



IEC Separable Connectors 36 kV, 630A

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



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 36kV applications.

KEY FEATURES

- Provides a fully shielded and submersible connection whenmated with the proper bushing or plug.
- I Type "C" 630A Interface in accordance with EN 50181-2010.

PRODUCT RATINGS

Maximum Voltage Class (U _m)	36 kV
AC 5 Minute Withstand	81 kV
DC 15 Minute Voltage Withstand	72 kV
Minimum Corona Voltage Level	30 kV < 10pC
BIL and Full Wave Crest (Impulse)	170 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 $30 \text{ kV} \leq 3\text{pC}$
- AC 5 Minute Withstand 81 kV

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

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

sizes are needed.

36 KV FRONT T-BODY CONNECTOR

STUD

Stainless steel studs.

I CONDUCTING INSERT

Precision molded peroxide cured conducting insert provides coronafree electrostatic shielding of the compression connector.

INSULATION LAYER

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

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.



INSULATING PLUG

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

I RUBBER END CAP

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

I COMPRESSION CONNECTOR/ SHEARBOLT CONNECTOR

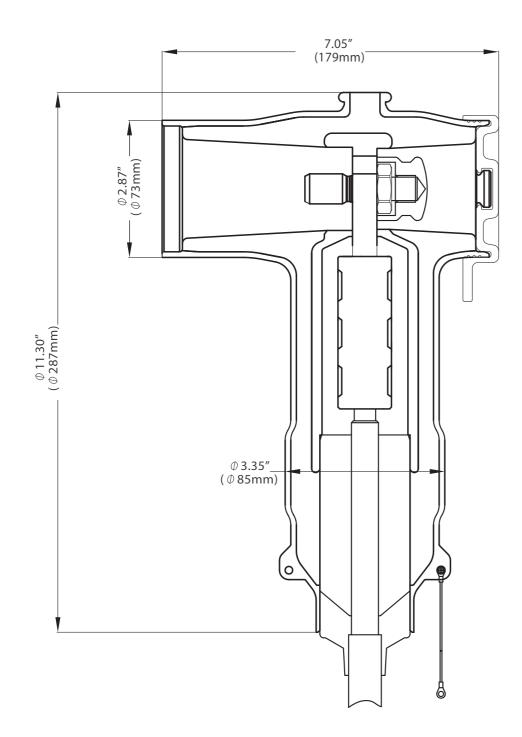
Compressionconnector/shearbolt connector made of aluminum, copper, or bimetal (aluminum/copper).

