

series
ZFC|ZFVseries
S5 DC|S5MDC|S5N DCseries
S6 DC|S6N DC|S6RDC

DC Switch - disconnectors

DC switch – disconnectors with high operating load capacity and a high level disconnection insulation; high reliability and safety in abnormal situations, available in different construction models, with a wide range of currents in different DC voltages and a variety of accessories.



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

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

They consist of a sandwich-type body containing self-cleaning blade type contacts,

with pre-arc zones to ensure long term, fault-free energy transmission and coated with silver alloy for long electromechanical life. The jump mechanism provides quick and independent switching due to the accumulation of elastic potential energy, which is transmitted at high speed to the contacts for arc extinction.

The switch - disconnectors S6 DC do not require external bridging links; thus reducing installation time and simplifying subsequent maintenance operations.

Functional and ergonomic handle

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

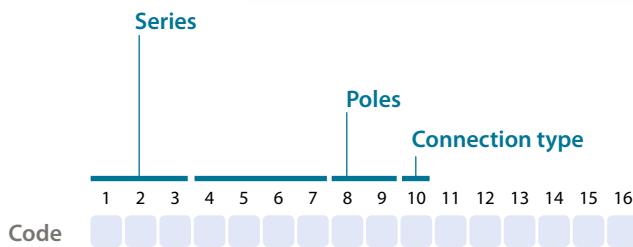


Relevant characteristics for photovoltaic installations

- U_i (V) Rated insulation voltage 1000 Vdc.
- U_{oc} (V) Open circuit voltage of the photovoltaic system.
- U_{ef} (V) Photovoltaic installation functioning voltage on load.
- I_{ef} (A) Installation working current under load.
- I_{sc} (A) Short-circuit current of the photovoltaic installation.
- In certain places of Pv Systems, inductive component must be considered (cables, inverter, etc.).
- The sizing of the switch must be done considering open circuit voltage as maximum operation voltage.
- It is necessary to comply with:
 $U_i \geq U_{oc}$
 We recommend to set U_i between 10 and 15% over U_{oc} .
 $U_e \geq U_{ef}$
 $I_e \geq I_{ef}$
 $I_e \geq I_{sc}$

Range codification:

The DC **ZFC|ZFV|S5|S5M|S5N|S6|S6N|S6R** series, are identified by a code that describes their most important characteristics as described below.



According to:

IEC 60947-1 y 3

UL508i

UL98B

RoHS



Testing and approvals:



series ZFC|ZFV



IP66

1 2 3 4 5 6
Z F C

1 2 3 4 5 6
Z F V

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

series S5 DC



1 2 3 4 5 6
S 5 -

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

series S5M DC



1 2 3 4 5 6
S 5 M

Back to back with operating mechanism in side,
arrangement to increase the number of available contacts.
Base mounting by screws.
Non polarized.
4P+4P 1000Vdc.
4P+4P 1500Vdc.

series S5N DC



1 2 3 4 5 6
S 5 N

Back to back with operating mechanism in front,
arrangement to increase the number of available contacts.
Base mounting with screws.
External or direct handles.
Non polarized.
4P+4P 1000Vdc.
4P+4P 1500Vdc.

series ZFC|ZFV



IP67

1 2 3 4 5 6
Z F C

1 2 3 4 5 6
Z F V

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

series S6 DC



1 2 3 4 5 6
S 6 -

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

series S6N DC



1 2 3 4 5 6
S 6 N

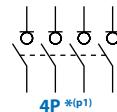
Back to back arrangement.
Different configurations to choose.
Base mounting by screws.
Non polarized.
Up to 1500Vdc.

series S6R DC



1 2 3 4 5 6
S 6 R

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

S5 DC
S5N DC

S5 switches 4 poles (40 - 3150A) (O - I)



Rated operational voltage Ue	Rated operational current le (A)	Size	Connection	4 pole (4P) *(p1) Code	External *(1) Code	Direct Code
900V DC21B	40	0	□	S5-01604PB0	DS-SA01	DS-SI01
	40		□	S5-01604PS0		
	100		□	S5-01254PRO		
	160		□	S5-02004PRO		
	250		□	S5-03154PRO		
	400	1	□	S5-04004PC0	DS-SA11	DS-SI11
	500		□	S5-06304PRO		
	630		□	S5-06302ER0		
	850		□	S5-12504PC0		
	1250		□	S5-12502EC0		
1000V DC21B	1250	2	□	S5-18004PS0	DS-LA21	DS-LI21
	1800		□	S5-18002ES0		
	2000		□	S5-20002ED0		
	2000	3	□	S5N20002ES0	DS-LA41	DS-LI41
	2500		□	S5N25002ES0		
	3150		□	S5N31502ES0		
	3150		□			
			□			
			□			
			□			

Manual handle

S6 DC

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



S6 DC

Rated operational voltage Ue	Rated operational current le (A)	Size	Connection	Diagram *(2) Code	External *(1) Code	Direct Code
500 Vdc 750Vdc DC21B 1000Vdc	125	1	□	S6-0125_S0	DS-SA11	DS-SI11
	160		□	S6-0160_S0		
	200		□	S6-0200_S0		
	250		□	S6-0250_S0		
	315		□	S6-0315_S0		
	400	2	□	S6-0400_D0	DS-LA21	DS-LI21
	500		□	S6-0500_S0		
	630		□	S6-0630_S0		
	250	1	□	S6-0250_S00L	DS-SA11	-
	400		□	S6-0400_S00L		

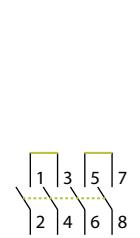
Manual handle

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

Rated operational voltage Ue	Rated operational current le (A)	Size	Connection	Code	Full details in page
1500V DC21B	16 25	00	□	ZFC16SMAH1NA40 ZFC25SMAH1NA40	214

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

Rated operational voltage Ue	Rated operational current le (A)	Size	Connection	Code	Full details in page
1500V DC21B	16	00	□	ZFC16VZVH4A40	214
	25		□	ZFC25VZVH4A40	
	32		□	ZFV32VZVH4A40	
	40		□	ZFV40VZVH4A40	
	55		□	ZFV55VZVH4A40	



A40

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

*(2) To complete the code according the specific diagram for IEC or UL versions and the possibility or not of grounding, see the full details pages of this catalogue. If you have any doubt about this, please do not hesitate to consult us.

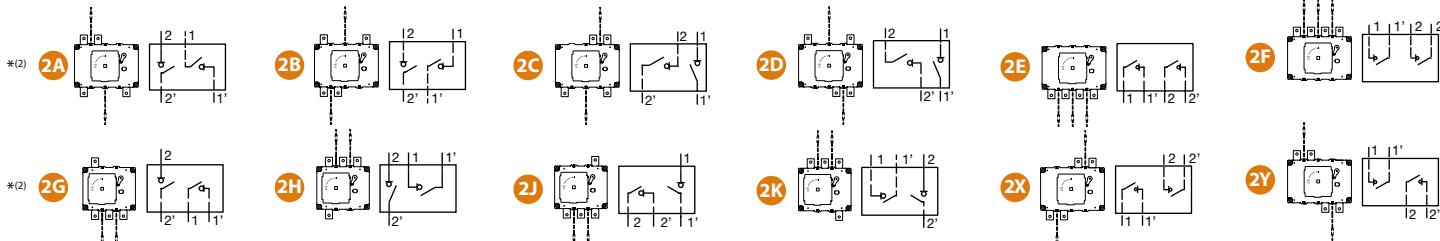
*(p1) To comply with the operation and electrical features, the bridging links must be assembled to the switch. See the full details pages of this catalogue, to choose the configuration needed and the possibility or not of grounding. If you have any doubt about this, please do not hesitate to consult us.

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



Shaft extensions *(3)			Bridging links *(p1)				Auxiliary contacts *(5)		Terminal protection		Terminal shrouds (2 units) *(4)		Full details in page
Size	□	Type 1 & 2 L Code *(e1)			Code	1NO+1NC Code	2NO+2NC Code	Connection	Code	Code	Code	Code	216
0	7	250 DS-EP04			DS-PI05 DS-PI01	D5LAU01	D5LAU02	□	DS-CU01	-	DS-CU10 DS-CU11 DS-CU18 DS-CU19	DS-CU10 DS-CU11 DS-CU18 DS-CU19	218
		387 DS-EP05			DS-PI11 DS-PI11 DS-PI11 DS-PI14	D5LAU01	D5LAU02	□	DS-CU12	DS-CU20 DS-CU21 DS-CU28 DS-CU29	DS-CU20 DS-CU21 DS-CU28 DS-CU29	220	
1	10	375 DS-EP14			DS-PI21	D5LAU01	D5LAU02	-	DS-CU22	DS-CU30 DS-CU31 DS-CU38 DS-CU39	DS-CU30 DS-CU31 DS-CU38 DS-CU39	DS-CU30 DS-CU31 DS-CU38 DS-CU39	222
		536 DS-EP15			DS-PI2D	D5LAU01	D5LAU02	-	-	DS-CU40 DS-CU41 DS-CU48 DS-CU49	DS-CU40 DS-CU41 DS-CU48 DS-CU49	DS-CU40 DS-CU41 DS-CU48 DS-CU49	
2	14	345 DS-EP23			DS-PI31	D5LAU01	D5LAU02	-	-	DS-CU50 DS-CU51 DS-CU58 DS-CU59	DS-CU50 DS-CU51 DS-CU58 DS-CU59	DS-CU50 DS-CU51 DS-CU58 DS-CU59	232
		535 DS-EP24			DS-PI3D	D5LAU01	D5LAU02	-	-	DS-CU60 DS-CU61 DS-CU68 DS-CU69	DS-CU60 DS-CU61 DS-CU68 DS-CU69	DS-CU60 DS-CU61 DS-CU68 DS-CU69	
3	14	485 DS-EP44			DS-PI41 (SS-18004P50)	D5LAU01	D5LAU02	-	-	DS-CU70 DS-CU71 DS-CU78 DS-CU79	DS-CU70 DS-CU71 DS-CU78 DS-CU79	DS-CU70 DS-CU71 DS-CU78 DS-CU79	234
		635 DS-EP45			DS-PI4D (SS-18002ES0-55-20002ED0)	D5LAU01	D5LAU02	-	-	DS-CU80 DS-CU81 DS-CU88 DS-CU89	DS-CU80 DS-CU81 DS-CU88 DS-CU89	DS-CU80 DS-CU81 DS-CU88 DS-CU89	
5 (S5N)	-	-			DS-PI51 + D5LPC45	D5LAU01	D5LAU02	-	-	DS-CU90 DS-CU91 DS-CU98 DS-CU99	DS-CU90 DS-CU91 DS-CU98 DS-CU99	DS-CU90 DS-CU91 DS-CU98 DS-CU99	236
		-			DS-PI51 + D5LPC45 (x2)	D5LAU01	D5LAU02	-	-	DS-CU100 DS-CU101 DS-CU108 DS-CU109	DS-CU100 DS-CU101 DS-CU108 DS-CU109	DS-CU100 DS-CU101 DS-CU108 DS-CU109	

Shaft extensions *(3)			Auxiliary contacts *(5)		Safety key lock device *(6)		Spacers (4 units)	Terminal lug (2 units)	Terminal shrouds (1 unit) *(4)			Phase barriers			Full details in page
Size	□	Type 1 & 2 L Code *(e1)	1NO+1NC Code	2NO+2NC Code	Simple Code *(e1)	Double Code *(e1)	Code	Code	Code	Code	Code	Code	Code	Code	234
1	10	375 DS-EP14	D5LAU01	D5LAU02	DS-CA11	DS-CE11	DR-EL11	-	DR-CU11	DR-CU12	DR-CU13	DR-SF11	DR-SF12	DR-SF13	
		536 DS-EP15													
2	14	345 DS-EP23	D5LAU01	D5LAU02	DS-CB21	DS-CF21	DR-EL21	-	DR-CU21	DR-CU22	DR-CU23	DR-SF21	DR-SF22	DR-SF23	238
		535 DS-EP24													
1	10	375 DS-EP14	D5LAU01	D5LAU02	-	-	DR-EL11	DR-TL11	DR-CU11	DR-CU12	DR-CU13	DR-SF11	DR-SF12	DR-SF13	236
		536 DS-EP15													
2	14	345 DS-EP23	D5LAU01	D5LAU02	-	-	DR-EL21	DR-TL22	DR-CU21	DR-CU22	DR-CU23	DR-SF21	DR-SF22	DR-SF23	240
		535 DS-EP24													

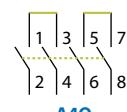


ZFV DC

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



2P	Rated operational voltage		Size	Connection	Code	Full details in page
	Ue	Rated operational current le (A)				
2P	1500 V DC21B / DC-PV1	32 40 55	00	□	ZFV32SMAH1A40 ZFV40SMAH1A40 ZFV55SMAH1A40	214



ZFC DC ZFV DC

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



2P	Rated operational voltage		Size	Connection	Code	Full details in page
	Ue	Rated operational current le (A)				
2P	1000 Vdc DC21B	16 32 55	00	□	ZFC16PFLH4A40 ZVF32PFLH4A40 ZVF55PFLH4A40	214



*(3) A standard shaft is included with the external handle.

*(4) One set for input or output. Only for switches □. See catalogue to choose the combination required.

*(5) To be used as signalling or control contacts - le = 16A (resistive loads) 4A (inductive loads) at 250 Vac.

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

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

Interlocking in other positions available upon request.

