

# Low Voltage Splices, 1000 V or less

For installations from 120 V to 1 kV, 3M offers several low voltage splice options, including 3M-developed cold shrink technology, heat shrink, resin and tape. 3M™ Low Voltage Splices are reliable in buried, overhead, indoor or outdoor applications.

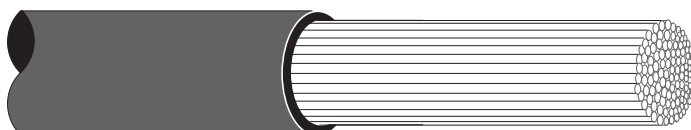


| Section                                                                                  | Page           |
|------------------------------------------------------------------------------------------|----------------|
| <b>3M™ Heat Shrink Splice Kits.....</b>                                                  | <b>149-152</b> |
| 3M™ Splice Kit UF .....                                                                  | 149            |
| 3M™ Airport Lighting Connector Sealing Kit .....                                         | 149            |
| 3M™ Heat Shrink Heavy-Wall Cable Sleeves ITCSN .....                                     | 150-152        |
| <b>3M™ Direct Bury Splice Kits .....</b>                                                 | <b>152-153</b> |
| 3M™ Direct Bury Splice Kit DB0/B-6.....                                                  | 152            |
| 3M™ Direct Bury Splice Kit DBR/Y-6 .....                                                 | 153            |
| <b>3M™ Resin Splice Kits .....</b>                                                       | <b>154-162</b> |
| 3M™ Scotchcast™ Inline Splice Kits, 72-N Series .....                                    | 154            |
| 3M™ Scotchcast™ Re-Enterable Signal and Control Cable Splice Kits 78-R Series.....       | 155            |
| 3M™ Scotchcast™ Multi-Mold Resin Splice Kits 85 Series .....                             | 156            |
| 3M™ Scotchcast™ Wye Resin Splice Kit 90-B1 .....                                         | 157            |
| 3M™ Scotchcast™ Flexible Power Cable Tap Splice Kit 82-BF1.....                          | 157            |
| 3M™ Scotchcast™ Inline Resin Power Cable Splice Kits 82-A Series.....                    | 158            |
| 3M™ Scotchcast™ Wye Resin Splice Kit 82-B1 .....                                         | 158            |
| 3M™ Scotchcast™ Flexible Power Cable Inline Splicing Kits 82-F Series.....               | 159            |
| 3M™ Scotchcast™ Flame-Retardant Compound 2131 .....                                      | 160            |
| 3M™ Scotchcast™ Potting Kit 2136 .....                                                   | 161            |
| 3M™ Resin Pressure System Components .....                                               | 162            |
| <b>3M™ Cold Shrink Splice Kits.....</b>                                                  | <b>163-171</b> |
| 3M™ Cold Shrink Connector Insulators 8420 and 8430 Series.....                           | 163-164        |
| 3M™ Cold Shrink Silicone Insulators 8440 Series (1000 Volts or less) .....               | 165            |
| 3M™ Cold Shrink Quick Insulator QI Series .....                                          | 166            |
| 3M™ Cold Shrink Quick Splice Low Voltage QSLV-M Series.....                              | 167            |
| 3M™ Cold Shrink Connector Insulator WF Series.....                                       | 168            |
| 3M™ Inline Splices for 3/C or 4/C Armored Power Cable (Teck-90) 5730 Series .....        | 169            |
| 3M™ Resin/Cold Shrink Non-Shielded, Armored or Non-Armored Splice Kits 5750 Series ..... | 170            |
| 3M™ Cold Shrink Portable Cable Splice Kits 2237A and 2238A.....                          | 171            |

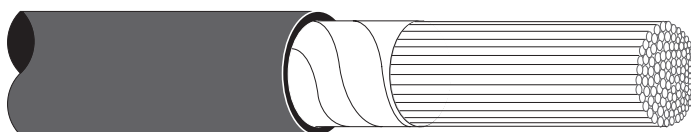
# Cable Types for Low Voltage Splicing



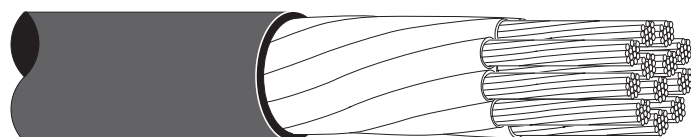
Single Conductor Cable



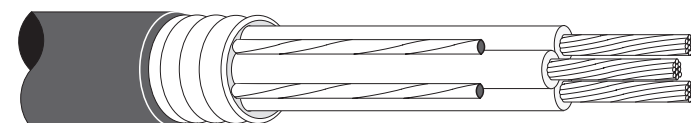
Multiple Conductor Unshielded Signal and Control Cable



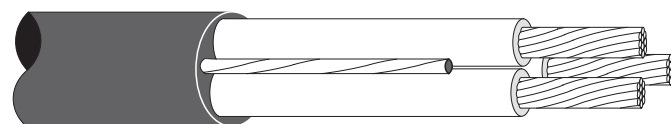
Multiple Conductor Shielded Signal and Control Cable



Multiple Conductor, to 1000 Volt, Cable



Three-Conductor Armored, Non Shielded Cable



Three-Conductor Non-Armored, Non Shielded Cable

## 3M™ Heat Shrink Splice Kits

### 3M™ Splice Kit UF

3M™ Splice Kit UF is designed to provide a reliable, moisture proof electrical connection for type UF-B underground feeder cable rated for 600 V (copper wire only) ranging from #14/3 without ground wire up to #8/3 with ground wire.

The UF splice kit consists of a connector-insulation assembly and a heat shrink tube. The connector assembly contains four cylindrical set screw connectors separated by a piece of vinyl insulation. The heat shrink tube is a heavy-wall, adhesive-lined tube. Underground Feeder (UF)-B cables are flat, and typically have three solid conductors without a ground or two solid conductors with a ground. They range in size from 14–8 AWG. The most common UF cable size is 14–10 AWG.

|                             |                                 |
|-----------------------------|---------------------------------|
| Voltage Rating              | 600 V (copper wire only)        |
| Number of Conductors        | Single Conductor                |
| Cable/Shielding Type        | Non-Shielded                    |
| Splice Type                 | Heat Shrink                     |
| Operating Temperature Range | -67°F to 230°F (-55°C to 110°C) |
| RoHS 2011/65/EU             | Yes                             |

Agency Approvals



UL 486D listed E102356

Manufacturing Origin



| Order No.             | UPC          | Description                                                                                                                                                                                                                                                           | Conductor Size | Min. Order Qty. | Case Qty. |
|-----------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------|-----------|
| UF1-Splice Kit-6 Kits | 054007-42920 | UF Splice Kit-Standard includes 1.8" (45,7 mm) length connector/ 8.0" (203,2 mm) length of heavy wall, adhesive lined heat shrink tube.                                                                                                                               | 14–8 AWG       | 6 kits          | 6 kits    |
| UF2-Splice Kit-6 Kits | 054007-42921 | UF Splice Kit-Stretcher offers an 11.5" (292,1 mm) length connector/ 20.0" (508,0 mm) length of heavy wall, adhesive lined heat shrink tube. The Stretcher Kit is used in situations where a 7–10" (17,8–25,4 cm) section of the cable has been damaged or destroyed. | 14–8 AWG       | 6 kits          | 6 kits    |

### 3M™ Airport Lighting Connector Sealing Kit



3M™ Airport Lighting Connector Sealing Kit IAL-3 is designed especially to meet the high demands on airport lighting connections. It meets specification for sealing FAA Specification L-823 connectors.

Kit Includes:

- ♦ Heat shrinkable sleeve
- ♦ Cleaning pad
- ♦ Instructions

RoHS 2011/65/EU Yes

| Order No. | UPC          | Sleeve Length  | Expanded/Recovered I.D.  | Case Qty.   |
|-----------|--------------|----------------|--------------------------|-------------|
| IAL-3     | 054007-08862 | 16" (406,4 mm) | 1.38/0.38" (35,1/9,7 mm) | 30 kit/case |

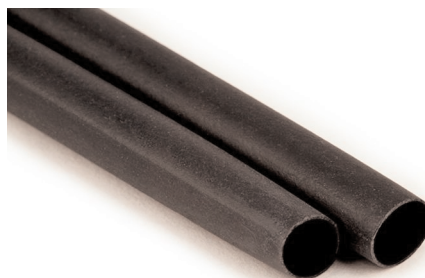
## 3M™ Heat Shrink Splice Kits

### 3M™ Heat Shrink Heavy-Wall Cable Sleeves ITCSN

The 3M™ Heat Shrink Heavy-Wall Cable Sleeves ITCSN are designed to provide reliable performance for electrical splices, connections and terminations, as well as mechanical and environmental protection. ITCSN heavy-wall cable sleeves are cross-linked polyolefin. They are highly split resistant and fast shrinking to provide rapid installation. The cut-to-length sleeves come standard with a factory-applied adhesive/sealant. Order any of several packaging choices or look for the counter merchandiser assortment at a 3M authorized distributor.

|                              |                                                                                   |
|------------------------------|-----------------------------------------------------------------------------------|
| <b>Voltage Rating</b>        | UL Rated to 600 V<br>3M Internal Test Rated to 1 kV                               |
| <b>Material</b>              | Polyolefin                                                                        |
| <b>Shrink Ratio</b>          | 3:1                                                                               |
| <b>Operating Temperature</b> | -67°F to 230°F<br>(-55°C to 110°C)                                                |
| <b>Flame Retardant</b>       | No                                                                                |
| <b>RoHS 2011/65/EU</b>       | Yes                                                                               |
| <b>Agency Approvals</b>      |  |

**Manufacturing Origin**



| Order No.                       | UPC          | Cable Size | Length         | Expanded/Recovered I.D.      | UL Spec. | Adhesive Included | Direct Bury | Case Qty.       |
|---------------------------------|--------------|------------|----------------|------------------------------|----------|-------------------|-------------|-----------------|
| ITCSN-0400-6"-Black-25 Pcs      | 054007-08887 | 12-6 AWG   | 6" (152,4 mm)  | 0.40"/0.15"<br>(10,2/3,8 mm) | UL 486D  | Yes               | Yes         | 25              |
| ITCSN-0400-6"-Black-100 Pcs     | 054007-08963 | 12-6 AWG   | 6" (152,4 mm)  | 0.40"/0.15"<br>(10,2/3,8 mm) | UL 486D  | Yes               | Yes         | 100             |
| ITCSN-0400-6"-Black-12-3 Pc Pks | 051128-60075 | 12-6 AWG   | 6" (152,4 mm)  | 0.40"/0.15"<br>(10,2/3,8 mm) | UL 486D  | Yes               | Yes         | 3/pk,<br>12 pks |
| ITCSN-0400-6"-Red-12-3 Pc Pks   | 051128-60076 | 12-6 AWG   | 6" (152,4 mm)  | 0.40"/0.15"<br>(10,2/3,8 mm) | N/A      | Yes               | No          | 3/pk,<br>12 pks |
| ITCSN-0400-48"-Black-5 Pcs      | 054007-08902 | 12-6 AWG   | 48" (1,22 m)   | 0.40"/0.15"<br>(10,2/3,8 mm) | UL 486D  | Yes               | Yes         | 5               |
| ITCSN-0400-48"-Black-20 Pcs     | 054007-08964 | 12-6 AWG   | 48" (1,22 m)   | 0.40"/0.15"<br>(10,2/3,8 mm) | UL 486D  | Yes               | Yes         | 20              |
| ITCSN-0400-25'-Black-Reel       | 054007-08886 | 12-6 AWG   | 25' (7,62 m)   | 0.40"/0.15"<br>(10,2/3,8 mm) | N/A      | No                | No          | 1               |
| ITCSN-0800-6"-Black-25 Pcs      | 054007-40067 | 8-1/0 AWG  | 6" (152,4 mm)  | 0.80"/0.20"<br>(20,3/5,1 mm) | UL 486D  | Yes               | Yes         | 25              |
| ITCSN-0800-6"-Black-100 Pcs     | 054007-08965 | 8-1/0 AWG  | 6" (152,4 mm)  | 0.80"/0.20"<br>(20,3/5,1 mm) | UL 486D  | Yes               | Yes         | 100             |
| ITCSN-0800-6"-Black-12-3 Pc Pks | 051128-60077 | 8-1/0 AWG  | 6" (152,4 mm)  | 0.80"/0.20"<br>(20,3/5,1 mm) | UL 486D  | Yes               | Yes         | 3/pk,<br>12 pks |
| ITCSN-0800-6"-Red-12-3 Pc Pks   | 051128-60078 | 8-1/0 AWG  | 6" (152,4 mm)  | 0.80"/0.20"<br>(20,3/5,1 mm) | N/A      | Yes               | No          | 3/pk,<br>12 pks |
| ITCSN-0800-9"-Black-25 Pcs      | 054007-08890 | 8-1/0 AWG  | 9" (228,6 mm)  | 0.80"/0.20"<br>(20,3/5,1 mm) | UL 486D  | Yes               | Yes         | 25              |
| ITCSN-0800-9"-Black-100 Pcs     | 054007-08966 | 8-1/0 AWG  | 9" (228,6 mm)  | 0.80"/0.20"<br>(20,3/5,1 mm) | UL 486D  | Yes               | Yes         | 100<br>pcs/cs   |
| ITCSN-0800-12"-Black-25 Pcs     | 054007-08889 | 8-1/0 AWG  | 12" (304,8 mm) | 0.80"/0.20"<br>(20,3/5,1 mm) | UL 486D  | Yes               | Yes         | 25<br>pcs/cs    |
| ITCSN-0800-12"-Black-100 Pcs    | 054007-08967 | 8-1/0 AWG  | 12" (304,8 mm) | 0.80"/0.20"<br>(20,3/5,1 mm) | UL 486D  | Yes               | Yes         | 100             |
| ITCSN-0800-48"-Black-5 Pcs      | 054007-08903 | 8-1/0 AWG  | 48" (1,22 m)   | 0.80"/0.20"<br>(20,3/5,1 mm) | UL 486D  | Yes               | Yes         | 5               |
| ITCSN-0800-48"-Black-20 Pcs     | 054007-08968 | 8-1/0 AWG  | 48" (1,22 m)   | 0.80"/0.20"<br>(20,3/5,1 mm) | UL 486D  | Yes               | Yes         | 20              |

