

HV DRY PLUG-IN TRANSFORMER TERMINATIONS (PHVT-245)

UP TO 245 kV

KEY FEATURES

- Dry interfaces, no oil-filling
- Insulator complies with EN 50299
- Pressure-tight resin housing
- Operates in SF6 and insulating liquids
- Pre-fabricated and factory-tested silicone-rubber stress cone
- Torque-controlled multi-contact conductor bolt
- Available with corona ring set up
- No special tools required to install the termination
- Insulated cable gland for sectionalization
- Type tested according to IEC 60840 and IEC 62067

TE Connectivity's (TE) Raychem high voltage dry plug-in transformer termination (PHVT) is designed for voltage up to 245 kV and installed in transformer cable entry housings. The PHVT is designed such that it is compatible with polymeric insulated cables independent of the manufacturer and can be adapted with respect to grounding required for various cable constructions. The complete system is separated into the epoxy insulator part and the plug-in part using the pre-moulded silicone stress cone.

The insulators are designed according to EN 50299. Hence, the PHVT is suitable for all transformers complying with the above standard. Each individual insulator is hermetically sealed and tested. Also, for entry housings with longer construction length individual adaptors are available. The epoxy insulator can be installed directly at the transformer manufacturer along with the corona ring to shield the termination, saving installation time on-site and reducing the risk of contamination of the cable entry housing.

The plug-in part consists of the pre-moulded silicone body for stress control and a mechanical cable lug for easy installation. The plug can be easily separated and re-installed for maintenance purpose. Accessories and add-on kits can be provided for testing and maintenance.

Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.

HV DRY PLUG-IN TRANSFORMER TERMINATIONS (PHVT-245)



| MECHANICAL DATA | |
|---|--|
| Construction length (with IEC adapter) | 620 (960) mm |
| Operating pressure SF6 | 0,35 - 0,85 MPa |
| Earth connection | 4 x M12 |
| Cantilever force | 4.5 kN |
| Weight Approx. PHVT (Insulator) PHVX (Plug-in) | 110 kg 70 kg |
| Packaging information PHVT (Insulator) PHVX (Plug-in) | 1010 x 550 x 700 mm 1600 x 430 x 700 mm |

NOTE : Weight and packaging information will vary for kits with adaptors or for larger sizes.

| DESIGN DATA | |
|------------------------------------|--|
| Diameter over prepared insulation | 77 - 119 mm |
| Diameter over sheath | Up to 150 mm |
| Cross section (Cu / Al) | Up to 2500 mm ² |
| Conductor connection | Mechanical (shear off bolts) |
| Material of housing | Epoxy resin |
| Material of connection bolt | Aluminium / Copper |
| Method of stress control | Geometric |
| Type of Stress cone | Pre-fabricated silicone rubber |
| Max. permissible dielectric stress | 4 kV/mm (at insulation screen of cable) |
| Corona Shield | For use in insulation liquids an additional corona shield is necessary |
| Installation temperature | 0°C to +40°C |
| Operation temperature | As per equipment |
| Storage temperature | 0°C to +40°C |

| ELECTRICAL TYPE TEST IEC 62067 | |
|--|---------|
| Heating cycle voltage | 254 kV |
| Partial discharge at ambient and elevated temperatures | 190 kV |
| Lightning impulse voltage 1.2µs/50µs | 1050 kV |
| ELECTRICAL ROUTINE TEST IEC 62067 | |
| AC withstand voltage | 318 kV |
| Partial discharge test | 190 kV |



