

HIGH VOLTAGE (HV) OUTDOOR TERMINATION OHVT-170C (4E)

UP TO 170 kV

KEY FEATURES

- Pressure-tight and light weight composite housing
- Prefabricated and factory tested silicone rubber stress cone
- No special tools required to install the termination
- Silicone oil filling without preheating
- Isolated base plate for sectionalization
- Fittings made of corrosion-resistant alloy
- Type tested according to IEC 60840 and IEC 62067 standards

TE Connectivity's (TE) Raychem High Voltage Outdoor Termination series (OHVT) is designed for voltages up to 245 kV and can operate under severe environmental conditions. The OHVT 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.

Composite housing with different creepage lengths are available and covers all pollution levels, from common to the most extreme. The installation of the termination can be done by a trained installer equipped with conventional tools. The termination is designed and tested according to the following standards: IEC-60840, IEC-62067, IEC-60815, IEEE-48.

The pressure-tight composite housing is made of a glass fiber reinforced (GFR) resin tube with silicone rubber sheds molded to the tube. The metal fitting associated with the termination consists of a corrosion-free alloy. The cable lug is available both in crimp and shear-off bolt version. It is suitable for all common conductors made of aluminum or copper. The insulator fills from the top with silicone oil, which does not require prior heating. The flexible double sealing system at the lug is installer-friendly and ensures protection against environmental influences. A heat-shrinkable polymeric tube containing oil-resistant sealant encapsulates the connector barrel and the polymeric insulation transition.

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









| MECHANICAL DATA | |
|---|---------------------|
| Length without connection bolt | 2980 mm |
| Outer diameter of insulator | 355 mm |
| Inner diameter of insulator | 248 mm |
| Cantilever force | 4000 N |
| Max. permissible radial pull at connection bolt | 2000 N |
| Diameter of connection bolt | 30/40/50/60 mm |
| Length of connection bolt | 100/130 mm |
| Earth connection | 4 x M12 |
| Weight approx. | 318 kg |
| Silicone-Oil volume approx. | 103 I |
| Packing information | 2800 × 900 × 630 mm |

| DESIGN DATA | |
|---|---|
| Diameter over insulation | 34 - 108 mm |
| Diameter over sheath | 135 mm |
| Max. Cross section (Cu / AI) | Approx. 3000 mm ² |
| Creepage distance | 9436 mm |
| Protected creepage distance [90°C shadow] | 2930 mm |
| Flashover distance | 2626 mm |
| Material of connection bolt | Aluminium / Copper |
| Material of insulator - outer surface | Silicone rubber |
| Profile of insulator | Alternating sheds |
| Colour of insulator | Grey |
| Method of stress control | Geometric |
| Stress cone | Pre-fabricated silicone rubber |
| Max. permissible dielectric stress | 4 kV/mm (at insulation screen of cable) |
| Insulating liquid | Silicone oil |
| Material of fittings | Aluminium |
| Clearance between terminations | As per IEC 60071-1 |
| Installation temperature | 0°C - +40°C |
| Operation temperature | -50°C - +50°C |
| Storage temperature | 0°C - +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 TYPE TEST IEC 60840 ANNEX H | | |
| AC withstand test screen to ground | 25 kV | |
| DC withstand test screen to ground | 25 kV | |
| Lightning impulse test screen to ground | 37.5 kV | |
| ELECTRICAL ROUTINE TEST IEC 60840 | | |
| AC withstand voltage | 218 kV | |
| Partial discharge test | 131 kV | |



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FOR MORE INFORMATION: TE Technical Support Centers

+ 1800 327 6996 USA: +1 (905) 475-6222 Canada: + 52 (0) 55-1106-0800 Mexico: Latin/S. America: + 54 (0) 11-4733-2200 France: + 33 380 583 200 + 44 0870 870 7500 + 49 896 089 903 UK: Germany: + 34 916 630 400 Spain: + 39 333 250 0915 Italy: Benelux: + 32 16 508 695 Russia: + 7 495-790 790 2-200 China: + 86 (0) 400-820-6015