## 3M™ Heat Shrink Splice Kits

### 3M™ Heat Shrink Heavy-Wall Cable Sleeves ITCSN (continued)

| Order No.                        | UPC          | Cable Size            | Length         | Expanded/Recovered I.D.       | UL Spec. | Adhesive Included | Direct Bury | Case Qty.       |
|----------------------------------|--------------|-----------------------|----------------|-------------------------------|----------|-------------------|-------------|-----------------|
| ITCSN-0800-48"-Red-20 Pcs        | 051128-55500 | 8-1/0 AWG             | 48" (1,22 m)   | 0.80"/0.20"<br>(20,3/5,1 mm)  | N/A      | Yes               | No          | 20              |
| ITCSN-0800-25'-Black-Reel        | 054007-08888 | 8-1/0 AWG             | 25' (7,62 m)   | 0.80"/0.20"<br>(20,3/5,1 mm)  | N/A      | No                | No          | 1               |
| ITCSN-1100-6"-Black-25 Pcs       | 054007-08894 | 2-4/0 AWG             | 6" (152,4 mm)  | 1.10"/0.37"<br>(27,9/9,4 mm)  | UL 486D  | Yes               | Yes         | 25              |
| ITCSN-1100-6"-Black-100 Pcs      | 054007-08969 | 2-4/0 AWG             | 6" (152,4 mm)  | 1.10"/0.37"<br>(27,9/9,4 mm)  | UL 486D  | Yes               | Yes         | 100             |
| ITCSN-1100-9"-Black-25 Pcs       | 054007-08893 | 2-4/0 AWG             | 9" (228,6 mm)  | 1.10"/0.37"<br>(27,9/9,4 mm)  | UL 486D  | Yes               | Yes         | 25              |
| ITCSN-1100-9"-Black-100 Pcs      | 054007-08970 | 2-4/0 AWG             | 9" (228,6 mm)  | 1.10"/0.37"<br>(27,9/9,4 mm)  | UL 486D  | Yes               | Yes         | 100             |
| ITCSN-1100-9"-Black-12-3 Pc Pks  | 051128-60079 | 2-4/0 AWG             | 9" (228,6 mm)  | 1.10"/0.37"<br>(27,9/9,4 mm)  | UL 486D  | Yes               | Yes         | 3/pk,<br>12 pks |
| ITCSN-1100-9"-Red-12-3 Pc Pks    | 051128-60080 | 2-4/0 AWG             | 9" (228,6 mm)  | 1.10"/0.37"<br>(27,9/9,4 mm)  | N/A      | Yes               | No          | 3/pk,<br>12 pks |
| ITCSN-1100-12"-Black-10 Pcs      | 054007-08892 | 2-4/0 AWG             | 12" (304,8 mm) | 1.10"/0.37"<br>(27,9/9,4 mm)  | UL 486D  | Yes               | Yes         | 10              |
| ITCSN-1100-12"-Black-100 Pcs     | 054007-08971 | 2-4/0 AWG             | 12" (304,8 mm) | 1.10"/0.37"<br>(27,9/9,4 mm)  | UL 486D  | Yes               | Yes         | 100             |
| ITCSN-1100-48"-Black-5 Pcs       | 054007-08904 | 2-4/0 AWG             | 48" (1,22 m)   | 1.10"/0.37"<br>(27,9/9,4 mm)  | UL 486D  | Yes               | Yes         | 5               |
| ITCSN-1100-48"-Black-20 Pcs      | 054007-08972 | 2-4/0 AWG             | 48" (1,22 m)   | 1.10"/0.37"<br>(27,9/9,4 mm)  | UL 486D  | Yes               | Yes         | 20              |
| ITCSN-1100-25'-Black-Reel        | 054007-08891 | 2-4/0 AWG             | 25' (7,62 m)   | 1.10"/0.37"<br>(27,9/9,4 mm)  | N/A      | No                | No          | 1               |
| ITCSN-1500-9"-Black-10 Pcs       | 054007-08897 | 3/0 AWG-<br>400 kcmil | 9" (228,6 mm)  | 1.50"/0.50"<br>(38,1/12,7 mm) | UL 486D  | Yes               | Yes         | 10              |
| ITCSN-1500-9"-Black-50 Pcs       | 054007-08973 | 3/0 AWG-<br>400 kcmil | 9" (228,6 mm)  | 1.50"/0.50"<br>(38,1/12,7 mm) | UL 486D  | Yes               | Yes         | 50              |
| ITCSN-1500-9"-Black-12-3 Pc Pks  | 051128-60081 | 3/0 AWG-<br>450 kcmil | 9" (228,6 mm)  | 1.50"/0.50"<br>(38,1/12,7 mm) | UL 486D  | Yes               | Yes         | 3/pk,<br>12 pks |
| ITCSN-1500-12"-Black-10 Pcs      | 054007-08896 | 3/0 AWG-<br>400 kcmil | 12" (304,8 mm) | 1.50"/0.50"<br>(38,1/12,7 mm) | UL 486D  | Yes               | Yes         | 10              |
| ITCSN-1500-12"-Black-50 Pcs      | 054007-08974 | 3/0 AWG-<br>400 kcmil | 12" (304,8 mm) | 1.50"/0.50"<br>(38,1/12,7 mm) | UL 486D  | Yes               | Yes         | 50              |
| ITCSN-1500-48"-Black-5 Pcs       | 054007-08905 | 3/0 AWG-<br>400 kcmil | 48" (1,22 m)   | 1.50"/0.50"<br>(38,1/12,7 mm) | UL 486D  | Yes               | Yes         | 5               |
| ITCSN-1500-48"-Black-20 Pcs      | 054007-08975 | 3/0 AWG-<br>400 kcmil | 48" (1,22 m)   | 1.50"/0.50"<br>(38,1/12,7 mm) | UL 486D  | Yes               | Yes         | 20              |
| ITCSN-1500-25'-Black-Reel        | 054007-08895 | 3/0 AWG-<br>450 kcmil | 25' (7,62 m)   | 1.50"/0.50"<br>(38,1/12,7 mm) | N/A      | No                | No          | 1               |
| ITCSN-2000-9"-Black-10 Pcs       | 054007-08900 | 250-750 kcmil         | 9" (228,6 mm)  | 2.00"/0.65"<br>(50,8/16,5 mm) | UL 486D  | Yes               | Yes         | 10              |
| ITCSN-2000-9"-Black-50 Pcs       | 054007-08976 | 250-750 kcmil         | 9" (228,6 mm)  | 2.00"/0.65"<br>(50,8/16,5 mm) | UL 486D  | Yes               | Yes         | 50              |
| ITCSN-2000-12"-Black-10 Pcs      | 054007-08899 | 250-750 kcmil         | 12" (304,8 mm) | 2.00"/0.65"<br>(50,8/16,5 mm) | UL 486D  | Yes               | Yes         | 10              |
| ITCSN-2000-12"-Black-50 Pcs      | 054007-08977 | 250-750 kcmil         | 12" (304,8 mm) | 2.00"/0.65"<br>(50,8/16,5 mm) | UL 486D  | Yes               | Yes         | 50              |
| ITCSN-2000-12"-Black-12-3 Pc Pks | 051128-60082 | 250-750 kcmil         | 12" (304,8 mm) | 2.00"/0.65"<br>(50,8/16,5 mm) | UL 486D  | Yes               | Yes         | 3/pk,<br>12 pks |
| ITCSN-2000-48"-Black-5 Pcs       | 054007-08906 | 250-750 kcmil         | 48" (1,22 m)   | 2.00"/0.65"<br>(50,8/16,5 mm) | UL 486D  | Yes               | Yes         | 5               |
| ITCSN-2000-48"-Black-20 Pcs      | 054007-08978 | 250-750 kcmil         | 48" (1,22 m)   | 2.00"/0.65"<br>(50,8/16,5 mm) | UL 486D  | Yes               | Yes         | 20              |

Low Voltage Splices, 1000 V or less

## 3M™ Heat Shrink Splice Kits

### 3M™ Heat Shrink Heavy-Wall Cable Sleeves ITCSN (continued)

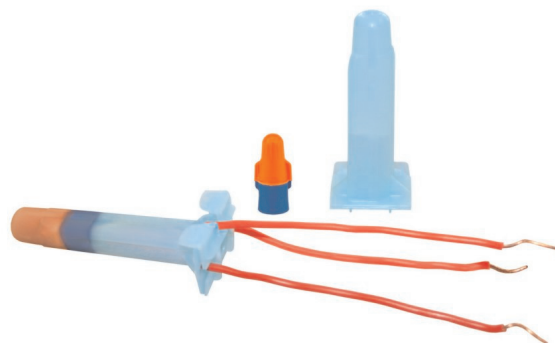
| Order No.                   | UPC          | Cable Size      | Length         | Expanded/Recovered I.D.        | UL Spec. | Adhesive Included | Direct Bury | Case Qty. |
|-----------------------------|--------------|-----------------|----------------|--------------------------------|----------|-------------------|-------------|-----------|
| ITCSN-2000-25'-Black-Reel   | 054007-08898 | 250-750 kcmil   | 25' (7,62 m)   | 2.00"/0.65"<br>(50,8/16,5 mm)  | N/A      | No                | No          | 1         |
| ITCSN-3000-12"-Black-10 Pcs | 054007-08901 | 600-1250 kcmil  | 12" (304,8 mm) | 3.00"/1.00"<br>(76,2/25,4 mm)  | N/A      | Yes               | No          | 10        |
| ITCSN-3000-12"-Black-50 Pcs | 054007-08979 | 600-1250 kcmil  | 12" (304,8 mm) | 3.00"/1.00"<br>(76,2/25,4 mm)  | N/A      | Yes               | No          | 50        |
| ITCSN-3000-48"-Black-5 Pcs  | 054007-08907 | 600-1250 kcmil  | 48" (1,22 m)   | 3.00"/1.00"<br>(76,2/25,4 mm)  | N/A      | Yes               | No          | 5         |
| ITCSN-3000-48"-Black-20 Pcs | 054007-08980 | 600-1250 kcmil  | 48" (1,22 m)   | 3.00"/1.00"<br>(76,2/25,4 mm)  | N/A      | Yes               | No          | 20        |
| ITCSN-4500-48"-Black-5 Pcs  | 051135-37979 | 1500-2500 kcmil | 48" (1,22 m)   | 4.50"/1.50"<br>(114,3/38,1 mm) | N/A      | Yes               | No          | 5         |
| ITCSN-4500-48"-Black-20 Pcs | 054007-08981 | 1500-2500 kcmil | 48" (1,22 m)   | 4.50"/1.50"<br>(114,3/38,1 mm) | N/A      | Yes               | No          | 20        |
| ITCSN-6000-48"-Black-5 Pcs  | 051135-37980 | 2.1"-4.8"       | 48" (1,22 m)   | 6.00"/1.80"<br>(152,4/45,7 mm) | N/A      | Yes               | No          | 5         |
| ITCSN-6000-48"-Black-20 Pcs | 054007-08982 | 2.1"-4.8"       | 48" (1,22 m)   | 6.00"/1.80"<br>(152,4/45,7 mm) | N/A      | Yes               | No          | 20        |

## 3M™ Direct Bury Splice Kits

### 3M™ Direct Bury Splice Kit DB0/B-6

The 3M™ Direct Bury Splice Kit DB0/B-6 is used to electrically connect two or more pre-stripped copper wires and moisture seal the connection for direct burial. The kit includes a 3M™ Performance Plus Wire Connector O/B+ and a high impact, UV-resistant polypropylene tube prefilled with moisture-resistant grease.

|                               |                                                                                     |
|-------------------------------|-------------------------------------------------------------------------------------|
| Voltage                       | 600 V                                                                               |
| Splice Type                   | Direct Bury                                                                         |
| Application Temperature Range | 32–120°F (0–49°C)                                                                   |
| Operating Temperature         | 221°F (105°C)                                                                       |
| Flame Retardant               | Yes                                                                                 |
| RoHS 2011/65/EU               | Yes                                                                                 |
| Agency Approval               |  |



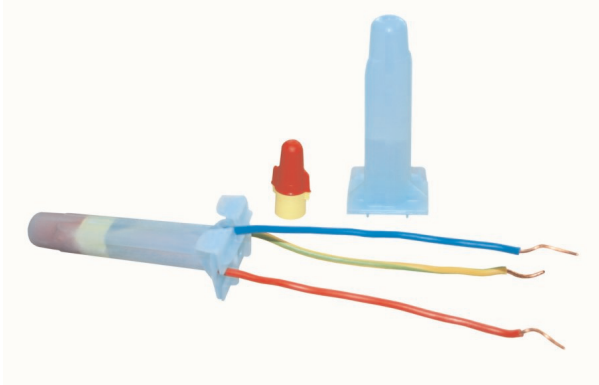
| Order No.    | UPC          | Conductor Size | Common AWG Wire Combinations (CU only)                                                                                                                             | Case Qty. |
|--------------|--------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| DB0/B-6 KIT  | 051128-59075 | 18–10 AWG      | 2–3#16 sol/str; 2–3#14 sol/str; 2#12 sol/str; 1#14 to 1#12 sol/str; 1#18 to 1–2#14 sol/str; 1#18 to 1–2#12 sol/str; 1#16 to 1–2#14 sol/str; 1#16 to 1–2#12 sol/str | 25 Kits   |
| DB0/B-6 BULK | 051128-59076 | 18–10 AWG      | 2–3#16 sol/str; 2–3#14 sol/str; 2#12 sol/str; 1#14 to 1#12 sol/str; 1#18 to 1–2#14 sol/str; 1#18 to 1–2#12 sol/str; 1#16 to 1–2#14 sol/str; 1#16 to 1–2#12 sol/str | 100 Kits  |

3M™ Direct Bury Splice Kits

3M™ Direct Bury Splice Kit DBR/Y-6

The 3M™ Direct Bury Splice Kit DBR/Y-6 is used to electrically connect two or more pre-stripped copper wires and moisture seal the connection for direct burial. The kit includes a 3M™ Performance Plus Wire Connector R/Y+ and a high impact, UV-resistant polypropylene tube prefilled with moisture-resistant grease.

|                               |                                                                                   |
|-------------------------------|-----------------------------------------------------------------------------------|
| Voltage                       | 600 V                                                                             |
| Splice Type                   | Direct Bury                                                                       |
| Application Temperature Range | 32–120°F (0–49°C)                                                                 |
| Operating Temperature Range   | -40–221°F (-40–105°C)                                                             |
| Flame Retardant               | Yes                                                                               |
| RoHS 2011/65/EU               | Yes                                                                               |
| Agency Approval               |  |



| Order No.    | UPC          | Conductor Size | Common AWG Wire Combinations (CU only)                                                               | Case Qty. |
|--------------|--------------|----------------|------------------------------------------------------------------------------------------------------|-----------|
| DBR/Y-6 KIT  | 051128-58573 | 18–10 AWG      | 2–7#18; 2–6#16; 2–4#14; 2–4#12; 2–3#10; 1–3#12 w/ 1#18; 1–2#10 w/1#18; 1–2#10 w/1#12; 1–2#14 w/ 1#18 | 25 Kits   |
| DBR/Y-6 BULK | 051128-58574 | 18–10 AWG      | 2–7#18; 2–6#16; 2–4#14; 2–4#12; 2–3#10; 1–3#12 w/ 1#18; 1–2#10 w/1#18; 1–2#10 w/1#12; 1–2#14 w/ 1#18 | 100 Kits  |

Low Voltage Splices, 1000 V or less

## 3M™ Resin Splice Kits

### 3M™ Scotchcast™ Inline Splice Kits, 72-N Series

The 3M™ Scotchcast™ Inline Splicing Kits 72-N Series is a series of rigid body splices tailored for joining signal and control cables rated up to 1000 V. The kits are designed to accommodate shielded or unshielded constructions of plastic or rubber-jacketed cables. Six kit sizes cover a range of cables up to 100-pair (200 conductors) 10 AWG or 200-pair (400 conductors) 22 AWG.

**Connectors are not included, order separately.** Each kit contains sufficient material to make one splice, excluding connectors.

### 3M Scotchcast 72-N Series Selection (Based on Conductor/Connector Bundle)

| Scotchlok™ Insulated Butt Connectors |                   |          |                     |                  |                   |          |                     |                  |                   |          |                     |          |
|--------------------------------------|-------------------|----------|---------------------|------------------|-------------------|----------|---------------------|------------------|-------------------|----------|---------------------|----------|
| MV18BC 22-18 AWG                     |                   |          |                     | MV14BC 16-14 AWG |                   |          |                     | MV10BC 12-10 AWG |                   |          |                     |          |
| Kit No.                              | Shielded Cables** |          | Unshielded Cables** |                  | Shielded Cables** |          | Unshielded Cables** |                  | Shielded Cables** |          | Unshielded Cables** |          |
|                                      | No Cond.          | No Pairs | No Cond.            | No Pairs         | No Cond.          | No Pairs | No Cond.            | No Pairs         | No Cond.          | No Pairs | No Cond.            | No Pairs |
| 72-N1*                               | —                 | —        | 6                   | 3                | —                 | —        | 4                   | 2                | —                 | —        | 3                   | —        |
| 72-N2                                | 18                | 9        | 32                  | 16               | 12                | 6        | 19                  | 9                | 8                 | 4        | 13                  | 6        |
| 72-N3                                | 42                | 21       | 75                  | 37               | 24                | 12       | 45                  | 22               | 14                | 7        | 27                  | 13       |
| 72-N4                                | 74                | 37       | 160                 | 80               | 50                | 25       | 90                  | 45               | 40                | 20       | 60                  | 30       |
| 72-N5                                | 140               | 70       | 200                 | 100              | 120               | 60       | 160                 | 80               | 100               | 50       | 100                 | 50       |
| 72-N6                                | 360               | 180      | 400                 | 200              | 220               | 110      | 250                 | 125              | 180               | 90       | 200                 | 100      |

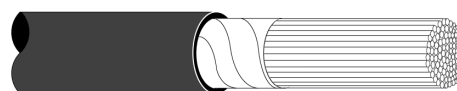
\*Nonshielded cable only.

\*\*Figures based on IMSA cable specifications.

|                             |                                                                                                                                            |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Voltage</b>              | 1000 V or less                                                                                                                             |
| <b>Number of Conductors</b> | Multiple Conductors                                                                                                                        |
| <b>Cable/Shielding Type</b> | Shielded and Non-Shielded Signal and Control Cable                                                                                         |
| <b>Splice Type</b>          | Resin                                                                                                                                      |
| <b>Applications</b>         | To splice signal and control cables rated up to 1000 V. Inline splicing of shielded and non-shielded cables in direct burial applications. |
| <b>RoHS 2011/65/EU</b>      | Yes                                                                                                                                        |



Multiple Conductor Nonshielded Signal & Control Cable



Multiple Conductor Shielded Signal & Control Cable



| Order No. | UPC          | Shielded/Non-Shielded | Molded Body Length    | Cable O.D.                      | Case Qty. |
|-----------|--------------|-----------------------|-----------------------|---------------------------------|-----------|
| 72-N1     | 054007-10623 | Non-Shielded          | 7.125"<br>(181,0 mm)  | 0.250"-0.625"<br>(6,4-15,9 mm)  | 10        |
| 72-N2     | 054007-10625 | Shielded              | 10.562"<br>(268,3 mm) | 0.500"-1.000"<br>(12,7-25,4 mm) | 10        |
| 72-N3     | 054007-10627 | Shielded              | 15.438"<br>(392,1 mm) | 0.625"-1.500"<br>(15,9-38,1 mm) | 10        |
| 72-N4     | 054007-10629 | Shielded              | 15.625"<br>(396,9 mm) | 1.000"-2.000"<br>(25,4-50,8 mm) | 1         |
| 72-N5     | 054007-10631 | Shielded              | 20.312"<br>(515,9 mm) | 1.250"-2.250"<br>(31,8-57,2 mm) | 1         |
| 72-N6     | 054007-10633 | Shielded              | 25"<br>(635,0 mm)     | 1.250"-3.250"<br>(31,8-82,6 mm) | 1         |

## 3M™ Resin Splice Kits

## 3M™ Scotchcast™ Re-Enterable Signal and Control Cable Splice Kits 78-R Series

3M™ Scotchcast™ Re-Enterable Signal and Control Cable Splice Kits 78-R Series make inline or tap splices on shielded or nonshielded, plastic- and rubber-jacketed, signal and control (or power) cable rated up to 1 kV.

