

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:

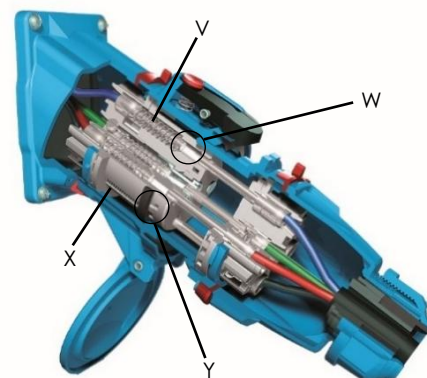
* to national regulations relating to the improvement of the safety and health of workers at work in France, Italy, Spain, Belgium,

* 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.



Intertek

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 : $\cos(\Phi)$ 0,6	2000	2000
	According to UL 2682 : $\cos(\Phi)$ 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

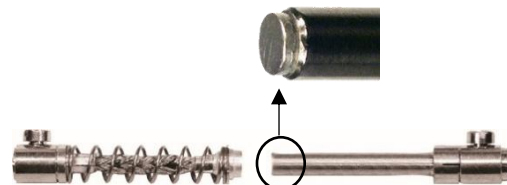


V : Contact spring

X : Ejection spring

W : Arc chamber

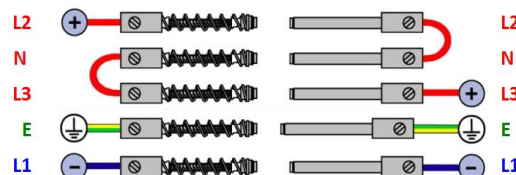
Y : Ejection ring



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

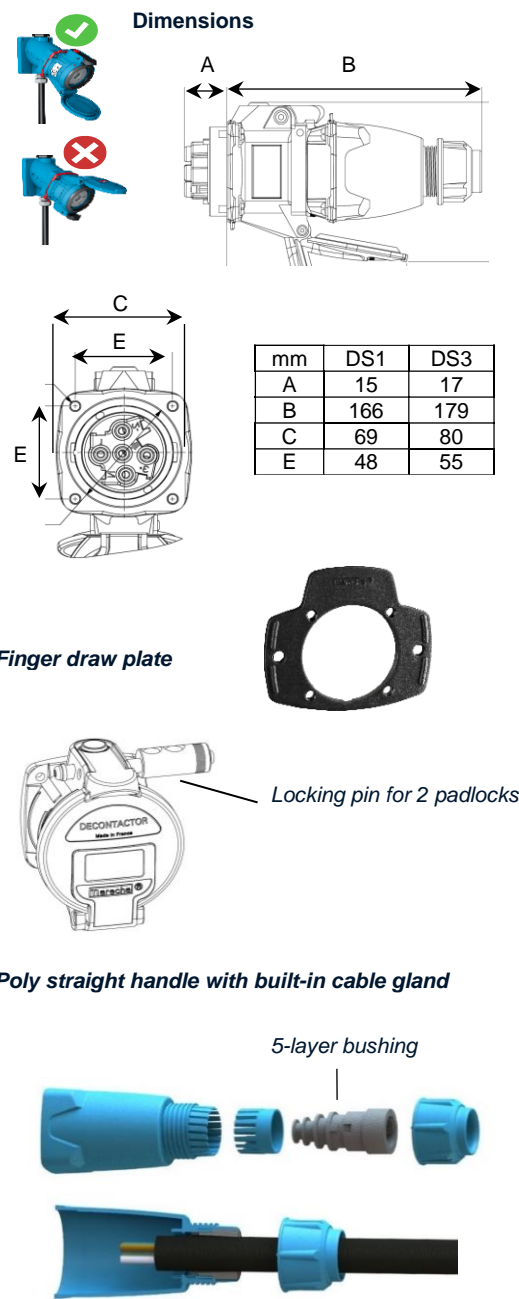


Spring assisted terminal:
Stainless steel ring



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
(j)	Retaining/releasing device	Red release button	
	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 !



- (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