

DS1 & DS3 DECONTACTOR™ is a compact and waterproof plug and socket-outlet with integral switch for industrial purposes.

DS1 & DS3 DECONTACTOR™ complies with the following regulations and standards(a):

European Directives Low Voltage and RoHS (affixing of CE marking), REACH European Regulation, standards IEC/EN 60309-1, IEC/EN 60309-4, IEC/EN 60947-3 (dealing with the load breaking capacities AC-22 and AC-23), UL 1682, UL 2682 (USA), CSA C22.2 N° 182.1-07 (Canada), GB/T 11918.1 (China).

DS1 & DS3 DECONTACTOR™ is certified by the following certification bodies:

LCIE (France), UL (USA), TR CU (Russia), CSA (Canada), CQC (China), , Intertek-RETIE (Colombia).

The use of DS1 & DS3 DECONTACTOR™ facilitates the compliance with:

- electrical machinery to the "Machinery" European Directive on isolating device, and to standard EN 60204-1 : Safety of machinery-electrical equipment of machines

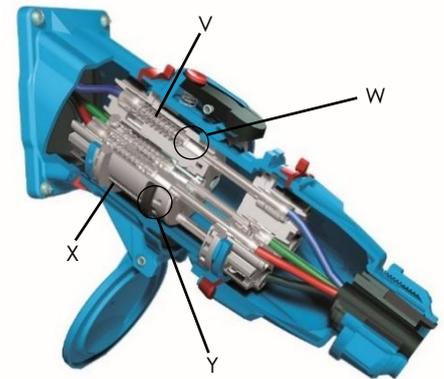
- electrical installation:

* to national regulations relating to the improvement of the safety and health of workers at work in France, Italy, Spain, Belgium,

* to installation standards : IEC 60364 (international), HD 60364 (European), NFPA 70 (USA) and NF C 15-100 (French) or other national transposition of IEC/HD 60364.

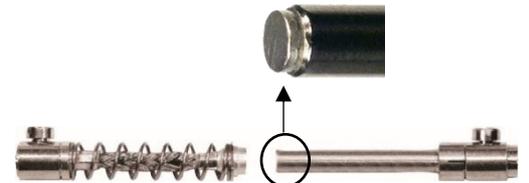


| General information | | DS1 | DS3 |
|--|--|------------|-----------------------|
| (b) | I_n | 30 A | 50 A |
| | U_{max} (V AC/V DC) | 690/1000 | 1000/1500 |
| (c) | Frequency max. (Hz) | 500 Hz | 500 Hz |
| (d) | Number of contacts | 4P+E | 4P+E |
| (e) | Number of keying positions | 24 | 24 |
| | Connection (min - max): mm ² | | |
| | Flexible conductors (Cu): main contacts | 2.5 - 6 | 6 - 16 |
| | Rigid/stranded conductors (Cu): main contacts | 2.5 - 10 | 10 - 25 |
| | Tightening torque - main contacts (Nm) | 1.5 N.m | 1.8 N.m |
| | Wiring lugs | Option | Option |
| | Icc: conditional short circuit current (kA) | | |
| | with gG fuse | 10 kA | 10 kA |
| | with RK1 NTD fuse | 100 kA | 100 kA |
| Auxiliaries contacts | | | |
| | I_n | 30 A | 16 A |
| | U_{max} (V AC/V DC) | 500 V | 400 V |
| (f) | Number of auxiliaries / pilots contacts | 2 | 4 |
| | Connection (min - max): mm ² | | |
| | Flexible wiring | 2.5 - 6 | 1 - 2.5 |
| | Rigid/stranded conductors | 2.5 - 10 | 1.5 - 4 |
| | Tightening torque (Nm) | 1.5 N.m | 0.8 N.m |
| Emploi comme connecteur selon IEC/EN 61984: I_n | | 30 A | 50 A |
| | U_{max} | 690 V AC | 1000 V AC |
| | | 1000 V DC | 1500 V DC |
| Breaking as plug and socket-outlet according to IEC/EN 60309-1 | | | |
| (g) | I_n (A) - U_{max} (V AC) | 30 - 690 | 45 - 1000 50 - 690 |
| Other breaking as switch according to IEC/EN 60947-3 | | | |
| (g) | Category AC-22A : I_n (A) - U_{max} (V AC) | 30 - 690 | 40 - 690 |
| (g) | Category AC-23A : I_n (A) - U_{max} (V AC) | 30 - 480 | 50 - 400 |
| Breaking as plug and socket-outlet according to UL 2682 | | | |
| | Power (240 VAC - 3Ø) | 15 hp | 25 hp |
| Increase of DC load-breaking capacity (contacts in series) | | Option | Option |
| Number of operations | | | |
| | According to IEC/EN 60309-1 : Cos(Φ) 0,6 | 2000 | 2000 |
| | According to UL 2682 : Cos(Φ) 0,75 | 6000 | 6000 |
| Isolating distance (mm) | | 8 mm | 13 mm |
| Thermal features | | | |
| | Temperature of use mini/maxi (°C) | -40/+60°C | -40/+60°C |
| | Storage temperature mini/max: (°C) | -40/+80 °C | -40/+80 °C |
| | Maximal temperature rise (Kmax) | 38 K | 30 K |
| | Time constant (to reach 63 % of Kmax) | 21mn | 23 mn |



