



## 3M Technical Information

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

# 3M™ QT-III Terminations



## Product Application

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

## Kit Contents

3M™ Cold Shrink Terminations include the Cold Shrink QT-III Silicone Termination body with integrated stress control device, silicone elastomeric insulation and built in moisture sealing mastic layer. Skirts are integrated for easier & faster installation. 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-III 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-III Series Terminations are included in each kit.



## QT-III Selection Table

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

Kit Number	BIL kV	Cable Insulation Range (mm)	3.3kV mm <sup>2</sup>	6.6kV mm <sup>2</sup>	11kV mm <sup>2</sup>	15kV mm <sup>2</sup>	22kV mm <sup>2</sup>	33kV mm <sup>2</sup>
7620-S-2-3W-AU	95	8.4 - 12.7	16 - 35	16 - 25	-	-	-	-
7621-S-2-3W-AU	95	12.7 - 17.8	50 - 95	35 - 70	-	-	-	-
7691-S-4-3W-AU	150	12.7 - 17.8	50 - 95	35 - 70	10 - 50	16 - 25	-	-
7692-S-4-3W-AU	150	17.8 - 23.4	120 - 185	95 - 150	70 - 150	35 - 95	25 - 70	-
7693-S-4-3W-AU	150	23.4 - 30.0	240 - 300	185 - 300	185 - 300	120 - 185	95 - 185	-
7695-S-4-3W-AU	150	30.0 - 38.6	400 - 500	400 - 500	400 - 500	200 - 325	240 - 300	-
7685-S-8-3W-AU	200	30.0 - 38.6	400 - 500	400 - 500	400 - 500	200 - 325	240 - 300	95 - 240

Final determining factor is cable insulation diameter

### Single Core Unarmoured Copper Wire Screen Cables

Kit Number	BIL kV	Cable Insulation Range (mm)	3.3kV mm <sup>2</sup>	6.6kV mm <sup>2</sup>	11kV mm <sup>2</sup>	15kV mm <sup>2</sup>	22kV mm <sup>2</sup>	33kV mm <sup>2</sup>
7620-S-2-AU	95	8.2 - 15.0	25	35	-	-	-	-
7621-S-2-AU	95	11.2 - 22.7	35 - 95	50 - 70	25 - 70	-	-	-
7652-S-4-AU	150	16.3 - 27.4	120 - 185	95 - 150	95 - 150	35 - 120	35 - 120	-
7654-S-4-AU	150	21.1 - 38.9	240 - 400	185 - 240	185 - 240	120 - 240	70 - 150	-
7655-S-4-AU	150	26.7 - 45.7	500 - 630	300 - 500	300 - 500	240 - 500	150 - 400	-
7656-S-4-AU	150	38.9 - 58.9	800 - 1000	630 - 1000	630 - 1000	625 - 1000	500 - 800	-
7663-S-8-AU	200	18.3 - 32.8	150 - 400	150 - 400	120 - 400	70 - 150	35 - 120	35 - 70
7664-S-8-AU	200	21.1 - 38.9	240 - 400	185 - 240	185 - 240	120 - 240	70 - 150	35 - 120
7665-S-8-AU	200	26.7 - 45.7	500 - 630	300 - 500	300 - 500	240 - 500	150 - 400	95 - 325
7666-S-8-AU	200	38.9 - 58.9	800 - 1000	630 - 1000	630 - 1000	625 - 1000	500 - 800	400 - 725

Final determining factor is cable insulation diameter

### Single Core Armoured Copper Wire Screen Cables

Kit Number	BIL kV	Cable Insulation Range (mm)	3.3kV mm <sup>2</sup>	6.6kV mm <sup>2</sup>	11kV mm <sup>2</sup>	15kV mm <sup>2</sup>	22kV mm <sup>2</sup>	33kV mm <sup>2</sup>
7620-S-2-AR-AU	95	8.2 - 15.0	25	35	-	-	-	-
7621-S-2-AR-AU	95	11.2 - 22.7	35 - 95	50 - 70	25 - 70	-	-	-
7652-S-4-AR-AU	150	16.3 - 27.4	120 - 185	95 - 150	95 - 150	35 - 120	35 - 120	-
7654-S-4-AR-AU	150	21.1 - 38.9	240 - 400	185 - 240	185 - 240	120 - 240	70 - 150	-
7655-S-4-AR-AU	150	26.7 - 45.7	500 - 630	300 - 500	300 - 500	240 - 500	150 - 400	-
7656-S-4-AR-AU	150	38.9 - 58.9	800 - 1000	630 - 1000	630 - 1000	625 - 1000	500 - 800	-
7663-S-8-AR-AU	200	18.3 - 32.8	150 - 400	150 - 400	120 - 400	70 - 150	35 - 120	35 - 70
7664-S-8-AR-AU	200	21.1 - 38.9	240 - 400	185 - 240	185 - 240	120 - 240	70 - 150	35 - 120
7665-S-8-AR-AU	200	26.7 - 45.7	500 - 630	300 - 500	300 - 500	240 - 500	150 - 400	95 - 325
7666-S-8-AR-AU	200	38.9 - 58.9	800 - 1000	630 - 1000	630 - 1000	625 - 1000	500 - 800	400 - 725

Final determining factor is cable insulation diameter



## Performance Tests

3M™ Terminations meet and exceed the requirements of the European standard CENELEC HD 629.1, IEC 60502-4 and IEEE-48.

## Storage

The shelf life of 3M™ QT-III 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-III 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-III Series Terminations are not subject to the European WEEE and RoHS Directives but meet their requirements.

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### Important Notice

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