

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), TR CU (Russia), CSA (Canada), Bureau Veritas Marine, MIL-S-901D (Military), CQC (China), SGBC (Singapore), Intertek-RETIE (Colombia).

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:

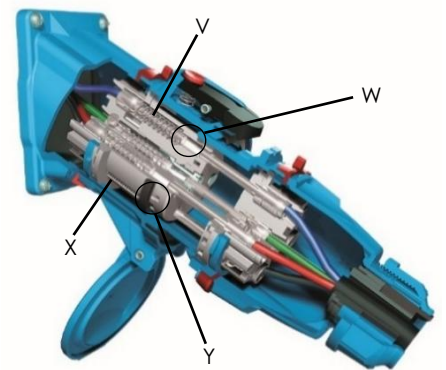
* to national regulations relating to the improvement of the safety and health of workers at work in France, Italy, Spain, Belgium,

* 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.



Intertek

General information		DSN1	DSN3	DSN6
(b)	I _n	20 A	32 A	63 A
	U _{max} (V AC/V DC) - Casing Insulating	500/750	690/1000	1000/1500
	U _{max} (V AC/V DC) - Casing Metallic	500/750	690/1000	800/1100
(c)	Frequency max. (Hz)	500 Hz	500 Hz	500 Hz
(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 (Nm)	0.8 N.m	1.5 N.m	1.8 N.m
	Wiring lugs	Option	Option	Option
	I _{cc} : 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	1 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 (Nm)		1.5 N.m	0.8 N.m
Use as connector according to IEC/EN 61984: In		20 A	32 A	63 A
	U _{max} (V AC/V DC) - Casing Insulating	500/750	690/1000	1000/1500
	U _{max} (V AC/V DC) - Casing Metallic	500/750	690/1000	800/1100
Breaking as plug and socket-outlet according to IEC/EN 60309-1				
	In (A) - U _{max} (V AC)	20 - 500	32 - 690	63 - 690
Other breaking as switch according to IEC/EN 60947-3				
	Category AC-22A : In (A) - U _{max} (V AC)	20 - 500	32 - 690	40 - 690
	Category AC-23A : In (A) - U _{max} (V AC)	20 - 500	32 - 480	63 - 400
(g)	Category DC-21A : In (A) - U _{max} (VDC)	20 - 250	32 - 250	63 - 250
Breaking as plug and socket-outlet according to UL 2682				
	Power (240 VAC - 3Ø)	7.5 hp	15 hp	20 hp
Increase of DC load-breaking capacity (contacts in series)		Option	Option	Option
Number of operations				
	According to IEC/EN 60309-1 : Cos(Φ) 0,6	5000	2000	2000
	According to UL 2682 : Cos(Φ) 0,75	6000	6000	6000
Isolating distance (mm)		10 mm	10 mm	14 mm

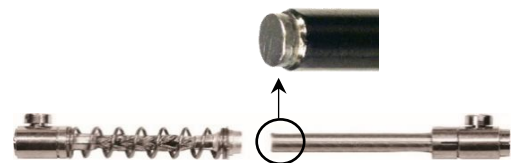


V : Contact spring

W : Arc chamber

X : Ejection spring

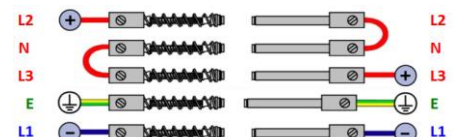
Y : Ejection ring



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



Spring assisted terminal:
Stainless steel ring



Contacts in series

Thermal features	DSN1	DSN3	DSN6
Temperature of use Min/Max (°C)	-40/+60°C	-40/+60°C	-40/+60°C
Storage temperature Min/Max: (°C)	-40/+80 °C	-40/+80 °C	-40/+80 °C
Maximal temperature rise (Kmax)	36 K	38 K	40 K
Time constant (to reach 63 % of Kmax)	17 mn	21 mn	22 mn

