

IEC Separable Connectors **17.5 kV/24 kV, 630A**

Front T-Body / Coupling (Rear) T-Body Connector



APPLICATION

The Chardon T-Body Connectors terminate polymeric cable to dead front apparatus such as transformers, switchgear, and other equipment. Suitable for both indoor and outdoor use, they can be utilized with all

polymeric cable types (XLPE, EPR, etc.) and conductors of either copper or aluminum at voltages of 17.5 kV or 24 kV.

KEY FEATURES

- / Provides a fully shielded and submersible connection when mated with the proper bushing or plug.
- / Type "C" 630A Interface.
- / Mounting can be vertical, horizontal, or any angle in between.
- / No minimum phase clearance requirements.
- / 100% electrical tested at factory.

PRODUCT RATINGS

Rated Voltage Class (U_m)	24 kV
AC 5 Minute Withstand	54 kV
Partial Discharge	20 kV < 3pC
BIL and Full Wave Crest (Impulse)	125 kV
Thermal Short Circuit (Conductor, 2 sec.)	23 kA / 2s
Dynamic Short Circuit (Conductor, 10 sec.)	82 kA / 10ms
Continuous Current	630 A
Overload Current (8 hours maximum)	900 A

PRODUCTION TESTS

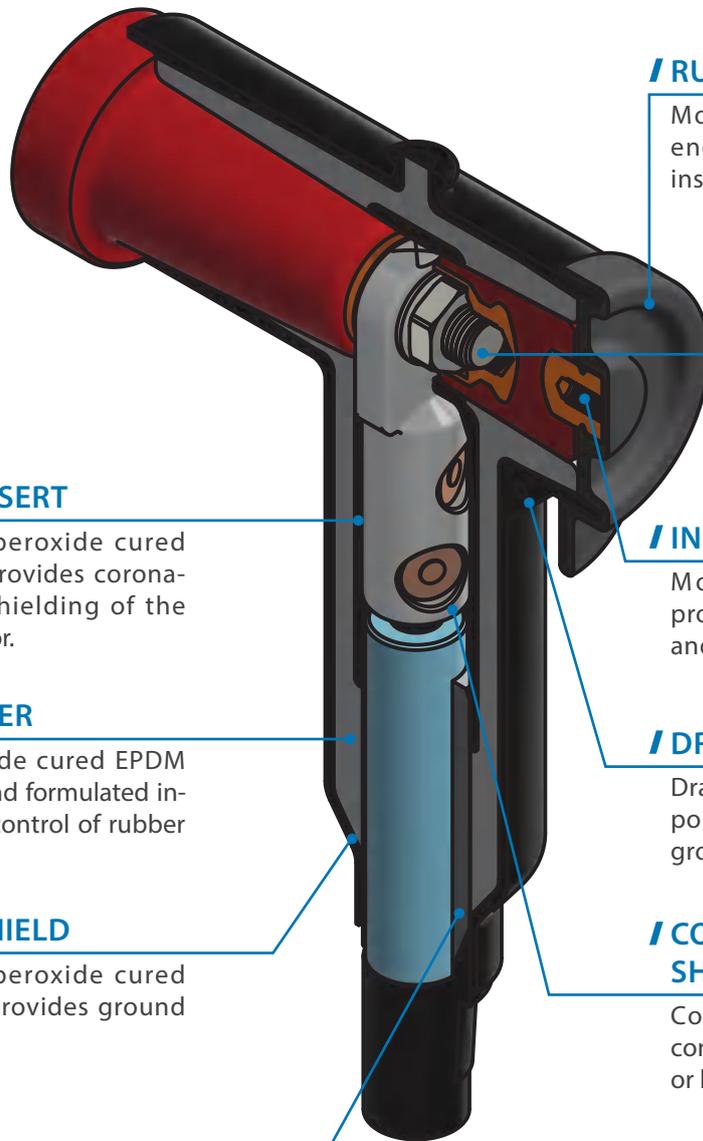
Tests conducted in accordance with IEC 60502-4.

- / Partial Discharge – 20 kV < 3pC
- / AC 5 Minute Withstand – 54 kV

Tests conducted in accordance with Chardon manufacturing process requirements:

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

DETAILED COMPOSITION OF THE CHARDON 17.5 KV/24 KV FRONT T-BODY CONNECTOR



/ RUBBER END CAP

Molded EPDM conducting rubber end cap protects and grounds the insulating plug test point.

/ STUD

Stainless steel studs.

/ CONDUCTING INSERT

Precision molded peroxide cured conducting insert provides corona-free electrostatic shielding of the compression connector.

/ INSULATING PLUG

Molded epoxy insulating plug provides excellent electrical, thermal and mechanical reliability.

