



GENERAL CATALOGUE

INDUSTRIAL PLUGS & SOCKET-OUTLETS
DECONTACTOR™ & BOXES



Marechal®

The image shows a close-up of a dark, metallic surface. At the top center, there is a circular bolt or fastener. Below it, the word "Marechal" is embossed in a stylized, lowercase font, followed by a registered trademark symbol (®). Below the text, there are four horizontal, rounded rectangular indentations or grooves, stacked vertically.

DECONTACTOR™ = SWITCH + INDUSTRIAL SOCKET-OUTLET

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

Page 14

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.
PN12C	DS7C3	GRP or Metal casing with automatic IP55/66/67 dust & liquid.
DN20C		Option : padlocking.
		Vibration & Shock resistance.

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INDUSTRIAL SOCKET-OUTLET

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

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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.
SP	Option : padlocking, auxiliary contact.

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CUSTOMIZED SOLUTIONS

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

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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.
DX	Full load breaking from 20 A till 200 A Umax 750 V,
	Option : padlocking, self-ejection, auxiliary contact.
	Vibration & Shock resistance.

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MULTICONTACT CONNECTORS/⚡ Zone

PXN12C	Available under ATEX/ IECEx for Zone 1, 2, 21, 22.
DXN25C	Multipin connector range from 12 to 37 pin.
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.

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COMPACT CONNECTOR/⚡ Zone

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

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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.
	High reliability, resistant to strong starting currents.
	Option : padlocking, auxiliary contact.

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CUSTOMIZED SOLUTIONS/⚡ Zone

MXBS	Available under ATEX/ IECEx for Zone 1, 2, 21, 22.
MXBJ	Customized socket distribution, junction or control enclosures.
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.

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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 MARECHAL® 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, the dozens of patents (filed in more than 50 countries) and the choice of the highly 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 m², 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.

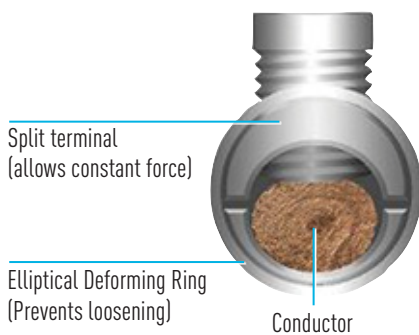
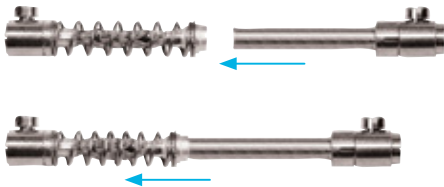
MARECHAL® also participates in the work of study committees (IEC and CENELEC) such as TC64, TC18 and TC69.

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



DECONTACTOR™, A ONE OF A 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 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 wear seen with pin and sleeve sockets. 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™ sockets 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.

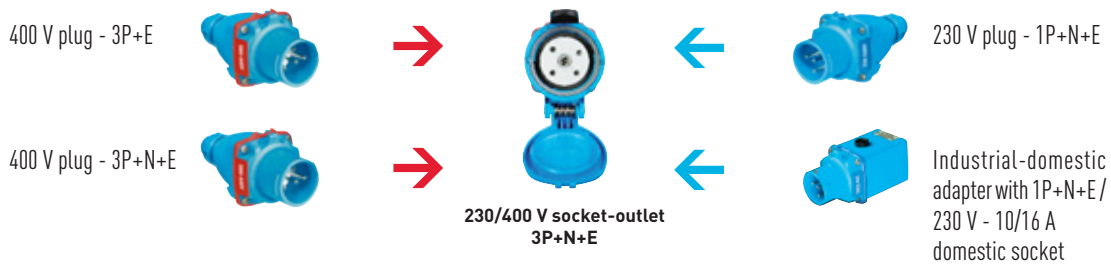


ECONOMY OF INSTALLATION: DUAL-VOLTAGE

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

- a 3 PNE - 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.

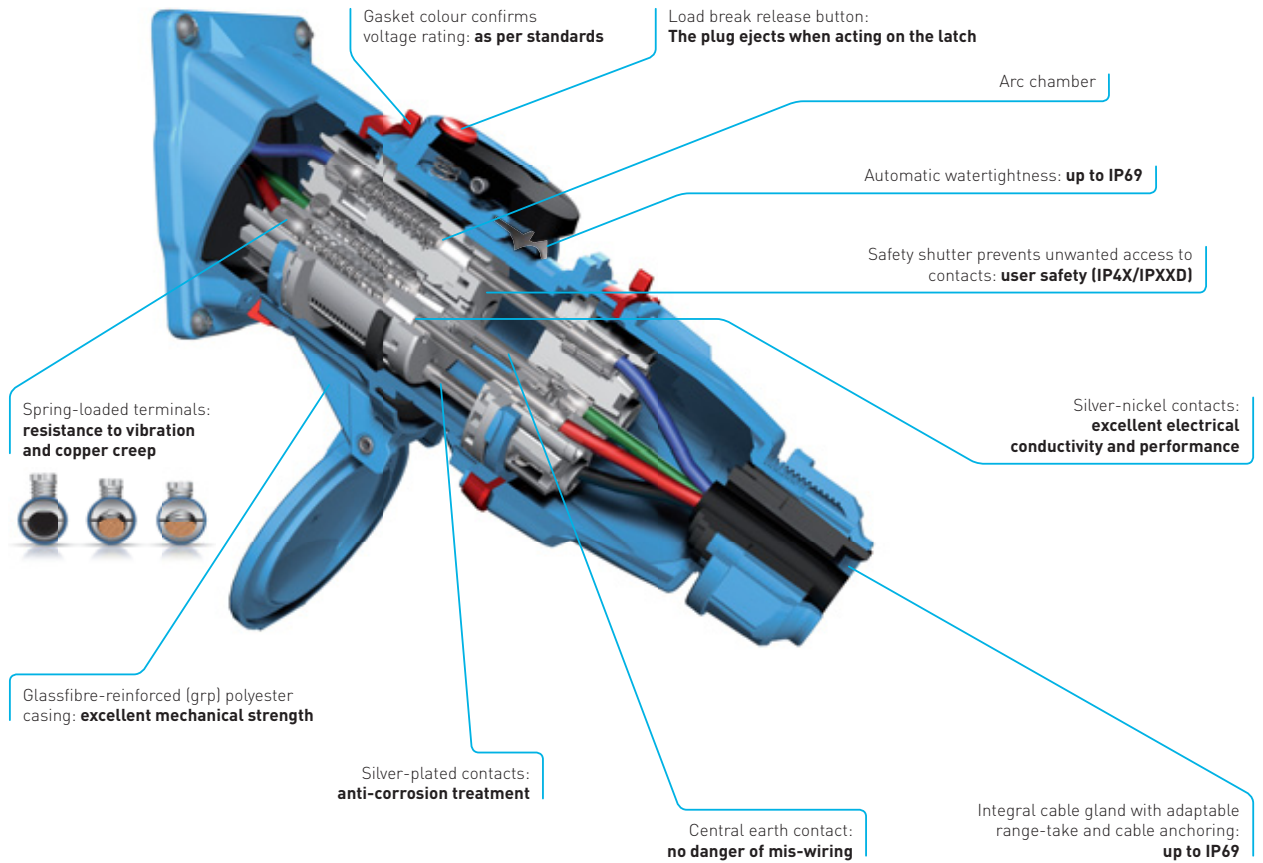




TECHNOLOGY

A CONCENTRATE OF FEATURES TO ENSURE YOUR SAFETY

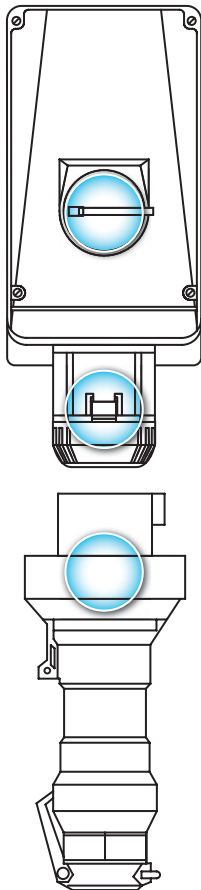
The quality of the material, the design, the assembly and the inspection of each component are at the core of our know-how and the MARECHAL® technology. They each provide a precise function that optimizes the performance, safety and sustainability of our sockets and your installations.





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

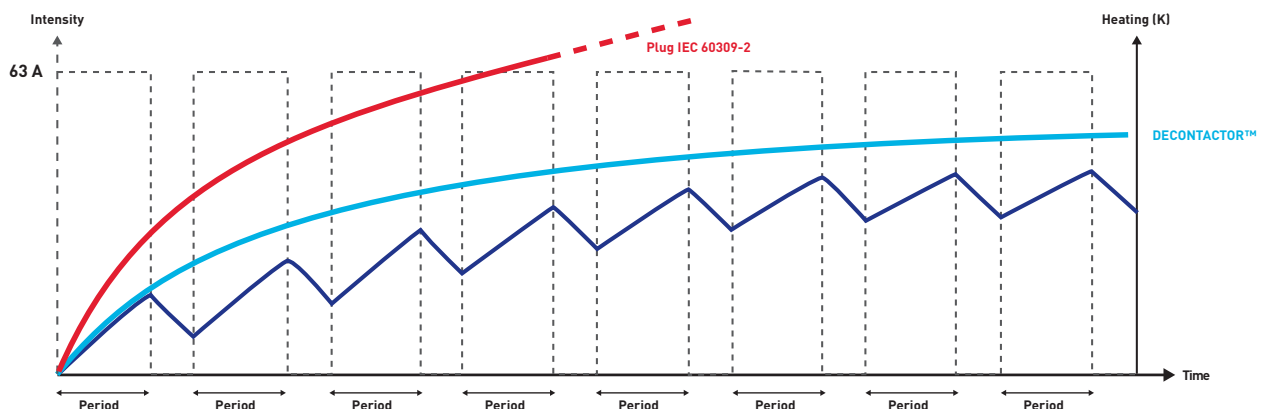
Socket-outlet

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.



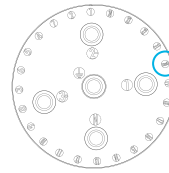
TECHNOLOGY

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 example

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:

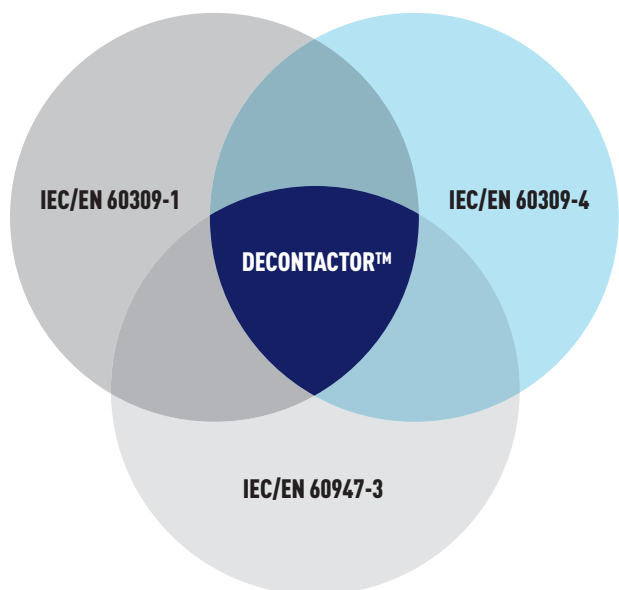
- CEI 61984 : connectors.

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

5TH & 6TH DIGIT

7TH 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



Dimensions
and certificates



DSN P. 16

COMPACT AND WATERTIGHT DECONTACTOR™ GRP

- Automatic IP66/IP67/IP69 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

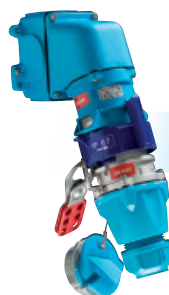
- 240 °C permanent et 400 °C (2 hours)
- 125 A/690 V
- IP66 Watertight



DN P. 58

METAL DECONTACTOR™

- Automatic IP55 water- and dust-tight (IP66/IP67 in option)
- IK09 Impact-resistant metal casing
- Suitable for heavy industry



DB P. 70

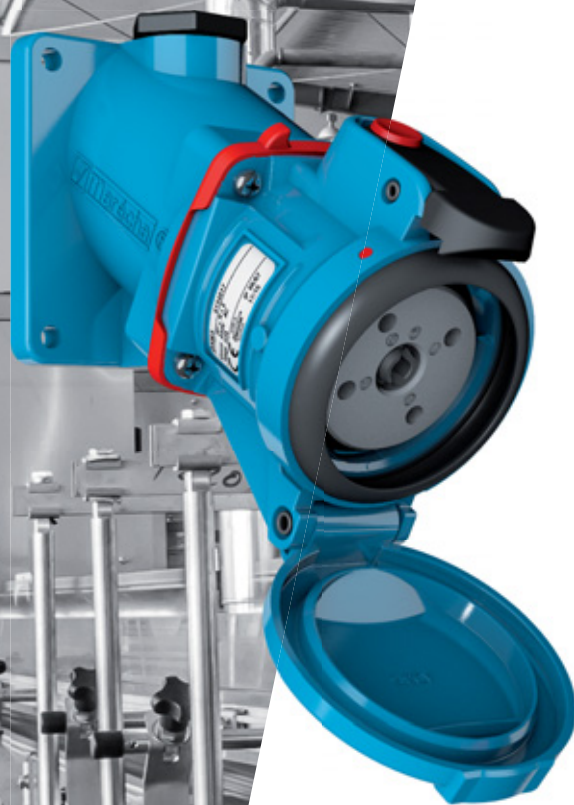
DISCONNECTABLE MOTOR SWITCH

- 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/IP69
- ▶ 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/IP69 WATER- AND DUST-TIGHT



DSN DECONTACTOR™ complies with (download our certificates on 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 ²
IP protection lid closed	IP66/IP67/IP69	Stranded wiring (min-max)	1,5-4 mm ²
IP protection plug connected	IP66/IP67/IP69	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 _{cc}	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/250 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.



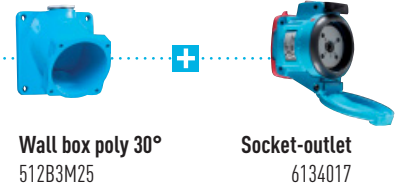
DSN3

DECONTACTOR™ GRP

32 A IP66/IP67/IP69



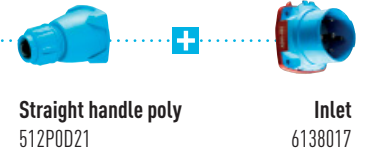
WALL MOUNTING SOCKET DSN3



Wall box poly 30°
512B3M25

Socket-outlet
6134017

PLUG DSN3



Straight handle poly
512POD21

Inlet
6138017

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 mm²
IP protection lid closed	IP66/IP67/IP69	Stranded wiring (min-max)	2,5-10 mm²
IP protection plug connected	IP66/IP67/IP69	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 _{cc}	10 kA
Power kW AC-22/AC-23	15 kW

SOCKET-OUTLET female DSN3 (32 A)



INLET male DSN3 (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).



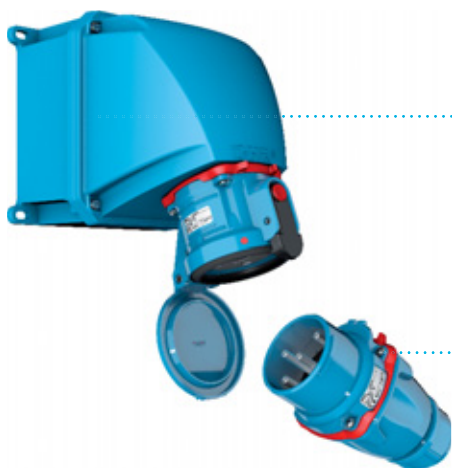
For a black colour GRP housing replace the second reference character 1 with 5.

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 ²
IP protection lid closed	IP66/IP67/IP69	Stranded wiring (min-max)	10-25 mm ²
IP protection plug connected	IP66/IP67/IP69	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 _{cc}	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
INDUSTRIAL-DOMESTIC ADAPTERS			
 <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>			
LOCKING PIN FOR 2 PADLOCKS Ø 8 mm (PADLOCKS NOT SUPPLIED)			
	Socket-outlet ref. + 843	Socket-outlet ref. + 843	Socket-outlet ref. + 843
SAFETY HASP FOR UP TO 6 PADLOCKS			
	873A541	873A541	873A541
LARGER RELEASE BUTTON			
	Socket-outlet ref. + 453	Socket-outlet ref. + 453	Socket-outlet ref. + 453
INLET CAP IP66/IP67			
	611A426	613A426	616A426
IN-LINE CONNECTIONS (A PAIR OF FINGER DRAW PLATES TO AID CLOSING)			
	611A346	613A346	616A346
180° OPENING LID			
	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10
SELF-RETURNING LID (WITHOUT FULL CLOSURE IP40)			
	Socket-outlet ref. + R	Socket-outlet ref. + R	Socket-outlet ref. + R
180° OPENING & SELF-RETURNING LID			
	Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18
SELF-CLOSING LID FOR INLET LOCKABLE (IP54)			
	NA	613A226	616A226
SELF-EJECTING (see references AND OPTIONS DETAILS PAGE 228)			
			



ACCESSORIES

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

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

TPM ELECTRICAL INLET WITH FLAP

DSN1
size 1

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



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	
POLY HANDLE WITH GLAND					
 * Short	9-18 mm	511P0D18*			
	5-21 mm	511P0D21	512P0D21		
	10-30 mm			513P0D30	
 * Short	9-18 mm	551P0D18*			
	5-21 mm		552P0D21		
	10-30 mm			553P0D30	
 60° angle	9-18 mm	511P6D18			
 60° angle	9-18 mm	551P6D18			
POLY HANDLE WITH POLY CABLE GLAND (FOR A BLACK COLOUR HANDLE REPLACE THE SECOND REFERENCE CHARACTER 1 WITH 5)					
	5-12 mm	511P020P	512P020P	513P020P	Ref. +443 (DSN1 10-14 mm)
	9-18 mm	511P025P	512P025P	513P025P	Ref. +443 (DSN1 12-18 mm)
	14-25 mm	511P032P	512P032P	513P032P	Ref. +443
	18-32 mm		512P040P	513P040P	Ref. +443
METAL HANDLE WITH METAL GLAND (+ EARTHING WIRE)					
	7-13 mm		592P020M	593P020M	
	8-16 mm		592P025M	593P025M	
	16-24 mm		592P032M	593P032M	
	22-32 mm			593P040M	
POLY HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY, (FOR A BLACK COLOUR HANDLE REPLACE THE SECOND REFERENCE CHARACTER 1 WITH 5)					
	M20	511P0M20	512P0M20	513P0M20	Ref. +443
	M25	511P0M25	512P0M25	513P0M25	Ref. +443
	M32	511P0M32	512P0M32	513P0M32	Ref. +443
	M40		512P0M40	513P0M40	Ref. +443
METAL HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY)					
	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)



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

DSN1

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)



Extra earth bar ref: 51AA089

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



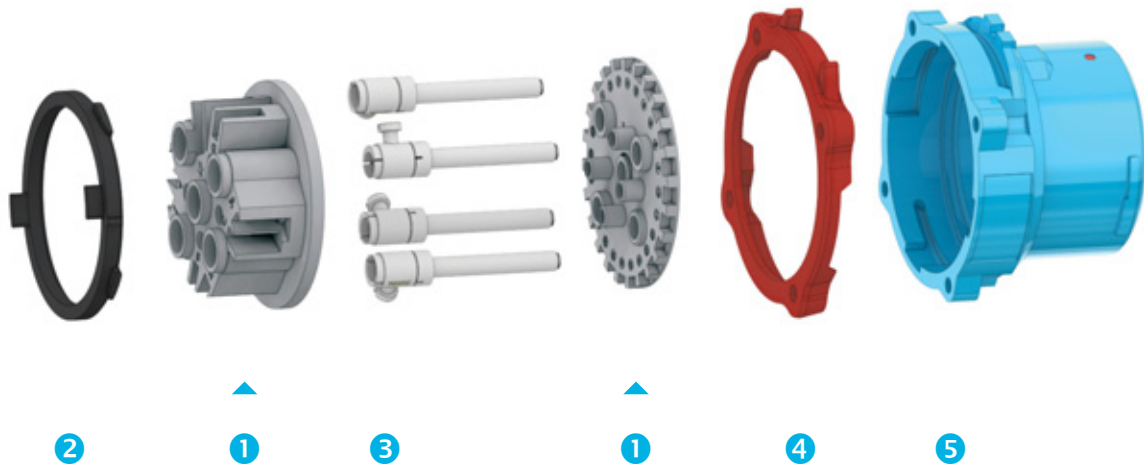
0°	M20		592C0M20	593C0M20
0°	M25		592C0M25	593C0M25
0°	M32		592C0M32	593C0M32
0°	M40			593C0M40



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.

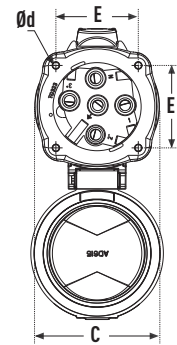
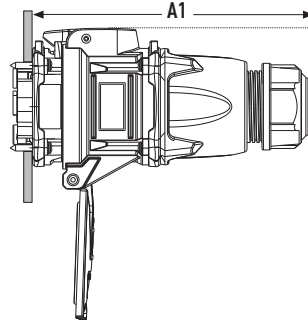
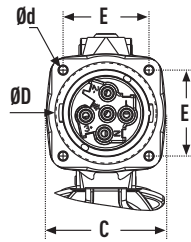
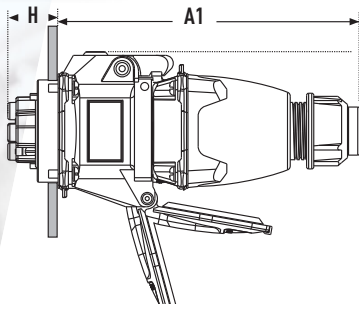


SOCKET		DSN1	DSN3	DSN6
1	Socket Interior	611A020	311A020	313A020
2	Locking ring	611A583	311A583	616A583
3	Socket contact	611A021	311A021	616A021
4	Color-coded voltage gasket	611AB26	613AB26	313AB26
		611AR26	613AR26	313AR26
		611AV26	613AV26	313AV26
		611AN26	613AN26	313AN26
5	Socket Lid Gasket	611A524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

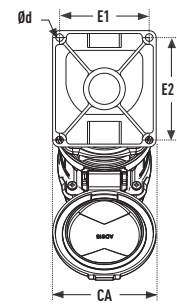
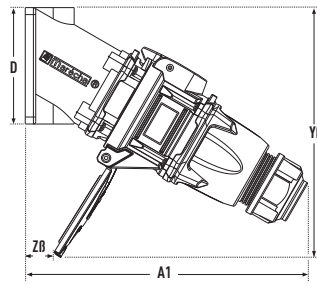
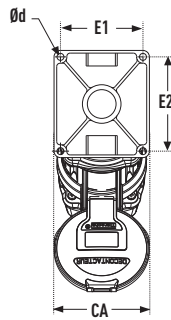
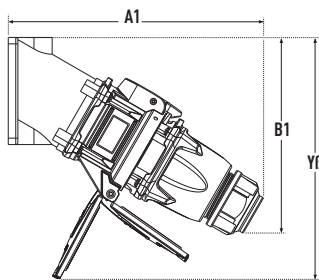
Contact us for spare parts.



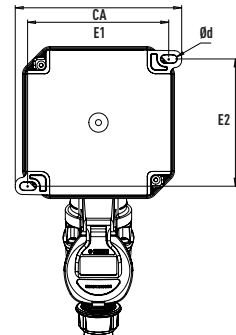
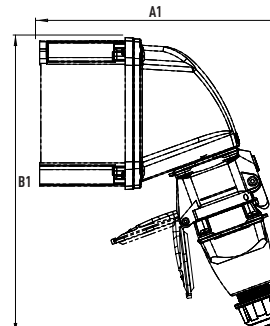
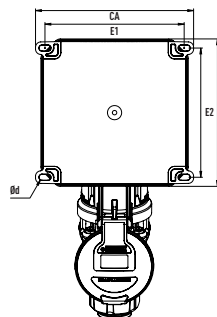
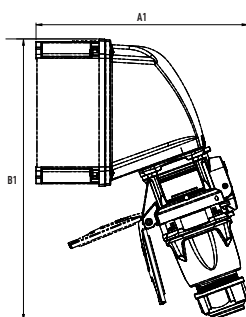
DIMENSIONS



	A1	C	E	H	Ød*	ØD*
DSN1	147	58	42	25	4,5	51
DSN3	171	74	48	14	5	58
DSN6	184	84	55	16	5	68

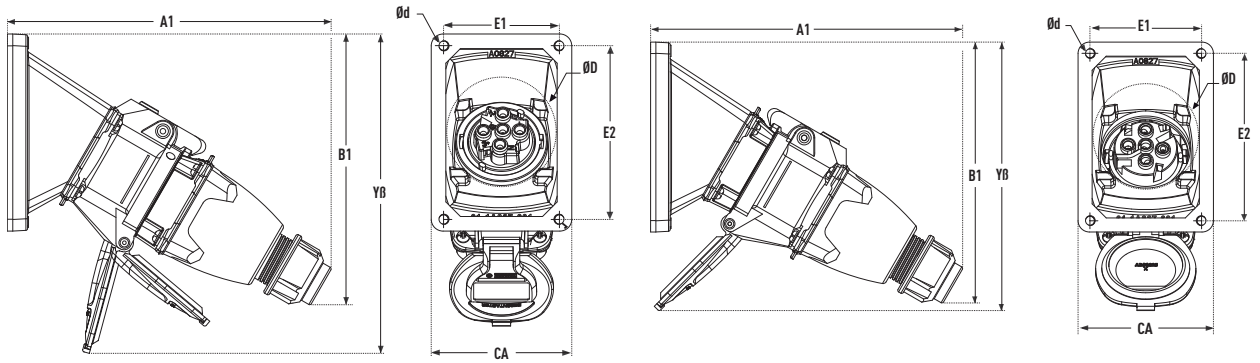


	A1	B1	CA	E1	E2	Ød*
DSN1	196	154	68	36/56	78	4,5
DSN3	213	159	84	70	70	6
DSN6	238	182	89	77	88	6,5

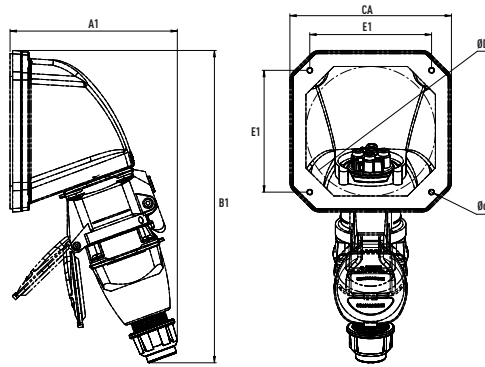


	A1	B1	CA	E1	E2	Ød*
DSN1	200	244	138	117	105,5	6,5
DSN3	207	262	138	117	105,5	6,5
DSN6	239	300	178	157	145,5	6,5

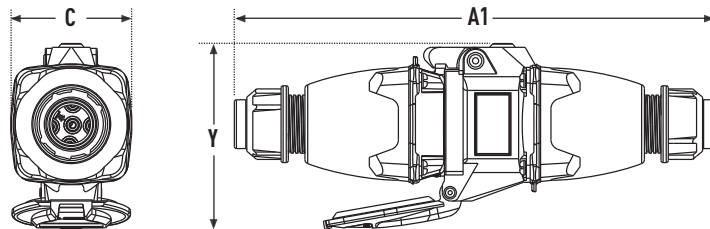
*Ød : maximum drilling diameter.



	A1	B1	CA	E1	E2	Ød*	ØD*
DSN1	177	148	77	63	95	5	51
DSN3	197	165	77	63	95	5,5	58
DSN6	212	178	77	63	95	5,5	68



	A1	B1	CA	E1	Ød*	ØD*
DSN1	131	244	126	95	3.6	51
DSN3	138	262	126	95	3.6	58
DSN6	170	317	166	135	3,6	68



	A1	C	Y
DSN1	231	58	89
DSN3	265	74	116
DSN6	286	84	122

*Ød : maximum drilling diameter.

RETTBOX®



ELECTROMAGNETIC SELF-EJECT DECONTACTOR™



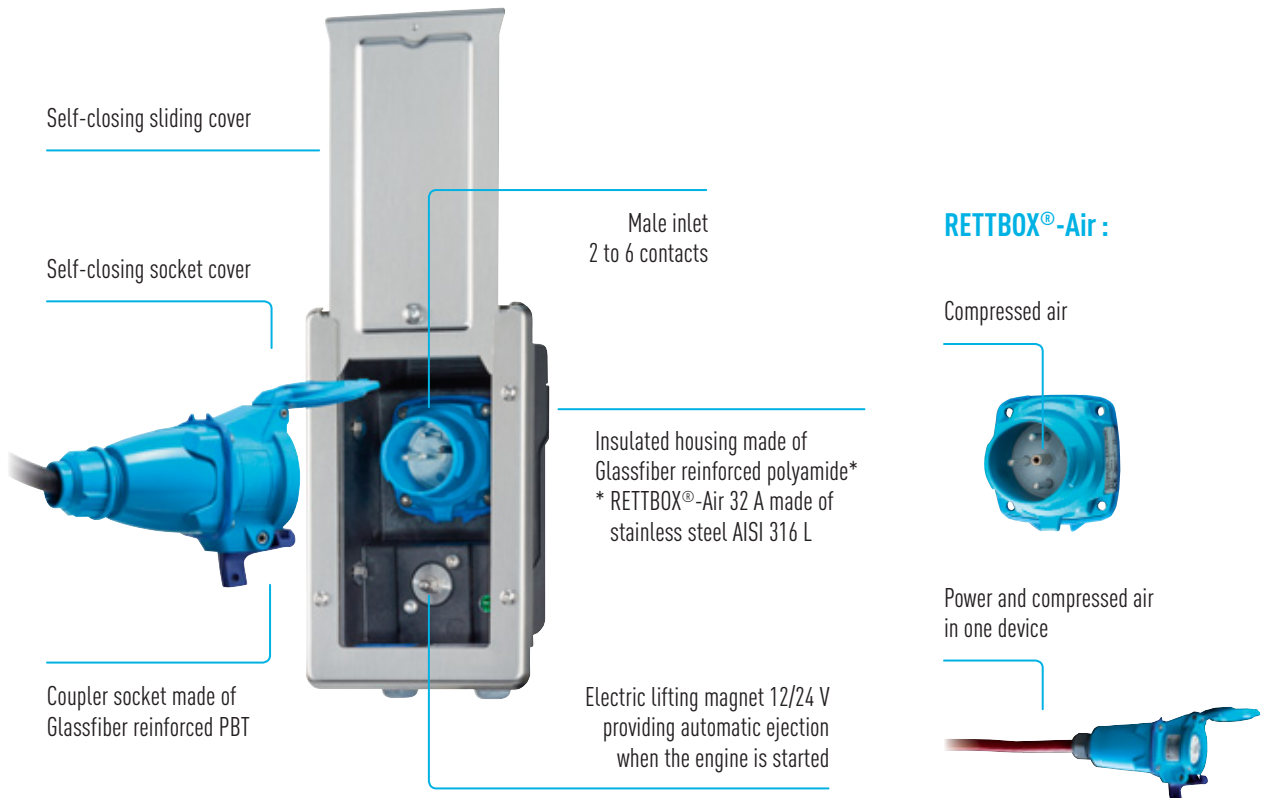
20 A/32 A

- ▶ 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 (20 A)

MAIN FEATURES

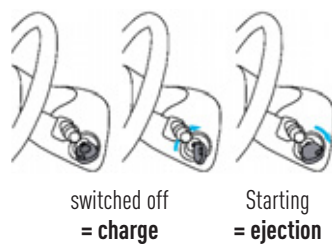
	RETTBOX® (20 A)	RETTBOX®-Air (20 A)	RETTBOX® (32 A)	RETTBOX®-Air (32 A)
Front	stainless steel	stainless steel	stainless steel	stainless steel
Box	glassfiber reinforced polyamide	glassfiber reinforced polyamide	stainless steel	stainless steel
Protection mode (closed cover)	IP55	IP55	IP55	IP55
Self-closing 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	1 aux	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.



INFOS +



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
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
24 V AC	2P DC*	RETTBOX® with 24 V relay and male inlet	6116089RK424U	6113089RK4L
12 V AC	2P DC*	RETTBOX® with 12 V relay and male inlet	6116059RK412U	6113059RK4L

*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
230 V AC	1P+N+E+1 aux.	RETTBOX® with 12 V relay and male inlet	6116175RK412U	6113175RK4L
230 V AC	1P+N+E+1 aux.	RETTBOX® with 24 V relay and male inlet	6116175RK424U	6113175RK4L
24 V AC	2P DC*	RETTBOX® with 24 V relay and male inlet	6116089AK424U	6113089AK4L
12 V AC	2P DC*	RETTBOX® with 12 V relay and male inlet	6116059AK412U	6113059AK4L

*LED not available for these configurations.
All versions are available in 4, 8 and 12m.

INFOS +

FIND ALL INFORMATION
ON OUR WEBSITE:



RETTBOX®
USER GUIDE

LED CONTROL LIGHT

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



RETTBOX®

ELECTROMAGNETIC SELF-EJECT

32 A IP55



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)



CEILING BRACKET made of stainless steel

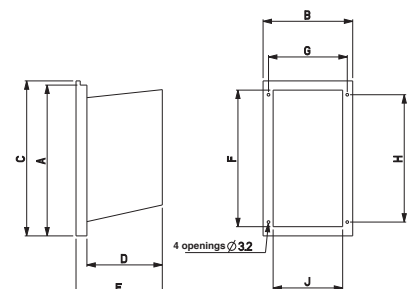


RETTBOX®	RETTBOX®-Air 20 A	RETTBOX®-Air 32 A	RETTBOX®	RETTBOX®-Air 20 A	RETTBOX®-Air 32 A
611AZIE	611AZIE	381AZIE	611AHUTRRR L	611AHUTAAA L	381AHUTAAA L

All versions are available in 4, 8 and 12m.
A ceiling bracket made of stainless steel is available.

DIMENSIONS

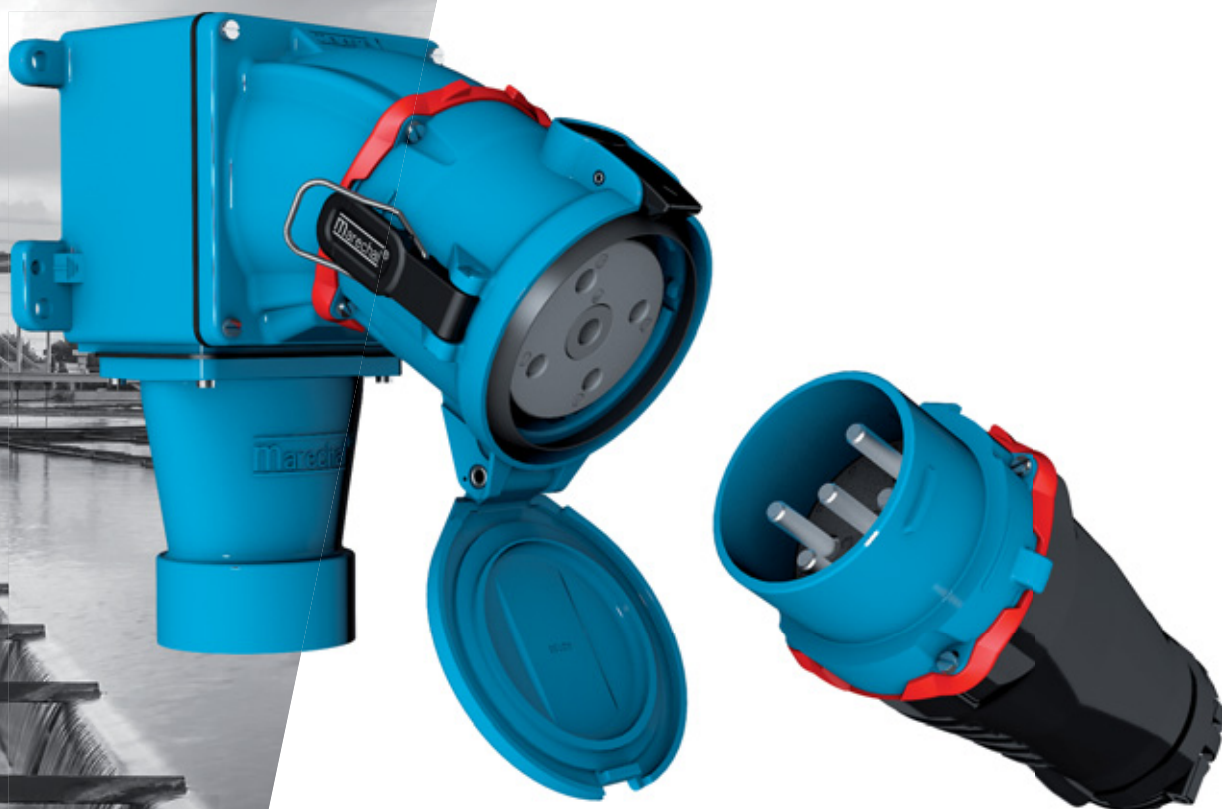
	A	B	C	D	E	F	G	H	J
RETTBOX® 20 A	184	114	184	89	114	163	94	152	83
RETTBOX®-Air 20 A	184	114	184	89	114	163	94	152	83
RETTBOX® 32 A	188	132	197	140	151	173	116	169	103
RETTBOX®-Air 32 A	188	132	197	140	151	173	116	169	103



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

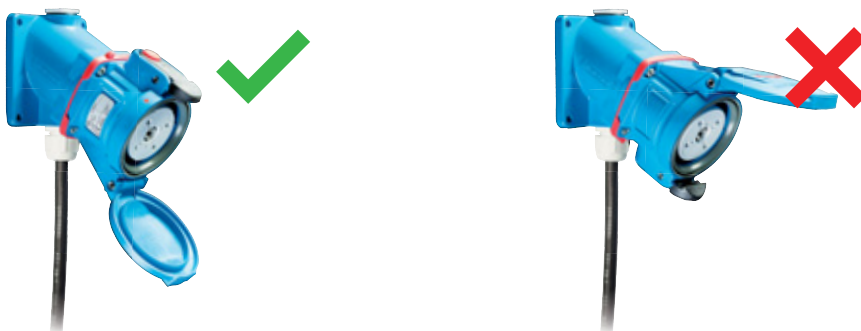
TECHNICAL FEATURES

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 _{max}	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 ⁽¹⁾	
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 _{cc}	<<< 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 ²
IP protection lid closed	IP55	Stranded wiring (min-max)	2,5-10 mm ²
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 _{cc}	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+

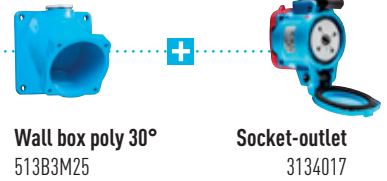
OPTIONS AND ACCESSORIES

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

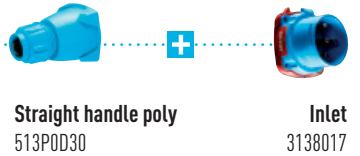




WALL MOUNTING SOCKET DS3



PLUG DS3



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 ²
IP protection lid closed	IP55	Stranded wiring (min-max)	10-25 mm ²
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 _{cc}	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+

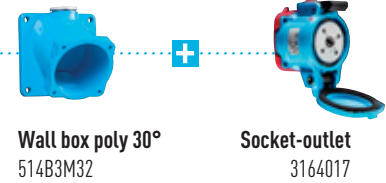
OPTIONS AND ACCESSORIES

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

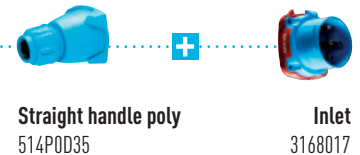




WALL MOUNTING SOCKET DS6



PLUG DS6



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 ²
IP protection lid closed	IP55	Stranded wiring (min-max)	10-35 mm ²
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 _{cc}	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/IP67		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 ²
IP protection lid closed	IP55	Stranded wiring (min-max)	10-35 mm ²
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 _{cc}	10 kA
Power kW AC-22/AC-23	45 kW



GRP devices are not compatible with metal devices.

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

SOCKET-OUTLET female DS6 (90 A)



INLET male DS6 (90 A)



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/IP67		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 ²
IP protection lid closed	IP66/IP67/IP69	Stranded wiring (min-max)	25-95 mm ²
IP protection plug connected	IP66/IP67/IP69	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 _{cc}	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 mm ²
IP protection lid closed	IP55 (optional IP66/IP67)	Stranded wiring (min-max)	25-95 mm ²
IP protection plug connected	IP54 (optional IP66/IP67)	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 _{cc}	10 kA
Power kW AC-22/AC-23	80 kW



GRP devices are not compatible with metal devices.

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

SOCKET-OUTLET female DS9 (150 A)



INLET male DS9 (150 A)



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/IP67		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 DS₂



Wall box metal 60°
596E6M63



Socket-outlet
3924017

PLUG DS₂



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 ²
IP protection lid closed	IP55 (optional IP66/IP67)	Stranded wiring (min-max)	70-120 mm ²
IP protection plug connected	IP54 (optional IP66/IP67)	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 _{cc}	10 kA

SOCKET-OUTLET female DS₂ (250 A)



INLET male DS₂ (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/IP67		Ref. + 600	Ref. + 600

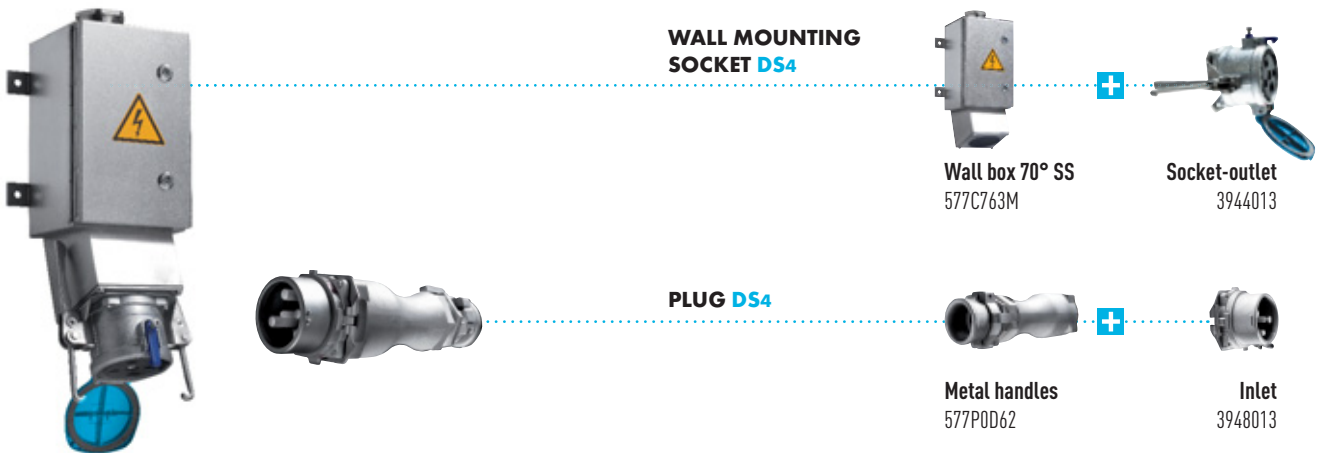
► Other voltages, frequencies and contact configurations are available (see page 10).
For more than 2 auxiliary contacts, please contact us.

