

series
S5|S5M

series
S6

series
CIS

AC Switch - disconnectors

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



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

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

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

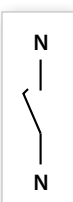
Functional and ergonomic handle

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



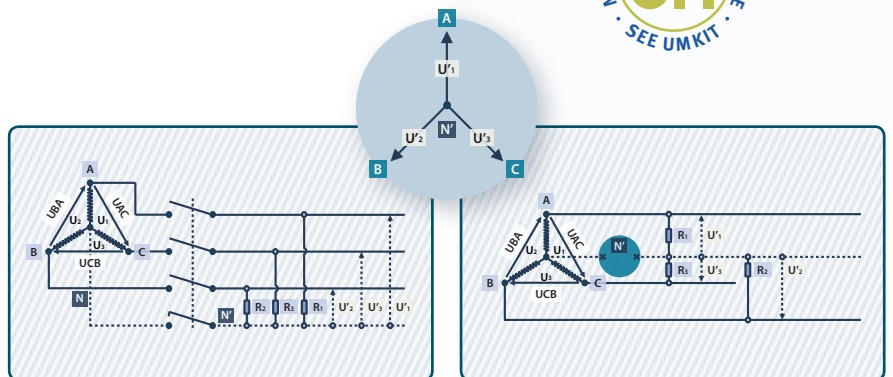
MOTORIZED KIT AVAILABLE
KIT UM
SEE UMKIT

Neutral pole early make & late break



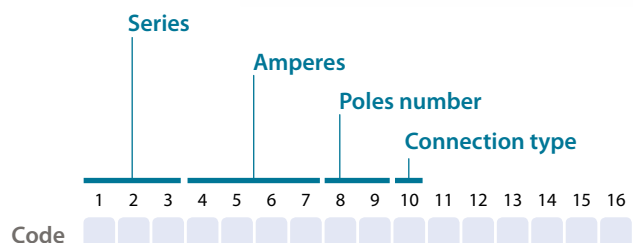
This safety feature prevents accidental overvoltage when making/breaking of loads connected between phase and neutral.

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



Range coding:

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



According to:
IEC/EN 60947-3
IEC/EN 61439-1
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 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
CIS25D



IP65

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

S5000 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

S5000 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



IP65

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

S5000 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

S5000 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.

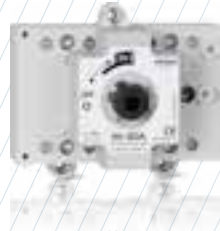
S5000 AC Switch - disconnecter base mounting 2P - 3P - 3P+N

Size 00

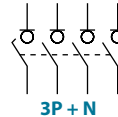
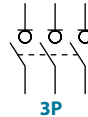
A 40|63|80



series S5



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



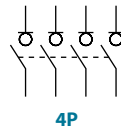
Technical information

According to IEC/EN 60947-3



				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 dielectric strength	50 Hz, 1 min.	V	3500	3500	3500	
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	80
		U _e 400V AC23A	A	50	63	63
		U _e 500V AC21A	A	50	63	80
		U _e 500V AC22A	A	50	63	63
AC rated operational power ^{*(2)}	P _e	3x400V AC23A	kW	27,7	34,9	34,9
		400V, sen φ = 0,65	kVA _r	22,5	28,3	28,3
Rated breaking capacity	400V	AC23A	A	400	504	504
Rated making capacity	400V	AC23A	A	500	630	630

				40	63	80
Short - circuit behaviour						
Rated short-circuit making capacity ^{*(3)}	I _{cm}	kA (peak)		5	5	5
Rated short-time withstand current (1sec.)	I _{cw}	kA rms		3	3	3
Conditional short - circuit current (rms value) ^{*(4)}		kA rms		100	100	100
Maximum cut - off current (peak value)		kA (peak)		10	10	10
Maximum power dissipation (I ² t)		A ² s (x10 ³)		54,7	54,7	54,7
Mechanical features						
Minimum number of mechanical operations ^{*(5)}		Cycles		30000	30000	30000
Maximum weight		Kg		0,4	0,4	0,4



Also available 4P switches under request, consult reference

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Indicative values: current values vary from one motor manufacturer to another
^{*(3)} Without limiting protective device (short-circuit maintained 50... 100 ms.)
^{*(4)} With a protective device limiting the cut - off current and the joule integral to the indicated values
^{*(5)} Please consult us for more operations

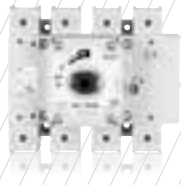
S5000 AC Switch - disconnecter base mounting 2P - 3P - 3P+N

Size 0

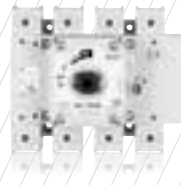
A 125|160|200|250



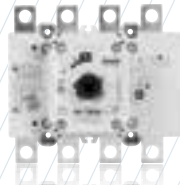
series S5



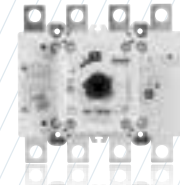
CODE - 125A



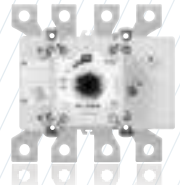
CODE - 160A



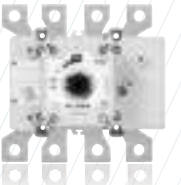
CODE - 125A



CODE - 160A



CODE - 200A



CODE - 250A

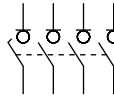
2P	S5-01252PB0	S5-01602PB0	S5-01252PS0	S5-01602PS0	S5-02002PS0	S5-02502PD0
3P	S5-01253PB0	S5-01603PB0	S5-01253PS0	S5-01603PS0	S5-02003PS0	S5-02503PD0
3P + N	S5-01253NB0	S5-01603NB0	S5-01253NS0	S5-01603NS0	S5-02003NS0	S5-02503ND0



2P



3P



3P + N

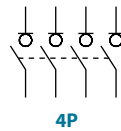
Technical information

According to IEC/EN 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 dielectric strength	50 Hz., 1 min.	V	4000	4000	4000	5000
Rated impulse withstand voltage U _{imp}		kV	8	8	8	8
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	U _e 400V AC21A	A	125	160	200	250
	U _e 400V AC22A	A	125	160	200	250 ^{*(6)}
	U _e 400V AC23A	A	125	160	160	160
	U _e 500V AC21A	A	125	160	200	200
	U _e 500V AC22A	A	125	160	200	200
	U _e 500V AC23A	A	100	125	125	125
AC rated operational power ^{*(2)}	3x400V AC23A	kW	69,2	88,6	88,6	88,6
Rated capacitor power	400V, sen φ = 0,65	kVA	56,2	72	72	72
Rated breaking capacity	400V AC23A	A	1000	1280	1280	1280
Rated making capacity	400V AC23A	A	1250	1600	1600	1600

		125 160 200 250			
Short - circuit behaviour					
Rated short-circuit making capacity ^{*(3)}	I _{cm} kA (peak)	13	13	13	13
Rated short-time withstand current (1sec.)	I _{cw} kA rms	7	7	7	7
Conditional short - circuit current (rms value) ^{*(4)}	kA rms	100	100	100	100
Maximum cut - off current (peak value)	kA (peak)	17	20	20	20
Maximum power dissipation (I ² t)	A ² s (x10 ³)	55	198	198	198
Mechanical features					
Minimum number of mechanical operations ^{*(5)}	Cycles	30000	30000	30000	30000
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 switches under request, consult reference

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Indicative values: current values vary from one motor manufacturer to another
^{*(3)} Without limiting protective device (short-circuit maintained 50... 100 ms.)
^{*(4)} With a protective device limiting the cut - off current and the joule integral to the indicated values
^{*(5)} Please consult us for more operations
^{*(6)} Rated operational current AC22B

Accessories



» Direct handle

CODE DS-SI01



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

IP65
CODE DS-SA01



» External handle without shaft

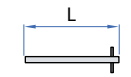
IP65
CODE DS-SA03



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

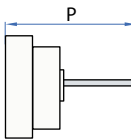
IP65
CODE DS-SR01

» Shafts



Standard shaft included ^{*(e1)}

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



Shaft extensions

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

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



» Terminal protection

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



» 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.



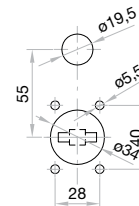
» Safety key lock device

Simple CODE DS-CAB1
Double CODE DS-CEB1

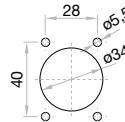
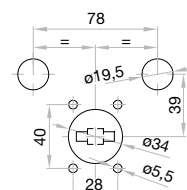
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and keylock device

Simple

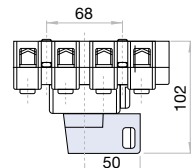
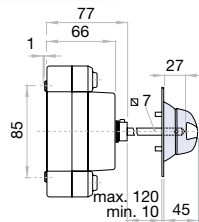
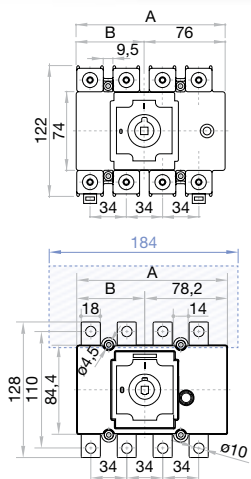


Double

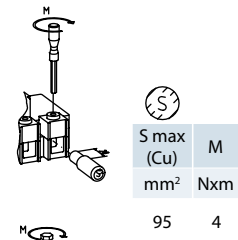


Dimensions (mm)

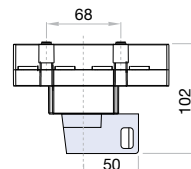
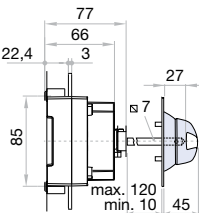
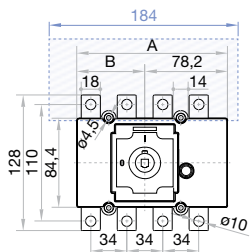
Door drilling for external handle



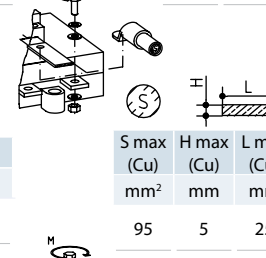
CODE	A			B		
	2P	3P	4P	2P	3P	4P
125 A	129	129	140	53	53	64
160 A						



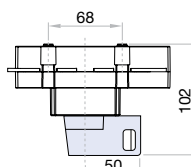
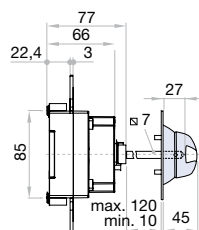
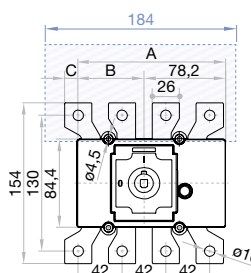
S max (Cu) mm ²	M Nxmm
95	4



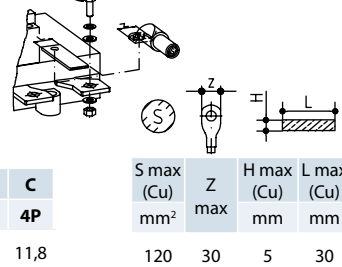
CODE	A			B		
	2P	3P	4P	2P	3P	4P
125 A	131	131	142	53	53	64
160 A						



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



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



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

S6000 AC Switch - disconnecter base mounting 2P - 3P - 3P+N

Size 1

A 200|250|315|400

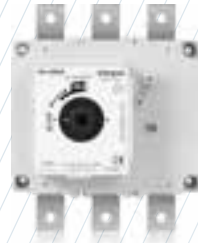


series
S6



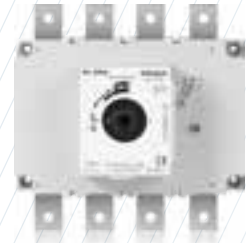
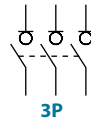
CODE - 2P

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



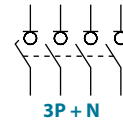
CODE - 3P

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



CODE - 3P + N

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



Technical information

According to IEC/EN 60947-3



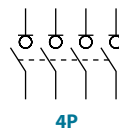
tests:



			200	250	315	400	
Rated thermal current in ambient at	I _{th}	40° C	A	200	250	315	400
		50° C	A	200	250	315	400
		60° C	A	200	250	315	400
Rated insulation voltage	U _i	V	1000	1000	1000	1000	
Rated dielectric strength	50 Hz., 1 min.	V	5000	5000	5000	5000	
Rated impulse withstand voltage	U _{imp}	kV	12	12	12	12	
		AC21A A	200	250	315	400	
AC Rated operational current ^{*(1)}	I _e	Monophasic 400V	AC22A A	200	250	315	400
			AC23A A	200	250	315	400
		Triphasic 400V	AC21A A	200	250	315	400
			AC22A A	200	250	315	400
AC rated operational power ^{*(2)}	P _e	3x400V	AC23A kW	110,8	138,5	174,5	221,7
			kVAr	90	112,5	141,8	180,1
Rated capacitor power	400V, sen φ=0,65	kVAr	90	112,5	141,8	180,1	
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	

			200	250	315	400
Short - circuit behaviour						
Rated short-circuit making capacity ^{*(3)}	I _{cm}	kA (peak)	20	20	20	20
		kA rms	12	12	12	12
Rated short-time withstand current (1sec)	I _{cw}	kA rms	12	12	12	12
Conditional short - circuit current ^{*(4)}		kA rms	100	100	100	100
Maximum cut - off current		kA (peak)	33	33	33	33
Maximum power dissipation		A ² s (x10 ³)	1000	1000	1000	1000
Mechanical features						
Minimum number of mechanical operations ^{*(5)}		Cycles	20000	20000	20000	20000
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

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Reference values, the associated current depends on motor manufacturer
^{*(3)} Without limiting protective device (short-circuit maintained 50... 100 ms.)
^{*(4)} With limiting protective device which set a limit to peak value short-circuit making capacity and maximum power dissipation to indicated values
^{*(5)} Please consult us for more operations



Also available 4P switches under request, consult reference



Accessories



» Direct handle

CODE DS-SI11



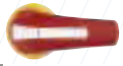
» External handle included shaft^{*(e1)}

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-SA11



» External handle without shaft

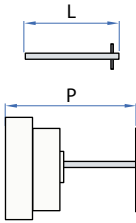
IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-SA14



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

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
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



» Auxiliary contacts

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

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



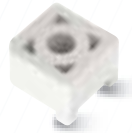
» Terminal shrouds

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)

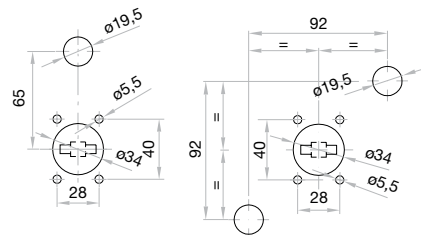


» Safety key lock device

Simple CODE DS-CA11
Double CODE DS-CE11

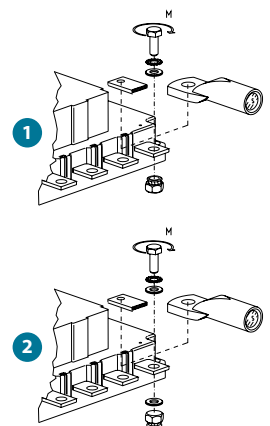
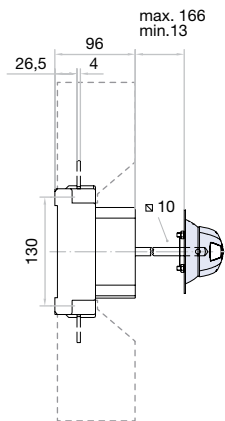
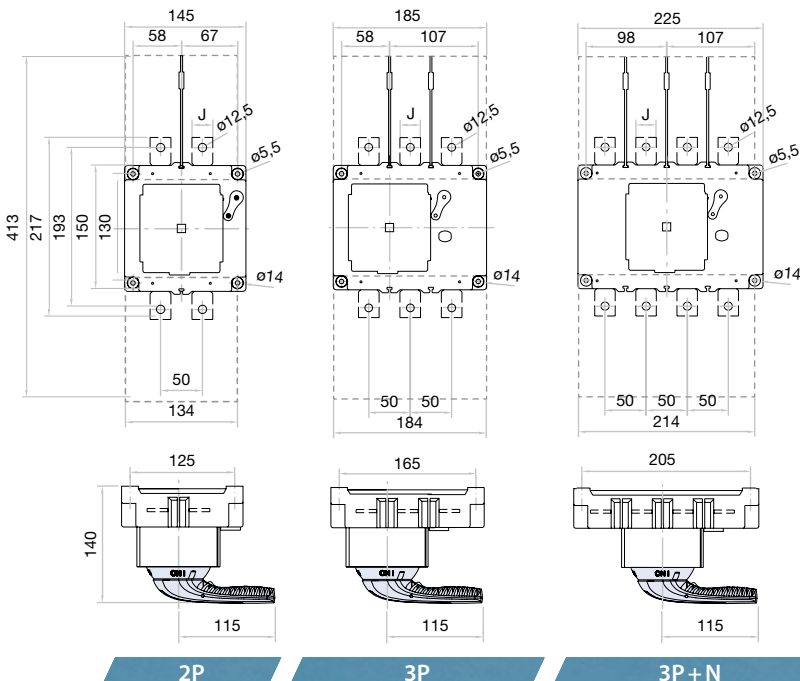
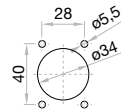
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and keylock device



Dimensions (mm)

Door drilling for external handle



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

	S max (Cu)	H max (Cu)	L max (Cu)	T	M
	mm ²	mm	mm		Nxm
200 A	120	7	25	M10	18
250 A	150	7	25	M10	18
315 A	185 ^{*(6)}	7	25	M10	18
400 A	240 ^{*(6)}	7	35 ^{*(6)}	M10	18

^{*(6)} Using phase barriers DR-SF__ to maintain the required clearance.

S6000 AC Switch - disconnecter base mounting 2P - 3P - 3P+N

Size 2

A 500|630|800

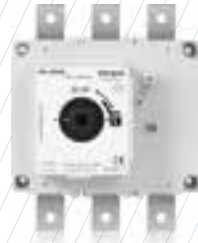


series
S6



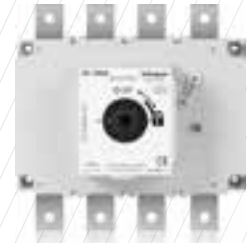
CODE - 2P

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



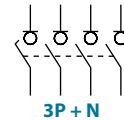
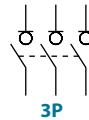
CODE - 3P

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



CODE - 3P + N

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



Technical information



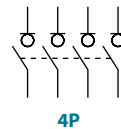
tests:



According to IEC/EN 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 dielectric strength	50 Hz., 1 min.	V	8000 8000 8000	
Rated impulse withstand voltage	Uimp	kV	12 12 12	
		AC21A	A 500 630 800	
AC Rated operational current ^{*(1)}	Ie	Monophasic 400V AC22A	A 500 630 800	
		AC23A	A 500 630 800	
		AC21A	A 500 630 800	
		Triphasic 400V AC22A	A 500 630 800	
	AC23A	A 500 630 800		
AC rated operational power ^{*(2)}	Pe	3x400V AC23A	kW 277,1 349,2 443,4	
Rated capacitor power	400V, sen φ=0,65	kVAr	225,2 283,7 360,3	
Rated breaking capacity	400V, cos φ=0,35-0,45	A	4000 5000 6400	
Rated making capacity	400V, cos φ=0,45	A	5000 6300 8000	

		500 630 800		
Short - circuit behaviour				
Rated short-circuit making capacity ^{*(3)}	Icm	kA (peak)	26 26 26	
Rated short-time withstand current (1sec)	Icw	kA rms	16 16 16	
Conditional short - circuit current ^{*(4)}		kA rms	100 100 100	
Maximum cut - off current		kA (peak)	39 39 39	
Maximum power dissipation		A ² s (x10 ³)	1000 1000 1000	
Minimum number of mechanical operations ^{*(5)}		Cycles	10000 10000 10000	
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 switches under request, consult reference

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Reference values, the associated current depends on motor manufacturer
^{*(3)} Without limiting protective device (short-circuit maintained 50... 100 ms.)
^{*(4)} With limiting protective device which set a limit to peak value short-circuit making capacity and maximum power dissipation to indicated values
^{*(5)} Please consult us for more operations



Accessories



» Direct handle

CODE DS-LI21



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

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LA21



» External handle without shaft

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LA24



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

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LR21



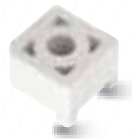
» Terminal shrouds

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



» Phase barriers

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



» Spacers

CODE DR-EL21 (4 units)

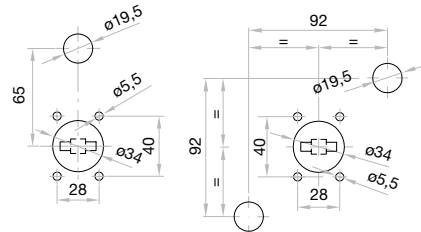


» Safety key lock device

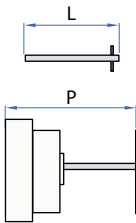
Simple CODE DS-CB21
Double CODE DS-CF21

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

Door drilling for handle and keylock device
Simple Double



» 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



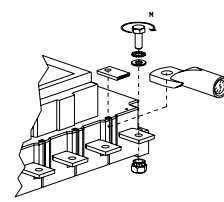
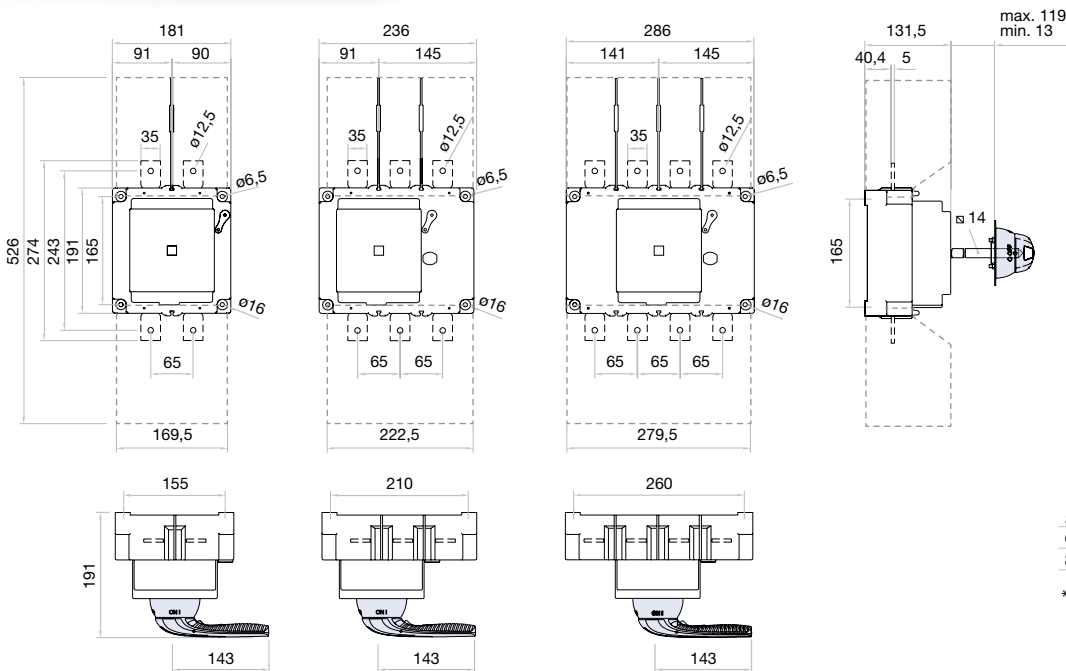
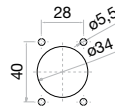
» Auxiliary contacts

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



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T	M
500 A	2x150	6	40	M10	24
630 A	2x185	2x5	40	M10	24
800 A	2x240	2x5	50 ^{*(6)}	M10	24

^{*(6)} Using phase barriers DR-SF__ to maintain the required clearance.

