

Separable compact tee connector FMCEAs-630/400 (Interface C / 630 A)



For polymeric cables - Deadbreak - Operation

Generally meets the requirements of C 33-051 - HD 629-1 S2 - IEC 60502-4.

Interfaces: CENELEC EN50180 - EN50181.



Medium Voltage (MV)

Up to 12,7/22 (24) kV

MV Separable connectors rating 630 A (interface C)

Reference: FMCEAs-630

FMCEAs - 400

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 630 A rms overload 900 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 24 kV.
- Conductor sizes: 25 to 300 mm².

Packing

- Supplied as a kit for 3 single connectors containing all the necessary components.

Shipping weight and volume (approx) of kit:
 6 kg / 0,026 m³

Other products

- Associated products such as bushing FMBOs-400 and accessories for separable connectors 630 A, interface C.

Installation features

- No need for special tools, no heating, taping or filling.
- Vertical, angled or inverted position.
- No minimum distance between phases.
- Energizing may take place immediately after the connector is plugged on its mating bushing, dead-end plug...
- An unplugged connector must never be energized.



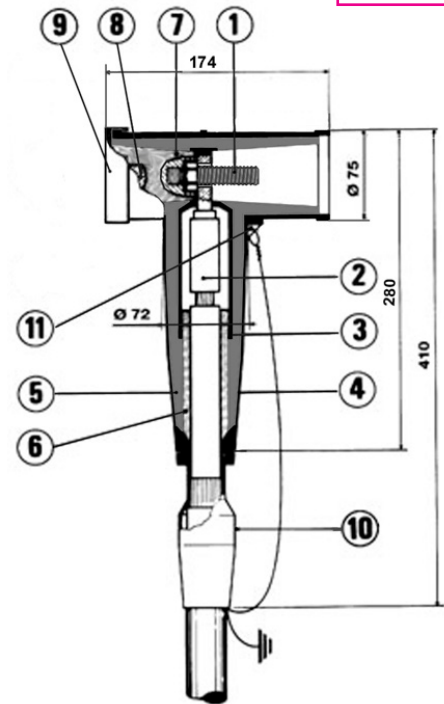
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Description

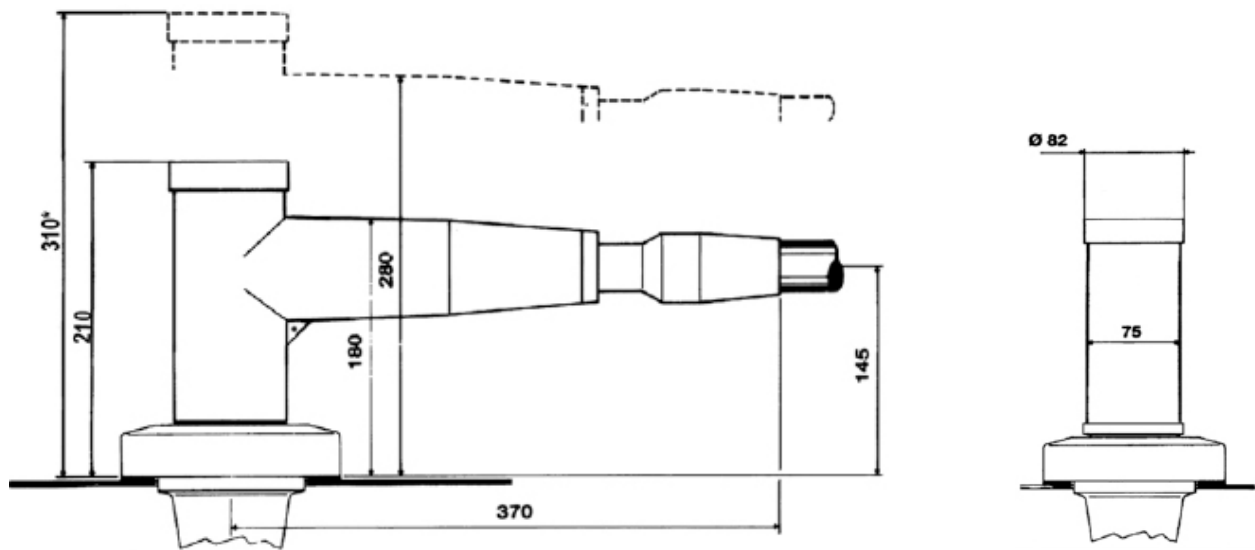
- ① **Clamping screw M16**
Steel silver-plated component threaded at both ends for attachment of the mating items: bushing, insulating plug, accessories. A uniform contact pressure is maintained for any combination.
- ② **Conductor contact**
Crimped, deep indented or bolted type. Connection of clamping screw through the flat hole.
- ③ **Semi-conducting inner screen**
Insert of molded semi-conducting EPDM enclosing the metallic contact piece so that the air inside is prevented.
- ④ **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.
- ⑤ **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 of mating items, providing an excellent moisture seal.
- ⑥ **Adapter**
Composite EPDM molding. To adapt the connector body to the different cable sizes (cross sections).
- ⑦ **Insulating plug**
Epoxy component with threaded metal insert for attachment to the clamping screw.
- ⑧ **Test point**
A capacitive voltage divider enables to check the absence of voltage before disconnecting the connector.
- ⑨ **Cap**
Molded semi-conducting EPDM. Protects and earthes the test point during normal use.
- ⑩ **Earth cover**
Molded semi-conducting EPDM. Ensures watertight protection of the earthing device.
- ⑪ **Earthing eye**
For connection of the outer envelope to the metallic screen of the cable.

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

Overall dimensions (installed on bushing)



Dimensions in mm

* Minimum dimension required for disconnection

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	
18,5	20,5	FMCEAs-630/400-Z	70	95	50	70	35	50
19,9	21,9	FMCEAs-630/400-A	95	120	70	95	50	70
21,4	23,5	FMCEAs-630/400-B	120	150	95	120	70	95
22,9	25,1	FMCEAs-630/400-C	150	185	120	150	95	120
24,4	26,6	FMCEAs-630/400-D	185	240	150	185	120	150
26,0	28,3	FMCEAs-630/400-E	240	300*	185	240	150	185
27,8	30,4	FMCEAs-630/400-F	300*		240	300*	185	
29,8	32,7	FMCEAs-630/400-G			300*		240	240
31,8	35,3	FMCEAs-630/400-H					300*	300*

*For 300 sqmm, 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 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

"A" for aluminium conductor(**)

4.2- indicate conducteur size in sqmm

4.3- for aluminium conductor, add "DIN" if lug for hexagonal crimping is required

(**) available for deep indenting a hexagonal crimping. Unless otherwise stated, standard delivery will be with deep indenting. Suitable tooling to be used.

Example of order

1x95 mm², 20 kV polymeric cable, diameter over insulation 24,1 mm, with copper tape screen, aluminium conductor : **FMCEA-630/400-24-T2-A95**.