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

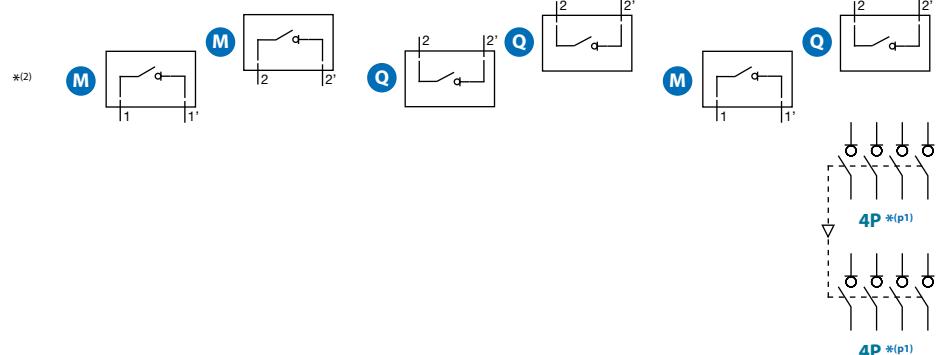


S6N DC

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



Rated operational voltage Ue	Rated operational current le (A)	Size	Connection	2P *(2)					
				Code MM	Code QQ	Code MQ	Code US	Code UU	Code SS
1500V DC21B	125	1		S6N0125MMS0	S6N0125QQS0	S6N0125MQS0	S6N0125USS0	S6N0125UU0	S6N0125SS0
	160			S6N0160MMS0	S6N0160QQS0	S6N0160MQS0	S6N0160USS0	S6N0160UU0	S6N0160SS0
	200			S6N0200MMS0	S6N0200QQS0	S6N0200MQS0	S6N0200USS0	S6N0200UU0	S6N0200SS0
	250			S6N0250MMS0	S6N0250QQS0	S6N0250MQS0	S6N0250USS0	S6N0250UU0	S6N0250SS0
	315			S6N0315MMS0	S6N0315QQS0	S6N0315MQS0	S6N0315USS0	S6N0315UU0	S6N0315SS0
	400			S6N0400MMS0	S6N0400QQS0	S6N0400MQS0	S6N0400USS0	S6N0400UU0	S6N0400SS0

S5M DC
S5N DC

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



S5N DC

Rated operational voltage Ue	Rated operational current le (A)	Size	Connection	4P + 4P *(p1)		External *(1)	Direct
				Code	Code		
1500V DC21B	500	2		S5M063044R0	DS-LA22	DS-LI22	DS-LI22
	630			S5M080044C0	DS-LA22	DS-LI22	DS-LI22
	800			S5M080044R0	DS-LA41	DS-LI41	DS-LI41
	1000			S5M125044C0	DS-LA41	DS-LI41	DS-LI41
	1250			S5N160044S0	DS-LA41	DS-LI41	DS-LI41
	1800			S5N180044S0	DS-LA41	DS-LI41	DS-LI41
1000V DC21B	2000	5 (S5N)		S5N20002ES0	DS-LA41	DS-LI41	DS-LI41
	2500			S5N25002ES0	DS-LA41	DS-LI41	DS-LI41
	3150			S5N31502ES0	DS-LA41	DS-LI41	DS-LI41

Manual handle

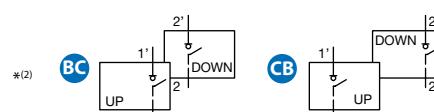


S6R DC

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



Rated operational voltage Ue	Rated operational current le (A)	Size	Connection	2P *(2)	
				Code BC	Code CB
1500Vdc IEC	160	1		S6R0160BCS0	S6R0160CBS0
	200			S6R0200BCS0	S6R0200CBS0
	250			S6R0250BCS0	S6R0250CBS0
	315			S6R0315BCS0	S6R0315CBS0
	400			S6R0400BCS0	S6R0400CBD0
	250			S6R0250BCS00L	S6R0250CBS00L
1500Vdc UL98B	320	1		S6R0320BCS00L	S6R0320CBS00L
	400			S6R0400BCD00L	S6R0400CBD00L



SERPA TEC

PATENTED TECHNOLOGY

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

*(2) See the full details pages in this catalogue to see the possibility or not of grounding the switch selected. If you have any doubt about this, please do not hesitate to consult us.

*(p1) To comply with the operation and electrical features, the bridging links must be assembled to the switch. See the full details pages of this catalogue, to choose the configuration needed and the possibility or not of grounding. If you have any doubt about this, please do not hesitate to consult us.

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



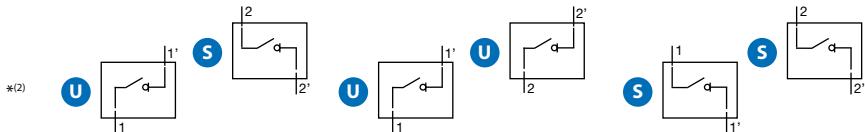
Manual handle

Auxiliary contacts *(2)



Full details in page

Size	External *(1)	Direct	1NO+1NC	2NO+2NC	Code
	Code	Code	Code	Code	
1	DS-SA11	DS-SI11	D5LAU01	D5LAU02	242 244



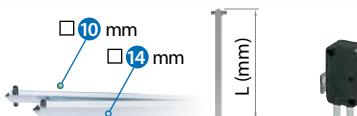
Bridging links *(p1)

Auxiliary contacts *(2)



Full details in page

Size	Code	1NO+1NC	2NO+2NC	Code
		Code	Code	
2	DS-PI230L	DS-AU11	DS-AU12	226
	DS-PI2D			
3	DS-PI3D	DS-AU11	DS-AU12	228
	DS-PI430U			
4 (S5N)	DS-PI4D	D5LAU01	D5LAU02	230
	DS-PI51 + D5LPC45			
	DS-PI51 + D5LPC45			
5 (S5N)	DS-PI4D + D5LPC45 (x2)	D5LAU01	D5LAU02	232



Manual handle



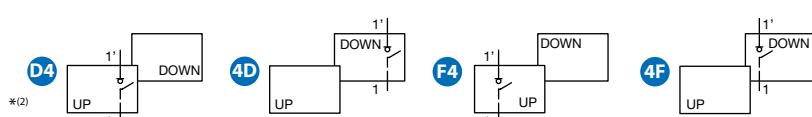
Shaft extensions *(4)

Auxiliary contacts *(2)



Full details in page

Size	1P *(2)				Panel *(3)	Code	Type 1 & 2	1NO+1NC	2NO+2NC	Code	Code
	Code D4	Code 4D	Code F4	Code 4F			L	Code *(e1)			
1	S6R0160D4S0	S6R01604DS0	S6R0160F4S0	S6R01604FS0	DS-SA11	375	DS-EP14	D5LAU01	D5LAU02	246	248
	S6R0200D4S0	S6R02004DS0	S6R0200F4S0	S6R02004FS0							
1	S6R0250D4S0	S6R02504DS0	S6R0250F4S0	S6R02504FS0							
	S6R0315D4S0	S6R03154DS0	S6R0315F4S0	S6R03154FS0							
1	S6R0400D4D0	S6R04004DD0	S6R0400F4D0	S6R04004FS0	536	DS-EP15	D5LAU01	D5LAU02	246	248	248
	S6R0250D4S00L	S6R02504DS00L	S6R0250F4S00L	S6R02504FS00L							
1	S6R0320D4S00L	S6R03204DS00L	S6R0320F4S00L	S6R03204FS00L							
	S6R0400D4D00L	S6R04004DD00L	S6R0400F4D00L	S6R04004FS00L							



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

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

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

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



ZFC | ZFV Switch - disconnector for DC current 2P

Size 00

A 16|25|32|40|55



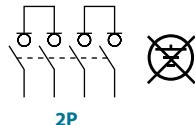
600 - 1000 - 1500 Vdc



	CODE 2P
16A	ZFC16SMAH1NA40
25A	ZFC25SMAH1NA40
32A	ZFV32SMAH1A40
40A	ZFV40SMAH1A40
55A	ZFV55SMAH1A40

	CODE 2P
16A	ZFC16VZVH4A40
25A	ZFC25VZVH4A40
32A	ZFV32VZVH4A40
40A	ZFV40VZVH4A40
55A	ZFV55VZVH4A40

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

DO NOT USE IN
GROUNDED INSTALLATIONS

Technical information



c UL LISTED

According to IEC 60947-3
DC-PV1
UL508i

IEC 60947-3

	le 2 Poles in series	le 4 Poles in series	IEC	1000Vdc	A	ZFC16	ZFC25	ZFV32	ZFV40	ZFV55
				1500Vdc	A	9 DC21A	11 DC21A	13 DC21B	29 DC21B	36 DC21B
				1000Vdc	A	16 DC21A	25 DC21A	32 DC21B	40 DC21B	55 DC21B
				1500Vdc	A	16 DC21A	20 DC21A	32 DC21B	40 DC21B	55 DC21B
				1000Vdc	A	10 DCPV1	11,5 DCPV1	13 DCPV1	29 DCPV1	36 DCPV1
				1500Vdc	A	3 DCPV1	5 DCPV1	6 DCPV1	7,5 DCPV1	10 DCPV1
				1000Vdc	A	16 DCPV1	25 DCPV1	32 DCPV1	40 DCPV1	55 DCPV1
				1500Vdc	A	16 DCPV1	25 DCPV1	32 DCPV1	40 DCPV1	55 DCPV1

Rated conditional short-circuit current	kAeff	5	5	5	10	10
Max. fuse size	gL (gG)	A	40	63	80	125
Maximum cable cross sections (included jumper)						
Solid or stranded	mm ²	1,5 - 10	1,5 - 10	4 - 16	2,5 - 25	2,5 - 25
Flexible	mm ²	1,5 - 6	1,5 - 6	4 - 10	2,5 - 16	2,5 - 16
Flexible (+ multicore cable end)	mm ²	1,5 - 6	1,5 - 6	4 - 10	1,5 - 16	1,5 - 16
Size of terminal screw	M3,5 Pz1	M3,5 Pz1	M4 Pz2	M5Pz2	M5Pz2	
Tightening torque	Nxm	1,4	1,4	1,7 - 1,8	2,5 - 2,8	2,5 - 2,8

UL508i LISTED E362647	2 Poles in series	UL	600Vdc	A	ZFC16	ZFC25	ZFV32	ZFV40	ZFV55
			1000Vdc	A	-	-	-	16	20
Ampere-Rating "General use"	4 Poles in series	UL	600Vdc	A	16	25	32	40	55
			1000Vdc	A	-	-	-	40	55
Fuse size (RK5) Industrial Control Switch	5 kA / 600 V		A	40	60	80	-	-	
Fuse size (RK5) Industrial Control Switch	5 kA / 1000 V		A	-	-	-	160	160	
Maximum cable cross sections (included jumper)									
Solid or stranded	AWG	16 - 10	16 - 10	12 - 10	16 - 10	16 - 10			
Flexible	AWG	20 - 6	20 - 6	12 - 6	14 - 4	14 - 4			
Flexible (+ multicore cable end)	AWG	20 - 6	20 - 6	12 - 6	-	-			
Size of terminal screw	M3,5 Pz1	M3,5 Pz1	M4 Pz2	M5Pz2	M5Pz2	M5Pz2			
Tightening torque	Nxm	1,7 - 1,8	1,7 - 1,8	1,7 - 1,8	2,5 - 2,8	2,5 - 2,8			

Accessories



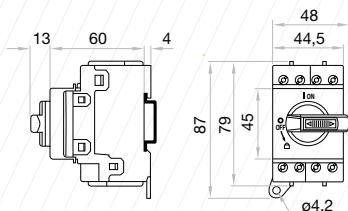
» **Insulated bridging links** included

CODE ZTC-B1 16-25 A
ZFV-B1 32 A
ZFV-B2 40-55 A

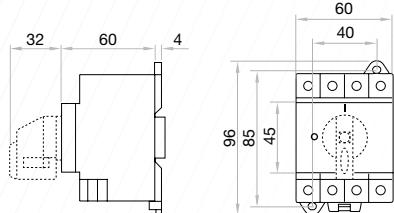


Dimensions (mm)

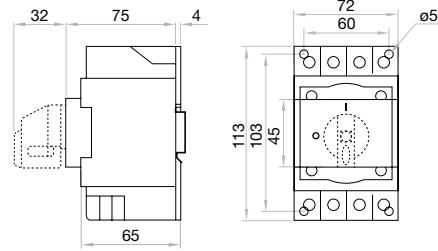
ZFC16-25



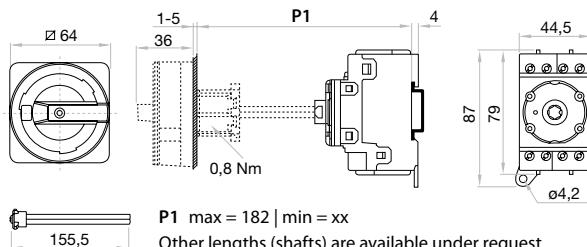
ZFV32



ZFV-40-55

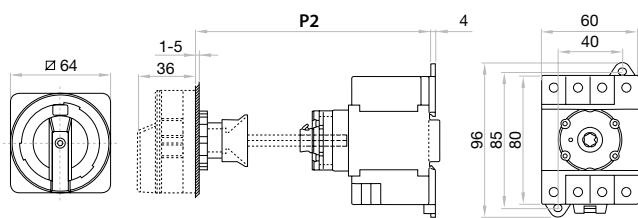


ZFC16-25

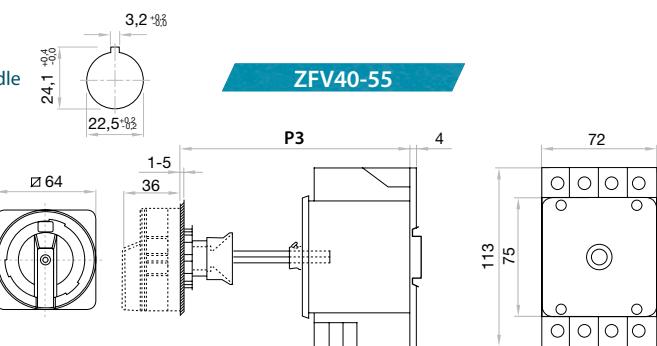


Door drilling for external handle

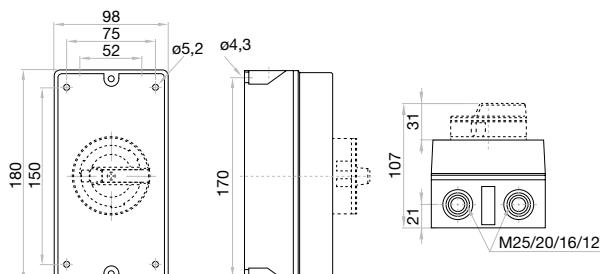
ZFV32



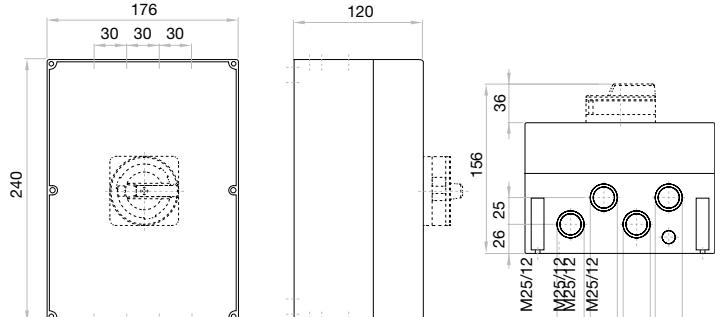
ZFV40-55



ZFC16 - ZFV32



ZFV55





S5 DC Switch - disconnector for DC current 4P

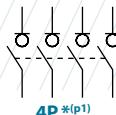
Size 0	
A	40
	900 Vdc



CODE - 40A S5-01604PB0



CODE - 40A S5-01604PS0



4P *(p1)

tests:



