

IEC Separable Connectors **24 kV to 36 kV, 1250A**

Front & Rear T-body with Wide Range Adapter



APPLICATION

The Chardon T-Body Connectors are designed to integrate polymeric cables into dead front apparatus such as transformers, switchgear, and other critical equipment, meeting the electrical standards set by IEC 60502 & HD 629. Suitable for both indoor and outdoor applications, these connectors comply with the interface

KEY FEATURES

- / Provides a fully shielded and submersible connection when mated with proper bushings or plugs.
- / Advanced adapter with optimized electrical stress dispersion for a wide range of cable sizes.
- / Adheres to EN 50180 Interface C standard.

requirements of EN 50180 and EN 50181 are compatible with all polymeric cable types and conductors made of either copper or aluminum. With an operational voltage capacity of up to 36 kV, these connectors are equipped with high performance adapters that allow for an extensive range of compatibility with various cable sizes.

- / Mounting can be vertical, horizontal, or any angle in between.
- / No minimum phase clearance requirements.
- / 100% electrical tested at factory.

PRODUCT RATINGS

	24-FDT630 24-RDT630	36-FDT630 36-RDT630	24/36-LFDT1250 24/36-LRDT1250
Rated Voltage Class (Ur)	24 kV	36 kV	36 kV
AC 5 Minute Withstand	54 kV	81 kV	81 kV
Partial Discharge	20 kV < 10pC	30 kV < 10pC	30 kV < 10pC
BIL and Full Wave Crest (Impulse)	125 kV	170 kV	170 kV
Thermal Short Circuit (Conductor, 2 sec.)	23 kA / 2s	23 kA / 2s	23 kA / 2s
Dynamic Short Circuit (Conductor, 10 sec.)	82 kA / 10ms	82 kA / 10ms	82 kA / 10ms
Continuous Current	630 A	630A	1250A

PRODUCTION TESTS

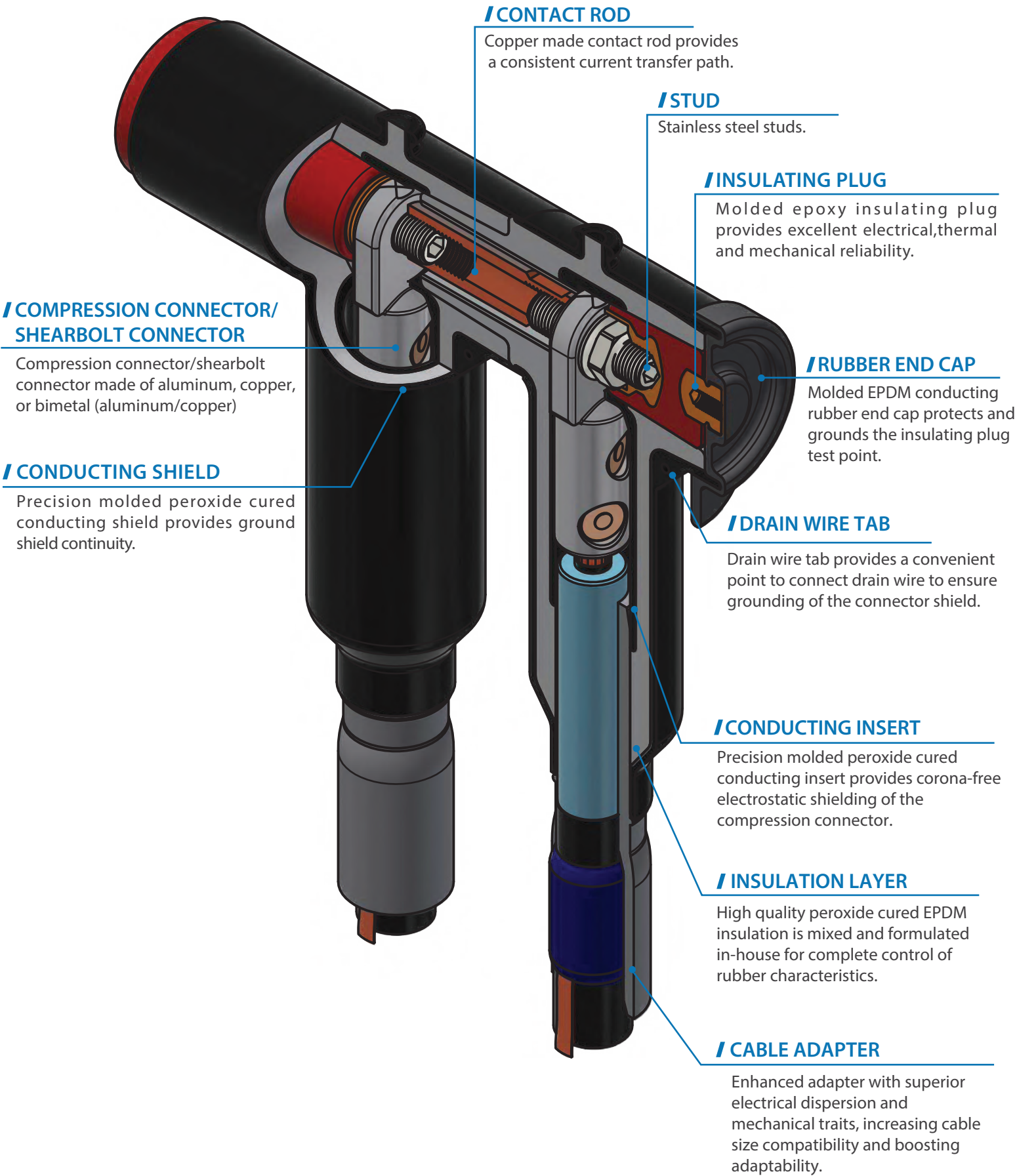
Routine tests conducted in accordance with IEC 60502-4:

