



Science.
Applied to Life.™

69 kV / 72.5 kV

High Voltage Underground Cable Accessories
for 69 kV / 72.5 kV

Reliable
solutions
for trusted
connections.

3M™ Cold Shrink QT-III Termination Kits for 69kV / 72.5kV

3M™ Cold Shrink Termination Kits are designed to help provide high reliability and help save you time and money.

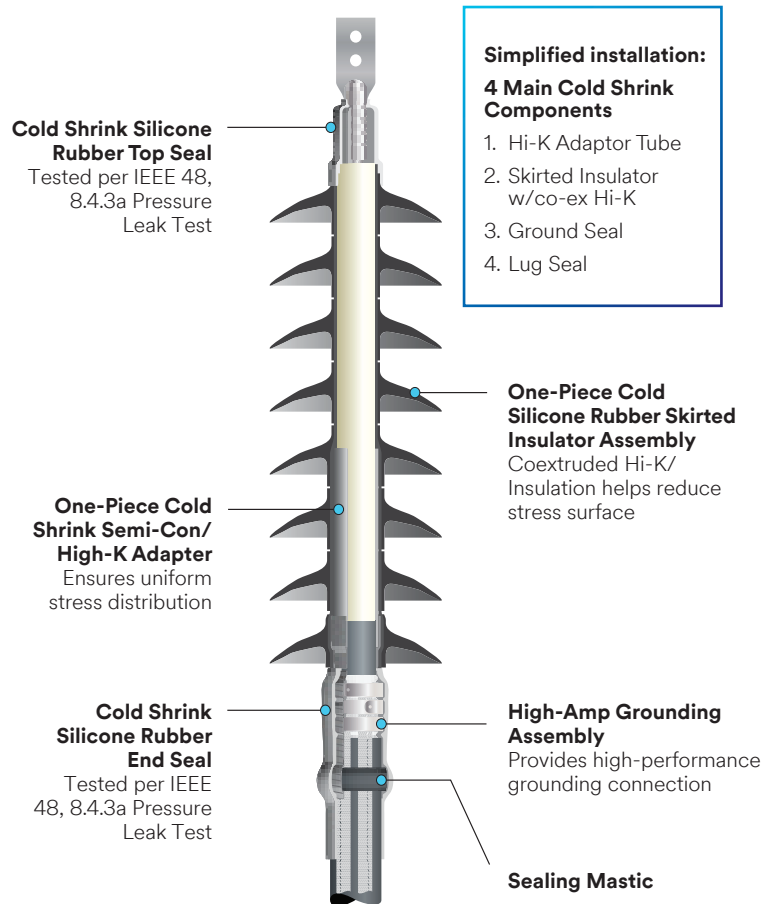
Cold shrink delivery systems:

- ▶ Installing quickly and easily
- ▶ Helping to reduce potential craft errors
- ▶ Requiring no specialized tools or flame
- ▶ Lightweight for safer and easier installation
- ▶ Safer to use with no flame or torch needed



3M™ Cold Shrink QT-III Termination Kits 7673-S-8/10 for 69 kV / 72.5 kV

3M™ Cold Shrink Termination Kits 69kV/72.7kV 7673-S-8/10 Series **meet or exceed requirements of IEEE 48, Class 1 and IEC 60840**. The semi-con/high-k adaptor provides reduced surface stress, which allows for a more compact termination, with large cross-sectional coverage. (1/0 awg/50 mm² - 3000 kcmil/1500 mm², insulation O.D. 2.01"/51,1 mm - 3.45"/87,6 mm)



Direct heat shrink/porcelain replacement application:

Step 1 ▶



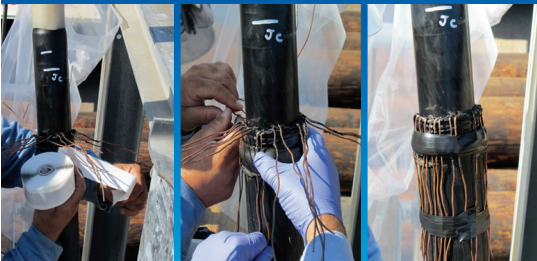
Remove existing termination and clean.

Step 2 ▶



Determine position of skirt assembly and stress control tubes.

Step 3 ▶



Install grounding moisture seal.

Step 4 ▶



Install primary stress control.

Step 5 ▶



Install the skirt assembly tube.

Step 6 ▶



Install the top seal tube.

For customer convenience – and peace of mind.



