

DC Disconnectors - ISOLATION ONLY 1500 Vdc

DC disconnectors with high level of insulation and safety, available in different construction models, with a wide range of currents and variety of accessories



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

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

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

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

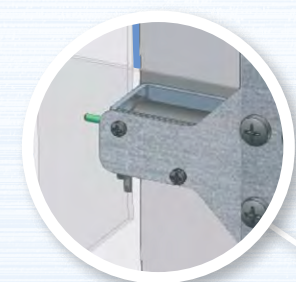
The DC Disconnectors S6 DC do not require external bridging links.

Functional and ergonomic handle

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

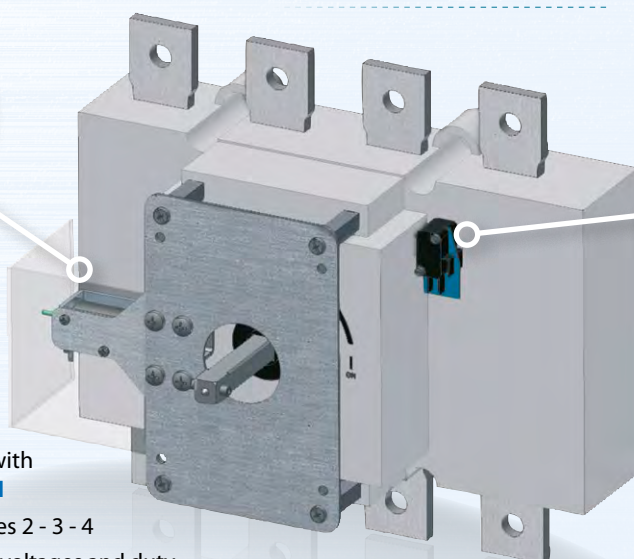


Safety devices



Locking by electric coil

- > Locked in the rest position with two options - **0** or **I** | **0** and **I**
- > For DC disconnectors **S5** Sizes 2 - 3 - 4
- > Coils available with different voltages and duty cycles according to requirements (please consult)



Signaling and control by auxiliary contacts

According to IEC 60947-1 section 7.1.7.2

- > 1NO + 1 NC (up to two micros can be installed)
- > In the closing operation, switching after the main contacts
- > In the opening operation, switching before the main contacts
- > Ie= 16 (4) A (250 V)

According to:
IEC 60947- 1 & 3



UL98
RoHS

Testing and approvals:



Main advantages

Modular and flexible solution

Multi-circuit switching (from 1 up to 8 circuits can be isolated with only one handle), a great solution for recombinaer and inverter applications

Single or dual polarity switching, for grounded or floating networks

Wide range of accessories, including additional safety devices like:

Auxiliary contacts (late close, early break)

Padlockable handle

Lock device by electric coil

Optimized dimensions and weight

To reduce the cost and the environmental impact

Easy to install Time saving

Customised solutions For specific OEM applications

Motorised control For remote or automatic operation

Suitable for isolation (disconnecter) As per IEC 60947-3

The range

		Amp.	Size	Code	Diagram	Direct handle	External handle	Bridging links ^{*(p2)}
	1 Pole	160	1	S6-01601VS0P38	1V	DS-SI11T	DS-SA14T	*
	1 Pole	200	1	S6-02001VS0P38	1V	DS-SI11T	DS-SA14T	*
	1 Pole	250	1	S6-02501VS0P38	1V	DS-SI11T	DS-SA14T	*
	1 Pole	400	1	S6-04001VD0P38	1V	DS-SI11T	DS-SA14T	*
	1 Pole	630	2	S6-06301VS0P38	1V	DS-LI21T	DS-LA24T	*
	1 Pole	800	1	S5-04003ZC0P38	3Z	DS-SI11T	DS-SA14T	DS-PI1G
	1 Pole	1000	1	S5-04004ZC0P38	4Z	DS-SI11T	DS-SA14T	DS-PI1H
	1 Pole	1600	2	S5-08004ZC0P38	4Z	DS-LI21T	DS-LA24T	DS-PI2H
	1 Pole	2000	3	S5-12504ZC0P38	4Z	DS-LI31T	DS-LA33T	DS-PI3H
		Amp.	Size	Code	Diagram	Direct handle	External handle	Bridging links ^{*(p2)}
	2 Poles	160	1	S6-01602LS0P38	2L	DS-SI11T	DS-SA14T	*
	2 Poles	200	1	S6-02002LS0P38	2L	DS-SI11T	DS-SA14T	*
	2 Poles	250	1	S6-02502LS0P38	2L	DS-SI11T	DS-SA14T	*
	2 Poles	400	1	S6-04002LD0P38	2L	DS-SI11T	DS-SA14T	*
	2 Poles	630	2	S6-06302LS0P38	2L	DS-LI21T	DS-LA24T	*
	2 Poles	800	2	S6-08002LD0P38	2L	DS-LI21T	DS-LA24T	*
	2 Poles	1600	3	S5-12504ZC0P38	2Z	DS-LI31T	DS-LA33T	DS-PI3L x 2
	2 Poles	2500	4	S5-16004ZS0P38	2Z	DS-LI41T	DS-LA43T	DS-PI4K x 2
	2 Poles	3150	4	S5-18004ZS0P38	2Z	DS-LI41T	DS-LA43T	DS-PI4K x 2

