



# GENERAL CATALOGUE

INDUSTRIAL PLUGS & SOCKET-OUTLETS  
DECONTACTOR™ & BOXES

Marechal®



**DECONTACTOR™ = SWITCH + INDUSTRIAL SOCKET-OUTLET**

DSN	DECONTACTOR™ range = industrial socket with integrated switch.	
RETTBOX®	Switching capability AC22/23 or AC2/3.	Page 14
DS	GRP or Metal casing with automatic IP55/66/67/69K dust & liquid tightness.	
DSHT	Full load breaking till 250 A Umax 1000 V.	
DN	Option : padlocking, self-ejection, auxiliary contact.	
DB	Vibration & Shock resistance.	

**MULTICONTACT**

PN7C	DSN24C	Multipin connector range from 7 to 37 pin.	
DN9C	DSN37C	Solid silver-nickel contacts assure superior conductivity and fulfill up to 2000 mating.	Page 82
PN12C	DS7C3	GRP or Metal casing with automatic IP55/66/67 dust & liquid.	
DN20C		Option : padlocking.	
		Vibration & Shock resistance.	

**INDUSTRIAL SOCKET-OUTLET**

PNC	Industrial socket outlet range from 16 A to 600 A 1000 V.	
PN	Temperature range : -40°C to 240°C.	Page 98
PNHT	Reliable & compact in GRP or Metal casing.	
PFQ	Option : padlocking, up to 6 auxiliaries + 2 pilots.	
PFC		

**SINGLE POLE POWER CONNECTOR**

CS2/3	Single-Pole power connectors from 75 A to 700 A-1000 V.	
CS1000	High reliability, resistant to strong starting currents.	Page 124
SP	Option : padlocking, auxiliary contact.	

**CUSTOMIZED SOLUTIONS**

BM	Distribution, Services & portable boxes with or without MCB, equipped with MARECHAL®	
CD	connectors or DECONTACTOR™	Page 142
BG/CRIC/BRP	Several type of casing: GRP, metal, stainless steel, rubber, ...	
TUNNELS	On request : cable assembly, electric winder, etc.	
CUSTOM		

**DECONTACTOR™ = SWITCH + SOCKET-OUTLET/⚠ Zone**

DXN	Available under ATEX/ IECEx for Zone 1, 2, 21, 22 : DECONTACTOR™ range = socket with integrated switch, switching capability AC22/23.	
DXA1	GRP or Metal casing with automatic IP55/66/67 dust & liquid tightness.	Page 160
DX	Full load breaking from 20 A till 200 A Umax 750 V,	
	Option : padlocking, self-ejection, auxiliary contact.	
	Vibration & Shock resistance.	

**MULTICONTACT CONNECTORS/⚠ Zone**

PXN12C	Available under ATEX/ IECEx for Zone 1, 2, 21, 22.	
DXN25C	Multipin connector range from 12 to 37 pin.	Page 188
DXN37C	Solid silver-nickel contacts assure superior conductivity and fulfill up to 2000 mating.	
	Metal casing with automatic IP55/66/67 dust & liquid tightness.	
	Option : padlocking.	
	Vibration & Shock resistance.	

**COMPACT CONNECTOR/⚠ Zone**

PNCX	Available under ATEX/ IECEx for Zone 1, 2, 21, 22.	
	5 PIN Compact connector 5 A 250 V.	Page 198
	Temperature range : -20°C to + 70°C.	
	Reliable & compact in GRP casing.	

**SINGLE POLE POWER CONNECTOR/⚠ Zone**

SPeX	Available under ATEX/ IECEx for Zone 1, 2, 21, 22.	
	Single-Pole power connectors till 680 A-1000 V.	Page 200
	High reliability, resistant to strong starting currents.	
	Option : padlocking, auxiliary contact.	

**CUSTOMIZED SOLUTIONS/⚠ Zone**

MXBS	Available under ATEX/ IECEx for Zone 1, 2, 21, 22.	
MXBJ	Customized socket distribution, junction or control enclosures.	Page 204
B2X	In several type of casing: GRP, aluminium or stainless steel.	
TECHNOR®	In several sizes.	
	Technor brand can offer also the full EX lighting solution with fluorescent, LED, HID lamp.	

**MAIN OPTIONS**

- Description of the main products option.
- Introduction to Hazardous areas.
- Accessories correlation table between old and new references.

Page 216



# MARECHAL ELECTRIC GROUP



Founded in 1952, the MARECHAL ELECTRIC group counts among the major players in Low Voltage LT electrical connection systems in industrial environments with or without the presence of an EX explosive atmosphere. With a consolidated turnover of nearly €100 million, its operational and/or sales subsidiaries in Europe, America, Asia, the Middle East, Africa and Australia, offer the best products and local services to the most demanding customers. A workforce of nearly 500 worldwide includes R&D, manufacturing and commercial development skills. The product range is intended for all sectors of industrial activity where safety and endurance are required.

## MARECHAL®

For more than 65 years it has been the brand of low voltage electrical connectors designed, manufactured and controlled in France in strict compliance with the requirements of international standards (IEC and UL). Thanks to the butt-contact technology, to the dozens of patents (filed in more than 50 countries) and the choice of the most advanced materials, MARECHAL® connectors are the most reliable in the world. They guarantee the best safety for users and equipment in accordance with the requirements of the European Low Voltage Directive (LVD no. 2014/35/EU since April 20, 2016).

They are available for non-ATEX or ATEX environments (IECex) Areas 1, 21, 2, 22:

- DECONTACTOR™ = plug + industrial switch (up to 250 A),
- multi-contact sockets (up to 37 contacts),
- industrial connectors (up to 600 A),
- single pole connectors (up to 700 A with pilots),
- socket, distribution, break-out, junction, boxes.

## TECHNOR®

Part of the Marechal Group since 2013, this brand dedicated to ATEX/IECex products has built its reputation over more than 30 years on exceptional product quality. All the products are designed, manufactured and tested in France and Italy.

A wide range of products conforming to the ATEX or/and IECex standards:

- explosion-proof distribution and control boxes,
- explosion-proof cast aluminium, steel, stainless steel or GRP/thermoset resin boxes,
- lighting (luminaires, spot lights with fluorescent or LEDs),
- stainless steel or GRP control and junction units,
- warning/indicator lights,
- earthing systems,

These products comply with European, international (IEC) and North American (UL, CSA) standards and regulations.



## MARKETS & REFERENCES

MARECHAL® and TECHNOR® products are ideal for the most demanding users, installers, integrators (EPC, OEM, etc.). Where **safety, reliability** and **endurance** are required. Each year, our teams provide advice, technical follow-up and design of custom solutions as part of projects or sites in more than 100 countries.

The offer is segmented by areas of activity and by types of site/project: NEW or RENOVATION, industrial or ATEX areas. This is in order to meet the requirements of the multiple and varied configurations of electrical installations: more than 40,000 products references are supplied every year.

In all industrial installations there are critical areas or processes where **reliability, strength** and safety are essential. The main industries using our products are:

- the agri-food industry (safety),
- water treatment (reliability),
- chemicals and refineries (safety and reliability),
- heavy industry (strength),
- construction and building (strength and safety),
- energy (reliability),
- transport and airports (safety and reliability),
- entertainment and medias (safety),
- fire emergency services (safety and reliability),
- mines and quarries (safety and toughness),
- ports, marinas, offshore and shipyards (toughness and safety),
- tunnels (safety),
- towns and infrastructure (safety).

Companies such as Technip, Total, Nestlé, Pepsi, Aramco, Sasol, SNCF, EDF, CEPSA, Actavis, Transnet, Arcelor, Universal Studios, Airbus, Boeing, McDonald's, Rio Tinto and BHP Billiton trust us.

## MEANS

Since its inception, MARECHAL ELECTRIC Group's R&D has filed nearly 100 patent in more than 50 countries. It has a laboratory approved by LCIE (Central Laboratory of Electrical Industries in France) Bureau Veritas for pre-testing and qualification of products. 5% of turnover is invested every year in R&D to create, develop and adapt.

With a total surface area of almost 34,000 m<sup>2</sup>, 9 sites are dedicated to production, assembly, inspection and shipment: France (3), Germany, Italy, Singapore, Australia, South Africa and the United States.

Our sites are certified:

- ISO 9001 (France),
- DIN EN ISO 9001 (Germany),
- UL (QLHN.E145931 for power sockets/plugs and QLIW.E85952 for bases/connectors - United States).

## INVOLVEMENT IN INTERNATIONAL STANDARDS

In its capacity as an expert and recognized participant in the industry at the international level, the MARECHAL ELECTRIC Group actively participates in standardization work by providing the Secretariat for the technical committees SC 23H of the IEC - "Power sockets for industrial uses" and SC 31-2 of the CENELEC - "Explosion-proof "d" casing", as well as chairing the French UF 23H research committee.

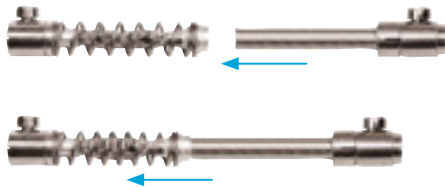
MARECHAL® also participates in the work of study committees (IEC and CENELEC) such as TC64, TC18 and TC69.

MARECHAL® power socket international charter: for the development and standardization of ranges internationally, a charter has been created to ensure the quality, compatibility and performance of power sockets with butt contacts.





## TECHNOLOGY



Split terminal  
(allows constant force)

Elliptical Deforming Ring  
(Prevents loosening)

Conductor



### DECONTACTOR™, A ONE OF ITS KIND DESIGN IN THE WORLD

The DECONTACTOR™ is a connector which combines

- the advantages of a **power socket**,
- and the performance of a **switch**.

With more than 65 years of research and innovations behind it, the DECONTACTOR™ range offers a level of reliability and safety never yet equalled in the world. It allows you to connect and disconnect devices thousands of times and in the most severe environments in perfect safety for the user!

### BUTT CONTACT ON A SILVER-NICKEL TIP

The MARECHAL® DECONTACTOR™ and connectors are all fitted with butt contacts with silver-nickel tips. They provide exceptional connection quality by eliminating the damage due to electric arcs and to wear seen with pin and sleeve sockets. The silver is an excellent conductor of current even when oxidized. Conductivity is optimal even in the presence of vibration and temperature variation thanks to the pressure of the springs.

### CRIMPED BRAIDS

The MARECHAL® contact uses a crimped braid with a spring which provides contact performance and tolerances superior to pin and sleeve contacts. The flexibility of the braid and the spring allows the base contact tip to always be perfectly aligned with the plug contact tip. These contacts, which are silver and anti-corrosion treated, offer very good corrosion resistance.

### ELASTIC LOCK TERMINALS

MARECHAL® contacts are fitted with "elastic lock" connection terminals. The wire clamp is split and surrounded by an elliptical deforming ring. This method allows the tightening force on the wire to be constant. Hence despite the creep of the copper or aluminium, the variations of temperature and vibration, the conductor wire is perfectly connected to the contact terminal.

### SAFETY SHUTTER

DECONTACTOR™ bases are fitted with an interlocked safety shutter which prevents access to live contacts. This shutter only unlocks at the time of connection of the plug into its base.

### CASING MADE FROM ADVANCED MATERIALS

MARECHAL® range connectors and DECONTACTOR™ have casings made from fibre glass- or metal-reinforced GRP, depending on the models. This choice of material contributes to the excellent mechanical performance and longevity of the socket.

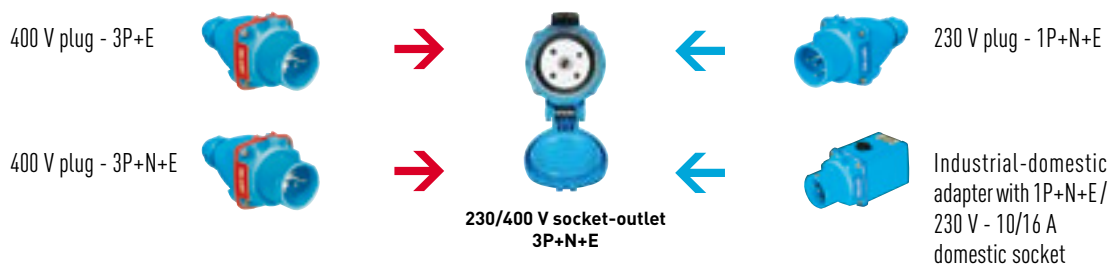


## ECONOMY OF INSTALLATION: DUAL-VOLTAGE

With a single base (e.g.: 3 PNE - 230/400 V) it is possible to feed 3 plugs indifferently:

- a 3 PNE - 230/400 V plug,
- a 3 PE - 400 V plug,
- a PNE - 230 V.

This compatibility provides real savings on the installation of these sockets for the user.



## ADVANTAGES

These technical choices provide MARECHAL® connectors and DECONTACTOR™ with unparalleled performance:

- Absolute safety after thousands of connections/disconnections,
- The ability to withstand repeated overloads, particularly on power supplies to motors with frequent starting,
- Perfect operation in the presence of vibration and variations in temperatures,
- Resistance to shocks, falls and climatic variations,
- A perfect resistance to corrosion and the most severe chemical agents.



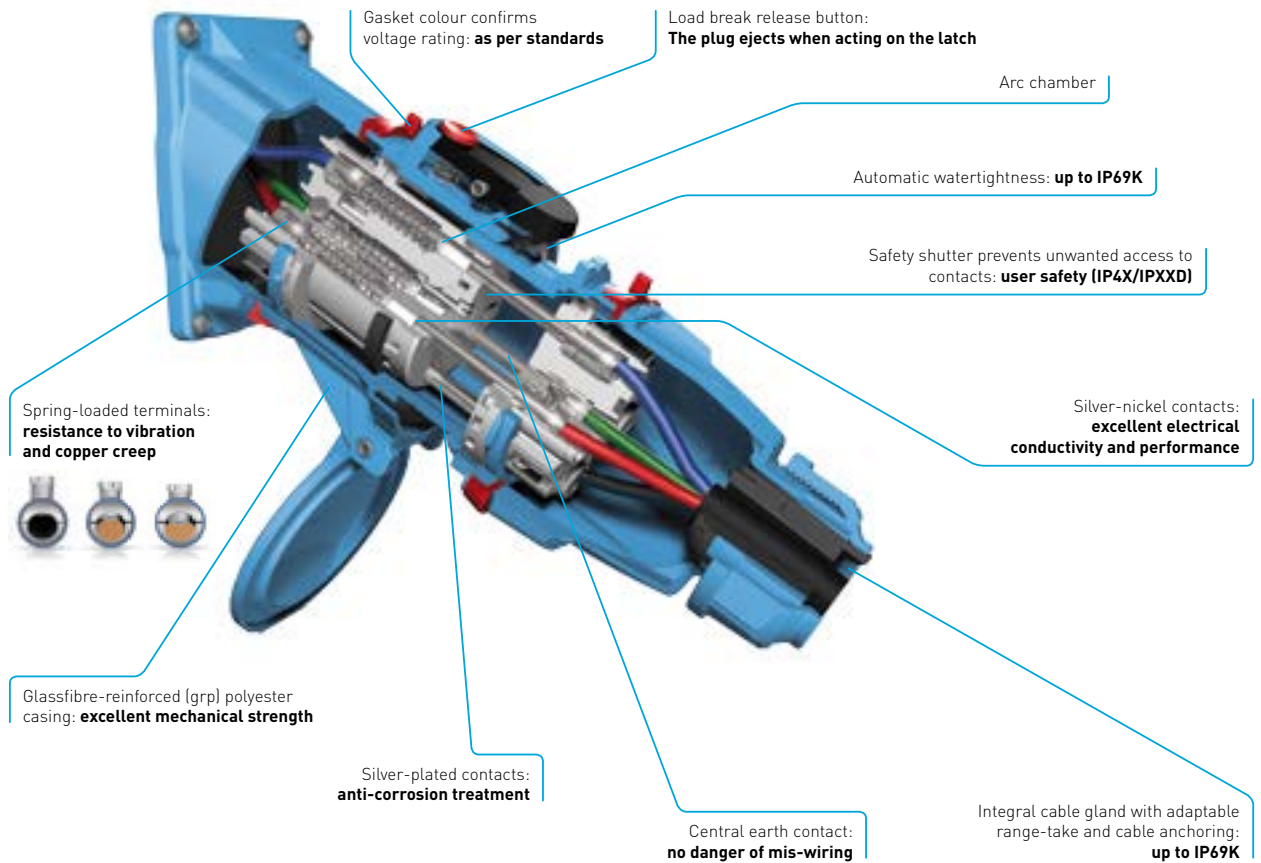


## TECHNOLOGY

### A CONCENTRATE OF FEATURES TO ENSURE YOUR SAFETY

The quality of the material, the design, the assembly and the inspection of each component are at the core of our know-how and the MARECHAL® technology.

They each provide a precise function that optimizes the performance, safety and sustainability of our sockets and your installations.

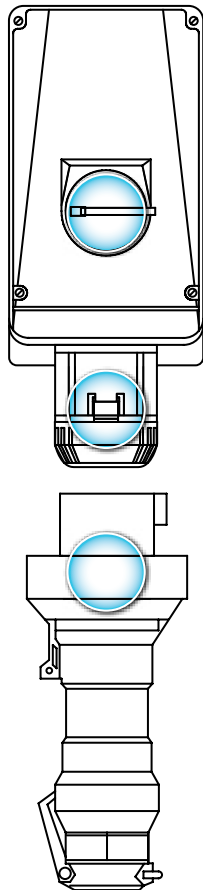






## COMPETITIVE ADVANTAGE, FOR A 63 A PRODUCT (SCALE PROPORTION PRESERVED)

Industrial socket  
with external switch



DECONTACTOR™ =  
socket outlet + integrated switch



On Load switch  
compulsory from 32 A or 1000 W

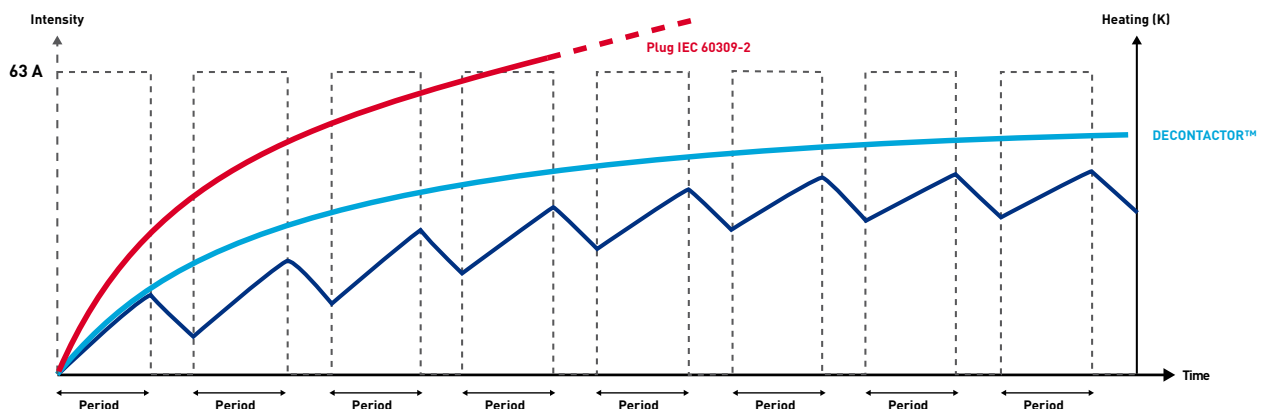
Socket-outlet

Plug

### Advantage for the DECONTACTOR™:

- Ease of installation: no additional pilot wire or switch upstream.
- No compulsory switch required, even beyond 32 A.
- More compact.
- Cable extension possibility.

## Comparative heating curve



■ Heating curve of a 60309-2 socket at a constant 63 A current.

■ Heating curve of a DECONTACTOR™ at a constant 63 A current.

■ Successive heating curves of a DECONTACTOR™ at a particular current cycle of 63 A. The DECONTACTOR™ stabilized.



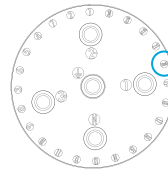
# TECHNOLOGY

## 24 POSSIBILITIES FOR VOLTAGE/FREQUENCY INTERLOCKING

The interlock device is associated with coding positions on the electrical connectors. It enables 24 different positions that are distinguished by volt-age/frequency. This is achieved by machining the relevant 'notch' on the coding ring. The colours in the rows of the table below correspond to the international voltage standard. These are the colours of the rings and labels on the bases and connectors.



Socket-outlet



Inlet

Keying positions				Keying positions			
20-24 V AC	AC	2P+E, 2P+N+E 3P+E, 3+N+E	08	220-250 V	AC	1P+N+E	01
20-24 V AC	AC 60 Hz	2P+E, 2P+N+E 3P+E, 3+N+E	UL 02	220-250 V 380-440 V	AC	2P+N+E, 3P+N+E	01
25-28 V	AC	2P+E, 2P+N+E 3P+E, 3+N+E	06	220-250 V	AC 60 Hz	2P+E, 3P+E	UL 07
40-48 V	AC	2P+E, 2P+N+E 3P+E, 3+N+E	13	220-250 V	DC	2P+E	20
110-125 V	AC 60 Hz	1P+N+E	UL 07	255-277 V	AC 60 Hz	1P+N+E	UL 04
110-125 V 220-250 V	AC 60 Hz	2P+N+E, 3P+N+E	UL 07	255-277 V 440-480 V	AC 60 Hz	2P+N+E, 3P+N+E	UL 04
110-130 V	AC	1P+N+E	03	347 V	AC 60 Hz	1P+N+E	UL 14
110-130 V 190-230 V	AC	2P+N+E, 3P+N+E	03	347 V 600 V	AC 60 Hz	2P+N+E, 3P+N+E	UL 14
110-130 V	DC	2P+E	10	380-400 V 660-690 V	AC	2P+N+E, 3P+N+E	19
115-127 V	AC 200 Hz	1P+N+E	12	380-440 V	AC	2P+E, 3P+E	01
115-127 V 200-220 V	AC 200 Hz	2P+N+E, 3P+N+E	12	380-440 V	AC	1P+N+E	19
115-127 V	AC 400 Hz	1P+N+E	11	440-480 V	AC 60 Hz	2P+E, 3P+E	UL 04
115-127 V 200-220 V	AC 400 Hz	2P+N+E, 3P+N+E	11	480-500 V	AC	2P+E, 3P+E	09
120-127 V	AC 60 Hz	1P+N+E	16	600 V	AC 60 Hz	2P+E, 3P+E	UL 14
120-127 V 208-220 V	AC 60 Hz	2P+N+E, 3P+N+E	16	660-690 V	AC	2P+E, 3P+E	19
190-230 V	AC	2P+E, 3P+E	03	1 000 V	AC	1P+N+E, 2P+E, 2P+N+E, 2P+N+E, 3P+E, 3P+N+E	22
200-220 V	AC 200 Hz	2P+E, 3P+E	12				
200-220 V	AC 400 Hz	2P+E, 3P+E	11				
208-220 V	AC 60 Hz	2P+E, 3P+E	UL 16				

AC = 50/60 Hz



# APPLICABLE STANDARDS AND DIRECTIVES

## EUROPEAN DIRECTIVES

The European texts aim to align the laws of the Member States to facilitate the movement of products while ensuring the protection of persons and property. All products put on the market must be consistent with the guidelines applicable to them and carry the CE mark.

For the power sockets designed to be used in potentially explosive atmospheres, the applicable Directive is the ATEX Directive 2014/34/EU.

For power sockets for industrial uses, the Directive applicable is the Low Voltage Directive (LVD) N°2014/35/EU.

The LVD lays down essential safety requirements: " Equipment may only be put on the market if it is built in accordance with the rules of good practice, and if when installed and maintained properly and used for the purpose intended it does not compromise the safety of persons, or domestic animals or property ".

The Directive requires manufacturers to:

- design and manufacture a product that complies with the safety requirements of the Directive (when equipment complies with the requirements of a product standard, it receives only a presumption of compliance with the essential safety requirements) ;
- follow the procedure of evaluation and then of attestation of this compliance;
- gather all the elements of the design and evaluation of this compliance in "Technical Documentation";
- manufacture appliances within the framework of a system of internal inspection of the manufacture, in order to ensure their conformity to the Technical Documentation, even when bought-in products and/or external services are used.

**All MARECHAL® appliances are consistent with the LVD and are manufactured within the framework of an ISO 9001 quality control system.**

CE marking constitutes a guarantee that MARECHAL® appliances do not compromise the safety of persons or property. If MARECHAL® appliances are associated with devices or spare parts that are not of MARECHAL® origin, the CE marking is invalidated and the responsibility of MARECHAL® cannot be engaged.

**MINISTERIAL  
DECREE DATED  
20/12/2011**

### Order relating to removable electrical devices and their conditions of connection and use.

This Order was published in the Official Journal on 27 January 2012. It stipulates:

Art. 6. - The joining or separation of the two parts of power sockets, extension cords and current connectors with a rating higher than 32 amps, must

only be able to be performed off load.

Art. 8. - This order is applicable with effect from the day following the day of its publication.

**All MARECHAL® appliances comply with this order.**

## INTERNATIONAL STANDARDS

MARECHAL® devices comply with the following standards:

- IEC/EN 60309-1 Ed. 4.2 : power outlets for industrial uses - Part 1: General rules
- IEC/EN 60309-4 Ed. 1.1 : Power outlets for industrial uses - Part 4: Switched socket-outlets and connectors with or without interlock.

The break capacity of the MARECHAL® DECONTACTOR™ is tested according to the following standard:

- IEC/EN 60947-3 : low voltage appliances - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units.

For specific uses, the MARECHAL® appliances comply with the following standard:

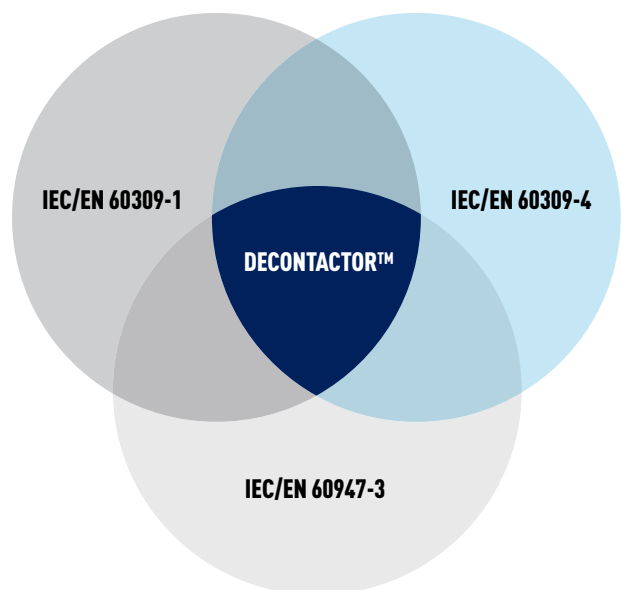
- CEI 61984 : connectors.

## AMERICAN STANDARDS

MARECHAL® devices comply with the following standards:

- UL 2682 (United States) : power sockets with break capacity for motor connection.
- UL 1682 (United States) and CSA C22.2 No. 182.1-07 (Canada) : power sockets and connectors.

## OTHER STANDARDS





# SIMPLIFIED DIGIT CODING OF COMMERCIAL PART NUMBERS

## 7 DIGITS FOR BASIC PRODUCTS + 3 DIGITS FOR SPECIALS PRODUCTS

Main option combination suffixes page 232.

1 <sup>ST</sup> DIGIT	2 <sup>ND</sup> DIGIT	3 <sup>RD</sup> DIGIT
▼	▼	▼
<b>PRODUCT LINE</b>	<b>CASING</b>	<b>RATING</b>
<p>0 = PN - PNC            1 = DN            2 = DX - DXN - DXA            3 = DS            4 = PF - SP - CS - SPeX            5 = ACCESSORIES            6 = DSN            8 = DB            9 = BOXES</p>	<p><b>IEC :</b> 1 = BLUE POLY            5 = BLACK POLY            9 = METAL</p> <p><b>UL :</b> 3 = BLUE POLY            7 = METAL            6 = BLACK METAL</p>	<p>16 A E = PNC            30 A N/2 = PN            20 A 8 } = DN            30 A 1 }            50 A 3 }            90 A 6 }            30 A 1 } = DS/DX            50 A 3 }            90 A 6 }            150 A 9 }            250 A 2 }            400 A 4 }            20 A 1 } = DSN/DXN/DXA            32 A 3 }            63 A 6 }            315 A 3 } = PFQ            400 A 4 }            500 A 5 } = PFC            600 A 6 }            40 A 3 } = DB            75 A 6 }            125 A 9 }            400 A 3 = CS1000            680 A 4 = SPeX            700 A 4 = SP</p>



## 4<sup>TH</sup> DIGIT

## 5<sup>TH</sup> & 6<sup>TH</sup> DIGIT

## 7<sup>TH</sup> DIGIT

### FORM

#### MALE

- 1 = Plug (with handle)
- 6 = Wall mounting appliance inlet (with box)
- 8 = Appliance inlet (male) semi-recessed
- 9 = Inclined appliance inlet (with sleeve)

#### FEMELLE

- 0 = Wall mounting socket (with box)
- 3 = Coupler socket (with handle)
- 7 = Inclined socket (with sleeve)
- 4 = Socket-outlet (female) semi-recessed

### VOLTAGE

08 =	20-24 V	AC
06 =	25-28 V	AC
13 =	40-48 V	AC
03 =	110-130/190-230 V	AC
01 =	220-250/380-440 V	AC
09 =	480-500 V	AC
19 =	400/690 V	AC
22 =	1 000 V	AC
02 =	20-24 V	60 Hz
16 =	120-208 V	60 Hz
07 =	110-125/220-250 V	60 Hz
04 =	255-277/440-480 V	60 Hz
14 =	347-600 V	60 Hz
12 =	115-127/200-220 V	200 Hz
11 =	115-127/200-220 V	400 Hz
10 =	110-130 V	DC
20 =	220-250 V	DC

Other voltages and frequencies are available on request, see table page 10.

### PHASING

#### Alternating current (AC)

- 5 = 1P+N+E
- 3 = 3P+E
- 7 = 3P+N+E
- D = 1P+N
- A = 2P (L1, L2)
- E = 2P (L1, L3)
- G = 2P+N
- B = 3P
- C = 3P+N
- L = 2P+2P
- H = 1P+E
- 2 = 2P+E
- 6 = 2P+N+E
- M = 2P+2P+E

#### Direct current (DC)

- 8 = 2P+E Double breaking point
- 9 = 2P+E
- J = 3P (-/+/0 V)
- K = 3P+E (-/+/0 V/T)
- N = 2P+2P
- P = 2P+2P+E
- Z = 2P

# DECONTACTOR™



## SWITCH WITH SOCKET-OUTLET

This extensive and comprehensive product range covers all industrial applications. With sizes up to 400 A, it offers a wide range of mounting and installation options.



FIND ALL INFORMATION  
ON OUR WEBSITE:



[marechal.com](http://marechal.com)



Dimensions  
and certificates



**DSN** P. 16

**COMPACT AND WATERTIGHT DECONTACTOR™ GRP**

- Automatic IP66/IP67/IP69k water- and dust-tight
- AC-22 and ac-23 breaking capacity
- IK08 Impact-resistant GRP casing



**RETTBOX®** P. 30

**COUPLER SOCKET/INLET ELECTROMAGNETIC SELF-EJECT**

- RETTBOX® & RETTBOX®-Air ranges on emergency vehicles
- Integrated self-eject



**DS** P. 34

**DECONTACTOR™ FOR INDUSTRY GRP AND METAL**

- Safe and simple connection, even at 400 A
- Safety shutter
- IK08 GRP or IK09 metal casing



**DSHT** P. 56

**DECONTACTOR™ HIGH TEMPERATURE**

- 240 °C permanent et 400 °C (2 hours)
- 125 A/690 V
- IP66 Watertight



**DN** P. 58

**METAL DECONTACTOR™**

- Automatic IP55 water- and dust-tight (IP66/67 in option)
- IK09 Impact-resistant metal casing
- Suitable for heavy industry



**DB** P. 70

**DISCONNECTABLE MOTOR SWITCH**

- AC-3 switch for motors (up to 45 kW)
- Standard IP66/IP67 water- and dust-tight
- IK09 Impact-resistant metal casing

# DSN



## COMPACT AND WATERTIGHT DECONTACTOR™ GRP



**20 A/32 A/63 A**

- ▶ Automatic IP66/IP67/IP69k
- ▶ AC-22 and ac-23 breaking capacity
- ▶ Chemical resistant GRP UL 94 casing
- ▶ Impact resistance IK08, vibration resistance
- ▶ -40 °C +60 °C temperature
- ▶ With safety shutter, up to 4 auxiliaries/pilots



### TECHNICAL FEATURES

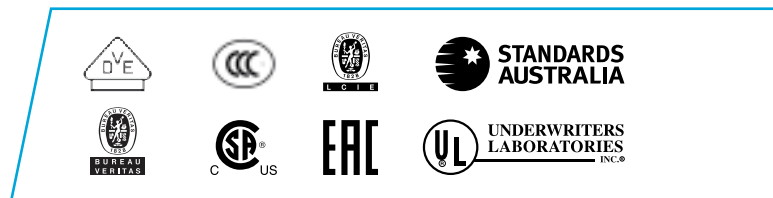
Plugs and sockets with integral load-break switching capability complying with IEC/EN 60309-1 and IEC/EN 60309-4 standards.

	DSN1	DSN3	DSN6
Rated current (In)	20 A	32 A	63 A
Umax	500 V	690 V	1 000 V
Power kW AC-22/AC-23	10 kW	15 kW	30 kW
AC-22 switching capability	20 A/500 V	32 A/690 V	50 A/690 V
AC-23 switching capability	20 A/400 V	32 A/400 V	63 A/400 V
Auxiliary contacts (optional)	2 pil	2 aux	4 aux
Keying positions	<<< 24 >>>		
Ambient temperature	<<< -40°C to +60°C >>>		
Short-circuit current Icc	<<< 10 kA >>>		

### MOUNTING: LOAD BREAK RELEASE BUTTON SHOULD BE AT THE TOP



### IP66/IP67/IP69K WATER- AND DUST-TIGHT



#### DSN DECONTACTOR™ complies with (download our certificates on [marechal.com](http://marechal.com)):

- IEC/EN 60309-1 et IEC/EN 60309-4 European and International standards (plugs and socket-outlets for industrial purposes),
- The European Low Voltage Directive 2014/35/UE, conformity with the CE marking,
- The European 'Machine Directive' 2006/42/CE regarding equipment isolation,
- The French NF C 15-100 standard,
- The French decree dated 20 December 2011 pertaining to the wiring and operating conditions of movable electrical apparatuses,
- The decrees relating to workers' protection in Belgium, Spain and Italy,
- The switch utilization categories AC-22 A and AC-23 A described in IEC/EN 60947-3,
- The UL 1682 and 2682 (USA) and CSA C22.2 N° 182.1-07 (Canada) standards for plugs and socket-outlets.

Also certified by VERITAS LCIE, UL, AS, VDE, TR CU (GOST) and cCSAus and Specification of Military Naval Standard MIL-S-901D (French, American, Australian, German, Russian and Canadian inspection laboratories), and by BUREAU VERITAS MARINE.



### WALL MOUNTING SOCKET DSN1



Wall box poly 30°  
511B3M20

Socket-outlet  
6114017

### PLUG DSN1



Straight handle poly  
511P0D18

Inlet  
6118017

## MAIN FEATURES

Rated current (with wiring according to standard)	20 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	500 V	Flexible wiring (min-max)	1-2,5 mm <sup>2</sup>
IP protection lid closed	IP66/IP67/IP69k	Stranded wiring (min-max)	1,5-4 mm <sup>2</sup>
IP protection plug connected	IP66/IP67/IP69k	Other wiring	on request
Shock resistance	IK08	Keying positions	24

### LOAD-BREAK CAPABILITY OF THE DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards	20 A/500 V
Load-break capability according to IEC/EN 60947-3/AC-22 A	20 A/500 V
Load-break capability according to IEC/EN 60947-3/AC-23 A	20 A/400 V
Short-circuit current I <sub>cc</sub>	10 kA
Power kW AC-22/AC-23	10 kW

### SOCKET-OUTLET female DSN1 (20 A)



### INLET male DSN1 (20 A)



Dual-voltage socket-outlet (see p. 7)

20-24 V AC	2P	611408A	611808A
220-250 V AC	1P+N+E	6114015	6118015
380-440 V AC	3P+E	6114013	6118013
220-250 V AC 380-440 V AC	3P+N+E	6114017	6118017
480-500 V AC	3P+E	6114093	6118093
480-500 V AC	3P+N+E	6114097	6118097
Pilots 2 A/220 V AC	+ 2 pilots	Ref. + 972	NA

► Other voltages, frequencies and contact configurations are available (see page 10).



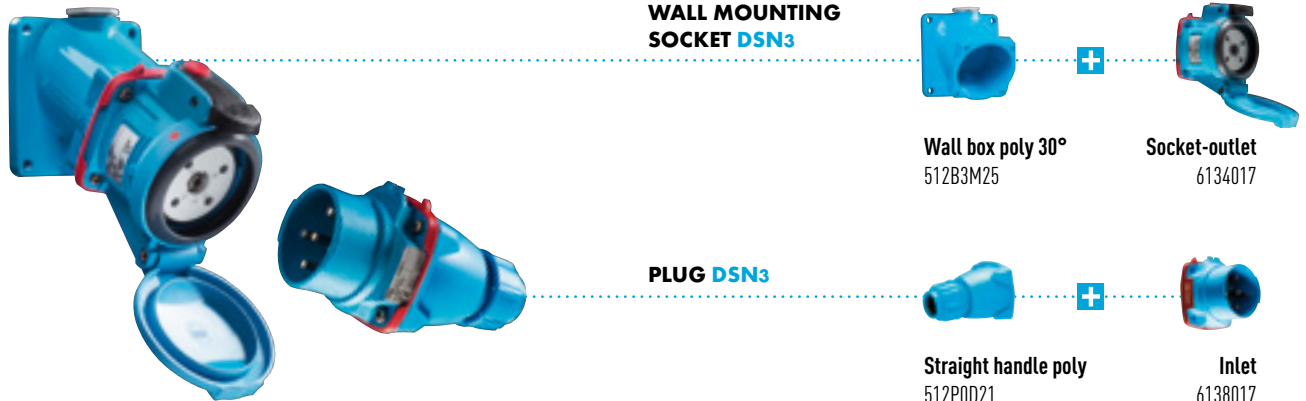
For a black colour GRP housing replace the second reference character 1 with 5.

### INFO+

## OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 22.





MAIN FEATURES			
Rated current (with wiring according to standard)	32 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	690 V	Flexible wiring (min-max)	2,5-6 mm <sup>2</sup>
IP protection lid closed	IP66/IP67/IP69k	Stranded wiring (min-max)	2,5-10 mm <sup>2</sup>
IP protection plug connected	IP66/IP67/IP69k	Other wiring	on request
Shock resistance	IK08	Keying positions	24

### Load-break capability of the DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards	32 A/690 V
Load-break capability according to IEC/EN 60947-3/AC-22 A	32 A/690 V
Load-break capability according to IEC/EN 60947-3/AC-23 A	32 A/400 V
Short-circuit current I <sub>cc</sub>	10 kA
Power kW AC-22/AC-23	15 kW

### SOCKET-OUTLET female DSN<sup>3</sup> (32 A)



### INLET male DSN<sup>3</sup> (32 A)



Dual-voltage socket-outlet (see p. 7)

20-24 V AC	2P	613408A	613808A
220-250 V AC	1P+N+E	6134015	6138015
380-440 V AC	3P+E	6134013	6138013
220-250 V AC / 380-440 V AC	3P+N+E	6134017	6138017
660-690 V AC	3P+E	6134193	6138193
380-400 V AC / 660-690 V AC	3P+N+E	6134197	6138197
Auxiliaries 30 A/500 V AC	+ 2 contacts	Ref. + 972	Ref. + 972

► Other voltages, frequencies and contact configurations are available (see page 10).

