

# **IEC Separable Connectors 36 kV and 42 kV, 1250A**

**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 and 42 kV 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" 1250A interface.
- Mounting can be vertical, horizontal, or any angle in between.
- No minimum phase clearance requirements.
- 100% electrical tested at factory.

# PRODUCT RATINGS

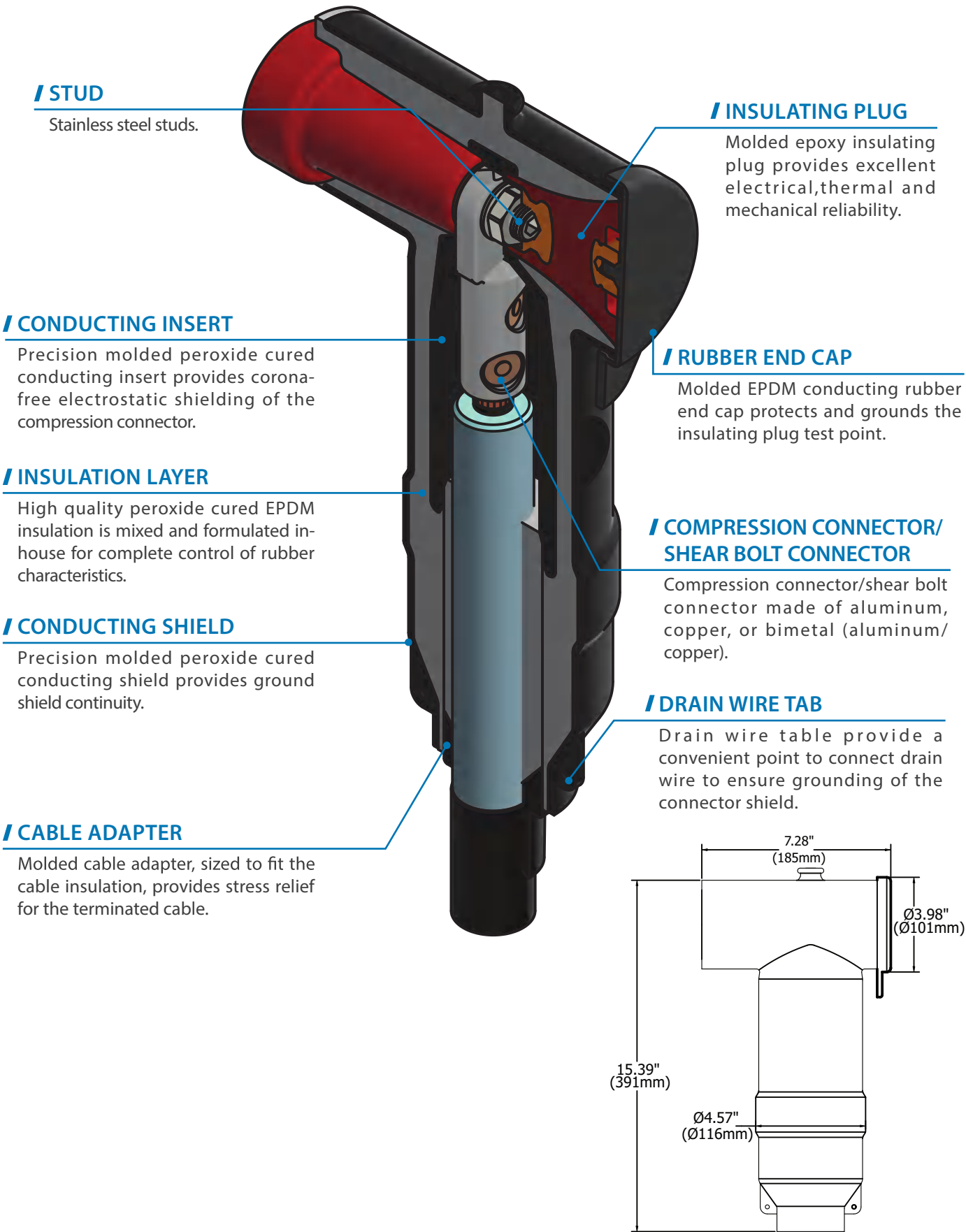
Maximum Voltage Class (U <sub>m</sub> )	42 kV
AC 5 Minute Withstand	117 kV
DC 15 Minute Voltage Withstand	125 kV
Minimum Corona Voltage Level	45 kV < 10 pC
BIL and Full Wave Crest (Impulse)	200 kV
Thermal Short Circuit (Conductor, 3 sec.)	45 kA
Dynamic Short Circuit	100 kA
Continuous Current	1250 A