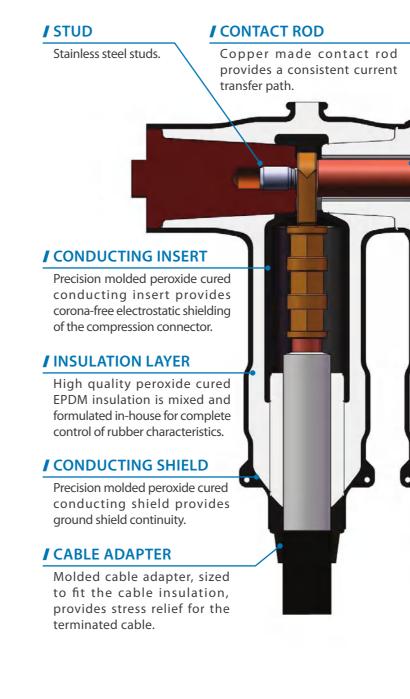
I DRAIN WIRE TAB

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

DETAILED COMPOSITION OF THE CHARDON 36 KV FRONT T-BODY CONNECTOR

DETAILED COMPOSITION OF THE CHARDON 36 KV COUPLING (REAR) T-BODY CONNECTOR







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

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

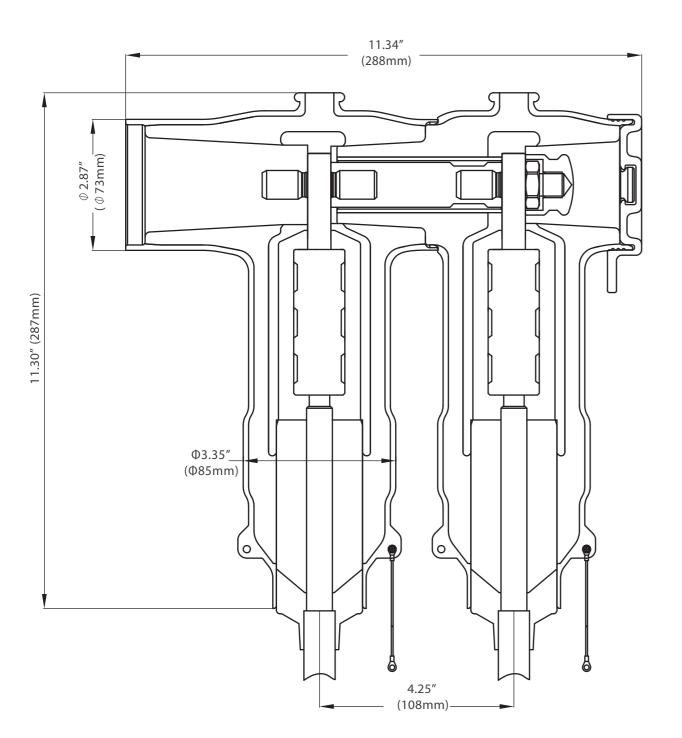
COMPRESSION CONNECTOR/ SHEARBOLT CONNECTOR

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

DRAIN WIRE TAB

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

DETAILED COMPOSITION OF THE CHARDON **36 KV COUPLING (REAR) T-BODY CONNECTOR**



ORDERING INFORMATION

36-		630-			-
50-	STEP1	030-	STEP2	STEP3	STEP4
STEP1			STEP3		
lection of Fr	ont / Rear T-body		Selection o	f Conductor Si	ize
Code			Conduc	tor Code	Conductor Size (mm
FDT	Front T-boo	Front T-body		25	25
RDT	Coupling (Rear)	T-body	35		35
				0	50
STEP2	_		7	0	70
			9	5	95
lection of Ca	able Insulation Di	mension	1	20	120
Range Code	mm (inch)			50	150
LA	15.5 - 19.0 (0.610 - 0.748)			85	185
LB	18.0 - 21.0 (0.709	9 - 0.827)	240		240
LC	20.0 - 23.0 (0.787	7 - 0.905)	300		300
LD	22.0 - 25.0 (0.866	5 - 0.984)	4	00	400
LE	24.0 - 27.0 (0.945	5 - 1.063)			
LF	26.0 - 29.0 (1.024	4 - 1.142)	STEP4		
LG	28.0 - 32.0 (1.102	2 - 1.260)			

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LE	24.0 - 27.0 (0.945 - 1.063)
LF	26.0 - 29.0 (1.024 - 1.142)
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)
IJ	36.0 - 39.0 (1.417 - 1.535)
LK	38.0 - 42.0 (1.496 - 1.654)

Ordering Example:

For a CHARDON 36 kV Front T-body with cable insulation outer dimension of 33.9 mm and a conductor size of 185 mm² with copper compression connector, the part number would be as follows.

36-	FDT	630	LH	185	С	
If a shear bolt connector is selected in this kit, the part number would be 36-FDT630LH-SBC-B-150-240/2.						
36-	FDT	630	LH	SBC-B-	150-240/2	

Chardon Shear Bolt Connector

Example:

ForaShear Bolt Connector with a conductor Range between 20-50 mm², the part number would be : SBC-B-25-50/1.

CATALOG NO.	Conductor Range(mm ²)
SBC-B-25-50/1	25 - 50
SBC-B-70-95/1	70 - 95
SBC-B-70-120/2	70 - 120
SBC-B-150-240/2	150 - 240
SBC-B-300-400/3	300 - 400

Selection of Compression Connector Material

Code	
В	Bi-metal (Al & Cu)
c	Copper





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