Mechanical features				
(h)	Watertightness : connected device	IP66/IP67/IP69		
	Watertightness: lid/cap closed	IP66/IP67/IP69		
	Watertightness : socket-outlet with lid/cap opened	IP4X - Safety shutter		
(i)	Mechanical resistance - IK			
	Casing Insulating	IK09	IK09	IK09
	Casing Metallic	IK10	IK10	IK10
	Retaining/releasing device : Casing Insulating	Red release button		
	Retaining/releasing device : Casing Metallic	Release button		
(j)	Material/ Standard color : Casing Insulating	GRP (poly) / MARECHAL® Blue		
	Material/ Standard color : Casing Metallic	Copper free aluminum / Grey		
	Other colors	On request		
	Vibrations resistance	✓	✓	✓
	Resistance to chemical agents	Contact us		
	Protection against UV (according to UL 746C or equivalent)	f1	f1	f1
	Corrosion resistance, marine environment			
	Casing Insulating	> 50 000 h	> 50 000 h	> 50 000 h
	Casing Metallic	> 25 000 h	> 25 000 h	> 25 000 h
	Screws and bolts	Stainless steel		
	Weight of inlet without accessory (≈)			
	Casing Insulating	0.1 kg	0.1 kg	0.2 kg
	Casing Metallic	0.15 kg	0.2 kg	0.3 kg
	Weight of socket-outlet without accessory (≈)			
	Casing Insulating	0.2 kg	0.3 kg	0.4 kg
	Casing Metallic	0.3 kg	0.5 kg	0.6 kg

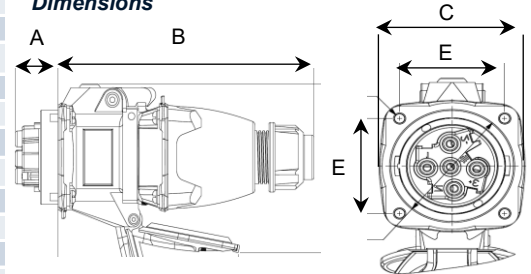
Main options				
	Socket-outlet opening up to 180°	Included	Included	Included
	Self-returning lid	IP40	IP40	IP40
	Inlet cap	IP66/IP67	IP66/IP67	IP66/IP67
	Self-returning inlet lid		IP55	IP55
	Locking / padlocking - Casing Insulating	✓	✓	✓
	Locking / padlocking - Casing Metallic	Included	Included	Included
	Automatic self-ejection	✓	✓	✓
	Larger release button ("STOP")	✓	✓	✓
	Finger draw plates	✓	✓	✓
	Industrial-domestic adapter	✓ (Poly)	✓ (Poly)	

Mounting accessories				
	Poly sleeve: angle (°)	30/70	30/70	30/70
	Metal sleeve: angle (°)	0/30	0/30	0/30/70
	Poly box: angle (°)	30	30	30
	Metal box: angle (°)		20	20
	Poly box + poly sleeve: angle (°)	70	70	70
	Metal box + poly sleeve: angle (°)	30	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	5 - 21	10 - 30
	Threaded poly straight handle	M20 - M32	M20 - M40	M20 - M40
	Threaded metal straight handle		M20 - M32	M20 - M40
	Poly 60° handle with built-in cable gland: range take (mm)	9 - 18		
	Poly straight handle + separated poly cable gland: range take (mm)	5 - 25	5 - 32	5 - 32
	Metal straight handle + separated metal cable gland: range take (mm)		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	Poly	Poly	Poly



Dimensions

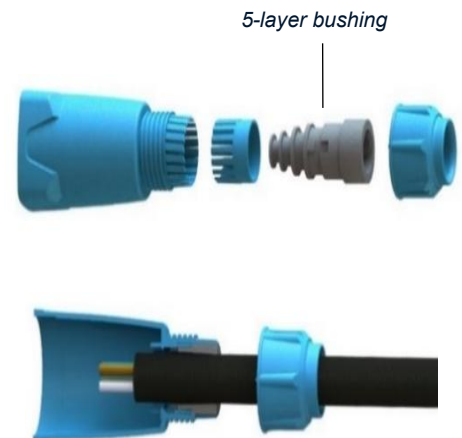


mm	DSN1	DSN3	DSN6
A	25	15	16
B	147	171	184
C	58	77	84
E	42	48	55

Finger draw plate



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"
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