^{*(p2)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.



1P

S5 DC
S6 DC

Disconnectors 1 pole (160 - 2000A) (O-I) ISOLATION ONLY

Manual handle
ISOLATION ONLY



S5 DC
ISOLATION ONLY



S6 DC
ISOLATION ONLY

Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	Unipolar (1P) *(p1)		External*(1)	Direct
				Code	Diagram		
1500V DC20A	160	1		S6-01601VS0P38	1V	DS-SA11T	DS-SI11T
	200			S6-02001VS0P38	1V		
	250			S6-02501VS0P38	1V		
	400			S6-04001VD0P38	1V		
	800	1		S5-04003ZC0P38	3Z	DS-SA11T	DS-SI11T
	1000			S5-04004ZC0P38	4Z		
	630	2		S6-06301VS0P38	1V	DS-LA21T	DS-LI21T
	1600			S5-08004ZC0P38	4Z	DS-LA31T	DS-LI31T
	2000	3		S5-12504ZC0P38	4Z		

*(2)

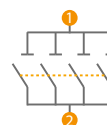
1V



3Z



4Z



2P

S5 DC
S6 DC

Disconnectors 2 poles (160 - 3150A) (O-I) ISOLATION ONLY

Manual handle
ISOLATION ONLY



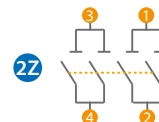
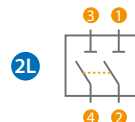
S5 DC
ISOLATION ONLY



S6 DC
ISOLATION ONLY

Rated operational voltage Ue	Rated operational current Ie (A)	Size	Connection	Bipolar (2P) *(p1)		External*(1)	Direct
				Code	Diagram		
1500V DC20A	160	1		S6-01602LS0P38	2L	DS-SA11T	DS-SI11T
	200			S6-02002LS0P38	2L		
	250			S6-02502LS0P38	2L		
	400			S6-04002LD0P38	2L		
	630	2		S6-06302LS0P38	2L	DS-LA21T	DS-LI21T
	800			S6-08002LD0P38	2L		
	1600	3		S5-12504ZC0P38	2Z	DS-LA31T	DS-LI31T
	2500	4		S5-16004ZS0P38	2Z		
	3150			S5-18004ZS0P38	2Z	DS-LA41T	DS-LI41T

*(2)



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

*(2) Other configurations are available, please consult.

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

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



Shaft extensions ※(3)				Bridging links ※(p1)	Auxiliary contacts ※(4)		Phase barriers		Spacers (4 units)	Terminal protection ※(5)	Terminal shrouds ※(5)	 Full details in page
Size		Type 1 & 2		Code	1NO+1NC	2NO+2NC	1 unit	2 units	Code	Code	Code	
		L	Code		Code	Code	Code	Code				
1	10	375	DS-EP14	-	D5LAU01	D5LAU02	DR-SF11	DR-SF12	DR-EL11	-	DR-CU11	254
		536	DS-EP15									
1	10	375	DS-EP14	DS-PI1G	D5LAU01	D5LAU02	-	-	-	DS-CU12	-	258
		536	DS-EP15	DS-PI1H								
2	14	345	DS-EP23	-	D5LAU01	D5LAU02	DR-SF21	DR-SF22	DR-EL21	-	DR-CU21	256
		535	DS-EP24	DS-PI2H	D5LAU01	D5LAU02	-	-	-	DS-CU22	-	260
3	14	345	DS-EP23	DS-PI3H	D5LAU01	D5LAU02	-	-	-	-	-	262
		535	DS-EP24									



