CHARDON GROUP

24-LFDT630 / 24-LRDT630

IEC Separable Connectors
24 kV 630A

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

www.chardongroup.com

APPLICATION

Chardon Front T-Body / Coupling (Rear) T-Body connectors are fully screened and fully submersible when mated with proper bushings or plugs. The products are used to terminate polymeric cable to dead front apparatus such as transformers, switchgear, and other equipment. They can be used for 24kV applications.

The Chardon T-body connectors are suitable for indoor or outdoor applications, and are able to be used for all polymeric cable types (XLPE, ETP, etc.) with copper or aluminum conductors. The design is especially suited for the harsh off-shore or wind farm environment, where long runs and large cable sizes are needed.

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

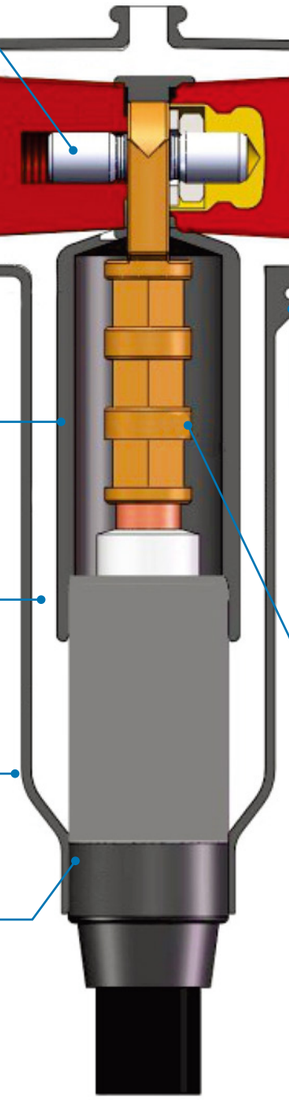
Maximum Voltage Class (U_m)	24 kV
AC 5 Minute Withstand	54 kV
DC 15 Minute Voltage Withstand	48 kV
Minimum Corona Voltage Level	20 kV < 10 pC
BIL and Full Wave Crest (Impulse)	125 kV
Thermal Short Circuit (Conductor, 2 sec.)	23 kA
Dynamic Short Circuit	82 kA
Continuous Current	630 A

PRODUCTION TESTS

Tests conducted in accordance with IEC 60502-4.

- Minimum Corona Voltage Level – 20 kV ≤ 3pC
- AC 5 Minute Withstand – 54 kV

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



STUD
Stainless steel studs.

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

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

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

DRAIN WIRE TAB
Drain wire table provide a conenient point to connect drain wire to ensure grounding of the connector shield.

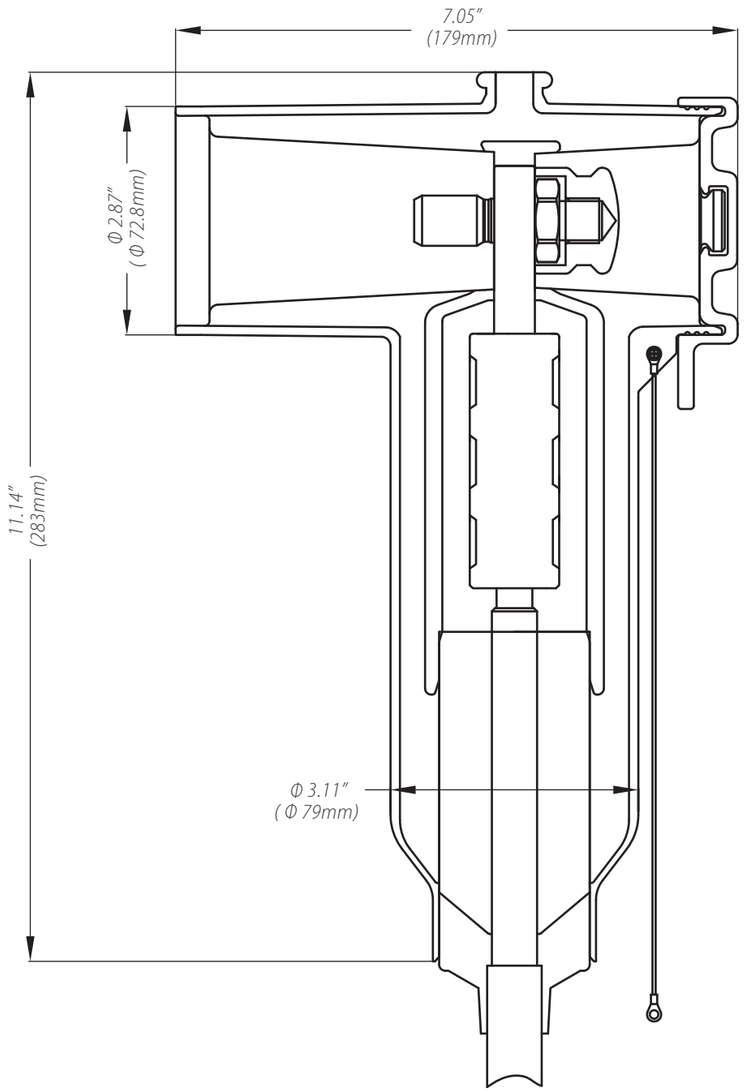
INSULATION LAYER
High quality peroxide cured EPDM insulation is mixed and formulated in-house for complete control of rubber characteristics.