2P

3P

3P+N

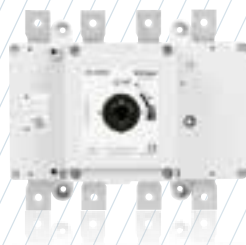
S5000 AC Switch - disconnecter base mounting 3P - 3P+N

Size 3

A 800|1000|1250|2000



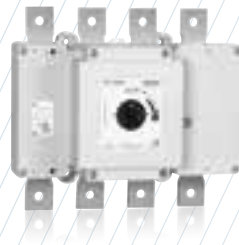
series
S5



CODE-800A

3P S5-08003PRO

3P + N S5-08003NRO



CODE-1000A

S5-10003PC0

S5-10003NC0



CODE-1250A

S5-12503PC0

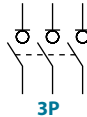
S5-12503NC0



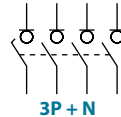
CODE-2000A

S5-20003PC0

S5-20003NC0



3P



3P + N

Technical information



consult



consult



consult

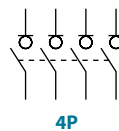
tests:



According to IEC/EN 60947-3

		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 dielectric strength	50 Hz, 1 min.	V	8000	8000	8000	8000	
Rated impulse withstand voltage	U _{imp}	kV	12	12	12	12	
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	I _e	U _e 400V AC21A	A	800	1000	1250	2000
		U _e 400V AC22A	A	800	1000	1250	2000 ^{*(6)}
		U _e 400V AC23A	A	800	1000	1000	1400 ^{*(6)}
		U _e 500V AC21A	A	800	1000	1250	2000
		U _e 500V AC22A	A	800	1000	1000	2000 ^{*(6)}
U _e 500V AC23A	A	800	800	800	1250 ^{*(6)}		
AC rated operational power ^{*(2)}	P _e	3x400V AC23A	kW	443,4	554,2	554,2	775,9
Rated capacitor power	400V, sen φ = 0,65	kVAr	360,2	450,3	450,3	630,4	
Rated breaking capacity	400V AC23A	A	6400	8000	8000	11200	
Rated making capacity	400V AC23A	A	8000	10000	10000	14000	

		800 1000 1250 2000			
Short - circuit behaviour					
Rated short-circuit making capacity ^{*(3)}	I _{cm} kA (peak)	60	60	60	80
Rated short-time withstand current (1sec.)	I _{cw} kA rms	25	25	25	38
Conditional short - circuit current (rms value) ^{*(4)}	kA rms	72	72	72	-
Maximum cut - off current (peak value)	kA (peak)	55	55	55	-
Maximum power dissipation (I ² t)	A ² s (x10 ³)	4900	4900	4900	-
Mechanical features					
Minimum number of mechanical operations ^{*(5)}	Cycles	10000	10000	10000	10000
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 switches under request, consult reference

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Indicative values: current values vary from one motor manufacturer to another
^{*(3)} Without limiting protective device (short-circuit maintained 50... 100 ms.)
^{*(4)} With a protective device limiting the cut - off current and the joule integral to the indicated values
^{*(5)} Please consult us for more operations
^{*(6)} Rated operational current AC22B



Accessories



» Direct handle

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



» External handle included shaft*(e1)

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12

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



» External handle without shaft

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12

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



» Emergency external handle included shaft*(e1)

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12

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

» 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



» Terminal shrouds

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



» Auxiliary contacts

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

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



» Safety key lock device

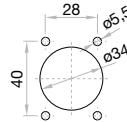
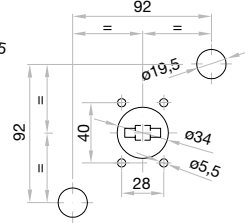
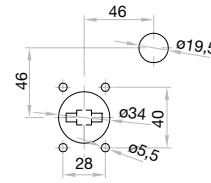
Simple CODE DS-CB31
Double CODE DS-CF31

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

Door drilling for handle and keylock device

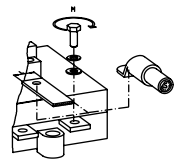
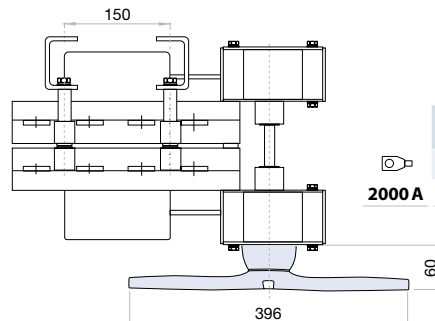
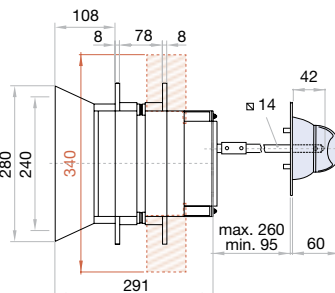
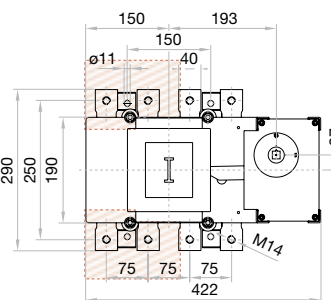
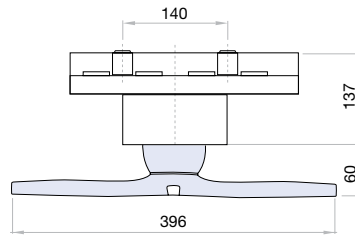
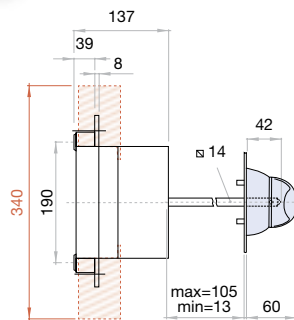
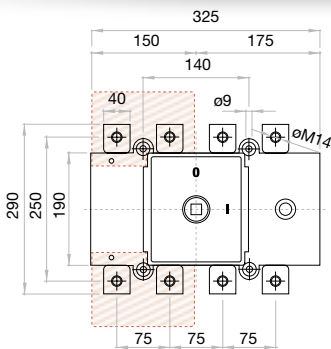
Simple

Double

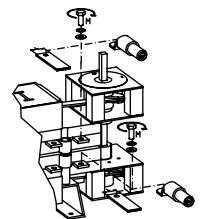


Dimensions (mm)

Door drilling for external handle



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



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

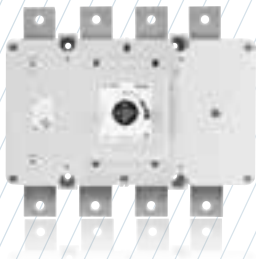
S5000 AC Switch - disconnecter base mounting 3P - 3P+N

Size 4

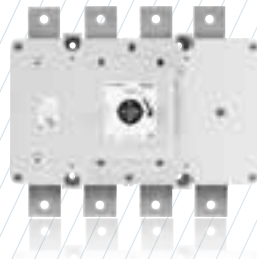
A 1000|1250|1600|1800|2000



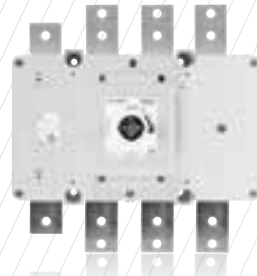
series
S5



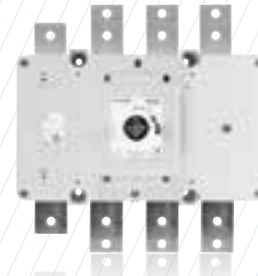
CODE-1000A



CODE-1250A



CODE-1600A



CODE-1800A

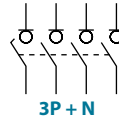
3P
S5-10003PS0
S5-10003NS0

S5-12503PS0
S5-12503NS0

S5-16003PS0
S5-16003NS0

S5-18003PS0
S5-18003NS0

S5-20003PD0
S5-20003ND0



Technical information

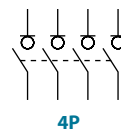


According to IEC/EN 60947-3

				1000	1250	1600	1800	2000
Rated thermal current in ambient at	Ith	40 °C	A	1000	1250	1600	1800	2000
		50 °C	A	1000	1250	1600	1620	1800
		60 °C	A	1000	1000	1440	1440	1600
Rated insulation voltage	Ui	V	1000	1000	1000	1000	1000	
Rated dielectric strength	50 Hz, 1 min.	V	10000	10000	10000	10000	10000	
Rated impulse withstand voltage	Uimp	kV	12	12	12	12	12	
AC rated operational current ^{*(1)}	Ie	Ue 400V AC21A	A	1000	1250	1600	1800	2000
		Ue 400V AC22A	A	1000	1250	1600	1800	2000
(Rated operational frequency 50/60 Hz)		Ue 400V AC23A	A	1000	1000	1000	1250	1250
		Ue 500V AC21A	A	1000	1250	1600	1800	2000
		Ue 500V AC22A	A	1000	1000	1250	1600	1800
		Ue 500V AC23A	A	800	800	900	1000 ^{*(5)}	1000 ^{*(5)}

				1000	1250	1600	1800	2000	
AC rated operational power ^{*(2)}	Pe	3x400V	AC23A	kW	554,2	554,2	554,2	692,8	692,8
				kVAr	450,3	450,3	450,3	562,9	562,9
Rated capacitor power		400V, sen φ = 0,65		kVAr	450,3	450,3	450,3	562,9	562,9
Rated breaking capacity		400V	AC23A	A	8000	8000	8000	10000	10000
Rated making capacity		400V	AC23A	A	10000	10000	10000	12500	12500
Short - circuit behaviour									
Rated short-circuit making capacity ^{*(3)}		Icm		kA (peak)	60	60	75	75	75
Rated short-time withstand current (1sec.)		Icw		kA rms	25	25	50	50	50
Mechanical features									
Minimum number of mechanical operations ^{*(4)}		Cycles			10000	10000	4500	4500	4500
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

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Indicative values: current values vary from one motor manufacturer to another
^{*(3)} Without limiting protective device (short-circuit maintained 50... 100 ms.)
^{*(4)} Please consult us for more operations
^{*(5)} Rated operational current AC22B



Also available 4P switches under request, consult reference



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

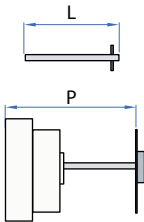
IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LA43



» Emergency external handle included shaft*(e1)

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
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

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



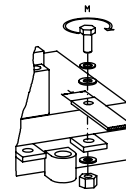
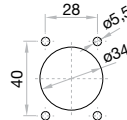
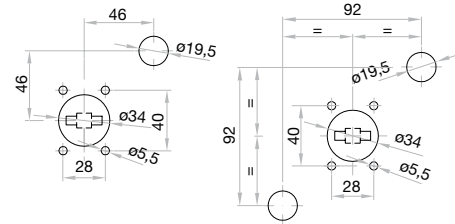
» Safety key lock device

Simple CODE DS-CB41
Double CODE DS-CF41

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

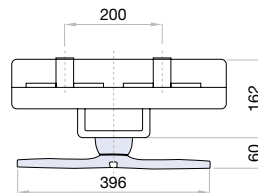
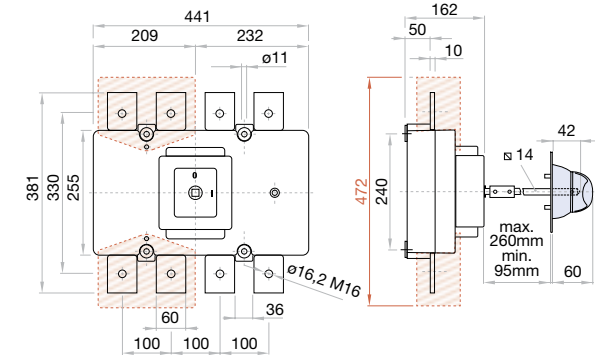
Door drilling for handle and keylock device

Simple Double

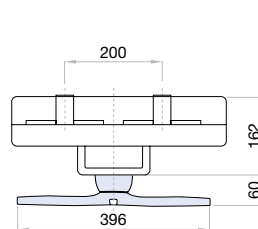
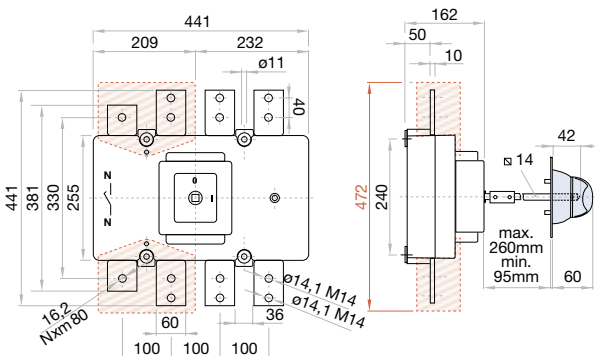


Dimensions (mm)

Door drilling for external handle



H max (Cu)	L max (Cu)	M		
		T	Nxm	
mm	mm			
1000 A	2x7	80	M16	80
1250 A				



H max (Cu)	L max (Cu)	M		
		T	Nxm	
mm	mm			
1600 A	2x7	80	M14	55
1800 A				
2000 A				

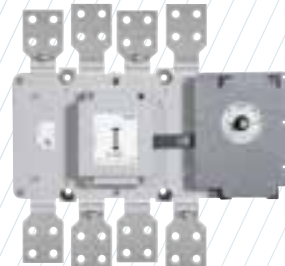
S5000 AC Switch - disconnecter base mounting 3P - 3P+N

Size 5

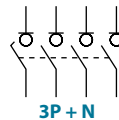
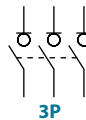
A 2000|2500|3150



series S5



	CODE-2000A	CODE-2500A	CODE-3150A
3P	S5-20003PP0	S5-25003PP0	S5-31503PP0
3P + N	S5-20003NP0	S5-25003NP0	S5-31503NP0



Technical information

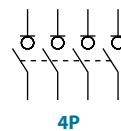


According to IEC/EN 60947-3

				2000	2500	3150
Rated thermal current in ambient at	Ith	40 °C	A	2000	2500	3150
		50 °C	A	2000	2500	2835
		60 °C	A	2000	2500	2520
Rated insulation voltage	Ui	V	1000	1000	1000	
Rated dielectric strength	50 Hz., 1 min.	V	10000	10000	10000	
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	2000	2500	3150
		Ue 400V AC22A	A	2000	2500	2500 ^{*(5)}
		Ue 400V AC23A	A	1600	1800	2000 ^{*(5)}
		Ue 500V AC21A	A	2000	2500	3150
		Ue 500V AC22A	A	2000 ^{*(5)}	2200 ^{*(5)}	2200 ^{*(5)}
Ue 500V AC23A	A	1250	1600 ^{*(5)}	1600 ^{*(5)}		

				2000	2500	3150
AC rated operational power ^{*(2)}	Pe	3x400V AC23A	kW	886,8	997,6	1108,5
Rated capacitor power	400V, sen φ = 0,65	kVAr	720,5	810,5	900,6	
Rated breaking capacity	400V AC23A	A	12800	14400	16000	
Rated making capacity	400V AC23A	A	16000	18000	20000	
Short - circuit behaviour						
Rated short-circuit making capacity ^{*(3)}	Icm	kA (peak)	100	100	100	
Rated short-time withstand current (1sec.)	Icw	kA rms	50	50	50	
Mechanical features						
Minimum number of mechanical operations ^{*(4)}	Cycles	2500	2500	2500		
Maximum weight 3P	Kg	50	50	50		
Maximum weight 3P + N	Kg	58	58	58		

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Indicative values: current values vary from one motor manufacturer to another
^{*(3)} Without limiting protective device (short-circuit maintained 50... 100 ms.)
^{*(4)} Please consult us for more operations
^{*(5)} Rated operational current AC22B



Also available 4P switches under request, consult reference



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



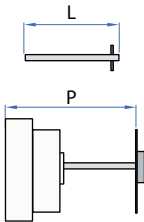
» External handle without shaft

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LA43



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

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LR41



» Shafts

Standard shaft included ^{*(e1)}

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



» 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.

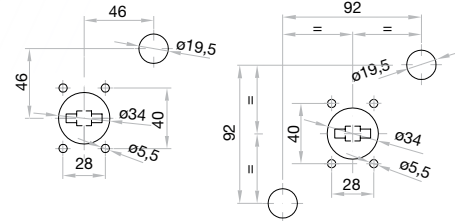


» Safety key lock device

Simple CODE DS-CB41
Double CODE DS-CF41

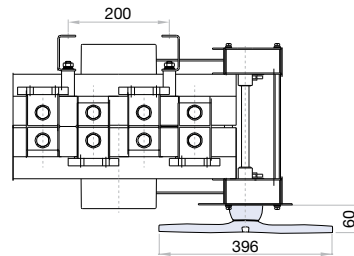
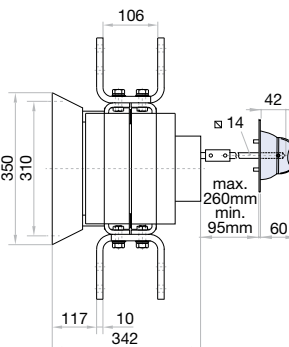
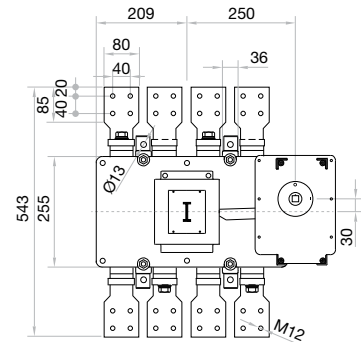
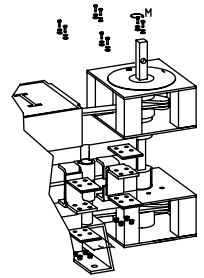
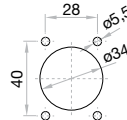
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and keylock device
Simple Double

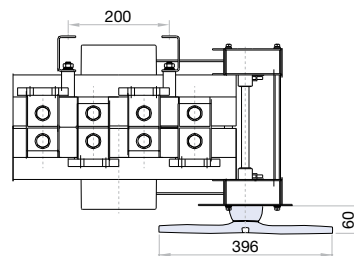
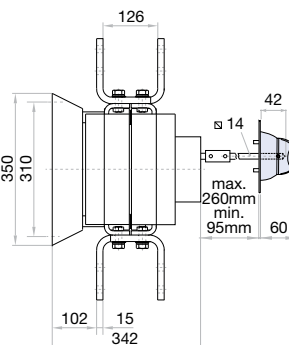
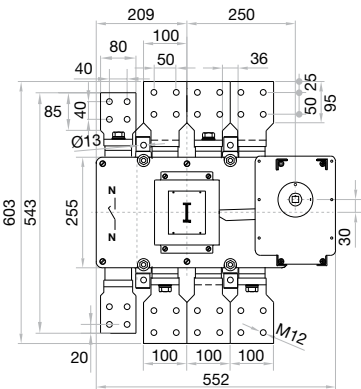


Dimensions (mm)

Door drilling for external handle



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



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

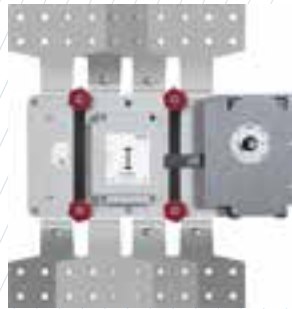
S5000 AC Switch - disconnecter base mounting 3P - 3P+N

Size 6

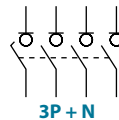
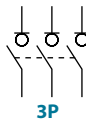
A 4000|5000|6300



series
S5



	CODE-4000A	CODE-5000A	CODE-6000A
3P	S5-40003PP0	S5-50003PP0	S5-60003PP0
3P + N	S5-40003NP0	S5-50003NP0	S5-60003NP0



Technical information

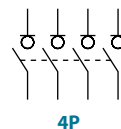


According to IEC/EN 60947-3

			4000	5000	6300
Rated thermal current in ambient at	I _{th}	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 dielectric strength	50 Hz, 1 min.	V	10000	10000	10000
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	4000	5000	6300
		U _e 400V AC22A A	3500	4000	4000
		U _e 400V AC23A A	2000	2500	2500
		U _e 500V AC21A A	3500	4000	5000
		U _e 500V AC22A A	3150 ⁽⁵⁾	3150	3150
	U _e 500V AC23A A	1600	1800	1800	

				4000	5000	6300
AC rated operational power ⁽²⁾	P _e	3x400V AC23A	kW	1108,5	1385,6	1385,6
Rated capacitor power	400V, sen φ = 0,65		kVar	900,6	1125,8	1125,8
Rated breaking capacity	400V AC23A		A	16000	20000	20000
Rated making capacity	400V AC23A		A	20000	25000	25000
Short - circuit behaviour						
Rated short-circuit making capacity ⁽³⁾	I _{cm}		kA (peak)	100	100	100
Rated short-time withstand current (1sec.)	I _{cw}		kA rms	50	50	50
Mechanical features						
Minimum number of mechanical operations ⁽⁴⁾	Cycles			1500	1500	1500
Maximum weight 3P			Kg	100	130	130
Maximum weight 3P + N			Kg	110	140	140

⁽¹⁾ Other voltages and / or utilization categories. Please consult
⁽²⁾ Without limiting protective device (short-circuit maintained 50... 100 ms.)
⁽³⁾ Indicative values: current values vary from one motor manufacturer to another
⁽⁴⁾ Please consult us for more operations
⁽⁵⁾ Rated operational current AC22B



Also available 4P switches under request, consult reference

Accessories



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

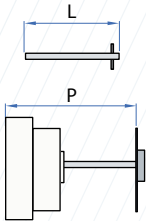


» **Auxiliary contacts**

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

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

» **Shafts**



Standard shaft included ^{*(e1)}

	L (mm)	P (mm)
	333	578... 728
(2000 A)	333	720... 870

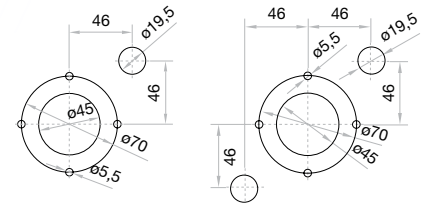


» **Safety key lock device**

Simple CODE DS-CS41
 Double CODE DS-CD41

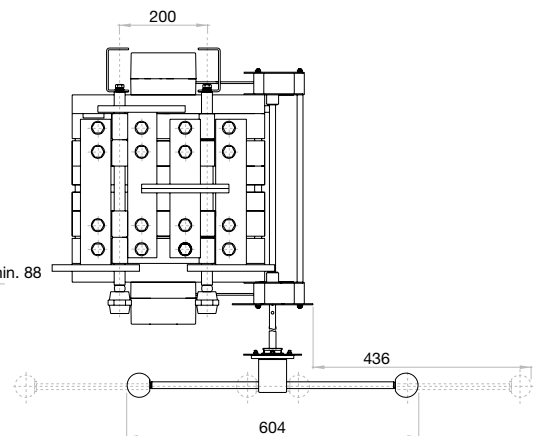
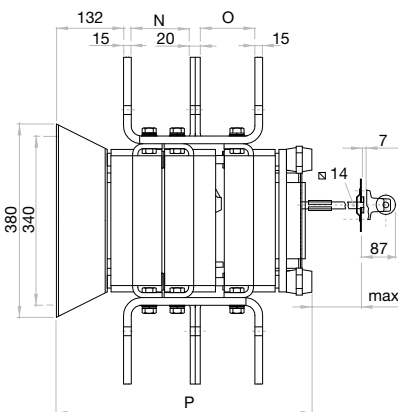
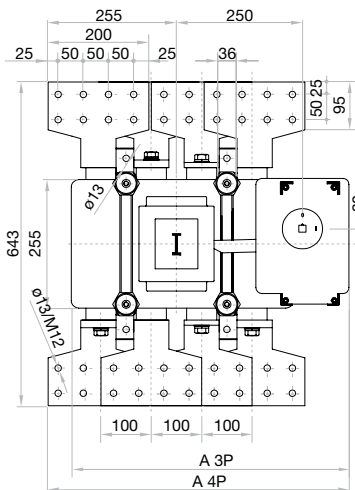
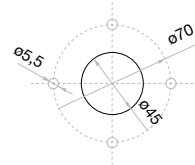
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and keylock device
 Simple Double

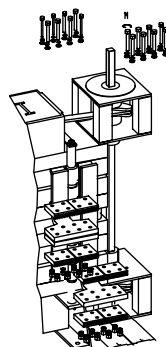


Dimensions (mm)

Door drilling for external handle



	A		N	O	P	Ø
	3P	4P				
4000 A	551,5	597,5	116	107,5	502,5	13
5000 A	551,5	597,5	164,5	164,5	632	
6300 A	551,5	597,5	164,5	164,5	632	

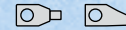


	H max (Cu)	L max (Cu)	M
	mm	mm	Nxm
4000 A	4x10		
5000 A	6x10	100	M12 45
6300 A	6x10		

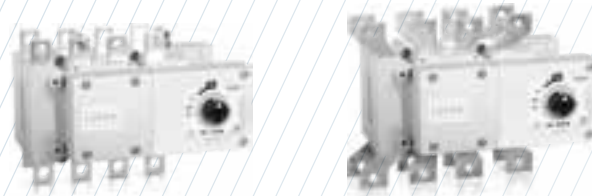
S5000M AC Switch - disconnecter base mounting 6P - 8P

Size 0

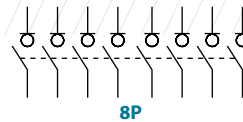
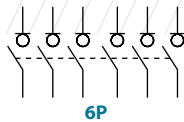
A 125|160|200



series
S5M



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



Technical information



According to IEC/EN 60947-3

			125	160	200	
Rated thermal current in ambient at	Ith	40 °C	A	125	160	200
		50 °C	A	125	160	200
		60 °C	A	125	160	200
Rated insulation voltage	Ui	V	1000	1000	1000	
Rated dielectric strength	50 Hz., 1 min.	V	4000	4000	4000	
Rated impulse withstand voltage	Uimp	kV	8	8	8	
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	Ie	Ue 400V AC21A	A	125	160	200
		Ue 400V AC22A	A	125	160	200
		Ue 400V AC23A	A	125	160	160
		Ue 500V AC21A	A	125	160	200
		Ue 500V AC22A	A	125	160	200
		Ue 500V AC23A	A	100	125	125
AC rated operational power ^{*(2)}	Pe	3x400V AC23A	kW	69,2	88,6	88,6
Rated capacitor power	400V, sen φ = 0,65	kVAr	56,2	72	72	
Rated breaking capacity	400V	AC23A	A	1000	1280	1280
Rated making capacity	400V	AC23A	A	1250	1600	1600

		125	160	200
Short - circuit behaviour				
Rated short-circuit making capacity ^{*(3)}	Icm kA (peak)	13	13	13
Rated short-time withstand current (1sec.)	Icw kA rms	7	7	7
Conditional short - circuit current (rms value) ^{*(4)}	kA rms	100	100	100
Maximum cut - off current (peak value)	kA (peak)	17	20	20
Maximum power dissipation (I ² t)	A ² s (x10 ³)	55	198	198
Mechanical features				
Minimum number of mechanical operations ^{*(5)}	Cycles	30000	30000	30000
Maximum weight 6P		1,8	1,8	1,9
Maximum weight 8P		2,1	2,1	2,2

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Indicative values: current values vary from one motor manufacturer to another
^{*(3)} Without limiting protective device (short-circuit maintained 50... 100 ms.)
^{*(4)} With a protective device limiting the cut - off current and the joule integral to the indicated values
^{*(5)} Please consult us for more operations

