

# **IEC Separable Connectors 42 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 42kV applications.

# KEY FEATURES

- / Provides a fully shielded and submersible connection whenmated 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% electrically 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, 2 sec twice)	24.1 kA
Dynamic Short Circuit (Conductor, 10ms)	85.2 kA
Continuous Current	630 A

# PRODUCTION TESTS

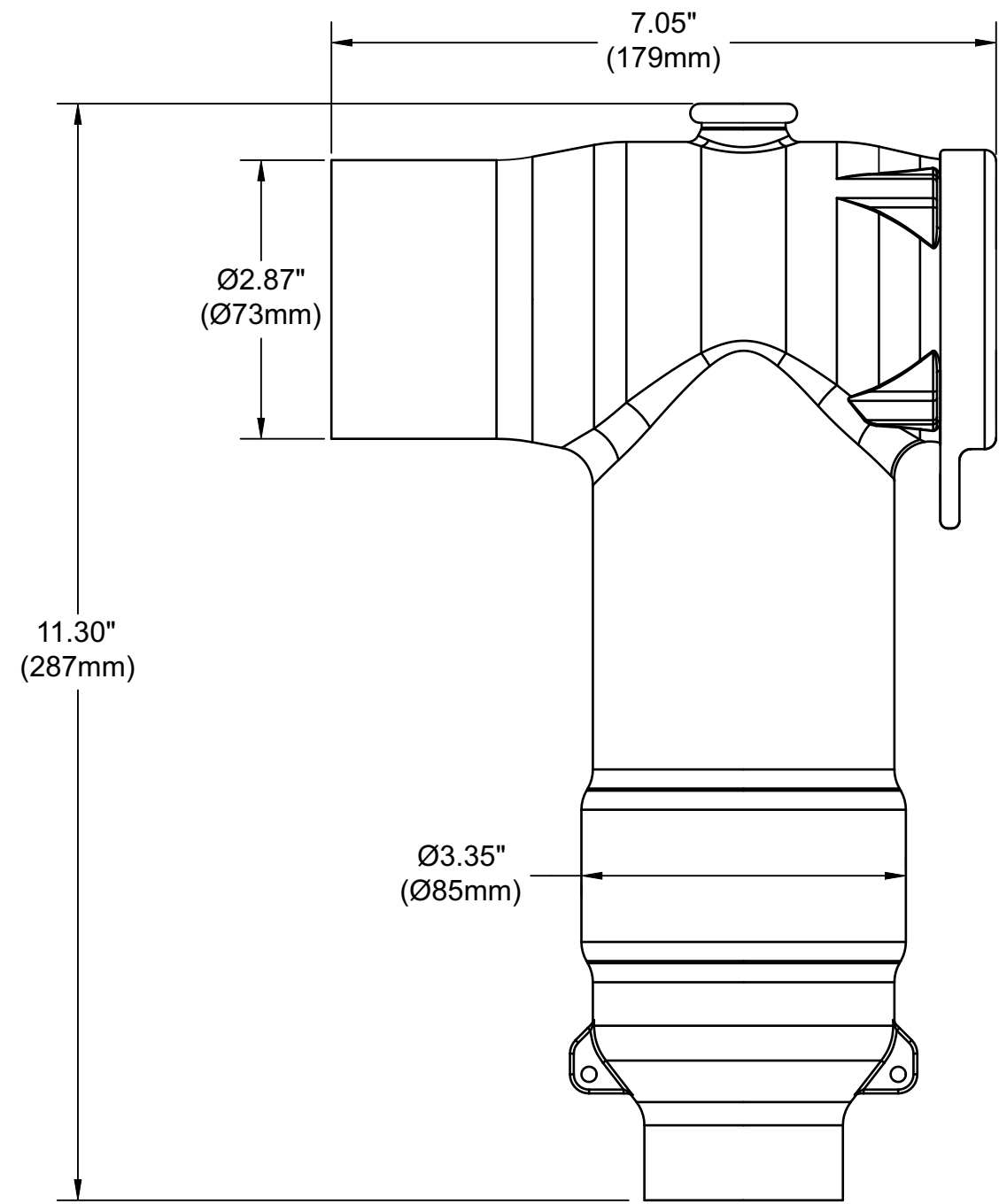
Tests conducted in accordance with IEC 60502-4.