/ INSULATION LAYER

High quality peroxide cured EPDM insulation is mixed and formulated in-house for complete control of rubber characteristics.

/ DRAIN WIRE TAB

Drain wire tab provide a convenient point to connect drain wire to ensure grounding of the connector shield.

/ CONDUCTING SHIELD

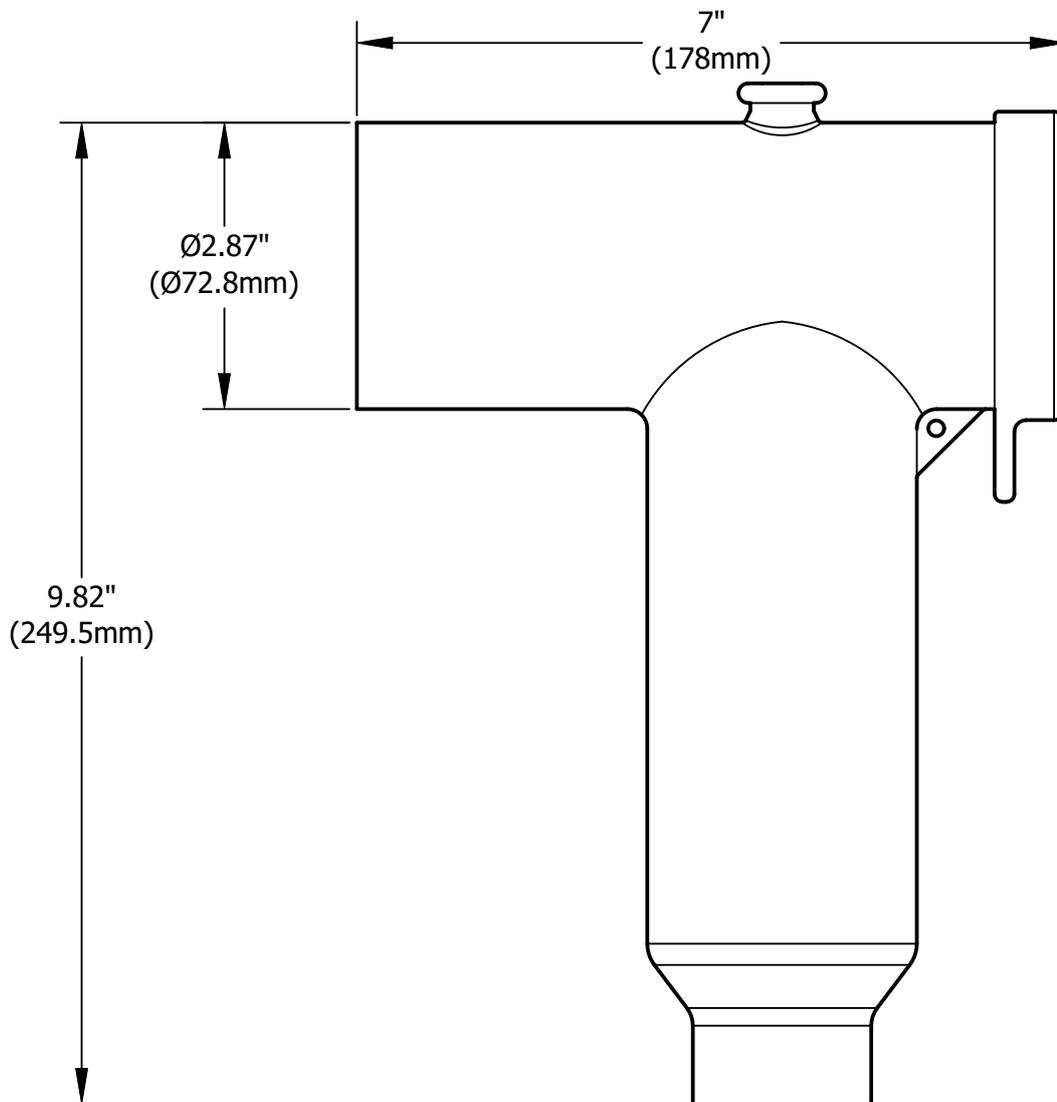
Precision molded peroxide cured conducting shield provides ground shield continuity.