Technical information

According to IEC 60947-1
IEC 60947-3

40			
Rated thermal current in ambient at	I _{th}	40° C	A 40
		50° C	A 40
		60° C	A 40
Rated insulation voltage DC20	U _i	V	1000
Rated impulse withstand voltage	U _{imp}	kV	8
Rated operational current *(1) DC21B	I _e	U _e	A 40
		900 Vdc	A 40

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

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

Short - circuit behaviour

Short - circuit making capacity *(2)	I _{cm}	kA (peak)	13
Rated short-time withstand current	I _{cw}	kA rms	7
(1sec.)			
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		10000
Maximum weight (without bridging links)	Kg		1



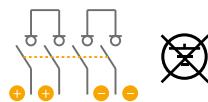
DO NOT USE IN GROUNDED INSTALLATIONS

Connection diagram

Connection diagram



A

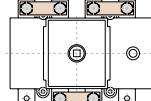
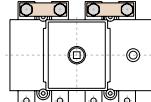
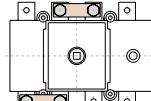


B

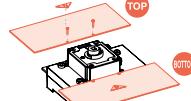
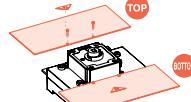
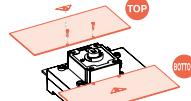


C

Bridging links *(p1)



Terminal protection





Accessories



» Direct handle

CODE DS-SI01



»



» External handle included shaft*(e1)

IP65

CODE DS-SA01



» External handle without shaft

IP65

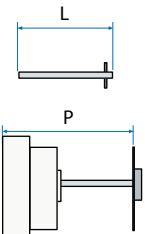
CODE DS-SA03



» Terminal protection

CODE DS-CU01

(1 unit for input or output)



» Shafts

Standard shaft included *(e1)

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



Shaft extensions

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

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



» Bridging links*(p1)

A **B** CODE DS-PI05 (2 units)

A **B** CODE DS-PI01 (2 units)

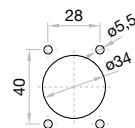
C CONSULT

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

» DIN rail mounting

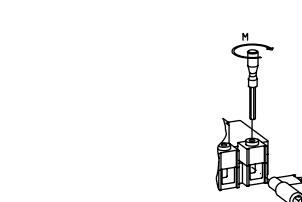
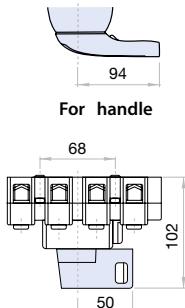
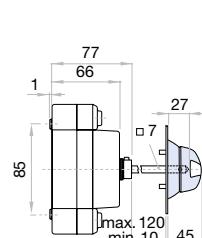
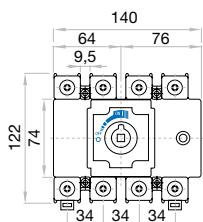
CODE DS-DN01

(1 kit)

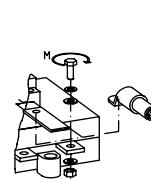
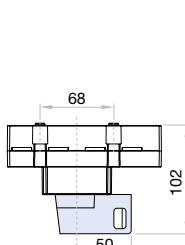
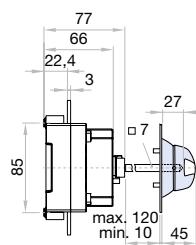
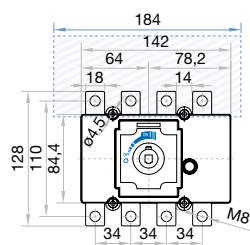


Dimensions (mm)

Door drilling for external handle



S max (Cu) mm ²	M Nm
95	4



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



S5 DC Switch - disconnector for DC current 4P

Size 1

A 100|160|250|400



1000 Vdc



CODE-100A S5-01254PRO



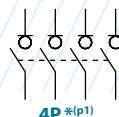
CODE-160A S5-02004PRO



CODE-250A S5-03154PRO



CODE-400A S5-04004PC0



4P *(p1)

tests:

Technical information

According to IEC 60947-1
IEC 60947-3

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

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

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

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

DO NOT USE IN
GROUNDED INSTALLATIONS

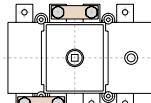
Connection diagram

Connection diagram

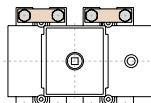


A

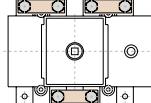
Bridging links *(p1)



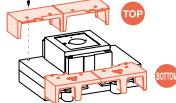
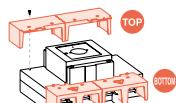
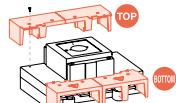
B



C



Terminal shrouds





Accessories



» Direct handle

CODE DS-SI11



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

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

» External handle included shaft*(e1)

IP65

CODE DS-SA11



» External handle without shaft

IP65

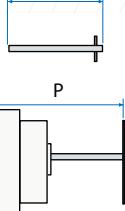
CODE DS-SA14



» Terminal protection

CODE DS-CU12

□ (1 unit for input or output)



» Shafts

Standard shaft included *(e1)

L (mm) | P (mm)

227 | 103...256



» Terminal shrouds (2 units) □

A	B	C
TOP DS-CU18	DS-CU10	DS-CU10
BOTTOM DS-CU19	DS-CU11	DS-CU18

Shaft extensions

Type 1

L (mm) | P (mm)

375 | 103...415

CODE DS-EP14

Type 2

L (mm) | P (mm)

536 | 103...576

CODE DS-EP15



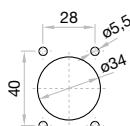
» Bridging links*(p1)

A B □ CODE DS-PI11 (2 units)

A B □ CODE DS-PI14 (2 units)

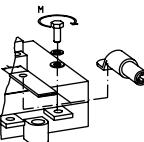
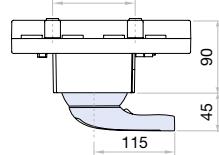
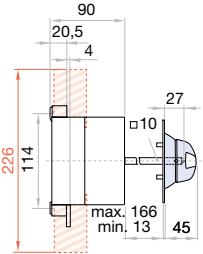
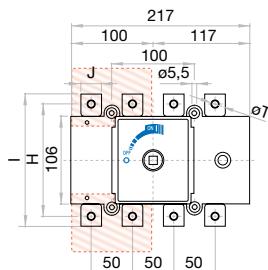
C CODE CONSULT

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



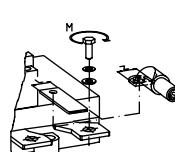
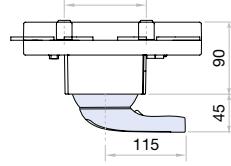
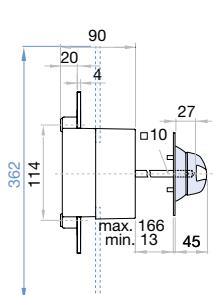
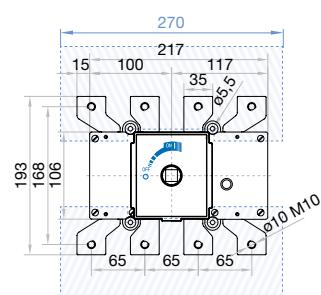
Dimensions (mm)

Door drilling for external handle



H	I	J	øT
100A	130	150	20 M8
160A	143	167	25 M10
250A			

S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M Nxm
100A	185	7	13 M8
160A	185	7	13 M10
250A			



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



S5 DC

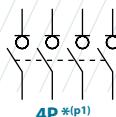
Switch - disconnector for DC current 4P

Size 2	
A	500 630
	1000 Vdc



CODE-500A S5-06304PRO

CODE-630A S5-06302ERO



Technical information



tests:



According to IEC 60947-1
IEC 60947-3

		500	630
Rated thermal current in ambient at	I _{th}	40° C A 500 630	
		50° C A 500 630	
		60° C A 400 500	
Rated insulation voltage DC20	U _i	V 1500 1500	
Rated impulse withstand voltage	U _{imp}	kV 12 12	
Rated operational current *(1) DC21B	I _e	Ue 1000 Vdc A 500 630	

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

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

	500	630
Short - circuit behaviour		
Short - circuit making capacity *(2)	I _{cm} kA (peak) 26	26
Rated short-time withstand current (1sec.)	I _{cw} kA rms 16	16
Number of mechanical operations (according to the standards, for other values please consult)	Cycles 5000	5000
Maximum weight (without bridging links)	Kg 4,5	4,5



DO NOT USE IN GROUNDED INSTALLATIONS

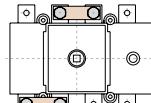
Connection diagram

Connection diagram



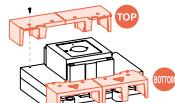
A

Bridging links *(p1)

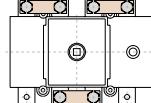
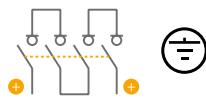


B

Terminal shrouds



C





Accessories



» Direct handle

CODE DS-LI21



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

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

» External handle included shaft*(e1)

IP65

CODE DS-LA21



» External handle without shaft

IP65

CODE DS-LA24



» Terminal protection

CODE DS-CU22

(1 unit for input or output)



» Terminal shrouds (2 units - only for 500A)

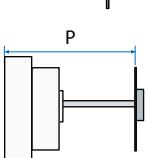
	A	B	C
TOP	DS-CU28	DS-CU20	DS-CU20
BOTTOM	DS-CU29	DS-CU21	DS-CU28



» Shafts

Standard shaft included *(e1)

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



Shaft extensions

Type 1

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

Type 2

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

» Bridging links*(p1)

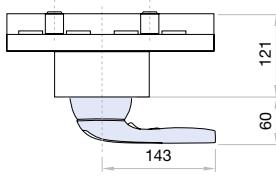
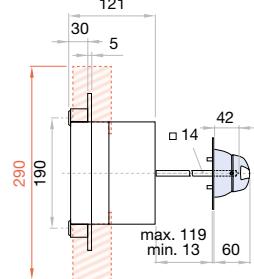
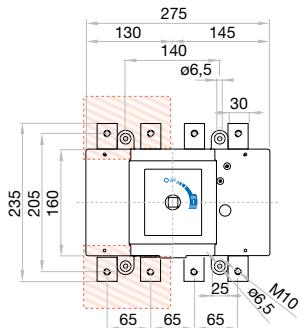
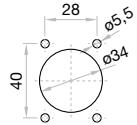
(A)	(B)	500A CODE DS-PI21 (2 units)
	(C)	CODE CONSULT

(B)	630A CODE DS-PI2D (2 units)
-----	-----------------------------

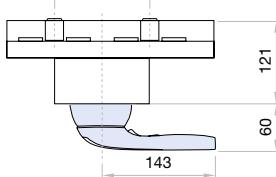
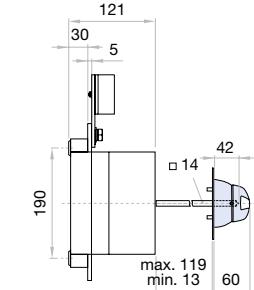
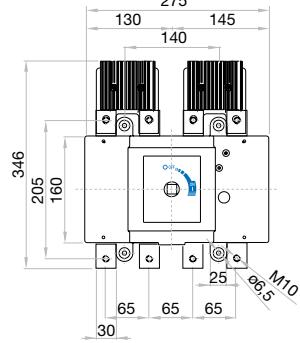
*(p1) To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.

