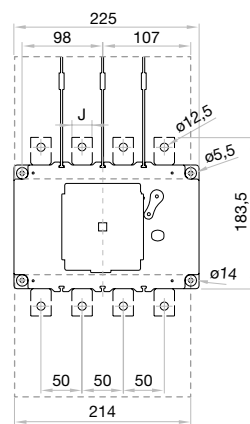
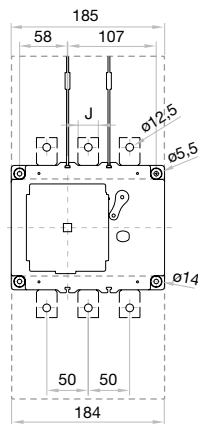
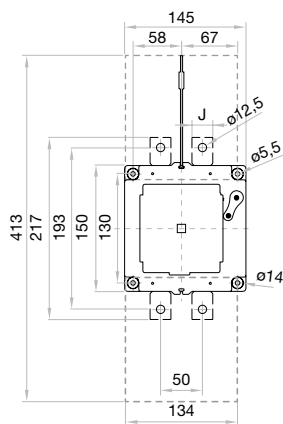
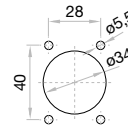
Simple

Double

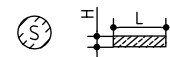
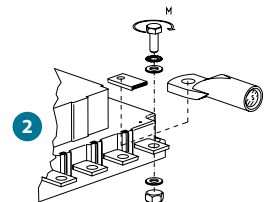
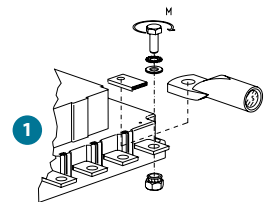


Dimensions (mm)

Door drilling for external handle



	J mm
125 A	25
160 A	25
200 A	25
250 A	25
315 A	25
400 A	30



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
125 A	185	8	25	M12	24
160 A	185	8	25	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 ^{*(t1)}	8	30	M10	18

^{*(t1)} Using phase barriers DR-SF__ to maintain the required clearance.

S6 DC UL

Switch - disconnecter for DC current 1P - 2P

Size 1

A

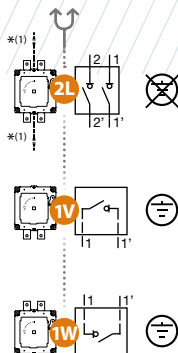
250



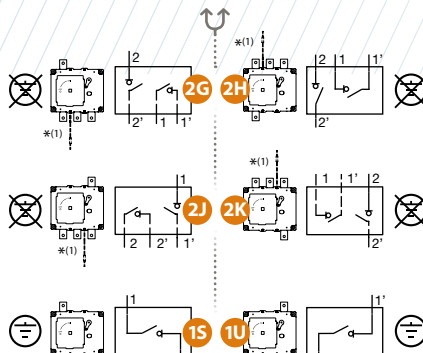
500 - 750 - 1000 Vdc



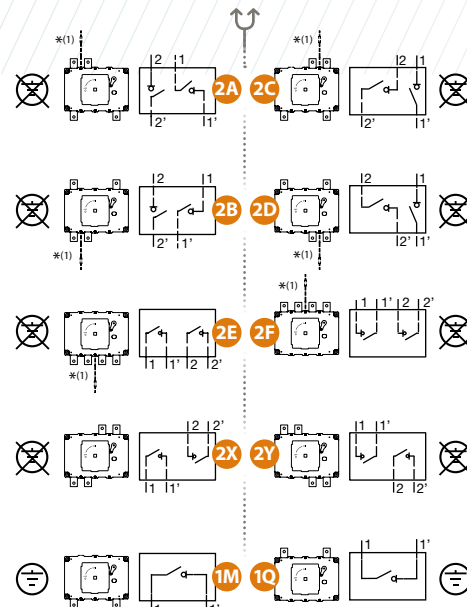
250A CODE-500 Vdc **S6-0250 _ S00L**



250A CODE-750 Vdc **S6-0250 _ S00L**



250A CODE-1000 Vdc **S6-0250 _ S00L**



**DO NOT USE IN
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Technical information



tests:

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According to UL98B

LISTED E333311			250	
Rated thermal current	I _{th}	-20°C to +50°C	A	250
Rated operational current	I _e	Code 500Vdc	A	250
		Code 750Vdc	A	250
		Code 1000Vdc	A	250
Rated short-circuit current	I _{cc}		kA	10
Maximum weight			Consult according to code	
Wiring capacity				
Minimum connection wire range/AWG			MCM	400
Maximum connection wire range/AWG			MCM	400

250 A

Conforms to UL98B. Minus 20 to +50°C. PV disconnects switch. Location Category B 1000Vdc 250 A Torque: 159 lbf-in. Short circuit rating: 10 kA

Suitable for Use in PV Systems in accordance with Article 690 of the NEC IEC-60947-3 Uimp 12 kV DC21B-1000Vdc-250 A Ui 1500Vdc Ith 250 A

S6 DC

Switch - disconnecter for DC current 1P - 2P

Size 2

A 500|630



500 - 750 - 1000 Vdc



CODE-500 Vdc

500A S6-0500 __ S0
630A S6-0630 __ S0



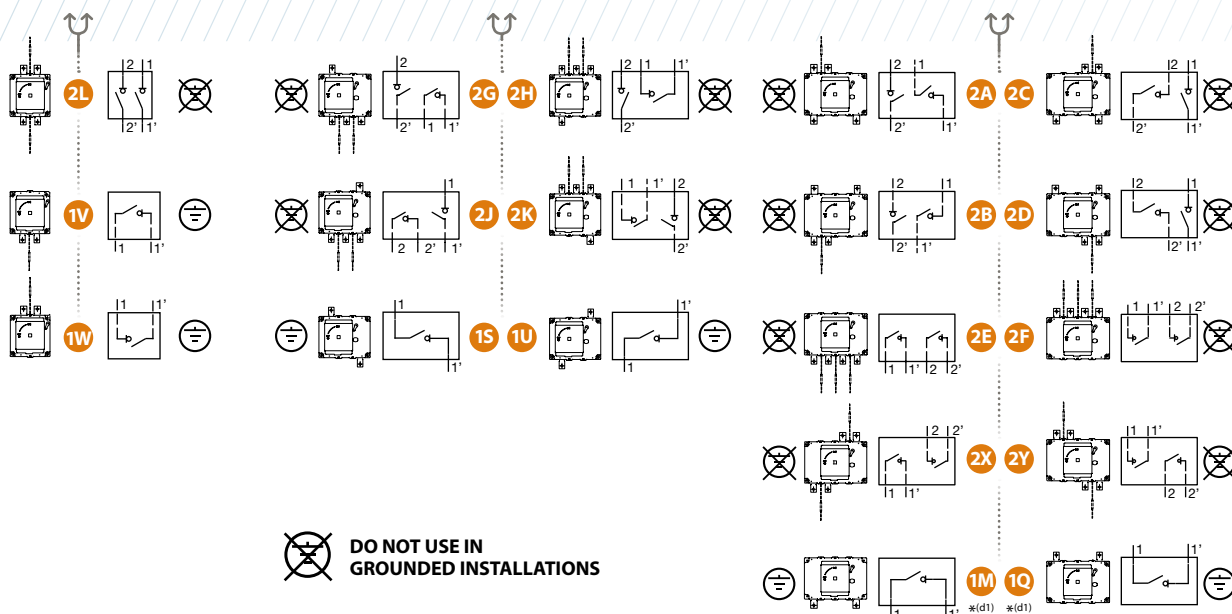
CODE-750 Vdc

500A S6-0500 __ S0
630A S6-0630 __ S0



CODE-1000 Vdc

500A S6-0500 __ S0
630A S6-0630 __ S0



*(d1) Only for 500 A.

Technical information



tests:



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

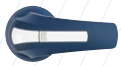
DC21B

			500	630
Short - circuit behaviour				
Rated short-circuit making capacity ^{*(2)}	Icm	kA (peak)	10	10
Rated short-time withstand current (1 sec)	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

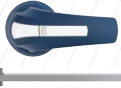
*(2) Without limiting protective device (short-circuit maintained 50... 100 ms.)

Accessories



» Direct handle

CODE DS-LI21

» External handle included shaft ^{*(e1)}

IP65

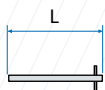
CODE DS-LA21



» External handle without shaft

IP65

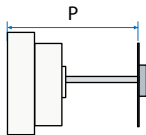
CODE DS-LA24



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
195	134... 240



Shaft extensions

Type 1

L (mm)	P (mm)	CODE
345	134... 400	DS-EP23

Type 2

L (mm)	P (mm)	CODE
535	134... 560	DS-EP24



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.



