

Separable tee connector FMCTs-630/1250 (interface C / D)

formfit[®]

For polymeric cables - Deadbreak - Operation

Generally meets the requirements of VDE 0278 - C33-051 - C33-001 - HD629-1 - IEC 60502-4.

Interfaces: CENELEC EN50180 - EN50181.



Medium voltage (MV)

Up to 24 kV

MV Separable connectors rating 630 A

Reference : FMCTs-630 / 1250

Product Application and Design

Utilisation

- For connection of polymeric MV cables to transformers, switchgear units, motors, etc.
- Separable combinations that give flexibility to network configurations.
- 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).
- Dead-break operated.
- Voltage detection through an integrated capacitive voltage divider.

Cable

- Single core polymeric insulation (PE, XLPE,EPR...).
- Copper or aluminium conductor.
- Semi-conducting screen either extruded or taped.
- Metallic screen of copper tape, wires or polylam type.
- Insulation voltage up to 24 kV.
- Conductor sizes: 50 to 630 mm².

Packing

- Supplied as a kit for 1 single connector containing all the necessary components.

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

Other products

- Associated products such as bushing FMBOs-400 and accessories.

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...

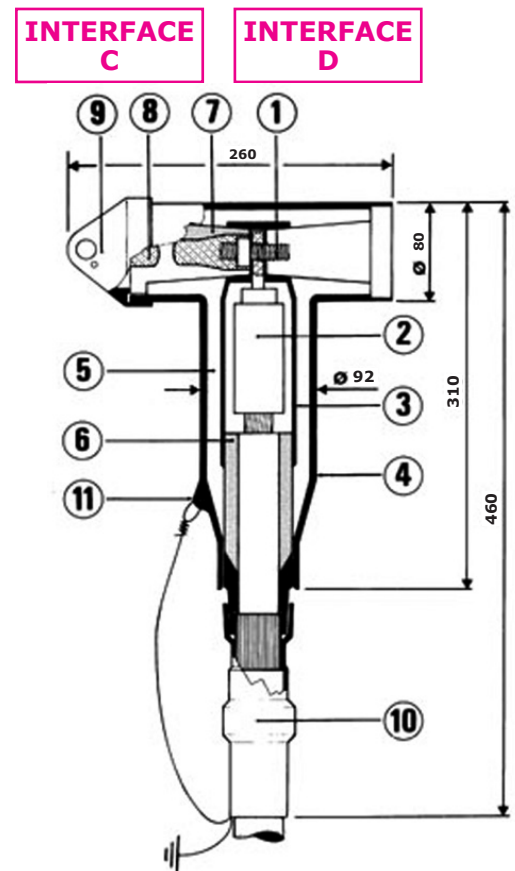


INTERFACE
C

INTERFACE
D

Description

- ① **Clamping screw**
Copper component threaded at both ends for attachment of mating items : bushing, insulating plug, accessories. A uniform contact pressure is maintained for any combination.
- ② **Conductor lug**
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**
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. This side of the connector and the insulating plug are suitable for interface type D only.
- ⑧ **Test point**
A capacitive voltage divider enables to check the absence of voltage before removing 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.

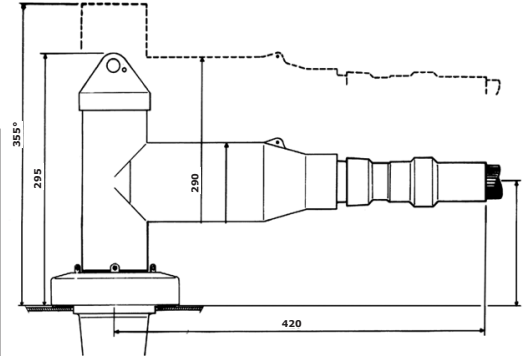


100% of the separable connector bodies are individually tested in factory (Industrial Power Frequency and partial discharges)

Selection guide

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

Diam. over insulation in mm		Kit Reference	Conductor size in mm ² (for guidance only)					
Min.	Max.		12 kV		17,5 kV		24kV	
19,7	24,3	FMCTs-630/1250-NZ	120	120	95		50	70
			150	150	120		70	95
23,3	28,5	FMCTs-630/1250-NA	185	185	150		95	120
			240	240	185		120	150
							150	
27,6	32,6	FMCTs-630/1250-NB	300	300	240		185	185
				400			240	
30,6	35,8	FMCTs-630/1250-NC	400	500	300		240	300
							300	
33,8	38,8	FMCTs-630/1250-ND	500	630	400		400	400
36,8	41,8	FMCTs-630/1250-NE	630		500		500	500
39,8	45,8	FMCTs-630/1250-NF			630		630	630



Overall dimensions (installed on bushing) in mm

(*) Minimum dimension required for disconnection

For cables with non peelable 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

Before using this product, you must check if it is suitable for your intended application. You assume all risks and liability associated with such use. If any doubt, please consult us.

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

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Example of order

1x300 mm², 20 kV polymeric cable, diameter over insulation 33,2 mm, with copper wire screen, aluminium conductor, lug for deep indenting :

FMCTs-630/1250-NC-24-T2-A300.

4. Select suitable lug :

4.1 - Indicate : **C** for copper conductor, Indicate : **A** for aluminium conductor

4.2 - Indicate conductor size in mm².

4.3 - for aluminium conductor, add «DIN».