Shaft extensions ^{*(3)}				Bridging links ^{*(p1)}	Auxiliary contacts ^{*(4)}		Phase barriers		Spacers (4 units)	Terminal shrouds ^{*(5)}	 Full details in page
Size		Type 1 & 2		Code	1NO+1NC	2NO+2NC	1 unit	2 units	Code	Code	
		L	Code		Code	Code	Code	Code			
1	10	375	DS-EP14	-	D5LAU01	D5LAU02	DR-SF11	DR-SF12	DR-EL11	DR-CU11	254
		536	DS-EP15								
2	14	345	DS-EP23	-	D5LAU01	D5LAU02	DR-SF21	DR-SF22	DR-EL21	DR-CU21	256
		535	DS-EP24								
3	14	345	DS-EP23	DS-PI3L x 2	D5LAU01	D5LAU02	-	-	-	-	262
		535	DS-EP24								
4	14	485	DS-EP44	DS-PI4K x 2	D5LAU01	D5LAU02	-	-	-	-	264
		635	DS-FP45								

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

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

^{*(5)} One unit for input or output.

S6 DC ISOLATION ONLY

DC Disconnectors

1P - 2P

series
S6 DC

Size 1

A 160|200|250|400



1500Vdc



CODE-1P

1V

160A
200A
250A
400A

S6-01601VS0P38
S6-02001VS0P38
S6-02501VS0P38
S6-04001VD0P38



1P

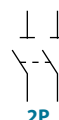


CODE-2P

2L

160A
200A
250A
400A

S6-01602LS0P38
S6-02002LS0P38
S6-02502LS0P38
S6-04002LD0P38



2P

Technical information

consult for
UL codesDO NOT OPERATE
UNDER LOAD

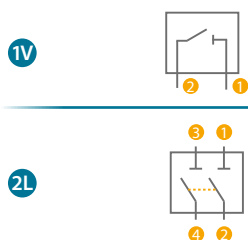
According to IEC 60947-1
IEC 60947-3

			160	200	250	400
Rated insulation voltage DC	Ui	V	1500	1500	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12	12	12
Rated operational current DC20A	Ie	Ue				
		1500 Vdc	A	160	200	250

			160	200	250	400
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		8000	8000	8000	5000
Maximum weight 1P	Kg		1,22	1,22	1,22	1,22
Maximum weight 2P	Kg		1,35	1,35	1,35	1,35

Connection diagram

Connection diagram



Accessories



» Direct handle

CODE DS-SI11T

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

IP65

CODE DS-SA11T



» External handle without shaft

IP65

CODE DS-SA14T



» Terminal shrouds

CODE DR-CU11 (1 unit)



» Phase barriers

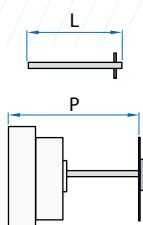
CODE DR-SF11 (1 unit)

CODE DR-SF12 (2 units)



» Spacers

CODE DR-EL11 (4 units)



» Shafts

Standard shaft included ^{*(e1)}

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

Shaft extensions

Type 1

L (mm)	P (mm)	CODE
375	103... 415	DS-EP14

Type 2

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



» Auxiliary contacts

1NO+1NC CODE D5LAU01

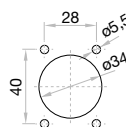
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

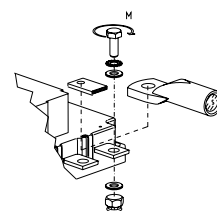
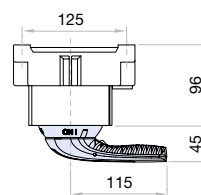
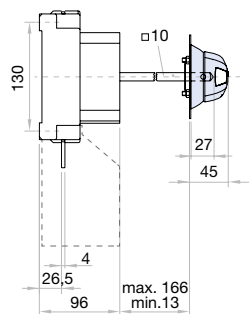
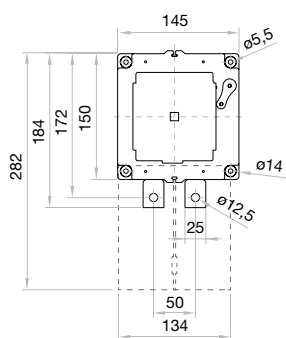
4 A (inductive loads) at 250 Vac.

