



Energy Division

Raychem Termination Systems for Polymeric Insulated Cables 72 kV

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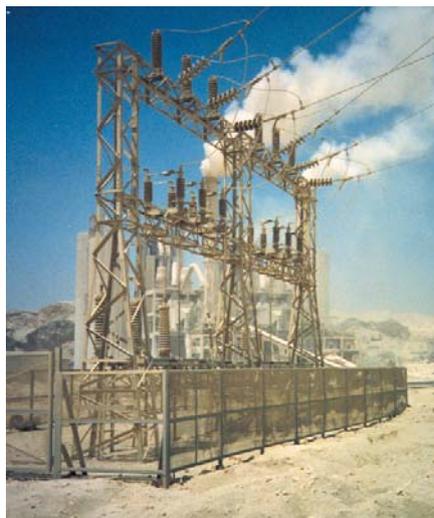
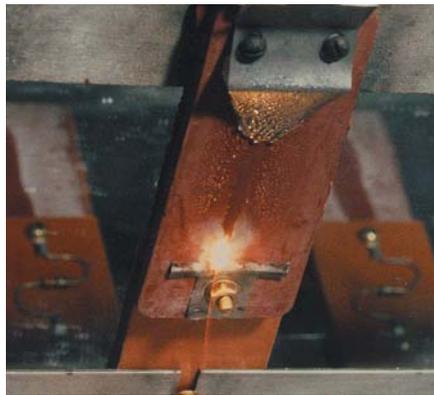
Versatile use

Raychem's 72 kV terminations are suitable for all climates and environments, even severely polluted areas, and for all installation conditions, including top feed installation. The factory-engineered kits contain a proven termination system which saves space, facilitates installation and enhances system reliability. The special design of the termination, which incorporates pre-coated track-resistant sealants that melt during the shrinking process, results in a reliable and lasting barrier against moisture and corrosion.



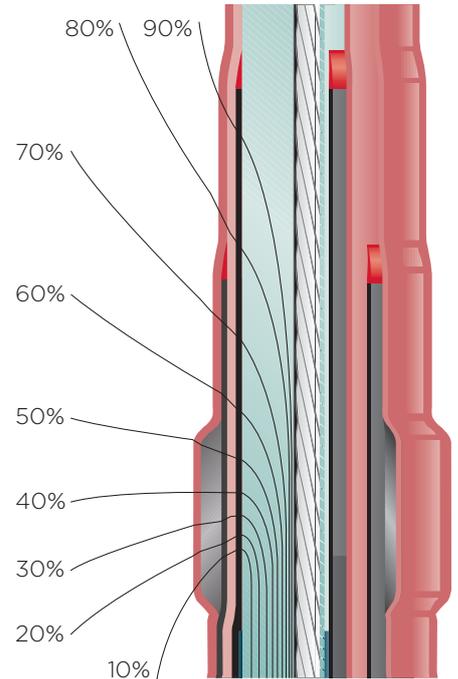
This is the kit ...

The kit contains a limited number of light-weight components with unlimited shelf life under normal storage conditions. The heat-shrinkable sleeves are extremely versatile, and accommodate a wide range of cable diameters. Five basic kits cover all cable sizes, permitting reduced inventories and an efficient stocking policy. The light weight of the components and limited volume of the kits facilitate safe and easy transportation and handling. All components are included in a single box. The set of pre-engineered components requires no special or expensive tools for installation. Installation involves a simple set of standard procedures with no soldering required. Neither does the termination require filling with oil or compound. Risk of leakage is avoided, and filling and topping-up time on the job site is saved.



High-performance material

Raychem terminations are made of a specially formulated material with excellent tracking and erosion resistance characteristics. Accelerated and natural weathering tests which are constantly being carried out at our facilities and independent test sites around the world have demonstrated that the terminations are UV and water resistant and perform reliably even when exposed to sudden temperature variations. A Tracking and Erosion Test as per ASTM D2303 showed no tracking. IEC 112 was also conducted with no erosion or tracking observed.



Electrical stress control

Screened or shielded power cables require electrical stress control in order to reduce the electrical stresses at the end of the screen and at the termination surface to avoid partial discharge and surface corona under all service conditions. Corona or electrical discharge can ultimately destroy the cable insulation, causing premature failure.

Raychem's stress control sleeves have electrical properties that smooth out the electrical field at the end of the cable. This is achieved by the unique resistive and capacitive properties of the heat-shrinkable materials.