Dimensions (mm)

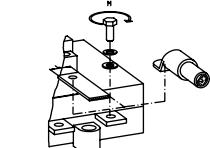
Door drilling for external handle



500 A



630 A



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



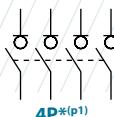
S5 DC

Switch - disconnector for DC current 4P

Size 3	
A	850 1250
	1000 Vdc



CODE-850A S5-12504PC0 CODE-1250A S5-12502EC0



Technical information



tests:



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	Ui	V	1500
Rated impulse withstand voltage	Uimp	kV	12
Rated operational current *(1) DC21B	Ie	A	850
			1250

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

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

	850	1250
Short - circuit behaviour		
Short - circuit making capacity *(2)	Icm kA (peak)	60 60
Rated short-time withstand current (1sec.)	Icw kA rms	25 25
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000 3000
Maximum weight (without bridging links)	Kg	7,6 7,6



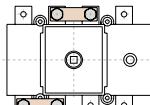
DO NOT USE IN GROUNDED INSTALLATIONS

Connection diagram

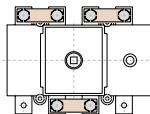
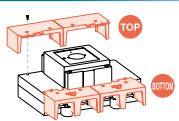
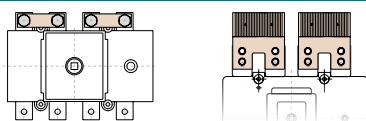
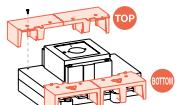
Connection diagram



Bridging links *(p1)



Terminal shrouds





Accessories



» Direct handle

CODE DS-LI31



» External handle included shaft*(e1)

IP65

CODE DS-LA31



» External handle without shaft

IP65

CODE DS-LA33



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

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

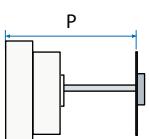
» Terminal shrouds (2 units - only for 850A)

	A	B	C
TOP	DS-CU38	DS-CU30	DS-CU38
BOTTOM	DS-CU39	DS-CU31	DS-CU38



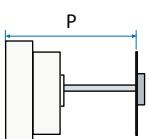
» Shafts

Standard shaft included *(e1)
 L (mm) | P (mm)
 186 | 145...242



Shaft extensions
 Type 1

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



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

» Bridging links*(p1)

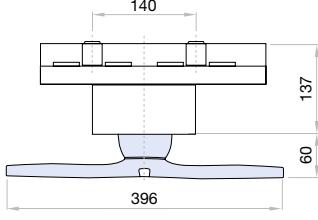
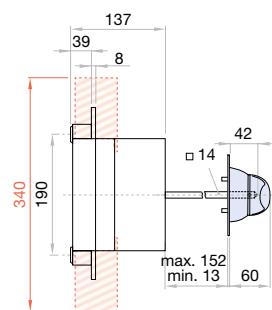
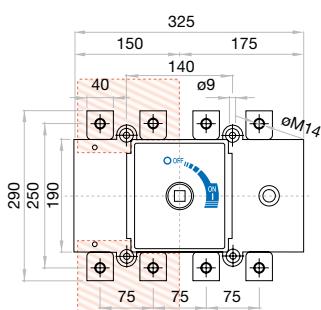
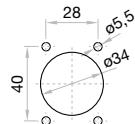
(A) 850A CODE DS-PI31 (2 units)
 (B) 1250A CODE DS-PI3D (2 units)
 (C) CODE CONSULT



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

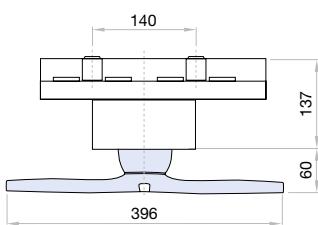
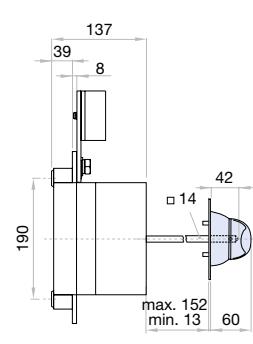
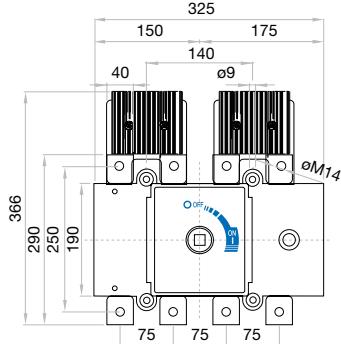
Dimensions (mm)

Door drilling for external handle



850 A

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



1250 A



S5 DC

Switch - disconnector for DC current 4P

Size 4

A 1250|1800|2000



1000 Vdc



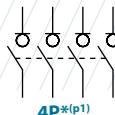
CODE-1250A S5-18004PS0



CODE-1800A S5-18002ES0



CODE-2000A S5-20002ED0



4P*(p1)

Technical information



tests:



According to IEC 60947-1
IEC 60947-3

		1250	1800	2000
Rated thermal current in ambient at	40° C	A	1250	1800
	50° C	A	1250	1620
	60° C	A	1250	1400
Rated insulation voltage DC20	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12
Rated operational current *(1) DC21B	Ie	Ue		
		1000 Vdc	A	1250 1800 2000

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

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

	1250	1800	2000
Short - circuit behaviour			
Short - circuit making capacity *(2)	Icm	kA (peak)	60 60 60
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000 3000 3000	
Maximum weight (without jumpers)	Kg	20,8 20,8 20,8	



DO NOT USE IN GROUNDED INSTALLATIONS

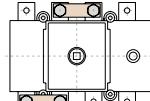
Connection diagram

Connection diagram

A S5-18004PS0



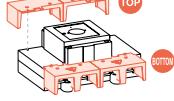
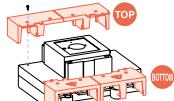
Bridging links*(p1)

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

C S5-18004PS0



Terminal shrouds





Accessories



» Direct handle

CODE DS-LI41



» External handle included shaft^(*)

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4Xy12
CODE DS-LA41



» External handle without shaft

IP65 | UL50E/NEMA 250
Types: 1, 3R, 4, 4Xy12
CODE DS-LA43



» Auxiliary contacts

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

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



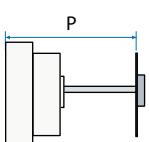
» Terminal shrouds (2 units)

A TOP	DS-CU48	DS-CU40	DS-CU40
B BOTTOM	DS-CU49	DS-CU41	DS-CU48



» Shafts

Standard shaft included ^(*)
L (mm) P (mm)
239 235...400



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

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



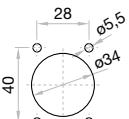
» Bridging links^(*)

For S5-18004PS0 **A** **B** CODE DS-PI41 (2 units)
C CONSULT

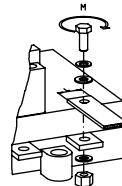
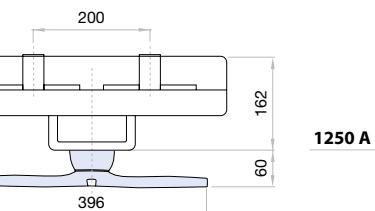
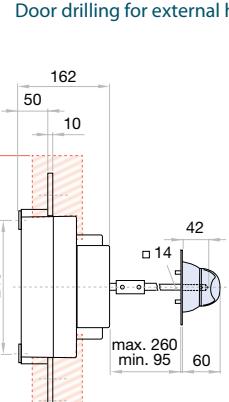
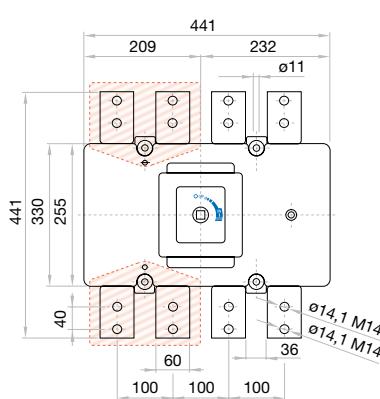
For S5-18002ES0
S5-20002ED0 **B** CODE DS-PI4D (2 units)

C CONSULT

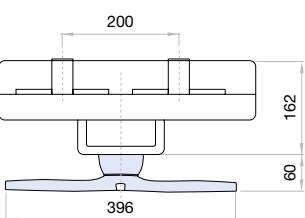
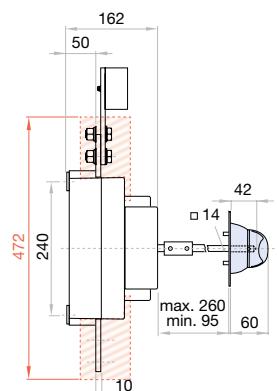
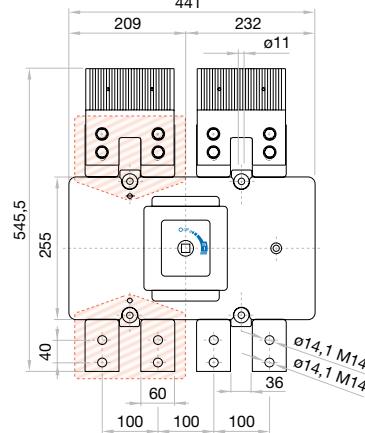
^(*)To meet the operation and electrical features, the product installed must be incorporate these bridging links.
Please consult.



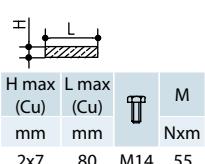
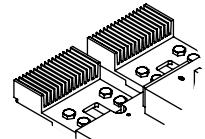
Dimensions (mm)



1250 A



1800 A
2000 A



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



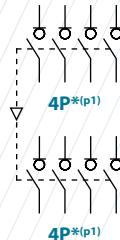
S5M DC Switch - disconnector for DC current 4P + 4P

Size 2	
A	500 630
1500 Vdc	



CODE-500A
S5M063044R0

CODE-630A
S5M080044C0



Technical information



tests:



According to IEC60947-1
IEC60947-3

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

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

Short - circuit behaviour

Maximum cut - off current *(1)	Icm	kA (peak)	26
Short - time withstand current (1 sec.)	Icw	kA rms	16

Mechanical features

Number of mechanical operations (according to the standards, for other values please consult)	Cycles	5000
Maximum weight (without jumpers)	Kg	13



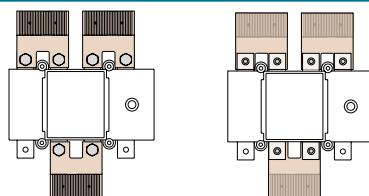
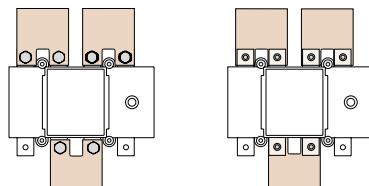
DO NOT USE IN
GROUNDED INSTALLATIONS

Connection diagram

Connection diagram



Bridging links*(p1)
Front switch Rear switch





Accessories



» Direct handle

CODE DS-LI22



» Auxiliary contacts

1NO+1NC CODE DS-AU11

2NO+2NC CODE DS-AU12

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

» External handle included shaft*(e1)

IP65

CODE DS-LA22



» Bridging links*(p1)

A 500A CODE DS-PI230L (2 units)

B 630A CODE DS-PI2D (2 units)

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

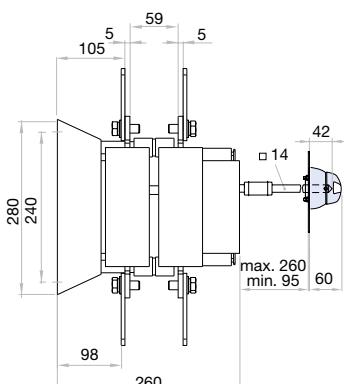
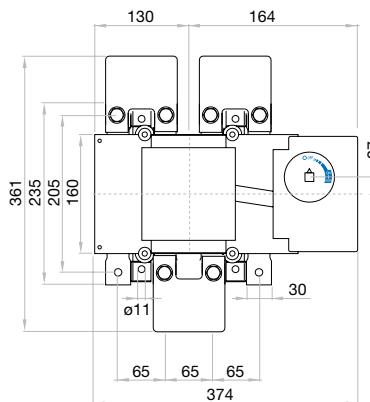
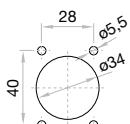
» Shafts

Standard shaft included *(e1)

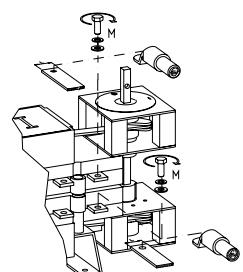
L (mm) | P (mm)
239 | 325...490

Dimensions (mm)

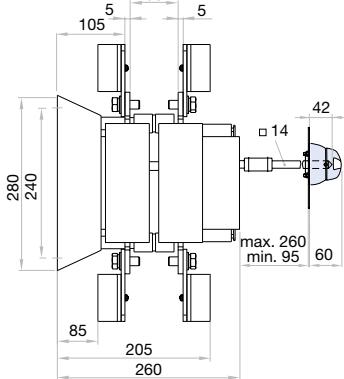
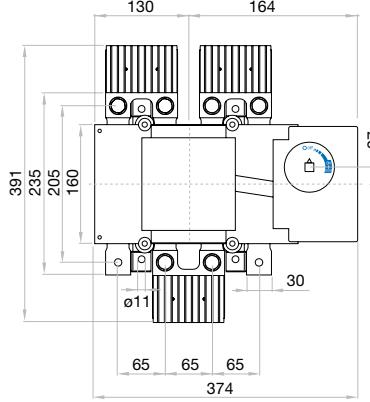
Door drilling for external handle



500A



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



630A



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

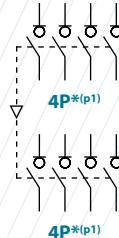
Size 3	
A	800 1000
	1500 Vdc



CODE-800A
S5M080044R0



CODE-1000A
S5M125044C0



Technical information



According to IEC60947-1
IEC60947-3

		800	1000
Rated thermal current in ambient at	I _{th}	40°C A 800	1000
		50°C A 800	1000
		60°C A 800	1000
Rated insulation voltage DC20	U _i	V 1500	1500
Rated impulse withstand voltage	U _{imp}	kV 12	12
Rated operational current DC21B	I _e	U _e 1500 Vdc 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 jumpers)	Kg	28,6



DO NOT USE IN
GROUNDED INSTALLATIONS

Connection diagram

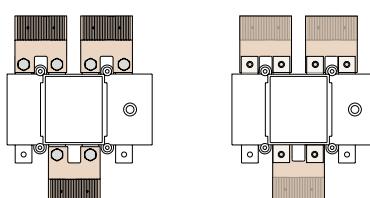
Connection diagram



Bridging links*(p1)

