



600A, 15 kV Class Elbow Tap Plug (ETP) Loadbreak Reducing Tap Plug (LRTP)



APPLICATION

The Chardon Elbow Tap Plug (ETP) and Load Reducing Tap Plug (LRTP) are used to convert a standard 600A deadbreak interface to a standard 200A loadbreak interface.

The ETP is ideal for applications where a 200A tap is desired for test or ground purposes. The ETP is also ideal for adding a 200A tap to an existing 600A T-Body connector. The 200A interface allows for live test, visible ground, addition of a 200A tap, or installation of an elbow arrester.

The LRTP is ideal for applications where the termination will be separated to achieve a visible break and ground. Having the T-body and LRTP connected, as one unit, makes it easier to install and remove from the mating bushing interface. The 200A interface allows for live test, phasing,

and visible ground. In addition, it can be used to add a 200A tap, or for the installation of an elbow arrester. The LRTP has a factory installed alignment guide with a shear pin that allows the alignment guide to disengage after installation. When the LRTP is screwed into the threaded insert of a bushing extender or threaded 600/900A compression connector, the alignment guide disengages once the proper amount of torque is applied.

Both the ETP and LRTP meet all the requirements of IEEE Standard 386, and are 200A three phase switching and three phase fault close rated.

The Chardon ETP and LRTP incorporate an all copper current path. This provides reliable and consistent performance under all conditions.

PRODUCTION TESTS

Tests conducted in accordance with IEEE/ANSI Standard 386.

- Partial Discharge 11 kV ≤5pC
- / AC 1 Minute Withstand 34 kV

Tests conducted in accordance with Chardon manufacturing process requirements:

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

VOLTAGE RATINGS

| Voltage Class | 15 kV |
|-----------------------------|-----------|
| Max. Rating Phase to Phase | 14.4 kV |
| Max. Rating Phase to Ground | 8.3 kV |
| AC 1 Minute Withstand | 34 kV |
| DC 15 Minute Withstand | 53 kV |
| BIL and Full Wave Crest | 95 kV |
| Partial Discharge | 11 kV≤5pC |

CURRENT RATINGS

| | Description | Amperes |
|--------------------------------------|-------------|--|
| Continuous 600A Interface Short Time | Continuous | 600 amps rms |
| | Short Time | • 25,000 amps rms symmetrical for 0.17 s • 10,000 amps rms symmetrical for 3.0 s |
| 200A Interface | Continuous | 200 amps rms |
| | Switching | 10 operations at 200 amps rms at 14.4 kV |
| | Fault Close | 10,000 amps rms symmetrical at 14.4 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 |

^{*}Note: System design and protection must recognize the ratings of 200A interface.

DETAILED COMPOSITION OF THE CHARDON ELBOW TAP PLUG (ETP)

I LOCKING GROOVE

Locking groove assures proper installation by "locking" into elbow.

| ARC SNUFFER ASSEMBLY

Arc quenching material extinguishes gas during loadbreak operations.

/ FINGER CONTACT

Tin plated copper contact provides a consistent current transfer during switching and fault close operations.

I SEMICONDUCTING SHIELD

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

/ HEX BROACH

5/16" hex broach permits installation with torque tool.

600A INTERFACE





/ STOP RING

Limits piston and finger contact travel during fault close.

/ DRAIN WIRE TAB

Drain wire tabs 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 in-house for complete control of rubber characteristics.

/ THREADED CONNECTION TO T-BODY

5/8" – 11 UNC copper threads provided connection to T-Body connector.

ORDERING INFORMATION

15 kV, 600A Elbow Tap Plug

15-ETP600

DETAILED COMPOSITION OF THE CHARDON LOAD REDUCING TAP PLUG (LRTP)

/ LOCKING GROOVE

Locking groove assures proper installation by "locking" into elbow.

I ARC SNUFFER ASSEMBLY

Arc quenching material extinguishes gas during loadbreak operations.

/ FINGER CONTACT

Tim plated copper contact provides a consistent current transfer during switching and fault close operations.

ISEMICONDUCTING SHIELD

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

/ THREADED CONNECTION TO T-BODY

5/8" – 11 UNC threads provided connection to T-Body connector.

200A INTERFACE



/ STOP RING

Limits piston and finger contact travel during fault close.

INSULATION LAYER

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

I HEX BROACH

5/16" hex broach permits installation with torque tool.

▼ THREADED CONNECTION TO T-BODY

15/16" – 9 NS 2A stationary threads mate with 600A compression connector or bushing extender.

ORDERING INFORMATION

15 kV, 600A Load Reducing Tap Plug

600A INTERFACE

15-LRTP600



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