Dimensions (mm)

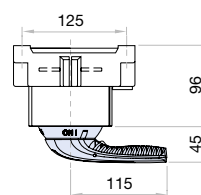
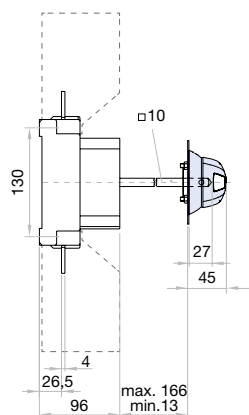
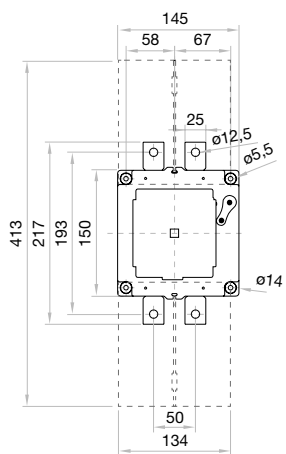
Door drilling for external handle



1V



2L



	S max (Cu) mm ²	H max (Cu) mm	L max (Cu) mm	M	M
					Nxm
160 A	185	8	25	M12	24
200 A	185	8	25	M12	24
250 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 ISOLATION ONLY

DC Disconnectors

1P - 2P

series
S6 DC

Size 2

A 630|800



1500Vdc



1V

630A

CODE-1P

S6-06301VS0P38



2L

630A

800A

CODE-2P

S6-06302LS0P38

S6-08002LD0P38



Technical information

consult for
UL codesDO NOT OPERATE
UNDER LOAD

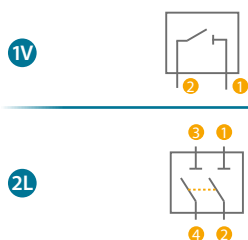
According to IEC 60947-1
IEC 60947-3

			630	800
Rated insulation voltage DC	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12
Rated operational current DC20A	Ie	Ue 1500 Vdc	A 630	800

			630	800
Number of mechanical operations (according to the standards, for other values please consult)	Cycles		5000	3000
Maximum weight 1P	Kg		3,40	3,40
Maximum weight 2P	Kg		3,80	3,80

Connection diagram

Connection diagram



Accessories



» Direct handle

CODE DS-LI21T

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

IP65

CODE DS-LA21T



» External handle without shaft

IP65

CODE DS-LA24T



» Terminal shrouds

CODE DR-CU21 (1 unit)



» Phase barriers

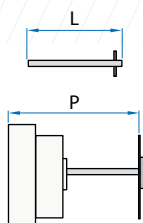
CODE DR-SF21 (1 unit)

CODE DR-SF22 (2 units)



» Spacers

CODE DR-EL21 (4 units)



» Shafts

Standard shaft included ^{*(e1)}

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

Shaft extensions

Type 1

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

Type 2

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



» Auxiliary contacts

1NO+1NC CODE D5LAU01

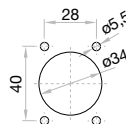
2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

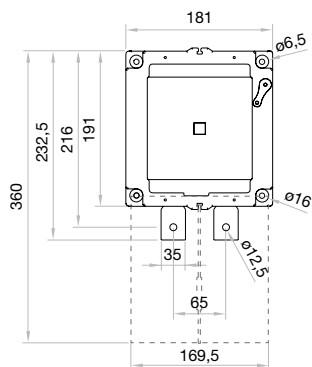
4 A (inductive loads) at 250 Vac.