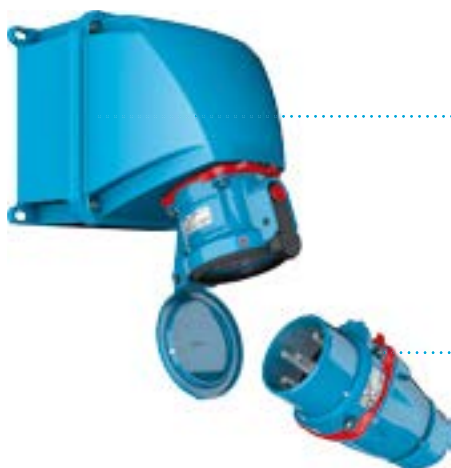
**i** For a black colour GRP housing replace the second reference character 1 with 5.

### INFO+

### OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 22.





### WALL MOUNTING SOCKET DSN6



Wall box poly 70°  
513C7M25



Socket-outlet  
6164017

### PLUG DSN6



Straight handle poly  
513P0D30



Inlet  
6168017

## MAIN FEATURES

Rated current (with wiring according to standard)	63 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	1 000 V	Flexible wiring (min-max)	6-16 mm <sup>2</sup>
IP protection lid closed	IP66/IP67/IP69k	Stranded wiring (min-max)	10-25 mm <sup>2</sup>
IP protection plug connected	IP66/IP67/IP69k	Other wiring	on request
Shock resistance	IK08	Keying positions	24

### Load-break capability of the DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards	(63 A/690 V) or (45 A/1 000 V)
Load-break capability according to IEC/EN 60947-3/AC-22 A	50 A/690 V
Load-break capability according to IEC/EN 60947-3/AC-23 A	63 A/400 V
Short-circuit current I <sub>cc</sub>	10 kA
Power kW AC-22/AC-23	30 kW

### SOCKET-OUTLET female DSN6 (63 A)



### INLET male DSN6 (63 A)



Dual-voltage socket-outlet (see p. 7)

20-24 V AC	2P	616408A	616808A
190-230 V AC	3P+E	6164033	6168033
220-250 V AC	1P+N+E	6164015	6168015
380-440 V AC	3P+E	6164013	6168013
220-250 V AC / 380-440 V AC	3P+N+E	6164017	6168017
660-690 V	3P+E	6164193	6168193
380-400 V / 660-690 V	3P+N+E	6164197	6168197
Auxiliaries 16 A/400 V AC	+ 2 contacts	Ref. + 972	Ref. + 972
Auxiliaries 16 A/400 V AC	+ 4 contacts	Ref. + 264	Ref. + 264

► Other voltages, frequencies and contact configurations are available (see page 10).



For a black colour GRP housing replace the second reference character 1 with 5.

### INFO+

## OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 22.








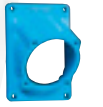



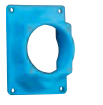
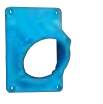

## OPTIONS (DETAILS ON PAGE 216)

	DSN1 size 1	DSN3 size 2	DSN6 size 3
<b>INDUSTRIAL-DOMESTIC ADAPTERS</b>			
 <p>Industrial inlet MARECHAL® 1P+N+E domestic socket-outlet 10/16 A 230 V fuse protection 10 A and 16 A (with integrated fuse).</p>	6118015D11*	6138015D11*	NA
 <p>* Adapters are available in foreign standards : replace D11 by D40 for UK, D30 for Germany/NL/Lux, D06 for Italy.</p>			
<b>LOCKING PIN FOR 2 PADLOCKS Ø 8 mm (PADLOCKS NOT SUPPLIED)</b>			
	Socket-outlet ref. + 843	Socket-outlet ref. + 843	Socket-outlet ref. + 843
<b>SAFETY HASP FOR UP TO 6 PADLOCKS</b>			
	873A541	873A541	873A541
<b>LARGER RELEASE BUTTON</b>			
	Socket-outlet ref. + 453	Socket-outlet ref. + 453	Socket-outlet ref. + 453
<b>INLET CAP IP66/67</b>			
	611A426	311A426	616A426
<b>IN-LINE CONNECTIONS (A PAIR OF FINGER DRAW PLATES TO AID CLOSING)</b>			
	611A346	613A346	616A346
<b>180° OPENING LID</b>			
	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10
<b>SELF-RETURNING LID (WITHOUT FULL CLOSURE IP40)</b>			
	Socket-outlet ref. + R	Socket-outlet ref. + R	Socket-outlet ref. + R
<b>180° OPENING &amp; SELF-RETURNING LID</b>			
	Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18
<b>SELF-CLOSING LID FOR INLET (IP54)</b>			
	NA	311A226	313A226
<b>SELF-EJECTING (see references AND OPTIONS DETAILS PAGE 228)</b>			
			



# ACCESSORIES

(SEE PAGE 238 TO CROSS REFERENCE WITH OLDER PART NUMBERS)

SLEEVE		DSN1 size 1	DSN3 size 2	DSN6 size 3
<b>POLY SLEEVE</b>				
	30°	511M3	512M3	513M3
	70°	511M7	512M7	513M7
	30°	551M3	552M3	553M3
	70°	551M7	552M7	553M7
<b>METAL SLEEVE</b>				
	0°	591M0	592M0	593M0
	30°	591M3	592M3	593M3
	70°			593M7

## TPM ELECTRICAL INLET WITH FLAP

DSN1  
size 1

### BLACK POLY HOUSING (IP55) WITH LID FOR MECHANICAL EJECTION SOCKET



### MECHANICAL EJECTION PLUGS & SOCKETS



Dimensions (LxHxD)

121 x 136 x 60

- 551B0065 Size 1 case without indicator light
- 551B0165 Size 1 case with 1+1 indicator lights
- 551B0265 Size 1 case with 1+2 indicator lights



# ACCESSORIES

(SEE PAGE 238 TO CROSS REFERENCE WITH OLDER PART NUMBERS)

HANDLE		DSN1 size 1	DSN3 size 2	DSN6 size 3	
<b>POLY HANDLE WITH GLAND</b>					
	9-18 mm	511P0D18			
	5-21 mm	511P0D21	512P0D21		
	10-30 mm			513P0D30	
	9-18 mm	551P0D18			
	5-21 mm		552P0D21		
	10-30 mm			553P0D30	
	60° angle	511P6D18			
	60° angle	551P6D18			
<b>POLY HANDLE WITH POLY CABLE GLAND (FOR A BLACK COLOUR HANDLE REPLACE THE SECOND REFERENCE CHARACTER 1 WITH 5)</b>					
	5-12 mm	511P020P	512P020P	513P020P	Ref. +443
	9-18 mm	511P025P	512P025P	513P025P	Ref. +443
	14-25 mm	511P032P	512P032P	513P032P	Ref. +443
	18-32 mm		512P040P	513P040P	Ref. +443
<b>METAL HANDLE WITH METAL GLAND (+ EARTHING WIRE)</b>					
	7-13 mm		592P020M	593P020M	
	8-16 mm		592P025M	593P025M	
	15-23 mm		592P032M	593P032M	
	22-32 mm			593P040M	
<b>POLY HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY, (FOR A BLACK COLOUR HANDLE REPLACE THE SECOND REFERENCE CHARACTER 1 WITH 5))</b>					
	M20	511P0M20	512P0M20	513P0M20	Ref. +443
	M25	511P0M25	512P0M25	513P0M25	Ref. +443
	M32	511P0M32	512P0M32	513P0M32	Ref. +443
	M40		512P0M40	513P0M40	Ref. +443
<b>METAL HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY)</b>					
	M20		592P0M20	593P0M20	
	M25		592P0M25	593P0M25	
	M32		592P0M32	593P0M32	
	M40			593P0M40	



**BOXES**



**DSN1**  
size 1

**DSN3**  
size 2

**DSN6**  
size 3

**POLY BOX (FOR A BLACK COLOUR HANDLE REPLACE THE SECOND REFERENCE CHARACTER 1 WITH 5)**



DSN1

30°	M20	511B3M20	512B3M20	
30°	M25	511B3M25	512B3M25	513B3M25

**METAL BOX (+ EARTHING WIRE)**



20°	M20		592B2M20	593B2M20
20°	M25		592B2M25	593B2M25
20°	M32			593B2M32

**POLY BOX + POLY SLEEVE (BLACK VERSION SEE ACCESSORIES DXN PAGE 169)**



70°	Without Hole	511C7000	512C7000	513C7000
70°	Ø M20	511C7M20	512C7M20	
70°	Ø M25	511C7M25	512C7M25	513C7M25
70°	Ø M32	511C7M32	512C7M32	513C7M32
70°	Ø M40		512C7M40	513C7M40

**METAL BOX (+ EARTHING WIRE) + POLY SLEEVE**



30°	M20	511C3M20	512C3M20	513C3M20
30°	M25		512C3M25	513C3M25
30°	M32		512C3M32	513C3M32
30°	M40		512C3M40	513C3M40

**METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)**



30°	M20		592C3M20	593C3M20
30°	M25		592C3M25	593C3M25
30°	M32		592C3M32	593C3M32
30°	M40			593C3M40



0°	M20		592C0M20	593C0M20
0°	M25		592C0M25	593C0M25
0°	M32		592C0M32	593C0M32
0°	M40			593C0M40







70°	M20			593C7M20
70°	M25			593C7M25
70°	M32			593C7M32
70°	M40			593C7M40



# SPARE PARTS



PLUG		DSN1	DSN3	DSN6
1 Plug interior		611A010	311A010	313A010
2 Locking ring		611A583	311A583	616A583
3 Plug contact		611A011	311A011	616A011
4 Color-coded voltage gasket		611AB26	613AB26	313AB26
		611AR26	613AR26	313AR26
		611AV26	613AV26	313AV26
		611AN26	613AN26	313AN26
5 Plug casing		611A501	613A501	616A501







Remember to order the special removal key



Yellow disassembly key  
31-A500-1

Contact us for spare parts.

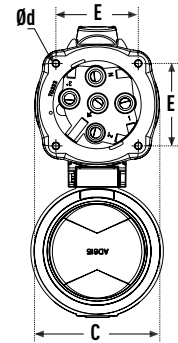
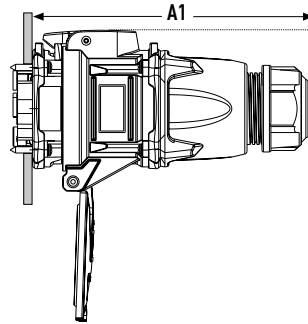
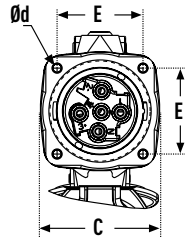
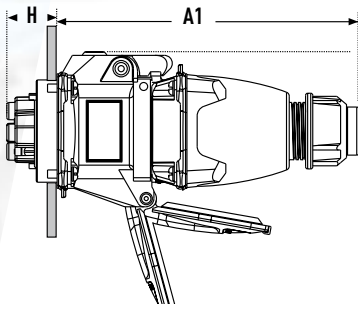


SOCKET		DSN1	DSN3	DSN6	
1	Socket Interior	611A020	311A020	313A020	
2	Locking ring	611A583	311A583	616A583	
3	Socket contact	611A021	311A021	616A021	
4	Color-coded voltage gasket		611AB26	613AB26	313AB26
			611AR26	613AR26	313AR26
			611AV26	613AV26	313AV26
			611AN26	613AN26	313AN26
5	Socket Lid Gasket	611A524	613A524	616A524	
6	Casing gasket	611A074	613A074	616A074	

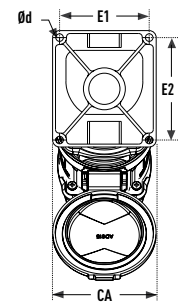
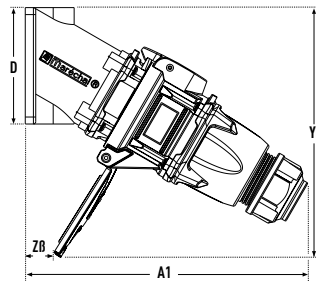
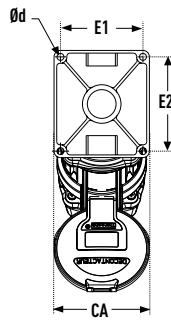
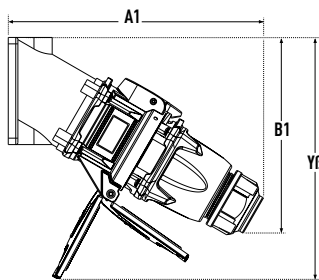
Contact us for spare parts.



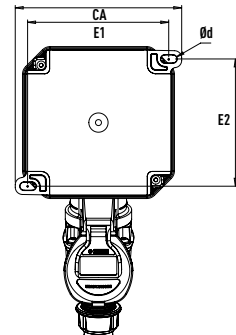
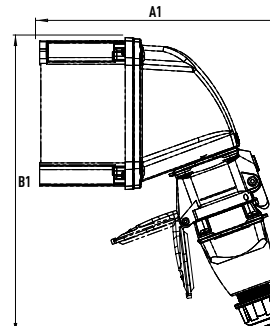
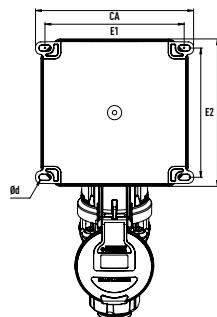
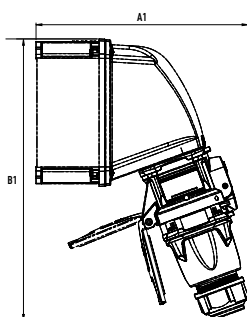
# DIMENSIONS



	A1	C	E	H	Ød*
<b>DSN1</b>	147	58	42	25	4,5
<b>DSN3</b>	171	74	48	14	5
<b>DSN6</b>	184	84	55	16	5

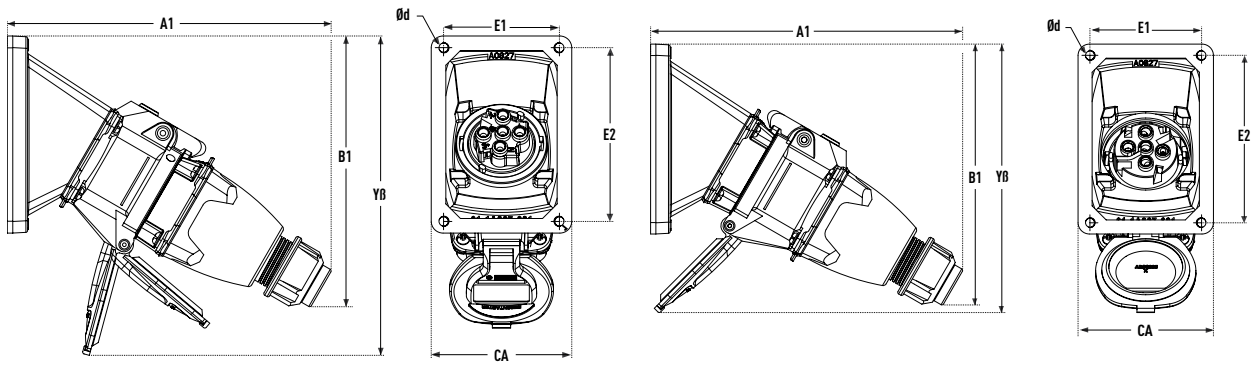


	A1	B1	CA	E1	E2	Ød*
<b>DSN1</b>	196	154	68	36/56	78	4,5
<b>DSN3</b>	213	159	84	70	70	6
<b>DSN6</b>	238	182	89	77	88	6,5

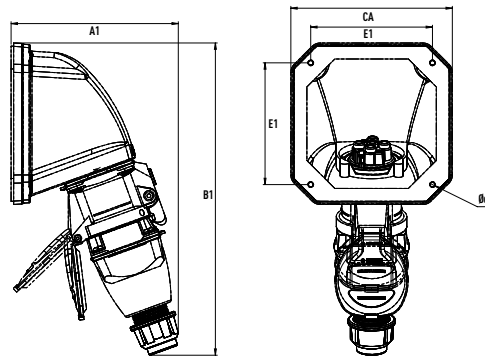


	A1	B1	CA	E1	E2	Ød*
<b>DSN1</b>	200	244	138	117	105,5	6,5
<b>DSN3</b>	207	262	138	117	105,5	6,5
<b>DSN6</b>	239	300	178	157	145,5	6,5

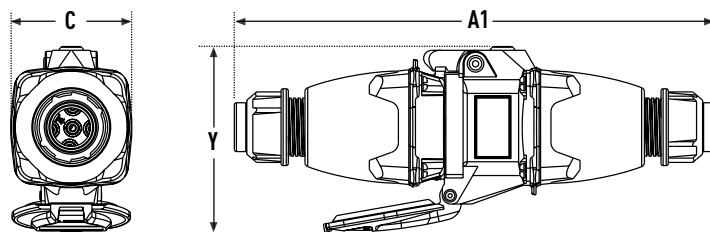
\*Ød : maximum drilling diameter.



	A1	B1	CA	E1	E2	Ød*
<b>DSN1</b>	177	148	77	63,5	95	5
<b>DSN3</b>	197	165	77	63	95	5,5
<b>DSN6</b>	212	178	77	64	95	5,5



	A1	B1	CA	E1	Ød*
<b>DSN1</b>	131	244	126	95	3,6
<b>DSN3</b>	138	262	126	95	3,6
<b>DSN6</b>	170	317	166	135	3,6



	A1	C	Y
<b>DSN1</b>	231	58	89
<b>DSN3</b>	265	74	116
<b>DSN6</b>	286	84	122

\*Ød : maximum drilling diameter.

# RETTBOX®



## ELECTROMAGNETIC SELF-EJECT DECONTACTOR™



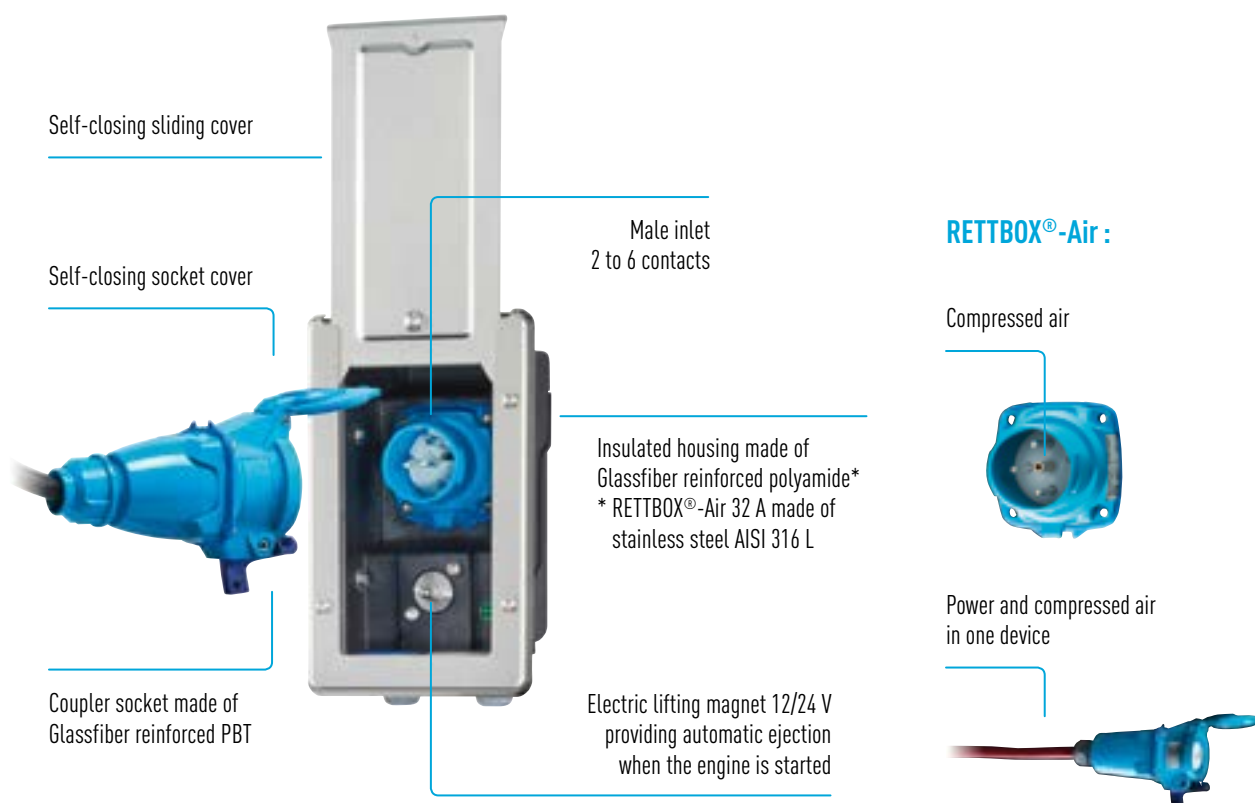
**20 A/32 A**

- ▶ For all types of emergency vehicles
- ▶ DECONTACTOR™ for power supply with secure/ automatic ejection RETTBOX® or power supply with compressed air RETTBOX®-Air
- ▶ AISI 316 L stainless steel housing with electromagnetic coil (12 V DC-24 V DC)
- ▶ Automatic ejection of the coupler socket upon start-up of the vehicle
- ▶ 5 pin connector for Anti-start function
- ▶ Voltage presence indicator
- ▶ RETTBOX®-Air : Compressed air supply up to 13 bar
- ▶ More than 10,000 matings tested

## MAIN FEATURES

	RETTBOX® (20 A)	RETTBOX®-Air (20 A)	RETTBOX® (32 A)	RETTBOX®-Air (32 A)
Front	stainless steel	stainless steel	stainless steel	stainless steel
Box	glassfiber reinforced polyamide	glassfiber reinforced polyamide	stainless steel	stainless steel
Protection mode (closed cover)	IP55	IP55	IP55	IP55
Self-closing coupler socket	IP55	IP55	IP55	IP55
Front dimensions (LxH) in mm	114 x 184	114 x 184	132 x 188	132 x 188
Cut-out dimensions on vehicle's frame (LxHxP) in mm	83 x 163 x 94	83 x 163 x 94	103 x 173 x 145	103 x 173 x 145
Coupler socket cable supplied	4 m	4 m*	4 m	4 m*
Auxiliary contacts (optional)	2 aux	no	3 aux	3 aux
Weight (excluding coupler socket)	1 200 g	1 200 g	3 200 g	3 200 g
Built-in DECONTACTOR™	20 A	20 A	32 A	32 A
Compressed air duct	no	up to 13 bars	no	up to 13 bars
Cable	flexible	flexible	flexible	flexible

\* with duct for compressed air



## ENSURE SPEED AND SAFETY

- 1 Loading box connected to the electrical system of the vehicle.
- 2 Automatic ejection of the coupler socket upon start-up of the vehicle by way of an electric lifting magnet.
- 3 Protection against water and dust by means of a self-closing cover.



switched off = charge      Starting = ejection





**ENCLOSURE WITH INLET RETTBOX®**



**Box**  
6116015RK412U

**COUPLER SOCKET RETTBOX®**



**Coupler socket**  
6113015RK4L

**RETTBOX® (20 A)**

**ENCLOSURE WITH INLET**  
supplied with 4 m cable  
(other length of cable on request)



**COUPLER SOCKET**  
pre-wired, cable  
4 m included



230 V AC	1P+N+E	RETTBOX® with 12 V relay and male inlet	6116015RK412U	6113015RK4L
230 V AC	1P+N+E	RETTBOX® with 24 V relay and male inlet	6116015RK424U	6113015RK4L
400 V AC	3P+N+E	RETTBOX® with 12 V relay and male inlet	6116017RK412U	6113017RK4L
400 V AC	3P+N+E	RETTBOX® with 24 V relay and male inlet	6116017RK424U	6113017RK4L
230 V AC	1P+N+E+2 aux.	RETTBOX® with 12 V relay and male inlet	6116175RK412U	6113175RK4L
230 V AC	1P+N+E+2 aux.	RETTBOX® with 24 V relay and male inlet	6116175RK424U	6113175RK4L
12 V AC	2P DC*	RETTBOX® with 12 V relay and male inlet	6116059RK412U	6113059RK4L
24 V AC	2P DC*	RETTBOX® with 24 V relay and male inlet	6116089RK424U	6113089RK4L

\*LED not available for these configurations

**RETTBOX®-Air (20 A)**

**ENCLOSURE WITH INLET**  
supplied with 4 m cable (other length of cable on request) - compressed air conduct up to 13 bars



**COUPLER SOCKET**  
pre-wired, cable  
4 m included



230 V AC	1P+N+E	RETTBOX® with 12 V relay and male inlet	6116015AK412U	6113015AK4L
230 V AC	1P+N+E	RETTBOX® with 24 V relay and male inlet	6116015AK424U	6113015AK4L
12 V AC	2P DC*	RETTBOX® with 12 V relay and male inlet	6116059AK412U	6113059AK4L
24 V AC	2P DC*	RETTBOX® with 24 V relay and male inlet	6116089AK424U	6113089AK4L

\*LED not available for these configurations

**INFOS +**

FIND ALL INFORMATION  
ON OUR WEBSITE:



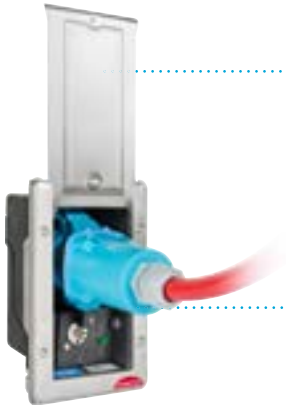
RETTBOX®  
USER GUIDE

**LED CONTROL LIGHT**

RETTBOX® (20 A, 230 and 400 V) and RETTBOX®-Air (20 A, 230 V) feature a LED signal light that indicates the presence of charging voltage.







### ENCLOSURE WITH INLET RETTBOX®



**Box**  
3816187AK424U

### COUPLER SOCKET RETTBOX®



**Coupler socket**  
3813187AK4L

### RETTBOX® (32 A)

#### ENCLOSURE WITH INLET

supplied with 4 m cable  
(other length of cable on request)



#### COUPLER SOCKET

pre-wired, cable 4 m  
included



230 V AC	1P+N+E+3 aux.	RETTBOX® with 24 V relay and male inlet	3816187RK424U	3813187RK4L
400 V AC	3P+N+E+1 aux.	RETTBOX® with 24 V relay and male inlet	3816247RK424U	3813247RK4L

### RETTBOX®-Air (32 A)

#### ENCLOSURE WITH INLET

supplied with 4 m cable (other length of cable on request) - compressed air conduct up to 13 bars



#### COUPLER SOCKET

pre-wired, cable 4 m  
included



230 V AC	1P+N+E+3 aux.	RETTBOX® with 24 V relay and male inlet	3816187AK424U	3813187AK4L
400 V AC	3P+N+E+1 aux.	RETTBOX® with 24 V relay and male inlet	3816247AK424U	3813247AK4L

## ADDITIONAL EQUIPMENT

### LEATHER PULL-GRIP (coupler socket)



RETTBOX®	RETTBOX®-Air 20 A	RETTBOX®-Air 32 A
611AZIE	611AZIE	381AZIE

### CEILING BRACKET made of stainless steel

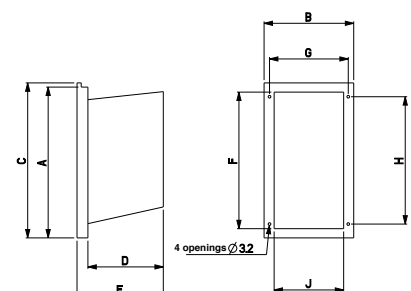


RETTBOX®	RETTBOX®-Air 20 A	RETTBOX®-Air 32 A
611AHUTRRR L	611AHUTAAA L	381AHUTAAA L

The ejecting socket is available with 5, 6, 7, 8 or 9 m of cable.  
A ceiling bracket made of stainless steel is available.

## DIMENSIONS

	A	B	C	D	E	F	G	H	J
RETTBOX® 20 A	184	114	184	89	114	163	94	152	83
RETTBOX®-Air 20 A	184	114	184	89	114	163	94	152	83
RETTBOX® 32 A	188	132	197	140	151	173	116	169	103
RETTBOX®-Air 32 A	188	132	197	140	151	173	116	169	103



# DS



## DECONTACTOR™ FOR INDUSTRY



**30 A/50 A/90 A/150 A/250 A/ 400 A**

- ▶ Automatic IP54/55
- ▶ Optional IP66 from 90 A
- ▶ Integrated load break switch: AC-22 and AC-23 breaking capacity
- ▶ Chemical resistant GRP UL 94 casing up to 150 A
- ▶ Metal casing (IK09) from 90 A to 400 A with epoxy paint

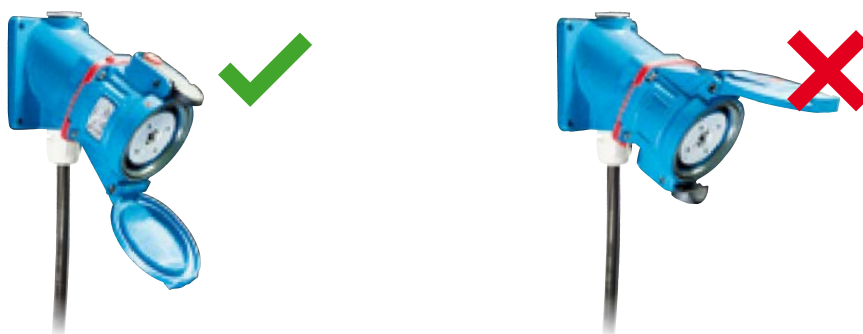
## TECHNICAL FEATURES

Plugs and sockets with integral load-break switching capability complying with IEC/EN 60309-1 and IEC/EN 60309-4 standards

	DS1	DS3	DS6	DS9	DS2	DS4
Rated current (In)	30 A	50 A	90 A	150 A	250 A	400 A
U <sub>max</sub>	690 V	1 000 V	1 000 V	1 000 V	1 000 V	1 000 V
Power kW AC-22/AC-23	15 kW	30 kW	45 kW	80 kW	100 kW <sup>(1)</sup>	
AC-22 switching capability	16 A/690 V	32 A/690 V	63 A/690 V	150 A/400 V	250 A/400 V	
AC-23 switching capability	30 A/400 V	50 A/400 V	90 A/400 V	100 A/440 V	160 A/440 V	
Auxiliary contacts (optional)	2	4	4	6	6	
Keying positions	24	24	24	24	12	12
Ambient temperature	<<< -40°C to +60°C >>>					
Short-circuit current I <sub>cc</sub>	<<< 10 kA >>>					

(1) 200 A 440 V

## MOUNTING: LOAD BREAK RELEASE BUTTON SHOULD BE AT THE TOP



### DS DECONTACTOR™ complies with:

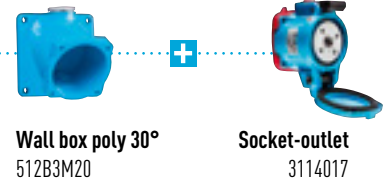
- IEC/EN 60309-1 & IEC/EN 60309-4 European and International standards (plugs and socket-outlets for industrial purposes),
- The European Low Voltage Directive 2014/35/EU, conformity with the CE marking,
- The European 'Machine Directive' 2006/42/CE regarding equipment isolation,
- The French NF C 15-100 standard,
- The French decree dated 20 December 2011 pertaining to the wiring and operating conditions of movable electrical apparatuses,
- The decrees relating to workers' protection in Belgium, Spain and Italy,
- The switch utilization categories AC-22 A and AC-23 A described in IEC/EN 60947-3.
- The UL 1682 and 2682 (USA) and CSA C22.2 N° 182.1-07 (Canada) standards for plugs and socket-outlets.

Also certified by UL, TR CU (GOST), CCC and cCSAus (French, American, German, Russian, Chinese and Canadian inspection laboratories).



▶ 180° opening lid as standard

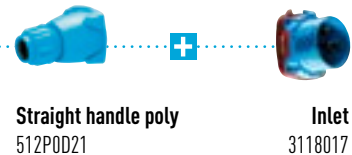
### WALL MOUNTING SOCKET DS1



Wall box poly 30°  
512B3M20

Socket-outlet  
3114017

### PLUG DS1



Straight handle poly  
512P0D21

Inlet  
3118017

## MAIN FEATURES

Rated current (with wiring according to standard)	30 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	690 V	Flexible wiring (min-max)	2,5-6 mm <sup>2</sup>
IP protection lid closed	IP55	Stranded wiring (min-max)	2,5-10 mm <sup>2</sup>
IP protection plug connected	IP54	Other wiring	on request
Shock resistance	IK08	Keying positions	24

### Load-break capability of the DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards	30 A/690 V
Load-break capability according to IEC/EN 60947-3/AC-22 A	(30 A/500 V) or (16 A/690 V)
Load-break capability according to IEC/EN 60947-3/AC-23 A	30 A/400 V
Short-circuit current I <sub>cc</sub>	10 kA
Power kW AC-22/AC-23	15 kW

### SOCKET-OUTLET female DS1 (30 A)



### INLET male DS1 (30 A)



Dual-voltage socket-outlet (see p. 7)

20-24 V AC	2P	311408A	311808A
220-250 V AC	1P+N+E	3114015	3118015
380-440 V AC	3P+E	3114013	3118013
220-250 V AC 380-440 V AC	3P+N+E	3114017	3118017
660-690 V AC	3P+E	3114193	3118193
380-400 V AC 660-690 V AC	3P+N+E	3114197	3118197
Up to 500 V AC - Auxiliaries 30 A	+ 2 contacts	Ref. + 972	Ref. + 972

▶ Other voltages, frequencies and contact configurations are available (see page 10).



For a black colour GRP housing replace the second reference character 1 with 5.

## INFO+

### OPTIONS AND ACCESSORIES

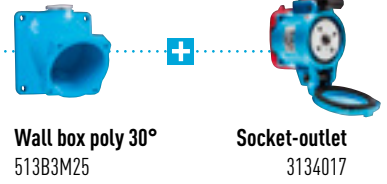
Find the boxes, sleeves and handles at the end of the section page 45.





▶ 180° opening lid as standard

### WALL MOUNTING SOCKET DS3



Wall box poly 30°  
513B3M25

Socket-outlet  
3134017

### PLUG DS3



Straight handle poly  
513P0D30

Inlet  
3138017

## MAIN FEATURES

Rated current (with wiring according to standard)	50 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	1 000 V	Flexible wiring (min-max)	6-16 mm <sup>2</sup>
IP protection lid closed	IP55	Stranded wiring (min-max)	10-25 mm <sup>2</sup>
IP protection plug connected	IP54	Other wiring	on request
Shock resistance	IK08	Keying positions	24

### Load-break capability of the DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards	(50 A/690 V) or (45 A/1 000 V)
Load-break capability according to IEC/EN 60947-3/AC-22 A	32 A/690 V
Load-break capability according to IEC/EN 60947-3/AC-23 A	50 A/400 V
Short-circuit current I <sub>cc</sub>	10 kA
Power kW AC-22/AC-23	30 kW

### SOCKET-OUTLET female DS3 (50 A)



### INLET male DS3 (50 A)



Dual-voltage socket-outlet (see p. 7)

20-24 V AC	2P	313408A	313808A
220-250 V AC	1P+N+E	3134015	3138015
380-440 V AC	3P+E	3134013	3138013
220-250 V AC / 380-440 V AC	3P+N+E	3134017	3138017
660-690 V AC	3P+E	3134193	3138193
380-400 V AC / 660-690 V AC	3P+N+E	3134197	3138197
1 000 V AC	3P+E	3134223	3138223
Auxiliaries 16 A/400 V AC	+ 2 contacts	Ref. + 972	Ref. + 972
Auxiliaries 16 A/400 V AC	+ 4 contacts	Ref. + 264	Ref. + 264

▶ Other voltages, frequencies and contact configurations are available (see page 10).



For a black colour GRP housing replace the second reference character 1 with 5.

## INFO+

### OPTIONS AND ACCESSORIES

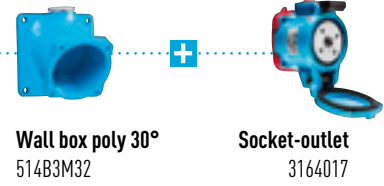
Find the boxes, sleeves and handles at the end of the section page 45.





▶ 180° opening lid as standard

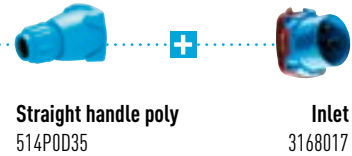
### WALL MOUNTING SOCKET DS6



Wall box poly 30°  
514B3M32

Socket-outlet  
3164017

### PLUG DS6



Straight handle poly  
514P0D35

Inlet  
3168017

## MAIN FEATURES

Rated current (with wiring according to standard)	90 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	1 000 V	Flexible wiring (min-max)	10-25 mm <sup>2</sup>
IP protection lid closed	IP55	Stranded wiring (min-max)	10-35 mm <sup>2</sup>
IP protection plug connected	IP54	Other wiring	on request
Shock resistance (poly casing)	IK08	Keying positions	24

### Load-break capability of the DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards	(90 A/690 V) or (63 A/1 000 V)
Load-break capability according to IEC/EN 60947-3/AC-22 A	63 A/690 V
Load-break capability according to IEC/EN 60947-3/AC-23 A	90 A/400 V
Short-circuit current I <sub>cc</sub>	10 kA
Power kW AC-22/AC-23	45 kW

### SOCKET-OUTLET female DS6 (90 A)



### INLET male DS6 (90 A)



Dual-voltage socket-outlet (see p. 7)

220-250 V AC	1P+N+E	3164015	3168015
380-440 V AC	3P+E	3164013	3168013
220-250 V AC / 380-440 V AC	3P+N+E	3164017	3168017
660-690 V AC	3P+E	3164193	3168193
380-400 V AC / 660-690 V AC	3P+N+E	3164197	3168197
1 000 V AC	3P+E	3164223	3168223
Auxiliaries 5 A/500 V AC	+ 2 contacts	Ref. + 972	Ref. + 972
Auxiliaries 5 A/500 V AC	+ 4 contacts	Ref. + 264	Ref. + 264
For IP66/67		Ref. + 600	Ref. + 600

▶ Other voltages, frequencies and contact configurations are available (see page 10).



For a black colour GRP housing replace the second reference character 1 with 5.

