

DSN DECONTACTOR is a compact and waterproof plug and socket-outlet with integral switch for industrial purposes.

DSN 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), MIL-S-901D (sea military specifications), GB/T 11918.1 (China).

DSN DECONTACTOR is certified by the following certification bodies:

LCIE (France), UL (USA), SAA (Australia), VDE (Germany), TR CU (Russia), CSA (Canada), Bureau Veritas Marine, MIL-S-901D (Military), CQC (China).



The use of DSN 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

	DSN1	DSN3	DSN6
(b) I_n	20 A	32 A	63 A
U_{max} (V AC/V DC)	500/750	690/1 000	1 000/1 500
(c) Frequency (Hz)	≤ 500	≤ 500	≤ 500
(d) Number of contacts	4P+E	4P+E	4P+E
(e) Number of keying positions	23	24	24
Connection (min - max): mm ²			
Flexible conductors (Cu): main contacts	1 - 2.5	2.5 - 6	6 - 16
Rigid/stranded conductors (Cu): main contacts	1.5 - 4	2.5 - 10	10 - 25
Tightening torque - main contacts	0.8 Nm	1.5 Nm	1.8 Nm
Wiring lugs	Option	Option	Option
Icc: conditional short circuit current (kA)			
with gG fuse	10 kA	10 kA	10 kA
with RK1 NTD fuse	100 kA	100 kA	100 kA

Auxiliaries / pilots contacts

I_n	2 A	30 A	16 A
U_{max} (V AC/V DC)	250 V	500 V	400 V
(f) Number of auxiliaries / pilots contacts	2 pil	2 aux	4 aux
Connection (min - max): mm ²			
Flexible wiring	0.8	2.5 - 6	1 - 2.5
Rigid/stranded conductors:		2.5 - 10	1.5 - 4
Tightening torque		1.5 Nm	0.8 Nm

Used as connector according to IEC/EN 61984: In

	20 A	32 A	63 A
U_{max}	500 V AC	690 V AC	1000 V AC
	750 V DC	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)	20 - 500	32 - 690	45 - 1 000 63 - 690
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Breaking as switch according to IEC/EN 60947-3

(g) Category AC-22A: I_n (A) - U_{max} (V AC)	20 - 500	32 - 690	40 - 690
(g) Category AC-23A: I_n (A) - U_{max} (V AC)	20 - 500	32 - 480	63 - 400

Breaking as plug and socket-outlet according to UL 2682

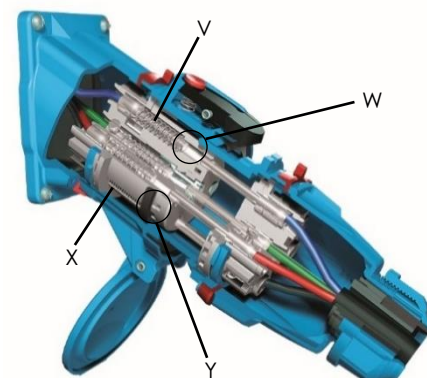
Power: HP	7.5	15	20
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Increase of DC load-breaking capacity (contacts in series)

Number of operations			
According to IEC/EN 60309-1 : $\cos(\Phi)$ 0,6	5 000	2 000	2 000
According to UL 2682 : $\cos(\Phi)$ 0,75	6 000	6 000	6 000

Isolating distance

	10 mm	10 mm	14 mm
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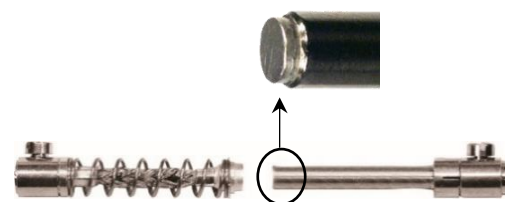


