

| | |
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Interruttori di manovra sezionatori
Switch disconnectors

16 ÷ 160 A



GENERALITA'

Gli **interuttori-sezionatori modulari della serie SD**, consentono l'interruzione e il sezionamento sotto carico di macchine e linee di bassa tensione con correnti nominali da 16 a 160 A.

IMPIEGO

Gli apparecchi della serie **SD** sono abitualmente impiegati nelle seguenti funzioni:

- > interruttore generale
- > interruttore per partenze motori
- > interruttore di sicurezza
- > sezionatore

CARATTERISTICHE GENERALI

- > alto potere d'interruzione (AC 22 A - AC 23 A)
- > doppia interruzione per ogni polo
- > elevata durata meccanica ed elettrica
- > adatto per l'utilizzo in climi tropicali
- > grado di protezione IP20 (accessori inclusi)
- > esecuzione modulare montaggio su profilato DIN 35 mm e a vite, finestra modulare 45 mm.

COMPOSIZIONE DELLA GAMMA

SD1 corpo tripolare con le portate da 16 - 25 - 32 - 40 - 63 A

SD2 corpo tripolare con le portate da 63 - 80 - 100 - 125 A

SD3 corpo tripolare con le portate da 125 - 160 A

POLI AGGIUNTIVI

Quarto polo sezionato, polo di neutro e di terra passanti.

COMANDO

Maniglia diretta nera (esecuzione standard), o di emergenza lucchettabile in posizione di zero.

Maniglia con e senza blocco porta, nera, o di emergenza, con possibilità di tre blocchi lucchettabili in posizione di zero.

Grado di protezione IP 65.

A levetta lucchettabile in posizione 0 (sezionatore SD2).

Vasta gamma di accessori.

CONFORMITA' ALLE NORME

IEC 60947/1-3

CEI EN 60947/1-3

UL508

CERTIFICATI E OMOLOGAZIONI

- > CESI
- > UL
- > TUV
- > INTEK
- > GOST R

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 160 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
- > 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 45mm.

RANGE COMPOSITION

SD1 three poles 16 - 25 - 32 - 40 - 63 A

SD2 three poles 63 - 80 - 100 - 125 A

SD3 three poles 125 - 160 A

ADDITIONAL POLES

Fourth switched pole, solid neutral and earth pole.

OPERATING MECHANISM

Black (standard execution) or emergency direct handle padlockable in 0 position.

Handle with and without door interlock handle, black or emergency handle padlockable with up to three padlocks in 0 position.

IP 65 degree of protection.

By toggle padlockable in 0 position (switch SD2). Wide range of accessories.

CONFORMITY TO STANDARDS

IEC 60947/1-3

CEI EN 60947/1-3

UL508

CERTIFICATES AND APPROVALS

- > CESI
- > UL
- > TUV
- > INTEK
- > GOST R

Codici per
l'ordinazione
Order references



| Tipo Type | Corrente nominale Rated current | Maniglia diretta (nera) Direct handle (black) | | Maniglia diretta emergenza Direct emergency handle | |
|---|------------------------------------|--|---------------|---|---------------|
| | | Poli / Poles | Codice / Code | Poli / Poles | Codice / Code |
| SD1 | 16A | 3P | 19300 | 3P | 19310 |
| | | 4P | 19330 | 4P | 19350 |
| | | 6P | 193006 | 6P | 193106 |
| | 25A | 8P | 193308 | 8P | 193508 |
| | | 3P | 19301 | 3P | 19311 |
| | | 4P | 19331 | 4P | 19351 |
| | 32A | 6P | 193016 | 6P | 193116 |
| | | 8P | 193318 | 8P | 193518 |
| | | 3P | 19302 | 3P | 19312 |
| | 40A | 4P | 19332 | 4P | 19352 |
| | | 6P | 193026 | 6P | 193126 |
| | | 8P | 193328 | 8P | 193528 |
| | 63A | 3P | 19303 | 3P | 19313 |
| | | 4P | 19333 | 4P | 19353 |
| | | 6P | 193036 | 6P | 193136 |
| SD1 retroportella door mounting switch disconnector | 16A | 8P | 193338 | 8P | 193538 |
| | | 3P | 19304 | 3P | 19314 |
| | | 4P | 19334 | 4P | 19354 |
| SD1 retroportella door mounting switch disconnector | 25A | 6P | 193046 | 6P | 193146 |
| | | 8P | 193348 | 8P | 193548 |
| | | 3P | 19300R | 3P | 19310R |
| SD1 retroportella door mounting switch disconnector | 40A | 4P | 19330R | 4P | 19350R |
| | | 3P | 19301R | 3P | 19311R |
| | | 4P | 19331R | 4P | 19351R |
| SD1 retroportella door mounting switch disconnector | 63A | 3P | 19302R | 3P | 19312R |
| | | 4P | 19332R | 4P | 19352R |
| | | 3P | 19303R | 3P | 19313R |
| SD1 retroportella door mounting switch disconnector | 40A | 4P | 19333R | 4P | 19353R |
| | | 3P | 19304R | 3P | 19314R |
| | | 4P | 19334R | 4P | 19354R |