Step 7 ▶

Install the bottom seal tube.

NOTE: Minimal or no additional cutbacks required to existing cable. Can use existing lug as there is no need to replace it.

3M™ Cold Shrink QT-III Silicone Rubber Skirted Termination Kit 7673-S-8 & 7673-S-10 Series

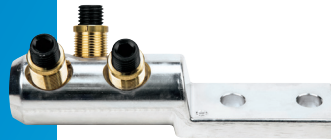
Kit Number	Typical conductor* size range AWG mm ² (kcmil)	Primary insulation OD range mm (inches)	Jacket OD range mm (inches)	Maximum lug width mm (inches)	Number of skirts	Dimension A typical cm (inches)	Creepage distance typical cm (inches)	Pollution class USCD required for 72.5 kV per IEC 60815
Standard 8 Skirt Termination Kit(s)								
7673-S-8(S)	175 - 725 (350 - 1500)	51.1 - 72.9 (2.01 - 2.87)	57.2 - 87.6 (2.25 - 3.45)	76 (3)	8	117 cm (46")	208 cm (82")	Class (d) 43.3 mm/kV Heavy
7673-S-8	800 - 1500 (1500 - 3000)	70.9 - 87.6 (2.79 - 3.45)	76.2 - 108.0 (3.00 - 4.25)	102 (4)	8	117 cm (46")	208 cm (82")	Class (d) 43.3 mm/kV Heavy
Industrial 10 Skirt Termination Kit(s)								
7673-S-10(R)	50 - 175 (1/0 - 350)	33.0 - 60.0 (1.30 - 2.36)	40.6 - 72.4 (1.60 - 2.85)	51 (2)	10	124 cm (49")	226 cm (89")	Class (d) 53.7 mm/kV Very Heavy
7673-S-10(S)	175 - 725 (350 - 1500)	51.1 - 72.9 (2.01 - 2.87)	57.2 - 87.6 (2.25 - 3.45)	76 (3)	10	132 cm (52")	266 cm (105")	Class (d) 53.7 mm/kV Very Heavy
7673-S-10	800 - 1500 (1500 - 3000)	70.9 - 87.6 (2.79 - 3.45)	76.2 - 108.0 (3.00 - 4.25)	102 (4)	10	132 cm (52")	266 cm (105")	Class (d) 53.7 mm/kV Very Heavy
Industrial 10 Skirt Termination Kit(s) w/WaterBlock								
7673-S-10(R)-WB	50 - 175 (1/0 - 350)	33.0 - 60.0 (1.30 - 2.36)	40.6 - 72.4 (1.60 - 2.85)	51 (2)	10	124 cm (49")	226 cm (89")	Class (d) 53.7 mm/kV Very Heavy
7673-S-10(S)-WB	175 - 725 (350 - 1500)	51.1 - 72.9 (2.01 - 2.87)	57.2 - 87.6 (2.25 - 3.45)	76 (3)	10	132 cm (52")	266 cm (105")	Class (d) 53.7 mm/kV Very Heavy
7673-S-10-WB	800 - 1500 (1500 - 3000)	70.9 - 87.6 (2.79 - 3.45)	76.2 - 108.0 (3.00 - 4.25)	102 (4)	10	132 cm (52")	266 cm (105")	Class (d) 53.7 mm/kV Very Heavy
Inverted 8 and 10 Skirt Termination Kit(s)								
7673-S-INV-8(S)	175 - 725 (350 - 1500)	51.1 - 72.9 (2.01 - 2.87)	57.2 - 87.6 (2.25 - 3.45)	76 (3)	8	117 cm (46")	208 cm (82")	Class (d) 43.3 mm/kV Heavy
7673-S-INV-8	800 - 1500 (1500 - 3000)	70.9 - 87.6 (2.79 - 3.45)	76.2 - 108.0 (3.00 - 4.25)	102 (4)	8	117 cm (46")	208 cm (82")	Class (d) 43.3 mm/kV Heavy
7673-S-INV-10(R)	50 - 175 (1/0 - 350)	33.0 - 60.0 (1.30 - 2.36)	40.6 - 72.4 (1.60 - 2.85)	51 (2)	10	124 cm (49")	208 cm (82")	Class (d) 53.7 mm/kV Very Heavy
7673-S- INV-10(S)	175 - 725 (350 - 1500)	51.1 - 72.9 (2.01 - 2.87)	57.2 - 87.6 (2.25 - 3.45)	76 (3)	10	132 cm (52")	266 cm (105")	Class (d) 53.7 mm/kV Very Heavy
7673-S- INV-10	800 - 1500 (1500 - 3000)	70.9 - 87.6 (2.79 - 3.45)	76.2 - 108.0 (3.00 - 4.25)	102 (4)	10	132 cm (52")	266 cm (105")	Class (d) 53.7 mm/kV Very Heavy
Inverted 10 skirt Termination Kit(s) w/WaterBlock								
7673-S-INV-10(R)-WB	50 - 175 (1/0 - 350)	33.0 - 60.0 (1.30 - 2.36)	40.6 - 72.4 (1.60 - 2.85)	51 (2)	10	124 cm (49")	226 cm (89")	Class (d) 53.7 mm/kV Very Heavy
7673-S-INV-10(S)-WB	175 - 725 (350 - 1500)	51.1 - 72.9 (2.01 - 2.87)	57.2 - 87.6 (2.25 - 3.45)	76 (3)	10	132 cm (52")	266 cm (105")	Class (d) 53.7 mm/kV Very Heavy
7673-S-INV-10-WB	175 - 725 (1500 - 3000)	70.9 - 87.6 (2.79 - 3.45)	76.2 - 108.0 (3.00 - 4.25)	102 (4)	10	132 cm (52")	266 cm (105")	Class (d) 53.7 mm/kV Very Heavy