- / Partial Discharge
- / AC 5 Minute Withstand

Tests conducted in accordance with Chardon manufacturing process requirements:

- / Physical Inspection
- / Periodic Dissection
- / Periodic X-ray Analysis

SECTIONAL VIEW OF THE CHARDON FRONT & REAR T-BODY CONNECTOR



DRAWINGS OF THE FRONT & REAR
T-BODY CONNECTORS

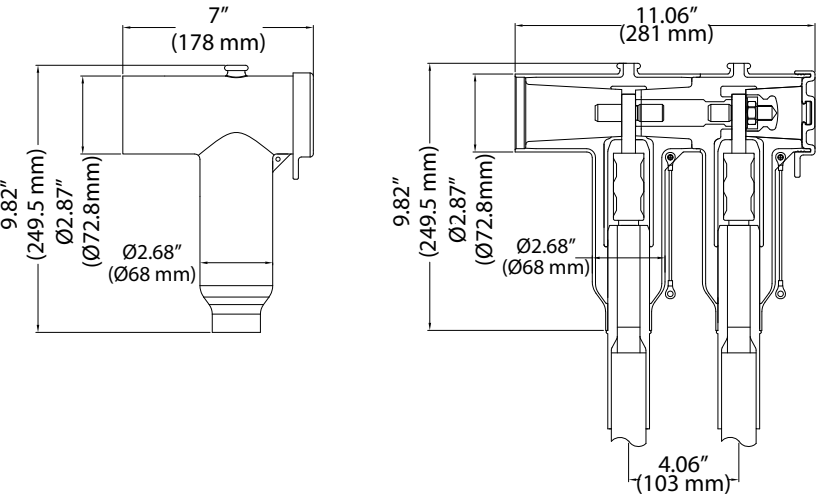


Fig.1:
24-FDT630
24-RDT630

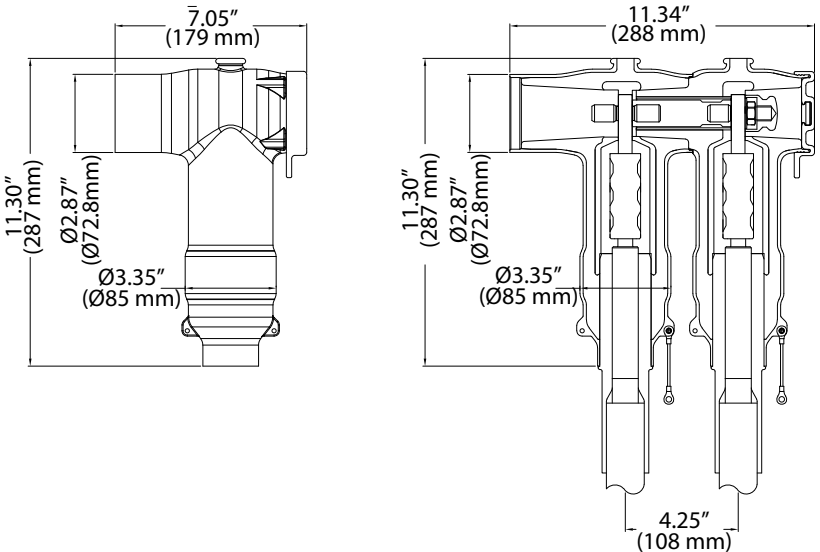


Fig.2:
36-FDT630
36-RDT630

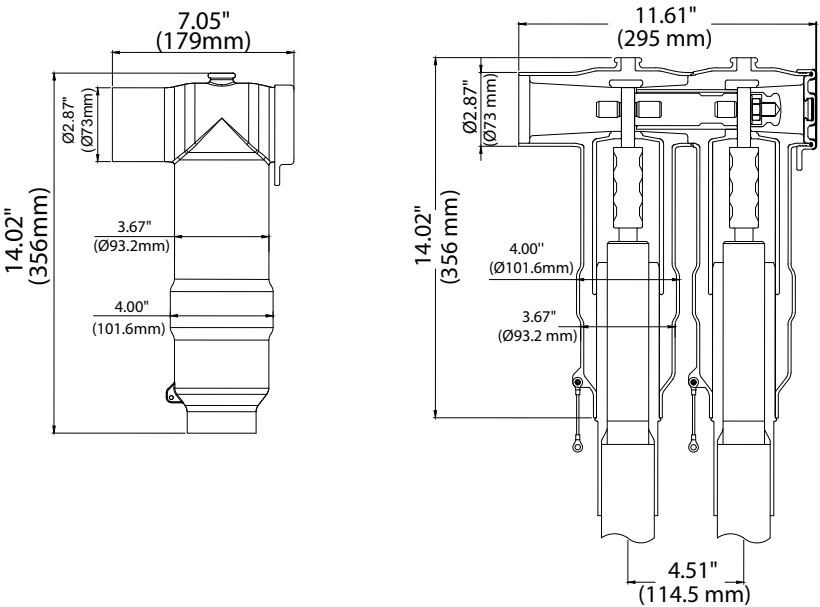


Fig.3:
24/36-LFDT1250
24/36-LRDT1250

ORDERING INSTRUCTIONS

STEP 1: Voltage & Current Class

Select the required voltage and current class for your cable application.

STEP 2: T-Body Type

Decide on the T-Body configuration needed: Front T-Body (FDT) or Rear T-Body (RDT).

STEP 3: Cable Adapter Code

Identify the cable insulation outer diameter to determine the appropriate cable adapter code.

Voltage & Current	Front or Rear T-Body	Cable Insulation Outer Diameter (mm)	Cable Adapter Code	*Compatible Cable Cross Section (mm²)		
				12 kV Cable Class	24 kV Cable Class	36 kV Cable Class
24 kV, 630A	24-FDT630 (Front) 24-RDT630 (Rear)	12.5 – 19.5	A1	25 – 95	X	X
		17.0 – 25.1	A2	X	25 – 95	X
