



Switch - disconnecter for DC current 2P



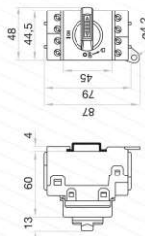
Size 00
A 16|25|32|40|55
600 - 1000 - 1500Vdc

Accessories

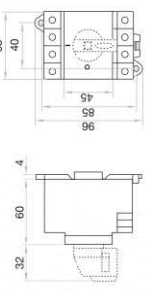
Insulated bridging links included
CODE ZTC-B1 16-25 A
ZFC-B1 32 A
ZFC-B2 40-55 A

Dimensions (mm)

ZFC16-25



ZFV32



ZFV40-55



- CODE 2P
- 16A ZFC16SVH4A40
 - 25A ZFC25SVH4A40
 - 32A ZFV32SVH4A40
 - 40A ZFV40SVH4A40
 - 55A ZFV55SVH4A40

- CODE 2P
- 16A ZFC16PFLH4A40
 - 25A ZFC25PFLH4A40
 - 32A ZFV32PFLH4A40
 - 40A ZFV40PFLH4A40
 - 55A ZFV55PFLH4A40

IP67



DO NOT USE IN GROUNDED INSTALLATIONS

Technical information

According to IEC 60947-3
DC-PV1
UL5081
IEC 60947-3



	ZFC16	ZFC25	ZFC32	ZFV40	ZFV55
le 2 Poles in series	9 DC21A	11 DC21A	13 DC21B	29 DC21B	36 DC21B
le 4 Poles in series	3 DC21A	4 DC21A	6 DC21B	7.5 DC21B	10 DC21B
le 2 Poles in series	16 DC21A	25 DC21A	32 DC21B	40 DC21B	55 DC21B
le 4 Poles in series	16 DC21A	29 DC21A	32 DC21B	49 DC21B	55 DC21B
le 2 Poles in series	3 DCPV1	5 DCPV1	6 DCPV1	7.5 DCPV1	10 DCPV1
le 4 Poles in series	16 DCPV1	25 DCPV1	32 DCPV1	40 DCPV1	55 DCPV1
le 4 Poles in series	16 DCPV1	25 DCPV1	32 DCPV1	40 DCPV1	55 DCPV1
Rated operational current	1000Vdc	1500Vdc	1500Vdc	1500Vdc	1500Vdc
Rated conditional short-circuit current	5 kAeif	5	5	10	10
Max. fuse size	9L(GG)	A 40	63	80	125
Maximum cable cross sections (included Jumper)	mm ²	1.5-10	1.5-10	4-16	2.5-25
Solid or stranded	mm ²	1.5-6	1.5-6	4-10	2.5-16
Flexible	mm ²	1.5-6	1.5-6	4-10	1.5-16
Flexible (+ multicore cable end)	mm ²	1.5-6	1.5-6	4-10	1.5-16
Size of terminal screw	Nxm	M3,5 P21	M3,5 P21	M4 P22	M3P22
Tightening torque	Nxm	1,4	1,4	1,7-1,8	2,5-2,8

	ZFC16	ZFC25	ZFC32	ZFV40	ZFV55
2 Poles in series	UL 600Vdc	A 16	25	32	40
4 Poles in series	UL 600Vdc	A -	-	16	20
Fuse size (RKS) Industrial Control Switch	5 kA / 600 V	A 16	25	32	40
Fuse size (RKS) Industrial Control Switch	5 kA / 1000 V	A -	-	40	55
Maximum cable cross sections (included Jumper)	AWG	16-10	16-10	12-10	16-10
Solid or stranded	AWG	20-6	20-6	12-6	14-4
Flexible	AWG	20-6	20-6	12-6	-
Flexible (+ multicore cable end)	AWG	M3,5 P21	M3,5 P21	M4 P22	M3P22
Size of terminal screw	Nxm	1,7-1,8	1,7-1,8	1,7-1,8	2,5-2,8
Tightening torque	Nxm	1,7-1,8	1,7-1,8	1,7-1,8	2,5-2,8

UL5081 LISTED ENEC847

Amperes-Rating 'General use'

Fuse size (RKS) Industrial Control Switch
5 kA / 600 V
5 kA / 1000 V

Maximum cable cross sections (included Jumper)

Solid or stranded

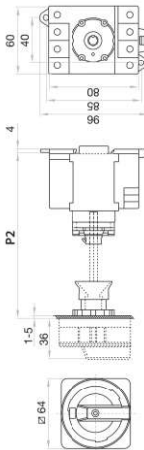
Flexible

Flexible (+ multicore cable end)

Size of terminal screw

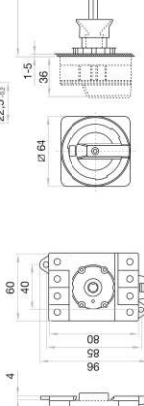
Tightening torque

ZFV32



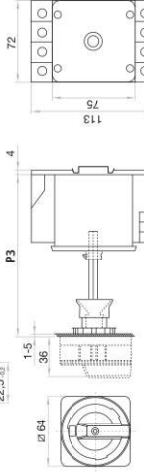
P2 max = 150 | min = 89
Other lengths (shafts) are available under request

ZFC16-25



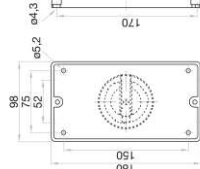
P1 max = 182 | min = xx
Other lengths (shafts) are available under request

ZFV40-55

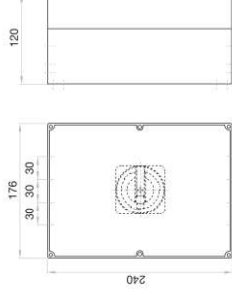


P3 max = 194 | min = 103
Other lengths (shafts) are available under request

ZFC16 - ZFV32



ZFV55



S5 DC

Switch - disconnecter for DC current 4P

Size 0

A 40

900Vdc



CODE: 40A **S5-01604P80**

CODE: 40A **S5-01604P50**



Technical information

According to IEC 60947-1
IEC 60947-3

Rated thermal current in ambient at	Ith	40°C	A	40
		50°C	A	40
		60°C	A	40
Rated insulation voltage DC20	Ui	V	V	1000
Rated impulse withstand voltage	Uimp	kV	kV	8
Rated operational current DC21B	Ie	900Vdc	A	40

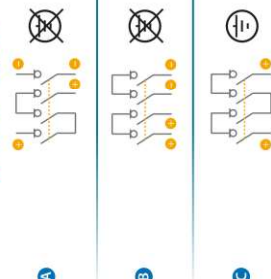
*⁽¹⁾ Other voltages and / or utilization categories. Please consult
*⁽²⁾ Without limiting protective device (short-circuit maintained 50... 100 ms.)

Short-circuit behaviour

Short-circuit making capacity* ⁽²⁾	Icm	kA (peak)	13
Rated short-time withstand current (1scc)	Icw	kA rms	7
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		10000
Maximum weight (without bridging links)	Kg		1

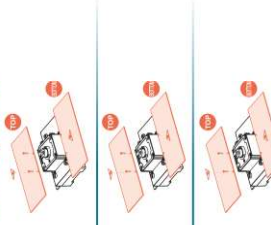
Connection diagram

Connection diagram



DO NOT USE IN GROUNDED INSTALLATIONS

Terminal protection



Accessories



Direct handle
CODE: DS-5101



External handle included shaft*⁽¹⁾
IP65
CODE: DS-SA01



External handle without shaft
IP65
CODE: DS-SA03



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



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



Bridging links*⁽¹⁾
A B CODE: DS-PI05 (2 units)
A B ☞ CODE: DS-PI01 (2 units)
C CONSULT

*⁽¹⁾ To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.

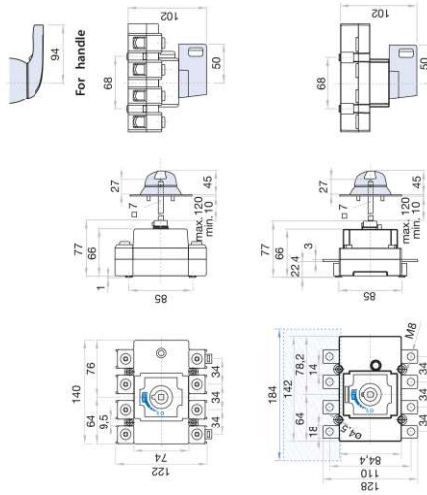
DIN rail mounting

CODE: DS-DN01
☞ (1 Kit)



Dimensions (mm)

Door drilling for external handle



S5 DC

Switch - disconnecter for DC current 4P

Size 1

A 100/160/250/400

1000Vdc



CODE - 100A **SS-01254PRO**

CODE - 160A **SS-02004PRO**

CODE - 250A **SS-03154PRO**

CODE - 400A **SS-04004PCO**



tests:



Technical information

According to IEC 60947-1
IEC 60947-3

Rated thermal current in ambient at	100				160				250				400				
	A	125	200	315	400	A	125	200	315	400	A	125	200	315	400		
50°C	A	125	200	315	400	A	125	200	315	400	A	125	200	315	400		
60°C	A	125	200	280	320	A	125	200	280	320	A	125	200	280	320		
Rated insulation voltage DC20	UI	1500				1500				1500				1500			
Rated impulse withstand voltage DC21B	Uimp	8				8				8				8			
Rated operational current DC21B	Ie	100				160				250				400			