## INFO+

### OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 45.





**WALL MOUNTING SOCKET DS6**



Wall box metal 30°  
594B2M25



Socket-outlet  
3964017

**PLUG DS6**



Straight handle poly  
514POD35



Inlet  
3968017

**MAIN FEATURES**

Rated current (with wiring according to standard)	90 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	1 000 V	Flexible wiring (min-max)	10-25 mm <sup>2</sup>
IP protection lid closed	IP55	Stranded wiring (min-max)	10-35 mm <sup>2</sup>
IP protection plug connected	IP54	Other wiring	on request
Shock resistance (metal casing)	IK09	Keying positions	24

**Load-break capability of the DECONTACTOR™**

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards	(90 A/690 V) or (63 A/1 000 V)
Load-break capability according to IEC/EN 60947-3/AC-22 A	63 A/690 V
Load-break capability according to IEC/EN 60947-3/AC-23 A	90 A/400 V
Short-circuit current I <sub>cc</sub>	10 kA
Power kW AC-22/AC-23	45 kW

**SOCKET-OUTLET female DS6 (90 A)**



**INLET male DS6 (90 A)**



Dual-voltage socket-outlet (see p. 7)

220-250 V AC	1P+N+E	3964015	3968015
380-440 V AC	3P+E	3964013	3968013
220-250 V AC / 380-440 V AC	3P+N+E	3964017	3968017
660-690 V AC	3P+E	3964193	3968193
380-400 V AC / 660-690 V AC	3P+N+E	3964197	3968197
1 000 V AC	3P+E	3964223	3968223
Auxiliaries 5 A/500 V AC	+ 2 contacts	Ref. + 972	Ref. + 972
Auxiliaries 5 A/500 V AC	+ 4 contacts	Ref. + 264	Ref. + 264
For IP66/67		Ref. + 600	Ref. + 600

► Other voltages, frequencies and contact configurations are available (see page 10).

**INFO+**

**OPTIONS AND ACCESSORIES**

Find the boxes, sleeves and handles at the end of the section page 45.





► 180° opening lid as standard



### WALL MOUNTING SOCKET DS9



Wall box metal 30°  
595E3M50



Socket-outlet  
3194017

### PLUG DS9



Straight elastomer  
555P0D35



Inlet  
3198017

## MAIN FEATURES

Rated current (with wiring according to standard)	150 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	1 000 V	Flexible wiring (min-max)	25-70 mm <sup>2</sup>
IP protection lid closed	IP66/IP67/IP69K	Stranded wiring (min-max)	25-95 mm <sup>2</sup>
IP protection plug connected	IP66/IP67/IP69K	Keying positions	24
Shock resistance (poly casing)	IK08		

### Load-break capability of the DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards	(150 A/500 V) or (150 A/690 V)
Load-break capability according to IEC/EN 60947-3/AC-22 A	(90 A/690 V) or (150 A/400 V)
Load-break capability according to IEC/EN 60947-3/AC-23 A	100 A/440 V
Short-circuit current I <sub>cc</sub>	10 kA
Power kW AC-22/AC-23	80 kW

### SOCKET-OUTLET female DS9 (150 A)



### INLET male DS9 (150 A)



Dual-voltage socket-outlet (see p. 7)

220-250 V AC	1P+N+E	3194015	3198015
380-440 V AC	3P+E	3194013	3198013
220-250 V AC / 380-440 V AC	3P+N+E	3194017	3198017
660-690 V AC	3P+E	3194193	3198193
380-400 V AC / 660-690 V AC	3P+N+E	3194197	3198197
1 000 V AC	3P+E	3194223	3198223
Auxiliaries 10 A/400 V AC	+ 2 contacts	Ref. + 262	Ref. + 262
Auxiliaries 10 A/400 V AC	+ 4 contacts	Ref. + 264	Ref. + 264
Auxiliaries 10 A/400 V AC	+ 6 contacts	Ref. + 976	Ref. + 976

► Other voltages, frequencies and contact configurations are available (see page 10).



For a black colour GRP housing replace the second reference character 1 with 5.

## INFO+

### OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 45.







### MAIN FEATURES

Rated current (with wiring according to standard)	150 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	1 000 V	Flexible wiring (min-max)	25-70 mm²
IP protection lid closed	IP55	Stranded wiring (min-max)	25-95 mm²
IP protection plug connected	IP54	Keying positions	24
Shock resistance (metal casing)	IK09		

### Load-break capability of the DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards	(150 A/500 V) or (150 A/690 V)
Load-break capability according to IEC/EN 60947-3/AC-22 A	(90 A/690 V) or (150 A/400 V)
Load-break capability according to IEC/EN 60947-3/AC-23 A	100 A/440 V
Short-circuit current I <sub>cc</sub>	10 kA
Power kW AC-22/AC-23	80 kW

### SOCKET-OUTLET female DS9 (150 A)

### INLET male DS9 (150 A)

Dual-voltage socket-outlet (see p. 7)

220-250 V AC	1P+N+E	3994015	3998015
380-440 V AC	3P+E	3994013	3998013
220-250 V AC / 380-440 V AC	3P+N+E	3994017	3998017
660-690 V AC	3P+E	3994193	3998193
380-400 V AC / 660-690 V AC	3P+N+E	3994197	3998197
1 000 V AC	3P+E	3994223	3998223
Auxiliaries 10 A/400 V AC	+ 2 contacts	Ref. + 262	Ref. + 262
Auxiliaries 10 A/400 V AC	+ 4 contacts	Ref. + 264	Ref. + 264
Auxiliaries 10 A/400 V AC	+ 6 contacts	Ref. + 976	Ref. + 976
For IP66/67		Ref. + 600	Ref. + 600

► Other voltages, frequencies and contact configurations are available (see page 10).

### INFO+

### OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 45.





### WALL MOUNTING SOCKET DS<sub>2</sub>



Wall box metal 60°  
596E6M63



Socket-outlet  
3924017

### PLUG DS<sub>2</sub>



Straight elastomer  
556POD35



Inlet  
3928017

## MAIN FEATURES

Rated current (with wiring according to standard)	250 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	1 000 V	Flexible wiring (min-max)	70-95 mm <sup>2</sup>
IP protection lid closed	IP55	Stranded wiring (min-max)	70-120 mm <sup>2</sup>
IP protection plug connected	IP54	Keying positions	12
Shock resistance	IK09		

### Load-break capability of the DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards	(250 A/500 V) or (200 A/690 V)
Load-break capability according to IEC/EN 60947-3/AC-22 A	(250 A/400 V) or (125 A/690 V)
Load-break capability according to IEC/EN 60947-3/AC-23 A	160 A/440 V
Short-circuit current I <sub>cc</sub>	10 kA

### SOCKET-OUTLET female DS<sub>2</sub> (250 A)



### INLET male DS<sub>2</sub> (250 A)



Dual-voltage socket-outlet (see p. 7)

380-440 V AC	3P+E	3924013	3928013
220-250 V AC 380-440 V AC	3P+N+E	3924017	3928017
660-690 V AC	3P+E	3924193	3928193
380-400 V AC 660-690 V AC	3P+N+E	3924197	3928197
1 000 V AC	3P+E	3924223	3928223
Auxiliaries 5 A/400 V AC	3P+N+E + 2 contacts	Ref. + 972	Ref. + 972
Auxiliaries 5 A/400 V AC	3P+E + 4 contacts	Ref. + 174	Ref. + 174
Auxiliaries 5 A/400 V AC	3P+E + 6 contacts	Ref. + 976	Ref. + 976
For IP66/67		Ref. + 600	Ref. + 600

► Other voltages, frequencies and contact configurations are available (see page 10).

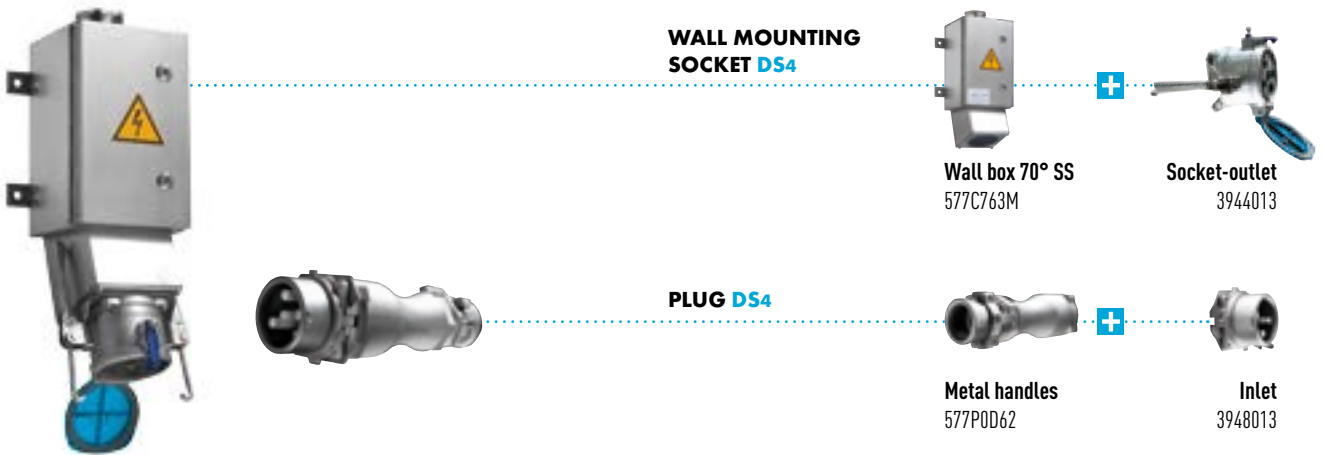
For more than 2 auxiliary contacts, please contact us.

## INFO+

### OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 45.





### MAIN FEATURES

Rated current (with wiring according to standard)	400 A	Flexible wiring (min-max)	95-150 mm <sup>2</sup>
Maximum voltage	1 000 V	Stranded wiring (min-max)	95-185 mm <sup>2</sup>
Protection	IP54 (optional IP66/67)	<b>Connector only: not to be disconnected while energised</b>	
Shock resistance	IK09	Pilot contacts 5 A/400 V AC for electrical interlock	2
Ambient temperature	-40 °C to +60 °C	Mechanical interlock	as standard
Keying positions	12	Inlet closing device in stainless steel	as standard

**SOCKET-OUTLET** female  
**DS4 (400 A)**



**INLET** male  
**DS4 (400 A)**



380-440 V AC	3P+E+ 2pil.	3944013	3948013
660-690 V AC	3P+E+ 2pil.	3944193	3948193
1 000 V AC	3P+E+ 2pil.	3944223	3948223

### REMEMBER TO ORDER AN OPTIONAL SPACER

Creates more space for easier wiring,  
thickness 68 mm : 577M0-68,  
thickness 115 mm : 577M0-115.



INFO+












### OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 45.















## OPTIONS (DETAILS ON PAGE 216)

	DS1 size 2	DS3 size 3	DS6 size 4	DS9 size 5	DS2 size 6	DS4 size 7
<b>INDUSTRIAL-DOMESTIC ADAPTERS</b>						
 <p>Industrial inlet MARECHAL® 1P+N+E domestic socket-outlet 10/16 A 230 V fuse protection 10 A and 16 A.</p>	3118015D11*	NA	NA	NA	NA	NA
 <p>* All these plug adapters are available to foreign standards: replace D11 by D40 for UK, D30 for Germany/NL/Lux, D06 for Italy.</p>						
<b>LOCKING PIN FOR 2 PADLOCKS Ø 8 mm (PADLOCKS NOT SUPPLIED)</b>						
	Socket-outlet ref. + 844	Socket-outlet ref. + 844	Socket-outlet ref. + 843	Socket-outlet ref. + 844	Socket-outlet ref. + 843	Socket-outlet ref. + 843
<b>SAFETY HASP FOR UP TO 6 PADLOCKS</b>						
	873A541	873A541	873A541	873A541	873A541	873A541
<b>LARGER RELEASE BUTTON</b>						
	Socket-outlet ref. + 453	Socket-outlet ref. + 453	Socket-outlet ref. + 453	Socket-outlet ref. + 453		
<b>INLET CAP</b>						
 IP66/67	311A426	313A426	316A426			
 IP55				319A126	312A126	312A126
<b>IN-LINE CONNECTIONS (A PAIR OF FINGER DRAW PLATES TO AID CLOSING)</b>						
	613A346	616A346	316A346			
<b>180° OPENING LID</b>						
Standard on poly housing	Standard	Standard	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10	NA
<b>SELF CLOSING/SELF RETURNING LID (ACCORDING TO MODEL)</b>						
	Socket-outlet + R Closing IP55	Socket-outlet + R Closing IP55	GRP Socket-outlet + R Closing IP55	Socket-outlet + R Returning IP40	Socket-outlet + R Returning IP40	Socket-outlet + R Returning IP40
<b>METAL SOCKET CASING WITH SELF RETURN &amp; 180° OPENING LID</b>						
			Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18	
<b>SELF-CLOSING LID FOR INLET (IP54)</b>						
	311A226	313A226	316A226			
<b>IP66/67 SOCKET-OUTLET AND INLET (RECOMMENDED IN THE CASE OF COUPLER SOCKET)</b>						
	NA	NA	Ref. + 600	Ref. metal + 600	Ref. + 600	Ref. + 600
<b>SELF-EJECTING (SEE REFERENCES AND OPTIONS DETAILS PAGE 228)</b>						
						
<b>ELECTROMAGNETIC COMPATIBILITY (EMC) (SEE DETAIL PAGE 223)</b>						
			Metal socket ref. +EMC	Metal socket ref. +EMC	Metal socket ref. +EMC	



# ACCESSORIES

(SEE PAGE 238 TO CROSS REFERENCE WITH OLDER PART NUMBERS)

BOXES			DS1 size 2	DS3 size 3	DS6 size 4	DS9 size 5	DS2 size 6	DS4 size 7	
<b>POLY BOX</b>									
	30°	M20	512B3M20						
	30°	M25	512B3M25	513B3M25					
	30°	M32			514B3M32				
	30°	M40			514B3M40				
	30°	M20	552B3M20						
	30°	M25	552B3M25	553B3M25					
	30°	M32			554B3M32				
	30°	M40			554B3M40				
<b>METAL BOX (+ EARTHING WIRE)</b>									
	20°	M20	592B2M20	593B2M20					
	20°	M25	592B2M25	593B2M25	594B2M25				Ref. +EMC
	20°	M32		593B2M32	594B2M32				Ref. +EMC
	20°	M40			594B2M40				Ref. +EMC
<b>POLY BOX + POLY SLEEVE (BLACK VERSION SEE ACCESSORIES DXN PAGE 169)</b>									
	70°	Without Hole	512C7000	513C7000	514C7000				
	70°	Ø M20	512C7M20						
	70°	Ø M25	512C7M25	513C7M25					
	70°	Ø M32	512C7M32	513C7M32	514C7M32				
	70°	Ø M40	512C7M40	513C7M40	514C7M40				
<b>METAL BOX (+ EARTHING WIRE) + POLY SLEEVE</b>									
	30°	M20	512C3M20	513C3M20					
	30°	M25	512C3M25	513C3M25	514C3M25				
	30°	M32	512C3M32	513C3M32	514C3M32	515C3M32			
	30°	M40	512C3M40	513C3M40	514C3M40	515C3M40			
	30°	M50			514C3M50	515C3M50			
	30°	M63				515C3M63			
<b>METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)</b>									
	30°	M20	592C3M20	593C3M20					
	30°	M25	592C3M25	593C3M25	594C3M25				Ref. +EMC
	30°	M32	592C3M32	593C3M32	594C3M32	595C3M32			Ref. +EMC
	30°	M40		593C3M40	594C3M40	595C3M40			Ref. +EMC
	30°	M50			594C3M50	595C3M50			Ref. +EMC
	30°	M63				595C3M63			Ref. +EMC
	0°	M20	592C0M20	593C0M20					
	0°	M25	592C0M25	593C0M25	594C0M25				Ref. +EMC
	0°	M32	592C0M32	593C0M32	594C0M32	595C0M32			Ref. +EMC
	0°	M40		593C0M40	594C0M40	595C0M40			Ref. +EMC
	0°	M50			594C0M50	595C0M50			Ref. +EMC
	0°	M63				595C0M63			Ref. +EMC
	70°	M20		593C7M20					
	70°	M25		593C7M25	594C7M25				Ref. +EMC
	70°	M32		593C7M32	594C7M32	595C7M32			Ref. +EMC
	70°	M40		593C7M40	594C7M40	595C7M40			Ref. +EMC
	70°	M50			594C7M50	595C7M50			Ref. +EMC
	70°	M63				595C7M63			Ref. +EMC









# ACCESSORIES



(SEE PAGE 238 TO CROSS REFERENCE WITH OLDER PART NUMBERS)

BOXES			DS1 size 2	DS3 size 3	DS6 size 4	DS9 size 5	DS2 size 6	DS4 size 7	
<b>METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)</b>									
	0°	M50				595E0M50			Ref. +EMC
	30°	M50				595E3M50			Ref. +EMC
	30°	M63				595E3M63			Ref. +EMC
	70°	M50				595E7M50			Ref. +EMC
	70°	M63				595E7M63			Ref. +EMC
	60°	M50					596E6M50		Ref. +EMC
	60°	M63					596E6M63		Ref. +EMC
	60°	M75					596E6M75		Ref. +EMC
<b>METAL BOXES WITH METAL SLEEVE AND METAL CABLE GLAND (+ EARTHING WIRE)</b>									
	70°	35-46 mm						577C763M	
	70°	48-65 mm						577C775M	

SLEEVE		DS1 size 2	DS3 size 3	DS6 size 4	DS9 size 5	DS2 size 6	DS4 size 7	
<b>POLY SLEEVE</b>								
	30°	512M3	513M3	514M3	515M3			
	30°	552M3	553M3	554M3	555M3			
	70°	512M7	513M7	514M7				
	70°	552M7	553M7	554M7				
<b>METAL SLEEVE</b>								
	0°	592M0	593M0	594M0	595M0	596M0		Ref. +EMC
	30°	592M3	593M3	594M3	595M3			Ref. +EMC
	60°					596M6		Ref. +EMC
	60°						597M6	
	70°		593M7	594M7	595M7			Ref. +EMC

HANDLE		DS1 size 2	DS3 size 3	DS6 size 4	DS9 size 5	DS2 size 6	DS4 size 7	
<b>POLY HANDLE WITH GLAND</b>								
	5-21 mm	512P0D21						
	10-30 mm		513P0D30					
	13-35 mm			514P0D35				
	5-21 mm	552P0D21						
	10-30 mm		553P0D30					
	13-35 mm			554P0D35				
	40-63 mm					516P0D63		
<b>ELASTOMER HANDLE WITH GLAND</b>								
	18-25 mm				555P0D25			Ref. +443
	25-35 mm				555P0D35	556P0D35		Ref. +443
	35-45 mm				555P0D45	556P0D45		Ref. +443
	45-49 mm				555P0D49	556P0D49		Ref. +443
<b>POLY HANDLE WITH POLY CABLE GLAND (BLACK COLOR VERSION REPLACE 1 BY 5)</b>								
	5-12 mm	512P020P						Ref. +443
	9-18 mm	512P025P	513P025P					Ref. +443
	14-25 mm	512P032P	513P032P	514P032P	515P032P			Ref. +443
	18-32 mm	512P040P	513P040P	514P040P	515P040P			Ref. +443
	24-38 mm			514P050P	515P050P			Ref. +443
	35-48 mm				515P063P	516P063P		
<b>POLY HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY, BLACK COLOR VERSION REPLACE 1 BY 5)</b>								
	M20	512P0M20	513P0M20					Ref. +443
	M25	512P0M25	513P0M25					Ref. +443
	M32	512P0M32	513P0M32	514P0M32				Ref. +443
	M40	512P0M40	513P0M40	514P0M40				Ref. +443
	M50			514P0M50	515P0M50			
	M63				515P0M63	516P0M63		
	M75					516P0M75		

### LEGEND FOR OPTIONAL ACCESSORIES

-  Angle
-  Threading or gland size
-  EMC option
-  HT 240° C
-  Self-ejection

**INFO +**



# ACCESSORIES

(SEE PAGE 238 TO CROSS REFERENCE WITH OLDER PART NUMBERS)

HANDLE



DS1  
size 2

DS3 - DSHT  
size 3

DS6  
size 4

DS9  
size 5

DS2  
size 6

DS4  
size 7



## METAL HANDLE WITH METAL GLAND (+ EARTHING WIRE)

	7-13 mm	592P020M	593P020M				
	8-16 mm	592P025M	593P025M	594P025M			Ref. +EMC (9-16 mm)
	15-23 mm	592P032M	593P032M	594P032M	595P032M		Ref. +EMC (11-21 mm)
	22-32 mm		593P040M	594P040M	595P040M		Ref. +EMC (19-28 mm)
	34-44 mm			594P050M	595P050M		Ref. +EMC (27-35 mm)
	35-48 mm				595P063M		Ref. +EMC (34-45 mm)
	8-16 mm		573P025M185				
	15-23 mm		573P032M185				

## METAL HANDLE WITH INTEGRATED CABLE CLAMP

	40-54 mm				596P0D54		
	54-63 mm				596P0D63		
	53-57 mm					577P0D57	
	58-62 mm					577P0D62	
	62-68 mm					577P0D68	
	69-73 mm					577P0D73	

## METAL HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY)

	M20	592P0M20	593P0M20				
	M25	592P0M25	593P0M25	594P0M25			Ref. +EMC
	M32	592P0M32	593P0M32	594P0M32	595P0M32		Ref. +EMC
	M40		593P0M40	594P0M40	595P0M40		Ref. +EMC
	M50			594P0M50	595P0M50	596P0M50	Ref. +EMC
	M63				595P0M63	596P0M63	Ref. +EMC
	M75					596P0M75	Ref. +EMC

### LEGEND FOR OPTIONAL ACCESSORIES



Angle



Threading or gland size



EMC option



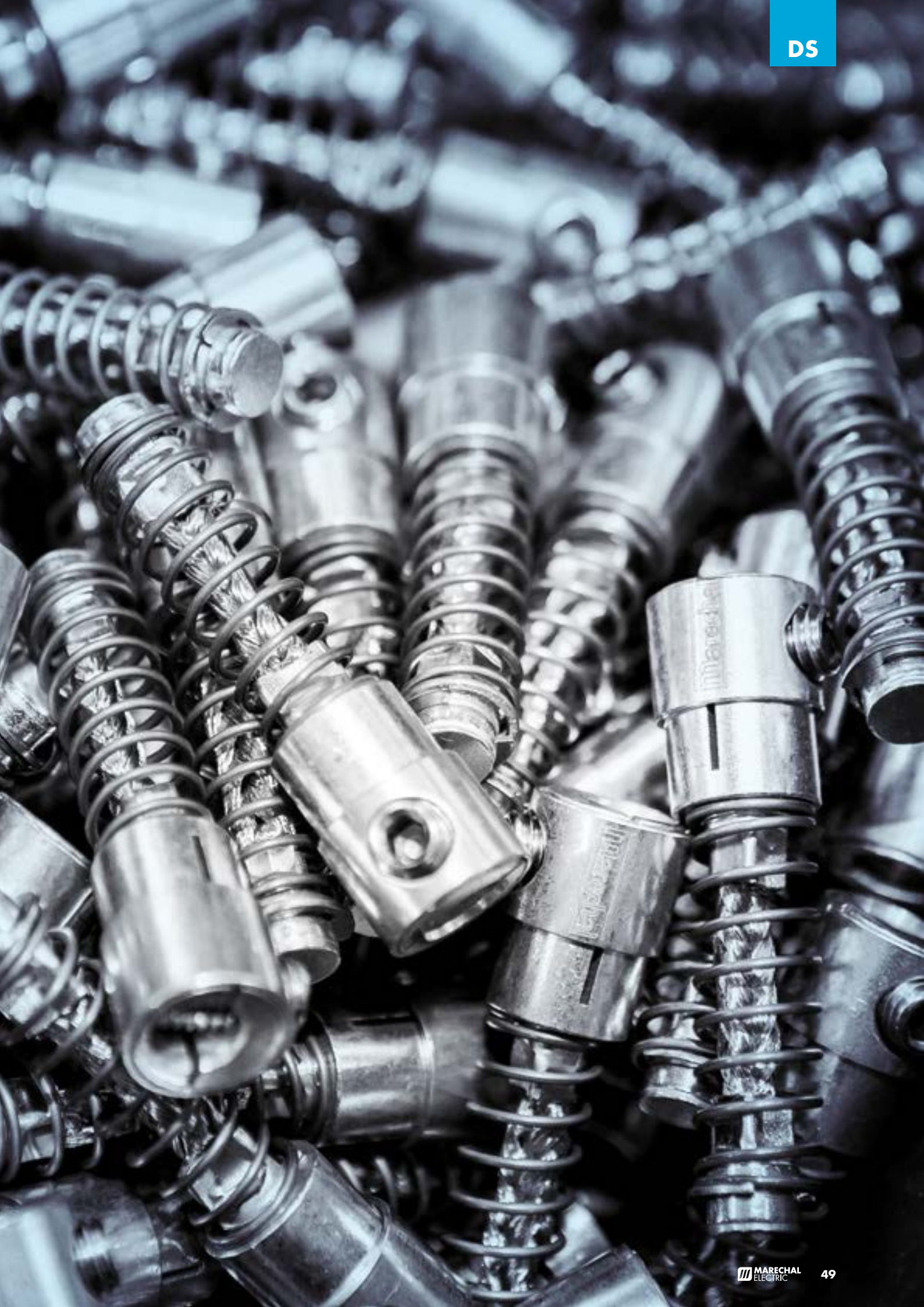
HT 240° C



Self-ejection

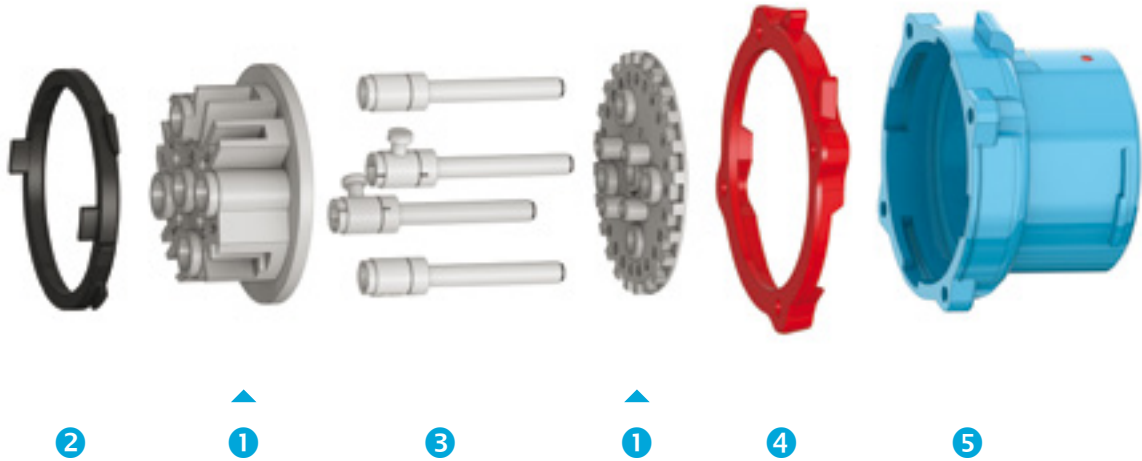
INFO +











# SPARE PARTS



PLUG	DS1	DS3	DS6	DS9	DS2	DS4	
1 Plug interior	311A010	313A010	316A010	619A010	-	-	
1 Plug interior metal + E	-	-	396A110	699A110	392A110	394A110	
2 Locking ring	311A583	313A583	316A583	319A583	-	-	
2 Locking ring metal	-	-	396A583	399A583	392A583	394A583	
3 Plug contact (P or N)	311A011	616A011	316A011	619A011	392A011	394A011	
4 Color-coded voltage gasket		311AB26	313AB26	316AB26	319AB26	392AB26	-
		311AR26	313AR26	316AR26	319AR26	392AR26	-
		311AV26	313AV26	-	-	-	-
		311AN26	313AN26	316AN26	319AN26	392AN26	-
5 Plug casing poly	311A501	313A501	316A501	619A501	-	-	
5 Plug casing metal	-	-	396A501	399A501	392A501	394A501	







Remember to order the special removal key



Yellow disassembly key  
For poly casing  
31-A500-1

Contact us for spare parts.



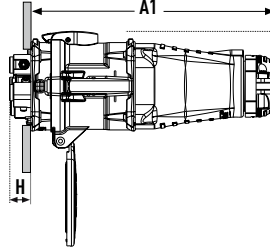
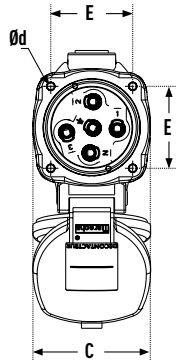
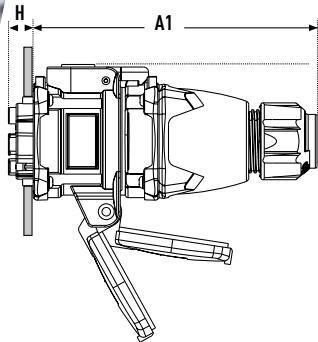
SOCKET	DS1	DS3	DS6	DS9	DS2	DS4	
1 Socket Interior poly	311A020	313A020	316A020	619A020	-	-	
1 Socket Interior metal +E			396A220	699A220	392A220	394A220	
2 Locking ring	311A583	313A583	316A583	319A583	-	-	
2 Locking ring metal	-	-	396A583	399A583	392A583	394A583	
3 Socket contact (P or N)	311A021	616A021	316A021	619A021	392A021	394A021	
4 Color-coded voltage gasket		311AB26	313AB26	316AB26	319AB26	392AB26	-
		311AR26	313AR26	316AR26	319AR26	392AR26	-
		311AV26	313AV26	-	-	-	-
		311AN26	313AN26	316AN26	319AN26	392AN26	-
5 Plug casing poly	311A524	313A524	316A524	619A524	-	-	
5 Metal Socket Lid Gasket	-	-	396A524	399A524	392A524	394A524	
6 Lid gasket	311A563	313A563	316A563	399A563 (metal) 619A074 (poly)	392A563	392A563	

Contact us for spare parts.

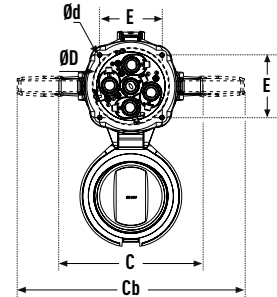


# DIMENSIONS

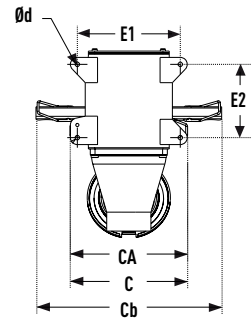
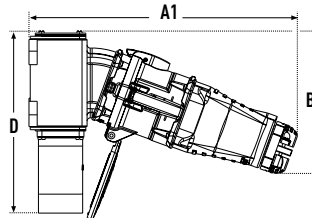
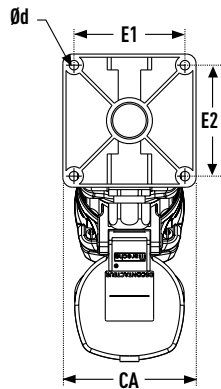
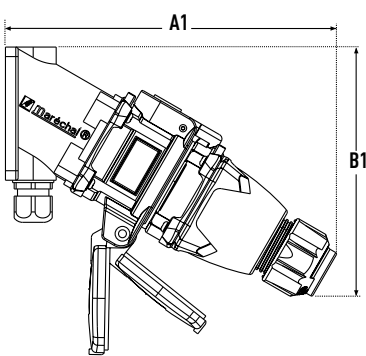
DS1/DS3/DS6



DS9/DS2



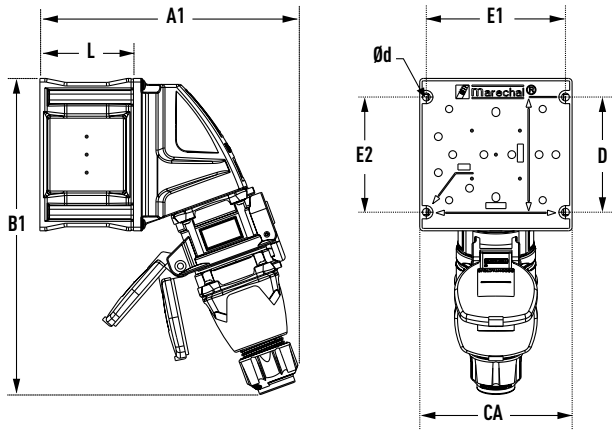
	A1	C	Cb	E	H	Ød*
<b>DS1</b>	166	69	/	48	15	5
<b>DS3</b>	179	80	/	55	17	5
<b>DS6</b>	203	95	/	66	25	5,5
<b>DS9 POLY</b>	315	186	294	81	26	6
<b>DS2</b>	360	192	304	98	38	6,5



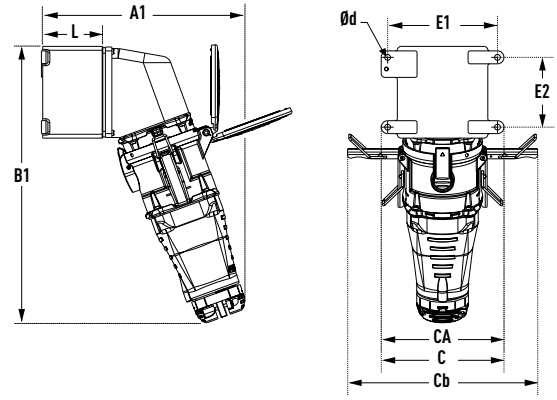
	A1	B1	CA	E1	E2	Ød*
<b>DS1</b>	209	157	84	70	70	6
<b>DS3</b>	235	181	89	77	88	6,5
<b>DS6</b>	283	215	105	89	112	7,5
<b>DS9 POLY (20°)</b>	425	225	185	163	116	7
<b>DS2 (60°)</b>	414	460	226	202	154	10

\*Ød : maximum drilling diameter.

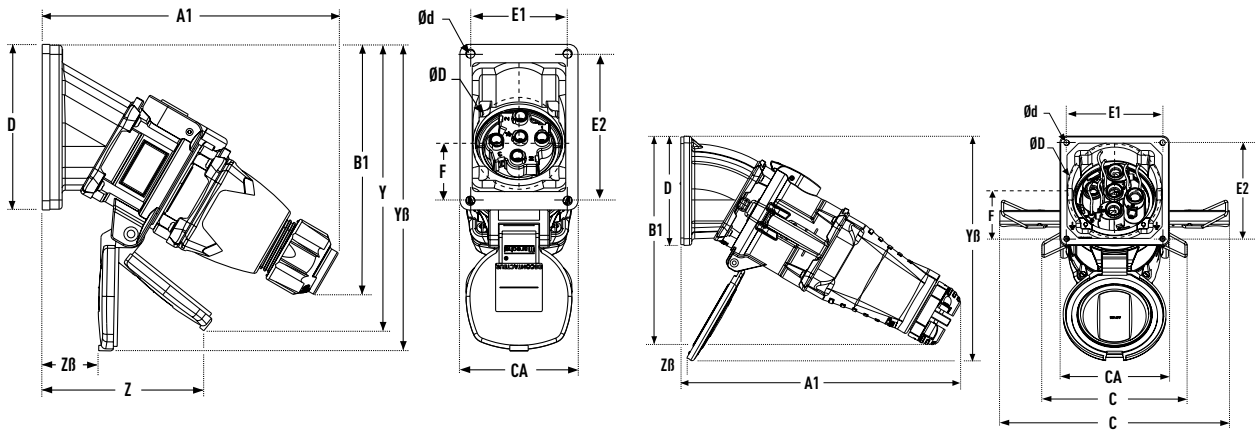
DS1/DS3/DS6



DS9/DS2



	A1	B1	Cb	CA	D	E1	E2	L	Ød*
<b>DS1</b>	216	263		128	128	116	96	78	6
<b>DS3</b>	243	313		170	170	158	139	78	6.5
<b>DS6</b>	250	338		170	170	158	139	78	8.5
<b>DS9 POLY</b>	315	430	294	190	142	170	108	95	9

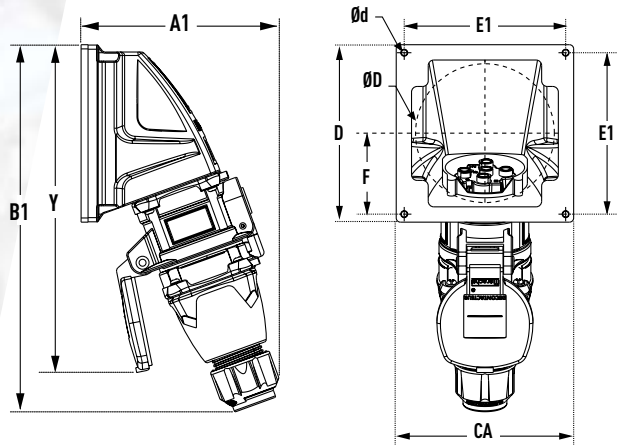


	A1	B1	CA	D	E1	E2	Ød*	ØD max
<b>DS1</b>	193	163	77	108	63	95	5,5	60
<b>DS3</b>	208	174	77	108	63	95	5,5	60
<b>DS6</b>	233	205	102	136	87	122	6,5	70

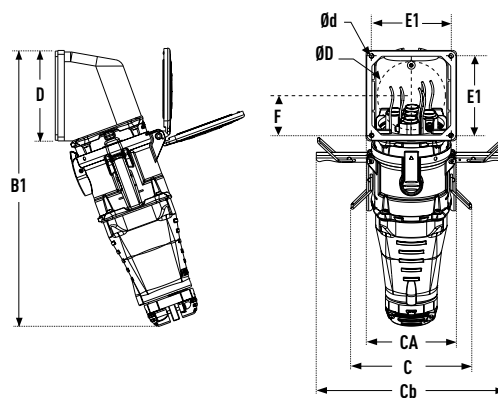
	A1	B1	C	CB	CA	D	E1	E2	Ød*	ØD max
<b>DS9 POLY (30°)</b>	358	267	186	294	140	140	124	124	7	120
<b>DS2 (60°)</b>	295	460	192	304	191	191	165	165	7	145

\*Ød : maximum drilling diameter.