V : Contact spring
X : Ejection spring

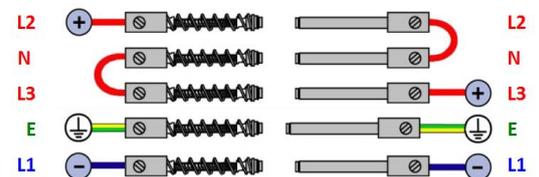
W : Arc chamber
Y : Ejection ring



Contacts with silver nickel alloy tips (Ag/Ni : 85/15)

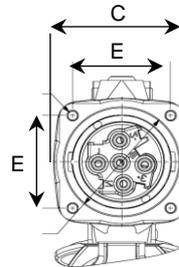
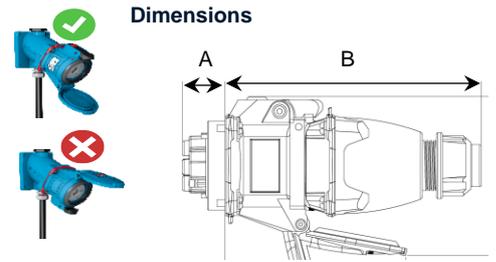


Spring assisted terminal:
Stainless steel ring



Contacts in series

| Mechanical features | | DS1 | DS3 |
|----------------------|--|-----------------------|-----------|
| (h) | Watertightness : connected device | IP54 | IP54 |
| | Watertightness: lid/cap closed | IP55 | IP55 |
| | Watertightness : socket-outlet with lid/cap opened | IP4X - Safety shutter | |
| (i) | IK | IK09 | IK09 |
| | Retaining/releasing device | Red release button | |
| (j) | Casing | GRP (poly) | |
| | Standard color | MARECHAL® Blue | |
| | Other colors | On request | |
| | Vibrations resistance | ✓ | ✓ |
| | Resistance to chemical agents | Contact us | |
| | Protection against UV (according to UL 746C or equivalent) | f1 | f1 |
| | Salt mist resistance | > 50 000 h | |
| | Screws and bolts | Stainless steel | |
| | Weight of inlet without accessory (≈) | 0.1 kg | 0.2 kg |
| | Weight of socket-outlet without accessory (≈) | 0.2 kg | 0.3 kg |
| Main options | | | |
| | Socket-outlet opening up to 180° | Included | Included |
| | Self-returning lid | IP55 | IP55 |
| | Inlet cap | IP66/IP67 | IP66/IP67 |
| | Self-returning inlet lid | IP55 | IP55 |
| | Locking / padlocking | ✓ | ✓ |
| | Automatic self-ejection | ✓ | ✓ |
| | Larger release button ("STOP") | ✓ | ✓ |
| | Finger draw plates | ✓ | ✓ |
| | Industrial-domestic adapter | ✓ | |
| Mounting accessories | | | |
| | Poly sleeve: angle (°) | 30/70 | 30/70 |
| | Metal sleeve: angle (°) | 0/30 | 0/30/70 |
| | Poly box: angle (°) | 30 | 30 |
| | Metal box: angle (°) | 20 | 20 |
| | Poly box + poly sleeve: angle (°) | 70 | 70 |
| | Metal box + poly sleeve: angle (°) | 30 | 30 |
| | Metal box + metal sleeve: angle (°) | 0/30 | 0/30/70 |
| | Poly straight handle with built-in cable gland: range take (mm) | 5 - 21 | 10 - 30 |
| | Threaded poly straight handle | M20 - M40 | M20 - M40 |
| | Threaded metal straight handle | M20 - M32 | M20 - M40 |
