

3M™ Medium Voltage Cold Shrink Termination Kit

3M™ QT-III Outdoor Silicone Rubber Termination Kits

3M™ Cold Shrink QT-III terminations offer easy installation and reliable performance when terminating indoor and outdoor medium voltage cable. The built-in Hi-K stress controlling compound along with the built in sealing compound means simpler installation on all types of cables. These factory applied compounds make field installation easier and reduce installation errors. Plus its high-K stress design delivers excellent BIL performance and lower surface stress resulting in a more compact termination. Through superior engineering, 3M™ Cold Shrink QT-III terminations deliver maximum performance.

QT-III Inverted Applications

Terminations that are inverted inside of equipment (switchgear, transformers, etc.) can be made using the QT-III indoor tubular design. However, for outdoor applications, skirted terminations are recommended. The standard skirts of most terminations are oriented to shed water when installed in the upright direction.

The skirts could collect moisture and contamination when inverted. This could lead to tracking problems. 3M has designed the 7600-S-INV series inverted kits to eliminate this problem. These inverted kits are recommended for all outdoor inverted applications.

QT-III Termination Features

- Improved long term reliability
- Hydrophobic silicone body
- Superior track and erosion resistance
- Optimum high-K stress control
- Built-in sealing and stress controlling compounds
- Outstanding UV stability
- Designed to meet IEEE 48, CENELEC 0278 and IEC 502 standards
- Easier installation
- Installation requires no silicone tape or grease
- Shorter installed length

QT-III	QT-II
Moisture Blocking Mastic	
Integrated into termination	Applied separately
Outer Insulator	
Very good track resistance	Good track resistance
Stress Control Tube	
Integrated into termination	
Silicone Grease-stress Relief	
No - Integrated mastic is sufficient	Yes - Applied separately
Stress Control Mastic	
Integrated into termination	No - Requires Silicone grease



3M™ Cold Shrink Benefits

Lower Installed Cost

- Minimal training required
- All materials included in the kit
- Easy cable preparation
- Compact to fit into smaller equipment

High Reliability

- No heat, flames or special tools needed
- Simple, straight forward installation
- Built-in stress relief
- Over 30 years of proven field experience

QT-II Indoor Termination Kit Selection Chart for Single Core XLPE Shielded Cables

Voltage	Application	Model	Cable Conductor Size (mm ²)	Cable Insulation Diameter (mm)	Cable Outer Diameter (mm)
11kV	Indoor	5623K	70 - 95	14.2 - 22.1	-
	Indoor	5624K	120 - 240	19.8 - 33.0	-
	Indoor	5624K	300	19.8 - 33.0	-
	Indoor	5625K	400 - 630	27.7 - 45.7	-



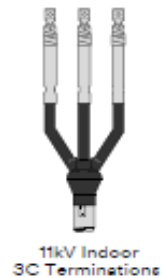
QT-II Outdoor Termination Kit Selection Chart for Single Core XLPE Shielded Cables

Voltage	Application	Model	Cable Conductor Size (mm ²)	Cable Insulation Diameter (mm)	Cable Outer Diameter (mm)
11kV	Outdoor	5633K	70 - 150	16.3 - 22.9	20.3 - 30.5
	Outdoor	5635K	185 - 240	21.3 - 33.8	25.4 - 40.6
	Outdoor	5635K	300	21.3 - 33.8	25.4 - 40.6
	Outdoor	5636K	400 - 630	27.9 - 41.9	33.0 - 48.3



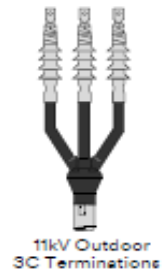
QT-II Indoor Termination Kit Selection Chart for Three Cores XLPE Shielded Cables

Voltage	Application	Model	Cable Conductor Size (mm ²)	Cable Insulation Diameter (mm)	Cable Outer Diameter (mm)
11kV	Indoor	62-RS42-3 MAL	70 - 95	14.2 - 22.1	48.8 - 78.7
	Indoor	62-RS43-3 MAL	120 - 150	19.8 - 33.0	48.8 - 78.7
	Indoor	62-RS44-3 MAL	185 - 240	19.8 - 33.0	64.0 - 109.7
	Indoor	62-RS44-3 MAL	300	19.8 - 33.0	64.0 - 109.7



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Voltage	Application	Model	Cable Conductor Size (mm ²)	Cable Insulation Diameter (mm)	Cable Outer Diameter (mm)
11kV	Outdoor	62-RS42-4 MAL	70 - 95	16.3 - 22.9	48.8 - 78.7
	Outdoor	62-RS43-4 MAL	120 - 150	16.3 - 22.9	48.8 - 78.7
	Outdoor	62-RS44-4 MAL	185 - 240	21.3 - 33.8	64.0 - 109.7
	Outdoor	62-RS44-4 MAL	300	21.3 - 33.8	64.0 - 109.7



QT-II Indoor Termination Kit Selection Chart for Single Core XLPE Shielded Cables

Voltage	Application	Model	Cable Conductor Size (mm ²)	Cable Insulation Diameter (mm)	Cable Outer Diameter (mm)
33kV	Indoor	5692K	70 - 120	21.3 - 33.8	25.4 - 40.6
	Indoor	5693K	150 - 240	27.9 - 41.9	33.0 - 48.3
	Indoor	5694K	300 - 500	33.0 - 49.5	38.1 - 61.0
	Indoor	5684-3 MAL	630	33.3 - 53.3	-



33kV Indoor 1C Terminations

QT-II Outdoor Termination Kit Selection Chart for Single Core XLPE Shielded Cables

Voltage	Application	Model	Cable Conductor Size (mm ²)	Cable Insulation Diameter (mm)	Cable Outer Diameter (mm)
33kV	Outdoor	5696K	70 - 120	21.3 - 33.8	25.4 - 40.6
	Outdoor	5697K	150 - 240	27.9 - 41.9	33.0 - 48.3
	Outdoor	5698K	300 - 500	33.0 - 49.5	38.1 - 61.0
	Outdoor	5608-3 MAL	630	45.7 - 69.8	-



33kV Outdoor 1C Terminations

QT-II Indoor Termination Kit Selection Chart for Three Cores XLPE Shielded Cables

Voltage	Application	Model	Cable Conductor Size (mm ²)	Cable Insulation Diameter (mm)	Cable Outer Diameter (mm)
33kV	Indoor	64-RS42-3 MAL	70 - 120	21.3 - 33.8	64.0 - 109.7
	Indoor	64-RS43-3 MAL	150 - 185	27.9 - 41.9	64.0 - 109.7
	Indoor	64-RS44-3 MAL	240 - 300	33.0 - 49.5	66.0 - 119.4



33kV Indoor 3C Terminations

QT-II Outdoor Termination Kit Selection Chart for Three Cores XLPE Shielded Cables

Voltage	Application	Model	Cable Conductor Size (mm ²)	Cable Insulation Diameter (mm)	Cable Outer Diameter (mm)
33kV	Outdoor	64-RS41-4 MAL	70 - 120	21.3 - 33.8	64.0 - 109.7
	Outdoor	64-RS42-4 MAL	150 - 185	27.9 - 41.9	64.0 - 109.7
	Outdoor	64-RS43-4 MAL	240 - 300	33.0 - 49.5	66.0 - 119.4



33kV Outdoor 3C Terminations