te.com/energy

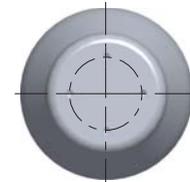
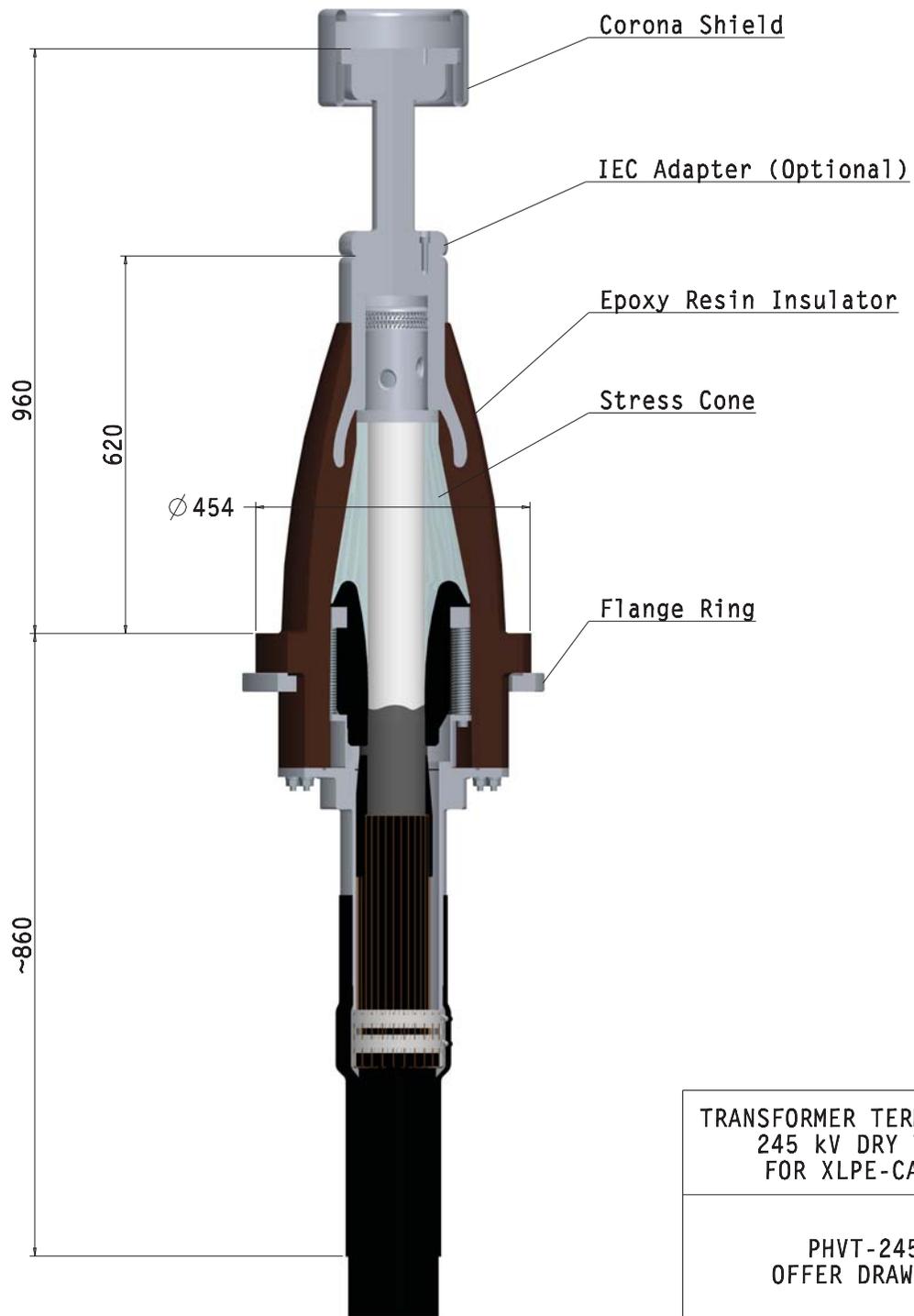
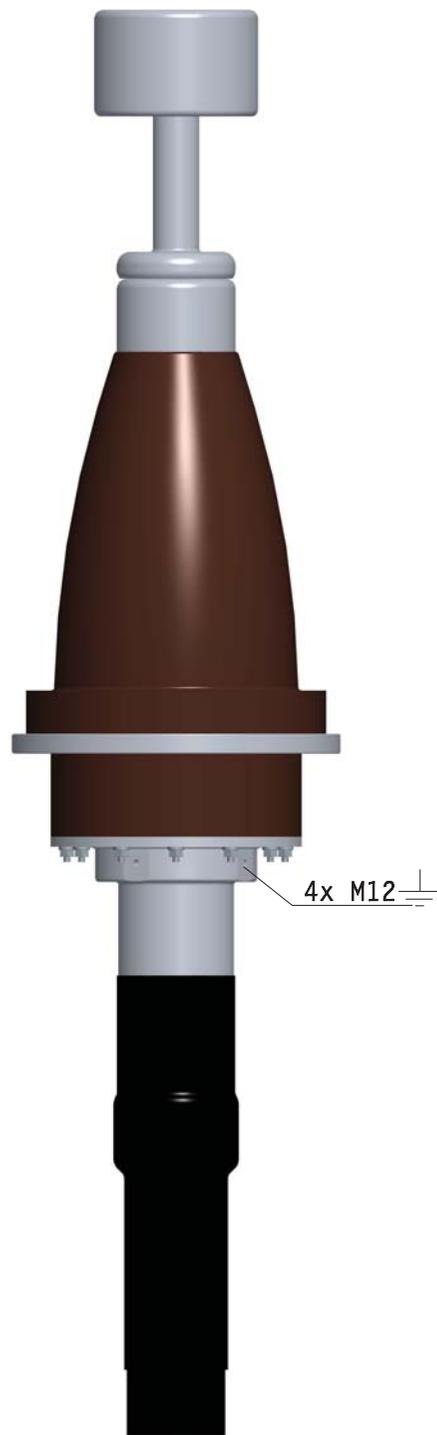
© 2018 TE Connectivity. All Rights Reserved. EPP-3176-DDS-10/18-Plug-in-Termination-PHVT-245