Front switch

Rear switch





Accessories



» Direct handle

CODE DS-LI41



» External handle included shaft*(e1)

IP65

CODE DS-LA41



» External handle without shaft

IP65

CODE DS-LA43



» Auxiliary contacts

1NO+1NC CODE DS-AU11

2NO+2NC CODE DS-AU12

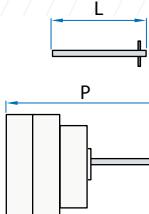
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Bridging links*(p1)

CODE DS-PI3D (2 units)

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



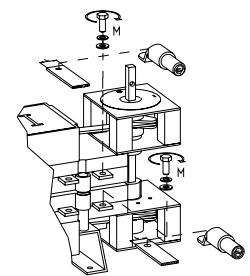
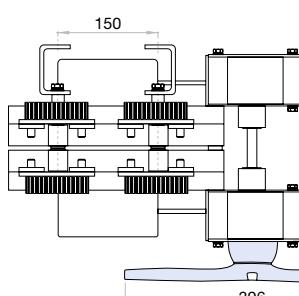
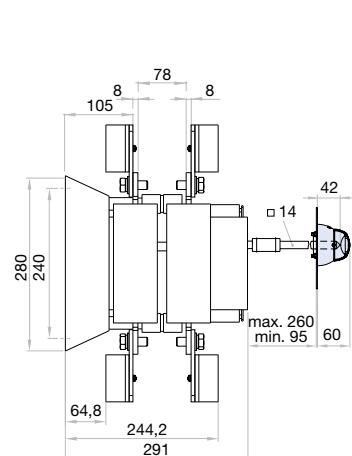
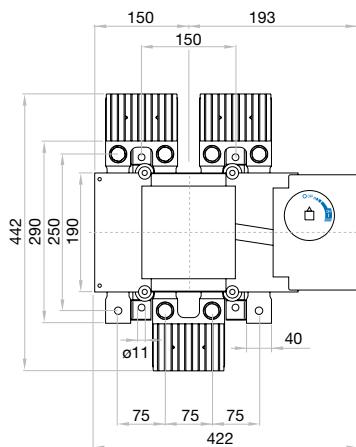
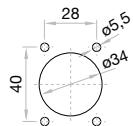
» Shafts

Standard shaft included *(e1)

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

Dimensions (mm)

Door drilling for external handle



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



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

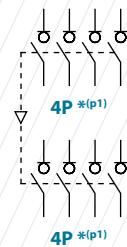
Size 4	
A	1250 1800

1500 Vdc



CODE-1250A S5N160044S0

CODE-1800A S5N180044S0



Technical information



According to IEC 60947-1
IEC 60947-3

		1250	1800
Rated thermal current in ambient at	I _{th}	40° C A 1250	1800
		50° C A 1250	1800
		60° C A 1250	1800
Rated insulation voltage DC20	Ui	V 1500	1500
Rated impulse withstand voltage	U _{imp}	kV 12	12
Rated operational current DC21B *(1)	I _e	Ue 1500 Vdc	A 1250 1800

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

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

Short - circuit behaviour

Short - circuit making capacity *(2)	I _{cm}	kA (peak)	60
Short - time withstand current (1 sec.)	I _{cw}	kA rms	50

Mechanical features

Number of mechanical operations (according to the standards, for other values please consult)	Cycles	600
Maximum weight (without bridging links)	Kg	44,3



DO NOT USE IN
GROUNDED INSTALLATIONS

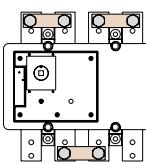
Connection diagram

Connection diagram

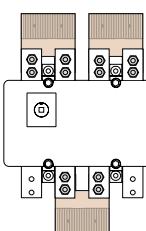
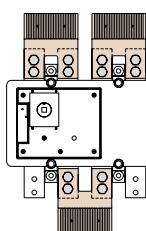
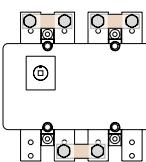


Bridging links *(p1)

Front switch



Rear switch





Accessories



» Direct handle

CODE DS-LI41



» External handle included shaft *(e1)

IP65

CODE DS-LA41



» External handle without shaft

IP65

CODE DS-LA43



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

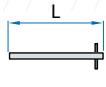
Ie = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac

» Bridging links*(p1)

A 1250A CODE DS-PI430U (3 units)

B 1800A CODE DS-PI4D (2 units)

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

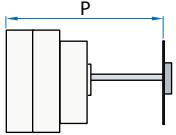


» Shafts

Standard shaft included *(e1)

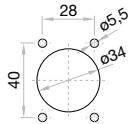
L (mm) | P (mm)

239 | 420 ... 580

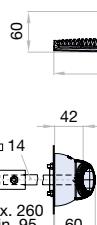
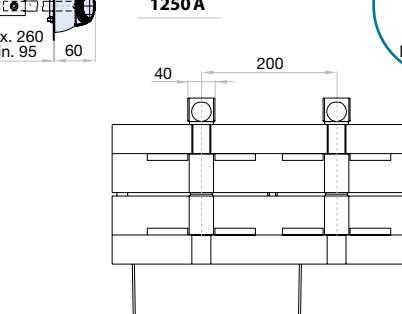
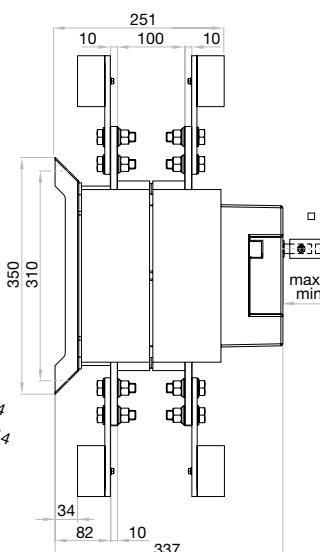
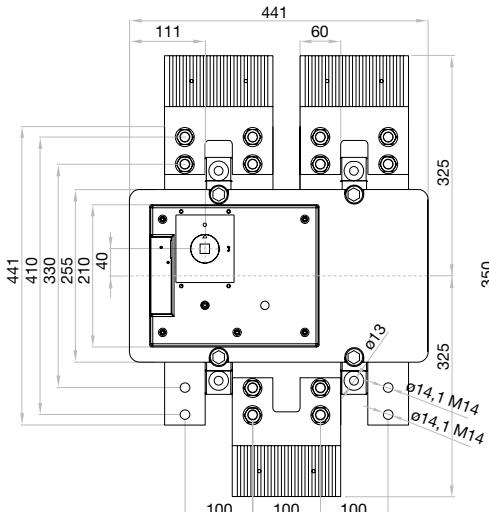
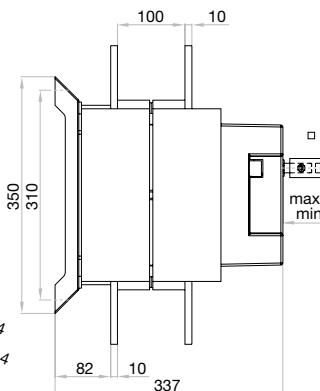
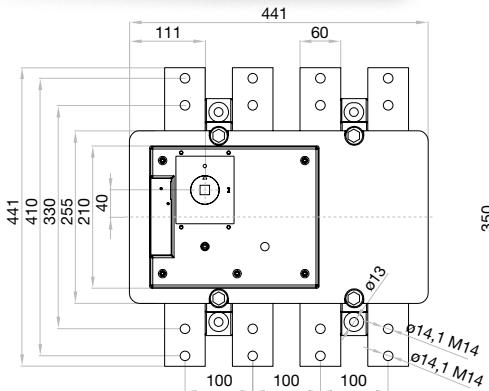
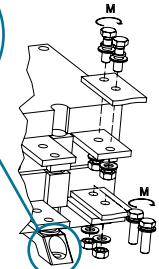
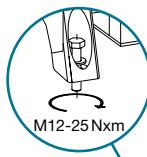


Dimensions (mm)

Door drilling for external handle



1250 A



1800 A

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



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

Size 5

A 2000|2500|3150



1000 Vdc

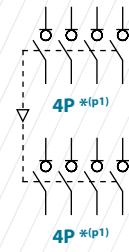


CODE-2000A S5N20002ES0



CODE-2500A S5N25002ES0

CODE-3150A S5N31502ES0

**Technical information**

According to IEC60947-1
IEC60947-3

		2000	2500	3150
Rated thermal current in ambient at	40°C	A	2000	2500
	50°C	A	2000	2500
	60°C	A	2000	2500
Rated insulation voltage DC20	Ui	V	1500	1500
Rated impulse withstand voltage	Uiimp	kV	12	12
Rated operational current DC21B *(1)	Ue			
	le	1000 Vdc	A	2000
				2500
				3150

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

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

Short - circuit behaviour

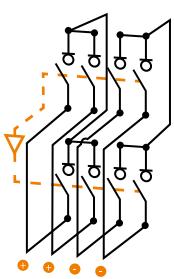
Short - circuit making capacity *(2)	Icm	kA (peak)	60
Rated short-time withstand current (1sec.)	Icw	kA rms	50

Mechanical features

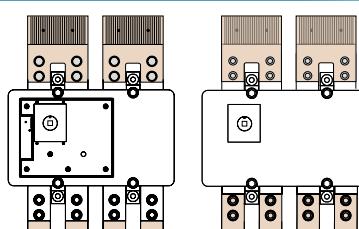
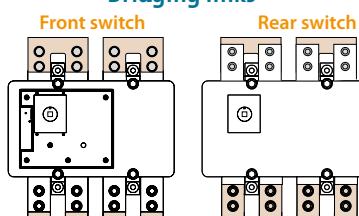
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	600
Maximum weight (without bridging links)	Kg	55



DO NOT USE IN GROUNDED INSTALLATIONS

Connection diagram**Connection diagram**(A) S5N20002ES0
S5N25002ES0

(B) S5N31502ES0

**Bridging links *(p1)**



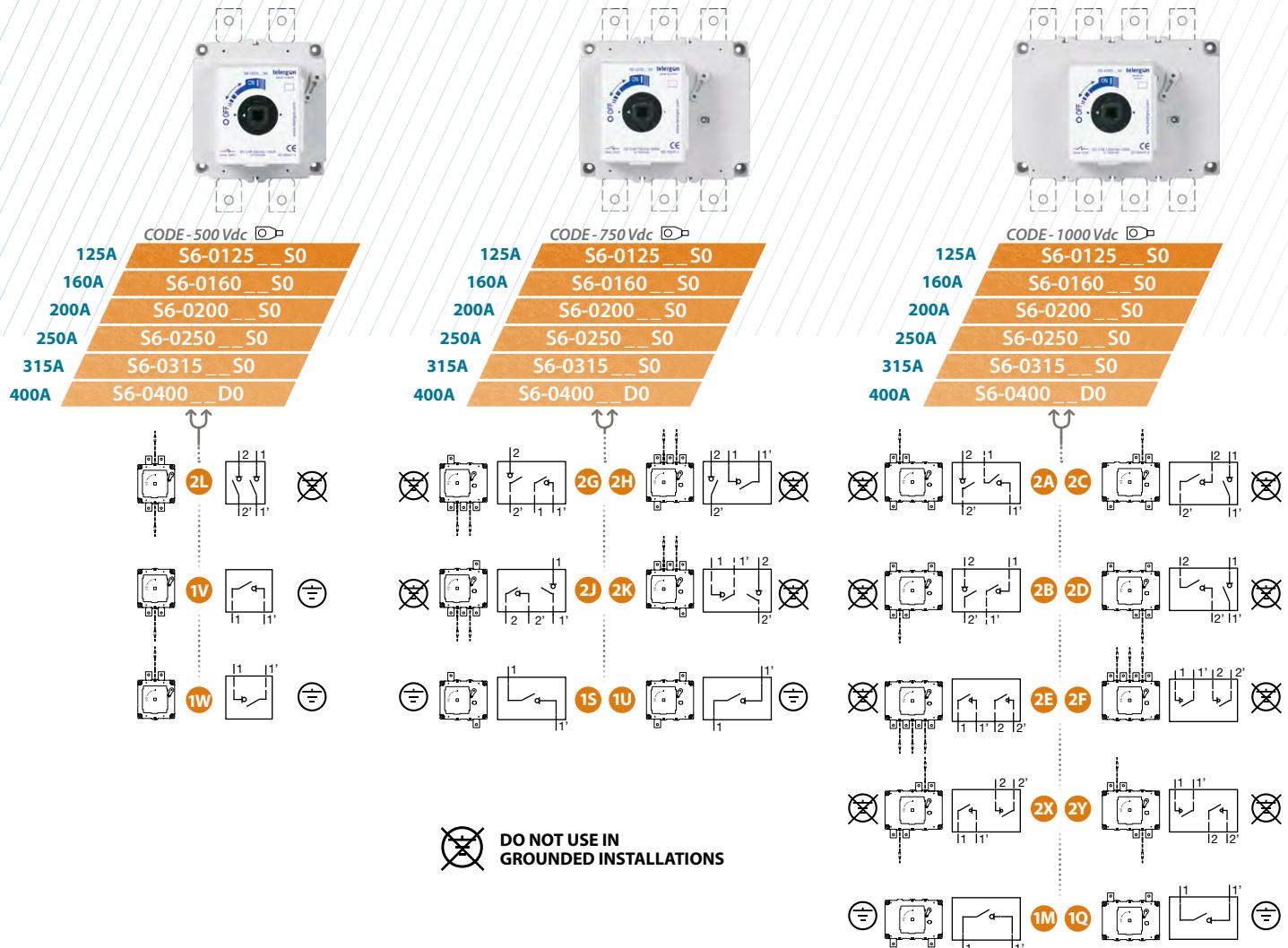
S6 DC Switch - disconnector for DC current 1P - 2P

Size 1

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



500 - 750 - 1000Vdc



Technical information



tests:



According to IEC 60947-1
IEC 60947-3

		125	160	200	250	315	400
Rated thermal current in ambient at	I _{th}	40° C	A 125 160 200 250 315 400				
		50° C	A 125 160 200 250 315 400				
		60° C	A 125 160 200 250 315 400				
Rated insulation voltage (DC)	U _i	V	1500 1500 1500 1500 1500 1500				
Rated impulse withstand voltage	U _{imp}	kV	12 12 12 12 12 12				
Rated operational current ⁽¹⁾	I _e	Code 500Vdc	A 125 160 200 250 315 400				
		Code 750Vdc	A 125 160 200 250 315 400				
		Code 1000Vdc	A 125 160 200 250 315 400				

	125	160	200	250	315	400
Short - circuit behaviour						
Rated short-circuit making capacity ⁽²⁾	I _{cm}		kA (peak)	10	10	10
Rated short-time withstand current (1sec)	I _{cw}		kA rms	10	10	10
Mechanical features						
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	8000 8000 8000 8000 8000 5000				
Maximum weight		Consult according to code				

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



Accessories



» Direct handle

CODE DS-SI11



» Terminal shrouds

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



» External handle included shaft*(e1)

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

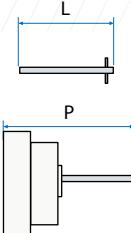
IP65

CODE DS-SA14



» Spacers

CODE DR-EL11 (4 units)



» Shafts

Standard shaft included *(e1)
 L (mm) | P (mm)
 227 | 103...256



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

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



» Auxiliary contacts

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

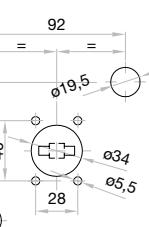
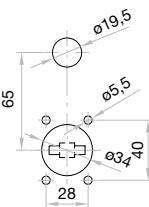
Ie = 16 A (resistive loads)
 4 A (inductive loads) at 250 Vac.

