

HIGH VOLTAGE DRY FLEXIBLE TERMINATION WITH SURGE ARRESTER OHVT-145FA (3A/3B/3C) UP TO 145 kV

KEY FEATURES

- Intelligent combination of two products
- Different surge arrester size combinations
- Compliant to IEC60099-4 and the IEC 60840
- Space and material saving
- Cost-effective solution
- No glueing needed
- Easy to install and maintenance free
- Dry interface, no leakage risk, explosion proof
- Both vertical and horizontal installation possible
- No scaffolding cost, installation on ground
- Ready for lifting immediately after installation

TE Connectivity's (TE) Raychem High Voltage Dry Self-supporting Flexible Outdoor Termination with Surge Arrester (OHVT-FA) is a novelty in the broad product line of TE. The solution, designed for voltages up to 145 kV and to operate under severe environmental conditions, cost efficiently combines the cable termination and the surge arrester into one single space-saving product. The possible combination of different surge arrester sizes results into high flexibility. The OHVT-FA is compatible with polymeric insulated cables independent of the manufacturer.

The cold applied termination without any insulating fluids is a single piece push on solution which requires no glueing. Its push on silicone body is formulated for excellent tracking resistance and pollution resistance due to its hydrophobic body. Additionally to being suitable for all common conductors made of aluminum or copper, the cable lug is also available in shearbolt version.

The surge arrester comprises of a number of ZnO elements, assembled within a open cage construction, which has a silicone rubber moulded shed profile chemically bonded to the surface of the core. Because of its robust and stable build, the surge arrester further serves to enhance the mechanical performance of the termination.

Both individual products are well established and are fully compliant with the IEC60099-4 and the IEC 60840 norm respectively. Compared to the separate installation, the combination into one product has significant advantages as it requires less components, less space and less time to mount.

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

High Voltage Dry Flexible Termination with Surge Arrester OHVT-145FA (3A/3B/3C)



DESIGN DATA OHVT-145 FA

| | |
|--------------------------------|--------------------|
| Length | 2334 mm |
| Outer diameter | 634 mm |
| Cantilever force | 4660 N |
| Diameter of connection bolt | 30/40/50 mm |
| Length of connection bolt | 130 mm |
| Weight approximate | 85 kg |
| Packing information | 2050 × 750 × 500 |
| Material of connection bolt | Aluminum / Copper |
| Installation temperature | 0°C - +40°C |
| Operation temperature | -55°C - +55°C |
| Storage temperature | 0°C - +40°C |
| Clearance between terminations | As per IEC 60071-1 |

| ARRESTER DATA | 3A | 3B | 3C |
|----------------------------------|---------------------------|------------|------------|
| Arrester code | PCA3E-108 | PCA3E-120 | PCA3E-132 |
| Rated voltage | Ur: 108 kV | Ur: 120 kV | Ur: 132 kV |
| Continuous operating voltage | Uc: 86.4 kV | Uc: 96 kV | Uc: 106 kV |
| Rated short circuit current | 65 kA | | |
| Dry impulse voltage (-1.2/50 μs) | 672 kV | | |
| Nominal discharge current | 10 kA | | |
| High current impulse (4/10 μs) | 100 kA | | |
| Energy capability (Wth) | 7.8 kJ/kV at Ur (Thermal) | | |
| Line discharge class | 3 | | |
| Min. Creepage distance | 4500 mm | | |
| Min. Flashover distance | 1113 mm | | |

TERMINATION DATA

| | |
|------------------------------------|---|
| Diameter over insulation | ≤ 78 mm |
| Diameter over sheath | ≤ 100 mm |
| Max. cross section (Cu / Al) | Approximate 1200 mm ² |
| Method of stress control | Geometric |
| Stress cone | Pre-fabricated silicone rubber |
| Max. permissible dielectric stress | 4 kV/mm (at insulation screen of cable) |
| Material of fittings | Aluminum |
| Min. Creepage distance | 4590 mm |
| Min. Flashover distance | 1430 mm |

ELECTRICAL TYPE TEST IEC 60840 (For Termination)

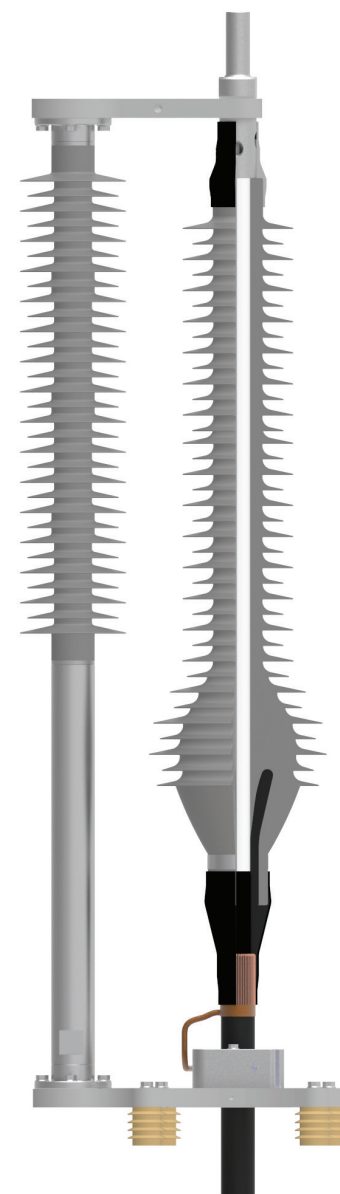
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| Heating cycle voltage | 152 kV |
| Partial discharge at ambient and elevated temperatures | 114 kV |
| Lightning impulse voltage 1.2μs/50μs | 650 kV |