Dimensions (mm)

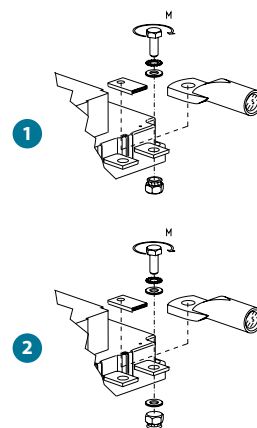
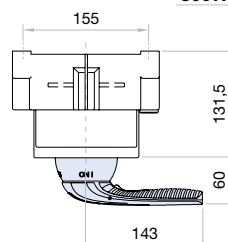
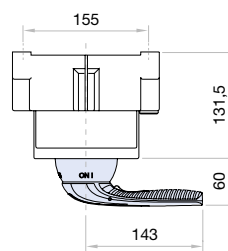
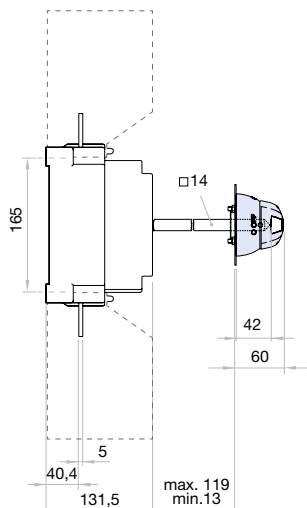
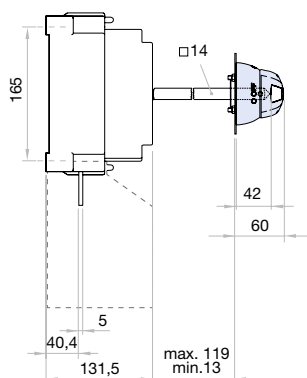
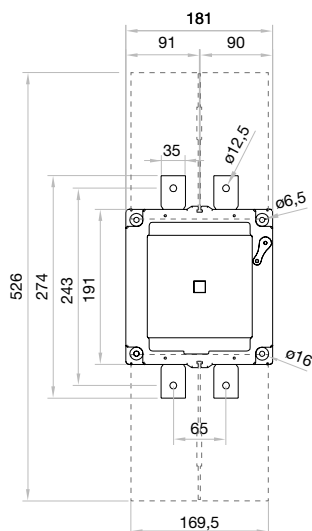
Door drilling for external handle



1V



2L



	S max (Cu)	H max (Cu)	L max (Cu)	T	M
	mm ²	mm	mm		Nxm
630 A	2x185	2x6	35	M12	24
800 A	2x240	2x7	35		

DC Disconnectors

1P

Size 1

A800|1000



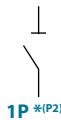
1500Vdc



CODE-800A  **3Z**
S5-04003ZC0P38



CODE-1000A  **4Z**
S5-04004ZC0P38



Technical information



 **DO NOT OPERATE UNDER LOAD**

According to IEC 60947-1
IEC 60947-3

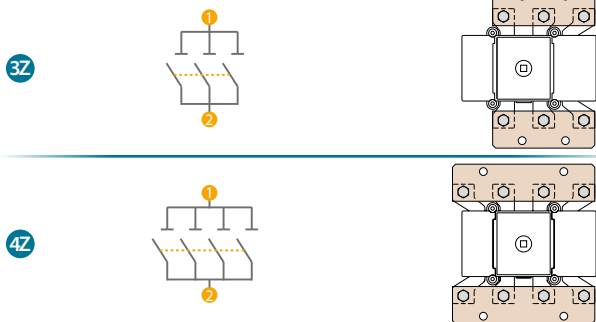
		800		1000
Rated insulation voltage DC	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	8	8
Rated operational current DC20A	Ie	Ue		
		1500 Vdc	A	800 1000

		800	1000
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000	3000
Maximum weight 3Z (without bridging links)	Kg	1,9	1,9
Maximum weight 4Z (without bridging links)	Kg	2,1	2,1

Connection diagram

Connection diagram

Bridging links ^{*(P2)}



Accessories



» Direct handle

CODE DS-SI11T

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

IP65

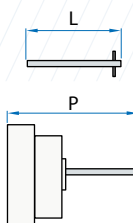
CODE DS-SA11T



» External handle without shaft

IP65

CODE DS-SA14T



» Shafts

Standard shaft included ^{*(e1)}

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

Shaft extensions

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

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



» Auxiliary contacts

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

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



» Terminal protection

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

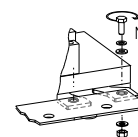
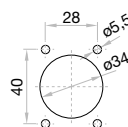
» Bridging links ^{*(P2)}

