

DEADBREAK SEPARABLE CONNECTORS

STRAIGHT CONNECTOR - FMCS-400
Description

Separable straight connector. 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 (XLPE).
- 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.
For cables with other sizes, please contact us.

Standards

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

Interfaces: CENELEC EN 50180 & EN 50181.

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 m³.


Other products

- Associated products such as bushing FMB0m-400 and accessories for separable connectors 400 A, interface B.

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 on its mating bushing, dead-end plug.
- Individual clamping by stainless steel brace.
- An unplugged connector must never be energized.

Technical information subject to change without notice.

All sizes and values without tolerances are reference values. Specifications are for product as supplied by Prysmian Group; any modification or alteration afterwards of product may give different result. The information contained within this document must not be copied, reprinted or reproduced in any form, either wholly or in part, without the written consent of Prysmian Group. The information is believed to be correct at the time of issue. Prysmian Group reserves the right to amend this specification without prior notice. This specification is not contractually valid unless specifically authorised by Prysmian Group.



SELECTION GUIDE – FMCS-400

Kit reference	Diameter over insulation (mm)		Voltage U_m							
			12 kV		17.5 kV		24 kV		36 kV	
	Min.	Max.	Conductor size (mm ²)* ¹							
			Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
FMCS-400-Z	18.5	20.5	70	95	50	70	35	50	-	-
FMCS-400-A	19.9	21.9	95	120	70	95	50	70	-	25
FMCS-400-B	21.4	23.5	120	150	95	120	70	95	25	35
FMCS-400-C	22.9	25.1	150	185	120	150	95	120	35	50
FMCS-400-D	24.4	26.6	185	240	150	185	120	150	50	70
FMCS-400-E	26.0	28.3	240	300*	185	240	150	185	70	95
FMCS-400-F	27.8	30.4	300* ²	-	240	300*	185	-	95	120
FMCS-400-G	29.8	32.7	-	-	300* ²	-	240	240	120/150	150
FMCS-400-H	31.8	35.3	-	-	-	-	300* ²	300* ²	185	240
FMCS-400-J	34.1	38.3	-	-	-	-	-	-	240	300* ²

*¹ For guidance only. *² For 300 sqmm, please contact us.

Note! For cables with bonded outer semi-conducting layer: carefully check the diameter over insulation after removal of the outer semi-conducting layer.

1. Select the kit corresponding to the diameter over cable insulation.
2. Specify the insulation voltage U_m in kV.
3. Select suitable earthing device.
4. Select suitable lug.

Example:

1x95 mm², 33 kV polymeric cable, diameter over insulation 29.3 mm, with copper wire screen, aluminium conductor:
 FMCS-400-F-36-T3-A95.

EARTHING DEVICE

Type of metallic screen of cable	Reference
Polyam	T1
Copper tape	T2
Copper wires	T3

LUG

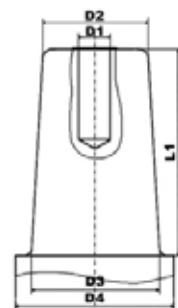
Type of conductor	Reference
Copper	C + conductor size in mm ²
Aluminium	A + conductor size in mm ²
Aluminium* + lug for hexagonal crimping required	A + conductor size in mm ² + DIN

*available for deep indenting a hexagonal crimping. Unless other wise stated, standard delivery will be with deep indenting. Suitable tooling to be used.

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 Sliding contact 12, 24 & 36 kV



Technical information subject to change without notice.

All sizes and values without tolerances are reference values. Specifications are for product as supplied by Prysmian Group: any modification or alteration afterwards of product may give different result. The information contained within this document must not be copied, reprinted or reproduced in any form, either wholly or in part, without the written consent of Prysmian Group. The information is believed to be correct at the time of issue. Prysmian Group reserves the right to amend this specification without prior notice. This specification is not contractually valid unless specifically authorised by Prysmian Group.

