vector Energy

SWITCHES DISCONNECTORS

SD 16 ÷ 200 A



MANUAL CHANGE OVER SWITCHES

CO-SD 16 ÷ 160 A



_GENERALITIES
The modular switch disconnectors of SD series, allow the breaking and the disconnecting on load of equipment on low voltage at nominal current from 16 to 200 A.

_USE
The switch disconnectors of SD series are commonly used for the following purposes:
main switch
switch for motors
safety switch
disconnector

_GENERAL CHARACTERISTICS
High breaking capacity (AC 22 A - AC 23 A)
Double break contacts on each pole
High electrical and mechanical endurance
Resistant to damp heat
IP20 degree of protection (with accessory)
Modular execution, basic mounting on 35 mm DIN rail and by screws, modular window 45 mm.

_RANGE
SD1 three poles 16 - 25 - 32 - 40 - 63 A
SD2 three poles 63 - 80 - 100 - 125 A
SD3 three poles 100 - 125 - 160 - 200 A

_ADDITIONAL POLES
Fourth neutral pole makes erlier and opens later than the phase contacts.
Fourth pole solid neutral.
Earth pole. Contemporary pole under request.

_OPERATING MECHANISM
Black (standard execution) or emergency direct handle padlockable in 0 position. Handle with door interlock handle, black or emergency handle padlockable with up to three padlocks in 0 position.
IP 65 degree of protection.

_STANDARD SERVICE, MOUNTING AND TRANSPORT CONDITIONS
Transport and storage ambient temperature - 25°C + 55°C
working ambient temperature - 20°C + 40°C
in case of higher ambient temperature (t_a), consider the following derating formula:

$$I_{The} = k\, I_{Th} \text{ where } K = 1 - \frac{t - 40}{100}$$

altitude max 2000 m a.s.l.
pollution degree 3 according IEC 60947-1 duty (UNI EN 60947-1):
8 hours; uninterrupted; intermittent 60% class 30
For other operating conditions please contact the manufacturer.

