

200A, 25 kV Class Loadbreak Elbow



APPLICATION

The Chardon Loadbreak Elbow is a fully shielded and insulated termination for connecting underground cable to transformers, switchgear, and other apparatus equipped with loadbreak bushings, junctions, or other loadbreak connectors. The bushing insert and loadbreak elbows are the primary components in all ANSI/IEEE loadbreak connections.

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

Chardon Loadbreak Elbow 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.

The Chardon Loadbreak Elbow include a stainless steel pulling eye. An optional capacitive test point is available. Included with the Elbow kit is a bi-metal or copper compression connector, and a tin plated copper probe with an arc quenching tip.

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

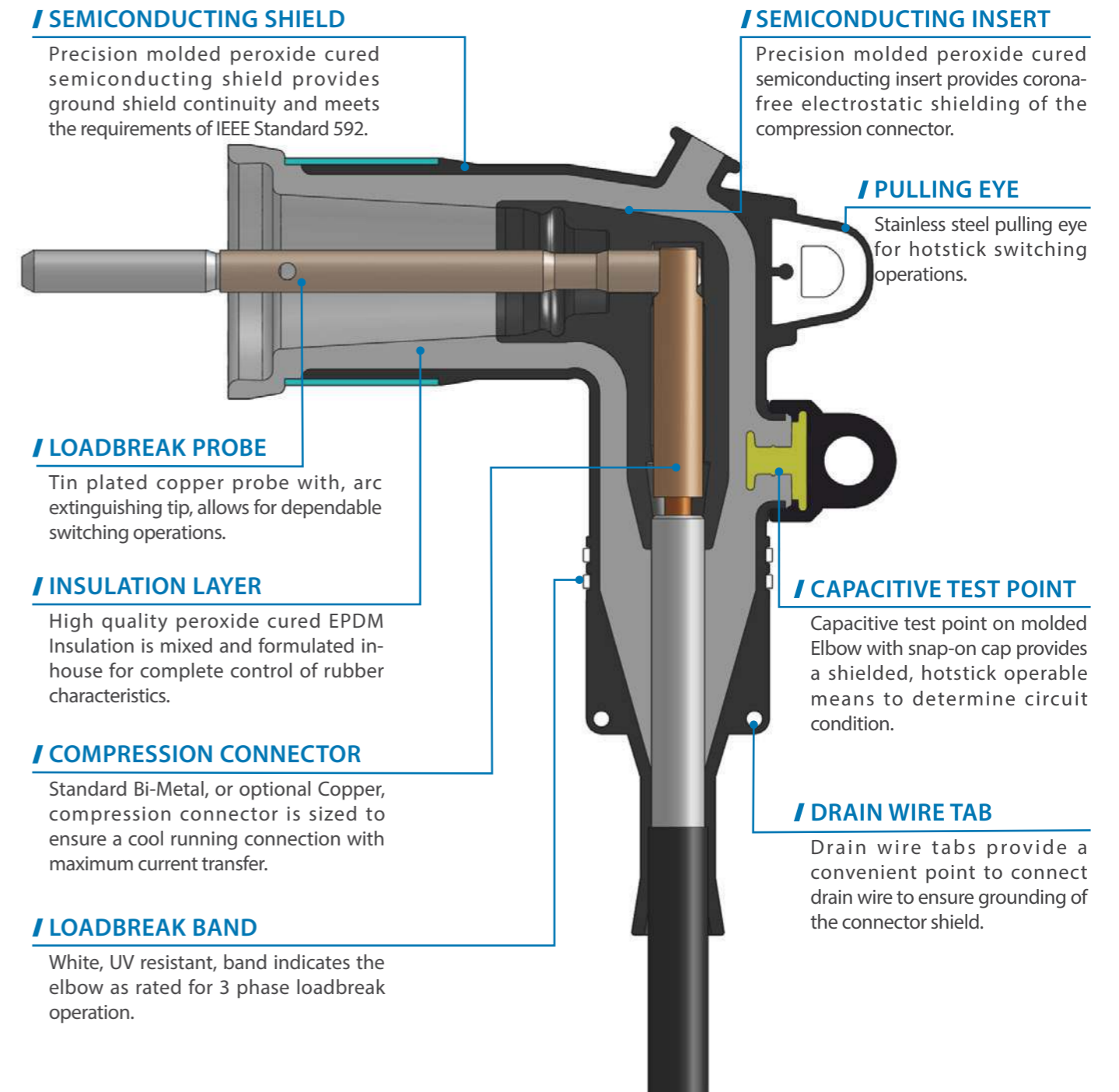
| | |
|------------------------------|---------|
| Voltage Class | 25 kV |
| Max. Rating Phase to Phase | 26.3 kV |
| Max. Rating Phase to Ground | 15.2 kV |
| AC 1 Minute Withstand | 40 kV |
| DC 15 Minute Withstand | 78 kV |
| BIL and Full Wave Crest | 125 kV |
| Minimum Corona Voltage Level | 19 kV |