Accessories



» Direct handle

CODE DS-SI01



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

IP65
CODE DS-LA01



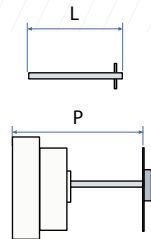
» Emergency external handle included shaft^{*(e1)}

IP65
CODE DS-LR01

» Shafts

Standard shaft included ^{*(e1)}

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



» Terminal protection

CODE DS-CU01
(1 unit for input or output only frontal side)



» Auxiliary contacts

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

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



» Safety key lock devices

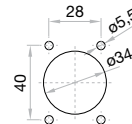
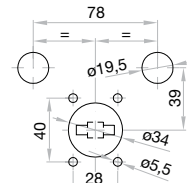
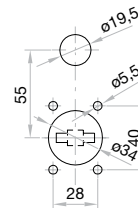
Simple CODE DS-CAB1
Double CODE DS-CEB1

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 keylock device

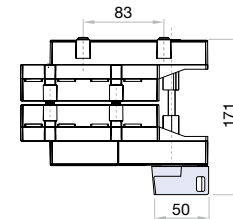
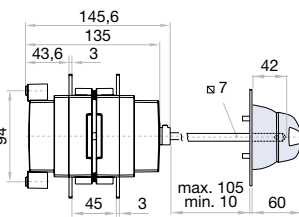
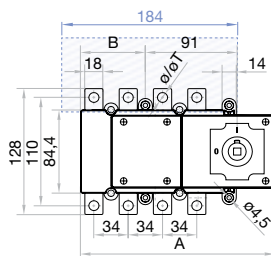
Simple

Double



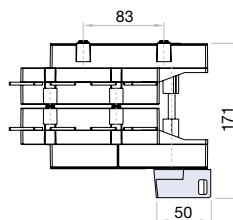
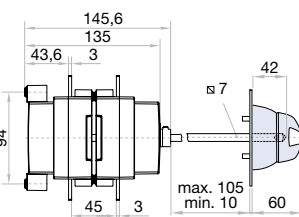
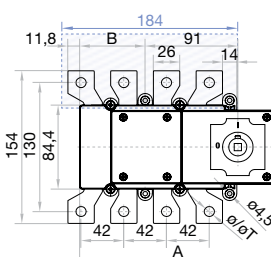
Door drilling for external handle

Dimensions (mm)



	A		B		ø
	6P	8P	6P	8P	
125 A	181	192	53	64	10
160 A					

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



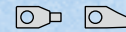
	A		B		ø
	6P	8P	6P	8P	
200 A	181	192	53	64	10

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

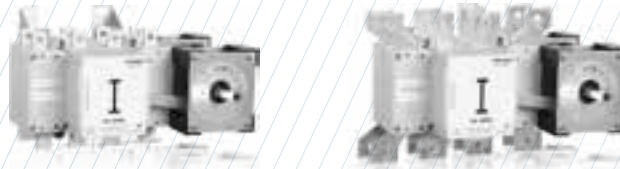
S5000M AC Switch - disconnecter base mounting 6P - 8P

Size 1

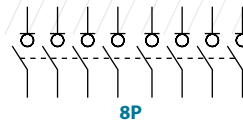
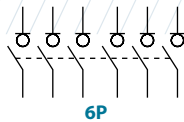
A 250|315|400



series
S5M



	CODE - 250A	CODE - 315A	CODE - 400A
6P	S5M02506PRO	S5M03156PRO	S5M04006PCO
8P	S5M02508PRO	S5M03158PRO	S5M04008PCO



Technical information



According to IEC/EN 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 dielectric strength	50 Hz, 1 min.	V		5000 5000 5000
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
		Ue 500V AC21A	A	250 315 400
		Ue 500V AC22A	A	250 315 400
		Ue 500V AC23A	A	200 250 315
AC rated operational power ^{*(2)}	Pe	3x400V AC23A	kW	138,5 174,5 221,7
Rated capacitor power	400V, sen φ = 0,65	kVAr		112,5 141,8 180,1
Rated breaking capacity	400V AC23A	A		2000 2520 3200
Rated making capacity	400V AC23A	A		2500 3150 4000

		250 315 400		
Short - circuit behaviour				
Rated short-circuit making capacity ^{*(3)}	Icm	kA (peak)	20 20 20	
Rated short-time withstand current (1sec.)	Icw	kA rms	12 12 12	
Conditional short - circuit current (rms value) ^{*(4)}		kA rms	100 100 100	
Maximum cut - off current (peak value)		kA (peak)	33 33 33	
Maximum power dissipation (I ² t)		A ² s (x10 ³)	1000 1000 1000	
Mechanical features				
Minimum number of mechanical operations ^{*(5)}		Cycles	20000 20000 20000	
Maximum weight 6P		Kg	5,5 5,5 5,7	
Maximum weight 8P		Kg	5,8 5,8 6	

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

^{*(2)} Indicative values: current values vary from one motor manufacturer to another

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

^{*(4)} With a protective device limiting the cut - off current and the joule integral to the indicated values

^{*(5)} Please consult us for more operations

Accessories



» Direct handle

CODE DS-LI12



» External handle included shaft*(e1)

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LA12



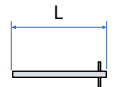
» External handle without shaft

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LA15



» Emergency external handle included shaft*(e1)

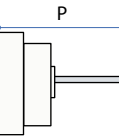
IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LR12



» Shafts

Standard shaft included *(e1)

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



» Auxiliary contacts

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

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



» Terminal protection

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



» Terminal shrouds

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



» Safety key lock devices

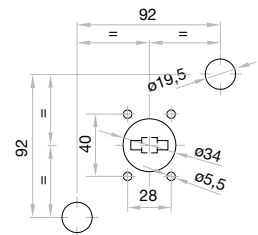
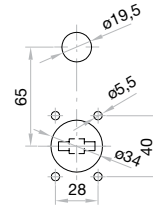
Simple CODE DS-CB12
Double CODE DS-CF11

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 keylock device

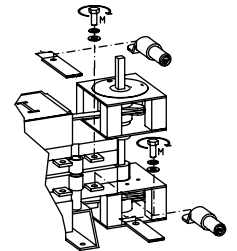
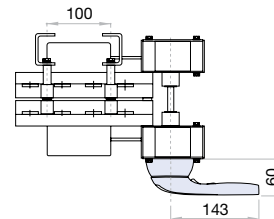
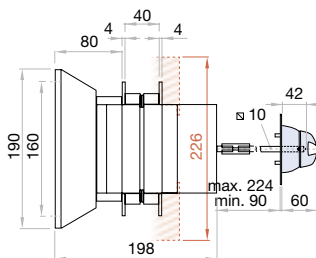
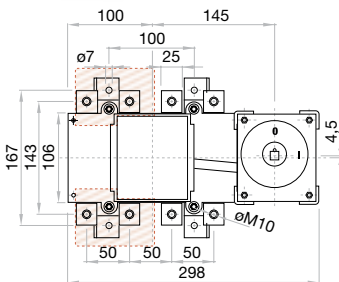
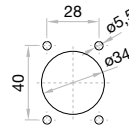
Simple

Double

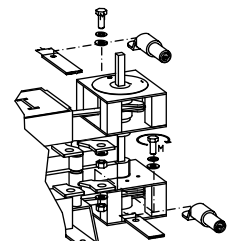


Dimensions (mm)

Door drilling for external handle



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



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

S5000M AC Switch - disconnecter base mounting 6P - 8P

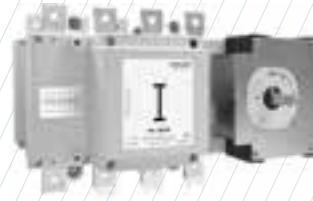
Size 2

A

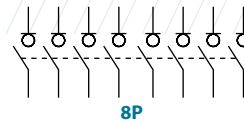
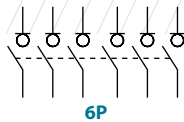
500|630



series
S5M



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



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 dielectric strength	50 Hz., 1 min.	V		8000	8000
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	500	630
		U _e 400V AC22A	A	500	630
		U _e 400V AC23A	A	500	630
		U _e 500V AC21A	A	500	630
		U _e 500V AC22A	A	500	630
		U _e 500V AC23A	A	400	500
AC rated operational power ^{*(2)}	P _e	3x400V AC23A	kW	277,1	349,1
Rated capacitor power	400V, sen φ = 0,65	kVAr		225,1	283,7
Rated breaking capacity	400V AC23A	A		4000	5000
Rated making capacity	400V AC23A	A		5000	6300

		500		630	
Short - circuit behaviour					
Rated short-circuit making capacity ^{*(3)}	I _{cm}	kA (peak)	26	26	
Rated short-time withstand current (1sec.)	I _{cw}	kA rms	16	16	
Conditional short - circuit current (rms value) ^{*(4)}		kA rms	100	100	
Maximum cut - off current (peak value)		kA (peak)	39	39	
Maximum power dissipation (I ² t)		A ² s (x10 ³)	1600	1600	
Mechanical features					
Minimum number of mechanical operations ^{*(5)}		Cycles	10000	10000	
Maximum weight 6P		Kg	12,3	12,3	
Maximum weight 8P		Kg	13	13	

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

^{*(2)} Indicative values: current values vary from one motor manufacturer to another

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

^{*(4)} With a protective device limiting the cut - off current and the joule integral to the indicated values

^{*(5)} Please consult us for more operations

Accessories



» Direct handle

CODE DS-LI22



» External handle included shaft*(e1)

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LA22



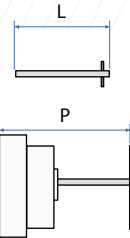
» Emergency external handle included shaft*(e1)

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LR22

» Shafts

Standard shaft included *(e1)

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



» Terminal shrouds

CODE DS-CU21

(1 kit for input or output only frontal side)



» Auxiliary contacts

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

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



» Safety key lock devices

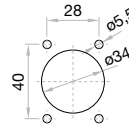
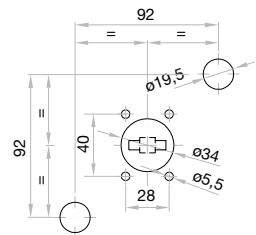
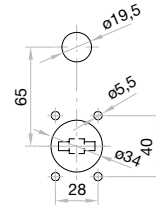
Simple CODE DS-CB21
Double CODE DS-CF21

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

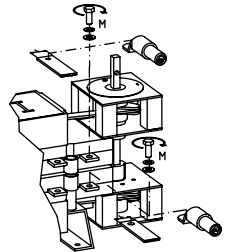
Door drilling for handle and keylock device

Simple

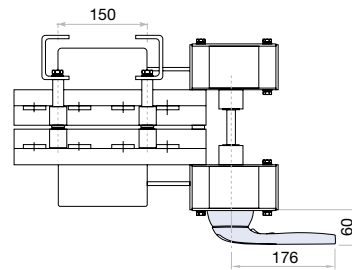
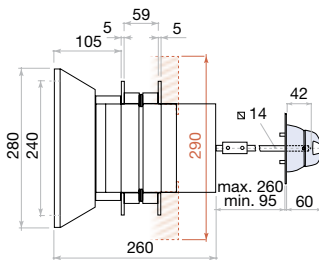
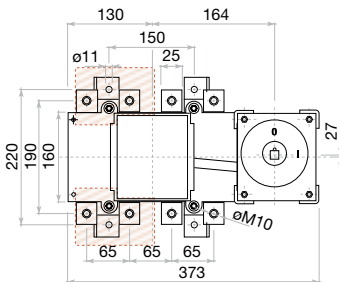
Double



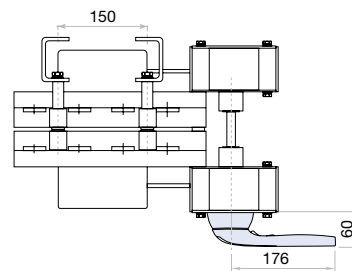
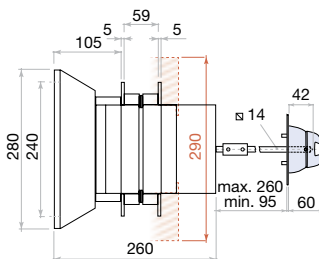
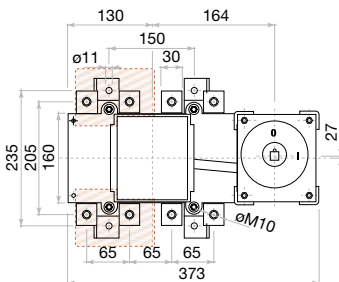
Door drilling for external handle



Dimensions (mm)



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



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

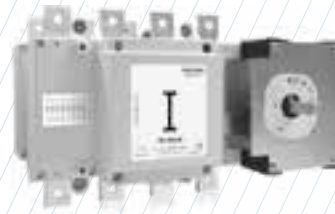
S5000M AC Switch - disconnecter base mounting 6P - 8P

Size 3

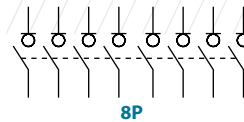
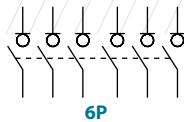
A 800|1000



series
S5M



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



Technical information



According to IEC/EN 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 dielectric strength	50 Hz., 1 min.	V		8000	8000
Rated impulse withstand voltage	U _{imp}	kV		12	12
AC rated operational current ^{*(1)}	I _e	U _e 400V AC21A	A	800	1000
		U _e 400V AC22A	A	800	1000
		U _e 400V AC23A	A	800	1000
		U _e 500V AC21A	A	800	1000
		U _e 500V AC22A	A	800	1000
		U _e 500V AC23A	A	800	800
AC rated operational power ^{*(2)}	Pe	3x400V AC23A	kW	443,4	554,2
Rated capacitor power	400V, sen φ = 0,65	kVAr		360,2	450,3
Rated breaking capacity	400V AC23A	A		6400	8000
Rated making capacity	400V AC23A	A		8000	10000

		800	1000
Short - circuit behaviour			
Rated short-circuit making capacity ^{*(3)}	I _{cm} kA (peak)	60	60
Rated short-time withstand current (1sec.)	I _{cw} kA rms	25	25
Conditional short - circuit current (rms value) ^{*(4)}	kA rms	72	72
Maximum cut - off current (peak value)	kA (peak)	55	55
Maximum power dissipation (I ² t)	A ² s (x10 ³)	4900	4900
Mechanical features			
Minimum number of mechanical operations ^{*(5)}	Cycles	10000	10000
Maximum weight 6P	Kg	18,5	18,5
Maximum weight 8P	Kg	20	20

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Indicative values: current values vary from one motor manufacturer to another
^{*(3)} Without limiting protective device (short-circuit maintained 50... 100 ms.)
^{*(4)} With a protective device limiting the cut - off current and the joule integral to the indicated values
^{*(5)} Please consult us for more operations

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



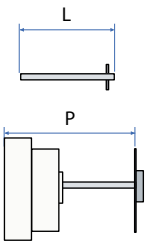
» External handle without shaft

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LA43



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

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LR41



» Shafts

Standard shaft included^{*(e1)}

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



» Terminal shrouds

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



» 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.

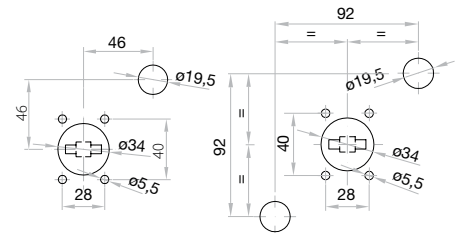


» Safety key lock devices

Simple CODE DS-CB41
Double CODE DS-CF41

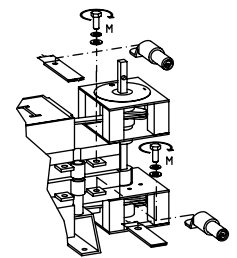
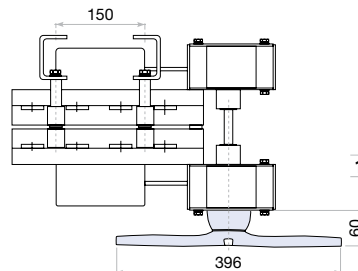
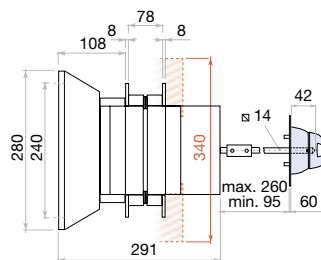
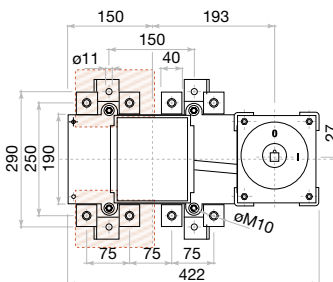
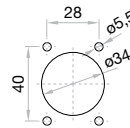
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and keylock device
Simple Double



Dimensions (mm)

Door drilling for external handle



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

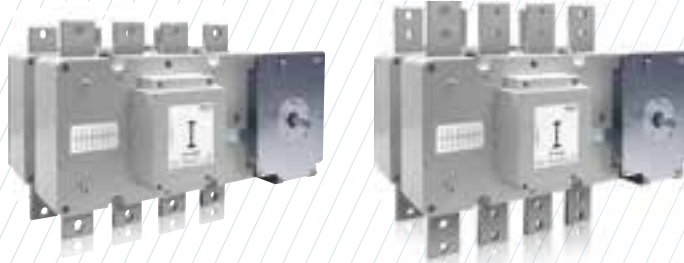
S5000M AC Switch - disconnecter base mounting 6P - 8P

Size 4

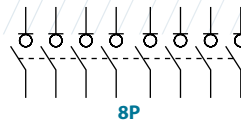
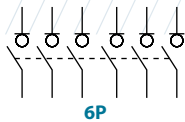
A 1250|1600|1800|2000



series
S5M



	CODE-1250A	CODE-1600A	CODE-1800A	CODE-2000A
6P	S5M12506PS0	S5M16006PS0	S5M18006PS0	S5M20006PD0
8P	S5M12508PS0	S5M16008PS0	S5M18008PS0	S5M20008PD0



Technical information



According to IEC/EN 60947-3

		1250 1600 1800 2000					
Rated thermal current in ambient at	lth	40 °C	A	1250	1600	1800	2000
		50 °C	A	1250	1600	1620	1800
		60 °C	A	1000	1440	1440	1600
Rated insulation voltage	Ui	V	1000	1000	1000	1000	
Rated dielectric strength	50 Hz., 1 min.	V	10000	10000	10000	10000	
Rated impulse withstand voltage	Uimp	kV	12	12	12	12	
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	le	Ue 400V AC21A	A	1250	1600	1800	2000
		Ue 400V AC22A	A	1250	1600	1800	2000
		Ue 400V AC23A	A	1000	1000	1250	1250
		Ue 500V AC21A	A	1250	1600	1800	2000
		Ue 500V AC22A	A	1000	1250	1600	1800
	Ue 500V AC23A	A	800	900	1000 ^{*(5)}	1000 ^{*(5)}	

		1250 1600 1800 2000						
AC rated operational power	Pe	3x400V	AC23A	kW	554,2	554,2	692,8	692,8
					^{*(2)}			
Rated capacitor power	400V, sen φ = 0,65	kVAr	450,3	450,3	562,9	562,9		
Rated breaking capacity	400V	AC23A	A	8000	8000	10000	10000	
Rated making capacity	400V	AC23A	A	10000	10000	12500	12500	
Short - circuit behaviour								
Rated short-circuit making capacity ^{*(3)}	lcm	kA (peak)	60	75	75	75		
Rated short-time withstand current (1sec.)	lcw	kA rms	25	50	50	50		
Mechanical features								
Minimum number of mechanical operations ^{*(4)}	Cycles	10000	4500	4500	4500			
Maximum weight 6P	Kg	42,9	42,9	42,9	42,9			
Maximum weight 8P	Kg	47,3	47,3	47,3	47,3			

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Indicative values: current values vary from one motor manufacturer to another
^{*(3)} Without limiting protective device (short-circuit maintained 50... 100 ms.)
^{*(4)} Please consult us for more operations
^{*(5)} Rated operational current AC22B

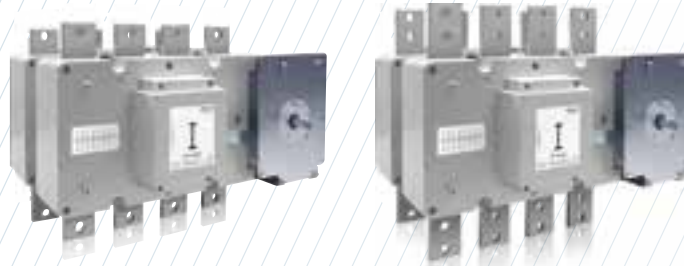
S5000M AC Switch - disconnecter base mounting 6P - 8P

Size 4

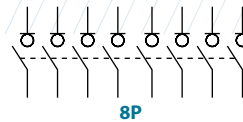
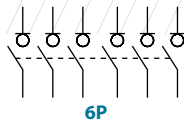
A 1250|1600|1800|2000



series
S5M



	CODE-1250A	CODE-1600A	CODE-1800A	CODE-2000A
6P	S5M12506PS0	S5M16006PS0	S5M18006PS0	S5M20006P00
8P	S5M12508PS0	S5M16008PS0	S5M18008PS0	S5M20008P00



Technical information



According to IEC/EN 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	1620	1800	
		60 °C	A	1000	1440	1440	1600	
Rated insulation voltage	U _i	V	1000	1000	1000	1000		
Rated dielectric strength	50 Hz, 1 min.	V	10000	10000	10000	10000		
Rated impulse withstand voltage	U _{imp}	kV	12	12	12	12		
AC rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	I _e	U _e 400V	AC21A	A	1250	1600	1800	2000
		U _e 400V	AC22A	A	1250	1600	1800	2000
		U _e 400V	AC23A	A	1000	1000	1250	1250
		U _e 500V	AC21A	A	1250	1600	1800	2000
		U _e 500V	AC22A	A	1000	1250	1600	1800
					800	900	1000 ^{*(5)}	1000 ^{*(5)}

		1250 1600 1800 2000						
AC rated operational power	P _e	3x400V	AC23A	kW	554,2	554,2	692,8	692,8
					^{*(2)}			
Rated capacitor power		400V, sen φ = 0,65		kVAr	450,3	450,3	562,9	562,9
Rated breaking capacity		400V	AC23A	A	8000	8000	10000	10000
Rated making capacity		400V	AC23A	A	10000	10000	12500	12500
Short - circuit behaviour								
Rated short-circuit making capacity			I _{cm}	kA (peak)	60	75	75	75
				^{*(3)}				
Rated short-time withstand current (1sec.)			I _{cw}	kA rms	25	50	50	50
Mechanical features								
Minimum number of mechanical operations			^{*(4)}	Cycles	10000	4500	4500	4500
Maximum weight 6P				Kg	42,9	42,9	42,9	42,9
Maximum weight 8P				Kg	47,3	47,3	47,3	47,3

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Indicative values: current values vary from one motor manufacturer to another
^{*(3)} Without limiting protective device (short-circuit maintained 50... 100 ms.)
^{*(4)} Please consult us for more operations
^{*(5)} Rated operational current AC22B

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



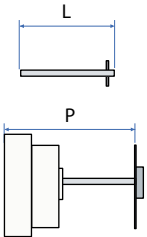
» External handle without shaft

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LA43



» Emergency external handle included shaft*(e1)

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LR41



» Shafts

Standard shaft included *(e1)

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



» Terminal shrouds

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



» Auxiliary contacts

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

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

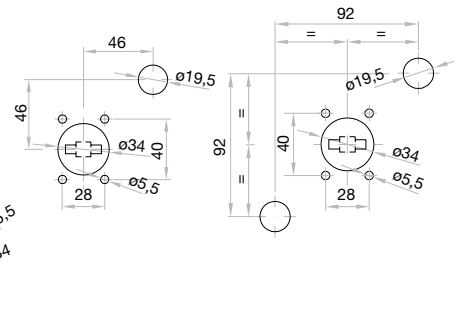


» Safety key lock devices

Simple CODE DS-CB41
Double CODE DS-CF41

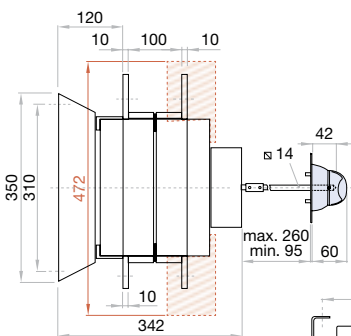
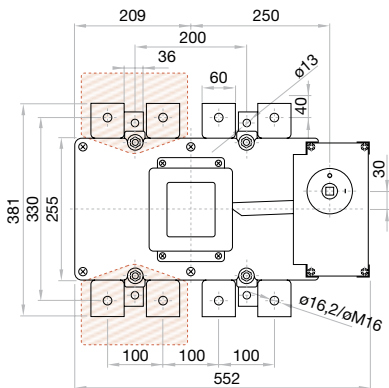
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and keylock device
Simple Double

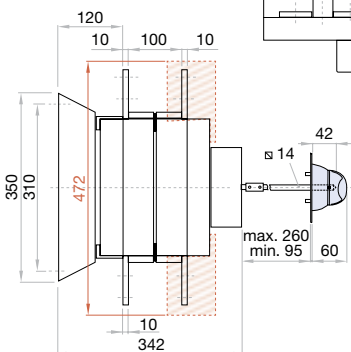
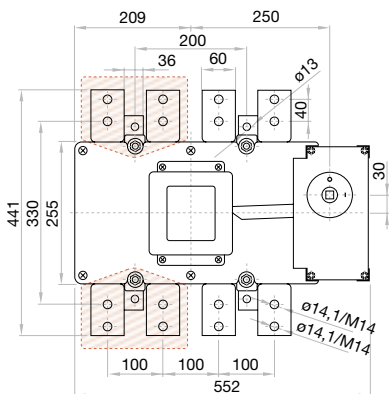
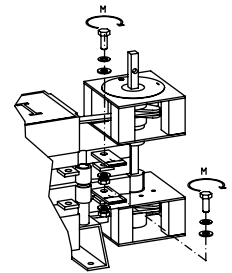


Dimensions (mm)

Door drilling for external handle



1250 A



1600 A
1800 A
2000 A

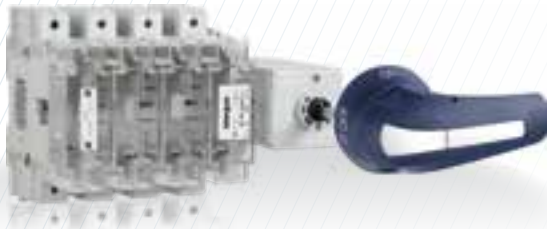
H max (Cu)	L max (Cu)	M	M
1250 A		M16	80
1600 A	2x7	80	
1800 A		M14	55
2000 A			

AC Fusible switches

series
M11

series
M21

Fusible switches 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 fusible switches 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 serie 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

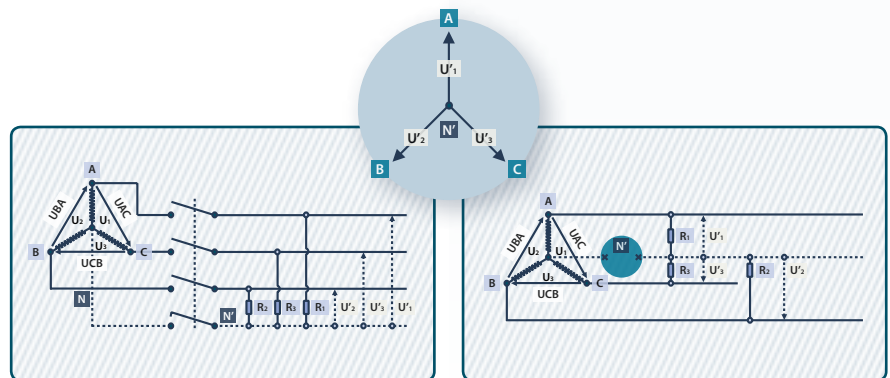
- > Good grip and excellent torque/resistance
- > Padlockable handle in **O OFF** position (up to three locks Ø 5-8 mm)
- > Door interlock in **ON I** position
- > When lock in **O OFF** position, door is interlocked
- > Defeatable feature in **ON I** position (with the use of a tool for maintenance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



Neutral pole early make & late break

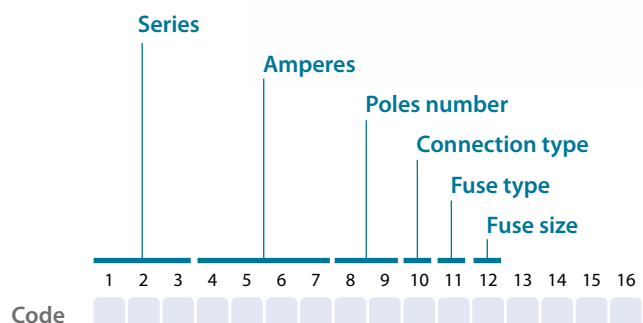
This safety feature prevents accidental overvoltage when making/breaking of loads connected between phase and neutral.