# PRODUCTION TESTS

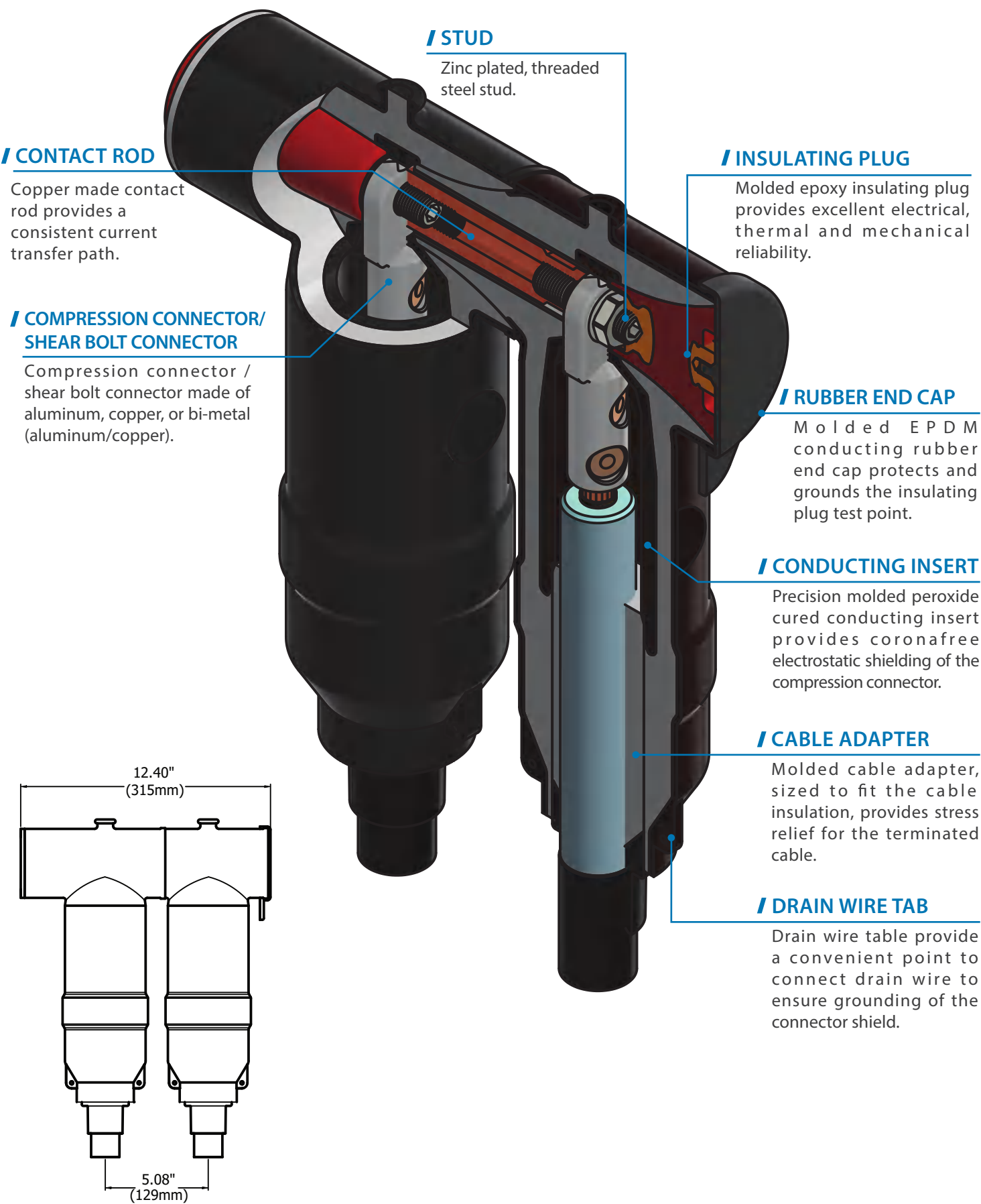
- Tests conducted in accordance with IEC 60502-4.
- Minimum Corona Voltage Level – 45 kV ≤ 10pC
  - AC 5 Minute Withstand – 117 kV

• 42FDT1250-42RDT1250-010323-REV03

# DETAILED COMPOSITION OF THE CHARDON 36 KV AND 42 KV FRONT T-BODY CONNECTOR



DETAILED COMPOSITION OF THE CHARDON  
36 KV AND 42 KV COUPLING (REAR) T-BODY CONNECTOR



ORDERING INFORMATION

42-	---	1250-	—	---	—
	STEP1		STEP2	STEP3	STEP4

STEP1	---
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Selection of Front / Rear T-body

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

STEP2	—
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Selection of Cable Insulation Dimension

Code	mm
D	19.10 - 25.00
E	23.60 - 26.40
F	24.90 - 28.30
G	26.40 - 29.90
H	27.80 - 31.50
J	29.50 - 33.20
K	31.00 - 34.90
L	32.60 - 35.40
M	34.40 - 38.60
N	37.70 - 40.50
P	38.90 - 41.70
Q	40.00 - 42.80
R	42.30 - 45.30
S	44.60 - 47.60
T	46.90 - 49.90
U	49.20 - 52.20
V	51.40 - 54.50



ORDERING INFORMATION

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
500	500
630	630

STEP4

—

Selection of Compression Connector Material

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

ORDERING INFORMATION

Ordering Example:

For a CHARDON 42 kV Front T-body with cable insulation outer dimension of 26.4 mm and a conductor size of 185 mm² with copper compression connector, the part number would be as follows.

42-	FDT	1250	E	185	C
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If a shear bolt connector is selected in this kit, the part number would be as follows:

42-	FDT	1250	E	SBC-B-25-50/1
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Chardon Shear Bolt Connector

Example:  
For a Shear 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	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
SBC-B-500-630/3	500 - 630





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