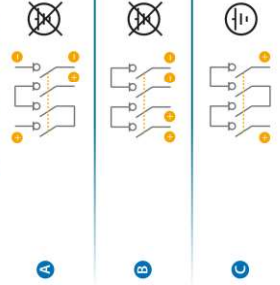
Short-circuit behaviour	100				160				250				400							
	Icm	kA (peak)	Icw	kA rms	Icm	kA (peak)	Icw	kA rms	Icm	kA (peak)	Icw	kA rms	Icm	kA (peak)	Icw	kA rms				
Short-circuit making capacity ^{*)}	20				20				20				20							
Rated short-time withstand current (1s.c.)	12				12				12				12							
Number of mechanical operations (according to the standards, for other values please consult)	10000				8000				8000				5000							
Maximum weight (without bridging links)	Kg				1,9				1,9				1,9				2,1			

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

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

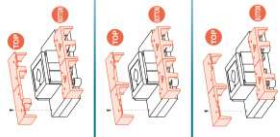
Connection diagram

Connection diagram

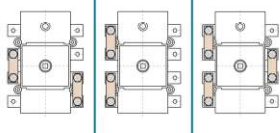


DO NOT USE IN GROUNDED INSTALLATIONS

Terminal shrouds



Bridging links^{*)}



Accessories



Direct handle
CODE DS-S111



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



External handle without shaft
IP65 CODE DS-SA14



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



Terminal protection
CODE DS-CUI2
 (1 unit for input or output)



Terminal shrouds (2 units)

A	DS-CUI8	DS-CUI0	DS-CUI0
B	DS-CUI9	DS-CUI1	DS-CUI8

Shafts

Standard shaft included^{*)}

L (mm) P (mm)

227 103...256

Shaft extensions

Type 1 CODE DS-EP14

L (mm) P (mm)

375 103...415

Type 2 CODE DS-EP15

L (mm) P (mm)

536 103...576

Bridging links^{*)}

A B CODE DS-PI11 (2 units)

A B CODE DS-PI14 (2 units)

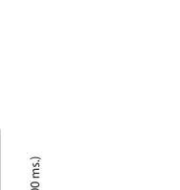
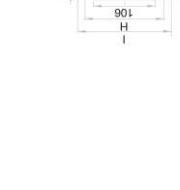
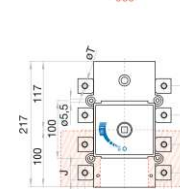
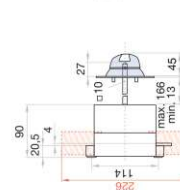
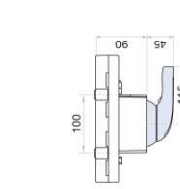
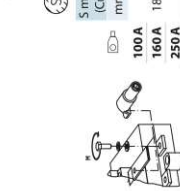
CODE CONSULT

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

Dimensions (mm)

	H	I	J	øT
100A	130	50	20	M8
160A	143	67	25	M10
250A	143	67	25	M10

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



S5 DC

Switch - disconnecter for DC current 4P

Size 2

A 500 I630

1000 Vdc



CODE: 500A I630-SS-06304PRO
CODE: 630A I630-SS-06302ERO



Technical information

According to IEC 60947-1
IEC 60947-3

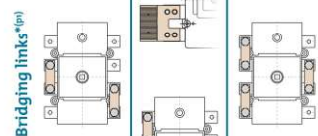
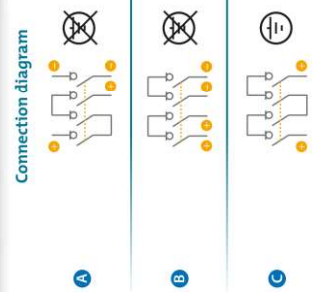


	500	630
Rated thermal current in ambient at 40°C	A 500	630
50°C	A 500	630
60°C	A 400	500
Rated insulation voltage DC20	UI 1500	1500
Rated impulse withstand voltage DC21B	Uimp kv 12	12
Rated operational current ^{*)}	Ie 1000Vdc A 500	630

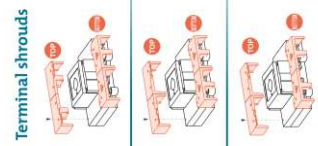
	500	630
Short-circuit behaviour		
Short-circuit making capacity ^{*)}	Icm kA (peak) 26	26
Rated short-time withstand current (1s.c.)	Icw kA rms 16	16
Number of mechanical operations (according to the standards, for other values please consult)	Cycles 5000	5000
Maximum weight (without bridging links)	Kg 4,5	4,5

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

Connection diagram



DO NOT USE IN GROUNDED INSTALLATIONS



Accessories

- Direct handle
CODE: DS-LI21
- External handle included shaft^{*)}
IP65 CODE: DS-LA21
- External handle without shaft
IP65 CODE: DS-LA24

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

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

- Terminal shrouds (2 units - only for 500A)
A DS-CU28 DS-CU20
B DS-CU21 DS-CU28
C DS-CU29 DS-CU28

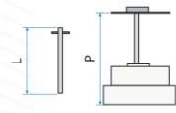
- Bridging links^{*)}
A B 500A CODE: DS-PI21 (2 units)
C CODE: CONSULT
B 630A CODE: DS-PI2D (2 units)

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

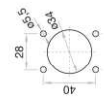
Shafts

Standard shaft included^{*)}

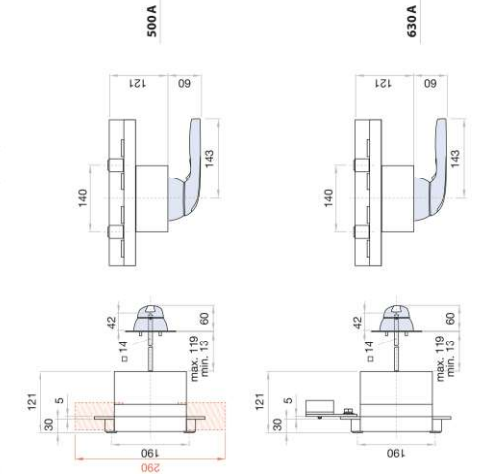
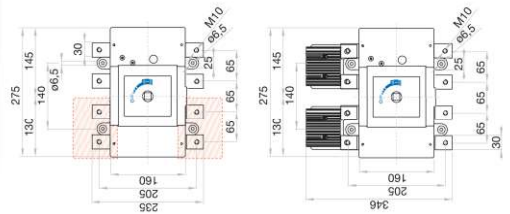
Type 1	Type 2
L (mm)	L (mm)
195	134...240
P (mm)	P (mm)
345	134...400
CODE	CODE
DS-EP23	DS-EP24



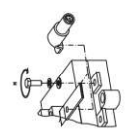
Door drilling for external handle



Dimensions (mm)



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



S5 DC

Switch - disconnecter for DC current 4P

Size 3

A 850/1250

1000Vdc



CODE: 850A IEC5
S5-T2504PC0

CODE: 1250A IEC5
S5-T2502ECO



Technical information

According to IEC 60947-1
IEC 60947-3

	850	1250
Rated thermal current in ambient at 40°C	A	850
50°C	A	850
60°C	A	700
Rated insulation voltage DC20	U	1500
Rated impulse withstand voltage DC21B	Uimp	12
Rated operational current ^{*)}	Ie	1000Vdc
DC21B	A	850

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

TESTS:

IEC **UL** **EAC** **CCC**

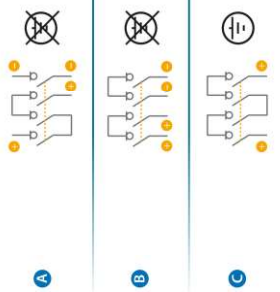
consult consult consult consult

AIT TOMORROW TODAY

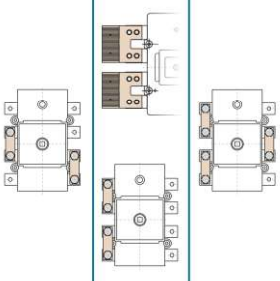
	850	1250
Short-circuit behaviour		
Short-circuit making capacity ^{*)}	Icm	60
Rated short-time withstand current (1scc)	Icw	25
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000
Maximum weight (without bridging links)	Kg	7,6

Connection diagram

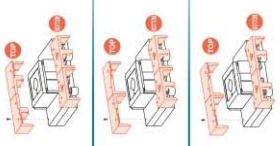
Connection diagram



Bridging links^{*)}



Terminal shrouds



DO NOT USE IN GROUNDED INSTALLATIONS

Accessories



Direct handle
CODE: DS-LI31



External handle included shaft^{*)}
IP65
CODE: DS-LA31



External handle without shaft
IP65
CODE: DS-LA33

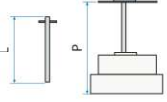
Auxiliary contacts

1NO+1NC CODE: DSLAU01
2NO+2NC CODE: DSLAU02
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.

