

HV DRY PLUG-IN TRANSFORMER TERMINATIONS (PHVT-145) UPTO 145 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 factorytested 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.







| MECHANICAL DATA | |
|---|--|
| Construction length (with IEC adapter) | 470 (757) mm |
| Operating pressure SF6 | 0,35 - 0,85 MPa |
| Earth connection | 6 x M12 |
| Cantilever force | 4.5 kN |
| Weight Approx. PHVT (Insulator) PHVX (Plug-in) | 55 kg 40 kg |
| Packaging information PHVT (Insulator) PHVX (Plug-in) | 700 × 390 × 650 mm 700 × 390 × 650 mm |

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

| DESIGN DATA | |
|------------------------------------|--|
| Diameter over prepared insulation | 34 - 108 mm |
| Diameter over sheath | Up to 155 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 60840 | | |
|--|--------|--|
| Heating cycle voltage | 152 kV | |
| Partial discharge at ambient and elevated temperatures | 114 kV | |
| Lightning impulse voltage 1.2µs/50µs | 650 kV | |
| ELECTRICAL ROUTINE TEST IEC 60840 | | |
| AC withstand voltage | 190 kV | |
| Partial discharge test | 114 kV | |



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