» 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

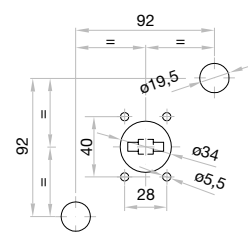
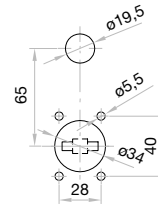
Double CODE DS-CF21

(Using phase barriers DR-SF_ to maintain the required clearance)

Door drilling for handle and key lock device

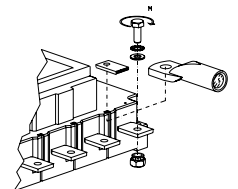
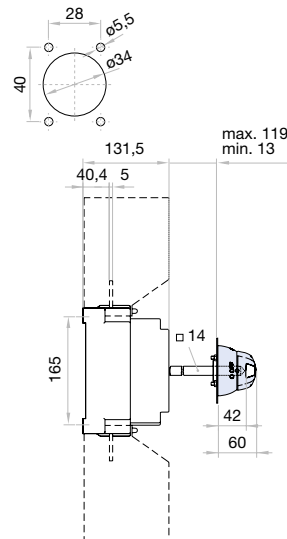
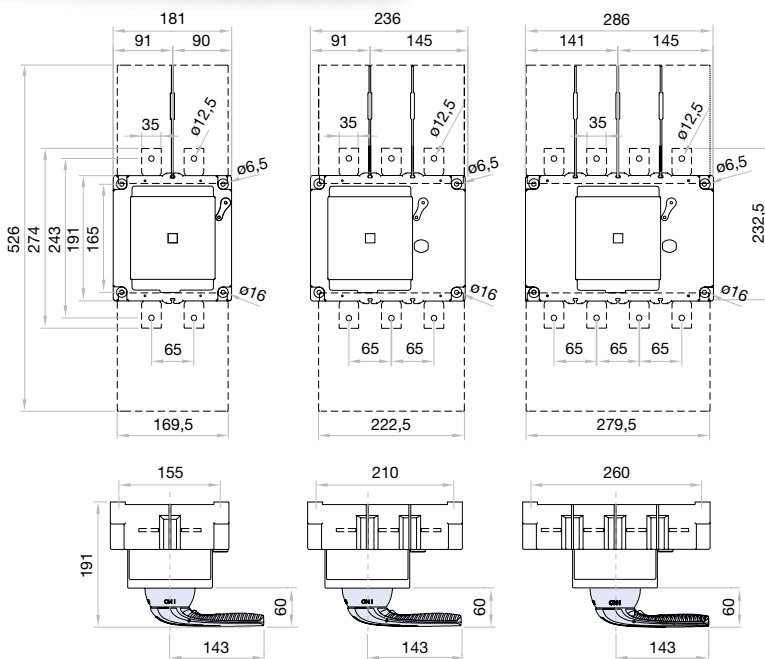
Simple

Double



Dimensions (mm)

Door drilling for external handle



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
				Nxm	
500 A	2x150	2x5	35	M10	24
630 A	2x185	2x6	35	M10	24

S6 DC UL

Switch - disconnecter for DC current 1P - 2P

Size 2

A

400

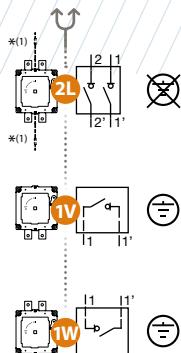


500 - 750 - 1000 Vdc



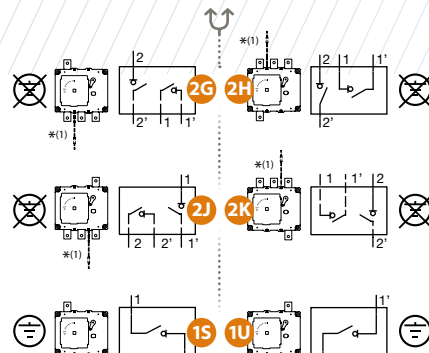
CODE-500 Vdc

400A S6-0400 S00L



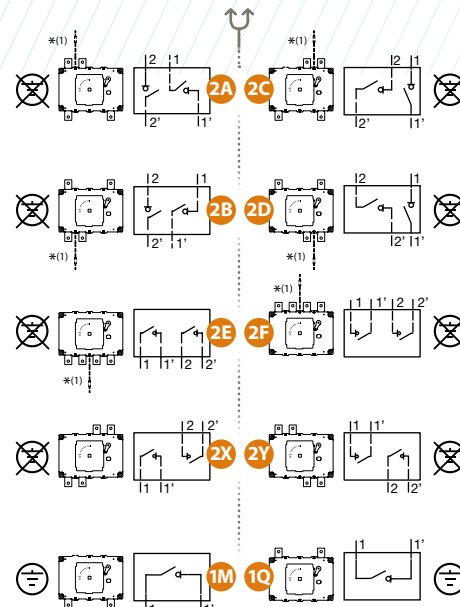
CODE-750 Vdc

400A S6-0400 S00L



CODE-1000 Vdc

400A S6-0400 S00L

DO NOT USE IN
GROUNDED INSTALLATIONS

Technical information



tests:



According to UL98 B

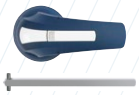
LISTED E333311			400	
Rated thermal current	I _{th}	-20°C to +50°C	A	400
Rated operational current	I _e	Code 500Vdc	A	400
		Code 750Vdc	A	400
		Code 1000Vdc	A	400
Rated short-circuit current	I _{cc}		kA	10
Maximum weight			Consult according to code	
Wiring capacity				
Minimum connection wire range/AWG			MCM	2x300
Maximum connection wire range/AWG			MCM	2x350

400 A

Conforms to UL98B. Minus 20 to +50°C. PV disconnects switch. Location Category B 1000 Vdc 400 A Torque: 212 lbf-in. Short circuit rating: 10 kA

Suitable for Use in PV Systems in accordance with Article 690 of the NEC IEC-60947-3 Uimp 12 kV DC21B - 1000 Vdc - 400 A Ui 1500 Vdc Ith 400 A

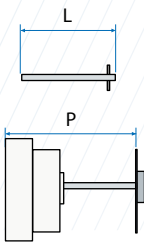
Accessories



» **External handle** included shaft ^{*(e1)}
IP65
 CODE DS-LA21



» **External handle** without shaft
IP65
 CODE DS-LA24

» **Shafts**

Standard shaft included ^{*(e1)}
 L (mm) P (mm)
 195 134... 240

» **Shaft extensions**

Type 1
 L (mm) P (mm) CODE
 345 134... 400 DS-EP23

Type 2
 L (mm) P (mm) CODE
 535 134... 560 DS-EP24

» **Terminal shrouds**

CODE DR-CU21 (1 unit)
 CODE DR-CU22 (1 unit)
 CODE DR-CU23 (1 unit)

» **Phase barriers**

CODE DR-SF21 (1 unit)
 CODE DR-SF22 (2 units)
 CODE DR-SF23 (3 units)

» **Spacers**

CODE DR-EL21 (4 units)

» **Terminal lug**

CODE DR-TL22 (2 units)

* ⁽¹⁾ With Terminal lug use phase barriers DR-SF__ to maintain the required clearance. Mandatory in these models

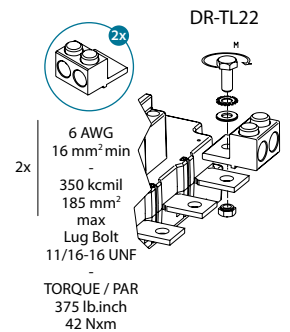
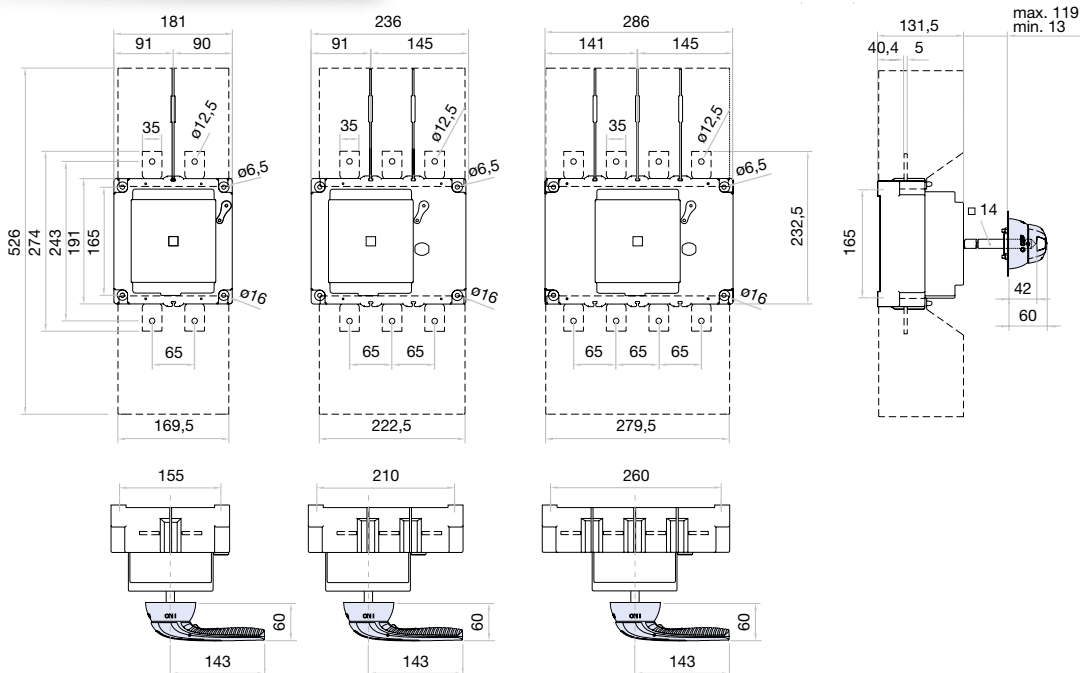
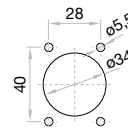
» **Auxiliary contacts**

1NO+1NC CODE D5LAU01
 2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.