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 ²
Maximum voltage	1 000 V	Stranded wiring (min-max)	95-185 mm ²
Protection	IP54 (optional IP66/IP67)	Connector only: not to be disconnected while energised	
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)



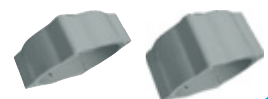
INLET male DS4 (400 A)



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
INDUSTRIAL-DOMESTIC ADAPTERS						
 <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>						
LOCKING PIN FOR 2 PADLOCKS Ø 8 mm (PADLOCKS NOT SUPPLIED)						
	Socket-outlet ref. + 843	Socket-outlet ref. + 843	Socket-outlet ref. + 843	Socket-outlet ref. + 844	Socket-outlet ref. + 843	Socket-outlet ref. + 843
SAFETY HASP FOR UP TO 6 PADLOCKS						
	873A541	873A541	873A541	873A541	873A541	873A541
LARGER RELEASE BUTTON						
	Socket-outlet ref. + 453	Socket-outlet ref. + 453	Socket-outlet ref. + 453	Socket-outlet ref. + 453		
INLET CAP						
 <p>IP66/IP67</p>	311A426	313A426	316A426			
 <p>IP55</p>				319A126	312A126	312A126
IN-LINE CONNECTIONS (A PAIR OF FINGER DRAW PLATES TO AID CLOSING)						
	613A346	616A346	316A346			
180° OPENING LID						
Standard on poly housing	Standard	Standard	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10	NA
SELF CLOSING/SELF RETURNING LID (ACCORDING TO MODEL)						
	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
METAL SOCKET CASING WITH SELF RETURN & 180° OPENING LID						
			Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18	
SELF-CLOSING LID FOR INLET LOCKABLE (IP54)						
	311A226	313A226	316A226 DS6 GRP 396A226 DS6 metal			
IP66/IP67 SOCKET-OUTLET AND INLET (RECOMMENDED IN THE CASE OF COUPLER SOCKET)						
		NA	NA	Ref. + 600	Ref. metal + 600	Ref. + 600
SELF-EJECTING (SEE REFERENCES AND OPTIONS DETAILS PAGE 228)						
				Metal socket ref. +EMC	Metal socket ref. +EMC	Metal socket ref. +EMC
ELECTROMAGNETIC COMPATIBILITY (EMC) (SEE DETAIL PAGE 223)						



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	
POLY BOX									
	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				
METAL BOX (+ EARTHING WIRE)									
	20°	M20	592B2M20	593B2M20					
	20°	M25	592B2M25	593B2M25	594B2M25				Ref. +EMC
	20°	M32		593B2M32	594B2M32				Ref. +EMC
	20°	M40			594B2M40				Ref. +EMC
POLY BOX + POLY SLEEVE (BLACK VERSION SEE ACCESSORIES DXN PAGE 169)									
	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				
Extra earth bar ref: 51AA089									
METAL BOX (+ EARTHING WIRE) + POLY SLEEVE									
	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			
METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)									
	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	
METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)									
	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
METAL BOXES WITH METAL SLEEVE AND METAL CABLE GLAND (+ EARTHING WIRE)									
	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	
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	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	
POLY HANDLE WITH GLAND								
	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		
ELASTOMER HANDLE WITH GLAND								
	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
POLY HANDLE WITH POLY CABLE GLAND (BLACK COLOR VERSION REPLACE 1 BY 5)								
	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		
POLY HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY, BLACK COLOR VERSION REPLACE 1 BY 5)								
	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

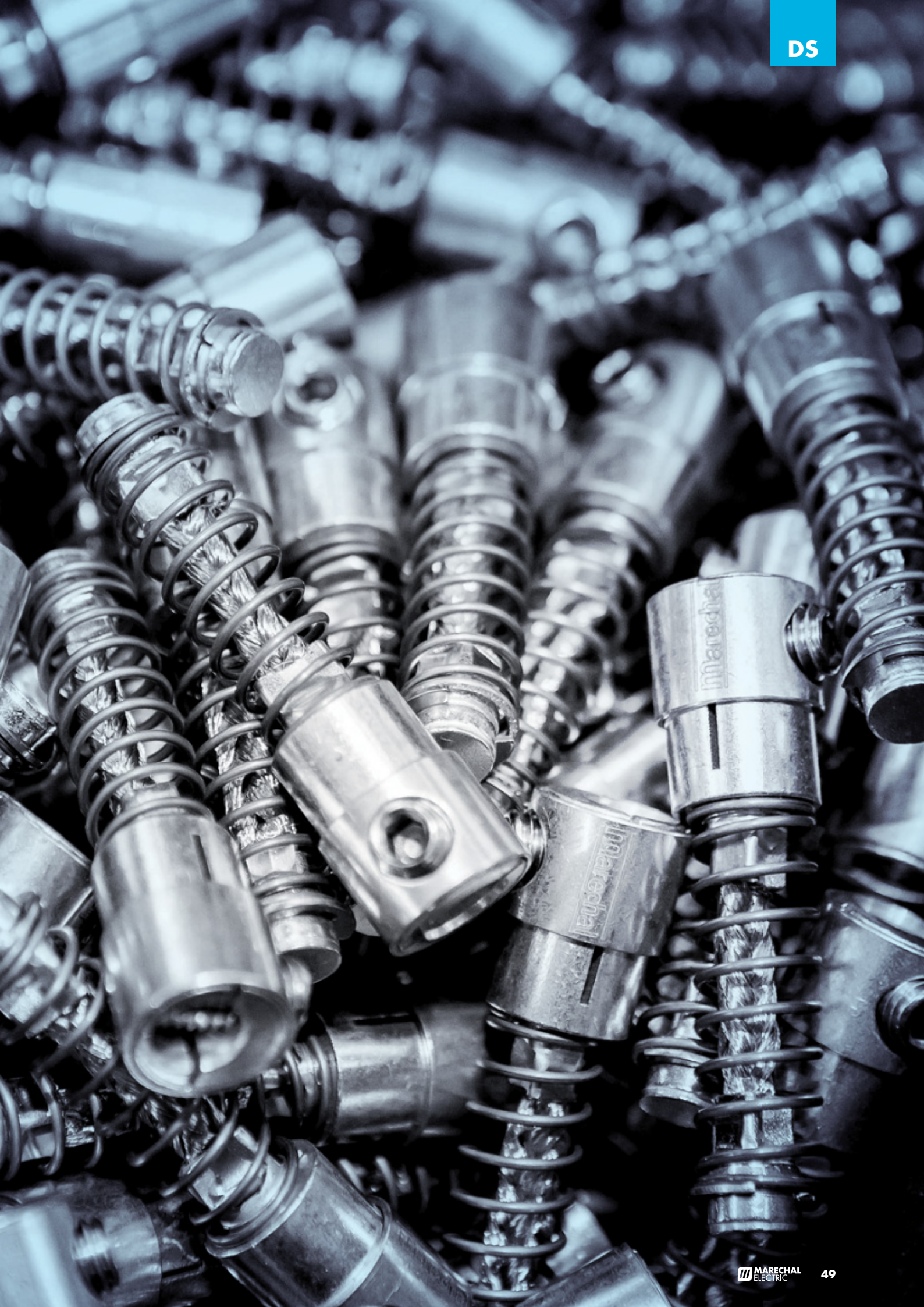
(SEE PAGE 238 TO CROSS REFERENCE WITH OLDER PART NUMBERS)

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)
	16-24 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)
	12-20 mm		573P025M185					
	16-24 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

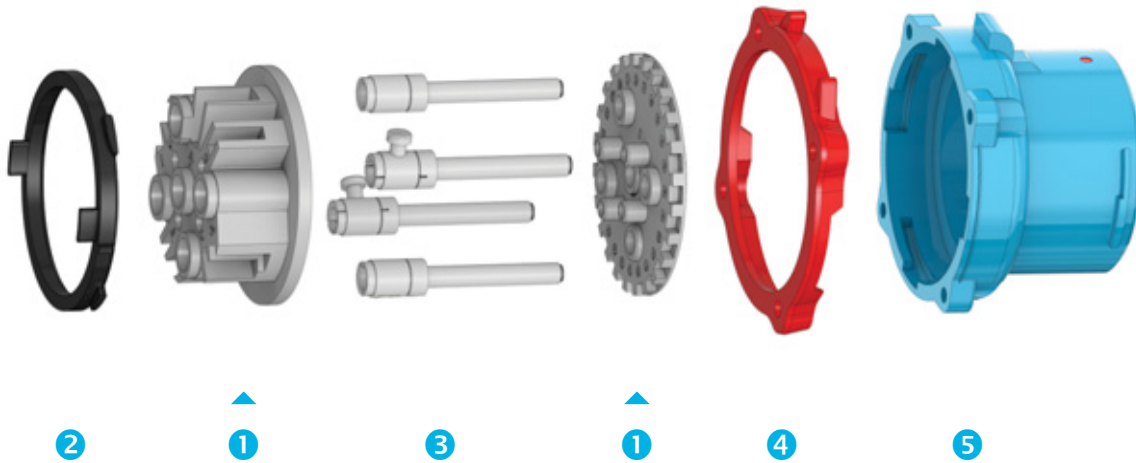
-  Angle
-  Threading or gland size
-  EMC option
-  HT 240° C
-  Self-ejection




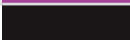
INFO +





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	

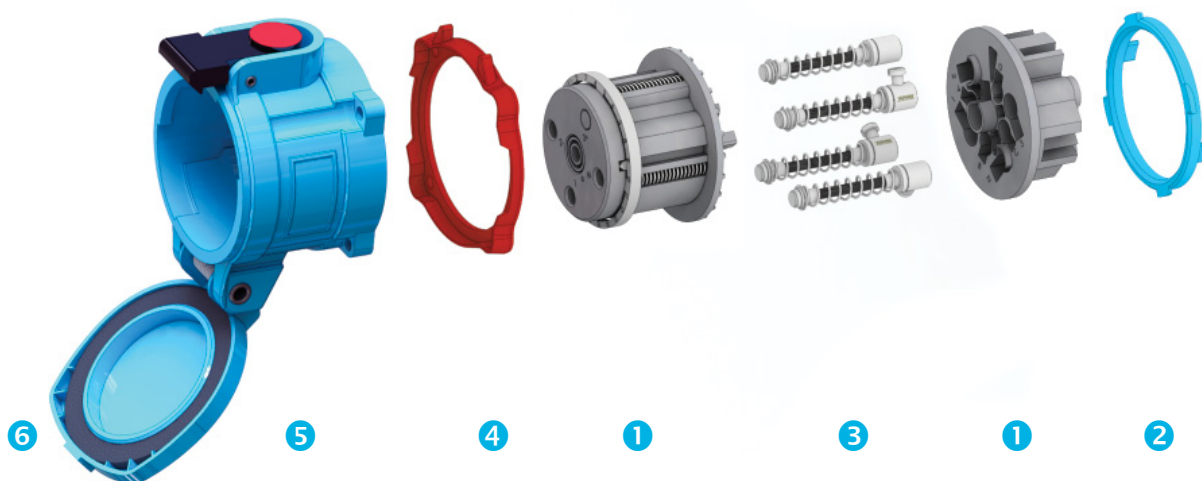


Remember to order the special removal key



Yellow disassembly key
For poly casing
31-A500-1

Contact us for spare parts.



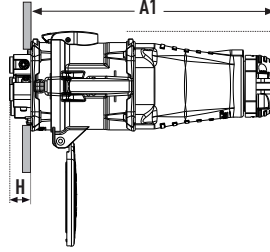
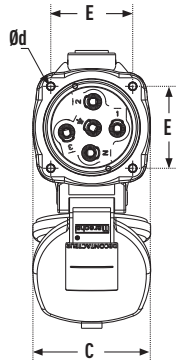
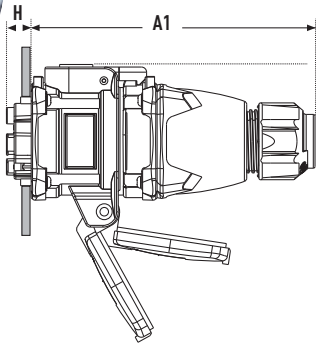
SOCKET	DS1	DS3	DS6	DS9	DS2	DS4
1 Socket Interior poly	311A020	313A020	316A020	619A020	-	-
1 Socket Interior metal +E			396A220	699A220	392A220	394A220
2 Locking ring	311A583	313A583	316A583	319A583	-	-
2 Locking ring metal	-	-	396A583	399A583	392A583	394A583
3 Socket contact (P or N)	311A021	616A021	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.

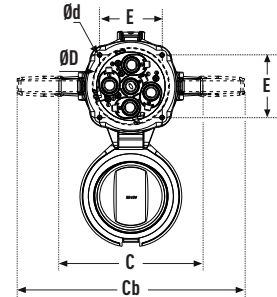


DIMENSIONS

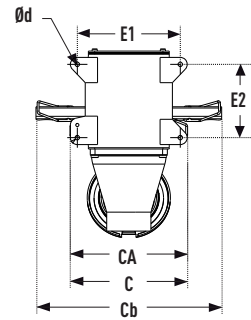
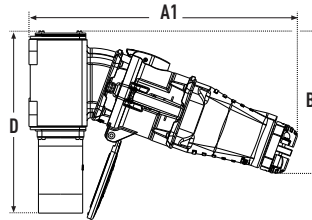
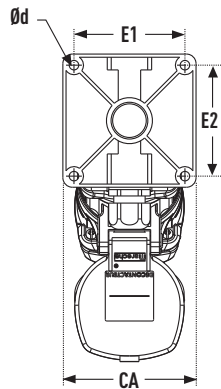
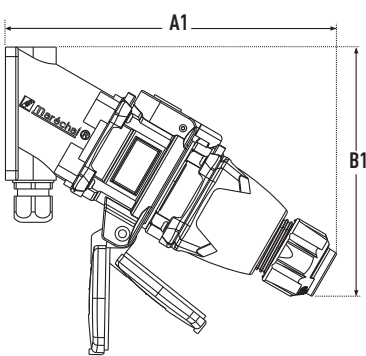
DS1/DS3/DS6



DS9/DS2



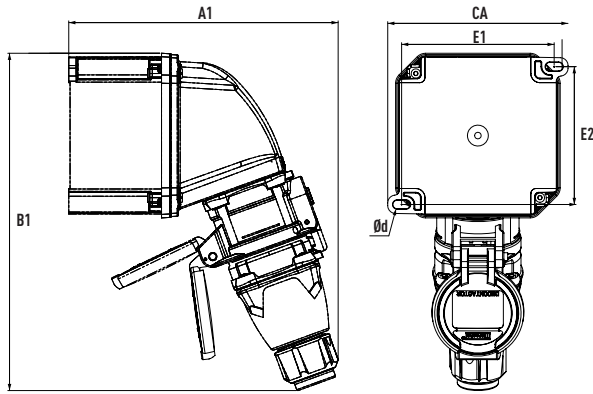
	A1	C	Cb	E	H	Ød*
DS1	166	69	/	48	15	5
DS3	179	80	/	55	17	5
DS6	203	95	/	66	25	5,5
DS9 POLY	315	186	294	81	26	6
DS2	360	192	304	98	38	6,5



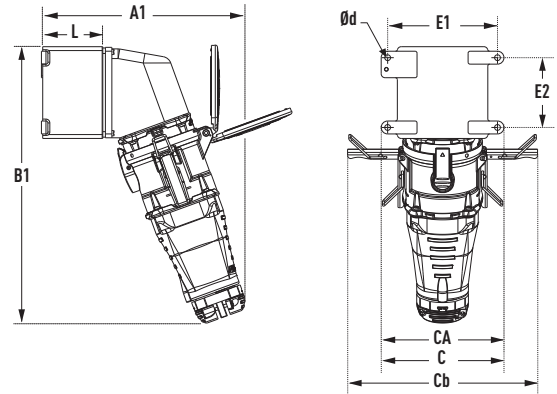
	A1	B1	CA	E1	E2	Ød*
DS1	209	157	84	70	70	6
DS3	235	181	89	77	88	6,5
DS6	283	215	105	89	112	7,5
DS9 POLY (20°)	425	225	185	163	116	7
DS2 (60°)	414	460	226	202	154	10

*Ød : maximum drilling diameter.

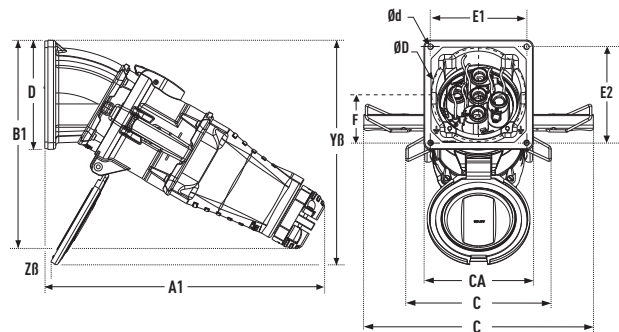
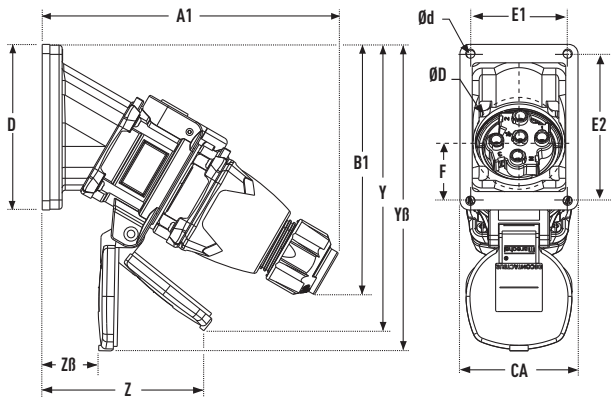
DS1/DS3/DS6



DS9/DS2



	A1	B1	Cb	CA	E1	E2	Ød*
DS1	207	259		136	117	105.5	6.5
DS3	236	313		176	157	145.5	6.5
DS6	243	336		176	157	145.5	6.5
DS9 POLY	315	430	294	190	170	108	9

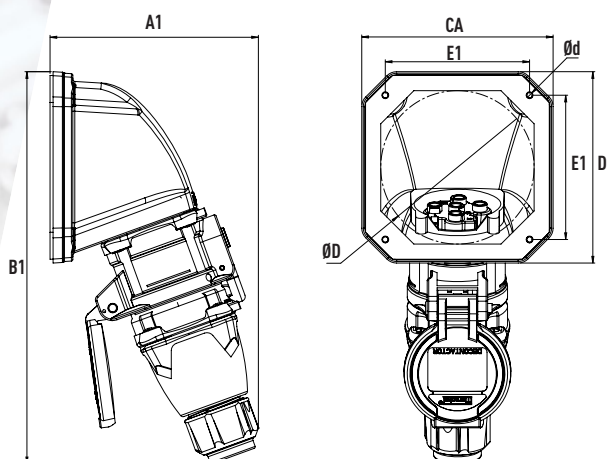


	A1	B1	CA	D	E1	E2	Ød*	ØD max
DS1	193	163	77	108	63	95	5,5	60
DS3	208	174	77	108	63	95	5,5	60
DS6	233	205	102	136	87	122	6,5	70

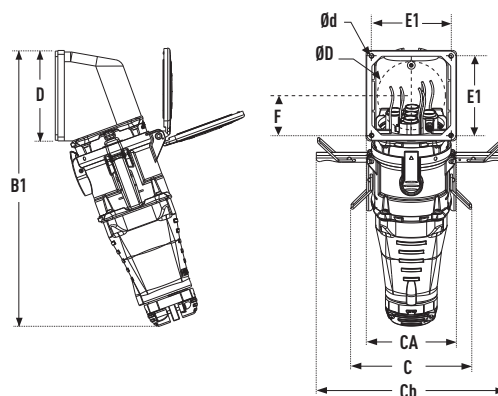
	A1	B1	C	CB	CA	D	E1	E2	Ød*	ØD max
DS9 POLY (30°)	358	267	186	294	140	140	124	124	7	120
DS2 (60°)	295	460	192	304	191	191	165	165	7	145

*Ød : maximum drilling diameter.

DS1/DS3/DS6

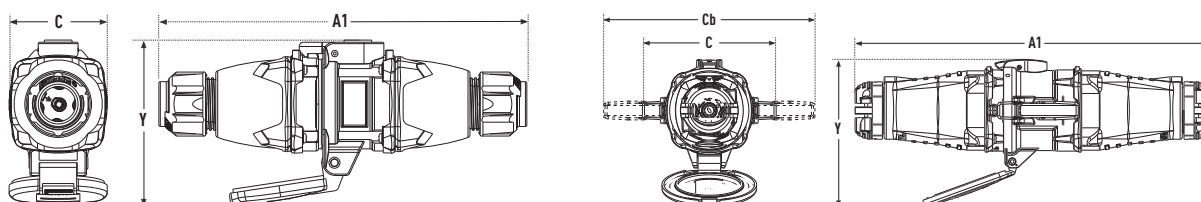


DS9/DS2



	A1	B1	CA	D	E1	Ød*
DS1	136	259	126	126	95	3.6
DS3	169	313	166	166	135	3.6
DS6	174	336	166	166	135	5

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

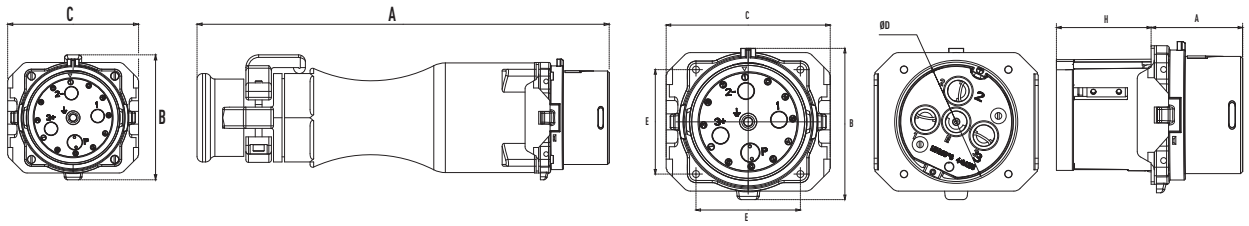


	A1	C	Y
DS1	259	69	117
DS3	277	80	145
DS6	309	95	167

	A1	C	Cb	Y
DS9 POLY	496	186	294	204
DS2	588	192	304	203

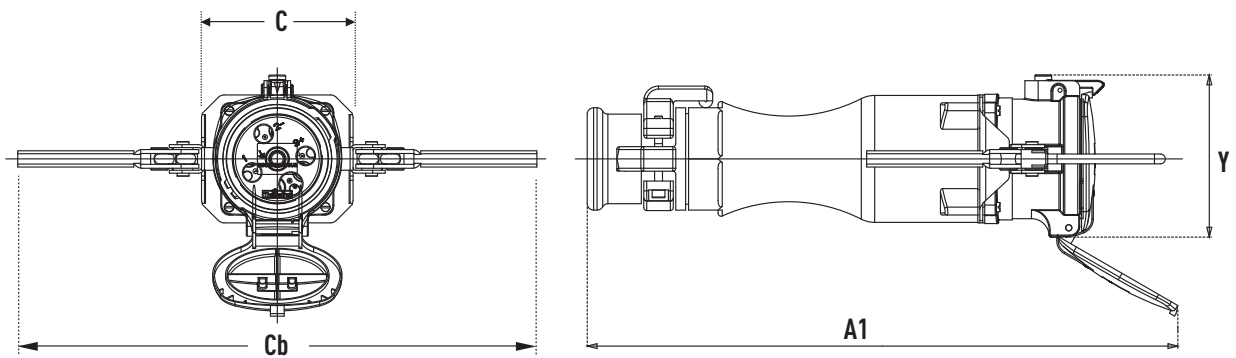
*Ød : maximum drilling diameter.

DS4

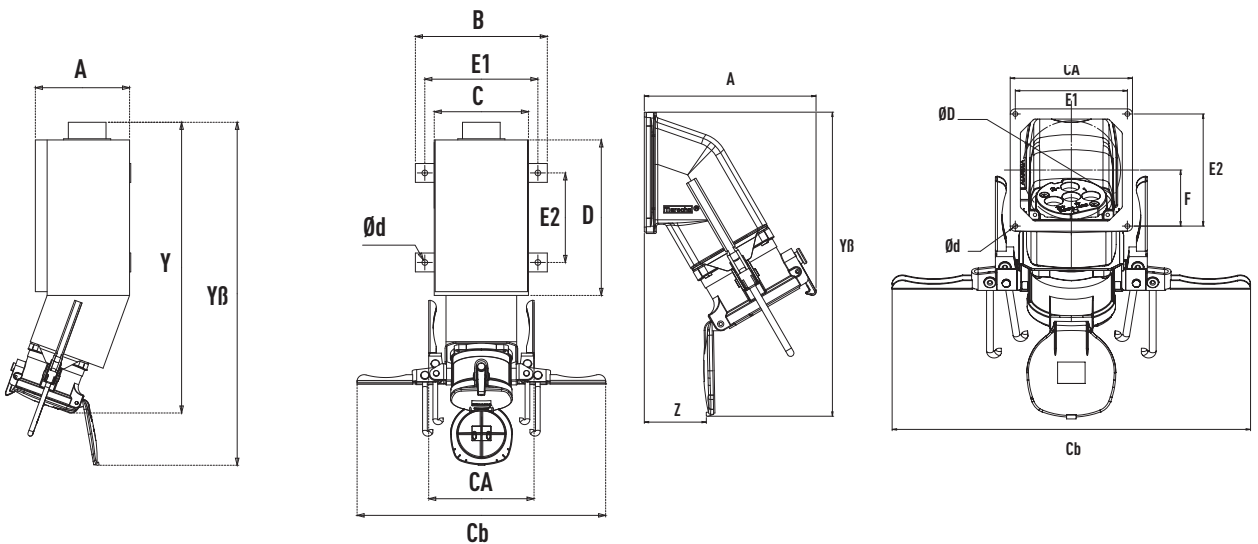


	A	B	C
DS4	485	147	154

	A	B	C	E	H	ØD max
DS4	86	89	154	142	98	112



	A1	C	Cb	Y
DS4	600	224	528	165



	A	B	C	CA	Cb
DS4	200	280	200	224	528

	A	CA	Cb	E1	E2
DS4	255	191	528	165	165

	E1	E2	Y	YB	Ød*
DS4	240	190	627	779	12

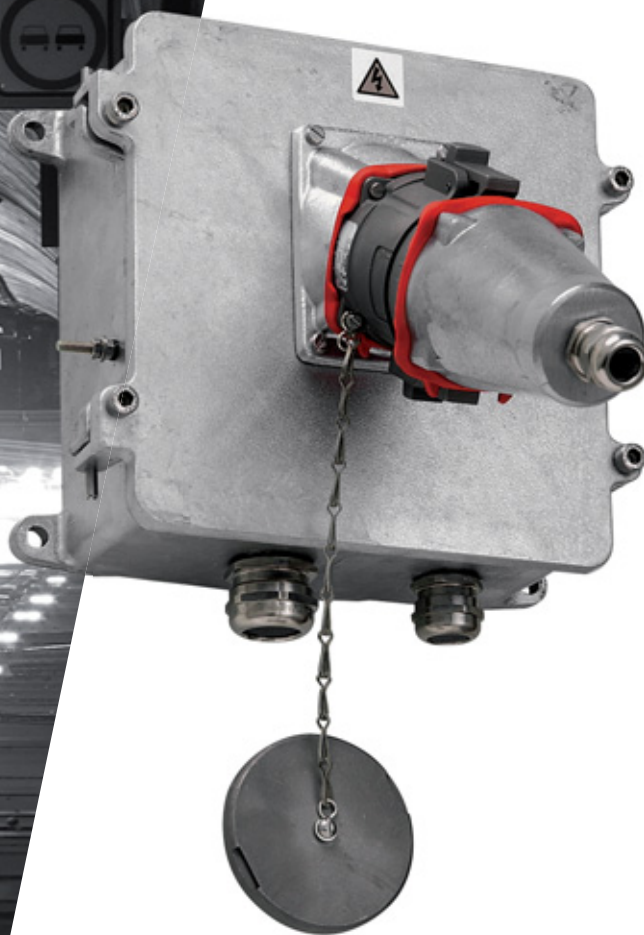
	F	YB	Z	Ød*	ØD max
DS4	82,5	448	85	7	145

*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 ²	
Maximum no. of contacts	3P+E	Terminal Wiring on socket side of 10 to 95 mm ²	
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***

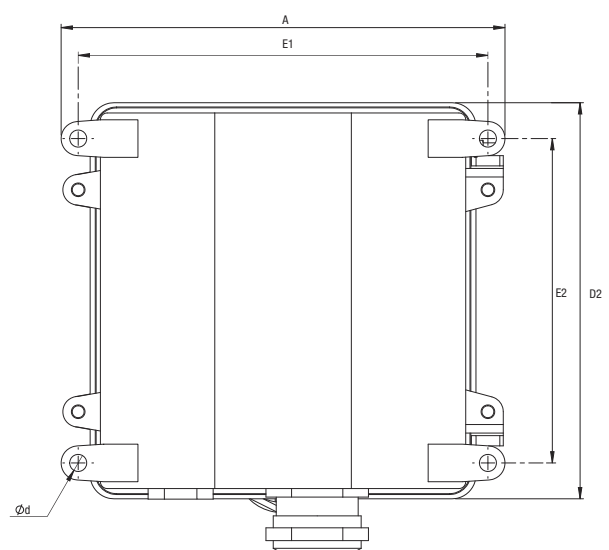
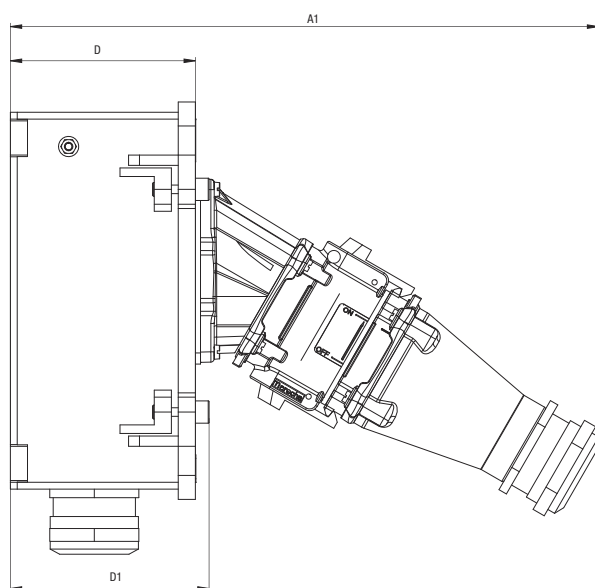
WALL MOUNTING SOCKET

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.

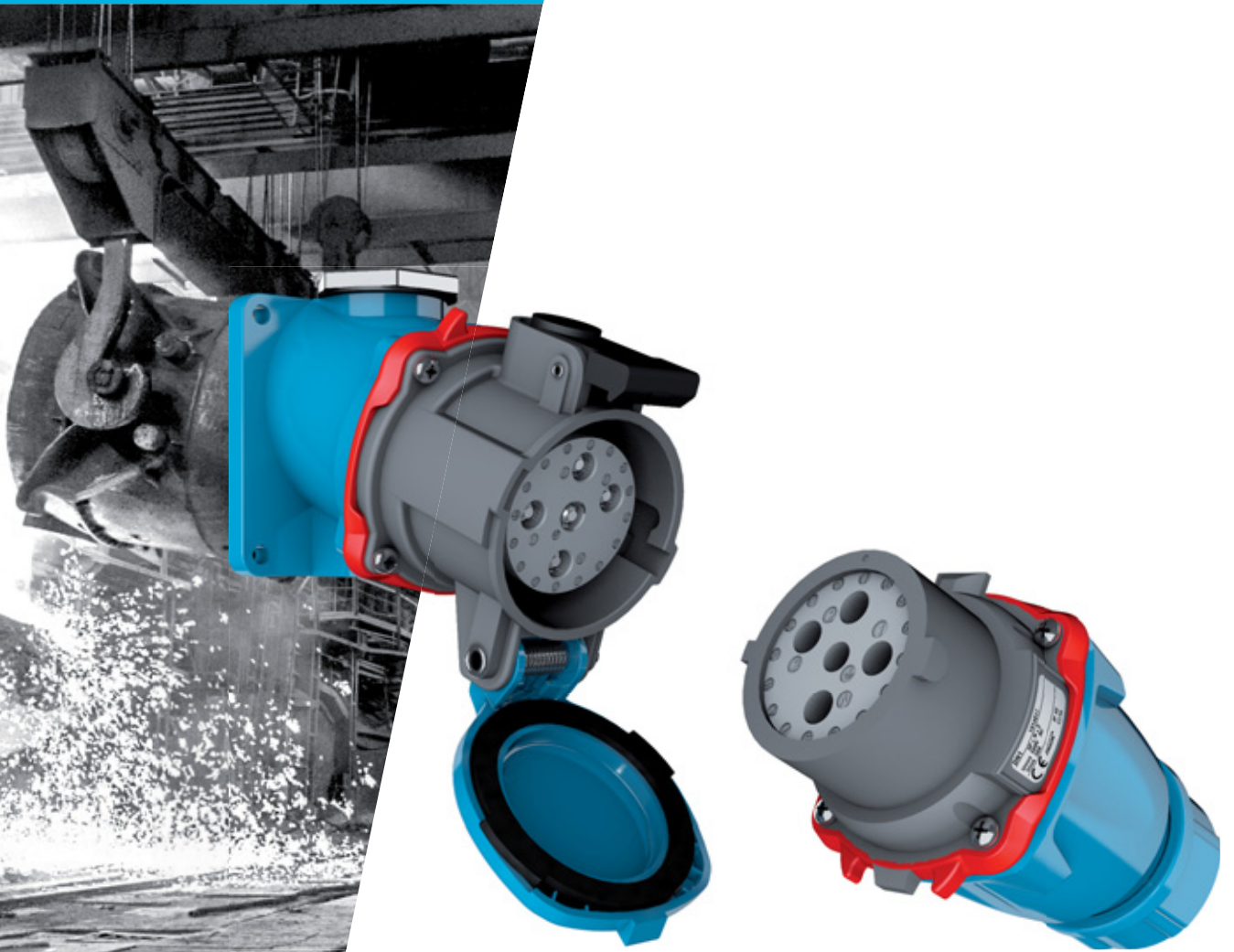


	A	A1	D	D1	D2	E1	E2	Ød max
DSHT	260	343	108	116	232	240	190	10

DN



DECONTACTOR™ METAL



20 A/30 A/50 A/90 A

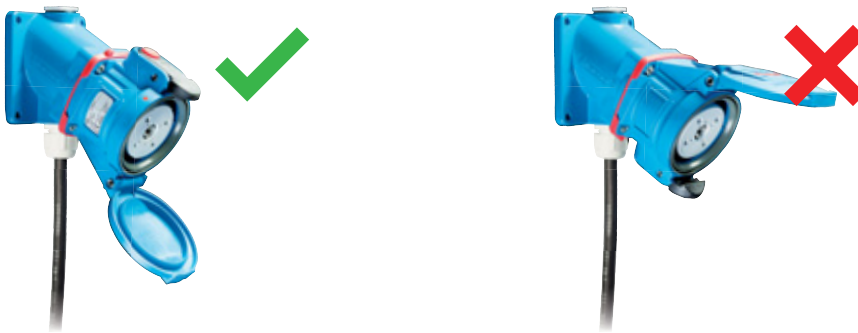
- ▶ IP55 automatic (IP66/IP67 optional)
- ▶ AC-22 and AC-23 Integrated Breaking Capacity (IEC/EN 60947-3)
- ▶ Impact resistant metal casing - IK09
- ▶ Suitable for heavy industry

TECHNICAL FEATURES

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

	DN8	DN1	DN3	DN6
Rated current (In)	20 A	30 A	50 A	90 A
U _{max}	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



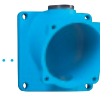
DN DECONTACTOR™ complies with:

- 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 ²
IP protection lid closed	IP55	Stranded wiring (min-max)	1,5-10 mm ²
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 ²
IP protection lid closed	IP55	Stranded wiring (min-max)	2,5-10 mm ²
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 ²
IP protection lid closed	IP55	Stranded wiring (min-max)	2,5-25 mm ²
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+

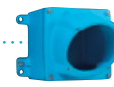
OPTIONS AND ACCESSORIES

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 ²
IP protection lid closed	IP55	Stranded wiring (min-max)	10-35 mm ²
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
INDUSTRIAL - DOMESTIC ADAPTERS				
 <p>Industrial inlet MARECHAL® 1P+N+E + domestic socket-outlet 10/16 A 230 V.</p>	1988015D11*	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>				
LOCKING SHAFT FOR 3 PADLOCKS Ø 8 mm (PADLOCKS NOT SUPPLIED)				
	Socket-outlet ref. + 844	Socket-outlet ref. + 844	Socket-outlet ref. + 844	Socket-outlet ref. + 844
SAFETY HASP FOR UP TO 6 PADLOCKS				
	873A541	873A541	873A541	873A541
INLET CAP				
	198A126	191A126	193A126	196A126
LARGER RELEASE BUTTON				
	Ref. + 453	Ref. + 453	Ref. + 453	Ref. + 453
180° OPENING LID				
	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10
SELF-RETURNING LID (WITHOUT FULL CLOSURE IP40)				
	Socket-outlet ref. +R	Socket-outlet ref. +R	Socket-outlet ref. +R	Socket-outlet ref. +R
180° OPENING & SELF-RETURNING LID				
	Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18
CLOSING MECHANISM				
				Draw lever only: 196A376 Draw plate only: 196A396
IP66/IP67 SOCKET-OUTLET AND INLET (RECOMMENDED IN THE CASE OF COUPLER SOCKET)				
	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
POLY HANDLE WITH GLAND					
	5-21 mm	512P0D21			
	10-30 mm		513P0D30		
	13-35 mm			514P0D35	
	5-21 mm	552P0D21			
	10-30 mm		553P0D30		
	13-35 mm			554P0D35	
ELASTOMER HANDLE WITH GLAND					
	18-25 mm				555P0D25
	25-35 mm				555P0D35
	35-45 mm				555P0D45
	45-49 mm				555P0D49
POLY HANDLE WITH POLY CABLE GLAND					
	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
METAL HANDLE WITH METAL GLAND (+ EARTHING WIRE)					
	7-13 mm	592P020M	593P020M		
	8-16 mm	592P025M	593P025M	594P025M	
	16-24 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

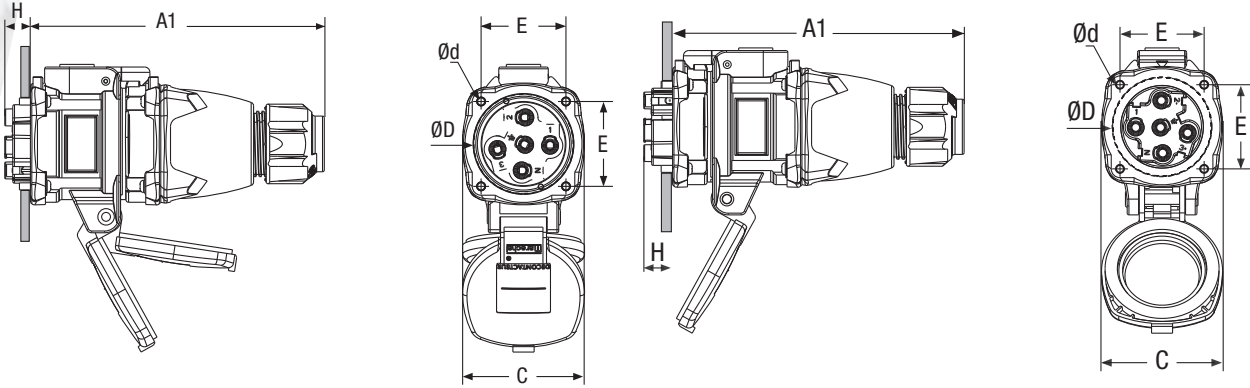
	0°	592M0	593M0	594M0	595M0
	30°	592M3	593M3	594M3	595M3
					
	70°		593M7	594M7	595M7

BOXES			DNs Size 2	DN1 Size 3	DN3 Size 4	DN6 Size 5
POLY BOX						
	30°	M20	512B3M20			
	30°	M25	512B3M25	513B3M25		
	30°	M32			514B3M32	
	30°	M40			514B3M40	
METAL BOX (+ EARTHING WIRE)						
	20°	M20	592B2M20	593B2M20		
	20°	M25	592B2M25	593B2M25	594B2M25	
	20°	M32		593B2M32	594B2M32	
	20°	M40			594B2M40	
POLY BOX + POLY SLEEVE						
	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	
Extra earth bar ref: 51AA089						
METAL BOX (+ EARTHING WIRE) + POLY SLEEVE						
	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
	METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)					
	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
METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)						
	0°	M50				595E0M50
	30°	M50				595E3M50
	30°	M63				595E3M63
	70°	M50				595E7M50
	70°	M63				595E7M63

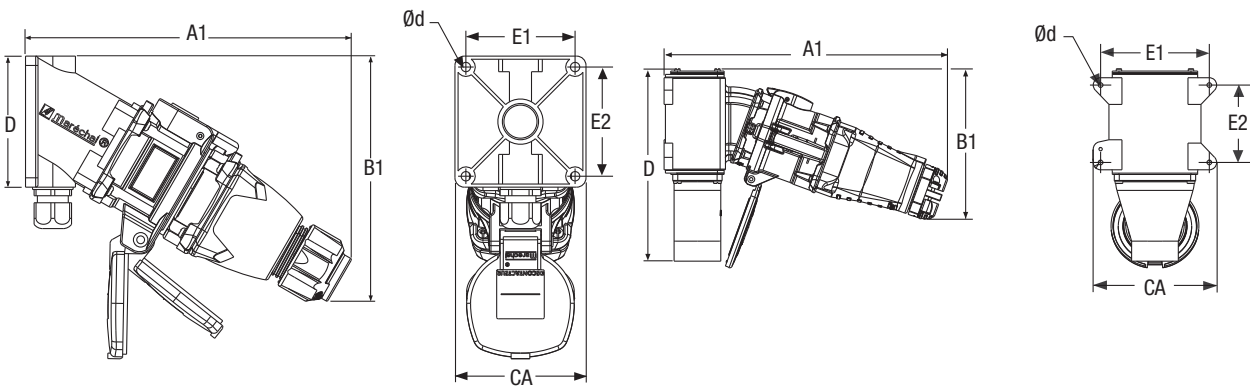


DIMENSIONS

DN8/DN1/DN3/DN6



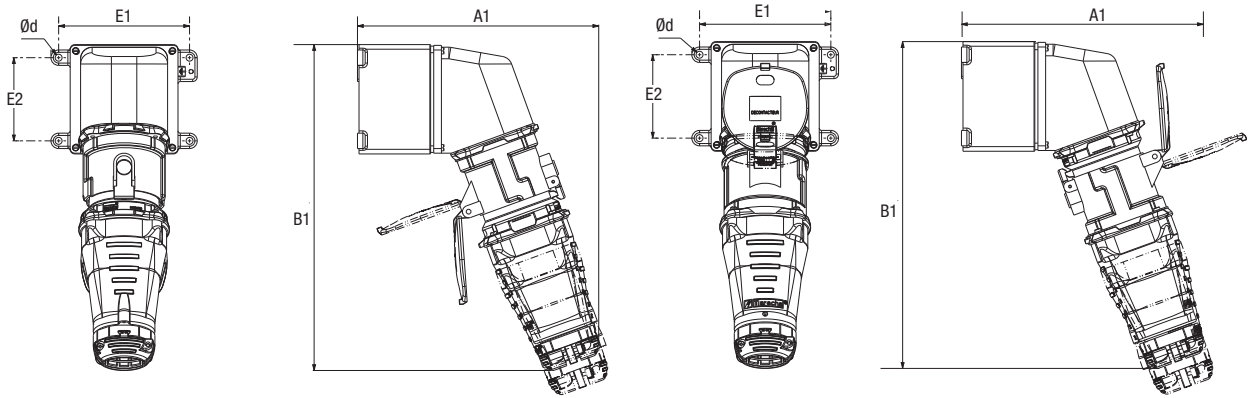
	A1	C	E	H	Ød*
DN8	174	69	48	12	5
DN1	174	81	55	15	5
DN3	212	95	66	22	5,5
DN6	311	118	81	25	6



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

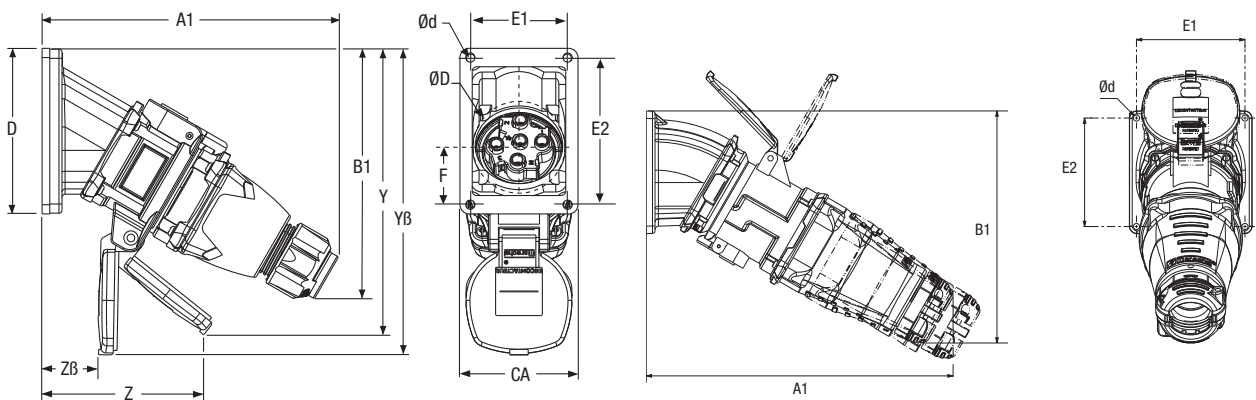
*Ød : maximum drilling diameter.