NOTE: Shearbolt lugs sold separately.

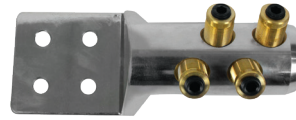
3M™ Mechanical Shearbolt Lugs for 69 kV / 72.5 kV

Shearbolt lugs from 3M help simplify installations with features like:

- ▶ Greater contact force
- ▶ No specialized tools required
- ▶ Centering rings for range taking
- ▶ Norm/standard: NEMA WC 70/71/74



3M™ Mechanical Shearbolt Two-Hole Lug QL-2 Series



3M™ Mechanical Shearbolt Four-Hole Lug QL-4 Series

3M™ Mechanical Shearbolt Lugs QL-2 (2 holes) and QL-4 (4 holes) Series 69 kV / 72.5 kV

3M Part	Number of holes	Conductor size range AWG mm ² (kcmil)	Stud size mm (inches)	Tongue width mm (inches)	Lug hole spacing (L x W) mm (inches)	Lug hole diameter mm (inches)	Outside diameter barrel mm (inches)	Lug length with centering rings mm (inches)	Lug I.D. mm (inches)
QL2-A-1/0-350	2	54 - 177 (1/0 - 350 kcmil)	13 (0.50)	33 (1.30)	44.5 (1.75)	14.2 (0.56)	28 (1.10)	152.0 (5.98)	16.3 (0.64)
QL4-A-350-750	4	177 - 380 (350 - 750 kcmil)	13 (0.50)	76 (2.99)	44.5 (1.75) x 44.5 (1.75)	14.3 (0.56)	42 (1.65)	184 (7.24)	26.2 (1.03)
QL4-A-600-1250	4	325 - 630 (600 - 1250 kcmil)	13 (0.50)	76 (2.99)	44.5 (1.75) x 44.5 (1.75)	14.3 (0.56)	52 (2.05)	210 (8.27)	33.3 (1.31)
QL4-A-1500	4	800 (1500 kcmil)	13 (0.50)	76 (2.99)	44.5 (1.75) x 44.5 (1.75)	14.3 (0.56)	65 (2.56)	216 (8.50)	36 (1.41)
QL4-A-1750-2000	4	875 - 1000 (1750 - 2000 kcmil)	13 (0.50)	100 (3.94)	44.5 (1.75) x 44.5 (1.75)	14.3 (0.56)	65 (2.56)	285 (11.22)	42 (1.65)
QL4-A-2500-3000	4	1300 - 1600 (2500 - 3000 kcmil)	13 (0.50)	100 (3.94)	44.5 (1.75) x 44.5 (1.75)	14.3 (0.56)	85 (3.36)	260 (10.24)	52 (2.04)

Cable clamps and mounting plates

3M™ Termination Mounting Hardware - Cable Mounting Plates 69 kV / 72.5 kV

Kit number	Description	Application
MP-1	Cable/termination mounting plate	New construction
MP-1(L)	Cable/termination mounting plate	Retrofit/replacement