Dimensions (mm)

Door drilling for external handle



Temperature rating	Copper wire only M ₁ ^{+5%} _{-10%}	Nxm lb.inch	
75 °C	M10	24	212



S6N DC

Switch - disconnecter

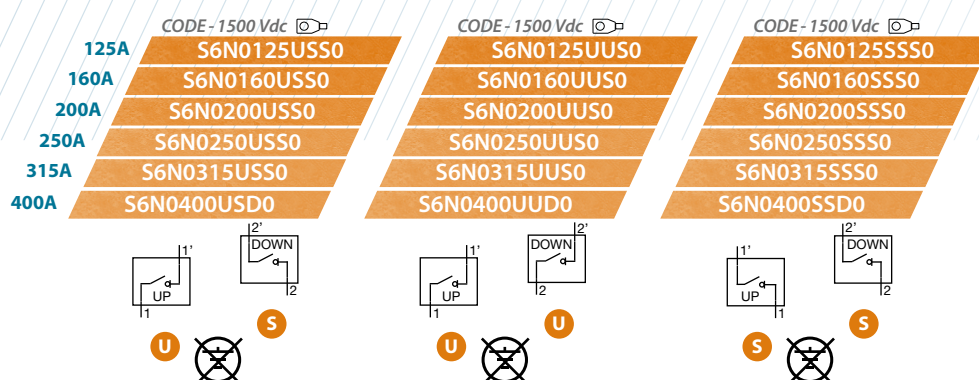
for DC current 2P

Size 1

A 125|160|200|250|315|400



1500Vdc



Technical information



DO NOT USE IN GROUNDING INSTALLATIONS

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		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)} DC21B	Ie	Ue							
1500Vdc		A	125	160	200	250	315	400	

Short - circuit behaviour

Rated short-circuit making capacity ^{*(2)}	Icm	kA (peak)	10
Rated short-time withstand current (1sec)	Icw	kA rms	10

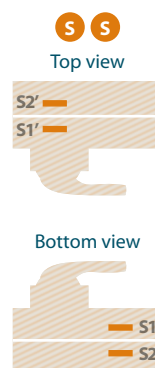
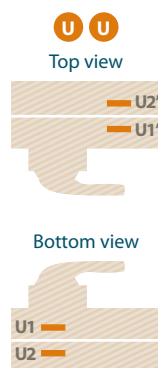
Mechanical features

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



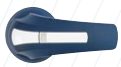
» Direct handle

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

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

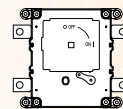
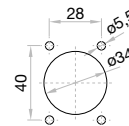
Shaft extensions

Type 1		CODE
L (mm)	P (mm)	
375	185... 497,5	DS-EP14

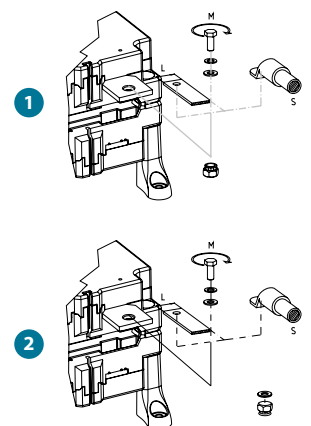
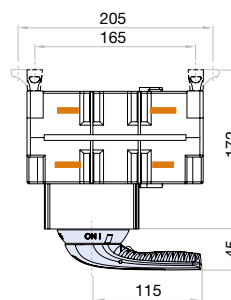
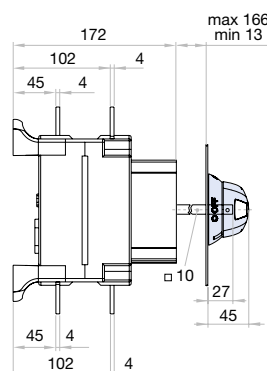
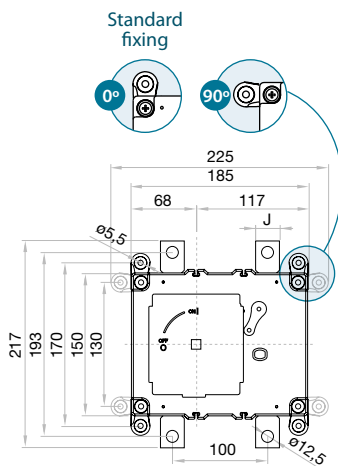
Type 2		CODE
L (mm)	P (mm)	
536	185... 647	DS-EP15

Dimensions (mm)

Door drilling for external handle



For rotated mounting there are **S6N** references with front plate rotated (supply under request).



		S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
						Nxm
	J					
125 A	25	185	8	25	M10	18
315 A		185	8	25	M10	18
400 A	30	185	8	25	M10	18
		240	8	30	M10	18

S6N DC

Switch - disconnecter for DC current 2P

Size 1

A 125|160|200|250|315|400



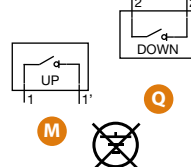
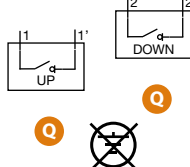
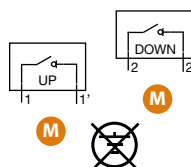
1500Vdc



	CODE - 1500 Vdc	
125A	S6N0125MMS0	
160A	S6N0160MMS0	
200A	S6N0200MMS0	
250A	S6N0250MMS0	
315A	S6N0315MMS0	
400A	S6N0400MMD0	

	CODE - 1500 Vdc	
	S6N0125QQS0	
	S6N0160QQS0	
	S6N0200QQS0	
	S6N0250QQS0	
	S6N0315QQS0	
	S6N0400QQD0	

	CODE - 1500 Vdc	
	S6N0125MQS0	
	S6N0160MQS0	
	S6N0200MQS0	
	S6N0250MQS0	
	S6N0315MQS0	
	S6N0400MQD0	



Technical information



tests:
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According to IEC 60947-1
IEC 60947-3



**DO NOT USE IN
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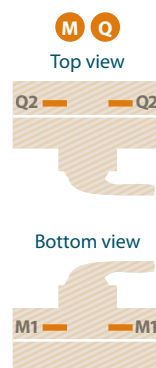
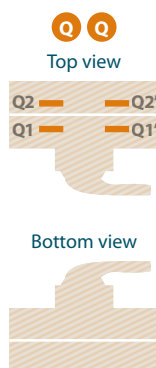
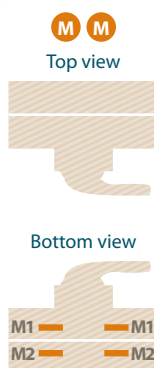
				125	160	200	250	315	400
Rated thermal current in ambient at	Ith	40°C	A	125	160	200	250	315	400
		50°C		125	160	200	250	315	400
		60°C		125	160	200	250	315	360
		70°C		125	160	200	250	315	315
Rated insulation voltage (DC)	Ui	V	1500	1500	1500	1500	1500	1500	
Rated impulse withstand voltage	Uimp	kV	12	12	12	12	12	12	
Rated operational current ^{*(1)} DC21B	Ie	Ue							
		1500Vdc	A	125	160	200	250	315	400

Short - circuit behaviour			
Rated short-circuit making capacity ^{*(2)}	Icm	kA (peak)	10
Rated short-time withstand current (1sec)	Icw	kA rms	10
Mechanical features			
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		8000
Maximum weight	kg		4,29

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

Terminals location



Accessories**>> Direct handle**

CODE DS-SI11

**>> External handle** included shaft ^{*(e1)}

IP65

CODE DS-SA11

**>> External handle** without shaft

IP65

CODE DS-SA14

**>> Auxiliary contacts**

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.

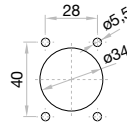
**>> Shafts****Standard shaft** included ^{*(e1)}

L (mm)	P (mm)
227	185... 336

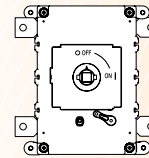
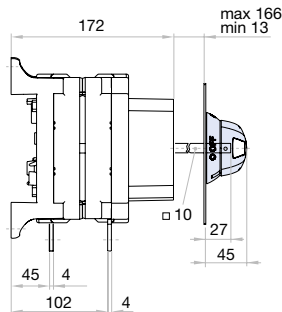
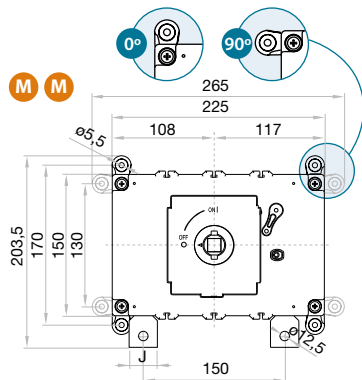
Shaft extensions

Type 1		CODE
L (mm)	P (mm)	
375	185... 497,5	DS-EP14

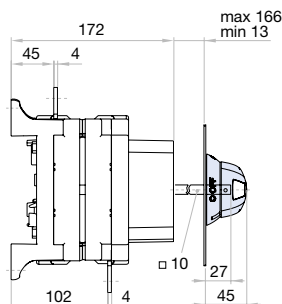
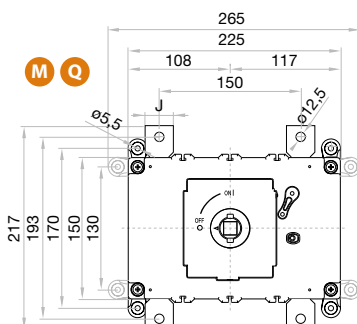
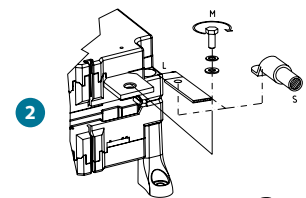
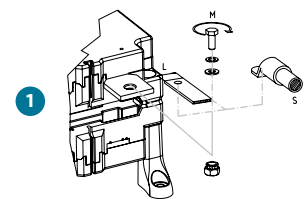
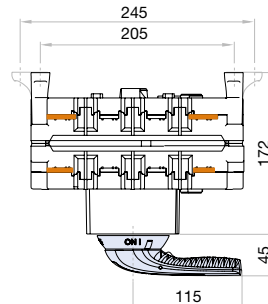
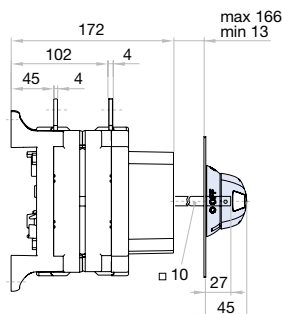
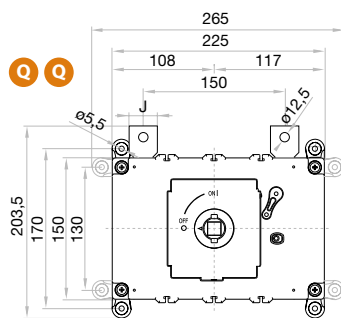
Type 2		CODE
L (mm)	P (mm)	
536	185... 647	DS-EP15



Door drilling for external handle

Dimensions (mm)Standard
fixing

For rotated mounting
there are **S6N** references
with front plate rotated
(supply under request).



