

SEPARABLE STRAIGHT CONNECTOR (INTERFACE A/250A)

For polymeric cables – Deadbreak operation – with mechanical conductor contact

elascon**EC**REFERENCE: **MSCS/EC-250-A****UTILISATION**

- For connection of polymeric MV cables to transformers, switchgear units, motors, etc.
- Indoor and outdoor installation. The connector is entirely protected by a watertight conductive envelope connected to earth.
- Continuous 250 A rms
- Overload 300 A rms (8 hours per 24-hour period).
- Operated when de-energized.
- Test by voltage detector through an inbuilt capacitive voltage divider.

CABLES

- Single core polymeric insulation (PE, XLPE, EPR ...).
- Copper or aluminium conductors, solid or stranded.
- Semi-conducting screen either extruded or taped.
- Metallic screen of tape, wire or polylam type.
- Insulation voltage up to 12.7/22 (24) kV.
- Conductor sizes: 25 to 95 mm².

STANDARDS

- Generally meets the requirements of CENELEC HD 629.1 S2 – IEC 60502-4 – NF C 33-051 – NF C 33-001.
- Interfaces: CENELEC EN 50180 – EN 50181.
- Mechanical conductor contact: IEC 61238-1 class A, HN 68-S-91.

**INTERFACE
A/250A****QUALITY ASSURANCE**

- The company has been assessed by third party and found in conformity with the requirements of the standard ISO 9001-EN 29001 version 2000.

PACKING

- Supplied as a kit of 3 single connectors containing all the necessary components.
- Shipping weight and volume (approx) of kit : 3 kg / 0,006 m³

INSTALLATION FEATURES

- **For class tension 24kV, only one product reference allows to cover the section from 25 mm² to 95 mm², copper or aluminium core.**
- No need for special tools, no heating, taping or filling.
- Vertical, angled or inverted position.
- No minimum distance between phases.
- Individual clamping by stainless steel brace.
- The three phases may also be locked together and to the equipment by use of metallic rings (supplied on request, separately or already fitted into the moulded groove).
- Energizing may take place immediately after the connector is plugged into its bushing, dead-end plug
- An unplugged connector must not be energized.

OTHER PRODUCTS

- Associated products such as bushing FMBOm-250, FMBOh-250, FMBOcm, FMBA-250 and accessories.
- Additional metallic cover.
- Separable elbow connector MSCE/EC-250-A.

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elascon**EC**REFERENCE: **MSCS/EC-250-A****DESCRIPTION****Rep 1 Mechanical contact piece Al/Cu 25/95 mm².**

Mechanical conductor contact with copper contact pin, designed with locking ring.
Only one conductor contact covers the section from 25 mm² to 95 mm², copper or aluminium core.
No need for special tools.

Rep 2 Semi-conducting inner screen.

Insert of semi-conducting EPDM enclosing the metallic connections so that ionization of the air remaining trapped inside is prevented.

Rep 3 Semi-conducting outer envelope (thickness 3mm).

Jacket made of semi-conducting EPDM. Its design provides relief of electrical stress as does a cable screen. Its connection to the cable screen ensures that the assembly is maintained at earth potential.
It allows to evacuate the short-circuit currents.

Rep 4 Insulating body.

Moulded from insulating EPDM, for integral reconstitution of insulation. It maintains a uniform contact pressure on the cable insulation and on the bushing interface, providing an excellent moisture seal.

Rep 5 Test point.

Electrically protected by a cap made of semi-conducting EPDM. A capacitive voltage divider allows the checking of absence of voltage before removing the connector.

Rep 6 Locking brace.

Stainless steel brace fastening the connector onto its mating bushing or other accessories.

Rep 7 Earthing eye.

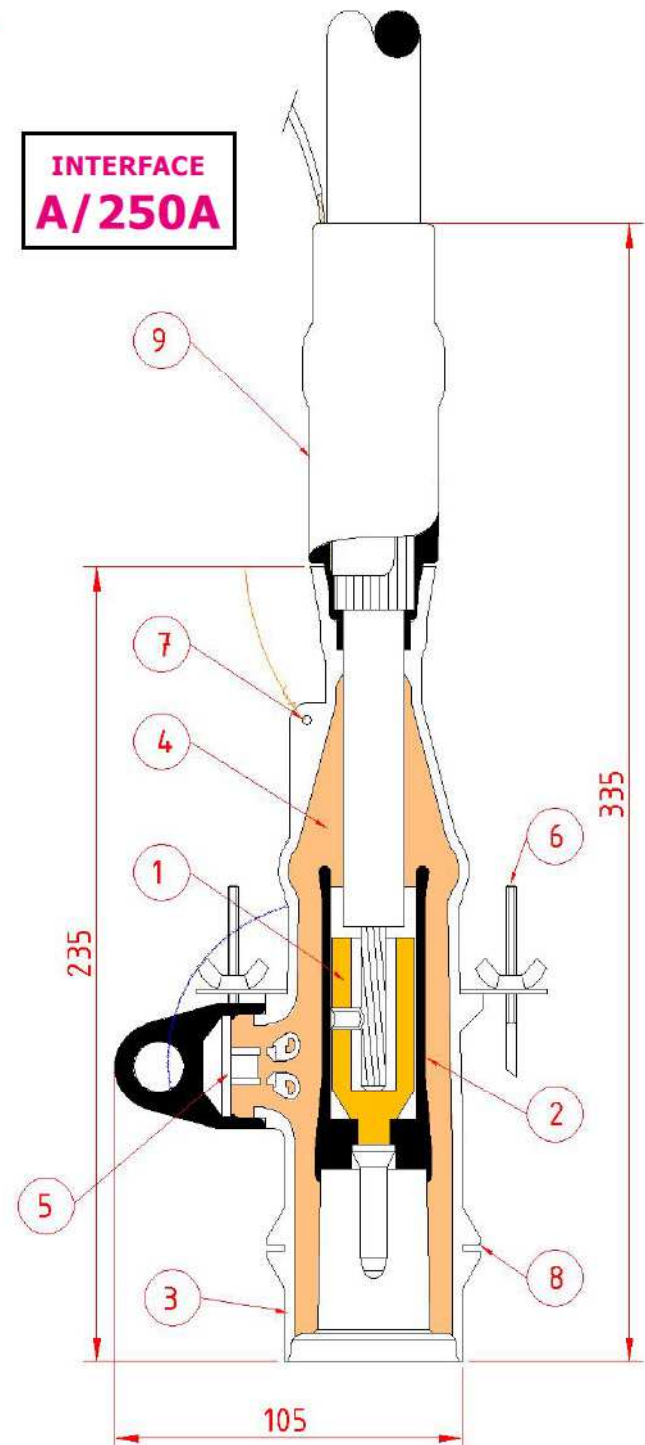
For connection of the outer envelope to the metallic cable screen.

