

Separable elbow connector (interface A/250 A)

For polymeric cables - Deadbreak operation
Generally meets the requirements of C 33-001 - C 33-051 - IEC 60502-4 - HD 629.1 S2
Interface : CENELEC EN 50180 - EN 50181

formfit[®]



Medium Voltage (MV)
Up to 12,7/22 (24) kV
MV Separable connectors rating 250 A (Interface A)
Reference: FMCE 250

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 (XLPE).
- Copper or aluminium conductor.
- 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: 16 to 95 (or 120) mm².

Packing

- Supplied as a kit for 3 single connectors containing all the necessary components.
Shipping weight and volume (approx) of kit 3.5 kg / 0,006 m³.

Other products

Associated products such as bushing FMB0m-250, FMB0h-250.
and accessories for separable connectors 250A, interface A.



**INTERFACE
A / 250 A**

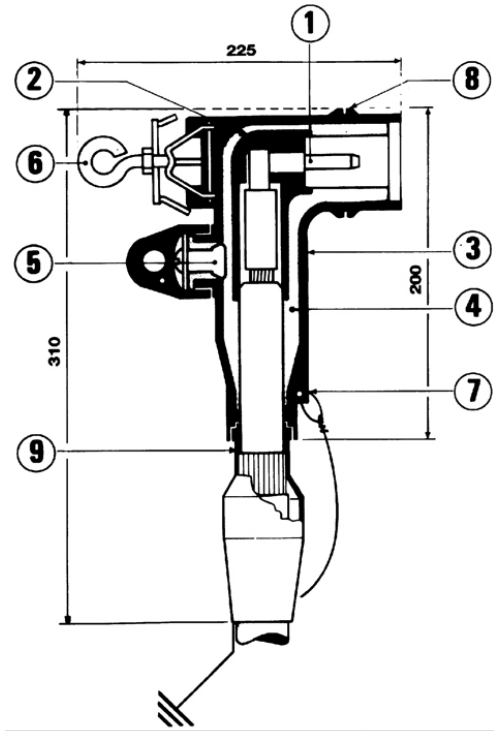
Installation features

- No need for special tools, no heating, taping or filling.
Vertical, angled or inverted position.
- 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 on its mating bushing, dead-end plug...
- An unplugged connector must never be energized.

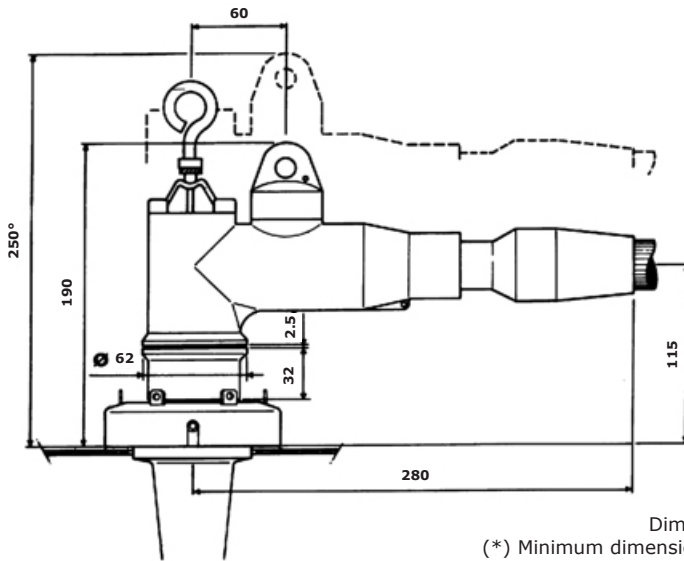
Description

- ① **Contact pin assembly**
Copper pin, screwed into the crimped or indented lug with the hexagonal wrench supplied in the kit.
- ② **Semi-conducting inner screen**
Insert of molded semi-conducting EPDM enclosing the metallic contact piece so that the air inside is prevented.
- ③ **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 that the assembly is maintained at earth potential.
- 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.
- ⑤ **Test point**
Electrically protected by a cap made of semi-conducting EPDM. A capacitive voltage divider enables to check the absence of voltage before disconnecting the connector.
- ⑥ **Locking brace**
Stainless steel brace fastening the connector on its mating bushing or other accessories.
- ⑦ **Earthing eye**
For connection of the outer envelope to the metallic cable screen.
- ⑧ **Groove for locking ring**
For the fitting of a metallic ring (supplied on request) when 3-phase locking is required.
- ⑨ **Earth cover**
Molded semi-conducting EPDM. Ensures watertight protection of the earthing device.

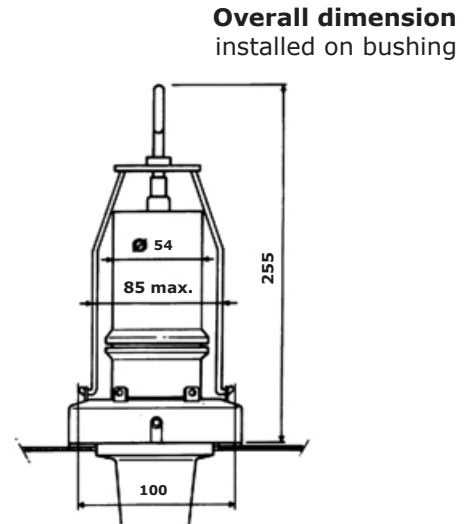
INTERFACE A / 250 A



100% of the separable connector bodies are individually tested in factory (Industrial Power Frequency and partial discharges).



Dimensions in mm
(*) Minimum dimension required for disconnection



Overall dimension
installed on bushing

Selection guide

1- Select in the table below, the kit size corresponding to the diameter over cable insulation

Ø over insulation in mm		Kit Reference	Conductor size in mm ² (for guidance only)						
Min	Max		Highest voltage in Um						
			12 kV		17,5 kV		24 kV		
10,0	12,6	FMCE-250-A*	16						
11,8	14,5	FMCE-250-B*	25	25					
13,7	16,3	FMCE-250-C*	35	35	25	25			
15,3	17,9	FMCE-250-D*	50	50	35	35		25	
17,0	19,5	FMCE-250-E*	70	95	50	70		35	
18,6	21,3	FMCE-250-F	95	120**	70	95	35	50	
20,2	23,0	FMCE-250-G			95	120**	50	70	
22,5	25,3	FMCE-250-H					70	95	
23,4	26,0	FMCE-250-J					95	120⁽¹⁾**	

(*) models with adapters

(**) for 120 mm², please consult us.

For cables with bonded outer semi-conducting layer: carefully check the diameter over insulation after removal of the outer semi-conducting layer.

2 - Specify insulation voltage Um in kV :
12 - 17,5 - 24

3 - 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

4 - Select suitable lug

- 4.1. - indicate "C" for copper conductor
- indicate "A" for aluminium conductor***
- 4.2. - indicate conductor size in sqmm
- 4.3. - for aluminium conductor, add "DIN"

** Available for deep indenting or hexagonal crimping. Unless otherwise stated deliver will be for deep indenting. Suitable tooling to be used.

Example of order

1 x 50 mm², 24 kV polymeric cable, diameter over insulation 21,2 mm, with copper wire screen, aluminium conductor, lug suitable for deep indenting: **FMCE-250-G-24-T3-A50**.