3M™ Termination Mounting Hardware - Cable Clamps 69 kV / 72.5 kV

Kit number	Description	Cable outer jacket O.D. range mm (inches)
GT	Cast aluminum cable clamp	49.3 - 75.4 mm (1.94 - 2.95)
CC-1(S)	Cast aluminum cable clamp - includes springs	49.3 - 75.4 mm (1.94 - 2.95)
CC-2(S)	Cast aluminum cable clamp	49.3 - 75.4 mm (1.94 - 2.95)



3M™ Cold Shrink QS-III Splice Kits for 69 kV / 72.5 kV

3M™ Cold Shrink Splice Kits for high-voltage applications **meet or exceed the 69 kV voltage class rating requirements of IEEE std. 404 and IEC 60840 for 72.5 kV.**

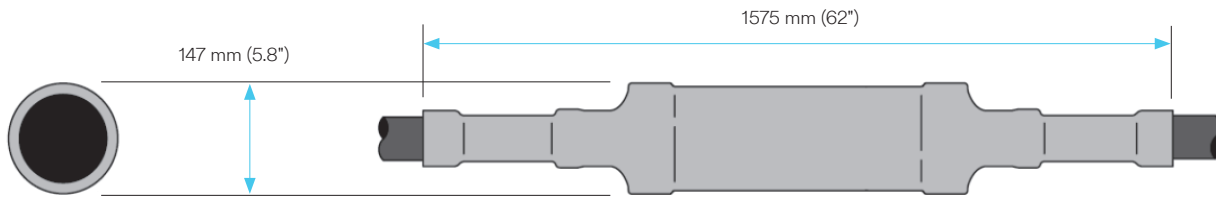
Made of durable silicone rubber to provide reliable and long-lasting installations.

Cold Shrink Splice kits from 3M offer:

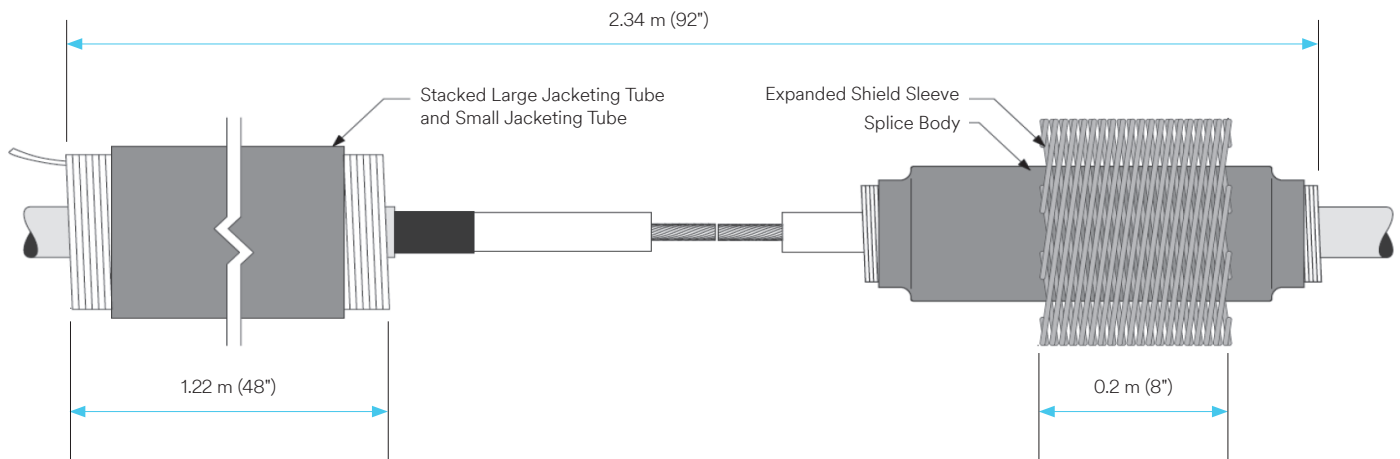
- Safer, easier and more economical installations
- Covers a wide range of cable sizes for in-line, transition and cross-bond applications
- No specialized tools or torches
- Excellent electrical performance
- Shearbolt connector included in kit



Typical dimensions (installed splice)



Parking distance (stacked)





3M™ Cold Shrink QS-III Silicone Rubber Splice Kits 5488A, 5488A-JCN-XB, and 5488A-Shielded-XB for 69 kV / 72.5 kV