Connectors are not included, order separately. Each kit contains sufficient material to make one splice.

## 3M™ Scotchcast™ 78-R Series Connector Selection

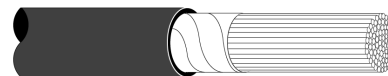
| Scotchlok™ Connectors |                           |             |                     |             |                     |             |                    |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|-----------------------|---------------------------|-------------|---------------------|-------------|---------------------|-------------|--------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|
| Kit No.               | Insulated Butt Connectors |             |                     |             |                     |             | Pigtail Connectors |             |                  |             |                  |             | Tap Connectors   |             |                  |             |                  |             |
|                       | MV18BC<br>22-18 AWG       |             | MV14BC<br>16-14 AWG |             | MV10BC<br>12-10 AWG |             | "Y"<br>18-12 AWG   |             | "R"<br>14-10 AWG |             | 557<br>22-18 AWG |             | 558<br>22-18 AWG |             | 560<br>18-14 AWG |             | 562<br>12-10 AWG |             |
|                       | No<br>Cond.               | No<br>Pairs | No<br>Cond.         | No<br>Pairs | No<br>Cond.         | No<br>Pairs | No<br>Cond.        | No<br>Pairs | No<br>Cond.      | No<br>Pairs | No<br>Cond.      | No<br>Pairs | No<br>Cond.      | No<br>Pairs | No<br>Cond.      | No<br>Pairs | No<br>Cond.      | No<br>Pairs |
| 78-R1                 | 40                        | 20          | 26                  | 13          | 16                  | 8           | 8                  | 4           | 5                | 2           | 15               | 7           | 10               | 5           | 8                | 4           | 6                | 3           |
| 78-R2                 | 66                        | 33          | 45                  | 22          | 26                  | 13          | 20                 | 10          | 10               | 5           | 30               | 15          | 20               | 10          | 16               | 8           | 12               | 6           |
| 78-R3                 | 160                       | 80          | 110                 | 55          | 70                  | 35          | 50                 | 25          | 28               | 14          | 80               | 40          | 50               | 25          | 40               | 20          | 36               | 18          |
| 78-R4                 | 300                       | 150         | 180                 | 90          | 110                 | 55          | 84                 | 42          | 60               | 30          | 142              | 71          | 100              | 50          | 80               | 40          | 68               | 34          |
| 78-R5                 | 550                       | 275         | 320                 | 160         | 200                 | 100         | 174                | 87          | 120              | 60          | 260              | 130         | 200              | 100         | 160              | 80          | 130              | 65          |

Note: Above figures based on IMSA cable specifications.

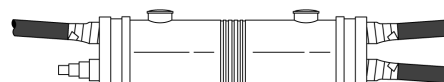
|                             |                                                                                                  |
|-----------------------------|--------------------------------------------------------------------------------------------------|
| <b>Voltage</b>              | 1000 V or less                                                                                   |
| <b>Number of Conductors</b> | Multiple Conductor                                                                               |
| <b>Cable/Shielding Type</b> | Shielded and Non-Shielded Signal and Control Cable                                               |
| <b>Splice Type</b>          | Resin                                                                                            |
| <b>RoHS 2011/65/EU</b>      | Yes                                                                                              |
| <b>Applications</b>         | Inline wye, "x," or butt splicing of shielded or non-shielded cable in direct bury applications. |



Multiple Conductor Nonshielded  
Signal & Control Cable



Multiple Conductor Shielded  
Signal & Control Cable



| Order No. | UPC          | Kit Size, L x I.D.            | Cable O.D., Run            | Cable O.D., Tap            | Case Qty. |
|-----------|--------------|-------------------------------|----------------------------|----------------------------|-----------|
| 78-R1     | 051128-55115 | 12.50" x 2.75" (318 x 70 mm)  | 0.25"-1.00" (6,4-25,4 mm)  | 0.25"-1.00" (6,4-25,4 mm)  | 1         |
| 78-R2     | 051128-55116 | 24.50" x 2.75" (622 x 70 mm)  | 0.25"-1.00" (6,4-25,4 mm)  | 0.25"-1.00" (6,4-25,4 mm)  | 1         |
| 78-R3     | 051128-55117 | 24.50" x 3.81" (622 x 97 mm)  | 0.50"-1.50" (12,7-38,1 mm) | 0.50"-1.00" (12,7-25,4 mm) | 1         |
| 78-R4     | 051128-55118 | 24.50" x 4.81" (622 x 122 mm) | 0.50"-2.00" (12,7-50,8 mm) | 0.50"-1.75" (12,7-44,5 mm) | 1         |
| 78-R5     | 051128-55119 | 26.50" x 6.00" (673 x 152 mm) | 1.00"-2.50" (25,4-63,5 mm) | 1.00"-2.50" (25,4-63,5 mm) | 1         |

## 3M™ Resin Splice Kits

### 3M™ Scotchcast™ Multi-Mold Resin Splice Kits 85 Series

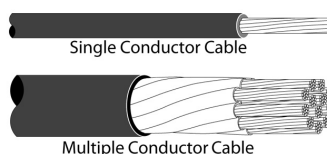
The 3M™ Scotchcast™ Multi-Mold Resin Splice Kit 85 Series are used to electrically insulate odd-sized and odd-shaped splices on cables rated through 1 kV. These flexible plastic molds are easily formed around splices. Within 30 minutes after the resin has been poured, the splice is ready for service – above ground or buried.

The 85-14CP splice is specifically designed for use in cathodic protection with 3M™ Scotchcast™ Electrical Insulating Resin 4.

Each kit makes one splice. Connectors are not included and must be ordered separately.

\* Single Conductor Cable

|                             |                                                                                                            |
|-----------------------------|------------------------------------------------------------------------------------------------------------|
| <b>Voltage</b>              | 1000 V or less                                                                                             |
| <b>Number of Conductors</b> | Single; Multiple                                                                                           |
| <b>Cable/Shielding Type</b> | Non-shielded                                                                                               |
| <b>Splice Type</b>          | Resin                                                                                                      |
| <b>Applications</b>         | Splice cables rated up to 1000 V for inline, wye, or 4-way non-shielded cable in direct bury applications. |
| <b>RoHS 2011/65/EU</b>      | Yes                                                                                                        |



| Order No. | UPC          | Max. Conductor, Split Bolt       | Max. Conductor, H- or C-Tap Compression | Max. Conductor, Inline Compression | Max. Connector Size (height + width)                                   | Max. Sheath Opening | Max. Cable O.D., Wye or 4-Way                         | Case Qty. |
|-----------|--------------|----------------------------------|-----------------------------------------|------------------------------------|------------------------------------------------------------------------|---------------------|-------------------------------------------------------|-----------|
| 85-10     | 054007-11846 | 8 AWG (stranded)                 | 4 AWG (stranded)                        | -                                  | 1-3/4" (44,5 mm)                                                       | 3-1/2" (88,9 mm)    | Run & Tap: 7/16" (11,1 mm)                            | 10        |
| 85-12     | 054007-11847 | 1 AWG (stranded)                 | 2/0 AWG (stranded)                      | -                                  | 2-3/4" (69,9 mm)                                                       | 3-1/2" (88,9 mm)    | Run & Tap: 3/4" (19,1 mm)                             | 10        |
| 85-14     | 054007-11848 | 2/0 AWG (stranded)               | 4/0 AWG (stranded)                      | -                                  | 3-1/4" (82,6 mm)                                                       | 6-1/2" (165,1 mm)   | Run & Tap: 7/8" (22,2 mm)                             | 10        |
| 85-14-CP* | 054007-31927 | 2/0 AWG (stranded)               | 4/0 AWG (stranded)                      | -                                  | 3-1/4" (82,6 mm)                                                       | 9" (228,6 mm)       | Run & Tap: 7/8" (22,2 mm)                             | 10        |
| 85-16     | 054007-02403 | 250 kcmil (run)<br>2/0 AWG (tap) | 500 kcmil (run)<br>4/0 AWG (tap)        | 750 kcmil                          | Split Bolt: 3-3/4" (95,3 mm)<br>H- or C-Tap Compression: 6" (152,4 mm) | 9" (228,6 mm)       | Run & Tap: 7/8" (22,2 mm)<br>Inline: 1-1/2" (38,1 mm) | 10        |

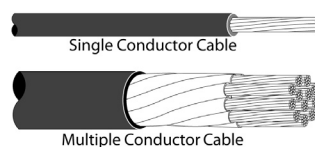
## 3M™ Resin Splice Kits

### 3M™ Scotchcast™ Wye Resin Splice Kit 90-B1

3M™ Scotchcast™ Wye Resin Splice Kit 90-B1 insulates and moisture-seals wye splices made with the split-bolt type connectors on cables rated through 1 kV.

Each kit makes one splice. Connectors must be ordered separately.

|                             |                                                                                                    |
|-----------------------------|----------------------------------------------------------------------------------------------------|
| <b>Voltage</b>              | 1000 V or less                                                                                     |
| <b>Number of Conductors</b> | Single; Multiple                                                                                   |
| <b>Cable/Shielding Type</b> | Single Conductor Cable, Multiple Conductor Cable                                                   |
| <b>Splice Type</b>          | Resin                                                                                              |
| <b>Applications</b>         | Insulation and protection of wye splices made with split bolt connectors on cable rated to 1000 V. |
| <b>RoHS 2011/65/EU</b>      | Yes                                                                                                |



| Order No. | UPC          | Cable O.D. – Run               | Cable O.D. (Max.) – Tap | Connector Size (Max.) – Split Bolt | Connector Size (Max.) – Crimped | Case Qty. |
|-----------|--------------|--------------------------------|-------------------------|------------------------------------|---------------------------------|-----------|
| 90-B1     | 054007-25115 | 0.50"-0.812"<br>(12,7-20,1 mm) | 0.375" (9,5 mm)         | 1/0 AWG                            | 2/0 AWG                         | 10        |

### 3M™ Scotchcast™ Flexible Power Cable Tap Splice Kit 82-BF1

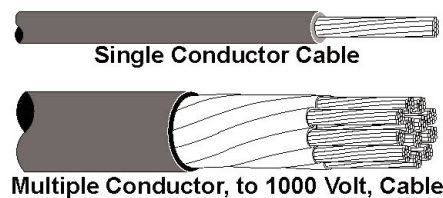
3M™ Scotchcast™ Splice Kit 82-BF1 is for tap splices on non-shielded portable power cables and cords with copper conductors rated up to 1 kV. It can be used on single- conductor or multiple-conductor cables using a compression (crimp) "C" tap connector.

The 82-BF1 molds are removable and reusable. The 82-BF1 splice kit creates a permanent splice as recognized by the Mine Safety and Health Administration (07-KA060002-MSHA).

Each kit makes one splice.

\* Base selection on cable O.D. range.

|                             |                                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------|
| <b>Voltage</b>              | 1000 V or less                                                                      |
| <b>No. of Conductors</b>    | Multiple (600 V), Single (1000 V)                                                   |
| <b>Cable/Shielding Type</b> | Non-Shielded Portable Power Cables and Cords                                        |
| <b>Splice Type</b>          | Resin                                                                               |
| <b>Applications</b>         | Making tap splices on non-shielded portable power cables and cords rated to 1000 V. |
| <b>RoHS 2011/65/EU</b>      | Yes                                                                                 |
| <b>Agency Approval</b>      | MSHA                                                                                |



| Order No. | UPC          | Cable O.D.                                                               | Voltage                                 | Conductor Size                                  | Case Qty. |
|-----------|--------------|--------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------|-----------|
| 82-BF1    | 051128-59175 | For Single: 0.25"-0.80" (6-20 mm)<br>For Multiple: 0.25"-0.80" (6-20 mm) | For Single: 1 kV<br>For Multiple: 600 V | For Single: 1/0 AWG (50 mm²)<br>For Multiple: * | 10        |

## 3M™ Resin Splice Kits

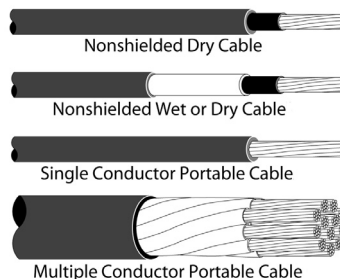
### 3M™ Scotchcast™ Inline Resin Power Cable Splice Kits 82-A Series

Use the 3M™ Scotchcast™ Inline Resin Splice Kits 82-A Series to insulate and seal single conductor, unshielded cable splices through 5 kV and multiple conductor cables through 1 kV. Designed for use in weather-exposed or direct-burial locations. UL listed for direct burial and submerged applications up to 600 V and 90°C. For use with UL listed connectors only.

Important: Use insulation jacket or connector O.D. for final ordering criteria.

\*Conductor size is 3/0 AWG–500 kcmil when using a 3M™ Scotchlok™ Copper Compression Connector 10014.

|                             |                                                                                                               |
|-----------------------------|---------------------------------------------------------------------------------------------------------------|
| <b>Voltage</b>              | 600 V or less (Direct Bury and Submerged Applications); 1000 V (Multiple); 5 kV (Single)                      |
| <b>Number of Conductors</b> | Single and Multiple                                                                                           |
| <b>Cable/Shielding Type</b> | Multiple Conductor Portable Cable, Non-Shielded, Single Conductor Portable Cable                              |
| <b>Splice Type</b>          | Resin                                                                                                         |
| <b>RoHS 2011/65/EU</b>      | Yes                                                                                                           |
| <b>Agency Approvals</b>     |  Certified for 600 V or less |



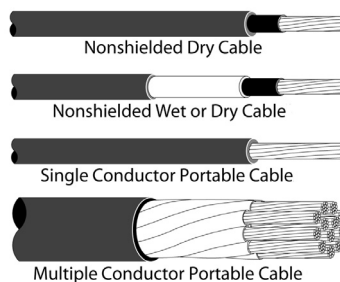
| Order No. | UPC          | Conductor Size     | Max. Connector O.D. | Max. Cable O.D.  | Max. Sheath Opening (L) | Case Qty. |
|-----------|--------------|--------------------|---------------------|------------------|-------------------------|-----------|
| 82-A      | 054007-25016 | 10-2 AWG           | 0.406" (10,3 mm)    | 0.75" (19,1 mm)  | 4.5" (114,3 mm)         | 10        |
| 82-A1     | 054007-25024 | 18-2 AWG           | 0.406" (10,3 mm)    | 0.625" (15,9 mm) | 4.5" (114,3 mm)         | 10        |
| 82-A2     | 054007-25032 | 2-3/0 AWG          | 0.625" (15,9 mm)    | 1.00" (25,4 mm)  | 6.0" (152,4 mm)         | 10        |
| 82-A3     | 054007-25040 | 3/0 AWG-400 kcmil* | 1.00" (25,4 mm)     | 1.56" (39,7 mm)  | 9.0" (228,6 mm)         | 10        |

### 3M™ Scotchcast™ Wye Resin Splice Kit 82-B1

3M™ Scotchcast™ Wye Resin Splice Kit 82-B1 insulates and seals wye splices for compression tap connectors (e.g., C-tap or H-tap) rated for cables up to 5 kV. Use on nonshielded cables through 5 kV and on multiple conductor cables through 1 kV.

This kit will accommodate both split bolt and crimped conductors. Each kit makes one splice. Connectors are not included in the kit and must be purchased separately.

|                             |                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------|
| <b>Voltage</b>              | 1000 V; 5 kV                                                                     |
| <b>Number of Conductors</b> | Multiple (1000 V), Single (5 kV)                                                 |
| <b>Cable/Shielding Type</b> | Multiple Conductor Portable Cable, Non-Shielded, Single Conductor Portable Cable |
| <b>Splice Type</b>          | Resin                                                                            |
| <b>RoHS 2011/65/EU</b>      | Yes                                                                              |



| Order No. | UPC          | Voltage Rating                 | Cable O.D.                 | Max. Conductor Size – Split Bolt | Max. Conductor Size – Crimped | Case Qty. |
|-----------|--------------|--------------------------------|----------------------------|----------------------------------|-------------------------------|-----------|
| 82-B1     | 054007-25057 | 5 kV (Single); 1 kV (Multiple) | 0.25"-0.625" (6,4-16,0 mm) | 4 AWG                            | 2 AWG                         | 10        |

## 3M™ Resin Splice Kits

### 3M™ Scotchcast™ Flexible Power Cable Inline Splicing Kits 82-F Series

3M™ Scotchcast™ Flexible Power Cable Inline Splicing Kits 82-F Series are a series of flexible inline splices for use on non-shielded portable power cables and cords. They are designed to be used on single and multiple conductor cables and cords rated up to 1000 Volts (600/2000 Volts mine portable cable rating). The 82-F Series accommodates a 1/C cable rated up to 5 kV. The splices accommodate 1/C cables sized up to 4/0 for inline splicing. Multi-conductor sizing is based on a cable diameter range of up to 1.2" for inline splicing.