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 coding:

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



According to:
IEC/EN 60947-3
IEC/EN 61439-1
RoHs



Testing and approvals:



series
M11



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

series
M21



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

series
CIF21



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

series
CIF22



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

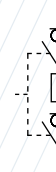
M11 Fusible switch base mounting 2P - 3P - 3P+N

Size 00

A 32|50|63|100

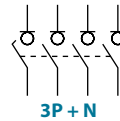
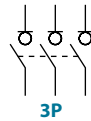


NFC 14x51 NH 00C
BS A1-A2-A3



	CODE - 50A	CODE - 63A	CODE - 100A
2P	M1100502PBC20	M1100632PBDB0	M1101002PBDB0
3P	M1100503PBC20	M1100633PBDB0	M1101003PBDB0
3P + N	M1100503NBC20	M1100633NBDB0	M1101003NBDB0
Fuses	NFC 14x51	NH 00C	NH 00C

	CODE - 32A	CODE - 63A
2P	M1100322PBBA0	M1100632PBDB0
3P	M1100323PBBA0	M1100633PBDB0
3P + N	M1100323NBBA0	M1100633NBDB0
Fuses	BS A1	BS A2 - BS A3 ^{*(0)}



Technical information



According to IEC/EN 60947-3

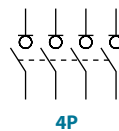
			32	50	63	100	
Fuses	NH/DIN		-	-	00C	00C	
	BS		A1	-	A2-A3 ^{*(0)}	-	
	NFC		-	14x51	-	-	
Rated thermal current in ambient at 40 °C	Ith	A	32	50	63	100	
Rated thermal current in enclosure	Ithe	A	-	-	63	100	
Rated insulation voltage	Ui	V	800	800	800	800	
Rated dielectric strength	50 Hz, 1 min	V	5000	5000	5000	5000	
Rated impulse withstand voltage	Uimp	kV	8	8	8	8	
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	-	-	5,1	6,9	
	BS		2,8	-	6,6	-	
	NFC		-	4,7	-	-	
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	le	400 V AC21A	A	32	50	63	100
		400 V AC22A	A	32	50	63	100
		400 V AC23A	A	32	50	63	100
		500 V AC21A	A	32	50	63	100
		500 V AC22A	A	32	50	63	100
		500 V AC23A	A	32	50	63	80
AC rated operational power ^{*(3)}	Pe	400 V AC23A	kW	15	25	30	55

			32	50	63	100
Rated capacitor power	400 V	kVA _r	15	18	25	42
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	260	400	504	800
Rated making capacity	400 V; cos φ = 0,45	A	320	500	800	1000
Short - circuit behaviour						
Short - time withstand current ^{*(4)}	kA rms		100	100	100	100
Short - circuit making current ^{*(4)}	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
Minimum number of mechanical operation ^{*(5)}	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

^{*(4)} With a protective device limiting the cut - off current and the joule integral to the indicated values

^{*(5)} Please consult us for more operations

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



Also available 4P switches under request, consult reference

^{*(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)} Indicative values: current values depend on the motor manufacturer

Accessories

- 

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

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

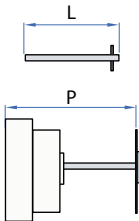
» **Direct handle**
 Frontal CODE DM1SI01
 Side CODE DM1SYB1
- 

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

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

» Shafts

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



Extended shafts
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** (1 kit for input or output)

2 UNITS | 3 UNITS
 DM1CU01 | DM1CU02

» **Auxiliary contacts**

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

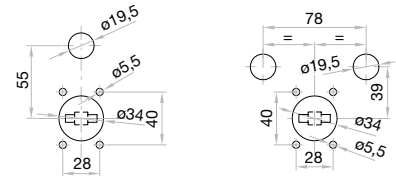
Ie = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.

» **Safety key lock device**

Simple CODE DS-CAB1
 Double CODE DS-CEB1

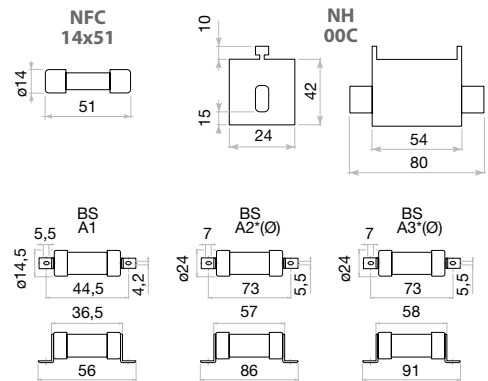
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and keylock device
 Simple | Double



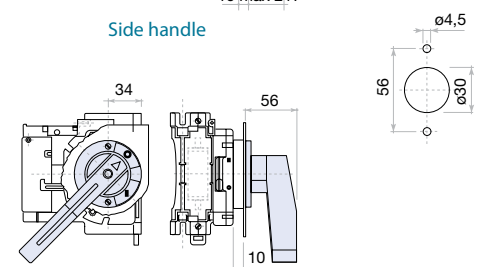
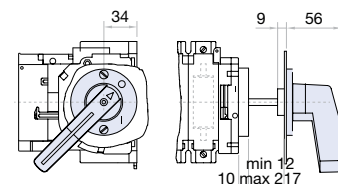
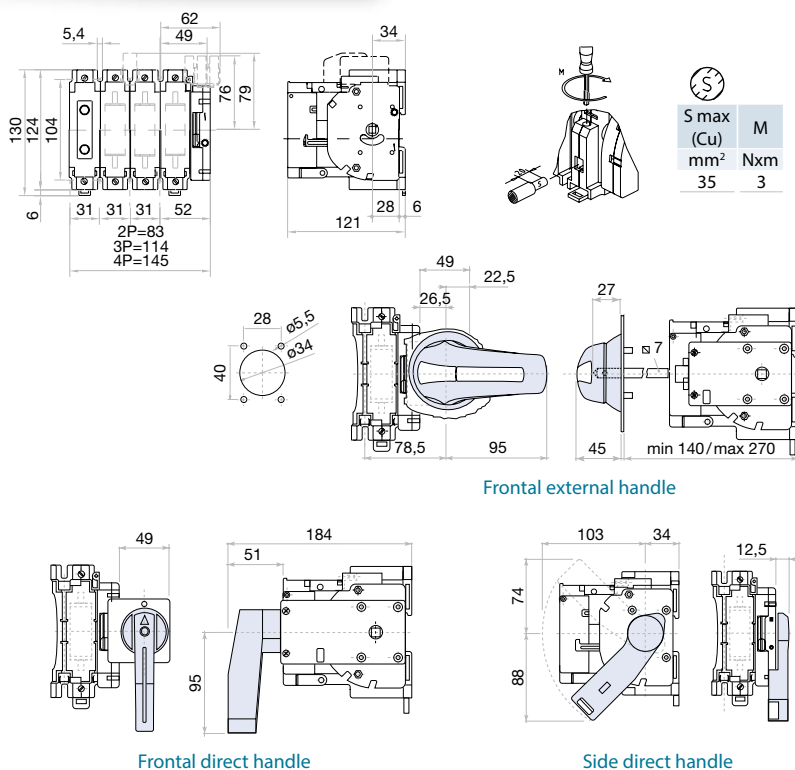
Fuses

 Maximum dimensions



*Ø) Only fuses with diameter < 25 mm

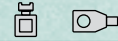
Dimensions (mm)



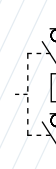
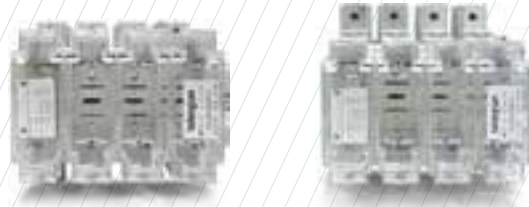
M11 Fusible switch base mounting 2P - 3P - 3P+N

Size 0

A 100|125|160



NFC 22x58 NH 00
BS A2-A3

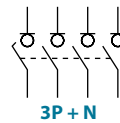
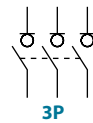


	CODE-125A	CODE-125A	CODE-125A	CODE-125A	CODE-160A	CODE-160A
2P	M1101252PBC30	M1101252PTC30	M1101252PBDB0	M1101252PTDB0	M1101602PBDB0	M1101602PTDB0
3P	M1101253PBC30	M1101253PTC30	M1101253PBDB0	M1101253PTDB0	M1101603PBDB0	M1101603PTDB0
3P + N	M1101253NBC30	M1101253NTC30	M1101253NBDB0	M1101253NTDB0	M1101603NBDB0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

Fuses	NFC 22x58	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/EN 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 dielectric strength	50 Hz, 1 min	V 6000	6000	6000
Rated impulse withstand voltage	U _{imp}	kV 8	8	8
Power dissipation in fuse links ^{*(1)}	NH/DIN	W -	9,5	11,8
	BS	8,5	-	-
	NFC	-	12,5	-
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	400 V AC21A	A 100	125	160
	400 V AC22A	A 100	125	160
	400 V AC23A	A 100	125	160
	500 V AC21A	A 100	125	160
	500 V AC22A	A 100	125	160
AC rated operational power ^{*(3)}	400 V AC23A	kW 55	65	90

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

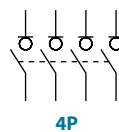
^{*(2)} Other voltages and / or utilization categories. Please consult

^{*(3)} Indicative values: current values depend on the motor manufacturer

		100	125	160
Rated capacitor power	400 V	kVAr 42	52	60
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				
Short - time withstand current ^{*(4)}	kA rms	100	100	100
Short - circuit making current ^{*(4)}	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
Minimum number of mechanical operations ^{*(5)}	Cycles	10000	10000	10000
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

^{*(4)} With a protective device limiting the cut - off current and the joule integral to the indicated values

^{*(5)} Please consult us for more operations



Also available 4P switches under request, consult reference

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)}

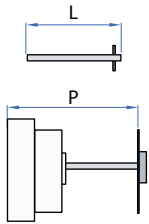
L (mm)	P (mm)
250	144... 270


Extended shafts

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** (1 kit for input or output)

2 UNITS	3 UNITS
DM1CU01	DM1CU02

» Auxiliary contacts

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

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

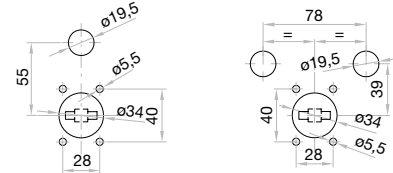


» Safety key lock device

Simple CODE DS-CAB1
 Double CODE DS-CEB1

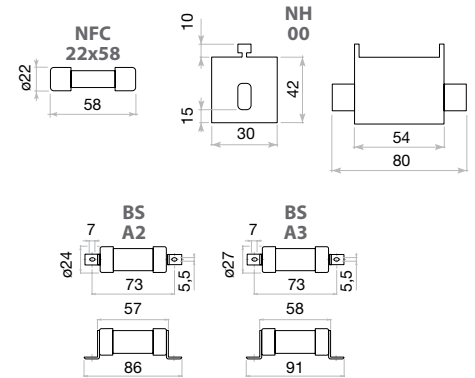
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and keylock device
 Simple Double

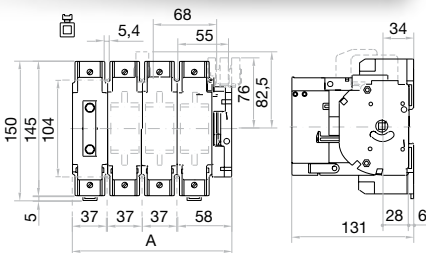


Fuses

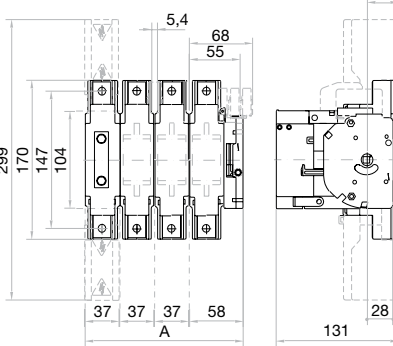
Maximum dimensions



Dimensions (mm)

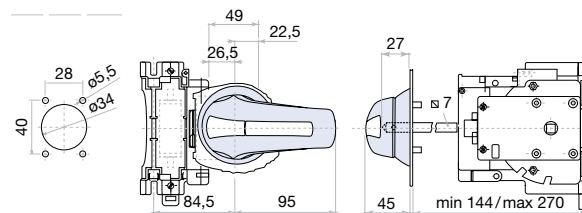


Fastening by screw only

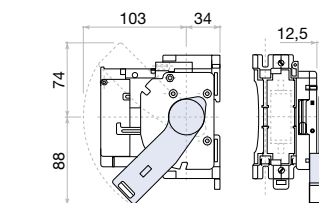


A		
2P	3P	4P
95	132	169

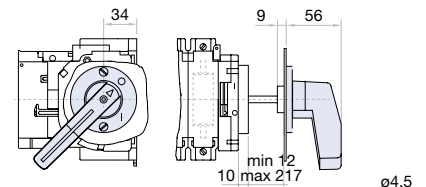
S max (Cu)	H max (Cu)	L max (Cu)	M	Nxm
95	-	-	4	
95	3	25	M8	13



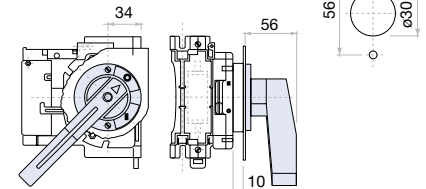
Frontal external handle



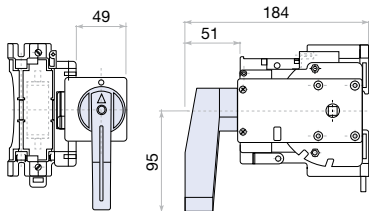
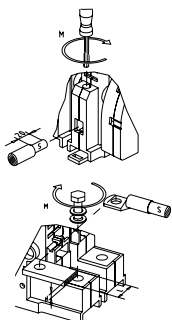
Side direct handle



Side handle



Side mounting



Frontal direct handle

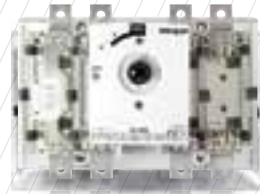
M21 Fusible switch base mounting 3P - 3P+N

Size 1

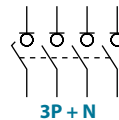
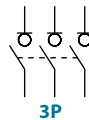
A 160|200|250



NH 0 BS A4
BS B1 BS B2



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



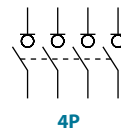
Technical information



According to IEC/EN 60947-3

			160	200	250	
Fuses	NH/DIN	A	0	-	05	
	BS	A	A4	B1-B2	B1-B2	
Rated thermal current in ambient at 40 °C	I _{th}	A	160	200	250	
	I _{the}	A	160	-	250	
Rated insulation voltage	U _i	V	800	800	800	
Rated dielectric strength	50 Hz, 1 min	kV	6000	6000	6000	
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	13,5	-	17,8	
	BS		11	13	16	
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	I _e	U _e 400 V AC21A	A	160	200	250
		U _e 400 V AC22A	A	160	200	250
		U _e 400 V AC23A	A	160	200	250
		U _e 500 V AC21A	A	160	200	250
		U _e 500 V AC22A	A	160	200	250
AC rated operational power ^{*(3)}	P _e	3x400 V AC23A	kW	90	110	132


			160	200	250
Rated capacitor power	400 V	kVAr	60	75	100
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	1280	1600	2000
Rated making capacity	400 V; cos φ = 0,45	A	1600	2000	2500
Conditional short - circuit current					
Fuse protected short-circuit withstand ^{*(4)}		kA rms	100	100	100
Fuse protected short-circuit making ^{*(4)}		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
Minimum number of mechanical operations ^{*(5)}		Cycles	10000	10000	10000
Maximum weight 3P		kg	3,1	3,1	3,1
Maximum weight 3P+N		kg	4	4	4




Also available 4P switches under request, consult reference

^{*(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)} Indicative values: current values depend on the motor manufacturer
^{*(4)} With a protective device limiting the cut - off current and the joule integral to the indicated values
^{*(5)} Please consult us for more operations

Accessories

External handle included shaft ^{*(e1)}

 IP65 | UL50E/NEMA 250
 Types: 1, 3R, 4, 4X y 12
 CODE DS-SA11

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

 IP65 | UL50E/NEMA 250
 Types: 1, 3R, 4, 4X y 12
 CODE DS-SR11

Direct handle

 CODE DM2S11

Shafts

Standard shaft included ^{*(e1)}

 L (mm) | P (mm)
 227 | 180... 292

Extended shafts
 Type 1

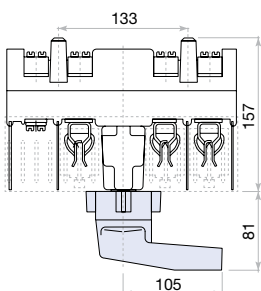
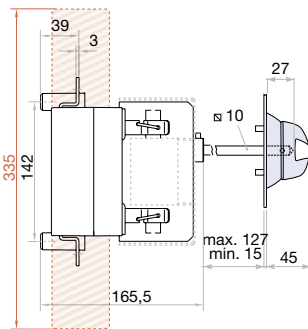
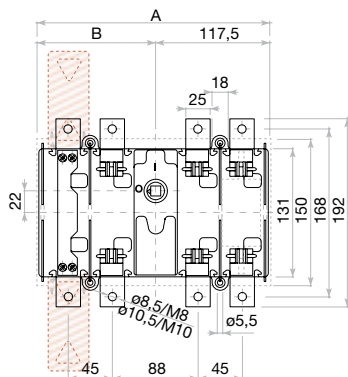
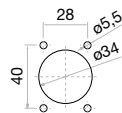
 L (mm) | P (mm) | CODE
 376 | 180... 441 | DS-EP14

Rear protective plate

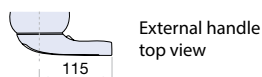

 160-200 A | 250 A
 3P | 4P | 3P | 4P
 DM2PP11 | DM2PP12 | DM2PP21 | DM2PP22

Dimensions (mm)

Door drilling for external handle



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



Terminal shrouds (1 kit for input or output)



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

Auxiliary contacts



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

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

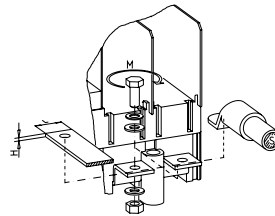
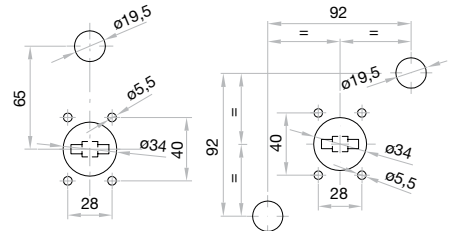
Safety key lock device



Simple CODE DS-CA11
 Double CODE DS-CEB1

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

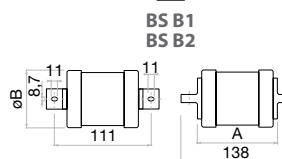
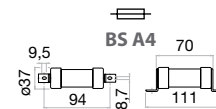
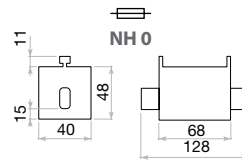
Door drilling for handle and keylock device
 Simple | Double



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

Fuses

Maximum dimensions



	A	øB
	max	max
B1	70	37
B2	77	42

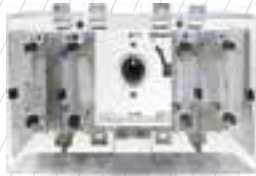
M21 Fusible switch base mounting 3P - 3P+N

Size 2

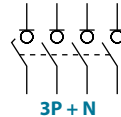
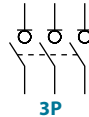
A 250|315|400



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



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



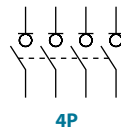
Technical information



According to IEC/EN 60947-3

		250 315 400		
Fuses	NH/DIN	A	1	- 2
	BS	A	-	B1-B3 B1-B4
Rated thermal current in ambient at 40 °C	I _{th}	A	250	315 400
Rated thermal current in enclosure	I _{the}	A	250	- 400
Rated insulation voltage	U _i	V	1000	1000 1000
Rated dielectric strength	50 Hz, 1 min	kV	8000	8000 8000
Rated impulse withstand voltage	U _{imp}	kV	12	12 12
Power dissipation in fuse links ^{*(1)}	NH/DIN	W	18,7	- 30
	BS		-	24 29
AC rated operational current ^{*(2)} (Rated frequency 50/60 Hz)	Ue 400 V AC21A	A	250	315 400
	Ue 400 V AC22A	A	250	315 400
	Ue 400 V AC23A	A	250	315 400
	Ue 500 V AC21A	A	250	315 400
	Ue 500 V AC22A	A	250	315 400
	Ue 500 V AC23A	A	250	315 400
AC rated operational power ^{*(3)}	Pe 3x400 V AC23A	kW	132	160 220

		250 315 400		
Rated capacitor power	400 V	kVAr	115	150 200
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	2000	2600 3200
Rated making capacity	400 V; cos φ = 0,45	A	2500	3150 4000
Conditional short - circuit current				
Fuse protected short-circuit withstand ^{*(4)}		kA rms	100	100 100
Fuse protected short-circuit making ^{*(4)}		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
Minimum number of mechanical operations ^{*(5)}		Cycles	10000	10000 10000
Maximum weight 3P		kg	6,6	6,6 6,6
Maximum weight 3P+N		kg	8	8 8



Also available 4P switches under request, consult reference

^{*(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)} Indicative values: current values depend on the motor manufacturer
^{*(4)} With a protective device limiting the cut - off current and the joule integral to the indicated values
^{*(5)} Please consult us for more operations

Accessories



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

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LA22



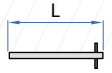
» Emergency external handle included shaft ^{*(e1)}

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LR22



» Direct handle

CODE DM2S121



» Shafts

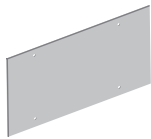
Standard shaft included ^{*(e1)}

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

Extended shafts

Type 1

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

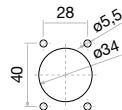


» Rear protective plate

3P	4P
DM2PP21	DM2PP22

Dimensions (mm)

Door drilling for external handle



» Terminal shrouds (1 kit for input or output)

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



» Auxiliary contacts

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



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

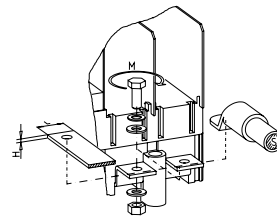
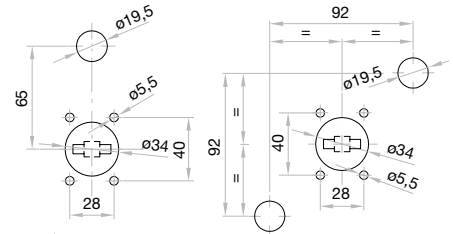
» Safety key lock device