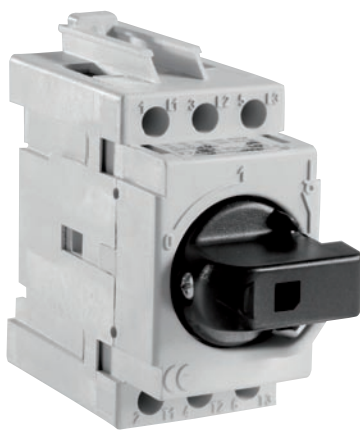
| | | | | | |
|--------------------|------|----|---------|----|--------|
| SD2 | 63A | 3P | 19205 | 3P | 19215 |
| | | 4P | 19235 | 4P | 19255 |
| | | 6P | 192056 | 6P | 192156 |
| | 80A | 8P | 192358 | 8P | 192558 |
| | | 3P | 19206 | 3P | 19216 |
| | | 4P | 19236 | 4P | 19256 |
| | 100A | 6P | 192066 | 6P | 192166 |
| | | 8P | 192368 | 8P | 192568 |
| | | 3P | 19207 | 3P | 19217 |
| | 125A | 4P | 19237 | 4P | 19257 |
| | | 6P | 192076 | 6P | 192176 |
| | | 8P | 192378 | 8P | 192578 |
| SD2 leva toggle | 63A | 3P | 19208 | 3P | 19218 |
| | | 4P | 19238 | 4P | 19258 |
| | | 6P | 192086 | 6P | 192186 |
| SD2 leva toggle | 80A | 8P | 192388 | 8P | 192588 |
| | | 3P | 19205LE | - | - |
| | | 4P | 19235LE | - | - |
| SD2 leva toggle | 100A | 3P | 19206LE | - | - |
| | | 4P | 19236LE | - | - |
| | | 3P | 19207LE | - | - |
| SD2 leva toggle | 125A | 4P | 19237LE | - | - |
| | | 3P | 19208LE | - | - |
| | | 4P | 19238LE | - | - |



| | | | | | |
|-----|------|----|-------|----|-------|
| SD3 | 125A | 3P | 19701 | 3P | 19711 |
| | | 4P | 19731 | 4P | 19751 |
| | 160A | 3P | 19702 | 3P | 19712 |
| | | 4P | 19732 | 4P | 19752 |