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

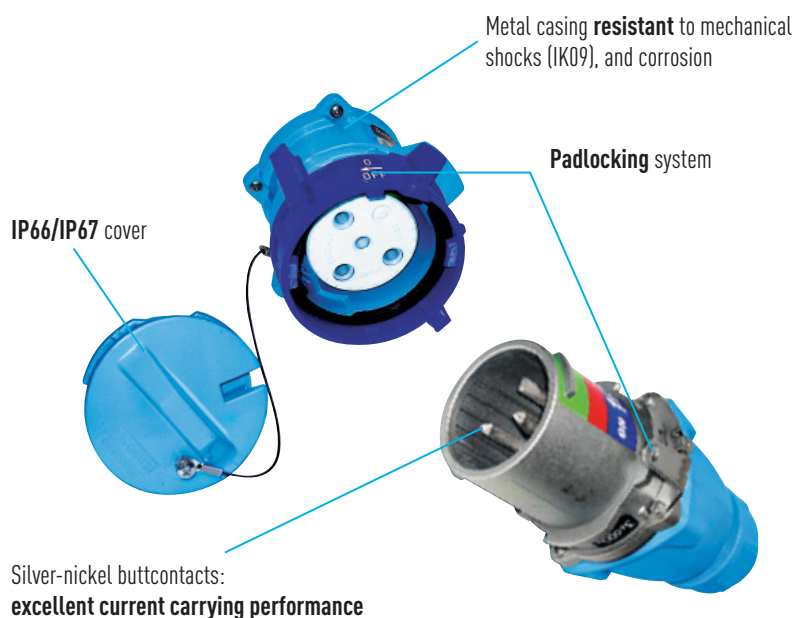
TECHNICAL FEATURES

AC-3 motor switch.

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

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

MECHANICAL FEATURES



UNDERWRITERS
LABORATORIES
INC.



STANDARDS
AUSTRALIA

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).

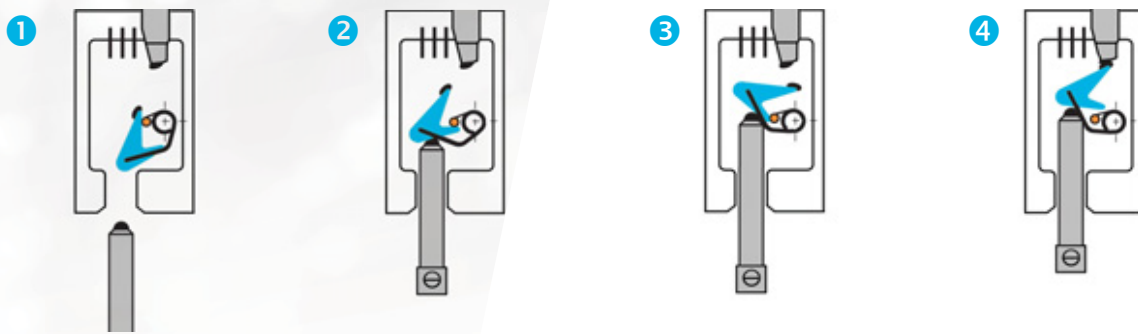
MARECHAL TECHNOLOGY



AC-3 DISCONNECTABLE MOTOR SWITCH

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.

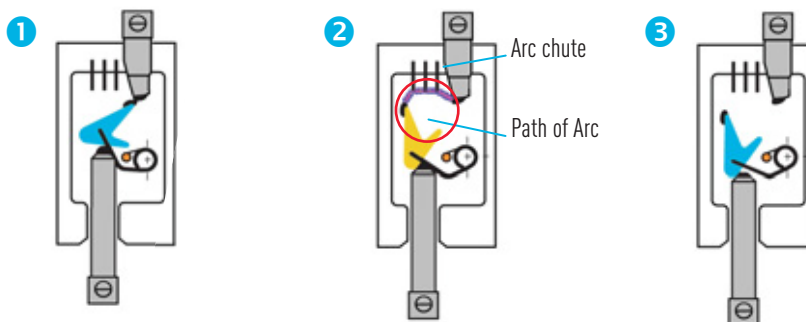
While pushing the plug further, the mobile part moves around a stop and a spring is bent...

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.



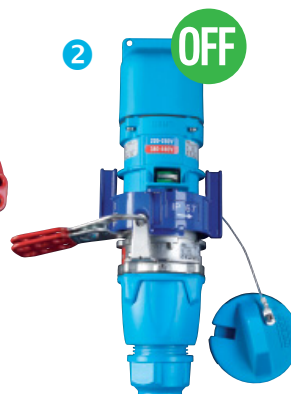
To reconnect:

- 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
513POD30



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 ²
IP protection lid closed	IP66/IP67	Stranded wiring (min-max)	2,5-10 mm ²
IP protection plug connected	IP66/IP67	Pre-wired auxiliary contacts (5 A)	1,5 mm ²
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_{cc} 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 ²
IP protection lid closed	IP66/IP67	Stranded wiring (min-max)	16-35 mm ²
IP protection plug connected	IP66/IP67	Pre-wired auxiliary contacts (5 A)	1,5 mm ²
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_{cc}

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	3P+N+E	8764197	8768197
660-690 V AC	3P+N+E	8764197	8768197
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.





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 ²
IP protection lid closed	IP66/IP67	Stranded wiring (min-max)	25-70 mm ²
IP protection plug connected	IP66/IP67	Pre-wired auxiliary contacts (5 A)	1,5 mm ²
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 _{cc}	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
SAFETY HASP FOR UP TO 6 PADLOCKS			
	873A541	873A541	873A541
INLET CAP			
	873A126	876A126	879A126



ACCESSORIES





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

BOXES			DB3 Size 3	DB6 Size 4	DB9 Size 5
METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)					
	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
METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)					
	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
METAL SLEEVE				
	0°	593M0	594M0	595M0
	30°	593M3	594M3	595M3
	70°	593M7	594M7	595M7

LEGEND FOR OPTIONAL ACCESSORIES

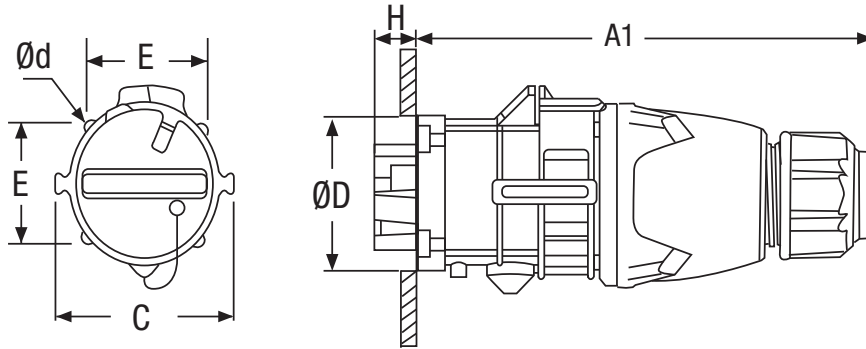
-  Angle
-  Threading or gland size
-  EMC option
-  HT 240° C
-  Self-ejection

INFO +

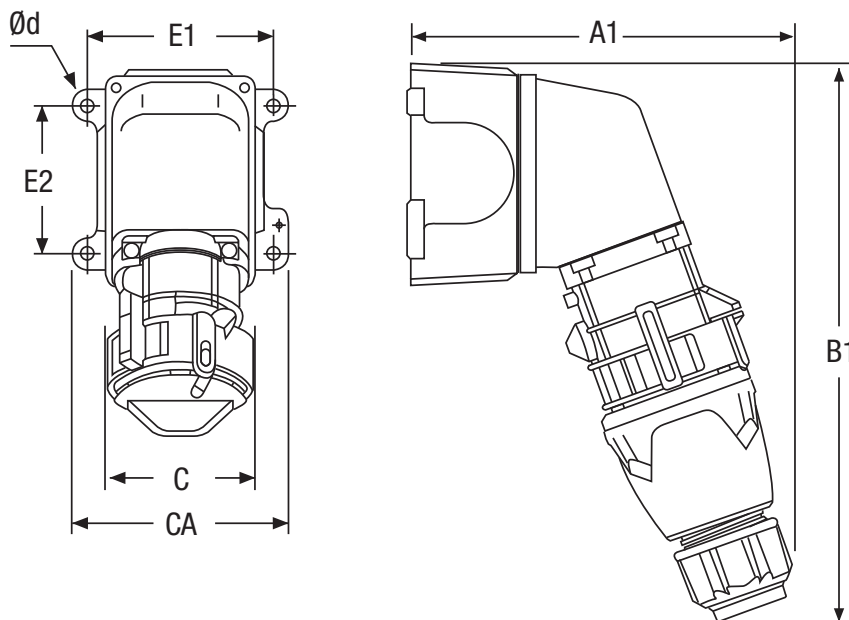
HANDLES		DB3 Size 3	DB6 Size 4	DB9 Size 5
POLY HANDLE WITH GLAND				
	10-30 mm	513P0D30		
	13-35 mm		514P0D35	
	10-30 mm	553P0D30		
	13-35 mm		554P0D35	
ELASTOMER HANDLE WITH GLAND				
	18-25 mm			555P0D25
	25-35 mm			555P0D35
	35-45 mm			555P0D45
	45-49 mm			555P0D49
POLY HANDLE WITH POLY CABLE GLAND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



DIMENSIONS

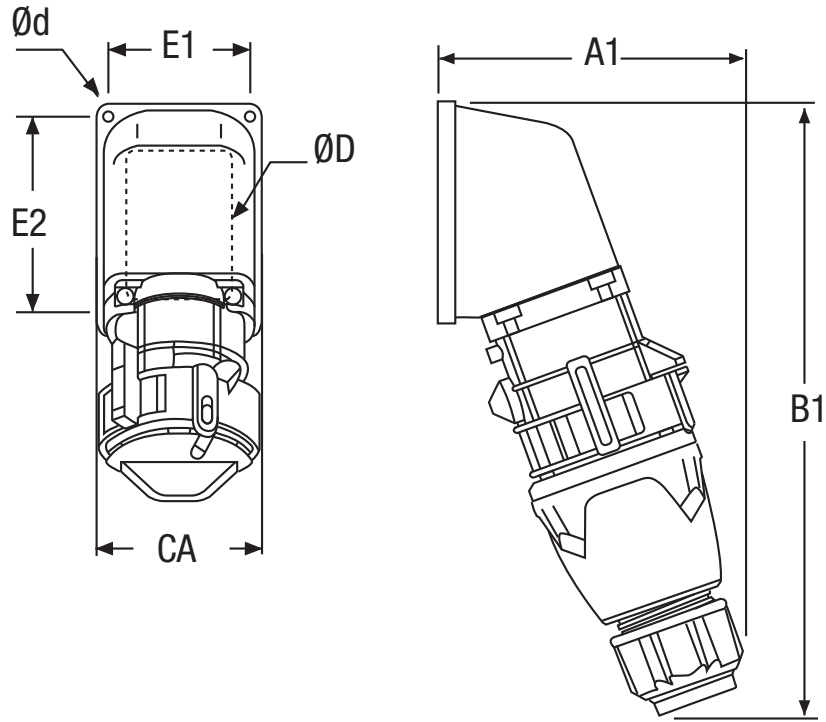


	A1	C	E	H	Ød**	ØD max
DB3	213	110	55	26	4,5	54
DB6	229	123	66	32	5,5	67
DB9	341	146	81	42	5,5	84

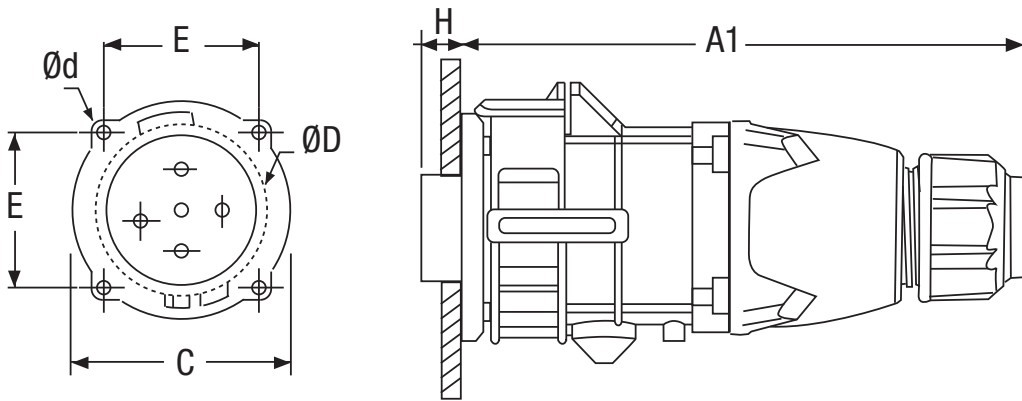


	A1	B1	C	CA	D	E1	E2	H	Ød**
DB3	230	296	84	110	114	94	70	30	6,5
DB6	266	347	114	145	145	125	97	40	8,5
DB9	335	452	140	190	140	170	108	49	9

*Ød : maximum drilling diameter.



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



	A1	C	E	H	Ød**	ØD max
DB3	213	80	55	18	4,5	54
DB6	229	93	66	21	5,5	67
DB9	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



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 Δ 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™ Δ 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.

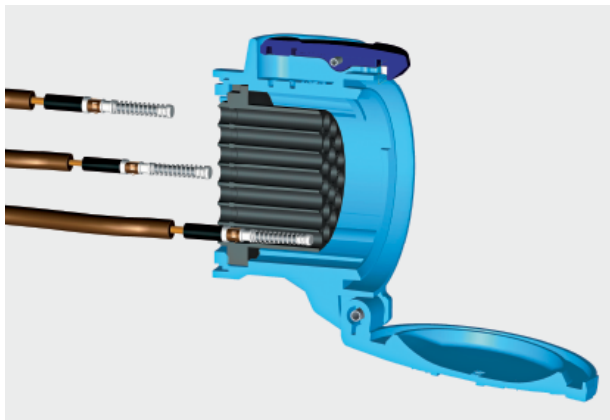
- No need for soldering performance qualifications.
- High resistance to vibrations.
- Handling more than 5000 operations: a high durability and quality of connection guaranteed.

ACCESSORIES AND OPTIONS	DESIGNATION	REFERENCE
	Bag of 13 females contacts	01AA213
	Bag of 13 males contacts	01AA113 (PN12C) 61CA113 (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 mm² to 2,5 mm²
- 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 mm² 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

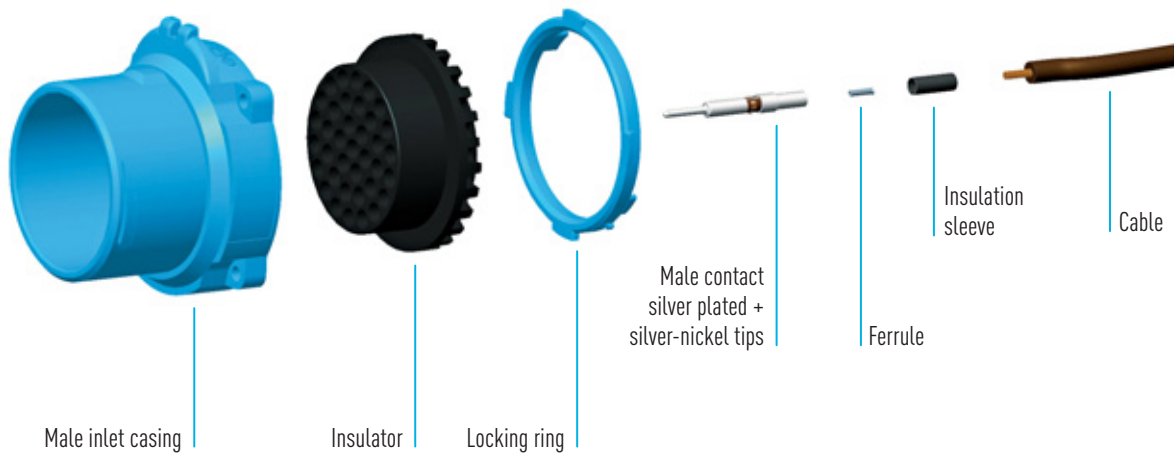
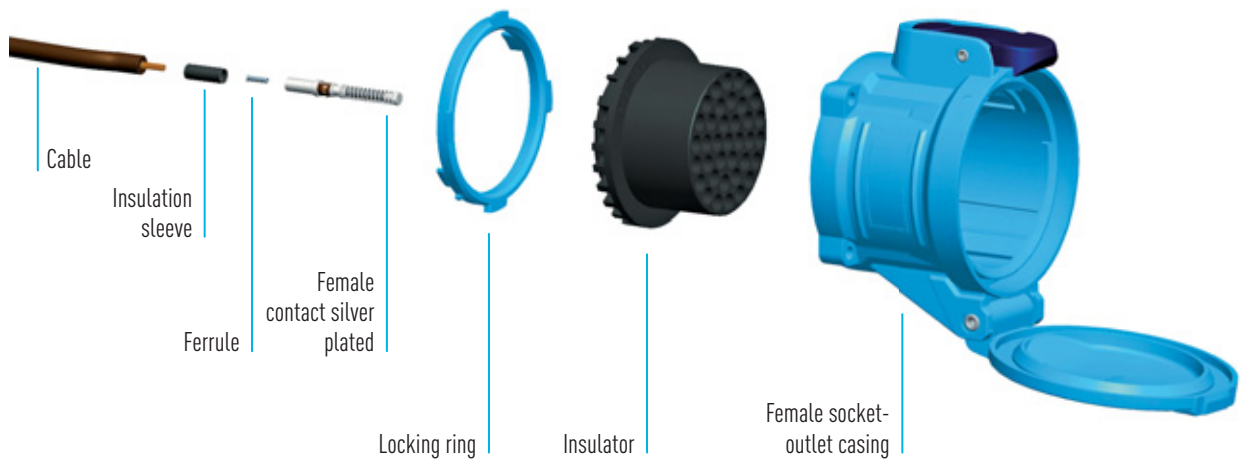


Assembly

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.



PN7c

MULTI-CONTACT CONNECTORS

GRP

OR

METAL

25 A IP66/IP67



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 ²
IP protection lid closed	IP66/IP67	Stranded wiring (min-max)	1-6 mm ²
IP protection plug connected	IP66/IP67	Wiring (terminals)	screw-type
Shock resistance (poly casing)	IK08	Keying positions	5



GRP devices are not compatible with metal devices.



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



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
480 V AC	5P+E (25 A)	09P4051	09P8051
480 V AC	6P+E (16 A)	09P4061	09P8061



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 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 ²
Maximum voltage	415 V	Stranded wiring (min-max)	1,5-10 mm ²
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 ²
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)



GRP	480 V AC	12 contacts	01A4001	01A8001
METAL	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.



GRP devices are not compatible with metal devices.

INFO+

OPTIONS AND ACCESSORIES

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



DN20c

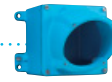
MULTI-CONTACT CONNECTORS METAL

MULTI

25 A IP55



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 ²
Maximum voltage	415 V	Stranded wiring (min-max)	1,5-10 mm ²
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+

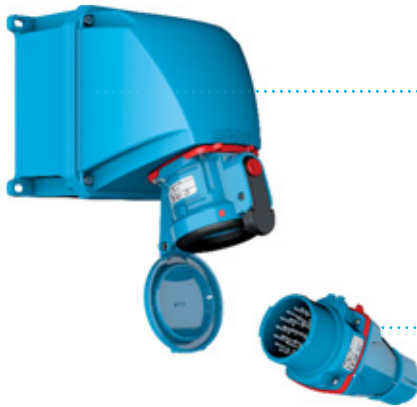
OPTIONS AND ACCESSORIES

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 ²
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

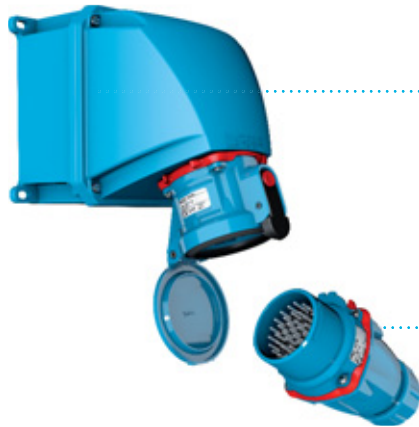
Find the boxes, sleeves and handles at the end of the section page 94.



DSN37C

MULTI-CONTACT CONNECTORS GRP

16 A IP66/IP67



WALL MOUNTING SOCKET DSN37C



Wall box poly 70°
513C7M25



Socket-outlet
61C4003

PLUG DSN37C



Straight handle poly
513POD30



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 ²
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	> 5 000 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.



DS7c3

DECONTACTOR™ METAL

50 A IP55



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 ²
IP protection lid closed	IP55	Stranded wiring (min-max)	2,5-10 mm ²
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
LOCKING PIN FOR 2 PADLOCKS Ø 8 mm (PADLOCKS NOT SUPPLIED)						
	Ref. + 843 1 padlocks Ø 4 mm	NA	Ref. + 843 1 padlocks Ø 4 mm	NA	Ref. + 843	Ref. + 843
LOCKING PIN FOR 3 PADLOCKS Ø 8 mm (PADLOCKS NOT SUPPLIED)						
	NA	Ref. + 844	NA	Ref. + 844	NA	NA
SCREW LOCKING IMPRINT BTR 2,5						
	Ref. + 22	NA	Ref. + 22	NA	NA	NA
LARGER RELEASE BUTTON						
	NA	Socket-outlet ref. + 453	NA	Socket-outlet ref. + 453	Socket-outlet ref. + 453	Socket-outlet ref. + 453
IN-LINE CONNECTIONS (A PAIR OF FINGER DRAW PLATES TO AID CLOSING)						
					613A346	616A346
INLET CAP						
	012A126	191A126	012A126	196A126	NA	NA
 IP66/IP67		NA	NA	NA	613A426	616A426
180° OPENING LID						
	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10
SELF-RETURNING LID (WITHOUT FULL CLOSURE IP40)						
	Socket-outlet ref. +R	Socket-outlet ref. +R	Socket-outlet ref. +R	Socket-outlet ref. +R	Socket-outlet ref. +R	Socket-outlet ref. +R
180° OPENING & SELF-RETURNING LID						
	Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18
CLOSING MECHANISM						
	Draw lever only			196A376		
	Draw plate only			196A396		
IP66/IP67 SOCKET-OUTLET AND INLET						
	Standard	Ref. + 600	Standard	Ref. + 600	Standard	Standard
ELECTROMAGNETIC COMPATIBILITY (EMC) (SEE DETAIL PAGE 223)						
		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	
POLY BOX								
	30°	M20	511B3M20	512B3M20				
	30°	M25	511B3M25	512B3M25	513B3M25			
	30°	M32				514B3M32		
	30°	M40				514B3M40		
METAL BOX (+ EARTHING WIRE)								
	20°	M20		592B2M20	593B2M20			Ref. +EMC
	20°	M25		592B2M25	593B2M25	594B2M25		Ref. +EMC
	20°	M32			593B2M32	594B2M32		Ref. +EMC
	20°	M40				594B2M40		
POLY BOX + POLY SLEEVE								
	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		
METAL BOX (+ EARTHING WIRE) + POLY SLEEVE								
	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	
METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)								
	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	




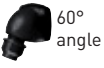





BOXES			PN7C PN12C Size 1	DSN24C Size 2	DN9C DSN37C Size 3	DS7c3 Size 4	DN20c Size 5
METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)							
	0°		M50				595E0M50
	30°		M50				595E3M50
	30°		M63				595E3M63
	70°		M50				595E7M50
	70°		M63				595E7M63

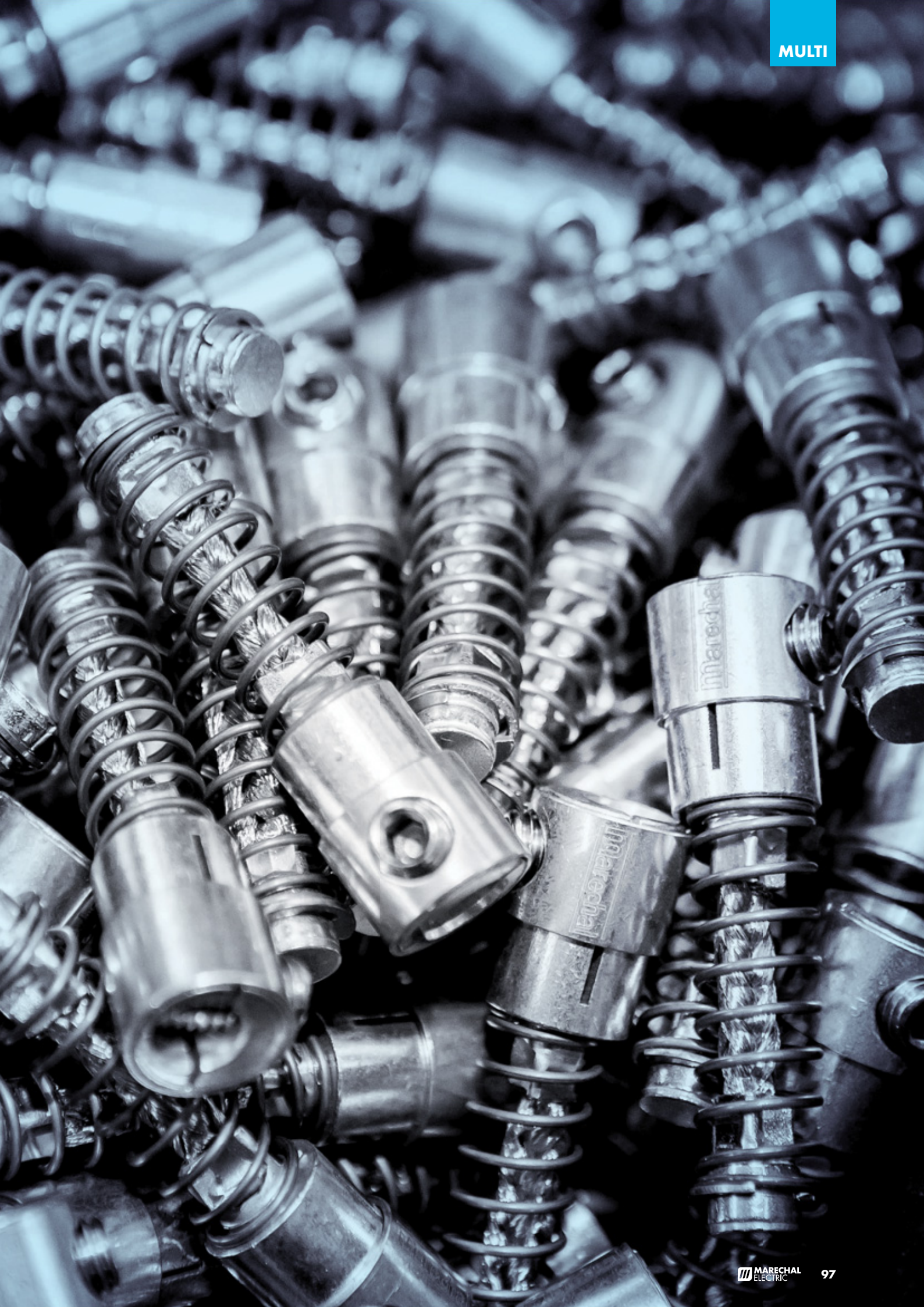
SLEEVE		PN7C PN12C Size 1	DSN24C Size 2	DN9C DSN37C Size 3	DS7c3 Size 4	DN20c Size 5	
POLY SLEEVE							
 DSN1	30°	511M3	512M3	513M3	514M3	515M3	
	30°	551M3	552M3	553M3	554M3	555M3	
	70°	511M7	512M7	513M7	514M7		
	70°	551M7	552M7	553M7	554M7		
METAL SLEEVE							
	0°	591M0	592M0	593M0	594M0	595M0	Ref. +EMC
 DSN1	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								
 * Short	9-18 mm	511P0D18*						
	5-21 mm	511P0D21	512P0D21					
	10-30 mm			513P0D30				
	13-35 mm				514P0D35			
 * Short	9-18 mm	551P0D18*						
	5-21 mm		552P0D21					
	10-30 mm			553P0D30				
	13-35 mm				554P0D35			
 60° angle	9-18 mm	511P6D18						
 60° angle	9-18 mm	551P6D18						
ELASTOMER HANDLE WITH GLAND								
	18-25 mm					555P0D25		
	25-35 mm					555P0D35		
	35-45 mm					555P0D45		
	45-49 mm					555P0D49		
POLY HANDLE WITH POLY CABLE GLAND								
	5-12 mm	511P020P	512P020P					Ref. +443
	9-18 mm	511P025P	512P025P	513P025P				Ref. +443
	14-25 mm	511P032P	512P032P	513P032P	514P032P	515P032P		Ref. +443
	18-32 mm		512P040P	513P040P	514P040P	515P040P		Ref. +443
	24-38 mm				514P050P	515P050P		
	35-48 mm					515P063P		
METAL HANDLE WITH METAL GLAND (+ EARTHING WIRE)								
	7-13 mm	591P020M	592P020M	593P020M				Ref. +EMC (7-12 mm)
	8-16 mm	591P025M	592P025M	593P025M	594P025M			Ref. +EMC (9-16 mm)
	16-24 mm	591P032M	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		
	35-48 mm					595P063M		
POLY HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY)								
	M20	511P0M20	512P0M20	513P0M20				Ref. +443
	M25	511P0M25	512P0M25	513P0M25				Ref. +443
	M32	511P0M32	512P0M32	513P0M32	514P0M32			Ref. +443
	M40		512P0M40	513P0M40	514P0M40			Ref. +443
	M50				514P0M50	515P0M50		Ref. +443
	M63					515P0M63		Ref. +443
	METAL HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY)							
	M20	591P0M20	592P0M20	593P0M20				Ref. +EMC
	M25	591P0M25	592P0M25	593P0M25	594P0M25			Ref. +EMC
	M32	591P0M32	592P0M32	593P0M32	594P0M32	595P0M32		Ref. +EMC
	M40			593P0M40	594P0M40	595P0M40		Ref. +EMC
	M50				594P0M50	595P0M50		
	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



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

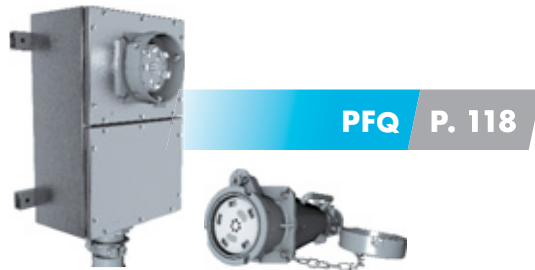
- Standard IP66/IP67
- All industries
- GRP or metal casing



PNHT P. 105

HIGH TEMPERATURE PLUGS & SOCKETS

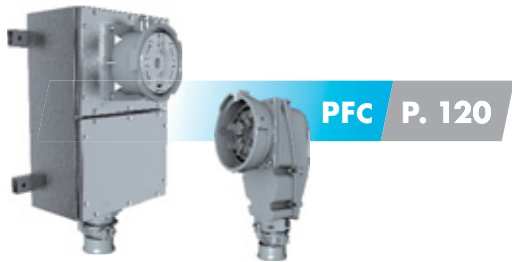
- Permanent 240 °C
- 30 A/500 V
- IP44 water-and dust-tight sealing



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/IP69 (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 ² to 2,5 mm ² 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 IP69 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) IP69 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)

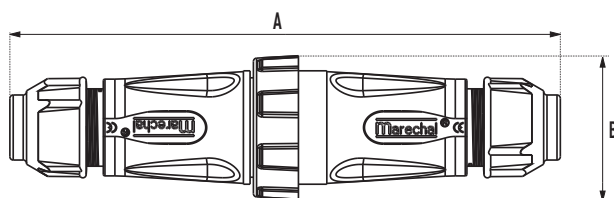


480 V AC

5P

01E3007

01E1007



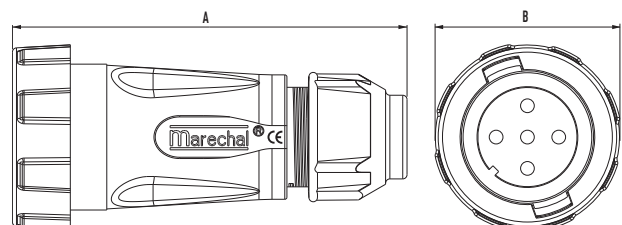
PNC

A

165

B

45



PNC

A

92

B

45

PNC connectors comply with:

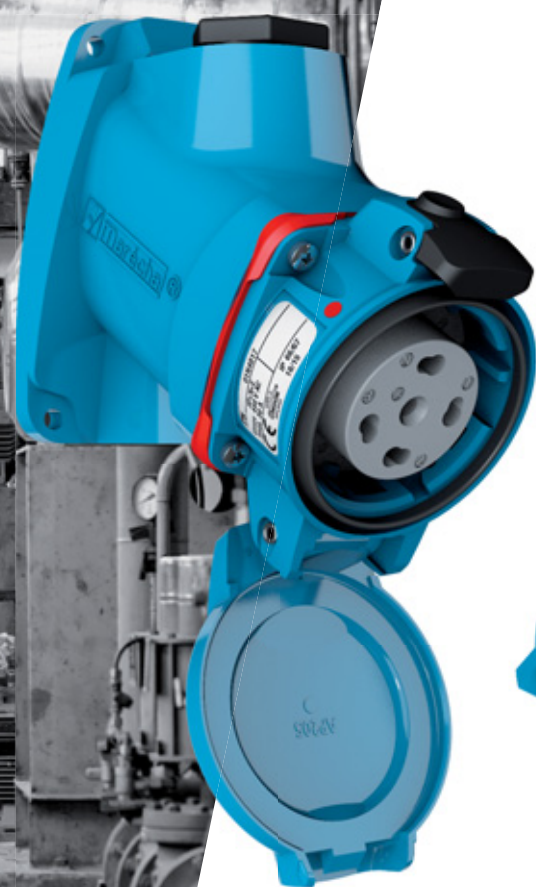
- The requirements of IEC 61984, IEC 60529, IEC 62262, IEC 68-2-6 International standards,
- The European Low Voltage Directive 2014/35/EU,
- The French NF C 15-100 standard,
- The decrees relating to workers' protection in Belgium, Spain and Italy.

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 _n)	30 A	30 A
U _{max}	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.

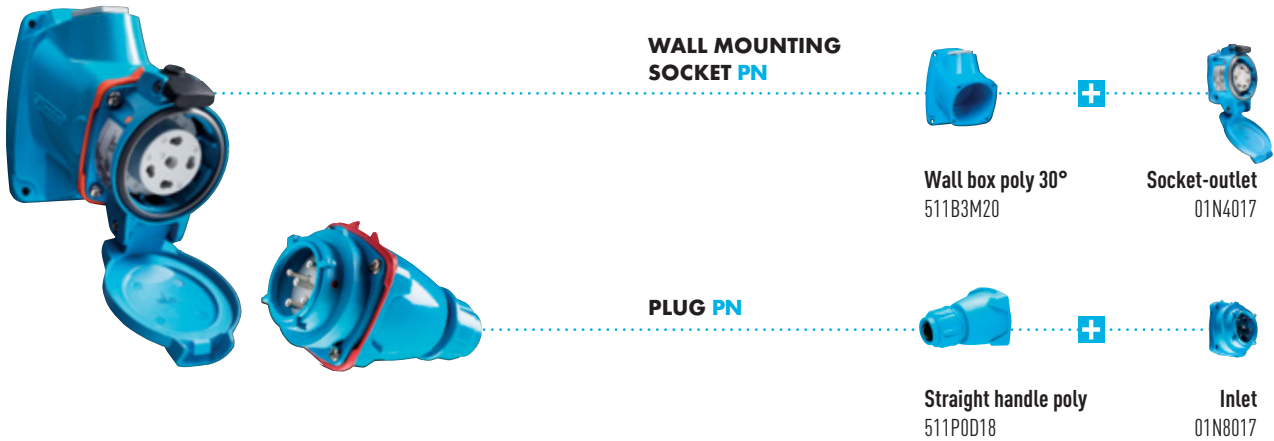


To remove the plug: turn the plug clockwise and withdraw.

**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).



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 ²
IP protection lid closed	IP66/IP67	Stranded wiring (min-max)	1,5-10 mm ²
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)

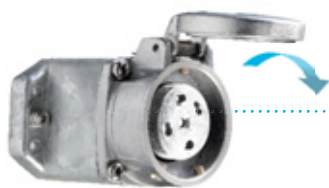
20-24 V AC	2P	09N408A	09N808A
220-250 V AC	1P+N+E	09N4015	09N8015
380-440 V AC	3P+E	09N4013	09N8013
220-250 V AC 380-440 V AC	3P+N+E	09N4017	09N8017
480-500 V AC	3P+E	09N4093	09N8093
480-500 V AC	3P+N+E	09N4097	09N8097

► 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

► Automatic closure of the lid

MAIN FEATURES

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



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	380-440 V AC	3P+N+E	0924017185	0928017185



OPTIONS (DETAILS ON PAGE 216)

	PN	PNC
INDUSTRIAL-DOMESTIC ADAPTERS		
	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.	
LOCKING WITH PADLOCK (Ø 4 mm) WITHOUT SHAFT (PADLOCKS NOT SUPPLIED)		
	Ref. + 843	NA
SCREW LOCKING IMPRINT BTR 2,5		
	Socket-outlet ref. + 22	NA
REVERSED INTERIOR AND CONTACTS		
	The connector is supplied with a Rubber inlet cap.	Ref. conn. + 001 Socket-outlet ref. + 001
IP55 SELF-CLOSING LID (SOCKET-OUTLET)		
	Replace N by S Eg: 400 V 3P+N+E poly = 01S4017	
INLET CAP		
	Socket-outlet cap Plug cap	01EA125 01EA126
	Inlet cap	012A126
ADAPTER PLATE FOR PN ACCESSORIES		
		251A457-E
180° OPENING LID		
	Metal socket ref. + 10	NA
SELF CLOSING/SELF RETURNING LID (ACCORDING TO MODEL)		
	Socket-outlet ref. +R	NA
180° OPENING & SELF-RETURNING LID		
	Socket-outlet ref. + 18	NA
ELECTROMAGNETIC COMPATIBILITY (EMC) (SEE DETAIL PAGE 223)		
	Metal socket ref. +EMC	



ACCESSORIES

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

BOXES



PN
Size 1

PNHT
Size 1



POLY BOX



0° M20 511B0M20

0° M25 511B0M25



30° M20 511B3M20

30° M25 511B3M25

METAL BOX (+ EARTHING WIRE)



0° M20 591B0M20 Ref. +EMC

0° M25 591B0M25 Ref. +EMC



0° M20 571B0M20185

0° M25 571B0M25185

POLY BOX + POLY SLEEVE



70° Without Hole 511C7000

70° ø 20 511C7M20

70° ø 25 511C7M25

Extra earth bar ref: 51AA089

70° ø 32 511C7M32

METAL BOX (+ EARTHING WIRE) + POLY SLEEVE



30° M20 511C3M20

METAL BOXES WITH METAL SLEEVE (+ EARTHING WIRE)



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 SOCKET



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

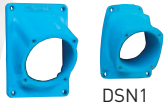


PN
Size 1

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



POLY HANDLE WITH GLAND



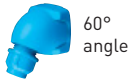
* Short

9-18 mm	511P0D18*
5-21 mm	511P0D21



* Short

9-18 mm	551P0D18
---------	----------



60°
angle

9-18 mm	511P6D18*
---------	-----------



60°
angle

9-18 mm	551P6D18
---------	----------

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



5-12 mm	511P020P
9-18 mm	511P025P
14-25 mm	511P032P

METAL HANDLE WITH METAL GLAND (+ EARTHING WIRE)



7-13 mm	591P020M	
8-16 mm	591P025M	Ref. +EMC (9-16 mm)
16-24 mm	591P032M	Ref. +EMC (11-21 mm)



8-13 mm		571P020M185
12-20 mm		571P025M185
18-28 mm		571P032M185

POLY HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY, FOR A BLACK COLOUR HANDLE REPLACE THE SECOND REFERENCE CHARACTER 1 WITH 5)



M20	511P0M20
M25	511P0M25
M32	511P0M32

METAL HANDLE WITHOUT CABLE GLAND (METRIC THREAD ENTRY)



M20	591P0M20	
M25	591P0M25	Ref. +EMC
M32	591P0M32	Ref. +EMC



M25		571P0M25185
M32		571P0M32185






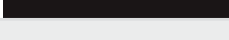
SPARE PARTS



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

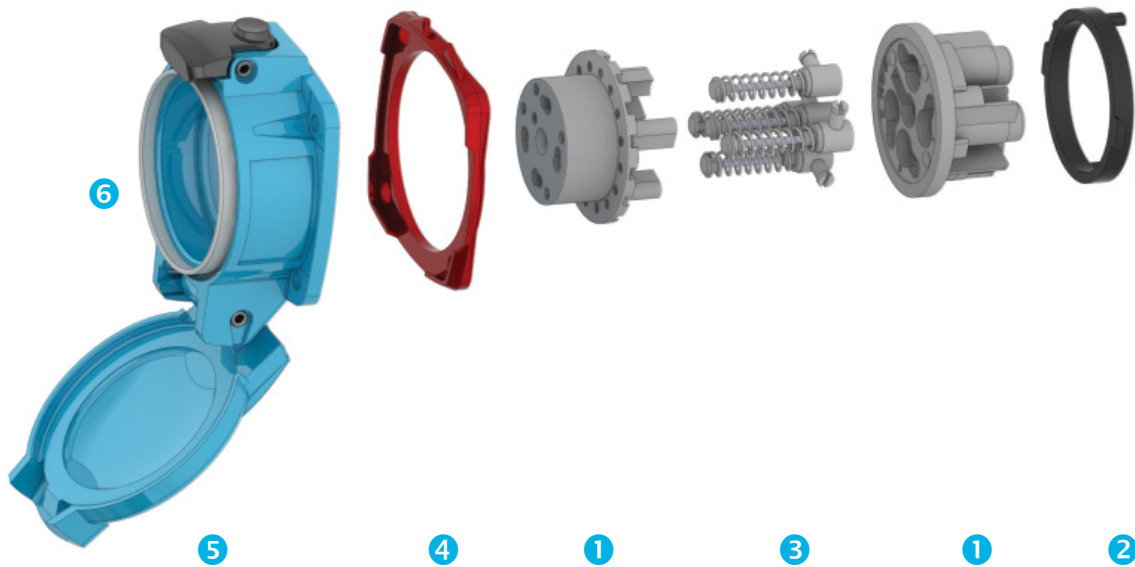


Remember to order the special removal key



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

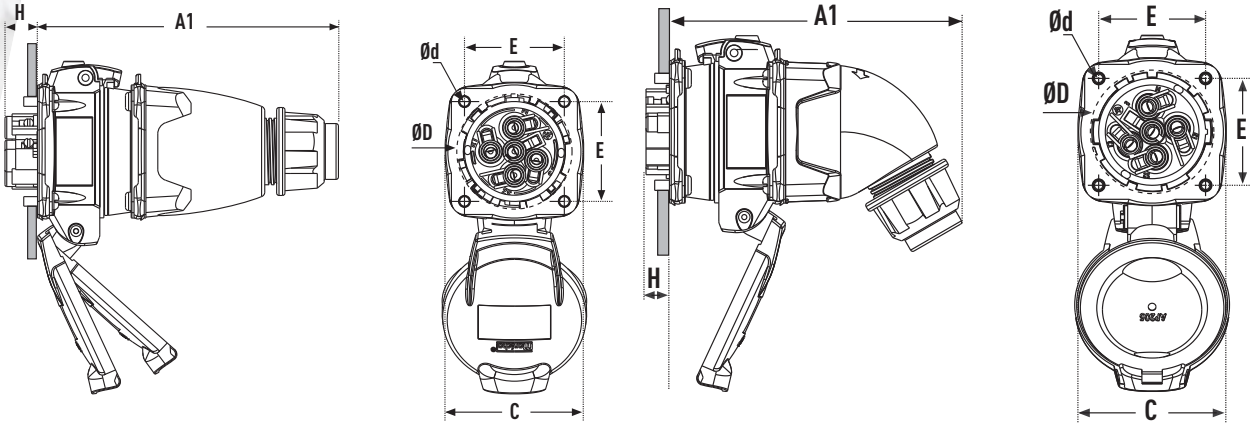
*Add suffix cover option (opening 180 °, self-returning, etc.).

