

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

	DS6	DS9
$I_n^{(b)}$	90 A	150 A
U_{max} (V AC/V DC)	1 000/1 500	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	10 - 25	25 - 70
Stranded wiring : power contact	10 - 35	25 - 95
Tightening torque :	hexagon head screw	
Power contact	4 Nm	9 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

	DS6	DS9
I_n	5 A	10 A
U_{max} (V AC/V DC)	500	400
Number of auxiliaries / pilots ^(f)	4 aux	6 aux
Connection (min - max) : mm ²		
Flexible wiring	2,2	2,2
Stranded wiring	X	X
Tightening torque :	pre-wired	pre-wired

Used as connector according to IEC/EN 61984 : I_n

	DS6	DS9
I_n	90 A	150 A
U_{max}	1 000 V AC 1 500 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)	90 / 690	150 / 690
------------------------------	----------	-----------

Breaking as switch according to IEC/EN 61947-3^(g)

Category AC-22A : I_n (A) / U_{max} (V AC)	63 / 690	150 / 600
Category AC-23A : I_n (A) / U_{max} (V AC)	90 / 400	100 / 440

Breaking as plug and socket-outlet according to UL 2682

Power : HP	50	75
------------	----	----

Increase of DC load-break capacity (contacts in series)

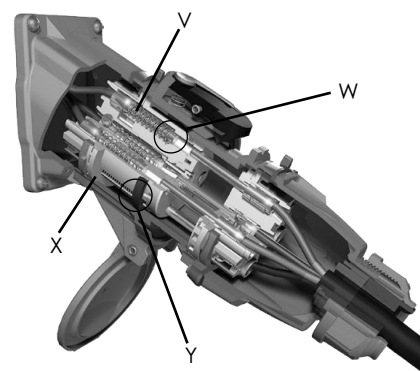
	option	option
--	--------	--------

Number of operations

Selon IEC/EN 60309-1 : Cos. Φ 0,6	2 000	500
Selon UL 2682 : Cos. Φ 0,75	6 000	6 000

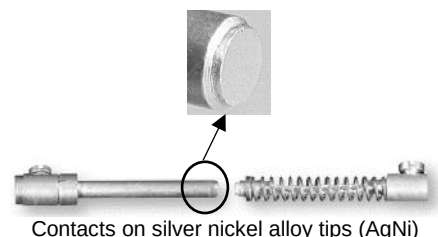
Distance de sectionnement

	17 mm	18 mm
--	-------	-------



V : Contact spring
X : Ejection spring

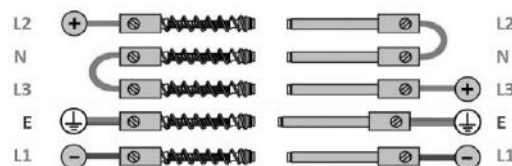
W : Arc chamber
Y : Ejection ring



Contacts on silver nickel alloy tips (AgNi)



Elastic tightening terminal :
Stainless steel ring



Contacts in series

Thermal features

Temperature of use
Storage temperature
Maximal temperature rise (K_{max}): new product
Time constant (to reach 63% of K_{max})

DS6

← -40 °C / +60 °C →
← -40 °C / +80 °C →
37 K
26 mn

DS9

29 K
42 mn

Mechanical features

IP ^(h) : connected product

Poly enclosure IP54 IP66/IP67/IP69
Metal enclosure IP54 IP54⁽ⁱ⁾

IP : cover/cap closed

Poly enclosure IP55 IP66/IP67/IP69
Metal enclosure IP55 IP55⁽ⁱ⁾

IP : socket-outlet opened with cover
(safety shutter)

← IP4X →

IK ⁽ⁱ⁾

Poly enclosure IK08 IK08
Metal enclosure IK09 IK09

Unlocking / opening

Red release button

Enclosure

Poly Glass Reinforced Poly (GRP)
Metal Aluminium / Zamak
MARECHAL® standard color MARECHAL® Blue
Other colors ← On request →

Vibrations resistance

✓ ✓

Resistance of chemical agents

GRP enclosure (contact us)

Protection against UV according to UL 746C

Poly enclosure ← f1 →

Metal enclosure ← Not applicable →

Salt mists resistance

Poly enclosure ← > 50 000 h →

Metal enclosure ← Contact us →

Screws and bolts

← Stainless steel →

Weight of inlet without accessories: (approx)

0,44 kg 0,95 kg

Weight of outlet without accessories: (approx)

0,65 kg 1,50 kg

Main options available

Socket-outlet opening up to 180°: metal enclosure

✓ ✓

Self-returning lid

✓ (IP55) ✓ (IP40)

Inlet cap (IP66/IP67)

✓ ✓

Self-closing lid for inlet with full closure (IP55)

✓ X

Locking / padlocking

✓ ✓

Automatic self-ejecting

✓ ✓

Larger release button ("STOP")

✓ ✓

Finger draw plates

✓ X

Mounting accessories

Poly sleeve (angle)

← 30° / 70° →

Metal sleeve (angle)

← Straight / 30° / 70° →

Poly box (angle)

30° / 70° X

Metal box (angle)

← Straight / 20° / 30° / 70° →

Poly straight handle with integrated cable gland: clamping range

13/35 mm X

Threaded poly straight handle

M32 - M50 M50 - M63

Threaded metal straight handle

M25 - M50 M32 - M63

Spare parts available

Inlet or socket-outlet internal isolating element

✓ ✓

Inlet or socket-outlet contacts

✓ ✓

Inlet or socket-outlet colored gasket

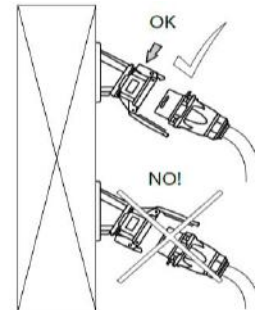
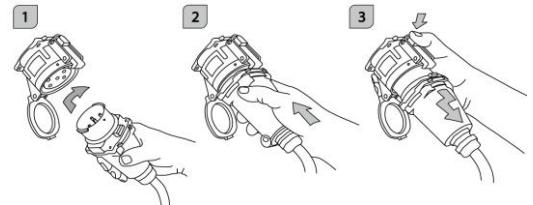
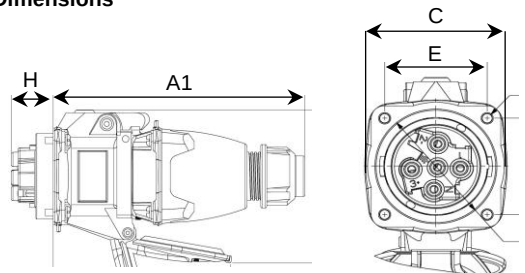
✓ ✓

Inlet or socket-outlet casing

✓ ✓

Socket-outlet casing gasket

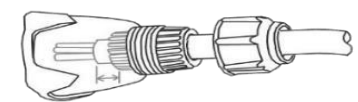
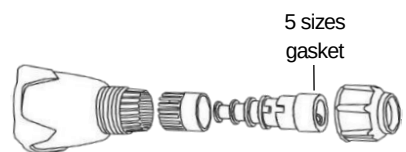
✓ ✓


Dimensions


mm	DS6	DS9
H	25	26
A1	203	315
E	66	81
C	95	186

Finger draw plates


Locking pin for 2 padlocks

Poly straight handle with integrated 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"
- (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) IP66/IP67 available in option
- (i) IK : Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts according to IEC/EN 62262 standard

**THORNE &
DERRICK**
INTERNATIONAL**Thorne & Derrick**
+44 (0) 191 410 4292
www.heatingandprocess.com