



## 3M Technical Information

Cold Shrink Three Core Indoor / Outdoor Terminations for Copper Wire Screen Armoured & Unarmoured Cables up to 36kV  $U_{max}$  Voltage Class

# 3M™ QT-II Terminations



### 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  $-20^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ .
- No heat or flame is needed during installation.
- No special tools needed during installation.

### Product Application

3M™ QT-II Cold Shrink Indoor / Outdoor Series Kits are designed up to 36kV  $U_{max}$  voltage class, three core polymeric power cable systems according to HD 620 (IEC 60502).

### Kit Contents

3M™ Terminations include the Cold Shrink QT-II Silicone Termination body with integrated stress control device, and silicone elastomeric insulation. Skirts are integrated for easier & faster installation. Silicone tape is included for moisture sealing. Also included are all armour continuity components where applicable, please refer to selection table for details.

### 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  $-20^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ .
- No heat or flame is needed during installation.
- No special tools needed during installation.

### Installation

3M™ Cold Shrink technology ensures quick, easy and safe installation of the QT-II 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™ QT-II Series Terminations are included in each kit.



## QT-II Selection Table

### Three Core Armoured / Unarmoured Copper Wire Screen Cables

Kit Number	BIL kV	Jacket Diameter Range (mm)	Cable Insulation Range (mm)	Indoor 3.3kV mm <sup>2</sup>	Indoor 6.6kV mm <sup>2</sup>	Indoor 11kV mm <sup>2</sup>	Indoor 15kV mm <sup>2</sup>
92-EB 60-3-AU	95	Max. 60	11.2 - 16.5	25 - 70	25 - 50	10-25	-
92-EB 61-3-AU	95	Max. 60	14.2 - 22.1	70 - 185	70 - 150	35-70	25-50
92-EB 62-3-AU	95	Max. 78	16.2 - 22.1	95 - 185	95 - 150	70-95	50-70
92-EB 63-3-AU	95	Max. 78	19.8 - 33.0	185 - 400	185 - 400	120-150	95-120
92-EB 64-3-AU	95	Max. 107	22.0 - 33.0	240 - 400	240 - 400	185-300	150-240

Final determining factor is cable insulation diameter

### Three Core Armoured / Unarmoured Copper Wire Screen Cables

Kit Number	BIL kV	Jacket Diameter Range (mm)	Cable Insulation Range (mm)	Outdoor 3.3kV mm <sup>2</sup>	Outdoor 6.6kV mm <sup>2</sup>	Outdoor 11kV mm <sup>2</sup>	Outdoor 15kV mm <sup>2</sup>	Indoor 22kV mm <sup>2</sup>
93-EB 60-3-AU	125	Max. 60	14.2 - 22.1	95 - 300	70 - 240	25-35	-	10
93-EB 61-3-AU	125	Max. 60	16.0 - 28.4	95 - 300	70 - 240	50-70	35-50	25-35
93-EB 62-3-AU	125	Max. 78	16.0 - 28.4	95 - 300	70 - 240	95-150	70-120	50-120
93-EB 63-3-AU	125	Max. 107	21.3 - 35.0	185 - 500	185 - 400	185-300	150-240	120-240

Final determining factor is cable insulation diameter

### Three Core Armoured / Unarmoured Copper Wire Screen Cables

Kit Number	BIL kV	Jacket Diameter Range (mm)	Cable Insulation Range (mm)	Outdoor 22kV mm <sup>2</sup>	Indoor 33kV mm <sup>2</sup>
94-EB 61-3-AU	170	23.0 - 35.0	16.2 - 28.5	25-35	-
94-EB 62-3-AU	170	30.0 - 44.0	21.3 - 35.0	50-120	25-50
94-EB 63-3-AU	170	35.0 - 52.0	27.4 - 45.7	120-240	25-150
94-EB 64-3-AU	170	41.0 - 65.0	33.3 - 53.3	-	95-240

Final determining factor is cable insulation diameter

### Three Core Armoured / Unarmoured Copper Wire Screen Cables

Kit Number	BIL kV	Jacket Diameter Range (mm)	Cable Insulation Range (mm)	Outdoor 33kV mm <sup>2</sup>
94-EB 63-4-AU	170	Max. 107	21.3 - 35.0	25-150
94-EB 64-4-AU	170	Max. 107	27.4 - 45.7	95-240

Final determining factor is cable insulation diameter

## Performance Tests

3M™ Terminations meet and exceed the requirements of IEC 60502-4 and IEEE-48.

## Storage

The shelf life of 3M™ QT-II 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.

## Legal Requirements

3M QT-II Series Inline Joints are not subject to the European WEEE and RoHS Directives but meet their requirements.

## 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™ QT-II Series Terminations are not subject to the European WEEE and RoHS Directives but meet their requirements.

3M and Scotchcast are trademarks of 3M Company

### Important Notice

All statements, technical information and recommendations related to the Seller's products are based on information believed to be reliable, but the accuracy or completeness thereof is not guaranteed. Before utilizing the product, the user should determine the suitability of the product for its intended use. The user assumes all risks and liability whatsoever in connection with such use.

Any statements or recommendations of the Seller which are not contained in the Seller's current publications shall have no force or effect unless contained in an agreement signed by an authorized office of the Seller. The statements contained herein are made in lieu of all warranties, expressed or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose which warranties are hereby expressly disclaimed.

SELLER SHALL NOT BE LIABLE TO THE USER OR ANY OTHER PERSON UNDER ANY LEGAL THEORY; INCLUDING BUT NOT LIMITED TO NEGLIGENCE OR STRICT LIABILITY; FOR ANY INJURY OR FOR ANY DIRECT; INDIRECT; INCIDENTAL OR CONSEQUENTIAL DAMAGES SUSTAINED OR INCURRED BY REASON OF THE USE OF ANY OF THE SELLER'S PRODUCTS.

**Electrical Markets Division**  
**3M Australia Pty Ltd**