- / Minimum Corona Voltage Level – 45 kV ≤ 3pC
- / AC 5 Minute Withstand – 117 kV

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



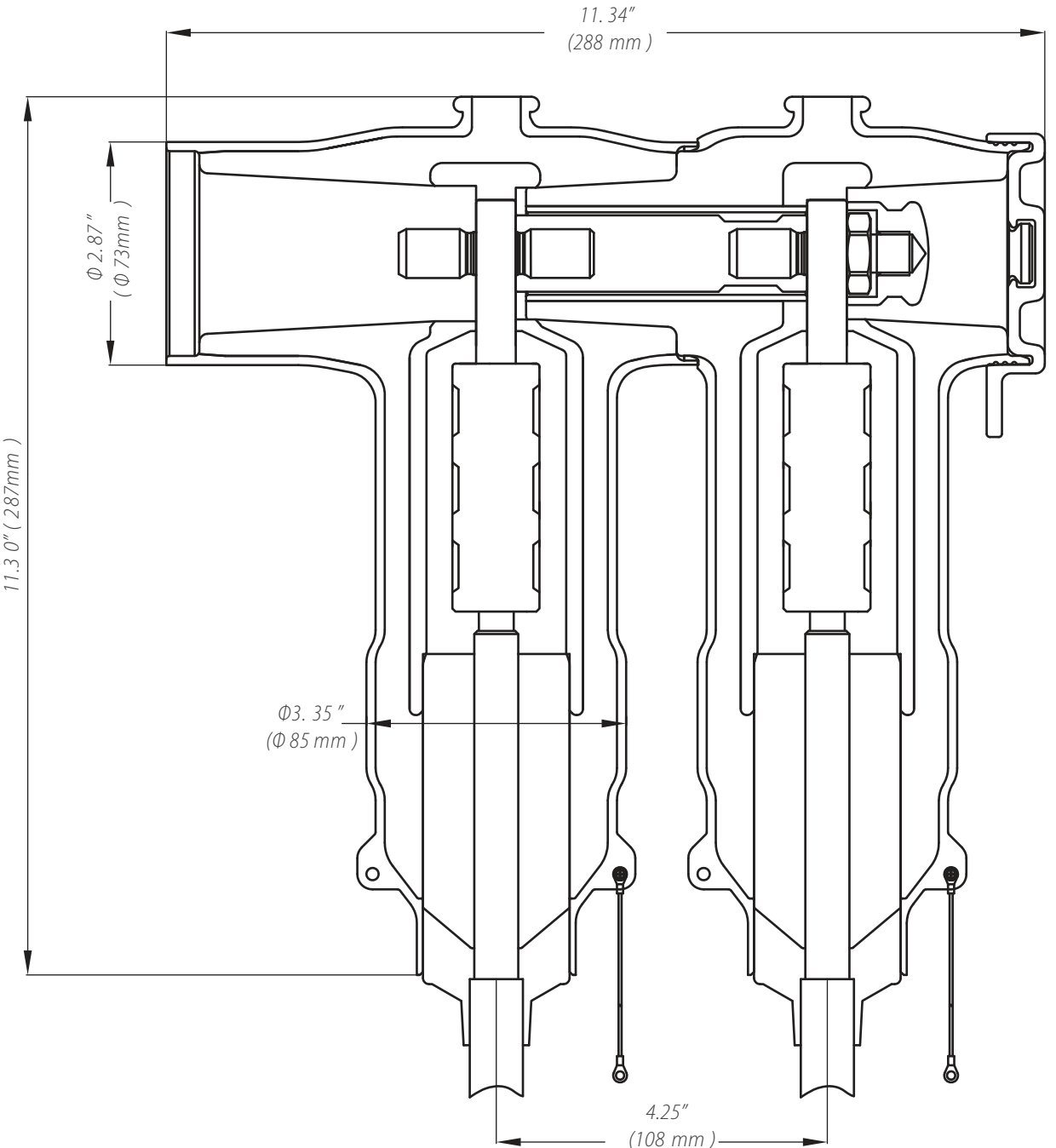
**DETAILED COMPOSITION OF THE CHARDON  
42 KV FRONT T-BODY CONNECTOR**



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



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



ORDERING INFORMATION

42-	---	630-	-	---	-
	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

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)
LJ	36.0 - 39.0 (1.417 - 1.535)
LK	38.0 - 42.0 (1.496 - 1.654)

STEP3	---
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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	-
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Selection of Compression Connector Material

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

Ordering Example:

For a CHARDON 42 kV Front T-body with cable insulation outer dimension of 39.0 mm and a conductor size of 185 mm² with copper compression connector, the part number would be as follows.

42-	FDT	630	LK	185	C
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If a shear bolt connector is selected in this kit, the part number would be 42-FDT630LK-SBC-B-150-240/2.

42-	FDT	630	LK	SBC-B-150-240/2
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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







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