

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.

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 whenmated with the proper bushing or plug.
- Type "C" 630A Interface in accordance with EN 50181-2010.
- Mounting can be vertical, horizontal, or any angle in between.
- / No minimum phase clearance requirements.
- 1 100% electrical tested at factory.

PRODUCT RATINGS

Rated Voltage Class (Ur)	36 kV
AC 5 Minute Withstand	81 kV
DC 15 Minute Voltage Withstand	72 kV
Partial Discharge	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.

Partial Discharge – 30 kV ≤ 3pC
AC 5 Minute Withstand – 81 kV

. 36FDT630-36RDT630-092625-REV04

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



I 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.

/ COMPRESSION CONNECTOR/ SHEARBOLT CONNECTOR

Compression connector/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.

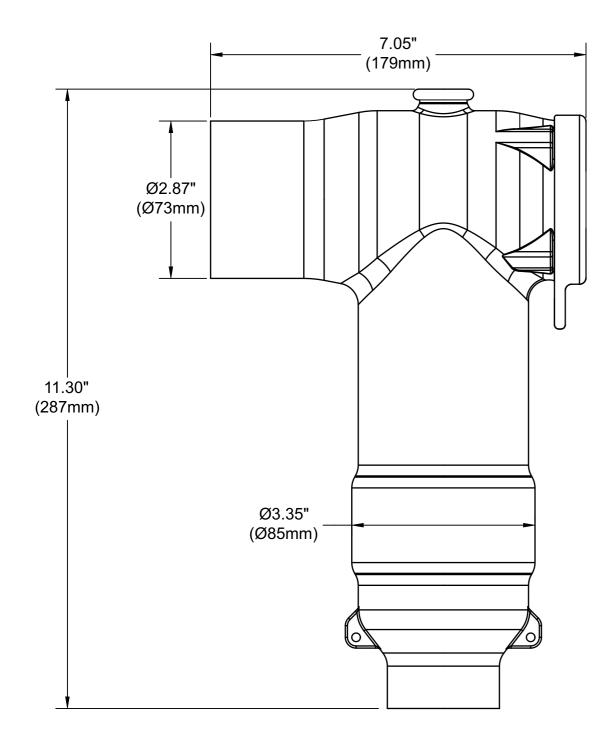
/ CONDUCTING SHIELD

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.

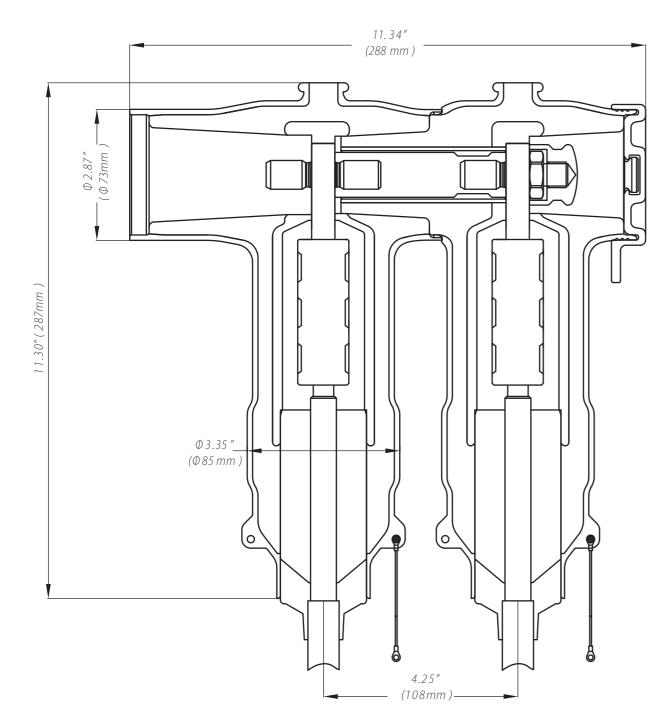
DETAILED COMPOSITION OF THE CHARDON 36 KV FRONT T-BODY CONNECTOR



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



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



ORDERING INFORMATION



Selection of Front / Rear T-body

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



Selection of Cable Insulation Dimension

Range Code	mm (inch)
LA	15.5 - 19.0 (0.610 - 0.748)
LB	18.0 - 21.0 (0.709 - 0.827)
LC	20.0 - 23.0 (0.787 - 0.905)
LD	22.0 - 25.0 (0.866 - 0.984)
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)

Selection of Conductor Size

Conductor Code	Conductor Size (mm²)
25	25
35	35
50	50
70	70
95	95
120	120
150	150
185	185
240	240
300	300
400	400
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STEP4		
Selection of C	ompression Connec	ctor Material

Code	
В	Bi-metal (Al & Cu)
C	Copper

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	C	
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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-AL
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Chardon Shear Bolt Connector

Examp

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(mm²)
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
SBC-B-300-400/3-AL	300-400