V : Contact spring

W : Arc chamber

X : Ejection spring

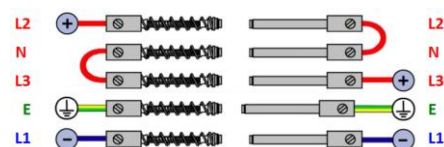
Y : Ejection ring



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



Spring assisted terminal:
Stainless steel ring



Contacts in series

Thermal features

Temperature of use mini/maxi (°C)
Storage temperature mini/max: (°C)
Maximal temperature rise (Kmax)
Time constant (to reach 63 % of Kmax)

DSN1	DSN3	DSN6
-40/+60 °C	-40/+60 °C	-40/+60 °C
-40/+80 °C	-40/+80 °C	-40/+80 °C
36 K	38 K	40 K
17 mn	21 mn	22 mn

Mechanical features

(h) IP: connected device
IP: lid/cap closed
IP: socket-outlet with lid/cap opened
(i) IK
Retaining/releasing device
(j) Casing

IP66/IP67/IP69
IP66/IP67/IP69
IP4X - Safety shutter
IK09 IK09 IK09
Red release button
GRP (poly)

Standard color
Other colors

MARECHAL® Blue
On request

Vibrations resistance
Resistance to chemical agents
Protection against UV (according to UL 746C or equivalent)
Salt mist resistance
Screws and bolts
Weight of inlet without accessory (≈)
Weight of socket-outlet without accessory (≈)

✓	✓	✓
f1	f1	f1
> 50 000 h	> 50 000 h	> 50 000 h
0.1 kg	0.1 kg	0.2 kg
0.2 kg	0.3 kg	0.4 kg
	Stainless steel	

Main options

Socket-outlet opening up to 180°
Self-returning lid
Inlet cap
Self-returning inlet lid
Locking / padlocking
Automatic self-ejection
Larger release button ("STOP")
Finger draw plates
Industrial-domestic adapter

Included	Included	Included
IP40	IP40	IP40
IP66/IP67	IP66/IP67	IP66/IP67
	IP55	IP55
✓	✓	✓
✓	✓	✓
✓	✓	✓
✓	✓	✓
✓	✓	

Mounting accessories

Poly sleeve: angle (°)
Metal sleeve: angle (°)
Poly box: angle (°)
Metal box: angle (°)
Poly box + poly sleeve: angle (°)
Metal box + poly sleeve: angle (°)
Metal box + metal sleeve: angle (°)
Poly straight handle with built-in cable gland: range take (mm)
Threaded poly straight handle
Threaded metal straight handle
Poly 60° handle with built-in cable gland: range take (mm)
Poly straight handle + separated poly cable gland:
Metal straight handle + separated metal cable gland: range take (mm)

30/70	30/70	30/70
0/30	0/30	0/30/70
30	30	30
	20	20
70	70	70
30	30	30
	0/30	0/30/70
5 - 21	5 - 21	10 - 30
M20 - M32	M20 - M40	M20 - M40
	M20 - M32	M20 - M40
9 - 18		
5 - 25	5 - 32	5 - 32
	7 - 24	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](#)

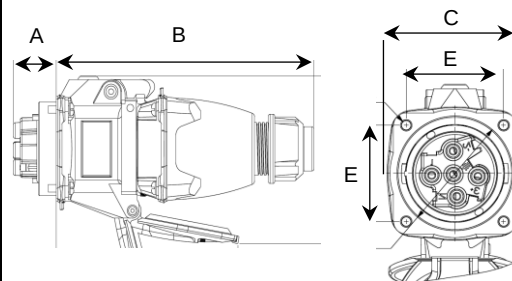
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Dimensions



mm	DSN1	DSN3	DSN6
A	25	15	16
B	147	171	184
C	58	77	84
E	42	48	55

Finger draw plate



Locking pin for 2 padlocks

Poly straight handle with built-in 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"
MIL-S-901D : Military specifications critical mechanical impacts resistance for equipments mounted on ships
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