

SEPARABLE TEE CONNECTOR (INTERFACE C/630A) WITH TEST POINT

For polymeric cables – Deadbreak operation – with mechanical conductor contact

elascon

EC

REFERENCE: **MSCEA/EC-630-C**

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).
- Operated when de-energized.

CABLES

- Single core polymeric insulation (PE, XLPE, EPR ...).
- Copper or aluminium conductors, solid or stranded.
- Semi-conducting screen either extruded or taped.
- Metallic screen of tape, wire or polyam type.
- Insulation voltage up to 18/30 (36) kV.
- Conductor sizes: up to 24 kV ➔ 35 to 300 mm²
36 kV ➔ 35 to 240 mm²

STANDARDS

- Generally meets the requirements of CENELEC HD 629.1 S2 – IEC 60502-4 – NF C 33-051 – NF C 33-001.
- Interfaces: CENELEC EN 50180 – EN 50181.
- Mechanical conductor contact: IEC 61238-1 class A, HN 68-S-91.



INTERFACE
C/630 A

QUALITY ASSURANCE

- The company has been assessed by third party to be in conformity with the requirements of the standard ISO 9001-EN 29001 version 2000.

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

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 into its bushing, dead-end plug
- An unplugged connector must not be energized.

OTHER PRODUCTS

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



**THORNE &
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DESCRIPTION

Rep 1 Multi-section mechanical conductor contact Al/Cu.

Cover the section from 35 mm² to 300 mm².
Copper or aluminium core.
No need for special tools.

Rep 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.

Rep 3 Semi-conducting inner screen.

Insert of semi-conducting **EPDM** enclosing the mechanical conductor contact connections so that ionization of the air remaining trapped inside is prevented.

Rep 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. It allows to evacuate the short-circuit currents.

Rep 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 bushing interface, providing an excellent moisture seal.

Rep 6 Test point.

Electrically protected by a cap made of semi-conducting **EPDM**. A capacitive voltage divider allows the checking of absence of voltage before removing the connector.

Rep 7 Insulating plug

Epoxy component with a threaded metal insert for attachment to the clamping screw

Rep 8 Cap

Moulded semi-conducting **EPDM**. Protects and earthes the test point during normal use.

Rep 9 Earthing eye.

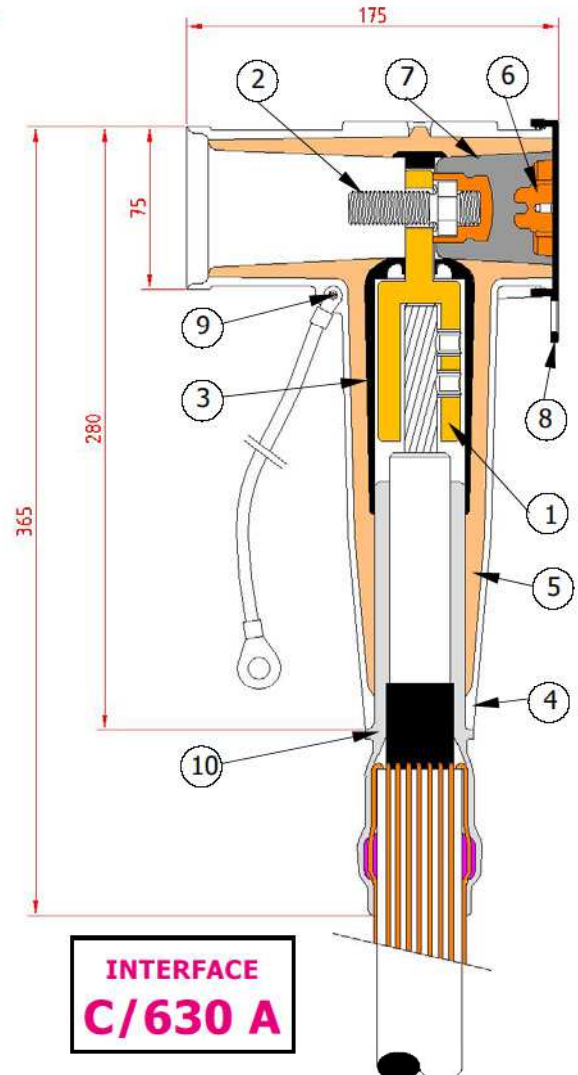
For connection of the outer envelope to the metallic cable screen.

Rep 10 Moulded high permittivity reducer.

Adapt the connector body to the different cables insulations diameters.
Ensures watertight protection of the earthing device and enables the cable screen test.

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**100% of the separable connectors bodies
are individually tested in factory**
- Industrial power frequency
and partial discharges -

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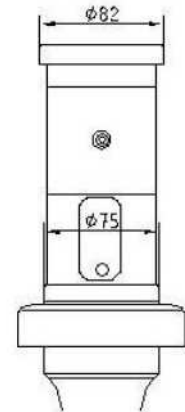
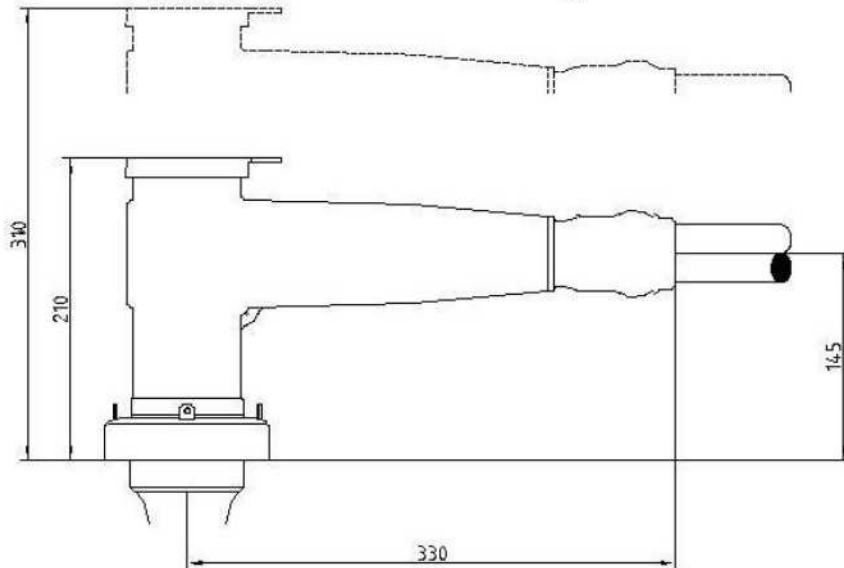
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SELECTION GUIDE

Overall dimensions (installed on bushing) in mm



(*) Minimum dimension required for disconnection

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

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

Voltage	Diam. Over insulation in mm		Conductor size in mm ² (for guidance only)		Kit reference
	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

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

20 kV polymeric cable, 1x 50 mm², diameter over insulation 21.5 mm, with copper wire screen, aluminium conductor:

MSCEA/EC-630-C-24-rB-T3-25/150.