Dati tecnici gamma standard
Technical data range standard

CEI/EN 60947/1-3
IEC 60947/1-3



| Caratteristiche Characteristics | | 16A | 25A | SD1 | | SD2 | | | | | SD3 | |
|--|--------------|-------|-------|-----------|-------|-------|--------|--------|-------|-------|-------|-------|
| Tensione nominale d'isolamento Rated insulation voltage | Ui (V) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| Tensione nominale tenuta impulso Impulse withstand voltage | Uimp (kV) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Corrente nominale termica a 40°C Rated thermal current at 40°C | Ith/Ithe (A) | 16 | 25 | 32 | 40 | 63 | 63 | 80 | 100 | 125 | 125 | 160 |
| Corrente nominale d' impiego Ie / Rated operational current Ie | | | | | | | | | | | | |
| AC-21A | 415V (A) | 16 | 25 | 32 | 40 | 63 | 63 | 80 | 100 | 125 | 125 | 160 |
| | 500V (A) | 16 | 25 | 32 | 40 | 63 | 63 | 80 | 100 | 125 | 125 | 160 |
| | 690V (A) | 16 | 25 | 32 | 40 | 63 | 63 | 80 | 100 | 125 | 125 | 160 |
| AC-22A | 415V (A) | 16 | 25 | 32 | 40 | 63 | 63 | 80 | 100 | 125 | 125 | 160 |
| | 500V (A) | 16 | 25 | 32 | 40 | 63 | 63 | 80 | 100 | 100 | 125 | 160 |
| | 690V (A) | 16 | 25 | 32 | 40 | 40 | 40 | 40 | 40 | 40 | 125 | 160 |
| AC-23A | 415V (A) | 16 | 25 | 32 | 40 | 40 | 63 | 80 | 100 | 100 | 125 | 160 |
| | 500V (A) | 16 | 25 | 32 | 40 | 40 | 63 | 63 | 63 | 63 | 125 | 125 |
| | 690V (A) | 16 | 25 | 25 | 25 | 25 | 32 | 32 | 32 | 32 | 100 | 100 |
| Potere di chiusura a 415V AC23 Rated making capacity at 415V AC23 | (A) | 160 | 250 | 320 | 400 | 400 | 630 | 800 | 1000 | 1000 | 1250 | 1600 |
| Potere di interruzione a 415V AC23 Rated breaking capacity at 415V AC23 | (A) | 128 | 200 | 256 | 320 | 320 | 504 | 640 | 800 | 800 | 1000 | 1280 |
| Potenza nominale di impiego AC23 Rated operational power AC23 | 415V (kW) | 7.5 | 11 | 14 | 15 | 15 | 29 | 37 | 46 | 46 | 55 | 69 |
| | 500V (kW) | 7.5 | 11 | 14 | 15 | 18.5 | 35 | 35 | 35 | 35 | 65 | 83 |
| | 690V (kW) | 7.5 | 11 | 14 | 15 | 18.5 | 24 | 24 | 24 | 24 | 90 | 90 |
| Corrente di breve durata per 1 sec Short-circuit withstand current 1 sec | (400V) (kA) | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.5 | 1.5 | 1.5 | 1.5 | 3 | 3 |
| Corrente di corto circuito condizionata da fusibile / Rated fuse short circuit current | | | | | | | | | | | | |
| Tipo fusibile gG / Back up fuse gG | (A) | 16 | 25 | 32 | 40 | 63 | 63 | 80 | 100 | 125 | 125 | 125 |
| Valore efficace / R.M.S. value | (kA) | 50 | 50 | 50 | 50 | 20 | 50 | 50 | 30 | 20 | 50 | 50 |
| Valore di picco / Peak value | (kA) | 3.8 | 4.5 | 5 | 5.7 | 5.7 | 8 | 9.9 | 9.9 | 9.9 | 10.5 | 10.5 |
| Durata meccanica Mechanical endurance | n. | 50000 | 50000 | 50000 | 50000 | 50000 | 30000 | 30000 | 30000 | 30000 | 30000 | 30000 |
| Durata elettrica / Electrical endurance | n. | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 1500 | 1500 | 1000 | 1000 | 1000 |
| Potenza dissipata per polo Power loss per pole | W | 0.1 | 0.1 | 0.2 30 | 0.3 | 0.8 | 0.8 | 1.3 | 2.0 | 3.1 | 2.5 | 3 |
| Dimensione cavo / Cable section | mmq | 16 | 16 | 16 | 16 | 16-25 | *16-50 | *16-50 | 25-50 | 35-50 | 10÷70 | 10÷70 |
| Max. torsione terminali Max terminal torque | Nm | 2 | 2 | 2 | 2 | 2 | 2,5 | 2,5 | 2,5 | 2,5 | 6 | 6 |
| Sforzi di manovra / Operation torque | Nm | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2,6 | 2,6 |
| Contatti ausiliari AC 15/415V Auxiliary contacts AC 15/415V | A | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Peso netto 3 poli / Net weight 3 poles | Kg. | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.25 | 0.25 | 0.25 | 0.25 | 0,4 | 0,4 |
| Peso netto 4 poli / Net weight 4 poles | Kg. | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.32 | 0.32 | 0.32 | 0.32 | 0,5 | 0,5 |
| Peso netto 6 poli / Net weight 6 poles | Kg. | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.55 | 0.55 | 0.55 | 0.55 | - | - |
| Peso netto 8 poli / Net weight 8 poles | Kg. | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.62 | 0.62 | 0.62 | 0.62 | - | - |