3Z 800A CODE DS-PI1G (2 units)
4Z 1000A CODE DS-PI1H (2 units)

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

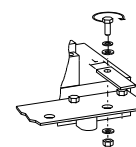
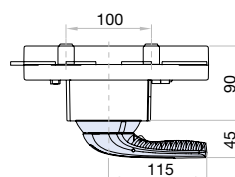
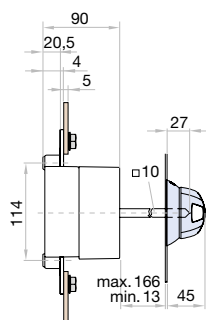
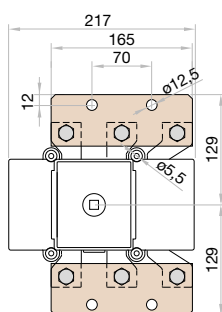
Dimensions (mm)

Door drilling for external handle



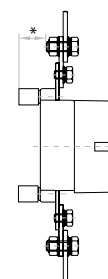
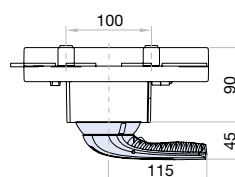
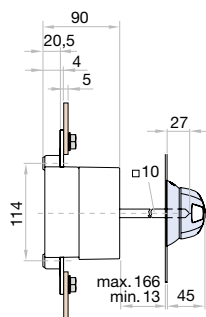
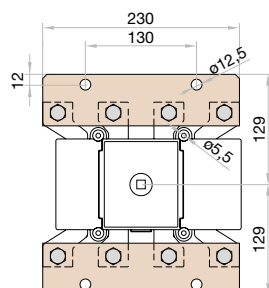
T	M
Nxm	
M10	24

3Z



	H max (Cu) mm	L max (Cu) mm
800A	2x5	50
1000A	2x5	60

4Z



* Please keep 14 mm of clearance if assemble plate is metallic

DC Disconnectors

1P

Size 2

A 1600

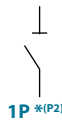


1500Vdc



CODE - 1600A

S5-08004ZC0P38



1P *(P2)

Technical information



 **DO NOT OPERATE UNDER LOAD**

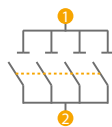
According to IEC 60947-1
IEC 60947-3

1600			
Rated insulation voltage DC	Ui	V	1500
Rated impulse withstand voltage	Uimp	kV	12
Rated operational current DC20A	Ie	Ue 1500 Vdc	A 1600

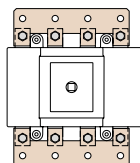
1600		
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000
Maximum weight (without bridging links)	Kg	4,5

Connection diagram

Connection diagram



Bridging links *(P2)



Accessories



» Direct handle

CODE DS-LI21T



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

IP65

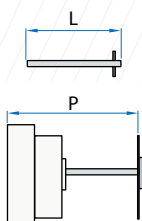
CODE DS-LA21T



» External handle without shaft

IP65

CODE DS-LA24T



» Shafts

Standard shaft included ^{*(e1)}

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

Shaft extensions

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

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



» Auxiliary contacts

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

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



» Terminal protection

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



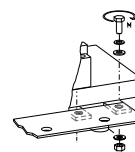
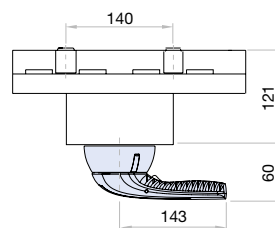
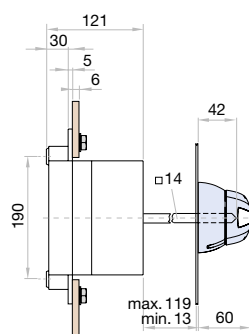
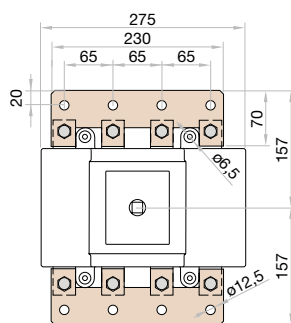
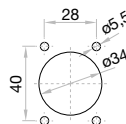
» Bridging links ^{*(P2)}

CODE DS-PI2H (2 units)

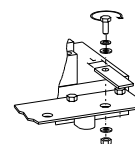
^{*(P2)} To comply with the operation and electrical features, the bridging links must be assembled to the switch. Please consult.

