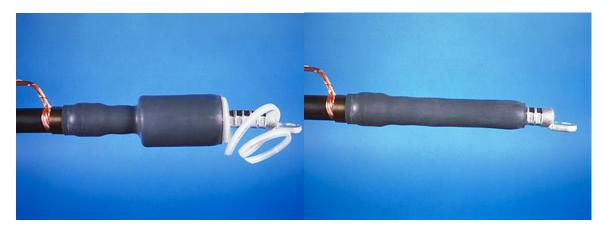


# 3M<sup>™</sup> Cold Shrink Single Core Indoor Terminations 93-EP Series for 12/20(24)kV

# Application

3M<sup>™</sup> QTIII Cold Shrink Series Kits are designed for 24kV Umax voltage class, Single core polymeric power cable systems according to HD 620 (IEC 60502).



## **Product Selection**

| Kit<br>Reference | Cable Type                        | Application<br>Range Guide<br>(mm²) | Diameter over<br>primary insulation<br>(mm) | Max. Lug<br>diameter<br>(mm) |
|------------------|-----------------------------------|-------------------------------------|---|------------------------------|
| 93-EP610-1       | Copper Wire Screen                | 25 – 120                            | 16.3 – 27.4                                 | 27                           |
| 93-EP620-1       | Copper Wire Screen                | 95 – 240                            | 20.5 - 38.9                                 | 39                           |
| 93-EP630-1       | Copper Wire Screen                | 185 – 400                           | 26.7 – 45.7                                 | 46                           |
| 93-EP640-1       | Copper Wire Screen                | 500 - 630                           | 38.9 - 58.9                                 | 59                           |
| 93-EP611-1       | Copper Tape or Braided Screen     | 25 – 120                            | 16.3 – 27.4                                 | 27                           |
| 93-EP621-1       | Copper Tape or Braided Screen     | 95 – 240                            | 20.5 – 38.9                                 | 39                           |
| 93-EP631-1       | Copper Tape or Braided Screen     | 185 – 400                           | 26.7 – 45.7                                 | 46                           |
| 93-EP641-1       | Copper Tape or Braided Screen     | 500 - 630                           | 38.9 – 58.9                                 | 59                           |
| 93-EP612-1       | Copper Wire Screen / Alu Laminate | 25 – 120                            | 16.3 – 27.4                                 | 27                           |
| 93-EP622-1       | Copper Wire Screen / Alu Laminate | 95 – 240                            | 20.5 – 38.9                                 | 39                           |
| 93-EP632-1       | Copper Wire Screen / Alu Laminate | 185 – 400                           | 26.7 – 45.7                                 | 46                           |
| 93-EP642-1       | Copper Wire Screen / Alu Laminate | 500 - 630                           | 38.9 – 58.9                                 | 59                           |

# **Kit Content**

3M<sup>™</sup> 93-EP Series Terminations include the Cold Shrink QTIII Silicone Termination body with integrated stress control tube, stress control mastic, silicone elastomeric insulation and built in moisture sealing mastic layer. The version for copper tape includes additional screen connection components and is also suitable for armoured cables when used in conjunction with a gland kit. Refer to instructions.

#### Installation

3M<sup>™</sup> Cold Shrink technology ensures quick, easy and safe installation of the QTIII Termination Body by pulling and unwinding the plastic support core in counter clockwise direction. Use of special tools is not necessary. Detailed instructions for installing the 3M<sup>™</sup> QTIII Series Terminations are included in each kit.

## **Product Features**

- The versatile design of the prefabricated one-piece cold shrink termination body allows installation on a wide range of cable sizes and types and a fast and easy installation at temperatures ranging from 20°C to + 50°C.
- No heat or flame is needed during installation.
- Solderless earth connection using Constant Force springs (where applicable)
- No special tools needed during installation.

## **Product Identification**

3M<sup>™</sup> QTIII Series Termination kits are marked with supplier name, cable cross section ranges, voltage class and cable type, storage conditions and manufacturing codes for product traceability.

# Performance Tests

3M<sup>™</sup> QTIII 93-EP Series Terminations meet and exceed the requirements of the European standard CENELEC HD 629.1 as well as IEC 60502-4. See Independent Test Report No. I0446-0E / TR-002574

## Storage

The shelf life of 3M<sup>™</sup> QTIII Series Terminations is specified as 3 years. Temperature: - 40°C to +50°C.

# Product Stewardship

3M has a fundamental concern for all who make, distribute and use its products, and for the environment in which we live. This concern is the basis of our philosophy and policies by which we assess the health and environmental information on our products and then take the appropriate steps to protect employee, the public health and the environment.

## **Customer Notice**

3M encourages its customers and potential users of 3M products to review their applications for such products from the standpoint of human health and environmental quality. To help ensure that 3M products are not used in ways for which they were not intended or tested. 3M personnel are available to assist customers in dealing with ecological and product safety considerations. Your 3M sales representative can arrange for the proper contacts.

## **Regulatory Status**

3M<sup>™</sup> QTIII Series Terminations are not subject of the European WEEE and RoHS Directives but meet their requirements.

**Important Notice:** Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Warranty; Limited Remedy; Limited Liability. This product will be free from defects in material and manufacture at the time of purchase. 3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any loss or damage arising from this 3M product, whether direct, indirect, special, incidental or consequential regardless of the legal theory asserted.



# **Electrical Markets Division**

3M UK PLC, 3M Centre, Cain Rd, Bracknell RG12 8HT, United Kingdom 0870 609 4639 www.3M.co.uk/electrical

#### **Electrical Markets Division**

3M Ireland Ltd, The Iveagh Building, The Park, Carrickmines, Dublin 18, Ireland 1 800 812 732 www.3M.co.uk/electrical 3M and is a trademarks of the 3M company. © 3M 2023. All rights reserved.

Issue 5