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

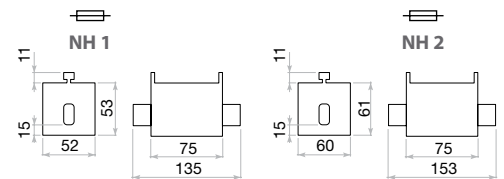
Door drilling for handle and keylock device
Simple Double



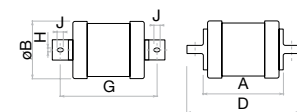
S max (Cu)	H max (Cu)	L max (Cu)	M
mm ²	mm	mm	Nxm
240	6	40	M10 24

Fuses

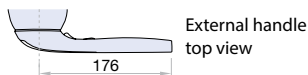
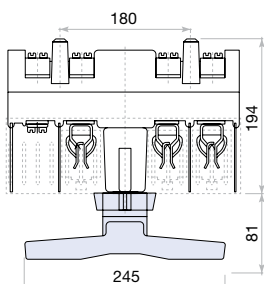
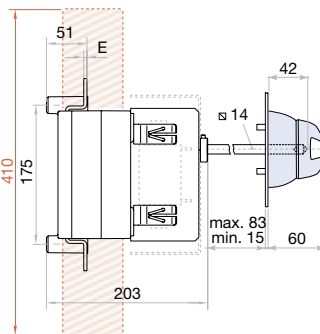
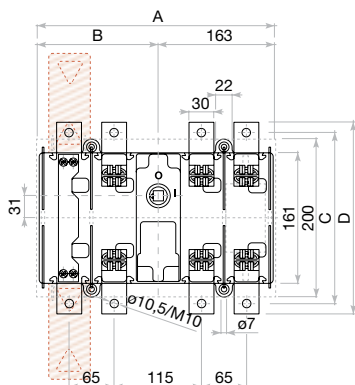
Maximum dimensions



BS B1
BS B2
BS B3
BS B4



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



External handle top view

	A	B	C	D	E
	3P	4P	3P	4P	
250A			212	242	4
315A	274	329	111	166	
400A			216	246	5

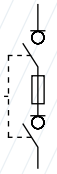
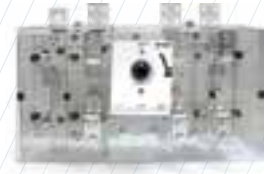
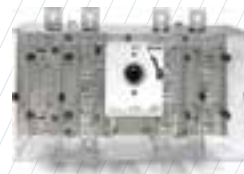
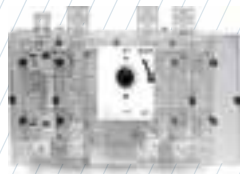
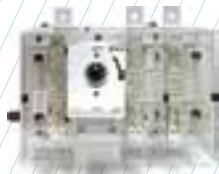
M21 Fusible switch base mounting 3P - 3P+N

Size 3

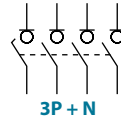
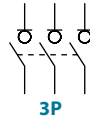
A 630|800



NH 3 BS C1 BS C2
BS C3



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



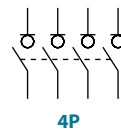
Technical information



According to IEC/EN 60947-3

		630		800	
Fuses	NH/DIN	A	3	3	
	BS	A	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 dielectric strength	50 Hz, 1 min	kV	8000	8000	
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)}	I _e	Ue 400 V AC21A	A	630	800
		Ue 400 V AC22A	A	630	800
		Ue 400 V AC23A	A	630	630
		Ue 500 V AC21A	A	630	800
		Ue 500 V AC22A	A	630	800
		Ue 500 V AC23A	A	630	630
AC rated operational power ^{*(3)}	P _e	3x400 V AC23A	kW	355	355

		630		800	
Rated capacitor power	400 V	kVAr	250	325	
Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	5100	5100	
Rated making capacity	400 V; cos φ = 0,45	A	6300	6300	
Conditional short - circuit current					
Fuse protected short-circuit withstand ^{*(4)}		kA rms	100	100	
Fuse protected short-circuit making ^{*(4)}		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	
Minimum number of mechanical operations ^{*(5)}		Cycles	5000	5000	
Maximum weight 3P		kg	13	13	
Maximum weight 3P+N		kg	15	15	



Also available 4P switches under request, consult reference

^{*(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)} Indicative values: current values depend on the motor manufacturer
^{*(4)} With a protective device limiting the cut - off current and the joule integral to the indicated values
^{*(5)} Please consult us for more operations

Accessories



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

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LA31



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

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DS-LR31



» **Direct handle**

CODE DM2SI31

» **Shafts**

Standard shaft included ^{*(e1)}

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

Extended shafts

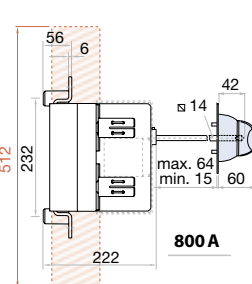
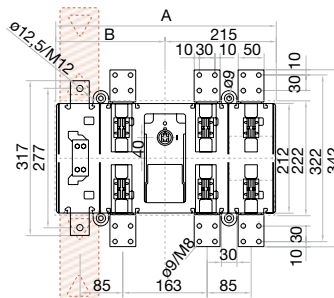
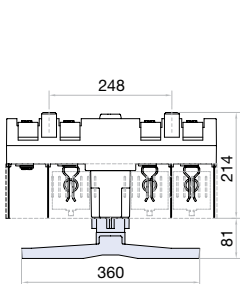
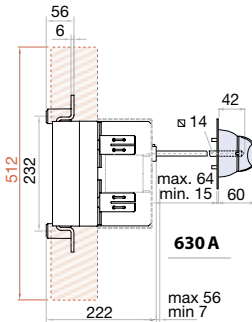
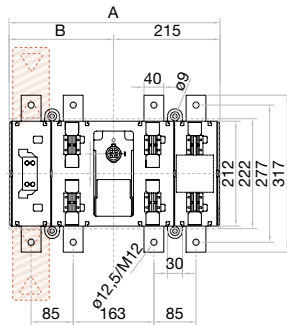
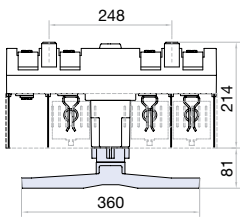
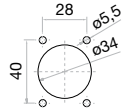
Type 1		
L (mm)	P (mm)	CODE
345	235... 445	DS-EP23

» **Rear protective plate**

3P	4P
DM2PP31	DM2PP32

Dimensions (mm)

Door drilling for external handle



» **Terminal shrouds** (1 kit for input or output)

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



» **Auxiliary contacts**

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

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

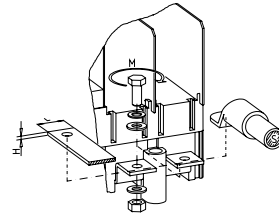
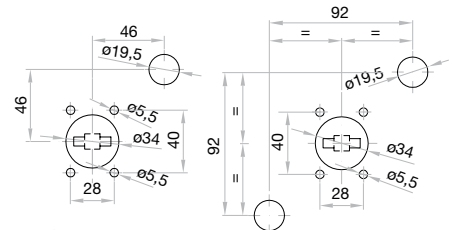


» **Safety key lock device**

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

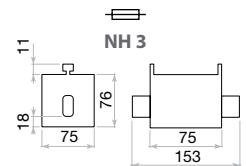
Door drilling for handle and keylock device



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

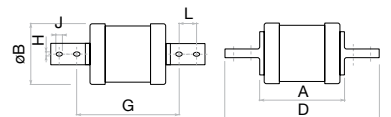
Fuses

Maximum dimensions

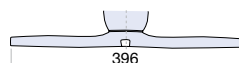


A		B	
3P	4P	3P	4P
381	426	166	211

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

Changeover switches

Changeover switches with high operating load capacity and a high level disconnection insulation; high reliability and safety in abnormal situations, available in different construction models, with a wide range of currents, motorized units and various accessories.



The changeover switches in 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 electro-mechanical 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

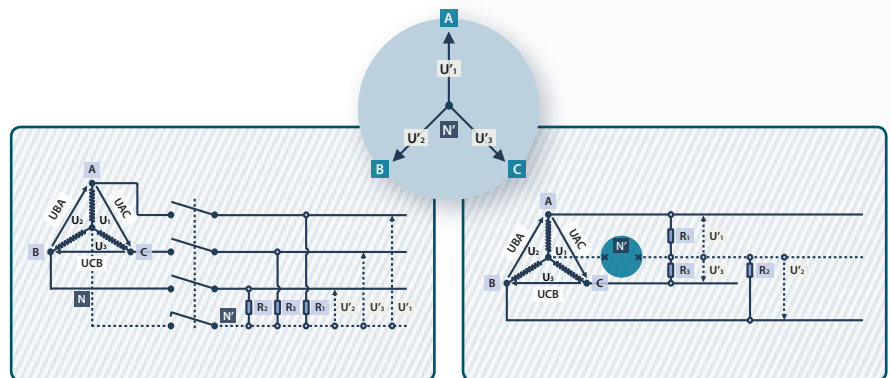


Neutral pole early make & late break



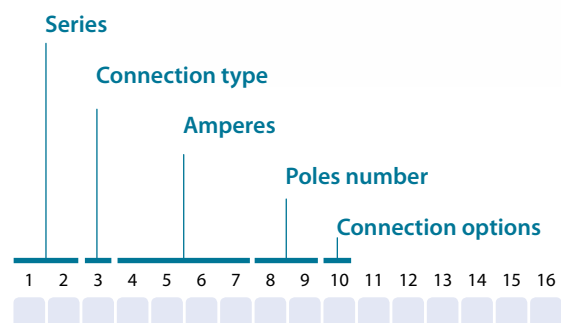
This safety feature prevents accidental overvoltage when making/breaking of loads connected between phase and neutral.

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.



Range coding:

The CCF|CCP|S5L|S5F|CCP series, are identified by a code that describes their most important characteristics as described below



According to:
IEC/EN 60947-3
IEC/EN 61439-1
RoHS



Testing and approvals:



series
CCF



1 2 3 4 5
CCF

Compact model.
Visible cut-off.
Common output from the front.
Wide range of currents.
Base mounting by screws.
External or direct handle.

series
CCP



1 2 3 4 5
CCP

Compact model.
Visible cut-off.
Common output from the rear.
Wide range of currents.
Base mounting by screws.
External or direct handle.

series
S5L



1 2 3 4 5
S5L

Line arrangement.
Base mounting by screws.
External or direct handle.

series
S5F



1 2 3 4 5
S5F

Back to back arrangement.
Base mounting by screws.
External or direct handle.

series
S5B



By-pass

1 2 3 4 5
S5B

Back to back arrangement.
Base mounting by screws.
External or direct handle.

series
CTR2



IP65

1 2 3 4 5
CTR2

Manual changeover switch in metallic enclosure.
External padlockable handle with locking door in ON I - ON II positions.

series
CTRC



IP65

1 2 3 4 5
CTRC

Motorized changeover switch in metallic enclosure.
Outdoor lights position indicators (mains - 0 - generator).
Power connections on the bottom for direct access.
Power part protected against accidental contact.
Physical separation between power and control parts.
Including manual handle (for emergency operation or maintenance).
Other special combinations under request.

series
CTRC



IP65 IP55

1 2 3 4 5
CTRC

Motorized changeover switch in metallic enclosure with automatic transfer switch for the generator control with automated switching Main - Gen management.
Configurable through software programming.
Power part protected against accidental contact.
Including manual handle (for emergency operation or maintenance).

S5000L Changeover switch base mounting 3P - 3P+N

Size 00

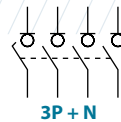
A 40|63|80



series
S5L



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



Technical information

According to IEC/EN 60947-3

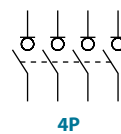


tests:



			40	63	80	
Rated thermal current	Ith in ambient at 40° C	A	50	63	80	
		V	800	800	800	
Rated insulation voltage	Ui	V	800	800	800	
Rated dielectric strength	50 Hz., 1 min.	V	3500	3500	3500	
Rated impulse withstand voltage	Uimp	kV	8	8	8	
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	Ie	400V AC21A	A	50	63	80
		400V AC22A	A	50	63	80
		500V AC21A	A	50	63	80
		500V AC22A	A	50	63	63
		690V AC21A	A	50	63	63
AC Rated operational power ^{*(2)}	Pe	3x400V AC23A	kW	27,7	34,9	34,9
		3x500V AC23A	kW	27,7	34,6	34,6
		3x690V AC23A	kW	23,9	30,5	30,5

			40	63	80
Rated capacitor power	400V, sen φ=0,65	kVA	22,5	28,3	28,3
Rated breaking capacity	400V AC22A	A	150	189	240
Rated making capacity	400V AC22A	A	150	189	240
Short - circuit behaviour					
Short - circuit making capacity ^{*(3)}	Icm	kA (peak)	5	5	5
Short - time withstand current (1 sec.)	Icw	kA rms	3	3	3
Minimum number of mechanical operations ^{*(4)}		Cycles	10000	10000	10000
Minimum number of electrical operations	400V AC22A	Cycles	1500	1500	1500
Maximum weight (3/4 poles)		Kg	0,8/0,8	0,8/0,8	0,8/0,8



Also available 4P changeover switches under request, consult reference

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Indicative values, value cos φ=0,8
^{*(3)} Without limiting protective device (short-circuit maintained 50 ms. - 100 ms.)
^{*(4)} Please consult us for more operations

Accessories



» Direct handle

CODE D5LSI01



» Bridging links (4 pieces)

CODE D5LPCB1



» External handle included shaft*(e1)

IP65
CODE D5LLA01



» Auxiliary contacts

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

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

» Shafts

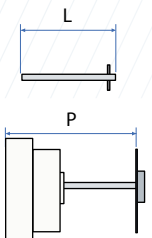
Standard shaft included *(e1)

L (mm)	P (mm)
177	85... 180,5

Shaft extensions

Type 1		CODE
L (mm)	P (mm)	DS-EP04
250	85... 253,5	

Type 2		CODE
L (mm)	P (mm)	DS-EP05
387	85... 390,5	

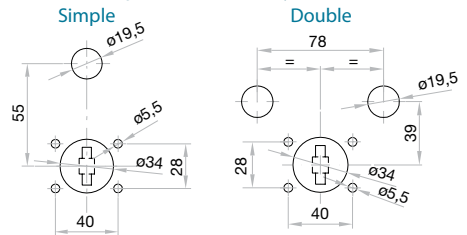


» Safety key lock devices

Simple CODE D5LCBB1
Double CODE D5LCEB1

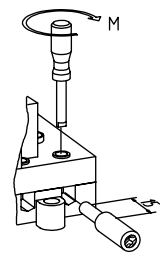
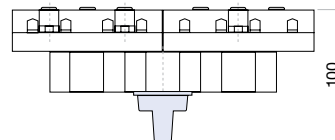
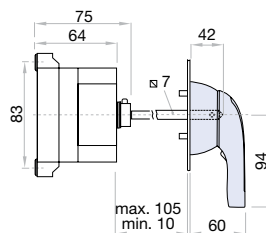
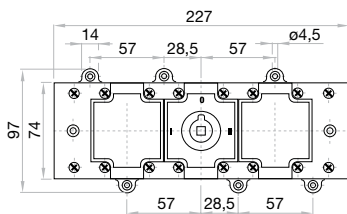
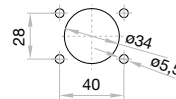
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and keylock device



Dimensions (mm)

Door drilling for external handle

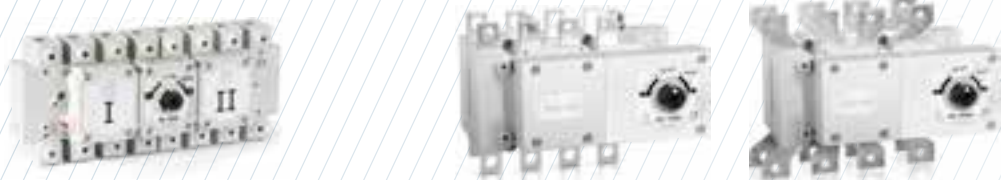


S max (Cu)	M
mm ²	Nxm
25	2

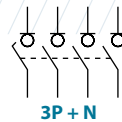
S5000L | S5000F Changeover switch base mounting 3P - 3P+N

Size 0

A 125|160|200



	CODE-125A	CODE-160A	CODE-125A	CODE-160A	CODE-200A
3P	S5L01253PB0	S5L01603PB0	S5F01253PS0	S5F01603PS0	S5F02003PS0
3P + N	S5L01253NB0	S5L01603NB0	S5F01253NS0	S5F01603NS0	S5F02003NS0



Technical information

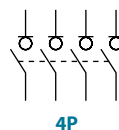
According to IEC/EN 60947-3



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 dielectric strength	50 Hz., 1 min.	V	4000	4000	4000
Rated impulse withstand voltage	U _{imp}	kV	8	8	8
AC Rated operational current ^{*(1)} (Rated operational frequency 50 / 60 Hz)	400V AC21A	A	125	160	200
	400V AC22A	A	125	160	200
	500V AC21A	A	125	160	200
500V AC22A	A	125	160	200	
690V AC21A	A	125	160	180	
690V AC22A	A	100	125	160	
800V AC20A	A	125	160	200	
1000V AC20A	A	125	160	200	
AC Rated operational power ^{*(2)}	Pe	3x400V AC23A kW	69,2	88,6	88,6
		3x500V AC23A kW	69,2	88,6	88,6
		3x690V AC23A kW	76,4	76,4	76,4

			125	160	200
Rated capacitor power	400V, sen φ=0,65	kVAr	56,2	72	90
Rated breaking capacity	400V AC22A	A	375	480	600
Rated making capacity	400V AC22A	A	375	480	600
Short - circuit behaviour					
Short - circuit making capacity ^{*(3)}	I _{cm}	kA (peak)	13	13	13
Short - time withstand current (1 sec.)	I _{cw}	kA rms	7	7	7
Minimum number of mechanical operations ^{*(4)}		Cycles	10000	10000	10000
Minimum number of electrical operations	400V AC22A	Cycles	1000	1000	1000
Maximum weight (3/4 poles)	SSL	Kg	1,8/2	1,8/2	-
	SSF	Kg	1,8/2,1	1,8/2,1	1,9/2,2



Also available 4P changeover switches under request, consult reference

^{*(1)} Other voltages and / or utilization categories. Please consult
^{*(2)} Indicative values, value cos φ=0,8
^{*(3)} Without limiting protective device (short-circuit maintained 50 ms. - 100 ms.)
^{*(4)} Please consult us for more operations



Accessories



» Direct handle

CODE D5LSI01



» External handle included shaft*(e1)

IP65
CODE D5LLA01

» Shafts

Standard shaft included *(e1)

	L (mm)	P (mm)
SSF	177	163... 250,5
SSL	177	87... 198

Shaft extensions

	Type 1		CODE
	L (mm)	P (mm)	
SSF	250	163... 323,5	DS-EP04
SSL	250	87... 271	DS-EP04

	Type 2		CODE
	L (mm)	P (mm)	
SSF	387	163... 460,5	DS-EP05
SSL	387	87... 408	DS-EP05



» Auxiliary contacts

1NO+1NC	CODE SSF	DS-AU11
	CODE SSL	D5LAU01
2NO+2NC	CODE SSF	DS-AU12
	CODE SSL	D5LAU02

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



» Terminal protection

CODE DS-CU01
(1 unit for input or output only frontal side)



» Bridging links (4 pieces)

CODE SSF D5LPC03
CODE SSL D5LPC01



» DIN rail mounting

CODE DS-DN01
(only for SSL changeover switches, order two kits)



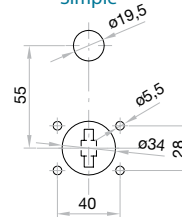
» Safety key lock devices

Simple CODE D5LCBB1
Double CODE D5LCEB1

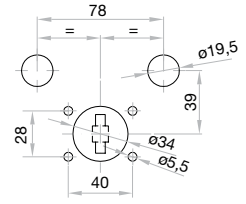
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and keylock device

Simple

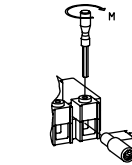
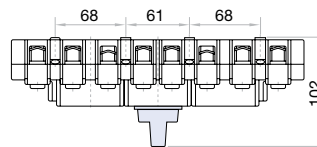
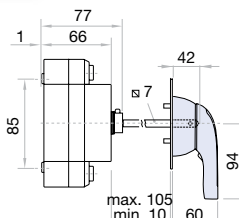
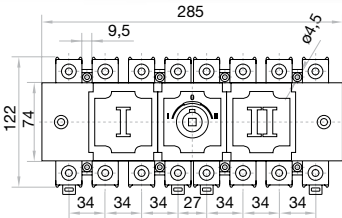


Double

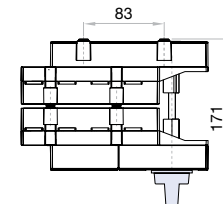
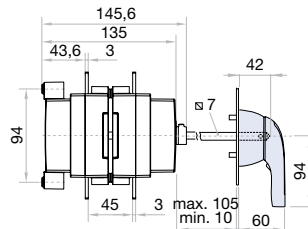
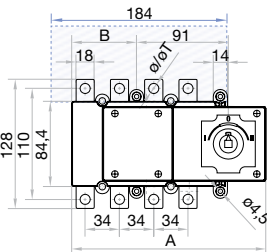


Dimensions (mm)

Door drilling for external handle



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



	A	B	ø T
125 A	181	192	53
160 A	181	192	53

	3P	4P
125 A	181	192
160 A	181	192

	3P	4P
125 A	181	192
160 A	181	192

	3P	4P
125 A	181	192
160 A	181	192

	3P	4P
125 A	181	192
160 A	181	192

	3P	4P
125 A	181	192
160 A	181	192

	3P	4P
125 A	181	192
160 A	181	192

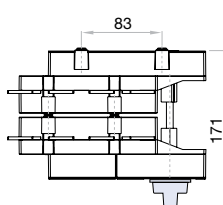
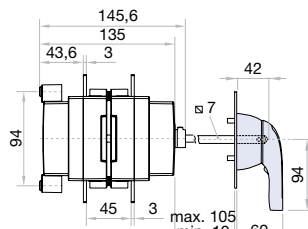
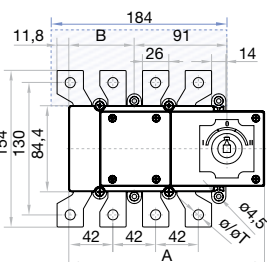
	3P	4P
125 A	181	192
160 A	181	192

	3P	4P
125 A	181	192
160 A	181	192

	3P	4P
125 A	181	192
160 A	181	192

	3P	4P
125 A	181	192
160 A	181	192

	3P	4P
125 A	181	192
160 A	181	192



	A	B	ø T
200 A	181	192	53

	3P	4P
200 A	181	192

	3P	4P
200 A	181	192

	3P	4P
200 A	181	192

	3P	4P
200 A	181	192

	3P	4P
200 A	181	192

	3P	4P
200 A	181	192

	3P	4P
200 A	181	192

	3P	4P
200 A	181	192

	3P	4P
200 A	181	192

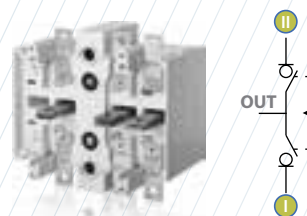
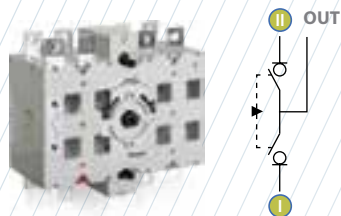
	3P	4P
200 A	181	192

	3P	4P
200 A	181	192

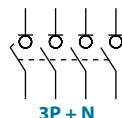
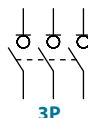
CCF | CCP Changeover switch base mounting 3P - 3P+N

Size 1

A 200|250|315|400



		CODE-200A	CODE-250A	CODE-315A	CODE-400A
CCF	3P	CCF02003PS0	CCF02503PS0	CCF03153PS0	CCF04003PS0
	3P + N	CCF02003NS0	CCF02503NS0	CCF03153NS0	CCF04003NS0
CCP	3P	CCP02003PS0	CCP02503PS0	CCP03153PS0	CCP04003PS0
	3P + N	CCP02003NS0	CCP02503NS0	CCP03153NS0	CCP04003NS0



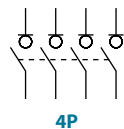
Technical information



According to IEC/EN 60947-3

				200	250	315	400
Rated thermal current	I _{th} in ambient at 40° C	A		200	250	315	400
		V		1000	1000	1000	1000
Rated insulation voltage	U _i	V		1000	1000	1000	1000
Rated dielectric strength	50 Hz., 1 min.	V		6000	6000	6000	6000
Rated impulse withstand voltage	U _{imp}	kV		8	8	8	8
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	I _e 400V AC21A	A		200	250	315	400
		A		200	250	315	400
	500V AC21A	A		200	250	315	400
		A		200	250	315 ^{*(5)}	400 ^{*(5)}
	690V AC21A	A		200	250	315	400
		A		160	200	250	315 ^{*(5)}
800V AC20A	A		200	250	315	400	
	A		200	250	315	400	
AC Rated operational power ^{*(2)}	P _e 3x400V AC23A	kW		80	90	100	125
		kW		78	94	100	125
		kW		69	86	108	138

				200	250	315	400
Rated capacitor power	400V, sen φ=0,65	kVar		90	104	131	166
Rated breaking capacity	400V AC22A	A		600	750	945	1200
Rated making capacity	400V AC22A	A		600	750	945	1200
Short - circuit behaviour							
Short - circuit making capacity ^{*(3)}	I _{cm}	kA (peak)		12	12	12	12
Short - time withstand current (1 sec.)	I _{cw}	kA rms		8	8	8	8
Minimum number of mechanical operations ^{*(4)}		Cycles		10000	10000	10000	10000
Minimum number of electrical operations	400V AC22A	Cycles		1000	1000	1000	1000
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



