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A manufacturer of products using Marechal technology



GENERAL

meltric.com

PXN12c/DXN25c/DXN37c plugs and receptacles comply with international and European safety rules and particularly with ATEX 94/9/CE Directive. PXN12c/DXN25c/DXN37c products can be used in zones 1, 2 (Gas), and 21, 22 (Dust).

AWARNING There are inherent dangers associated with electrical products. Failure to follow safety precautions can result in serious injury or death. These instructions must be followed to ensure the safe and proper installation. operation and maintenance of the Meltric devices. Before installation, disconnect all sources of power to the circuit to eliminate the risk of electrical shock. It is imperative that Meltric explosion-proof multicontact

without a load in a de-energized state.

INSTALLATION



plugs and receptacles are connected or disconnected

Assembly

Optimum operating conditions are achieved by installing PXN12c/DXN25c/DXN37c plugs and receptacles with the latch at the top.

Wiring



Before starting, verify that the power is off, that the product ratings are appropriate for the application, and the conductors meet code requirements and are within the capacities of the terminals noted in Table 1.

Table 1 — Wiring Terminal Capacity* (in AWG) Contacts Device Min Max DXN25c 16 14 DXN37c 16 14

The maximum cross-section of the conductors is 4934 CM (2.5 mm²) (solid or flexible). Conductors must be stripped by .315 in (8 mm).

- 1. Contacts can be soldered or crimped. If crimping, crimp the contact with a KNIPEX crimping tool part # 61-CA500 or a GREENLEE crimping tool part # 45505. Use the 4 mm² footprint whatever the conductor cross-section. Perform a double crimping with a 90° rotation, in compliance with IEN 60352-2.
- 2. Prior to soldering or crimping a heat shrink sleeve (supplied- part #9CP0250) must be slipped over each conductor or alternatively an insulating sleeve (supplied - part # 9SES201007301) can be used but the insulating sleeve must be installed using sleeve tool 61-CA500 (sold separately).
- 3. If soldering use tin solder and a 50 W soldering iron. Insert the conductor in the terminal and heat the terminal for about 30 s. During heating, insert the solder wire in the hole at the foot of the terminal and let the solder penetrate by capillary action. Let the terminal cool without any tension on the conductor.



- 4. Slip the heat shrink or insulating sleeve over the whole visible part of the contact, down to the molding.
- 5. Slide the heat-shrink sleeve up to the shoulder of the contact. With a heat gun, apply heat evenly 370° around the sleeve until it shrinks around the terminal and wire

NOTICE: For a proper clamping, the use of PVC cables is not recommended.

WARNING: This product must be electrically grounded to Earth. A grounding terminal is provided on all metal accessories.

Contact Assembly/Disassembly

Once wired, contacts must be inserted through the rear of the interior moulding 1. Push each contact fully home. Check its proper engagement by a light pull 2. Contacts can be removed with the supplied tool: insert the tool through the front 3 and push fully home 4. Tool part # 9-LD12-37.



Contact Configurations

This is in reference to different keying positions on the PXN12c. If or when 2 contacts are not in use, 9 different contact/keying configurations can be achieved by plugging the contact holes not in use with the hole plugs supplied.

OPERATION



To ensure safe and reliable operation, Meltric plugs and receptacles must be used in accordance with their assigned ratings.

Meltric plugs & receptacles can only be used in conjunction with mating receptacles or plugs manufactured by Meltric or another licensed producer of products bearing the Marechal TM technology trademark. WARNING: PXN12c/DXN25c/DXN37c plugs and receptacles must be operated in compliance with its explosion-proof classifications.

When not in use, the receptacle is shielded by a protective lid preventing the entry of dust and moisture.

This is held in the closed position by one or two latch(es). To release the spring-loaded lid, depress the latch(es).

DXN25c/DXN37c





To connect, align the plug bayonets with the hollow part of the receptacle. Insert the plug and turn until the stop. The plug is in the rest position, circuit is open, figure 1 Push the plug fully home until latched, figure 2. To disconnect, depress the latch. The plug returns to its rest position, figure 3. Turn the plug in the opposite direction to remove it. Shut the receptacle lid, figure 4.

PXN12c





To connect, align the plug bayonets with the hollow parts of the receptacle (if any, use the two red marks as a visual indication), figure 5. Push the plug in and turn counter-clockwise; the circuit is closed figure 6. To disconnect, press the latch, push the plug and turn it clockwise to withdraw it figure 6. Close the lid.

Lockout Provisions

WARNING: It is imperative to lock out PXN12c/ DXN25c/DXN37c plugs and receptacles after connection or disconnection.

A mechanical locking device on receptacle latches, by means of either a padlock(s) or by a specific screw prevents any accidental disconnection under load.

MAINTENANCE

WARNING: Before inspecting, repairing, or main- taining Meltric products, disconnect electrical power to the receptacle to eliminate the risk of electrical shock. Rules applying to products for use in explosive atmospheres require that any replacement of components must be performed under the control of the manufacturer: Meltric Corporation.

From time to time, the fastening screws should be checked for tightness. Care should be taken that the weight of the cable is taken by the glanding arrangement and not the terminals themselves.

Contact surfaces may be checked for cleanliness. Any deposit of dust can be rubbed off with a clean cloth. Sprays should not be used, as they tend to collect dirt. Depending on prevailing conditions, the pitting of plug and socket contacts should be regularly monitored. In the event of serious damage, contact your supplier to have the contacts replaced.

IP gaskets between plug and receptacled bodies should be inspected periodically.

Any repair or service must be achieved with genuine **marechal** parts only.

MANUFACTURER'S RESPONSIBILITY

Meltric's responsibility is strictly limited to the repair or replacement of any product that does not conform to the warranty specified in the purchase contract. Meltric shall not be liable for any penalties or consequential damages associated with the loss of production, work, profit, or any other kind of financial loss incurred by the customer.

Meltric Corporation shall not be held liable when its products are used in conjunction with products not bearing the **Marecha**[™] technology trademark. The use of Meltric products in conjunction with mating devices that are not marked with the **Marecha**technology trademark shall void all warranties on the product.

DECLARATION OF CONFORMITY

PXN12c/DXN25c/DXN37c use the **Marechal** technology. They have been designed, manufactured and controlled in a strict respect of the relevant international and European standards, laws and directives, and particularly of the European ATEX Directive. They bear the CE marking whenever applicable. They also bear the markings of their explosion-proof classification.

Meltric Corporation is an ISO 9001 certified company. Its products are designed, manufactured and rated in accordance with applicable UL, CSA and IEC standards. Meltric designs and manufactures its products in accordance with Marechal keying standards established to ensure intermatability with similarly rated products manufactured by Marechal Electric Group.