**DS1/DS3/DS6**

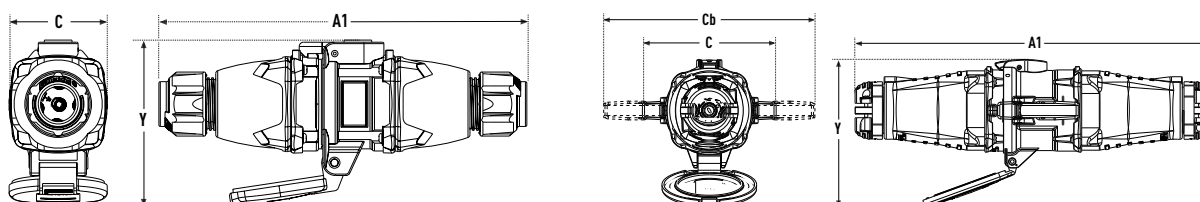


**DS9/DS2**



	A1	B1	CA	D	E1	Ød*
<b>DS1</b>	140	264	128	128	116	5
<b>DS3</b>	170	313	170	170	159	5
<b>DS6</b>	175	338	170	170	159	5

	A1	B1	C	Cb	CA	D	E1	Ød*
<b>DS9 POLY</b>	220	427	186	294	140	140	124	7

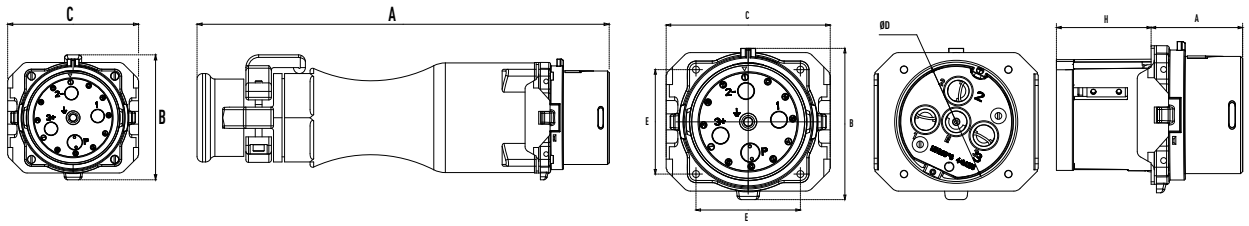


	A1	C	Y
<b>DS1</b>	259	69	117
<b>DS3</b>	277	80	145
<b>DS6</b>	309	95	167

	A1	C	Cb	Y
<b>DS9 POLY</b>	496	186	294	204
<b>DS2</b>	588	192	304	203

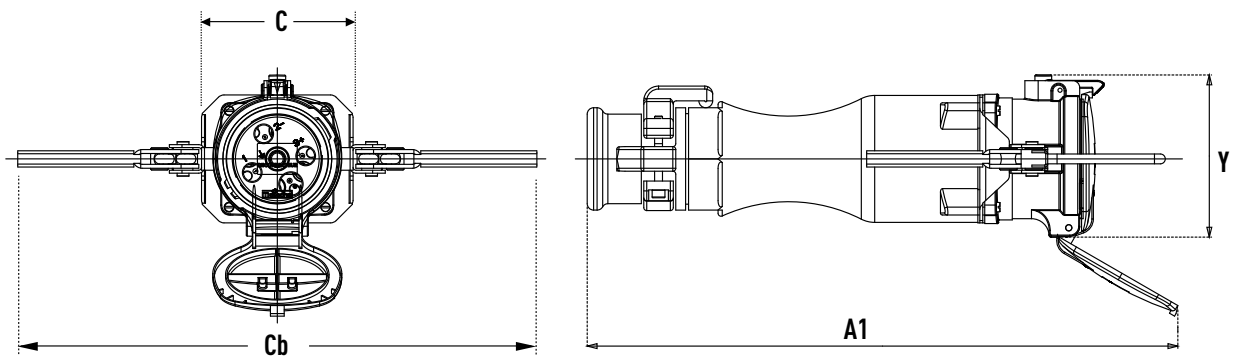
\*Ød : maximum drilling diameter.

DS4

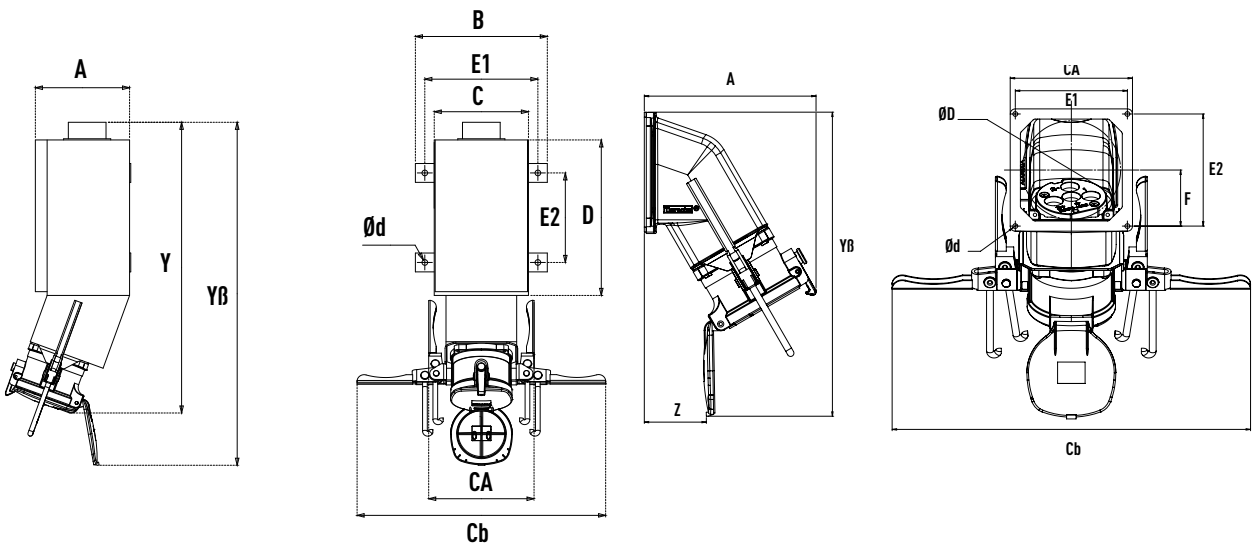


	A	B	C
<b>DS4</b>	485	147	154

	A	B	C	E	H	ØD max
<b>DS4</b>	86	89	154	142	98	112



	A1	C	Cb	Y
<b>DS4</b>	600	224	528	165



	A	B	C	CA	Cb
<b>DS4</b>	200	280	200	224	528

	A	CA	Cb	E1	E2
<b>DS4</b>	255	191	528	165	165

	E1	E2	Y	YB	Ød*
<b>DS4</b>	240	190	627	779	12

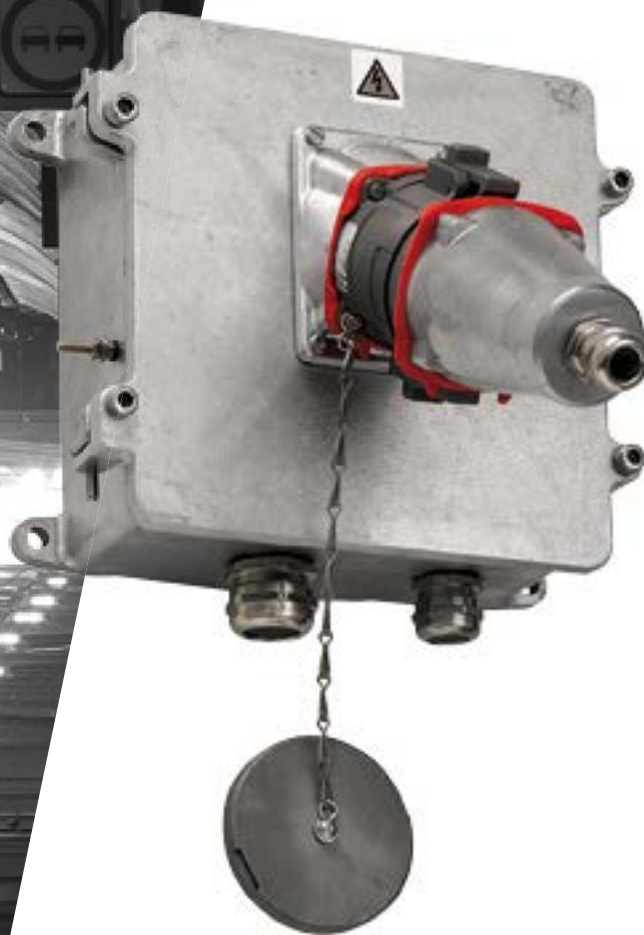
	F	YB	Z	Ød*	ØD max
<b>DS4</b>	82,5	448	85	7	145

\*Ød : maximum drilling diameter.

# DSHT



## DECONTACTOR™ HIGH TEMPERATURE



**30 A → 125 A**

- ▶ Proximity power supply of smoke accelerators or in high temperature environment up to 240 °C
- ▶ DECONTACTOR™ 3P+E+2 aux 125 A – 690 V AC - AC 22 IEC 60947-3
- ▶ Continuous use at 240 °C or 400 °C - EN 12101-3
- ▶ IP66 & IK09 for Metal casing
- ▶ Complies with machine directive EN 60204-1 (Art 5.3 & 5.4 proximity emergency stop)



**MAIN FEATURES**

Max. operating temperature steady	240 °C/400 °C (2h)	Protection	IP66
Rated current In	125 A	Robustness	IK09
Umax	690 V	Crimp cable wiring from 6 to 35 mm <sup>2</sup>	
Maximum no. of contacts	3P+E	Terminal Wiring on socket side of 10 to 95 mm <sup>2</sup>	
Auxiliary contacts (optional)	2	Shock resistance	IK09 according to NF EN 50102
Breaking capacity	AC-22 (NF EN 60947-3)	Ingress Protection	IP66 (NF EN 60529)
Service terminals	3 terminals usually mounted on a steel base fire	Internal and external Earth point	Inside and outside the enclosure
Fire resistance	Electrical continuity of the main cable guaranteed to 400°C for 2 hours as the test program 5 of NF EN 12101-3 standard		



**TUNNEL APPLICATION EQUIPMENT**

**DSHT (125 A)  
400°C\***

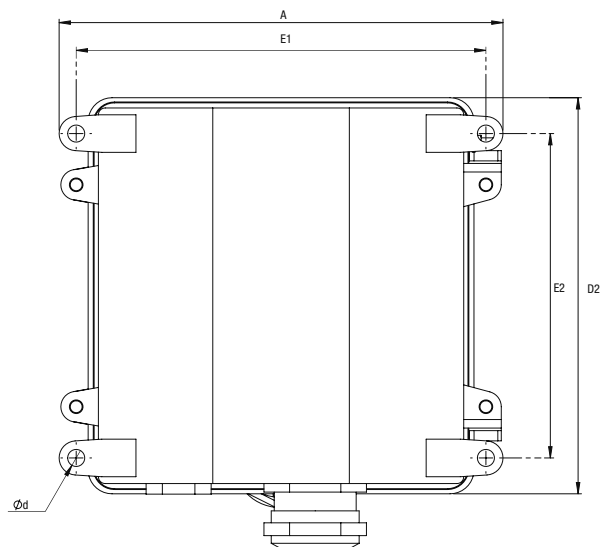
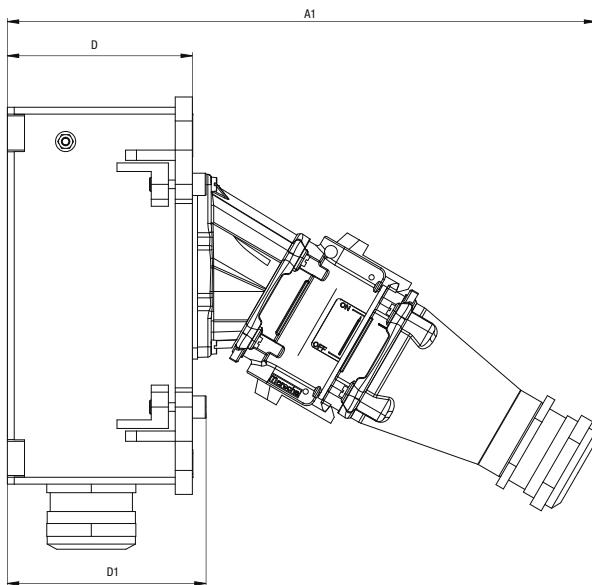
**WALL MOUNTING SOCKET**

**PLUG**

380-440 V AC	3P+E	3934013Zxxxx	3938013Zxxxx
660-690 V AC 63 A	3P+E	3934193Zxxxx	3938193Zxxxx

\* 400 °C for 2 hours/240 °C permanently

Contact us for configurations and references.



	A	A1	D	D1	D2	E1	E2	Ød max
<b>DSHT</b>	260	343	108	116	232	240	190	10

# DN



## DECONTACTOR™ METAL



**20 A/30 A/50 A/90 A**

- ▶ IP55 automatic (IP66/67 optional)
- ▶ AC-22 and AC-23 Integrated Breaking Capacity (IEC/EN 60947-3)
- ▶ Impact resistant metal casing - IK09
- ▶ Suitable for heavy industry

## TECHNICAL FEATURES

Plugs and sockets with integral load-break switching capability according to IEC/EN 60947-3.

	DN8	DN1	DN3	DN6
Rated current (I <sub>n</sub> )	20 A	30 A	50 A	90 A
U <sub>max</sub>	500 V	500 V	500 V	500 V
AC-22 switching capability	20 A/400 V	30 A/400 V	50 A/400 V	90 A/400 V
Auxiliary contacts (optional)	–	–	–	4
Keying positions	<<< 16 >>>			
Ambient temperature	<<< -40 °C to +60 °C >>>			

## MOUNTING: LOAD BREAK RELEASE BUTTON SHOULD BE AT THE TOP



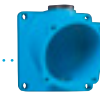
### DN DECONTACTOR™ complies with:

- The essential requirements of IEC/EN 60309-1 & IEC/EN 60309-4 European and International standards (plugs and socket-outlets for industrial purposes),
- The European Low Voltage Directive 2014/35/EU, conformity with the CE marking,
- The European 'Machine Directive' 2006/42/CE regarding equipment isolation,
- The French NF C 15-100 standard,
- The French decree dated 20 December 2011 pertaining to the wiring and operating conditions of movable electrical apparatuses,
- The decrees relating to workers' protection in Belgium, Spain and Italy,
- The load-break capability for AC-22 category described in IEC/EN 60947-3.

**Also certified by TR CU (GOST) (Russian inspection laboratory).**



### WALL MOUNTING SOCKET DN8



Wall box metal 20°  
592B2M20



Socket-outlet  
1984017

### PLUG DN8



Straight handle poly  
512P0D21



Inlet  
1988017

## MAIN FEATURES

Rated current (with wiring according to standard)	20 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	500 V	Flexible wiring (min-max)	1-6 mm <sup>2</sup>
IP protection lid closed	IP55	Stranded wiring (min-max)	1,5-10 mm <sup>2</sup>
IP protection plug connected	IP54	Other wiring	on request
Shock resistance (metal casing)	IK09	Keying positions	16

### Load-break capability of the DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards	20 A/500 V
Load-break capability according to IEC/EN 60947-3/AC-22 A	(20 A/400 V) or (10 A/500 V)

### SOCKET-OUTLET female DN8 (20 A)



### INLET male DN8 (20 A)



Dual-voltage socket-outlet (see p. 7)

20-24 V AC	2P	198408A	198808A
220-250 V AC	1P+N+E	1984015	1988015
380-440 V AC	3P+E	1984013	1988013
220-250 V AC 380-440 V AC	3P+N+E	1984017	1988017
480-500 V AC	3P+E	1984093	1988093
480-500 V AC	3P+N+E	1984097	1988097

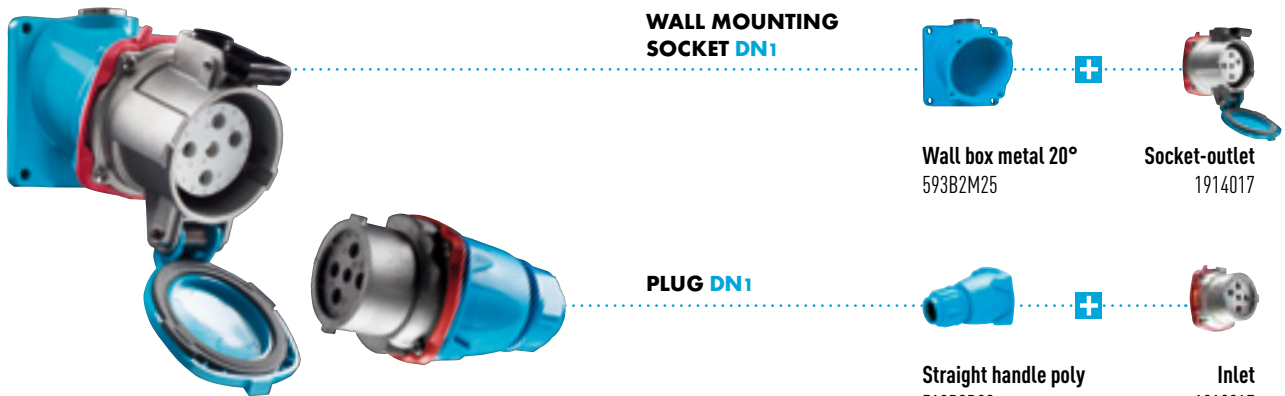
► Other voltages, frequencies and contact configurations are available (see page 10).

## INFO+

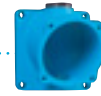
### OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 64.





**WALL MOUNTING SOCKET DN1**



Wall box metal 20°  
593B2M25



Socket-outlet  
1914017

**PLUG DN1**



Straight handle poly  
513POD30



Inlet  
1918017

## MAIN FEATURES

Rated current (with wiring according to standard)	30 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	500 V	Flexible wiring (min-max)	2,5-6 mm <sup>2</sup>
IP protection lid closed	IP55	Stranded wiring (min-max)	2,5-10 mm <sup>2</sup>
IP protection plug connected	IP54	Other wiring	on request
Shock resistance (metal casing)	IK09	Keying positions	16

### Load-break capability of the DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards

30 A/500 V

Load-break capability according to IEC/EN 60947-3/AC-22 A

(30 A/400 V) or (16 A/500 V)

**SOCKET-OUTLET female DN1 (30 A)**



**INLET male DN1 (30 A)**



Dual-voltage socket-outlet (see p. 7)

20-24 V AC	2P	191408A	191808A
220-250 V AC	1P+N+E	1914015	1918015
380-440 V AC	3P+E	1914013	1918013
220-250 V AC 380-440 V AC	3P+N+E	1914017	1918017
480-500 V AC	3P+E	1914093	1918093
480-500 V AC	3P+N+E	1914097	1918097

► Other voltages, frequencies and contact configurations are available (see page 10).

**INFO+**

## OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 64.





### WALL MOUNTING SOCKET DN3



Wall box metal 20°  
594B2M25



Socket-outlet  
1934017

### PLUG DN3



Straight handle poly  
514P0D35



Inlet  
1938017

## MAIN FEATURES

Rated current (with wiring according to standard)	50 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	500 V	Flexible wiring (min-max)	2,5-16 mm <sup>2</sup>
IP protection lid closed	IP55	Stranded wiring (min-max)	2,5-25 mm <sup>2</sup>
IP protection plug connected	IP54	Other wiring	on request
Shock resistance (metal casing)	IK09	Keying positions	16

### Load-break capability of the DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards	50 A/500 V
Load-break capability according to IEC/EN 60947-3/AC-22 A	(50 A/400 V) or (32 A/500 V)

### SOCKET-OUTLET female DN3 (50 A)



### INLET male DN3 (50 A)



Dual-voltage socket-outlet (see p. 7)

20-24 V AC	2P	193408A	193808A
220-250 V AC	1P+N+E	1934015	1938015
380-440 V AC	3P+E	1934013	1938013
220-250 V AC 380-440 V AC	3P+N+E	1934017	1938017
480-500 V AC	3P+E	1934093	1938093
480-500 V AC	3P+N+E	1934097	1938097

► Other voltages, frequencies and contact configurations are available (see page 10).

## INFO+

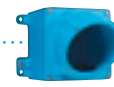
### OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 64.





### WALL MOUNTING SOCKET DN6



Wall box metal 30°  
595C3M50



Socket-outlet  
1964017

### PLUG DN6



Straight elastomer  
555POD35



Inlet  
1968017

## MAIN FEATURES

Rated current (with wiring according to standard)	90 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	500 V	Flexible wiring (min-max)	10-25 mm <sup>2</sup>
IP protection lid closed	IP55	Stranded wiring (min-max)	10-35 mm <sup>2</sup>
IP protection plug connected	IP54	Other wiring	on request
Shock resistance (metal casing)	IK09	Keying positions	16

### Load-break capability of the DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards

90 A/500 V

Load-break capability according to IEC/EN 60947-3/AC-22 A

(90 A/400 V) or (63 A/500 V)

### SOCKET-OUTLET female DN6 (90 A)



### INLET male DN6 (90 A)



Dual-voltage socket-outlet (see p. 7)

20-24 V AC	2P	196408A	196808A
220-250 V AC	1P+N+E	1964015	1968015
380-440 V AC	3P+E	1964013	1968013
220-250 V AC / 380-440 V AC	3P+N+E	1964017	1968017
480-500 V AC	3P+E	1964093	1968093
480-500 V AC	3P+N+E	1964097	1968097
Auxiliaries 10 A/400 V AC	+ 4 contacts	Ref. + 264	Ref. + 264

► Other voltages, frequencies and contact configurations are available (see page 10).

## INFO+









### OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 64.





## OPTIONS (DETAILS ON PAGE 216)







	DN8 Size 2	DN1 Size 3	DN3 Size 4	DN6 Size 5
<b>INDUSTRIAL-DOMESTIC ADAPTERS</b>				
	Industrial inlet MARECHAL® 1P+N+E + domestic socket-outlet 10/16 A 230 V. 1988015D11*	NA	NA	NA
	* All these plug adapters are available to foreign standards : replace D11 by D40 for UK, D30 for Germany/NL/Lux, D06 for Italy.			
<b>LOCKING SHAFT FOR 3 PADLOCKS Ø 8 mm (PADLOCKS NOT SUPPLIED)</b>				
	Socket-outlet ref. + 844	Socket-outlet ref. + 844	Socket-outlet ref. + 844	Socket-outlet ref. + 844
<b>SAFETY HASP FOR UP TO 6 PADLOCKS</b>				
	873A541	873A541	873A541	873A541
<b>INLET CAP</b>				
	198A126	191A126	193A126	196A126
<b>LARGER RELEASE BUTTON</b>				
	Ref. + 453	Ref. + 453	Ref. + 453	Ref. + 453
<b>180° OPENING LID</b>				
	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10
<b>SELF-RETURNING LID (WITHOUT FULL CLOSURE IP40)</b>				
	Socket-outlet ref. +R	Socket-outlet ref. +R	Socket-outlet ref. +R	Socket-outlet ref. +R
<b>180° OPENING &amp; SELF-RETURNING LID</b>				
	Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18
<b>CLOSING MECHANISM</b>				
				Draw lever only: 196A376 Draw plate only: 196A396
<b>IP66/67 SOCKET-OUTLET AND INLET (RECOMMENDED IN THE CASE OF COUPLER SOCKET)</b>				
	Ref. + 600	Ref. + 600	Ref. + 600	Ref. + 600





## ACCESSORIES

(SEE PAGE 238 TO CROSS REFERENCE WITH OLDER PART NUMBERS)

HANDLES		DN8 Size 2	DN1 Size 3	DN3 Size 4	DN6 Size 5
<b>POLY HANDLE WITH GLAND</b>					
	5-21 mm	512P0D21			
	10-30 mm		513P0D30		
	13-35 mm			514P0D35	
	5-21 mm	552P0D21			
	10-30 mm		553P0D30		
	13-35 mm			554P0D35	
<b>ELASTOMER HANDLE WITH GLAND</b>					
	18-25 mm				555P0D25
	25-35 mm				555P0D35
	35-45 mm				555P0D45
	45-49 mm				555P0D49
<b>POLY HANDLE WITH POLY CABLE GLAND</b>					
	5-12 mm	512P020P			
	9-18 mm	512P025P	513P025P		
	14-25 mm	512P032P	513P032P	514P032P	515P032P
	18-32 mm	512P040P	513P040P	514P040P	515P040P
	24-38 mm			514P050P	515P050P
	35-48 mm				515P063P
<b>METAL HANDLE WITH METAL GLAND (+ EARTHING WIRE)</b>					
	7-13 mm	592P020M	593P020M		
	8-16 mm	592P025M	593P025M	594P025M	
	15-23 mm	592P032M	593P032M	594P032M	595P032M
	22-32 mm		593P040M	594P040M	595P040M
	34-44 mm			594P050M	595P050M
	35-48 mm				595P063M



# ACCESSORIES

(SEE PAGE 238 TO CROSS REFERENCE WITH OLDER PART NUMBERS)

## HANDLES



**DN8  
Size 2**

**DN1  
Size 3**

**DN3  
Size 4**

**DN6  
Size 5**

### POLY HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY)



M20	512P0M20	513P0M20		
M25	512P0M25	513P0M25		
M32	512P0M32	513P0M32	514P0M32	
M40	512P0M40	513P0M40	514P0M40	515P0M40
M50			514P0M50	515P0M50
M63				515P0M63

### METAL HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY)



M20	592P0M20	593P0M20		
M25	592P0M25	593P0M25	594P0M25	
M32	592P0M32	593P0M32	594P0M32	595P0M32
M40		593P0M40	594P0M40	595P0M40
M50			594P0M50	595P0M50

## SLEEVES



**DN8  
Size 2**

**DN1  
Size 3**

**DN3  
Size 4**

**DN6  
Size 5**

### POLY SLEEVE



30°	512M3	513M3	514M3	515M3
-----	-------	-------	-------	-------



30°	552M3	553M3	554M3	555M3
-----	-------	-------	-------	-------



70°	512M7	513M7	514M7	
-----	-------	-------	-------	--



70°	552M7	553M7	554M7	
-----	-------	-------	-------	--

### METAL SLEEVE



0°	592M0	593M0	594M0	595M0
----	-------	-------	-------	-------



30°	592M3	593M3	594M3	595M3
-----	-------	-------	-------	-------



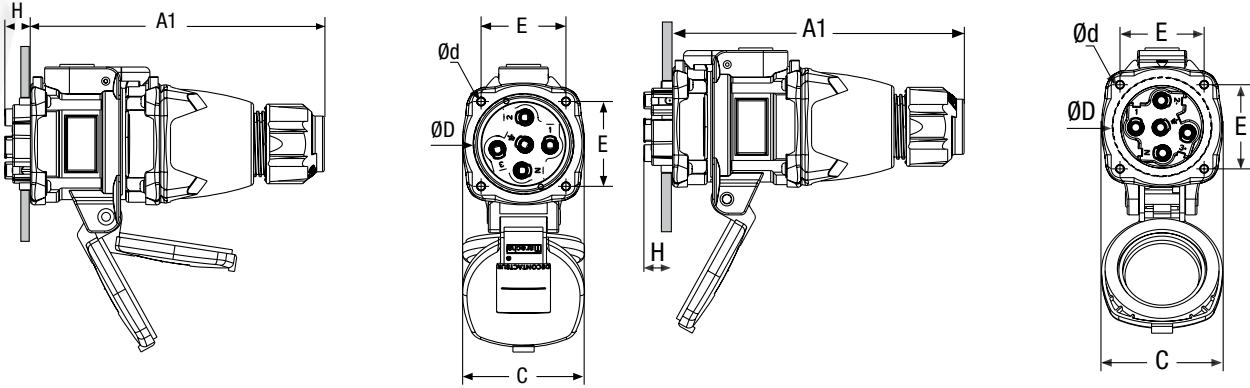
70°		593M7	594M7	595M7
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BOXES			DNs Size 2	DN1 Size 3	DN3 Size 4	DN6 Size 5
<b>POLY BOX</b>						
	30°	M20	512B3M20			
	30°	M25	512B3M25	513B3M25		
	30°	M32			514B3M32	
	30°	M40			514B3M40	
<b>METAL BOX (+ EARTHING WIRE)</b>						
	20°	M20	592B2M20	593B2M20		
	20°	M25	592B2M25	593B2M25	594B2M25	
	20°	M32		593B2M32	594B2M32	
	20°	M40			594B2M40	
<b>POLY BOX + POLY SLEEVE</b>						
	70°	Without Hole	512C7000	513C7000	514C7000	
	70°	Ø M20	512C7M20			
	70°	Ø M25	512C7M25	513C7M25		
	70°	Ø M32	512C7M32	513C7M32	514C7M32	
	70°	Ø M40	512C7M40	513C7M40	514C7M40	
<b>METAL BOX (+ EARTHING WIRE) + POLY SLEEVE</b>						
	30°	M20	512C3M20	513C3M20		
	30°	M25	512C3M25	513C3M25	514C3M25	
	30°	M32	512C3M32	513C3M32	514C3M32	515C3M32
	30°	M40	512C3M40	513C3M40	514C3M40	515C3M40
	30°	M50			514C3M50	515C3M50
	30°	M63				515C3M63
<b>METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)</b>						
	30°	M20	592C3M20	593C3M20		
	30°	M25	592C3M25	593C3M25	594C3M25	
	30°	M32	592C3M32	593C3M32	594C3M32	595C3M32
	30°	M40		593C3M40	594C3M40	595C3M40
	30°	M50			594C3M50	595C3M50
	30°	M63				595C3M63
	0°	M20	592C0M20	593C0M20		
	0°	M25	592C0M25	593C0M25	594C0M25	
	0°	M32	592C0M32	593C0M32	594C0M32	595C0M32
	0°	M40		593C0M40	594C0M40	595C0M40
	0°	M50			594C0M50	595C0M50
	0°	M63				595C0M63
	70°	M20		593C7M20		
	70°	M25		593C7M25	594C7M25	
	70°	M32		593C7M32	594C7M32	595C7M32
	70°	M40		593C7M40	594C7M40	595C7M40
	70°	M50			594C7M50	595C7M50
	70°	M63				595C7M63
<b>METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)</b>						
	0°	M50				595E0M50
	30°	M50				595E3M50
	30°	M63				595E3M63
	70°	M50				595E7M50
	70°	M63				595E7M63

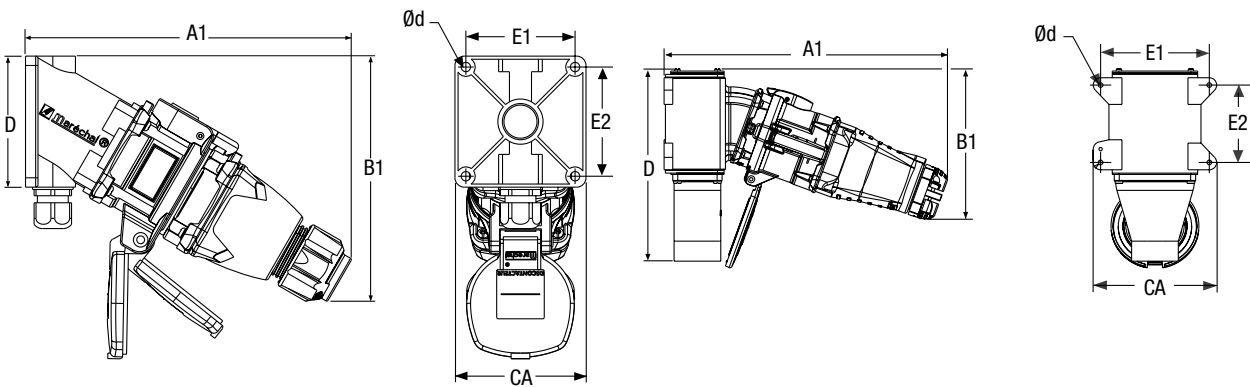


# DIMENSIONS

## DN8/DN1/DN3/DN6



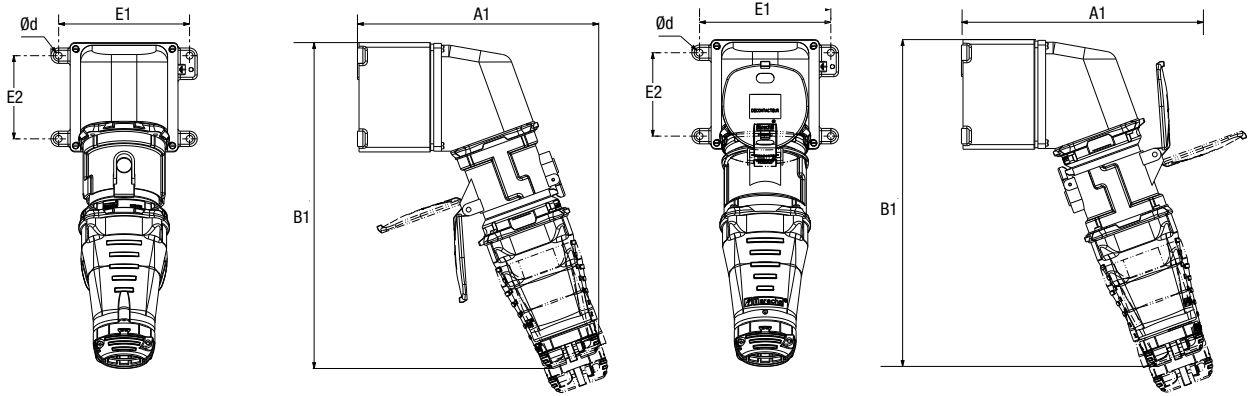
	A1	C	E	H	Ød*
<b>DN8</b>	174	69	48	12	5
<b>DN1</b>	174	81	55	15	5
<b>DN3</b>	212	95	66	22	5,5
<b>DN6</b>	311	118	81	25	6



	A1	B1	CA	D	E1	E2	Ød*
<b>DN8</b>	198	143	76	76	64	64	5,5
<b>DN1</b>	221	160	85	85	72	72	6
<b>DN3</b>	266	190	105	130	89	112	7
<b>DN6</b>	385	216	125	150	105	105	8
<b>DN9</b>	420	226	185	283	163	116	7

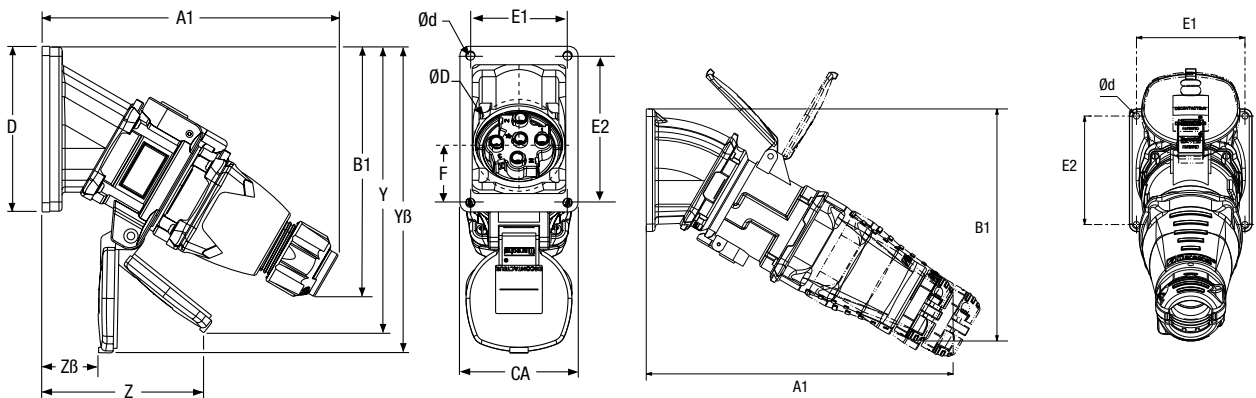
\*Ød : maximum drilling diameter.

DN6/DN9



	A2	B2	E1	E2	Ød*
DN1	203	267	110	70	6,5
DN3	239	320	145	97	8,5
DN6	313	423	190	108	9

DN8/DN1/DN3/DN6



	A1	b1	D	E1	E2	Ød*
DN8	189	168	108	63	95	5,5
DN1	104	178	107	63	95	5,5
DN3	242	220	136	87	122	6,5
DN6	350	265	140	124	124	7

\*Ød : maximum drilling diameter.

# DB



## DISCONNECTABLE MOTOR SWITCH AC-3 UP TO 45 kW



**kw**

**7.5 kW/22 kW/45 kW**

- ▶ AC-3 visible switch for motors
- ▶ Standard IP66/IP67
- ▶ Impact resistant metal casing - IK09
- ▶ LOTO compliant

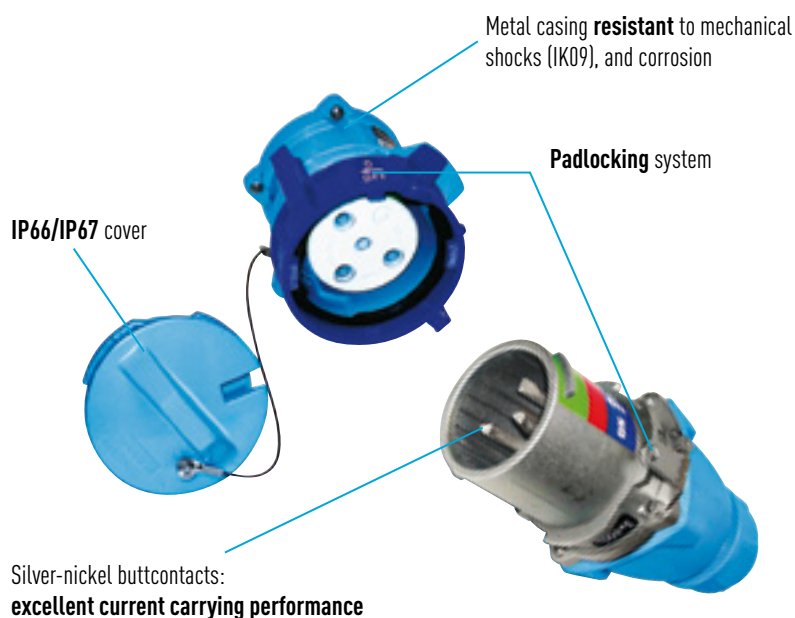
## TECHNICAL FEATURES

AC-3 motor switch.

	DB3	DB6	DB9
AC-3 load-break capability	7,5 kW	22 kW	45 kW
I <sub>max</sub>	40 A	75 A	125 A
U <sub>max</sub>	<<< 690 V >>>		
Casing material	<<< Metal >>>		
Keying positions <sup>(1)</sup>	<<< 24 >>>		
Ambient temperature	<<< -40 °C to +60 °C >>>		
Short-circuit current I <sub>cc</sub>	200 kA	200 kA	200 kA

(1) To distinguish between different power supplies and applications.

## MECHANICAL FEATURES



**DB disconnectable motor switches are DECONTACTOR™ that comply with:**

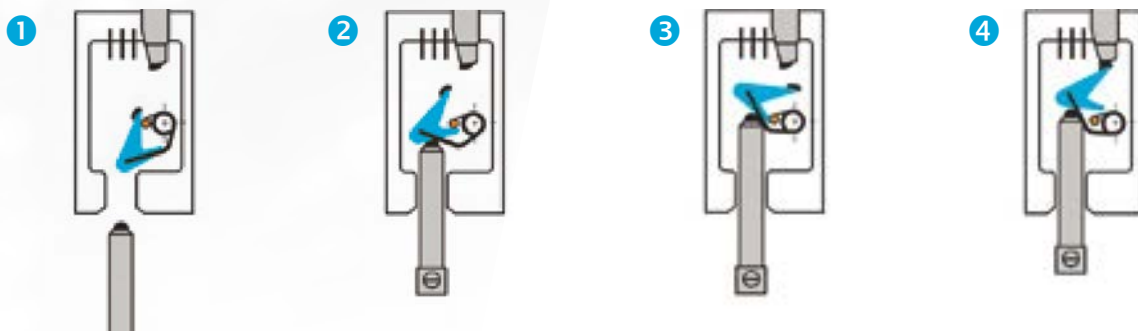
- The European Low Voltage Directive 2014/35/EU, conformity with the CE marking,
- The European 'Machine Directive' 2006/42/CE regarding equipment isolation,
- The French decree dated 20 December 2011 pertaining to the wiring and operating conditions of movable electrical apparatuses,
- The French NF C 15-100 standard,
- The decrees relating to workers' protection in Belgium, Spain and Italy,
- The requirements of IEC/EN 60309-1 European and international standard (plugs and socket-outlets for industrial purposes), Interlock according to IEC/EN 60309-4 International and European standard
- UL 1682, UL 2682 and UL 98/508 American standards
- The load breaking capacity according to utilisation category AC-3 of IEC/EN 60947-3 standard.