/ COMPRESSION CONNECTOR/ SHEARBOLT CONNECTOR

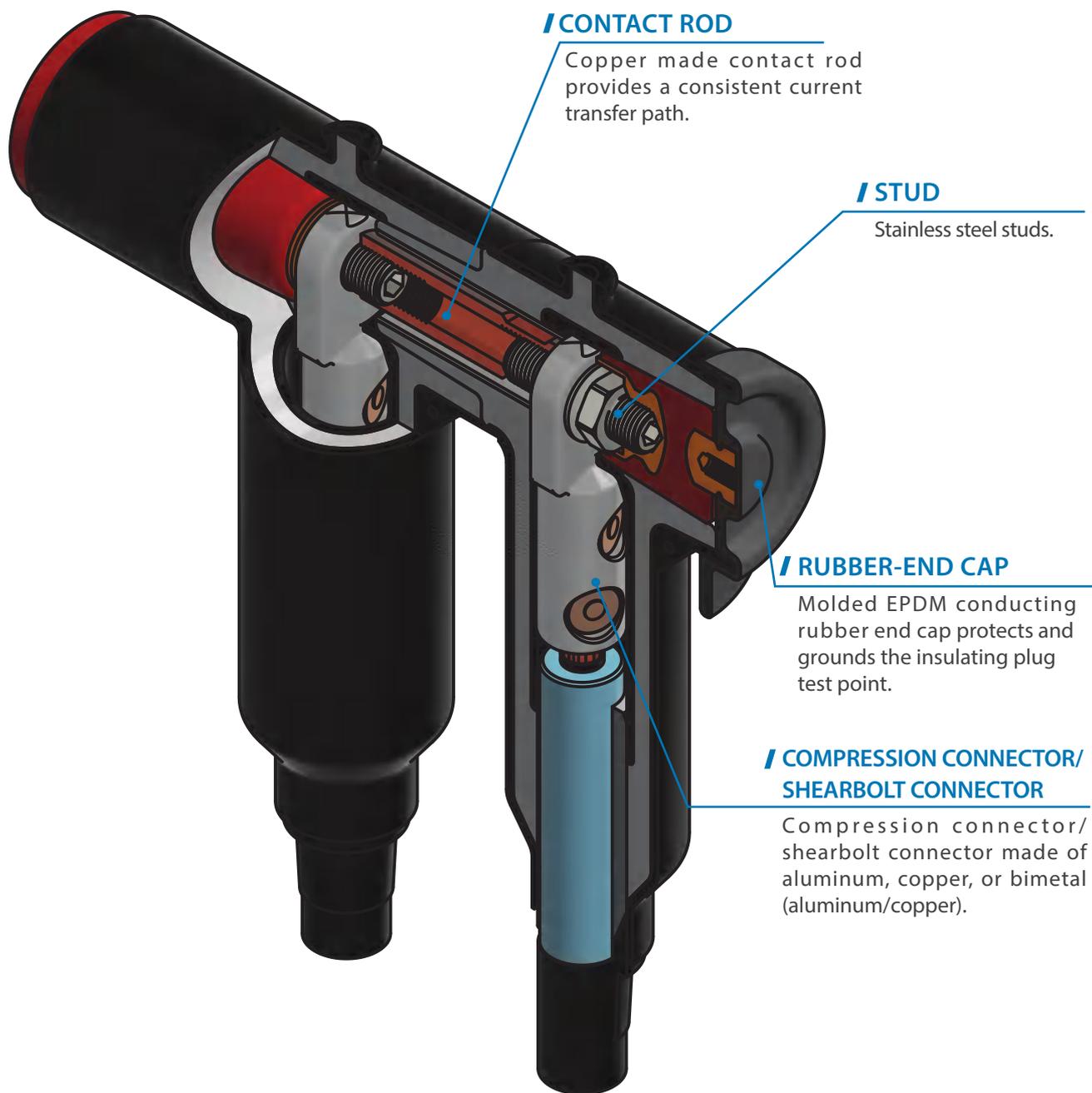
Compression connector/shearbolt connector made of aluminum, copper, or bimetel (aluminum/copper).

