

630A Deadbreak Symmetrical Elbow Connector

Up to 36kV



The EST66 Elbow Connector is a fully-rated up to 36kV, 630A Class Deadbreak connector. It has a standard C1 interface for connecting up to 36kV, 630A Deadbreak bushing, junctions and other accessories. The EST66 is equipped with an integral voltage test point.

Features and benefits

- Up to 36kV, 630A Deadbreak Elbow
- Fully shielded, fully submersible molded rubber housing
- 100% peroxide-cured construction includes insulation and conductive EPDM materials
- Provision for ground wire connection
- Wide cable range with minimum number of sizes
- Torque limiting epoxy plug and contact stud

Applications

Medium voltage deadbreak applications up to 36kV and 630A using EN50180 & EN50181 Interface C1.

Materials

100% peroxide-cured EPDM.

Ambient operating temperature range

- 40°C ~ 65°C

Certified to:

Meets IEC 60502-4, CENELEC HD 629.1S3
U₀/U(Um)

Interface C1: EN50180 and EN50181

For 6.35/11(12)kV Voltage Class:

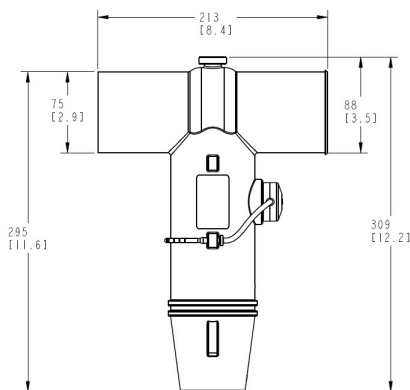
6.35kV Phase-to-Ground U₀ – Operating Voltage 11kV
Phase-to-Phase U
95kV BIL – Impulse Withstand (1.2 x 50 microsecond wave)
28.5kV AC – Five minute withstand
Max 10pC at 12.5kV
630A – Continuous

For 12.7/22(24)kV Voltage Class:

12.7kV Phase-to-Ground U₀ – Operating Voltage
22kV Phase-to-Phase U
125kV BIL – Impulse Withstand (1.2 x 50 microsecond wave)
57kV AC – Five minute withstand
Max 10pC at 25kV
630A – Continuous

For 19/33(36)kV Voltage Class:

19kV Phase-to-Ground U₀ – Operating Voltage
33kV Phase-to-Phase U
194kV BIL – Impulse Withstand (1.2 x 50 microsecond wave)
85.5kV AC – Five minute withstand
Max 10pC at 38kV
630A – Continuous



Part number selection

1. Select the type of separable connector (EST66 = Symmetrical)
2. Choose the relevant cable conductor code
3. Choose the correct code for the cable adapter being used

Example:

The part number for a 36kV Symmetrical Connector, with a cable conductor with a cross section of 400 mm² and insulation diameter of 41 mm, will be EST66NAN.

Note: Cable adapter selection is determined based on the insulation diameter of the cable.

EST66

*

Cable Type
A = Unarmoured

A

*

Cable Conductor	
Code	Cross section (mm ²)
G	16-150
L	50-240
M	95-300
N	185-400

Cable Adapter	Cable Insulation Diameter mm		Cable Insulation Diameter Inches	
	MIN	MAX	MIN	MAX
E	13.46	17.27	0.530	0.680
F	16.26	20.32	0.640	0.800
G	19.30	22.61	0.760	0.890
H	21.59	26.67	0.850	1.050
I	25.65	30.99	1.010	1.220
L	29.97	35.81	1.180	1.410
M	34.80	39.67	1.370	1.562
N	38.66	43.00	1.522	1.693

The 1 Phase standard kit contains the following

1 Phase kit		
Quantity	Description	Part #
1	Symmetrical Elbow housing	EST6-MIB1
1	VD Cap	ESX1-MTC1
1	Cleaning Cloth	ECX1-CCL1
1	Earthing Wire Assembly	ESX1-GKA1
1	Stud	ESX6-CSS1
3	Compound Lube	82-08
1	Shear Bolt Contact 630A	ESX6-CSB*
1	Cable Adapter	ESX6-MAA**
2	Gloves	ECX1-GLO1
1	PVC Tape	ECX1-PTA1
1	Abrasive Paper	ECX1-APA1
1	Instruction Sheet 630A	ESX6-CUM2
1	Mastic Tape	ECX1-MTA1/2
1	Bleeder Line	ECX1-BLN1
1	Cap Epoxy Plug	ESX6-MEP1
1	Epoxy Plug	EST6-ESP1
1	Cold Shrink Tube 1/2/3	ECX1-CST1/2/3
1	Screen Wire Lug 13mm Hole	ECX1-GWL1

*: Connector should be sized accordingly as shown in "Cable Conductor Code" table above

**Last letter in part number corresponds to cable adapter. Example of F size Cable Adapter: ESX6-MAAF

Symmetrical	Cable Conductor	Cross section (mm ²)	Cable Adapter	Cable Insulation Diameter		Part Number
	Code		Code	Min (mm)	Max (mm)	
EST66	G	16 - 150	E	13.46	17.27	EST66GAE
			F	16.26	20.32	EST66GAF
			G	19.30	22.61	EST66GAG
			H	21.59	26.67	EST66GAH
			I	25.65	30.99	EST66GAI
			L	29.97	35.81	EST66GAL
	L	50 - 240	E	13.46	17.27	EST66LAE
			F	16.26	20.32	EST66LAF
			G	19.30	22.61	EST66LAG
			H	21.59	26.67	EST66LAH
			I	25.65	30.99	EST66LAI
			L	29.97	35.81	EST66LAL
	M	95 - 300	M	34.80	39.67	EST66LAM
			F	16.26	20.32	EST66MAF
			G	19.30	22.61	EST66MAG
			H	21.59	26.67	EST66MAH
			I	25.65	30.99	EST66MAI
			L	29.97	35.81	EST66MAL
	N	185 - 400	M	34.80	39.67	EST66MAM
			G	19.30	22.61	EST66NAG
			H	21.59	26.67	EST66NAH
			I	25.65	30.99	EST66NAI
			L	29.97	35.81	EST66NAL
			M	34.80	39.67	EST66NAM
			N	38.66	43.00	EST66NAN

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction - in whole or in part - is forbidden without prior written consent of ABB. © 2025 ABB Installation Products Inc. and/or its related companies. All Rights Reserved.