

DS DECONTACTOR™ is a compact and waterproof plug and socket-outlet with integrated switch for industrial applications.

DS DECONTACTOR™ complies with the following regulations and standards^(a):

European Directives 2014/35/EU Low Voltage and 2020/95/EC 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 break capability AC-22 and AC-23), UL 1682, UL 2682 (USA), CSA C22.2 N° 182.1-07 (Canada).

DS DECONTACTOR™ is certified by the following certification bodies:

LCIE (France), UL (USA), SAA (Australia), VDE (Germany), TR CU (Russia), CSA (Canada).



The use of DS DECONTACTOR™ facilitates the compliance with:

- electrical machinery to the "Machinery" European Directive 2006/42/EC on isolating device, and to standard EN 60204-1 : Safety of machinery-electrical equipment of machines

- electrical installation:

* to the French decree of 20 december 2011 relating to removable electrical equipment and their conditions of connection and use

* to national regulations relating to workers' protection in Italy, Spain and 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
$I_n^{(b)}$	30 A	50 A
U_{max} (V AC/V DC)	690/1 000	1 000/1 500
Frequency ^(c)	≤ 400 Hz	≤ 400 Hz
Number of contacts ^(d)	4P + E	4P + E
Number of keying positions ^(e)	24	24
Connection (min - max) : mm ²		
Flexible wiring : power contact	2,5 - 6	6 - 16
Stranded wiring : power contact	2,5 - 10	10 - 25
Tightening torque :	slotted head screw	
Power contact	1,5 Nm	1,8 Nm
Wiring lugs	option	option
I_{cc} : rated conditional short circuit current		
using a type gG fuse	10 kA	10 kA
using a type RK1 NTD fuse	100 kA	100 kA

Auxiliaries / pilots

I_n	30 A	16 A
U_{max} (V AC/V DC)	500	400
Number of auxiliaries / pilots ^(f)	2 aux	4 aux
Connection (min - max) : mm ²		
Flexible wiring	2,5 - 6	1 - 2,5
Stranded wiring	2,5 - 10	1,5 - 4
Tightening torque :	1,5 Nm	0,8 Nm

Used as connector according to IEC/EN 61984 : I_n

	30 A	50 A
U_{max}	690 V AC 1 000 V DC	1 000 V AC 1 500 V DC

Breaking as plug and socket-outlet according to IEC/EN 60309^(g)

I_n (A) / U_{max} (V AC)	30 / 690	50 / 690
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Breaking as switch according to IEC/EN 61947-3^(g)

Category AC-22A : I_n (A) / U_{max} (V AC)	32 / 690	40 / 690
Category AC-23A : I_n (A) / U_{max} (V AC)	32 / 480	50 / 400

Breaking as plug and socket-outlet according to UL 2682

Power : HP	15	25
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Increase of DC load-break capacity (contacts in series)

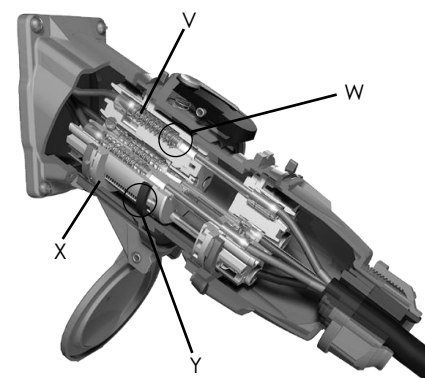
option	option
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Number of operations

According to IEC/EN 60309-1 : Cos. Φ 0,6	2 000	2 000
According to UL 2682 : Cos. Φ 0,75	6 000	6 000

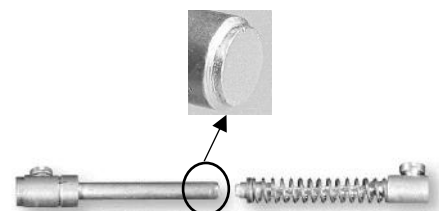
Isolating distance

8 mm	13 mm
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V : Contact spring
X : Ejection spring

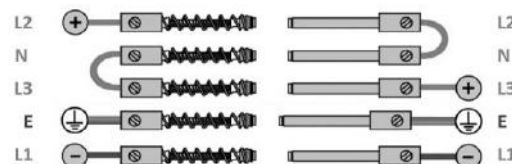
W : Arc chamber
Y : Ejection ring



Contacts on silver nickel alloy tips (AgNi)



