

## SEPARABLE TEE CONNECTOR FMCTs-600/1250

for polymeric cables - Deadbreak - Rating 1250 A (with screw contact)

**formfit**

### APPLICATION

#### 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 1250 A rms  
overload 1800 A rms (8 hours per 24-hour period).
- operated when de-energized.

#### Cables

- single core polymeric insulation (PE, XLPE, EPR...).
- copper or aluminium conductors.
- semi-conducting screen either extruded or taped.
- metallic screen of tape, wire or polylam type.
- insulation voltage up to 24 kV ( $U_m$ ).
- conductor sizes : 50 to 630 sqmm.

### STANDARDS

Generally meets the requirements of VDE 0278 - C33 051 - C33-001 - HD 629 -1 - IEC 60502-4.

Interfaces : CENELEC EN50180 - EN50181.

### QUALITY ASSURANCE

The Company has been assessed by third party and found in conformity with the requirements of the standard ISO 9001 - EN 29001.

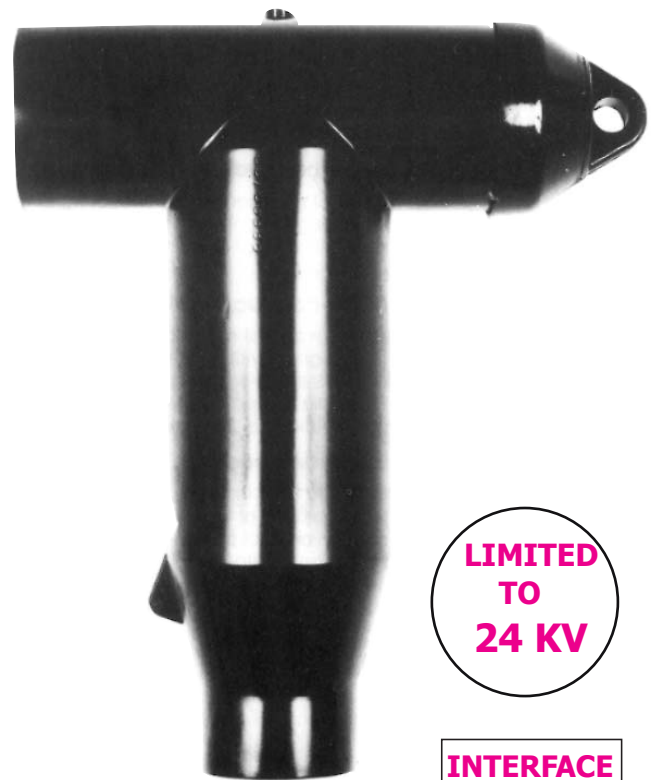
### PACKING

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

Shipping weight and volume (approx) of kit :  
9 kg / 0.026 m<sup>3</sup>

### INSTALLATION FEATURES

- no need for special tools, no taping or filling.
- vertical, angled or inverted position.
- no minimum distance between phases.
- energizing may take place immediately after the connector is plugged into its bushing, dead-end plug...



LIMITED  
TO  
24 KV

INTERFACE  
D

### OTHER PRODUCTS

- Associated products such as bushing FMBOs-600/1250 and accessories.

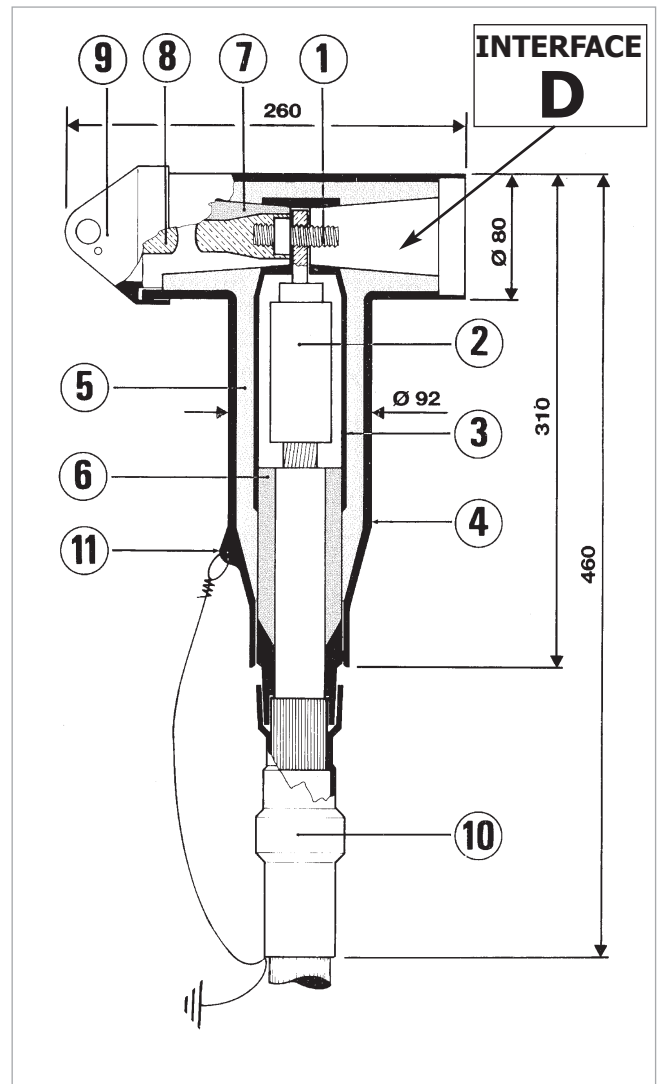
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### DESCRIPTION

