

## DEADBREAK SEPARABLE CONNECTORS

# STRAIGHT CONNECTOR - MSCS/EC-400-B

## Description

Separable straight connector with mechanical conductor contact. For polymeric medium voltage (MV) cables up to 19/33 (36) kV. Rating 400 A – Interface B.

#### Utilisation

- For connection to transformers, switch gear 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).
- Dead-break 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 240 mm<sup>2</sup>. For cables with other sizes, please contact us.

### Standards

Generally meets the requirements of CENELEC HD 629.1 S2, IEC 60502-4, IEEE 386, C 33-051.

Interfaces: CENELEC EN 50180 & EN 50181.

Mechanical conductor contact: IEC 61238-1 class A.

#### Packing

Supplied as a kit of three single connectors containing all the necessary components. Shipping weight and volume (approx.) of kit: 4.5 kg/0.01 m<sup>3</sup>.



#### **Other products**

- Associated products such as bushing FMBOm-400 and accessories for separable connectors 400 A, interface B.
- Separable elbow connector MSCE/EC-400-B.

#### 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.
- No minimum distance between phases.
- Individual clamping by stainless steel brace.
- Energizing may take place immediately after the connector is plugged on its mating bushing, dead-end plug.
- An unplugged connector must never be energized.



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## SELECTION GUIDE – MSCS/EC-400-B

| Voltage<br>Um | Diameter over insulation (mm) |      | Conductor size (mm <sup>2</sup> )* |      | 1/14 m 6 m m m             |
|---------------|-------------------------------|------|------------------------------------|------|----------------------------|
|               | Min.                          | Max. | Min.                               | Max. | Kit reference              |
| 12 kV         | 13.0                          | 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         | 13.0                          | 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                          | 33.0 | 35                                 | 120  | MSCS/EC-400-B-36-rD-35/120 |
|               | 25.6                          | 35.3 | 70                                 | 240  | MSCS/EC-400-B-36-rE-70/240 |

\* For guidance only.

- 1. Select the kit corresponding to the insulation voltage  $U_{\rm m}$  in kV and to the diameter over cable insulation.
- 2. Select suitable earthing device.

#### Example:

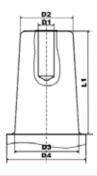
1x50 mm<sup>2</sup>, 20 kV polymeric cable, diameter over insulation 21.5 mm, with copper wire screen, aluminium conductor: *MSCS/EC-400-B-24-rB-T3-25/150.* 

| Type of metallic screen of cable | Reference |
|----------------------------------|-----------|
| Polyam                           | T1        |
| Copper tape                      | Τ2        |
| Copper wires                     | T3        |

EARTHING DEVICE

## INTERFACE FOR SEPARABLE CONNECTORS – TYPE B2

| According to CENELEC EN 50180 & EN 50181. Medium Voltage (MV) |  |  |  |  |
|---|--|--|--|--|
| Insulator voltage:  | 36 kV                                      |  |  |  |
| Continuous current:   | 400 A                                      |  |  |  |
| D1  | Bore: Ø 14 mm, depth 40 mm                 |  |  |  |
| D2  | Ø 46 mm                                    |  |  |  |
| D3  | Ø 56 mm                                    |  |  |  |
| D4  | Ø 70 mm                                    |  |  |  |
| L1  | 90 mm                                      |  |  |  |
| Utilisation   | 400 A<br>Sliding contact<br>12, 24 & 36 kV |  |  |  |





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