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
					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

	J
125 A	25
315 A	30
400 A	30



S6R DC

Switch - disconnecter

base mounting 1P - 2P

Size 1

A 160|200|250|315|400

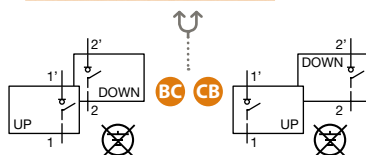


1500Vdc



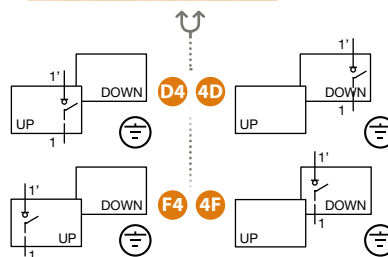
CODE-2P

160 A	S6R0160_S0
200 A	S6R0200_S0
250 A	S6R0250_S0
315 A	S6R0315_S0
400 A	S6R0400_D0



CODE-1P

160 A	S6R0160_S0
200 A	S6R0200_S0
250 A	S6R0250_S0
315 A	S6R0315_S0
400 A	S6R0400_D0



Technical information



According to IEC 60947-1
IEC 60947-3



**DO NOT USE IN
GROUNDED INSTALLATIONS**

			160	200	250	315	400
Rated thermal current in ambient at 40°C up to 80°C	Ith	A	160	200	250	315	400
Rated insulation voltage (DC)	Ui	V	1500	1500	1500	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12	12	12	12
Rated operational current ^{*(1)} DC21B	Ue Ie	160 200 250 315 400 1500Vdc A					

^{*(1)} Other voltages and / or utilization categories. Please consult

^{*(2)} Without limiting protective device (short-circuit maintained 50... 100 ms.)

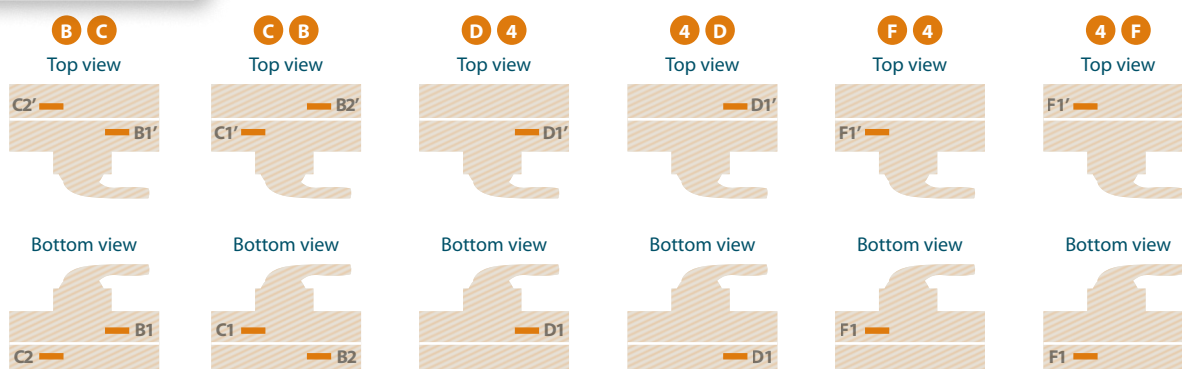
Short - circuit behaviour

Rated short-circuit making capacity ^{*(2)}	Icm	kA (peak)	10
Rated short-time withstand current (1sec)	Icw	kA rms	10

Mechanical features

Number of mechanical operations (according to the standards, for other values please consult)	Cycles	8000
---	--------	------

Terminals location



S6R DC UL

Switch - disconnecter for DC current 1P - 2P

Size 1

A 250|320|400

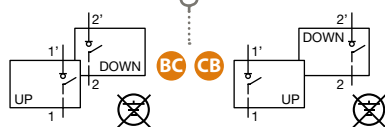


1500Vdc



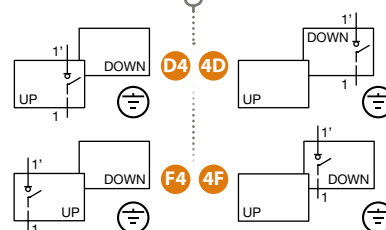
CODE - 2P

250 A S6R0250 _ S00L
320 A S6R0320 _ S00L
400 A S6R0400 _ D00L



CODE - 1P

250 A S6R0250 _ S00L
320 A S6R0320 _ S00L
400 A S6R0400 _ D00L



Technical information



tests:

AIT
AUSTRIAN INSTITUTE
OF TECHNOLOGY
TOMORROW TODAY

According to UL98 B

LISTED E333311			250	320	400
Rated thermal current	I _{th} -20°C to 50°C	A	250	320	400
Rated operational current	I _e 1500Vdc	A	250	320	400
Rated short-time withstand current (0,05 sec)	I _{cw}	kA	10	10	10
Maximum weight	Consult according to code				
Wiring capacity					
Minimum busbar connection range	mm ²	2x 4x30	2x 4x32	2x 4x32	

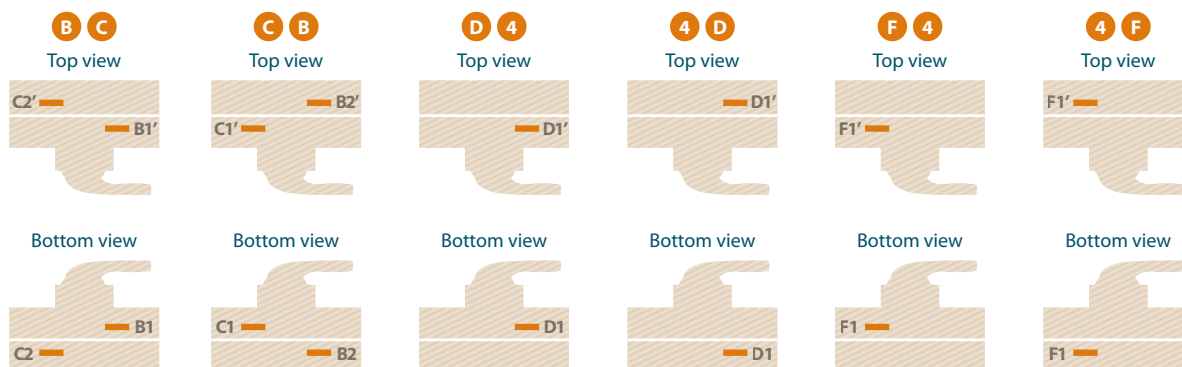


**DO NOT USE IN
GROUNDED INSTALLATIONS**

Conforms to UL98B. Minus -20 to 50°C. PV disconnect switch. Location Category B
Suitable for use in PV Systems in accordance with Article 690 of the NEC

Patent USA
N.º 9,899,159 B2

Terminals location

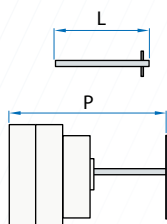


IP65
CODE DS-SA11



1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

le = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



Standard shaft included *(e1)

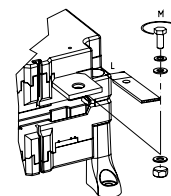
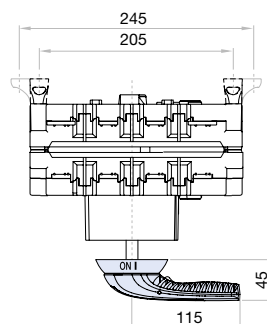
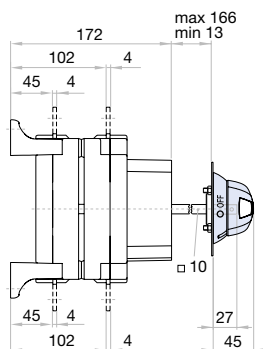
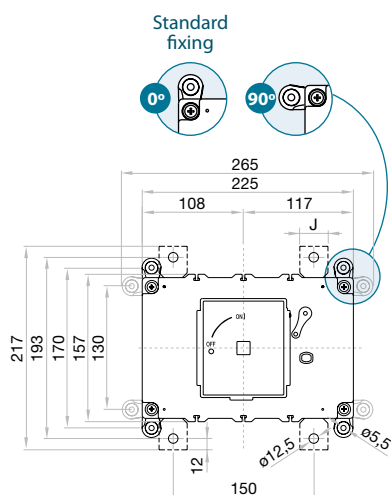
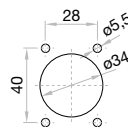
L (mm)	P (mm)
227	185... 336

Type 1

<i>L</i> (mm)	<i>P</i> (mm)	CODE
375	185... 486	DS-EP14

<i>L (mm)</i>	Type 2 <i>P (mm)</i>	<i>CODE</i>
536	185... 647	DS-EP15

Door drilling for external handle



		H max (Cu)		L max (Cu)			M	
	J		mm lb.inch	mm lb.inch	Nxm lb.inch			
250 A	25	250 A	4 5/32	30 1-3/16	M12	24	212	
320 A		320 A						
400 A	30	400 A	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



The DC Disconnectors in their different series are manufactured with high safety self-extinguishing materials, providing an excellent level of electrical insulation, low smoke emission and high resistance to electromechanical stress.

They comply with environmental requirements and undergo strict quality controls for a reliable product that meets the most demanding requirements.

They consist of a sandwich-type body containing self-cleaning blade type con-

tacts, to ensure long term, fault-free energy transmission and coated with silver alloy for long electromechanical life. The jump mechanism provides quick and independent switching due to the accumulation of elastic potential energy, which is transmitted at high speed to the contacts for arc extinction.

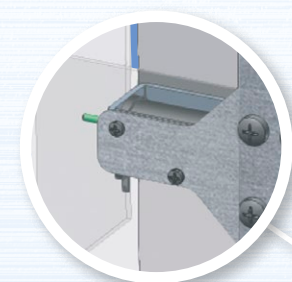
The DC Disconnectors S6 DC do not require external bridging links.