Dimensions (mm)

Door drilling for external handle



M
Nxm
M10 24



H max	L max
(Cu)	(Cu)
mm	mm
2x5	50

series
S5 DC

S5 DC ISOLATION ONLY DC Disconnectors

1P - 2P

Size 3

A

2200|2500



1500 Vdc



2Z

CODE - 2P - 2200A **S5-12504ZC0P38**

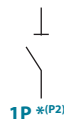


2P *(P2)



4Z

CODE - 1P - 2500A **S5-12504ZC0P38**



1P *(P2)

Technical information



DO NOT OPERATE UNDER LOAD

According to IEC 60947-1
IEC 60947-3

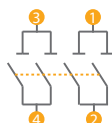
			2200	2500
Rated insulation voltage DC	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12
Rated operational current DC20A	Ie	Ue		
		1500 Vdc	A	2200

		2200	2500
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000	3000
Maximum weight (without bridging links)	Kg	7,6	7,6

Connection diagram

Connection diagram

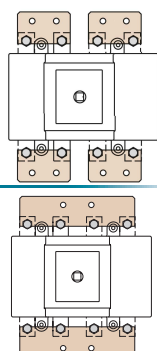
2Z



4Z



Bridging links *(P2)



Accessories



» Direct handle

CODE DS-LI31T

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

IP65

CODE DS-LA31T



» External handle without shaft

IP65

CODE DS-LA33T



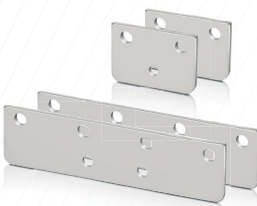
» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

I_e = 16 A (resistive loads)

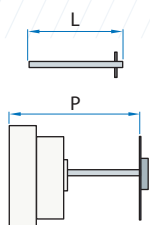
4 A (inductive loads) at 250 Vac.

» Bridging links ^{*(P2)}

2Z 2200A CODE x2 DS-PI3L (2 units)

4Z 2500A CODE DS-PI3H (2 units)

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



» Shafts

Standard shaft included ^{*(e1)}

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

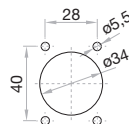
Shaft extensions

Type 1

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

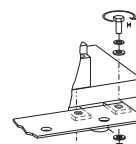
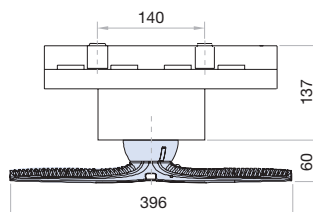
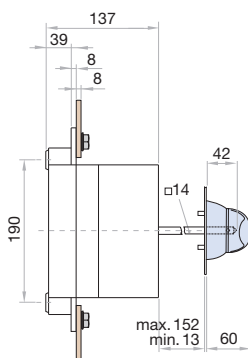
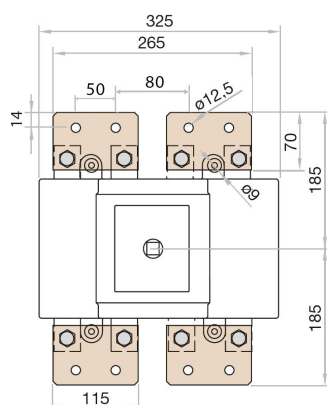
Type 2

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

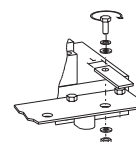


Dimensions (mm)