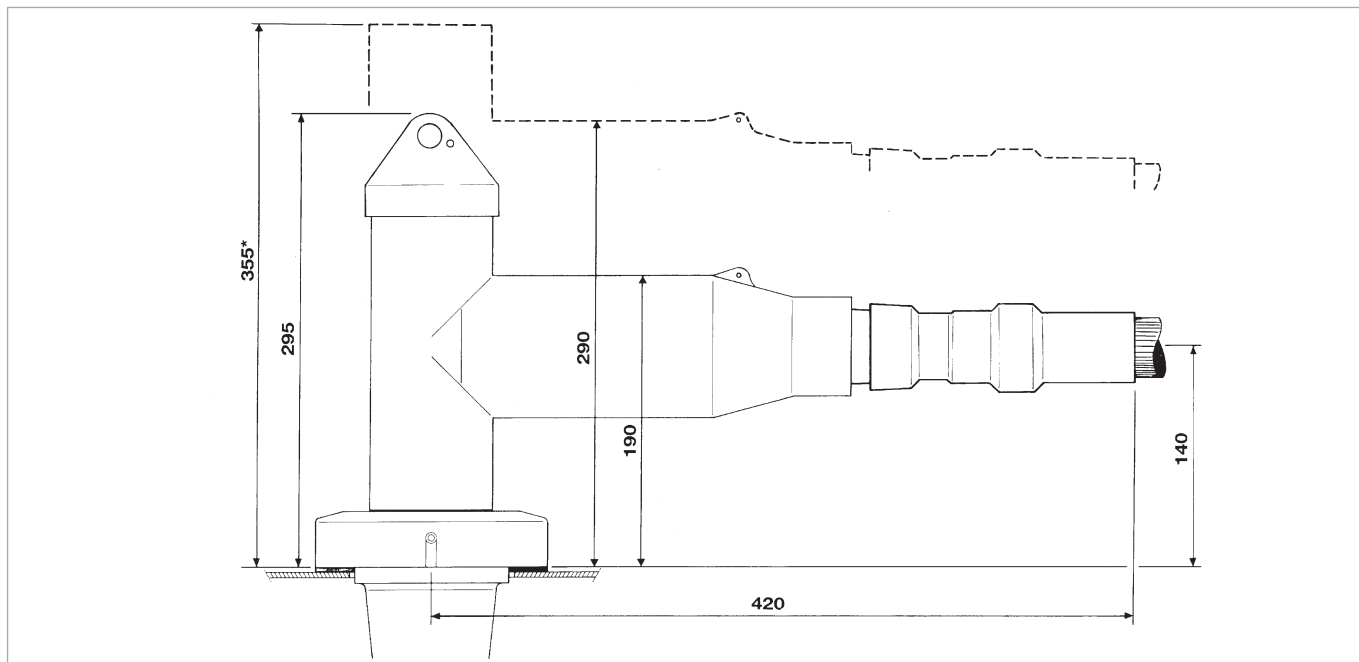
- ① **Clamping screw**  
Copper component threaded at both ends for attachment of the mating items : bushing, insulating plug, accessories. A uniform contact pressure is maintained for any combination.
- ② **Conductor lug**  
Crimped or deep indented type. Connection of the clamping screw through the flat hole.
- ③ **Semi-conducting inner screen**  
Insert of moulded semi-conducting EPDM enclosing the conductor lug so that ionization of the air remaining trapped 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**  
Moulded from insulating EPDM, for integral reconstitution of insulation. It maintains a uniform contact pressure on the cable insulation and on the interface of mating items, providing an excellent moisture seal.
- ⑥ **Adapter**  
Composite EPDM moulding. To adapt the connector body to the different cables sizes (cross sections).
- ⑦ **Insulating plug**  
Epoxy component with a threaded metal insert for attachment to the clamping screw.
- ⑧ **Test point**  
A capacitive voltage divider enables to check the absence of voltage before removing the connector.
- ⑨ **Cap**  
Moulded semi-conducting EPDM. Protects and earthes the test point during normal use.
- ⑩ **Earth cover**  
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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### OVERALL DIMENSIONS (Installed on bushing)



Dimensions in mm

\* Minimum dimension required for disconnection

### SELECTION GUIDE

- Select in the table the kit model corresponding to the diameter over insulation of cable  
**For cables with reduced insulation thickness, please contact us.**

Diam. over insulation in mm		Kit Reference	Conductor size in mm <sup>2</sup> (for guidance only)					
Min.	Max.		Highest voltage in Um					
			12 kV		17,5 kV		24 kV	
19,7	24,3	FMCTs-600/1250-NZ	120	120	95		50	70
			150	150	120		70	95
23,3	28,5	FMCTs-600/1250-NA	185	185	150		95	120
			240	240	185		120	150
27,6	32,6	FMCTs-600/1250-NB	300	300	240		185	185
				400				240
30,6	35,8	FMCTs-600/1250-NC	400	500	300		240	300
							300	
33,8	38,8	FMCTs-600/1250-ND	500	630	400		400	400
36,8	41,8	FMCTs-600/1250-NE	630		500		500	500
39,8	45,8	FMCTs-600/1250-NF			630		630	630

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

- Specify insulation voltage  $U_m$  in kV :

**12 - 17.5 - 24**

IMPORTANT : 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.

- 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

- Select suitable lug :

- 4.1. - indicate "C" for copper conductor  
"A" for aluminium conductor
- 4.2. - indicate conductor size in sqmm.
- 4.3. - for aluminium conductor, add "DIN" if suitable (see table below) :

Types of lugs	Aluminium	Copper	Add to Kit Ref.
Deep indenting according HN	available	N.A.	---
Hexag. crimping according DIN	available	available	for alu, add "DIN"

### EXAMPLE OF ORDER

20 kV polymeric cable, 1x300 sqmm, diameter over insulation 33,2 mm, with copper wire screen, aluminium conductor, lug for deep indenting :  
**FMCTs-600/1250-ND-24-T3-A300.**