Terminal shrouds (2 units - only for 850A)

- A** DS-CU38 DS-CU39
- B** DS-CU30 DS-CU31
- C** DS-CU38 DS-CU38

Shafts



Standard shaft included^{*)}

L (mm) P (mm)
186 | 145... 242

Shaft extensions

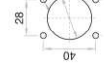
Type 1
L (mm) P (mm) CODE
345 | 145... 411 DS-EP23

Type 2
L (mm) P (mm) CODE
535 | 145... 600 DS-EP24

Bridging links^{*)}

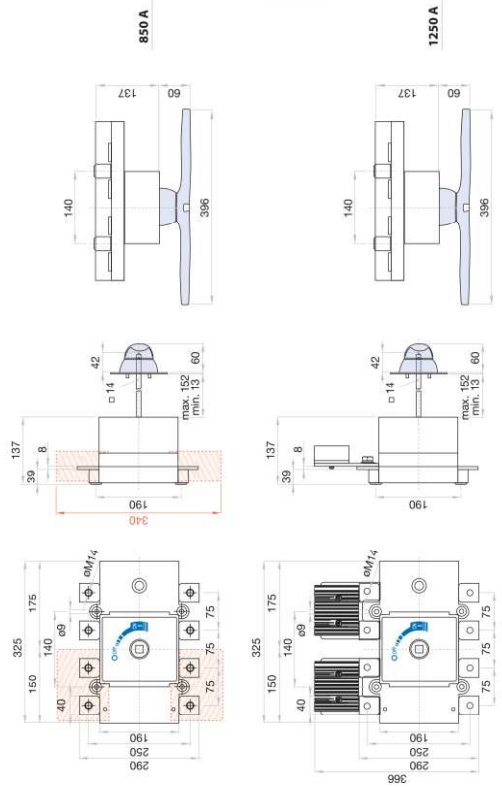
- A** 850A CODE: DS-PI31 (2 units)
- B** 1250A CODE: DS-PI3D (2 units)

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



Door drilling for external handle

Dimensions (mm)



S	H max (C0)	L max (C0)	M
mm	mm	mm	Nxm
2x300	2x10	50	M14 45

Switch - disconnecter for DC current 4P

Size 4
A 1250 | 1800 | 2000
1000Vdc



CODE: 1250A (S5-18004P50)



CODE: 1800A (S5-18002E50)

CODE: 2000A (S5-20002E00)



Technical information

According to IEC 60947-1
IEC 60947-3

Rated thermal current in ambient at	1250			1800			2000				
	A	1250	1800	2000	A	1250	1800	2000			
Rated insulation voltage DC20	50° C	A	1250	1620	1800	60° C	A	1250	1400	1600	
Rated impulse withstand voltage	Uimp	kV	12	12	12	Ue	1000Vdc	A	1250	1800	2000

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

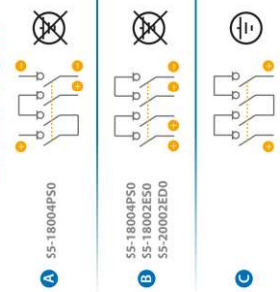
TESTS:



Short-circuit behaviour	1250			1800			2000		
	Short-circuit making capacity ^{*)}	Icm	kA (peak)	60	60	60	3000	3000	3000
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000	3000	3000	3000	3000	3000	3000	3000
Maximum weight (without jumpers)	Kg	20,8	20,8	20,8	20,8	20,8	20,8	20,8	20,8

Connection diagram

Connection diagram



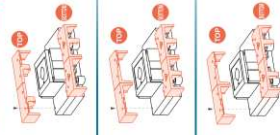
A S5-18004P50

B S5-18002E50
S5-20002E00

C

DO NOT USE IN GROUNDED INSTALLATIONS

Terminal shrouds



Accessories



Direct handle
CODE: DS-L141



External handle included shaft ^{*)}
IP65 UL508/NEMA 250
Types: 1, 3R, 4, 4X, Y, 12
CODE: DS-LA41



External handle without shaft
IP65 UL508/NEMA 250
Types: 1, 3R, 4, 4X, Y, 12
CODE: DS-LA43



Auxiliary contacts
1NO+1NC CODE: DSLAU01
2NO+2NC CODE: DSLAU02
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



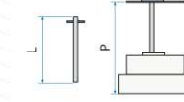
Terminal shrouds (2 units)
TOP DS-CU48 DS-CU49
BOTTOM DS-CU48 DS-CU49



Bridging links ^{*)}(p)
For S5-18004P50 A B C CODE DS-P141 (2 units) CONSULT



For S5-18002E50 S5-20002E00 B CODE DS-P14D (2 units) CONSULT



Shafts

Standard shaft included ^{*)}(p)

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

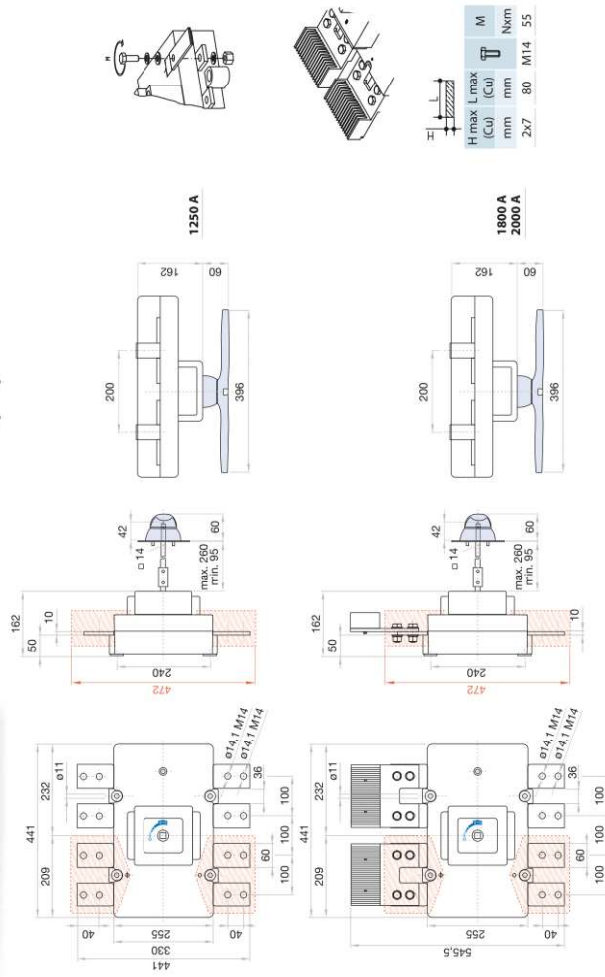
Shaft extensions
Type 1 L (mm) P (mm) CODE
485 | 235...686 DS-EP44

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

^{*)} To meet the operation and electrical features, the product installed must be incorporate these bridging links. Please consult.

Dimensions (mm)

Door drilling for external handle



H max	L max	M
(Cu)	(Cu)	Nkm
mm	mm	
2,7	80	M14 55

1800 A
2000 A

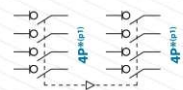


S5M DC Switch - disconnecter for DC current 4P+4P

Size 2
A 500/630
 1500Vdc



CODE: 500A (A) **S5M063044R0**
 CODE: 630A (B) **S5M080044C0**



Technical information

According to IEC60947-1
 IEC60947-3

	500		630	
Rated thermal current in ambient at	Ith	40°C	A	500
		50°C	A	500
		60°C	A	500
Rated insulation voltage DC20	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12
Rated operational current DC21B	Ie	1500Vdc	A	500

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



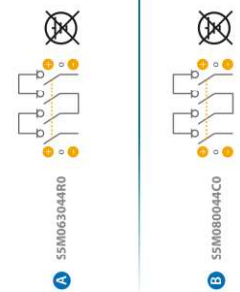
tests:
AIT
 TOMORROW'S TECHNOLOGY TODAY

Short-circuit behaviour			
Maximum cut-off current ^(*)	Icm	kA (peak)	26
Short-time withstand current (1 sec.)	Icw	kA rms	16
Mechanical features			
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		5000
Maximum weight (without lumpers)	Kg		13

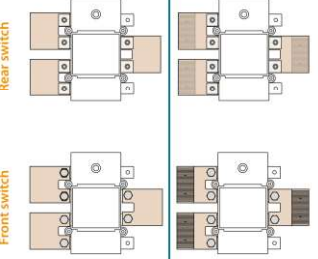
DO NOT USE IN GROUNDED INSTALLATIONS

Connection diagram

Connection diagram



Bridging links^(*)



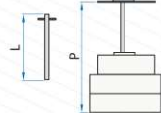
Accessories



» **Direct handle**
 CODE: DS-LI22



» **External handle** included shaft^(*)
 IP65
 CODE: DS-LA22



» **Shafts**
Standard shaft included ^(*)
 L (mm) | P (mm)
 239 | 325...490



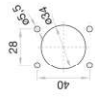
» **Auxiliary contacts**
 1NO+1NC CODE: DS-AU11
 2NO+2NC CODE: DS-AU12
 Ie = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.