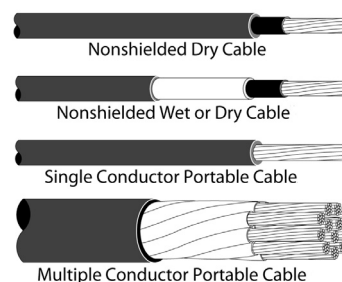
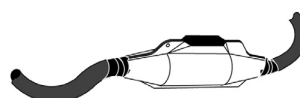
The splice kits are based on 3M™ Scotchcast™ Flame Retardant Compound 2130 for toughness, flexibility, moisture sealing and flame retardancy. They are permanent splices as assigned by the Mine Safety and Health Administration (07-KA060002-MSHA). The completed splices are designed for use in weather-exposed, direct burial or submerged locations. 3M™ Scotchcast™ Inline Splice Kits for Flexible Power Cable 82-F1 are for use on unshielded, portable power cables. The kits are rated up to 5 kV for 1/C and up to 1 kV for multiple conductors.

Each kit makes one splice. Connectors are not included in the kit, and must be purchased separately.

\*Mine portable cable rating of 600/2000 V

\*\*Base selection on cable O.D. range

|                             |                                                                                |
|-----------------------------|--------------------------------------------------------------------------------|
| <b>Voltage</b>              | 1000 V; 5 kV                                                                   |
| <b>Number of Conductors</b> | Multiple (1000 V), Single (5 kV)                                               |
| <b>Cable/Shielding Type</b> | Non-Shielded Dry and Wet Cables, Single and Multiple Conductor Portable Cables |
| <b>Splice Type</b>          | Resin                                                                          |
| <b>RoHS 2011/65/EU</b>      | Yes                                                                            |
| <b>Agency Approvals</b>     | MSHA                                                                           |



| Order No. | UPC          | Cable O.D.                                                                 | Connection Max. O.D.                                     | Voltage                                 | Conductor Size                                                       | Case Qty. |
|-----------|--------------|----------------------------------------------------------------------------|----------------------------------------------------------|-----------------------------------------|----------------------------------------------------------------------|-----------|
| 82-F1     | 051128-59176 | For Single: 0.25"-0.80" (6-20 mm)<br>For Multiple: 0.25"-0.80" (6-20 mm)   | For Single: 0.62" (16 mm)<br>For Multiple: 0.90" (23 mm) | For Single: 5 kV<br>For Multiple: 1 kV* | For Single: 6-1/0 AWG (16-50 mm <sup>2</sup> )<br>For Multiple: **   | 10        |
| 82-F2     | 051128-59177 | For Single: 0.80"-1.20" (20-30 mm)<br>For Multiple: 0.80"-1.20" (20-30 mm) | For Single: 0.82" (21 mm)<br>For Multiple: 1.30" (33 mm) | For Single: 5 kV<br>For Multiple: 1 kV* | For Single: 2/0-4/0 AWG (70-95 mm <sup>2</sup> )<br>For Multiple: ** | 10        |

3M™ Resin Splice Kits

3M™ Scotchcast™ Flame-Retardant Compound 2131

3M™ Scotchcast™ Flame-Retardant Compound 2131 is a two-part polyurethane resin designed to replace the cable jacket when splicing or repairing mine and portable cables. Its unique formulation makes it particularly suited to withstand the rugged conditions under which mine and portable cables must operate. When used in accordance with the appropriate kit configuration, Compound 2131 conforms to MSHA Part 7, Title 30 CFR.

Flame-Retardant Compound 2131 is also used as the insulating material for cable splices operating at up to 1000 volts and designed for 194°F (90°C) at continuous use and for 266°F (130°C) at temporary, overload temperature.

3M™ Scotchcast™ Flame-Retardant Compound 2131 comes in two sizes of 2-part pouch containers, as well as separate 5 gallon jugs for both Part A and Part B. (Note: 2.1 parts of B required for every 1 part of A by weight.)

|                            |                                                                |
|----------------------------|----------------------------------------------------------------|
| Voltage                    | 1000 Volts or less                                             |
| Cure Time                  | 16 to 24 Hours at 70°F (21°C)                                  |
| Energize Time              | Immediately                                                    |
| Max. Operating Temperature | 194°F (90°C) continuous                                        |
| Color                      | Black                                                          |
| RoHS 2011/65/EU            | Yes                                                            |
| Used in these kits         | 5750; 5760; 5831; 5832; 82-F1; 82-F2; 82-BF1; M-20; M-30; M-40 |



| Order No.         | UPC          | Packaging Description | Weight            | Volume in³ (cm³) | Case Qty. |
|-------------------|--------------|-----------------------|-------------------|------------------|-----------|
| 2131B             | 051128-59166 | 2-part pouch          | 7.5 oz (213 g)    | 10.6 (175)       | 10        |
| 2131C             | 051128-59167 | 2-part pouch          | 21.5 oz (612 g)   | 30.6 (502)       | 10        |
| 2131-Part A 5 Gal | 051128-59181 | 5 gallon jug, Part A  | 44.5 lb (20.1 kg) |                  | 1 pail    |
| 2131-Part B 5 Gal | 051128-59182 | 5 gallon jug, Part B  | 46.5 lb (21 kg)   |                  | 1 pail    |

## 3M™ Resin Splice Kits

### 3M™ Scotchcast™ Potting Kit 2136

The 3M™ Scotchcast™ Potting Kit 2136 is designed to provide protection against corrosion and possible deteriorating effects of fresh swimming pool or fountain water and sunlight by reliably encapsulating the 8 AWG ground connection in a wet-niche shell as required by NEC® when using rigid, non-metallic conduit in the installation of wet-niche

underwater lighting fixtures. Scotchcast 2136 compound is UL Listed as a potting compound for swimming pool, fountain, or spa equipment and is for use only where adhering to copper, copper alloy and stainless steel materials.

3M™ Scotchcast™ Potting Compound 2136 is a thixotropic polyurethane resin, designed to resist dripping or sagging, and contained in an easy mix 1.5 oz. closed mixing pouch. At temperatures above 40°F (18°C) the compound will firm up in minutes. Encapsulated connections should be allowed to cure for 4 hours prior to submersion.

|                                   |                                                |
|-----------------------------------|------------------------------------------------|
| <b>Voltage</b>                    | Up to 1000 Volts;<br>UL Listed up to 600 Volts |
| <b>Cure Time</b>                  | 4 Hours at 70°F (21°C)                         |
| <b>Energize Time</b>              | Immediately                                    |
| <b>Max. Operating Temperature</b> | UL Listed 20L02 220°F (105°C)                  |
| <b>Color</b>                      | Black                                          |
| <b>RoHS 2011/65/EU</b>            | Yes                                            |



| Order No. | UPC          | Material         | Weight, oz (g) | Containers per Case |
|-----------|--------------|------------------|----------------|---------------------|
| 2136      | 051128-59190 | Potting Compound | 1.50 (42,5)    | 10                  |

## 3M™ Resin Splice Kits

### 3M™ Resin Pressure System Components

The 3M™ Resin Pressure System is comprised of several components used for constructing splices or splice jackets on medium voltage power cables for harsh environments. 3M™ Scotchcast™ Electrical Insulating Resin 4 is a key component of the system, which can be used as the primary insulation for shielded and non-shielded splices rated up to 8 kV. The system is also available as a resin-jacketed tape splice (TapeCast) rated up to 25 kV. The resin is a two-part epoxy, packaged in a special Unipak container that provides the exact mixing ratio for making a strong, dependable and long-lasting splice or splice jacket. The versatile resin system accommodates a variety of splice configurations and cables.

A resin pressure system splice is suitable for submerged locations (e.g. manholes and vaults), underground direct burial, and aerial applications. All parts are ordered separately. Contact your local 3M representative for further details.



### 3M™ Resin Pressure System Components

| Voltage Class | Number of Conductors                                        | Shielding                                                              | Insulation Material                                                                    | Splice Configuration             |
|---------------|-------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------|
| 5 and 8 kV    | 1/C, multi/C and Transitions from Multi-to single conductor | Non-shielded, Tape Shielded, Wire Shielded, UniShield®, LC, CN and JCN | Solid Dielectric (EPR, XLPE, etc.), PILC and transitions from PILC to Solid Dielectric | Inline, Wye and Tee Resin Splice |
| 15 kV         | 1/C, multi/C and Transitions from Multi-to single conductor | Tape Shielded, Wire Shielded, UniShield®, LC, CN and JCN               | Solid Dielectric (EPR, XLPE, etc.), PILC and transitions from PILC to Solid Dielectric | Inline and Tee TapeCast™ Splice  |
| 25 kV         | 1/C, multi/C and Transitions from Multi-to single conductor | Tape Shielded, Wire Shielded, UniShield®, LC, CN and JCN               | Solid Dielectric (EPR, XLPE, etc.), PILC and transitions from PILC to Solid Dielectric | Inline and Tee TapeCast™ Splice  |

These Resin and 3M™ TapeCast™ Splices will also work on sector shaped conductors.

| Order No. | UPC          | Product Name                           | Description                                                                                                                               | Case Qty. |
|-----------|--------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| E-4       | 054007-25701 | 3M™ Resin Pressure Gun E-4             | Reusable resin pressure gun used for constructing a resin pressure splice.                                                                | 1         |
| P-1B      | 054007-11857 | 3M™ Scotchcast™ Injection Fitting P-1B | Enables safe transfer of resin through gun and into the joint.                                                                            | 5         |
| P-3       | 054007-25735 | 3M™ Scotchcast™ Spacer Tape P-3        | Used to build up voids in odd shaped splices, ensures full resin coverage, and forms a liquid tight mold. 27' x 1-1/2" (8,23 m x 38,1 mm) | 50        |
| P-4       | 054007-25743 | 3M™ Cloth Tape P-4                     | Restrictor Tape, 1" x 30' on 1" core.                                                                                                     | 50        |
| P-5B      | 054007-11858 | 3M™ Scotchcast™ Injection Nozzle P-5B  | Used to puncture compound bag and pipe compound to P-1B injection fitting. Mastic seal prevents spillage.                                 | 5         |

## 3M™ Cold Shrink Connector Insulators 8420 and 8430 Series

3M™ Cold Shrink Connector Insulators 8420 and 8430 Series are designed using 3M's proprietary cold shrink delivery system. Products are supplied prestretched on a removable core for efficiency and ease of installation. Removal of the core (unwinding) after positioning the splice allows the product to shrink into position forming a moisture-tight seal. The live memory action of the specially formulated EPDM material promotes a permanent, durable environmental seal and insulation, with a typical operating temperature range from -40–194°F (-40–90°C).

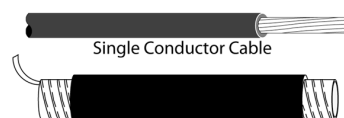
The 8420 insulator meets requirements of ANSI C119-1 and Western Underground Guide 2.14 for secondary splices rated up to 1 kV.

Important: Use insulation jacket or connector O.D. for final ordering criteria.

\* Mastic pads included for cable O.D. build-up. \*\* Kit contains adapters. \*\*\* These sizes are listed for availability only and are not designed to be used as primary insulation. These tubes are for conduit sealing and breakouts. \*\*\*\*Maximum connector length: 5.625"

"Point of Purchase" packaging designated by "P". Example: 8423-6P

|                             |                                                                                                                                                                                                                                    |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Voltage</b>              | 1000 V or less                                                                                                                                                                                                                     |
| <b>Number of Conductors</b> | Single Conductor                                                                                                                                                                                                                   |
| <b>Cable Type</b>           | Low Voltage Single Conductor<br>Insulated Cable                                                                                                                                                                                    |
| <b>Splice Type</b>          | Cold Shrink                                                                                                                                                                                                                        |
| <b>Applications</b>         | Primary electrical insulation for all solid dielectric (rubber and plastic) insulated wire and cable splicing rated to 1000 V. Good for repairs and environmental sealing for communication and other non-electrical applications. |
| <b>RoHS 2011/65/EU</b>      | Yes                                                                                                                                                                                                                                |
| <b>Agency Approvals</b>     | ANSI C1191.1                                                                                                                                                                                                                       |



| Order No. | UPC          | Typical Conductor Size         | Min. Cable Dia. for Seal | Max. Dia. Insulator Cable or Connector Covers | Max. Connector Length | Relaxed Tube Length | Case Qty. |
|-----------|--------------|--------------------------------|--------------------------|-----------------------------------------------|-----------------------|---------------------|-----------|
| 8423-6    | 054007-42146 | 6-4 AWG (14-16 mm²)            | 0.31" (7,8 mm)           | 0.56" (14,2 mm)                               | 2.0" (50,8 mm)        | 6.0" (152,4 mm)     | 10        |
| 8423-6P   | 054007-42864 | 6-4 AWG (14-16 mm²)            | 0.31" (7,8 mm)           | 0.56" (14,2 mm)                               | 2.0" (50,8 mm)        | 6.0" (152,4 mm)     | 10        |
| 8424-8**  | 054007-42390 | 10-1/0 AWG (6-16 mm²)          | 0.10" (2,5 mm)           | 0.82" (20,9 mm)                               | 3.0" (76,2 mm)        | 8.0" (203,2 mm)     | 10        |
| 8424-8P   | 054007-42865 | 10-1/0 AWG (6-16 mm²)          | 0.10" (2,5 mm)           | 0.82" (20,9 mm)                               | 3.0" (76,2 mm)        | 8.0" (203,2 mm)     | 10        |
| 8425-8    | 054007-42391 | 2-1/0 AWG (35-50 mm²)          | 0.40" (10,1 mm)          | 0.82" (20,9 mm)                               | 3.0" (76,2 mm)        | 8.0" (203,2 mm)     | 10        |
| 8425-8P   | 054007-42866 | 2-1/0 AWG (35-50 mm²)          | 0.40" (10,1 mm)          | 0.82" (20,9 mm)                               | 3.0" (76,2 mm)        | 8.0" (203,2 mm)     | 10        |
| 8426-9    | 054007-34457 | 2/0 AWG-250 kcmil (70-125 mm²) | 0.55" (13,9 mm)          | 1.18" (30,1 mm)                               | 5.0" (127,0 mm)       | 9.0" (228,6 mm)     | 10        |
| 8426-9M*  | 054007-43436 | 2-4/0 AWG (30-90 mm²)          | 0.40" (10,1 mm)          | 1.18" (30,1 mm)                               | 5.0" (127,0 mm)       | 9.0" (228,6 mm)     | 10        |
| 8426-9P   | 054007-42867 | 2/0 AWG-250 kcmil (70-125 mm²) | 0.55" (13,9 mm)          | 1.18" (30,1 mm)                               | 5.0" (127,0 mm)       | 9.0" (228,6 mm)     | 10        |
| 8426-11   | 054007-34458 | 2/0 AWG-250 kcmil (70-125 mm²) | 0.55" (13,9 mm)          | 1.18" (30,1 mm)                               | 7.0" (177,8 mm)       | 11.0" (279,4 mm)    | 10        |
| 8427-6*** | 054007-09915 | -                              | 0.67" (16,8 mm)          | 1.38" (35,1 mm)                               | 2.0" (50,8 mm)        | 6.0" (152,4 mm)     | 10        |
| 8427-12   | 054007-34459 | 250-400 kcmil (125-200 mm²)    | 0.67" (16,8 mm)          | 1.38" (35,1 mm)                               | 8.0" (203,2 mm)       | 12.0" (304,8 mm)    | 10        |
| 8427-12P  | 054007-42868 | 250-400 kcmil (125-200 mm²)    | 0.67" (16,8 mm)          | 1.38" (35,1 mm)                               | 8.0" (203,2 mm)       | 12.0" (304,8 mm)    | 10        |
| 8427-16   | 054007-34460 | 250-400 kcmil (125-200 mm²)    | 0.67" (16,8 mm)          | 1.38" (35,1 mm)                               | 12.0" (304,8 mm)      | 16.0" (406,4 mm)    | 10        |
| 8428-6*** | 054007-09916 | -                              | 0.95" (24,1 mm)          | 1.94" (49,2 mm)                               | 2.0" (50,8 mm)        | 6.0" (152,4 mm)     | 10        |