Contact us for spare parts.

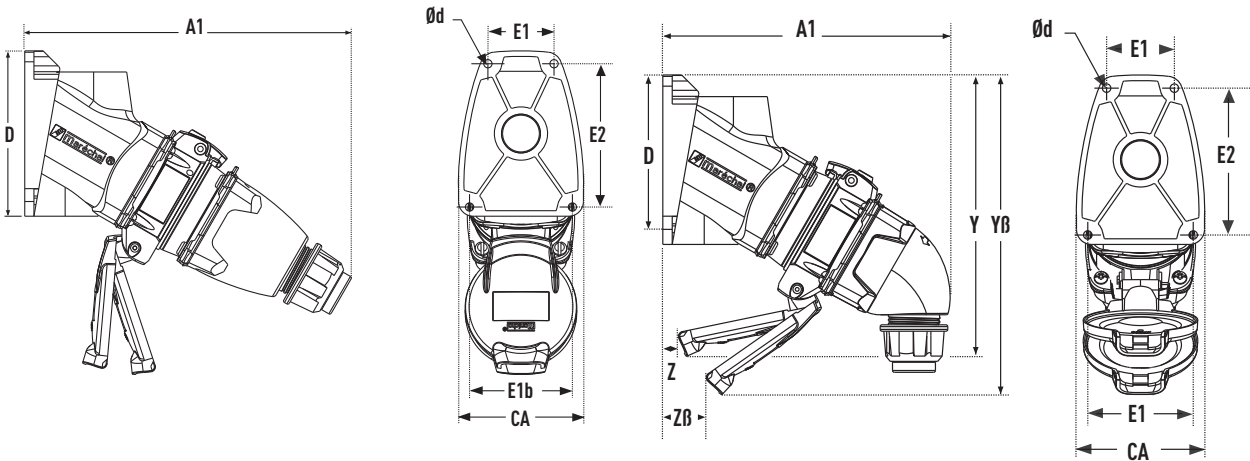


DIMENSIONS

PN



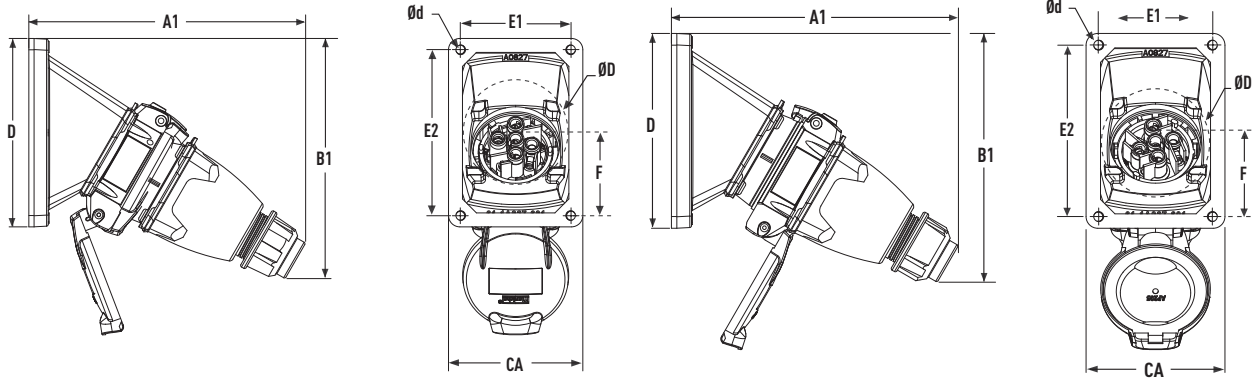
	A1	C	E	H	Ød*
Straight handle	127	58	42	14	4,5
Angled handle	117	58	42	14	4,5



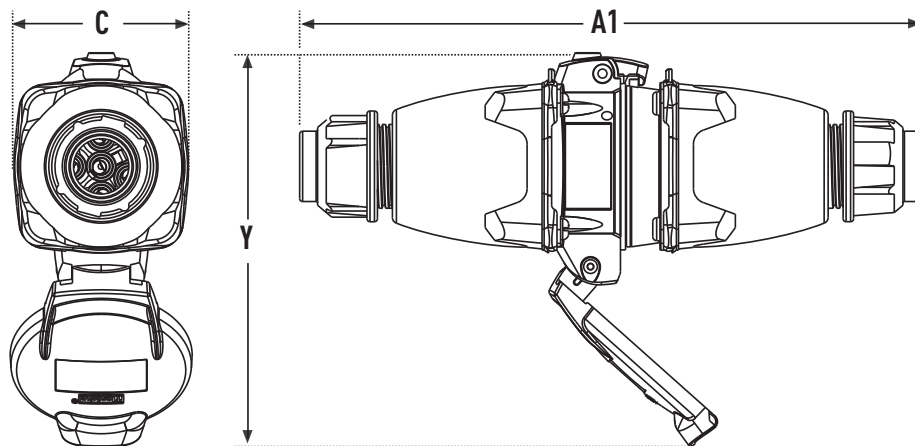
	A1	B1	CA	D	E1	E1b	E2	Ød*
Straight handle	178	143	68	90	36	56	78	4,5
Angled handle	153	159	68	90	36	56	78	4,5

*Ød : maximum drilling diameter.

PN



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



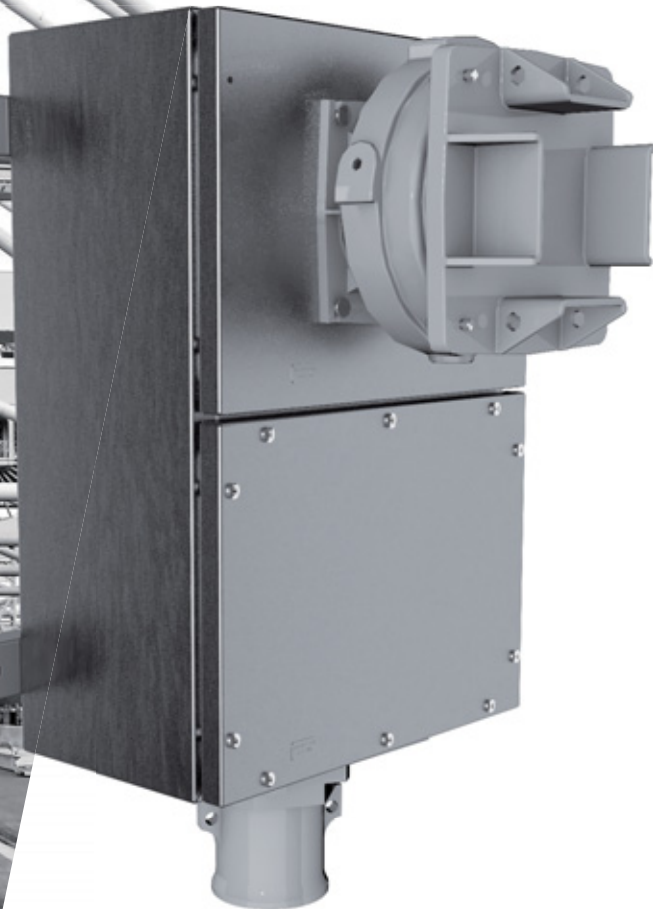
	A1	C	Y
Straight handle	208	58	132

*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

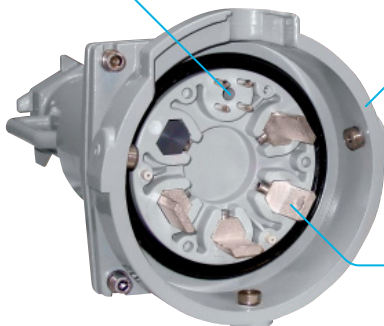
Socket-outlets that must be linked to switch/contactors via the pilot contacts.

	PFQ3	PFQ4	PFC5	PFC6
Rated current (In)	315 A	400 A	500 A	600 A
U _{max}	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

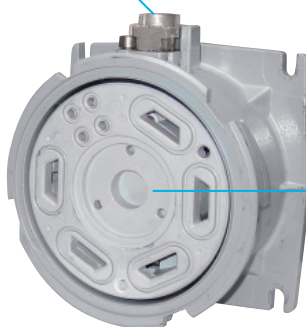
IK10 metal casing
High resistance to shocks



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

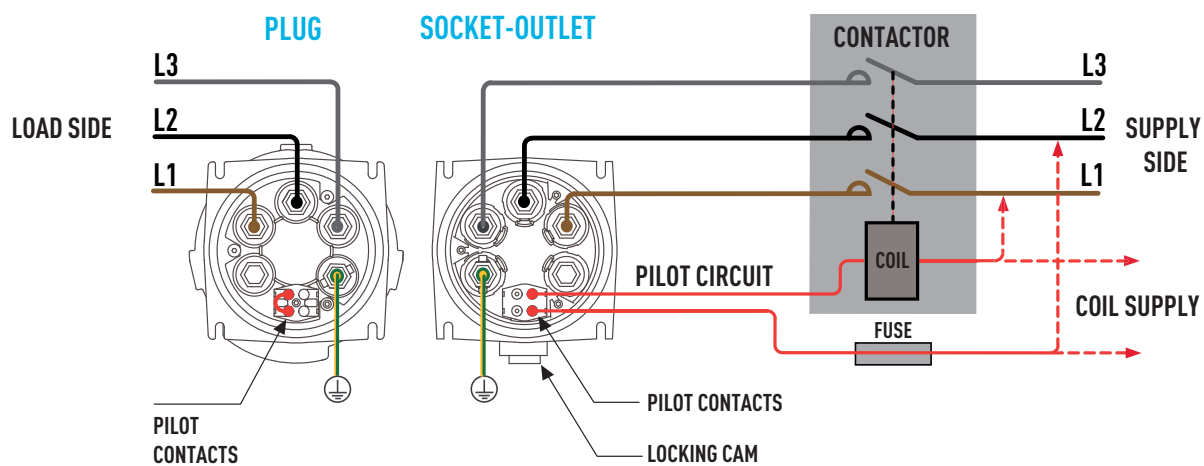
ELECTRICAL INTERLOCKING

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



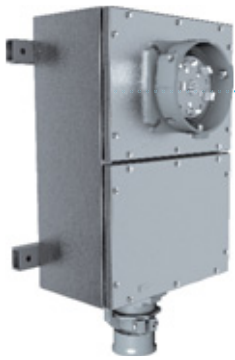
PILOT CONTACTS

	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 ²
Maximum voltage	690 V	Stranded wiring (min-max)	95-240 mm ²
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 ²	Wiring from 150 to 240 mm ²
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

Straight connection:
use M12 straight cable lugs and sleeves

Right angle connection using straight M12 cable lugs and insulation sleeves



PF socket instructions



ACCESSORIES AND OPTIONS

Key for locking and operating pilot contacts	473A393
Inlet lid	474A126
M12 connection piece	474A277



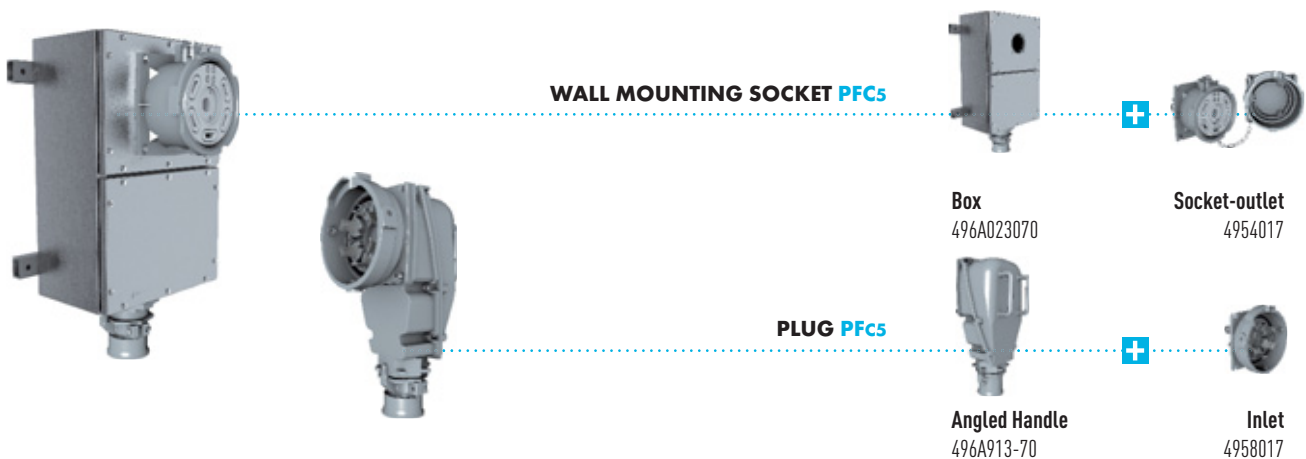
It is recommended to put an insulating sleeve once the lugs are crimped.



* Trumpet gland available on request

PFC5 & C6

HEAVY-DUTY PLUGS & SOCKETS



MAIN FEATURES

Rated current	500 A (PFC5)/600 A (PFC6)	Flexible wiring (min-max)	95-240 mm ²
Maximum voltage	1 000 V	Stranded wiring (min-max)	95-240 mm ²
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 **PFC6 (600 A)**

INLET male **PFC6 (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 ²	Wiring from 150 to 240 mm ²
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



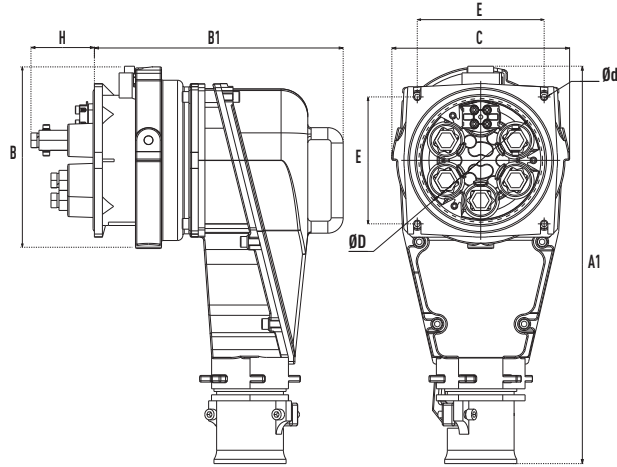
i It is recommended to put an insulating sleeve once the lugs are crimped.

* Trumpet gland available on request

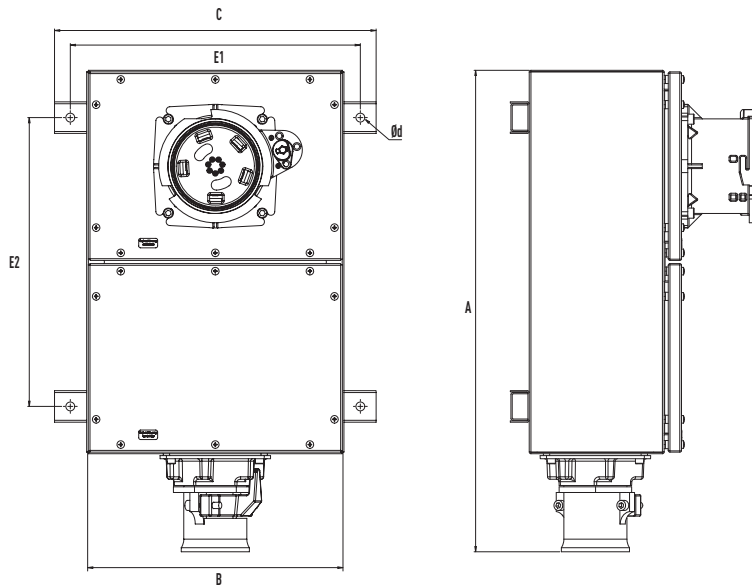


DIMENSIONS

PFQ/PFC



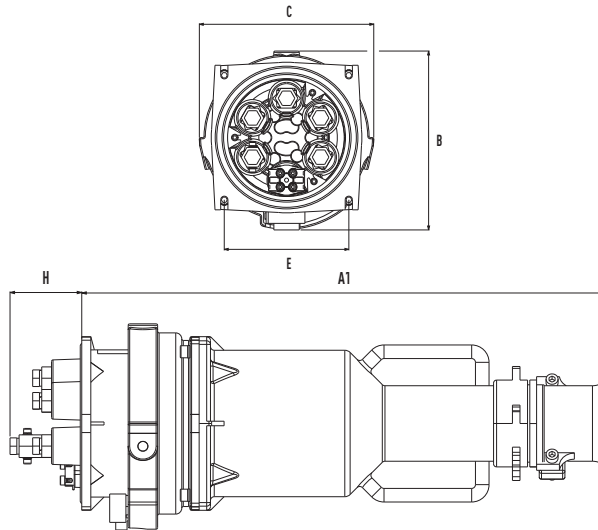
	A1	B	B1	C	E	H	Ød*	ØD max.
PFQ ANGLED	471	244	354	202	145	69	11	135
PFC ANGLED	595	273	373	266	190	95	11	185



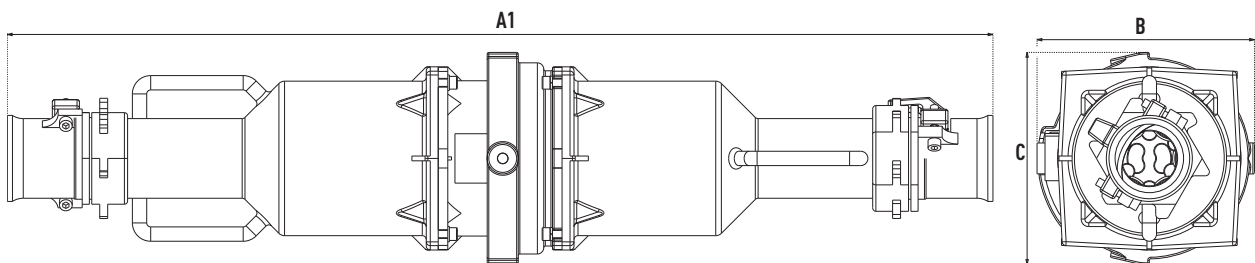
	A	B	C	E1	E2	Ød*
95-150 mm²	764	408	510	460	458	14
150-240 mm²	1064	408	510	460	400/800	14

*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



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 mm² conductors



CS1000 P. 130

SINGLE POLE POWER CONNECTOR

- Up to 400 A/1 000 V
- Automatic IP66/IP67 water- and dust-tight
- Visual and mechanical coding
- 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 mm² conductors

TECHNICAL FEATURES

Type CS	Wire cross-section (mm ²)	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 ²)	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 ²)	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.



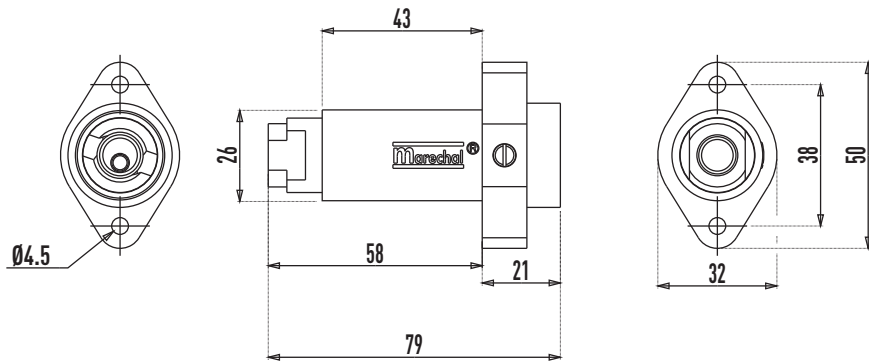
Wiring (mm ²)		Straight threaded M10*	Straight threaded M14*	Internal diameter (mm)
Flexible	Stranded	CS2	CS3	
16	25	4 2 301 416		6,6
25	35	42 301 430		7,9
35	50	42 301 440		9,2
50	70	42 301 450	4 3301 450	11
70	95		4 3301 475	13,1
95	120		4 3301 400	14,5

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

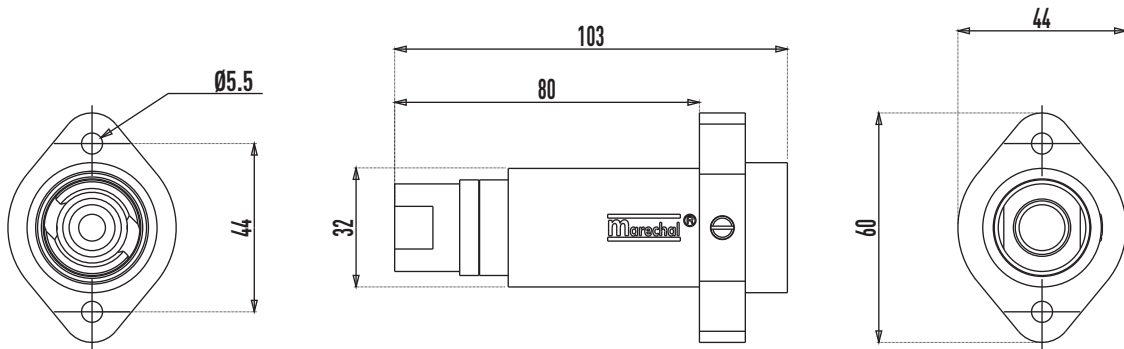


DIMENSIONS

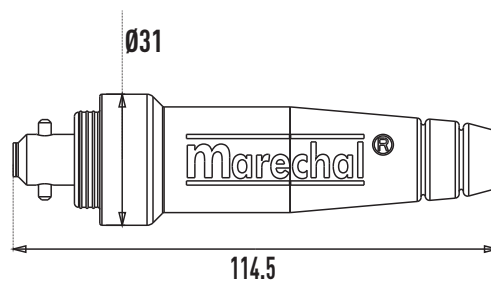
CS2/SOCKET-OUTLET



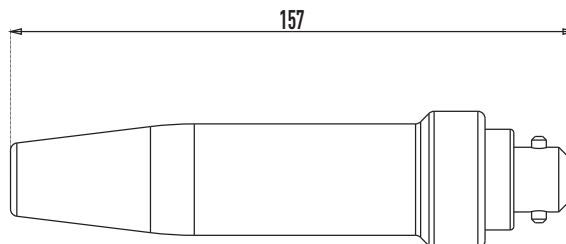
CS3/SOCKET-OUTLET



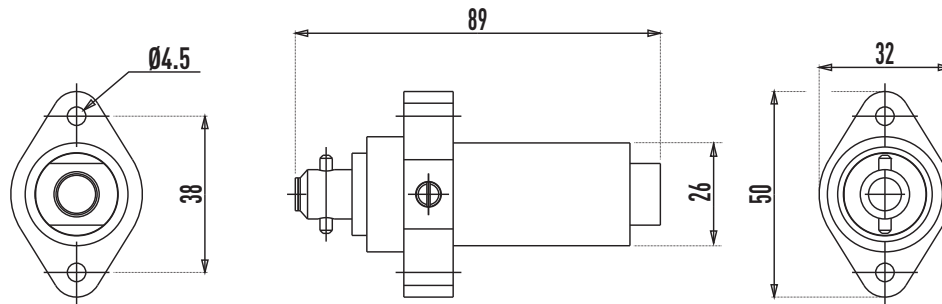
CS2/PLUG



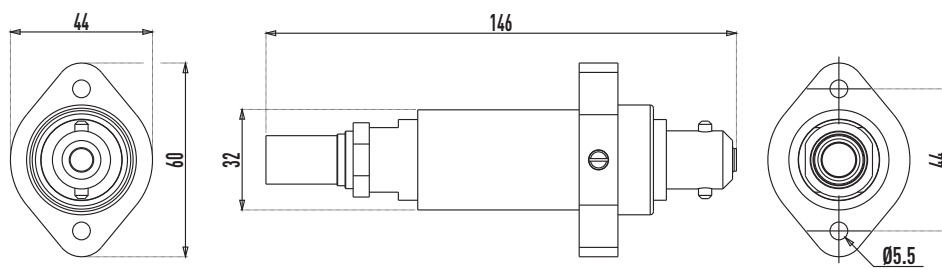
CS3/PLUG



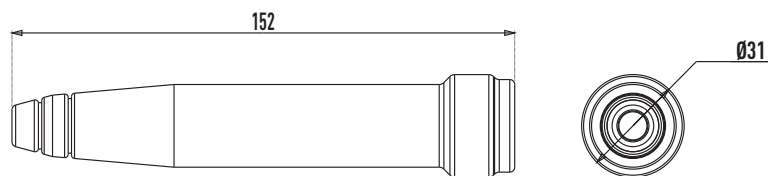
CS2/INLET



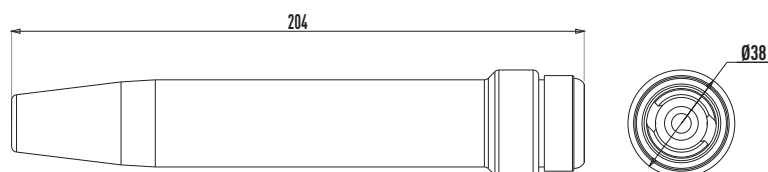
CS3/INLET



CS2/COUPLER SOCKET



CS3/COUPLER SOCKET



CS1000



SINGLE POLE POWER CONNECTOR



400 A

- ▶ Up to 400 A/1 000 V
- ▶ Automatic IP66/IP67 water- and dust-tight
- ▶ Visual and mechanical coding
- ▶ 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 ²
Short-circuit current I _{cc}	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.

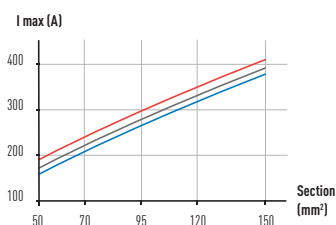
High Performance

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 mm²).

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

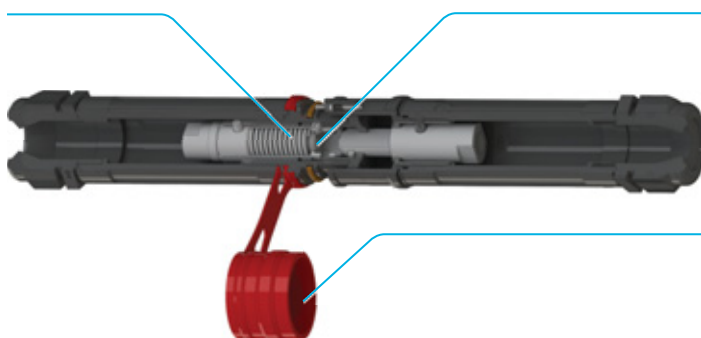


Safety shutter (IP2X protection)

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 ²)		Straight with hole ⁽¹⁾	Straight threaded M12 ⁽²⁾	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.

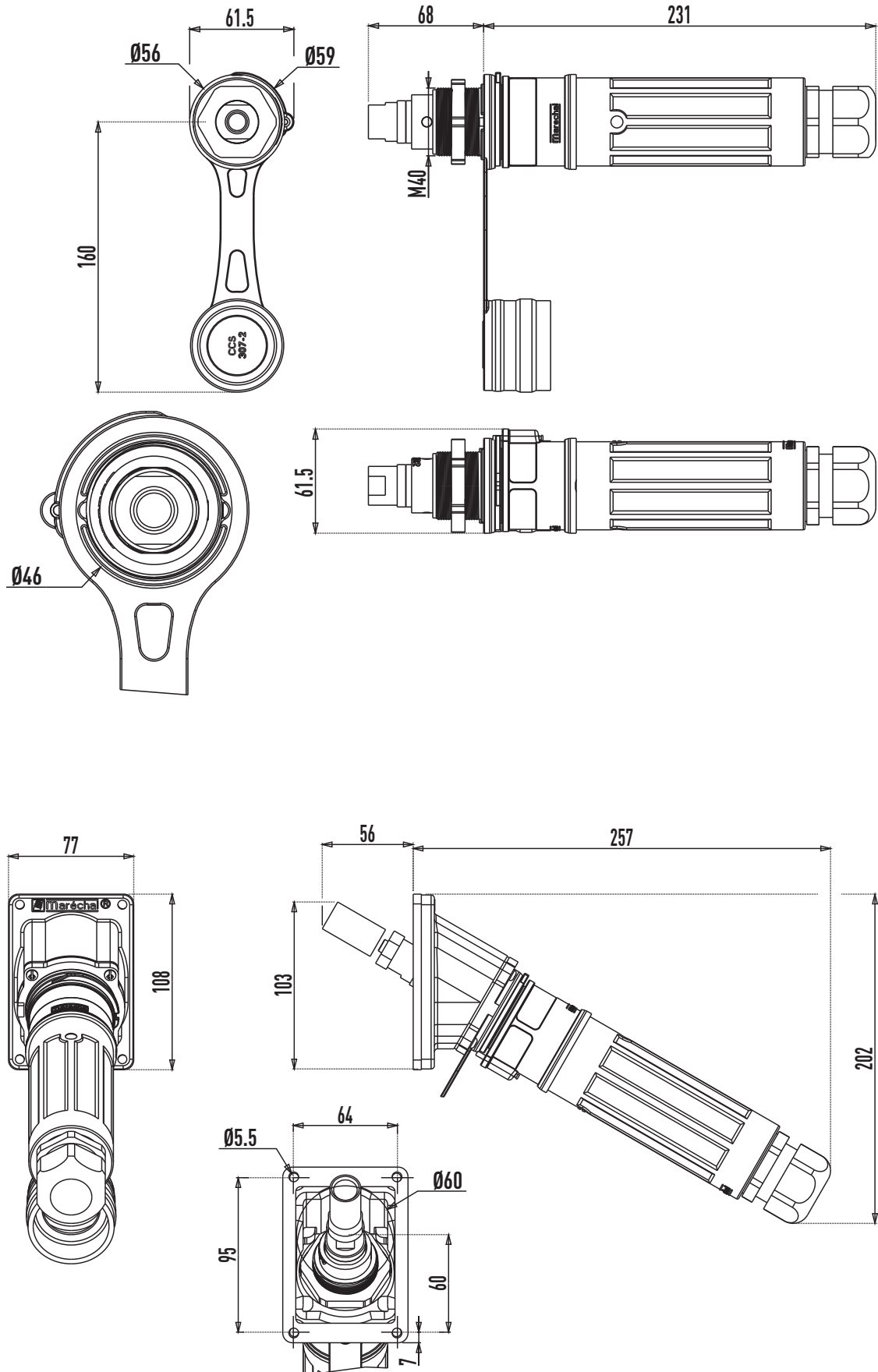
ACCESSORIES AND OPTIONS

Additional unlocking key	453A396	
M12 connection piece for connection of straight cable lugs to the terminals	474A277	



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 ²
Maximum voltage DC	1 500 V	Stranded wiring (min-max)	70-400 mm ²
Short-circuit current I _{cc}	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

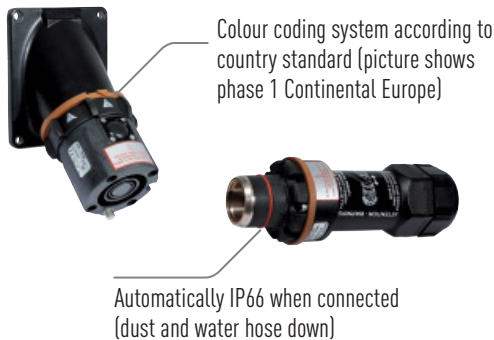
- Reliable mechanical and electrical interlocking with pilotcontact circuit.
- IP2X socket-outlet when cap removed.
- Automatic IP66 watertightness when plug is connected.

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

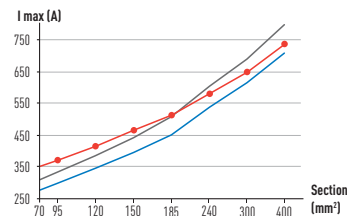
Thanks to the butt-contact principle, the SP withstands continuously up to 700 A/1000 V AC or 1500 V DC (70 mm² to 400 mm² conductors), withstands at least 2 000 operations.



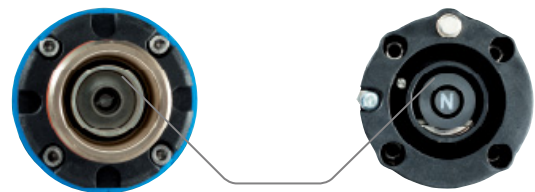
SP Characterisation

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.

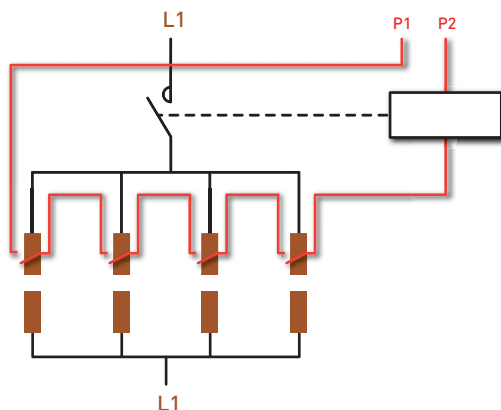


Mechanical coding between phases

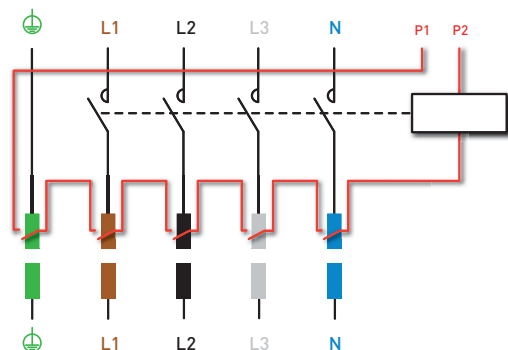


Coding ring (each phase, neutral and earth has a different diameter)

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 ²)		Straight with hole ⁽¹⁾	Straight threaded M12 ⁽²⁾	Internal diameter (mm)
Flexible	Stranded	Reference	Reference	
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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.

ACCESSORIES AND OPTIONS

Lever mechanism
Compatible with socket or inlet since 2018

454A376



M12 connection piece for connection of straight cable lugs to the terminals

474A277



SLEEVE*

Inclined metal 45°



HANDLE

Straight



454A027

M50

454A753

17-38 mm

M63

454A783

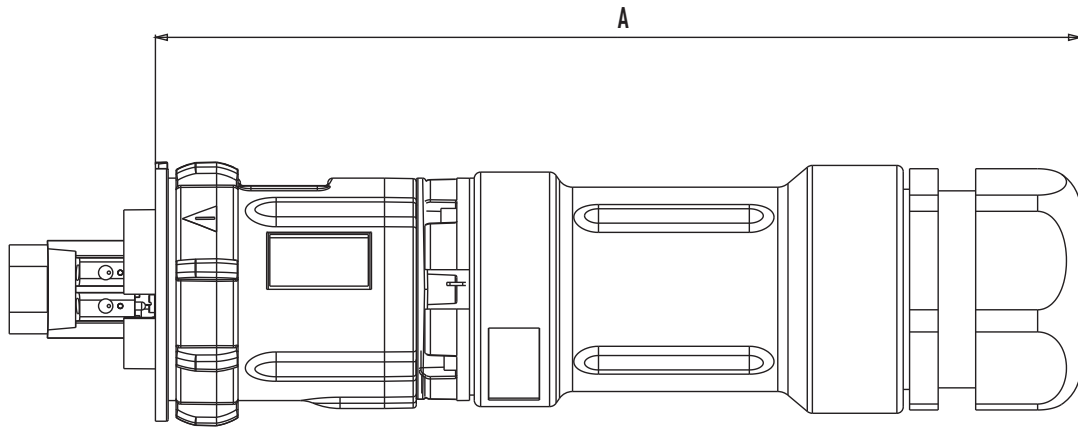
35-48 mm

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

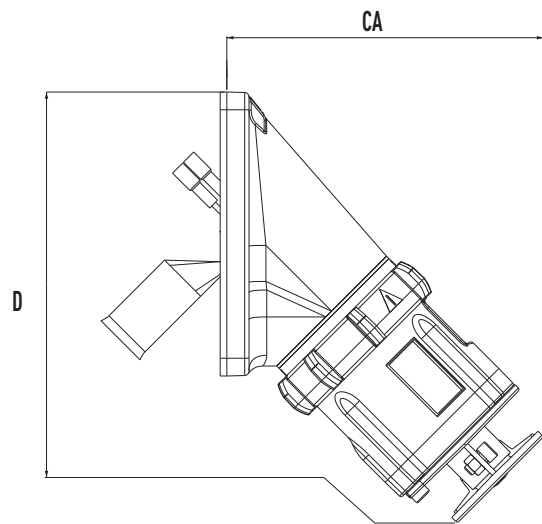
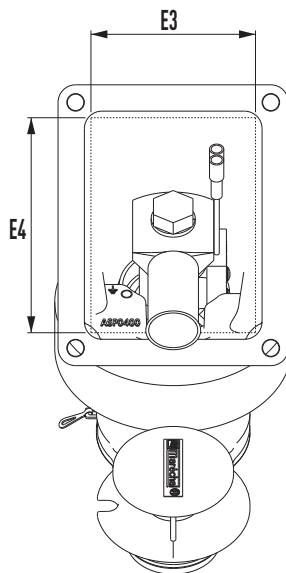
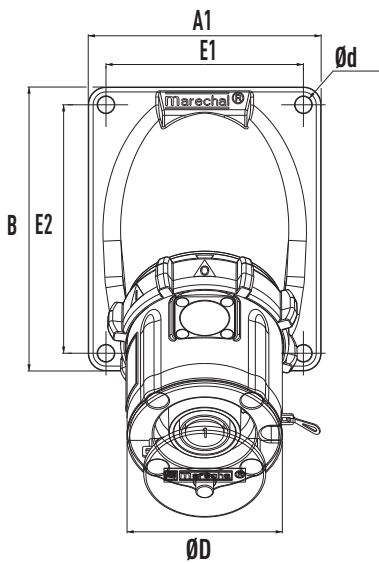


DIMENSIONS

SP M50/SP M63

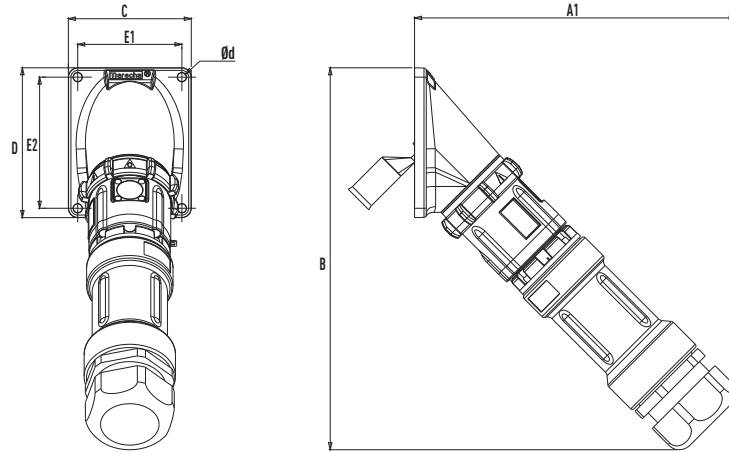


	A1
SP M50	265
SP M63	291

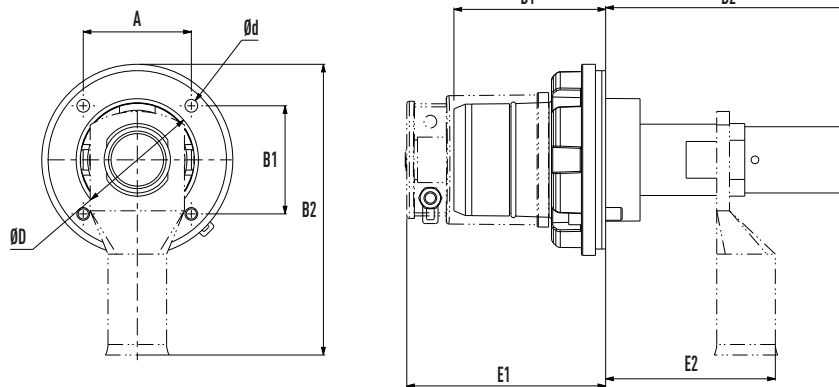


	A1	E1	B	E2	E3	E4	D	CA	Ød*	ØD max.
SP M50/SP M63	105	89	128	112	75	98	194	143	7,5	70

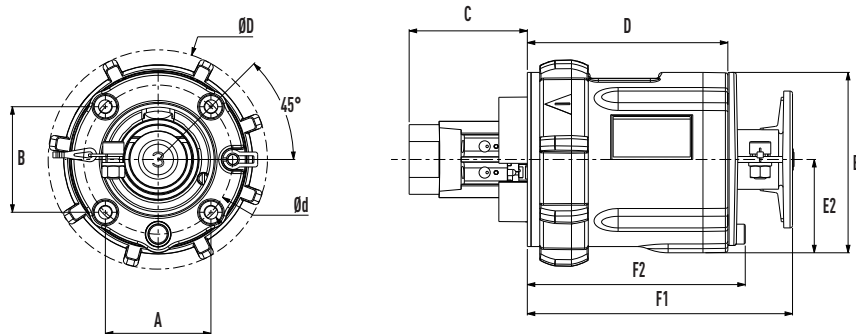
SP M50/SP M63



	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



	A	B1	B2	D1	D2	E1	E2	ØD	Ød
SP	42	42	114	60	95	78	67	48	5



	A	B	C	D	E1	E2	F1	F2	ØD	Ød
SP	42	42	47,5	81	73	38	107	88	88	60

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



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
- For MARECHAL® DECONTACTOR™ 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

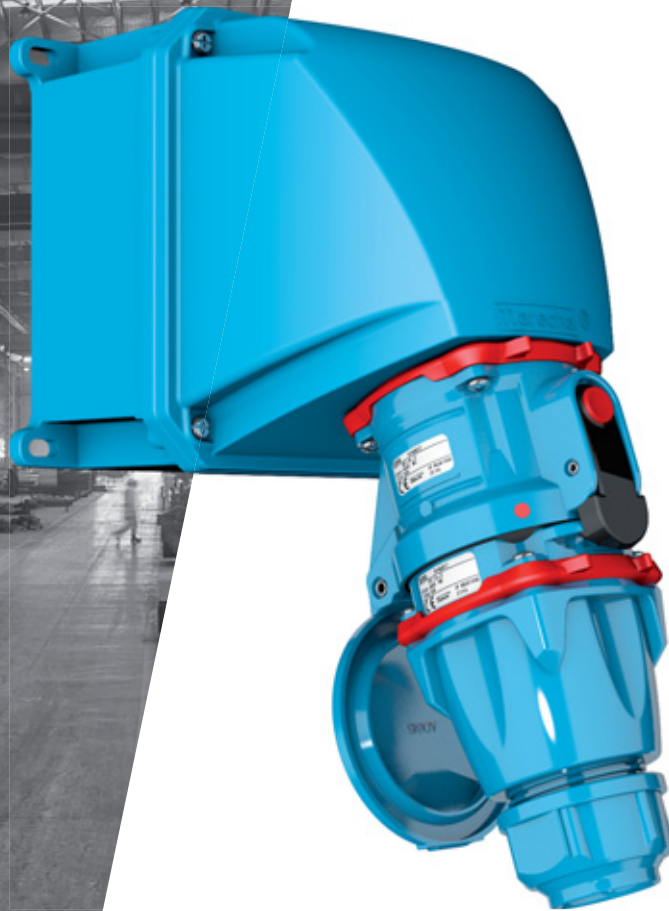
BOXES, EXTENSIONS AND CABLE REEL

- 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 ² to 5 x 35 mm ²
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/IP67 - 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
PN or DSN1	for 2 from M16 to M32 per side	With	127 x 127 x 172	511C7000
DS1 or DSN3	for 2 from M16 to M32 per side	With	127 x 127 x 172	512C7000
DS3 or DSN6	for 2 from M16 to M40 per side	With	170 x 170 x 201	513C7000
DS6	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

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/IP69 water-and dust-tight
- ▶ RCD protection
- ▶ For MARECHAL® DECONTACTOR™ 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/IP69 - IP44 with domestic sockets
Rated current	From 16 to 63 A
Wiring capacity	2 x 1,5 mm ² to 5 x 35 mm ²
Cable entries	M50 max.
Housing dimensions (WxHxD) in mm	345 x 225 x 156
Assembly	10 modules max.



Ready wired for installation.



