

# Chardon 35kV Class Class Deadbreak Accessories and Replacement Parts



## APPLICATION

Chardon 600A 35kV Class Deadbreak Accessories are used to connect and assemble 600A products to provide fully shielded and submersible connections.

Chardon's products meet all the requirements of IEEE Standard 386, and are fully interchangeable with competitor's products that also meet IEEE standard 386.

## PRODUCTION TESTS

Tests conducted in accordance with IEEE/ANSI Standard 386™:

- / AC 60 Hz 1 Minute Withstand – 50 kV
- / Minimum Corona Voltage Level – 26 kV

## VOLTAGE RATINGS AND CHARACTERISTICS

Voltage Class	35 kV
Max. Rating Phase to Ground	21.1 kV
AC 1 Minute Withstand	50 kV
DC 15 Minute Withstand	103 kV
BIL and Full Wave Crest	150 kV
Minimum Corona Voltage Level	26 kV

## CURRENT RATINGS AND CHARACTERISTICS

Description	Amperes
Continuous	600 A rms
24 Hour Overload	1,000 A rms
Short Time	• 25,000 A rms symmetrical for 0.17s • 10,000 A rms symmetrical for 3.0s

• 35-600A-REPLACEMENT PART-030420-REV06

## INSULATING PLUG (EPOXY) AND CAP

A one-inch socket and torque wrench are needed to tighten the insulating plug into a de-energized deadbreak connector and mating apparatus. Refer to Chardon instruction sheet for detail.

Capacitive test point allows circuit testing without interrupting the connection. The one inch-hex head provides easy assembly to the connector and mating parts.

A semi-conducting EPDM rubber cap fits over the insulating plug for a waterproof seal and deadfront shielding.



## CONNECTING PLUG (EPOXY)

A spanner wrench is used to tighten the connecting plug into a deenergized deadbreak connector or mating part.

A conductive coating around the center provides continuity of semiconducting shield with EPDM shield of mating parts. Holes in the part allow easy assembly using a spanner wrench.

Chardon connecting plugs can be used for connecting 2 or more 600A deadbreak connectors.



## THREADED STUD

The threaded stud is used with a T-Body connector or splices to connect reducing well plugs, deadbreak tap plugs, connecting plugs, and insulating plugs to other components or apparatus bushings.



## CABLE ADAPTER (EPDM)

Molded cable adapter is available in sizes to fit cables from 0.640" to 1.985" in diameter (16.3 mm to 49.9 mm). The Chardon cable adapter is molded with high quality peroxide cured insulation and semiconductive.



## COMPRESSION CONNECTOR

Compression connectors are available in all aluminum, all copper (for 900A applications), or bi-metal designs. All are available with threaded and unthreaded holes. See Conductor Code Table for proper application. All connectors are designed for use with either aluminum or copper conductors.



## CHARDON SHEAR BOLT CONNECTOR

Chardon shear bolt connectors are designed for use in low and medium voltage connection. The tool require disastandard ratchet wrench with a hexagonal socket; no crimping tools needed in field operation.



## ORDERING INFORMATION

### Cable Adapters

These adapters are used on Chardon T-Bodies. To select the correct adapter, determine the minimum and maximum diameter over insulation for the cable as shown in Figure (insert diagram). Then reference the Cable Diameter Range Table to select proper code.

**Cable Adapters**    35-ADP+Cable Diameter Range Code

Example :  
For cable with nominal insulation diameter of 1.400", select the 35-ADP-J.

### Cable Diameter Range Table

Range Code	Inches	mm
D	0.750 - 0.985	19.1 - 25.0
E	0.930 - 1.040	23.6 - 26.4
F	0.980 - 1.115	24.9 - 28.3
G	1.040 - 1.175	26.4 - 29.8
H	1.095 - 1.240	27.8 - 31.5
J	1.160 - 1.305	29.5 - 33.1
K	1.220 - 1.375	31.0 - 34.9
L	1.285 - 1.395	32.6 - 35.4
M	1.355 - 1.520	34.4 - 39.0
N	1.485 - 1.595	37.7 - 40.5
P	1.530 - 1.640	38.9 - 41.7
Q	1.575 - 1.685	40.0 - 42.8
R	1.665 - 1.785	42.3 - 45.3
S	1.775 - 1.875	45.1 - 47.6
T	1.845 - 1.965	46.9 - 50.0
U	1.935 - 2.055	49.1 - 52.2
V	2.025 - 2.145	51.4 - 54.5

## ORDERING INFORMATION

### Compression Connectors

To order a compression connector, select the connector type and reference to the conductor code table below for desired connector part number.

<b>Bi-Metal Connector</b>	600BMC + Conductor Code
<b>Aluminum Connector</b>	600AC + Conductor Code
<b>Copper Connector</b>	900CC + Conductor Code

Example :

For a 600A bi-metal compression lug with a conductor code of 550, the part number would be : 600BMC0550.

### Compression Lug Conductor Code Chart

CONDUCTOR CODE	Concentric or Compressed		Compact or Solid	
	AWG or kcmil	mm <sup>2</sup>	AWG or kcmil	mm <sup>2</sup>
0002	#2	35	#1	-
0001	#1	-	1/0	50
0010	1/0	50	2/0	70
0020	2/0	70	3/0	-
0030	3/0	-	4/0	95
0040	4/0	95	250	120
0250	250	120	300	150
0300	300	150	350	-
0350	350	-	400	185
0400	400	185	450/500	-
0450	450	-	500/550	240
0500	500	240	600	300
0550	550	-	650	-
0600	600	300	700	-
0650	650	-	750	400
0750	750	400	800	-
0800	800	-	900	-
0900	900	-	1000	500
1000	1000	500	-	-

## ORDERING INFORMATION

### Chardon Shear Bolt Connector

Example:

For a Shear Bolt Connector with a conductor Range between 20-50 mm<sup>2</sup>, the part number would be : SBC-B-25-50/1.

CATALOG NO.	Conductor Range(mm <sup>2</sup> )
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-500/3	500
SBC-B-500-630/3	500 - 630

Insulating Plugs	
35 kV, 600A Insulating Plug (AL)	35-IP600
35 kV, 600A Insulating Plug (AL) + End Cap	35-IP600C
35 kV, 600A Insulating Plug (AL) + End Cap + Stud	35-IP600CS

Connecting Plugs	
35 kV, 600A Deadbreak Connecting Plug (AL)	35-DCP600
35 kV, 900A Deadbreak Connecting Plug (CU)	35-DCP900

Threaded Studs	
35 kV 600A Threaded Stud (AL)	35-STUD600
35 kV 900A Threaded Stud (CU)	35-STUD900



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