

Separable compact tee connector with mechanical conductor contact (interface C / 630 A)



For polymeric cables – Deadbreak operation
Generally meets the requirements of C 33-051 - CENELEC HD 629.1 S2 – IEC 60502-4
Interfaces: CENELEC EN 50180 – EN 50181
Mechanical conductor contact: IEC 61238-1 class A

Medium Voltage (MV)
Up to 19/33 (36) kV
MV separable connectors rating 630 A (interface C)
Reference: MSCEA/EC-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).
- DeadBreak operated.
- Voltage detection through an integrated capacitive voltage divider.

Cables

- Single core polymeric insulation (PE, XLPE, EPR ...).
- Copper or aluminium conductor, solid or stranded.
- Semi-conducting screen either extruded or taped.
- Metallic screen of copper tape, copper wires or polylam type.
- Insulation voltage up to 19/33 (36) kV.
- Conductor sizes: 25 to 300 mm².

Packing

- Supplied as a kit of 3 single connectors containing all the necessary components.
- Shipping weight and volume (approx) of kit : 6 kg / 0,013 m³.

Other products

- Associated products such as bushing FMBOs-400 and accessories for separable connector 630A, interface C.
- Tee Connector MSCT/EC-630-C.



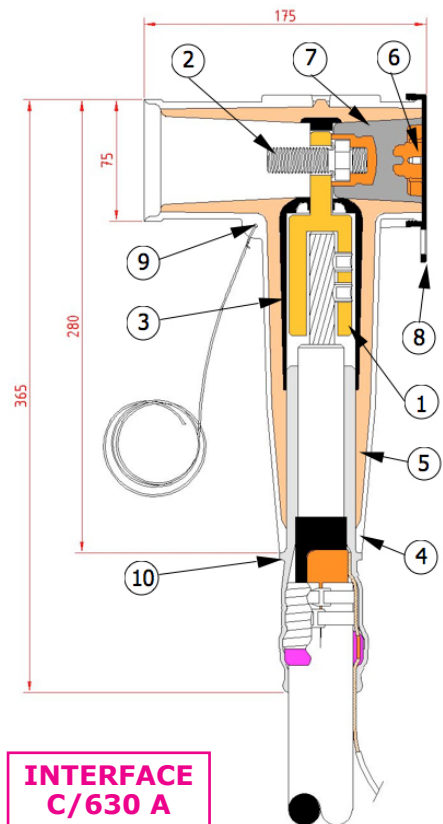
**INTERFACE
C/630 A**

Installation features

- The screen break design enables cable outer sheath testing without removing or dismantling the connector.
- 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.