_CONFORMITY TO STANDARDS
IEC 60947-1 | IEC 60947-3 | UNI EN 60947-1 | UNI EN 60947-3 | UL 508A

_CERTIFICATES AND APPROVALS
IEC | EAC | UL EAC | CSA



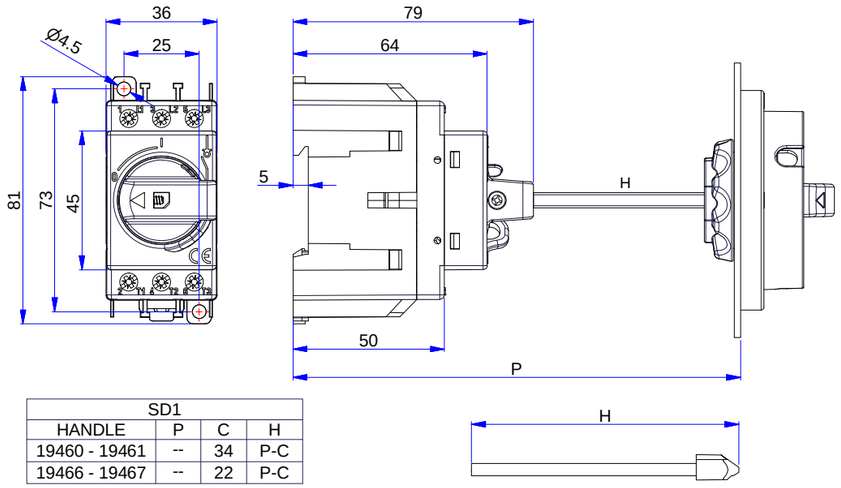




Caratteristiche tecniche _technincal features	Tipo _Type		SD1					SD2			SD3		
	In	A	16	25	32	40	63	80	100	125	125	160	200
Tensione nominale d' isolamento _Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Tensione nominale tenuta impulso _Shock resistance	Uimp	kV	4	4	4	4	4	8	8	8	8	8	8
Corrente nominale termica a 40°C _Thermal current at 40°C	Ith/ Ithe	A	16	25	32	40	63	80	100	125	125	160	200
Corrente nominale d' impiego _Rated operational current													
AC-21A	415V	A	16	25	32	40	63	80	100	125	125	160	200
	500V	A	16	25	32	40	63	80	100	125	125	160	160
	690V	A	16	25	32	40	63	80	100	125	125	160	160
AC-22A	415V	A	16	25	32	40	63	80	100	125	125	160	200
	500V	A	16	25	32	40	63	80	100	125	125	160	160
	690V	A	16	25	32	40	63	80	100	125	125	160	160
AC-23A/B	415V	A	16	25	32	40	63	80	100	100	125	160	160
	500V	A	16	16/25	32	40	63	63	63	63	125	160	160
	690V	A	16	16/25	32	40	63	63	63	63	125	125	125
Potere di chiusura a 415V AC23 _Rated making capacity at 415V AC23		A	160	250	320	400	630	800	1000	1250	1250	1600	1600
Potere di interruzione a 415V AC23 _Breaking capacity at 415V AC23		A	128	200	256	320	504	640	800	1024	1000	1280	1280
Potenza nominale di impiego AC23 _Rated operational power AC23	415V	kW	8	11	14	18	29	37	46	46	55	69	69
	500V	kW	8	14	17	22	35	35	35	35	65	83	83
	690V	kW	12	19	24	31	48	48	48	48	90	90	90
Corrente di breve durata per 1 sec _Short-circuit withstand currente 1 sec	400V	kA	1,1	1,1	1,1	1,1	1,1	1,5	1,5	1,5	3	3	3
Potere di chiusura in corto circuito _Short-circuit making capacity	400V	kA	2,1	2,1	2,1	2,1	2,1	3,5	3,5	3,5	4,5	4,5	4,5
Corrente di corto circuito condizionata da fusibile _fuse protected short-circuit withstand													
Tipo fusibile gG DIN _gG DIN Backup associated fuse rating		A	16	25	32	40	63	80	100	125	125	160	200
Valore efficace/R.M.S. value		kA	10	10	10	10	10	10	10	10	10	10	10
Durata meccanica _Mechanical endurance		n.	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
Durata elettrica _Electrical endurance		n.	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Potenza dissipata per polo _Power loss per pole		W	0,1	0,1	0,2	0,3	0,8	1,3	2	3,1	2,5	3	3
Dimensione cavo _Cable section		mm^2	16	16	16	16	16	50	50	50	70	70	70
Max.torsione terminali _Tightening torque		Nm	2	2	2	2	2	2,5	2,5	2,5	6	6	6
Sforzi di manovra _Operating torque		Nm	1,6	1,6	1,6	1,6	1,6	2	2	2	2,6	2,6	2,6
Peso netto _Net weight	3P	Kg.	0,13	0,13	0,13	0,13	0,13	0,25	0,25	0,25	0,4	0,4	0,4
	4P	Kg.	0,16	0,16	0,16	0,16	0,16	0,32	0,32	0,32	0,5	0,5	0,5
	6P	Kg.	0,3	0,3	0,3	0,3	0,3	0,55	0,55	0,55	0,8	0,8	0,8
	8P	Kg.	0,4	0,4	0,4	0,4	0,4	0,62	0,62	0,62	1	1	1