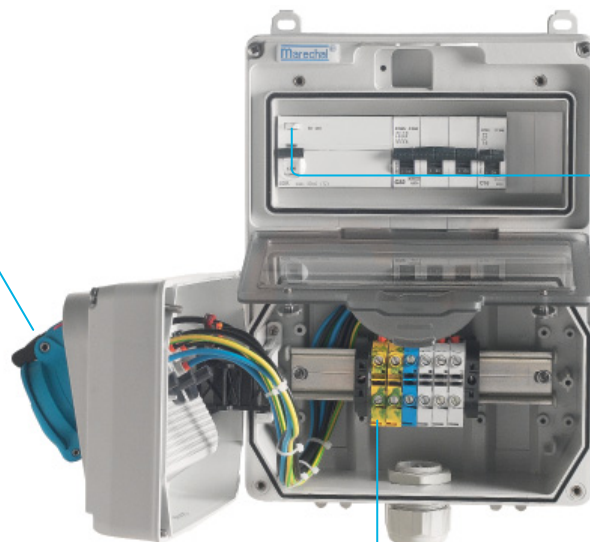
DECONTACTOR™ DSN1

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 mm²

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 ²	M25 POLY (9-18)
CD2	1x25 A 1P+N	1x16 A 1P+N	1x16 A 1P+N	1P+N+E 16 mm ²	M25 POLY (9-18)
CD3		1x16 A 3P+N 30mA		3P+N+E 16 mm ²	M25 POLY (9-18)
CD4		1x16 A 3P 30mA		3P+E 16 mm ²	M25 POLY (9-18)
CD5	1x25 A 3P+N	1x16 A 3P+N	1x16 A 3P+N	3P+N+E 16 mm ²	M25 POLY (9-18)
CD6*		+ 2 fuses 6 A Gg		1P+N+E 16 mm ²	M25 POLY (9-18)
CD7	1x25 A 1P+N	1x16 A 1P+N	1x16 A 1P+N	1P+N+E 16 mm ²	M25 POLY (9-18)
CD8		1x32 A 1P+N 30mA		1P+N+E 16 mm ²	M32 POLY (14-25)
CD9	1x40 A 1P+N	1x32 A 1P+N	1x32 A 1P+N	3P+N+E 16 mm ²	M32 POLY (14-25)
CD10		1x32 A 3P+N 30mA		3P+N+E 16 mm ²	M32 POLY (14-25)
CD11	1x40 A 3P+N	1x32 A 3P+N	1x32 A 3P+N	3P+N+E 16 mm ²	M32 POLY (14-25)
CD12	1x40 A 3P+N	1x16 A 1P+N	1x32 A 3P+N	3P+N+E 16 mm ²	M32 POLY (14-25)
CD13	1x40 A 3P+N	1x16 A 1P+N	1x32 A 3P+N	3P+N+E 35 mm ²	M40 POLY (18-32)
CD14	1x40 A 3P+N	1x16 A 1P+N	1x32 A 3P+N	3P+N+E 16 mm ²	M32 POLY (14-25)
CD15		1x63 A 3P+N 30mA		3P+N+E 16 mm ²	M40 POLY (18-32)
CD16*	1x25 A 3P+N	+ 2 fuses 6 A Gg	1x16 A 3P+N	3P+N+E 16 mm ²	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® Deconnector™ 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

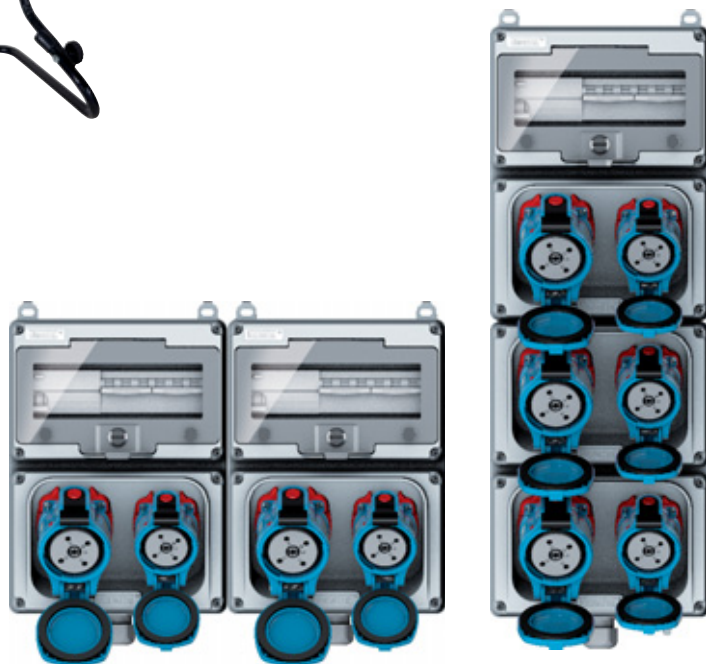
* CD6 and CD16 boxes are equipped with a 160 VA 230V/24V transformer. Maximum operating temperature: 40 °C.

INFOS +

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



Other configurations on request.
Assembly possible (factory) for your needs greater than 2 outlets. Please contact us for references.





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 mm²
- ▶ 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
DN6	80 A	400 V	1---9 0670 A	Nitrogen*	19 68 037 Z0078	+ 555P0D35 (see DN6)
DN6	80 A	230 V	1---9 0670 B	Oxygen and nitrogen*	19 68 037	+ 555P0D35 (see DN6)
DN1	16 A	400 V	1---9 0670 C	Co ₂	19 18 037 Z0078	+ 513P0D30
DS9	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 mm²

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

IP54 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
T6	2 x 1,5 mm ² to 2 x 6 mm ²	6 TA 6	6 TB 6	6 TD 6	6 TE 6	6 TF 6	6 TV 6	-
T16	2 x 4 mm ² to 2 x 16 mm ²	6 TA 16	6 TB 16	6 TD 16	6 TE 16	6 TF 16	6 TV 16	-
T35	2 x 6 mm ² to 2 x 35 mm ²	6 TA 35	6 TB 35	6 TD 35	6 TE 35	6 TF 35	6 TV 35	-
B70	2 x 25 mm ² to 2 x 70 mm ²	6 BA 70	6 BB 70*	6 BD 70	6 BE 70	6 BF 70	-	6 C 70
B120	2 x 50 mm ² to 2 x 120 mm ²	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.

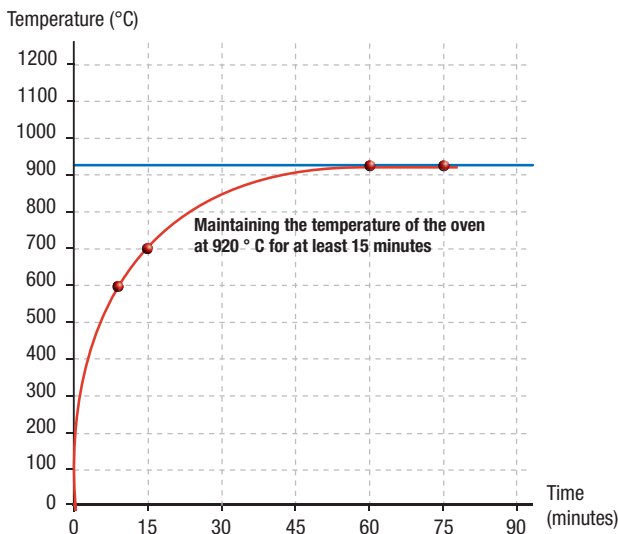
STANDARDS AND CERTIFICATIONS

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

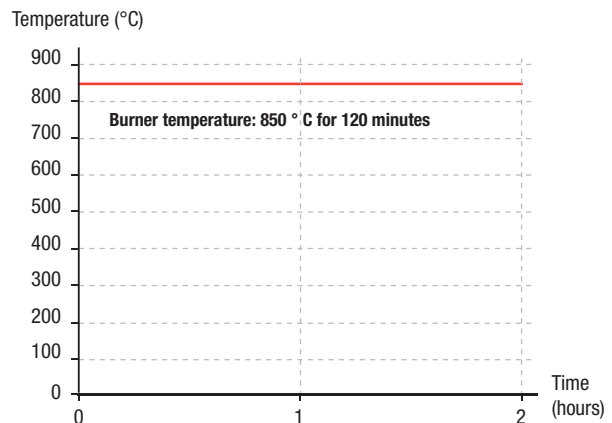
- EN 50362 European standard.
- French government Directive No. 2000-63 of 25 August 2000 on safety in tunnels and national road network.
- NF C 32-070 French standards.
- Guides CETU defining the fire behavior of road tunnels.

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 ² to 35 mm ² (for conductors above 25 mm ² , 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"> • Supply of service leads fitted with MARECHAL® coupler sockets • Accessories for fixing box to cable tray or ladder. • "Power On" signal light • Alternative non-piercing terminals • Alternative Protection: single phase circuit breaker • Plate for external fixing

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
Fire resistance	Electrical continuity of the main cable guaranteed: <ul style="list-style-type: none"> • NF C 32-070 : oven temp. 920°C - temperature increases. • NF EN 50362 : oven temp. 850°C - temperature increases.* 	Electrical continuity of the main cable guaranteed to oven temp. 920°C - temperature increases according to NFC 32-070 standard.
Service terminals	<ul style="list-style-type: none"> • 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. • 2 to 5 insulation-piercing only under EN 50362 	2 to 5 insulation-piercing, stainless steel connectors, fitted into a ceramic base.
Service protection	By fuse or circuit breaker fitted to DIN rail	By fuse or circuit breaker mounted on ceramic base.
Cables accepted	Armoured and unarmoured cables, stranded or flexible, from 4 mm ² to 25 mm ² . (For conductors above 25 mm ² , the main cable must be cut.)	Cables up to 185 mm ² .
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"> • Supply of service leads fitted with MARECHAL® coupler sockets • Accessories for fixing box to cable tray or ladder. • "Power On" signal light • Alternative non-piercing terminals • Alternative Protection: single phase circuit breaker • Plate for external fixing 	<ul style="list-style-type: none"> • Supply of service leads fitted with MARECHAL® coupler sockets • Alternative Protection: single phase circuit breaker

* 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 ²

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 mm² 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 IP69 (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

DECONTACTOR™



Switch with socket-outlet.

The plugs and sockets as well as socket-outlet boxes and junction boxes in this range are meant for use in hazardous areas in compliance with the ATEX 2014/35/EU Directive and as per the IECEx in zones 1 and 2 (Gas) and zones 21 and 22 (Dust).

FIND ALL INFORMATION
ON OUR WEBSITE:



marechal.com



Dimensions
and certificates



DXN P. 162


DECONTACTOR™ COMPACT & WATERTIGHT

-  II2 G D Ex de IIC, Ex tb IIIC
- IP66/IP67 water- and dust-tight
- Integrated load-break switch
- Robust and compact design
- High performance poly casing
- From 20 A to 63 A
- From -40 °C to +60 °C



DXA1 P. 174


DECONTACTOR™ METAL

-  II2 G D Ex de IIC, Ex tb IIIC
- IP66/IP67 water- and dust-tight
- Integrated load-break switch
- Locking in connected or disconnected by padlockable shaft
- Intended for low temperature -55°C
- 20 A



DX P. 178

DECONTACTOR™ METAL

-  II2 G D Ex de IIC, tD A21
- IP65 water- and dust-tight
- Integrated load-break switch
- Locking in connected or disconnected position by keying axis
- From 20 A to 200 A

DXN



DECONTACTOR™ FOR HAZARDOUS AREAS



20 A/32 A/63 A

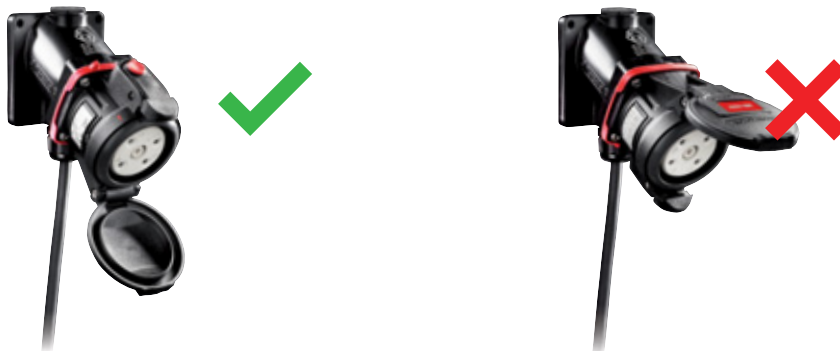
- ▶ IIC G D Ex de IIC, Ex tb IIIC
- ▶ Automatic IP66/IP67 water-and dust-tight
- ▶ Integrated load-break switch
- ▶ Robust and compact design
- ▶ High performance GRP casing

TECHNICAL FEATURES

	DXN1	DXN3	DXN6
Rated current (In)	20 A	32 A	63 A
U _{max}	550 V	750 V	750 V
Auxiliary contacts (optional)	–	2	2
Keying positions ⁽¹⁾	<<< 24 >>>		
Ambient temperature	<<< -40 °C to +60 °C >>>		
Protection mode	<<< «de» and «tb» >>>		
ATEX zones	<<< Zones 1 and 2 (gas) Zones 21 and 22 (dusts) >>>		

[1] To distinguish between different power supplies and applications

MOUNTING: LOAD BREAK RELEASE BUTTON SHOULD BE AT THE TOP



DECONTACTOR™ DXN are conform to:

- The ATEX 2014/35/EU Directive,
- IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31 international standards
- The essential safety requirements of IEC 60309-1 & IEC 60309-4 international and European standards (plugs and socket-outlets for industrial purposes),
- The switch utilization categories AC-22 and AC-23 described in IEC/EN 60947-3,
- The French NF C 15-100 standard,
- 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 decrees relating to workers' protection in Belgium, Spain and Italy,

Also certified by LCIE (ATEX and IECEx), NANIO (TR CU EAC), NCC (INMETRO) and cCSAus (French, Russian, Brazilian and American-Canadian* European and international notified bodies) and by BUREAU VERITAS MARINE.

[*] for North-American markets

DXN1

 DECONTACTOR™ HIGH PERFORMANCE  CASING

20 A IP66/IP67



WALL MOUNTING SOCKET DXN1



Wall box poly 30°
251AB53



Socket-outlet
2514017

PLUG DXN1



Straight handle poly
251A753



Inlet
2518017

MAIN FEATURES

Rated current (with wiring according to standard)	20 A	Flexible wiring (min-max)	1-4 mm ²
Maximum voltage	550 V	Stranded wiring (min-max)	1,5-6 mm ²
IP protection lid closed	IP66/IP67	Other wiring	on request
IP protection plug connected	IP66/IP67	Keying positions	24
Shock resistance	IK08	Protection mode	de, tb
Ambient temperature	-40 °C to +60 °C	ATEX zones	1 & 2, 21 & 22

TEMPERATURE RATING

Gas temperature classes	T6 for an ambient T° between -40 °C and +40 °C
	T5 for an ambient T° between -40 °C and +60 °C
Dust surface temperature classes	Surface T° ≤ 70 °C for an ambient T° between -40 °C and +40 °C
	Surface T° ≤ 90 °C for an ambient T° between -40 °C and +60 °C
Comply with EN 60309-1	20 A/550 V

SOCKET-OUTLET female DXN1 (20 A)



INLET male DXN1 (20 A)




Each socket outlet or inlet must be associated with a box, a sleeve or a handle.

20-24 V AC	2P	251408A	251808A
220-250 V AC	1P+N+E	2514015	2518015
380-440 V AC	3P+E	2514013	2518013
380-440 V AC	3P+N+E	2514017	2518017
480-500 V AC	3P+E	2514093	2518093
480-500 V AC	3P+N+E	2514097	2518097

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

MARECHAL ELECTRIC FRANCE

 II 2 G D	Ex de IIC	T* Gb
	Ex tb IIIC	T* Db
*-40 °C ≤ Ta ≤ +60 °C	T5	T90 °C
-40 °C ≤ Ta ≤ +40 °C	T6	T70 °C
IECEX LCI 09.0005X/LCIE 99 ATEX 6027 X		

DXN3

 DECONTACTOR™ HIGH PERFORMANCE GRP CASING

32 A IP66/IP67



WALL MOUNTING SOCKET DXN3



Wall box poly 30 °
253A853

Socket-outlet
2534017

PLUG DXN3



Straight handle poly
253A753

Inlet
2538017

MAIN FEATURES

Rated current (with wiring according to standard)	32 A	Flexible wiring (min-max)	2,5-10 mm ²
Maximum voltage	750 V	Stranded wiring (min-max)	2,5-16 mm ²
IP protection lid closed	IP66/IP67	Other wiring	on request
IP protection plug connected	IP66/IP67	Keying positions	24
Shock resistance	IK08	Protection mode	de, tb
Ambient temperature	-40 °C to +60 °C	ATEX zones	1 & 2, 21 & 22

TEMPERATURE RATING

Gas temperature classes	T6 for an ambient T° between -40 °C and +40 °C
	T5 for an ambient T° between -40 °C and +60 °C
Dust surface temperature classes	Surface T° ≤ 57 °C for an ambient T° between -40 °C and +40 °C
	Surface T° ≤ 77 °C for an ambient T° between -40 °C and +60 °C
Comply with EN 60309-1	32 A/750 V

SOCKET-OUTLET female DXN3 (32 A)



INLET male DXN3 (32 A)




Each socket outlet or inlet must be associated with a box, a sleeve or a handle.

20-24 V AC	2P	253408A	253808A
220-250 V AC	1P+N+E	2534015	2538015
380-440 V AC	3P+E	2534013	2538013
380-440 V AC	3P+N+E	2534017	2538017
480-500 V AC	3P+E	2534093	2538093
480-500 V AC	3P+N+E	2534097	2538097
550 V AC - Auxiliaries 5 A	+ 2 contacts	Ref. + 972	Ref. + 972

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

MARECHAL ELECTRIC FRANCE

 II2 G D	Ex de IIC	T* Gb
	Ex tb IIIC	T* Db
*-40 °C ≤ Ta ≤ +60 °C	T5	T77 °C
-40 °C ≤ Ta ≤ +40 °C	T6	T57 °C
IECEx LCI 09.0006/LCIE 05 ATEX 6149		



WALL MOUNTING SOCKET DXN6



Wall box poly 30°
256AB53

Socket-outlet
2564017

PLUG DXN6



Straight handle poly
256A753

Inlet
2568017

MAIN FEATURES

Rated current (with wiring according to standard)	63 A	Flexible wiring (min-max)	6-16 mm ²
Maximum voltage	750 V	Stranded wiring (min-max)	6-25 mm ²
IP protection lid closed	IP66/IP67	Other wiring	on request
IP protection plug connected	IP66/IP67	Keying positions	24
Shock resistance	IK09	Protection mode	de, tb
Ambient temperature	-40 °C to +60 °C	ATEX zones	1 & 2, 21 & 22

TEMPERATURE RATING

Gas temperature classes	T5 for an ambient T° between -40 °C and +40 °C
	T4 for an ambient T° between -40 °C and +60 °C
Dust surface temperature classes	Surface T° ≤ 87 °C for an ambient T° between -40 °C and +40 °C
	Surface T° ≤ 107 °C for an ambient T° between -40 °C and +60 °C
The essential safety requirements of IEC 60309-1	63 A/750 V

SOCKET-OUTLET female DXN6 (63 A)



INLET male DXN6 (63 A)




Each socket outlet or inlet must be associated with a box, a sleeve or a handle.

20-24 V AC	2P	256408A	256808A
220-250 V AC	1P+N+E	2564015	2568015
380-440 V AC	3P+E	2564013	2568013
380-440 V AC	3P+N+E	2564017	2568017
480-500 V AC	3P+E	2564093	2568093
480-500 V AC	3P+N+E	2564097	2568097
550 V AC - Auxiliaries 5 A	+ 2 contacts	Ref. + 972	Ref. + 972








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

MARECHAL ELECTRIC FRANCE

 II2 G D	Ex de IIC	T* Gb
	Ex tb IIIC	T* Db
*-40 °C ≤ Ta ≤ +60 °C	T4	T107 °C
-40 °C ≤ Ta ≤ +40 °C	T5	T87 °C
IECEX LCI 09.0007/LCIE 05 ATEX 6150		



OPTIONS (DETAILS ON PAGE 216)

	DXN1 size 1	DXN3 size 2	DXN6 size 3
LOCKING PIN FOR 2 PADLOCKS Ø 8 mm (PADLOCKS NOT SUPPLIED)			
	Socket-outlet ref. + 843	Socket-outlet ref. + 843	Socket-outlet ref. + 843
SAFETY HASP FOR UP TO 6 PADLOCKS			
	873A541	873A541	873A541
INLET CAP IP66/IP67			
	251A426	253A426	256A426
IN-LINE CONNECTIONS (A PAIR OF FINGER DRAW PLATES TO AID CLOSING)			
	611A346	613A346	616A346
180° OPENING LID			
	Metal socket ref. + 10	Metal socket ref. + 10	Metal socket ref. + 10
SELF-RETURNING LID (WITHOUT FULL CLOSURE IP40)			
	Socket-outlet ref. +R	Socket-outlet ref. +R	Socket-outlet ref. +R
180° OPENING & SELF-RETURNING LID			
	Socket-outlet ref. + 18	Socket-outlet ref. + 18	Socket-outlet ref. + 18
COMPATIBLE WITH DSN SOCKET			
	Please contact	Please contact	NA
SELF-EJECTING (see References AND OPTIONS DETAILS PAGE 228)			
			



ACCESSORIES

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

BOXES



DXN1
size 1

DXN3
size 2

DXN6
size 3

WALL BOX POLY WITH EX POLY CABLE GLAND



30°	5-10 mm	251AB5316P		
30°	10-14 mm	251AB53	253AB53	
30°	12-18 mm	251AB5325P	253AB5325P	256AB53

WALL BOX POLY WITHOUT CABLE GLAND



30°	M20	251AB53417	253AB53417	
30°	M25	251AB53418	253AB53418	256AB53418

WALL BOX POLY WITHOUT TERMINAL BLOCKS



120 X 120 mm
FOR DXN1/3

160 X 160 mm
FOR DXN6

70°	10-14 mm	251AB8820P	253AB8820P	256AB8820P
70°	12-18 mm	251AB8825P	253AB8825P	256AB8825P
70°	16-25 mm	251AB8832P	253AB8832P	256AB8832P
70°	22-32 mm			256AB8840P

WALL BOX POLY WITH TERMINAL BLOCKS (IECEX LCIE 16.0042X/LCIE 16 ATEX 3054X)



120 X 120 mm
FOR DXN1/3

160 X 160 mm
FOR DXN6

70°	10-14 mm	251A08820P ⁽¹⁾	253A08820P ⁽²⁾	256A08820P ⁽³⁾
70°	12-18 mm	251A08825P ⁽¹⁾	253A08825P ⁽²⁾	256A08825P ⁽³⁾
70°	16-25 mm			256A08832P ⁽³⁾
70°	22-32 mm			256A08840P ⁽³⁾

- With 2 holes (1 with a cable gland + 1 with a stopping plug), with 8+2E 4 mm² terminals blocks + 2,5 mm² wires, wiring 1 - 4mm².
For alternatives, please contact us.
- With 2 holes (1 with a cable gland + 1 with a stopping plug), with 8+2E 10 mm² terminals blocks + 6 mm² wires, wiring 2.5 - 10mm².
For alternatives, please contact us.
- With 2 holes (1 with a cable gland + 1 with a stopping plug), with 8+2E 16 mm² terminals blocks + 16 mm² wires, wiring 6 - 16mm².
For alternatives, please contact us.

IN THIS CONFIGURATION

-40 °C ≤ Ta ≤ +55 °C T4 T105 ° C
-40 °C ≤ Ta ≤ +50 °C T5 T95 ° C

LEGEND FOR OPTIONAL ACCESSORIES



Angle



Threading or gland size



EMC option






HT 240° C



Self-ejection

INFO +


SLEEVE		DXN1 size 1	DXN3 size 2	DXN6 size 3
INCLINED POLY SLEEVE				
	30°	251A057	253A027	256A027

	70°	251A757	253A757	256A757
---	-----	---------	---------	---------


HANDLE		DXN1 size 1	DXN3 size 2	DXN6 size 3
POLY HANDLE WITH POLY CABLE GLAND				

	10-14 mm	251A753	253A753	256A25320P
	12-18 mm	251A25325P	253A783	256A753
	16-25 mm	251A25332P	253A25332P	256A25332P
	22-32 mm		253A25340P	256A25340P

POLY HANDLE WITH EX GLAND FOR SELF-EJECTION OPTION 				
---	--	--	--	--

	10-14 mm	251A463	253A463	
	12-18 mm	251A44325P	253A44325P	256A463
	16-25 mm		253A44332P	256A44332P
	22-32 mm			256A44340P

STRAIGHT POLY HANDLE WITH METAL CABLE GLAND WITH EARTH CONTINUITY				
--	--	--	--	--

	8-10 mm	251A25320M	253A25320M	256A25320M
	12-14 mm	251A25325M	253A25325M	256A25325M
	18-24 mm	251A25332M	253A25332M	256A25332M

LEGEND FOR OPTIONAL ACCESSORIES

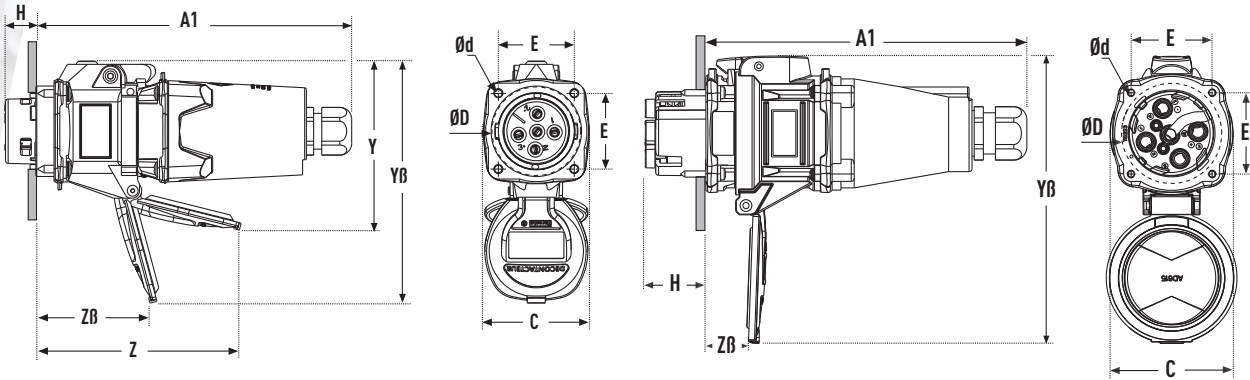
-  Angle
-  Threading or gland size
-  EMC option
-  HT 240° C
-  Self-ejection

INFO +

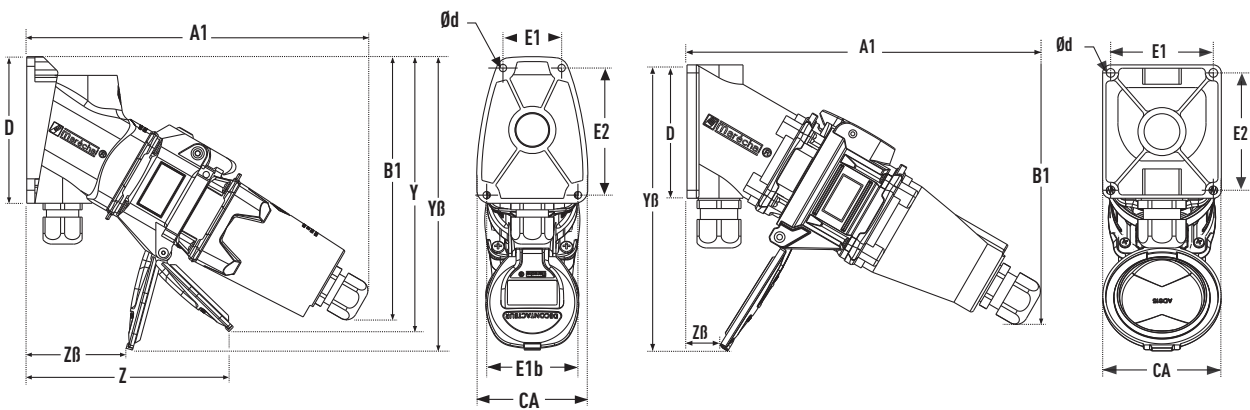


DIMENSIONS

DXN1/DXN3/DXN6



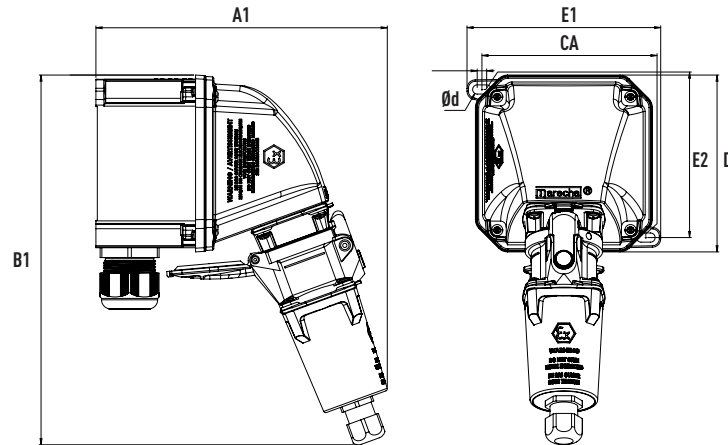
	A1	C	E	H	Y	YB	Z	ZB	Ød*	ØD max
DXN1	165	58	42	27	89	134	104	53	4,5	51
DXN3	190	77	48	29	-	171	-	39	5	57
DXN6	218	84	55	30	-	195	-	50	5	68



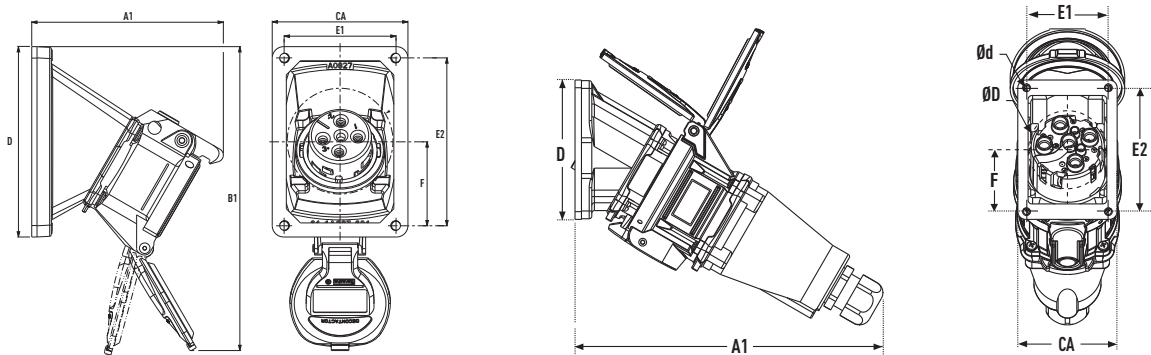
	A1	B1	CA	D	E1	E1b	E2	Y	YB	Z	ZB	Ød*
DXN1	209	162	68	90	36	56	78	166	180	127	61	4,5
DXN3	226	166	84	84	70	/	70	/	191	/	30	6
DXN6	265	195	89	100	77	/	88	/	225	/	41	6,5

*Ød : maximum drilling diameter.

DXN1/DXN3/DXN6



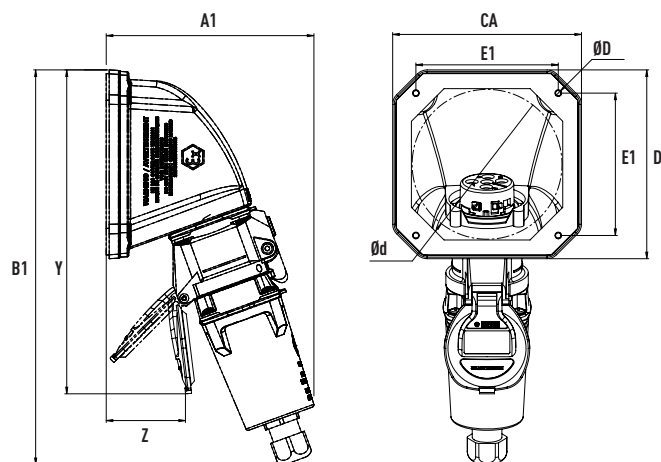
	A1	B1	CA	D	E1	E2	Ød*
DXN1	208	264	117	126	138	105.5	6,5
DXN3	217	275	117	126	138	105.5	6,5
DXN6	244	341	157	166	175	145.5	6,5



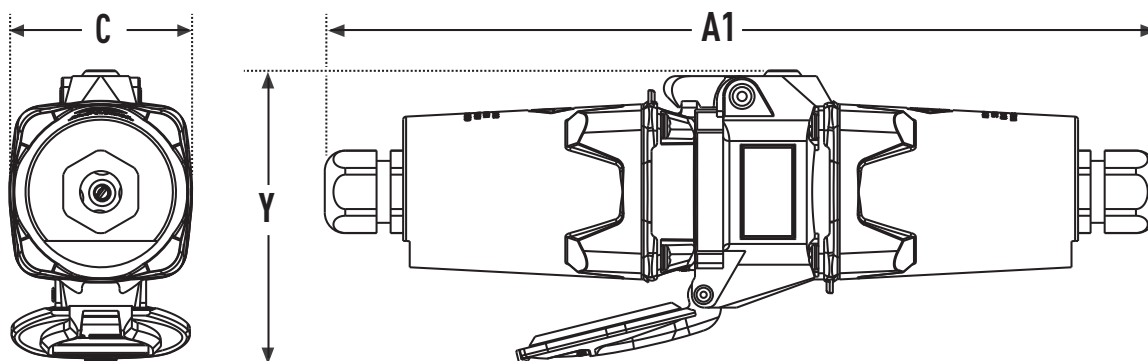
	A1	B1	CA	D	E1	E2	F	Ød*	ØD max
DXN1	109	172	77	108	63,5	95	48	5	60
DXN3	205	167	77	108	63	95	37	5,5	60
DXN6	239	190	77	108	64	95	40	5,5	60

*Ød : maximum drilling diameter.

DXN1/DXN3/DXN6

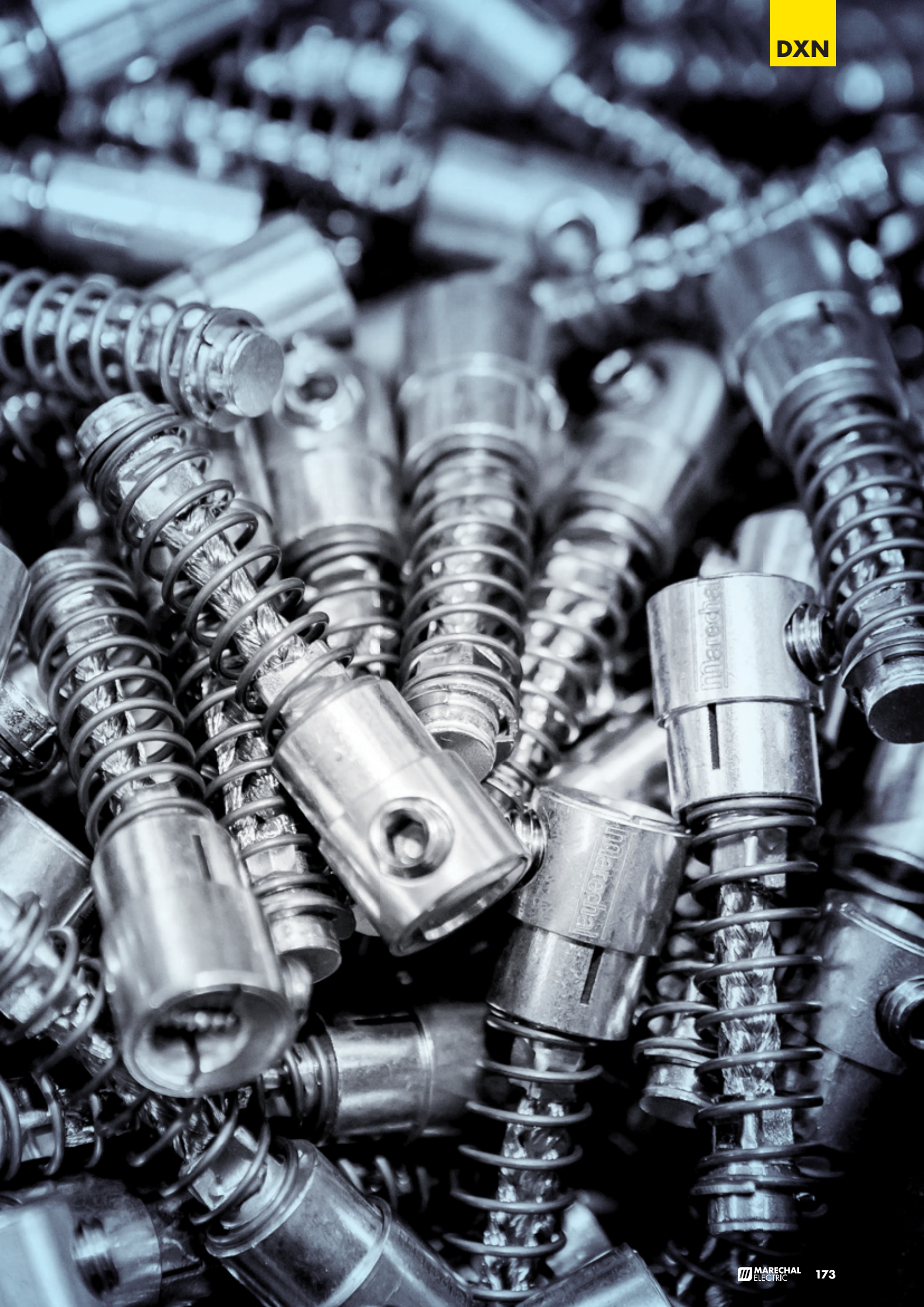


	A1	B1	CA	D	E1	Y	Z	Ød*	ØD max
DXN1	139	264	126	126	95	217	53	3.6	100
DXN3	148	275	126	126	95	246	45	3.6	100
DXN6	175	341	166	166	135	300	71	3.6	140



	A1	C	Y
DXN1	266	58	89
DXN3	304	71	118
DXN6	350	84	122

*Ød : maximum drilling diameter.



DXA1



DECONTACTOR™ METAL



20 A

- ▶ II 2 G D Ex de IIC, Ex tb IIIC
- ▶ Automatic IP66/IP67 water-and dust-tight
- ▶ Integrated load-break switch
- ▶ Lockable in connected or disconnected position with optional lockout shaft
- ▶ Low temperature rating of -55°C

MAIN FEATURES

Rated current (with wiring according to standard)	20 A	Ambient temperature	-55 °C to +60 °C
Maximum voltage	550 V	Flexible wiring (min-max)	1-4 mm ²
IP protection lid closed	IP66/IP67	Stranded wiring (min-max)	1,5-6 mm ²
IP protection plug connected	IP66/IP67	ATEX zones	1 & 2, 21 & 22
Shock resistance	IK10	Keying positions	24



DXA DECONTACTOR™ complies with:

- The ATEX 2014/35/EU Directive,
- IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31 international standards
- The essential safety requirements of IEC 60309-1 & IEC 60309-4 international and European standards (plugs and socket-outlets for industrial purposes),
- The switch utilization categories AC-22 and AC-23 described in IEC/EN 60947-3,
- The French NF C 15-100 standard,
- 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 decrees relating to workers' protection in Belgium, Spain and Italy,

Also certified by LCIE (ATEX et IECEx) and cCSAus (French and American-Canadian* European and international notified bodies).

(* for North-American markets)



**WALL MOUNTING
SOCKET DXA1**



PLUG DXA1

GLAND SUFFIX

PE Ex	Suffix
M25 (9-16 mm)	Ref. + 25M
M32 (12-21mm)	291A653
Other	Consult us

**SOCKET-OUTLET
female
DXA1 (20 A)**



**PLUG male
DXA1 (20 A)**



220-250 V AC	1P+N+E	2914015	2918015
380-440 V AC	3P+E	2914013	2918013
380-440 V AC	3P+N+E	2914017	2918017

**WALL mounting
socket female
DXA1 (20 A)**



**PLUG male
DXA1 (20 A)**



220-250 V AC	1P+N+E	M20	8-13 mm	2914015 + 291A053	2918015 + 291A963
380-440 V AC	3P+E	M20	8-13 mm	2914013 + 291A053	2918013 + 291A963
380-440 V AC	3P+N+E	M20	8-13 mm	2914017 + 291A053	2918017 + 291A963

**INCLINED socket
female
DXA1 (20 A)**



**INCLINED appliance
inlet male
DXA1 (20 A)**



220-250 V AC	1P+N+E	2914015 + 291A027	2918015 + 291A027
380-440 V AC	3P+E	2914013 + 291A027	2918013 + 291A027
380-440 V AC	3P+N+E	2914017 + 291A027	2918017 + 291A027

**COUPLER socket
female
DXA1 (20 A)**




**WALL mounting
appliance inlet male
DXA1 (20 A)**



220-250 V AC	1P+N+E	M20	8-13 mm	2914015 + 291A963	2918015 + 291A053
380-440 V AC	3P+E	M20	8-13 mm	2914013 + 291A963	2918013 + 291A053
380-440 V AC	3P+N+E	M20	8-13 mm	2914017 + 291A963	2918017 + 291A053

MARECHAL ELECTRIC FRANCE

 II 2 G D Ex de IIC T* Gb Ex tb IIIC T* Db
 -55 °C ≤ Ta ≤ +40 °C T6 T68 °C
 -55 °C ≤ Ta ≤ +60 °C T5 T88 °C
 LCIE 15 ATEX3033X/IECEx LCIE 15.0030X

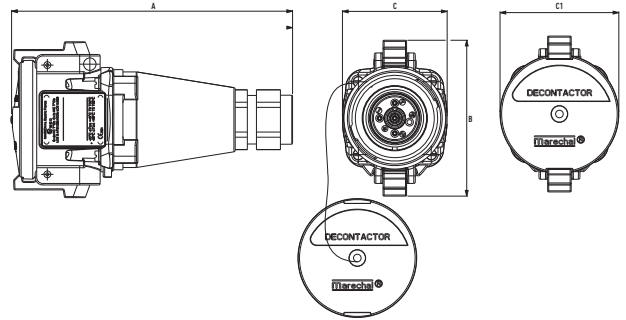
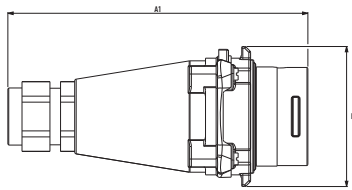
ACCESSORIES AND OPTIONS

Inlet cap 291A426

Locking with shaft for 2 padlocks ø 8 mm
(padlocks not supplied) Ref. socle + 843

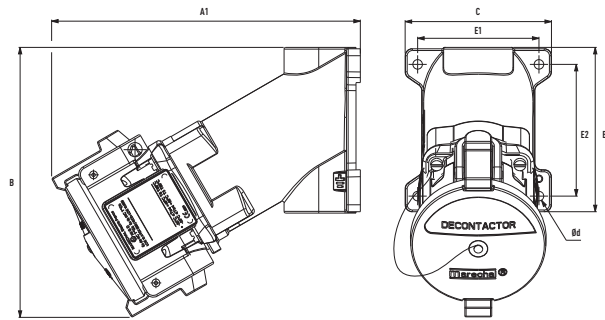


DIMENSIONS

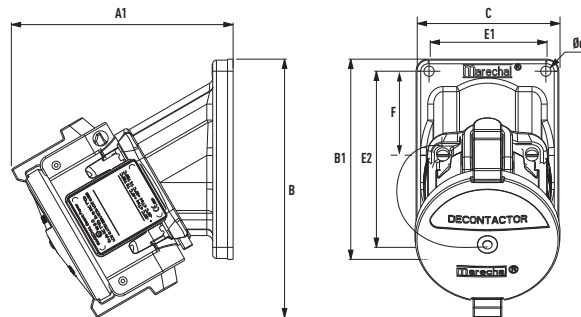


	A1	B
DXA1	170	79

	A	B	C	C1
DXA1	185	103	69	78



	A1	B	B1	C	E1	E2	Ød*
DXA1	178	156	95	84	70	76	5,5



	A1	B	B1	C	E1	E2	F	Ød*	ØD max
DXA1	120	140	108	77	63	95	37	5,5	60

*Ød : maximum drilling diameter.