* Con terminale aggiunto / With added terminal

Dati tecnici gamma standard
 Technical data range standard

UL 508

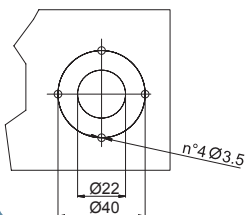


| Caratteristiche / Characteristics | | SD1 | | | SD2 | | | SD3 | | | | |
|--|-----------|------|------|------|------|------|------|------|------|-------|-------|-------|
| Corrente generale / Rating 3 poles | | 16A | 25A | 32A | 40A | 63A | 80A | 100A | 125A | 100A | 125A | 160A |
| Uso generale / General use | (V AC) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| Valore di corto circuito / Short circuit rating | (kA) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 10 | 10 | 10 |
| Tipo fusibile / Fuse type | | RK5 | RK5 | RK5 | RK5 | RK5 | RK5 | RK5 | RK5 | RK5 | RK5 | RK5 |
| Valore fusibile / Fuse rating | (A) | 40 | 40 | 40 | 40 | 125 | 125 | 125 | 125 | 175 | 175 | 175 |
| Max. potenza impiego UL 3 fasi Maximum UL horsepower 3 phases | 120V (Hp) | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 15 | 20 | 20 |
| | 240V (Hp) | 5 | 7.5 | 7.5 | 10 | 10 | 15 | 15 | 15 | 30 | 40 | 40 |
| | 415V (Hp) | 7.5 | 10 | 10 | 15 | 20 | 25 | 25 | 25 | 50 | 60 | 60 |
| | 480V (Hp) | 10 | 15 | 20 | 20 | 25 | 30 | 30 | 30 | 75 | 100 | 100 |
| | 600V (Hp) | 15 | 20 | 25 | 30 | 30 | 40 | 40 | 40 | 100 | 125 | 125 |
| Max. potenza impiego UL 1 fase Maximum UL horsepower 1 phase | 120V (Hp) | - | - | - | - | 3 | 5 | 5 | 5 | - | - | - |
| | 240V (Hp) | - | - | - | - | 7.5 | 10 | 10 | 10 | - | - | - |
| Max. carico avviamento motore 3 fasi Maximum full load motor running 3 phases | 120V (A) | 19,2 | 19,2 | 19,2 | 19,2 | 30,4 | 30,4 | 30,4 | 30,4 | 84 | 108 | 108 |
| | 240V (A) | 15,2 | 22 | 22 | 28 | 42 | 42 | 42 | 42 | 80 | 104 | 104 |
| | 415V (A) | 14 | 18 | 18 | 27 | 44 | 44 | 44 | 44 | 83 | 103 | 103 |
| | 480V (A) | 14 | 21 | 27 | 27 | 40 | 40 | 40 | 40 | 84 | 104 | 104 |
| | 600V (A) | 17 | 22 | 27 | 32 | 41 | 41 | 41 | 41 | 99 | 125 | 125 |
| Max. carico avviamento motore 1 fase Maximum full load motor running 1 phase | 120V (A) | - | - | - | - | 56 | 56 | 56 | 56 | - | - | - |
| | 240V (A) | - | - | - | - | 50 | 50 | 50 | 50 | - | - | - |
| Durata meccanica / Mechanical endurance | n. | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 |
| Durata elettrica / Electrical endurance | n. | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 |
| Sezione terminali / Wire size range | AWG | 16÷6 | 16÷6 | 16÷6 | 16÷6 | 6÷1 | 6÷1 | 6÷1 | 6÷1 | 3/0÷6 | 3/0÷6 | 3/0÷6 |
| Tipo terminale / Tightening type | | Cu | Cu | Cu | Cu | Cu | Cu | Cu | Cu | Cu | Cu | Cu |
| Max. torsione terminali / Max terminal Torque | Nm | 2 | 2 | 2 | 2 | 3.5 | 3.5 | 3.5 | 3.5 | 6 | 6 | 6 |
| Peso netto / Net weight | Kg. | 0.13 | 0.13 | 0.13 | 0.13 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |

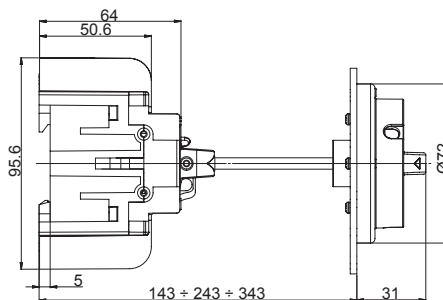
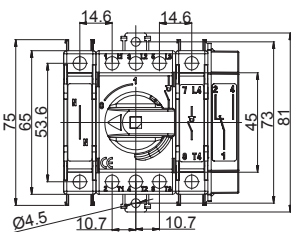
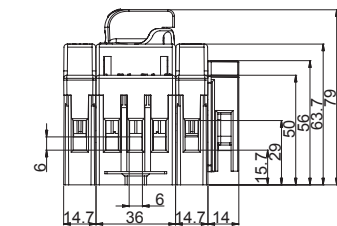
Dimensioni
Dimensions



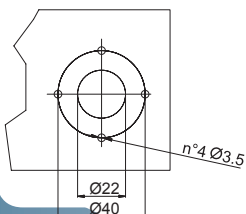
L
L = 10 mm



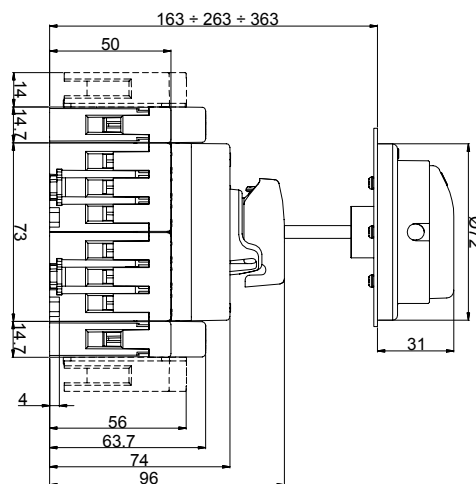
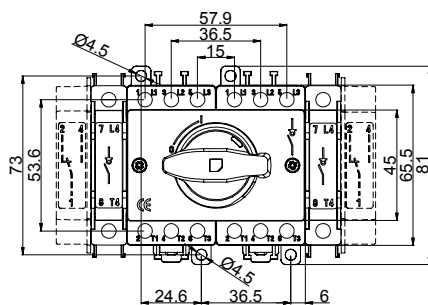
SD1 3 - 4 poli / poles



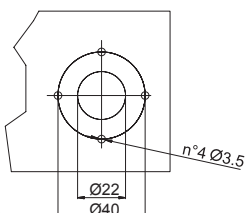
L
L = 10 mm



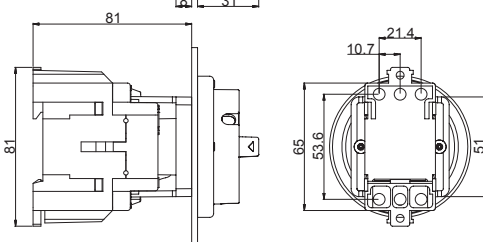
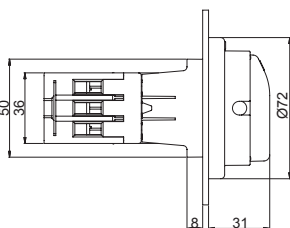
SD1 6 - 8 poli / poles