SD1 3 poles

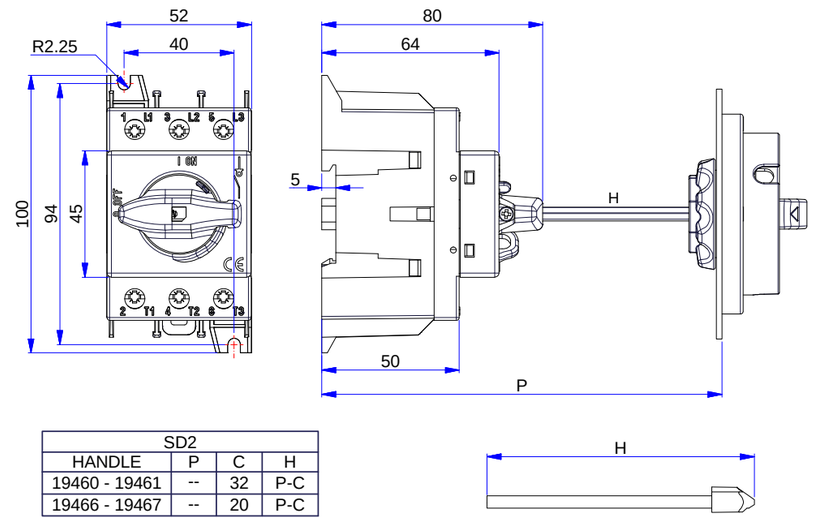




SD1			
HANDLE	P	C	H
19460 - 19461	--	34	P-C
19466 - 19467	--	22	P-C

SD2 3 poles

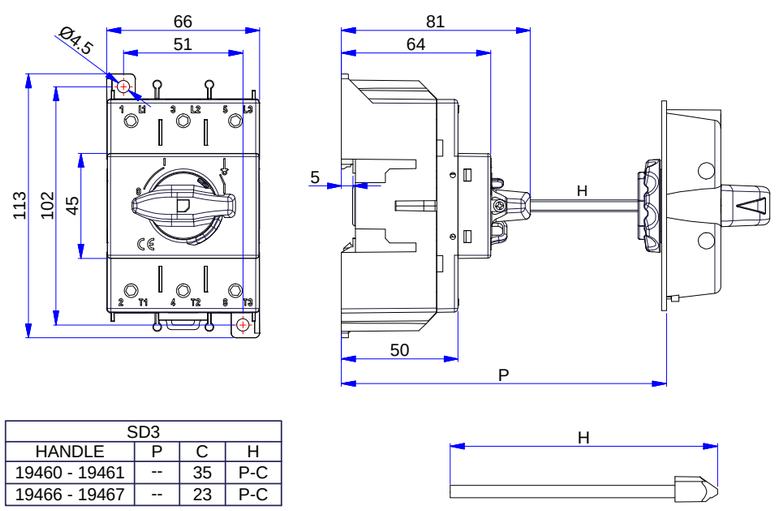




SD2			
HANDLE	P	C	H
19460 - 19461	--	32	P-C
19466 - 19467	--	20	P-C

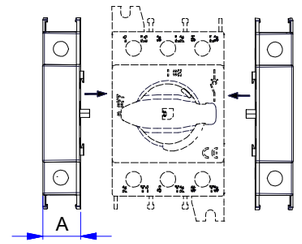
SD3 3 poles





SD3			
HANDLE	P	C	H
19460 - 19461	--	35	P-C
19466 - 19467	--	23	P-C

4P
additional poles assembly



Tipo_Type	SD1	SD2	SD3
A	14	17	22

MANUAL CHANGEOVER SWITCHES

CO-SD 16 ÷ 160 A

_SD CHANGE-OVER SWITCHES GENERALITIES

The manual change-over switches SD series, allow the change-over of two low voltage electrical circuits.
They are made by two standard switches of SD series mechanically interlocked

Available in standard version I-0II (pos 0 both switches are OFF) and in close transition "OL" version I-I+II-II (pos I+II both switches are ON).





_RANGE

CO-SD1 change-over switches 16 - 25 - 32 - 40 - 63 A
CO-SD2 change-over switches 80 - 100 - 125 A
CO-SD3 change-over switches 125 - 160 A

_OPERATING MECHANISM

Direct handle padlockable in 0 position.
Handle with and without door interlock handle.

_CONFORMITY TO STANDARDS

IEC 60947/1-3 | UNI EN 60947/1-3 | UL | EAC | CSA

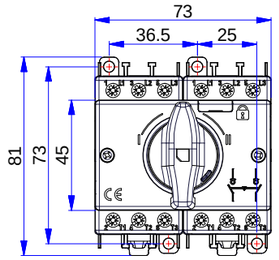


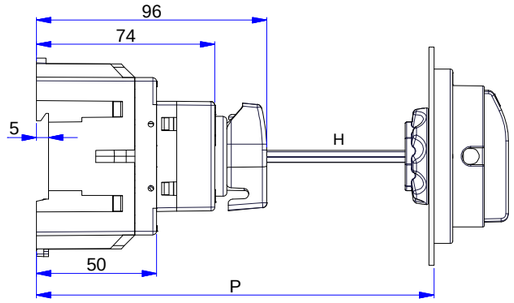
Close look to Changeover (CO) version



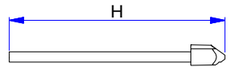
CO SD1





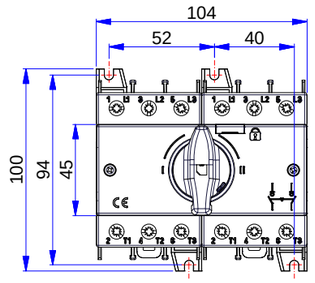


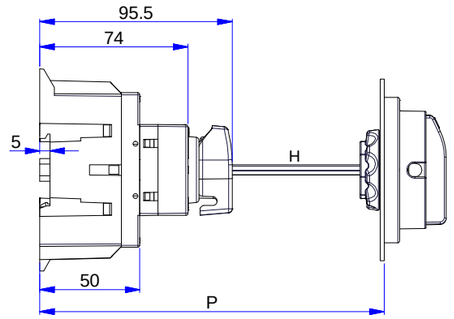
CO SD1			
HANDLE	P	C	H
19462	--	52	P-C
19459	--	40	P-C



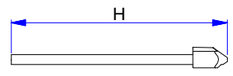
CO SD2





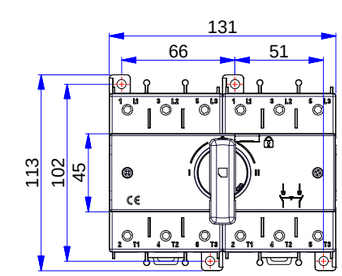


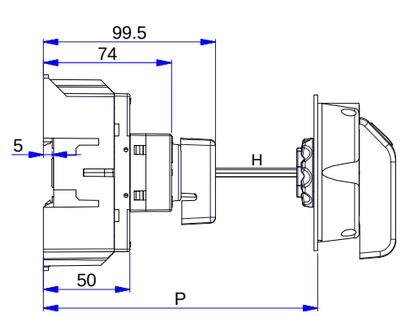
CO SD2			
HANDLE	P	C	H
19462	--	52	P-C
19459	--	40	P-C



CO SD3







CO SD3			
HANDLE	P	C	H
19462	--	52	P-C
19459	--	40	P-C