Also available 4P changeover switches under request, consult reference

^{*(1)} Other voltages and/or utilization categories; please consult
^{*(2)} Indicative values, value cos φ=0,8
^{*(3)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)
^{*(4)} Please consult us for more operations
^{*(5)} AC22B



Accessories



» Direct handle

CODE DCCLI1



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

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DCCLA11

» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
227	166... 293

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
376	166... 442	DS-EP14

Type 2		
L (mm)	P (mm)	CODE
536	166... 602	DS-EP15

» Rear protective plate

3P	4P
DCCPP11	DCCPP12

» Terminal shrouds

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

» Auxiliary contacts

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

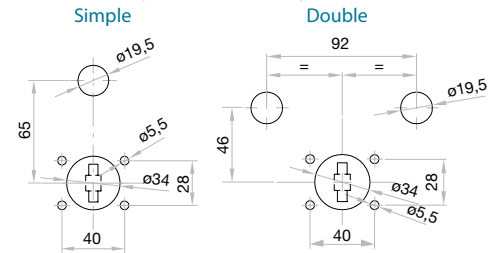
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

» Safety key lock device

Simple CODE D5LCB11
Double CODE D5LCF11

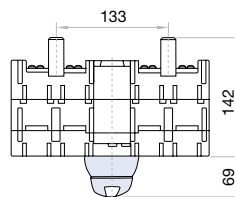
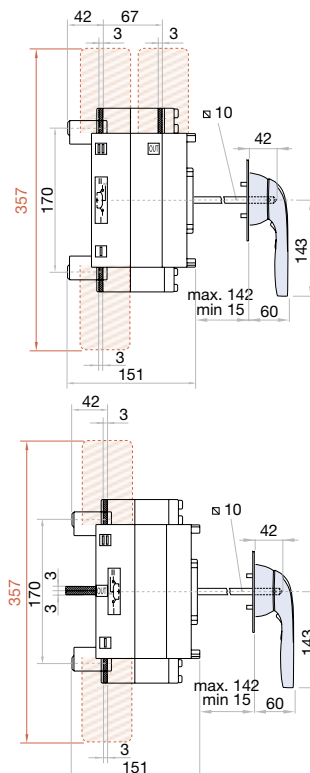
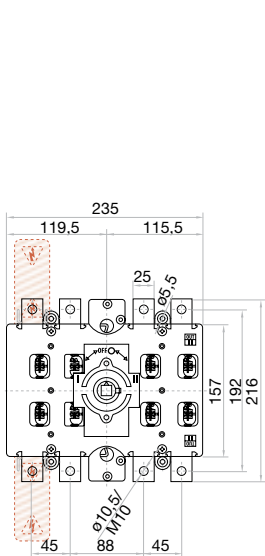
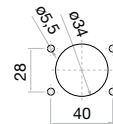
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and keylock device

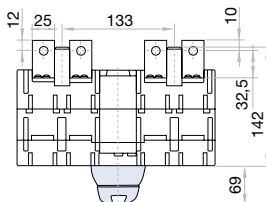


Dimensions (mm)

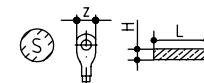
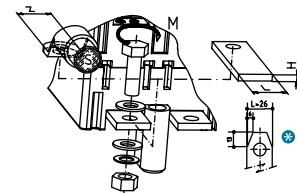
Door drilling for external handle



CCF



CCP

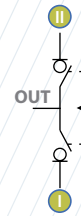
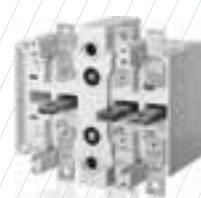
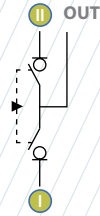
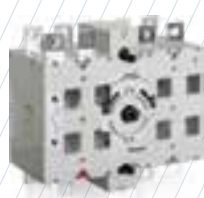


S max (Cu)	Z max	H max (Cu)	L max (Cu)	M
mm ²	mm	mm	mm	Nxm
240	31	2x5	30	M10 24

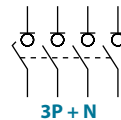
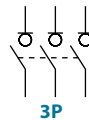
CCF | CCP Changeover switch base mounting 3P - 3P+N

Size 2

A 500|630|800



		CODE-500A	CODE-630A	CODE-800A
CCF	3P	CCF05003PS0	CCF06303PS0	CCF08003PS0
	3P + N	CCF05003NS0	CCF06303NS0	CCF08003NS0
CCP	3P	CCP05003PS0	CCP06303PS0	CCP08003PS0
	3P + N	CCP05003NS0	CCP06303NS0	CCP08003NS0



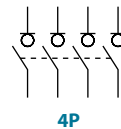
Technical information



According to IEC/EN 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 dielectric strength	50 Hz., 1 min.	V	8000	8000	8000					
Rated impulse withstand voltage	U _{imp}	kV	12	12	12					
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	I _e	400V AC21A	A	500	630	800				
		400V AC22A	A	500	630	800 ^{*(5)}				
		500V AC21A	A	500	630	800				
		500V AC22A	A	500	630	800 ^{*(5)}				
		690V AC21A	A	500	630	800				
		690V AC22A	A	400	500	630 ^{*(5)}				
AC Rated operational power ^{*(2)}	P _e	3x400V AC23A	kW	200	250	315				
		3x500V AC23A	kW	156	197	250				
		3x690V AC23A	kW	173	216	272				

		500			630			800		
Rated capacitor power	400V, sen φ=0,65	kVA _r	208	262	333					
Rated breaking capacity	400V AC22A	A	1500	1890	2400					
Rated making capacity	400V AC22A	A	1500	1890	2400					
Short - circuit behaviour										
Short - circuit making capacity ^{*(3)}	I _{cm}	kA (peak)	20	20	20					
Short - time withstand current (1 sec.)	I _{cw}	kA rms	13	13	13					
Minimum number of mechanical operations ^{*(4)}		Cycles	10000	10000	10000					
Minimum number of electrical operations	400V AC22A	Cycles	1000	1000	100 ^{*(5)}					
Maximum weight (3/4 poles)	CCF	Kg	11,5/12,6	11,5/12,6	11,9/13,2					
	CCP	Kg	12,8/14,3	12,8/14,3	13/14,6					



Also available 4P changeover switches under request, consult reference

^{*(1)} Other voltages and/or utilization categories; please consult
^{*(2)} Indicative values, value cos φ=0,8
^{*(3)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)
^{*(4)} Please consult us for more operations
^{*(5)} AC22B



Accessories



» Direct handle

CODE DCCLI21



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

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DCCLA21

» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
195	195... 272

Shaft extensions

Type 1		
L (mm)	P (mm)	CODE
345	195... 422	DS-EP23

Type 2		
L (mm)	P (mm)	CODE
535	195... 612	DS-EP24

» Rear protective plate

3P	4P
DCCPP21	DCCPP22



» Terminal shrouds

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

» Auxiliary contacts

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

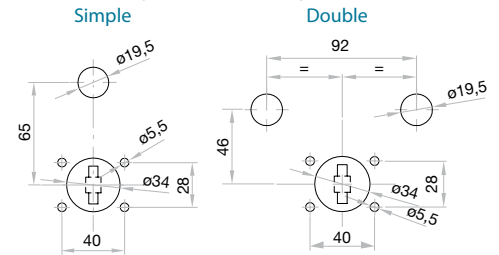
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

» Safety key lock device

Simple CODE D5LCB21
Double CODE D5LCF21

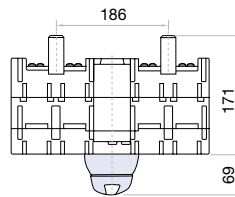
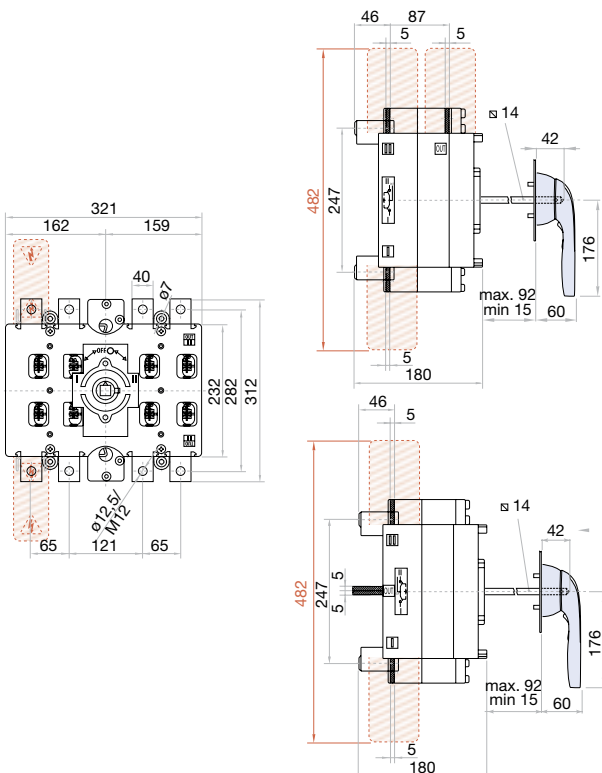
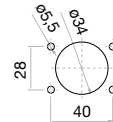
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and keylock device

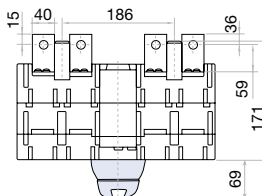


Dimensions (mm)

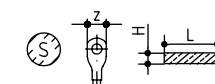
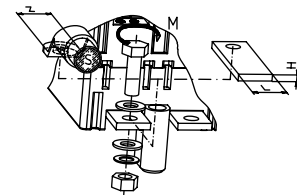
Door drilling for external handle



CCF



CCP



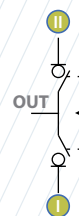
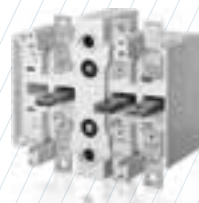
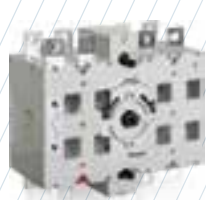
S max (Cu)	Z max	H max (Cu)	L max (Cu)	M
mm ²		mm	mm	Nxm
2x240	45	2x6	45	M12 45

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

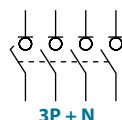
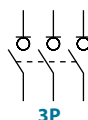
Size 3

A

1000|1250



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



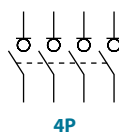
Technical information



According to IEC/EN 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 dielectric strength	50 Hz., 1 min.	V	8000	8000
Rated impulse withstand voltage	U _{imp}	kV	12	12
AC Rated operational current ^{*(1)}	400V AC21A	A	1000	1250
	400V AC22A	A	1000	1250 ^{*(5)}
	500V AC21A	A	1000	1250
	500V AC22A	A	1000	1250 ^{*(5)}
	690V AC21A	A	1000	1250
AC Rated operational power ^{*(2)}	3x400V AC23A	kW	501	626
	3x500V AC23A	kW	501	626
	3x690V AC23A	kW	544	691
	3x690V AC20A	A	1000	1250

			1000	1250
Rated capacitor power	400V, sen φ = 0,65	kVAr	416	520
Rated breaking capacity	400V AC22A	A	3000	3750
Rated making capacity	400V AC22A	A	3000	3750
Short - circuit behaviour				
Short - circuit making capacity ^{*(3)}	I _{cm}	kA (peak)	32	32
Short - time withstand current (1 sec.)	I _{cw}	kA rms	25	25
Minimum number of mechanical operations ^{*(4)}		Cycles	10000	10000
Minimum number of electrical operations	400V AC22A	Cycles	500	100 ^{*(5)}
Maximum weight (3/4 poles)	CCF	Kg	22,5 / 25	24,3 / 27,3
	CCP	Kg	25 / 28,3	26 / 29,7



Also available 4P changeover switches under request, consult reference

^{*(1)} Other voltages and/or utilization categories; please consult
^{*(2)} Indicative values, value cos φ=0,8
^{*(3)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)
^{*(4)} Please consult us for more operations
^{*(5)} AC22B



Accessories



» Direct handle

CODE DCCLI31



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

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE DCCLA31

» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
186	223... 298

Shaft extensions

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

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

» Rear protective plate

3P	4P
DCCPP31	DCCPP32



» Terminal shrouds

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

» 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

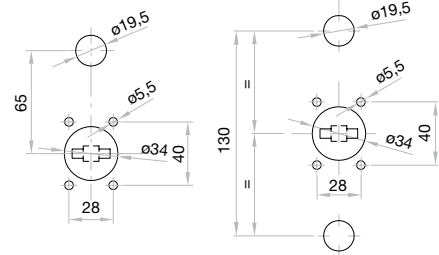
Simple CODE D5LCB31
Double CODE D5LCF31

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 keylock device

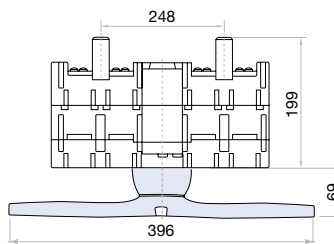
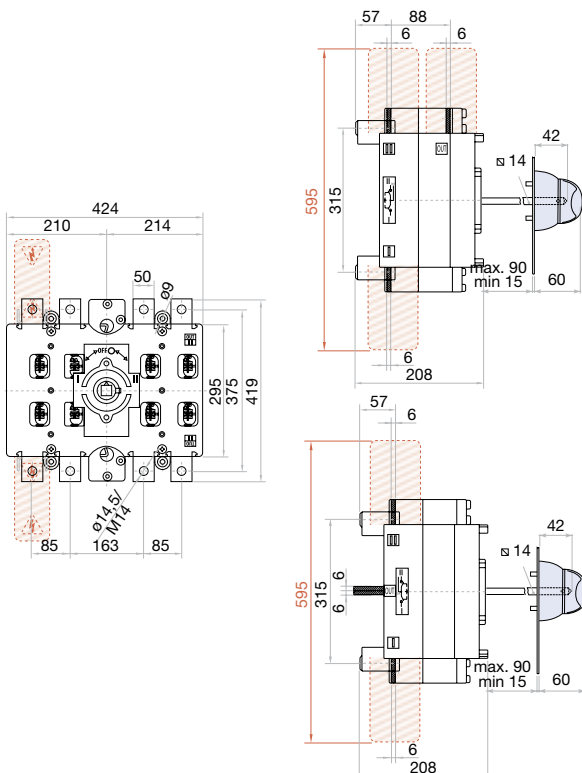
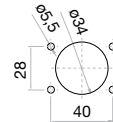
Simple

Double

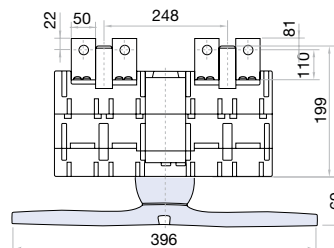


Dimensions (mm)

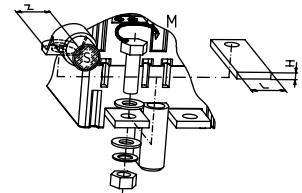
Door drilling for external handle



CCF



CCP

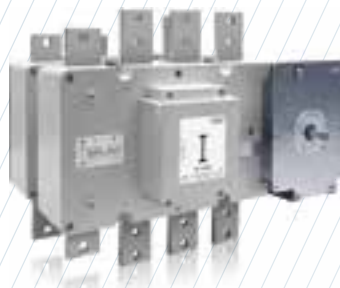


H max (Cu)	L max (Cu)	M
mm	mm	Nxm
2x10	60	M14 55

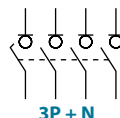
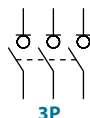
S5000F Changeover switch base mounting 3P - 3P+N

Size 4

A 1600|1800|2000



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



Technical information

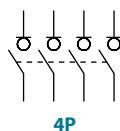


consult

According to IEC/EN 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 dielectric strength	50 Hz., 1 min.	V	10000	10000	10000
Rated impulse withstand voltage	U _{imp}	kV	12	12	12
AC Rated operational current ^{*(1)} (Rated operational frequency 50 / 60 Hz)	400V AC21A	A	1600	1800	2000
	400V AC22A	A	1600	1800	2000
	500V AC21A	A	1600	1800	2000
	500V AC22A	A	1250	1600	1800
	690V AC21A	A	1600	1800	1800
	690V AC22A	A	1000	1250	1600
AC Rated operational power ^{*(2)}	800V AC20A	A	1600	1800	2000
	1000V AC20A	A	1600	1800	2000
	3x400V AC23A	kW	554,2	692,8	692,8
	3x500V AC23A	kW	623,5	692,8	692,8
	3x690V AC23A	kW	602,3	764,8	764,8

		1600 1800 2000			
Rated capacitor power	400V, sen φ=0,65	kVA _r	450,03	562,9	562,9
Rated breaking capacity	400V AC22A	A	4800	5400	6000
Rated making capacity	400V AC22A	A	4800	5400	6000
Short - circuit behaviour					
Short - circuit making capacity ^{*(3)}	I _{cm}	kA (peak)	75	75	75
Short - time withstand current (1 sec.)	I _{cw}	kA rms	50	50	50
Minimum number of mechanical operations ^{*(4)}		Cycles	3000	3000	3000
Minimum number of electrical operations	400V AC22A	Cycles	500	500	500
Maximum weight (3/4 poles)		Kg	42,9/47,3	42,9/47,3	42,9/47,3



Also available 4P changeover switches under request, consult reference

^{*(1)} Other voltages and/or utilization categories; please consult
^{*(2)} Indicative values, value cos φ=0,8
^{*(3)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)
^{*(4)} Please consult us for more operations



Accessories



» Direct handle

CODE D5LLI32



» External handle included shaft*(e1)

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE D5LLA31



» Terminal shrouds

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



» Bridging links

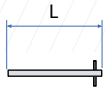
CODE D5LPC42 (4 units)



» Auxiliary contacts

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

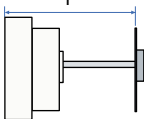
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Shafts

Standard shaft included *(e1)

L (mm) | P (mm)
239 | 418... 573



Shaft extensions

Consult



» Safety key lock device

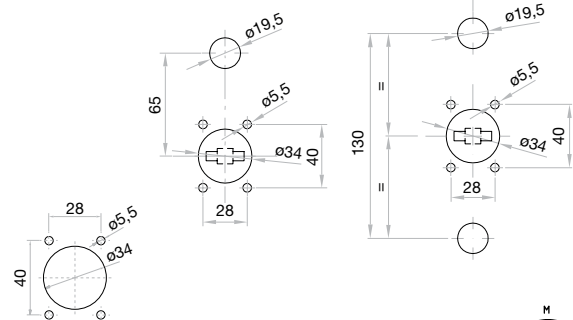
Simple CODE D5LCB41
Double CODE D5LCF41

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 keylock device

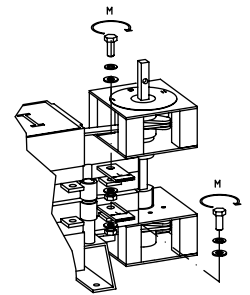
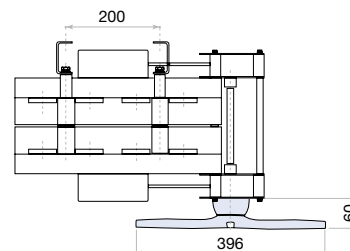
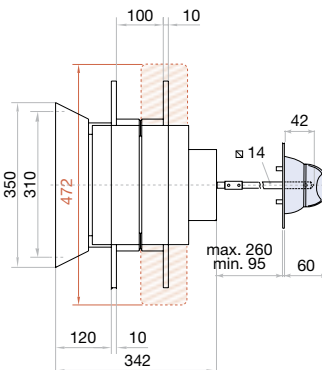
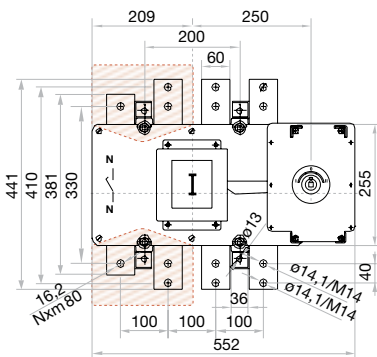
Simple

Double



Door drilling for external handle

Dimensions (mm)



	H max (Cu)	L max (Cu)	M
	mm	mm	Nxm
1600 A			
1800 A	2x7	80	M14
2000 A			55

S5000F Changeover switch base mounting 3P - 3P+N

Size 5

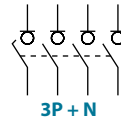
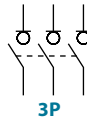
A 2000|2500|3150



series
S5F



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



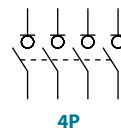
Technical information



According to IEC/EN 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 dielectric strength	50 Hz., 1 min.	V	10000	10000	10000	
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	I _e	400V AC21A	A	2000	2500	3150
		400V AC22A	A	2000	2500	2500 ^{*(5)}
		500V AC21A	A	2000	2500	3150
		500V AC22A	A	2000 ^{*(5)}	2000 ^{*(5)}	2200 ^{*(5)}
		690V AC21A	A	2000	2500	2500
		690V AC22A	A	2000 ^{*(5)}	2000 ^{*(5)}	2000 ^{*(5)}
AC Rated operational power ^{*(2)}	P _e	3x400V AC23A	kW	886,8	997,6	1108,5
		3x500V AC23A	kW	866	1108,5	1108,5
		3x690V AC23A	kW	956	956	956

		2000			2500	3150
Rated capacitor power	400V, sen φ=0,65	kVar	720,5	810,5	900,6	
Rated breaking capacity	400V AC22A	A	6000	7500	9450	
Rated making capacity	400V AC22A	A	6000	7500	9450	
Short - circuit behaviour						
Short - circuit making capacity ^{*(3)}	I _{cm}	kA (peak)	100	100	100	
Short - time withstand current (1 sec.)	I _{cw}	kA rms	50	50	50	
Minimum number of mechanical operations ^{*(4)}	Cycles		2500	2500	2500	
Minimum number of electrical operations	400V AC22A	Cycles	500	500	500	
Maximum weight (3/4 poles)		Kg	Consult			



Also available 4P changeover switches under request, consult reference

^{*(1)} Other voltages and / or utilization categories; please consult
^{*(2)} Indicative values, value cos φ=0,8
^{*(3)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)
^{*(4)} Please consult us for more operations
^{*(5)} AC22B

Accessories



» Direct handle
(Slide bar)
CODE DS-EI61



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

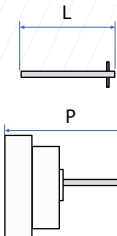
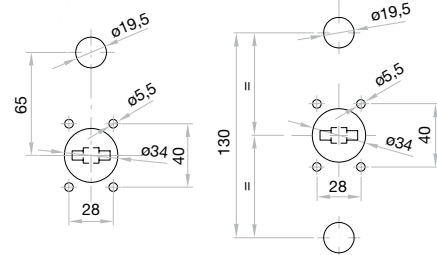


» Safety key lock device

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 keylock device
Simple Double



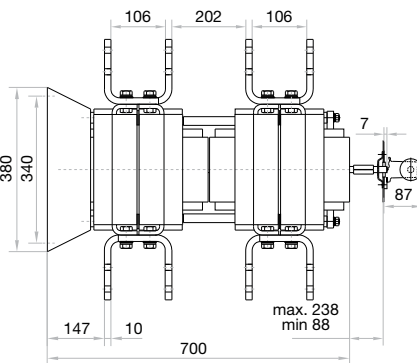
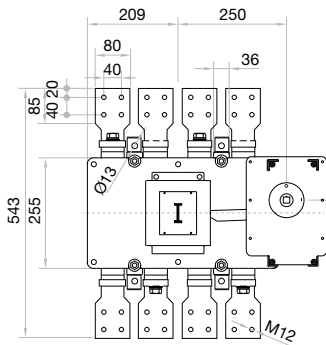
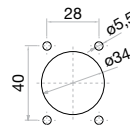
» Shafts

Standard shaft included^{*(e1)}
L (mm) P (mm)
333 788... 938

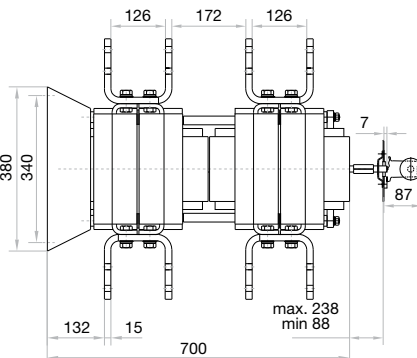
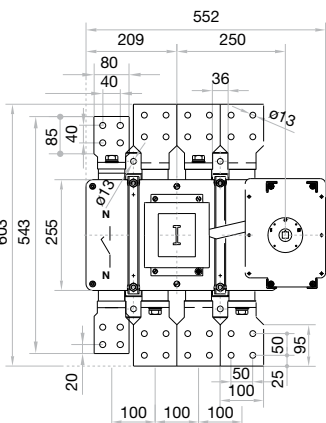
Shaft extensions
Consult

Dimensions (mm)

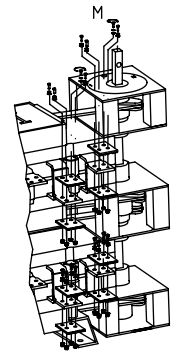
Door drilling for external handle



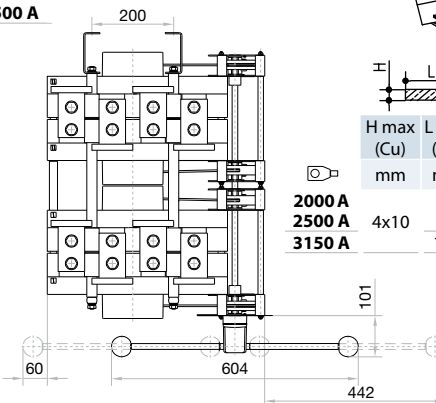
2000 A
2500 A



3150 A



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



S5000B

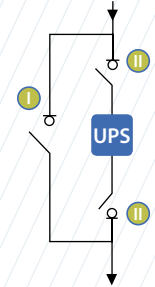
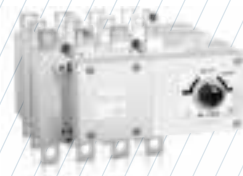
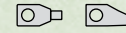
By-pass changeover switch

base mounting 3P - 3P+N

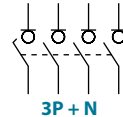
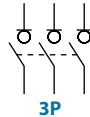
series
S5B

Size 0

A 125|160|200



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



Technical information

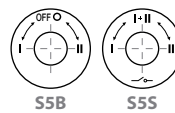
According to IEC / EN 60947-3



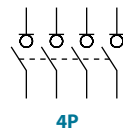
tests:

		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 dielectric strength	50 Hz., 1 min.	V	4000	4000	4000	
Rated impulse withstand voltage	U _{imp}	kV	8	8	8	
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	I _e 400V	AC21A	A	125	160	200
		AC22A	A	125	160	200
	500V	AC21A	A	125	160	200
		AC22A	A	125	160	200
	690V	AC21A	A	125	160	180
		AC22A	A	100	125	160
AC Rated operational power ^{*(2)}	P _e	3x400V AC23A	kW	69,2	88,6	88,6
		3x500V AC23A	kW	69,2	88,6	88,6
		3x690V AC23A	kW	76,4	76,4	76,4

		125	160	200	
Rated capacitor power	400V, sen φ=0,65	kVAr	56,2	72	90
Rated breaking capacity	400V AC22A	A	375	480	600
Rated making capacity	400V AC22A	A	375	480	600
Short - circuit behaviour					
Short - circuit making capacity ^{*(3)}	I _{cm}	kA (peak)	13	13	13
Short - time withstand current (1 sec.)	I _{cw}	kA rms	7	7	7
Minimum number of mechanical operations ^{*(4)}	Cycles		10000	10000	10000
Minimum number of electrical operations	400V AC22A	Cycles	1000	1000	1000
Maximum weight (3/4 poles)		Kg	2,4/2,8	2,4/2,8	2,5/2,9



Overlapped contacts (S5S series), under request.