## 3M™ Cold Shrink Splice Kits

### 3M™ Cold Shrink Connector Insulators 8420 and 8430 Series (continued)

| Order No.  | UPC          | Typical Conductor Size                      | Min. Cable Dia.<br>for Seal | Max. Dia. Insulator Cable or Connector<br>Covers | Max. Connector<br>Length | Relaxed Tube<br>Length | Case<br>Qty. |
|------------|--------------|---------------------------------------------|-----------------------------|--------------------------------------------------|--------------------------|------------------------|--------------|
| 8428-6M    | 051128-53828 | 450-800 kcmil<br>(240-400 mm <sup>2</sup> ) | 0.95" (24,1 mm)             | 1.94" (49,2 mm)                                  | 2.0" (50,8 mm)           | 6.0" (152,4 mm)        | 50           |
| 8428-8     | 051128-53711 | 500-800 kcmil<br>(300-400 mm <sup>2</sup> ) | 0.95" (24,1 mm)             | 1.94" (49,2 mm)                                  | 3.0" (76,2 mm)           | 8.0" (203,2 mm)        | 25           |
| 8428-12    | 054007-09056 | 500-800 kcmil<br>(300-400 mm <sup>2</sup> ) | 0.95" (24,1 mm)             | 1.94" (49,2 mm)                                  | 8.0" (203,2 mm)          | 12.0" (304,8 mm)       | 10           |
| 8428-12M   | 054007-43746 | 500-800 kcmil<br>(300-400 mm <sup>2</sup> ) | 0.95" (24,1 mm)             | 1.94" (49,2 mm)                                  | 8.0" (203,2 mm)          | 12.0" (304,8 mm)       | 10           |
| 8428-12P   | 054007-42869 | 500-800 kcmil<br>(300-400 mm <sup>2</sup> ) | 0.95" (24,1 mm)             | 1.94" (49,2 mm)                                  | 8.0" (203,2 mm)          | 12.0" (304,8 mm)       | 10           |
| 8428-18    | 054007-34461 | 500-800 kcmil<br>(300-400 mm <sup>2</sup> ) | 0.95" (24,1 mm)             | 1.94" (49,2 mm)                                  | 14.0" (355,6 mm)         | 18.0" (457,2 mm)       | 10           |
| 8429-6***  | 054007-09917 | -                                           | 1.27" (32,2 mm)             | 2.67" (67,8 mm)                                  | 2.0" (50,8 mm)           | 6.0" (152,4 mm)        | 10           |
| 8429-9**** | 054007-09931 | 900-1000 kcmil<br>(500 mm <sup>2</sup> )    | 1.27" (32,2 mm)             | 2.67" (67,8 mm)                                  | 5.0" (127,0 mm)          | 9.0" (228,6 mm)        | 10           |
| 8429-9M    | 054007-42018 | 900-1000 kcmil<br>(500 mm <sup>2</sup> )    | 1.27" (32,2 mm)             | 2.67" (67,8 mm)                                  | 5.0" (127,0 mm)          | 9.0" (228,6 mm)        | 10           |
| 8429-12    | 054007-42389 | 900-1000 kcmil<br>(500 mm <sup>2</sup> )    | 1.27" (32,2 mm)             | 2.67" (67,8 mm)                                  | 8.0" (203,2 mm)          | 12.0" (304,8 mm)       | 10           |
| 8429-15    | 054007-44198 | 900-1000 kcmil<br>(500 mm <sup>2</sup> )    | 1.27" (32,2 mm)             | 2.67" (67,8 mm)                                  | 11.0" (279,4 mm)         | 15.0" (381,0 mm)       | 10           |
| 8429-18    | 054007-34462 | 900-1000 kcmil<br>(500 mm <sup>2</sup> )    | 1.27" (32,2 mm)             | 2.67" (67,8 mm)                                  | 14.0" (355,6 mm)         | 18.0" (457,2 mm)       | 10           |
| 8430-9***  | 054007-42147 | 1250-2000 kcmil                             | 1.68" (42,6 mm)             | 3.69" (93,7 mm)                                  | 5.0" (127,0 mm)          | 9.0" (228,6 mm)        | 10           |
| 8430-18    | 054007-42388 | 1250-2000 kcmil                             | 1.68" (42,6 mm)             | 3.69" (93,7 mm)                                  | 14.0" (355,6 mm)         | 18.0" (457,2 mm)       | 10           |

## 3M™ Cold Shrink Splice Kits

### 3M™ Cold Shrink Silicone Insulators 8440 Series (1000 Volts or less)

3M™ Cold Shrink Silicone Insulators 8440 Series are insulating sleeves made from a specially formulated high-temperature silicone rubber with a typical operating temperature range of -67–500°F (-55–260°C).



|                          |                                                                                                                               |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Voltage</b>           | 1000 V or less                                                                                                                |
| <b>No. of Conductors</b> | Single Conductor                                                                                                              |
| <b>Cable Type</b>        | Low Voltage Single Conductor Insulated Cable                                                                                  |
| <b>Splice Type</b>       | Cold Shrink                                                                                                                   |
| <b>Application</b>       | Primary electrical insulation for all solid dielectric (rubber and plastic) insulated wire and cable splices rated to 1000 V. |
| <b>RoHS 2011/65/EU</b>   | Yes                                                                                                                           |



| Order No. | UPC          | Typical Conductor Size     | Min. Cable Diameter for Seal | Max. Diameter Insulator Cable or Connector Covers | Relaxed Tube Length | Case Qty. |
|-----------|--------------|----------------------------|------------------------------|---------------------------------------------------|---------------------|-----------|
| 8443-2    | 054007-09485 | 6–2 AWG<br>(14–30 mm²)     | 0.30" (7,6 mm)               | 0.56" (14,2 mm)                                   | 2.00" (50,8 mm)     | 12        |
| 8443-3    | 051128-57098 | 6–2 AWG<br>(14–30 mm²)     | 0.30" (7,6 mm)               | 0.56" (14,2 mm)                                   | 2.00" (50,8 mm)     | 12        |
| 8443-6.5  | 054007-09482 | 6–2 AWG<br>(14–30 mm²)     | 0.30" (7,6 mm)               | 0.56" (14,2 mm)                                   | 6.50" (165,1 mm)    | 12        |
| 8445-2.5  | 054007-09486 | 2–1/0 AWG<br>(35–50 mm²)   | 0.37" (9,4 mm)               | 0.72" (18,3 mm)                                   | 2.50" (63,5 mm)     | 12        |
| 8445-7.5  | 054007-09483 | 2–1/0 AWG<br>(35–50 mm²)   | 0.37" (9,4 mm)               | 0.72" (18,3 mm)                                   | 7.50" (190,5 mm)    | 12        |
| 8447-3.2  | 054007-09487 | 1/0–3/0 AWG<br>(60–80 mm²) | 0.49" (12,4 mm)              | 0.95" (24,1 mm)                                   | 3.20" (81,3 mm)     | 12        |
| 8447-8    | 054007-09484 | 1/0–3/0 AWG<br>(60–80 mm²) | 0.49" (12,4 mm)              | 0.95" (24,1 mm)                                   | 8.00" (203,2 mm)    | 12        |

3M™ Cold Shrink Splice Kits

3M™ Cold Shrink Quick Insulator QI Series

3M™ Cold Shrink Quick Insulator QI Series are open-ended tubular rubber sleeves with sealing mastic on each end that are factory expanded and assembled onto a removable core. The core is removed by pulling from one end after the QI insulator has been positioned over an inline connector, allowing the ends of the tube to shrink and form a water-resistant seal. Sizing of the core and tube, along with the sealing mastic on each end, provides a broader application range without degrading the seal and insulating characteristics of the EPDM rubber tube. Three diameter sizes will cover a range of 1 kV or less cable from 8 AWG–1250 kcmil, copper and aluminum conductors with crimped connectors.



Single Conductor Cable

|                      |                                                                                                  |
|----------------------|--------------------------------------------------------------------------------------------------|
| Voltage              | 1000 V or less                                                                                   |
| Number of Conductors | Single Conductor                                                                                 |
| Cable Type           | Low Voltage Single Conductor Insulated Cable                                                     |
| Splice Type          | Cold Shrink                                                                                      |
| Applications         | Insulating and protecting low voltage splices in direct bury secondary low voltage applications. |
| RoHS 2011/65/EU      | Yes                                                                                              |
| Agency Approvals     | ANSI C-119.1                                                                                     |



| Order No.    | UPC          | Conductor Size, Cu | Conductor Size, Al | Cable Insulation O.D.      | Max. Connector O.D. | Max Connector Length | Case Qty. |
|--------------|--------------|--------------------|--------------------|----------------------------|---------------------|----------------------|-----------|
| QI-5/16-220  | 051128-57750 | 8–2/0 AWG          | 8–1/0 AWG          | 0.20"–0.65" (5,1–16,5 mm)  | 0.65" (16,5 mm)     | 2.75" (69,9 mm)      | 10        |
| QI-10/37-270 | 051128-57698 | 2 AWG–750 kcmil    | 2 AWG–500 kcmil    | 0.40"–1.45" (10,2–36,8 mm) | 1.45" (36,8 mm)     | 4.50" (114,3 mm)     | 10        |
| QI-18/57-325 | 051128-57751 | 250–1250 kcmil     | 250–1250 kcmil     | 0.71"–2.25" (18,0–57,2 mm) | 2.25" (57,2 mm)     | 6.00" (152,4 mm)     | 10        |

## 3M™ Cold Shrink Splice Kits

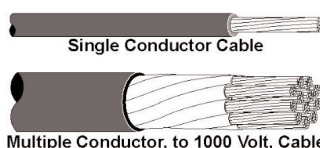
### 3M™ Cold Shrink Quick Splice Low Voltage QSLV-M Series

3M™ Cold Shrink Quick Splice Low Voltage QSLV-M are open-ended tubular rubber sleeves with sealing mastic on each end which are factory expanded and assembled onto a unique three-core system. Two cores, one on each end, are removed after the QSLV-M insulator has been centered over an inline connector, allowing the ends of the tube to shrink and form a water-resistant seal. The third, center segment of the core remains inside the cold shrink tube, acting as a support structure. Sizing of the cores and tube, along with the sealing mastic on each end, is designed to accommodate the variance in connectors and connector crimping techniques and final dimensions without degrading the seal and insulating characteristics of the EPDM rubber tube, while also making core removal easy. Two diameter sizes will cover a range of 1 kV or less cable from 8 AWG through 500 kcmil, copper and aluminum conductors with crimped connectors.

In aerial applications where intense UV radiation will be common and visual inspection is not possible, it is recommended to overwrap the tubing with Scotch® Super 33+™ Vinyl Electrical Tape or Scotch® Self-Fusing Silicone Rubber Electrical Tape 70.

Note: Insulator may be used on cable sizes outside of the recommended range provided both cables are within the insulation O.D. range, and the connector meets the dimensional requirements shown in the table.

|                             |                                                                                                        |
|-----------------------------|--------------------------------------------------------------------------------------------------------|
| <b>Voltage</b>              | 1000 V or less                                                                                         |
| <b>Number of Conductors</b> | Single Conductor                                                                                       |
| <b>Cable Type</b>           | Low Voltage Single Conductor<br>Insulated Cable                                                        |
| <b>Splice Type</b>          | Cold Shrink                                                                                            |
| <b>Applications</b>         | Insulating and protecting low voltage<br>splices in direct bury secondary low<br>voltage applications. |
| <b>RoHS 2011/65/EU</b>      | Yes                                                                                                    |
| <b>Agency Approvals</b>     | ANSI C119.1                                                                                            |



| Order No.     | UPC          | Cable Size, Al  | Cable Size, Cu   | Cable Insulation O.D.     | Max. Connector O.D. | Max. Connector Length | Case Qty. |
|---------------|--------------|-----------------|------------------|---------------------------|---------------------|-----------------------|-----------|
| QSLV-M(8-2/0) | 051128-57236 | 8-2/0 AWG       | 8-3/0 AWG        | 0.20"-0.75"<br>(5-19 mm)  | 0.687" (17 mm)      | 2.50" (63 mm)         | 10        |
| QSLV-M(2-500) | 051128-57237 | 2 AWG-500 kcmil | 2 AWG-1000 kcmil | 0.40"-1.60"<br>(10-41 mm) | 1.500" (38 mm)      | 4.25" (108 mm)        | 10        |

## 3M™ Cold Shrink Splice Kits

### 3M™ Cold Shrink Connector Insulator WF Series

3M™ Cold Shrink Connector Insulator WF Series are designed using 3M's unique cold shrink delivery system. Products are supplied pre-stretched on a removable core for efficiency and ease of installation. Removal of the core (unwinding) after positioning the splice allows the product to shrink into position forming a moisture tight seal. The live memory action of the specially formulated EPDM material promotes a permanent, durable environmental seal and insulation, with typical operating range from 40° to 194°F (-40° to 90°C).

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Voltage</b>              | 2000 V or less                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Number of Conductors</b> | Single Conductor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Cable Type</b>           | Low Voltage Single Conductor<br>Insulated Cable                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Splice Type</b>          | Cold Shrink                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Applications</b>         | Primary electrical insulation for all solid dielectric (rubber and plastic) insulated wire and cable splices rated to 2000 volts. Direct bury or submersible, indoor and outdoor, lug connections to bus bar, insulation of secondary splices, copper or aluminum conductors, relocation of service, dig in and sheath repairs, wind farm down tower applications, environmental sealing for communication and other non-electrical applications and insulation of inline conductor transition connector. |
| <b>RoHS 2011/65/EU</b>      | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Agency Approvals</b>     | UL listed in US and Canada                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

| Order No. | UPC          | Conductor Size AWG & kcmil                | Product Diameter Range Inches (mm) | Min. Order Qty. | Case Qty. |
|-----------|--------------|-------------------------------------------|------------------------------------|-----------------|-----------|
| WF100     | 051128-60145 | 4-2 AWG                                   | 0.35"-0.56" (8,9-14,2 mm)          | 10              | 10        |
| WF101     | 051128-60146 | 1-2/0 AWG                                 | 0.45"-0.82" (11,4-20,8 mm)         | 10              | 10        |
| WF102     | 051128-60147 | 3/0 AWG-250 kcmil                         | 0.62"-1.18" (15,7-30,1 mm)         | 10              | 10        |
| WF103     | 051128-59546 | 350-500 kcmil                             | 0.88"-1.63" (22,4-41,4 mm)         | 10              | 10        |
| WF104     | 051128-60148 | 600-750 kcmil (Al)<br>600-1000 kcmil (Cu) | 1.00"-1.94" (25,4-49,3 mm)         | 10              | 10        |

## 3M™ Cold Shrink Splice Kits

### 3M™ Inline Splices for 3/C or 4/C Armored Power Cable (Teck-90) 5730 Series

These kits are applicable for indoor and outdoor installations, including direct burial, aerial and submersible applications. Each kit requires at least 1 roll of 3M™ Armorcast Structural Material. For use with 3/C or 4/C Armor Power Cable (Teck-90) up to 1000 V.

3M™ 3/C Armored Power Cable 5730 Series accommodates a full range of cable sizes from 14 AWG–750 kcmil. The overall jacket diameter ranges from 0.62–4.00" (16–102 mm).

#### Notes

- Connectors are not included in the kit. Use only CSA certified compression connectors. Vinyl or nylon butt connectors are preferred.
- Amount of armorcast needed is based on two half-lapped layers and 15' rolls.

|                             |                                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------|
| <b>Voltage</b>              | 1000 V or less                                                                      |
| <b>Number of Conductors</b> | Multiple Conductor                                                                  |
| <b>Cable/Shielding Type</b> | Armor Power Cable (Teck 90)                                                         |
| <b>Splice Type</b>          | Inline                                                                              |
| <b>RoHS 2011/65/EU</b>      | Yes                                                                                 |
| <b>Agency Approvals</b>     |    |
|                             | Certified for 600 V or less<br>CSA Approved for use in the United States and Canada |



| Order No. | UPC          | Voltage  | Conductor Size    | Overall Jacket Diameter        | Number of Conductors | Amount of 3M™ Armorcast Required | Case Qty. |
|-----------|--------------|----------|-------------------|--------------------------------|----------------------|----------------------------------|-----------|
| 5730      | 054007-43171 | 0–600 V  | 14–10 AWG         | 0.62"–1.00"<br>(15,7–25,4 mm)  | 3/C or 4/C           | 1 roll                           | 1         |
| 5731      | 054007-43172 | 0–600 V  | 8–4 AWG           | 0.95"–1.40"<br>(24,1–35,6 mm)  | 3/C or 4/C           | 1 roll                           | 1         |
| 5732      | 054007-43173 | 0–1000 V | 2–1/0 AWG         | 0.95"–2.40"<br>(24,1–61,0 mm)  | 3/C only             | 1 roll                           | 1         |
| 5733      | 054007-43174 | 0–1000 V | 2/0 AWG–250 kcmil | 1.15"–3.30"<br>(29,2–83,8 mm)  | 3/C only             | 2 rolls                          | 1         |
| 5734      | 054007-43175 | 0–1000 V | 250–500 kcmil     | 1.55"–4.00"<br>(39,4–101,6 mm) | 3/C only             | 2 rolls                          | 1         |
| 5735      | 054007-43176 | 0–1000 V | 500–750 kcmil     | 1.55"–4.00"<br>(39,4–101,6 mm) | 3/C only             | 3 rolls                          | 1         |

3M™ Cold Shrink Splice Kits

3M™ Resin/Cold Shrink Non-Shielded, Armored or Non-Armored Splice Kits 5750 Series

3M™ Resin/Cold Shrink 5750 Series splice kits are designed for non-shielded armored and non-armored solid dielectric cables rated up to 5 kV. Each kit makes one 3/C splice. Connectors are not included and must be ordered separately.