Functional and ergonomic handle

- > Good grip and excellent torque/resistance balance
- > Padlockable handle in **OFF** position (up to three locks Ø 5-8 mm)
- > Door interlock in **ON** position
- > When lock in **OFF** position, door is interlocked
- > Possibility of unlocking the door in **ON** position (with the use of a tool for maintenance operations). Handle interlock is restored when closing
- > Self-centering shaft for door handle

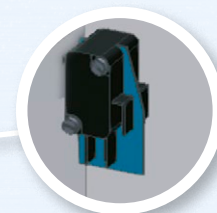
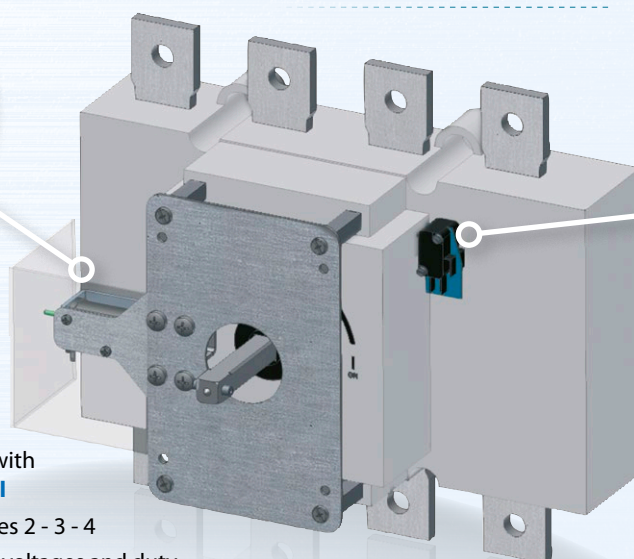


Safety devices



Locking by electric coil

- > Locked in the rest position with two options - 0 or I | 0 and I
- > For DC disconnectors **S5** Sizes 2 - 3 - 4
- > Coils available with different voltages and duty cycles according to requirements (please consult)



Signaling and control by auxiliary contacts

According to IEC 60947-1 section 7.1.7.2

- > 1 NO + 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)

According to:
IEC 60947- 1 & 3



UL98
RoHS

Testing and approvals:



Main advantages

Modular and flexible solution

Multi-circuit switching (from 1 up to 8 circuits can be isolated with only one handle), a great solution for 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
		Amp.	Size	Code	Diagram	Direct handle	External handle	Bridging links ^{*(p2)}
	2 Poles	160	1	S6-01602LS0P38	2L	DS-SI11T	DS-SA14T	*
	2 Poles	200	1	S6-02002LS0P38	2L	DS-SI11T	DS-SA14T	*
	2 Poles	250	1	S6-02502LS0P38	2L	DS-SI11T	DS-SA14T	*
	2 Poles	400	1	S6-04002LD0P38	2L	DS-SI11T	DS-SA14T	*
	2 Poles	630	2	S6-06302LS0P38	2L	DS-LI21T	DS-LA24T	*
	2 Poles	800	2	S6-08002LD0P38	2L	DS-LI21T	DS-LA24T	*
	2 Poles	1600	3	S5-12504ZC0P38	2Z	DS-LI31T	DS-LA33T	DS-PI3L x 2
	2 Poles	2500	4	S5-16004ZS0P38	2Z	DS-LI41T	DS-LA43T	DS-PI4K x 2
	2 Poles	3150	4	S5-18004ZS0P38	2Z	DS-LI41T	DS-LA43T	DS-PI4K x 2

^{*(p2)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.



1P

S5 DC
S6 DC

Disconnectors 1 pole (160 - 2000A) (O-I) ISOLATION ONLY

Manual handle
ISOLATION ONLY



S5 DC
ISOLATION ONLY



S6 DC
ISOLATION ONLY

1P *(p1)	Rated operational voltage	Rated operational current I _e (A)	Size	Connection	Unipolar (1P) *(p1)		External*(1)	Direct
	U _e				Code	Diagram	Code	Code
1500V DC20A	160 200 250 400	1			S6-01601VS0P38	1V	DS-SA11T	DS-SI11T
					S6-02001VS0P38	1V		
					S6-02501VS0P38	1V		
					S6-04001VD0P38	1V		
	800 1000	1			S5-04003ZC0P38	3Z	DS-SA11T	DS-SI11T
					S5-04004ZC0P38	4Z		
	630 1600 2000	2			S6-06301VS0P38	1V	DS-LA21T	DS-LI21T
					S5-08004ZC0P38	4Z		
					S5-12504ZC0P38	4Z		

*(2)

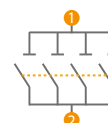
1V



3Z



4Z



2P

S5 DC
S6 DC

Disconnectors 2 poles (160 - 3150A) (O-I) ISOLATION ONLY

Manual handle
ISOLATION ONLY



S5 DC
ISOLATION ONLY



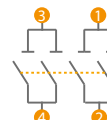
S6 DC
ISOLATION ONLY

2P *(p1)	Rated operational voltage	Rated operational current I _e (A)	Size	Connection	Bipolar (2P) *(p1)		External*(1)	Direct
	U _e				Code	Diagram	Code	Code
1500V DC20A	160 200 250 400	1			S6-01602LS0P38	2L	DS-SA11T	DS-SI11T
					S6-02002LS0P38	2L		
					S6-02502LS0P38	2L		
					S6-04002LD0P38	2L		
	630 800	2			S6-06302LS0P38	2L	DS-LA21T	DS-LI21T
					S6-08002LD0P38	2L		
	1600	3			S5-12504ZC0P38	2Z	DS-LA31T	DS-LI31T
					S5-16004ZS0P38	2Z		
	2500 3150	4			S5-18004ZS0P38	2Z	DS-LA41T	DS-LI41T

*(2)



2Z



*(1) Padlockable handle in OFF 0 position. Possibility of unlocking the door in ON I position (with the use of a tool). Door interlock by a padlock in OFF 0 position.

*(2) Other configurations are available, please consult.

*(p1) To comply with the operation and electrical features, the bridging links must be assembled to the switch. See the full details pages of this catalogue, to choose the configuration needed and the possibility or not of grounding. If you have any doubt about this, please do not hesitate to consult us.

⚠ Please indicate in your order the switch code and the handle code, as these both products are managed separately. A standard shaft is included with the handle.



Shaft extensions ※(3)				Bridging links ※(p1)	Auxiliary contacts ※(4)		Phase barriers		Spacers (4 units)	Terminal protection ※(5)	Terminal shrouds ※(5)	 Full details in page
Size		Type 1 & 2		Code	1NO+1NC	2NO+2NC	1 unit	2 units	Code	Code	Code	
		L	Code		Code	Code	Code	Code				
1	10	375	DS-EP14	-	D5LAU01	D5LAU02	DR-SF11	DR-SF12	DR-EL11	-	DR-CU11	254
		536	DS-EP15									
1	10	375	DS-EP14	DS-PI1G	D5LAU01	D5LAU02	-	-	-	DS-CU12	-	258
		536	DS-EP15	DS-PI1H								
2	14	345	DS-EP23	-	D5LAU01	D5LAU02	DR-SF21	DR-SF22	DR-EL21	-	DR-CU21	256
		535	DS-EP24	DS-PI2H	D5LAU01	D5LAU02	-	-	-	DS-CU22	-	260
3	14	345	DS-EP23	DS-PI3H	D5LAU01	D5LAU02	-	-	-	-	-	262
		535	DS-EP24									



Shaft extensions ^{*(3)}				Bridging links ^{*(p1)}	Auxiliary contacts ^{*(4)}		Phase barriers		Spacers (4 units)	Terminal shrouds ^{*(5)}	 Full details in page
Size		Type 1 & 2		Code	1NO+1NC	2NO+2NC	1 unit	2 units	Code	Code	
		L	Code		Code	Code	Code	Code			
1	10	375	DS-EP14	-	D5LAU01	D5LAU02	DR-SF11	DR-SF12	DR-EL11	DR-CU11	254
		536	DS-EP15		D5LAU01	D5LAU02	DR-SF21	DR-SF22	DR-EL21	DR-CU21	256
2	14	345	DS-EP23	-	D5LAU01	D5LAU02	DR-SF21	DR-SF22	DR-EL21	DR-CU21	256
		535	DS-EP24		D5LAU01	D5LAU02	DR-SF21	DR-SF22	DR-EL21	DR-CU21	256
3	14	345	DS-EP23	DS-PI3Lx2	D5LAU01	D5LAU02	-	-	-	-	262
		535	DS-EP24		D5LAU01	D5LAU02	-	-	-	-	262
4	14	485	DS-EP44	DS-PI4Kx2	D5LAU01	D5LAU02	-	-	-	-	264
		635	DS-EP45		D5LAU01	D5LAU02	-	-	-	-	264

^{*(3)} A standard shaft is included with the external handle.

^{*(4)} To be used as signalling or control contacts - I_e = 16A (resistive loads) 4A (inductive loads) at 250 Vac.
Whilst closing, it switches after the main contacts. Whilst opening, it switches before the main contacts.

^{*(5)} One unit for input or output.

