



# 15/25kV Deadbreak 200A Elbow Connector



## APPLICATION

The Chardon Deadbreak Elbow Connector is a fully shielded and insulated termination for connecting underground cable to transformers, switchgear and other apparatus equipped with deadbreak bushings, junctions, or other deadbreak connectors.

The Chardon Deadbreak Elbow meets all the requirements of IEEE standard 386, and is fully interchangeable with competitor's products and mating products that meet IEEE Standard 386.

Chardon Deadbreak Elbow Connectors are molded using high quality peroxide -cured insulating and semi-conducting EPDM rubber. All insulating rubber is compounded in house, using Chardon - developed proprietary formulations. Chardon Deadbreak Elbow Connecters and copper probe are combined with the bi-metal compression lug, this ensures a reliable operating connection.

## **PRODUCTION TESTS**

#### Tests conducted in accordance with IEEE/ANSI Standard 386.

- Minimum Corona Voltage Level 19 kV
- AC 1 Minute Withstand 40 kV
- Test Point Voltage Test

#### Tests conducted in accordance with Chardon manufacturing process requirements:

- Physical Inspection
- Periodic Dissection
- Periodic X-ray Analysis

## **VOLTAGE RATINGS**

Voltage Class	25 kV
Max. Rating Phase to Ground	15.2 kV
AC 1 Minute Withstand	40 kV
DC 15 Minute Withstand	78 kV
BIL and Full Wave Crest	125 kV
Minimum Corona Voltage Level	19 kV

## **CURRENT RATINGS**

Description	Test Parameters
Continuous	200 amps rms
Short Time	<ul> <li>10,000 amps rms symmetrical for 0.17 s</li> <li>3,500 amps rms symmetrical for 3.0 s</li> </ul>

## **DETAILED COMPOSITION OF THE CHARDON DEADBREAK ELBOW CONNECTOR**

#### **I** SEMICONDUCTING SHIELD

Precision molded peroxide cured semiconducting shield provides ground shield continuity and meets the requirements of IEEE Standard 592.

#### **I** CABLE ENTRANCE

The sized cable entrance provides an interference fit to maintain a watertight seal.

#### **I** DRAIN WIRE TAB

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

#### **INSULATION LAYER**

High quality peroxide cured EPDM insulation is mixed and formulated inhouse for complete control of rubber characteristics.

#### **COMPRESSION CONNECTOR**

Compression connector is sized to ensure a cool running connection with maximum current transfer.

• Revision Date: 12.20.2024



#### **CAPACITIVE TEST POINT**

Capacitive test point on molded Elbow with snap-on cap provides a shielded, hotstick operable means to determine circuit condition.

#### **/** PULLING EYE

Stainless steel pulling eye for hotstick operations.

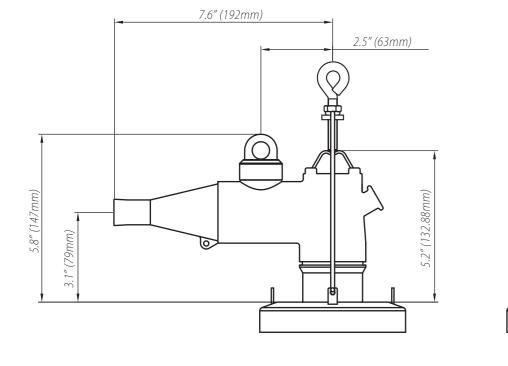
#### **I** SEMICONDUCITING INSERT

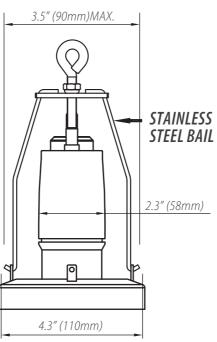
Precision molded peroxide cured semiconducting insert provides corona-free electrostatic shielding of the compression connector.

#### **PROBE**

Tin plated copper probe ensures reliable electrical connection.

### DETAILED COMPOSITION OF THE CHARDON DEADBREAK ELBOW CONNECTOR





## **ORDERING INFORMATION**

15/25kV Deadbreak Elbow **Each kit Contains:** 

I	Elbow body	
I	Bi-Metal Compression Lug	
I	Copper Probe	
I	Probe Installation Tool	

### To order a Chardon 25kV Deadbreak Elbow Kit, follow the steps below:

25-DE200	"W"	"X"	"Y"	"Z"
W"= Enter T if want a Capacitive Test Point				

- **"X**" = Cable Range Code (See Cable Range Table)
- "**Y**" = Conductor Code (See Conductor Table)
- "Z" = Enter C if a Plated Copper Connector is needed Enter B if a Bi-metal Connector is needed

#### Cable Range Table (Insulation Diameter)

Cable Range Code	Inches	Millimeters
AA	0.508 - 0.685	12.9 - 17.4
Α	0.642 - 0.807	16.3 - 20.5
В	0.768 - 0.945	19.5 - 24.0
С	0.906 - 1.106	23.0 - 28.1

### **Conductor Code Table (Compression Connectors)**

CONDUCTOR	Concentric or Compressed		Compact or Solid	
CODE	AWG or kcmil	mm²	AWG or kcmil	mm <sup>2</sup>
01	#6	-	#4	-
02	#4	-	#3	25
03	#3	25	#2	35
04	#2	35	#1	-
05	#1	-	1/	50
06	1/	50	02/	70
07	02/	70	03/	-
08	03/	-	04/	95
09	04/	95	025	120
10	260	120	300	-

Example :

To order a standard Chardon 25kV Deadbreak Elbow with a cable insulation diameter of 0.990", a 3/0 bi-metal compression connector, and a capacitive test point, order the part number 25-DE200TC08B.



- Bail Assembly
- Silicone Lubricant
- Installation Instruction Sheet



**CHARDON** TAIWAN CORPORATION

No.37 Min-Chie Road, Tung Lo Industrial Park, Miao Li, Taiwan 366 Tel : +886-37-984385 Fax : +886-37-984770

www.chardongroup.com • info@chardongroup.com