

Separable elbow connector with mechanical conductor contact (interface A / 250 A)



For polymeric cables – Deadbreak operation

Generally meets the requirements of CENELEC HD 629.1 S2 - EC 60502-4 - C 33-051 - C 33-001

Interfaces: CENELEC EN 50180 – EN 50181

Mechanical conductor contact: IEC 61238-1 class A

Medium Voltage (MV)

Up to 12.7/22 (24) kV

MV separable connectors rating 250 A (interface A)

Reference : MSCE/EC -250-A

Product Application and Design

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).
- Deadbreak operation.
- Voltage detection through an integrated capacitive voltage divider.

Cables

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

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.

Other products

- Associated products such as bushing FMB0m-250, FMB0h-250 and accessories for separable connectors 250A, interface B.
- Separable straight connector MSCS/EC-250-A.



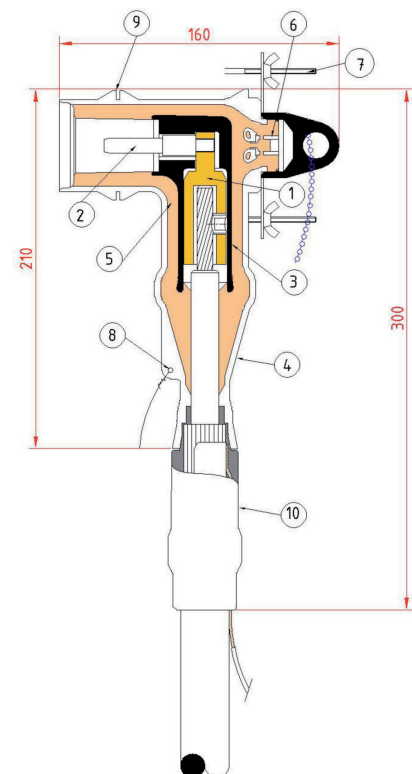
**INTERFACE
A/250 A**

Installation features

- For voltage class 24kV, one product reference allows to cover the cross sections from 25 mm² to 95 mm², copper or aluminum conductor.
- 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 onto the molded groove).
- Energizing may take place immediately after the connector is plugged onto its mating bushing, dead-end plug ...
- An unplugged connector must never be energized.

Description

- Mechanical conductor contact Al/Cu 25/95 mm²**
One conductor contact only covers the cross sections from 25 mm² to 95 mm², copper or aluminum conductor. No need for special tools.
- Copper contact pin**
Copper pin, screwed into the mechanical conductor contact.
- Semi-conducting inner screen**
Insert of molded semi-conducting EPDM enclosing the metallic contact piece so that the air inside is prevented.
- Semi-conducting outer envelope (thickness 3 mm)**
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 the assembly is maintained at earth potential. It allows to evacuate the fault currents.
- Insulating body**
Molded 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.
- Test point**
Electrically protected by a cap made of semi-conducting EPDM. A capacitive voltage divider allows to check the absence of voltage before disconnecting the connector.
- Locking brace**
Stainless steel brace fastening the connector onto its mating bushing or other accessories.
- Earthing eye**
For connection of the outer envelope to the metallic cable screen.
- Groove for locking ring**
For the fitting of a metallic ring (supplied on request) when 3-phase locking is required.
- Earth cover**
Molded semi-conducting EPDM. Ensures watertight protection of the earthing device.

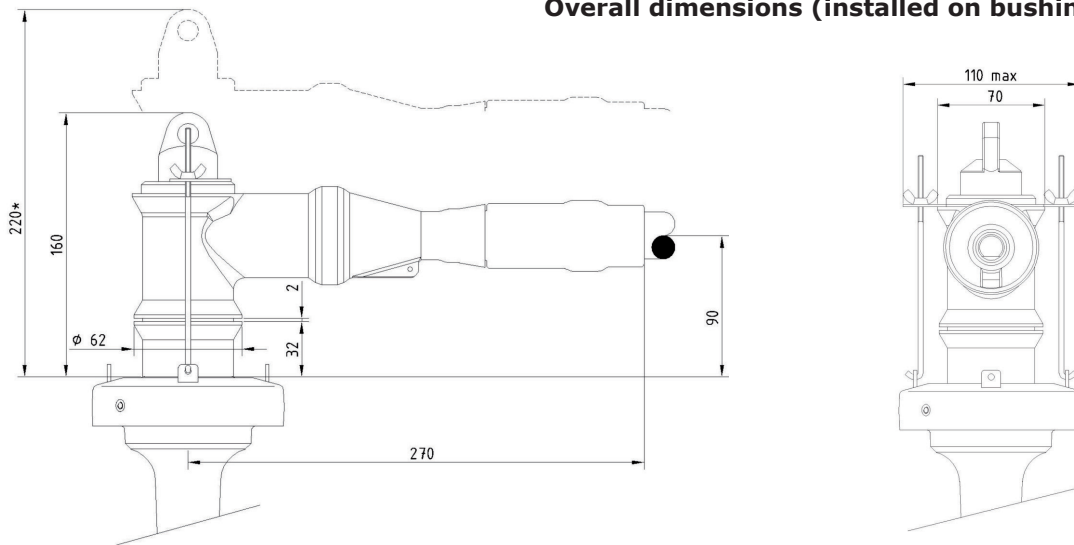


**INTERFACE
A/250 A**

100% of the separable connector bodies are individually tested in factory industrial power frequency and partial discharges.

Selection guide

Overall dimensions (installed on bushing) in mm



(*) Minimum dimension required for disconnection

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

Voltage U_m	Diam. Over insulation in mm		Conductor size in mm ² (for guidance only)		Kit reference
	min	max	min	max	
12 kV	11,8	23,2	25	95	MSCE/EC-250-A-12-25/95*
17 kV	11,8	23,2	25	95	MSCE/EC-250-A-17-25/95*
24 kV	17,2	25,0	25	95	MSCE/EC-250-A-24-25/95

* models with adapters

For cables with cross-sections, please contact us.

2- Select suitable earthing device in the table below.

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

Example of order

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