**Also certified by VERITAS LCIE, UL, TR CU (GOST) and cCSAus (French, American, Russian and Canadian inspection laboratories).**



DB disconnectable motor switches combine the functions of motor switch breaker and plug and socket-outlet. They guarantee the safety of persons during an operation on the load (motor load or highly inductive).

### LOAD MAKING



Plug and socket contacts are both made of a pin fitted with a solid silver-nickel tip.

When the plug is inserted into the socket, each plug phase contact touches the mobile contact first, also fitted with silver-nickel tips.

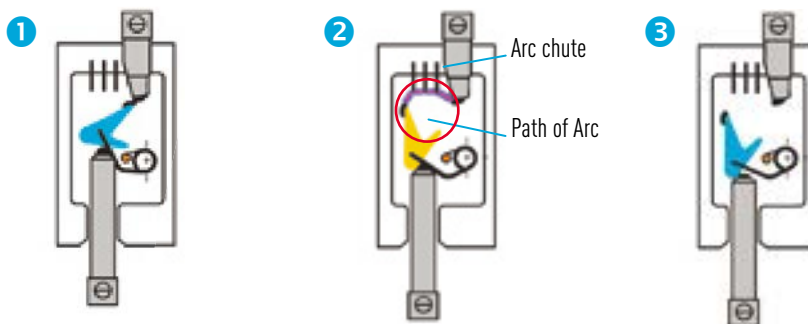
While pushing the plug further, the mobile part moves around a stop and a spring is bent...

Under spring pressure, the intermediate part escapes from the stop and rocks to connect with the live-socket contact.

This is the independent making (off the speed connexion, unlike other DECONTACTOR™ ranges like DS or DSN).

This advantage makes it possible to connect even a motor that is blocked (very strong induced current).

### ARC-EXTINGUISHING SYSTEM



In the "on" (I) position, the plug is held by a socket-mounted retaining ring. Turning this ring to the (0) releases the plug, which moves back.

The spring-loaded mobile part abruptly slips from the socket-live contact, and draws the arc across the blowing blades.

Arc extinguished. This is the independent opening (same as the other DECONTACTOR™ ranges like DS or DSN).



## OPERATING INSTRUCTIONS



When the plug and socket are latched together, the circuit is connected ( red color window). The IP67 is reached when the ring is locked to the right.



Turning the socket ring counterclockwise releases the plug and rapidly opens the circuit. (green color window). The plug is ejected to its rest position.



Turning the socket ring counterclockwise by another 10° lets the plug drop down.



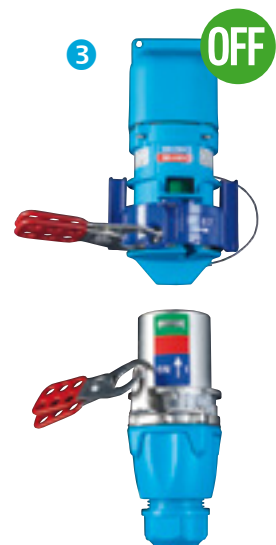
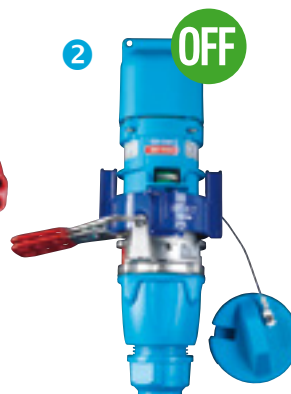
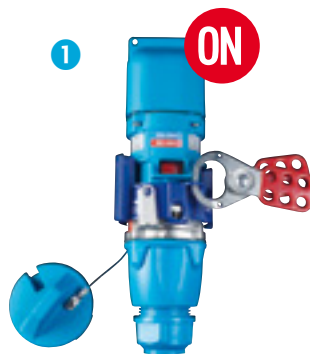
To reconnect:

- insert plug and twist, pushing the plug fully home safety makes the circuit.
- The plug is held in the "on" position by a locking ring.
- Turn the ring to the right, to reach the IP67.

### INFOS +

#### PADLOCKING

- 1 Padlocked in ON position
- 2 Padlocked in OFF position
- 3 Socket-outlet padlocked with closed cover Inlet padlocked





### WALL MOUNTING SOCKET DB3



Wall box metal 70°  
593C7M25



Socket-outlet  
8734017

### PLUG DB3



Straight handle poly  
513P0D30



Inlet  
8738017

## MAIN FEATURES

Rated current (with wiring according to standard)	40 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	690 V	Flexible wiring (min-max)	2,5-6 mm <sup>2</sup>
IP protection lid closed	IP66/IP67	Stranded wiring (min-max)	2,5-10 mm <sup>2</sup>
IP protection plug connected	IP66/IP67	Pre-wired auxiliary contacts (5 A)	1,5 mm <sup>2</sup>
Shock resistance	IK09	Keying positions	24

### Load-break capability of the DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards	40 A/690 V
Rated powers (AC-3 load-breaking capacity according to IEC/EN 60947-3):	3 kW up to 230 V - 1P 5,5 kW up to 230 V - 3P 7,5 kW up to 400 V - 3P 7,5 kW up to 500 V - 3P 7,5 kW up to 690 V - 3P
Short-circuit current I <sub>cc</sub>	200 kA

### SOCKET-OUTLET female DB3 (40 A)



### INLET male DB3 (40 A)



220-250 V AC	1P+N+E	8734015	8738015
380-440 V AC	3P+E	8734013	8738013
220-250 V AC 380-440 V AC	3P+N+E	8734017	8738017
660-690 V AC	3P+E	8734193	8738193
380-400 V AC 660-690 V AC	3P+N+E	8734197	8738197
Auxiliaries 5 A/400 V AC	+ 2 contacts	Ref. + 172	Ref. + 172

► Other voltages, frequencies and contact configurations are available (see page 10).



## INFO+

### OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 77.

# DB6

MOTOR SWITCH

## 22 kW/75 A IP66/IP67



### WALL MOUNTING SOCKET DB6



+



Wall box metal 70°  
594C7M40

Socket-outlet  
8764017



### PLUG DB6



+



Straight handle poly  
514POD35

Inlet  
8768017

## MAIN FEATURES

Rated current (with wiring according to standard)	75 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	690 V	Flexible wiring (min-max)	10-25 mm <sup>2</sup>
IP protection lid closed	IP66/IP67	Stranded wiring (min-max)	16-35 mm <sup>2</sup>
IP protection plug connected	IP66/IP67	Pre-wired auxiliary contacts (5 A)	1,5 mm <sup>2</sup>
Shock resistance	IK09	Keying positions	24

### Load-break capability of the DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards

75 A/690 V

Rated powers (AC-3 load-breaking capacity according to IEC/EN 60947-3):

7,5 kW up to 230 V - 1P  
11 kW up to 230 V - 3P  
15 kW up to 400 V - 3P  
15 kW up to 500 V - 3P  
22 kW up to 690 V - 3P

Short-circuit current I<sub>cc</sub>

200 kA

**SOCKET-  
OUTLET** female  
**DB6 (75 A)**



**INLET** male  
**DB6 (75 A)**



220-250 V AC	1P+N+E	8764015	8768015	
380-440 V AC	3P+E	8764013	8768013	
220-250 V AC	3P+N+E	8764017	8768017	
380-440 V AC	3P+N+E	8764193	8768193	
660-690 V AC	3P+E	8764193	8768193	
380-400 V AC	660-690 V AC	3P+N+E	8764197	8768197
Auxiliaries 5 A/400 V AC		+ 2 contacts	Ref. + 172	

► Other voltages, frequencies and contact configurations are available (see page 10).

INFO+

## OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 77.





### WALL MOUNTING SOCKET DB9



Wall box metal 70°  
595C7M50



Socket-outlet  
8794017

### PLUG DB9



Straight elastomer  
555POD35



Inlet  
8798017

## MAIN FEATURES

Rated current (with wiring according to standard)	125 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	690 V	Flexible wiring (min-max)	16-50 mm <sup>2</sup>
IP protection lid closed	IP66/IP67	Stranded wiring (min-max)	25-70 mm <sup>2</sup>
IP protection plug connected	IP66/IP67	Pre-wired auxiliary contacts (5 A)	1,5 mm <sup>2</sup>
Shock resistance	IK09	Keying positions	24

### Load-break capability of the DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards	125 A/690 V
Rated powers (AC-3 load-breaking capacity according to IEC/EN 60947-3):	15 kW up to 230 V - 1P 22 kW up to 230 V - 3P 30 kW up to 400 V - 3P 30 kW up to 500 V - 3P 45 kW up to 690 V - 3P
Short-circuit current I <sub>cc</sub>	200 kA

### SOCKET-OUTLET female DB9 (125 A)



### INLET male DB9 (125 A)



220-250 V AC	1P+N+E	8794015	8798015
380-440 V AC	3P+E	8794013	8798013
220-250 V AC 380-440 V AC	3P+N+E	8794017	8798017
660-690 V AC	3P+E	8794193	8798193
380-400 V AC 660-690 V AC	3P+N+E	8794197	8798197
Auxiliaries 5 A/400 V AC	+ 4 contacts	Ref. + 264	Ref. + 264

► Other voltages, frequencies and contact configurations are available (see page 10).

## INFO+



### OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 77.








## OPTIONS (DETAILS ON PAGE 216)

	DB3 size 1	DB6 size 2	DB9 size 3
<b>SAFETY HASP FOR UP TO 6 PADLOCKS</b>			
	873A541	873A541	873A541
<b>INLET CAP</b>			
	873A126	876A126	879A126



## ACCESSORIES





(SEE PAGE 238 TO CROSS REFERENCE WITH OLDER PART NUMBERS)

BOXES			DB3 Size 3	DB6 Size 4	DB9 Size 5
<b>METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)</b>					
	30°	M20	593C3M20		
	30°	M25	593C3M25	594C3M25	
	30°	M32	593C3M32	594C3M32	595C3M32
	30°	M40	593C3M40	594C3M40	595C3M40
	30°	M50		594C3M50	595C3M50
	30°	M63			595C3M63
	0°	M20	593C0M20		
	0°	M25	593C0M25	594C0M25	
	0°	M32	593C0M32	594C0M32	595C0M32
	0°	M40	593C0M40	594C0M40	595C0M40
	0°	M50		594C0M50	595C0M50
	0°	M63			595C0M63
	70°	M20	593C7M20		
	70°	M25	593C7M25	594C7M25	
	70°	M32	593C7M32	594C7M32	595C7M32
	70°	M40	593C7M40	594C7M40	595C7M40
	70°	M50		594C7M50	595C7M50
	70°	M63			595C7M63
<b>METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)</b>					
	0°	M50			595E0M50
	30°	M50			595E3M50
	30°	M63			595E3M63
	70°	M50			595E7M50
	70°	M63			595E7M63








# ACCESSORIES









(SEE PAGE 238 TO CROSS REFERENCE WITH OLDER PART NUMBERS)

SLEEVES		DB3 Size 3	DB6 Size 4	DB9 Size 5
<b>METAL SLEEVE</b>				
	0°	593M0	594M0	595M0
	30°	593M3	594M3	595M3
	70°	593M7	594M7	595M7

## LEGEND FOR OPTIONAL ACCESSORIES

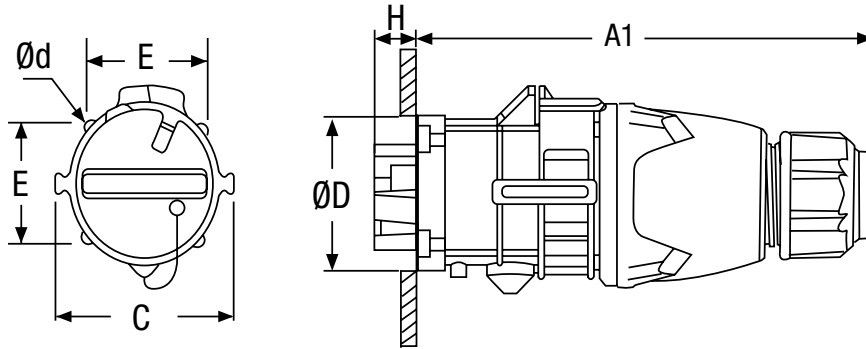
-  Angle
-  Threading or gland size
-  EMC option
-  HT 240° C
-  Self-ejection

INFO +

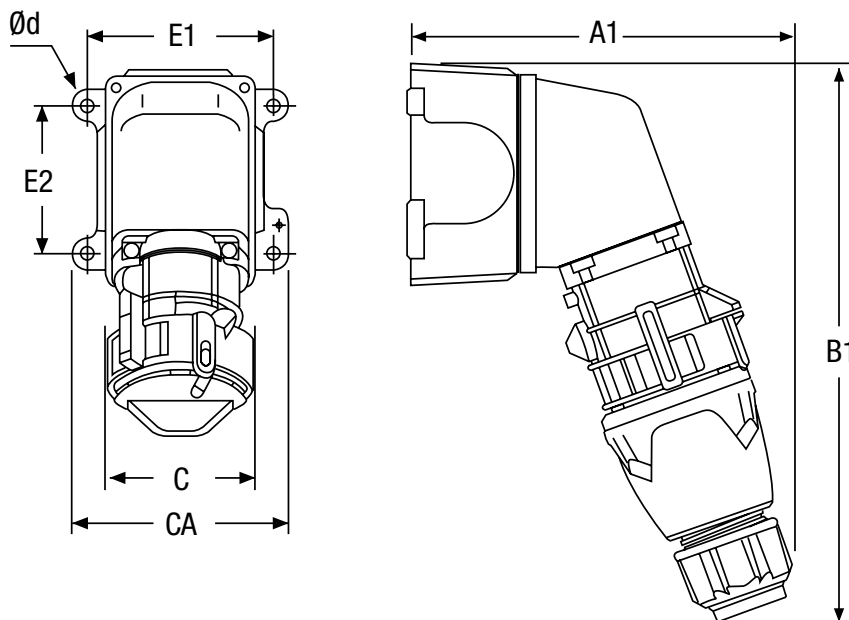
HANDLES		DB3 Size 3	DB6 Size 4	DB9 Size 5
<b>POLY HANDLE WITH GLAND</b>				
	10-30 mm	513P0D30		
	13-35 mm		514P0D35	
	10-30 mm	553P0D30		
	13-35 mm		554P0D35	
<b>ELASTOMER HANDLE WITH GLAND</b>				
	18-25 mm			555P0D25
	25-35 mm			555P0D35
	35-45 mm			555P0D45
	45-49 mm			555P0D49
<b>POLY HANDLE WITH POLY CABLE GLAND</b>				
	9-18 mm	513P025P		
	14-25 mm	513P032P	514P032P	515P032P
	18-32 mm	513P040P	514P040P	515P040P
	24-38 mm		514P050P	515P050P
	35-48 mm			515P063P
<b>METAL HANDLE WITH METAL GLAND (+ EARTHING WIRE)</b>				
	7-13 mm	593P020M		
	8-16 mm	593P025M	594P025M	
	15-23 mm	593P032M	594P032M	595P032M
	22-32 mm	593P040M	594P040M	595P040M
	34-44 mm		594P050M	595P050M
	35-48 mm			595P063M
<b>POLY HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY)</b>				
	M20	513P0M20		
	M25	513P0M25		
	M32	513P0M32	514P0M32	
	M40	513P0M40	514P0M40	
	M50		514P0M50	515P0M50
	M63			515P0M63
	M75			
<b>METAL HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY)</b>				
	M20	593P0M20		
	M25	593P0M25	594P0M25	
	M32	593P0M32	594P0M32	595P0M32
	M40	593P0M40	594P0M40	595P0M40
	M50		594P0M50	595P0M50
	M63			595P0M63



# DIMENSIONS



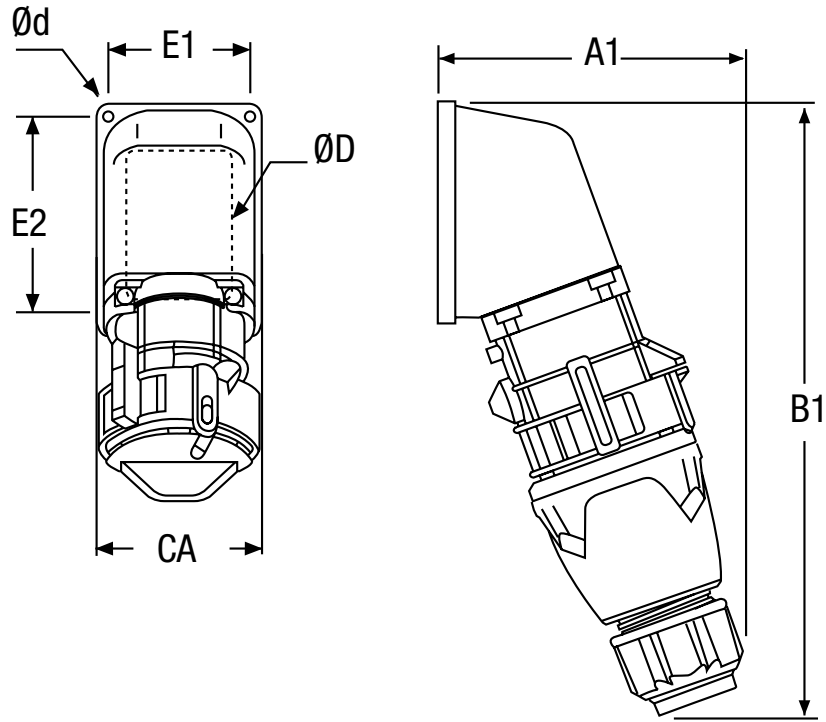
	A1	C	E	H	Ød**	ØD max
<b>DB3</b>	213	110	55	26	4,5	54
<b>DB6</b>	229	123	66	32	5,5	67
<b>DB9</b>	341	146	81	42	5,5	84



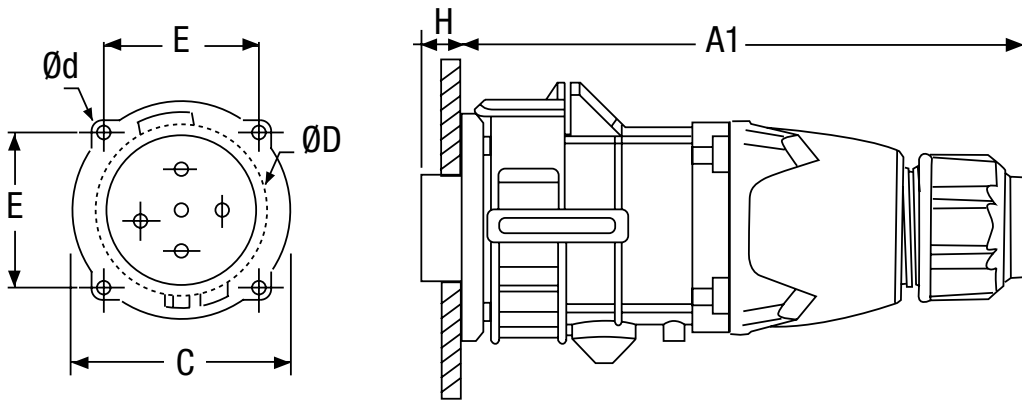
	A1	B1	C	CA	D	E1	E2	H	Ød**
<b>DB3</b>	230	296	84	110	114	94	70	30	6,5
<b>DB6</b>	266	347	114	145	145	125	97	40	8,5
<b>DB9</b>	335	452	140	190	140	170	108	49	9

\*Ød : maximum drilling diameter.





	A1	B1	CA	D	E1	E2	F	Ød**	ØD max
<b>DB3</b>	167	293	77	106	63	95	40	5,5	60
<b>DB6</b>	187	342	102	136	87	122	50	6,5	70
<b>DB9</b>	243	452	140	140	124	124	61,5	6,5	120



	A1	C	E	H	Ød**	ØD max
<b>DB3</b>	213	80	55	18	4,5	54
<b>DB6</b>	229	93	66	21	5,5	67
<b>DB9</b>	341	116	81	41	5,5	84

\*Ød : maximum drilling diameter.

# MULTICONTACT



- Number of connections up to 5000 matings.
- Very good resistance to vibrations.
- Resistance to current fluctuation.
- Resistance to corrosion.
- Solid silver-nickel contacts assure superior conductivity.



FIND ALL INFORMATION  
ON OUR WEBSITE:



[marechal.com](http://marechal.com)



Dimensions  
and certificates

**PN7C** P. 86**MULTI-CONTACT CONNECTORS GRP OR METAL**

- Up to 7 contacts
- 25 A/500 V max.
- IP66/IP67
- Screw-in contacts

**DN9C** P. 87**CONNECTEUR  $\Delta$  MULTICONTACTS METAL**

- Up to 9 contacts
- 30 A/415 V max.
- IP54/IP55 (IP66 in option)
- Screw-in contacts

**PN12C** P. 88**MULTI-CONTACT CONNECTORS GRP OR METAL**

- Up to 12 contacts
- 16 A/480 V max.
- IP66/IP67
- Crimping or welding contacts

**DN20C** P. 89**METAL MULTI-CONTACT CONNECTORS**

- Up to 20 contacts
- 25 A/415 V max.
- IP54/IP55 (IP66 in option)
- Screw-in contacts

**DSN24C** P. 90**GRP MULTI-CONTACT CONNECTORS**

- Up to 24 contacts
- 16 A/415 V max.
- IP66/IP67
- Crimping or welding contacts

**DSN37C** P. 91**GRP MULTI-CONTACT CONNECTORS**

- Up to 37 contacts
- 16 A/415 V max.
- IP66/IP67
- Crimping or welding contacts

**DS7C3** P. 92**DECONTACTOR™  $\Delta$  METAL**

- Up to 7 contacts
- Star delta starting
- 50 A/500 V max.
- IP55

# CRIMPING CONTACTS








## FOR PN12C/DSN24C/DSN37C

### ECONOMIC AND TECHNICAL ADVANTAGES

Crimping ensures an economical and sustainable solution through installation time saving and quality of connection.

- No need for soldering performance qualifications.
- High resistance to vibrations.
- Handling more than 5000 operations: a high durability and quality of connection guaranteed.

ACCESSORIES AND OPTIONS	DESIGNATION	REFERENCE
	Bag of 13 females contacts	01AA213
	Bag of 13 males contacts	01AA113 (PN12C) 61AA113 (DSN24C/37C)
	Multi-Contact removal tool	61CA593
	European crimping tool	61CA500
	Helavia sleeve expansion tool	61CA400
	Bag of 13 heat shrink insulation sleeves	61CA083

### FAST WIRING

- Cable conductors: 1 mm<sup>2</sup> to 2,5 mm<sup>2</sup>
- Before wiring, equip each conductor with a heat-shrink sleeve or an insulating sleeve.
- After wiring, cover the visible portion of the contact with the sleeve.
- Crimp the contact with a KNIPEX crimping tool P/N° 61CA500 or a GREENLEE crimping tool P/N° 45505.
- Use the 4 mm<sup>2</sup> footprint whatever the conductor cross-section.
- Perform a double crimping in compliance with CEI 60352-2 standard.
- Conductors can equally be soldered.

**SIMPLE ASSEMBLY AND DISASSEMBLY**

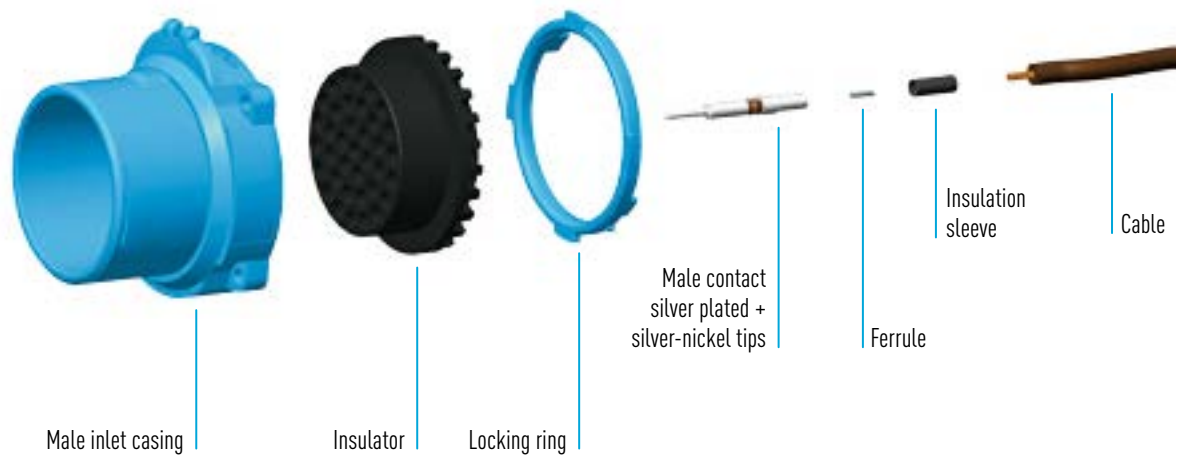
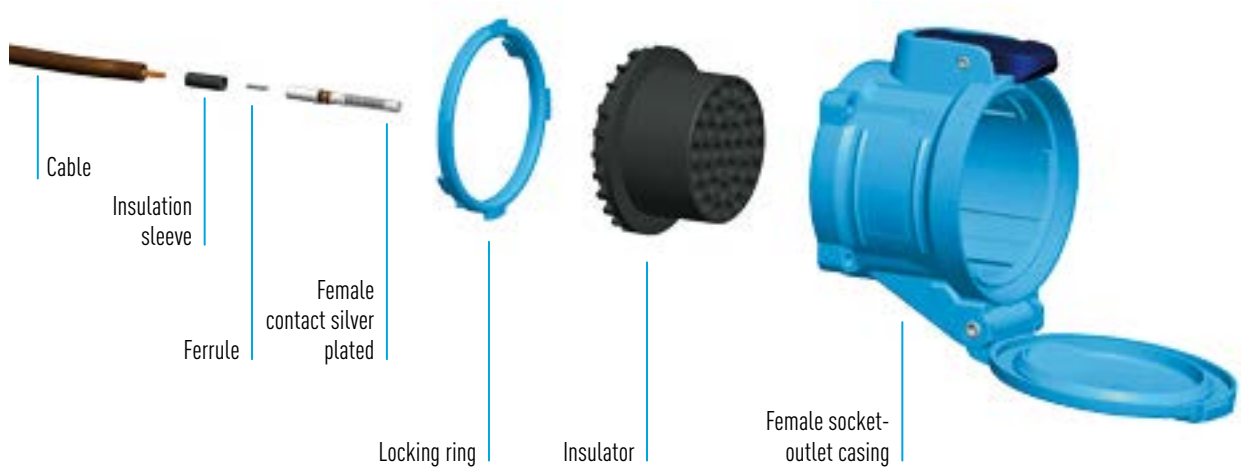


**Assembly**

To insert contacts when they have been wired is simple. Push wired contact into rear of insulator until it stops to complete the installation.

**Disassembly**

To remove, use the tool provided. Push tool from front onto contact until tool stops. Contact is then released at rear of insulator.





### WALL MOUNTING SOCKET PN7c



Wall box poly 30°  
511B3M20

Socket-outlet  
01P4061

### PLUG PN7c



Straight handle poly  
511P0D18

Inlet  
01P8061

## MAIN FEATURES

Rated current/contact (wiring according to standard)	25 A	Shock resistance (metal casing)	IK09
Σ of currents (contacts)	≤ 130 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	500 V	Flexible wiring (min-max)	1-4 mm <sup>2</sup>
IP protection lid closed	IP66/IP67	Stranded wiring (min-max)	1-6 mm <sup>2</sup>
IP protection plug connected	IP66/IP67	Wiring (terminals)	screw-type
Shock resistance (poly casing)	IK08	Keying positions	5



In case of Different voltage, think of MARECHAL® keying position coding



**SOCKET-OUTLET** female  
**PN7c (16/25 A)**



**INLET** male  
**PN7c (16/25 A)**



50 V AC	6P (16 A)	01P4060	01P8060
50 V AC	7P (16 A)	01P4070	01P8070
500 V AC	5P+E (25 A)	01P4051	01P8051
500 V AC	6P+E (16 A)	01P4061	01P8061



For a black colour GRP housing replace the second reference character 1 with 5.



**SOCKET-OUTLET** female  
**PN7c (16/25 A)**



**INLET** male  
**PN7c (16/25 A)**



50 V AC	6P (16 A)	09P4060	09P8060
50 V AC	7P (16 A)	09P4070	09P8070
415 V AC	5P+E (25 A)	09P4051	09P8051
415 V AC	6P+E (16 A)	09P4061	09P8061

## INFO+

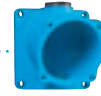
### OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 94.





**WALL MOUNTING SOCKET DN9c**



Wall box metal 20°  
593B2M25



Socket-outlet  
1914081

**PLUG DN9c**



Straight handle poly  
513POD30



Inlet  
1918081

## MAIN FEATURES

Rated current/contact (wiring according to standard)	30 A	Ambient temperature	-40 °C to +60 °C
Σ of currents (contacts)	≤ 210 A	Flexible wiring (min-max)	1-6 mm <sup>2</sup>
Maximum voltage	415 V	Stranded wiring (min-max)	1,5-10 mm <sup>2</sup>
IP protection lid closed	IP55	Wiring (terminals)	screw-type
IP protection plug connected	IP54	Keying positions	2
Shock resistance	IK09		



In case of Different voltage, think of MARECHAL® keying position coding

**SOCKET-OUTLET female DN9c (30 A)**



**INLET male DN9c (30 A)**



50 V AC	6P	1914060	1918060
50 V AC	7P	1914070	1918070
50 V AC	8P	1914080	1918080
50 V AC	9P	1914090	1918090
415 V AC	5P+E	1914051	1918051
415 V AC	6P+E	1914061	1918061
415 V AC	7P+E	1914071	1918071
415 V AC	8P+E	1914081	1918081

► The contacts can be assigned either power or signal.

**INFO+**

## OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 94.



# PN12C

MULTI-CONTACT CONNECTORS **GRP** OR **METAL** OR **STAINLESS STEEL**

**16 A IP66/IP67**



## WALL MOUNTING SOCKET PN12C



Wall box poly 30°  
511B3M20

Socket-outlet  
01A4001

## PLUG PN12C



Straight handle poly  
511P0D18

Inlet  
01A8001

## MAIN FEATURES

Maximum voltage	480 V	Σ of currents (contacts)	≤ 110 A
Impulse withstand voltage	5 kV/Pollution degree 3	Flexible wiring (min-max)	1-2,5 mm <sup>2</sup>
Contact resistance	< 2 mΩ	Wiring (terminals)	To weld/crimp
Permitted current range	4-20 mA/16 A	Keying positions	2
Rated current percontact (max)	16 A		

## CLIMATIC FEATURES

Ambient temperature	-40 °C to +60 °C	Salt, Fog performance	1000 hours connected
IP protection plug connected	IP66/IP67	Resistance to fluids	Motor oils, petrol, oils, detergents...
IP protection lid closed	IP66/IP67		

## MECHANICAL FEATURES

Butt contacts	Pastilles argent-nickel	Shock resistance (poly casing)	IK08
Contact protection	Silvering	Shock resistance (metal casing)	IK09
Load cycles	> 5000 cycles	Vibration	Frequency 5-1000 Hz, 1g/(90 minutes on each critical frequency) according to IEC 6068-2-6



AISI 304 stainless steel version available on request



**SOCKET-OUTLET** female  
**PN12C (16 A)**



**INLET** male  
**PN12C (16 A)**



<b>GRP</b>	480 V AC	12 contacts	01A4001	01A8001
<b>METAL</b>	480 V AC	12 contacts	09A4001	09A8001
		Bag of 13 contacts	01AA213	01AA113

► Each product is supplied with 1 bag of 13 contacts, supplied with insulation sleeves and ferrules



For a black colour GRP housing replace the second reference character 1 with 5.

**INFO+**

## OPTIONS AND ACCESSORIES

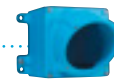
Find the boxes, sleeves and handles at the end of the section page 94.







**WALL MOUNTING SOCKET DN20c**



Wall box metal 30°  
595C3M50

Socket-outlet  
1964191



**PLUG DN20c**



Straight elastomer  
555POD35

Inlet  
1968191

## MAIN FEATURES

Rated current/contact (wiring according to standard)	25 A	Ambient temperature	-40 °C to +60 °C
Σ of currents (contacts)	≤ 350 A	Flexible wiring (min-max)	1-6 mm <sup>2</sup>
Maximum voltage	415 V	Stranded wiring (min-max)	1,5-10 mm <sup>2</sup>
IP protection lid closed	IP55	Wiring (terminals)	screw-type
IP protection plug connected	IP54	Keying positions	4
Shock resistance	IK09		



In case of Different voltage, think of MARECHAL® keying position coding

**SOCKET-OUTLET female DN20c (25 A)**



**INLET male DN20c (25 A)**



50 V AC	10P	1964100	1968100
50 V AC	11P	1964110	1968110
50 V AC	12P	1964120	1968120
50 V AC	13P	1964130	1968130
50 V AC	14P	1964140	1968140
50 V AC	15P	1964150	1968150
50 V AC	16P	1964160	1968160
50 V AC	17P	1964170	1968170
50 V AC	18P	1964180	1968180
50 V AC	19P	1964190	1968190
50 V AC	20P	1964200	1968200
415 V AC	9P+E	1964091	1968091
415 V AC	10P+E	1964101	1968101
415 V AC	11P+E	1964111	1968111
415 V AC	12P+E	1964121	1968121
415 V AC	13P+E	1964131	1968131
415 V AC	14P+E	1964141	1968141
415 V AC	15P+E	1964151	1968151
415 V AC	16P+E	1964161	1968161
415 V AC	17P+E	1964171	1968171
415 V AC	18P+E	1964181	1968181
415 V AC	19P+E	1964191	1968191



## INFO+

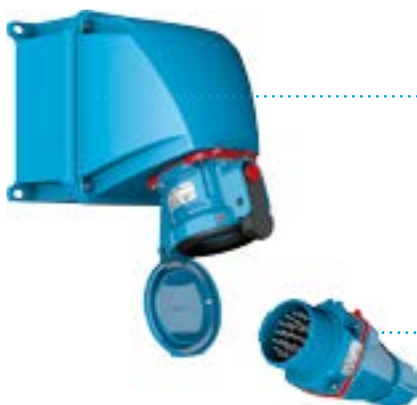
### OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 94.

# DSN24C

MULTI-CONTACT CONNECTORS **GRP**

16 A IP66/IP67



## WALL MOUNTING SOCKET DSN24C



Wall box poly 70°  
512C7M25



Socket-outlet  
61B4002

## PLUG DSN24C



Straight handle poly  
512P0D21



Inlet  
61B8002

## MAIN FEATURES

Maximum voltage	480 V	Σ of currents (contacts)	≤ 230 A
Impulse withstand voltage	5 kV/Pollution degree 3	Flexible wiring (min-max)	1-2,5 mm <sup>2</sup>
Contact resistance	< 2 mΩ	Wiring (terminals)	To weld/crimp
Permitted current range	4-20 mA/16 A	Keying positions	1
Rated current percontact (max)	16 A		

## CLIMATIC FEATURES

Ambient temperature	-40 °C to +60 °C	Salt, Fog performance	200 hours connected
IP protection plug connected	IP66/IP67	Resistance to fluids	Motor oils, petrol, oils, detergents...
IP protection lid closed	IP66/IP67		

## MECHANICAL FEATURES

Butt contacts	Pastilles argent-nickel	Shock resistance	IK08
Contact protection	Silvering	Vibration	Frequency 5-1000 Hz, 1g/(90 minutes on each critical frequency) according to IEC 6068-2-6
Load cycles	> 5000 cycles		

**SOCKET-OUTLET** female  
DSN24c (16 A)



**INLET** male  
DSN24c (16 A)



480 V AC	24 contacts	61B4002	61B8002
	Bag of 13 contacts	01AA213	61CA113

► Each product is supplied with 2 bags of 13 contacts, supplied with insulation sleeves and ferrules



For a black colour GRP housing replace the second reference character 1 with 5.

INFO+

## OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 94.



# DSN37C

MULTI-CONTACT CONNECTORS GRP

MULTI

16 A IP66/IP67



## WALL MOUNTING SOCKET DSN37C



Wall box poly 70°  
513C7M25



Socket-outlet  
61C4003

## PLUG DSN37C



Straight handle poly  
513P0D30



Inlet  
61C8003

## MAIN FEATURES

Maximum voltage	480 V	Σ of currents (contacts)	≤ 360 A
Impulse withstand voltage	5 kV/Pollution degree 3	Flexible wiring (min-max)	1-2,5 mm <sup>2</sup>
Contact resistance	< 2 mΩ	Wiring (terminals)	To weld/crimp
Permitted current range	4-20 mA/16 A	Keying positions	3
Rated current percontact (max)	16 A		

## CLIMATIC FEATURES

Ambient temperature	-40 °C to +60 °C	Salt, Fog performance	200 hours connected
IP protection plug connected	IP66/IP67	Resistance to fluids	Motor oils, petrol, oils, detergents...
IP protection lid closed	IP66/IP67		

## MECHANICAL FEATURES

Butt contacts	Pastilles argent-nickel	Shock resistance	IK08
Contact protection	Silvering	Vibration	Frequency 5-1000 Hz, 1g/(90 minutes on each critical frequency) according to IEC 6068-2-6
Load cycles	> 5000 cycles		

**SOCKET-OUTLET** female  
DSN37C (16 A)



**INLET** male  
DSN37C (16 A)



480 V AC	37 contacts	61C4003	61C8003
	Bag of 13 contacts	01AA213	61CA113

► Each product is supplied with 3 bags of 13 contacts, supplied with insulation sleeves and ferrules



For a black colour GRP housing replace the second reference character 1 with 5.

INFO+

## OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 94.





### WALL MOUNTING SOCKET DS7c3



Wall box metal 30°  
594C3M32

Socket-outlet  
3934561

### PLUG DS7c3



Straight handle poly  
514P0D35

Inlet  
3938561

## MAIN FEATURES

Rated current (with wiring according to standard)	50 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	500 V	Flexible wiring (min-max)	2,5-10 mm <sup>2</sup>
IP protection lid closed	IP55	Stranded wiring (min-max)	2,5-16 mm <sup>2</sup>
IP protection plug connected	IP54	Wiring (terminals)	screw-type
Shock resistance (metal casing)	IK09	Keying positions	5
Auxiliary contacts 5 A/400 V option	3		

### Load-break capability of the DECONTACTOR™

Comply with IEC/EN 60309-1 and IEC/EN 60309-4 standards	50 A/500 V
Load-break capability according to IEC/EN 60947-3/AC-22 A	50 A/500 V

### SOCKET-OUTLET female DS7c3 (50 A)



### INLET male DS7c3 (50 A)



50 A/max 500 V AC	6P+E	3934561	3938561
50 A/max 500 V AC	6P+E+3 aux.	3934561972	3938561972

## INFO+









### OPTIONS AND ACCESSORIES

Find the boxes, sleeves and handles at the end of the section page 94.