\* Splice diameter varies according to cable size (O.D.).

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

Voltage

Number of Conductors

Shielding Type

Splice Type

Technology

Conductor Material

RoHS 2011/65/EU

Agency Approval

1 kV, 5 kV

Three Conductor

Non-Armored (Non-Shielded), Armored (Non-Shielded)

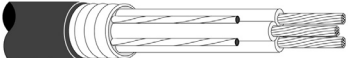
Inline

Cold Shrink, Resin

Aluminum, Copper

Yes

Mine Safety and Health Administrations Acceptance: 07-KA060007-MSHA



Three-Conductor Armored, Nonshielded Cable



Three-Conductor Non-Armored, Nonshielded Cable



| Order No. | UPC          | Insulation O.D. Range     | 1 kV Conductor Size, Copper or Aluminum         | 5 kV Conductor Size, Copper or Aluminum        | Splice Diameter Range*       | Typical Splice Length | Case Qty. |
|-----------|--------------|---------------------------|-------------------------------------------------|------------------------------------------------|------------------------------|-----------------------|-----------|
| 5751      | 051128-59169 | 0.50"-0.95"<br>(13-24 mm) | 1-3/0 AWG<br>(50-95 mm <sup>2</sup> )           | 6-1 AWG<br>(14-50 mm <sup>2</sup> )            | 1.5"-2.5"<br>(38,1-63,5 mm)  | 19.0"<br>(483 mm)     | 1         |
| 5752      | 051128-59168 | 0.66"-1.25"<br>(17-31 mm) | 4/0 AWG-350 kcmil<br>(120-185 mm <sup>2</sup> ) | 1/0 AWG-350 kcmil<br>(60-185 mm <sup>2</sup> ) | 2.5"-4.0"<br>(63,5-101,6 mm) | 28.0"<br>(711 mm)     | 1         |
| 5753      | 051128-59171 | 0.95"-1.80"<br>(24-46 mm) | 350-750 kcmil<br>(185-400 mm <sup>2</sup> )     | 350-750 kcmil<br>(185-400 mm <sup>2</sup> )    | 3.5"-6.0"<br>(88,9-152,4 mm) | 42.0"<br>(1067 mm)    | 1         |

## 3M™ Cold Shrink Splice Kits

### 3M™ Cold Shrink Portable Cable Splice Kits 2237A and 2238A

3M™ Cold Shrink Portable Cable Splice Kits 2237A and 2238A are designed to splice SO and SJ type portable power cables (commercial grade extension cords) which are typically used in industrial environments. The 2237A kit accommodates 4-conductor 12-10 AWG and the 2238A kit accommodates 4-conductor 8 AWG.

The primary application for the kits is splicing damaged portable cable. The kits can be used for cables aboard ships, cargo operations and a variety of industrial applications.

Each kit contains:

- Cold shrink tube
- Butt connectors
- Rubber phase
- Divider mastic strips
- Scotch® Vinyl Electrical Color-Coding Tape 35
- Instructions

|                      |                                  |
|----------------------|----------------------------------|
| Voltage              | 1000 V or less                   |
| Number of Conductors | Single Conductor                 |
| Cable/Shielding Type | SO, SJ                           |
| Splice Type          | Cold Shrink                      |
| Application          | Splicing damaged portable cable. |
| RoHS 2011/65/EU      | Yes                              |

| Order No. | UPC          | Conductor Size                 | Cable O.D.      | Case Qty. |
|-----------|--------------|--------------------------------|-----------------|-----------|
| 2237A     | 054007-41317 | 12-10 AWG (6 mm <sup>2</sup> ) | 0.62" (0.96 mm) | 10        |
| 2238A     | 054007-41318 | 8 AWG (10 mm <sup>2</sup> )    | 0.62" (0.96 mm) | 10        |



# Medium Voltage Splice Kits, 5 kV–46 kV

3M™ Splice Solutions are designed to help you reduce the time, labor and cost involved in a variety of electrical cable splicing applications. The 3M product line covers splicing needs from 5 kV-46 kV applications, and utilizes field-proven technologies to provide dependable performance, stability and long life with every splice you make. With 3M, you can choose the right splice to fit your specific needs.

## Cold Shrink Splices

3M™ Cold Shrink splicing products are designed using 3M's proprietary cold shrink delivery system. Products are supplied pre-stretched on a removable core for efficiency and ease of installation. The removable core unwinds after positioning the splice, allowing the product to shrink into position and form a moisture resistant seal. The live-memory action of the specially formulated material ensures a permanent, durable environmental seal and insulation. All 3M™ Cold Shrink QS-III medium voltage (5 kV-46 kV) kits meet the requirements of IEEE-404, and each splice is factory tested on power cable to ensure long-term reliability and quality. 3M QS-III splices can be used for direct burial applications, as well as in manholes, vaults, cable trays, and junction boxes. All 3M cold shrink products require no special tools, flame or training to install.

## Molded Rubber Splices

3M™ Molded Rubber QS and QS-II kits are molded from specially formulated, peroxide cured, EPDM rubber to provide a reliable medium voltage inline splice with a life expectancy equal to the cable. All 3M medium voltage (15 kV-35 kV) QS Series meet the requirements of IEEE-404, and each splice is factory tested.

## PILC Splices

3M™ Cold Shrink splice kits for Paper Insulated Lead Covered (PILC) cable use 3M patented oil stop technology. Kits install without soldering or lead wiping. 3M Cold Shrink PILC splices allow quick installation time without the need of an open flame or heat. Single conductor splice kits allow inline splicing of PILC to PILC or PILC to Poly/EPR insulated cable. Three conductor cable splices kits are



designed to transition splice three conductor PILC to three single conductor poly/EPR insulated cables. All splices are jacketed and can be fully submersed. Modular splice kits are available for single conductor PILC equipment connections and tap splicing.

**Resin Splices**

3M™ Resin Splice Kits are used in a variety of applications where conditions require the unique properties of 3M resins. The splicing kits have a high degree of mechanical strength for physical protection of connections and provide moisture-resistant insulation in above ground or direct burial applications.

**Tape Splices**

When you want the versatility of tape, Scotch® Cable Splicing Kits are the answer for almost any application, regardless of cable type or size. Scotch® rubber splicing tape is designed for extra-long shelf life, so there's less chance of being caught without the supplies you need for emergencies. Tape products are available to splice cables from 2 kV-69 kV.

| Section       | Page    |
|---------------|---------|
| 5 kV.....     | 181-182 |
| 5/8 kV.....   | 183-189 |
| 15 kV.....    | 190-209 |
| 25/28 kV..... | 210-221 |
| 35 kV.....    | 222-230 |
| 46 kV.....    | 231-232 |

## Technology Features

| Technology            | Installation Time<br>(1-5, 1=Fastest) | Installation Ease<br>(1-5, 1=Easiest) | Wide Application Range<br>(1-5, 1=Greatest) | Factory Tested | Re-Jacketing Included |
|-----------------------|---------------------------------------|---------------------------------------|---------------------------------------------|----------------|-----------------------|
| Cold Shrink           | 1                                     | 1                                     | 2                                           | Yes            | Yes                   |
| Push On/Molded Rubber | 2                                     | 2                                     | 4                                           | Yes            | No                    |
| Resin                 | 3                                     | 3                                     | 3                                           | No             | Yes                   |
| Tape                  | 4                                     | 4                                     | 1                                           | No             | Yes                   |

## 5 kV Medium Voltage Splice Reference

|                                                                                    |                             |                                 |  |
|------------------------------------------------------------------------------------|-----------------------------|---------------------------------|--|
| ①                                                                                  | Three Conductor (3/C)       |                                 |  |
| ②                                                                                  | Non-shielded                |                                 |  |
| ③                                                                                  | 3M™ Cold Shrink Splice Kits | <div>QUICK TO<br/>INSTALL</div> |  |
| 3M™ Resin/Cold Shrink Non-Shielded, Armored or Non-Armored Splice Kits 5750 Series |                             |                                 |  |

## 5/8 kV Medium Voltage Splice Reference

|   |                                                  |                                                                    |                                                             |                                                                             |                                                                                               |
|---|--------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| ① | <b>Single Conductor (1/C)</b>                    |                                                                    |                                                             | <b>Three Conductor (3/C)</b>                                                |                                                                                               |
| ② | <b>Shielded</b>                                  |                                                                    | <b>Non-shielded</b>                                         | <b>Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)</b> |                                                                                               |
| ③ | 3M™ Cold Shrink Splice Kits<br>QUICK TO INSTALL  | 3M™ Tape Splice Kits                                               | 3M™ Cold Shrink Splice Kits<br>QUICK TO INSTALL             | 3M™ Cold Shrink Splice Kits<br>QUICK TO INSTALL                             |                                                                                               |
|   | 3M™ Cold Shrink Shielded Splice Kits 5550 Series | Scotch® Inline and Tee Tape Shielded Cable Splice Kits 5700 Series | 3M™ Cold Shrink Inline Non-Shielded Splice Kits 5740 Series | 3M™ Cold Shrink/Armorcast, Armored or Non-Armored Splice Kit 5551-3C-AC     | 3M™ Cold Shrink QS-III Armored or Non-Armored Cable Splice Kits 5775A-MT, 5776A-MT & 5777A-MT |
|   |                                                  |                                                                    |                                                             |                                                                             | 3M™ Cold Shrink Inline Shielded, Armored or Non-Armored Splice Kits 5760 Series               |

# 15 kV Medium Voltage Splice Reference

| 1 Single Conductor (1/C)                                                     |                                                              |                                                                                |                                                                    |                                                                                        |                                             |                                                                       |                                                                    |                                                                                                    |
|------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 2 Concentric Neutral (CN) and Jacketed Concentric Neutral (JCN)              |                                                              |                                                                                |                                                                    | Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)                   |                                             |                                                                       |                                                                    | Paper Insulated Lead Cover (PILC)                                                                  |
| 3 3M™ Cold Shrink Splice Kits (non-PILC)                                     |                                                              | 3M™ Molded Rubber Splice Kits                                                  | 3M™ Tape Splice Kits                                               | 3M™ Cold Shrink Splice Kits (non-PILC)                                                 |                                             | 3M™ Molded Rubber Splice Kits                                         | 3M™ Tape Splice Kits                                               | 3M™ Cold Shrink Splice Kits                                                                        |
| QUICK TO INSTALL                                                             |                                                              |                                                                                |                                                                    | QUICK TO INSTALL                                                                       |                                             |                                                                       |                                                                    | QUICK TO INSTALL                                                                                   |
| Inline                                                                       | Branch                                                       |                                                                                |                                                                    | Inline                                                                                 | Branch                                      |                                                                       |                                                                    |                                                                                                    |
| 3M™ Cold Shrink QS-III Inline JCN/ CN Splice Kits 5415A, 5416A, 5417A, 5418A | 3M™ Cold Shrink Branch JCN and Shielded Splice Kits QS-2001B | 3M™ Molded Rubber QS Inline JCN/ CN Splice Kits 5400 Series                    | Scotch® Inline and Tee Tape Shielded Cable Splice Kits 5700 Series | 3M™ Cold Shrink QS-III Shielded Cable Splice Kits 5513A, 5514A, 5515A and 5516A Series | 3M™ Cold Shrink Branch Splice Kits QS 2001B | 3M™ Molded Rubber QS-II Inline Shielded Cable Splice Kits 5500 Series | Scotch® Inline and Tee Tape Shielded Cable Splice Kits 5700 Series | 3M™ Cold Shrink 1/C Inline Transition Splice Kit QS-III, 5510A-1T-PILC Series                      |
|                                                                              |                                                              | 3M™ Molded Rubber QS-II Inline JCN/ CN Splice Kits 5411, 5411A and 5412 Series |                                                                    |                                                                                        |                                             |                                                                       |                                                                    | 3M™ Cold Shrink Splice Kit QS-2000T 1/C PILC to 1/C Poly/EPR or 1/C PILC to 1/C PILC Cable Splices |
|                                                                              |                                                              | 3M™ Molded Rubber QS-II JCN/CN Cable Repair Splice Kit 5411R and 5412R Series  |                                                                    |                                                                                        |                                             |                                                                       |                                                                    |                                                                                                    |

| 1 Three Conductor (3/C)                                                                      |  |                                                                                                             |
|----------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------|
| 2 Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)                       |  | Paper Insulated Lead Cover (PILC)                                                                           |
| 3 3M™ Cold Shrink Splice Kits (non-PILC)                                                     |  | 3M™ Cold Shrink Splice Kits                                                                                 |
| QUICK TO INSTALL                                                                             |  | QUICK TO INSTALL                                                                                            |
| 3M™ Cold Shrink QS-III Armored, Non-Armored Cable Splices Kits 5775A-MT, 5776A-MT & 5777A-MT |  | 3M™ Cold Shrink 3/C PILC to 3/C Poly/EPR Cable Transition Splice Kit QS-2013-3T-3C                          |
| 3M™ Cold Shrink 3/C Inline Shielded, Armored or Non-Armored Splice Kits 5760 Series          |  | 3M™ Cold Shrink Splice Kit QS-2000-3T and QS-2000-3T-WS 3/C PILC to 1/C Poly/EPR Cable Trifurcating Splices |

## 25/28 kV Medium Voltage Splice Reference

| 1 Single Conductor (1/C)                                                      |  |  | Three Conductor (3/C)                                                           |                                                                       |                                                                                                            |
|-------------------------------------------------------------------------------|--|--|---------------------------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| 2 Concentric Neutral (CN) and Jacketed Concentric Neutral (JCN)               |  |  | Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)            | Paper Insulated Lead Cover (PILC)                                     | Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)                                       |
| 3 3M™ Cold Shrink Splice Kits (non-PILC)                                      |  |  | 3M™ Cold Shrink Splice Kits (non-PILC)                                          | 3M™ Cold Shrink Splice Kits                                           | 3M™ Cold Shrink Splice Kits (non-PILC)                                                                     |
| QUICK TO INSTALL                                                              |  |  | QUICK TO INSTALL                                                                | QUICK TO INSTALL                                                      | QUICK TO INSTALL                                                                                           |
| 3M™ Cold Shrink QS-III Inline CN/JCN Cable Splice Kits 5456A, 5457A and 5458A |  |  | 3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5524A, 5525A and 5526A | 3M™ Cold Shrink 1/C Transition Splice Kit QS-III 5520A-1T-PILC Series | 3M™ Cold Shrink QS-III 3/C Inline Armored or Non-Armored Cable Splice Kits 5786A-MT, 5787A-MT and 5788A-MT |
| 3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5420 Series           |  |  | 3M™ Molded Rubber QS-II JCN Cable Repair Splice Kit 5451R Series                |                                                                       |                                                                                                            |

## 35 kV Medium Voltage Splice Reference

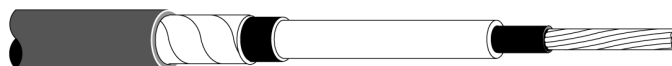
| 1 Single Conductor (1/C)                                                           |  |  | Three Conductor (3/C)                                                    |                                                                               |                                                                                     |
|------------------------------------------------------------------------------------|--|--|--------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 2 Concentric Neutral (CN) and Jacketed Concentric Neutral (JCN)                    |  |  | Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)     | Paper Insulated Lead Cover (PILC)                                             | Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)                |
| 3 3M™ Cold Shrink Splice Kits (non-PILC)                                           |  |  | 3M™ Cold Shrink Splice Kits (non-PILC)                                   | 3M™ Cold Shrink Splice Kits                                                   | 3M™ Cold Shrink Splice Kits (non-PILC)                                              |
| QUICK TO INSTALL                                                                   |  |  | QUICK TO INSTALL                                                         | QUICK TO INSTALL                                                              | QUICK TO INSTALL                                                                    |
| 3M™ Cold Shrink QS-III Inline CN/JCN Cable Splice Kits 5467A and 5468A             |  |  | 3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5535A and 5536A | 3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5530A-1T-PILC Series | 3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Splice Kits 5797A-MT and 5798A-MT |
| 3M™ Cold Shrink QS-III CN/JCN Cable Shield-Break Splice Kits 5467A-XB and 5468A-XB |  |  | 3M™ Molded Rubber QS-II CN/JCN Cable Splice Kits 5461                    |                                                                               |                                                                                     |

## 46 kV Medium Voltage Splice Reference

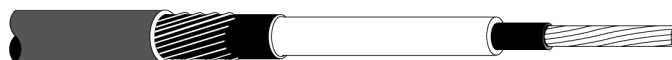
|                                                         |                                                                           |
|---------------------------------------------------------|---------------------------------------------------------------------------|
| ①                                                       | Single Conductor (1/C)                                                    |
| ②                                                       | Shielded                                                                  |
| ③                                                       | 3M™ Cold Shrink Splice Kits (non-PILC)<br><small>QUICK TO INSTALL</small> |
| 3M™ Cold Shrink QS-III Inline Shielded Splice Kit 5545A |                                                                           |

\*For higher voltages, see High Voltage section of catalog.