S6 DC ISOLATION ONLY

DC Disconnectors

1P - 2P

series
S6 DC

Size 1

A 160|200|250|400



1500 Vdc



CODE-1P

160A
200A
250A
400A

S6-01601VS0P38
S6-02001VS0P38
S6-02501VS0P38
S6-04001VD0P38



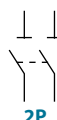
1P



CODE-2P

160A
200A
250A
400A

S6-01602LS0P38
S6-02002LS0P38
S6-02502LS0P38
S6-04002LD0P38



2P

Technical information

consult for
UL codesDO NOT OPERATE
UNDER LOAD

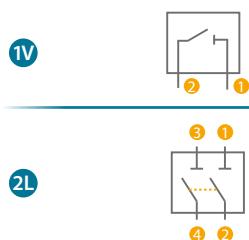
According to IEC 60947-1
IEC 60947-3

			160	200	250	400	
Rated insulation voltage DC	Ui	V	1500	1500	1500	1500	
Rated impulse withstand voltage	Uimp	kV	12	12	12	12	
Rated operational current DC20A	Ie	Ue 1500 Vdc	A	160	200	250	400

			160	200	250	400
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		8000	8000	8000	5000
Maximum weight 1P	Kg		1,22	1,22	1,22	1,22
Maximum weight 2P	Kg		1,35	1,35	1,35	1,35

Connection diagram

Connection diagram



Accessories



» Direct handle

CODE DS-SI11T

» External handle included shaft ^{*(e1)}

IP65

CODE DS-SA11T



» External handle without shaft

IP65

CODE DS-SA14T



» Terminal shrouds

CODE DR-CU11 (1 unit)



» Phase barriers

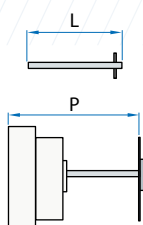
CODE DR-SF11 (1 unit)

CODE DR-SF12 (2 units)



» Spacers

CODE DR-EL11 (4 units)



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
227	103... 256

Shaft extensions

Type 1

L (mm)	P (mm)	CODE
375	103... 415	DS-EP14

Type 2

L (mm)	P (mm)	CODE
536	103... 576	DS-EP15



» Auxiliary contacts

1NO+1NC CODE D5LAU01

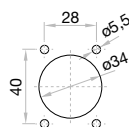
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

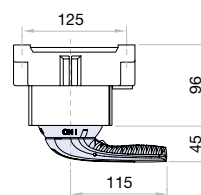
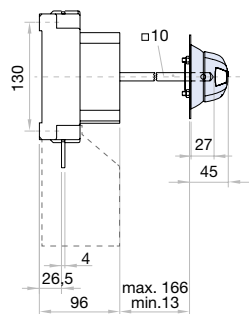
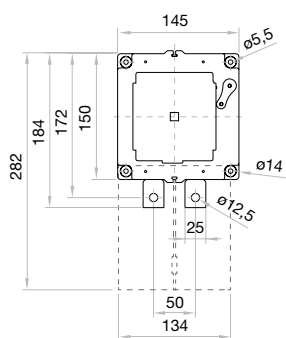
4 A (inductive loads) at 250 Vac.

Dimensions (mm)

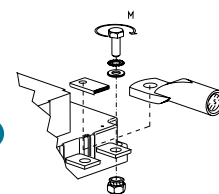
Door drilling for external handle



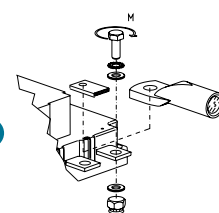
1V



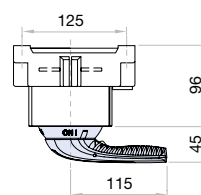
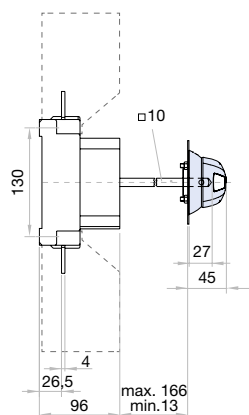
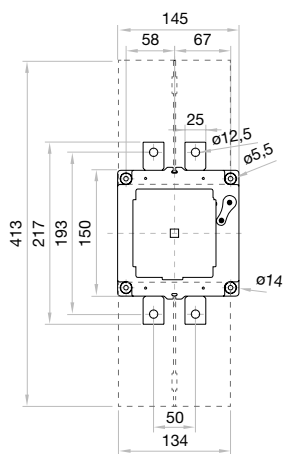
1



2



2L



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M	M
				Nxm	
160 A	185	8	25	M10	18
200 A	185	8	25	M10	18
250 A	185	8	25	M10	18
400 A	240 ^{*(t1)}	8	30	M10	18

^{*(t1)} Using phase barriers DR-SF__
to maintain the required clearance.

series
S6 DC

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



1P



2P

Technical information



DO NOT OPERATE
UNDER LOAD

According to IEC 60947-1
IEC 60947-3

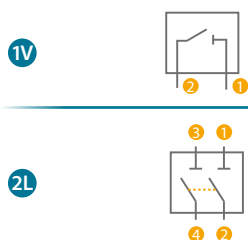
consult for
UL codes

			630	800
Rated insulation voltage DC	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12
Rated operational current DC20A	le	Ue 1500 Vdc	A 630	A 800

			630	800
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		5000	3000
Maximum weight 1P	Kg		3,40	3,40
Maximum weight 2P	Kg		3,80	3,80

Connection diagram

Connection diagram



Accessories



» Direct handle

CODE DS-LI21T

» External handle included shaft ^{*(e1)}

IP65

CODE DS-LA21T



» External handle without shaft

IP65

CODE DS-LA24T



» Terminal shrouds

CODE DR-CU21 (1 unit)



» Phase barriers

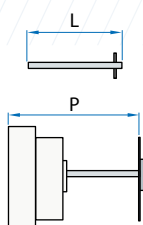
CODE DR-SF21 (1 unit)

CODE DR-SF22 (2 units)



» Spacers

CODE DR-EL21 (4 units)



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
195	134... 240

Shaft extensions

Type 1

L (mm)	P (mm)	CODE
345	134... 400	DS-EP23

Type 2

L (mm)	P (mm)	CODE
535	134... 560	DS-EP24



» Auxiliary contacts

1NO+1NC CODE D5LAU01

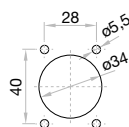
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

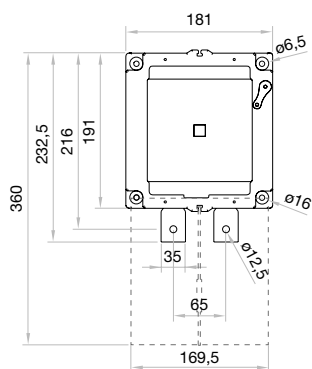
4 A (inductive loads) at 250 Vac.

Dimensions (mm)

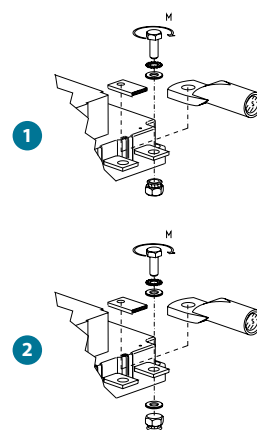
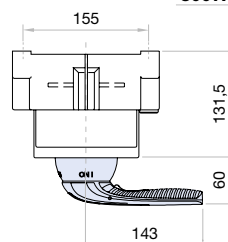
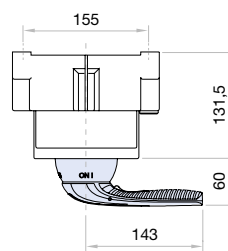
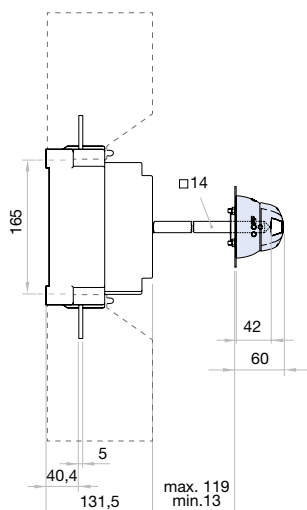
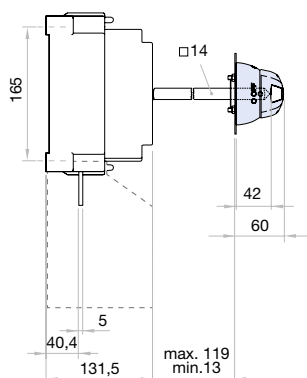
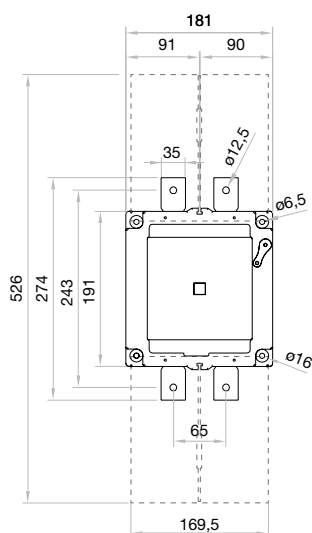
Door drilling for external handle



1V



2L



	S max (Cu)	H max (Cu)	L max (Cu)	T	M
	mm ²	mm	mm		Nxm
630 A	2x185	2x6	35	M10	24
800 A	2x240	2x7	35		

DC Disconnectors

1P

Size 1

A800|1000



1500Vdc



CODE-800A  **3Z**
S5-04003ZC0P38



CODE-1000A  **4Z**
S5-04004ZC0P38



Technical information



 **DO NOT OPERATE UNDER LOAD**

According to IEC 60947-1
IEC 60947-3

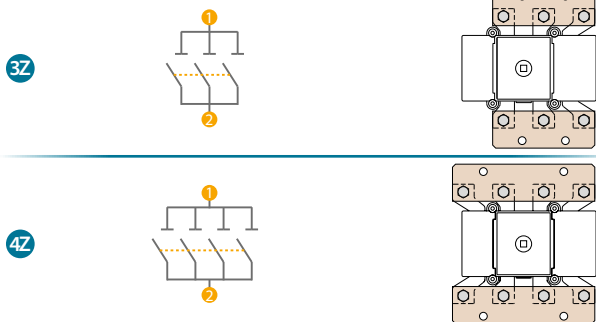
		800		1000
Rated insulation voltage DC	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	8	8
Rated operational current DC20A	Ie	Ue		
		1500 Vdc	A	800 1000

		800	1000
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000	3000
Maximum weight 3Z (without bridging links)	Kg	1,9	1,9
Maximum weight 4Z (without bridging links)	Kg	2,1	2,1

Connection diagram

Connection diagram

Bridging links ^{*(P2)}



Accessories



» Direct handle

CODE DS-SI11T

» External handle included shaft ^{*(e1)}

IP65

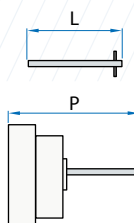
CODE DS-SA11T



» External handle without shaft

IP65

CODE DS-SA14T



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
227	103... 256

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
375	103... 415	DS-EP14

Type 2		
L (mm)	P (mm)	CODE
536	103... 576	DS-EP15



» Auxiliary contacts

1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal protection

CODE DS-CU12
(1 unit for input or output)

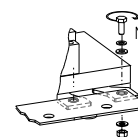
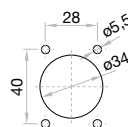
» Bridging links ^{*(P2)}

3Z 800A CODE DS-PI1G (2 units)
4Z 1000A CODE DS-PI1H (2 units)

^{*(P2)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.