Door drilling for external handle



M	Nxm
M14	45



H	L
max	max

H max (Cu)	L max (Cu)
2x10	100
3x10	100

2200A
2500A

DC Disconnectors

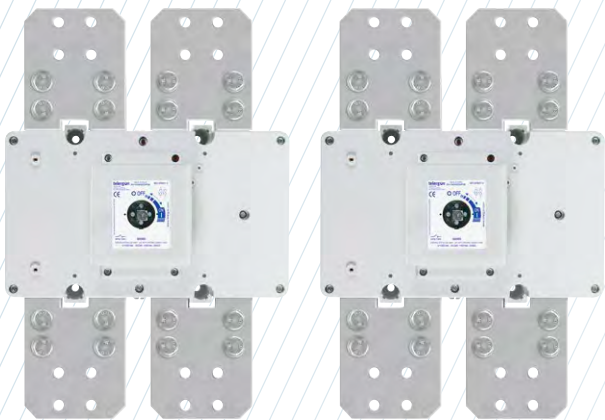
2P

Size 4

A 2500 3150



1500Vdc



CODE-2500A S5-16004ZS0P38

CODE-3150A S5-18004ZS0P38



Technical information



DO NOT OPERATE UNDER LOAD

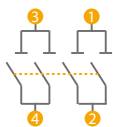
According to IEC 60947-1
IEC 60947-3

			2500	3150
Rated insulation voltage DC	Ui	V	1500	1500
Rated impulse withstand voltage	Uimp	kV	12	12
Rated operational current DC20A	Ie	Ue 1500 Vdc	A 2500	A 3150

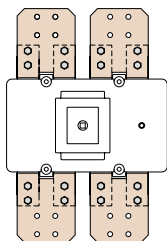
		2500	3150
Number of mechanical operations (according to the standards, for other values please consult)	Cycles	3000	2000
Maximum weight (without bridging links)	Kg	20,8	20,8

Connection diagram

Connection diagram



Bridging links ^{*(P2)}



Accessories



» Direct handle

CODE DS-LI41T



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

IP65

CODE DS-LA41T



» External handle without shaft

IP65

CODE DS-LA43T



» Auxiliary contacts

1NO+1NC CODE D5LAU01

2NO+2NC CODE D5LAU02

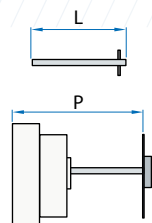
I_e = 16 A (resistive loads)
4 A (inductive loads) at 250 Vac.



» Bridging links^{*(P2)}

CODE x2 DS-PI4K (2 units)

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



» Shafts

Standard shaft included ^{*(e1)}

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

Shaft extensions

Type 1

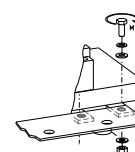
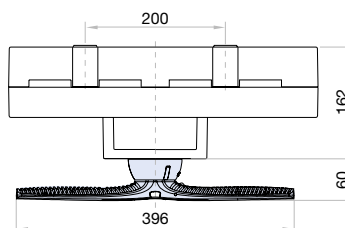
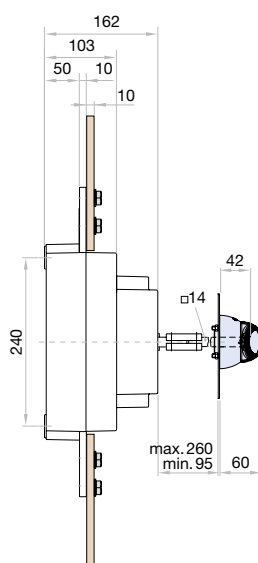
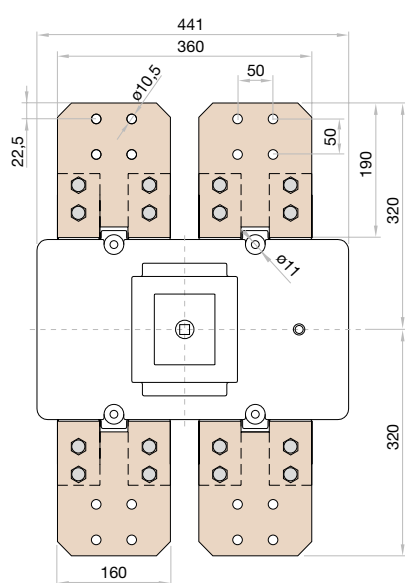
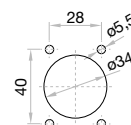
L (mm)	P (mm)	CODE
485	235... 686	DS-EP44

Type 2

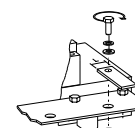
L (mm)	P (mm)	CODE
635	235... 836	DS-EP45

Dimensions (mm)

Door drilling for external handle



T	M
M14	Nxm
	55



	H max (Cu) mm	L max (Cu) mm
2500A	2x5	100
3150A	3x5	100