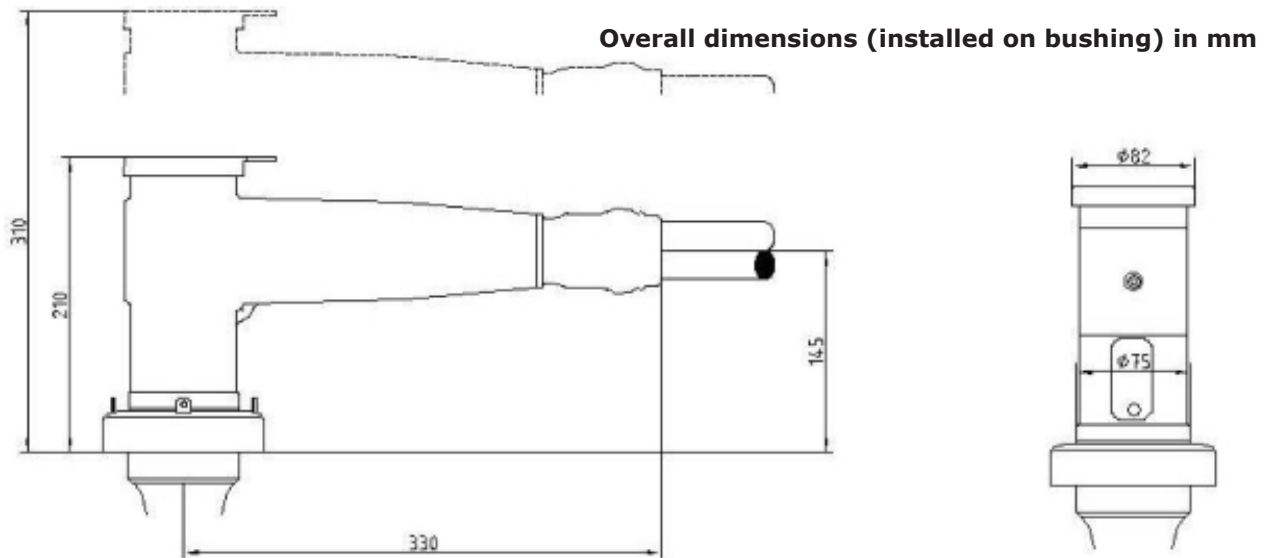
Description

- ① **Multi-section mechanical conductor contact Al/Cu**
3 sizes cover the cross sections from 25 mm² to 300 mm², copper or aluminium conductor. No need for special tools.
- ② **M16 Clamping screw**
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.
- 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 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. It allows to evacuate the short-circuit currents.
- 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, providing an excellent moisture seal.
- ⑥ **Test point**
A capacitive voltage divider allows to check the absence of voltage before disconnecting the connector.
- ⑦ **Insulating plug**
Epoxy component with a threaded metal insert for attachment to the clamping screw.
- ⑧ **Cap**
Molded semi-conducting EPDM. Protects and earthes the test point during normal use.
- ⑨ **Earthing eye**
For connection of the outer envelope to the metallic cable screen.
- ⑩ **Molded high permittivity adapter**
Adapts the connector body to the different cable insulation diameters cross sections. Ensures watertight protection of the earthing device and enables the cable jacket test.



100% of the separable connector bodies are individually tested in factory (Industriel Power Frequency and partial discharges). The screen break design enables cable outer sheath testing without removing or dismantling the connector.

Selection guide



(*) Minimum dimension required for disconnection

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

Voltage	Diam. Over insulation in mm		Conductor size in mm ² (for guidance only)		Kit reference
	min	max	min	max	
12 kV	13	22,3	25	120	MSCEA/EC-630-C-12-rA-25/120
	16,1	26,3	95	240	MSCEA/EC-630-C-12-rB-95/240
	22,7	33,0	185	300	MSCEA/EC-630-C-12-rD-185/300
17 kV	13	22,3	25	70	MSCEA/EC-630-C-17-rA-25/70
	16,1	26,3	35	120	MSCEA/EC-630-C-17-rB-35/120
	20,2	30,8	95	240	MSCEA/EC-630-C-17-rC-95/240
	25,6	35,3	185	300	MSCEA/EC-630-C-17-rE-185/300
24 kV	16,1	26,3	25	150	MSCEA/EC-630-C-24-rB-25/150
	16,1	26,3	70	185	MSCEA/EC-630-C-24-rB-70/185
	20,2	30,8	95	240	MSCEA/EC-630-C-24-rC-95/240
	22,7	33,0	95	240	MSCEA/EC-630-C-24-rD-95/240
	25,6	35,3	185	300	MSCEA/EC-630-C-24-rE-185/300
36 kV	20,2	30,8	25	95	MSCEA/EC-630-C-36-rC-25/95
	22,7	33,1	35	120	MSCEA/EC-630-C-36-rD-35/120
	25,6	35,3	70	240	MSCEA/EC-630-C-36-rE-70/240
	30,5	40,6	150	300	MSCEA/EC-630-C-36-rF-150/300

For cables with reduced insulation thickness or other cross-sections, please contact us.

2- 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

Example of order

1x 50 mm², 20 kV polymeric cable, diameter over insulation 21.5 mm, with copper wire screen, aluminium conductor : **MSCEA/EC-630-C-24-rB-T3-25/150.**