DX



DECONTACTOR™ METAL



20 A/32 A/63 A/125 A/200 A

- ▶ II 2 G D Ex de IIC, tD A21
- ▶ IP65 water-and dust-tight
- ▶ Integrated load-break switch
- ▶ Locking in connected or disconnected position by keying axis

TECHNICAL FEATURES

	DX1	DX3	DX6	DX9	DX2
Rated current (In)	20 A	32 A	63 A	125 A	200 A
U _{max}	750 V	750 V	750 V	750 V	750 V
Keying positions	24	24	24	24	24
Ambient temperature	<<< -25 °C ≤ Ta ≤ +60 °C >>>		<<< -40 °C ≤ Ta ≤ +60 °C >>>		
Protection mode	<<< «de» and «tD A21» >>>				
ATEX zones	<<< Zones 1 & 2 (gas) Zones 21 & 22 (dusts) >>>				

MECHANICAL FEATURES

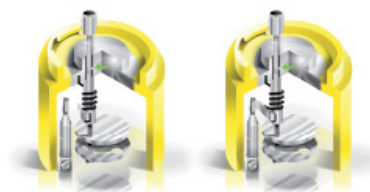
- Enclosure "d": during connection and disconnection, electric arc is contained and cannot reach the outside of the enclosure.



Interior moulding in the stand-by position: Cut view of the explosion-proof chamber.

Connection:

Socket-outlet with a plug contact engaged: Closing of the dead butt-contact(s); unlocking of the interior moulding.



Plug rotation: Pressure on the springs. Switch contacts close immediately.

- Aluminium corrosion-free casing
- IK10 shock resistance
- External male contacts: these pins engage with the spring-loaded silver-nickel butt contacts inside the socket
- IP65 lid
- ON/OFF indicator
- Design ensures compliance with interlock standard EN 60309-4 : no live contacts.

**Disconnection:**

Reversed rotation of the plug: The switch contacts open immediately. Return of the plug to its "off" stand-by position.

**DX DECONTACTOR™ complies with:**

- The ATEX 2014/35/EU Directive,
- IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31 international standards
- The essential safety requirements of IEC 60309-1 & IEC 60309-4 international and European standards (plugs and socket-outlets for industrial purposes),
- The French NF C 15-100 standard,
- 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 decrees relating to workers' protection in Belgium, Spain and Italy,

Also certified by NANIO (TR CU EAC) and LCIE (ATEX and IECEx, Russian and French European and international notified bodies).



WALL MOUNTING SOCKET DX1



Wall box 90°
262AB53



Socket-outlet
2624017

PLUG DX1



Plug
2621017

MAIN FEATURES

Rated current (with wiring according to standard)	20 A	Flexible wiring (min-max)	2,5-10 mm ²
Maximum voltage	750 V	Stranded wiring (min-max)	2,5-10 mm ²
IP protection lid closed	IP65	Other wiring	on request
IP protection plug connected	IP65	Keying positions	24
Shock resistance	IK10	Protection mode	de, tD A21
Ambient temperature	-25 °C to +60 °C	ATEX zones	1 & 2, 21 & 22

SOCKET-OUTLET female DX1 (20 A)



INCLINED appliance inlet DX1 (20 A)



PLUG male DX1 (20 A)



Each socket outlet or inlet must be associated with a box, a sleeve or a handle.

220-250 V AC	1P+N+E	2624015	2626015	8-13 mm	2621015
380-440 V AC	3P+E	2624013	2626013	8-13 mm	2621013
380-440 V AC	3P+N+E	2624017	2626017	8-13 mm	2621017

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

BOXES Ex metal CABLE GLAND INCLUDED*



Cable gland entry	Wall box metal 90°	
M20	262AB53	8-13 mm
M25	262AB5325M	9-16 mm
M32	262AB5332M	12-21 mm

* For alternatives with Earth continuity, please contact us

HANDLES Ex metal CABLE GLAND INCLUDED



Cable gland entry	Straight handle metal	
M20	262A963	8-13 mm
M25	262A95325M	9-16 mm
M32	262A95332M	12-21 mm

MARECHAL ELECTRIC FRANCE

Ex II 2 G D	Ex de IIC	tD A21
-25 °C ≤ Ta ≤ +60 °C	T5	T84 °C
-25 °C ≤ Ta ≤ +50 °C	T6	T74 °C
IECEx LC1 09.0014/LCIE 05 ATEX 6127		


**WALL MOUNTING
SOCKET DX3**

Wall box 90°
263AB53

Socket-outlet
2634017

PLUG DX3

Plug
2631017

MAIN FEATURES

Rated current (with wiring according to standard)	32 A	Flexible wiring (min-max)	2,5-10 mm ²
Maximum voltage	750 V	Stranded wiring (min-max)	2,5-10 mm ²
IP protection lid closed	IP65	Other wiring	on request
IP protection plug connected	IP65	Keying positions	24
Shock resistance	IK10	Protection mode	de, tD A21
Ambient temperature	-25 °C to +60 °C	ATEX zones	1 & 2, 21 & 22

SOCKET-OUTLET
female
DX3 (32 A)

INCLINED
appliance inlet
DX3 (32 A)

PLUG
male
DX3 (32 A)


Each socket outlet or inlet must be associated with a box, a sleeve or a handle.

220-250 V AC	1P+N+E	2634015	2636015	9-16 mm	2631015
380-440 V AC	3P+E	2634013	2636013	9-16 mm	2631013
380-440 V AC	3P+N+E	2634017	2636017	9-16 mm	2631017

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

BOXES

Ex metal cable gland included*



Cable gland entry	Wall box metal 90°	
M20	263AB5320M	8-13 mm
M25	263AB53	9-16 mm
M32	263AB5332M	12-21 mm

* For alternatives with Earth continuity, please contact us

HANDLES

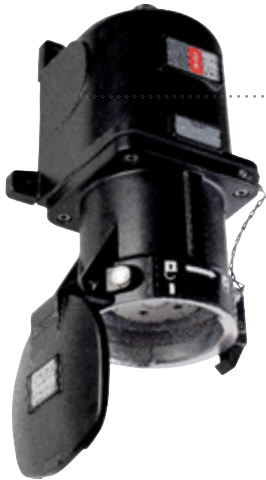
Ex metal cable gland included



Cable gland entry	Straight handle metal	
M20	263A95320M	8-13 mm
M25	263A963	9-16 mm
M32	263A95332M	12-21 mm

MARECHAL ELECTRIC FRANCE

II 2 G D	Ex de IIC	tD A21
-25 °C ≤ Ta ≤ +60 °C	T5	T84 °C
-25 °C ≤ Ta ≤ +50 °C	T6	T74 °C
IECEX LCI 09.0014/LCIE 05 ATEX 6127		



WALL MOUNTING SOCKET DX6



Wall box 90°
266AB53



Socket-outlet
2664017

PLUG DX6



Plug
2661017

MAIN FEATURES

Rated current (with wiring according to standard)	63 A	Flexible wiring (min-max)	16-35 mm ²
Maximum voltage	750 V	Stranded wiring (min-max)	16-50 mm ²
IP protection lid closed	IP65	Other wiring	on request
IP protection plug connected	IP65/IP66	Keying positions	24
Shock resistance	IK10	Protection mode	de, tD A21
Ambient temperature	-40 °C to +60 °C	ATEX zones	1 & 2, 21 & 22

SOCKET-OUTLET female DX6 (63 A)



INCLINED appliance inlet DX6 (63 A)



PLUG male DX6 (63 A)



Each socket outlet or inlet must be associated with a box, a sleeve or a handle.

Voltage	Contact configuration	Socket-outlet female	Inclined appliance inlet	Plug male
220-250 V AC	1P+N+E	2664015	2666015	2661015
380-440 V AC	3P+E	2664013	2666013	2661013
380-440 V AC	3P+N+E	2664017	2666017	2661017

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

BOXES

Ex metal cable gland included*



Cable gland entry	Wall box metal 90°
M25	266AB5325M 9-16 mm
M32	266AB53 12-21 mm
M40	266AB5340M 16-27 mm

* For alternatives with Earth continuity, please contact us

HANDLES

Ex metal cable gland included



Cable gland entry	Straight handle metal
M25	266A95325M 9-16 mm
M32	266A963 12-21 mm
M40	266A95340M 16-27 mm

MARECHAL ELECTRIC FRANCE

II 2 G D	Ex de IIC	tD A21
-40 °C ≤ Ta ≤ +60 °C	T5	T90 °C
-40 °C ≤ Ta ≤ +50 °C	T6	T80 °C
IECEx LCI 09.0015/LCIE 04 ATEX 6038		


**WALL MOUNTING
SOCKET DX9**

Wall box 90°
269AB53

Socket-outlet
2694017

PLUG DX9

Plug
2691017

MAIN FEATURES

Rated current (with wiring according to standard)	125 A	Flexible wiring (min-max)	35-50 mm ²
Maximum voltage	750 V	Stranded wiring (min-max)	50-70 mm ²
IP protection lid closed	IP65	Other wiring	on request
IP protection plug connected	IP65/IP66	Keying positions	24
Shock resistance	IK10	Protection mode	de, tD A21
Ambient temperature	-40 °C to +60 °C	ATEX zones	1 & 2, 21 & 22

SOCKET-OUTLET
female
DX9 (125 A)

INCLINED
appliance inlet
DX9 (125 A)

PLUG
male
DX9 (125 A)


Each socket outlet or inlet must be associated with a box, a sleeve or a handle.

380-440 V AC	3P+E	2694013	2696013	16-27 mm	2691013
				23-35 mm	269101350M
				36-48 mm	269101363M
380-440 V AC	3P+N+E	2694017	2696017	16-27 mm	2691017
				23-35 mm	269101750M
				36-48 mm	269101763M

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

BOXES

Ex metal cable gland included*



Cable gland entry	Wall box metal 90°	
M32	269AB5332M	12-21 mm
M40	269AB53	16-27 mm
M50	269AB5350M	23-35 mm
M63	269AB5363M	36-48 mm

* For alternatives with Earth continuity, please contact us


HANDLES

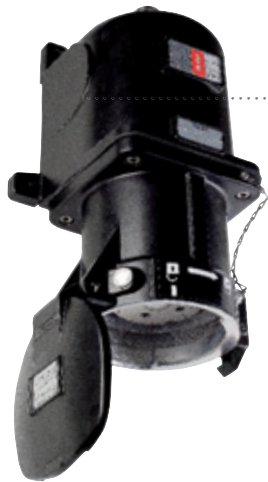
Ex metal cable gland included



Cable gland entry	Straight handle metal	
M32	269A95332M	12-21 mm
M40	269A963	16-27 mm
M50	269A95350M	23-35 mm
M63	269A95363M	36-48 mm

MARECHAL ELECTRIC FRANCE

 II 2 G D	Ex de IIC	tD A21
-40 °C ≤ Ta ≤ +60 °C	T5	T90 °C
-40 °C ≤ Ta ≤ +50 °C	T6	T80 °C
IECEX LCI 09.0015/LCIE 04 ATEX 6038		



WALL MOUNTING SOCKET DX2



Wall box 90°
267AB53



Socket-outlet
2674017

PLUG DX2



Plug
2671017

MAIN FEATURES

Rated current (with wiring according to standard)	200 A	Flexible wiring	50 mm ²
Maximum voltage	750 V	Stranded wiring	70 mm ²
IP protection lid closed	IP65	Other wiring	on request
IP protection plug connected	IP65/IP66	Keying positions	24
Shock resistance	IK10	Protection mode	de, tD A21
Ambient temperature	-40 °C to +60 °C	ATEX zones	1 & 2, 21 & 22

SOCKET-OUTLET female DX2 (200 A)



INCLINED appliance inlet DX2 (200 A)



PLUG male DX2 (200 A)



Each socket outlet or inlet must be associated with a box, a sleeve or a handle.

380-440 V AC	3P+E	2674013	2676013	36-48 mm	2671013
380-440 V AC	3P+N+E	2674017	2676017	36-48 mm	2671017

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

BOXES

Ex metal cable gland included*



Cable gland entry	Wall box metal 90°
M63	267AB53 36-48 mm

* For alternatives with Earth continuity, please contact us

HANDLES

Ex metal cable gland included



Cable gland entry	Straight handle metal
M63	267A963 36-48 mm

MARECHAL ELECTRIC FRANCE

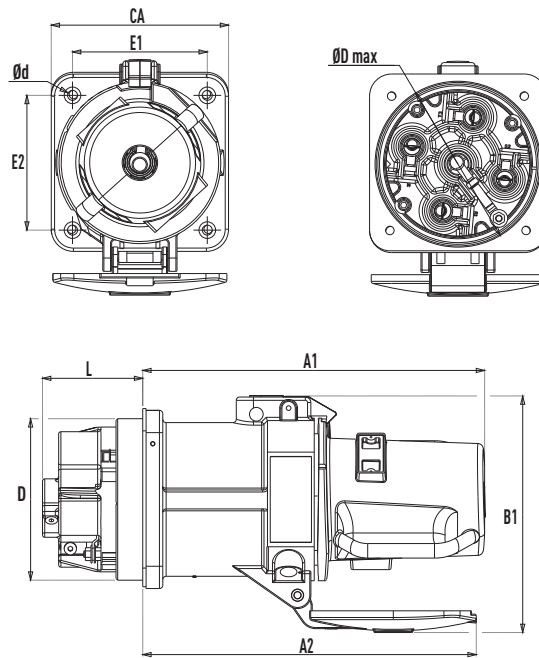
Ex II 2 G D Ex de IIC tD A21
-40 °C ≤ Ta ≤ +60 °C T3 T91 °C
IECEX LCI 09.0015/LCIE 04 ATEX 6038



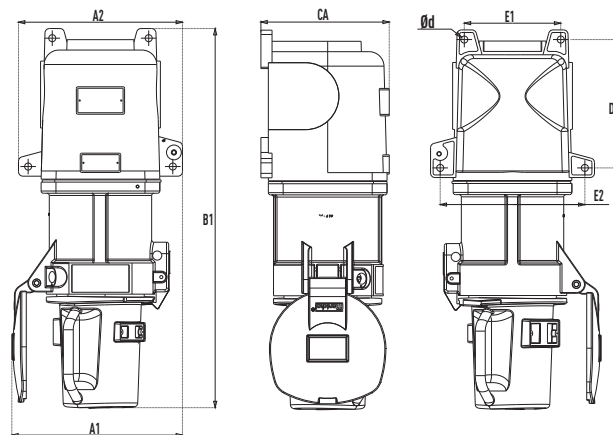


DIMENSIONS

DX1/DX3/DX6/DX9/DX2



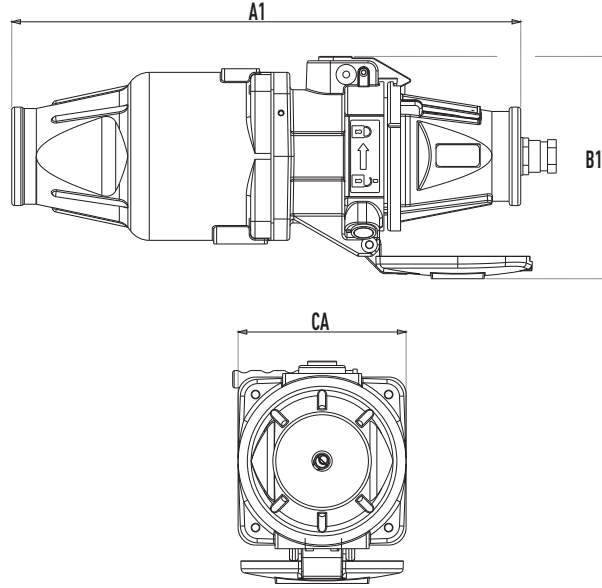
	A1	A2	B1	CA	D	E1	E2	L	Ød*	ØD max
DX1/DX3	173	181	154	116	116	92	92	59	5,7	108
DX6/DX9/DX2	307	300	212	160	145	122	122	90	9	150



	A1	A2	B1	CA	D	E1	E2	Ød*
DX1/DX3	168	167	324	129	118	90	145	9,5
DX6/DX9/DX2	230	221	511	173	173	130	195	9,5

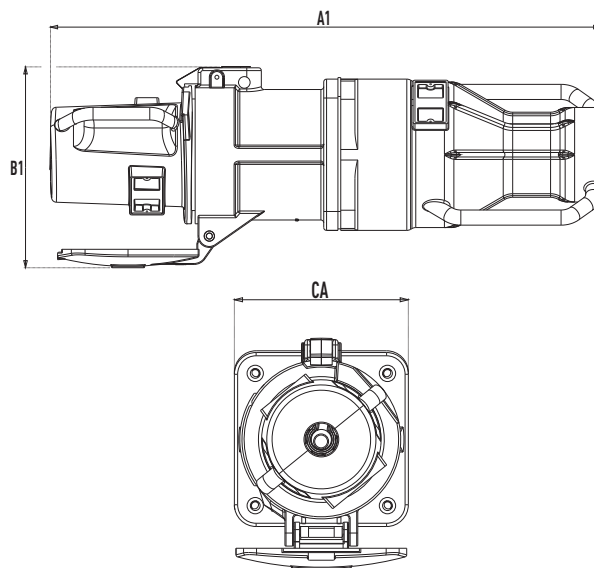
*Ød : maximum drilling diameter.

DX1/DX3



	A1	B1	CA
DX1/DX3	351,5	153,5	116

DX6/DX9/DX2



	A1	B1	CA
DX6/DX9/DX2	582	212	160

*Ød : maximum drilling diameter.

MULTICONTACT CONNECTORS



FIND ALL INFORMATION
ON OUR WEBSITE:



marechal.com




Dimensions
and certificates



PXN12C P. 190


MULTICONTACT CONNECTORS

-  II2 G D Ex e IIC, Ex tb IIIC
- Up to 12 contacts
- Locking in connected or disconnected position
- Corrosion-free metal casing



DXN25C P. 191


MULTICONTACT CONNECTORS

-  II2 G D Ex e IIC, Ex tb IIIC
- Up to 25 contacts
- Locking in connected or disconnected position
- Corrosion-free metal casing



DXN37C P. 192

MULTICONTACT CONNECTORS

-  II2 G D Ex e IIC, Ex tb IIIC
- Up to 37 contacts
- Locking in connected or disconnected position
- Corrosion-free metal casing



PXN12C, DXN25C and DXN37C multicontact connectors comply with:

- The ATEX 2014/35/EU Directive,
- IEC/EN 60079-0, IEC/EN 60079-7 and IEC/EN 60079-31 International standards
- The French NF C 15-100 standard,
- The decrees relating to workers' protection in Belgium, Spain and Italy,

Also certified by LCIE (ATEX and IECEX) and NANIO (TR CU EAC) (French and Russian European and international notified bodies).

MULTI

PXN12C

 MULTI-CONTACT CONNECTORS 

10 A IP65/IP66



**WALL MOUNTING
SOCKET PXN12C**



Wall box 30°
06A0001



PLUG PXN12C



Plug
06A1001

MAIN FEATURES

Rated current (with wiring according to standard)	4-20 mA/10 A	Ambient temperature	-40 °C to +55 °C
Maximum voltage	220 V	Flexible wiring (min-max)	1-2,5 mm ²
Number of contacts	11C+E	Wiring (terminals)	crimping
IP protection lid closed	IP65/IP66	Protection mode	e or i, tb
IP protection plug connected	IP65/IP66	ATEX zones	1 & 2, 21 & 22
Shock resistance	IK09	Keying positions	2

Connection or disconnection
screw locking imprint BTR 2.5.

WALL mounting socket
female
PXN12c (10 A)



PLUG male
PXN12c (10 A)



M25	06A000125M	9-16 mm	M25	06A100125M	9-16 mm
M32	06A0001	12-21 mm	M32	06A1001	12-21 mm

INCLINED socket
female
PXN12c (10 A)



INCLINED
appliance inlet male
PXN12c (10 A)



06A7001

06A9001

COUPLER socket
female
PXN12c (10 A)




WALL mounting
appliance inlet male
PXN12c (10 A)



M25	06A300125M	9-16 mm	M25	06A600125M	9-16 mm
M32	06A3001	12-21 mm	M32	06A6001	12-21 mm

MARECHAL ELECTRIC FRANCE

 II 2 G D Ex e IIC Gb Ex tb IIIC Db
-40 °C ≤ Ta ≤ +55 °C T5 T69 °C
Ex ia or ib IIC T6 Gb
IECEX LCIE 14.0041X/LCIE 07 ATEX 6070X

INFOS +

Each product is supplied with 1 bag of 13 contacts depending on the maximum configuration.
This allows you to set up the product to suit your needs.

DXN25C

MULTI-CONTACT CONNECTORS METAL

10 A IP66/IP67



WALL MOUNTING SOCKET DXN25c



Wall mounting socket
36D0002



PLUG DXN25c



Plug
36D1002

MAIN FEATURES

Rated current (with wiring according to standard)	4-20 mA/10 A	Ambient temperature	-40 °C to +60 °C
Maximum voltage	440 V	Flexible wiring (min-max)	1-2,5 mm ²
Number of contacts	24C+E	Wiring (terminals)	crimping
IP protection lid closed	IP66/IP67	Protection mode	e or i, tb
IP protection plug connected	IP66/IP67	ATEX zones	1 & 2, 21 & 22
Shock resistance	IK09	Keying positions	3

Locking position connected or disconnected by lockable shaft.

Other accessories on request.

WALL mounting socket female
DXN25c (10 A)



PLUG male
DXN25c (10 A)



M32	36D000232M	12-21 mm	M32	36D100232M	12-21 mm
M40	36D0002	16-27 mm	M40	36D1002	16-27 mm

INCLINED socket female
DXN25c (10 A)



INCLINED appliance inlet male
DXN25c (10 A)



36D7002

36D9002

COUPLER socket female
DXN25c (10 A)



WALL mounting appliance inlet male
DXN25c (10 A)



M32	36D300232M	12-21 mm	M32	36D600232M	12-21 mm
M40	36D3002	16-27 mm	M40	36D6002	16-27 mm

MARECHAL ELECTRIC FRANCE

II 2 G D Ex e IIC Gb Ex tb IIIC Db
 -40 °C ≤ Ta ≤ +40 °C T6 T51 °C
 -40 °C ≤ Ta ≤ +60 °C T5 T71 °C
 Ex ia or ib IIC T6 Gb
 IECEx LCIE 14.0040X/LCIE 09 ATEX 3050X

INFOS +

Each product is supplied with 2 bags of 13 contacts depending on the maximum configuration. This allows you to set up the product to suit your needs. Delivered with padlocking shaft.

DXN37C



MULTI-CONTACT CONNECTORS

METAL

10 A IP66/IP67



WALL MOUNTING SOCKET DXN37C



Wall mounting socket
36C0003



PLUG DXN37C



Plug
36C1003

MAIN FEATURES

Rated current (with wiring according to standard)	10 A	Ambient temperature	-40 °C to +55 °C
Maximum voltage	230 V	Flexible wiring (min-max)	1-2,5 mm ²
Number of contacts	36C+E	Wiring (terminals)	crimping
IP protection lid closed	IP66/IP67	Protection mode	e or i, tb
IP protection plug connected	IP66/IP67	ATEX zones	1 & 2, 21 & 22
Shock resistance	IK09	Keying positions	3

Locking position connected or disconnected by lockable shaft.

Other accessories on request.

WALL mounting socket female
DXN37c (10 A)



PLUG male
DXN37c (10 A)



M32	36C000332M	12-21 mm	M32	36C100332M	12-21 mm
M40	36C0003	16-27 mm	M40	36C1003	16-27 mm

INCLINED socket female
DXN37c (10 A)



INCLINED appliance inlet male
DXN37c (10 A)



36C7003

36C9003

COUPLER socket female
DXN37c (10 A)



WALL mounting appliance inlet male
DXN37c (10 A)



M32	36C300332M	12-21 mm	M32	36C600332M	12-21 mm
M40	36C3003	16-27 mm	M40	36C6003	16-27 mm

MARECHAL ELECTRIC FRANCE



II 2 G D

Ex e IIC Gb Ex tb IIIC Db

-40 °C ≤ Ta ≤ +40 °C

T6

T56 °C

-40 °C ≤ Ta ≤ +55 °C

T5

T76 °C

Ex ia or ib IIC T6 Gb

IECEx LCIE 14.0038X/LCIE 07 ATEX 6071X

INFOS +

Each product is supplied with 3 bags of 13 contacts depending on the maximum configuration. This allows you to set up the product to suit your needs. Delivered with padlocking shaft.





OPTIONS

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.

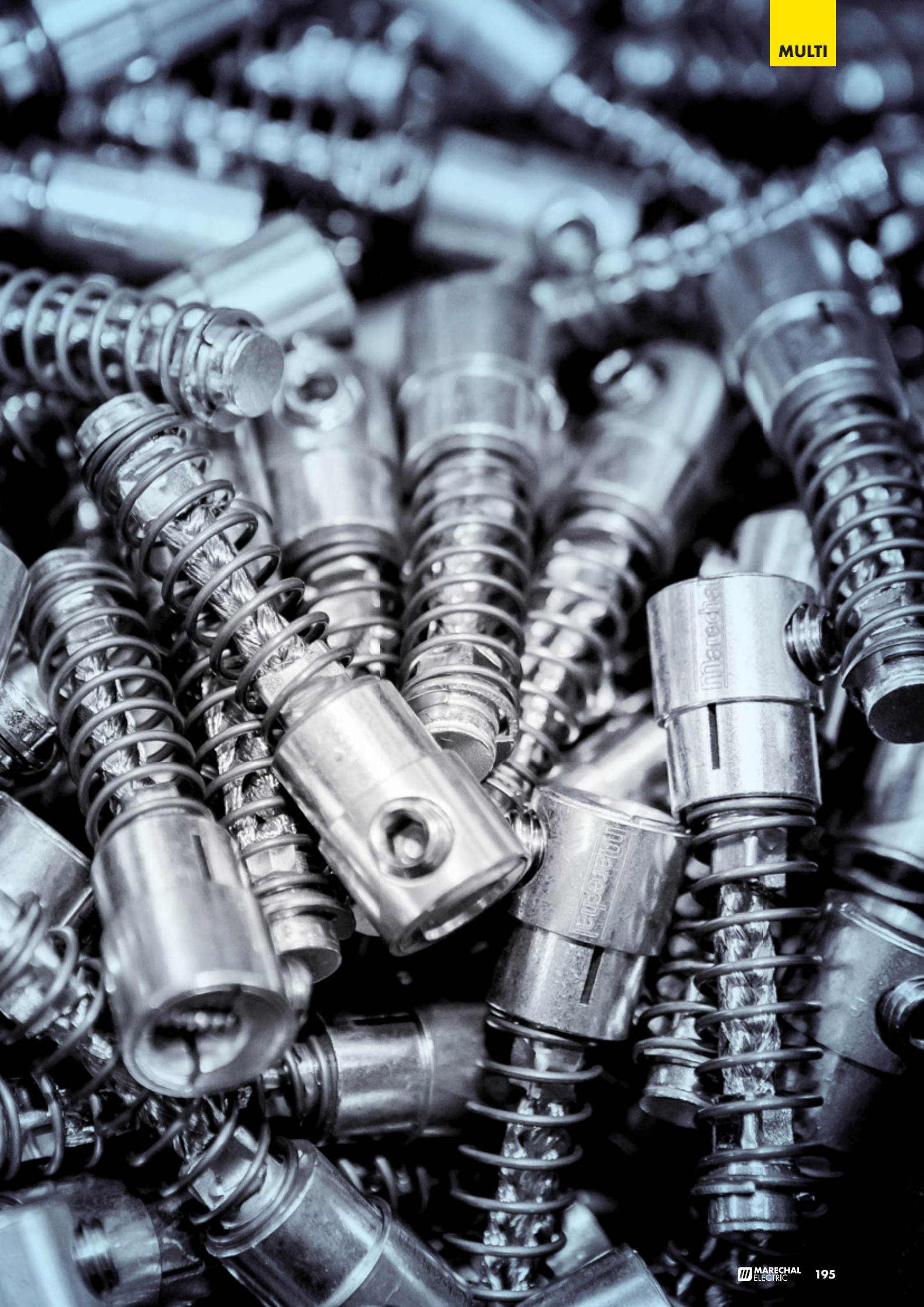
Disassembly

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

Fast wiring

- Cable conductors: 1 mm² to 2,5 mm².
- 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 mm² footprint whatever the conductor cross-section.
- Perform a double crimping in compliance with CEI 60352-2 standard.
- Conductors can equally be soldered.

	PXN12C	DXN25C	DXN37C
BAG OF 13 FEMALE CONTACTS			
	Ref. 01AA213	Ref. 01AA213	Ref. 01AA213
BAG OF 13 MALE CONTACTS			
	Ref. 01AA113	Ref. 61CA113	Ref. 61CA113
REMOVAL KEY			
	Ref. 61CA593	Ref. 61CA593	Ref. 61CA593
CRIMPING TOOL			
	Ref. 61CA500	Ref. 61CA500	Ref. 61CA500
HELAVIA SLEEVE EXPANSION TOOL			
	Ref. 61CA400	Ref. 61CA400	Ref. 61CA400
BAG OF 13 HEAT SHRINK INSULATION SLEEVES			
	Ref. 61CA083	Ref. 61CA083	Ref. 61CA083
INLET CAP			
	Ref. 012A126		
 IP66/IP67		Ref. 313A426	Ref. 313A426

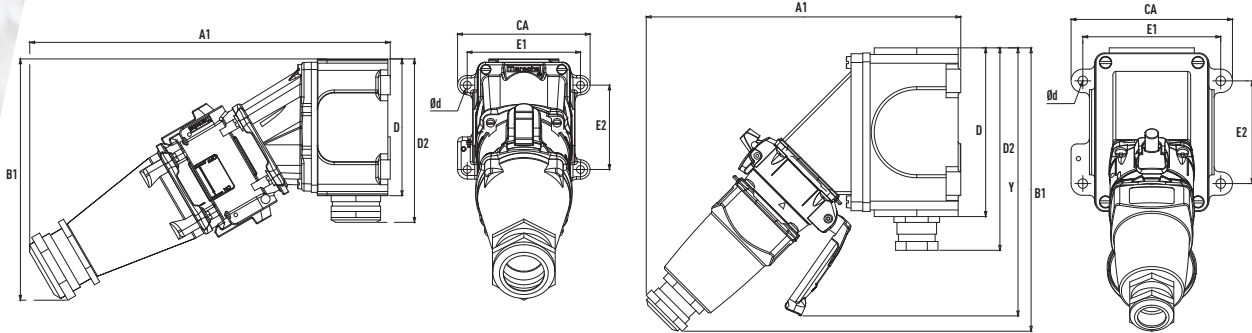




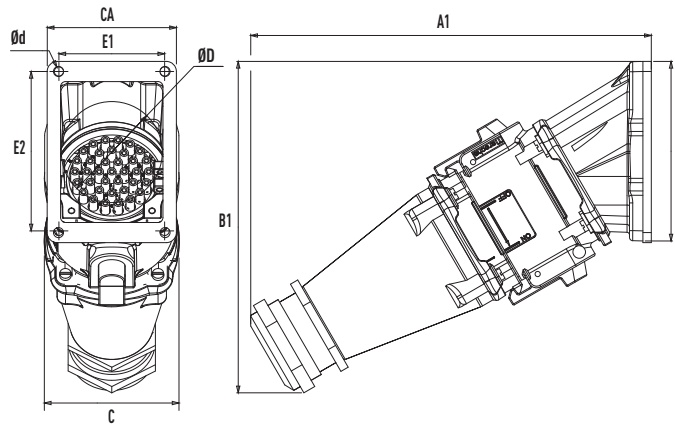
DIMENSIONS

DXN25c/DXN37c

PXN12c

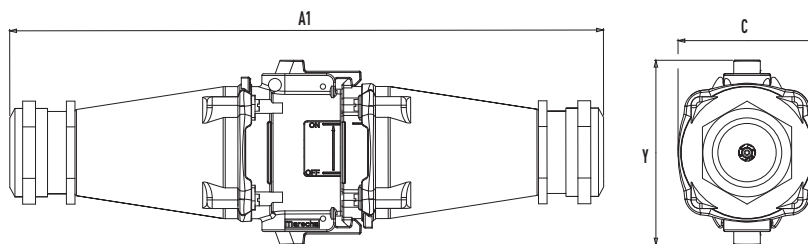


	A1	B1	D	D2	CA	E1	E2	Ød*
DXN25c/DXN37c	299	200	114	136	110	94	70	6,5
PXN12c	213	193	114	142	110	94	70	6,5

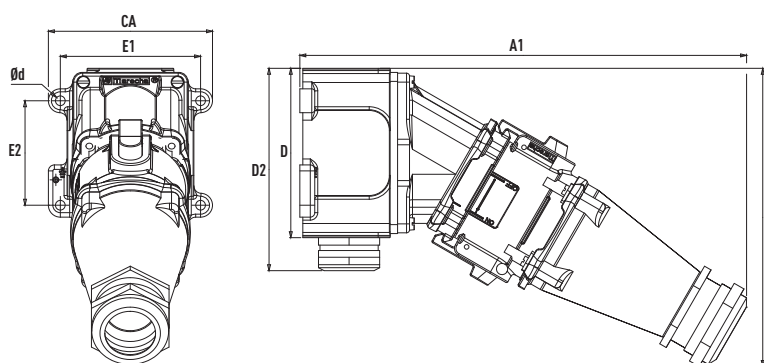


	A1	B1	CA	D	E1	E2	Ød*	ØD max
DXN25c/DXN37c	239	197	77	107	63	95	5,5	60
PXN12c	153	189	77	107	63	95	6	60

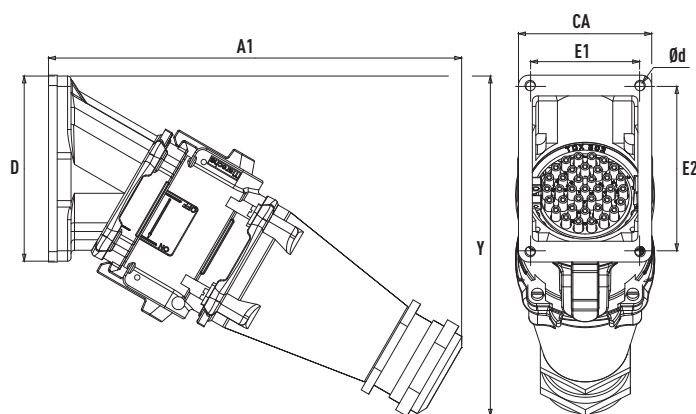
*Ød : maximum drilling diameter.



	A1	C	Y
DXN25c/DXN37c	346	80	108
PXN12c	246	58	87



	A1	CA	D	D2	E1	E2	Y	Ød*
DXN25c/DXN37c	299	110	114	136	94	70	200	6,5
PXN12c	213	110	114	142	94	70	193	6,5



	A1	CA	D	E1	E2	Y	Ød*	ØD max
DXN25c/DXN37c	239	77	107	63	95	197	5,5	60
PXN12c	153	77	107	63	95	189	6	60

*Ød : maximum drilling diameter.

PNCX



COMPACT CONNECTOR



5 A

- ▶ II 2 G D Ex e IIC, Ex tb IIIC
- ▶ Can be used in zones 1 and 2 (gas), 21 and 22 (dust)
- ▶ Compact and easy to use
- ▶ Standard IP66/IP67/IP69
- ▶ Long life, 2 000 operations

ELECTRICAL FEATURES

Maximum voltage	250 V
Impulse withstand voltage	5 kV/Pollution degree 3
Contact resistance	< 2 mΩ
Permitted current range	4-20 mA/5 A
Polarity	3P+N+E
Conductors accepted	From 0,75 mm ² to 2,5 mm ² Screwed terminals
Cable diameter	From 10 to 14 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 5-1 000 Hz, 1 g (90 minutes on each critical frequency) according to IEC 60068-2-6

CLIMATIC FEATURES

Ambient temperature	-20 °C to +70 °C
IP protection Socket with cap	IP66/IP67 IP69 100bar (1450 PSI) 80 °C
IP protection plug connected	IP66/IP67 IP69 100bar (1450 PSI) 80 °C
Salt, Fog performance	200 h minimum not connected > 1000 h connected
Resistance to fluids	Motor oils, petrol, oils, detergents...

MARQUAGE ATEX

ATEX zones	Gas zones 1 and 2, Dust zones 21 and 22
ATEX markings	Ⓔ II 2 G D Ex e IIC T6 Gb Ex tb IIIC T72 °C Db
Certificates	LCIE 16 ATEX 3001 X IECEx LCIE 16.0001 X

		SOCKET-OUTLET female (with lock nut) PNCX (5 A)		INLET male (with lock nut) PNCX (5 A)	
250 V	5P	06E4007		06E8007	
		COUPLER SOCKET female PNCX (5 A)		PLUG male PNCX (5 A)	
250 V	5P	06E3007		06E1007	
				ADAPTER PLATE FOR DNX1 ACCESSORIES (SEE PAGES 168-169)	
					251A457-E

PLUG



PNCX connectors complies with:

- The ATEX 2014/34/UE Directive,
- The requirements of IEC 61984, IEC 60529, IEC 62262, EN/IEC 60079-0, EN/IEC 60079-7 and EN/IEC 60079-31 International standards,
- The European Low Voltage Directive 2014/35/UE.
- 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,

SPeX



SINGLE POLE POWER CONNECTOR



680 A

- ▶ II 2 G D Ex e IIC, Ex tb III C
- ▶ Ambient temperature -20 °C to +60 °C
- ▶ IP65/IP66 Water-and dust-tight
- ▶ Electromechanical interlocking system
- ▶ Mechanic and visual keying

THE HIGHEST POSSIBLE SAFETY

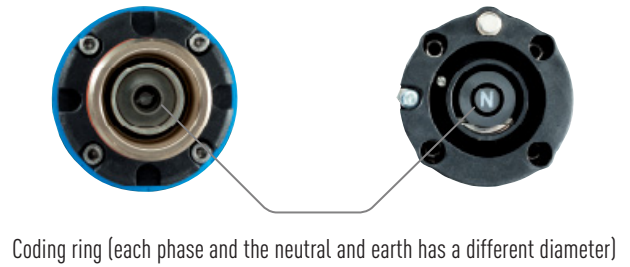
- Reliable mechanical and electrical interlocking.
- IP2X socket-outlet when cap removed.
- Automatic IP65/IP66 when plug is connected.

AN SIMPLE-TO-USE CONNECTOR

- Straight insertion of the plug into the socket-outlet.
- Different mechanical keying for L1, L2, L3, N and E, positive and negative (DC).
- Visual identification by standard colours.



Mechanical coding between phases



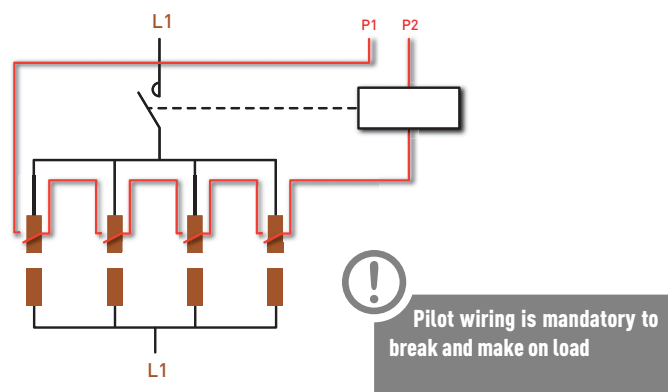
SPeX ATEX CLASSIFICATION ACCORDING TO CABLE CROSS-SECTION AND TA (AMBIENT TEMPERATURE)

	-20 °C ≤ Ta ≤ +40 °C G D T5/T56 °C	-20 °C ≤ Ta ≤ +40 °C G D T6/T56 °C	-20 °C ≤ Ta ≤ +60 °C G D T5/T76 °C
70 mm ²	290 A	235 A	235 A
95 mm ²	415 A	335 A	335 A
120 mm ²	456 A	376 A	376 A
150 mm ²	493 A	415 A	415 A
185 mm ²	530 A	450 A	450 A
240 mm ²	570 A	497 A	497 A
300 mm ²	620 A	540 A	540 A
400 mm ²	680 A	600 A	600 A

PERFORMANCES

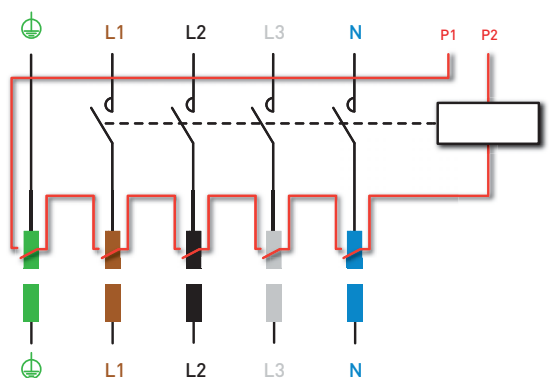
- With 240 mm² wiring, the SPeX accepts a permanent current up to 570 A/1000 V AC with T5 ATEX classification at 40 °C ambient temperature.

**Interlocking electrical wiring diagram:
increased power with parallel connection.**



Energy distribution system with separate connection of contacts

The pilot contact breaks the circuit in conformity with ATEX Directive (increased safety "e"). **The breaking system is not supplied.**



SINGLE POLE

SPeX SINGLE POLE POWER CONNECTOR



**INCLINED
SOCKET SPeX**

Panel mounting
socket
464700N

PLUG SPeX

Plug
464100N50P

MAIN FEATURES

Rated current	according to temperature class and section of cable	Ambient temperature	see table
Maximum voltage AC	1 000 V	Wiring (min - max)	see table
Maximum voltage DC	1 500 V	Keying position	5, mechanical and visual
Short-circuit current I_{cc}	20 kA during 250 ms	Protection mode	e, tb
IP protection - lid closed	IP65/IP66	ATEX zones	1 & 2, 21 & 22
IP protection - connected plug	IP65/IP66	Number of operations	2000
Shock resistance	IK08	Pre-wired pilot circuit	6 A/250 V

**SOCKET-OUTLET female
SPeX (680 A)
WITHOUT LUG**



**INLET male
SPeX (680 A)
WITHOUT LUG**



Type	Europe*	Reference	Reference 16-25 mm	Reference 22-32 mm	Reference 28-38 mm	Reference 40-48 mm
L1	Brown	4647001	464100132P	464100140P	464100150P	464100163P
L2	Black	4647002	464100232P	464100240P	464100250P	464100263P
L3	Grey	4647003	464100332P	464100340P	464100350P	464100363P
Neutral	Blue	464700N	464100N32P	464100N40P	464100N50P	464100N63P
Earth	Green	464700T	464100T32P	464100T40P	464100T50P	464100T63P
Positive	Red	464700P	464100P32P	464100P40P	464100P50P	464100P63P
Negative	Black	464700M	464100M32P	464100M40P	464100M50P	464100M63P

* The indicated references are valid for Europe and Japan. For other countries: replace the prefix 46 by: 42 for the USA/43 for Australia and New Zealand/44 for UK and South Africa

Type	Australia and New Zealand	Reference	Reference 16-25 mm	Reference 22-32 mm	Reference 28-38 mm	Reference 40-48 mm
L1	Red	4347001	434100132P	434100140P	434100150P	434100163P
L2	White	4347002	434100232P	434100240P	434100250P	434100263P
L3	Blue	4347003	434100332P	434100340P	434100350P	434100363P
Neutral	Black	434700N	434100N32P	434100N40P	434100N50P	434100N63P
Earth	Green	434700T	434100T32P	434100T40P	434100T50P	434100T63P
Positive	Red	434700P	434100P32P	434100P40P	434100P50P	434100P63P
Negative	Black	434700M	434100M32P	434100M40P	434100M50P	434100M63P

ACCESSORIES AND OPTIONS



Lever mechanism

454A376

Compatible with socket or inlet since 2018.

**MARECHAL ELECTRIC
FRANCE**



 II2 G D

Ex e IIC Gb
Ex tb IIIC Db

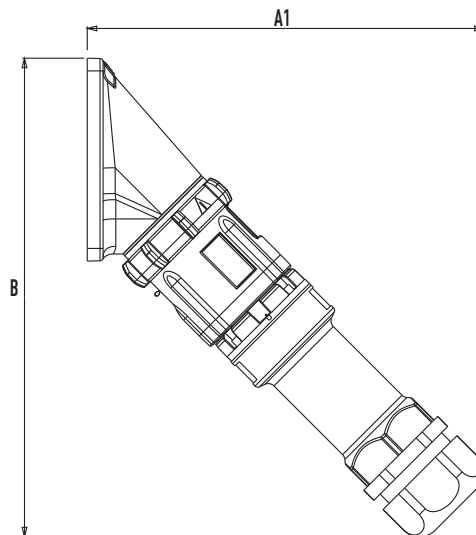
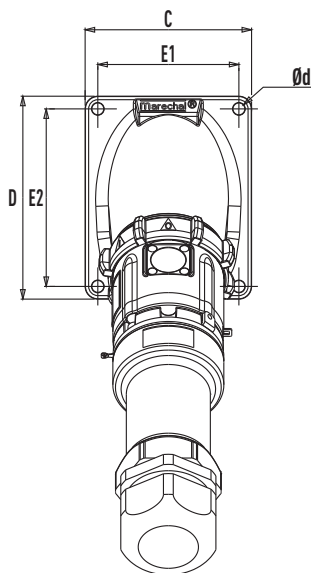
IECEx LCI 12.0005X
LCIE 07 ATEX 6073 X

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 ²)		 Straight with hole	 Straight threaded M12*	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

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



	A1	B	E1	E2	D	C	Ød*
SPeX	250	302	89	112	128	105	7.5

*Ød : maximum drilling diameter.