## OPTIONS (DETAILS ON PAGE 216)





	PN7c	DN9c	PN12c	DN20c	DSN24c	DSN37c
<b>LOCKING PIN FOR 2 PADLOCKS Ø 8 mm (PADLOCKS NOT SUPPLIED)</b>						
	Ref. + 843 1 padlocks Ø 4 mm	NA	Ref. + 843 1 padlocks Ø 4 mm	NA	Ref. + 843	Ref. + 843
<b>LOCKING PIN FOR 3 PADLOCKS Ø 8 mm (PADLOCKS NOT SUPPLIED)</b>						
	NA	Ref. + 844	NA	Ref. + 844	NA	NA
<b>SCREW LOCKING IMPRINT BTR 2,5</b>						
	Ref. + 22	NA	Ref. + 22	NA	NA	NA
<b>LARGER RELEASE BUTTON</b>						
	NA	Socket-outlet ref. + 453	NA	Socket-outlet ref. + 453	Socket-outlet ref. + 453	Socket-outlet ref. + 453
<b>IN-LINE CONNECTIONS (A PAIR OF FINGER DRAW PLATES TO AID CLOSING)</b>						
					613A346	616A346
<b>INLET CAP</b>						
	012A126	191A126	012A126	196A126	NA	NA
	IP66/67	NA	NA	NA	613A426	616A426
<b>180° OPENING LID</b>						
	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10
<b>SELF-RETURNING LID (WITHOUT FULL CLOSURE IP40)</b>						
	Socket-outlet ref. +R	Socket-outlet ref. +R	Socket-outlet ref. +R	Socket-outlet ref. +R	Socket-outlet ref. +R	Socket-outlet ref. +R
<b>180° OPENING &amp; SELF-RETURNING LID</b>						
	Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18
<b>CLOSING MECHANISM</b>						
	Draw lever only			196A376		
	Draw plate only			196A396		
<b>IP66/67 SOCKET-OUTLET AND INLET</b>						
	Standard	Ref. + 600	Standard	Ref. + 600	Standard	Standard
<b>ELECTROMAGNETIC COMPATIBILITY (EMC) (SEE DETAIL PAGE 223)</b>						
		Metal socket ref. +EMC	Metal socket ref. +EMC			



# ACCESSORIES

(SEE PAGE 238 TO CROSS REFERENCE WITH OLDER PART NUMBERS)

BOXES			PN7c PN12c Size 1	DSN24c Size 2	DN9c DSN37c Size 3	DS7c3 Size 4	DN20c Size 5	
<b>POLY BOX</b>								
	30°	M20	511B3M20	512B3M20				
	30°	M25	511B3M25	512B3M25	513B3M25			
	30°	M32				514B3M32		
	30°	M40				514B3M40		
<b>METAL BOX (+ EARTHING WIRE)</b>								
	20°	M20		592B2M20	593B2M20			Ref. +EMC
	20°	M25		592B2M25	593B2M25	594B2M25		Ref. +EMC
	20°	M32			593B2M32	594B2M32		Ref. +EMC
	20°	M40				594B2M40		
<b>POLY BOX + POLY SLEEVE</b>								
	70°	Without Hole	511C7000	512C7000	513C7000	514C7000		
	70°	ø 20	511C7M20	512C7M20				
	70°	ø 25	511C7M25	512C7M25	513C7M25			
	70°	ø 32	511C7M32	512C7M32	513C7M32	514C7M32		
	70°	ø 40		512C7M40	513C7M40	514C7M40		
<b>METAL BOX (+ EARTHING WIRE) + POLY SLEEVE</b>								
	30°	M20	511C3M20	512C3M20	513C3M20			
	30°	M25		512C3M25	513C3M25	514C3M25		
	30°	M32		512C3M32	513C3M32	514C3M32	515C3M32	
	30°	M40		512C3M40	513C3M40	514C3M40	515C3M40	
	30°	M50				514C3M50	515C3M50	
	30°	M63					515C3M63	
<b>METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)</b>								
	30°	M20		592C3M20	593C3M20			Ref. +EMC
	30°	M25		592C3M25	593C3M25	594C3M25		Ref. +EMC
	30°	M32		592C3M32	593C3M32	594C3M32	595C3M32	Ref. +EMC
	30°	M40			593C3M40	594C3M40	595C3M40	Ref. +EMC
	30°	M50				594C3M50	595C3M50	
	30°	M63					595C3M63	
	0°	M20		592C0M20	593C0M20			Ref. +EMC
	0°	M25		592C0M25	593C0M25	594C0M25		Ref. +EMC
	0°	M32		592C0M32	593C0M32	594C0M32	595C0M32	Ref. +EMC
	0°	M40			593C0M40	594C0M40	595C0M40	Ref. +EMC
	0°	M50				594C0M50	595C0M50	
	0°	M63					595C0M63	
	45°	M20	591C4M20					
	45°	M25	591C4M25					
	45°	M32	591C4M32					
	70°	M20			593C7M20			Ref. +EMC
	70°	M25			593C7M25	594C7M25		Ref. +EMC
	70°	M32			593C7M32	594C7M32	595C7M32	Ref. +EMC
	70°	M40			593C7M40	594C7M40	595C7M40	Ref. +EMC
	70°	M50				594C7M50	595C7M50	
	70°	M63					595C7M63	

BOXES			PN7C PN12C Size 1	DSN24C Size 2	DN9C DSN37C Size 3	DS7c3 Size 4	DN20c Size 5
<b>METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)</b>							
	0°		M50				595E0M50
	30°		M50				595E3M50
	30°		M63				595E3M63
	70°		M50				595E7M50
	70°		M63				595E7M63

SLEEVE		PN7C PN12C Size 1	DSN24C Size 2	DN9C DSN37C Size 3	DS7c3 Size 4	DN20c Size 5	
<b>POLY SLEEVE</b>							
	30°	511M3	512M3	513M3	514M3	515M3	
	30°	551M3	552M3	553M3	554M3	555M3	
	70°	511M7	512M7	513M7	514M7		
	70°	551M7	552M7	553M7	554M7		
<b>METAL SLEEVE</b>							
	0°	591M0	592M0	593M0	594M0	595M0	Ref. +EMC
	30°	591M3	592M3	593M3	594M3	595M3	Ref. +EMC
	45°	591M4					
	70°			593M7	594M7	595M7	Ref. +EMC



# ACCESSORIES

(SEE PAGE 238 TO CROSS REFERENCE WITH OLDER PART NUMBERS)

HANDLE



PN7c  
PN12c  
Size 1

DSN24c  
Size 2

DN9c  
DSN37c  
Size 3

DS7c3  
Size 4

DN20c  
Size 5



## POLY HANDLE WITH GLAND

	0°	9-18 mm	511P0D18				
	0°	5-21 mm	511P0D21	512P0D21			
	0°	10-30 mm			513P0D30		
	0°	13-35 mm				514P0D35	
	0°	9-18 mm	551P0D18				
	0°	5-21 mm		552P0D21			
	0°	10-30 mm			553P0D30		
	0°	13-35 mm				554P0D35	
	60°	9-18 mm	511P6D18				
	60°	9-18 mm	551P6D18				

## ELASTOMER HANDLE WITH GLAND

	0°	18-25 mm				555P0D25	
	0°	25-35 mm				555P0D35	
	0°	35-45 mm				555P0D45	
	0°	45-49 mm				555P0D49	

## POLY HANDLE WITH POLY CABLE GLAND

	0°	5-12 mm	511P020P	512P020P				Ref. +443
	0°	9-18 mm	511P025P	512P025P	513P025P			Ref. +443
	0°	14-25 mm	511P032P	512P032P	513P032P	514P032P	515P032P	Ref. +443
	0°	18-32 mm		512P040P	513P040P	514P040P	515P040P	Ref. +443
	0°	24-38 mm				514P050P	515P050P	
	0°	35-48 mm					515P063P	

## METAL HANDLE WITH METAL GLAND (+ EARTHING WIRE)

	0°	7-13 mm	591P020M	592P020M	593P020M			Ref. +EMC (7-12 mm)
	0°	8-16 mm	591P025M	592P025M	593P025M	594P025M		Ref. +EMC (9-16 mm)
	0°	15-23 mm	591P032M	592P032M	593P032M	594P032M	595P032M	Ref. +EMC (11-21 mm)
	0°	22-32 mm			593P040M	594P040M	595P040M	Ref. +EMC (19-28 mm)
	0°	34-44 mm				594P050M	595P050M	
	0°	35-48 mm					595P063M	

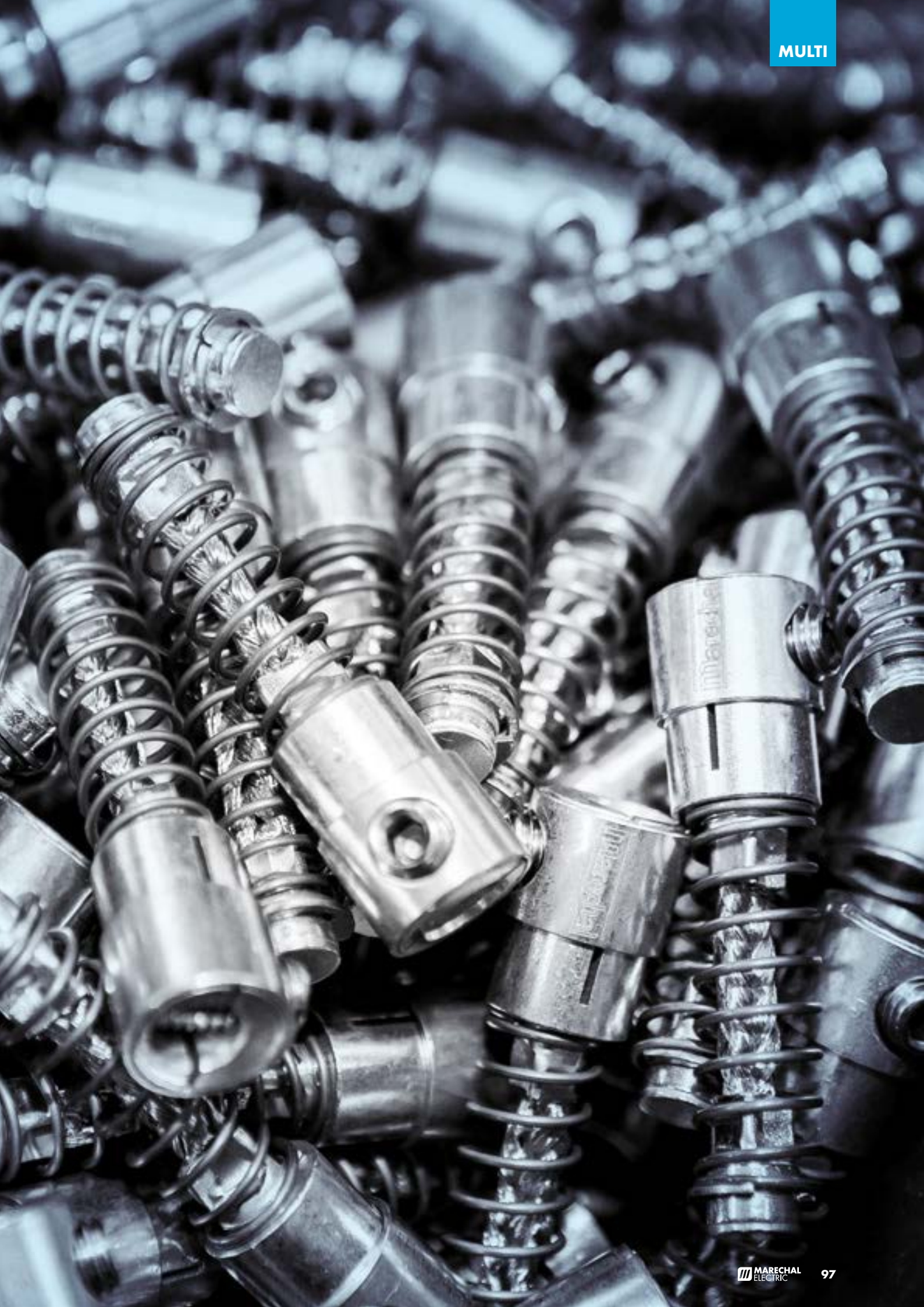
## POLY HANDLE WITHOUT CABLE GLAND [METRIC THREAD ENTRY]

	0°	M20	511P0M20	512P0M20	513P0M20			Ref. +443
	0°	M25	511P0M25	512P0M25	513P0M25			Ref. +443
	0°	M32	511P0M32	512P0M32	513P0M32	514P0M32		Ref. +443
	0°	M40		512P0M40	513P0M40	514P0M40		Ref. +443
	0°	M50				514P0M50	515P0M50	Ref. +443
	0°	M63					515P0M63	Ref. +443

## METAL HANDLE WITHOUT CABLE GLAND [METRIC THREAD ENTRY]

	0°	M20	591P0M20	592P0M20	593P0M20			Ref. +EMC
	0°	M25	591P0M25	592P0M25	593P0M25	594P0M25		Ref. +EMC
	0°	M32	591P0M32	592P0M32	593P0M32	594P0M32	595P0M32	Ref. +EMC
	0°	M40			593P0M40	594P0M40	595P0M40	Ref. +EMC
	0°	M50				594P0M50	595P0M50	
	0°	M63					595P0M63	





# INDUSTRIAL PLUGS



- A range from 16 A to 600 A 1000 V.
- Automatic watertightness from IP44 to 66/67.
- From -40 ° to +240 °C.
- GRP or metal casing.
- Reliable & compact.

FIND ALL INFORMATION  
ON OUR WEBSITE:



[marechal.com](https://marechal.com)



Dimensions  
and certificates



**PNC P. 100**

**COMPACT CONNECTOR**

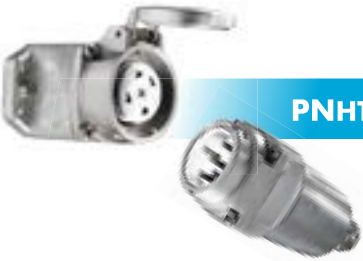
- Glassfiber reinforced thermoplastic UL94 V-0
- Standard IP66/IP67 (IP68 on specification)
- Long life, 2 000 operations



**PN P. 102**

**COMPACT PLUGS & SOCKETS**

- Standard IP66/IP67
- All industries
- GRP or metal casing



**PNHT P. 105**

**HIGH TEMPERATURE PLUGS & SOCKETS**

- Permanent 240 °C
- 30 A/500 V
- IP44 water-and dust-tight sealing



**PFQ P. 118**

**HEAVY-DUTY PLUGS & SOCKETS**

- Up to 400 A/690 V
- Automatic IP66/IP67 water-and dust-tight
- Mechanical and electrical interlocking
- Up to 6 auxiliary and 2 pilot contacts
- Metal casing and stainless steel case AISI 316 L



**PFC P. 120**

**HEAVY-DUTY PLUGS & SOCKETS**

- Up to 600 A/1 000 V
- Automatic IP66/IP67 water-and dust-tight
- Mechanical and electrical interlocking
- Up to 2 auxiliary and 2 pilot contacts
- Metal casing and stainless steel case AISI 316 L

# PNC



## COMPACT CONNECTOR



**16 A**

- ▶ Glassfiber reinforced thermoplastic UL94 V-0
- ▶ Standard IP66/IP67 (IP68 on specification)
- ▶ Long life, 2 000 operations tested
- ▶ Very good vibration resistance

### ELECTRICAL FEATURES

Permitted current range	4-20 mA/16 A
Maximum voltage	480 V
Impulse withstand voltage	5 kV/Pollution degree 3
Contact resistance	< 2 mΩ
Polarity	3P+N+E
Conductors accepted	From 0,75 mm <sup>2</sup> to 2,5 mm <sup>2</sup> Screwed terminals
Cable diameter	From 11 to 15 mm (smaller Ø available according to specification)

### MECHANICAL FEATURES

Casing & insulator	Glassfiber reinforced thermoplastic UL94 V-0
Butt contacts	Copper alloy with silver-nickel tips
Contact protection	Tinning
Load cycles	> 2000 cycles
Shock resistance	IK08
Vibration	Frequency 5-1000 Hz, 1g (90 minutes on each critical frequency) according to IEC 6068-2-6

### CLIMATIC FEATURES

Ambient temperature	-40 °C to +100 °C
IP protection Socket with cap	IP66/IP67 IP69K 100bar (1450 PSI) 80 °C
IP protection plug connected	IP66/IP67 IP68 tested at 10 meters deep for 15 days (please contact us for references) IP69K 100bar (1450 PSI) 80 °C
Salt, Fog performance	200 h not connected > 1000 h connected
Resistance to fluids	Motor oils, petrol, oils, detergents...

#### SOCKET-

**OUTLET** female  
(with M25 lock nut)  
**PNC (16 A)**



**INLET** male  
(with M25 lock nut)  
**PNC (16 A)**



480 V AC	5P	01E4007	01E8007
----------	----	---------	---------

#### COUPLER

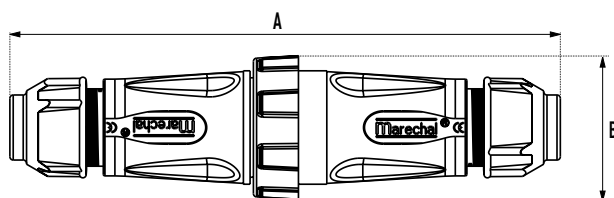
socket female  
**PNC (16 A)**



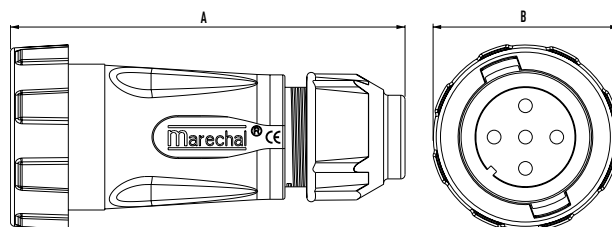
**PLUG**  
male  
**PNC (16 A)**



480 V AC	5P	01E3007	01E1007
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<b>PNC</b>	<b>A</b> 165	<b>B</b> 45
------------	-----------------	----------------



<b>PNC</b>	<b>A</b> 92	<b>B</b> 45
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#### PNC connectors comply with:

- The requirements of IEC 61984, IEC 60529, IEC 62262, IEC 68-2-6 International standards,
- The European Low Voltage Directive 2014/35/EU,
- The French NF C 15-100 standard,
- The decrees relating to workers' protection in Belgium, Spain and Italy.

Also certified by TR CU (GOST) (Russian inspection laboratory).



# PN



## COMPACT PLUGS & SOCKETS



**30 A**

- ▶ Standard IP66/IP67
- ▶ All industries
- ▶ Chemical resistant GRP UL94 Or metal casing

## TECHNICAL FEATURES

	PN	PNHT
Rated current (I <sub>n</sub> )	30 A	30 A
U <sub>max</sub>	500 V	500 V
Keying positions	16	4
Ambient temperature	-40 °C to +60 °C	240 °C
IP protection	IP66/IP67	IP44

## OPERATION



To connect the plug: align the red dots on the plug and the socket-outlet, then turn the plug anticlockwise to connect.

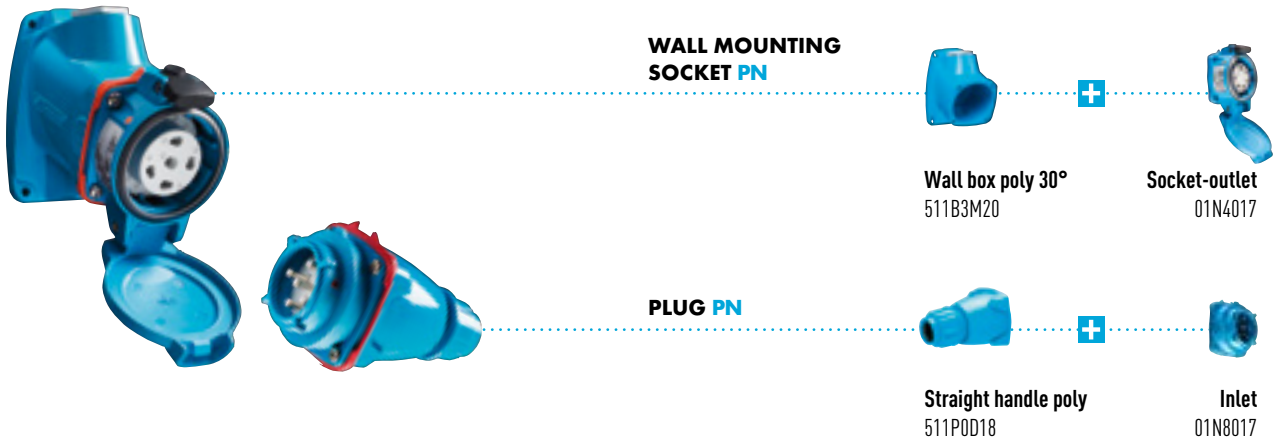


To remove the plug: turn the plug clockwise and withdraw.

**PN plugs and socket-outlets comply with:**

- IEC/EN 60309-1 & IEC/EN 60309-4 European and International standards (plugs and socket-outlets for industrial purposes),
- The European Low Voltage Directive 2014/35/EU, conformity with the CE marking,
- The European 'Machine Directive' 2006/42/CE regarding equipment isolation,
- The French NF C 15-100 standard,
- The French decree dated 20 December 2011 pertaining to the wiring and operating conditions of movable electrical apparatuses,
- The decrees relating to workers' protection in Belgium, Spain and Italy,
- The UL 1682 (USA) and CSA C22.2 N° 182.1-07 (Canada) standards for plugs and socket-outlets.

**Also certified by VERITAS LCIE, UL, TR CU (GOST) and cCSAus (French, American, Russian and Canadian inspection laboratories).**



**WALL MOUNTING SOCKET PN**



Wall box poly 30°  
511B3M20

Socket-outlet  
01N4017

**PLUG PN**



Straight handle poly  
511P0D18

Inlet  
01N8017

### MAIN FEATURES

Rated current (with wiring according to standard)	30 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	500 V	Flexible wiring (min-max)	1-6 mm <sup>2</sup>
IP protection lid closed	IP66/IP67	Stranded wiring (min-max)	1,5-10 mm <sup>2</sup>
IP protection plug connected	IP66/IP67	Other wiring	on request
Shock resistance (poly casing)	IK08	Keying positions	16
Shock resistance (metal casing)	IK09		



GRP devices are not compatible with metal devices.

Dual-voltage socket-outlet (see p. 7)



**SOCKET-OUTLET female PN (30 A)**



**INLET male PN (30 A)**



20-24 V AC	2P	01N408A	01N808A
220-250 V AC	1P+N+E	01N4015	01N8015
380-440 V AC	3P+E	01N4013	01N8013
220-250 V AC 380-440 V AC	3P+N+E	01N4017	01N8017
480-500 V AC	3P+E	01N4093	01N8093
480-500 V AC	3P+N+E	01N4097	01N8097

► Other voltages, frequencies and contact configurations are available (see page 10).



For a black colour GRP housing replace the second reference character 1 with 5.



**SOCKET-OUTLET female PN (30 A)**



**INLET male PN (30 A)**



Dual-voltage socket-outlet (see p. 7)

20-24 V AC	2P	09N408A	09N808A
220-250 V AC	1P+N+E	09N4015	09N8015
380-440 V AC	3P+E	09N4013	09N8013
220-250 V AC 380-440 V AC	3P+N+E	09N4017	09N8017
480-500 V AC	3P+E	09N4093	09N8093
480-500 V AC	3P+N+E	09N4097	09N8097

► Other voltages, frequencies and contact configurations are available (see page 10).



# PNHT

+240 °C HIGH TEMPERATURE PLUGS & SOCKETS METAL

30 A IP44



## WALL MOUNTING SOCKET PNHT



Wall box  
571B0M20185

Socket-outlet  
0924017185



## PLUG PNHT



Straight handle  
571P020M185

Inlet  
0928017185

### MAIN FEATURES

Max. operating temperature steady	240 °C	Protection	IP44
Rated current I <sub>n</sub>	30 A	Robustness	IK09
U <sub>max</sub>	500 V	Flexible wiring (min-max)	1-6 mm <sup>2</sup>
Maximum no. of contacts	3P+N+E	Stranded wiring (min-max)	1,5-10 mm <sup>2</sup>



## SOCKET-OUTLET female PNHT (30 A)













## INLET male PNHT (30 A)



20-24 V AC	2P	092408A185	092808A185
220-250 V AC	1P+N+E	0924015185	0928015185
380-440 V AC	3P+E	0924013185	0928013185
220-250 V AC	3P+N+E	0924017185	0928017185



## OPTIONS (DETAILS ON PAGE 216)

	PN	PNC
<b>INDUSTRIAL-DOMESTIC ADAPTERS</b>		
	Industrial inlet MARECHAL® 1P+N+E domestic socket-outlet 10/16 A 230 V 10 A and 16 A.	01N8015D11* NA
	* All these plug adapters are available to foreign standards : replace D11 by D40 for UK, D30 for Germany/NL/Lux, D06 for Italy.	
<b>LOCKING WITH PADLOCK (Ø 4 mm) WITHOUT SHAFT (PADLOCKS NOT SUPPLIED)</b>		
	Ref. + 843	NA
<b>SCREW LOCKING IMPRINT BTR 2,5</b>		
	Socket-outlet ref. + 22	NA
<b>REVERSED INTERIOR AND CONTACTS</b>		
	The connector is supplied with a Rubber inlet cap.	Ref. conn. + 001 Socket-outlet ref. + 001
<b>IP55 SELF-CLOSING LID (SOCKET-OUTLET)</b>		
	Replace N by S Eg: 400 V 3P+N+E poly = 01S4017	
<b>INLET CAP</b>		
	Socket-outlet cap Plug cap	01EA125 01EA126
	Inlet cap	012A126
<b>ADAPTER PLATE FOR PN ACCESSORIES</b>		
		251A457-E
<b>180° OPENING LID</b>		
	Metal socket ref. + 10	NA
<b>SELF CLOSING/SELF RETURNING LID (ACCORDING TO MODEL)</b>		
	Socket-outlet ref. +R	NA
<b>180° OPENING &amp; SELF-RETURNING LID</b>		
	Socket-outlet ref. + 18	NA
<b>ELECTROMAGNETIC COMPATIBILITY (EMC) (SEE DETAIL PAGE 223)</b>		
	Metal socket ref. +EMC	



## ACCESSORIES

(SEE PAGE 238 TO CROSS REFERENCE WITH OLDER PART NUMBERS)

BOXES			PN Size 1	PNHT Size 1	
<b>POLY BOX</b>					
	0°	M20	511B0M20		
	0°	M25	511B0M25		
	30°	M20	511B3M20		
	30°	M25	511B3M25		
<b>METAL BOX (+ EARTHING WIRE)</b>					
	0°	M20	591B0M20		Ref. +EMC
	0°	M25	591B0M25		Ref. +EMC
	0°	M20		571B0M20185	
	0°	M25		571B0M25185	
<b>POLY BOX + POLY SLEEVE</b>					
	70°	Without Hole	511C7000		
	70°	ø 20	511C7M20		
	70°	ø 25	511C7M25		
	70°	ø 32	511C7M32		
<b>METAL BOX (+ EARTHING WIRE) + POLY SLEEVE</b>					
	30°	M20	511C3M20		
<b>METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)</b>					
	45°	M20	591C4M20		Ref. +EMC
	45°	M25	591C4M25		Ref. +EMC
	45°	M32	591C4M32		Ref. +EMC
	45°	M20		571C4M20185	
	45°	M25		571C4M25185	
	45°	M32		571C4M32185	

### TPM ELECTRICAL INLET WITH FLAP

PN  
size 1

#### BLACK POLY HOUSING (IP55) WITH LID FOR MECHANICAL EJECTION SOCKET



#### MECHANICAL EJECTION PLUGS & SOCKETS



Dimensions (LxHxD)

121 x 136 x 60

551B0065 Size 1 case without indicator light  
551B0165 Size 1 case with 1+1 indicator lights  
551B0265 Size 1 case with 1+2 indicator lights



# ACCESSORIES

(SEE PAGE 238 TO CROSS REFERENCE WITH OLDER PART NUMBERS)

## SLEEVE



PN  
Size 1

PNHT  
Size 1



### POLY SLEEVE



30°

511M3



30°

551M3



70°

511M7



70°

551M7

### METAL SLEEVE



0°

591M0

Ref. +EMC



30°

591M3

Ref. +EMC



45°





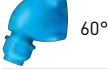







591M4

Ref. +EMC



45°

571M4185

HANDLE		PN Size 1	PNHT Size 1	
<b>POLY HANDLE WITH GLAND</b>				
	9-18 mm	511P0D18		
	5-21 mm	511P0D21		
	9-18 mm	551P0D18		
 60°	9-18 mm	511P6D18		
 60°	9-18 mm	551P6D18		
<b>POLY HANDLE WITH POLY CABLE GLAND (FOR A BLACK COLOUR HANDLE REPLACE THE SECOND REFERENCE CHARACTER 1 WITH 5)</b>				
	5-12 mm	511P020P		
	9-18 mm	511P025P		
	14-25 mm	511P032P		
<b>METAL HANDLE WITH METAL GLAND (+ EARTHING WIRE)</b>				
	7-13 mm	591P020M		
	8-16 mm	591P025M		Ref. +EMC (9-16 mm)
	15-23 mm	591P032M		Ref. +EMC (11-21 mm)
	7-13 mm		571P020M185	
	8-16 mm		571P025M185	
	15-23 mm		571P032M185	
<b>POLY HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY, FOR A BLACK COLOUR HANDLE REPLACE THE SECOND REFERENCE CHARACTER 1 WITH 5)</b>				
	M20	511P0M20		
	M25	511P0M25		
	M32	511P0M32		
<b>METAL HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY)</b>				
	M20	591P0M20		
	M25	591P0M25		Ref. +EMC
	M32	591P0M32		Ref. +EMC
	M25		571P0M25185	
	M32		571P0M32185	



# SPARE PARTS



PLUG		PN poly	PN METAL
1	Plug interior	01NA010	09NA110
2	Locking ring	611A583	09NA583
3	Plug contact (P or N)	01NA011	01NA011
4	Color-coded voltage gasket	611AV26	611AV26
		611AB26	611AB26
		611AR26	611AR26
		611AN26	611AN26
5	Plug casing	01NA501	09NA501



Remember to order the special removal key



Yellow disassembly key  
For poly casing  
31-A500-1

Contact us for spare parts.



SOCKET		PN	PN METAL
1	Socket Interior 3P+E	01NA020C3	09NA220C3
1	Socket Interior 1P+N+E	01NA020C5	09NA220C5
1	Socket Interior 3P+N+E	01NA020C7	09NA220C7
2	Locking ring	611A583	09NA583
3	Socket contact	01NA021	01NA021
4	Color-coded voltage gasket	611AV26	611AV26
		611AB26	611AB26
		611AR26	611AR26
		611AN26	611AN26
5	Socket Lid Gasket	01NA524*	09NA524*
6	Casing gasket	01NA074	01NA074

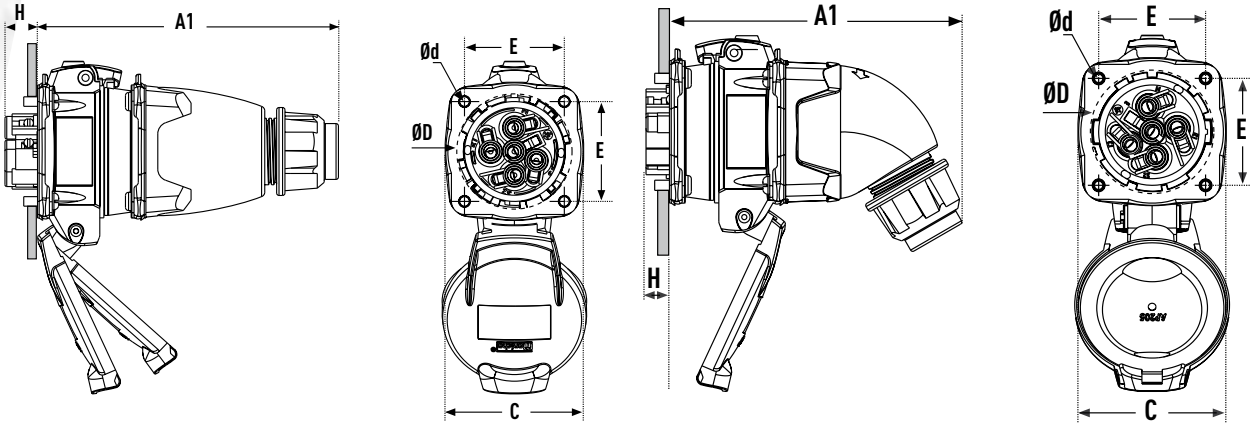
\*Add suffix cover option (opening 180 °, self-returning, etc.).

Contact us for spare parts.

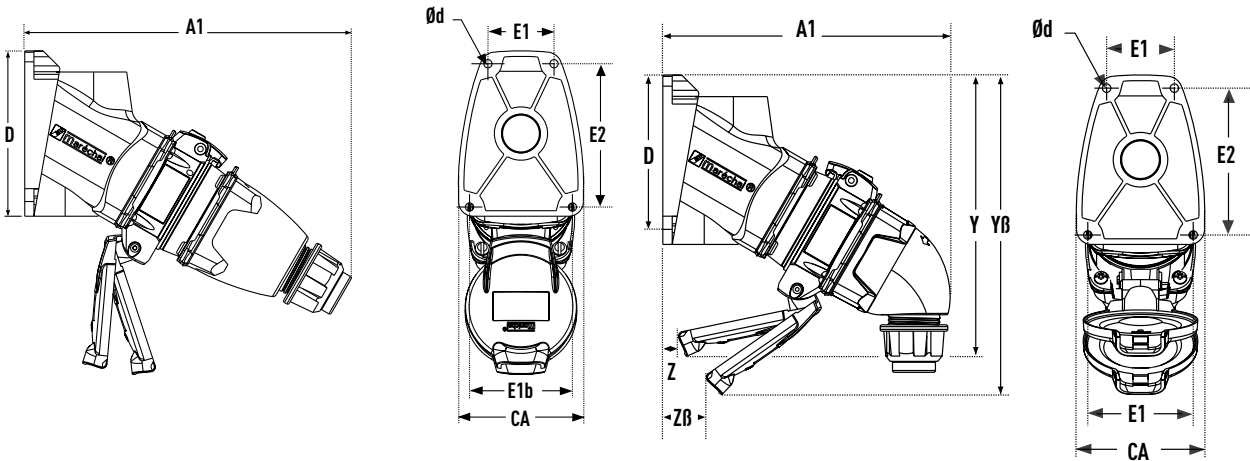


# DIMENSIONS

PN



	A1	C	E	H	Ød*
<b>Straight handle</b>	127	58	42	14	4,5
<b>Angled handle</b>	117	58	42	14	4,5

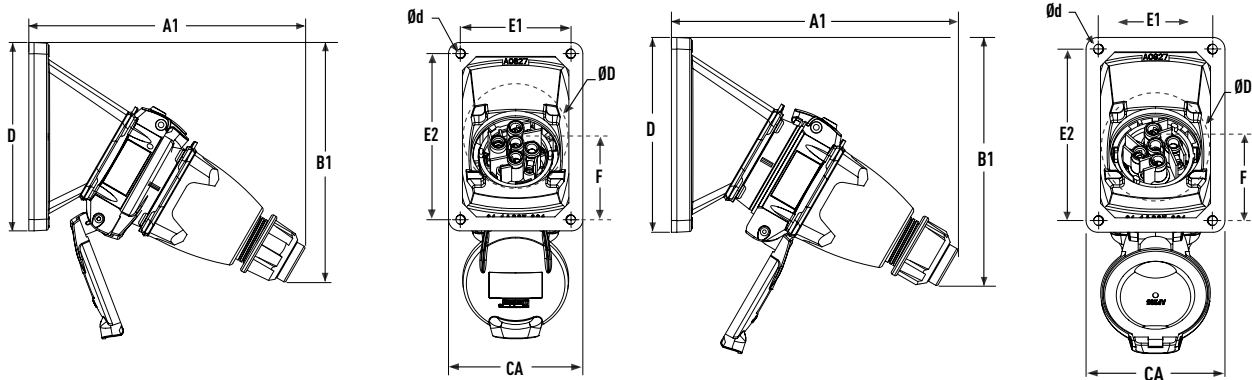


	A1	B1	CA	D	E1	E1b	E2	Ød*
<b>Straight handle</b>	178	143	68	90	36	56	78	4,5
<b>Angled handle</b>	153	159	68	90	36	56	78	4,5

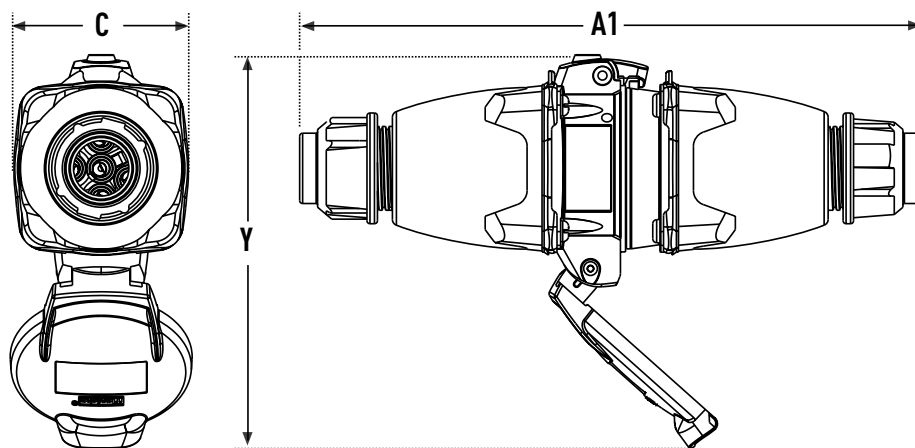
\*Ød : maximum drilling diameter.



PN



	A1	B1	CA	D	E1	E2	Ød*
<b>Straight handle</b>	159	138	77	108	63,5	95	5
<b>Angled handle</b>	134	153	77	108	63,5	95	5



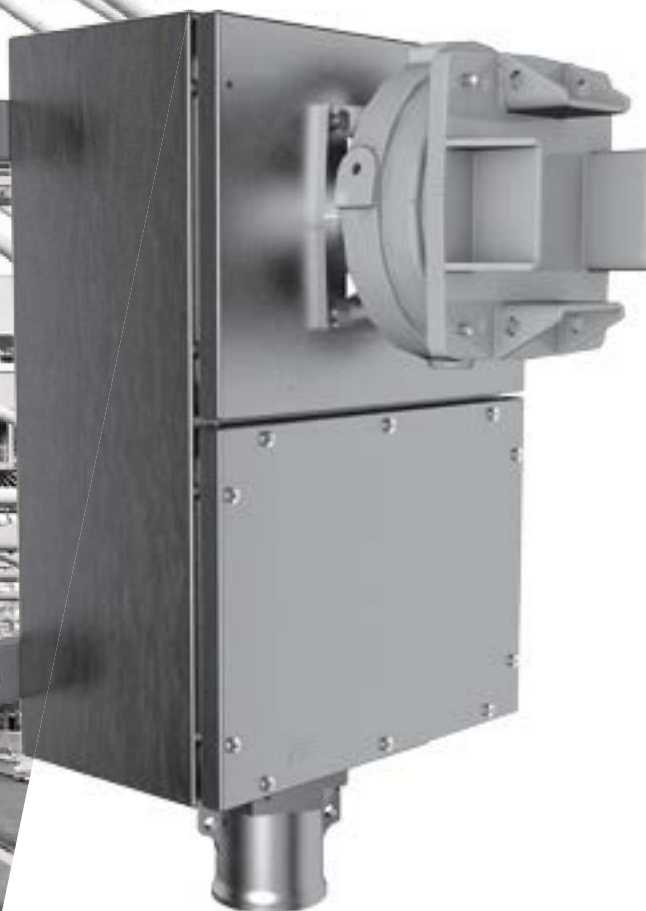
	A1	C	Y
<b>Straight handle</b>	208	58	132

\*Ød : maximum drilling diameter.