COMPRESSION CONNECTOR/ SHEAR BOLT CONNECTOR
Compression connector/shear bolt connector made of aluminum, copper, or bimetal (aluminum/ copper).

CONDUCTING SHIELD
Precision molded peroxide cured conducting shield provides ground shield continuity.

CABLE ADAPTER
Molded cable adapter, sized to fit the cable insulation, provides stress relief for the terminated cable.

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

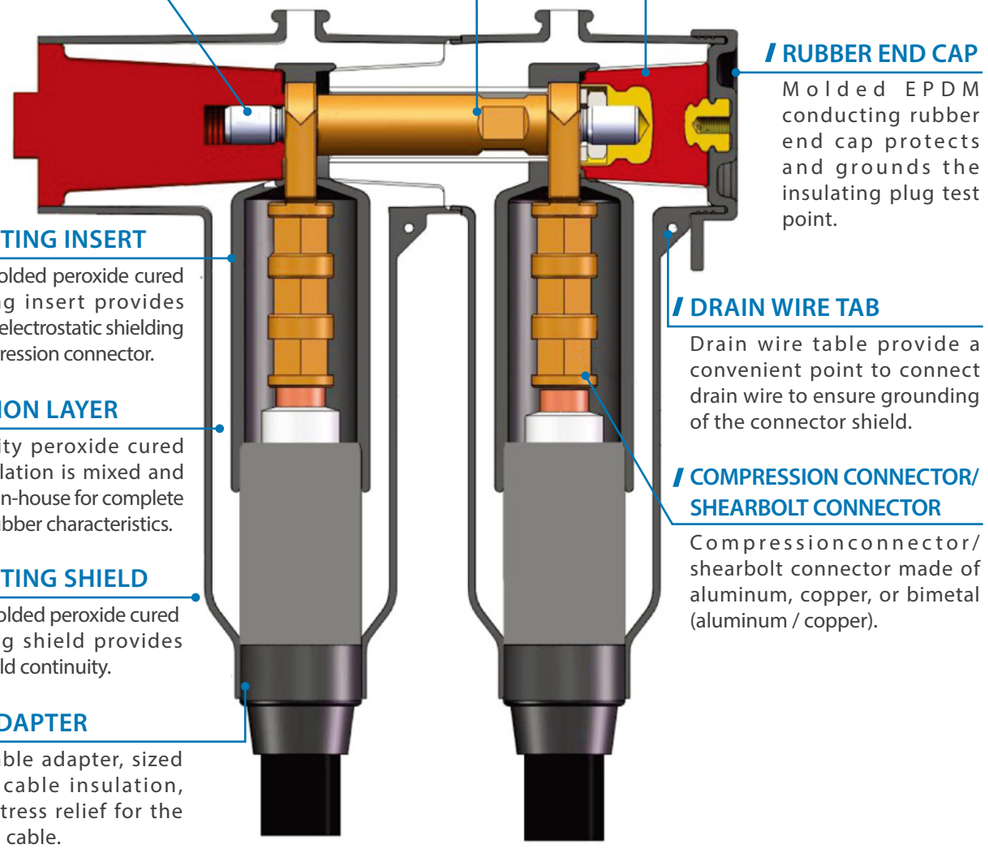


DETAILED COMPOSITION OF THE CHARDON 24 KV LARGE COUPLING (REAR) T-BODY CONNECTOR

STUD
Stainless steel studs.

CONTACT ROD
Copper made contact rod provides a consistent current transfer path.

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



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

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

DRAIN WIRE TAB
Drain wire table provide a convenient point to connect drain wire to ensure grounding of the connector shield.