Elastic tightening terminal :
Stainless steel ring



Contacts in series

Thermal features

Temperature of use	←----- -40 °C / +60 °C -----→
Storage temperature	←----- -40 °C / +80 °C -----→
Maximal temperature rise (K _{max}): new product	38 K
Time constant (to reach 63% of K _{max})	21mn

DS1
DS3
Mechanical features

IP ^(h) : connected product	←----- IP54 -----→
IP : cover/cap closed	←----- IP55 -----→
IP : socket-outlet opened with cover (safety shutter)	←----- IP4X -----→
IK ⁽ⁱ⁾	←----- IK08 -----→
Unlocking / opening	Red release button
Enclosure	Glass Reinforced Poly (GRP)
	MARECHAL® Blue
	Other colors ←----- On request -----→
Vibrations resistance	✓
Resistance of chemical agents	GRP enclosure (contact us)
Protection against UV according to UL 746C	←----- f1 -----→
Salt mists resistance	←----- > 50 000 h -----→
Screws and bolts	←----- Stainless steel -----→
Weight of inlet without accessories: (approx)	0,15 kg
Weight of outlet without accessories: (approx)	0,26 kg

Main options available

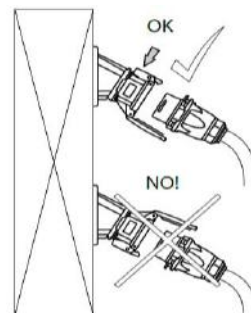
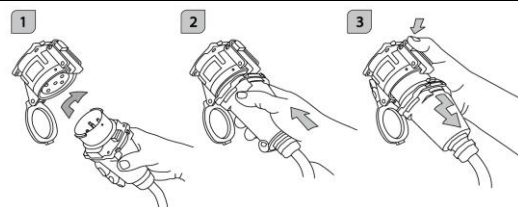
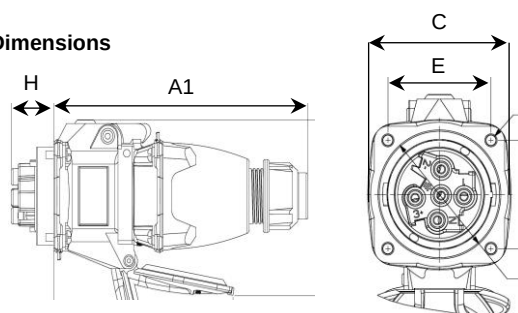
Socket-outlet opening up to 180°	included	included
Self-returning lid	✓ (IP55)	✓ (IP55)
Inlet cap (IP66/IP67)	✓	✓
Self-closing lid for inlet with full closure (IP55)	✓	✓
Locking / padlocking	✓	✓
Automatic self-ejecting	✓	✓
Larger release button ("STOP")	✓	✓
Finger draw plates	✓	✓
Industrial-domestic adapter	✓	X

Mounting accessories

Poly sleeve (angle)	←----- 30° / 70° -----→	
Metal sleeve (angle)	←----- Straight / 30° / 60° / 70° -----→	
Poly or metal box (angle)	←----- Straight / 20° / 30° / 70° -----→	
Poly straight handle with integrated cable gland: clamping range	5/21 mm	10/30 mm
Threaded poly straight handle	M20 - M40	M20 - M40
Threaded metal straight handle	M20 - M32	M20 - M40

Spare parts available

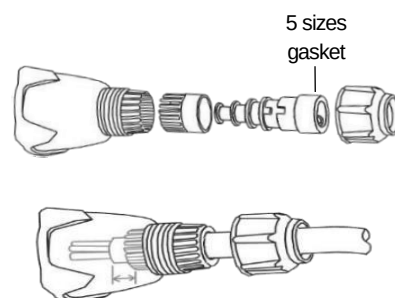
Inlet or socket-outlet internal isolating element	✓	✓
Inlet or socket-outlet contacts	✓	✓
Inlet or socket-outlet colored gasket	✓	✓
Inlet or socket-outlet casing	✓	✓
Socket-outlet casing gasket	✓	✓


Dimensions


mm	DS1	DS3
H	15	17
A1	166	179
E	48	55
C	69	80

Finger draw plates


Locking pin
for
2 padlocks

Poly straight handle with integrated cable gland


5 sizes
gasket

- (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"
- (b) I_n : Rated current, current value defined by the manufacturer
- (c) Other frequency: contact us
- (d) Silver contacts on silver-nickel alloy tips (AgNi)
- (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 according to IEC/EN 60529 standard
- (i) IK : Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts according to IEC/EN 62262 standard