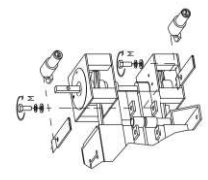
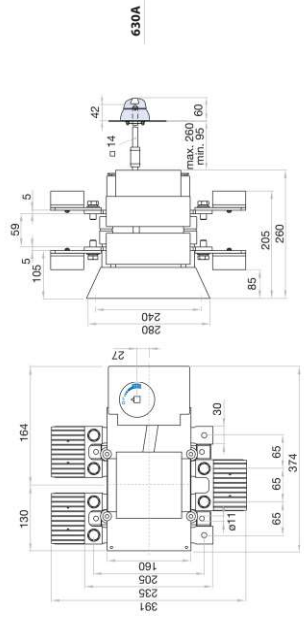
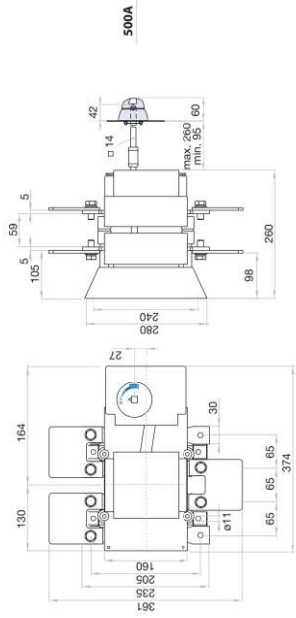
» **Bridging links^(*)**
A 500A CODE: DS-PI230L (2 units)
B 630A CODE: DS-PI2D (2 units)

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

Dimensions (mm)



Door drilling for external handle



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



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

Size 3

A 800 | 1000

1500Vdc



Technical information

According to IEC60947-1
IEC60947-3



	800	1000
Rated thermal current in ambient at	A 800	1000
50°C	A 800	1000
60°C	A 800	1000
Rated insulation voltage DC20	V 1500	1500
Rated impulse withstand voltage	kV 12	12
Rated operational current DC21B	Ie 1500Vdc A 800	1000

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

Short-circuit behaviour	
Maximum cut-off current ⁽¹⁾	I _{cm} kA (peak) 60
Short-time withstand current (1 sec.)	I _{cw} kA rms 25
Mechanical features	
Number of mechanical operations (according to the standards, for other values please consult)	Cycles 3000
Maximum weight (without lumpers)	Kg 28.6

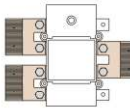
DO NOT USE IN GROUNDED INSTALLATIONS

Connection diagram

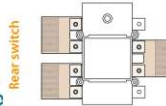
Connection diagram



Front switch



Rear switch



Bridging links ⁽¹⁾(p)

Accessories



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



» **Bridging links ⁽¹⁾(p)**
CODE: DS-P3D (2 units)

⁽¹⁾To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.



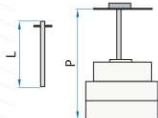
» **Direct handle**
CODE: DS-LA1



» **External handle** included shaft ⁽¹⁾(p)
IP65 CODE: DS-LA41



» **External handle** without shaft
IP65 CODE: DS-LA43



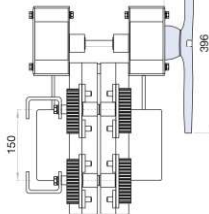
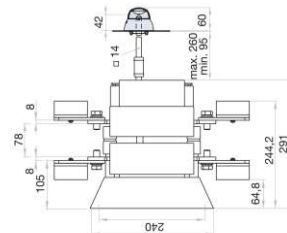
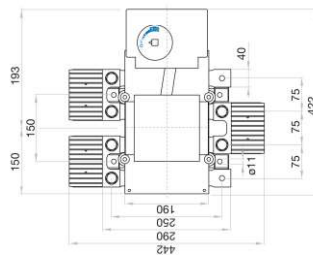
» **Shafts**

Standard shaft included ⁽¹⁾(p)
L (mm) 239
P (mm) 408... 373



Door drilling for external handle

Dimensions (mm)



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

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

Size 4

A 1250/1800

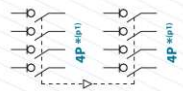
1500Vdc



CODE: 1250A **S5N16004450**



CODE: 1800A **S5N18004450**



Technical information



According to IEC 60947-1
IEC 60947-3

	1250	1800
Rated thermal current in ambient at	A 1250 50°C	A 1800 60°C
Rated insulation voltage DC20	A 1250	V 1500
Rated impulse withstand voltage	Uimp 12	12
Rated operational current DC21B ^(*)	Ie 1250	A 1800

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

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

Short - circuit behaviour	
Short - circuit making capacity ^(**)	Icm kA (peak) 60
Short - time withstand current (1 sec.)	Icw kA rms 50

Mechanical features

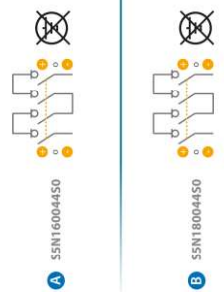
Number of mechanical operations (according to the standards, for other values please consult) Cycles 600

Maximum weight (without bridging links) Kg 44,3

DO NOT USE IN GROUNDED INSTALLATIONS

Connection diagram

Connection diagram



Accessories



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



>> Bridging links ^(ip)

- A** 1250A CODE: DS-P1430U (3 units)
- B** 1800A CODE: DS-P14D (2 units)

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

>> Direct handle
CODE: DS-L141

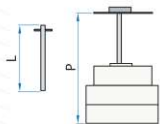


>> External handle included shaft ^(*)
IP65
CODE: DS-LA41



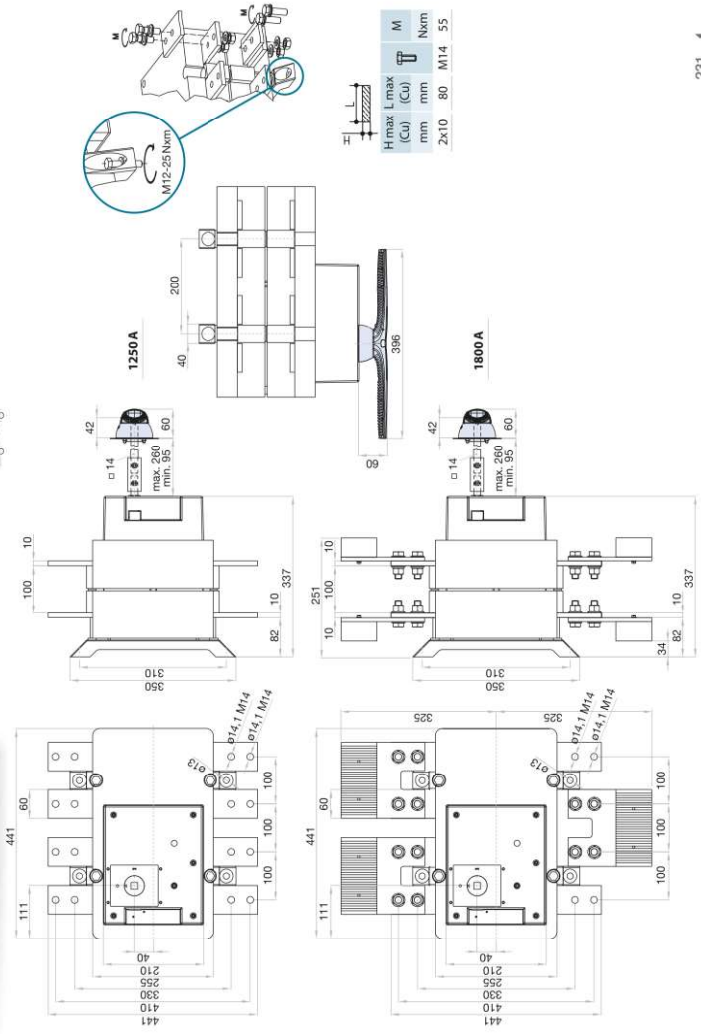
>> External handle without shaft
IP65
CODE: DS-LA43

>> Shafts



Standard shaft included ^(*)
L (mm) 239
P (mm) 420...580

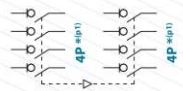
Dimensions (mm)



S5N DC

Switch - disconnecter for DC current 4P+4P

Size 5
A 2000/2500/3150
 1000Vdc



CODE: 2000A **SSN20002ES0**

CODE: 2500A **SSN25002ES0**

CODE: 3150A **SSN31502ES0**

Technical information



According to IEC 60947-1
 IEC 60947-3

	2000	2500	3150
Rated thermal current in ambient at 40°C	A 2000	2500	3150
50°C	A 2000	2500	2850
60°C	A 2000	2500	2500
Rated insulation voltage DC20	U 1500	1500	1500
Rated impulse withstand voltage DC21B ^(*)	Uimp 12	12	12
Rated operational current Ie	A 2000	2500	3150

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

Short - circuit behaviour			
Short - circuit making capacity ^(**)	Icm	kA (peak)	60
Rated short-time withstand current (1sec)	Icw	kA rms	50

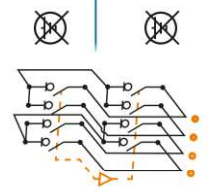
Mechanical features

Number of mechanical operations (according to the standards, for other values please consult)	Cycles	600
Maximum weight (without bridging links)	Kg	55

DO NOT USE IN GROUNDED INSTALLATIONS

Connection diagram

Connection diagram



A SSN20002ES0
 SSN25002ES0

B SSN31502ES0



Accessories



» **Direct handle**
 CODE: DS-LA41



» **External handle** included shaft ^(**)
 IP65
 CODE: DS-LA41



» **External handle** without shaft
 IP65
 CODE: DS-LA43

» Shafts

standard shaft included ^(**)



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

» Auxiliary contacts

- 1NO+1NC CODE: DSLAU01
- 2NO+2NC CODE: DSLAU02
- Ie = 16A (resistive loads)
- 4A (inductive loads) at 250 Vac

» Bridging links ^(**)

- A** 2000A CODE: DS-PI51 (2 units) + DS-LPC45 (4 units)
- B** 2500A CODE: DS-PI51 (2 units) + DS-LPC45 (4 units)
- B** 3150A CODE: **x2** DS-PI4D (2 units) + **x2** DS-LPC45 (4 units)