Rep 8 Groove for locking ring.

For the fitting of a metallic ring (supplied on request) when 3-phase locking is required.

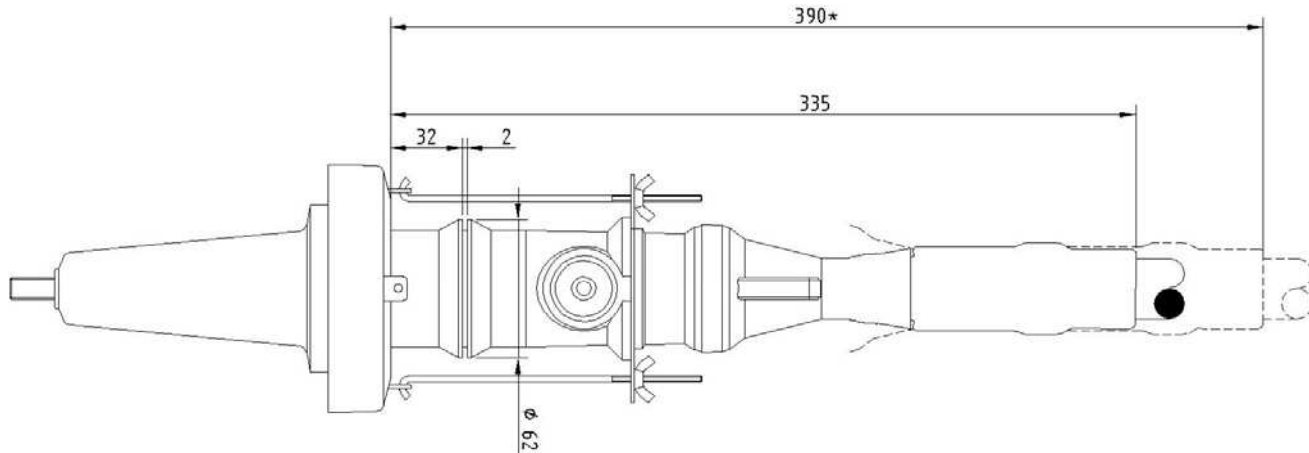
Rep 9 Earth cover.

Moulded semi-conducting EPDM. Ensures watertight protection of the earthing device.



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(*) Minimum dimension required for disconnection

1. Select in the table below the kit model corresponding to the diameter over cable insulation and to the insulation voltage U_m in kV.

For cables with reduced insulation thickness, please contact us.

2. Select suitable earthing device in the table below.

| Voltage | Diam. Over insulation in mm | | Conductor size in mm ² (for guidance only) | Kit reference |
|---------|-----------------------------|------|--|-------------------------|
| | Min. | Max. | | |
| 12 kV | 11,8 | 17,2 | 25 / 50 | MSCS/EC-250-A-12-25/50* |
| | 17,2 | 25 | 70 / 95 | MSCS/EC-250-A-12-70/95 |
| 17 kV | 13,7 | 17,2 | 25 / 35 | MSCS/EC-250-A-17-25/35* |
| | 17,2 | 25 | 50 / 95 | MSCS/EC-250-A-17-50/95 |
| 24 kV | 17,2 | 25 | 25 / 95 | MSCS/EC-250-A-24-25/95 |

* : models with adapters, please contact us

| Earthing Device Reference | Type of Metallic Screen of Cable |
|---------------------------|----------------------------------|
| T1 | polylam |
| T2 | Copper tape |
| T3 | Copper wires |

EXAMPLE OF ORDER

20 kV polymeric cable, 1x 50 mm², diameter over insulation 21.5 mm, with copper wire screen, aluminium conductor:
MSCS/EC -250-A-24-T3-25/95.

Metallic ring to lock the 3 connectors together could be supplied on request.



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