# PF



## HEAVY-DUTY PLUGS & SOCKETS



**315 A/400 A/500 A/600 A**

- ▶ Up to 600 A/1 000 V
- ▶ Automatic IP66/IP67 water-and dust-tight
- ▶ Mechanical and electrical interlocking
- ▶ Up to 6 auxiliary and 2 pilot contacts
- ▶ Marine aluminum casing and stainless steel AISI 316 L box

## TECHNICAL FEATURES

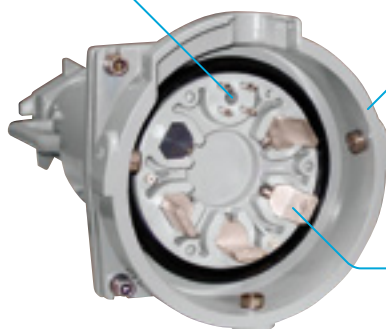
Socket-outlets that must be linked to switch/contactor via the pilot contacts.

	PFQ3	PFQ4	PFC5	PFC6
Rated current (In)	315 A	400 A	500 A	600 A
U <sub>max</sub>	690 V	690 V	1 000 V	1 000 V
Auxiliary contacts available	6	6	2	2
Pilot contacts		<<< 2 >>>		
Keying positions	10	10	7	7
Ambient temperature		<<< -40 °C to +60 °C >>>		

## MECHANICAL FEATURES

**Pilot contacts:** designed to connect after and disconnect before the phase contacts

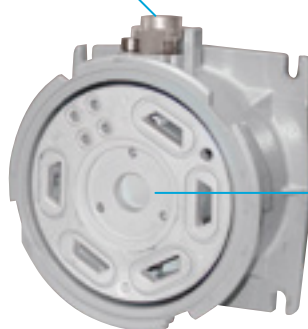
**IK10 metal casing**  
High resistance to shocks



**Lateral spring-loaded silver butt-contacts.** Silver is an excellent conductor and the plug engagement cleans contacts automatically.

### Electromechanical interlocking mechanism

The locking mechanism guarantees safe and watertight connection and engages the pilot contacts



**Safety shutter IP4X/IPXXD (PFQ) IP2X (PFC)**



### PF series comply with :

- The European Low Voltage Directive 2014/35/EU,
- The French decree dated 20 December 2011 pertaining to the wiring and operating conditions of movable electrical apparatuses, and to NF C15-100 French standard
- The decrees relating to workers' protection in Belgium, Spain and Italy.

**Also certified by UL, TR CU (GOST) and CSA (American, Russian and Canadian inspection laboratories).**

# HEAVY-DUTY PLUGS & SOCKETS



## MECHANICAL AND ELECTRICAL LOCKING



### OPERATING INSTRUCTIONS



Off load engagement



The male-female couple is automatically watertight.



Locking the plug in the socket closes the pilots and connects the main circuit.

FIND PF OPERATION IN VIDEO



PF operation

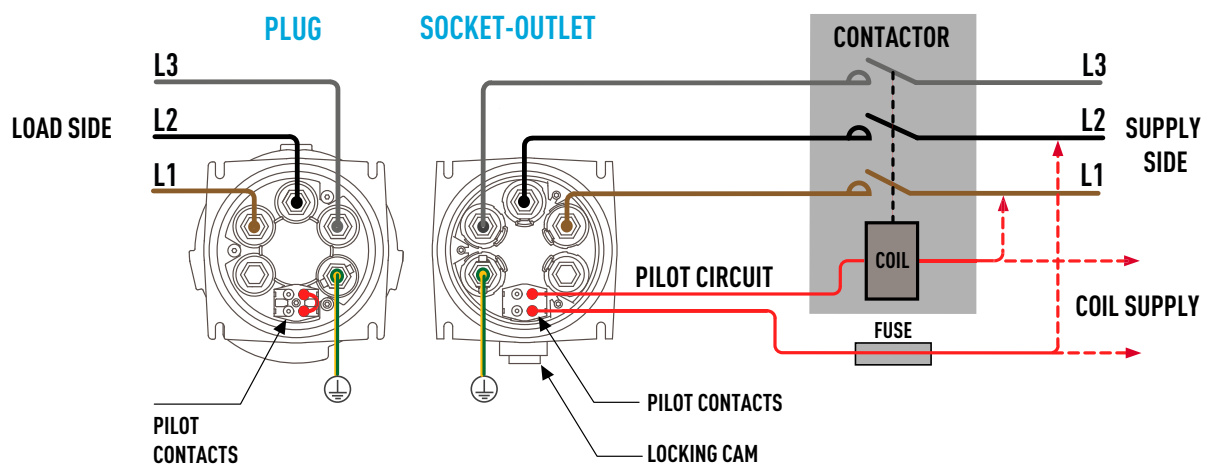
### ELECTRICAL INTERLOCKING

At this level of power, it is not possible to cut directly under load. Electrical interlocking with a switch or a pilot controlled contactor is required. Boxes with the following equipment are available upon request:

- circuit breaker or differential switch,
- contactor,
- fuses,
- loop-out enclosures,
- terminals for single pole cables...

INFOS +

#### LINE DIAGRAM OF TYPICAL PF PILOT CONTROL CIRCUIT



#### PILOT CONTACTS

	PFC	PFQ
Pilot contacts	2	2
Pilot Amperage	20 A/400 V AC	10 A/400 V AC
Interlocking Type	Mechanical	Mechanical
Terminal Type	Screw	Solder/crimp

Notes : The mechanical locking of the plug to the socket-outlet, via the rotation of a cam, closes the pilot contacts.  
Failure to use a pilot/relay system can create an electrical shock hazard.

# PFQ3 & Q4

## HEAVY-DUTY PLUGS & SOCKETS



### WALL MOUNTING INLET PFQ3



**Box**  
474A023070

**Inlet**  
4738017



### COUPLER SOCKET PFQ3



**Straight handle**  
474A013-70

**Socket-outlet**  
4734017

### MAIN FEATURES

Rated current	315 A (PFQ3)/400 A (PFQ4)	Flexible wiring (min-max)	95-240 mm <sup>2</sup>
Maximum voltage	690 V	Stranded wiring (min-max)	95-240 mm <sup>2</sup>
IP protection lid closed	IP66/IP67	Wiring for single or multi entry	
IP protection plug connected	IP66/IP67	Keying positions	10
Shock resistance	IK10	Auxiliary contacts (10 A/400 V)	6
Ambient temperature	-40 °C to +60 °C	Pilot contacts (10 A/400 V)	2

### SOCKET-OUTLET female PFQ3 (315 A)



### INLET male PFQ3 (315 A)



380-440 V AC	3P+E	4734013	4738013
220-250 V AC 380-440 V AC	3P+N+E	4734017	4738017
660-690 V AC	3P+E	4734193	4738193
380-400 V AC 660-690 V AC	3P+N+E	4734197	4738197

### SOCKET-OUTLET female PFQ4 (400 A)



### INLET male PFQ4 (400 A)



380-440 V AC	3P+E	4744013	4748013
220-250 V AC 380-440 V AC	3P+N+E	4744017	4748017
660-690 V AC	3P+E	4744193	4748193
380-400 V AC 660-690 V AC	3P+N+E	4744197	4748197

# 315 A & 400 A IP66/IP67

## BOXES STAINLESS STEEL 316 L CABLE GLAND INCLUDED



	Wiring from 95 to 150 mm <sup>2</sup>	Wiring from 150 to 240 mm <sup>2</sup>
46-50 mm	474A023050	474A023550
51-55 mm	474A023055	474A023555
56-60 mm	474A023060	474A023560
61-65 mm	474A023065	474A023565
66-70 mm	474A023070	474A023570
71-75 mm	474A023075	474A023575
76-80 mm	474A023080	474A023580
81-85 mm	474A023085	474A023585
86-90 mm	474A023090	474A023590

On request: boxes for installation in ducts, boxes equipped with circuit breaker, earth-leakage switch, contactor,...

## HANDLES



	Straight*	Angled 90°
46-50 mm	474A013-50	474A913-50
51-55 mm	474A013-55	474A913-55
56-60 mm	474A013-60	474A913-60
61-65 mm	474A013-65	474A913-65
66-70 mm	474A013-70	474A913-70
71-75 mm	474A013-75	474A913-75
76-80 mm	474A013-80	474A913-80
81-85 mm	474A013-85	474A913-85
86-90 mm	474A013-90	474A913-90

A right angled cable lug M14 with insulated sleeve

Straight cable lug M14 with insulated sleeve



## ACCESSORIES AND OPTIONS

Key for locking and operating pilot contacts	473A393
Inlet lid	474A126



**i** It is recommended to put an insulating sleeve once the lugs are crimped.

\* Trumpet gland available on request

# PFC5 & C6

HEAVY-DUTY PLUGS & SOCKETS



## WALL MOUNTING SOCKET PFCs



**Box**  
496A023070



**Socket-outlet**  
4954017

## PLUG PFCs



**Angled Handle**  
496A913-70



**Inlet**  
4945017

## MAIN FEATURES

Rated current	500 A (PFC5)/600 A (PFC6)	Flexible wiring (min-max)	95-240 mm <sup>2</sup>
Maximum voltage	1 000 V	Stranded wiring (min-max)	95-240 mm <sup>2</sup>
IP protection lid closed	IP66/IP67	Wiring for single or multi entry	
IP protection plug connected	IP66/IP67	Keying positions	7
Shock resistance	IK10	Auxiliary contacts (20 A/400 V)	2
Ambient temperature	-40 °C to +60 °C	Pilot contacts (20 A/400 V)	2

### SOCKET-OUTLET female PFCs (500 A)



### INLET male PFCs (500 A)



380-440 V AC	3P+E	4954013	4958013
220-250 V AC 380-440 V AC	3P+N+E	4954017	4958017
660-690 V AC	3P+E	4954193	4958193
380-400 V AC 660-690 V AC	3P+N+E	4954197	4958197
1000 V AC	3P+E	4954223	4958223

### SOCKET-OUTLET female PFCs (600 A)



### INLET male PFCs (600 A)



380-440 V AC	3P+E	4964013	4968013
220-250 V AC 380-440 V AC	3P+N+E	4964017	4968017
660-690 V AC	3P+E	4964193	4968193
380-400 V AC 660-690 V AC	3P+N+E	4964197	4968197
1000 V AC	3P+E	4964223	4968223



# 500 A to 600 A IP66/IP67

## BOXES STAINLESS STEEL 316 L CABLE GLAND INCLUDED



	Wiring from 95 to 150 mm <sup>2</sup>	Wiring from 150 to 240 mm <sup>2</sup>
46-50 mm	496A023050	496A023550
51-55 mm	496A023055	496A023555
56-60 mm	496A023060	496A023560
61-65 mm	496A023065	496A023565
66-70 mm	496A023070	496A023570
71-75 mm	496A023075	496A023575
76-80 mm	496A023080	496A023580
81-85 mm	496A023085	496A023585
86-90 mm	496A023090	496A023590

On request: boxes for installation in ducts, boxes equipped with circuit breaker, earth-leakage switch, contactor,...

## HANDLES



	Straight *	Angled 90°
46-50 mm	496A013-50	496A913-50
51-55 mm	496A013-55	496A913-55
56-60 mm	496A013-60	496A913-60
61-65 mm	496A013-65	496A913-65
66-70 mm	496A013-70	496A913-70
71-75 mm	496A013-75	496A913-75
76-80 mm	496A013-80	496A913-80
81-85 mm	496A013-85	496A913-85
86-90 mm	496A013-90	496A913-90

A right angled cable lug M14 with insulated sleeve

Straight cable lug M14 with insulated sleeve



## ACCESSORIES AND OPTIONS

Locking key	496A393
Inlet cap	496A126



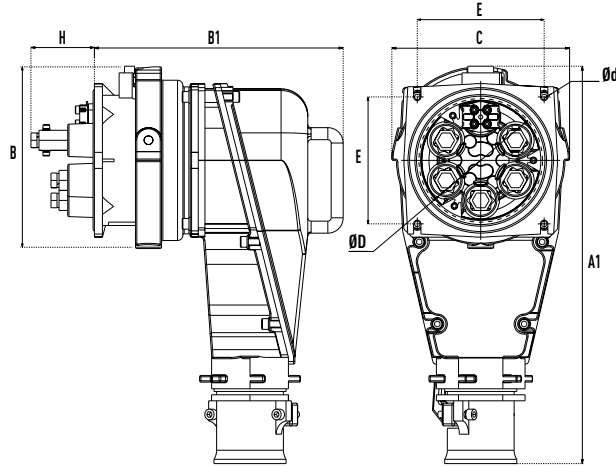
**i** It is recommended to put an insulating sleeve once the lugs are crimped.

\* Trumpet gland available on request

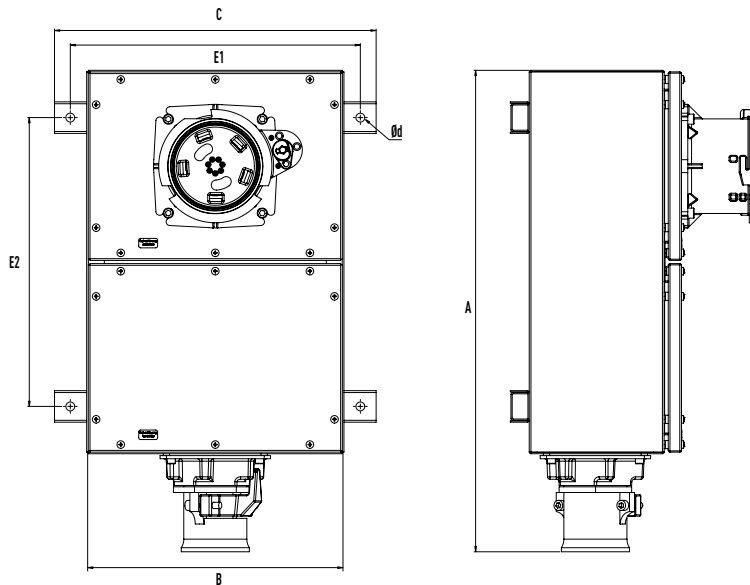


# DIMENSIONS

## PFQ/PFC



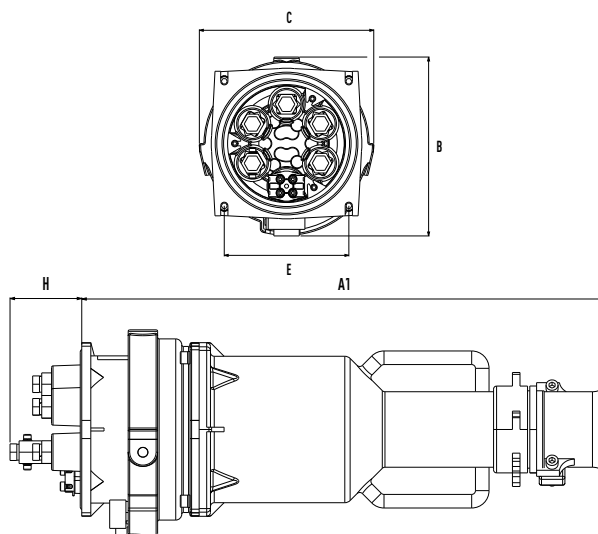
	A1	B	B1	C	E	H	Ød*	ØD max.
<b>PFQ ANGLED</b>	471	244	354	202	145	69	11	135
<b>PFC ANGLED</b>	595	273	373	266	190	95	11	185



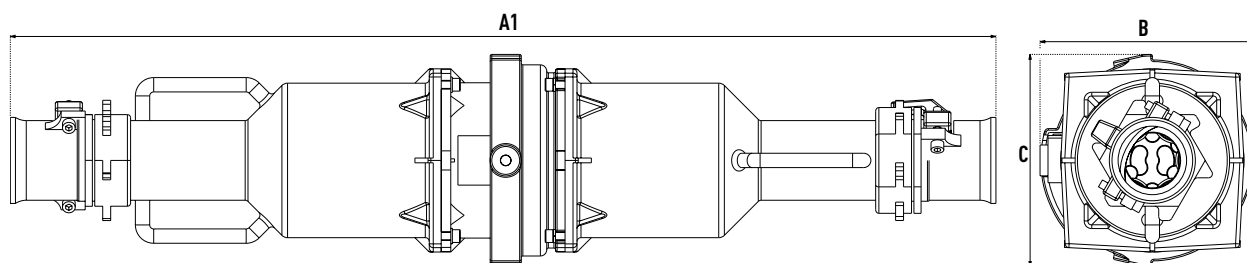
	A	B	C	E1	E2	Ød*
<b>95-150 mm<sup>2</sup></b>	764	408	510	460	458	14
<b>150-240 mm<sup>2</sup></b>	1064	408	510	460	400/800	14

\*Ød : maximum drilling diameter.

PFQ/PFC



	A1	B	B1	C	E	H	Ød*	ØD max.
PFQ STRAIGHT	645	244	-	202	145	69	11	135
PFC STRAIGHT	697	273	-	266	190	95	11	185



	A1	B	C
PFQ	1181	244	202
PFC	1238	273	266

\*Ød : maximum drilling diameter.

# SINGLE POLE POWER CONNECTOR



- Single-Pole power connectors from 75 A to 700 A-1000 V.
- High reliability, resistant to strong starting currents.
- Option : padlocking, auxiliary contact.



FIND ALL INFORMATION  
ON OUR WEBSITE:



[marechal.com](http://marechal.com)



Dimensions  
and certificates



**CS** P. 126

### SINGLE POLE POWER CONNECTOR

- From 75 to 250 A - very low voltage (maximum 50 V)
- Bayonet contact system
- Self-cleaning contacts
- 16 to 95 mm<sup>2</sup> conductors



**CS1000** P. 130

### SINGLE POLE POWER CONNECTOR

- Up to 400 A/1 000 V
- Automatic IP66/IP67 water- and dust-tight
- Mechanical fool-proofing
- Padlocking ring



**SP** P. 136

### SINGLE POLE POWER CONNECTOR

- Up to 700 A/1 000 V
- Automatic IP66/IP67 water- and dust-tight
- Electromechanical interlocking system
- Visual and mechanical coding

# CS



## SINGLE POLE POWER CONNECTOR



**250 A**

- ▶ From 75 to 250 A - very low voltage (maximum 50 V)
- ▶ Bayonet contact system
- ▶ Self-cleaning contacts
- ▶ 16 to 95 mm<sup>2</sup> conductors

## TECHNICAL FEATURES

Type CS	Wire cross-section (mm <sup>2</sup> )	In rated current (A)	i max welding cycle (A)	
			5 minutes cycles	
			60 %	30 %
CS2	16	75	100	150
	25	100	125	200
	35	125	150	250
	50	150	200	300
CS3	50	150	200	300
	70	200	250	350
	95	250	300	400

\* Definition of 30% welding cycle: on a 5 min cycle, 30% of the time working (i.e. 1 min 30 s) and 70% off (i.e. 3 min 30 s).

**INLET** male  
with lug



**PLUG**  
male with lug



Wire cross-section (mm <sup>2</sup> )	Rated current welding cycle		CS2	CS3	CS2	CS3
	60 %	30 %				
	16	100 A	150 A	4 2901 016		4 0201 016
25	125 A	200 A	4 2901 030		4 0201 030	
35	150 A	250 A	4 2901 040		4 0201 040	
50	200 A	300 A	4 2901 050	4 3901 050	4 0201 050	4 0301 050
70	250 A	350 A		4 3901 075		4 0301 075
95	300 A	400 A		4 3901 100		4 0301 100
with screw	200 A	300 A	4 2901 121			
with screw	300 A	400 A		4 3901 121		

**SOCKET-OUTLET**  
female with lug



**COUPLER**  
socket female  
with lug



Wire cross-section (mm <sup>2</sup> )	Rated current welding cycle		CS2	CS3	CS2	CS3
	60 %	30 %				
	16	100 A	150 A	4 2401 016		4 2301 016
25	125 A	200 A	4 2401 030		4 2301 030	
35	150 A	250 A	4 2401 040		4 2301 040	
50	200 A	300 A	4 2401 050	4 3401 050	4 2301 050	4 3301 050
70	250 A	350 A		4 3401 075		4 3301 075
95	300 A	400 A		4 3401 100		4 3301 100
with screw	200 A	300 A	4 2401 121			
with screw	300 A	400 A		4 3401 121		

## ADDITIONAL COPPER LUGS

**Lug choice depends on the cable:** the cross-section of the flexible cable mentioned in the table below is for information only. Please check dimensions as these may vary according to cable types and manufacturers.



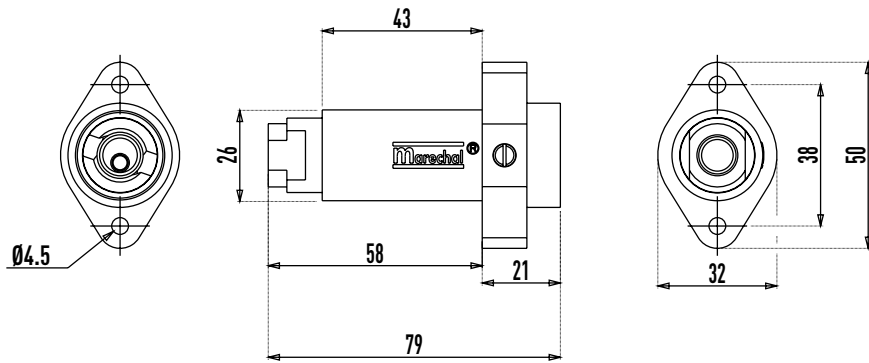
Wiring (mm <sup>2</sup> )		Straight threaded M10*	Straight threaded M14*	Internal diameter (mm)
Flexible	Stranded	CS2	CS3	
16	25	4 2 301 416		6,6
25	35	42 301 430		7,9
35	50	42 301 440		9,2
50	70	42 301 450	4 3301 450	11
70	95		4 3301 475	13,1
95	120		4 3301 400	14,5

\* Wiring with crimping lugs, according to NF C20-130 standard (for VDE 0220 standard, please contact us). Crimping: double hexagonal crimping is recommended.

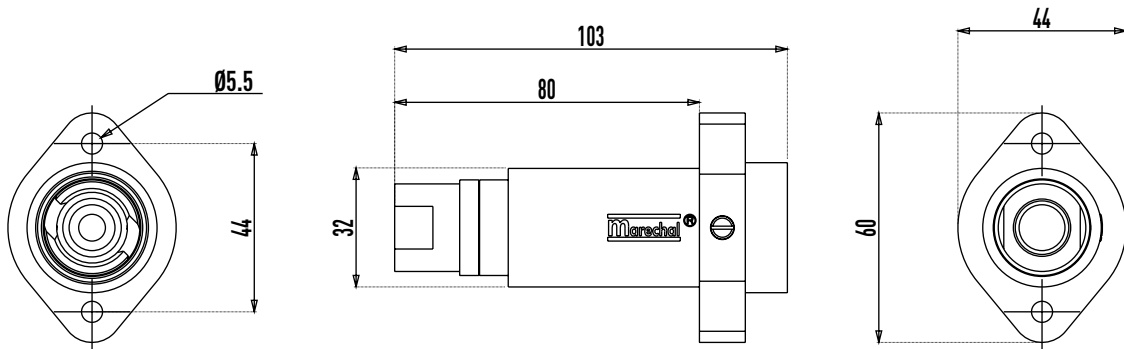


# DIMENSIONS

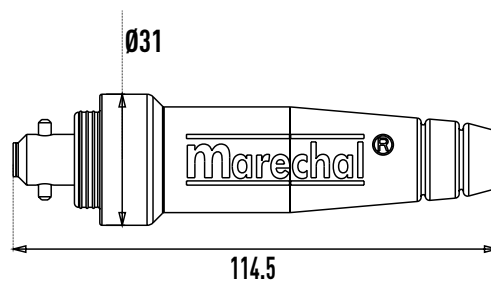
## CS2/SOCKET-OUTLET



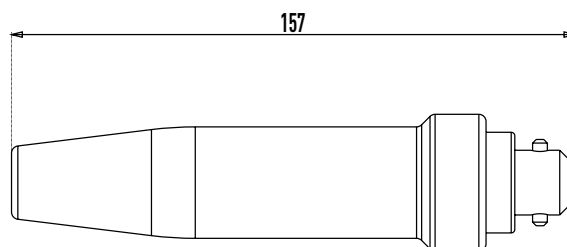
## CS3/SOCKET-OUTLET



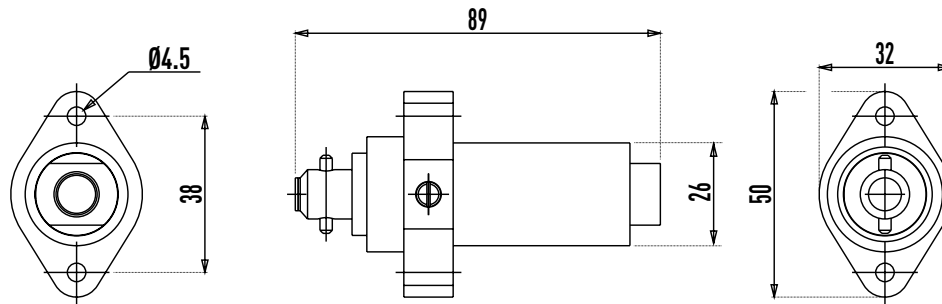
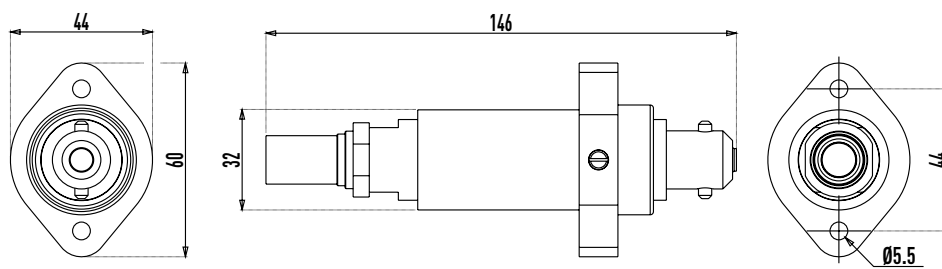
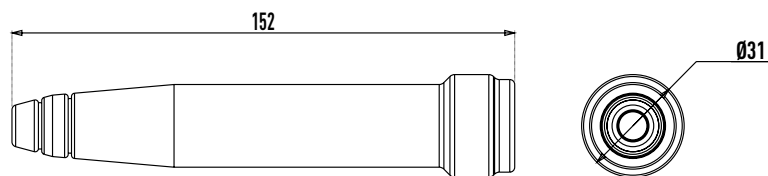
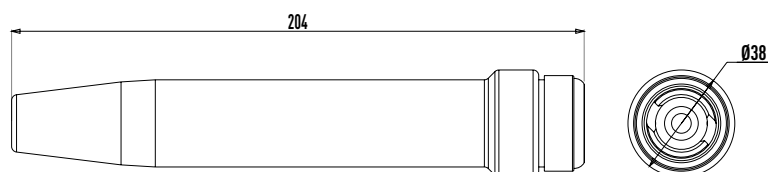
## CS2/PLUG



## CS3/PLUG





CS<sub>2</sub>/INLETCS<sub>3</sub>/INLETCS<sub>2</sub>/COUPLER SOCKETCS<sub>3</sub>/COUPLER SOCKET

# CS1000



## SINGLE POLE POWER CONNECTOR



**400 A**

- ▶ Up to 400 A/1 000 V
- ▶ Automatic IP66/IP67 water- and dust-tight
- ▶ Mechanical fool-proofing
- ▶ Padlocking ring

## MAIN FEATURES

Rated current (with wiring according to standard)	400 A	Shock resistance	IK08
Maximum voltage AC	1 000 V	Ambient temperature	-40 °C to +60 °C
Maximum voltage DC	1 500 V	Flexible wiring (min-max)	50-150 mm <sup>2</sup>
Short-circuit current I <sub>cc</sub>	20 kA pendant 250 ms	Keying positions	5, mechanical and visual
Protection	IP66/IP67	Number of operations	2 000

### Perfect safety

- Socket-outlet: IP2X finger protection, without cap,
- IP66/IP67 watertightness with cap ; or upon connection,
- Locking mechanism preventing disconnection by accident.

### Easy connection

- Mechanical fool-proofing system between phases, neutral and earth,
- Standardised colour coding (according to local regulation),
- Replacable crimping lug in case of cable damage.

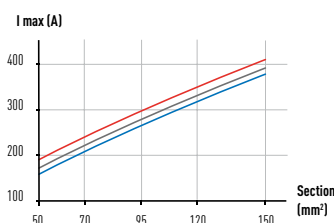
### High Performance

Thanks to its silver butt-contact technology the CS1000 connector withstands permanent current of 400 A/1 000 V AC or 1 500 V DC (wiring from 50 to 150 mm<sup>2</sup>).

### CS1000 electrical rating

Permanent permissible current for a H07RNF cable, at 30 °C ambient temperature

- Maximum permanent permissible current in the CS1000 after 2 000 operations depending on cable cross-section.
- Maximum intensity of permanent current specified by the cable manufacturers to maintain a conductor core temperature < 85 °C.
- NFC 15-100 or the IEC 60 364-5-52 standards to maintain a conductor core temperature < 70 °C.



### IP66/IP67 seal ring

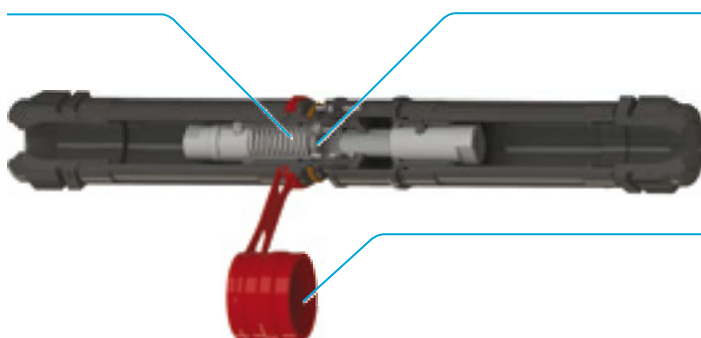


**Safety shutter**  
(IP2X protection)

**Bayonet operation**

### Spring Loaded Butt-Style Contacts

Ensures optimal contact force and superior electrical performance over thousands of operations.



### Silver-Nickel Contact Material

Solid silver-nickel contact surfaces provide:

- superior conductivity,
- corrosion resistance,
- durability.

### Protective Cap

Ensures IP66/IP67 watertightness when disconnected.

# CS1000

SINGLE POLE CONNECTOR



## INCLINED SOCKET CS1000



Inclined sleeve 30°  
453A027



Socket-outlet  
453400N

## PLUG CS1000



Straight handle poly  
453A783



Inlet  
453800N

## SOCKET-OUTLET female CS1000 (400 A) WITHOUT LUG



## INLET male CS1000 (400 A) WITHOUT LUG



### COLOR coding

Type	Europe*	Reference	Reference
L1	Brown	4534001	4538001
L2	Black	4534002	4538002
L3	Grey	4534003	4538003
Neutral	Blue	453400N	453800N
Earth	Green	453400T	453800T
Positive	Red	453400P	453800P
Negative	Black	453400M	453800M

\* The indicated references are valid for Europe and Japan. For other countries: add the suffix P80 for the USA/P67 for Australia and New Zealand/P40 for UK and South-Africa.

Type	Australia and New Zealand	Reference	Reference
L1	Red	4534001-P67	4538001-P67
L2	White	4534002-P67	4538002-P67
L3	Blue	4534003-P67	4538003-P67
Neutral	Black	453400N-P67	453800N-P67
Earth	Green	453400T-P67	453800T-P67
Positive	Red	453400P-P67	453800P-P67
Negative	Black	453400M-P67	453800M-P67

Type	USA	Reference	Reference
L1	Black	4534001-P80	4538001-P80
L2	Red	4534002-P80	4538002-P80
L3	Blue	4534003-P80	4538003-P80
Neutral	White	453400N-P80	453800N-P80
Earth	Green	453400T-P80	453800T-P80
Positive	Red	453400P-P80	453800P-P80
Negative	Black	453400M-P80	453800M-P80

### 5 MECHANICAL KEYING POSITIONS (EUROPEAN COLOR CODING)



### COPPER LUGS

**Lug choice depends on the cable:** the cross-section of the flexible cable mentioned in the table below is for information only. Please check dimensions as these may vary according to cable types and manufacturers.



Wiring (mm <sup>2</sup> )		Straight with hole <sup>(1)</sup>	Straight threaded M12 <sup>(2)</sup>	Internal diameter (mm)
Flexible	Stranded	Reference	Reference	
50	70	454A50C	454A50D	11
70	95	454A70C	454A70D	13,1
95	120	454A95C	454A95D	14,5
120	150	454A12C	454A12D	16,2
150	185	454A15C	454A15D	18

[1] For female socket-outlet.

[2] For male contact, wiring with crimping lugs, according to NF C20-130 standard (for VDE 0220 standard, please contact us). Crimping: Double hexagonal crimping is recommended.

PADLOCKING ring	SLEEVE** inclined 30° with adapter plate	ADAPTER plate	HANDLE straight	INLET cap
453A843	453A027	453A540	M32	453A753 14-25 mm
			M40	453A783 18-32 mm

\*\* The inclined sleeve is recommended to reduce cable weight effect.

### ACCESSORIES AND OPTIONS

Additional unlocking key

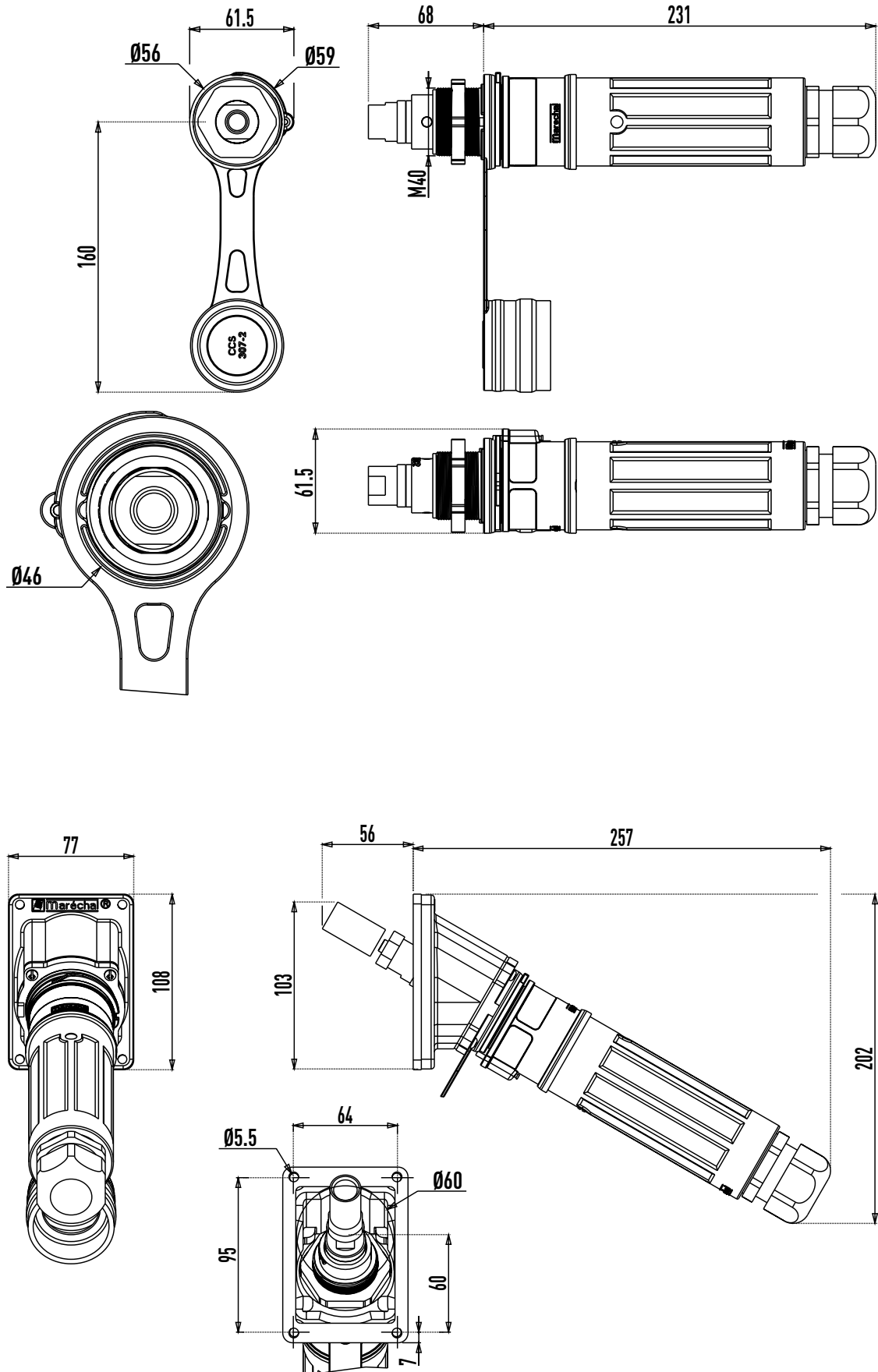


453A396



# DIMENSIONS

CS1000





# SP



## SINGLE POLE POWER CONNECTOR



**700 A**

- ▶ Up to 700 A/1 000 V
- ▶ Automatic IP66 water-and dust-tight
- ▶ Electromechanical interlocking system
- ▶ Visual and mechanical coding



## MAIN FEATURES

Rated current	700 A For higher current, please contact us	Ambient temperature	-40 °C to +60 °C
Maximum voltage AC	1 000 V	Flexible wiring (min-max)	50-400 mm <sup>2</sup>
Maximum voltage DC	1 500 V	Stranded wiring (min-max)	70-400 mm <sup>2</sup>
Short-circuit current I <sub>cc</sub>	20 kA pendant 250 ms	Keying positions	5, mechanical and visual
IP protection lid closed	IP66	Number of operations	2 000
Shock resistance	IK08	Pre-wired pilot circuit	10 A/250 V

### The highest possible safety

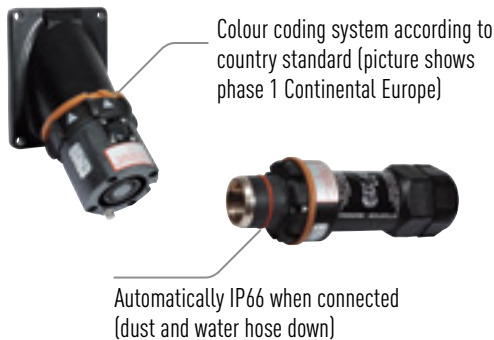
- Reliable mechanical and electrical interlocking with pilotcontact circuit.
- IP2X socket-outlet when cap removed.
- Automatic IP66 watertightness when plug is connected.