DS-PI4D



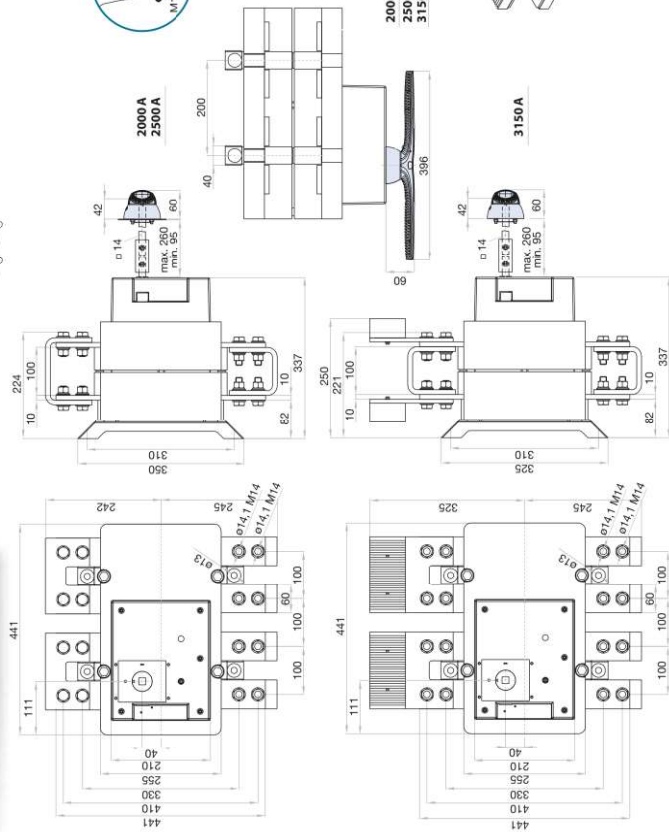
DS-PI51



DS-LPC45

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

Dimensions (mm)



M	H max	L max
(Cu)	mm	mm
Ncm	mm	mm

2000 A 2x10 80 M14 55
 2500 A 4x10 80 M14 55
 3150 A

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

Size 1

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

500 - 750 - 1000Vdc

Terminal shrouds

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



Phase barriers

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



Spacers

- CODE DR-EL11 (4 units)

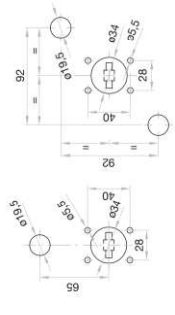


Safety key lock device

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

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

Door drilling for handle and key lock device
Simple
Double



Direct handle

- CODE DS-S11



External handle included shaft**)

- IP65 CODE DS-SA11



External handle without shaft

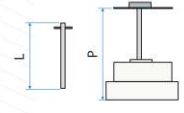
- IP65 CODE DS-SA14



Shafts

Standard shaft included**)

- Type 1 L (mm) 375 P (mm) 103... 256 CODE DS-EP14
- Type 2 L (mm) 536 P (mm) 103... 276 CODE DS-EP15



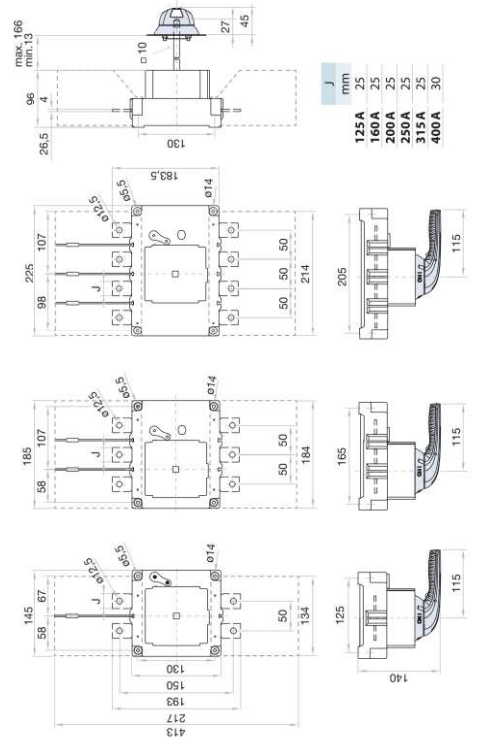
Auxiliary contacts

- INO⁺-INC CODE DSLAU01
- ZNO⁺-ZNC CODE DSLAU02
- Ie = 16A (resistive loads)
- 4A (inductive loads) at 250Vac.



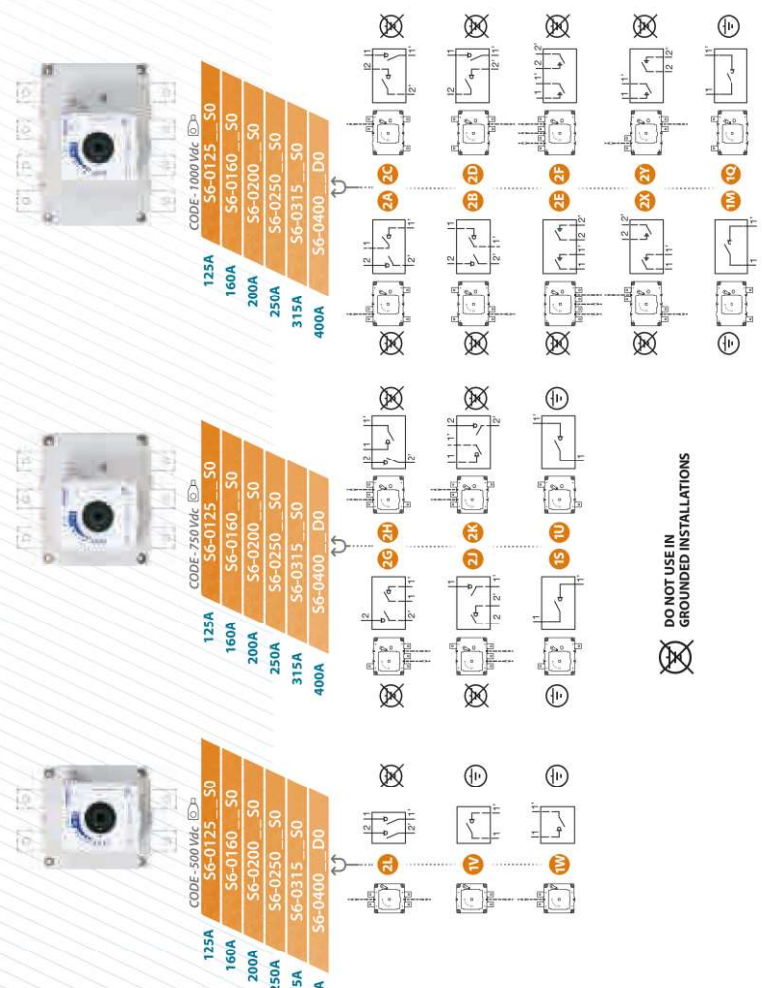
Dimensions (mm)

Door drilling for external handle



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

**1) Using phase barriers DR-SF... to maintain the required clearance.



DO NOT USE IN GROUNDED INSTALLATIONS



Technical information

According to IEC 60947-1 IEC 60947-3

	125	160	200	250	315	400
Rated thermal current	A 125	160	200	250	315	400
Rated short-circuit making capacity**)	A 125	160	200	250	315	400
Rated short-time withstand current (I _{sc})	A 125	160	200	250	315	400
Rated impulse withstand voltage (U _{imp})	KV 12 12 12 12 12 12					
Rated operational current (I _e)	A 125 160 200 250 315 400					
Code 500Vdc	A 125 160 200 250 315 400					
Code 750Vdc	A 125 160 200 250 315 400					
Code 1000Vdc	A 125 160 200 250 315 400					

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



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

Size 1

A 250

500 - 750 - 1000Vdc



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



External handle included shaft
 IP65 CODE DS-SA11



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

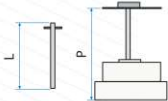


External handle without shaft
 IP65 CODE DS-SA14



Shafts

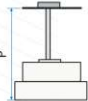
Standard shaft included
 L (mm) P (mm)
 227 103...256



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

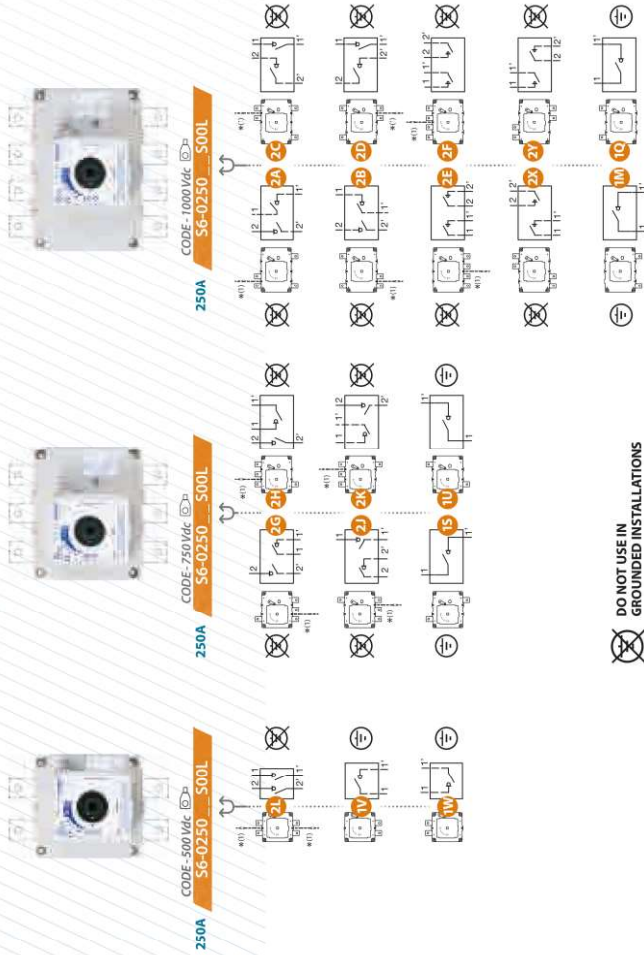
1NO+1NC CODE DSLAU01
 2NO+2NC CODE DSLAU02
 Ie = 16A (resistive loads)
 4A (inductive loads) at 250Vac.



