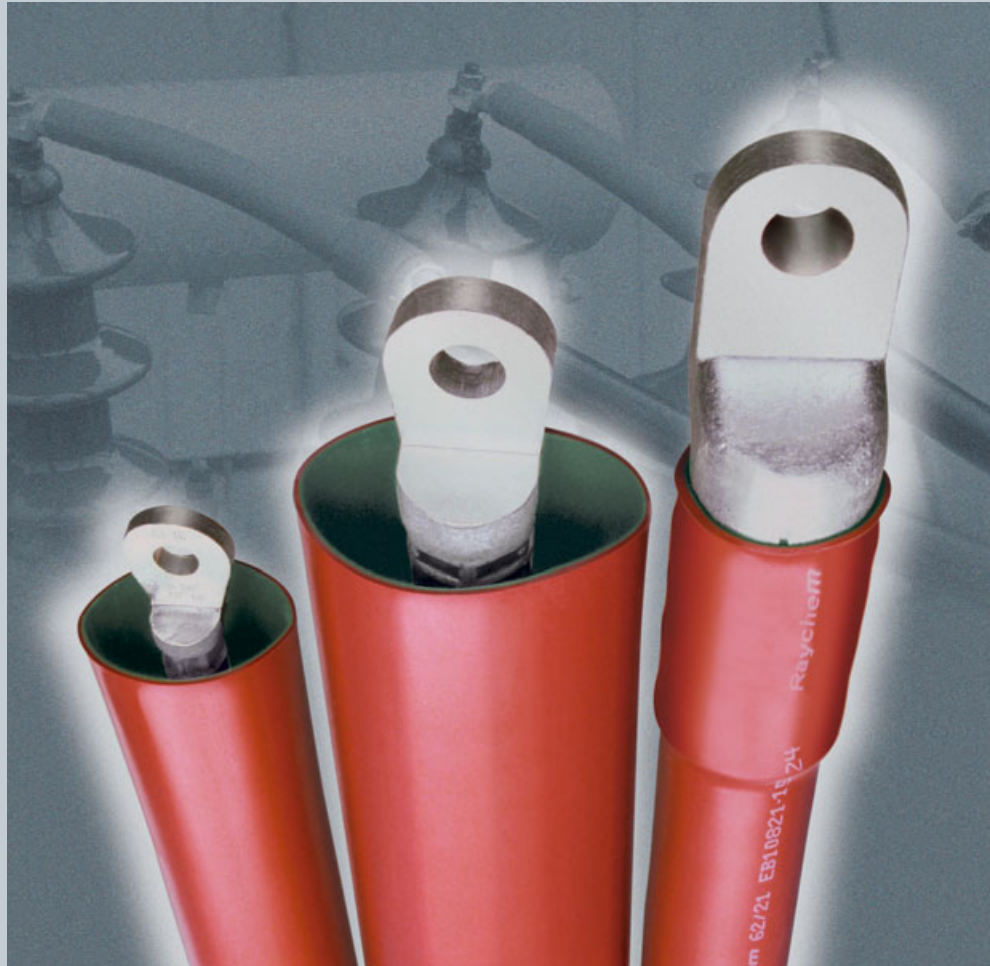


**IXSU-F/OXSU-F**

**Heat-shrinkable medium voltage terminations for indoor and outdoor applications for polymeric cables up to 42 kV**

**Features**

- No sheds for indoor applications up to 42 kV
- High-performance termination material
- Unique zinc oxide stress control system
- Compact design
- Few components
- Simple to install, high reliability
- Mechanical robustness
- Range taking
- No shelf life limitation



**Insulating tubing**

**Stress control and sealant layer**

**Stress controlling void filler**

**Sealant tape**



*IXSU-F indoor termination*

### **The material makes the difference**

Key to the performance of Tyco Energy Division products is the materials science and technology going into their development. Tyco supply heat-shrinkable cable accessories up to 72 kV with a history of excellent performance. Tyco's Raychem heat-shrinkable terminations have a record of proven stability, durability and reliability over many years.

Tyco's Raychem cable accessories have been used by utilities and industrial companies around the world for more than 30 years. This ongoing field experience has made Tyco's Energy Division a leader in materials technology for high-voltage applications. The Energy Division's materials technology is at the core of the development of our new range of heat-shrinkable terminations.

### **Benefits**

- Space saving
- Unlimited shelf life
- Minimal waste for disposal
- Simple and fast to install
- Superior application range

Designed for both indoor and outdoor use in all climate conditions, the IXSU-F/OXSU-F range covers applications for polymeric cables up to 42 kV. The components combine to provide the important functions required for all medium voltage products: electrical performance, stress control and moisture sealing. The proprietary materials used in Tyco's Raychem cable accessories have been extensively optimised with respect to product design and function, manufacturing and expected service environments.

Variations and differences can exist among base polymer grades and additives. Formulations consist not only of polymer but of additives and fillers which greatly influence the material's properties. The formulation, the compounding procedures, material processing, product design and assembly all contribute to the overall product performance.

### **Insulation materials**

The materials used in the IXSU-F/OXSU-F termination generation have undergone many years of development, yielding a polymeric material with exceptional electrical and weathering properties. The formulation is based on proven polymer compounds, exhibiting excellent stability and long-term performance



*IXSU-F terminations installed with Raychem elastomeric bushing boot (RCAB)*



*IXSU-F terminations installed with Raychem insulated connection system (RICS)*

over several decades under severe environmental conditions. It delivers outstanding tracking and erosion resistance, mechanical strength, weatherability and dielectric properties.