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 | 190 kV |
| Partial discharge test | 114 kV |



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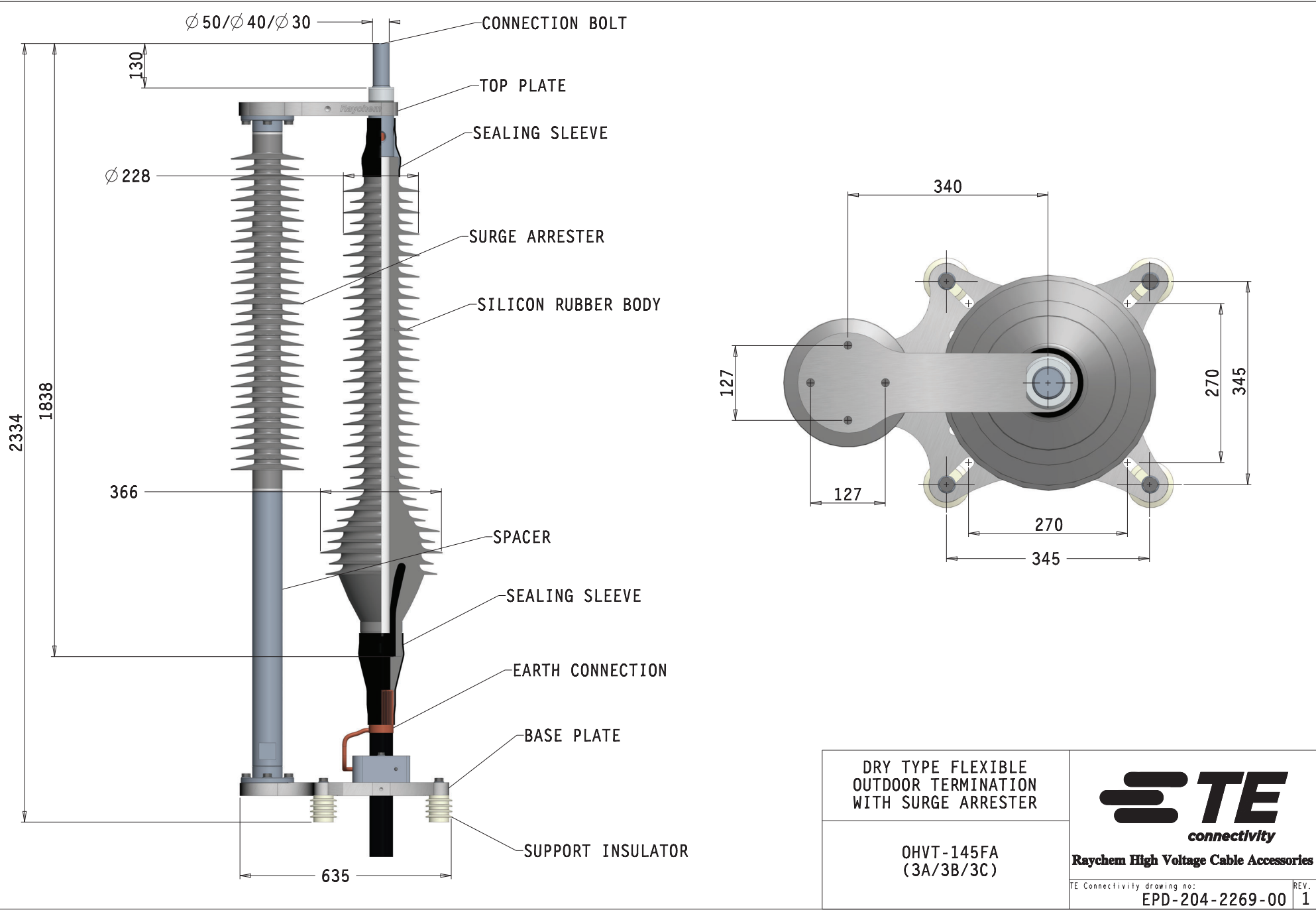
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FOR MORE INFORMATION: TE Technical Support Centers

| | |
|----------------------|----------------------|
| USA/Canada: | +1 800-327-6996 |
| Brazil: | +55 11-2103-6023 |
| Mexico: | +52 55-1106-0800 |
| South America: | +57 1-319-8962 |
| Benelux: | +32 16-508-695 |
| France: | +33 (0) 38-058-3210 |
| Germany/Switzerland: | +49 (0) 89-608-9903 |
| Italy: | +39 335-834-3453 |
| Middle East/Africa: | +971 4-211-7020 |
| Russia: | +7 495-790-790-2-200 |
| Spain/Portugal: | +34 912-681-885 |
| UK: | +44 08708-707-500 |
| China: | +86 400-820-6015 |

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| <p>DRY TYPE FLEXIBLE OUTDOOR TERMINATION WITH SURGE ARRESTER</p> |  |
| <p>OHVT-145FA (3A/3B/3C)</p> | <p>Raychem High Voltage Cable Accessories</p> <p>TE Connectivity drawing no: EPD-204-2269-00 REV. 1</p> |