» Safety key lock device

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

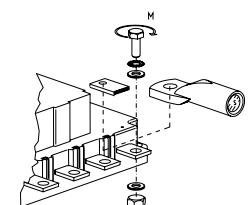
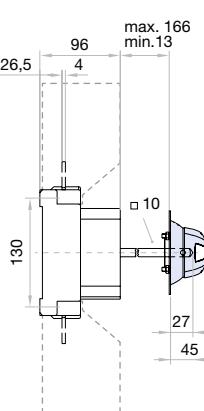
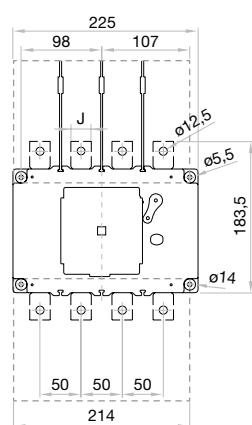
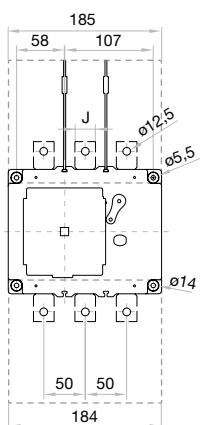
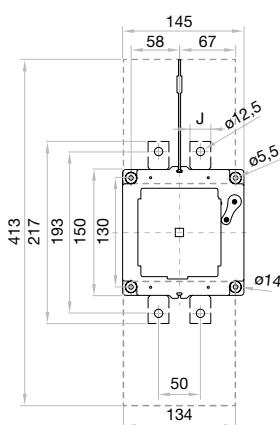
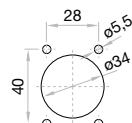
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device
 Simple



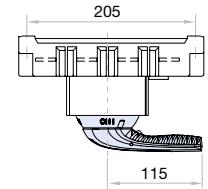
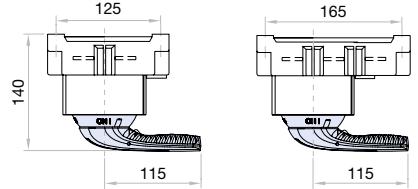
Dimensions (mm)

Door drilling for external handle



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

S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	T Nm	M
125 A	185	8	25	M12 24
160 A	185	8	25	M12 24
200 A	185	8	25	M12 24
250 A	185	8	25	M12 24
315 A	185	8	25	M12 24
400 A	240*(t1)	8	30	M12 24



*(t1) Using phase barriers DR-SF_ _ to maintain the required clearance.



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

Size 1

A

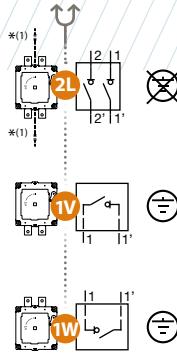
250



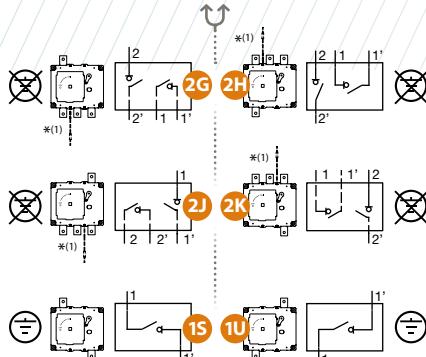
500 - 750 - 1000Vdc



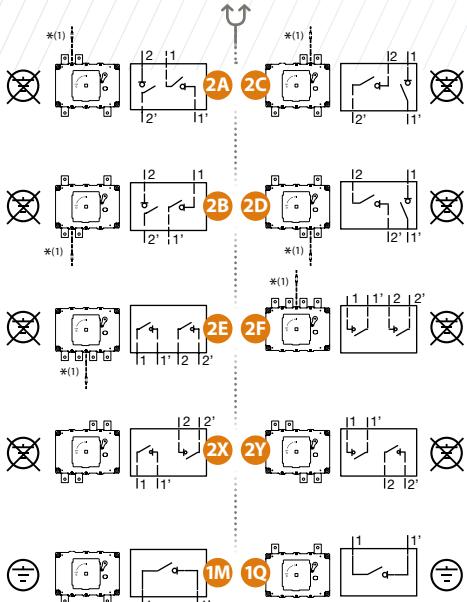
250A CODE-500Vdc S6-0250_500L



250A CODE-750Vdc S6-0250_500L



250A CODE-1000Vdc S6-0250_500L



DO NOT USE IN
GROUNDED INSTALLATIONS

Technical information



tests:

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TOMORROW TODAY

According to UL98B

LISTED				250		
Rated thermal current	I _{th}	-20°C to +50°C	A	250		
Rated operational current	I _e	Code 500Vdc	A	250		
		Code 750Vdc	A	250		
		Code 1000Vdc	A	250		
Rated short-circuit current	I _{cc}			10		
Maximum weight	Consult according to code					
Wiring capacity						
Minimum connection wire range/AWG	MCM	400				
Maximum connection wire range/AWG	MCM	400				

250 A

Conforms to UL98B. Minus 20 to +50°C. PV disconnects switch. Location Category B 1000Vdc 250A Torque: 159 lbf-in. Short circuit rating: 10 kA
Suitable for Use in PV Systems in accordance with Article 690 of the NEC IEC-60947-3 Uimp 12 kV DC21B-1000Vdc-250 A Ui 1500Vdc Ith 250 A



Accessories



>> External handle included shaft*(e1)
IP65
CODE DS-SA11



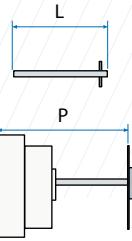
>> Terminal shrouds
CODE DR-CU11 (1 unit)
CODE DR-CU12 (1 unit)
CODE DR-CU13 (1 unit)



>> External handle without shaft
IP65
CODE DS-SA14



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



» Shafts

Standard shaft included *(e1)
L (mm) | P (mm)
227 | 103...256



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

» Spacers

CODE DR-EL11 (4 units)

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



» Auxiliary contacts

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

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



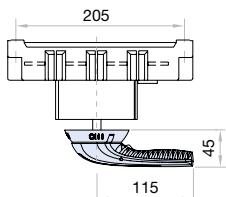
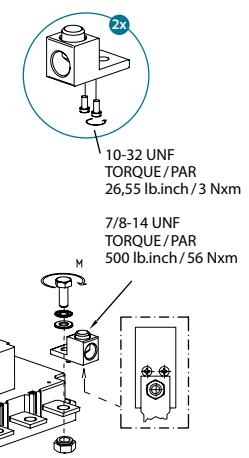
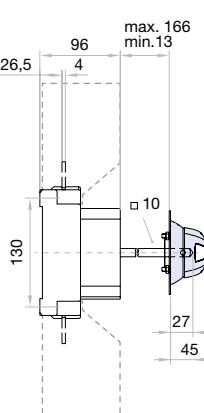
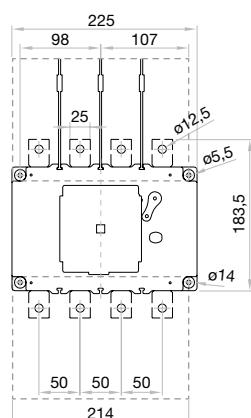
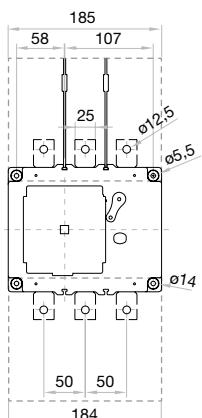
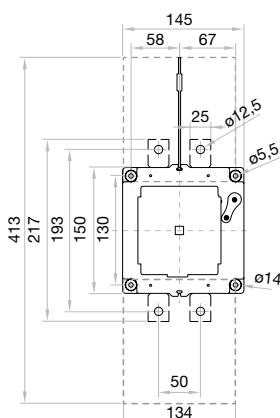
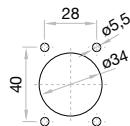
» Terminal lug

CODE DR-TL11 (2 units)

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

Dimensions (mm)

Door drilling for external handle



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



S6 DC

Switch - disconnector for DC current 1P - 2P

Size 2

A

500|630



500 - 750 - 1000 Vdc



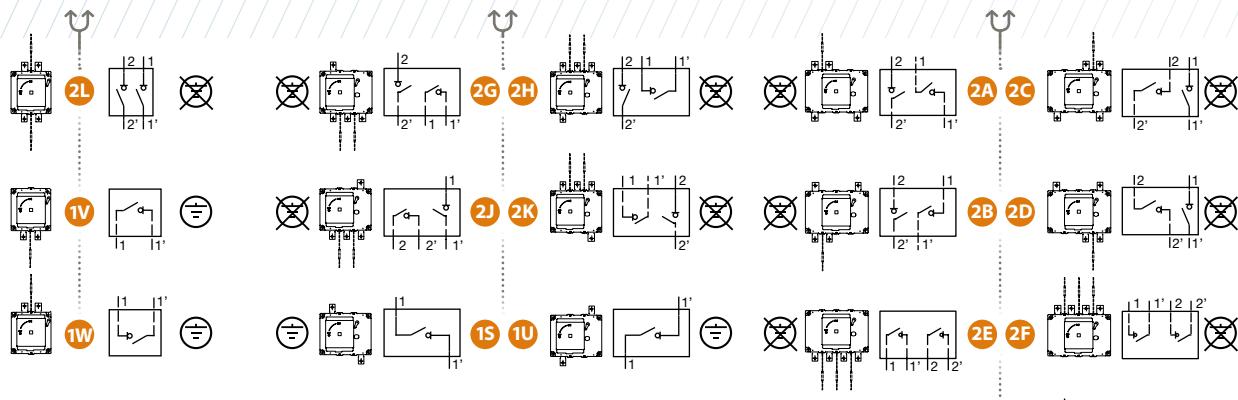
500A CODE-500 Vdc **500A**
630A S6-0500_50
S6-0630_50



500A CODE-750 Vdc **500A**
630A S6-0500_50
S6-0630_50



500A CODE-1000 Vdc **500A**
630A S6-0500_50
S6-0630_50



DO NOT USE IN
GROUNDED INSTALLATIONS

Technical information



tests:



According to IEC 60947-1
IEC 60947-3

			500	630
Rated thermal current in ambient at	I _{th}	40° C	A	500
		50° C	A	500
		60° C	A	500
Rated insulation voltage (DC)	U _i	V	1500	1500
Rated impulse withstand voltage	U _{imp}	kV	12	12
Rated operational current ⁽¹⁾	I _e	Code 500Vdc	A	500
		Code 750Vdc	A	500
		Code 1000Vdc	DC21B	A
				500

	500	630
Short - circuit behaviour		
Rated short-circuit making capacity ⁽²⁾	I _{cm}	kA (peak)
Rated short-time withstand current (1sec)	I _{cw}	kA rms
Mechanical features		
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	5000
Maximum weight	Consult according to code	

⁽¹⁾ Other voltages and / or utilization categories. Please consult

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



Accessories



» Direct handle

CODE DS-LI21



» External handle included shaft*(e1)

IP65

CODE DS-LA21



» External handle without shaft

IP65

CODE DS-LA24



» Terminal shrouds

CODE DR-CU21 (1 unit)

CODE DR-CU22 (1 unit)

CODE DR-CU23 (1 unit)



» Phase barriers

CODE DR-SF21 (1 unit)

CODE DR-SF22 (2 units)

CODE DR-SF23 (3 units)



» Spacers

CODE DR-EL21 (4 units)