Also available 4P changeover switches under request, consult reference

^{*(1)} Other voltages and / or utilization categories; please consult
^{*(2)} Indicative values, value cos φ=0,8
^{*(3)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)
^{*(4)} Please consult us for more operations

Accessories



» Direct handle

CODE D5LSI02



» Terminal protection

CODE DS-CU01
(1 unit for input or output only front side)



» External handle included shaft*(e1)

IP65
CODE D5LLA01



» Safety key lock device

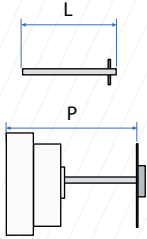
Simple CODE D5LCBB1
Double CODE D5LCFB1

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

» Shafts

Standard shaft included *(e1)

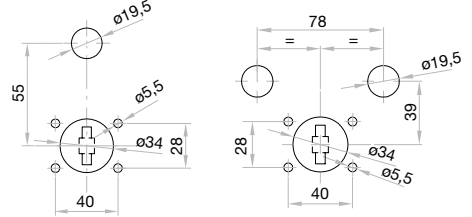
L (mm)	P (mm)
177	221... 346



Door drilling for handle and keylock device

Simple

Double



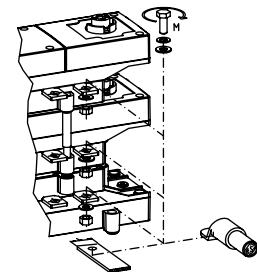
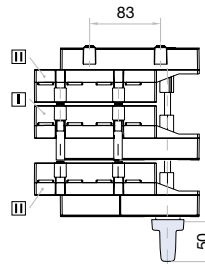
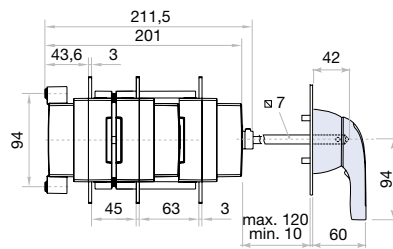
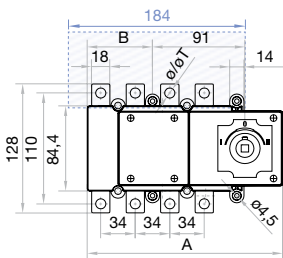
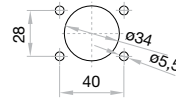
» Auxiliary contacts

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

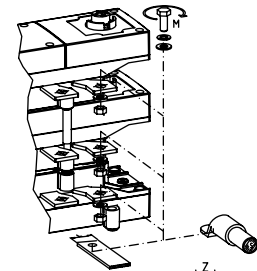
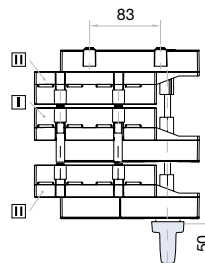
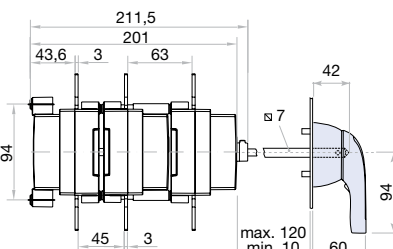
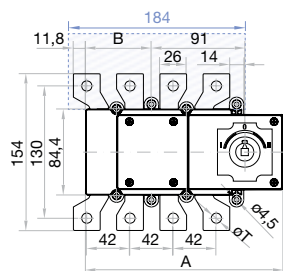
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

Dimensions (mm)

Door drilling for external handle



	A		B		Ø	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M
	3P	4P	3P	4P					
125 A	181	192	53	64	10	95	5	25	M8
160 A									13



	A		B		Ø	S max (Cu) mm ²	Z max	H max (Cu) mm	L max (Cu) mm	M
	3P	4P	3P	4P						
200 A	181	192	53	64	10	120	30	5	30	M10
										18

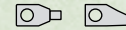
S5000B

By-pass changeover switch

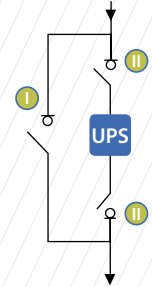
base mounting 3P - 3P+N

Size 1

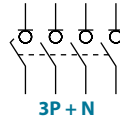
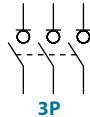
A 250|315|400



series
S5B



	CODE-250A	CODE-315A	CODE-400A
3P	S5B02503PR0	S5B03153PR0	S5B04003PC0
3P + N	S5B02503NR0	S5B03153NR0	S5B04003NC0



Technical information

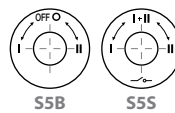


tests:

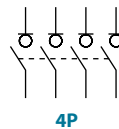
According to IEC/EN 60947-3

		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 dielectric strength	50 Hz., 1 min.	V	5000	5000	5000					
Rated impulse withstand voltage	U _{imp}	kV	8	8	8					
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	400V AC21A	A	250	315	400					
	400V AC22A	A	250	315	400					
	500V AC21A	A	250	315	400					
	500V AC22A	A	250	315	400					
	690V AC21A	A	200	250	250					
	690V AC22A	A	160	200	200					
AC Rated operational power ^{*(2)}	3x400V AC23A	kW	138,5	174,5	221,7					
	3x500V AC23A	kW	138,5	173,2	218,2					
	3x690V AC23A	kW	152,9	152,9	152,9					

		250			315			400		
Rated capacitor power	400V, sen φ=0,65	kVAr	112,5	141,8	180,1					
Rated breaking capacity	400V AC22A	A	750	945	1200					
Rated making capacity	400V AC22A	A	750	945	1200					
Short - circuit behaviour										
Short - circuit making capacity ^{*(3)}	I _{cm}	kA (peak)	20	20	20					
Short - time withstand current (1 sec.)	I _{cw}	kA rms	12	12	12					
Minimum number of mechanical operations ^{*(4)}		Cycles	10000	10000	10000					
Minimum number of electrical operations	400V AC22A	Cycles	1000	1000	1000					
Maximum weight (3/4 poles)		Kg	7,2/7,7	7,2/7,7	7,4/7,9					



Overlapped contacts (S5S series), under request.



Also available 4P changeover switches under request, consult reference

^{*(1)} Other voltages and/or utilization categories; please consult
^{*(2)} Indicative values, value cos φ=0,8
^{*(3)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)
^{*(4)} Please consult us for more operations

Accessories



» Direct handle

CODE D5LLI12



» Terminal protection

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



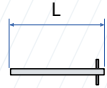
» External handle included shaft^{*(e1)}

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE D5LLA11



» Terminal shrouds

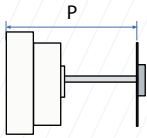
CODE DS-CU11
(1 kit for input or output only front side)



» Shafts

Standard shaft included ^{*(e1)}

L (mm)	P (mm)
227	382... 516



» Safety key lock device

Simple CODE D5LCB11
Double CODE D5LCF11

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

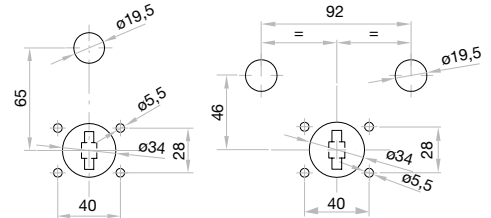


» Auxiliary contacts

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

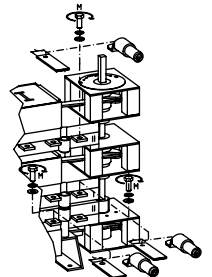
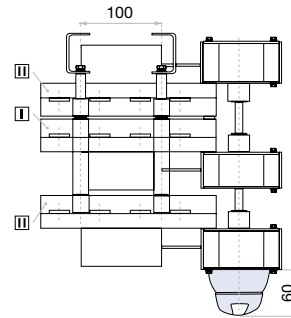
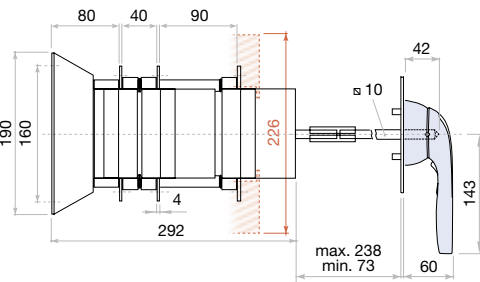
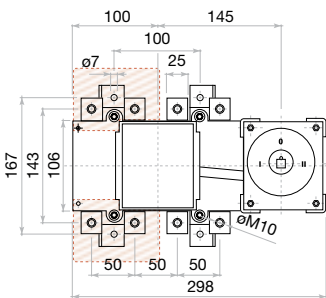
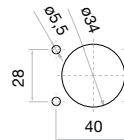
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

Door drilling for handle and keylock device
Simple Double

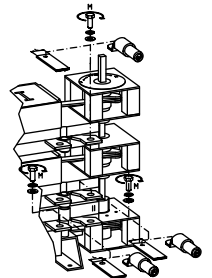
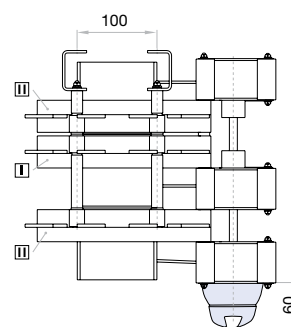
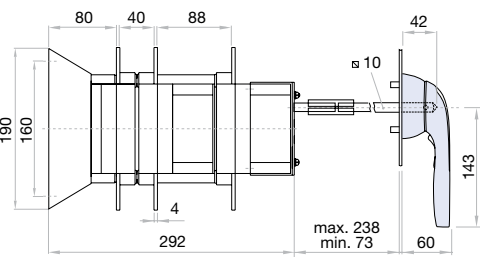
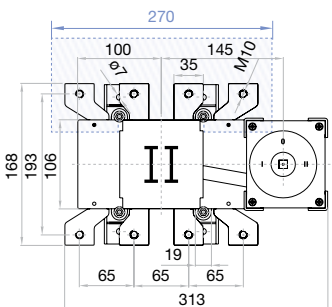


Dimensions (mm)

Door drilling for external handle



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



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

S5000B

By-pass changeover switch

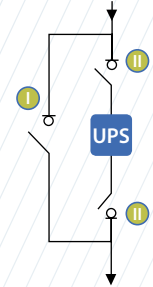
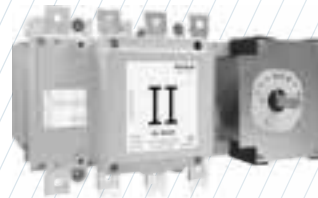
base mounting 3P - 3P+N

Size 2

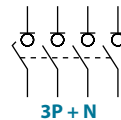
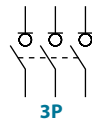
A 500|630



series
S5B



	CODE-500A	CODE-630A
3P	S5B05003PR0	S5B06303PR0
3P + N	S5B05003NR0	S5B06303NR0



Technical information

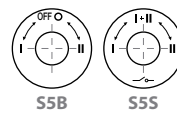


tests:

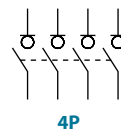
According to IEC/EN 60947-3

		500		630	
Rated thermal current	I _{th} in ambient at 40° C	A	500	A	630
Rated insulation voltage	U _i	V	1000	V	1000
Rated dielectric strength	50 Hz., 1 min.	V	8000	V	8000
Rated impulse withstand voltage	U _{imp}	kV	12	kV	12
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	400V AC21A	A	500	A	630
	400V AC22A	A	500	A	630
	500V AC21A	A	500	A	630
	500V AC22A	A	500	A	630
	690V AC21A	A	500	A	630
	690V AC22A	A	400	A	500
AC Rated operational power ^{*(2)}	3x400V AC23A	kW	277,1	kW	349,1
	3x500V AC23A	kW	277,1	kW	346,4
	3x690V AC23A	kW	239	kW	301,1

		500		630	
Rated capacitor power	400V, sen φ = 0,65	kVA	225,1	kVA	283,7
Rated breaking capacity	400V AC22A	A	1500	A	1890
Rated making capacity	400V AC22A	A	1500	A	1890
Short - circuit behaviour					
Short - circuit making capacity ^{*(3)}	I _{cm}	kA (peak)	26	kA (peak)	26
Short - time withstand current (1 sec.)	I _{cw}	kA rms	16	kA rms	16
Minimum number of mechanical operations ^{*(4)}		Cycles	10000	Cycles	10000
Minimum number of electrical operations	400V AC22A	Cycles	1000	Cycles	1000
Maximum weight (3/4 poles)		Kg	16,5/17,5	Kg	16,5/17,5



Overlapped contacts (S5S series), under request.



Also available 4P changeover switches under request, consult reference

^{*(1)} Other voltages and/or utilization categories; please consult
^{*(2)} Indicative values, value cos φ=0,8
^{*(3)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)
^{*(4)} Please consult us for more operations

Accessories



» Direct handle

CODE D5LLI22



» Terminal shrouds

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



» External handle included shaft*(e1)

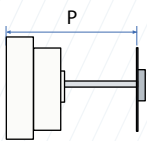
IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE D5LLA21



» Shafts

Standard shaft included *(e1)

L (mm)	P (mm)
239	448... 613



» Safety key lock device

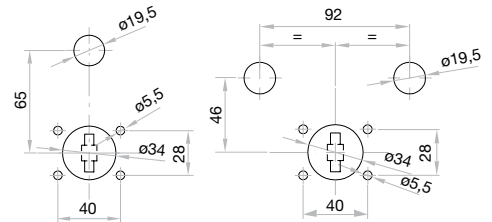
Simple CODE D5LCB21
Double CODE D5LCF21

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 keylock device

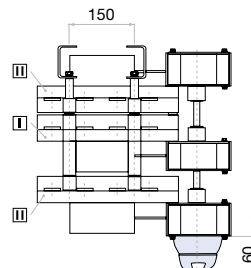
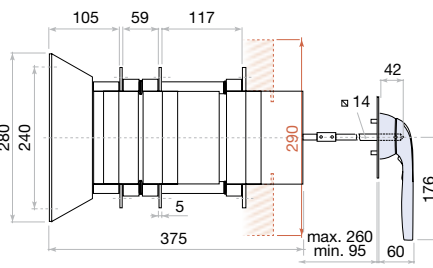
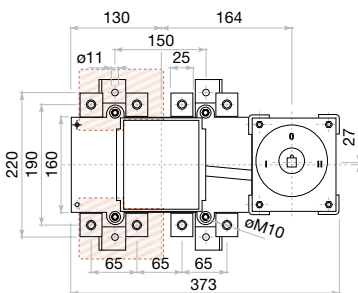
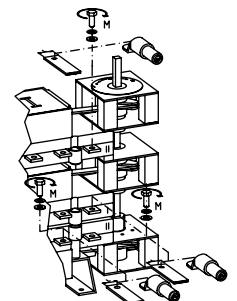
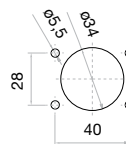
Simple

Double

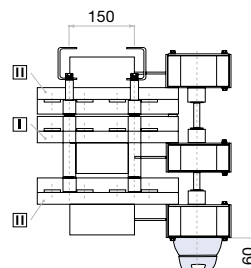
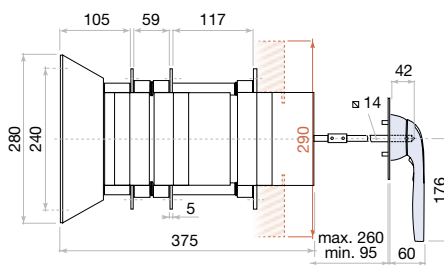
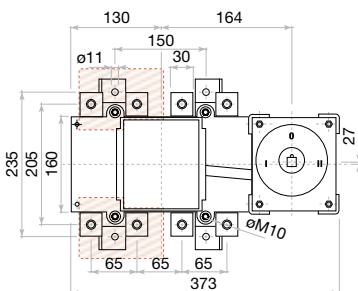


Dimensions (mm)

Door drilling for external handle



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



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

S5000B

By-pass changeover switch

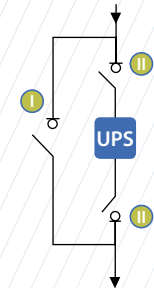
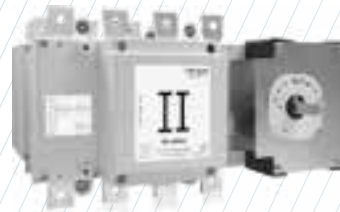
base mounting 3P - 3P+N

Size 3

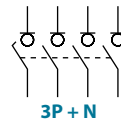
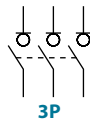
A 800|1000



series
S5B



	CODE-800A	CODE-1000A
3P	S5B08003PRO	S5B10003PC0
3P + N	S5B08003NR0	S5B10003NC0



Technical information

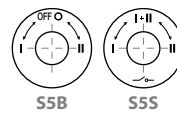


tests:

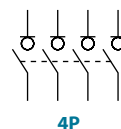
According to IEC/EN 60947-3

		800		1000	
Rated thermal current	I _{th} in ambient at 40° C	A	800	1000	
Rated insulation voltage	U _i	V	1000	1000	
Rated dielectric strength	50 Hz., 1 min.	V	8000	8000	
Rated impulse withstand voltage	U _{imp}	kV	12	12	
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	400V AC21A	A	800	1000	
	400V AC22A	A	800	1000	
	500V AC21A	A	800	1000	
	500V AC22A	A	800	1000	
	690V AC21A	A	800	1000	
	690V AC22A	A	630	800	
AC Rated operational power ^{*(2)}	3x400V AC23A	kW	443,4	501	
	3x500V AC23A	kW	554,2	501	
	3x690V AC23A	kW	239	544	

			800		1000	
Rated capacitor power	400V, sen φ = 0,65	kVAr	360,2	450,3		
Rated breaking capacity	400V AC22A	A	2400	3000		
Rated making capacity	400V AC22A	A	2400	3000		
Short - circuit behaviour						
Short - circuit making capacity ^{*(3)}	I _{cm}	kA (peak)	60	60		
Short - time withstand current (1 sec.)	I _{cw}	kA rms	25	25		
Minimum number of mechanical operations ^{*(4)}		Cycles	10000	10000		
Minimum number of electrical operations	400V AC22A	Cycles	500	500		
Maximum weight (3/4 poles)		Kg	26,5/28,6	26,5/28,6		



Overlapped contacts (S5S series), under request.



Also available 4P changeover switches under request, consult reference

^{*(1)} Other voltages and / or utilization categories; please consult
^{*(2)} Indicative values, value cos φ=0,8
^{*(3)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)
^{*(4)} Please consult us for more operations

Accessories



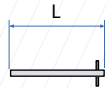
» Direct handle

CODE D5LLI32



» External handle included shaft*(e1)

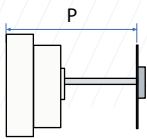
IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE D5LLA31



» Shafts

Standard shaft included *(e1)

L (mm)	P (mm)
239	480... 645



» Auxiliary contacts

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

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



» Terminal shrouds

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

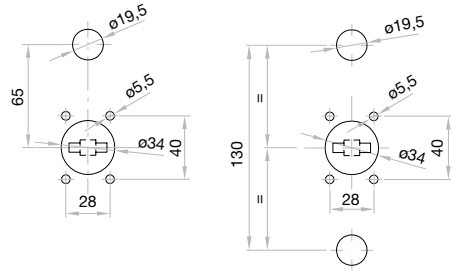


» Safety key lock device

Simple CODE D5LCB31
Double CODE D5LCF31

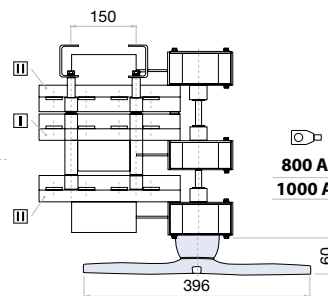
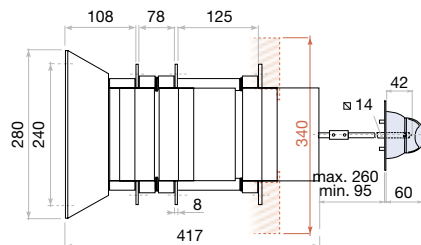
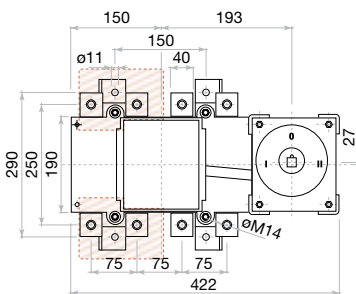
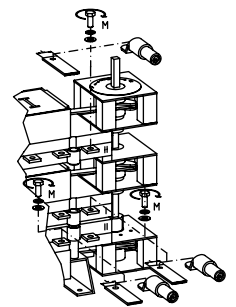
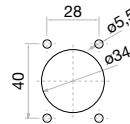
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and keylock device



Dimensions (mm)

Door drilling for external handle

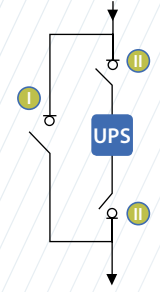
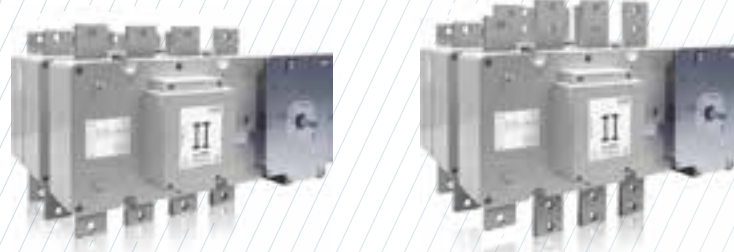


S max (Cu)	H max (Cu)	L max (Cu)	T	M	
mm ²	mm	mm		Nxm	
800 A	2x240	2x10	50	M14	45
1000 A	2x300	2x10			

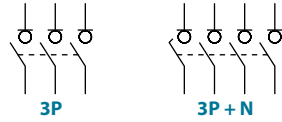
S5000B

By-pass 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



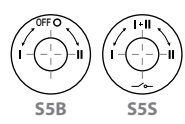
Technical information



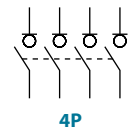
According to IEC/EN 60947-3

		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 dielectric strength	50 Hz., 1 min.	V	10000	10000	10000	10000	
Rated impulse withstand voltage	U _{imp}	kV	12	12	12	12	
AC Rated operational current ^{*(1)} (Rated operational frequency 50/60 Hz)	I _e 400V	AC21A	A	1250	1600	1800	2000
		AC22A	A	1250	1600	1800	2000
	500V	AC21A	A	1250	1600	1800	2000
		AC22A	A	1000	1250	1600	1800
	690V	AC21A	A	1000	1600	1800	1800
		AC22A	A	630	1000	1250	1600
	800V	AC20A	A	1250	1600	1800	2000
AC20A		A	1250	1600	1800	2000	
AC Rated operational power ^{*(2)}	P _e	3x400V AC23A	kW	554,2	554,2	692,8	692,8
		3x500V AC23A	kW	554,2	623,5	692,8	692,8
		3x690V AC23A	kW	478	602,3	764,8	764,8

		1250 1600 1800 2000				
Rated capacitor power	400V, sen φ=0,65	kVAr	450,03	450,03	562,9	562,9
Rated breaking capacity	400V AC22A	A	3750	4800	5400	6000
Rated making capacity	400V AC22A	A	3750	4800	5400	6000
Short - circuit behaviour						
Short - circuit making capacity ^{*(3)}	I _{cm}	kA (peak)	60	75	75	75
Short - time withstand current (1 sec.)	I _{cw}	kA rms	25	50	50	50
Minimum number of mechanical operations ^{*(4)}		Cycles	3000	3000	3000	3000
Minimum number of electrical operations	400V AC22A	Cycles	500	500	500	500
Maximum weight (3/4 poles)		Kg	65,2/72,1	65,2/72,1	65,2/72,1	65,2/72,1



Overlapped contacts (S5S series), under request.