		19.0 – 29.0	B1	95 – 300	X	X
		23.6 – 34.6	B2	X	95 – 300	X
36 kV, 630A	36-FDT630 (Front) 36-RDT630 (Rear)	21.0 – 30.0	A3	X	X	25 – 95
		27.3 – 38.5	B3	X	X	95 – 300
24 & 36 kV, 1250A	24/36-LFDT1250 (Front) 24/36-LRDT1250 (Rear)	30.0 – 38.5	C1	400 – 630	X	X
		34.0 – 45.0	C2	X	400 – 630	X
		38.5 – 50.0	D1/C3	800	X	400 – 630
		44.0 – 56.0	E1/D2	1000 – 1200	800	X
		51.4 – 58.5	E2	X	1000 – 1200	800

***Note:** The compatible cable cross-section range is provided for reference purposes only. Please check the actual dimensions of your cable to ensure proper selection of the shear bolt lug cross-section range.

STEP 4: Shear Bolt Lug

Determine the cable conductor cross section to select the suitable shear bolt lug size.

Shear Bolt Lug Code	Cable Conductor Cross-Section (mm²)	Note
SBC-B-25-120/1L	25-120	Suitable for 630A T-body
SBC-B-95-300/2L	95-300	Suitable for 630A T-body
SBC-LB-400-630/4L	400-630	Suitable for 1250A T-body

Part Number Ordering Example:

For a Chardon 36 kV Front T-body with cable insulation outer diameter of 28 mm and a conductor size of 95 mm² with shear bolt connector the part number would be as follows:

36-	FDT630	A3	SBC-B-25-120/1L
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