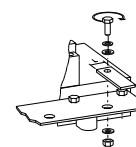
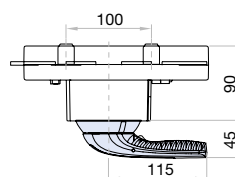
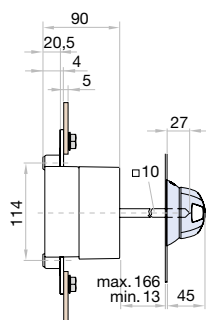
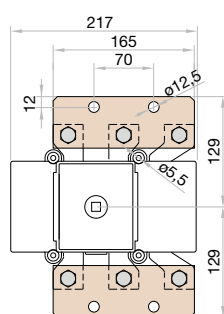
Dimensions (mm)

Door drilling for external handle



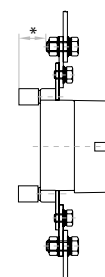
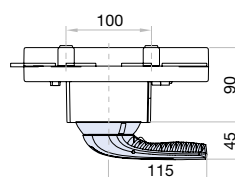
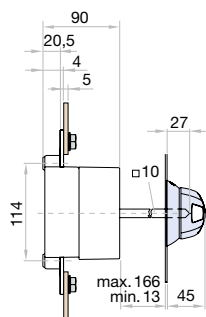
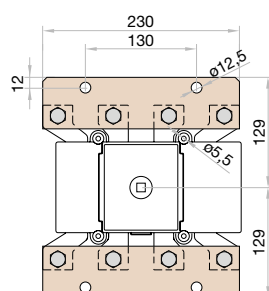
T	M
Nxm	
M10	24

3Z



	H max (Cu) mm	L max (Cu) mm
800A	2x5	50
1000A	2x5	60

4Z



* Please keep 14 mm of clearance if assemble plate is metallic

DC Disconnectors

1P

Size 2

A1600



1500Vdc



Technical information



 DO NOT OPERATE UNDER LOAD

According to IEC 60947-1
IEC 60947-3

1600			
Rated insulation voltage DC	Ui	V	1500
Rated impulse withstand voltage	Uimp	kV	12
Rated operational current DC20A	Ie	Ue 1500 Vdc A	1600

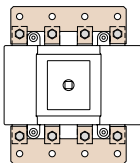
1600		
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000
Maximum weight (without bridging links)	Kg	4,5

Connection diagram

Connection diagram



Bridging links *(P2)



Accessories



» Direct handle

CODE DS-LI21T



» External handle included shaft ^{*(e1)}

IP65

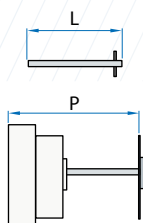
CODE DS-LA21T



» External handle without shaft

IP65

CODE DS-LA24T



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
195	134... 240

Shaft extensions

Type 1

L (mm)	P (mm)	CODE
345	134... 400	DS-EP23

Type 2

L (mm)	P (mm)	CODE
535	134... 560	DS-EP24



» Auxiliary contacts

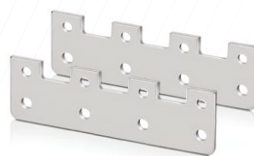
1NO+1NC CODE D5LAU01
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Terminal protection

CODE DS-CU22
(1 unit for input or output)



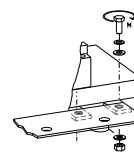
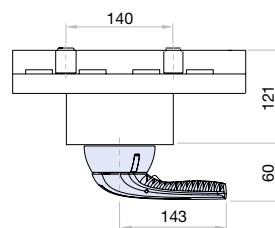
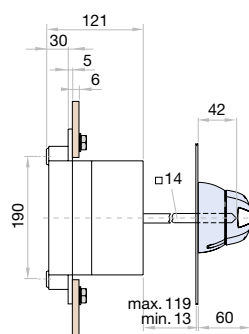
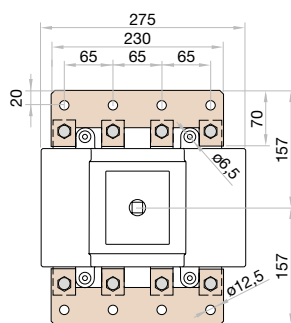
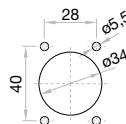
» Bridging links ^{*(P2)}

CODE DS-PI2H (2 units)

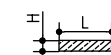
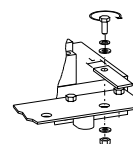
^{*(P2)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.

Dimensions (mm)

Door drilling for external handle



T	M
M10	Nxm 24



H max (Cu)	L max (Cu)
mm	mm
2x5	50

series
S5 DC

S5 DC ISOLATION ONLY

DC Disconnectors

1P - 2P

Size 3

A 2200|2500



1500 Vdc



2Z

CODE - 2P - 2200A S5-12504ZC0P38

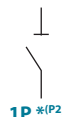


2P *(P2)



4Z

CODE - 1P - 2500A S5-12504ZC0P38



1P *(P2)

Technical information

DO NOT OPERATE
UNDER LOAD

According to IEC 60947-1
IEC 60947-3

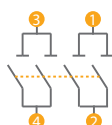
			2200	2500
Rated insulation voltage DC	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12
Rated operational current DC20A	Ie	Ue		
		1500 Vdc	A	2200

		2200	2500
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000	3000
Maximum weight (without bridging links)	Kg	7,6	7,6

Connection diagram

Connection diagram

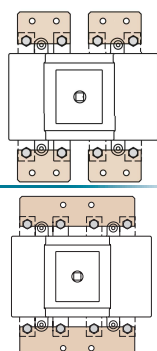
2Z



4Z



Bridging links *(P2)



Accessories



» Direct handle

CODE DS-LI31T

» External handle included shaft^{*(e1)}

IP65

CODE DS-LA31T



» External handle without shaft

IP65

CODE DS-LA33T



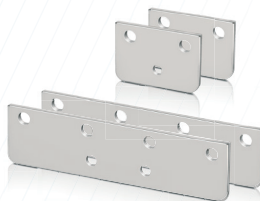
» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

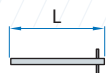
4 A (inductive loads) at 250 Vac.

» Bridging links^{*(P2)}

2Z 2200A CODE x2 DS-PI3L (2 units)

4Z 2500A CODE DS-PI3H (2 units)

^{*(P2)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
186	145... 242

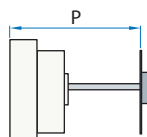
Shaft extensions

Type 1

L (mm)	P (mm)	CODE
345	145... 411	DS-EP23

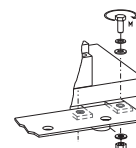
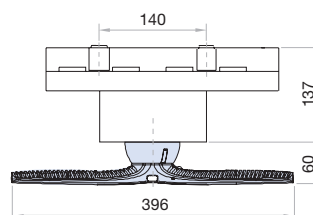
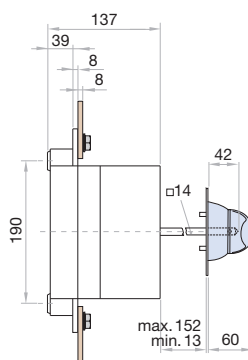
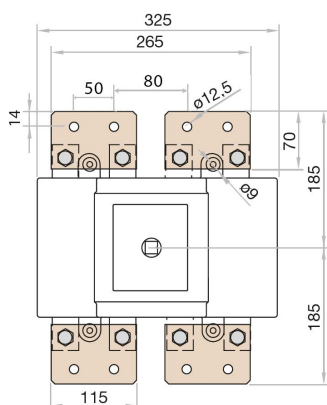
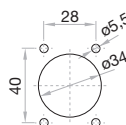
Type 2

L (mm)	P (mm)	CODE
535	145... 600	DS-EP24

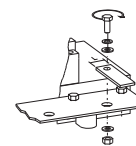


Dimensions (mm)

Door drilling for external handle

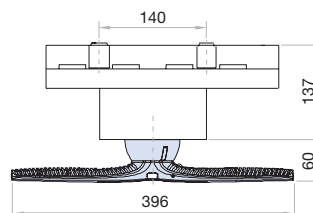
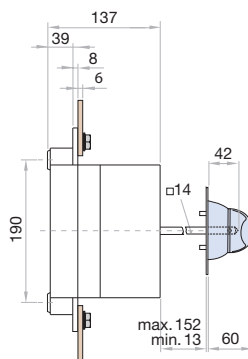
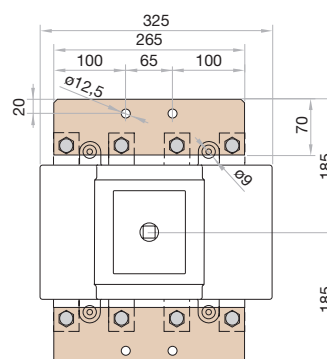


M
NxM
M14 45



H
L

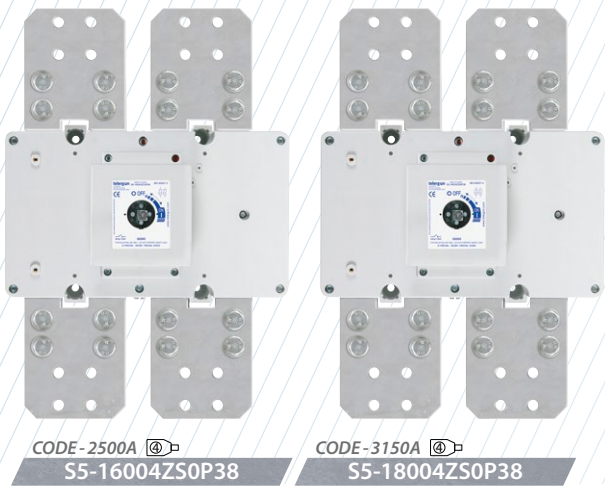
	H max (Cu) mm	L max (Cu) mm
2200A	2x10	100
2500A	3x10	100