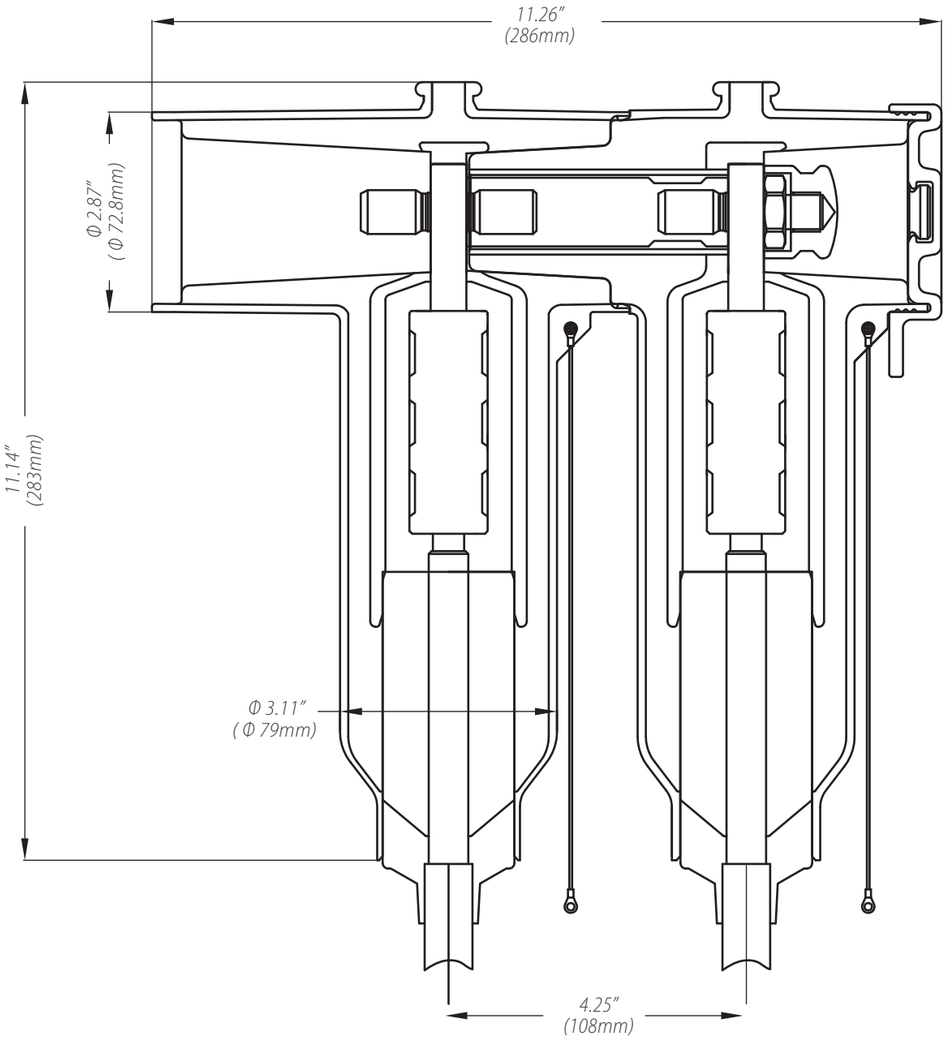
INSULATION LAYER
High quality peroxide cured EPDM insulation is mixed and formulated in-house for complete control of rubber characteristics.

COMPRESSION CONNECTOR/ SHEARBOLT CONNECTOR
Compressionconnector/ shearbolt connector made of aluminum, copper, or bimetal (aluminum / copper).

CONDUCTING SHIELD
Precision molded peroxide cured conducting shield provides ground shield continuity.

CABLE ADAPTER
Molded cable adapter, sized to fit the cable insulation, provides stress relief for the terminated cable.

DETAILED COMPOSITION OF THE CHARDON 24 KV LARGE COUPLING (REAR) T-BODY CONNECTOR



ORDERING INFORMATION

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

STEP1 _ _ _

Selection of Front / Rear T-body

Code	
LFDT	Large Front T-body
LRDT	Large Coupling (Rear) T

STEP2 _

Selection of Cable Insulation Dimension

Code	mm
LG	28. 0 - 32.0 (1.102 - 1.260)
LH	31.0 - 34.0 (1.220 - 1.339)
LI	33.0 - 37.0 (1.299 - 1.457)
LJ	36.0 - 39.0 (1.417 - 1.535)
LK	38.0 - 42.0 (1.496 - 1.654)

STEP3 _ _ _

Selection of Conductor Size

Conductor Code	Conductor Size (mm^2)
300	300
400	400
500	500

STEP4 _

Selection of Compression Connector Material

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

Ordering Example:

For a CHARDON 24 kV Large Front T-body with cable insulation outer dimension of 32.8 mm and a conductor size of 300mm^2 with copper compression connector, the part number would be as follows.

24-	LFDT	630	LH	300	C

If a shear bolt connector is selected in this kit, the part number would be 24-LFDT630LH-SBC-B-300-400/3.

24-	LFDT	630	LH	SBC-B-300-400/3

Chardon Shear Bolt Connector

Example:
For a Shear Bolt Connector with a conductor range 300-400 mm^2 , the part number would be : SBC-B-300-400/3.

CATALOG NO.	Conductor Range(mm^2)
SBC-B-300-400/3	300 - 400

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