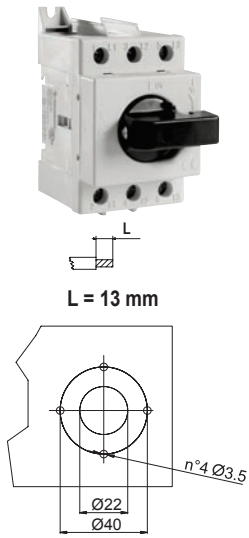
L
L = 10 mm



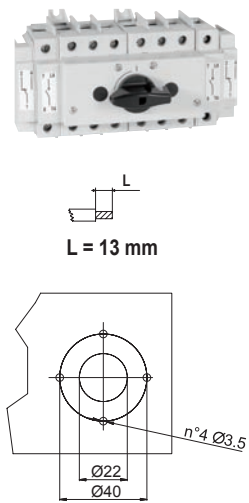
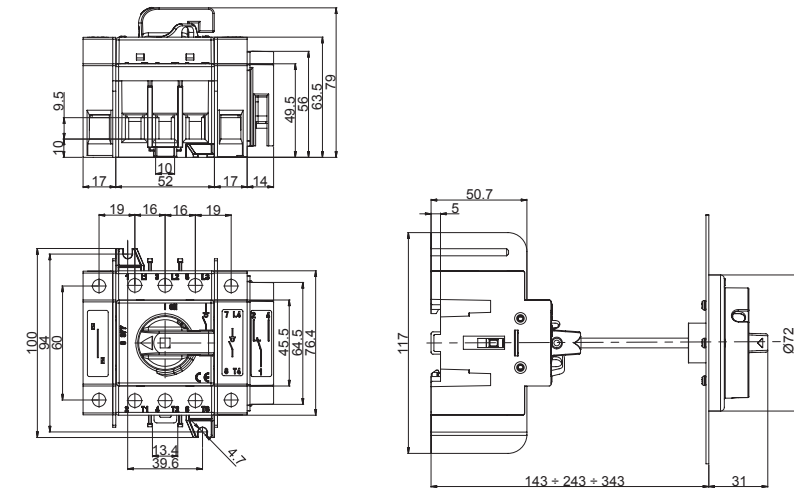
SD1 retroportella / door mounting switch disconnecter