Terminal lug

CODE DR-TL11 (2 units)

* With Terminal lug use phase barriers DR-SF... to maintain the required clearance. Mandatory in these models



DO NOT USE IN GROUND INSTALLATIONS



Technical information

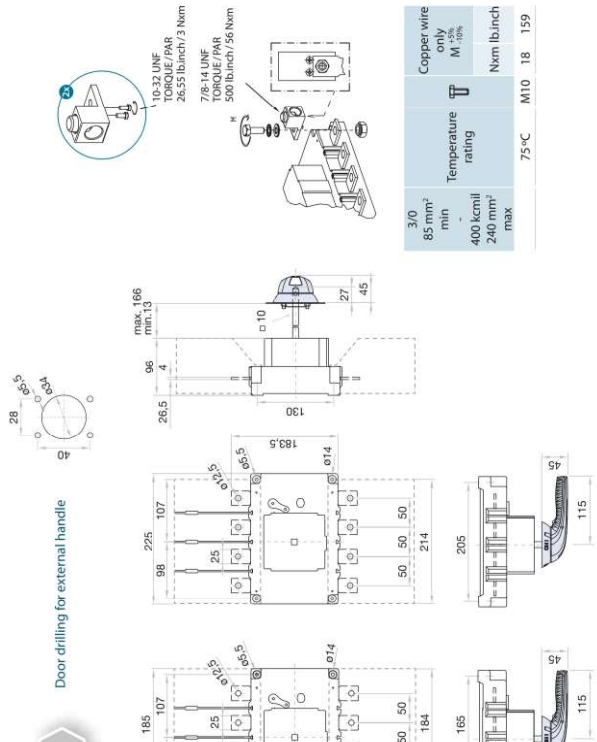
According to UL988

LISTED E33311	250				
Rated thermal current	lth	-20°C to +50°C	A	250	Consult according to code
Rated operational current	le	Code 500Vdc	A	250	
		Code 750Vdc	A	250	
		Code 1000Vdc	A	250	
Rated short-circuit current	Icc	kA		10	
Maximum weight					
Wiring capacity					
Minimum connection wire range/AWG		MCM		400	
Maximum connection wire range/AWG		MCM		400	



250A
 Conforms to UL988. Minus 20 to +50°C. PV disconnects switch. Location Category B
 1000Vdc 250A. Torque: 139 lbf.in. Short circuit rating: 10kA
 Suitable for Use in PV Systems in accordance with Article 690 of the NEC
 IEC-60947-3 Uimp 12kV DC21B-1000Vdc-250A U1 1500Vdc Ith 250A

Dimensions (mm)



3/0	Copper wire only			
85 mm² min	Temperature rating			
400 kcmil max	M 50%			
240 mm²	Nmm lbinch			
		75°C	M10	18 159

» Terminal shrouds
CODE DR-CU21 (1 unit)
CODE DR-CU22 (1 unit)
CODE DR-CU23 (1 unit)



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



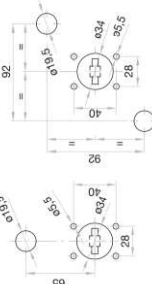
» Spacers
CODE DR-EL21 (4 units)



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



Door drilling for handle and key lock device
Simple
Double



» Direct handle
CODE DS-LI21



» External handle included shaft^{**1)}
IP65 CODE DS-LA21



» External handle without shaft
IP65 CODE DS-LA24



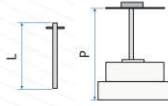
» Shafts
Standard shaft included^{**1)}

L (mm)	P (mm)	CODE
195	134... 240	DS-EP23

Shaft extensions

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

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

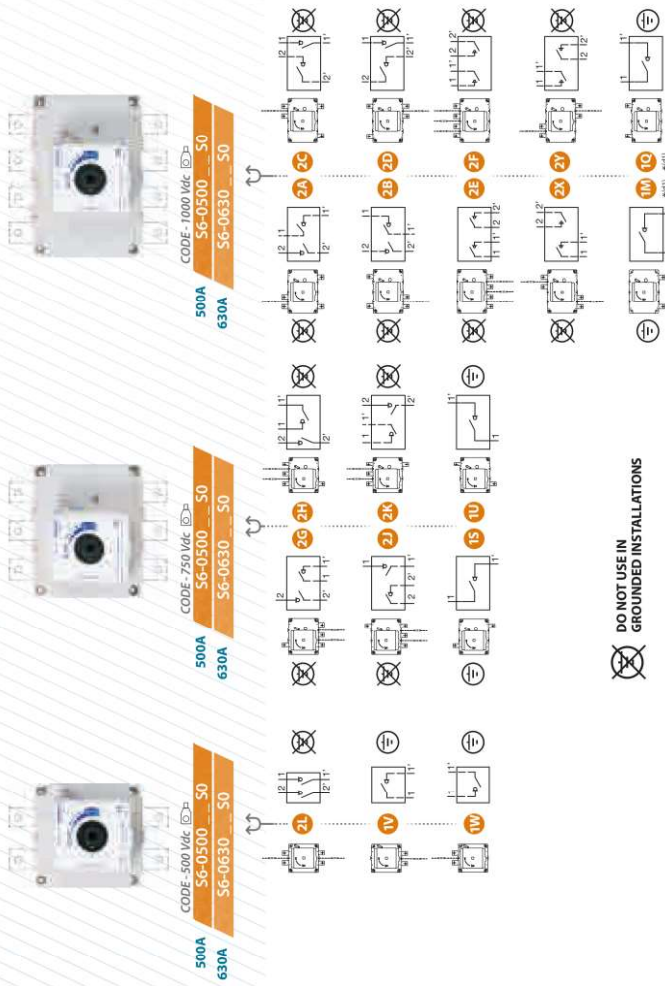


» Auxiliary contacts

1NO+1NC CODE DS-LA01
2NO+1NC CODE DS-LA02
Ie = 16A (resistive loads)
4A (inductive loads) at 250 Vac.



DO NOT USE IN
GROUNDED INSTALLATIONS



**1) Only for 500 A.

Technical information

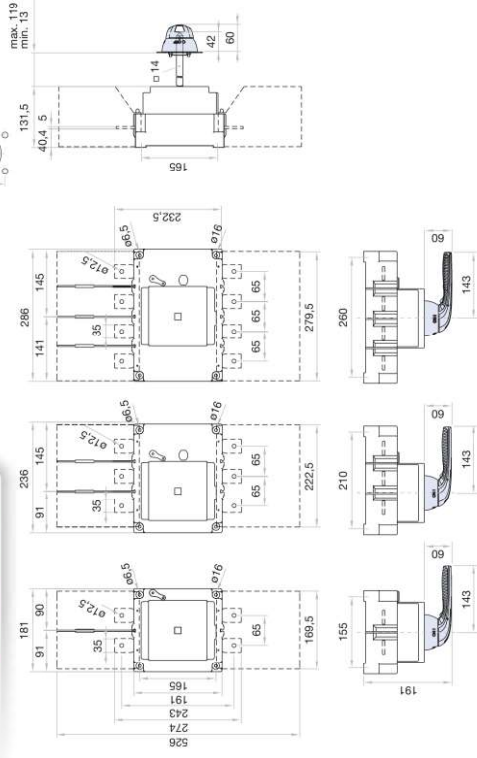
According to IEC 60947-1
IEC 60947-3

	500	630
Rated thermal current	A 500	A 630
Rated impulse withstand voltage (DC)	U _i 1500	U _i 1500
Rated operational current	A 500	A 630
Rated insulation level	A 500	A 630
Rated short-circuit making capacity ^{**2)}	I _{cm} 10	I _{cm} 10
Rated short-time withstand current (1 sec)	I _{cs} 10	I _{cs} 10
Rated short-time withstand current (1 sec)	I _{cs} 10	I _{cs} 10
Number of mechanical operations (according to the standards, for other values please consult)	Cycles 5000	Cycles 5000
Maximum weight	Consult according to code	

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

Dimensions (mm)

Door drilling for external handle



tests:



According to IEC 60947-1
IEC 60947-3

	500	630
Rated short-circuit making capacity ^{**2)}	I _{cm} 10	I _{cm} 10
Rated short-time withstand current (1 sec)	I _{cs} 10	I _{cs} 10
Rated short-time withstand current (1 sec)	I _{cs} 10	I _{cs} 10
Number of mechanical operations (according to the standards, for other values please consult)	Cycles 5000	Cycles 5000
Maximum weight	Consult according to code	