# Cable Types for Medium Voltage Splicing



Tape Shielded Cable



Wire Shielded Cable



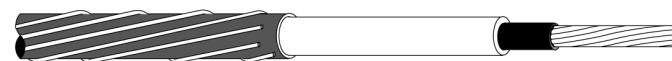
UniShield® Cable



Longitudinally Corrugated (LC) Shielded Cable



EP-Lead or XLP-Lead Cable



Concentric Neutral (CN) Cable



Jacketed Concentric Neutral (JCN) Cable



Paper Insulated Lead Covered (PILC) Cable

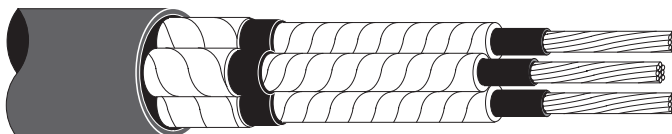
## Cable Types for Medium Voltage Splicing



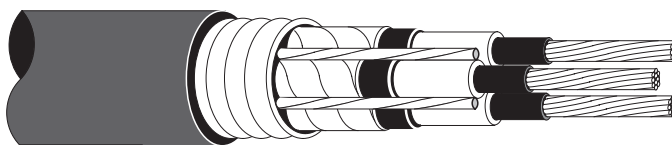
Non Shielded (Dry) Cable



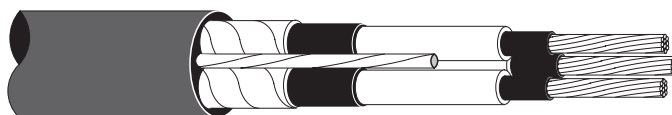
Non Shielded (Wet or Dry) Cable



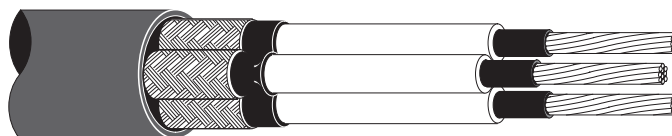
Three-Conductor Paper Insulated Lead Covered (PILC) Cable



Three-Conductor Armored, Shielded Cable



Three-Conductor Non-Armored, Shielded Cable



Three-Conductor Portable Cable Type SHD-GC

## 5 kV Medium Voltage Splices

The following 3M products cover splicing needs for applications up to 5 kV, and promote dependable performance, stability and long life with every splice you make.



| Section                                                                                  | Page    |
|------------------------------------------------------------------------------------------|---------|
| 5 kV .....                                                                               | 181-182 |
| Non-Shielded .....                                                                       | 182     |
| Three Conductor (3/C) .....                                                              | 182     |
| 3M™ Resin/Cold Shrink Non-Shielded, Armored or Non-Armored Splice Kits 5750 Series ..... | 182     |

## 5 kV: Non-Shielded: Three Conductor (3/C)

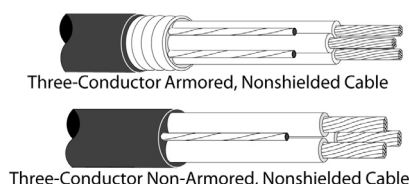
### 3M™ Resin/Cold Shrink Non-Shielded, Armored or Non-Armored Splice Kits 5750 Series

3M™ Resin/Cold Shrink 5750 Series splice kits are designed for non-shielded armored and non-armored solid dielectric cables rated up to 5 kV. Each kit makes one 3/C splice. Connectors are not included and must be ordered separately.

\* Splice diameter varies according to cable size (O.D.).

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                                                        |
|----------------------|------------------------------------------------------------------------|
| Voltage              | 1 kV, 5 kV                                                             |
| Number of Conductors | Three Conductor                                                        |
| Shielding Type       | Non-Armored (Non-Shielded), Armored (Non-Shielded)                     |
| Splice Type          | Inline                                                                 |
| Technology           | Cold Shrink, Resin                                                     |
| Conductor Material   | Aluminum, Copper                                                       |
| RoHS 2011/65/EU      | Yes                                                                    |
| Agency Approval      | Mine Safety and Health Administrations<br>Acceptance: 07-KA060007-MSHA |



| Order No. | UPC          | Insulation O.D. Range     | 1 kV Conductor Size, Copper or Aluminum         | 5 kV Conductor Size, Copper or Aluminum        | Splice Diameter Range*       | Typical Splice Length | Case Qty. |
|-----------|--------------|---------------------------|-------------------------------------------------|------------------------------------------------|------------------------------|-----------------------|-----------|
| 5751      | 051128-59169 | 0.50"-0.95"<br>(13-24 mm) | 1-3/0 AWG<br>(50-95 mm <sup>2</sup> )           | 6-1 AWG<br>(14-50 mm <sup>2</sup> )            | 1.5"-2.5"<br>(38,1-63,5 mm)  | 19.0"<br>(483 mm)     | 1         |
| 5752      | 051128-59168 | 0.66"-1.25"<br>(17-31 mm) | 4/0 AWG-350 kcmil<br>(120-185 mm <sup>2</sup> ) | 1/0 AWG-350 kcmil<br>(60-185 mm <sup>2</sup> ) | 2.5"-4.0"<br>(63,5-101,6 mm) | 28.0"<br>(711 mm)     | 1         |
| 5753      | 051128-59171 | 0.95"-1.80"<br>(24-46 mm) | 350-750 kcmil<br>(185-400 mm <sup>2</sup> )     | 350-750 kcmil<br>(185-400 mm <sup>2</sup> )    | 3.5"-6.0"<br>(88,9-152,4 mm) | 42.0"<br>(1067 mm)    | 1         |

## 5/8 kV Medium Voltage Splices

The following 3M products cover splicing needs for applications up to 5/8 kV, and promote dependable performance, stability and long life with every splice you make.



| Section                                                                                                           | Page    |
|-------------------------------------------------------------------------------------------------------------------|---------|
| 5/8 kV.....                                                                                                       | 183-189 |
| Non-Shielded .....                                                                                                | 184     |
| Single Conductor (1/C).....                                                                                       | 184     |
| 3M™ Cold Shrink Inline Non-Shielded Splice Kits 5740 Series .....                                                 | 184     |
| Shielded .....                                                                                                    | 185-189 |
| Single Conductor (1/C) .....                                                                                      | 185-186 |
| Scotch® Inline and Tee Tape Shielded Cable Splice Kit 5700 Series.....                                            | 185     |
| 3M™ Cold Shrink Shielded Splice Kits 5550 Series .....                                                            | 186     |
| Three Conductor (3/C) .....                                                                                       | 187-189 |
| 3M™ Cold Shrink/Armorcast, Armored or Non-Armored Splice Kit 5551-3C-AC.....                                      | 187     |
| 3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splice Kits 5775A-MT, 5776A-MT & 5777A-MT for 5/8 kV..... | 188     |
| 3M™ Cold Shrink MT-C & MT-E Trifurcating Accessory Kits (One 3/C to Three 1/C) for 5/8 kV.....                    | 189     |
| 3M™ Cold Shrink 3/C Inline Shielded, Armored or Non-Armored Splice Kits 5760 Series for 5/8 kV.....               | 189     |

## 5/8 kV: Non-Shielded: Single Conductor (1/C)

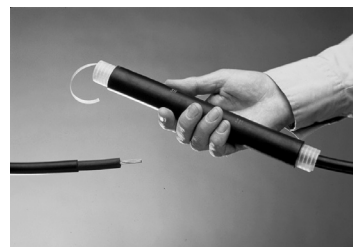
## 3M™ Cold Shrink Inline Non-Shielded Splice Kits 5740 Series

The 3M™ Cold Shrink Splicing Products are designed using the proprietary cold shrink delivery system developed by 3M. Products are supplied prestretched on a removable core for efficiency and ease of installation. 3M™ Cold Shrink Splices 5740 Series are used for single conductor, non-shielded 5/8 kV cables.

Each kit is a cold shrink design and contains enough material to insulate three splices. Connectors are not included and must be ordered separately.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                                           |
|----------------------|-----------------------------------------------------------|
| Voltage              | 5/8 kV                                                    |
| Number of Conductors | Single Conductor                                          |
| Shielding Type       | Non-Shielded (Dry) Cable, Non-Shielded (Wet or Dry) Cable |
| Splice Type          | Inline                                                    |
| Technology           | Cold Shrink                                               |



Nonshielded (Dry) Cable

Nonshielded (Wet or Dry) Cable

| Order No. | UPC          | Insulation/Jacket O.D. Range  | Conductor Size                                                                                | Max. Connector Length (Cu or Al) | Typical Splice Length | Case Qty. |
|-----------|--------------|-------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------|-----------------------|-----------|
| 5741      | 054007-49491 | 0.38"-0.70"<br>(9,7-17,8 mm)  | 8-4 AWG (10-25 mm <sup>2</sup> )                                                              | 2.5"<br>(63,5 mm)                | 10"<br>(254 mm)       | 1         |
| 5742      | 054007-49492 | 0.63"-1.20"<br>(16,0-30,5 mm) | 2 AWG-300 kcmil (35-150 mm <sup>2</sup> )                                                     | 4.25"<br>(108,0 mm)              | 12"<br>(305 mm)       | 1         |
| 5743      | 054007-49493 | 0.90"-2.10"<br>(22,9-53,3 mm) | Cu: 350-1000 kcmil (185-500 mm <sup>2</sup> )<br>Al: 350-750 kcmil (185-400 mm <sup>2</sup> ) | 6.25"<br>(158,8 mm)              | 15"<br>(381 mm)       | 1         |

5/8 kV: Shielded: Single Conductor (1/C)

## Scotch® Inline and Tee Tape Shielded Cable Splice Kit 5700 Series

Scotch® Inline and Tee Tape Shielded Cable Splice Kits 5700 Series handle inline and tee splices on tape shielded, wire shielded or UniShield® cables with copper (Cu) or aluminum (Al) conductors. Kits are rated 5 kV-15 kV, and each kit makes three splices. Use the selector chart to determine the proper kit needed. Connectors and Lugs need to be ordered separately. 3M does not offer tee connectors.

**Note:** Cable sizes shown below are for standard insulation thickness.  
**Final determining factor is cable insulation O.D.**

**Voltage:** 5 kV, 5/8 kV, 15 kV

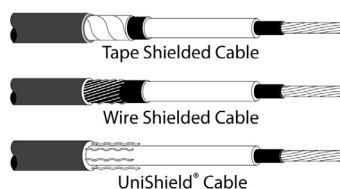
**Number of Conductors:** Single Conductor

**Shielding Type:** Tape Shield, Wire Shield, UniShield®

**Splice Type:** Inline, Tee

**Technology:** Tape

**Conductor Material:** Aluminum, Copper



| Inline Splices                                                                                        |               |                    |                    |                    |                   |                    |                   |                   |                   | Tee Splices*       |                |                    |               |           |  |
|-------------------------------------------------------------------------------------------------------|---------------|--------------------|--------------------|--------------------|-------------------|--------------------|-------------------|-------------------|-------------------|--------------------|----------------|--------------------|---------------|-----------|--|
| Product Number                                                                                        | UPC (054007-) | 5 and 8 kV         |                    | 15 kV 100% 175mil  |                   | 15 kV 133% 220 mil |                   | 5 and 8 kV        |                   | 15 kV 100% 175 mil |                | 15 kV 133% 220 mil |               | Case Qty. |  |
|                                                                                                       |               | Cu                 | Al                 | Cu                 | Al                | Cu                 | Al                | Cu                | Al                | Cu                 | Al             | Cu                 | Al            |           |  |
| Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable<br>See above for cable type illustrations. |               |                    |                    |                    |                   |                    |                   |                   |                   |                    |                |                    |               |           |  |
| 5717                                                                                                  | 12030         | 4-250 (22-125)     | 4-4/0 (2-100)      | 4-2 (22-30)        | —                 | 4                  | —                 | —                 | —                 | —                  | —              | —                  | —             | 1         |  |
| 5718                                                                                                  | 12048         | 300-500 (180-250)  | 250 (150)          | 1-4/0 (50-100)     | 4-2/0 (22-60)     | 2-1/0 (35-60)      | —                 | 4-2/0 (22-60)     | 4-1/0 (22-50)     | —                  | —              | —                  | —             | 1         |  |
| 5719                                                                                                  | 12055         | 550-1000 (300-500) | 300-500 (180-250)  | 250-500 (180-250)  | 3/0-250 (95-125)  | 2/0-350 (70-180)   | 4-3/0 (22-80)     | 3/0-350 (95-180)  | 2/0-4/0 (70-100)  | 4-1 (22-38)        | —              | —                  | —             | 1         |  |
| 5720                                                                                                  | 12063         | —                  | 500-1000 (300-500) | 550-1000 (300-500) | 300-750 (180-325) | 400-750 (240-325)  | 4/0-500 (120-250) | 400-750 (240-325) | 250-500 (125-250) | 1/0-350 (60-180)   | 4-4/0 (22-100) | 4-250 (22-125)     | 4-3/0 (22-80) | 1         |  |

\*3M does not offer tee compression connectors.

**Note:** Larger-numbered kits may be used in place of smaller-numbered kits (with excess materials left over).

| Order No. | UPC          | Case Qty. |
|-----------|--------------|-----------|
| 5717      | 054007-12030 | 1         |
| 5718      | 054007-12048 | 1         |
| 5719      | 054007-12055 | 1         |
| 5720      | 054007-12063 | 1         |

5/8 kV: Shielded: Single Conductor (1/C)

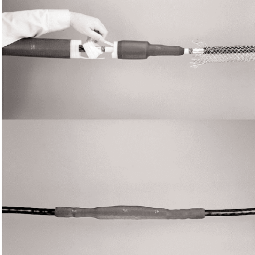
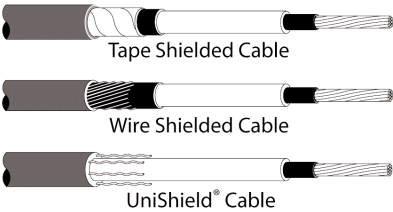
3M™ Cold Shrink Shielded Splice Kits 5550 Series

3M™ Cold Shrink Shielded Splice Kit 5550 Series are for splicing 5 kV and 8 kV shielded, solid dielectric, power cables. Meets requirements of IEEE 404. Each kit contains all the materials (except connectors and optional ground strap) required to construct three (3) single conductor splices on Tape Shield, Wire Shield or UniShield® cables.

