

SEPARABLE STRAIGHT CONNECTOR (INTERFACE B/400A)

For polymeric cables – Deadbreak operation – with mechanical conductor contact

REFERENCE: **MSCS/EC-400-B**

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 400 A rms
- Overload 600 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 polylam 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.

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 : 4.5 kg / 0.01 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.

elascon

EC



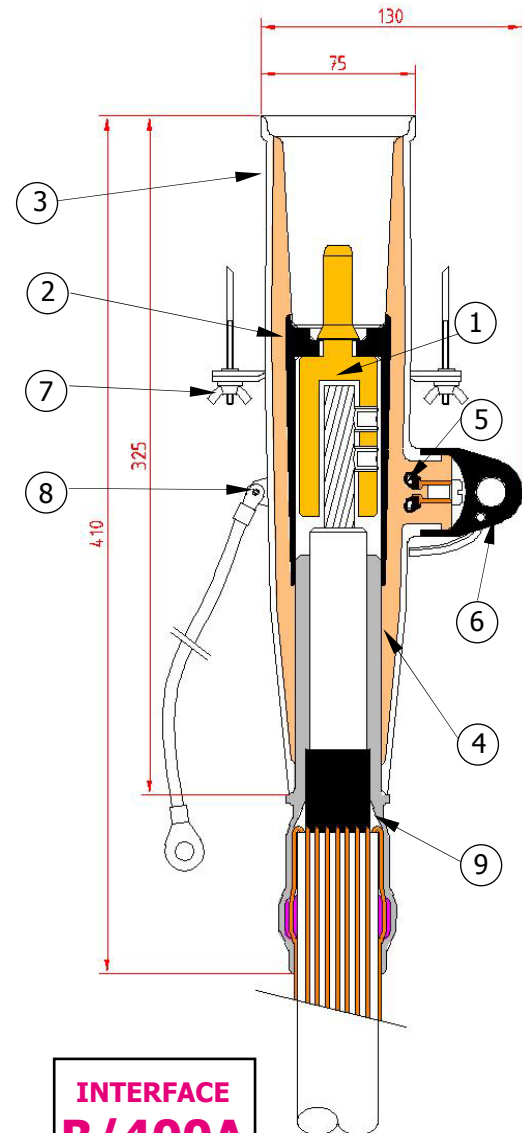
SEPARABLE STRAIGHT CONNECTOR (INTERFACE B/400A)

For polymeric cables – Deadbreak operation – with mechanical conductor contact

REFERENCE: **MSCS/EC-400-B**

DESCRIPTION

- Rep 1 Multi-section mechanical contact piece Al/Cu.**
Mechanical lug with tinned copper contact pin; designed with locking ring.
Cover the section from 35 mm² to 300 mm².
Copper or aluminium core.
No need for special tools.
- Rep 2 Semi-conducting inner screen.**
Insert of semi-conducting **EPDM** enclosing the mechanical contact piece so that ionization of the air remaining trapped inside is prevented.
- Rep 3 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 4 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 5 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 6 Cap**
Moulded semi-conducting **EPDM**. Protects and earthes the test point during normal use.
- Rep 7 Locking brace.**
Stainless steel brace fastening the connector onto its mating bushing or other mating accessories.
- Rep 8 Earthing eye.**
For connection of the outer envelope to the metallic cable screen.
- Rep 9 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.



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

elascon
EC

SEPARABLE STRAIGHT CONNECTOR (INTERFACE B/400A)

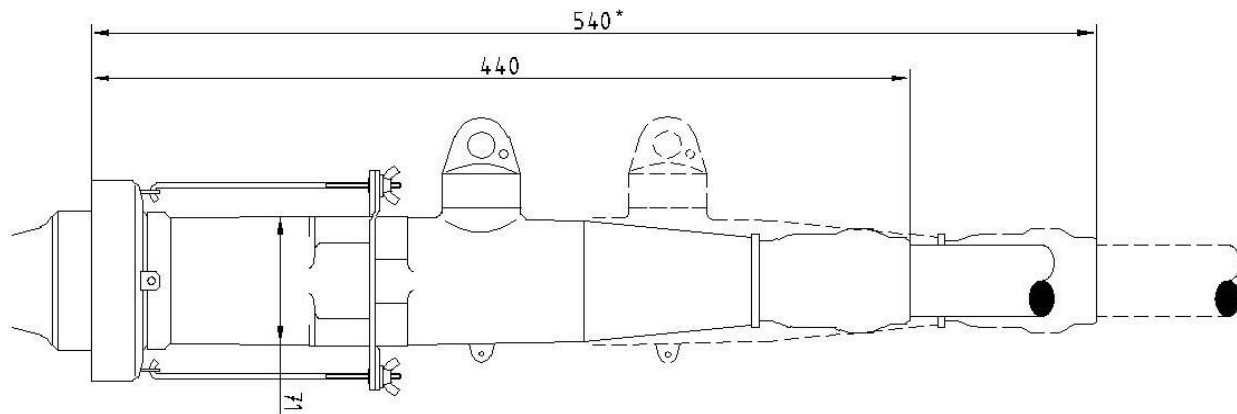
For polymeric cables – Deadbreak operation – with mechanical conductor contact

REFERENCE: **MSCS/EC-400-B**



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	MSCS/EC-400-B-12-rA-25/120
	16,1	26,3	95	240	MSCS/EC-400-B-12-rB-95/240
17 kV	13	22,3	25	70	MSCS/EC-400-B-17-rA-25/70
	16,1	26,3	35	120	MSCS/EC-400-B-17-rB-35/120
	20,2	30,8	95	240	MSCS/EC-400-B-17-rC-95/240
24 kV	16,1	26,3	25	150	MSCS/EC-400-B-24-rB-25/150
	16,1	26,3	70	185	MSCS/EC-400-B-24-rB-70/185
	20,2	30,8	95	240	MSCS/EC-400-B-24-rC-95/240
	22,7	33,0	95	240	MSCS/EC-400-B-24-rD-95/240
36 kV	20,2	30,8	25	95	MSCS/EC-400-B-36-rC-25/95
	22,7	33,1	35	120	MSCS/EC-400-B-36-rD-35/120
	25,6	35,3	70	240	MSCS/EC-400-B-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:

MSCS/EC-400-B-24-rB-T3-25/150.