| | Poly straight handle + separated poly cable gland: range take (mm) | 5 - 32 | 9 - 32 |
| | Metal straight handle + separated metal cable gland: range take | 7 - 23 | 7 - 32 |
| Spare parts | | | |
| | Inlet or socket-outlet interior moulding | ✓ | ✓ |
| | Inlet or socket-outlet contacts | ✓ | ✓ |
| | Inlet or socket-outlet colored gasket | ✓ | ✓ |
| | Inlet or socket-outlet casing | ✓ | ✓ |
| | Socket-outlet casing gasket | ✓ | ✓ |
| Catalog: Web link | | Click ! | Click ! |



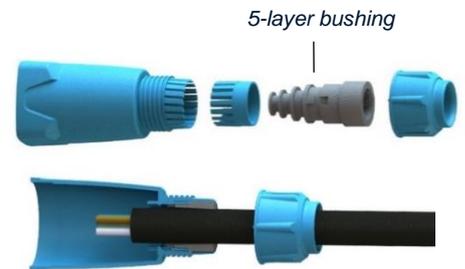
| mm | DS1 | DS3 |
|----|-----|-----|
| A | 15 | 17 |
| B | 166 | 179 |
| C | 69 | 80 |
| E | 48 | 55 |

Finger draw plate



Locking pin for 2 padlocks

Poly straight handle with built-in cable gland



- (a) European Regulation REACH: registration, evaluation, authorisation and restriction of chemicals
IEC/EN 60309-1 : "Plugs, socket-outlets and couplers for industrial purposes – Part 1: General requirements"
IEC/EN 60309-4 : "Plugs, socket-outlets and couplers for industrial purposes – Part 4: Switched socket-outlets and connectors with or without interlock"
IEC/EN 60947-3 : "Low-voltage switchgear and controlgear – Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units"
IEC/EN 61984 : "Connectors – Safety requirements and tests"
UL 1682 : "Plugs, Receptacles, and Cable Connectors of the Pin and Sleeve Type"
UL 2682 : "Outline of Investigation for Switch-Rated Plugs and Receptacles"
CSA C22,2 No 182,1-07 : "Plugs, Receptacles, and Cable Connectors of the Pin and Sleeve Type"
GB/T 11918.1 : "Plugs, socket-outlets and couplers for industrial purposes – Part 1: General requirements"

- (b) In : Rated current as defined by the manufacturer
- (c) Other frequency: contact us
- (d) Contacts with silver-nickel tips (Ag/Ni 85/15)
- (e) Number of voltage / frequency / grid, keying positions
- (f) Auxiliaries contacts are located on the plug and socket-outlet sides. Pilot contacts are only located on the socket-outlet side
- (g) For direct current applications : contact us
- (h) IP : Degrees of protection provided by enclosures (IEC/EN 60529)
- (i) IK : Degrees of protection provided by enclosures against mechanical impacts (IEC/EN 62262)
- (j) GRP : Glass-reinforced technical plastic