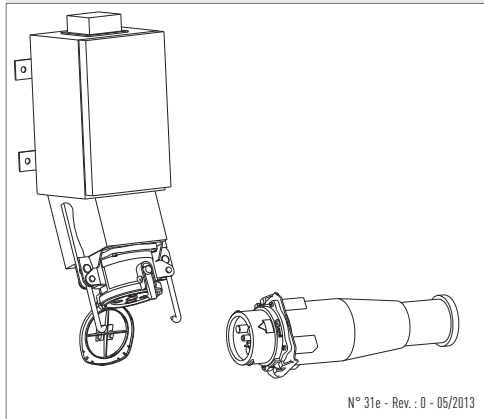


# INSTRUCTION SHEET

**Marechal** Technology



## DS4

**MARECHAL ELECTRIC S.A.**

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## GENERAL

DS4s are plugs and socket-outlets for permanent loads up to 400 A. They must not be disconnected under load. They are fitted with 2 auxiliary contacts and must be electrically interlocked with a suitably rated switchgear.

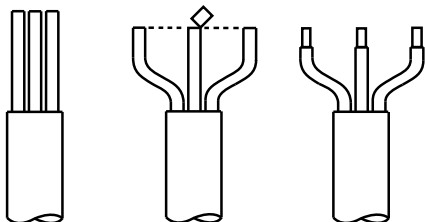
In normal operating conditions, live parts are protected against contact test finger (IP2X/IPXXB), according to IEC/EN 60529 standard.

## WARNINGS

- These accessories must be installed by a qualified electrician, according to applicable installation standards and to the present instruction sheet.
- Rear metal accessories must have a minimum inner diameter of 115 mm to guarantee air and creepage distances suitable for 1 kV.
- These accessories must imperatively be interlocked with a suitable switchgear.
- When operating voltage exceeds 50 V a.c. or 120 V d.c., all metal parts must be connected to Earth. An Earth connection is supplied with all metal accessories.
- Install the socket-outlet facing downwards, with the latch at the top.
- Respect tightening torques.
- **Marechal** accessories must be used with **Marechal** complementary accessories only. Any repair or service must be achieved with genuine **Marechal** parts only.

## INSTALLATION

Wiring capacity		Stripping length mm	Tightening torque N.m	Hex key
Flexible mm²	Rigid/stranded mm²			
95 to 150	95 to 185	60	10	4 mm



- Strip cable outer sheath;
- Shape conductors to align them with their respective terminals. Conductors must be parallel and penetrate freely into them;
- Cut them all at the same length;
- Strip conductors;
- Insert all conductors in their terminals. Tighten slightly the screws of the central earth contact first. Proceed with other screws in the same manner and then, tighten them at the recommended torque.

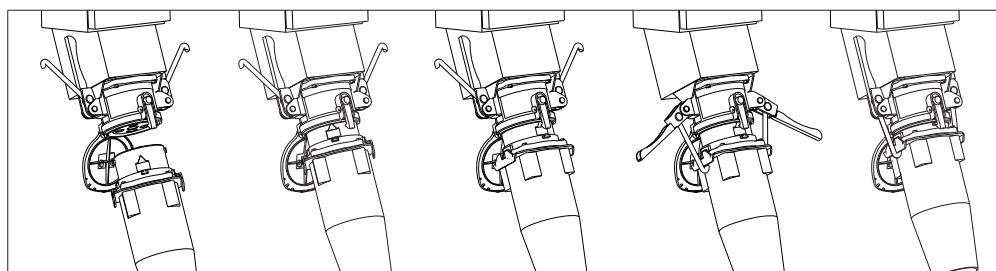
⚠ Terminals are spring-assisted to prevent loosening due to strand settlement, vibration or thermal cycling. **Respect recommended torques.**

## COLOUR-CODED RINGS

Insert the colour-coded rings between the inlet/plug top or socket-outlet and their rear accessory. The two protrusions of the rings must be positioned on the latch side for the socket-outlet/connector and on the catch side for the plug/appliance inlet. These rings act as seals.

## OPERATION

- To be connected, the plug and the socket-outlet must have similar ratings (voltage, current ...), and compatible contact configurations.
- The socket-outlet is shielded by a protective lid held in the closed position by a latch. Depress the latch to release the lid.
- Align the plug bayonets with the hollow parts of the socket-outlet. Insert the plug and turn until the stop. The plug is in the rest position, circuit open.
- To close the circuit, use the draw-and-lock levers to push the plug fully home until latched.
- To remove the plug, switch the power Off then disengage the draw mechanism and depress the latch. The plug returns to its rest position.
- Turn the plug in the opposite direction to remove it. Shut the socket-outlet lid.



## OPTIONAL SOCKET-OUTLET LOCKING / PLUG LOCKOUT

- Single-padlocking: cover closed, insert a padlock that fits tightly in the locking hole (6 mm or 8 mm depending on the option chosen).
- Triple-padlocking: cover closed, insert into the hole the shaft that can accommodate up to three padlocks.
- Screw locking: cover closed, turn the triangular or hexagonal screw of the latch with a key until it reaches the bottom. Do not overtighten.
- Plug lockout: place a padlock or a lockout through the hole provided in the plug skirt.

## MAINTENANCE

- Ensure that the fixing screws, caps and cable glands are tight.
- Check the cleanliness of contact surfaces. Any deposit can be rubbed off with a clean cloth or a fine sand paper. Do not file or grind as this would damage the silver-nickel tips.  
For socket-outlets that have a safety shutter, contact surfaces may be inspected directly from the front by a qualified electrician: depress the spring-loaded ejection ring on two opposite points. The safety shutter can then be rotated clockwise to inspect contact tips. Do not forget to re-lock the safety shutter after inspection.
- Inspect periodically IP gaskets. Replace as needed.
- Check regularly the continuity of the ground circuit by electric tests.

## DECLARATION OF CONFORMITY

These accessories use the **Marechal** technology. They have been designed, manufactured and controlled in a strict respect of the requirements and rules of international and European standards and particularly the European Low Voltage Directive 2006/95/EC. They bear the CE marking whenever applicable.

Note: The CE marking does not apply to spare parts and components supplied separately.

Whenever these accessories fall within its scope:

We,  
**MARECHAL ELECTRIC S.A.**,  
5 avenue de Presles - F-94417 Saint-Maurice Cedex - France  
Declare that the DS4s satisfy the measures set in the European Low Voltage Directive 2006/95/EC and in the application decrees of Member States.

Affixing year of CE marking: 2012

Saint Maurice  
Quality Manager  
**MARECHAL ELECTRIC S.A.**

## RESPONSIBILITY

In the case **Marechal** accessories are associated with accessories or spare parts other than from **Marechal**, the CE marking is invalidated and MARECHAL ELECTRIC S.A.'s responsibility cannot be engaged. MARECHAL ELECTRIC S.A.'s responsibility is strictly limited to the obligations expressly agreed in its general sales conditions. Any penalty or indemnity provided herein will be considered as lump damages, redeeming from any other sanctions.



**MARECHAL ELECTRIC S.A. is a member of the international association, BECMA: the Butt-contact Electrical Connectors Manufacturers' Association. [www.becma.ch](http://www.becma.ch)**



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