

## HV DRY PLUG-IN TRANSFORMER TERMINATIONS (PHVT-170) UP TO 170 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	4 × M12
Cantilever force	4.5 kN
Weight Approx. PHVT (Insulator) PHVX (Plug-in)	55 kg 60 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 135 mm
Cross section (Cu / Al)	Up to 2500 mm <sup>2</sup>
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	174 kV	
Partial discharge at ambient and elevated temperatures	131 kV	
Lightning impulse voltage 1.2µs/50µs	750 kV	
ELECTRICAL ROUTINE TEST IEC 60840		
AC withstand voltage	218 kV	
Partial discharge test	131 kV	



## FOR MORE INFORMATION: TE Technical Support Centers

Canada: Mexico: Latin/S. America: France: UK: Germany: Spain: Italy: Benelux: Russia: China:

USA:

+ 1 800 327 6996 + 1 (905) 475-6222 + 52 (0) 55-1106-0800 + 54 (0) 11-4733-2200 + 33 380 583 200 + 44 0870 870 7500 + 49 896 089 903 + 34 916 630 400

- + 39 333 250 0915
- +32 16 508 695 +7 495-790 790 2-200
- + 86 (0) 400-820-6015

## te.com/energy

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