TE Connectivity and TE connectivity (logo) are trademarks. Other logos, product and/or company names might be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

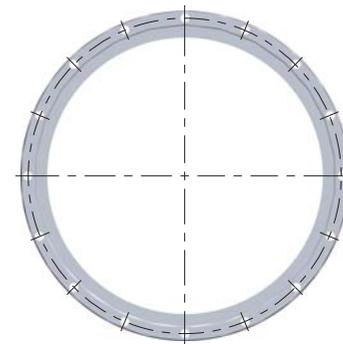
FOR MORE INFORMATION: TE Technical Support Centers

| | |
|-------------------|-----------------------|
| USA: | + 1 800 327 6996 |
| Canada: | + 1 (905) 475-6222 |
| Mexico: | + 52 (0) 55-1106-0800 |
| Latin/S. America: | + 54 (0) 11-4733-2200 |
| France: | + 33 380 583 200 |
| UK: | + 44 0870 870 7500 |
| Germany: | + 49 896 089 903 |
| Spain: | + 34 916 630 400 |
| Italy: | + 39 333 250 0915 |
| Benelux: | +32 16 508 695 |
| Russia: | +7 495-790 790 2-200 |
| China: | + 86 (0) 400-820-6015 |

While TE Connectivity (TE) has made every reasonable effort to ensure the accuracy of the information in the catalog, TE does not guarantee that it is error free, nor does TE make any other representation, warranty or implied warranties regarding the information contained herein, including, but not limited to, any implied warranties or merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purpose only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.



4xM12x25
BORES ON $\phi 110$
CONNECTION INTERFACE
ACC. TO IEC 62271-209



16x $\phi 13$ BORES
ON $\phi 475$
BASE FLANGE
ACC. TO IEC 62271-209

| | |
|---|---|
| <p>TRANSFORMER TERMINATION 245 KV DRY TYPE FOR XLPE-CABLE</p> |  <p>Raychem High Voltage Cable Accessories</p> <p>TE Connectivity drawing no: EPD-204-1399-00</p> |
| <p>PHVT-245 OFFER DRAWING</p> | |

REV. 1