

# Separable tee connector (up to 630 mm<sup>2</sup>) (Interface C / 630A)

for polymeric cables - Deadbreak - Operation

Generally meets the requirement of C 33-001 - C 33-051 - HD 629.1S2 - IEC 60502-4.

Interface GENELEC EN 50180 - EN 50181

**formfit**<sup>®</sup>



## Medium Voltage (MV)

Up to 19/33 (36) kV

MV Separable connectors rating 630A (Interface C)

Reference : FMCTXs-630/C

### 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).
- Dead break operated.
- Voltage detection through capacitive voltage divider.

#### Cables

- Single core polymeric insulation (XLPE).
- Copper or aluminium conductor.
- Semi-conducting screen either extended or taped.
- Metallic screen of copper tape, copper wire or polylam type.
- Insulation voltage up to 36 kV.
- Range of conductor sizes : 25 to 630 mm<sup>2</sup>.

#### Packing

Supplied as a kit of 1 or 3 single connectors containing all the necessary components.

Shipping weight and volume (approx) of kit:

- 1 connector = 2,5 kg / 0,026 m<sup>3</sup>
- 2 connectors = 7 kg / 0,057 m<sup>3</sup>

#### Other products

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

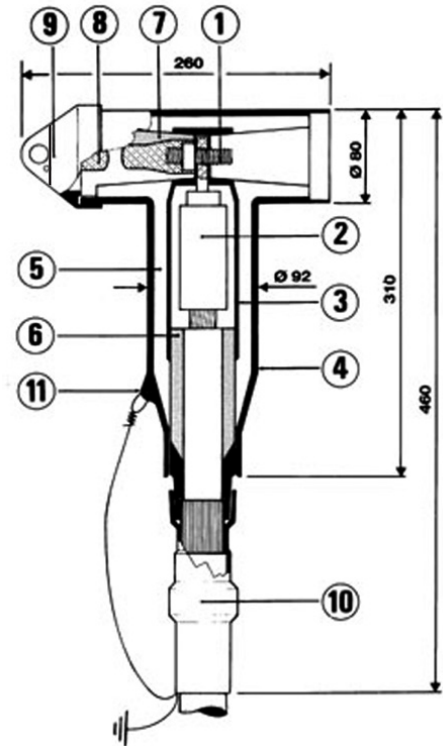


**INTERFACE**  
**C / 630 A**

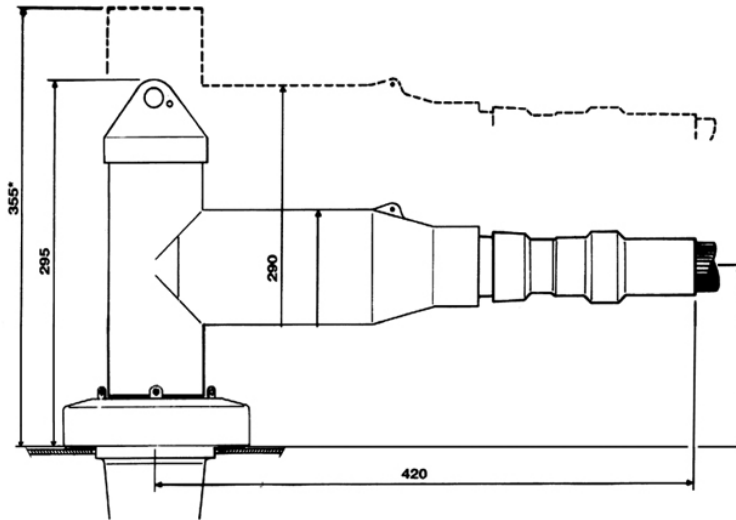
## Description

- 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.

### INTERFACE C / 630 A



## 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 of cable.

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

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 - 36**

3- Select suitable earthing device in the table below:

Earthing Device Reference	Type of Metallic Screen of Cable
T1	polylam
T2	Copper tapes
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

1x300 mm<sup>2</sup>, 20 kV polymeric cable, diameter over insulation 33,2 mm, with copper tape screen, aluminium conductor, lug for deep indenting, bushing with bolted contact: **FMCTXs-630/C-NC-24-T3-A300**.