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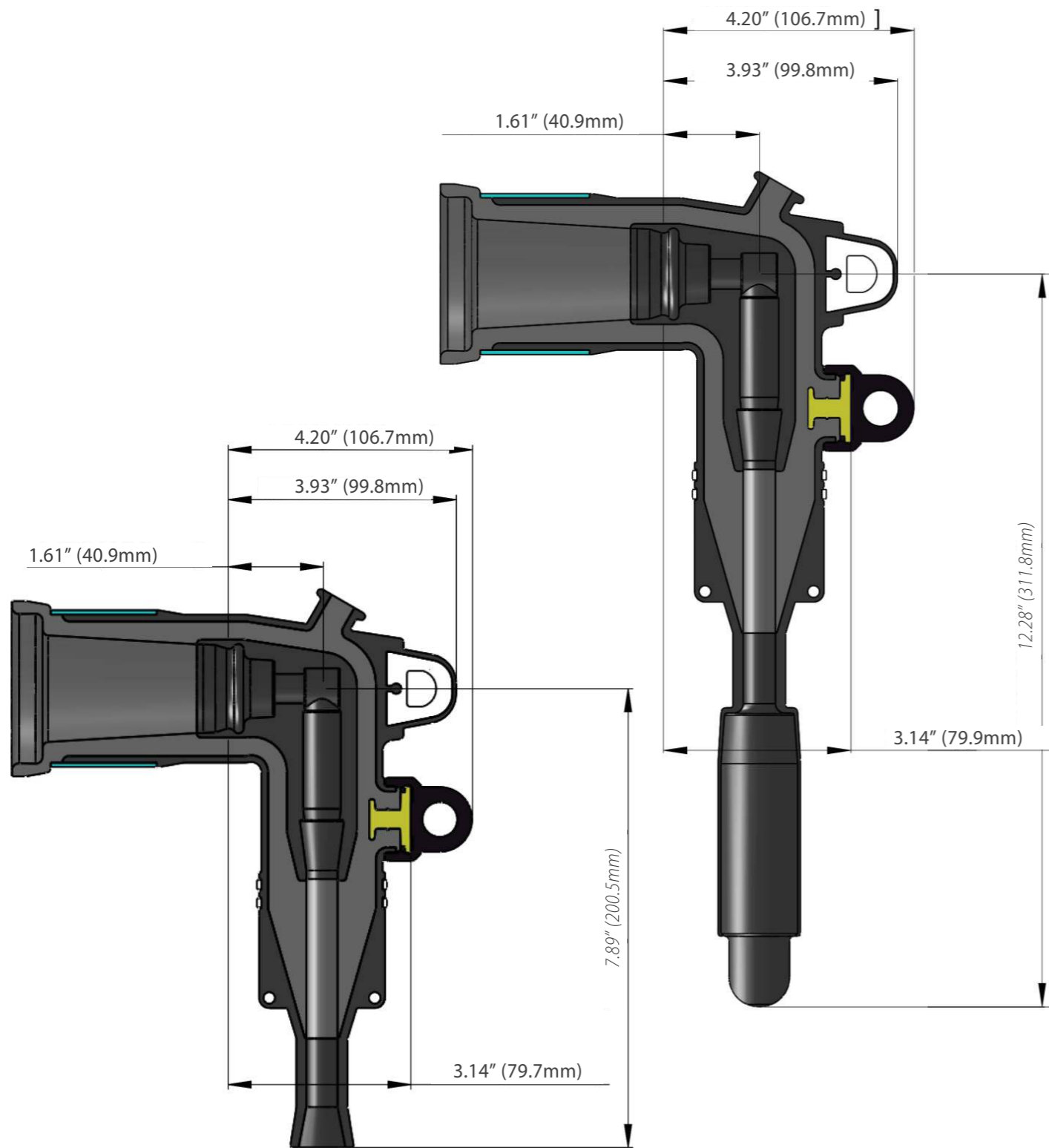
CURRENT RATINGS