### An easily operable connector

- Straight insertion of the plug into the socket-outlet without any rotation,
- Different mechanical keying of L1, L2, L3, N and E,
- Visual identification by standard colours,
- Screwed crimping lugs facilitate cable replacement.

### Performances

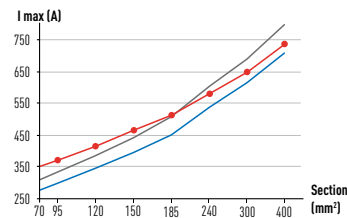
Thanks to the butt-contact principle, the SP withstands continuously up to 700 A/1000 V AC or 1500 V DC (70 mm<sup>2</sup> to 400 mm<sup>2</sup> conductors), withstands at least 2 000 operations.



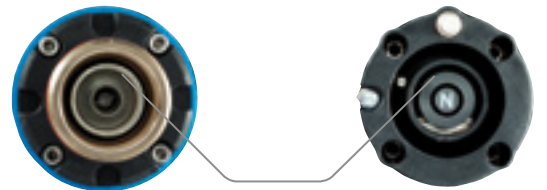
### SP Characterisation

Permissible current according to conductor cross-section at 30 °C ambient temperature

- Maximum permanent permissible current in the SP after 2 000 operations depending on cable cross-section.
- Maximum intensity of permanent current specified by the cable manufacturers to maintain a conductor core temperature < 85 °C.
- Maximum intensity of permanent current specified by the NFC 15-100 or the IEC 60 364-5-52 standards to maintain a conductor core temperature < 70 °C.

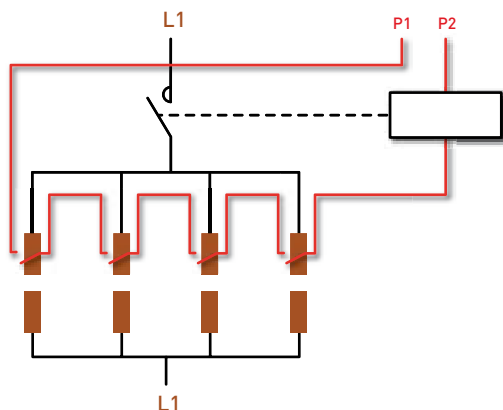


### Mechanical coding between phases

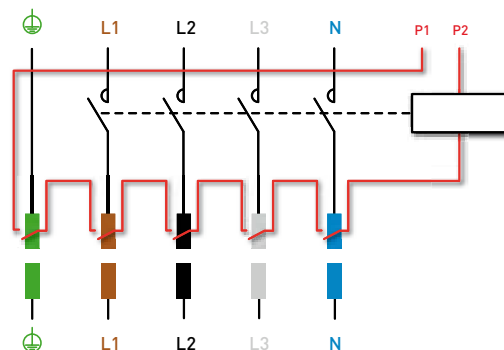


Coding ring (each phase, neutral and earth has a different diameter)

### Interlocking electrical wiring diagram: increased power with parallel connection



### Interlocking electrical wiring diagram: last connection close all the circuit





### INCLINED SOCKET SP



Inclined sleeve 45°  
454A027



Socket-outlet  
454400N



### PLUG SP



Straight handle poly  
454A753



Inlet  
454800N

### SOCKET-OUTLET female SP (700 A) WITHOUT LUG



### INLET male SP (700 A) WITHOUT LUG



### COLOR coding

Type	Europe*	Reference	Reference
L1	Brown	4544001	4548001
L2	Black	4544002	4548002
L3	Grey	4544003	4548003
Neutral	Blue	454400N	454800N
Earth	Green	454400T	454800T
Positive	Red	454400P	454800P
Negative	Black	454400M	454800M

\* The indicated references are valid for Europe and Japan. For other countries: add the suffix P80 for the USA/P67 for Australia and New Zealand/P40 for UK and South-Africa.

Type	Australia and New Zealand	Reference	Reference
L1	Red	4544001-P67	4548001-P67
L2	White	4544002-P67	4548002-P67
L3	Blue	4544003-P67	4548003-P67
Neutral	Black	454400N-P67	454800N-P67
Earth	Green	454400T-P67	454800T-P67
Positive	Red	454400P-P67	454800P-P67
Negative	Black	454400M-P67	454800M-P67

Type	USA	Reference	Reference
L1	Black	4544001-P80	4548001-P80
L2	Red	4544002-P80	4548002-P80
L3	Blue	4544003-P80	4548003-P80
Neutral	White	454400N-P80	454800N-P80
Earth	Green	454400T-P80	454800T-P80
Positive	Red	454400P-P80	454800P-P80
Negative	Black	454400M-P80	454800M-P80



**LUGS**

**Lug choice depends on the cable:** the cross-section of the flexible cable mentioned in the table below is for information only. Please check dimensions as these may vary according to cable types and manufacturers.

Wiring (mm <sup>2</sup> )		Straight with hole <sup>(1)</sup>	Straight threaded M12 <sup>(2)</sup>	Internal diameter (mm)
Flexible	Stranded	Reference	Reference	
50	70	454A50C	454A50D	11
70	95	454A70C	454A70D	13,1
95	120	454A95C	454A95D	14,5
120	150	454A12C	454A12D	16,2
150	185	454A15C	454A15D	18
185	240	454A18C	454A18D	20,6
240	300	454A24C	454A24D	23,1
300	400	454A30C	454A30D	26,1
400	500	454A40C	454A40D	29,2

[1] For female socket-outlet.

[2] For male contact, wiring with crimping lugs, according to NF C20-130 standard (for VDE 0220 standard, please contact us). Crimping: Double hexagonal crimping is recommended.

**SLEEVE\***

Inclined metal 45°



**HANDLE**

Straight



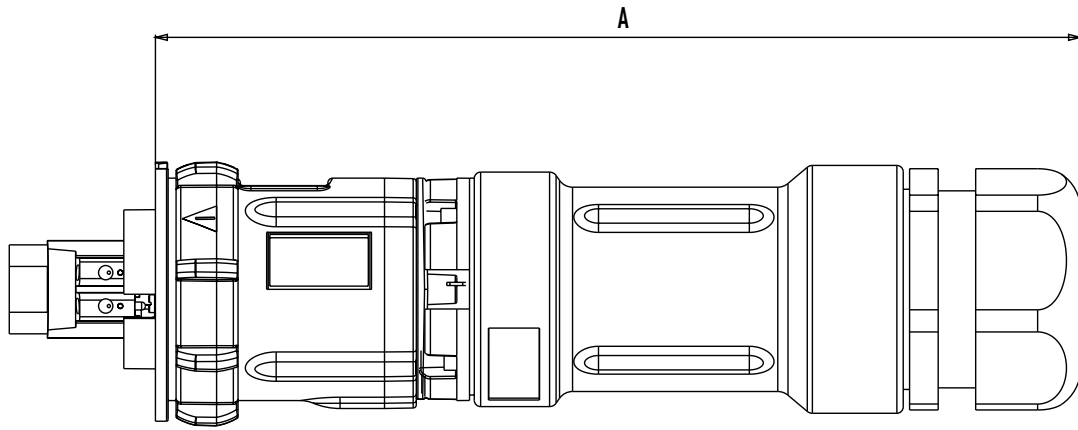
454A027	M50	454A753	17-38 mm
	M63	454A783	35-48 mm

\* The inclined sleeve is recommended to reduce cable weight effect.

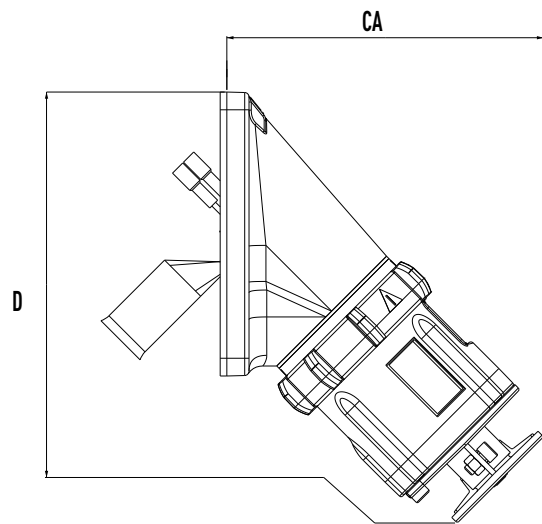
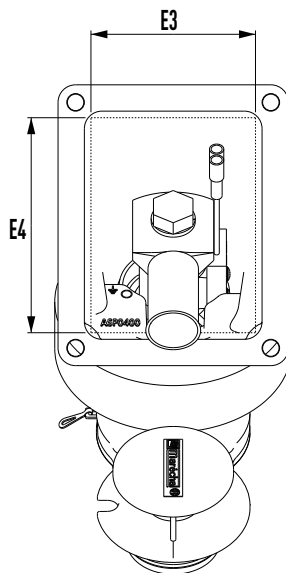
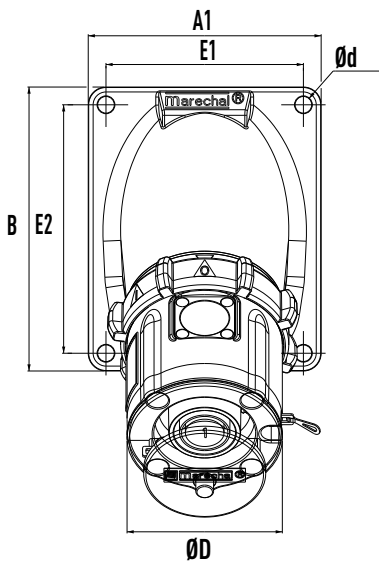


# DIMENSIONS

## SP M50/SP M63

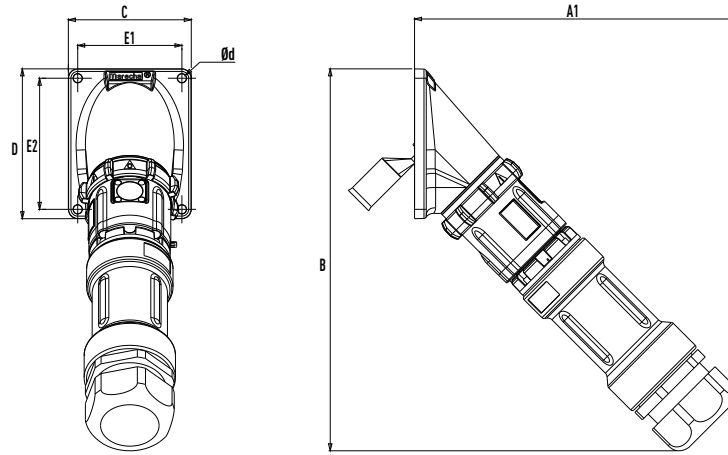


	A1
SP M50	265
SP M63	291

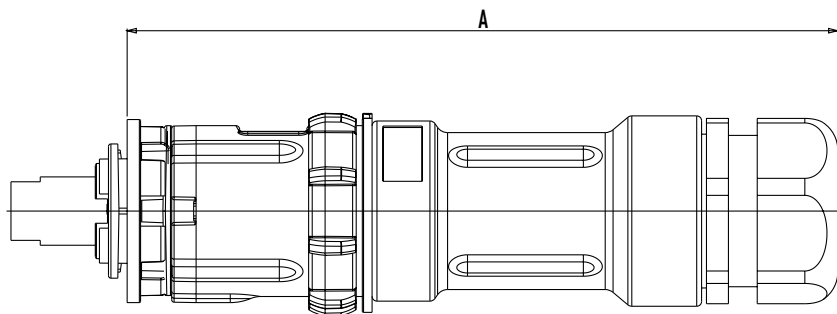


	A1	E1	B	E2	E3	E4	D	CA	Ød*	ØD max.
SP M50/SP M63	105	89	128	112	75	98	194	143	7,5	70

SP M50/SP M63



	A1	B	E1	E2	D	C	Ød*
SP M50	250	302	89	112	128	105	7,5
SP M63	275	326	89	112	128	105	7,5



	A1
SP M50	265
SP M63	291

# CUSTOMIZED SOLUTIONS



MARECHAL® offers a wide range of distribution boxes for all industrial applications and a large choice of products designed specifically for power-supply in tunnels.

FIND ALL INFORMATION  
ON OUR WEBSITE:



[marechal.com](http://marechal.com)



Dimensions  
and certificates



**BM** P. 144

### MODULAR BOXES

- Assembly from 1 to 6 modules
- IP66/IP67 sealing
- 1 or 2 cable glands per side
- Range of protection levels available



**CD** P. 146

### DISTRIBUTION BOX

- From 16 A up to 63 A
- RCD protection
- Inspection trap
- 1 or 2 MARECHAL® socket-outlets
- Range of protection levels available



**BG/CRIC/BRP** P. 150

### LIQUEFIED GAS TRANSFER BOXES

- Carrier safety
- 30 mA protection
- Guaranteed lorry grounding



**TUNNELS** P. 152

### BOXES AND CONNECTORS

- No cable cutting
- Fire-resistant boxes
- Wall mounting socket-outlet for smoke accelerators
- Fire brigade boxes



**CUSTOM** P. 158

### BOXES, EXTENSIONS AND CABLE REEL

- Distribution boxes
- Portable power distribution
- Cable assembly
- Construction case

# BM



## MODULAR BOXES



**16 A → 63 A**

- ▶ Assembly from 1 to 6 modules
- ▶ IP66/IP67 sealing
- ▶ 1 or 2 cable glands per side
- ▶ Range of protection levels available



## MAIN FEATURES

	BM
Material	Impact-resistant thermoplastic (IK08)
Fastenings	Captive stainless steel screws
Protection mode	IP66/IP67
Rated current	From 16 to 63 A
Wiring	2 x 1,5 mm <sup>2</sup> to 5 x 35 mm <sup>2</sup>
Wall box dimensions (HxWxD) in mm	170 x 170 x 118 (80 without lid)
Assembly	1 or 2 cable gland per side



Wall boxes can be used alone mounting accessories to socket-outlets and inlets to form a wall mounting socket or a wall mounting appliance inlet. These solutions are described in the PN, DS and DSN pages.



## BOXES FITTED WITH SOCKET-OUTLETS AND PLUGS

**Inclined box - 1 socket-outlet**

Inclined box made of thermoplastic material (IP66/67 - IK 08), with a flat lid, including:

- A MARECHAL® socket from 16 A to 63 A, polarities from 2P to 3P+N+E, voltages from 24 V to 690 V: PN/DSN1 (16 A) - DS1 (30 A) - DSN3 (32 A) - DS3 (50 A) - DSN6 (63 A) - DS6 (90 A).
- The box is not drilled (drilled at extra cost).
- Entries from M16 to M40.
- Earth-leakage circuit breaker protection as standard. Other types of protection (earthleakage switch, fuses etc) available on request.

**Inclined box with an inspection window - 1 socket-outlet**

Inclined box made of thermoplastic material (IP66/IP67 - IK 08), with an inspection window, including:

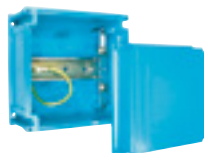
- A MARECHAL® socket from 16 A to 63 A, polarities from 2P to 3P+N+E, voltages from 24 V to 690 V : PN/DSN1 (16 A) - DS1 (30 A) - DSN3 (32 A) - DS3 (50 A) - DSN6 (63 A)
- The box is not drilled (drilled at extra cost).
- Entries from M16 to M40.
- Earth-leakage circuit breaker protection as standard. Other types of protection (earthleakage switch, fuses etc) available on request.

## BASIC ELEMENTS

**WALL** box

Products	Entries	Earth terminal	Dimensions*	Reference
<b>PN or DSN1</b>	for 2 from M16 to M32 per side	With	127 x 127 x 172	511C7000
<b>DS1 or DSN3</b>	for 2 from M16 to M32 per side	With	127 x 127 x 172	512C7000
<b>DS3 or DSN6</b>	for 2 from M16 to M40 per side	With	170 x 170 x 201	513C7000
<b>DS6</b>	for 2 from M16 to M40 per side	With	170 x 170 x 201	514C7000

Boxes are not drilled (drilled at extra cost).  
\* H x W x D

**BOX** for terminal blocks with flat lid

Dimensions*	Reference
170 x 170 x 118	509ACP2

Boxes for terminal blocks include a DIN rail and an earth terminal. The box accommodates a 130-mm wide terminal box and can be equipped with a domestic socket-outlet (ref. 509AD40).  
\* H x W x D

**BOX** with inspection window

Dimensions*	Reference
170 x 170 x 118	509ACF2

The box is designed for 1 to 8 module assemblies.  
\* H x W x D

**COUPLING** units (batch of 2)

Inside diameter	Reference
26 mm	509AML1

These coupling units are used to connect 2 boxes together (vertically).

## INFOS +

These boxes are available with other circuit-breakers, fuses, decontactors and plug and sockets. Please contact us to communicate your needs.

To order plugs associated to the sockets mounted on the boxes, please see pages related to DSN1, DSN3, DSN6, DS1, DS3 and PN.

# CD



## DISTRIBUTION BOX



**16 A/32 A/63 A**

- ▶ IP66/IP69K water-and dust-tight
- ▶ RCD protection
- ▶ 1 or 2 MARECHAL® socket-outlets
- ▶ Complies with IEC/EN 61439-1 and IEC/EN 61439-3,
- ▶ Composed of two parts fixed on hinges
- ▶ Pre-wired ready for installation
- ▶ UV protected

## MAIN FEATURES

	CD
Material	Impact-resistant thermoplastic (IK09)
Fastenings	Captive stainless steel screws
Protection mode	IP66/IP69k - IP44 with domestic sockets
Rated current	From 16 to 63 A
Wiring capacity	2 x 1,5 mm <sup>2</sup> to 5 x 35 mm <sup>2</sup>
Cable entries	M50 max.
Housing dimensions (WxHxD) in mm	345 x 225 x 156
Assembly	10 modules max.



Ready wired for installation.



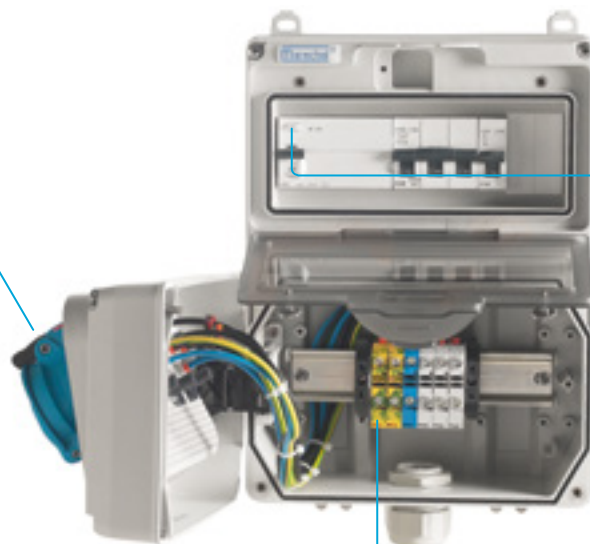
### DECONTACTOR™ DSN1

16 A - 1P+N+E  
220-250 V



### DECONTACTOR™ DSN3

32 A - 3P+N+E  
220-250 V/380-440 V



Terminal  
3P+N+E 16 mm<sup>2</sup>

Cable gland  
M32 Poly (14-25 mm)

### Protection

- Main switch with RCD 30 mA  
1x40A 3P+N
- Circuit breaker PC1 :  
1x16 A 1P+N
- Circuit breaker PC2 :  
1x32 A 3P+N

## COMPOSITION

### INSIDE box

Box	Main switch with RCD 30mA	Circuit breaker Socket 1	Circuit breaker Socket 2	Terminal	Cable gland mm
CD1		1x16 A 1P+N 30mA		1P+N+E 16 mm <sup>2</sup>	M25 POLY (9-18)
CD2	1x25 A 1P+N	1x16 A 1P+N	1x16 A 1P+N	1P+N+E 16 mm <sup>2</sup>	M25 POLY (9-18)
CD3		1x16 A 3P+N 30mA		3P+N+E 16 mm <sup>2</sup>	M25 POLY (9-18)
CD4		1x16 A 3P 30mA		3P+E 16 mm <sup>2</sup>	M25 POLY (9-18)
CD5	1x25 A 3P+N	1x16 A 3P+N	1x16 A 3P+N	3P+N+E 16 mm <sup>2</sup>	M25 POLY (9-18)
CD6*		+ 2 fuses 6 A Gg		1P+N+E 16 mm <sup>2</sup>	M25 POLY (9-18)
CD7	1x25 A 1P+N	1x16 A 1P+N	1x16 A 1P+N	1P+N+E 16 mm <sup>2</sup>	M25 POLY (9-18)
CD8		1x32 A 1P+N 30mA		1P+N+E 16 mm <sup>2</sup>	M32 POLY (14-25)
CD9	1x40 A 1P+N	1x32 A 1P+N	1x32 A 1P+N	3P+N+E 16 mm <sup>2</sup>	M32 POLY (14-25)
CD10		1x32 A 3P+N 30mA		3P+N+E 16 mm <sup>2</sup>	M32 POLY (14-25)
CD11	1x40 A 3P+N	1x32 A 3P+N	1x32 A 3P+N	3P+N+E 16 mm <sup>2</sup>	M32 POLY (14-25)
CD12	1x40 A 3P+N	1x16 A 1P+N	1x32 A 3P+N	3P+N+E 16 mm <sup>2</sup>	M32 POLY (14-25)
CD13	1x40 A 3P+N	1x16 A 1P+N	1x32 A 3P+N	3P+N+E 35 mm <sup>2</sup>	M40 POLY (18-32)
CD14	1x40 A 3P+N	1x16 A 1P+N	1x32 A 3P+N	3P+N+E 16 mm <sup>2</sup>	M32 POLY (14-25)
CD15		1x63 A 3P+N 30mA		3P+N+E 16 mm <sup>2</sup>	M40 POLY (18-32)
CD16*	1x25 A 3P+N	+ 2 fuses 6 A Gg	1x16 A 3P+N	3P+N+E 16 mm <sup>2</sup>	M32 POLY (14-25)

\* CD6 and CD16 boxes are equipped with a 160 VA 230 V/24 V transformer. Maximum operating temperature: 40 ° C

Type	French standard socket 16 A - 230 V	16 A socket		16 A socket		32 A socket		63 A socket		MARECHAL® Decontactor™ associated*	
		24 V	220-250 V	380-440 V	220-250 V	380-440 V	220-250 V	380-440 V	220-250 V	380-440 V	DSN range
Box	2P+E	2P	1P+N+E	3P+E	3P+N+E	1P+N+E	3P+N+E	3P+N+E	3P+N+E		
CD1			1							6114015CD1	3114015CD1
CD2			2							6114015CD2	3114015CD2
CD3					1					6114017CD3	3114017CD3
CD4				1						6114013CD4	3114013CD4
CD5					2					6114017CD5	3114017CD5
CD6		1								611408ACD6	311408ACD6
CD7	1		1							6114015CD7	3114015CD7
CD8						1				6134015CD8	3134015CD8
CD9						2				6134015CD9	3134015CD9
CD10								1		6134017CD10	3134017CD10
CD11								2		6134017CD11	3134017CD11
CD12			1					1		6134017CD12	3134017CD12
CD13			1					1		6134017CD13	3134017CD13
CD14	1							1		6134017CD14	3134017CD14
CD15									1	6164017CD15	
CD16		1 [PN range]			1					6114017CD16	3114017CD16

\* CD6 and CD16 boxes are equipped with a 160 VA 230V/24V transformer. Maximum operating temperature: 40 °C.



Other configurations on request.  
Please contact us for references.

**INFOS +**

The CD box can be mounted on a support.  
Frame ref. : 9CHAS-CD





# BG/ CRIC/BRP



## EQUIPMENT



### Transfer boxes

- ▶ Carrier safety
- ▶ 30 mA protection
- ▶ Guaranteed lorry grounding

Safe connection box for loading and unloading liquefied gas from vehicles



### Connection terminals

- ▶ From 2 x 1.5 to 2 x 120 mm<sup>2</sup>
- ▶ Vibration-resistant
- ▶ Thermal cycling-resistant and anti-shearing terminals



### Portable service box

- ▶ From 2 to 4 outlets
- ▶ From 16 to 90 A
- ▶ 24, 230 or 400 V
- ▶ Protection on request

### MAIN FEATURES

- RCD 30 mA protection
- Truck Earth linkage warranty
- Fixation: 300 x 300 mm
- Height: 470 mm
- Depth: 250 mm
- IP68 M40 (Ø 20 to 32 mm) cable gland



### THIS BOX IS DESIGNED TO ACHIEVE FIVE KEY FUNCTIONS:

- 1 - Compliance with **the NFC 15 100 installation standard.**
- 2 - Compliance with **users protection decrees** (workers and goods).
- 3 - **Mobile facilities protection.**
- 4 - Switching off the socket on the rest position.
- 5 - Personnel safety.



	Current	Voltage	Box part number	Gas Type	Plug part number	
					Inlet	+ Handle
<b>DN6</b>	80 A	400 V	1---9 0670 A	Nitrogen*	19 68 037 Z0078	+ 555P0D35 (see DN6)
<b>DN6</b>	80 A	230 V	1---9 0670 B	Oxygen and nitrogen*	19 68 037	+ 555P0D35 (see DN6)
<b>DN1</b>	16 A	400 V	1---9 0670 C	Co <sub>2</sub>	19 18 017	+ 513P0D30
<b>DS9</b>	100 A	400 V	3---9 0670 D	Hydrogen	39 98 017	+ 555P0D35 (see DS9)

\* According to truck size.



### CRIC - TERMINALS FROM 2 X 1.5 TO 2 X 120 mm<sup>2</sup>

The CRIC terminals are characterised by:

- perfectly tight: no tool required,
- a spring placed inside the terminal head compensates for strand settlement and copper yield.
- Spring-assisted tightening (even after copper yield)
- Vibration-resistant, thermal cycling-resistant and anti-shearing terminals
- Comply with the NFC 20-110 standard



### BRP : PORTABLE SERVICE BOXE

IP 54 Polyester box (2-3-4 outlets).

- Entry by cable gland (maximum 4 outlets)
- Entry by inlet (maximum 3 outlets)
- From 16 to 90 A - DS, DSN or DN 24, 230 or 400 V plugs and socket-outlets
- Protection on request



Terminal	Wiring	insulated with fixing part	insulated + screw with rear part	Earth with treaded hole	Earth + screw with rear part	Earth + screw with treaded hole	insulated without fixing part	Protecting cap
<b>T6</b>	2 x 1,5 mm <sup>2</sup> to 2 x 6 mm <sup>2</sup>	6 TA 6	6 TB 6	6 TD 6	6 TE 6	6 TF 6	6 TV 6	-
<b>T16</b>	2 x 4 mm <sup>2</sup> to 2 x 16 mm <sup>2</sup>	6 TA 16	6 TB 16	6 TD 16	6 TE 16	6 TF 16	6 TV 16	-
<b>T35</b>	2 x 6 mm <sup>2</sup> to 2 x 35 mm <sup>2</sup>	6 TA 35	6 TB 35	6 TD 35	6 TE 35	6 TF 35	6 TV 35	-
<b>B70</b>	2 x 25 mm <sup>2</sup> to 2 x 70 mm <sup>2</sup>	6 BA 70	6 BB 70*	6 BD 70	6 BE 70	6 BF 70	-	6 C 70
<b>B120</b>	2 x 50 mm <sup>2</sup> to 2 x 120 mm <sup>2</sup>	6 BA 120	6 BB 120*	6 BD 120	6 BE 120	6 BF 120	-	6 C 120

\* Rod non insulated.

# TUNNELS



## BOXES AND CONNECTORS



**MARECHAL ELECTRIC** is now a leading company in the electric connection for tunnels. Based on technology specially intended for such difficult environments and quick light disconnection, **MARECHAL ELECTRIC** has already equipped more than 700 km of underground roads, railroads and inland waterways...

Always with the same objective: provide user safety, optimise maintenance and make the work of emergency services easier.



**PRODUCTS SUITED FOR SPECIAL TUNNEL ENVIRONMENTS**

Very often in a tunnel, there is dust, stone projections, smoke, gas, moisture, water streaming and, of course, pollution. Electric connections in tunnels are subjected to extremely corrosive conditions. Designed to withstand such conditions, MARECHAL® boxes equipped with connectors or deconnectors provide safe solutions for tunnel maintenance.

**WATERTIGHTNESS**

All boxes are watertight and withstand the use of high-pressure washing during the tunnels' maintenance.

**CORROSION AND IMPACT RESISTANCE  
HALOGENE AND SMOKE FREE**

For optimum safety, the materials used for making Marechal® boxes and connectors are resistant to corrosion and impact (resistance IK09). In case of fire, these materials emit no smoke or dangerous product.

**QUALITY CONNECTION AND EASY DISCONNECTION:  
USE OF BUTT-CONTACT**

Easy disconnection = easy maintenance: thanks to the MARECHAL® silver-nickel butt-contact technology, the contacts are never welded. Therefore, the connection quality remains absolutely stable, and the disconnection can be done any time, even after several years.

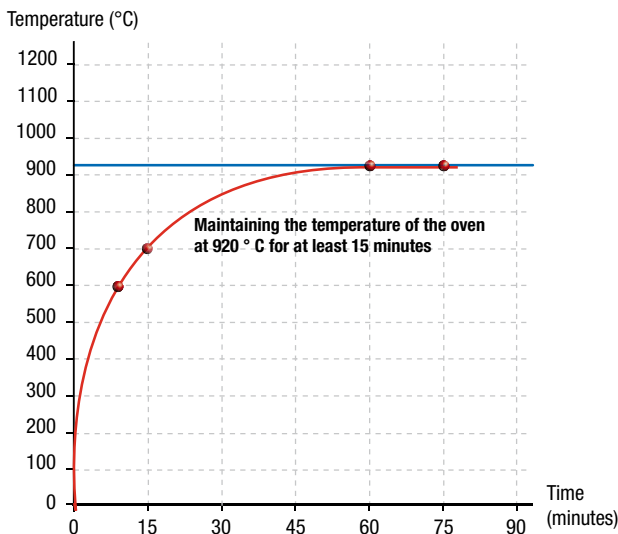
**STANDARDS AND CERTIFICATIONS**

Supply circuits for emergency lighting installed in tunnels must meet the following requirements:

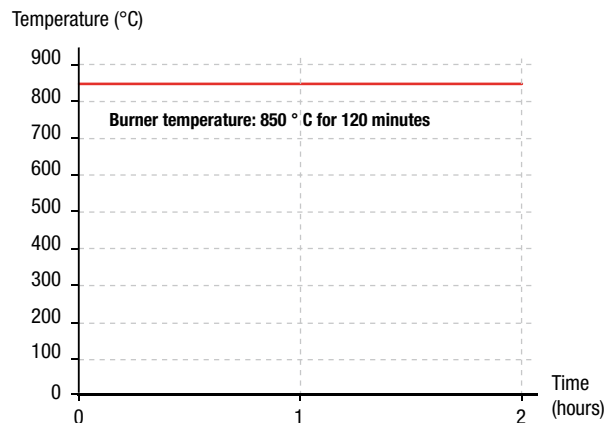
- EN 50362 European standard.
- French government Directive No. 2000-63 of 25 August 2000 on safety in tunnels and national road network.
- NF C 32-070 French standards.
- Guides CETU defining the fire behavior of road tunnels.

To meet these requirements, MARECHAL® equipments are among the only on the market to have been tested and certified by:

- C.S.T.B France - Centre Scientifique et Technique du Bâtiment.
- IMQ laboratory in Ital.



Oven temperature curve - standardized time  
NF C 32-070 standard



Flame temperature curve - Time  
NF EN 50362 standard



Consult us

### MAIN FEATURES

	POLY BOXES
Service terminals	2 to 5 insulation-piercing.
Service protection	By circuit breaker fitted to DIN rail
Cables accepted	Armoured and unarmoured cables, stranded or flexible, from 2,5 mm <sup>2</sup> to 35 mm <sup>2</sup> (for conductors above 25 mm <sup>2</sup> , the main cable must be cut).
Internal and external Earth point	Inside and outside the enclosure
Ingress Protection	IP66 according to NF EN 60529
Shock resistance	IK09 according to NF EN 50102
Fire smoke class	M1F0
Self extinguishing material	UL94-V0
Modularity box Options Other equipment	<ul style="list-style-type: none"> <li>• Supply of service leads fitted with MARECHAL® coupler sockets</li> <li>• Accessories for fixing box to cable tray or ladder.</li> <li>• "Power On" signal light</li> <li>• Alternative non-piercing terminals</li> <li>• Alternative Protection: single phase circuit breaker</li> <li>• Plate for external fixing</li> </ul>

### DERIVATION BOXES WITHOUT CUTTING MAIN CABLE - STANDARD LIGHTING.

Made from halogen free fiberglass reinforced polyester compound or thermoplastic, these boxes allow a service tap-off from the main through cable without the need to strip or cut the main cable. "Snail" type gasket allow the immediate positioning of cables with a maximum diameter of 28 mm whilst creating an IP67 seal. The box lid, fitted with a retaining cord, is fixed to the box by means of captive stainless steel screws.



**EXPRESS®** box made from halogen free fiberglass reinforced polyester compound

Type	H x L x P en mm	Distribution
91150	268 x 272 x 111	Maximum 2 tap-offs using 2 sockets Maximum 4 tap-offs using glands



**EXPRESS®** Box made from halogen free thermoplastic

Type	H x L x P en mm	Distribution
93036	190 x 522 x 121	Maximum 2 tap-offs using 2 sockets Maximum 4 tap-offs using glands

# TUNNELS

DISTRIBUTION BOXES FIRE RESISTANT



Consult us

## MAIN FEATURES

	POLY BOXES	STAINLESS STEEL 316 L BOXES
<b>Fire resistance</b>	Electrical continuity of the main cable guaranteed: <ul style="list-style-type: none"> <li>• NF C 32-070 : oven temp. 920°C - temperature increases.</li> <li>• NF EN 50362 : oven temp. 850°C - temperature increases.*</li> </ul>	Electrical continuity of the main cable guaranteed to oven temp. 920°C - temperature increases according to NFC 32-070 standard.
<b>Service terminals</b>	<ul style="list-style-type: none"> <li>• 2 to 5 insulation-piercing, stainless steel connectors, fitted into a ceramic base. The whole arrangement is fitted to the wall by means of a stainless steel plate.</li> <li>• 2 to 5 insulation-piercing only under EN 50362</li> </ul>	2 to 5 insulation-piercing, stainless steel connectors, fitted into a ceramic base.
<b>Service protection</b>	By fuse or circuit breaker fitted to DIN rail	By fuse or circuit breaker mounted on ceramic base.
<b>Cables accepted</b>	Armoured and unarmoured cables, stranded or flexible, from 4 mm <sup>2</sup> to 25 mm <sup>2</sup> . (For conductors above 25 mm <sup>2</sup> , the main cable must be cut.)	Cables up to 185 mm <sup>2</sup> .
<b>Internal and external Earth point</b>		Inside and outside the enclosure
<b>Ingress Protection</b>		IP66 according to NF EN 60529
<b>Shock resistance</b>		IK09 according to NF EN 50102
<b>Fire smoke class</b>	M1F0	
<b>Self extinguishing material</b>	UL94-V0	
<b>Modularity box Options Other equipment</b>	<ul style="list-style-type: none"> <li>• Supply of service leads fitted with MARECHAL® coupler sockets</li> <li>• Accessories for fixing box to cable tray or ladder.</li> <li>• "Power On" signal light</li> <li>• Alternative non-piercing terminals</li> <li>• Alternative Protection: single phase circuit breaker</li> <li>• Plate for external fixing</li> </ul>	<ul style="list-style-type: none"> <li>• Supply of service leads fitted with MARECHAL® coupler sockets</li> <li>• Alternative Protection: single phase circuit breaker</li> </ul>

\* Only for EXPRESS® BOX Part no. 91151

## DISTRIBUTION BOXES FIRE RESISTANT - EMERGENCY LIGHTING, SIGNALLING, SIGNPOSTING

### Poly boxes

Made from halogen free fiberglass reinforced polyester compound, these boxes allow a service tap-off from the main through cable without the need to strip or cut the main cable, known as type CR1-C1, conforms to NF C 32-070 or type FTG10(O) M1 0.6 KV conforms to EN 50362. "Snail" type gasket allow the immediate positioning of cables with a maximum diameter of 28mm whilst creating an IP67 seal. The box lid, fitted with a retaining cord, is fixed to the box by means of captive stainless steel screws.

### Stainless steel boxes

Made from AISI 316 L, these boxes allow a service tap-off from the main through cable. Known as type CR1-C1, it conforms to NF C 32-070. The main cable through the box through the cable glands and is connected to stainless steel terminals mounted on ceramic base. The box lid is fixed to the box by means of captive stainless steel screws.



**EXPRESS®** box made from halogen free fiberglass reinforced polyester compound

Type	CSTB Certificate	IMQ Certificate	H x L x P in mm	Distribution
91151	RS10-083	AC.00646	268 x 272 x 111	Maximum 2 tap-offs using 2 sockets. Maximum 4 tap-offs using glands.



**STAINLESS** steel 316 L box

Type	CSTB Certificate	H x L x P en mm	Distribution
91141	RS15-077 RS15-124	140x200x130 500x500x160	Cable gland cable diameter greater than 25mm <sup>2</sup>

# FIRE BOXES

FIRE DEPARTMENT BOX - SECURITY RECESS



Consult us

## MAIN FEATURES

Service protection	Differential circuit breaker 30 mA.
Internal and external Earth point	Inside and outside the enclosure
Ingress Protection	IP55 (metal) IP66/69K (thermoplastique) according to NF EN 60529
Shock resistance	IK09 according to NF EN 50102

## ALUMINIUM BOX

Especially developed in collaboration with emergency services who specialise in tunnel rescue, this box is installed in a security recess. Completely made of aluminium, this box is composed of a back box, an inclined cover with an inspection window. The power of this kit is carried by cables 5G16 mm<sup>2</sup> max. The box lid is fixed to the box by means of captive stainless steel screws.



### ALUMINIUM box

Type	H x L x P in mm	Distribution
91277	345 x 280 x 125	One or two MARECHAL® decontactor (DS or DN) can be fit on the inclined cover.

## THERMOPLASTIC BOX

Natural evolution of the aluminum version, this cabinet fulfills the same functions by adding an IP66 waterproof or even IP69K (high cleaning pressure). And resistance to corrosion due to salting.

This box is composed of two parts fixed on hinges:

- a protection part, with a transparent window (locking key in option),
- a terminal part for a quick access to the connection.

The assembly is in captive stainless steel screws.



### THERMOPLASTIC box

Type	H x L x P in mm	Distribution
3134017CDxx	342 x 225 x 156	One to two MARECHAL® sockets of type DS or DSN can be mounted



# CUSTOM



**BOXES,  
EXTENSIONS  
AND CABLE REEL**



In direct connection with its production of industrial electrical socket-outlets, MARECHAL ELECTRIC has the internal skills to offer you complete customized solutions. From cable assembly to the power distribution box.

Contact us.

EXAMPLE OF SOLUTIONS'



Portable rubber box



Automatic cable reel



Equipped cable reel



Boxes of all sizes and materials, GRP, sheet metal or stainless steel.



Cable assembly