### **Stress control materials**

Tyco's Energy Division has formulated a new electrical stress control material, which is based on long experience with Raychem ceramic semiconductor technology (ZnO). The ZnO stress control system is integrated in a heat-shrinkable insulating tubing. It fills any irregularities, bonds to the insulation and achieves excellent electrical performance.

## Product range

The product line is designed for polymer cables from 10 to 1200 mm<sup>2</sup> and up to 42 kV. This coverage is achieved with a minimum number of design variants.

The products are fully tested in accordance with IEEE-48 CENELEC specification HD629.1S1 which encompasses international standards such as IEC 60502-4.

For cable box applications, IXSU-F can be combined with either Raychem's elastomeric bushing boot (RCAB) or Raychem's insulated connection system (RICS) to fit most types of switchgear bushing currently available.

For pole top applications, we can supply OXSU-F along with polymeric support insulators (EPBI), Polygarde metal oxide surge arresters (HDA), and most fittings required for installation.

All IXSU-F/OXSU-F components have full traceability of raw materials and manufacture according to ISO 9001 and ISO 14001.

## Kit content

Each IXSU-F/OXSU-F kit consists of the insulation tubing including coextruded stress control, sealant tapes and installation instructions. For 3-core cables, the kit also includes a conductive breakout and tubing for custom core length. For special applications contact your local sales representative.

Use the EPP 0795 selection guide to select the right kit for your cable range.

## Installation

Each kit contains easy-to-follow installation instructions with excellent visuals of the installation steps. Installation is both fast and simple.

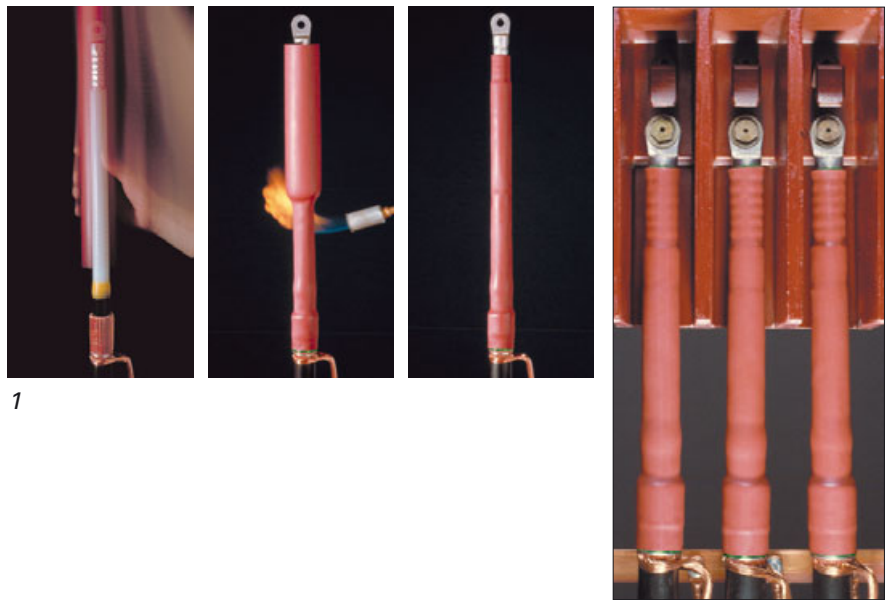
1 Installation of 24 kV termination

2 The slim compact IXSU-F system in a 24 kV switchgear termination

3 IXSU-F terminations connecting 24 kV plastic cables to a substation transformer

4 Overhead live connections for 24 kV using OXSU-F terminations and polymeric support insulators (EPBI)

5) picture 5 ???



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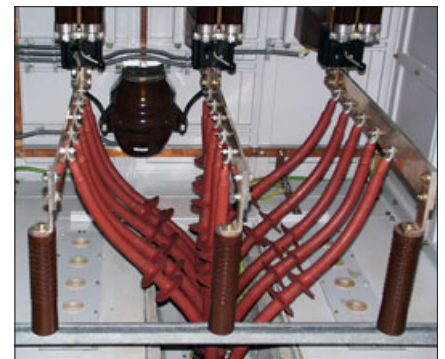
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3



4



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## Features and benefits

### Features

High-performance termination material

Unique zinc oxide stress control system

Integrated stress control over entire termination length

Separate mastic tapes for moisture sealing, specially designed for heat-shrinkable applications

Compact design

Range taking kit

Easy application

### Benefits

Outstanding UV properties  
 Exceptional track and erosion resistance  
 Highly hydrophobic  
 Excellent high-voltage insulation material

Superb high-impulse withstand performance

Ensures stress control system is correctly positioned

Ensures mastic tapes are correctly positioned  
 Excellent resistance to moisture ingress

Space saving and universal application

Fewer kits for a wide range of cable sizes

Time saving, simple to install and high reliability

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. ALR, AMP, AXICOM, B&H, BOWTHORPE EMP, DORMAN SMITH, DULMISON, GURO, HELLSTERN, LA PRAIRIE, MORLYNN, RAYCHEM, and SIMEL are trademarks. CROMPTON is a trademark of Crompton Parkinson Ltd. and is used by Tyco Electronics under licence.



**Energy Division – a pioneer in the development of economical solutions for the electrical power industry. Our product range includes: cable accessories, connectors & fittings, electrical equipment, instruments, lighting controls, insulators & insulation enhancement and surge arresters.**

For more information and your country contact person, please visit us at:  
<http://energy.tycoelectronics.com>

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