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



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

Size 2

A 400

500 - 750 - 1000Vdc



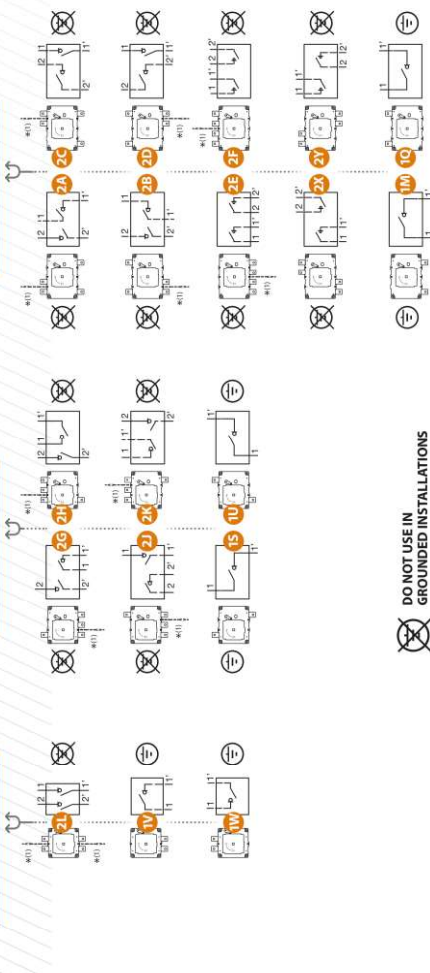
400A CODE 500Vdc S6-0400 - 500L



400A CODE 750Vdc S6-0400 - 500L



400A CODE 1000Vdc S6-0400 - 500L



DO NOT USE IN GROUNDED INSTALLATIONS



Technical information

According to UL98 B

LISTED	E33311
Rated thermal current	lth -20°C to +50°C A 400
Rated operational current	le Code 500Vdc A 400 Code 750Vdc A 400 Code 1000Vdc A 400
Rated short-circuit current	lcc kA 10
Maximum weight	Consult according to code
Wiring capacity	
Minimum connection wire range/AWG	MCM 2x300
Maximum connection wire range/AWG	MCM 2x350

400A
 Conforms to UL98B. Minus 20 to +50°C. PV disconnects switch. Location Category B
 1000 Vdc-400 A torque:212 lbf.in. Short circuit rating: 10 kA
 Suitable for Use in PV Systems in accordance with Article 690 of the NEC
 IEC-60947-3 Uimp 12 kV DC21B - 1000 Vdc - 400 A U1 1500 Vdc Ith-400 A



tests:

Accessories



➤ **External handle** included shaft ^(*)
 IP65 CODE DS-LA21



➤ **External handle** without shaft
 IP65 CODE DS-LA24

Shafts

Standard shaft included ^(**)

L (mm)	P (mm)	CODE
195	134...240	DS-EP23

Shaft extensions

Type 1		CODE
L (mm)	P (mm)	DS-EP23
345	134...400	
Type 2		CODE
L (mm)	P (mm)	DS-EP24
535	134...560	



Auxiliary contacts

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

➤ **Terminal shrouds**
 CODE DR-CU21 (1 unit)
 CODE DR-CU22 (1 unit)
 CODE DR-CU23 (1 unit)



➤ **Phase barriers**
 CODE DR-SF21 (1 unit)
 CODE DR-SF22 (2 units)
 CODE DR-SF23 (3 units)



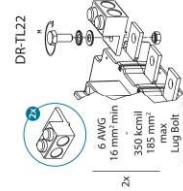
➤ **Spacers**
 CODE DR-EL21 (4 units)



➤ **Terminal lug**
 CODE DR-TL22 (2 units)

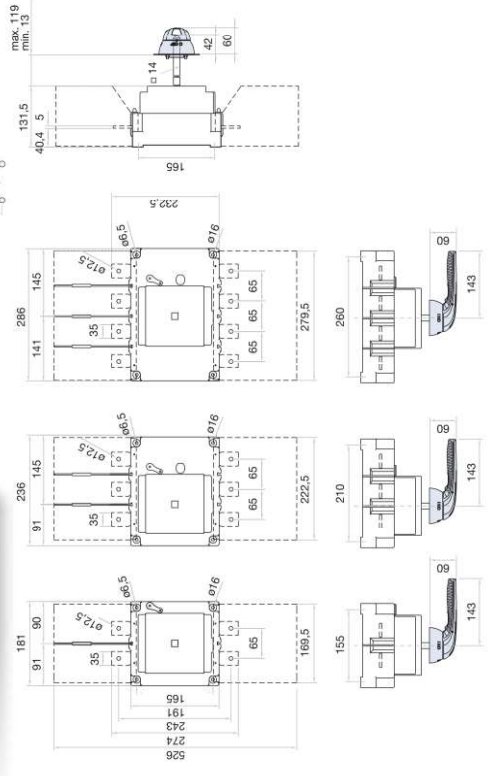


* With Terminal lug use phase barriers DR-SF... to maintain the required clearance. Mandatory in these models



Door drilling for external handle

Dimensions (mm)



Temperature rating	75°C
Copper wire only M _{10%}	Nm Ibs/inch
	M10 24 212



S6N DC Switch - disconnecter for DC current 2P

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



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



» **Direct handle**
CODE DS-S11



» **External handle** included shaft ^(see 1)
IP65
CODE DS-SA11

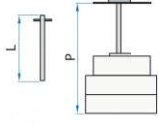


» **External handle** without shaft
IP65
CODE DS-SA14



» **Shafts**

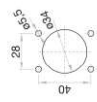
Standard shaft included ^(see 1)
L (mm) 227
P (mm) 185...336



Shaft extensions

Type 1
L (mm) 375
P (mm) 185...497,5
CODE DS-EP14

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



Dimensions (mm)

Door drilling for external handle

Technical information

According to IEC 60947-1
IEC 60947-3

Rated thermal current in ambient at	lth	40°C	125	160	200	250	315	400	
Rated insulation voltage (DC)	Ui	125	160	200	250	315	315	400	
	Uimp	125	160	200	250	315	315	400	
	Rated operational current ⁽¹⁾ DC21B	Ie	1500Vdc	A	125	160	200	250	315

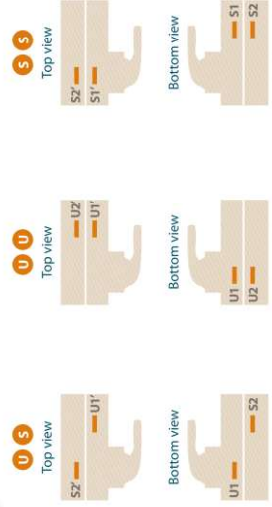
Short-circuit behaviour	
Rated short-circuit making capacity ⁽²⁾	Icm kA (peak) 10
Rated short-time withstand current ⁽³⁾	Icw kA rms 10
Mechanical features	
Number of mechanical operations (according to the standards, for other values please consult)	Cycles 8000
Maximum weight	kg 4,25

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

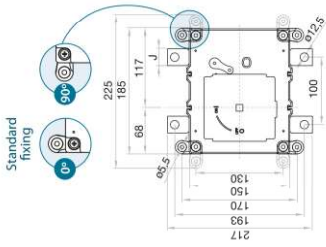
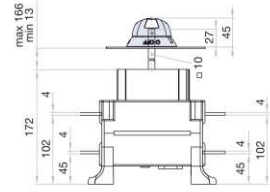
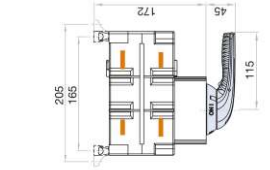
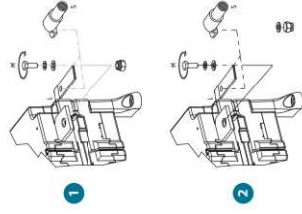


DO NOT USE IN GROUNDED INSTALLATIONS

Terminals location



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



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

J	mm
125A	25
400A	30

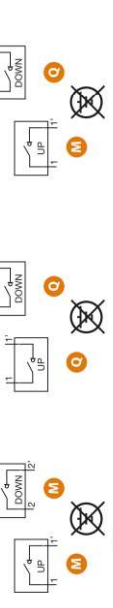
S6N DC

Switch - disconnecter for DC current 2P

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



Current (A)	Code	Rated Voltage (Vdc)
125A	S6N0125MMS0	1500
160A	S6N0160MMS0	1500
200A	S6N0200MMS0	1500
250A	S6N0250MMS0	1500
315A	S6N0315MMS0	1500
400A	S6N0400MMS0	1500

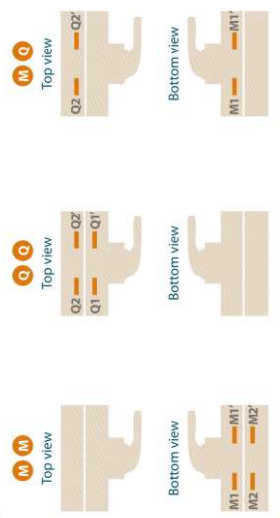


Technical information

According to IEC 60947-1
IEC 60947-3

Rated thermal current in ambient at	125	160	200	250	315	400
40°C	A	125	160	200	250	315
50°C	A	125	160	200	250	315
60°C	A	125	160	200	250	315
70°C	A	125	160	200	250	315
Rated insulation voltage (DC)	Uimp	125	160	200	250	315
Rated impulse withstand voltage	Ue	1500	1500	1500	1500	1500
Rated operational current ⁽¹⁾ DC21B	Ie	1500	160	200	250	315

Terminals location



tests:
AIT
APPLIED INSTITUTE
TOMORROW TODAY

DO NOT USE IN GROUNDED INSTALLATIONS

Short-circuit behaviour	
Rated short-circuit making capacity ⁽²⁾ Icm	kA (peak) 10
Rated short-time withstand current I _{scw}	kA rms 10
Mechanical features	
Number of mechanical operations (according to the standards, for other values please consult)	Cycles 8000
Maximum weight	kg 4,29

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

Accessories



» **Auxiliary contacts**
1NO+1NC CODE DS-LAU01
2NO+2NC CODE DS-LAU02
Ie = 16A (resistive loads)
4A (inductive loads) at 250 Vac.