CUSTOMIZED SOLUTIONS



FIND ALL INFORMATION
ON OUR WEBSITE:



marechal.com



Dimensions
and certificates



technor.com



MXBS P. 206

SOCKET-OUTLET COMBINATION BOXES

- II 2 G D Ex eb IIC, Ex tb IIIC
- Intrinsic safety capability
- IP66 Water-and dust-tight
- GRP casing, aluminium, stainless steel AISI 316 L
- Assembly of multi-contact connectors and socket-outlets on the same enclosure
- Custom configuration



MXBJ P. 208

JUNCTION BOXES

- II 2 G D Ex eb IIC, Ex tb IIIC
- Intrinsic safety capability
- IP66 Water-and dust-tight
- GRP casing, aluminium, stainless steel AISI 316 L
- Custom configuration



B2X P. 210

SOCKET OR JUNCTION BOXES

- II 2 G D Ex e IIC, Ex tb IIIC
- Intrinsic safety capability
- IP66/IP67 Water-and dust-tight
- GRP casing
- For Ex socket and/or EX terminals
- 120x120 mm or 160x160 mm
- On hinges



Technor P. 212

A WIDE RANGE OF TECHNOLOGICALLY ADVANCED PRODUCTS

- Lighting
- Flameproof enclosure
- Junction boxes
- Control station
- Visual signal
- Cable glands & fittings

MXBS



SOCKET-OUTLET COMBINATION BOXES



Ⓐ

680 A

- ▶ Ex eb IIC, Ex tb IIIC
- ▶ Intrinsic safety capability
- ▶ IP66 Water-and dust-tight
- ▶ GRP casing, aluminium, stainless steel AISI 316 L
- ▶ Assembly of multi-contact connectors and socket-outlets on the same enclosure
- ▶ From -55 °C to +60 °C



ASSOCIATED MARECHAL® PRODUCTS

DECONTACTOR™	DXA1, DXN1, DXN3 and DXN6
Connectors	PNCX and SPeX
Multicontact connectors	PXN12C, DXN25C and DXN37C

CLIMATIC FEATURES

Temperature range and ratings	From -55 °C to +60 °C
--------------------------------------	-----------------------

ATEX MARKINGS

ATEX zones	Gas and Dust : zones 1 & 2, 21 & 22
-------------------	-------------------------------------

ATEX markings	⊕ II 2 G Ex eb IIC T* Gb increased safety
	⊕ II 2 G Ex ia IIC T* Gb or ⊕ II 2 G Ex ib IIC T* Gb increased safety
	⊕ II 2 G Ex eb ia or eb ib IIC T* Gb increased safety and intrinsic safety
	⊕ II 2 D Ex tb IIIC T* Db in dust

Standards compliance	IEC/EN 60079-0, 60079-7, 60079-11 and 60079-31
-----------------------------	--

Certificates	Certificates IECEX N° IECEX LCI 11.0042X and ATEX n° LCIE 11 ATEX 3047X
---------------------	---

* Depending on the ambient temperature, the internal components and socket mix.

MECHANICAL FEATURES

Degree of protection	IP66
-----------------------------	------

Shock resistance	IK09 according to IEC and EN 62 262
-------------------------	-------------------------------------

GRP casing, aluminium, stainless steel AISI 316 L. Casing made of High performance Poly for DXN1, DXN3 and DXN6 decontactors and PNCX, SPeX connectors.

Material	Casing made of Metal for DXA1 DECONTACTOR™ and PXN12C, DXN25C and DXN37C multicontact connectors. Stainless steel screw.
-----------------	---

ELECTRICAL FEATURES

Maximum voltage*	1000 V AC/DC
-------------------------	--------------

Maximum nominal current*	680 A
---------------------------------	-------

Flexible and stranded wiring (mini - maxi)*	0.22-400 mm²
--	--------------

Junction	Terminal blocks. Feed through and loop-in loop-out connection.
-----------------	--

M12 to M80 depending on the size of the box/Polyamide cable gland for unarmoured cable.

Cable entries and glands	Nickel plated brass cable gland for unarmoured cable and armoured cable (with plate or washer bonding inside the box).
---------------------------------	--

* Depending on the socket-outlet.



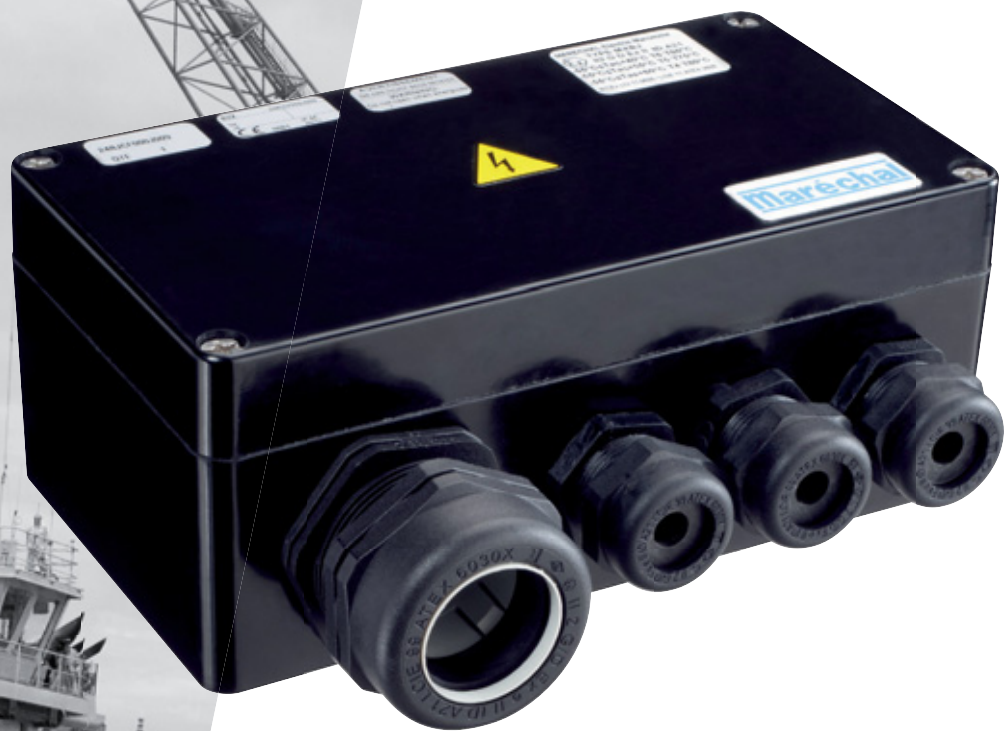
ACCESSORIES ON REQUEST

- Inclined sleeve
- Earth stud
- Earth bar
- Hinges
- Mounting brackets
- Purge or breather
- Earthing plate
- Metal gland with or without earth ring

MXBJ



JUNCTION BOXES



ⓐ

400 A

- ▶ II2 G D Ex eb IIC and Ex tb IIC
- ▶ Intrinsic safety capability
- ▶ IP66 Water-and dust-tight
- ▶ GRP casing, aluminium, stainless steel AISI 316 L
- ▶ From -55 °C to +60 °C
- ▶ Shock resistance IK09



ELECTRICAL FEATURES

Maximum voltage*	750 V
Maximum nominal current*	400 A
Flexible and stranded wiring (mini - maxi)*	0,2-300 mm ²
Cable entries	M12 to M80

* Depending on the type of terminal connection.

CLIMATIC FEATURES

Temperature range and ratings	From -55°C to +60°C
-------------------------------	---------------------

MECHANICAL FEATURES

Degree of protection	IP66
Shock resistance	IK09 according to IEC and EN 62 262
Material	GRP casing, aluminium, stainless steel AISI 316 L. Stainless steel screws.

ATEX MARKINGS

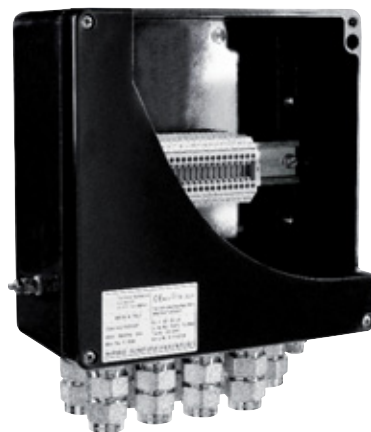
ATEX zones	Gas and Dust : zones 1 & 2, 21 & 22
------------	-------------------------------------

ATEX markings	II 2 G Ex eb IIC T* Gb increased safety
	II 2 G Ex ia IIC T* Gb or
	II 2 G Ex ib IIC T* Gb intrinsic safety
	II 2 G Ex eb ib or ia IIC T* Gb increased safety and intrinsic safety
	II 2 D Ex tb IIIC T* Db in dust

Standards compliance	IEC/EN 60079-0, 60079-7, 60079-11 et 60079-31
----------------------	--

Certificates	Certificates IECEx N° IECEx LCI 11.0026X and ATEX N° LCIE 11 ATEX 3028X
--------------	--

* Depending on the ambient temperature, the internal components and socket mix.



ACCESSORIES ON REQUEST

- Earth stud
- Earth bar
- Shield bar
- Junction bar
- Hinges
- Mounting
- Purge or breather
- Earthing plate
- Metal gland with or without earth ring

B2X



SOCKET OR JUNCTION BOXES



63 A

- ▶ II 2 G D Ex e IIC, Ex tb IIIC
- ▶ Intrinsic safety capability
- ▶ IP66/IP67 Water-and dust-tight
- ▶ GRP casing
- ▶ With Ex e certified Terminal
- ▶ Dimension 120x120x90 mm or 160x160x90 mm



ELECTRICAL FEATURES

Maximum voltage	750 V DC/AC
Maximum nominal current	63 A
Flexible and stranded wiring (mini - maxi)	0.22 – 35 mm ²
Cable entries	M12 to M40

CLIMATIC FEATURES

Temperature range	From -50 °C to +60 °C
-------------------	-----------------------

MECHANICAL FEATURES

Dimensions	120x120x90 and 160x160x90
Degree of protection	IP66/IP67
Shock resistance	IK09 according to IEC and EN 62 262
Material	High performance GRP

ASSOCIATED MARECHAL® PRODUCTS

DECONTACTOR™	DXA1, DXN1, DXN3 and DXN6
Connectors	PNCX
Multicontact connectors	PXN12C, DXN25C and DXN37C

ATEX MARKINGS

ATEX zones	IECEx and ATEX for zones 1 and 2 (gas) and 21 et 22 (dusts)
------------	--

ATEX markings	⊕ II 2 G Ex e IIC T* Gb or Ex ia or ib IIC T* Gb or Ex e ia or ib IIC T* Gb
	⊕ II 2 D Ex tb IIIC T* Db

Standards compliance	IEC/EN 60079-0, 60079-7, 60079-11 and 60079-31
----------------------	---

Certificates	Certificates IECEx N° IECEx LCIE 16.0042X and ATEX N° LCIE 16 ATEX 3054X
--------------	---

* Depends on equipment mounted in/on the enclosure and the ambient temperature. Ambient temperature: -50°C to +60°C T6/T5/T4 for gas.

For standard configurations of socket boxes with terminals, see the DXN1, DXN3 and DXN6 pages.
For special configurations, contact us.



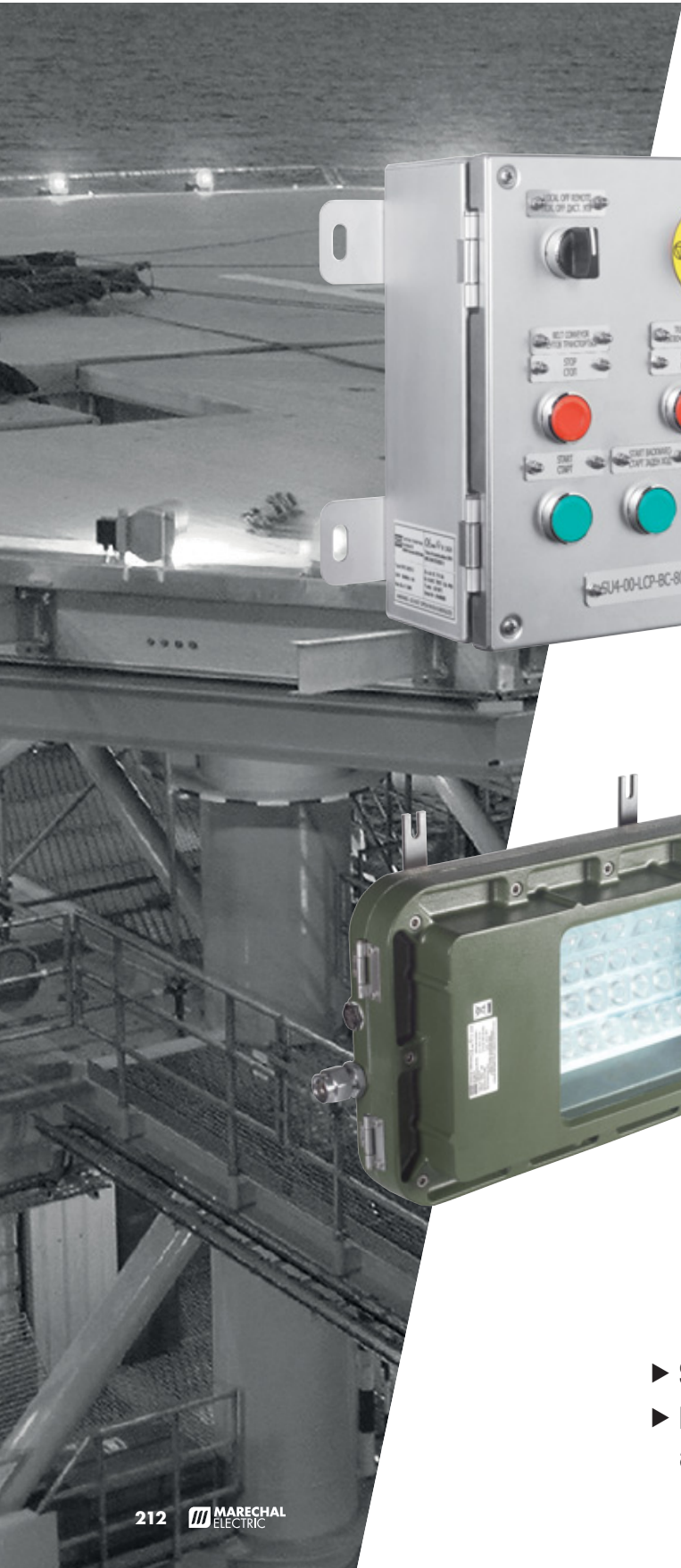
ACCESSORIES ON REQUEST

- Earth Stud
- Earth bar
- Junction bar
- Draining and breathing device
- Earth continuity plate
- Metal cable gland with or without earth continuity

Technor®



A WIDE RANGE OF ATEX PRODUCTS



- ▶ Safety of people
- ▶ Equipment and infrastructure in potentially explosive atmosphere



LIGHTING

Ex d, Ex de, Ex nA, Ex emb

A complete range of lighting with dedicated design for hazardous areas. Manufactured either in stainless steel, marine grade aluminium and cast steel with an extra Polyurethane painting. Every single light brings excellent photometric properties.



CONTROL STATIONS

Ex d, Ex e, Ex de, Ex dem

Range of GRP, Copper free aluminium or Stainless Steel control stations designed to offer a flexible, light weight and cost effective solution tailor made upon customer request.



JUNCTION BOXES

Ex d, Ex e et Ex ia

The AQ/AR range of stainless steel AISI-316L enclosure used as instrument and electrical terminal boxes, where an explosive atmosphere may be present and are especially recommended for chemical agent environments, sea-water corrosion resistance and extremes of low and high temperature, offshore and onshore oriented.

The CP./CPS.. range of copper free aluminium enclosures, used for terminals wiring, grants Ex d or Ex e mode of protection. Internal and external screws are made of AISI316 stainless steel. This series is tailor made on the base of customer specification, including quantity and type of terminals. These boxes are suitable for hazardous areas of industrial plants for indoor and outdoor applications.



FLAMEPROOF ENCLOSURES

Ex d IIB, IIB+H2 et IIC

Large range of enclosures manufactured in Copper free aluminium, Cast Iron or Stainless steel. Ideal for instrument housing, control, check, connection, automation, interruption and/or protection use. They can be equipped with pushbuttons, pilot lamps and selector switches.



EARTHING SYSTEMS

Ex d IIC T5 Gb

Control and discharge system for electrostatic charges suitable for road tankers, rail tankers and any movable tanker for dangerous items, ready for one/two double circuit clamps PTA ISE0-2. System is complete with arrest/consensus optical warning and changeover contact free from output voltage.



VISUAL SIGNAL

Ex d, Ex de IIC

The top of technology among Aircraft Warning Lights, LIOL, MIOL with LED technology, reliable long life and maintenance saving products, in compliance with ICAO and FAA, along with signalization unit like beacons, flashing unit, rotating light.



CABLE GLANDS & ACCESSORIES

Ex d/e

Single seal, double seals cable glands, suitable for unarmored and armored cables. Nickel-chrome plated brass, stainless steel and aluminum made, hexagon shape, anti-ageing EPDM oil resistant gaskets. These cable glands are used in classified Area Zone 1 & 2 and Zone 21 & 22.



MAIN OPTIONS

DESCRIPTION OF THE KEY OPTIONS
OF OUR PRODUCTS.



FIND ALL INFORMATION
ON OUR WEBSITE:



marechal.com



Dimensions
and certificates



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EX REGULATIONS.....	P. 233
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REFERENCES	P. 238



MECHANICAL LOCKING



Locking devices prevent the unintentional supply or use of an equipment during maintenance, and fit perfectly within consignment procedures known as LOTO (Lockout/Tag-out). Socket-outlets adjacent to electric machines or motors may be disconnected and locked-out thus providing a visible disconnection and protecting workers from a local security failure, without the use of an authorized electrician.

After disconnecting the DECONTACTOR™ in complete safety:

- The plug can be locked-out thus preventing its connection to any socket-outlet;
- The socket-outlet can also be locked-out cover closed;
- The plug and the socket-outlet can also be padlocked together to prevent any unwanted disconnection (supply of emergency equipment).
- Plug/appliance inlet: a padlock (or a safety lock) can be placed directly. Padlock not supplied.
- Socket-outlet alone (cover closed) or connected assembly: a padlock (or a safety lock) can be placed directly on the socket latch or onto a locking shaft under the latch (padlock not supplied).

Socket-outlet alone



Connected assembly



Plug alone



Suffix to be added to the socket-outlet or plug/inlet part number (P/N°) depending on the locking option:

OPTIONS	DSN SERIES	DS SERIES	DXN SERIES	DN SERIES	PN SERIES
Locking shaft for up to 2 padlocks Ø 4 to 8 mm max.	Socket-outlet P/N° + 843	Socket-outlet P/N° + 843 (DS1/DS3/DS2/DS6/DS4)	Socket-outlet P/N° + 843	NA	NA
Locking shaft for up to 3 padlocks Ø 8 mm max.	NA	Réf. socle + 844 (DS9)	NA	Réf. socle + 844	NA
Padlocking latch (no shaft) one padlock Ø 4 mm max.	NA	NA	NA	NA	Socket-outlet P/N° + 843
Allen-screw locking latch*	NA	DS2 Socket-outlet/P/N° + 22 (6 mm hexagonal key)	NA	NA	Socket-outlet P/N° + 22 (2.5 mm hexagonal key)
Locking plug/inlet (padlocking hole)		<<< Inlet P/N° + 843 >>>		NA	NA
Safety lock (up to 6 padlocks)		<<< P/N° 873A541 >>>			NA

* no possibility to use a padlock.

Some of our ranges are equipped with a mechanical locking device as standard.

With a BTR screw:
PXM12C/DS4



With lockable shaft:
DX/DXN25C et DXN37C



Consignment:
DB





STOP-LATCH

This option is ideal for quick disconnection of machinery and equipment by employees wearing gloves.

The latch is fitted with a red label with warning "stop" for ease of identification.



The use of this latch is not recommended in case of extension cables.



Suffix to be added to the socket-outlet part number (P/N°):

OPTION	DSN SERIES	DS SERIES*	DN SERIES
Stop-latch		<<< Socket-outlet P/N° + 453 >>>	

* The stop-latch is standard for the DS2.



The stop latch is not an emergency-stop button



TYOLOGY OF LIDS

LIDS

Lid opening at 180°

Hinged lids of our products open as standard at 120°.

They may, however, depending on the configuration open at 180°.

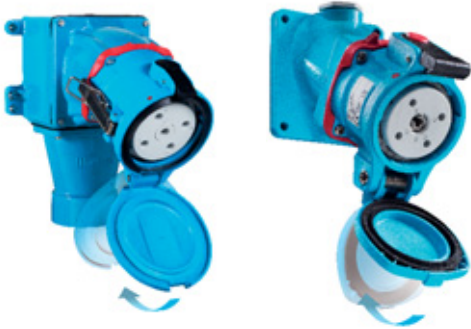
MARECHAL® products lids are designed with an automatic opening, in order

to oblige the user to close it voluntarily and thus ensure the waterproofness of the socket-outlet, up to IP66/IP67/IP69.

Suffix to be added to the socket-outlet part number (P/N°):

OPTION	DSN SERIES	DS9/2 METAL SERIES	DN SERIES	PN SERIES	DXN SERIES
Lid opening at 180°		<<< Socket-outlet P/N° + 10 >>>			

LID OPENING AT 180° IS A STANDARD FOR THE DS1-, DS3-, DS6-POLY AND DS9-POLY.



Check that this option is compatible with the final assembly of the product.



STANDARD LID CONFIGURATIONS



180° opening lid



120° opening lid



90° opening lid



Detached lid

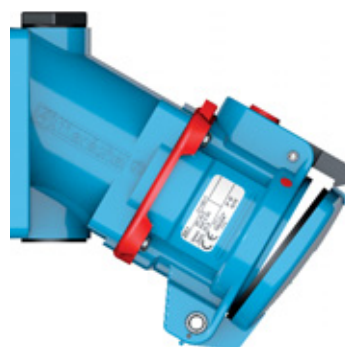


AUTOMATIC SELF-RETURNING LID AND LID-SPRUNG-CLOSED

A normally closed lid configuration is available for applications where it is desirable to protect the socket-outlet front – the Shutter – from ingress of dust and debris or potential damage.

This option provides a lid that automatically returns to a pre-closed position after withdrawal of the plug.

The user must then always manually close the lid in order to achieve the complete seal (IP-rating), except for the DS1-, DS3- and DS6-poly, for which there is an automatic sprung-closed lid.



Suffix to be added to the socket-outlet part number (P/N°):

OPTION	DSN SERIES	DS SERIES ⁽¹⁾	DN SERIES	PN SERIES ⁽²⁾	DXN SERIES
Socket-outlet with self-returning lid closed		<<< Socket-outlet P/N° + R >>>			

1 For DS1-, DS3- and DS6-poly, this is an automatic sprung-closed lid.

2 The IP55 PN series version is available with a standard automatic sprung-closed lid (no need to add R).

DS1/DS3/DS6 example



PN example



This option is recommended for self-ejecting applications. See page 228.

SELF-RETURNING LID + LID OPENING AT 180°

It is possible to combine these two options if required.

Suffix to be added to the socket-outlet part number (P/N°):

OPTION	DSN SERIES	DS SERIES*	DN SERIES	PN SERIES	DXN SERIES
Self-returning lid opening at 180°		<<< Socket-outlet P/N° + 18 >>>			

* Since lid opening at 180° is a standard for the DS1-, DS3-, DS6-poly and DS9-poly, the « R » for self-returning lid is sufficient.



DRAW MECHANISM

DRAW LEVERS

A draw-lever mechanism is available as an accessory for certain sizes in the DN series to ease inserting the plug into the socket-outlet.

Part numbers (P/N°) for these products:

OPTION	DN6
Draw Lever with handle alone	196A376
Draw base-plate alone	196A396



FINGER DRAW PLATES

Other engagement support systems are available, especially for couple socket (plug + connector).

Part numbers (P/N°) for these products:

OPTION	DSN1	DSN3/DS1	DSN6/DS3	DS6
Plates	611A346	613A346	616A346	316A346



Finger draw-plates are available in pairs with 2 seals and mounting screws a bit longer than standard.

DS9 - 150 A



DS2 - 250 A



DS4 - 400 A



Some of our products are supplied with a draw mechanism as standard.



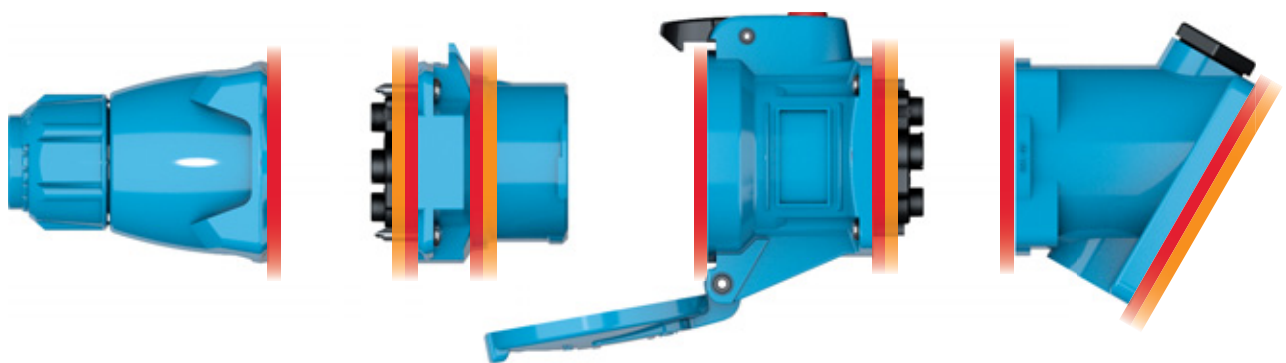
ELECTROMAGNETIC COMPATIBILITY (EMC)

Most electrical and electronic equipments generate electromagnetic fields can sometimes interfere with the operation of other equipments. This option allows our metal cased devices to function properly in an electromagnetic environment without producing disturbances for everything that is in this environment, thus limiting the level of unwanted emissions from the device to not to disrupt radio reception or other equipment. Electromagnetic compatibility (EMC) tests are carried out on our products according to IEC 62153-4-5: 2016. Within a frequency range between **30 MHz** and **1000 MHz**, the **EMC** option offers an attenuation between **30 dB** and **70 dB** of the electromagnetic emissions.



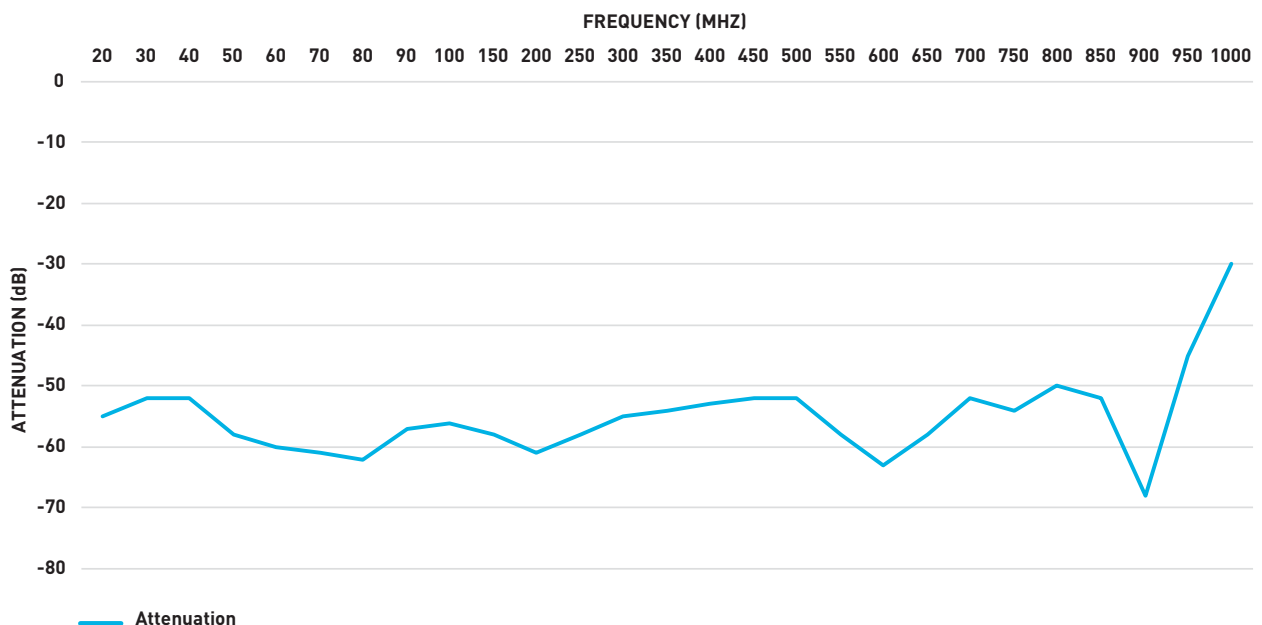
Suffix to be added to socket-outlets, inlets and accessories part numbers (P/N°):

OPTION	DS6 - DS9 - DS2	DN9C	PN SERIES
Electromagnetic compatibility	Socket-outlet, inlet & accessory P/N° + EMC		



- All contact surfaces are un-protected to provide optimal electrical conductivity;
- Gaskets are fitted with metallic braided fabric, silicone with Monel threads or graphite-loaded, ensuring an excellent EMC performance.

Example: DS2 EMC shielding attenuation curve:





ADDITIONAL OPTIONS

INCREASED WATERTIGHTNESS (IP66/IP67)

In order to increase the IP rating of a product that is not IP66/IP67 as standard, a seal is added to the plug (appliance Inlet), and the socket-outlet lid is fitted with a heavier, higher-IP sealing gasket.



Suffix to be added to socket-outlet & inlet part number (P/N°):

OPTION	DS6*	DS9 METAL	DS2	DN SERIES
Seals to IP66/IP67		<<< Socket-outlet & inlet P/N° + 600 >>>		

* Automatic sprung-closed lid is not possible with this option. The only option in this instance is self-returning lid (R).



With this option, it is recommended to use our draw mechanisms systems, especially in couple socket configuration.

REVERSED INTERIORS

In the PN series, the interior mouldings and contacts can be swapped:

- The plug interior moulding and contacts can be assembled in a socket-outlet casing.
- The socket-outlet moulding and contacts can be assembled in plug casing.

Suffix to be added to socket-outlet & inlet part number (P/N°):

OPTION	PN SERIES
Reversed interior mouldings and contacts	Socket-outlet & inlet P/N° + 001

As the plug top becomes the emitting part, it is supplied with a cap as standard (012A126).



PHASE-SEQUENCE INDICATOR

The phase-sequence indicator is an accessory that provides a simple way to test if the phase sequence is correct, and the rotation direction of AC motors, from 250 to 690 V AC.

The accessory comprises a plug top to be mated directly with the socket-outlet which phase-sequence is to be tested. The plug top is either fitted with a handle with LEDs that illuminate to indicate the presence of phase and the phase-rotational direction, or connected with a cable to a phase sequence indicator.



Please contact us for part numbers



VISUAL STATUS-INDICATORS

Our devices can be fitted with LEDs indicating the presence of voltage.

The LEDs are fitted on handles as follows:

- Tension 24 V AC Ø 8 mm yellow LED
- Tension 240 V AC Ø 8 mm red LED
- Tension 400 V AC Ø 8 mm red LED



Suffix to be added to handles part numbers (P/N°):

HANDLE	DSN1 - DSN3 - DSN6 - DS1 - DS3 - DS6 - DN8 - DN1 - DN3 - PN - DB3 - DB6
For 24 V	Standard P/N° + LY
For 240 V	Standard P/N° + LR
For 400 V	Standard P/N° + LR4



INDUSTRIAL/DOMESTIC ADAPTER

In order to allow the connection of an appliance fitted with a domestic plug to an industrial type socket-outlet, MARECHAL ELECTRIC has developed an adapter which features a MARECHAL® single phase industrial plug top at one end and a 10/16 A - 230 V domestic socket at the other end. The adapter includes a 6 x 32 mm 10/16 A fuse-link.



Part numbers (P/N°) for these products:

TYPE		DSN1	DSN3	DS1	DN8	PN
France	Poly	6118015D11	6138015D11	3118015D11	-	01N8015D11
	Metal	-	-	-	1988015D11	09N8015D11
United Kingdom	Poly	6118015D40	6138015D40	3118015D40	-	01N8015D40
	Metal	-	-	-	1988015D40	09N8015D40
Germany	Poly	6118015D30	6138015D30	3118015D30	-	01N8015D30
	Metal	-	-	-	1988015D30	09N8015D30
Italy	Poly	6118015D06	6138015D06	3118015D06	-	01N8015D06
	Metal	-	-	-	1988015D06	09N8015D06
Australia	Poly	6118015D67	6138015D67	3118015D67	-	01N8015D67
	Metal	-	-	-	1988015D67	09N8015D67



PILOTS & AUXILIARIES

The use of socket-outlets and plugs with at least one pilot contact and cables with pilot conductors allows the remote control of a contactor (or similar electrically controlled switchgear). This concept is named "electrical interlocking".

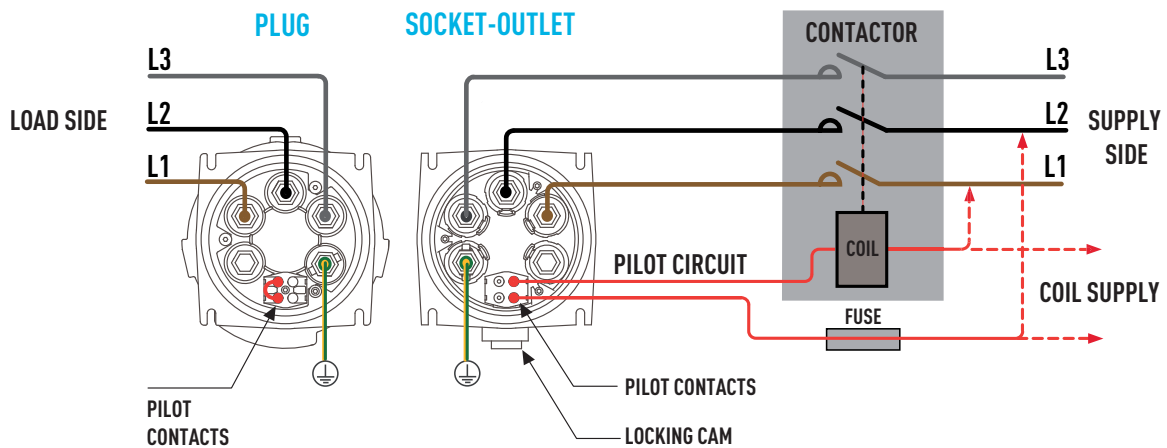
- The power supply of the socket-outlet must be controlled by a contactor or similar.
- One terminal of the contactor control-coil must be connected to a phase and the other terminal to the pilot contact of the socket-outlet.
- The cable (or coupler socket) between the source and the load, must include pilot conductor(s).

- The plug (or inlet) is provided with a shunt, which, when the socket-outlet and the plug are mated, closes the supply circuit for the up-stream feeding contactor coil.

- The contactor closes and power is fed downstream to the load.

The circuit must be so designed that the contactor coil can not be fed (and the contactor closed) until all connections downstream between socket-outlet (connector) and plug (appliance inlet) are completely made – i.e. closed.

Example of diagram for PFC series pilot circuit:



Plug side: 2 pilot contacts are shorted to close the pilot circuit.

Socket-outlet side: rotate the locking cam to lock/unlock the plug and close/open the pilot circuit.

Coil supply: DC etc.

SP series



PF series

Up to 6 auxiliaries (and 2 contacts pilots)



DS4 series



Some of our products feature pilot contacts as standard.



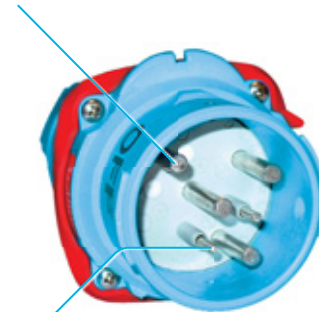
AUXILIARY CONTACTS

Auxiliary contacts are often required for all kinds of remote control or signal transmission and in particular:

- To de-energized a motor-starter when a motor is disconnected.
- To connect a winding embedded thermistor for thermal protection of a pump motor.
- In particular for automated systems, it may be necessary to indicate if an equipment is connected or not.

MARECHAL® offers a wide range of products with up to 8 auxiliary contacts.

Power Contact



Auxiliary Contact

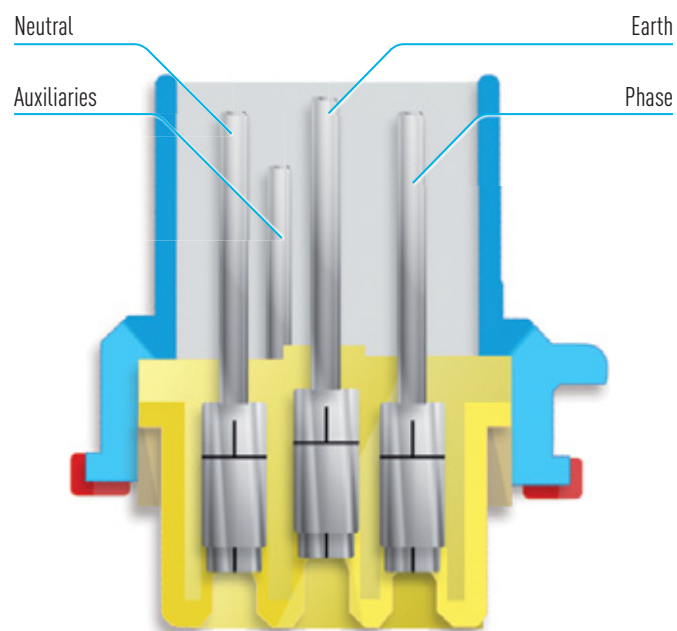
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Please refer to the catalogue for information about the suffix for the socket-outlet and inlet part numbers, in relation to requirement for the number of auxiliary contacts.

SEQUENCING BETWEEN AUXILIARY CONTACTS AND POWER CONTACTS (EARTH, NEUTRAL AND PHASES)

To ensure optimum operation, DECONTACTOR™ contacts are sequenced:

- 1 the earth contact closes first,
- 2 then the neutral contact,
- 3 then the phase contacts L1, L2 and L3,
- 4 and last the auxiliary contacts.



i

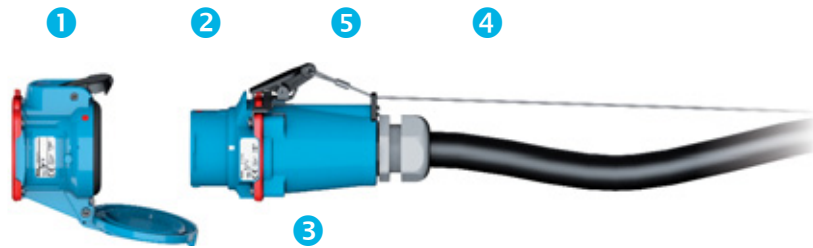
This design ensures no arc at connection and disconnection.



MECHANICAL SELF-EJECTING SYSTEMS


FIXED ELECTRIC POWER SUPPLY

Ejecting plug (inlet + handle)



	INDUSTRIAL RANGE			ATEX RANGE	
Legends	Ejection pawl		Cam Mechanism	Ejection pawl	
	DSN	DS POLY	DS6 METAL	DS9 METAL	DXN
1 Socket-outlet	Ref. +352	Ref. +352	Ref. +352	Ref. +353	Ref. +352
2 Inlet	Standard	Standard	Standard	Ref. +204	Standard
3 Poly handles + eyelet	Ref. +443	Ref. +443	Ref. +443	Ref. +443	See DXN handle page 169
4 Tension cord	311A336	311A336	311A336	311A336	251A336
5 Mechanism	611A338 (DSN1) 613A338 (DSN3) 616A338 (DSN6)	311A338 (DS1) 313A338 (DS3) 316A338 (DS6)	316A338	399A338 (DS9)	251A338 (DXN1) 253A338 (DXN3) 256A338 (DXN6)

Cam Mechanism



INFOS +

FOR ELECTROMECHANICAL EJECTION SEE RETTBOX® IN PAGE 30

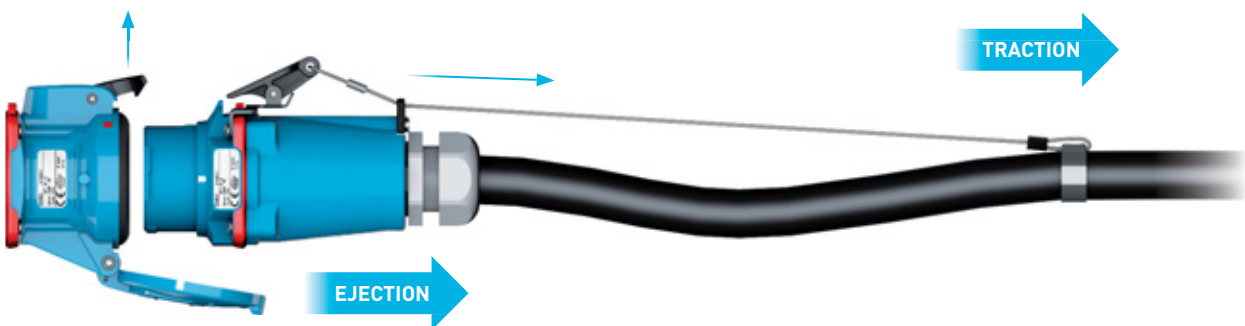




Step 1: self-ejection system at rest.



Step 2: the traction acts on the electrical cable and the rope. The ejection finger gradually raises the latch.



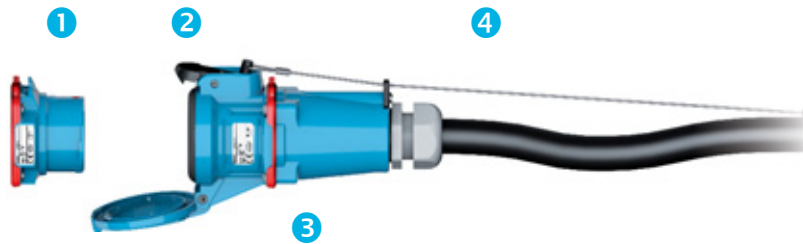
Step 3: the latch is fully raised by the ejection finger, causing the automatic ejection of the plug.



MECHANICAL SELF-EJECTING SYSTEMS

MOBILE POWER SUPPLY SOURCE

Ejecting coupler socket (handle + socket- outlet)



Legends	INDUSTRIAL RANGE			ATEX RANGE	
		Ejection pawl		Cam Mechanism	Ejection pawl
	DSN	DS POLY	DS6 METAL	DS9 METAL	DXN
1 Inlet	Standard	Standard	Standard	Ref. +204	Standard
2 Socket-outlet	Ref. +354	Ref. +354	Ref.+354	Ref. +365	Ref. +354
3 Poly handles + eyelet	Ref. +443	Ref. +443	Ref. +443	Ref. +443	See DXN handle page 169
4 Tension cord	311A336	311A336	311A336	311A336	251A336

For metal casing, we recommend to ensure the mooring of the product.
If you want to fix the connector directly without a sleeve, provide a socket-outlet with a 180° opening option.