DC Disconnectors

2P

Size 4
A 2500 3150
1500Vdc



Technical information



DO NOT OPERATE UNDER LOAD

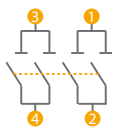
According to IEC 60947-1
IEC 60947-3

			2500	3150
Rated insulation voltage DC	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12
Rated operational current DC20A	Ie	Ue 1500 Vdc	A 2500	A 3150

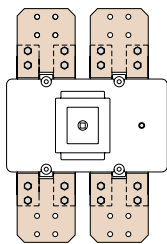
		2500	3150
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000	2000
Maximum weight (without bridging links)	Kg	20,8	20,8

Connection diagram

Connection diagram



Bridging links ^{*(P2)}



Accessories



» Direct handle

CODE DS-LI41T



» External handle included shaft ^{*(e1)}

IP65

CODE DS-LA41T



» External handle without shaft

IP65

CODE DS-LA43T



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

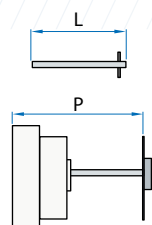
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Bridging links ^{*(P2)}

CODE x2 DS-PI4K (2 units)

^{*(P2)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
239	235... 400

Shaft extensions

Type 1

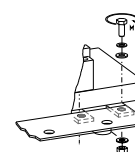
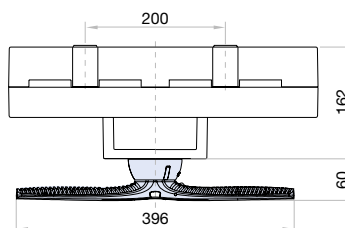
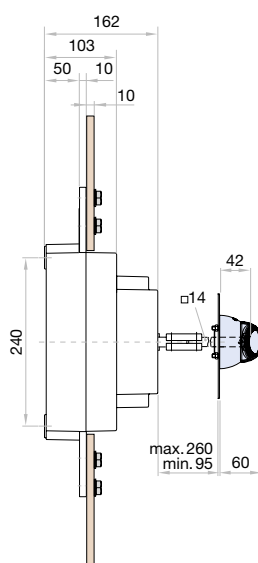
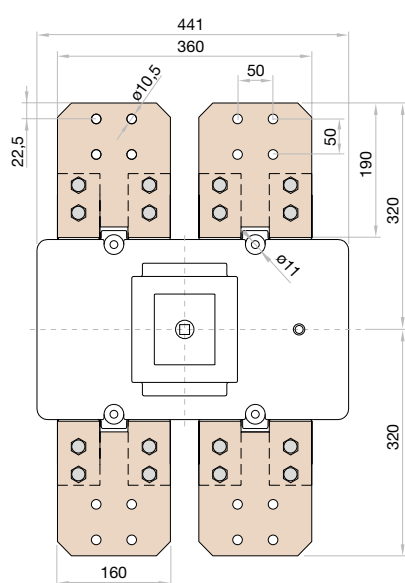
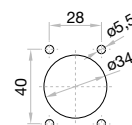
L (mm)	P (mm)	CODE
485	235... 686	DS-EP44

Type 2

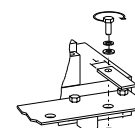
L (mm)	P (mm)	CODE
635	235... 836	DS-EP45

Dimensions (mm)

Door drilling for external handle



T	M
M14	Nxm
	55



	H max (Cu) mm	L max (Cu) mm
2500A	2x5	100
3150A	3x5	100

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S6N0315US0	212/242	UM-S2A230Z	194/196	ZBK25VZVHN4A8	56	ZBK80VZVH4A6	56		
S6N0315UUS0	212/242	UM-S31120M	194/198	ZBK40EH1A3	52	ZBK80VZVH4A8	56		
S6N04006PD0	66/102	UM-S31230M	194/198	ZBK40EH1A4	52	ZBK80VZVHN1A3	54		
S6N04006PDC	194/196	UM-S35120M	194/200	ZBK40EH4A3	52	ZBK80VZVHN1A4	54		
S6N04008PD0	66/102	UM-S35230M	194/200	ZBK40EH4A4	52	ZBK80VZVHN4A3	54		
S6N04008PDC	194/196	UM-S41120M	194/198	ZBK40EHN1A3	52	ZBK80VZVHN4A4	54		
S6N0400MMD0	212/244	UM-S41230M	194/198	ZBK40EHN1A4	52	ZBK80VZVHN4A6	56		
S6N0400MQD0	212/244	UM-S56230M	194/198/200	ZBK40EHN4A3	52	ZBK80VZVHN4A8	56		
S6N0400QQD0	212/244	UMC14230Z	195	ZBK40EHN4A4	52	ZBK1H11	53/55/57/59/61		
S6N0400QD0	212/244	ZBK-0002	55/57	ZBK40PFHN4A3	60	ZBK1H11X	53/55/57/59/61		
S6N0400SSD0	212/242	ZBK-0002	55/57	ZBK40PFHN4A4	60				
S6N0400USD0	212/242	ZBK-0003	55/57	ZBK40PFLHN4A6	60				
S6N0400UUD0	212/242	ZBK125EH4A3	52	ZBK40PFLHN4A8	60				
S6N05006PR0	66/104	ZBK125EH4A4	52	ZBK40SMAH1A3	58	ZBK40E	53		
S6N05006PRC	194/200	ZBK125EHN4A3	52	ZBK40SMAH1A4	58	ZBK40V	55		
S6N05008PR0	66/104	ZBK125EHN4A4	52	ZBK40SMAH1A6	58	ZBK40V	57		
S6N05008PRC	194/200	ZBK125PFLHN4A3	60	ZBK40SMAH1A8	58	ZBK80E	53		
S6N06306PR0	66/104	ZBK125PFLHN4A4	60	ZBK40SMAH1U4	58	ZBK80V	55		
S6N06306PRC	194/200	ZBK125SMAH1A3	58	ZBK40SMAHN1A3	58	ZBK80V	57		
S6N06308PR0	66/104	ZBK125SMAH1A4	58	ZBK40SMAHN1A4	58	ZBKPE80E	53		
S6N06308PRC	194/200	ZBK125SMAHN1A3	58	ZBK40SMAHN1A6	58	ZBKPE80V	55		
						ZBKPE80V	57		
						ZBKPE80V	59		

Utilization categories

Utilization categories according to IEC 60947-3			
Nature of current	Utilization category		Typical applications
	Category A ^{*(2)}	Category B ^{*(3)}	
AC	AC-20A ^{*(1)}	AC-20B ^{*(1)}	Connecting and disconnecting under no-load conditions
	AC-21A	AC-21B	Switching of resistive loads including moderate overloads
	AC-22A	AC-22B	Switching of mixed resistive and inductive loads, including moderate overloads
	AC-23A	AC-23B	Switching of motor loads or other highly inductive loads
DC	DC-20A ^{*(1)}	DC-20B ^{*(1)}	Connecting and disconnecting under no-load conditions
	DC-21A	DC-21B	Switching of resistive loads including moderate overloads
	DC-22A	DC-22B	Switching of mixed resistive and inductive loads, including moderate overloads (e.g.: motores shunt)
	DC-23A	DC-23B	Switching of highly inductive loads (e.g. series motors)
^{*(1)} The use of these utilization categories is not permitted in the EE.UU.			
^{*(2)} A Repeatedly operation			
^{*(3)} B Not very repeatedly operation			

Category AC-23 includes occasional switching of individual motors. The switching of capacitors or of tungsten filament lamps shall be subject to agreement between manufacturer and user.

The utilization categories referred do not apply to an equipment normally used to start, accelerate and / or stop individual motors. The utilization categories for such equipment are explained next:

Utilization category	Typical applications	
AC	AC-2	Slip-ring motors: starting, plugging ^{a)} , switching off
	AC-3	Squirrel-cage motors: starting, switching off of motors during running
	AC-4	Squirrel-cage motors: starting, plugging ^{a)} , inching ^{b)}
DC	DC-3	Shunt motors: starting, plugging ^{a)} , inching ^{b)} , dynamic breaking of d.c. motors
	DC-5	Serie-motors: starting, plugging ^{a)} inching ^{b)} , dynamic breaking of d.c. motors
NOTE - The switching of motor circuits, capacitors or tungsten filament lamps shall be subject to special agreement between manufacturer and user.		
^{a)} Plugging means stopping or reversing the motor rapidly by reversing motor primary connections while the motor is running.		
^{b)} Inching (jogging) means energizing a motor once or repeatedly for short periods to obtain small movements of the driven mechanism.		

The previous information is only advisory, it does not replace the specifications of the standard which will be consulted for its exact knowledge.

» MAINTENANCE RECOMMENDATIONS:

Electrical installations and their components should be periodically inspected to check they are in good condition. Operability of switches should be checked after an incident, during maintenance or due to ageing.

Tightening torque of electrical connections should be revised as vibrations in the environment and electrical conductivity may loose them affecting to the performance and durability of all components as well.

Not performing preventive maintenance may damage and spoil parts, systems and machines. Moreover it can also cause accidents and to injure people.

Before working on equipment or components which may be electrically live, the appropriate safety cautions must be taken by operators, end-users or other staff. Right personal protective equipment (e.g. safety clothes, gloves, goggles, helmet, insulating footwear) should be used, and the appropriate tools for the operation. At the same time, caution measures should be taken to prevent damages to third parties such as warning signs, barriers, mechanical locks, etc.

Prior to use any protective equipment or tools, they must be checked to be in good condition.

Maintenance or repair works should be performed in areas not electrically live by qualified and authorized staff following the applicable regulations and good practices.

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April 2019

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