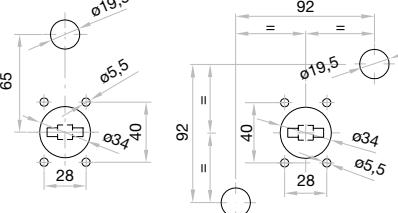


» Safety key lock device

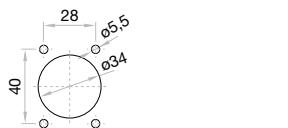
Simple CODE DS-CB21

Double CODE DS-CF21

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

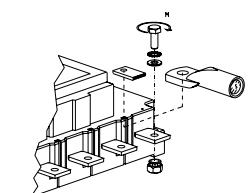
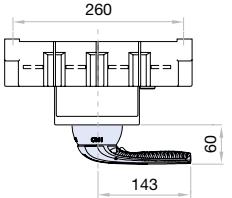
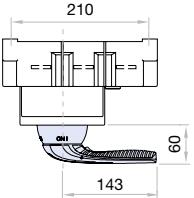
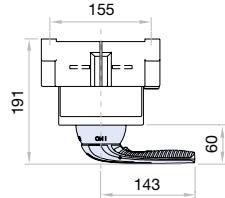
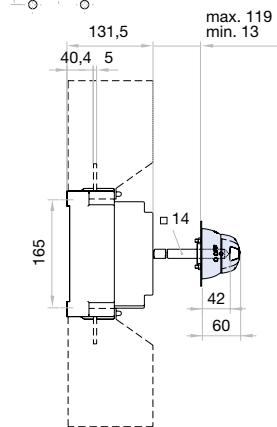
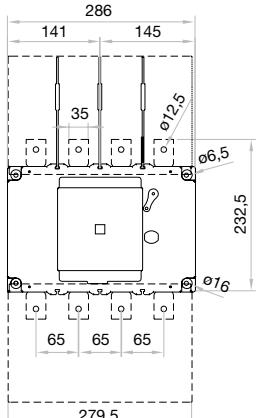
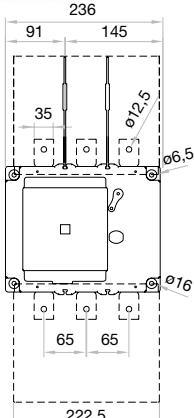
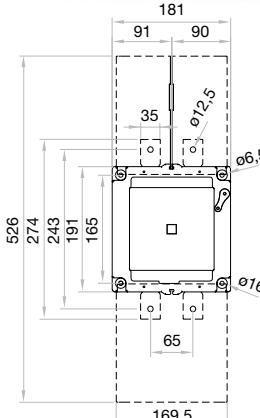
Door drilling for handle and key lock device
Simple

Double



Door drilling for external handle

Dimensions (mm)



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



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

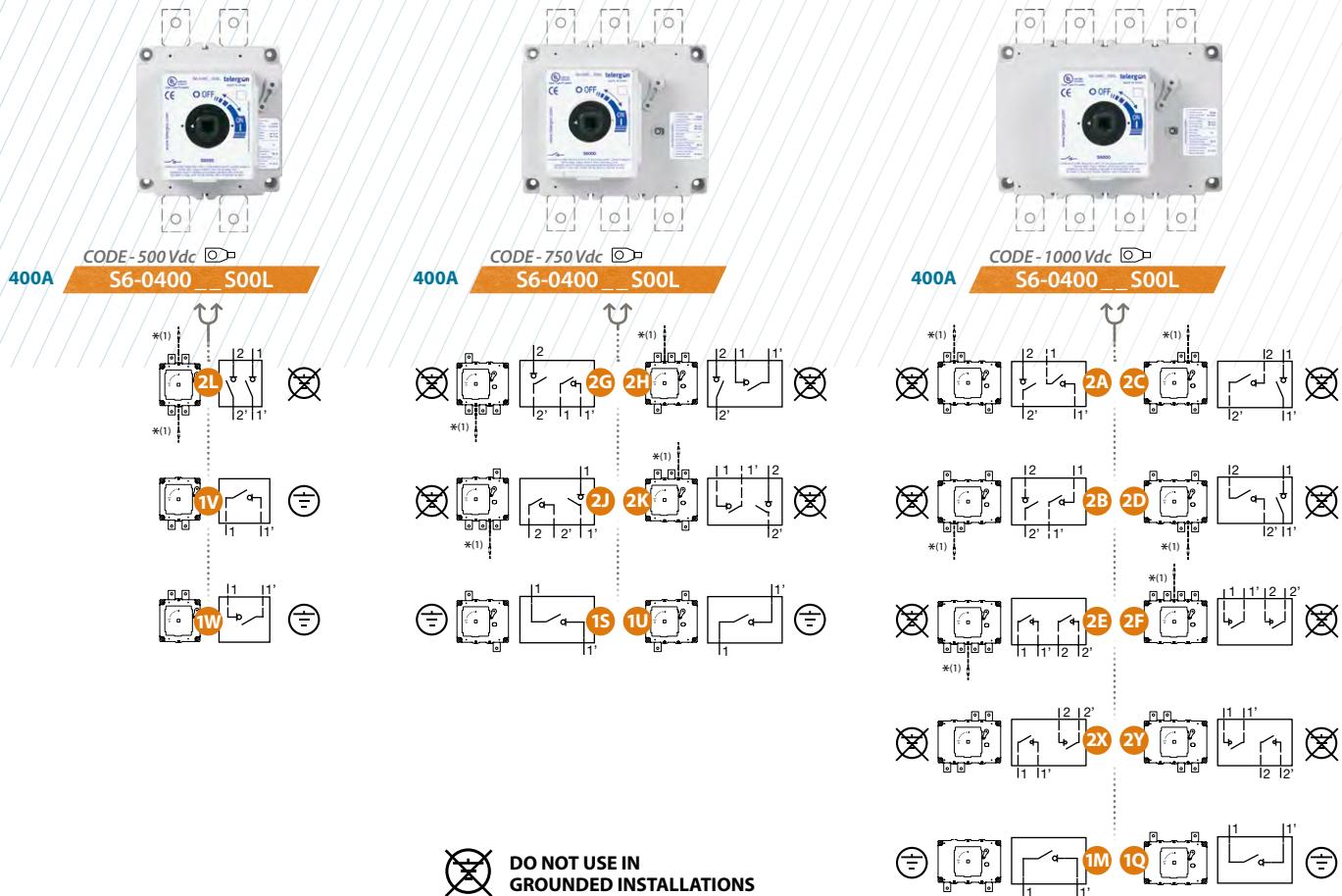
Size 2

A

400



500 - 750 - 1000 Vdc



Technical information



tests:

AIT
AUSTRIAN INSTITUTE
OF TECHNOLOGY
TOMORROW TODAY

According to UL98 B

LISTED			
Rated thermal current	I _{th}	-20°C to +50°C	A
			400
Rated operational current	I _e	Code 500 Vdc	A
		Code 750 Vdc	400
		Code 1000 Vdc	A
Rated short-circuit current	I _{cc}	kA	10
Maximum weight	Consult according to code		
Wiring capacity			
Minimum connection wire range/AWG	MCM	2x300	
Maximum connection wire range/AWG	MCM	2x350	

400 A

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



Accessories



>> External handle included shaft*(e1)
IP65
CODE DS-LA21



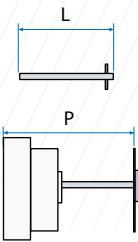
>> Terminal shrouds
 CODE DR-CU21 (1 unit)
 CODE DR-CU22 (1 unit)
 CODE DR-CU23 (1 unit)



>> External handle without shaft
IP65
CODE DS-LA24



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



>> Shafts

Standard shaft included *(e1)
 L (mm) | P (mm)
 195 | 134... 240



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



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

>> Spacers

CODE DR-EL21 (4 units)

>> Terminal lug

CODE DR-TL22 (2 units)

* (1) With Terminal lug use phase barriers DR-SF_ to maintain the required clearance. Mandatory in these models



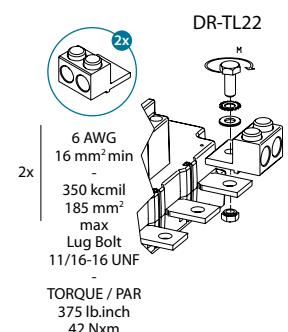
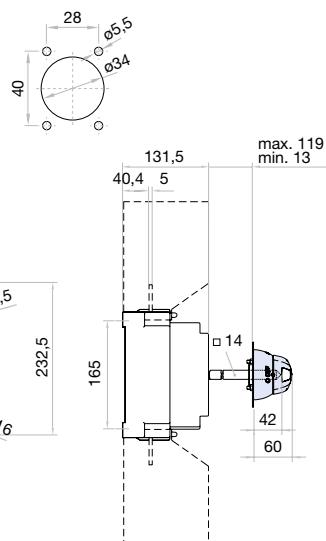
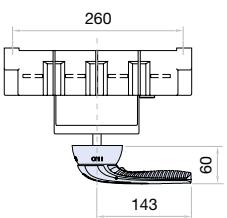
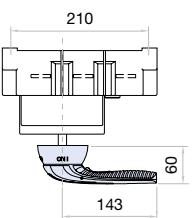
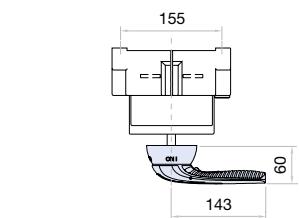
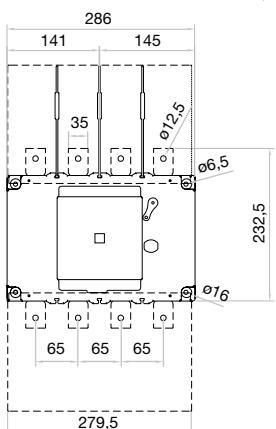
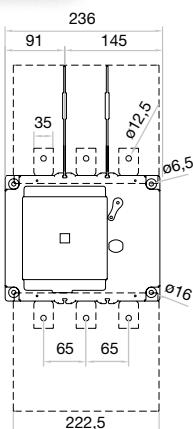
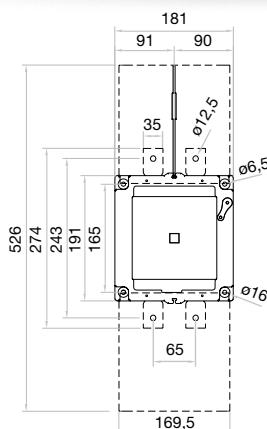
>> Auxiliary contacts

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

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

Dimensions (mm)

Door drilling for external handle



Temperature rating		Copper wire only M _{1.5%} to 10%
Nxm lb.inch		

75°C M10 24 212



S6N DC Switch - disconnector for DC current 2P

Size 1

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



1500 Vdc



		CODE - 1500 Vdc	
125A	S6N0125USS0		
160A	S6N0160USS0		
200A	S6N0200USS0		
250A	S6N0250USS0		
315A	S6N0315USS0		
400A	S6N0400USSD0		

		CODE - 1500 Vdc	

		CODE - 1500 Vdc	

Technical information



According to IEC 60947-1
IEC 60947-3

	Ith	40°C	A	125	160	200	250	315	400
Rated thermal current in ambient at		50°C		125	160	200	250	315	400
		60°C		125	160	200	250	315	360
		70°C		125	160	200	250	315	315
Rated insulation voltage (DC)	Ui	V		1500	1500	1500	1500	1500	1500
Rated impulse withstand voltage	Uimp	kV		12	12	12	12	12	12
Rated operational current *(1) DC21B	le	Ue							
		1500Vdc	A	125	160	200	250	315	400

Short - circuit behaviour

Rated short-circuit making capacity *(2) Icm kA (peak) 10

Rated short-time withstand current (1sec) Icw kA rms 10

Mechanical features

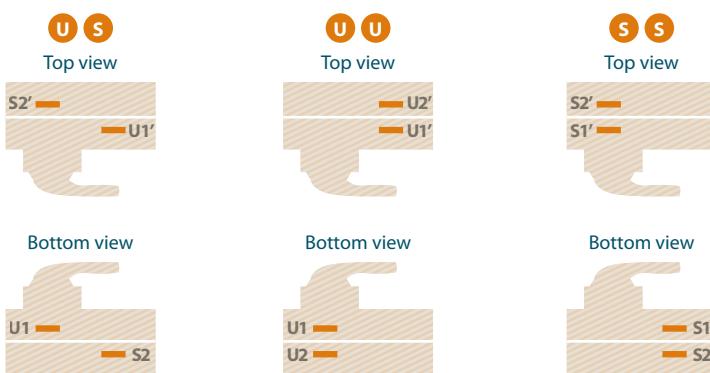
Number of mechanical operations (according to the standards, for other values please consult) Cycles 8000

Maximum weight kg 4,25

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

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

Terminals location





S6N DC Switch - disconnector for DC current 2P

Size 1

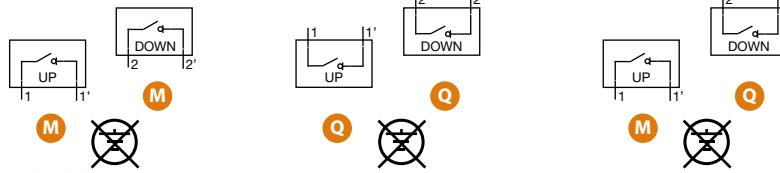
A 125|160|200|250|315|400



1500 Vdc



	CODE - 1500 Vdc		CODE - 1500 Vdc		CODE - 1500 Vdc
125A	S6N0125MMS0		S6N0125QQS0		S6N0125MQS0
160A	S6N0160MMS0		S6N0160QQS0		S6N0160MQS0
200A	S6N0200MMS0		S6N0200QQS0		S6N0200MQS0
250A	S6N0250MMS0		S6N0250QQS0		S6N0250MQS0
315A	S6N0315MMS0		S6N0315QQS0		S6N0315MQS0
400A	S6N0400MMDO		S6N0400QQDO		S6N0400MQDO



Technical information



According to IEC 60947-1
IEC 60947-3

		125	160	200	250	315	400
Rated thermal current in ambient at	Ith	40°C	A	125	160	200	250
		50°C		125	160	200	250
		60°C		125	160	200	250
		70°C		125	160	200	250
Rated insulation voltage (DC)	Ui	V	1500	1500	1500	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12	12	12	12
Rated operational current *(1) DC21B	le	Ue					
		1500 Vdc	A	125	160	200	250
				315	400		