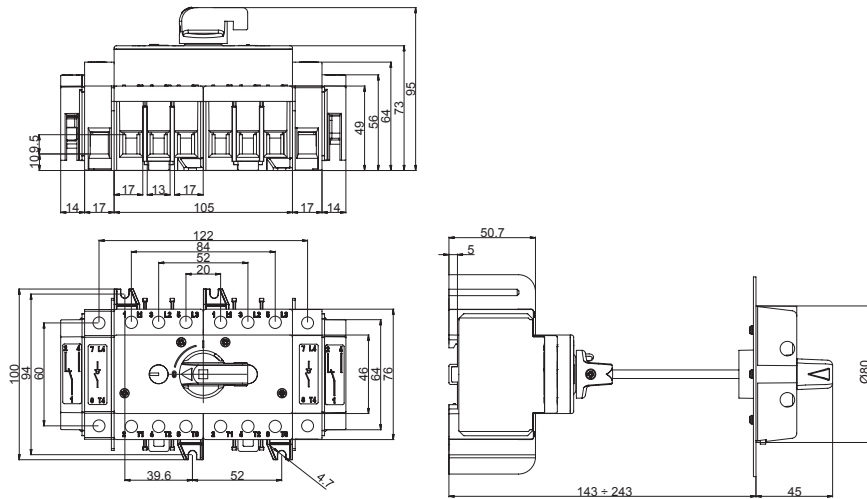
Dimensioni
Dimensions



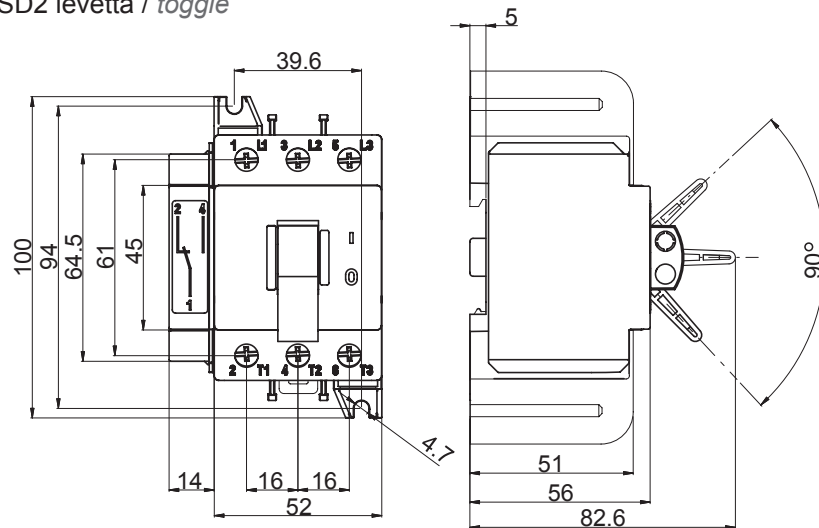
SD2 3 - 4 poli / poles



SD2 6 - 8 poli / poles



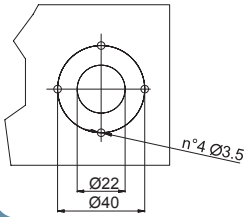
SD2 levetta / toggle



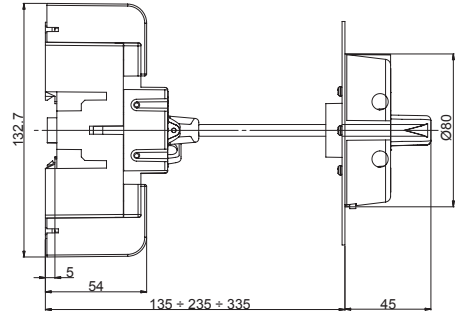
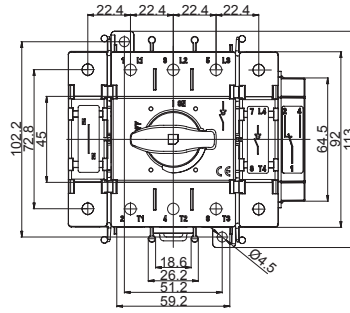
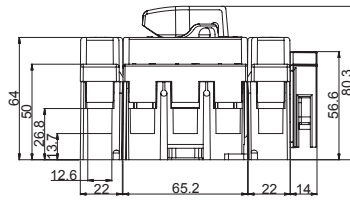
Dimensioni
Dimensions



L = 15 mm



SD3



Accessori
Accessories

Codici per
l'ordinazione
Order references

maniglia blocco porta
door interlock handle

| | | |
|---------------|---|--|
| Tipo / Type | SD1 - SD2 rotonda nera / black round | SD1 - SD2 rotonda giallo-rossa / yellow-red round |
| Codice / Code | 19400 | 19401 |



19400



19401



maniglia blocco porta
door interlock handle

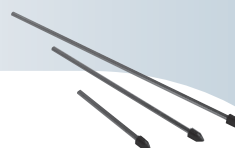
| | | |
|---------------|---|--|
| Tipo / Type | SD1 - SD2 - SD3 quadrata nera / black square | SD1-SD2-SD3 quadrata giallo-rossa / yellow-red square |
| Codice / Code | 19403 | 19404 |



19403



19404

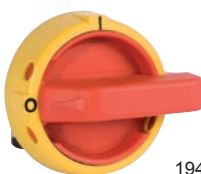


maniglia blocco porta con
sblocco
door interlock handle with
defeater mechanism

| | | |
|---------------|---------------------------------|--|
| Tipo / Type | SD1 - SD2 - SD3 nera / black | SD1-SD2-SD3 giallo-rossa / yellow-red |
| Codice / Code | 19406 | 19407 |



19406



19407



maniglia blocco porta con
ghiera
door interlock handle with
ring

| | | |
|---------------|---|--|
| Tipo / Type | SD1 - SD2 rotonda nera / black round | SD1 - SD2 rotonda giallo-rossa / yellow-red round |
| Codice / Code | 19460 | 19461 |



19460



19461



maniglia blocco porta
door interlock handle

| | | |
|---------------|---|--|
| Tipo / Type | SD1 - SD2 - SD3 quadrata nera / black square | SD1-SD2-SD3 quadrata giallo-rossa / yellow-red square |
| Codice / Code | 19463 | 19464 |



