

IEC Separable Connectors 36kV 400A Front T-Body Connector



APPLICATION

Chardon 36kV 400A Front 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.

It is designed in accordance with Type B-400A interface as described by EN 50180 and

50181. 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 "B" 400A interface.

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

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	400 A

PRODUCTION TESTS

Tests conducted in accordance with IEC 60502-4.

/ Minimum Corona Voltage Level – 30 kV \leq 3pC

AC 5 Minute Withstand – 81 kV

• 36FDT400-100218-REV01

DETAILED COMPOSITION OF THE CHARDON 36 KV 400A FRONT T-BODY CONNECTOR

I RUBBER END CAP

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

/ PROBE

Tin plated copper probe ensures reliable electrical connection.

/ 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.

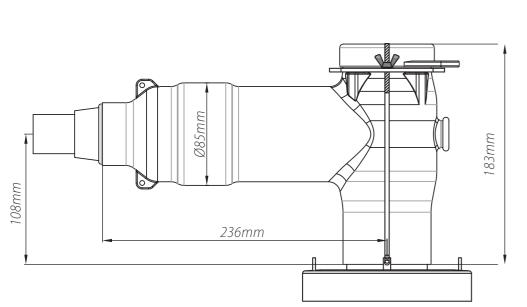
/ COMPRESSION CONNECTOR/ SHEARBOLT CONNECTOR

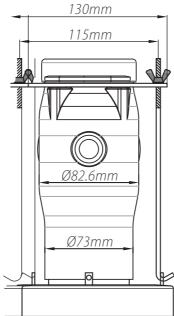
Compression connector/shearbolt connector made of aluminum, copper, or bimetal (aluminum/copper).

/ DRAIN WIRE TAB

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

DETAILED COMPOSITION OF THE CHARDON 36 KV 400A FRONT T-BODY CONNECTOR





ORDERING INFORMATION





Selection of Front T-body

Code	
FDT	Front T-body

STEP2

Selection of Cable Insulation Dimension

Range Code	Inches	mm	
LA	0.610 - 0.748	15.5 - 19.0	
LB	0.709 - 0.827	18.0 - 21.0	
LC	0.787 - 0.905	20.0 - 23.0	
LD	0.866 - 0.984	22.0 - 25.0	
LE	0.945 - 1.063	24.0 - 27.0	
LF	1.024 - 1.142	26.0 - 29.0	
LG	1.102 - 1.260	28.0 - 32.0	
LH	1.220 - 1.339	31.0 - 34.0	
LI	1.299 - 1.457	33.0 - 37.0	
IJ	1.417 - 1.535	36.0 - 39.0	
LK	1.496 - 1.654	38.0 - 42.0	

STEP3 ___

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		

STEP4

Selection of Compression Connector Material

Code	
В	Bi-metal (Al & Cu)
С	Copper

Selection of Shear Bolt Connector Material

Catalog No.	Conductor Range (mm²)		
TSBC-B-25-50/1	25 - 50		
TSBC-B-70-95/1	70 - 95		
TSBC-B-70-120/2	70 - 120		
TSBC-B-150-240/2	150 - 240		

Ordering Example:

For a CHARDON 36 kV 400A Front T-body with cable insulation outer dimension of 26.4 mm and a conductor size of 85 mm² with copper compression connector, the part number would be as follows:

36-	FDT	400	LE	185	С
If using Shear Bolt Connectors, the part number would be as follows:					
36-	FDT	400	LE	185	T-SBC-B-150-240/2