Construction and design

Outdoor

Controlled torque lug

Non-tracking
heat-shrinkable
outer insulation

Heat-shrinkable
sheds

Heat-shrinkable
stress-control sleeves

Stress-relief material

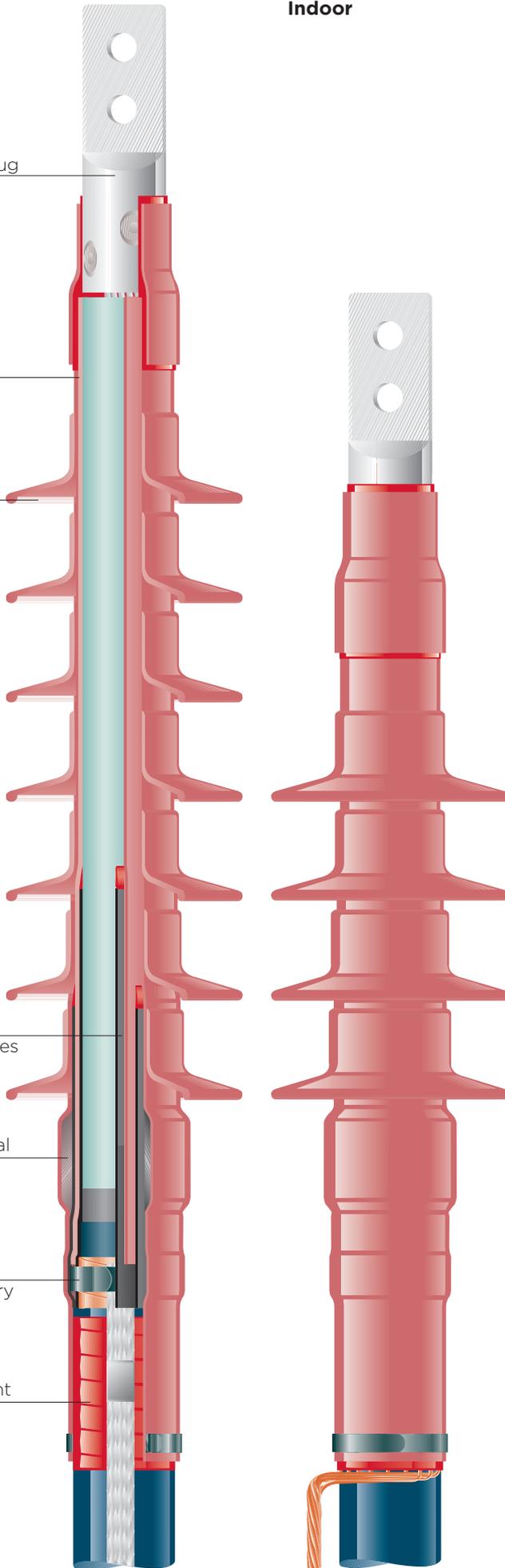
Solderless
grounding accessory

High-voltage sealant

Indoor

A universal system

The material used in Raychem's 72 kV termination is suitable for all climates and environments, it is not susceptible to damage from transportation or vandalism. The termination has a discreet, low profile which allows it to blend into landscapes.



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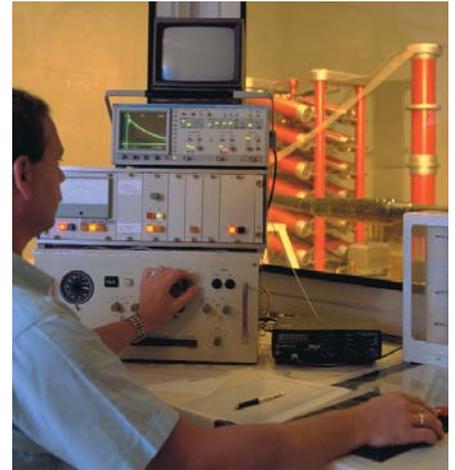
Technical data

Cable insulation diameter range	30 to 86 mm (5 sizes) 1.18 to 3.39 inches
Maximum voltage to ground	40 kV
Basic impulse level	outdoor \pm 350 kV indoor \pm 350 kV
Maximum continuous conductor operating temperature	90 °C
Maximum conductor emergency temperature	130 °C
1 s conductor short circuit temperature	250 °C
Creepage length*	indoor >1450 mm (57.0 inches) outdoor >1900 mm (74.8 inches)

* Longer creepage length on request

The termination has been tested in accordance with international specifications (e.g., IEEE 48, IEC 60840).

For 52 kV polymeric insulated cables similar termination systems are available.



Stripping tool for XLPE cable:

Raychem's stripping tool, designed to remove both semi-conductive screen and dielectric, will help professional jointers to overcome this difficulty.



All of the above information, including drawings, illustrations and graphic designs, reflects our present understanding and is to the best of our knowledge and belief correct and reliable. Users, however, should independently evaluate the suitability of each product for the desired application. Under no circumstances does this constitute an assurance of any particular quality or performance. Such an assurance is only provided in the context of our product specifications or explicit contractual arrangements. Our liability for these products is set forth in our standard terms and conditions of sale. Raychem, TE Logo and Tyco Electronics are trademarks.

Energy Division - innovative and economical solutions for the electrical power industry: cable accessories, connectors & fittings, insulators & insulation, surge arresters, switching equipment, lighting controls, power measurement and control.

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