DO NOT USE IN
GROUNDED INSTALLATIONS

Short - circuit behaviour

Rated short-circuit making capacity *(2)	Icm	kA (peak)	10
Rated short-time withstand current (1sec)	Icw	kA rms	10

Mechanical features

Number of mechanical operations (according to the standards, for other values please consult)	Cycles	8000
Maximum weight	kg	4,29

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

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

Terminals location

M M
Top view



Bottom view



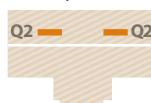
Q Q
Top view



Bottom view



M Q
Top view



Bottom view



Accessories



» Direct handle

CODE DS-SI11



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

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

» External handle included shaft*(e1)

IP65

CODE DS-SA11



» External handle without shaft

IP65

CODE DS-SA14

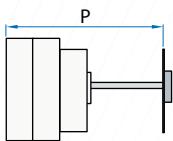


» Shafts

Standard shaft included *(e1)

L (mm) 227

P (mm) 185... 336



Shaft extensions

Type 1

L (mm) 375

P (mm) 185... 497,5

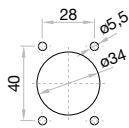
CODE DS-EP14

Type 2

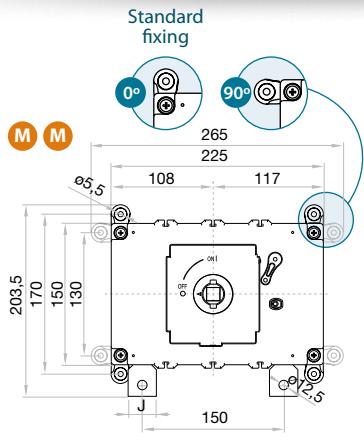
L (mm) 536

P (mm) 185... 647

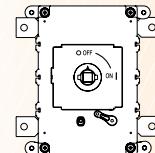
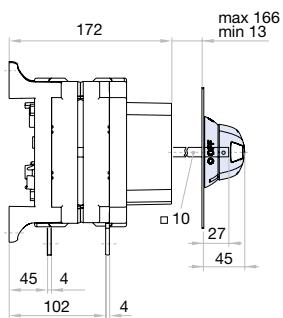
CODE DS-EP15



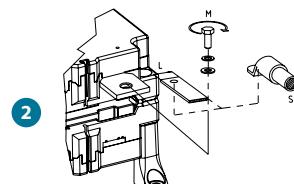
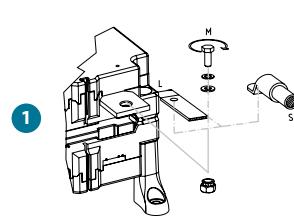
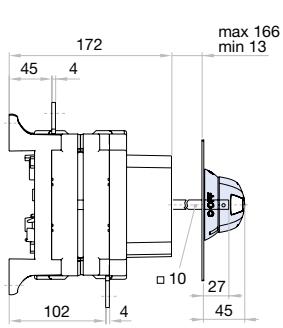
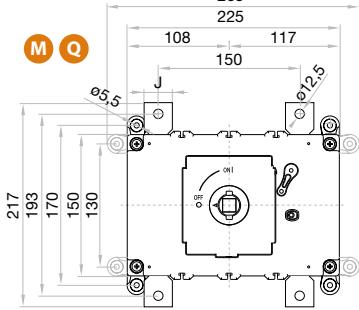
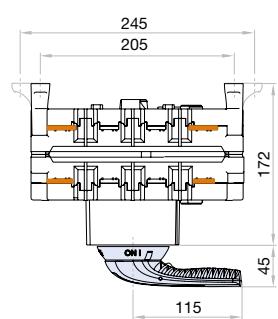
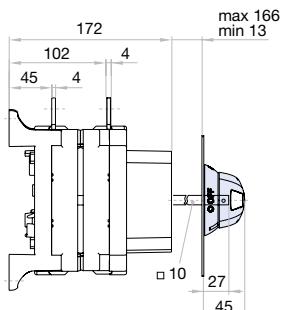
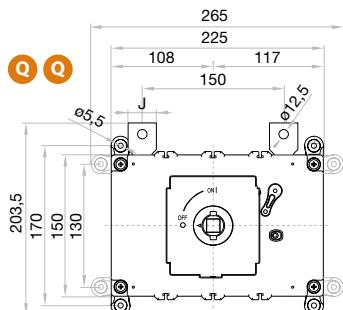
Dimensions (mm)



Door drilling for external handle



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



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



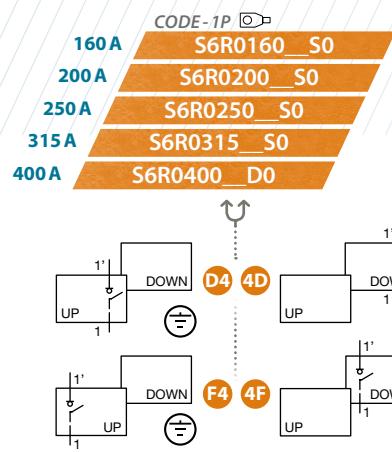
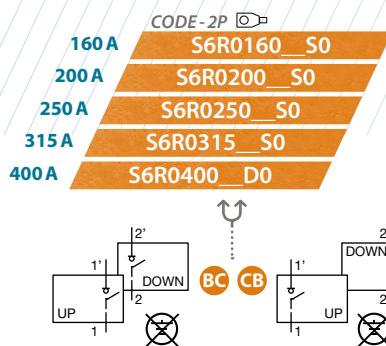
S6R DC Switch - disconnector base mounting 1P - 2P

Size 1

A 160|200|250|315|400



1500 Vdc



Technical information



According to IEC 60947-1
IEC 60947-3

		160	200	250	315	400	
Rated thermal current	I _{th}	A	160	200	250	315	400
in ambient at 40°C up to 80°C							
Rated insulation voltage (DC)	U _i	V	1500	1500	1500	1500	1500
Rated impulse withstand voltage	U _{imp}	kV	12	12	12	12	12
Rated operational current *(1)	I _e		160	200	250	315	400
DC21B		1500 Vdc	A				

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

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

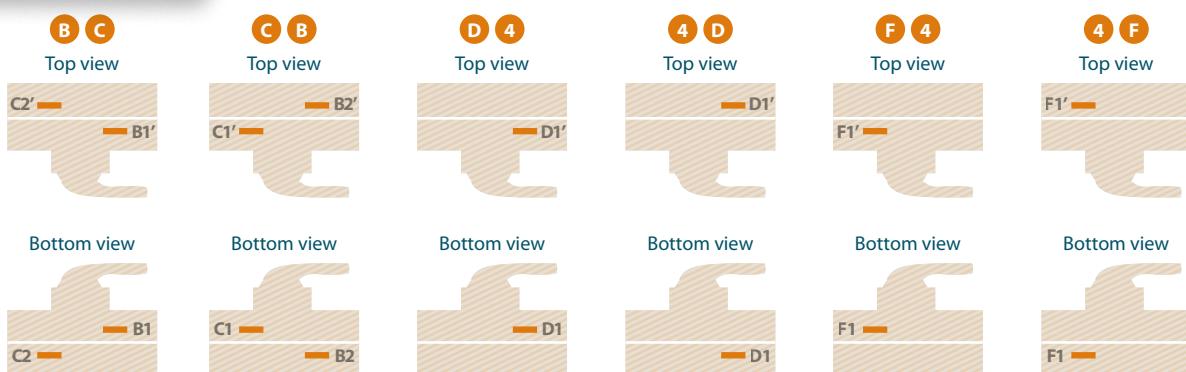
Short - circuit behaviour

Rated short-circuit making capacity *(2)	I _{cm}	kA (peak)	10
Rated short-time withstand current	I _{cw}	kA rms	10

Mechanical features

Number of mechanical operations (according to the standards, for other values please consult)	Cycles	8000
---	--------	------

Terminals location



Accessories



» Direct handle

CODE DS-SI11



» Auxiliary contacts

1NO+1NC CODE D5LAU01

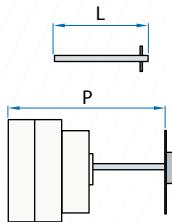
2NO+2NC CODE D5LAU02

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

» External handle included shaft *(e1)

IP65

CODE DS-SA11



» Shafts

Standard shaft included *(e1)

L (mm) 227

P (mm) 179... 398,5

Shaft extensions

Type 1

L (mm) 375

P (mm) 179... 546,5

CODE DS-EP14

Type 2

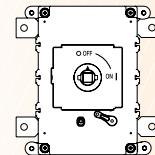
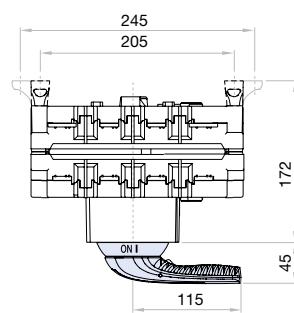
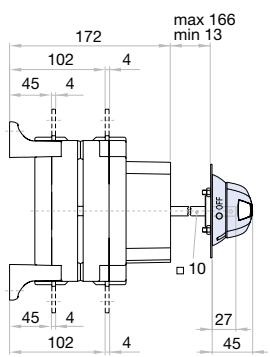
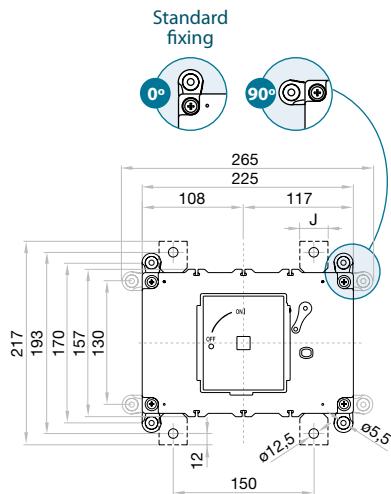
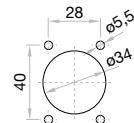
L (mm) 536

P (mm) 179... 707,5

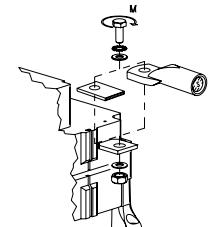
CODE DS-EP15

Dimensions (mm)

Door drilling for external handle



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



J	□	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M 10% Nxm
160 A	25	160 A	185	8	M12 24
200 A	25	200 A	185	8	M12 24
250 A	25	250 A	185	8	M12 24
315 A	25	315 A	185	8	M12 24
400 A	30	400 A	240	8	M12 24



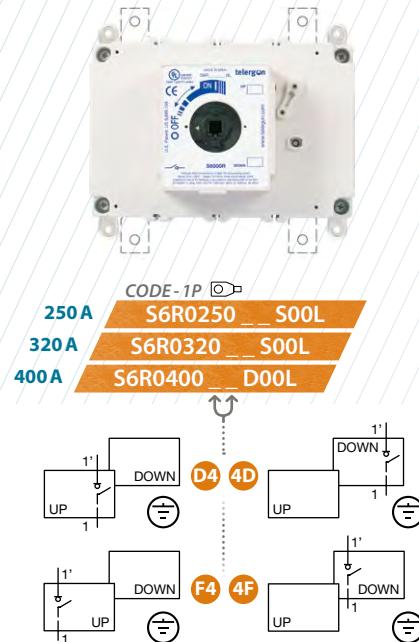
S6R DC UL Switch - disconnector for DC current 1P - 2P

Size 1

A 250|320|400



1500 Vdc



Technical information



According to UL98 B

LISTED				250	320	400
Rated thermal current Ith	-20°C to 50°C	A	250	320	400	
Rated operational current Ie	1500Vdc	A	250	320	400	
Rated short-time withstand current (0,05 sec) Icw	kA	10	10	10		
Maximum weight	Consult according to code					
Wiring capacity						
Minimum busbar connection range	mm²	2x	2x	2x		
		4x30	4x32	4x32		

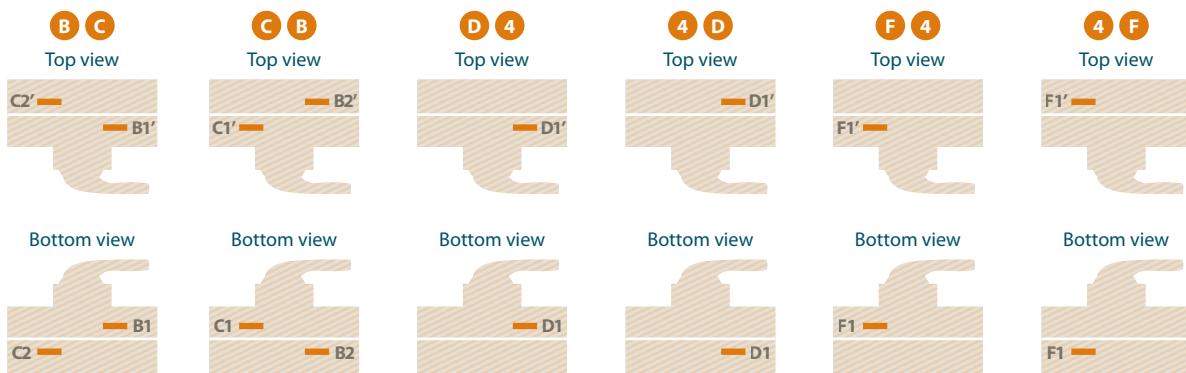
tests:



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

Patent USA
N.º 9,899,159 B2

Terminals location



Accessories



» External handle included shaft *(e1)

IP65

CODE DS-SA11



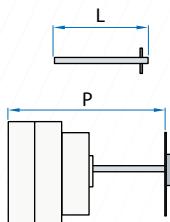
» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

le = 16 A (resistive loads)

4 A (inductive loads) at 250 Vac.



» Shafts

Standard shaft included *(e1)

L (mm)

227

P (mm)

185... 336

Shaft extensions

Type 1

L (mm)

375

P (mm)

185... 486

CODE

DS-EP14

DS-EP14