/ CABLE ADAPTER

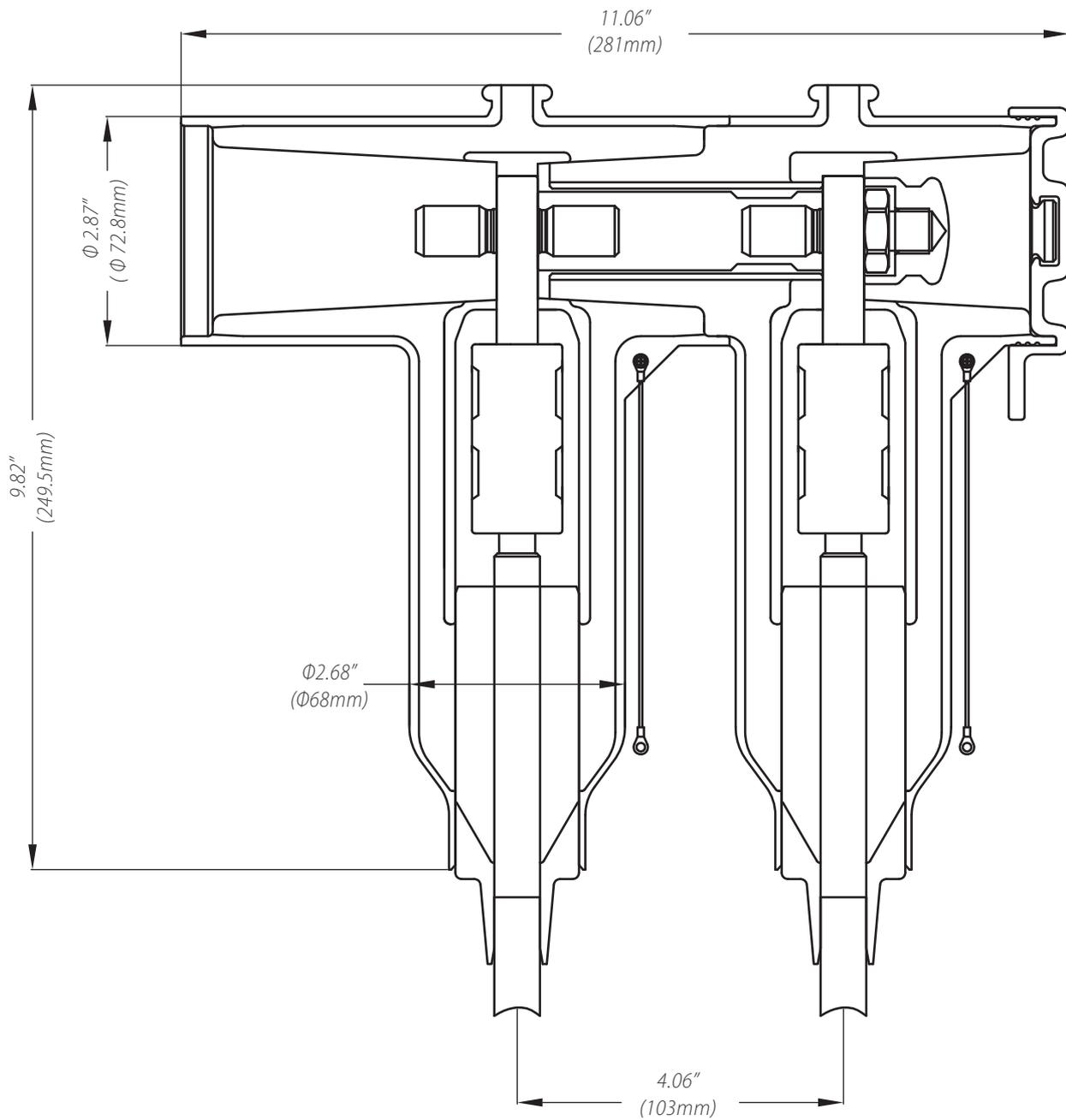
**DETAILED COMPOSITION OF THE CHARDON
17.5 KV/24 KV FRONT T-BODY CONNECTOR**



DETAILED COMPOSITION OF THE CHARDON 17.5 KV/24 KV, COUPLING (REAR) T-BODY CONNECTOR



**DETAILED COMPOSITION OF THE CHARDON
17.5 KV/24 KV, COUPLING (REAR) T-BODY CONNECTOR**



ORDERING INFORMATION

24-	---	630-	-	---	-
	STEP1		STEP2	STEP3	STEP4

STEP1

Selection of Front / Rear T-body

Code	
FDT	Front T-body
RDT	Coupling (Rear) T-body

STEP2

Selection of Cable Insulation Dimension

Range Code	mm
A	15.5 - 19.0
B	18.0 - 23.0
C	22.0 - 27.0
D	26.0 - 32.0
E	31.0 - 37.0

STEP3

Selection of Conductor Size

Conductor Code	Conductor Size (mm ²)
25	25
35	35
50	50
70	70
95	95
120	120
150	150
185	185
240	240
300	300
400	400

STEP4

Selection of Compression Connector Material

Code	
B	Bi-metal (Al & Cu)
C	Copper

Note :

When ordering a shear bolt connector in a kit, use the chart below and add code in the end of the part number, for example, SBC-B-25-50/1.

Selection of Shear Bolt Connector Material

CATALOG No.	Conductor Range(mm ²)
SBC-B-25-50/1-AL	25-50
SBC-B-70-120/2-AL	70-120
SBC-B-150-240/2-AL	150-240
SBC-B-120-300/2-AL	120-300

Ordering Example:

For a CHARDON 24kV Front T-body with cable insulation outer dimension of 26.4mm and a conductor size of 185mm² with copper compression connector, the part number would be as follows.

24-	FDT	630	C	185	C
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If a shear bolt connector is selected in this kit, the part number would be as follows:

24-	FDT	630	C	SBC-B-25-50/1-AL
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