| Description | Test Parameters |
|-------------|--|
| Continuous | 200 amps rms |
| Switching | 10 operations at 200 amps rms at 26.3 kV |
| Fault Close | 10,000 amps rms symmetrical at 26.3 kV for 0.17 s after 10 consecutive successful switching operations |
| Short Time | • 10,000 amps rms symmetrical for 0.17 s • 3,500 amps rms symmetrical for 3.0 s |

DETAILED COMPOSITION OF THE CHARDON 25 KV LOADBREAK ELBOW



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ORDERING INFORMATION

Chardon Loadbreak Fuse Elbow kits are packaged in a heavy duty plastic bag.

Each elbow kit includes the following:

- / Silicone Grease
- / Plated Copper Probe
- / Probe Installation Wrench
- / Elbow or Elbow with Integral Jacket Seal
- / Bi-Metal or Copper Compression Connector
- / Mastic Strips (Integral Jacket Seal Elbow Only)
- / Installation Instructions

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

| | | | | | |
|-----------------|------------|------------|------------|------------|------------|
| 25-LE200 | "U" | "W" | "X" | "Y" | "Z" |
|-----------------|------------|------------|------------|------------|------------|

"U" = Enter **J** if an Integral Jacket Seal is Desired

"W" = Enter **T** if want a Capacitive Test Point

"X" = Cable Range Code (A, B, C or D)

"Y" = Conductor Code (See table)

"Z" = Enter **C** if a Plated Copper Connector is Desired (Bi-metal are standard)

Note :

Bi-metal lug for use on copper and aluminum conductors. Cooper lug for use on cooper conductors only.

25 kV, 200A Loadbreak Cable Ranges (Insulation Diameter)

| Cable Range Code | Inches | Millimeters |
|------------------|---------------|---------------|
| A | 0.610 - 0.875 | 15.49 - 22.23 |
| B | 0.720 - 0.985 | 18.29 - 25.02 |
| C | 0.920 - 1.185 | 23.37 - 30.10 |
| D | 1.040 - 1.305 | 26.42 - 33.15 |

Note :

The elbow with integral jacket seal only has size B and C available.

Conductor Code Table

| CONDUCTOR CODE | Concentric or Compressed | | Compact or Solid | |
|----------------|--------------------------|-----------------|------------------|-----------------|
| | AWG or kcmil | mm ² | AWG or kcmil | mm ² |
| 01 | #6 | - | #4 | - |
| 02 | #4 | - | #3 | 25 |
| 03 | #3 | 25 | #2 | 35 |
| 04 | #2 | 35 | #1 | - |
| 05 | #1 | - | 1/0 | 50 |
| 06 | 1/0 | 50 | 2/0 | 70 |
| 07 | 2/0 | 70 | 3/0 | - |
| 08 | 3/0 | - | 4/0 | 95 |
| 09 | 4/0 | 95 | 250 | 120 |
| 10 | 250 | 120 | 300 | - |

Example :

To order a standard Chardon 25 kV Loadbreak Elbow with a cable insulation diameter of 0.990", a 3/0 bi-metal compression connector and a capacitive test point, order the following part number: 25-LE200TC08.



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