**Cu/Al Shearbolt Connector
Included in Standard Kits**

Kit Number	Stock Number	Description	Primary cable insulation O.D. range mm (inches)	Conductor size range AWG mm ² (kcmil)	Typical dimensions installed splice mm (inches)	Parking distance m (inches)	Connector O.D. mm (inches)	Connector length mm (inches)	"XB" cross bond
5488A-250-500	80-6114-3386-5	69kV Cold Shrink QS-III Underground Splice for 250 - 500 Standard Wall Cable	49.3 - 75.4 mm (1.94 - 3.08")	125 - 325 mm ² (250 - 500)	1575 × 147 mm (62" L x 5.8" W)	2.34 m (92")	49.3 - 63.5 mm (1.94 - 2.50")	203 ± 2.54 mm (8" ± 0.10")	—
5488A-750-1000	80-6114-3387-3	69kV Cold Shrink QS-III Underground Splice for 750 - 1000 Standard Wall Cable	49.3 - 75.4 mm (1.94 - 3.08")	400 - 500 mm ² (750 - 1000)	1575 × 147 mm (62" L x 5.8" W)	2.34 m (92")	49.3 - 63.5 mm (1.94 - 2.50")	203 ± 2.54 mm (8" ± 0.10")	—
5488A-1250-1500	80-6114-3388-1	69kV Cold Shrink QS-III Underground Splice for 1250 - 1500 Standard Wall Cable	49.3 - 75.4 mm (1.94 - 3.08")	655 - 800 mm ² (1250 - 1500)	1575 × 147 mm (62" L x 5.8" W)	2.34 m (92")	63.6 - 75.4 mm (2.51 - 3.25")	203 ± 2.54 mm (8" ± 0.10")	—
5488A-1750-2000	80-6114-3389-9	69kV Cold Shrink QS-III Underground Splice for 1750 - 2000 Standard Wall Cable	49.3 - 75.4 mm (1.94 - 3.08")	875 - 1000 mm ² (1750 - 2000)	1575 × 147 mm (62" L x 5.8" W)	2.34 m (92")	63.6 - 75.4 mm (2.51 - 3.25")	235 ± 2.54 mm (9.25" ± 0.10")	—
5488A-XB-JCN-250-500	80-6114-3390-7	69kV JCN X-Bond Cold Shrink QS-III Underground Splice for 250 - 500 JCN Standard Wall Cable	49.3 - 75.4 mm (1.94 - 3.08")	125 - 325 mm ² (250 - 500)	1575 × 147 mm (62" L x 5.8" W)	2.34 m (92")	49.3 - 63.5 mm (1.94 - 2.50")	203 ± 2.54 mm (8" ± 0.10")	Yes - JCN Cable
5488A-XB-JCN-750-1000	80-6114-3391-5	69kV JCN X-Bond Cold Shrink QS-III Underground Splice for 750 - 1000 JCN Standard Wall Cable	49.3 - 75.4 mm (1.94 - 3.08")	400 - 500 mm ² (750 - 1000)	1575 × 147 mm (62" L x 5.8" W)	2.34 m (92")	49.3 - 63.5 mm (1.94 - 2.50")	203 ± 2.54 mm (8" ± 0.10")	Yes - JCN Cable
5488A-XB-JCN-1250-1500	80-6114-3392-3	69kV JCN X-Bond Cold Shrink QS-III Underground Splice for 1250 - 1500 JCN Standard Wall Cable	49.3 - 75.4 mm (1.94 - 3.08")	655 - 800 mm ² (1250 - 1500)	1575 × 147 mm (62" L x 5.8" W)	2.34 m (92")	63.6 - 75.4 mm (2.51 - 3.25")	235 ± 2.54 mm (9.25" ± 0.10")	Yes - JCN Cable
5488A-XB-JCN-1750-2000	80-6114-3393-1	69kV JCN X-Bond Cold Shrink QS-III Underground Splice for 1750 - 2000 JCN Standard Wall Cable	49.3 - 75.4 mm (1.94 - 3.08")	875 - 1000 mm ² (1750 - 2000)	1575 × 147 mm (62" L x 5.8" W)	2.34 m (92")	63.6 - 75.4 mm (2.51 - 3.25")	235 ± 2.54 mm (9.25" ± 0.10")	Yes - JCN Cable
5488A-XB-Shielded-250-500	80-6114-4997-8	69kV Shielded X-Bond Cold Shrink QS-III Underground Splice for 250 - 500 Shielded Standard Wall Cable	49.3 - 75.4 mm (1.94 - 3.08")	125 - 325 mm ² (250 - 500)	1575 × 147 mm (62" L x 5.8" W)	2.34 m (92")	49.3 - 63.5 mm (1.94 - 2.50")	203 ± 2.54 mm (8" ± 0.10")	Yes - Shielded Cable
5488A-XB-Shielded-750-1000	80-6114-4998-6	69kV Shielded X-Bond Cold Shrink QS-III Underground Splice for 750 - 1000 Shielded Standard Wall Cable	49.3 - 75.4 mm (1.94 - 3.08")	400 - 500 mm ² (750 - 1000)	1575 × 147 mm (62" L x 5.8" W)	2.34 m (92")	49.3 - 63.5 mm (1.94 - 2.50")	203 ± 2.54 mm (8" ± 0.10")	Yes - Shielded Cable
5488A-XB-Shielded-1250-1500	80-6114-4999-4	69kV Shielded X-Bond Cold Shrink QS-III Underground Splice for 1250 - 1500 Shielded Standard Wall Cable	49.3 - 75.4 mm (1.94 - 3.08")	655 - 800 mm ² (1250 - 1500)	1575 × 147 mm (62" L x 5.8" W)	2.34 m (92")	63.6 - 75.4 mm (2.51 - 3.25")	235 ± 2.54 mm (9.25" ± 0.10")	Yes - Shielded Cable
5488A-XB-Shielded-1750-2000	80-6114-5000-0	69kV Shielded X-Bond Cold Shrink QS-III Underground Splice for 1750 - 2000 JCN Standard Wall Cable	49.3 - 75.4 mm (1.94 - 3.08")	875 - 1000 mm ² (1750 - 2000)	1575 × 147 mm (62" L x 5.8" W)	2.34 m (92")	63.6 - 75.4 mm (2.51 - 3.25")	235 ± 2.54 mm (9.25" ± 0.10")	Yes - Shielded Cable