Also available 4P changeover switches under request, consult reference

^{*(1)} Other voltages and /or utilization categories; please consult
^{*(2)} Indicative values, value cos φ=0,8
^{*(3)} Without limiting protective device (short - circuit maintained 50 ms. - 100 ms.)
^{*(4)} Please consult us for more operations

Accessories



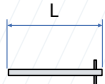
» Direct handle

CODE D5LLI32



» External handle included shaft*(e1)

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4X y 12
CODE D5LLA31



» Shafts

Standard shaft included *(e1)

L (mm)	P (mm)
239	572... 645



» Auxiliary contacts

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

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



» Terminal shrouds

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

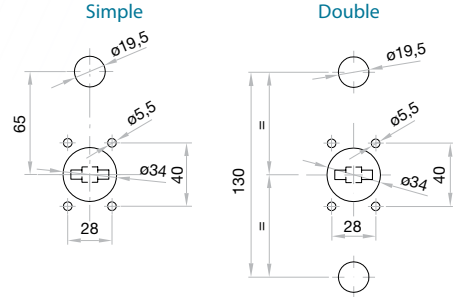


» Safety key lock device

Simple CODE D5LCB41
Double CODE D5LCF41

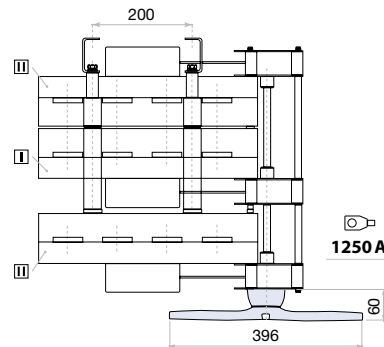
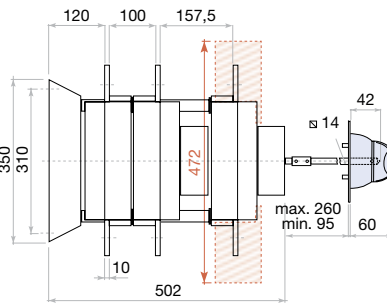
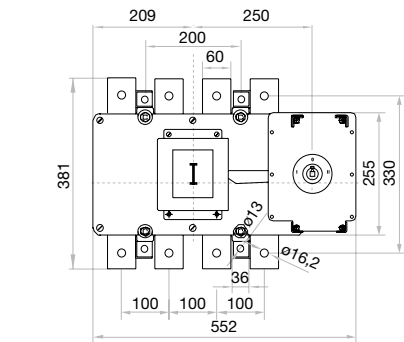
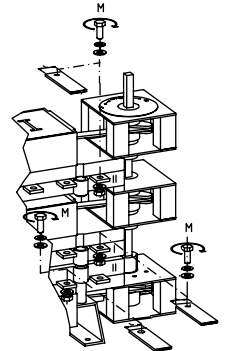
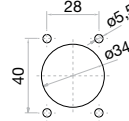
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and keylock device

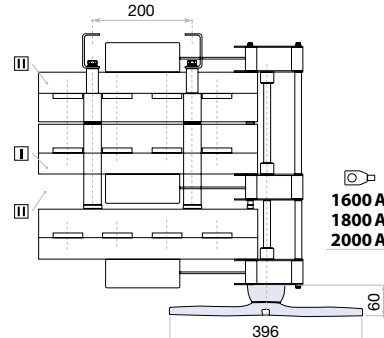
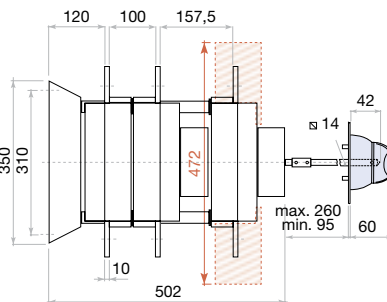
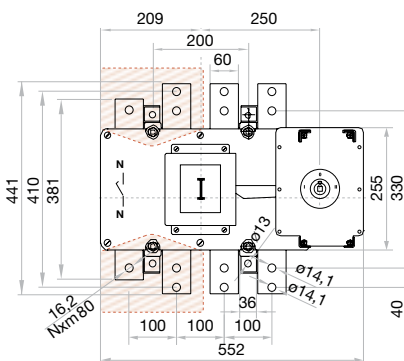


Dimensions (mm)

Door drilling for external handle



H max (Cu)	L max (Cu)	M
2x7 mm	80 mm	M16 80 Nxm



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

Kit motorized unit for switch or changeover switch

Motorized units to automate the drive system of the switch-disconnectors and changeover switches, with a high level of reliability, safety and ease of operation even in extreme situations.

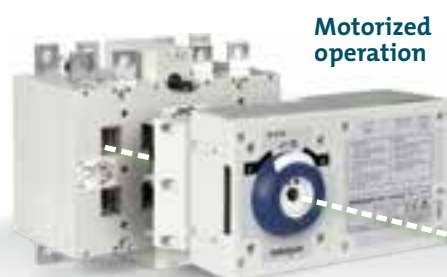


The motorized unit kits are manufactured with high safety self-extinguishing materials, providing an excellent level of electrical insulation, low smoke emission and high resistance to electromechanical stress.

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

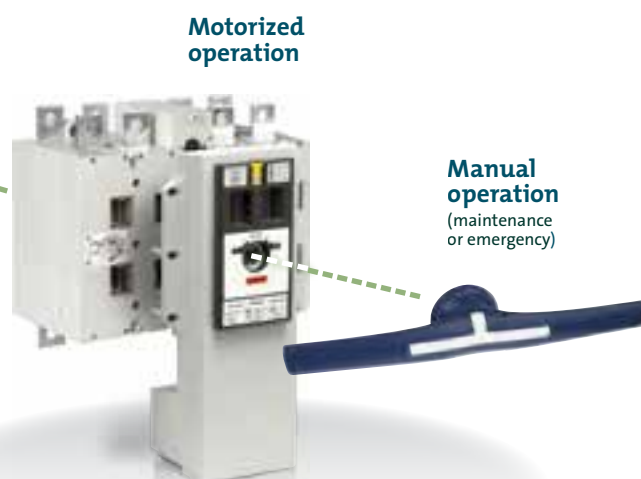
They consist of a body housing the motor, gears, electronics to command and control. They are equipped with a selector for automatic-manual-lock operating modes.

The kit concept simplifies both logistics and maintenance, for easy and simple assembly on the changeover switch or switch - disconnector as required.



Motorized operation

Manual operation
(maintenance or emergency)



Motorized operation

Manual operation
(maintenance or emergency)

- > IEC60947-1 and 3. Low voltage devices. General part and switch - disconnectors.
- > IEC61000-6, Parts 2 and 4. Electromagnetic compatibility in industrial environments, immunity and emission.

- > According to European Standard 2014/35/UE for low voltage.
- > According to European standard 2014/30/UE of EMC.

According to:
EN55011 CISPR11
IEC 60947-1 & 3
IEC 61000, parts 3 & 4
RoHS



Testing and approvals:



series
UM-S



1 2 3 4 5 6
U M S

Supply voltage
230Vac/dc.
For switch - disconnectors
S5 & S6 sizes 1 and 2.

series
UM-S



1 2 3 4 5 6
U M S

Supply voltage
120 - 230 - 277Vac/dc.
For switch - disconnectors
S5 sizes 3 up to 5.

series
UM-C



1 2 3 4 5 6
U M C

Supply voltage
230Vac/dc.
For changeover switches
S5F or CCF sizes 0 up to 2.

series
UM-C



1 2 3 4 5 6
U M C

Supply voltage
120 - 230 - 277Vac/dc.
For changeover switches
S5F & CCF sizes 2 up to 4.

UM-S Motorized unit kit for switch S5000 & S6000



	120 Vac/dc	230 Vac/dc	277 Vac/dc	
S5 S6	Size 3 UM T2	UM-S11120Z	UM-S11230Z	UM-S11277Z
	Size 3 UM T2	UM-S21120Z	UM-S21230Z	UM-S21277Z
	Size 3 ^(m1) UM T3	UM-S32120Z	UM-S32230Z	UM-S32277Z
	Size 4 UM T3	UM-S31120Z	UM-S31230Z	UM-S31277Z
	Size 5 UM T3	UM-S32120Z	UM-S32230Z	UM-S32277Z
				Size 1 UM T0 UM-S1A230Z
				Size 2 UM T0 UM-S2A230Z

^(m1) For 2000A size 3.

Technical information



According to IEC 60947-3



UM
T0

Rated operational voltage	230Vac/dc	
Operating voltage range (based in our own tests) (S5 S6 size 1)	ΔV	0,85*V to 1,15*V
Operating voltage range (based in our own tests) (S5 S6 size 2)	ΔV	0,9*V to 1,1*V
Operating voltage range according to IEC 60947-3	ΔV	0,95*V to 1,10*V
Cable section of voltage supply	mm ²	1,5 - 2,5
Cable section area Input Signals	mm ²	0,5 - 1,5
Cable section area Auto-Lock mode Outputs	mm ²	0,5 - 1,5
Inrush Current (I _{rms})	A	1,1
Use current	mA	45
Protective Fuse (Ref. F1AL250V Littelfuse)	A	1
Operating angle		0-90° (0 - I)
Number of UM T0 operations (S5 S6 size 1)	Cycles	10000
Number of UM T0 operations (S5 S6 size 2)	Cycles	5000
Operation rate (0-I-0) (S5 S6 size 1)	Cycles/hour	120
Operation rate (0-I-0) (S5 S6 size 2)	Cycles/hour	60
Operating temperature		- 25°C + 55°C
Transportation and storage temperature		- 40°C + 70°C
Weight	Kg	1,8

Pos.	Direction	Pos.	Operating time
0	→	I	750 ms
I	→	0	750 ms



UM
T2-T3

Rated operational voltage	120Vac/dc	230Vac/dc	277Vac/dc
Frequency	50/60		
Operating voltage range (based in our own tests)	ΔV	0,85*V to 1,15*V	
Operating voltage range according to IEC 60947-3	ΔV	0,95*V to 1,10*V	
Cable of voltage supply	mm ²	1,5 - 2,5	
Cable section area Input & MODBUS Signals	mm ²	0,5 - 1,5	
Cable section area Outputs	mm ²	0,5 - 1,5	
Inrush Current	A	17	
Nominal Current during operation UM T2	A	4,75	2,1
Nominal Current during operation UM T3	A	7,5	3,3
Use current (I _{rms})	A	0,041	
Use current (I _{max})	A	0,275	
Contacts operating time	ms	180	174
Number of UM T2 operations for S5 size 3 1000 - 1250A ⁽¹⁾ ⁽²⁾	Cycles	3000 / 10000	
Operation rate (0-I-0) for S5 size 3 1000 - 1250A ⁽¹⁾	Cycles/hour	20 / 120	
Number of UM T3 operations for S5 size 3 2000A ⁽¹⁾ ⁽²⁾	Cycles	3000 / 6000	
Operation rate (0-I-0) for S5 size 3 2000A ⁽¹⁾	Cycles/hour	20 / 40	
Number of UM T3 operations for S5 size 4 1000 - 2000A ⁽¹⁾ ⁽²⁾	Cycles	3000 / 6000	
Operation rate (0-I-0) for S5 size 4 1000 - 2000A ⁽¹⁾	Cycles/hour	20 / 40	
Number of UM T3 operations for S5 size 5 2000 - 3150A ⁽¹⁾ ⁽²⁾	Cycles	3000 / 6000	
Operation rate (0-I-0) for S5 size 5 2000 - 3150A ⁽¹⁾	Cycles/hour	20 / 40	
Operating temperature	T/Un RH90%	- 25°C + 55°C	
Transportation and storage temperature	RH90%	- 40°C + 70°C	
Weight T2/T3	Kg	3,96 / 4,4	

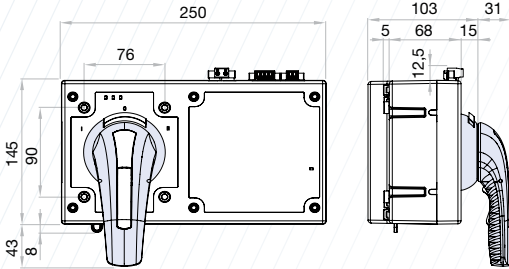
⁽¹⁾ According to IEC 60947-3 / Based in our own tests

⁽²⁾ Please consult us for more operations

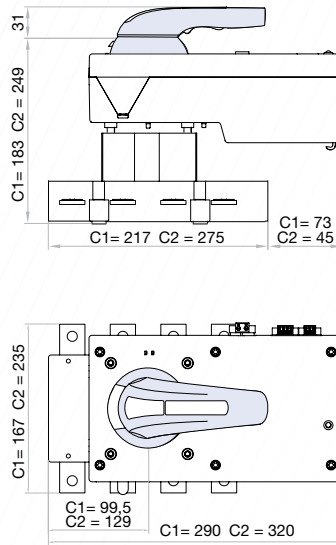
For inverted mounting there are references for with inverted frontal plates. Supply under request.

Dimensions (mm)

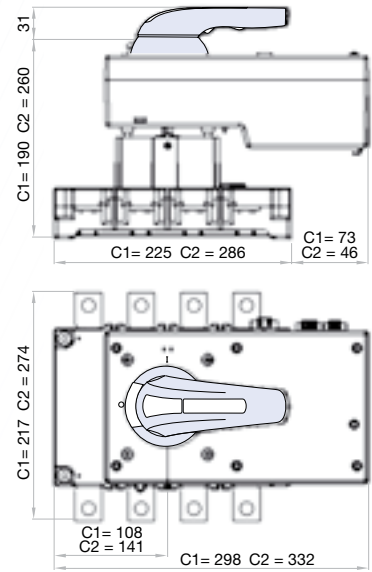
UM T0



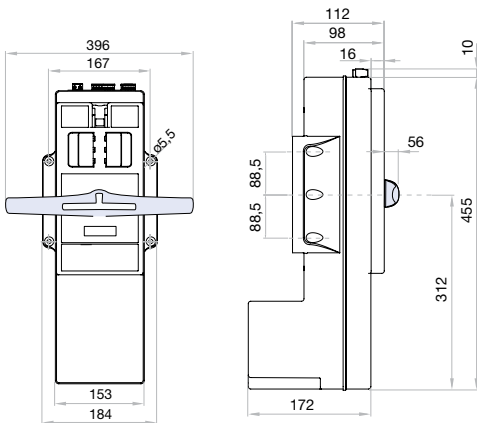
S5000 size 1&2 + UM T0



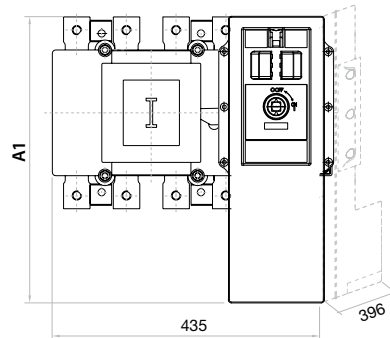
S6000 size 1&2 + UM T0



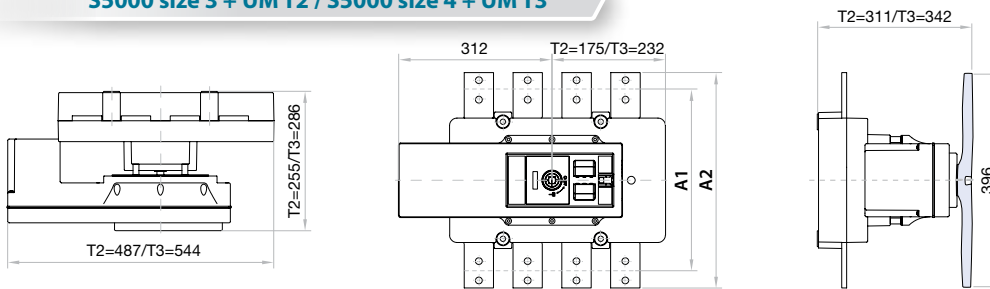
UM T2-T3



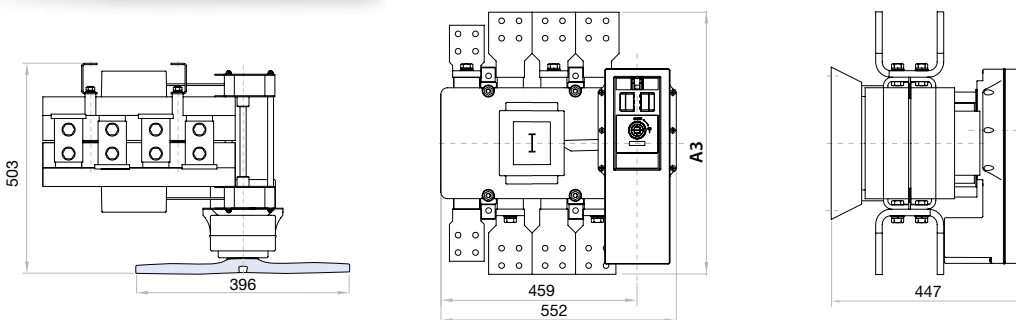
S5000 size 3 (2000 A) + UMT3



S5000 size 3 + UM T2 / S5000 size 4 + UM T3



S5000 size 5 + UM T3



	A1
size 3-UM T2	290
size 3-UM T3	455 (2000A)
A2	
size 4-UM T3	381 (1000-1250A)
size 4-UM T3	441 (1600-2000A)
A3	
size 5-UM T3	543 (2000-2500A)
size 5-UM T3	603 (3150A)

UM-C Motorized unit kit for changeover switch S5000F & CCF

series
UM-C



230 Vac/dc

SSF Size 0	UM T0	UM-C0A230Z
CCF Size 1	UM T0	UM-C1A230Z
CCF Size 2	UM T0	UM-C2A230Z

		120 Vac/dc	230 Vac/dc	277 Vac/dc
CCF	Size 2 UM T2	UM-C21120Z	UM-C21230Z	UM-C21277Z
	Size 3 UM T3	UM-C31120Z	UM-C31230Z	UM-C31277Z
SSF	Size 4 UM T3	UM-C35120Z	UM-C35230Z	UM-C35277Z

Technical information



According to IEC 60947-3



UM
T0

Rated operational voltage		230Vac/dc
Operating voltage range (based in our own tests) (size 1)	ΔV	0,85*V to 1,15*V
Operating voltage range (based in our own tests) (size 2)	ΔV	0,9*V to 1,1*V
Operating voltage range according to IEC 60947-6 (size 1)	ΔV	0,95*V to 1,10*V
Operating voltage range according to IEC 60947-6 (size 2)	ΔV	0,95*V to 1,1*V
Cable of voltage supply	mm ²	1,5 - 2,5
Cable section area Input Signals	mm ²	0,5 - 1,5
Cable section area Auto-Lock mode Outputs	mm ²	0,5 - 1,5
Inrush Current (I _{rms})	A	1,1
Use current	mA	45
Protective Fuse (Ref. F1AL250V Littelfuse)	A	1
Operating angle		- 70° / 0° / +70° (I - 0 - II)
Number of UM T0 operations (S5 S6 size 1)	Cycles	10000
Number of UM T0 operations (S5 S6 size 2)	Cycles	5000
Operation rate (0-I-II-0) (S5 S6 size 1)	Cycles/hour	120
Operation rate (0-I-II-0) (S5 S6 size 2)	Cycles/hour	60
Operating temperature		- 25°C + 55°C
Transportation and storage temperature		- 40°C + 70°C
Weight	Kg	1,8

Pos.	Direction	Pos.	Operating time
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



UM
T2-T3

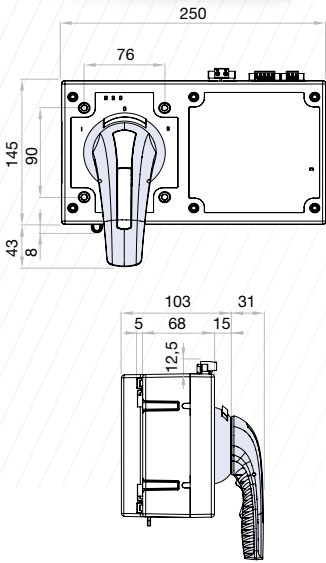
Rated operational voltage		120Vac/dc	230Vac/dc	277Vac/dc
Frequency	Hz		50/60	
Operating voltage range (based in our own tests)	ΔV		0,85*V to 1,15*V	
Operating voltage range according to IEC 60947-6	ΔV		0,95*V to 1,10*V	
Cable of voltage supply	mm ²		1,5 - 2,5	
Cable section area Input & MODBUS Signals	mm ²		0,5 - 1,5	
Cable section area Outputs	mm ²		0,5 - 1,5	
Inrush Current	A		17	
Nominal Current during operation UM T2	A	4,75	2,5	2,1
Nominal Current during operation UM T3	A	7,5	3,9	3,3
Use current (I _{rms})	A		0,041	
Use current (I _{max})	A		0,275	
Operation time CCF size 2 - UM T2	ms	180	168	174
Operation time SSF size 4 CCF C3 UM T3	ms	166	148	154
Number of UM T2 operations for CCF size 2 500 - 630A ^{*(1)} ^{*(2)}	Cycles		4000 / 10000	
Operation rate (0-I-II-0) for CCF size 2 500 - 630A ^{*(1)}	Cycles/hour		60 / 120	
Number of UM T2 operations for CCF size 2 800A ^{*(1)} ^{*(2)}	Cycles		2500 / 10000	
Operation rate (0-I-II-0) for CCF size 2 800A ^{*(1)}	Cycles/hour		20 / 120	
Number of UM T3 operations for SSF size 4 CCF size 3 ^{*(1)} ^{*(2)}	Cycles		2500 / 7000	
Operation rate (0-I-II-0) for SSF size 4 CCF size 3 ^{*(1)}	Cycles/hour		20 / 60	
Operating temperature	T/Un RH90%		-25°C +55°C	
Transportation and storage temperature	RH90%		- 40°C + 70°C	
Weight T2/T3	Kg		3,96 / 4,4	

^{*(1)} According to IEC 60947-3 / Based in our own tests
^{*(2)} Please consult us for more operations

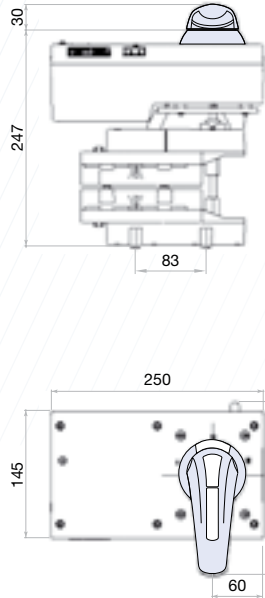
For inverted mounting there are references for **MU** with inverted frontal plates Supply under request.

Dimensions (mm)

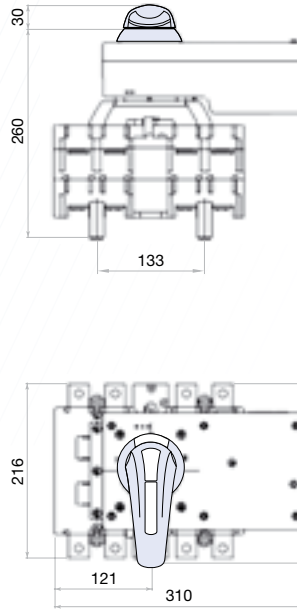
UM T0



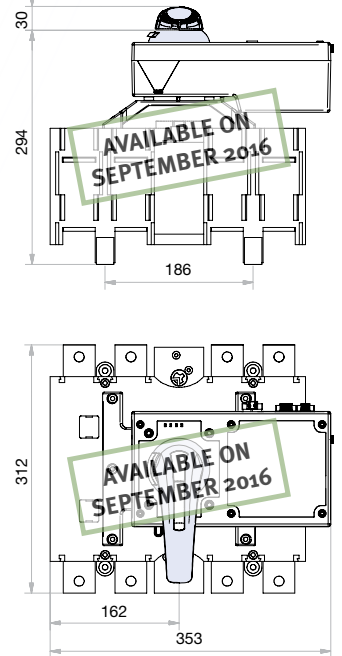
S5000F size 0 + UM T0



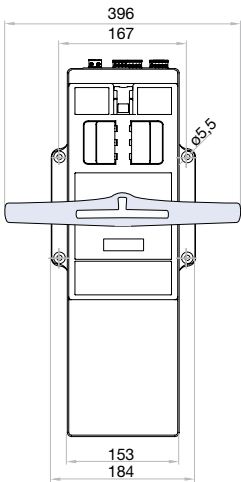
CCF size 1 + UM T0



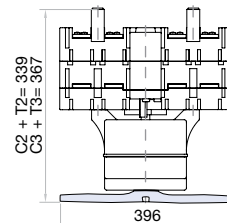
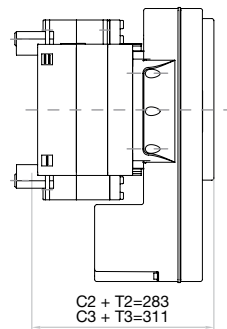
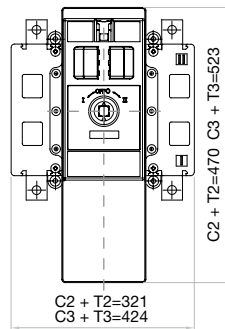
CCF size 2 + UM T0



UM T2-T3



CCF size 2&3 + UM T2 - T3



S5000F size 4 + UM T3