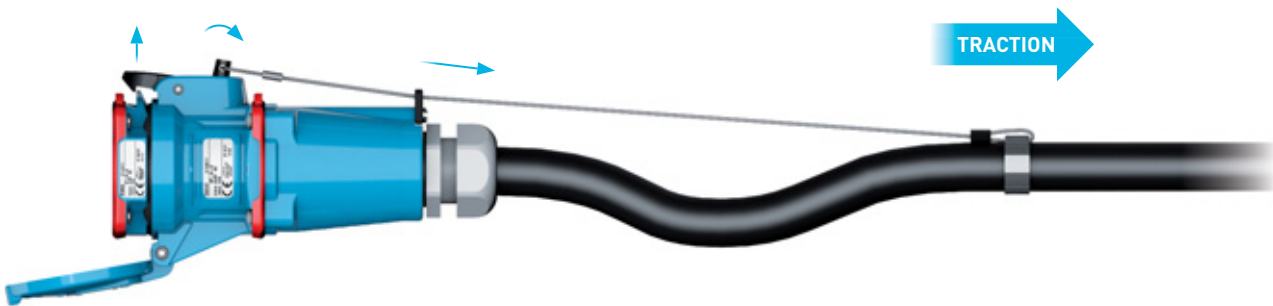
INFOS +

FOR ELECTROMECHANICAL EJECTION SEE RETTBOX® IN PAGE 30

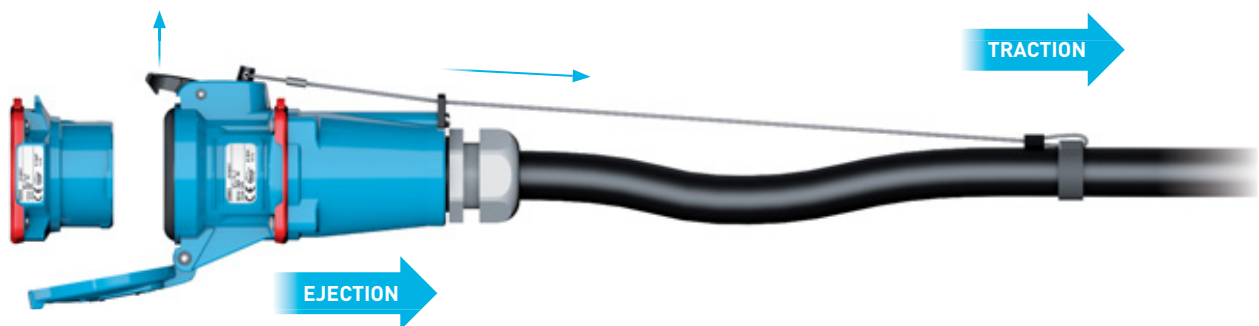




Step 1: Self-ejection system at rest.



Step 2: The traction acts on the electrical cable and the rope. The latch rises gradually.



Step 3: The latch is fully raised, causing the ejection of the socket automatically.



MAIN OPTION COMBINATION SUFFIXES

3 digits suffixes (8, 9 and 10) for specials products, to be added to 7 digits for basic products.

SOCKET SUFFIX

OPTION CHOICE							APPLICABLE RANGE									
Locking	180° Opening lid	Self returning lid	2 aux.	IP66/IP67	Self ejection	Ejection latch	PN	DSN1 DSN3 DSN6	DN8 DN1 DN3	DN6	DS1 DS3	DS6 POLY	DS6 METAL	DS9 POLY	DS9 METAL	DS2
•							843	843	843	843	843	843	843	843	843	843
	•						10	10	10	10			10		10	10
		•					R	R	R	R	R	R	R	R	R	R
			•					972		972	972	972		262	262	972
				•					600	600		600	600		600	600
					•			341			341	341	341	341		
						•		348	348	348	348	348			348	
•	•						841	841	841	841			841		841	841
•	•			•				672	672			672		672	672	672
•		•					858	858	858	858	858	858	858	858	858	858
•		•	•					977	977	977	977	977		662	662	977
•		•		•					588	588		588	588		588	588
•		•		•				372		372	372	372		213	213	372
•		•	•							807		807	807		808	807
•		•		•					659	659		659	659		659	659
•	•	•		•			514	514	514	514			514		514	514
•	•	•		•					809	809			809		809	809
•	•	•		•			18	18	18	18			18		18	18
•	•	•	•					961		961			961		210	961
•	•	•		•					608	608			608		608	608
•	•	•			•			184					184			
•	•	•			•	•		384					384			
•	•	•		•					612	612			612		612	612
•	•	•			•			134					134			
•	•	•			•	•		346					346			
•	•	•	•		•	•		232					232			
•	•	•		•				960		960	960	960	960	267	267	960
•	•	•		•		•		853			853	853	853	093		
•	•	•		•		•		973			973	973	973			
•	•	•		•					605	605		605	605		605	605
•	•	•		•		•		352			352	352	352	352		
•	•	•		•		•		354			354	354	354			
•	•	•		•		•		365	365	365	365	365			365	
•	•	•		•		•			307	307		307	307		307	
•	•	•		•		•						339	339			
•	•	•		•		•				604		604	604		632	604
•	•	•		•		•				602		602	602		655	602
•	•	•		•		•		366			366	366	366			

PLUG SUFFIX


OPTION CHOICE				APPLICABLE RANGE											
Locking	2 aux.	IP66/IP67	Self ejection	PN	DSN1	DSN3 DSN6	DN8 DN1 DN3	DN6	DS1 DS3	DS6 POLY	DS6 METAL	DS9 POLY	DS9 METAL	DS2	
•					843	843			843	843	843	843	843	843	
	•					972		972	972	972	972	262	262	972	
		•					600	600		600	600		600	600	
			•				204	204					204	204	
•	•							372	372	372	372	213	213	372	
•	•							807			807		808	807	
•	•							659			659		659	659	
	•	•						602		602	602		655	602	
	•	•						206					530	206	
	•	•						374					189	374	
	•	•					620	620					620	620	



REGULATIONS

EUROPEAN ATEX DIRECTIVE

> European Directive 2014/34/EU

ATEX Directive 2014/34/EU is a "new approach" directive that applies to protective systems against explosions as well as all equipment used in or related to explosive atmospheres, such as electrical and non-electrical equipment, components and safety, control and adjusting devices that are necessary for the safe operation of those equipment and protective systems. As a "new approach" directive, the 2014/34/EU Directive defines the essential requirements for the safety and health which shall be respected by all manufacturers. Devices falling within the scope of the European Directive and answering to the essential requirements for the safety and health are identified by a marking plate on which the  logo appears.

> European Directive 1999/92/EC

The 1999/92/EC Directive aims to improve the safety and health protection of workers who may be exposed to potentially explosive atmospheres. The site manager has the obligation:

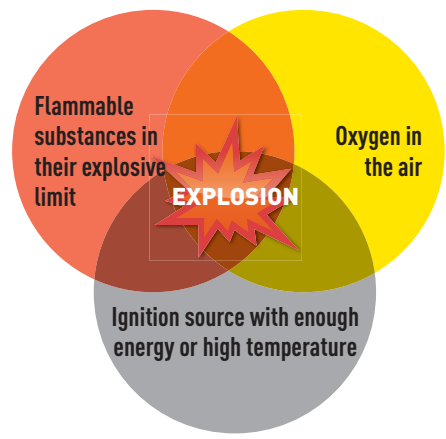
- to prevent the formation of explosive atmospheres or if this is not possible, prevent ignition of explosive atmospheres,
- to assess the specific risks arising from explosive atmospheres ; to draw up and keep up to date an explosion protection document,
- to classify places where explosive atmospheres may occur into zones,
- to mitigate the detrimental effects of an explosion to protect the health and safety of workers (install appropriate equipment, take organizational measures such as staff training, ...).

INTERNATIONAL SCHEME: IECEx

IECEx Scheme: A voluntary certification scheme complying with international standards for electrical and non-electrical equipment for use in explosive atmospheres.

Its aim is to facilitate the international flow of equipment intended to be used in potentially explosive atmospheres (in compliance with one or more international standards defining the type of protection against the risk of explosion) and thus avoiding multiple national certifications and at the same time ensuring an appropriate level of safety. The IECEx certification scheme allows the manufacturers of "Ex proof" equipment to obtain a Certificate of Conformity that would be accepted in Member States in which this certification scheme is recognized.

> Conditions for explosion



AREAS CLASSIFICATION DEFINED BY DIRECTIVE 1999/92/EC

Probability of ATEX presence	Very High	High and Normal	Low
Definition	Location where an explosive atmosphere is present continuously or for a long period or frequently.	Location in which an explosive atmosphere occurs occasionally during normal operation.	Location where an explosive atmosphere is not liable to occur during normal operation or, if it does, is only short-lived (foreseeable abnormal operation).
Zoning for gas & vapours (1999/92/EC)	Zone 0	Zone 1	Zone 2
Zoning for dust & fiber (1999/92/EC)	Zone 20	Zone 21	Zone 22



REGULATIONS

ATEX/IECEX CLASSIFICATION

ATEX Category	IEC protection Level (EPL)	Zone of installation	Atmosphere
1G	Ga	0	GAS
2G	Gb	1	
3G	Gc	2	
1D	Da	20	DUST
2D	Db	21	
3D	Dc	22	
M1	Ma	MINING	COAL DUST METHANE
M2	Mb		

GAS AND VAPOURS CLASSIFICATION AND TEMPERATURE CLASSIFICATION

Gases are divided into three groups by IEC/EN standards, four groups by the CEC (Canadian Electrical Code) and the NEC (National Electrical Code - US) standards. The groups defined in European, International and North American standards are fundamentally the same, as illustrated by the following table.

Gas group		Typical gas
EN/IEC	North America	
IIC	A	Acetylene
IIC	B	Hydrogen
IIB	C	Ethylene, Ethyl ether, Cyclopropane, Butadene 1-3
IIA	D	Propane, Ethane, Butane, Heptane, Acetone, Ethyl Alcohol

DUST CLASSIFICATION

IEC/EN standards defines dust classification:

Dust group	Definition		
	Dust type	Size	Resistivity
IIIA	combustible flyings	> 500 µm	-
IIIB	non-conductive dust	≤ 500 µm	> 10 ³ Ω.m
IIIC	conductive dust	≤ 500 µm	≤ 10 ³ Ω.m



REGULATIONS

PRESENTATION OF MOST COMMON TYPES OF PROTECTION

> Flameproof « Ex d » equipment

A flameproof equipment offers an enclosure in which the parts which can ignite an explosive gas atmosphere can be placed. It withstands the pressure developed during an internal explosion of an explosive mixture, and prevents the transmission of the explosion to the explosive gas atmosphere surrounding the enclosure.

A flameproof enclosure must meet three criteria:

- Contain an internal explosion without permanent distortions.
- Guarantee that the explosion cannot be transmitted to the surrounding atmosphere.
- Have a temperature at any points on the surface that is lower than the self ignition temperature of the surrounding gases or vapours.

There are two construction values which are essential for a flameproof equipment to answer to the 3 criteria:

- the length of flameproof gasket (L)
- the gap (i)

These values depend on gas group and the maximum allowed gap depends on the length of flameproof gasket.

It is necessary to lubricate the thread and to ensure that at least 5 threads are engaged for metric thread and that 5 threads are present on each parts for NPT threads.

Holes which are not used for cable entries must be blanked using the appropriate blanking plugs.

The equipment is supplied with the lubricated gasket. When the equipment is installed, the flamespaths must be lubricated to keep it in good condition. Use a non-hardening, anti-corrosive grease (see technical note).

In order to successfully retain the flameproof character of the equipment:

- Care must be taken before starting up to ensure that all the screws for closing the covers and cable entries are firmly tightened and that the blocking device is well screwed, if necessary.
- Modification of the original predrilled holes is prohibited.

> Increased Safety « Ex e » equipment

Method of protection applicable to electrical equipment such as light fittings, sockets, switches, etc, which consists of preventing the occurrence of any accidental ignition.

The construction principles for increased safety « e » equipment are as follows:

- Use of high-quality insulation materials
- Specially dimensioned clearance and creepage distance
- Electrical connection which can't become loose
- Minimum protection level against penetration into enclosures IP54
- Respect of the temperature classes
- Conformity of cable entries
- Labelling.

These principles are respected by screwing the cable gland directly onto the enclosure or, for untapped holes, by fixing with a locknut. Holes which are not used for cable entries must be blanked using the appropriate blanking plugs. The equipment has a protection level of at least IP54; it is therefore important to ensure that the sealing gasket is in good condition when the product is installed. Defective seals must be systematically replaced.

It is important to be sure that the gasket is properly positioned for the plugs and sockets and for all the luminaries before connecting the male and female parts (for plugs and sockets) and before closing the light transmitting part of the lighting fixture.

For the connection, all technical note or instruction sheet shall be followed.

> Products marked « Ex de »

Except «Ex d» enclosure, equipment having a combined protection type « d » and « e » are the most commonly used.

Some apparatuses such as power sockets, lampholders, etc, which create arcs and sparks in normal operation, can't be designed only with protection mode « e ».

- The part where the electric arc is produced is enclosed in a small flameproof chamber.
- The connection terminals are « e » increased safety.
- The assembly is mounted in an « e » increased safety enclosure.

Cables entries

The connection of cables to the electrical equipment shall maintain the explosion protection integrity of the relevant type of protection. When the cable gland certificate has an 'X' marking, this cable gland shall only be used for fixed installations. When the equipment is only portable, cable glands without 'X' marking shall be used.








INSTALLATION RECOMMENDATION

> General requirements

Electrical installations for explosive atmosphere must comply with the requirements regarding installations in both non hazardous and hazardous locations:

- national rules (for example NFC 15-100 + BE3 condition for France),
- EN/IEC 60079-14,
- EN/IEC 60079-17.

> Equipment selection (except cable entries)

Zones	Type of protection		Marking	EN/IEC standard
-	General requirements		-	60079-0
For use in Zones 1, 2	Flameproof enclosure		Ex d	60079-1
For use in Zones 1, 2	Increased safety		Ex e	60079-7
For use in Zones 0, 1, 2, 20, 21, 22	Intrinsic safety		Ex i	60079-11
For use in Zones 1, 2	Pressurization		Ex p	60079-2
For use in Zones 0, 1, 2, 20, 21, 22	Encapsulation		Ex m	60079-18
For use in Zones 1, 2	Oil immersion		Ex o	60079-6
For use in Zones 1, 2	Powder filling		Ex q	60079-5
For use in Zone 2	"Non sparking"		Ex n	60079-15
For use in Zones 20, 21, 22	Dust atmospheres		Ex t	60079-31



OLD/NEW ACCESSORIES REFERENCES

CROSS REFERENCES

Entry by the former reference towards the new one.

OLD REFERENCE	NEW REFERENCE	OLD REFERENCE	NEW REFERENCE	OLD REFERENCE	NEW REFERENCE	OLD REFERENCE	NEW REFERENCE
01NA013	511P0D18	09NA0055483	591B0N07	191A095418	593C0M25	193A653419	594C3M32
01NA013130	511P0D18	09NA005561	591B0M20	191A095419	593C0M32	193A653420	594C3M40
01NA013T	511P0D18	09NA0055Z0076	571B0Z0076	191A127	593M0	193A753	514P025P
01NA053	511B3M20	09NA0055Z1142	591B0Z1142	191A25325P	513P025P	193A95332M	594P032M
01NA053130	511B3M20	09NA205476	591F0N10	191A25332P	513P032P	193A95340M	594P040M
01NA053418	511B3M25	09NA653	591C4M20	191A25340P	513P040P	193A953417	594P0M20
01NA053568	511B320P568	09NA653418	591C4M25	191A253417	513P0M20	193A953418	594P0M25
01NA055	511B0M20	09NA653418EMC	591C4M25EMC	191A253418	513P0M25	193A953419	594P0M32
01NA055130	511B0M20	09NA653419	591C4M32	191A253419	513P0M32	193A953420	594P0M40
01NA055418	511B0M25	09NA653483	591C4N07	191A253420	513P0M40	193A95440M	5K4P040M
01NA055Z1156	511B0Z1156	09NA653EMC	591C4M20EMC	191A253Z1963	513P0Z1963	193A954420	5K4P0M40
01NA055Z1233	511B0Z1233	09NA653Z1676	591C4Z1676	191A44325P	513P025P443	193A963	594P025M
01NA25325P	511P025P	09NA95325M	591P025M	191A44332P	513P032P443	196A027	595M3
01NA25332P	511P032P	09NA95325M130	591P025M	191A443418	513P0M25443	196A027130	595M3
01NA253417	511P0M20	09NA95325MEMC	591P025MEMC	191A463	513P020P443	196A02761	595M3
01NA253418	511P0M25	09NA95332M	591P032M	191A473	513P0D30473	196A053	595C3M40
01NA253419	511P0M32	09NA95332MEMC	591P032MEMC	191A653	593C3M20	196A095	595C0M50
01NA253Z1154	511P0Z1154	09NA953417	591P0M20	191A653418	593C3M25	196A095419	595C0M32
01NA313	511P6D18	09NA953418	591P0M25	191A653419	593C3M32	196A095420	595C0M40
01NA313130	511P6D18	09NA953419	591P0M32	191A653420	593C3M40	196A095463	595C0M63
01NA313Z0037	511P6Z0037	09NA953478	571P0M25	191A753	513P020P	196A127	595M0
01NA753	511P020P	09NA953479	571P0M32	191A95325M	593P025M	196A25332P	515P032P
01NA753Z0361	511P0Z0361	09NA953481	591P0N10	191A95332M	593P032M	196A253419	515P0M32
02NA013	521P0D18	09NA95425M	5K1P025M	191A95332MEMC	593P032MEMC	196A253429	515P0M50
02NA313	521P6D18	09NA954418	5K1P0M25	191A95335932M	5T3P032M	196A25350P	515P050P
03NA313	531P6D18	09NA963	591P020M	191A95340M	593P040M	196A653	595C3M50
03NA313130	531P6D18	09NA963356	5K1P020M	191A953417	593P0M20	196A653419	595C3M32
04NA013	541P0D18	09NA963491	571P020M	191A953418	593P0M25	196A653420	595C3M40
04NA313	541P6D18	09NA963EMC	591P020MEMC	191A953419	593P0M32	196A653463	595C3M63
04NA313130	541P6D18	09NA963Z0076	571P0Z0076	191A953420	593P0M40	196A65361	595C3M50
05NA013	551P0D18	118A013	512P0D21	191A963	593P020M	196A653Z1566	595C3Z1566
05NA013130	551P0D18	118A013130	512P0D21	193A013	514P0D35	196A753	515P040P
05NA313	551P6D18	118A01361	512P0D21	193A013130	514P0D35	196A95332M	595P032M
0---92504-2	591B0M20	118A027	512M3	193A013T	514P0D35	196A953419	595P0M32
0---92504-3	571P020M185	118A053	512B3M20	193A027	594M3	196A953420	595P0M40
092A027	591M4	118A053130	512B3M20	193A027356	5K4M3	196A953429	595P0M50
092A027185	571M4185	118A653	512C3M20	193A02761	594M3	196A953463	595P0M63
092A055185	571B0M20185	191A013	513P0D30	193A053	594B2M25	196A95350M	595P050M
092A055186	571B0000185	191A013130	513P0D30	193A053419	594B2M32	196A963	595P040M
092A127-2035	571M0-2035	191A013230	513P0D30	193A05361	594B2M25	198A013	512P0D21
092A653185	571C4M20185	191A013P	513P0D30	193A095	594C0M25	198A027	592M3
092A672185	571C4M25185	191A013T	513P0D30	193A095419	594C0M32	198A027130	592M3
092A673185	571C4M32185	191A027	593M3	193A095420	594C0M40	198A027356	5K2M3
092A674185	571P025M185	191A027356	5K3M3	193A095429	594C0M50	198A027491	572M3
092A675185	571P032M185	191A027359	5T3M3	193A127	594M0	198A02761	592M3
092A963185	571P020M185	191A02761	593M3	193A127356	5K4M0	198A027826	592M3EMC
09NA027	591M3	191A053	593B2M20	193A25320P	514P020P	198A053	592B2M20
09NA027130	591M3	191A053077	593B2M25077	193A25332P	514P032P	198A053356	5K2B2M20
09NA027356	5K1M3	191A053098	593B2M20098	193A25340P	514P040P	198A053418	592B2M25
09NA027EMC	591M3EMC	191A053418	593B2M25	193A253417	514P0M20	198A053491	572B2M20
09NA055	591B0M20	191A053419	593B2M32	193A253420	514P0M40	198A05361	592B2M20
09NA055130	591B0M20	191A053419EMC	593B2M32EMC	193A463	514P025P443	198A053Z1069	5T2B2Z1069
09NA055418	591B0M25	191A05361	593B2M20	193A473	514P0D35473	198A095	592C0M20
09NA055418EMC	591B0M25EMC	191A095	593C0M20	193A653	594C3M25	198A095418	592C0M25



OLD REFERENCE	NEW REFERENCE	OLD REFERENCE	NEW REFERENCE	OLD REFERENCE	NEW REFERENCE	OLD REFERENCE	NEW REFERENCE
198A127	592M0	311A083000M	512B3M25	313A463	513P025P443	316A95350M	594P050M
198A25325P	512P025P	311A083130	512B3M25	313A473	513P0D30473	316A95350MEMC	594P050MEMC
198A25332P	512P032P	311A25320M	512P020M	313A653	513C3M25	316A953Z1904	594P0Z1904
198A25340P	512P040P	311A25325P	512P025P	313A653417	513C3M20	316A963	594P040M
198A253417	512P0M20	311A25332P	512P032P	313A653419	513C3M32	316A963130	594P040M
198A253418	512P0M25	311A25340P	512P040P	313A653420	513C3M40	316A963EMC	594P040MEMC
198A44325P	512P025P443	311A253417	512P0M20	313A753	513P025P	316A963Z1069	594P0Z1069
198A463	512P020P443	311A253418	512P0M25	313A95320M	593P020M	319A027	515M3
198A653	592C3M20	311A253419	512P0M32	313A95332M	593P032M	319A027130	515M3
198A653418	592C3M25	311A253420	512P0M40	313A95340M	593P040M	319A027400	515M3400
198A653419	592C3M32	311A253476	512PON10	313A953417	593P0M20	319A027773	515M3773
198A653420	592C3M40	311A25350P	512P050P	313A953418	593P0M25	319A207	515M3
198A753	512P020P	311A44325P	512P025P443	313A953419	593P0M32	319A25332P	515P032P
198A95325M	592P025M	311A44332P	512P032P443	313A953420	593P0M40	319A25340P	515P040P
198A95332M	592P032M	311A44340P	512P040P443	313A963	593P025M	319A253419	515P0M32
198A953417	592P0M20	311A443417	512P0M20443	316A013	514P0D35	319A253420	515P0M40
198A953418	592P0M25	311A443418	512P0M25443	316A013130	514P0D35	319A253429	515P0M50
198A953419	592P0M32	311A443420	512P0M40443	316A013230	514P0D35	319A253463	515P0M63
198A95349125M	572P025M	311A463	512P020P443	316A013488	514P0D35	319A253487	515PON12
198A954418	5K2P0M25	311A653	512C3M20	316A013 V	514P0D35	319A25363P	515P063P
198A963	592P020M	311A653130	512C3M20	316A013Z1133	514P0Z1133	319A653	515C3M50
198A963356	5K2P020M	311A653418	512C3M25	316A013Z1412	514P0Z1412	319A653419	515C3M32
198A963491	572P020M	311A653418130	512C3M25	316A027	514M3	319A653420	515C3M40
198A963Z1069	592P0Z1069	311A653419	512C3M32	316A027130	514M3	319A653463	515C3M63
199A027	595M3	311A653420	512C3M40	316A027230	514M3	319A653487	515C3N12
199A053	595E3M50	311A753	512P020P	316A053	514B3M40	319A753	515P050P
199A053463	595E3M63	311A95325M	592P025M	316A053130	514B3M40	319A873	515P040P873
199A095420	595C0M40	311A953417	592P0M20	316A073	514B3N12	319A95332M	595P032M
199A095463	595C0M63	311A953418	592P0M25	316A20380	514B3000	319A95340M	595P040M
199A127	595M0	311A953419	592P0M32	316A207	514M3	319A953419	595P0M32
199A25332P	515P032P	311A963	592P020M	316A25325P	514P025P	319A953420	595P0M40
199A25340P	515P040P	313A013	513P0D30	316A25332P	514P032P	319A953429	595P0M50
199A25363P	515P063P	313A013130	513P0D30	316A253417	514P0M20	319A953463	595P0M63
199A653	595C3M50	313A013230	513P0D30	316A253418	514P0M25	319A95363M	595P063M
199A653420	595C3M40	313A01361	513P0D30	316A253419	514P0M32	319A95363MEMC	595P063MEMC
199A753	515P050P	313A027	513M3	316A253420	514P0M40	319A953Z1060	595P0Z1060
199A95332M	595P032M	313A027130	513M3	316A253429	514P0M50	319A953Z1180	595P0Z1180
199A95340M	595P040M	313A027230	513M3	316A253487	514P0N12	319A963	595P050M
199A95363M	595P063M	313A02761	513M3	316A25350P	514P050P	319A963826	575P050MEMC
199A963	595P050M	313A053	513B3M25	316A44325P	514P025P443	319A963EMC	595P050MEMC
311A013	512P0D21	313A053130	513B3M25	316A44332P	514P032P443	341A027	542M3
311A013000M	512P0D21	313A053230	513B3M25	316A443417	514P0M20443	341A463	542P020P443
311A013130	512P0D21	313A073	513B3N10	316A443419	514P0M32443	351A013	552P0D21
311A013230	512P0D21	313A25320P	513P020P	316A463	514P040P443	351A013130	552P0D21
311A01361	512P0D21	313A25332P	513P032P	316A473	514P0D35473	351A027	552M3
311A013Z0361	512P0Z0361	313A25340P	513P040P	316A473130	514P0D35473	351A053	552B3M20
311A027	512M3	313A253417	513P0M20	316A473488	514P0D35473	351A253417	552P0M20
311A027130	512M3	313A253418	513P0M25	316A653	514C3M40	351A95325M	5K2P025M
311A027230	512M3	313A253419	513P0M32	316A653418	514C3M25	351A953Z1033	5K2P0Z1033
311A02761	512M3	313A253420	513P0M40	316A653419	514C3M32	352A013D25	556P0D25
311A053	512B3M20	313A253476	513P0N10	316A653429	514C3M50	352A013D35	556P0D35
311A053000M	512B3M20	313A253Z1280	513P0Z1280	316A753	514P040P	352A013D45	556P0D45
311A053130	512B3M20	313A44320P	513P020P443	316A95325M	594P025M	352A013D49	556P0D49
311A053230	512B3M20	313A44332P	513P032P443	316A95332MEMC	594P032MEMC	352A013D49130	556P0D49
311A053390	512B3M20390	313A44340P	513P040P443	316A953418	594P0M25	352A027	5K6M6
311A053418	512B3M25	313A443417	513P0M20443	316A953419	594P0M32	352A053475	5K6E6M75
311A073	512B3N07	313A443418	513P0M25443	316A953420	594P0M40	352A773	556P0000
311A083	512B3M25	313A443420	513P0M40443	316A953429	594P0M50	352A913	5K6P0D54

OLD REFERENCE	NEW REFERENCE	OLD REFERENCE	NEW REFERENCE	OLD REFERENCE	NEW REFERENCE	OLD REFERENCE	NEW REFERENCE
352A913-63	5K6P0D63	392A507463	596N0M63	396A95325M	594P025M	51BA058Z0039	512C7Z0039
353A013	553P0D30	392A507475	596N0M75	396A95332M	594P032M	51BA058Z0259	512C7Z0259
353A027	553M3	392A507575	576N0M75	396A953418	594P0M25	51BA058Z0451	512C7Z0451
353A053	553B3M25	392A723	596B3723	396A953420	594P0M40	51BA058Z0694	512C7Z0694
353A127	5K3M0	392A753	516P063P	396A95350M	594P050M	51BA058Z0778	512C7Z0778
353A253419	553P0M32	392A753Z0124	516P0Z0124	396A963	594P040M	51BA058Z0787	512C7Z0787
353A463	553P025P443	392A753Z1412	516P0Z1412	399A027	595M3	51BA058Z0788	512C7Z0788
353A473	553P0D30473	392A913	596P0D54	399A027130	595M3	51BA058Z1452	512C7Z1452
356A013	554P0D35	392A913-63	596P0D63	399A027355	5R5M3	51BA058Z1518	512C7Z1518
356A027	554M3	392A953429	596P0M50	399A027356	5K5M3	51BA058Z1631	512C7Z1631
356A053	554B3M40	392A953463	596P0M63	399A027357	5H5M3	51BA058Z1756	512C7Z1756
356A25350P	554P050P	392A953475	596P0M75	399A02761	595M3	51BA757	512M7
356A463	554P040P443	393A027	593M3	399A027826	595M3EMC	51CA055	513F0000
356A473	554P0D35473	393A027491	573M3	399A027EMC	595M3EMC	51CA058	513C7000
356A95332M	5K4P032M	393A053	593B2M25	399A027 V	595M3	51CA058420	513C7M40
356A953429	5K4P0M50	393A095	593C0M25	399A053	595E3M50	51CA058Z0451	513C7Z0451
356A95350M	5K4P050M	393A095417	593C0M20	399A053061463	595E3M63	51CA058Z0694	513C7Z0694
356A963	5K4P040M	393A095419	593C0M32	399A053356	5K5E3M50	51CA058Z0778	513C7Z0778
359A027	555M3	393A127	593M0	399A053463	595E3M63	51CA058Z0788	513C7Z0788
359A25325P	555P025P	393A653	593C3M25	399A053475	595E3M75	51CA058Z1756	513C7Z1756
359A25363P	555P063P	393A653417	593C3M20	399A05361	595E3M50	51CA757	513M7
359A753	555P050P	393A653419	593C3M32	399A053Z0035	595E3Z0035	51DA058	514C7000
359A953463	5K5P0M63	393A653420	593C3M40	399A053Z1905	595E3Z1905	51DA757	514M7
359A95363M	5K5P063M	393A653483	593C3N07	399A095	595C0M50	55AA058	551C7000
359A953Z1204	5K5P0Z1204	393A953Z0027	573P0Z0027	399A095420	595C0M40	55BA058	552C7000
359A963	5K5P050M	393A953Z0920	573P0Z0920	399A095463	595C0M63	55BA757	552M7
391A027	529M3	393A953Z1431	573P0Z1431	399A095Z1164	595C0Z1164	55CA058	553C7000
391A053	592B2M20	393A953Z1552	573P0Z1552	399A107	595A107	55CA757	553M7
391A095	592C0M20	394A02525Z25M	577C7M63Z25M	399A127	595M0	611A013	511P0D18
391A095418	592C0M25	394A02563M	577C763M	399A127EMC	595M0EMC	611A013130	511P0D18
391A095419	592C0M32	394A02575M	577C775M	399A503	595F0	611A01361	511P0D18
391A127	592M0	394A02768	597M6	399A653	595C3M50	611A013Z1412	511P0Z1412
391A653	592C3M20	394A915-57	577P0D57	399A653073	595C3N20	611A053	511B3M20
391A653418	592C3M25	394A915-62	577P0D62	399A653419	595C3M32	611A053130	511B3M20
391A653419	592C3M32	394A915-68	577P0D68	399A653420	595C3M40	611A05325P	511B325P
392A027	596M6	394A91573	577P0D73	399A653463	595C3M63	611A053418	511B3M25
392A027130	596M6	396A013	514P0D35	399A65361	595C3M50	611A053484	511B3N05
392A027355	5R6M6	396A025490	594F0N20	399A653EMC	595C3M50EMC	611A057	511M3
392A027357	5H6M6	396A027	594M3	399A653Z1695	595C3Z1695	611A057130	511M3
392A02761	596M6	396A027130	594M3	399A895	595E0M50	611A065	551B0065
392A053	596E6M63	396A027356	5K4M3	399A953429	595P0M50	611A073	511B3N05
392A053429	596E6M50	396A027EMC	594M3EMC	399A95363M	595P063M	611A165	551B0165
392A053475	596E6M75	396A027 V	594M3	399A963	595P050M	611A165Z1901	551B0Z1901
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392A053Z1089	596E6Z1089	396A073	594B2N12	51AA05820M	511C720M	611A25332M	511P032M
392A053Z1279	596C6Z1279	396A095	594C0M40	51AA058417	511C7M20	611A25332P	511P032P
392A053Z1396	596E6Z1396	396A095418	594C0M25	51AA058418	511C7M25	611A253417	511P0M20
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392A053Z1824	596E6Z1824	396A127	594M0	51AA058Z0778	511C7Z0778	611A253Z1413	511P0Z1413
392A073	596E6N20	396A653	594C3M40	51AA058Z0786	511C7Z0786	611A265	551B0265
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392A253475	516P0M75	396A653419	594C3M32	51AA058Z1866	511C7Z1866	611A44325P	511P025P443
392A25375M	516P075M	396A653420EMC	594C3M40EMC	51AA757	511M7	611A44332P	511P032P443
392A25375M404	516P075M	396A653429	594C3M50	51BA058	512C7000	611A463	511P020P443
392A253D63	516P0D63	396A653429130	594C3M50	51BA05820M	512C720M	611A653	511C3M20
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392A503463	596F0M63	396A653Z0757	594C3Z0757	51BA058418	512C7M25	611A653484	511C3N05
392A503490	596F0N20	396A653Z1427	594C3Z1427	51BA058419	512C7M32	611A753	511P020P



OLD REFERENCE	NEW REFERENCE	OLD REFERENCE	NEW REFERENCE	OLD REFERENCE	NEW REFERENCE	OLD REFERENCE	NEW REFERENCE
611A953417	591P0M20	616A44332P	513P032P443	693A053	592B2M20	876A053417	594C7M20
611A953418	591P0M25	616A44340P	513P040P443	693A095	592C0M20	876A053418	594C7M25
611A953419	591P0M32	616A443418	513P0M25443	693A095418	592C0M25	876A053419	594C7M32
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613A013Z1412	512P0Z1412	616A653	513C3M25	693A653	592C3M20	876A053429130	594C7M50
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613A027130	512M3	616A653419	513C3M32	693A653419	592C3M32	876A087	594M7
613A053	512B3M20	616A653420	513C3M40	693A653420	592C3M40	876A087356	5K4M7
613A053130	512B3M20	616A753	513P025P	696A027	593M3	876A095418	594C0M25
613A053418	512B3M25	616A95320M	593P020M	696A053	593B2M25	876A095419	594C0M32
613A053Z1182	512B3Z1182	616A95332M	593P032M	696A095	593C0M25	876A253418	514P0M25
613A073	512B3N07	616A95340M	593P040M	696A095417	593C0M20	876A253419	514P0M32
613A083	512B3M25	616A953417	593P0M20	696A095419	593C0M32	876A253420	514P0M40
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613A25332P	512P032P	616A953419	593P0M32	696A127	593M0	876A653	594C3M40
613A25340P	512P040P	616A953420	593P0M40	696A653	593C3M25	876A653418	594C3M25
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613A253483	512P0N07	619A253Z1414	515P0Z1414	873A025417	591F0M20	876A95332M	594P032M
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613A653	512C3M20	653A083	552B3M25	873A053800	593C7000	879A087130	595M7
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613A653420	512C3M40	653A463	552P020P443	873A053Z1431	573C7Z1431	879A127	595M0
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613A753	512P020P	656A027	553M3	873A087	593M7	879A25340P	515P040P
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613A953419	592P0M32	659A01361D25	555P0D25	873A25332P	513P032P	879A653420	595C3M40
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616A253420	513P0M40	693A027	592M3	876A053	594C7M40		



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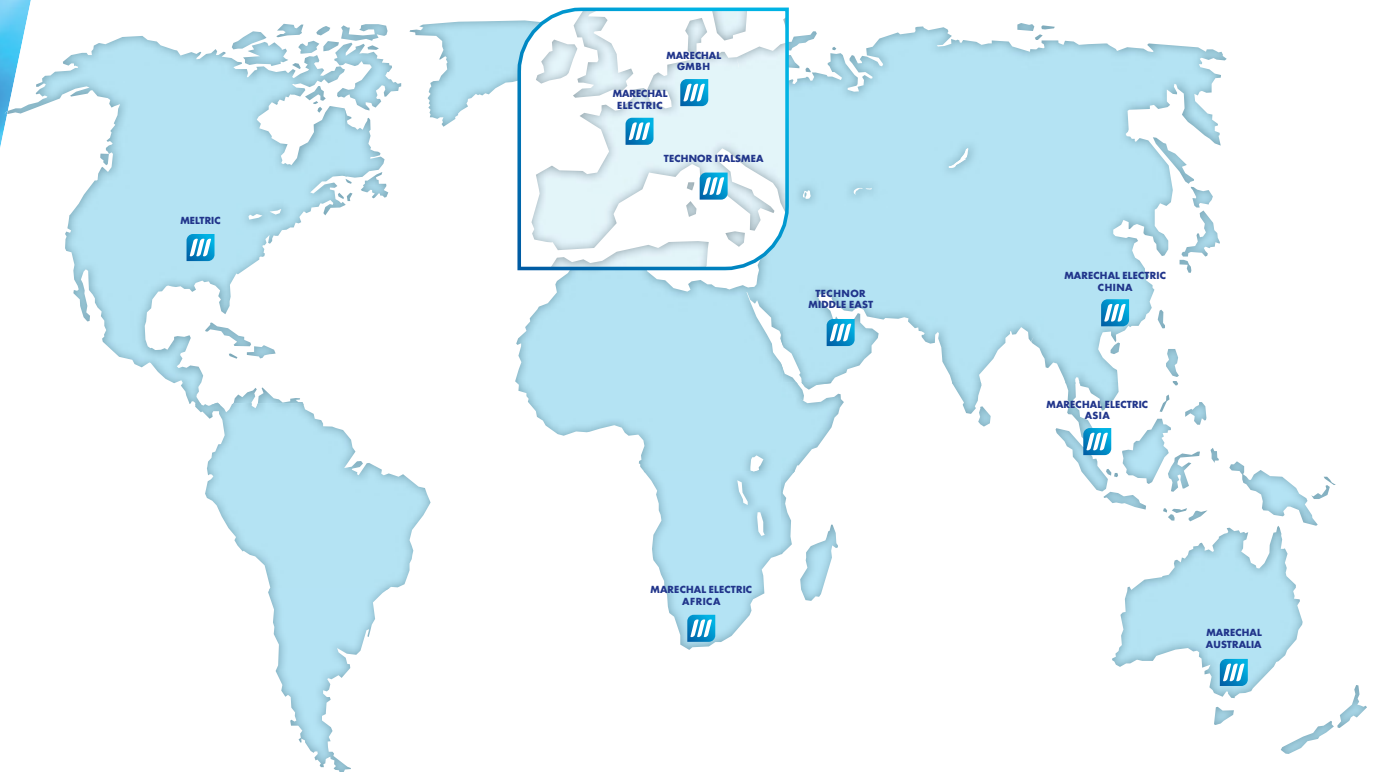


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INDUSTRIAL APPLICATION


I max	Nb max contact	Nb aux. max	(AC/DC) U max	IP max	Material	Temperature	
DECONTACTOR™ = SWITCH + SOCKET-OUTLET							Page 14
20-63 A	5	4	1000 V	66/67/69	Poly	-40 °+60 °C	DSN
30-400 A	5	6	1000 V	55	Poly/Metal	-40 °+60 °C	DS
125 A	4	2	440 V	66	Metal	+400 °C	DSHT
20-90 A	5	4	500 V	55	Metal	-40 °+60 °C	DN
40-125 A	5	4	690 V	66/67	Metal	-40 °+60 °C	DB
MULTICONTACT							Page 82
25 A	7		500 V	66/67	Poly/Metal	-40 °+60 °C	PN7C
30 A	9		415 V	54/55	Metal	-40 °+60 °C	DN9C
16 A	12		480 V	66/67	Poly/Metal	-40 °+60 °C	PN12C
25 A	20		415 V	54/55	Metal	-40 °+60 °C	DN20C
16 A	24		480 V	66/67	Poly	-40 °+60 °C	DSN24C
16 A	37		480 V	66/67	Poly	-40 °+60 °C	DSN37C
INDUSTRIAL PLUGS							Page 98
16 A	5		480 V	66/67/68	Poly	-40 °+100 °C	PNC
30 A	5		500 V	66/67	Poly/Metal	-40 °+60 °C	PN
30 A	5		500 V	44	Metal	240 °C	PNHT
315-400 A	5	8	690 V	66/67	Metal	-40 °+60 °C	PFQ
500-600 A	5	4	1000 V	66/67	Metal	-40 °+60 °C	PFC
SINGLE POLE POWER CONNECTOR							Page 124
75-250 A	1		50 V		Poly	-40 °+60 °C	CS2/3
400 A	1		1000 V		Poly	-40 °+60 °C	CS1000
700 A	1		1000 V		Poly	-40 °+60 °C	SP
CUSTOMIZED SOLUTIONS							Page 142

Distribution boxes, service boxes, with or without MCB, cable extension.

ZONE APPLICATION

I max	Nb max contact	Nb aux. max	(AC/DC) U max	IP max	Material	Temperature	
DECONTACTOR™ = SWITCH + SOCKET-OUTLET							Page 160
20-63 A	4	2	750 V	66/67	GRP	-40 °+60 °C	DXN
20 A	4		550 V	66/67	Metal	-55 °+60 °C	DXA1
20-200 A	4		750 V	65	Metal	-40 °+60 °C	DX
MULTICONTACT CONNECTORS							Page 188
10 A	12		220 V	65/66	Metal	-40 °+55 °C	PXN12C
10 A	25		440 V	66/67	Metal	-40 °+55 °C	DXN25C
10 A	37		230 V	66/67	Metal	-40 °+55 °C	DXN37C
PRISE ZONES EX							Page 198
5 A	5		250 V	66/67	GRP	-40 °+60 °C	PNCX
SINGLE POLE POWER CONNECTOR							Page 200
680 A	1		1000 V	65/66	GRP	-20 °+60 °C	SPeX
CUSTOMIZED SOLUTIONS							Page 204
Socket-Outlet combination boxes				66	GRP/ALU/STAIN-LESS STEEL	-55 °+60 °C	MXBS
Junction boxes				66	GRP/ALU/STAIN-LESS STEEL	-55 °+60 °C	MXBJ
Junction & socket boxes				66/67	GRP	-50 °+60 °C	B2X
TECHNOR® products						-50 °+60 °C	

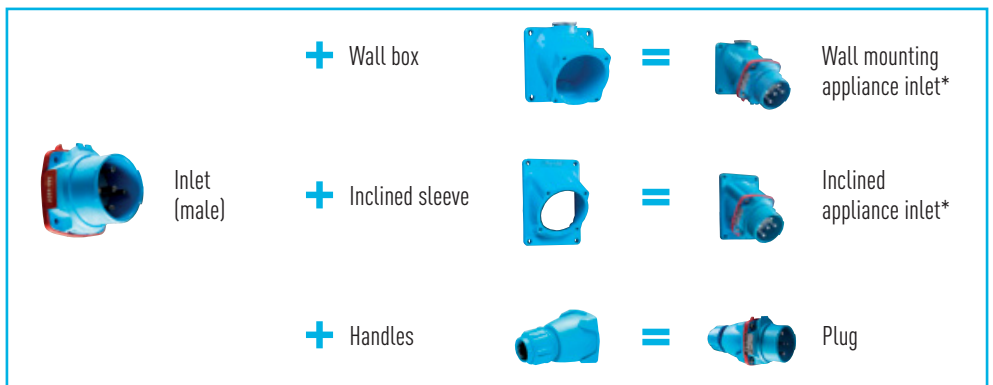
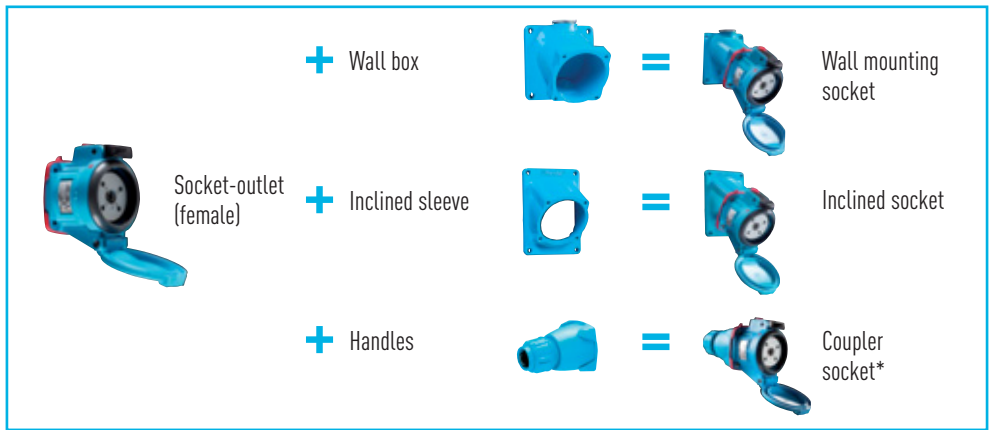
LEGEND FOR OPTIONAL ACCESSORIES

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

INFO +

A MODULAR SYSTEM TO SUIT A MAXIMUM NUMBER OF DIFFERENT COMBINATIONS

By combining 2 products and 3 assembly accessories, 6 additional products can be obtained.



*Link to the application, IP66 option is recommended.

IEC 60309-1 NORM TERMINOLOGY