NOTE: Shearbolt connector is included in Kit.

Global high voltage accessory installation history

A legacy of enhanced performance.

For over 40 years, electrical installers from around the world have depended on 3M Cold Shrink Technology for their fast, easy and reliable connections.

69 kV / 72.5 kV Class Accessories

- First install 2009
- **9,000+ kits installed globally**

115 kV / 123 kV Class Accessories

- First install in 2004
- **8,500+ kits installed globally**

138 kV / 145 kV Class Accessories

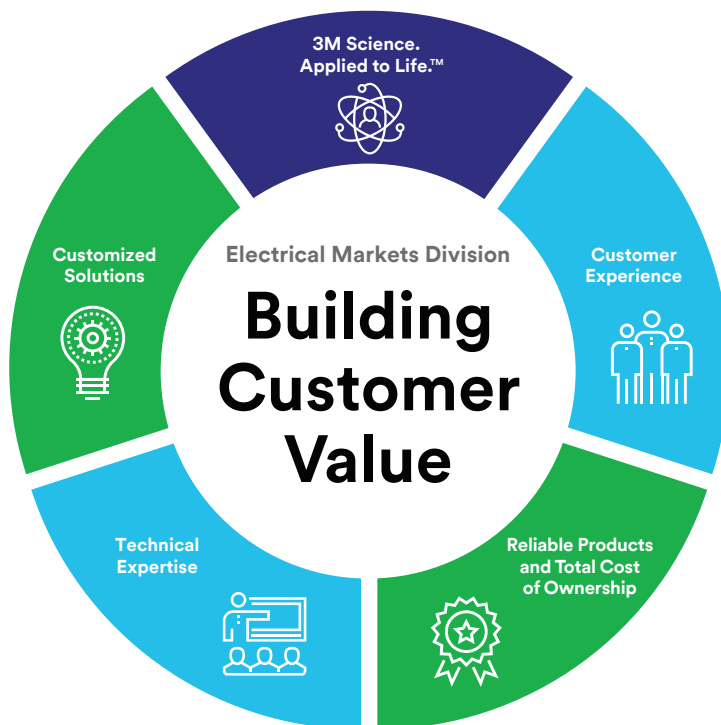
- First installation 2008
- **4,000+ kits installed globally**



Global high voltage underground support from start to finish.

- Global Presence
- Customized Solutions
- Onsite Technical and Customer Support
- Onsite Classroom and Field Installation Training

With 60+ years of industry experience in 64 international subsidiaries and operations in 200+ countries, we can work with you to get the expert support where you need it – when you need it.



For more information about 3M electrical products and solutions contact us at:
3Menergysolutions@mmm.com

Important Notice

Before using these products, you must evaluate them and determine if they are suitable for your intended application. You assume all risks and liability associated with such use.

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