» **External handle** without shaft
IP65 CODE DS-SA11



» **Standard shaft** included^(*)
L (mm) P (mm)
227 185...336

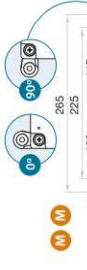


» **External handle** without shaft
IP65 CODE DS-SA14

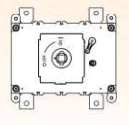
Dimensions (mm)



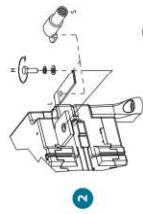
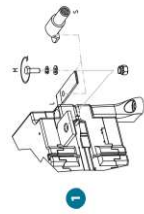
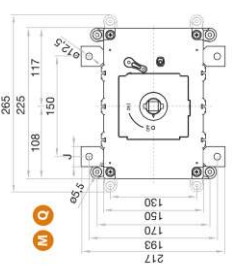
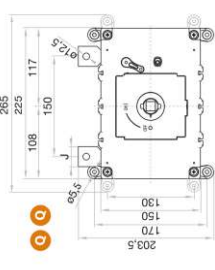
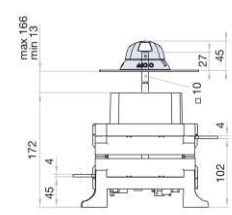
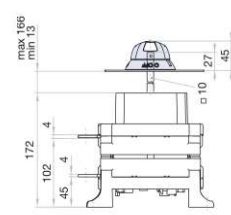
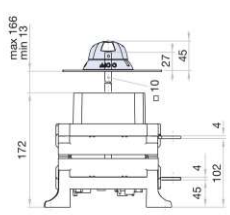
Door drilling for external handle



Standard fixing



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



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

J	125A	25
400A	25 <td>30</td>	30



S6R DC Switch - disconnecter base mounting 1P-2P

Size 1
A 160/200/250/315/400
1500Vdc



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



» **Direct handle**
CODE DS-5111

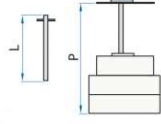


» **External handle** included shaft *661
IP65 CODE DS-5A11



» **Shafts**

Standard shaft included *661
L (mm) P (mm)
227 179...398,5

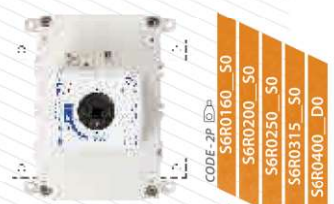


Shaft extensions

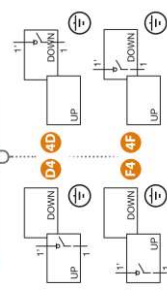
Type 1 CODE
L (mm) P (mm) DS-EP14
375 179...546,5
Type 2 CODE
L (mm) P (mm) DS-EP15
536 179...707,5



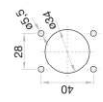
CODE 1P *661
160 A S6R0160_S0
200 A S6R0200_S0
250 A S6R0250_S0
315 A S6R0315_S0
400 A S6R0400_D0



CODE 2P *661
160 A S6R0160_S0
200 A S6R0200_S0
250 A S6R0250_S0
315 A S6R0315_S0
400 A S6R0400_D0



Dimensions (mm)



Door drilling for external handle

Short-circuit behaviour

Rated short-circuit making capacity ^{*62)}	Icm	kA (peak)	10
Rated short-time withstand current	Icw	kA rms	10
(Isec)			

Mechanical features

Number of mechanical operations (according to the standards, for other values please consult)	Cycles	8000
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DO NOT USE IN GROUNDED INSTALLATIONS

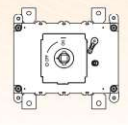
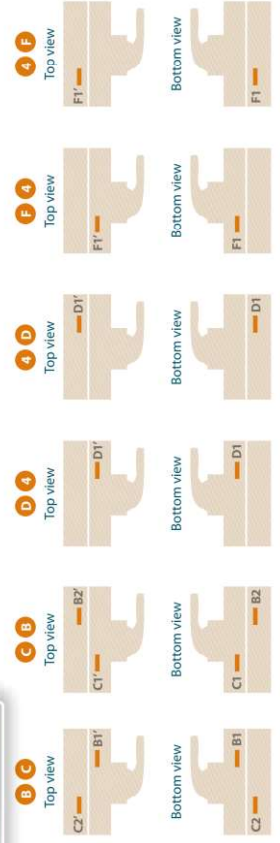
Technical information

According to IEC 60947-1
IEC 60947-3

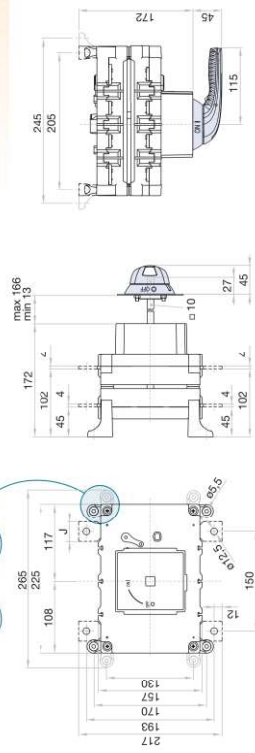
	160	200	250	315	400		
Rated thermal current Ith in ambient at 40°C up to 80°C	A	160	200	250	315	400	
Rated insulation voltage (DC)	U _i	V	1500	1500	1500	1500	
Rated impulse withstand voltage (DC21B)	U _{imp}	kV	12	12	12	12	
Rated operational current ^{*61)}	I _e	A	160	200	250	315	400

^{*61)} Other voltages and / or utilization categories. Please consult
^{*62)} Without limiting protective device (short-circuit maintained 50...100 ms.)

Terminals location



For rotated mounting there are **S6R** references with front plate rotated (supply under request).



J	S max (Cu)	H max (Cu)	L max (Cu)	M ^{nom} Nmm	
					mm
160 A 25	160	185	8	25	M12 24
200 A 25	200	185	8	25	M12 24
250 A 25	250	185	8	25	M12 24
315 A 25	315	185	8	25	M12 24
400 A 30	400	240	8	30	M12 24



S6R DC UL Switch - disconnecter for DC current 1P - 2P

Size 1

A 250 | 320 | 400

1500Vdc

Accessories



External handle included shaft ^(*)

IP65
CODE DS-SA11



Auxiliary contacts

1NO+1NC CODE DS-LAU01
2NO+2NC CODE DS-LAU02

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



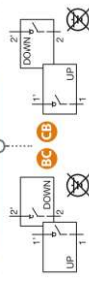
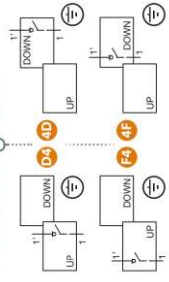
CODE 1P

250 A S6R0250 S00L
320 A S6R0320 S00L
400 A S6R0400 D00L



CODE 2P

250 A S6R0250 S00L
320 A S6R0320 S00L
400 A S6R0400 D00L



Technical information

According to UL98 B

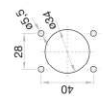
LISTED E33311	250	320	400
Rated thermal current I _{th}	-20°C to 50°C	A 250	320 400
Rated operational current I _e	1500Vdc	A 250	320 400
Rated short-time withstand current (0.05 sec) I _{cw}	kA	10	10 10
Maximum weight	Consult according to code		
Wiring capacity	mm ²	2x 4x30	2x 4x32
Minimum busbar connection range		2x 4x30	2x 4x32



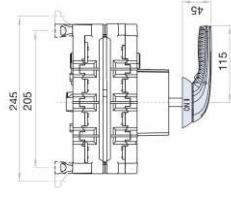
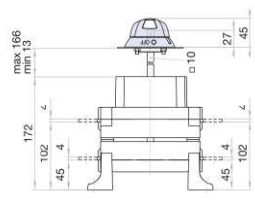
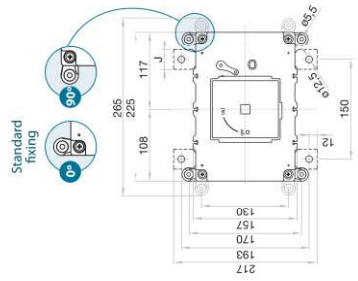
Conforms to UL98B, Minus -20 to 50°C, PV disconnect switch, Location Category B
Suitable for use in PV Systems in accordance with Article 690 of the NEC

Patent USA
N.° 9.899.159 B2

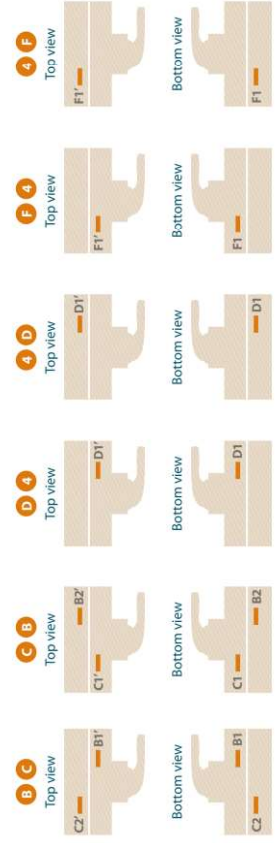
Dimensions (mm)



Door drilling for external handle



Terminals location



J	H max (Cu)	L max (Cu)	M
250 A	25	4	1-3/16
320 A	30	4	M12 24
400 A	30	4	M12 24