19463



19464

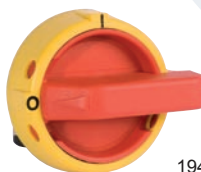


maniglia blocco porta con
sblocco con ghiera
door interlock handle with
defeater mechanism with
ring

| | | |
|---------------|---------------------------------|--|
| Tipo / Type | SD1 - SD2 - SD3 nera / black | SD1-SD2-SD3 giallo-rossa / yellow-red |
| Codice / Code | 19466 | 19467 |



19466

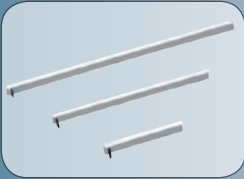


19467



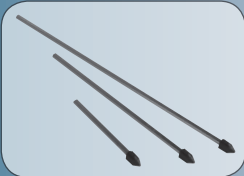
Accessori
Accessories

Codici per
l'ordinazione
Order references



alberi di comando / shaft

| Tipo/Type | SD1 - SD2 alluminio / aluminum | | SD1 - SD2 acciaio / steel | | |
|-------------|--------------------------------|-----------|---------------------------|-----------|-----------|
| mm | 100 | 200 | 100 | 200 | 300 |
| Codice Code | 19535-100 | 19535-200 | 19534-100 | 19534-200 | 19534-300 |



alberi di comando con puntale / shaft with point

| Tipo/Type | SD1 - SD2 alluminio / aluminum | | SD1 - SD2 - SD3 acciaio / steel | | |
|-------------|--------------------------------|------------|---------------------------------|------------|------------|
| mm | 100 | 200 | 100 | 200 | 300 |
| Codice Code | 19535-100P | 19535-200P | 19534-100P | 19534-200P | 19534-300P |



4° polo / 4th pole

| Tipo Type | SD1 | SD2 | SD3 |
|-------------|-------|-------|-------|
| Codice Code | 19442 | 19443 | 19444 |



neutro / neutral

| Tipo Type | SD1 | SD2 | SD3 |
|-------------|-------|-------|-------|
| Codice Code | 19320 | 19418 | 19450 |



morsetto di terra / earthing neutral

| Tipo Type | SD1 | SD2 | SD3 |
|-------------|-------|-------|-------|
| Codice Code | 19322 | 19422 | 19452 |



neutro passante / solid neutral

| Tipo Type | SD1 | SD2 | SD3 |
|-------------|-------|-------|-------|
| Codice Code | 19321 | 19420 | 19451 |

Accessori
Accessories

Codici per
l'ordinazione
Order references



contatti ausiliari 1NA+1NC terminali a vite
auxiliary contacts 1NO+1NC screw terminals

| | | | |
|----------------|-------|-------|-------|
| Tipo Type | SD1 | SD2 | SD3 |
| Codice Code | 19429 | 19429 | 19429 |

Portata nominale 10A 400V - 16A 250V ca
Apertura anticipata rispetto all'apertura dei contatti principali dell'interruttore.
Rated current 10A 400V - 16A 250V ac - Break before main contacts.



contatti ausiliari 1NA+1NC terminali a Faston
auxiliary contacts 1NO+1NC Faston terminals

| | | | |
|----------------|-------|-------|-------|
| Tipo Type | SD1 | SD2 | SD3 |
| Codice Code | 19430 | 19430 | 19430 |

Portata nominale 10A 400V - 16A 250V ca
Apertura anticipata rispetto all'apertura dei contatti principali dell'interruttore.
Rated current 10A 400V - 16A 250V ac - Break before main contacts.



kit compriterminali 3 poli / 3 poles terminals cover kit

| | | | |
|----------------|-------|-------|-------|
| Tipo Type | SD1 | SD2 | SD3 |
| Codice Code | 19424 | 19425 | 19453 |



kit compriterminali 4° polo / 4th pole terminals cover kit

| | | | |
|----------------|-------|-------|-------|
| Tipo Type | SD1 | SD2 | SD3 |
| Codice Code | 19426 | 19427 | 19454 |