Note: The kit can also be used to splice a shielded to a non-shielded 5/8 kV cable.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                      |
|----------------------|--------------------------------------|
| Voltage              | 5/8 kV                               |
| Number of Conductors | 3 Single Conductors                  |
| Shielding Type       | Tape Shield, Wire Shield, UniShield® |
| Splice Type          | Inline                               |
| Technology           | Cold Shrink, Tape                    |



| Order No. | UPC          | Conductor Size, Cu                              | Conductor Size, Al                              | Max Connector Length, Cu | Max Connector Length, Al | Typical Splice Length | Suggested Accessory           | Case Qty. |
|-----------|--------------|-------------------------------------------------|-------------------------------------------------|--------------------------|--------------------------|-----------------------|-------------------------------|-----------|
| 5551      | 054007-09089 | 6-4/0 AWG<br>(14-100 mm <sup>2</sup> )          | 6-3/0 AWG<br>(14-80 mm <sup>2</sup> )           | 3.3"<br>(84 mm)          | 2.7"<br>(69 mm)          | 19.0"<br>(482,6 mm)   | 3M Ground Strap Assembly GS-1 | 1         |
| 5552      | 054007-09090 | 4/0 AWG-500 kcmil<br>(120-250 mm <sup>2</sup> ) | 4/0 AWG-400 kcmil<br>(120-200 mm <sup>2</sup> ) | 4.3"<br>(109 mm)         | 3.7"<br>(94 mm)          | 21.0"<br>(533,4 mm)   | 3M Ground Strap Assembly GS-2 | 1         |
| 5553      | 054007-09091 | 500-1000 kcmil<br>(300-500 mm <sup>2</sup> )    | 500-1000 kcmil<br>(300-500 mm <sup>2</sup> )    | 6.3"<br>(160 mm)         | 5.3"<br>(135 mm)         | 23.0"<br>(584,2 mm)   | 3M Ground Strap Assembly GS-3 | 1         |

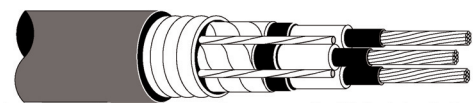
5/8 kV: Shielded: Three Conductor (3/C)

## 3M™ Cold Shrink/Armorcast, Armored or Non-Armored Splice Kit 5551-3C-AC

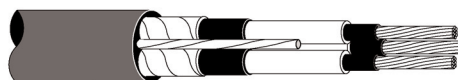
3M™ Cold Shrink/Armorcast, Armored or Non-Armored Splice Kit 5551-3C-AC is for splicing 3/C, 5/8 kV shielded, armored and non-armored cables. Connectors are not included. Kits include armorcast structural material to reconstitute the cable's armor. Meets the requirements of IEEE 404. Each kit makes one 3/C splice.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                 |
|----------------------|---------------------------------|
| Voltage              | 5/8 kV                          |
| Number of Conductors | Three Conductors                |
| Shielding Type       | Shielded Armored or Non-Armored |
| Splice Type          | Inline                          |
| Technology           | Cold Shrink, Armorcast, Tape    |



**Three-Conductor Armored, Shielded Cable**



**Three-Conductor Non-Armored, Shielded Cable**

| Order No.  | UPC          | Insulation O.D. Range     | Conductor Size                                                                    | Max. Connector Length | Typical Splice Length | Case Qty. |
|------------|--------------|---------------------------|-----------------------------------------------------------------------------------|-----------------------|-----------------------|-----------|
| 5551-3C-AC | 051128-54317 | 0.37"-0.78" (9,4-19,8 mm) | Cu: 6-4/0 AWG (14-120 mm <sup>2</sup> )<br>Al: 6-3/0 AWG (14-95 mm <sup>2</sup> ) | 2.7" (68,6 mm)        | 34" (864 mm)          | 1         |

## 5/8 kV: Shielded: Three Conductor (3/C)

## 3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splice Kits 5775A-MT, 5776A-MT & 5777A-MT for 5/8 kV

3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splices 5775A-MT, 5776A-MT and 5777A-MT Series are designed for splicing 3-conductor, armored and non-armored, shielded power cables. The kits are rated for use on 5/8 kV cables with conductor sizes from 3/0 AWG-1000 kcmil (95-500 mm<sup>2</sup>) or 15 kV cables with conductor sizes from 2 AWG-750 kcmil (35-325 mm<sup>2</sup>). The kits are designed to be used with 3M™ Scotchlok™ Connectors 10000 and 20000 Series or other UL listed inline compression connectors that fit within the dimension limits listed in the data sheet. Meets the requirements of IEEE-404.

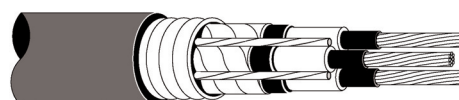
Kits include material necessary to make one 3/C splice. Connectors are not included and must be ordered separately. The completed splice is designed for use in cable trays, weather exposed or direct burial locations.

The splice utilizes several technologies to accommodate the various functions of a 3/C shielded power cable: 3M™ Cold Shrink QS-III Splice Bodies, Scotch® Tapes for moisture sealing, Constant Force Springs for connecting ground braid jumpers and armorcast for replacing the cable armor and/or jacket.

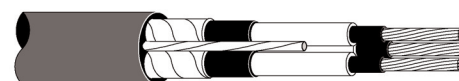
Note: When making a trifurcating splice, the 3M™ Cold Shrink MT-C or MT-E Trifurcating Accessory Kit must be used along with the splice kit.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                 |
|----------------------|---------------------------------|
| Voltage              | 5/8 kV, 15 kV                   |
| Number of Conductors | Three Conductors                |
| Shielding Type       | Shielded Armored or Non-Armored |
| Splice Type          | Inline, Trifurcating            |
| Technology           | Cold Shrink, Armorcast          |



**Three-Conductor Armored, Shielded Cable**



**Three-Conductor Non-Armored, Shielded Cable**

| Order No. | UPC          | Insulation O.D. Range         | Conductor Size, 5/8 kV                         | Typical Splice Length | Suggested Accessory                                                                                                                  | Case Qty. |
|-----------|--------------|-------------------------------|------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 5775A-MT  | 051128-53493 | 0.64"-1.01"<br>(16,3-25,7 mm) | 3/0 AWG-250 kcmil<br>(95-125 mm <sup>2</sup> ) | 52.0"<br>(1320,8 mm)  | 3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-C                                                                       | 1         |
| 5776A-MT  | 054007-44112 | 0.84"-1.38"<br>(21,3-35,1 mm) | 350-500 kcmil<br>(185-240 mm <sup>2</sup> )    | 54.0"<br>(1371,6 mm)  | 3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-C; or<br>3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E | 1         |
| 5777A-MT  | 054007-44289 | 1.04"-1.70"<br>(26,4-43,2 mm) | 750-1000 kcmil<br>(325-500 mm <sup>2</sup> )   | 58.0"<br>(1473,2 mm)  | 3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E                                                                       | 1         |

5/8 kV: Shielded: Three Conductor (3/C)

## 3M™ Cold Shrink MT-C & MT-E Trifurcating Accessory Kits (One 3/C to Three 1/C) for 5/8 kV

3M™ Cold Shrink MT-C and MT-E Trifurcating Accessory Kits are used to break out and seal a transition from 3/C to three 1/C.

For use with 3M™ Cold Shrink QS-III Splicing Series 5700A-MT.

**NOTE: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

**Voltage:** 5/8 kV

**Number of Conductors:** One 3/C to three 1/C



### Selection Table

| 3M™ Splice 57XXA-MT                       | 5/8 kV (90/140 mil) | Appropriate MT Transition Kit |
|-------------------------------------------|---------------------|-------------------------------|
| *Typical Conductor Size Range – AWG/kcmil |                     |                               |
| 5775A-MT                                  | 3/0-250             | MT-C                          |
| 5776A-MT                                  | 350                 | MT-C                          |
| 5776A-MT                                  | 500                 | MT-E                          |
| 5777A-MT                                  | —                   | MT-E                          |

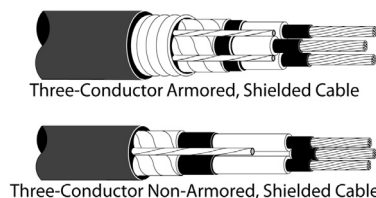
| Order No. | UPC          | Single Conductor Jacket O.D. | Kits per Case |
|-----------|--------------|------------------------------|---------------|
| MT-C      | 051128-55208 | 0.62"-1.13" (15,7-28,7 mm)   | 1             |
| MT-E      | 051128-54318 | 1.13"-1.80" (28,7-45,7 mm)   | 1             |

## 3M™ Cold Shrink 3/C Inline Shielded, Armored or Non-Armored Splice Kits 5760 Series for 5/8 kV

These splice kits are designed for splicing shielded armored and non-armored cables, 5/8 kV and 15 kV. Each kit makes one 3/C splice. Connectors are not included and must be ordered separately.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                             |                                 |
|-----------------------------|---------------------------------|
| <b>Voltage</b>              | 5/8 kV, 15 kV                   |
| <b>Number of Conductors</b> | Three Conductors                |
| <b>Shielding Type</b>       | Shielded Armored or Non-Armored |
| <b>Splice Type</b>          | Inline                          |
| <b>Technology</b>           | Cold Shrink, Resin              |
| <b>RoHS 2011/65/EU</b>      | Yes                             |



| Order No. | UPC          | Insulation O.D. Range         | Conductor Size, 5/8 kV            | Max. Connector O.D. | Max. Connector Length | Typical Splice Length | Case Qty. |
|-----------|--------------|-------------------------------|-----------------------------------|---------------------|-----------------------|-----------------------|-----------|
| 5761      | 051128-59172 | 0.65"-1.00"<br>(16,5-25,4 mm) | 2/0 AWG-350 kcmil<br>(60-150 mm²) | 0.90"<br>(22,9 mm)  | 2.75"<br>(69,9 mm)    | 29.0"<br>(737 mm)     | 1         |
| 5762      | 051128-59170 | 0.93"-1.94"<br>(23,6-49,3 mm) | 500-1000 kcmil<br>(300-500 mm²)   | 1.40"<br>(35,5 mm)  | 5.00"<br>(127,0 mm)   | 44.0"<br>(1118 mm)    | 1         |

# 15 kV Medium Voltage Splices

The following 3M products cover splicing needs for applications up to 15 kV, and promote dependable performance, stability and long life with every splice you make.



| Section                                                                                                           | Page    |
|-------------------------------------------------------------------------------------------------------------------|---------|
| 15 kV .....                                                                                                       | 190-209 |
| 3M™ Cold Shrink Splice Kits.....                                                                                  | 191-196 |
| Single Conductor (1/C) .....                                                                                      | 191-194 |
| Inline.....                                                                                                       | 191-194 |
| 3M™ Cold Shrink QS-III Inline CN/JCN Splice Kits 5415A, 5416A, 5417A and 5418A Series.....                        | 191-192 |
| 3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5513A, 5514A, 5515A and 5516A Series.....                | 193-194 |
| Branch.....                                                                                                       | 194     |
| 3M™ Cold Shrink Branch Splice Kit QS-2001B and 3M™ Cold Shrink Branch Splice Adapter QS-2000BA .....              | 194     |
| Three Conductor (3/C) .....                                                                                       | 195-196 |
| 3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splice Kits 5775A-MT, 5776A-MT & 5777A-MT for 15 kV.....  | 195     |
| 3M™ Cold Shrink MT-C & MT-E Trifurcating Accessory Kits (One 3/C to Three 1/C) for 15 kV.....                     | 196     |
| 3M™ Cold Shrink 3/C Inline Shielded, Armored or Non-Armored Splice Kits 5760 Series for 15 kV .....               | 196     |
| 3M™ Molded Rubber Splice Kits.....                                                                                | 197-202 |
| Single Conductor (1/C) .....                                                                                      | 197-202 |
| 3M™ Molded Rubber QS-II Inline JCN/CN Splice Kits 5411, 5411A and 5412 Series .....                               | 197     |
| 3M™ Molded Rubber QS Inline JCN/CN Splice Kits 5400 Series .....                                                  | 198     |
| 3M™ Molded Rubber QS-II JCN/CN Cable Repair Splice Kits 5411R and 5412R Series.....                               | 199     |
| 3M™ Molded Rubber QS-II Inline Shielded Cable Splice Kits 5500 Series .....                                       | 200     |
| 3M™ Aluminum Repair Connectors CIR Series for 3M™ Rubber Splices 5411R & 5412R Series .....                       | 201     |
| 3M™ Connectors CI Series for 3M™ Rubber Splices 5400 & 5500 Series.....                                           | 201     |
| 3M™ Connectors CI Series for 3M™ Rubber Splices 5411, 5411A, 5412 & 5500 Series.....                              | 202     |
| 3M™ Aluminum Transition Connectors CI-T Series for 5411 & 5500 Series .....                                       | 202     |
| 3M™ PILC Splice Kits .....                                                                                        | 203-208 |
| Single Conductor (1/C) .....                                                                                      | 203-204 |
| 3M™ Cold Shrink QS-III 1/C Inline Transition Splice Kits 5510A-1T-PILC Series .....                               | 203     |
| 3M™ Cold Shrink Splice Kits QS-2000T 1/C PILC to 1/C Poly/EPR or 1/C PILC to 1/C PILC Cable Splices .....         | 204     |
| Three Conductor (3/C) .....                                                                                       | 205-208 |
| 3M™ Cold Shrink Splice Kits QS-2000-3T and QS-2000-3T-WS 3/C PILC to 1/C Poly/EPR Cable Trifurcating Splices..... | 205     |
| 3M™ Cold Shrink 3/C PILC to 3/C Poly/EPR Cable Transition Splice Kit QS-2013-3T-3C.....                           | 206     |
| 3M™ Scotchlok™ Connectors 2000T-CU for 15 kV.....                                                                 | 207     |
| 3M™ Scotchlok™ Reducer Series Connectors 2000T-CU/AL for 15 kV .....                                              | 208     |
| 3M™ Tape Splice Kits.....                                                                                         | 209     |
| Single Conductor (1/C).....                                                                                       | 209     |
| Scotch® Inline and Tee Tape Shielded Cable Splice Kits 5700 Series .....                                          | 209     |

## 15 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C): Inline

## 3M™ Cold Shrink QS-III Inline CN/JCN Splice Kits 5415A, 5416A, 5417A and 5418A Series

The 3M™ Cold Shrink QS-III Inline CN/JCN Splice Kits 5415A, 5416A, 5417A, 5417A-WG, 5418A and 5418A-WG Series are 15 kV class inline splices for joining jacketed concentric neutral (JCN) and concentric neutral (CN) power cables. They are a cold shrink design sized to fit Type MV-90 or Type MV-105 cables with copper, or aluminum conductor sizes ranging from 2 AWG-1000 kcmil (35-500 mm²). The cold shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the cold shrink jacketing is made of EPDM rubber for physical protection. Each splice manufactured is factory tested to provide reliability.

The splices can be used with standard copper (Cu) or aluminum (Al/Cu) inline compression (crimp type) connectors as well as shearbolt connectors, and can be used for size transitions within the listed kit size range. They are designed to exceed minimum industry test standards, and have a BIL rating of 150 kV (equal to a 25 kV voltage class). The 3M™ Cold Shrink QS-III Splice Kits 5415A, 5416A, 5417A, 5417A-WG, 5418A and 5418A-WG meet or exceed the 15 kV Voltage Class rating requirements of IEEE-404. Kit contents include sufficient materials to make one splice.

Note: 5417A-WG and 5418A-WG are partially jacketed splices containing built-in bleeder wires. Additional end user materials are required to convert to full jacketing.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                             |                                                            |
|-----------------------------|------------------------------------------------------------|
| <b>Voltage</b>              | 15 kV                                                      |
| <b>Number of Conductors</b> | Single Conductor                                           |
| <b>Shielding Type</b>       | Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) |
| <b>Splice Type</b>          | Inline                                                     |
| <b>Technology</b>           | Cold Shrink                                                |



| Order No.    | UPC          | Insulation O.D. Range      | Conductor Size                 | Connector Included | Case Qty. |
|--------------|--------------|----------------------------|--------------------------------|--------------------|-----------|
| 5415A        | 051128-53470 | 0.64"-1.01" (16,3-25,7 mm) | 2-4/0 AWG (35-95 mm²)          | -                  | 1         |
| 5415A-2-AL   | 051128-53471 | 0.64"-1.01" (16,3-25,7 mm) | 2 AWG                          | 20003              | 1         |
| 5415A-2-CU   | 051128-53472 | 0.64"-1.01" (16,3-25,7 mm) | 2 AWG                          | 10003              | 1         |
| 5415A-1-AL   | 051128-53473 | 0.64"-1.01" (16,3-25,7 mm) | 1 AWG                          | 20004              | 1         |
| 5415A-1-CU   | 051128-53474 | 0.64"-1.01" (16,3-25,7 mm) | 1 AWG                          | 10004              | 1         |
| 5415A-1/0-AL | 051128-53475 | 0.64"-1.01" (16,3-25,7 mm) | 1/0 AWG                        | 20005              | 1         |
| 5415A-1/0-CU | 051128-53476 | 0.64"-1.01" (16,3-25,7 mm) | 1/0 AWG                        | 10005              | 1         |
| 5415A-2/0-AL | 051128-53477 | 0.64"-1.01" (16,3-25,7 mm) | 2/0 AWG                        | 20006              | 1         |
| 5415A-2/0-CU | 051128-53478 | 0.64"-1.01" (16,3-25,7 mm) | 2/0 AWG                        | 10006              | 1         |
| 5415A-3/0-AL | 051128-53747 | 0.64"-1.01" (16,3-25,7 mm) | 3/0 AWG                        | 20007              | 1         |
| 5415A-3/0-CU | 051128-53748 | 0.64"-1.01" (16,3-25,7 mm) | 3/0 AWG                        | 10007              | 1         |
| 5415A-4/0-AL | 051128-53749 | 0.64"-1.01" (16,3-25,7 mm) | 4/0 AWG                        | 20008              | 1         |
| 5415A-4/0-CU | 051128-53750 | 0.64"-1.01" (16,3-25,7 mm) | 4/0 AWG                        | 10008              | 1         |
| 5416A        | 054007-44092 | 0.84"-1.38" (21,3-35,1 mm) | 4/0 AWG-350 kcmil (95-185 mm²) | -                  | 1         |
| 5416A-4/0-AL | 054007-44093 | 0.84"-1.38" (21,3-35,1 mm) | 4/0 AWG                        | 20008              | 1         |
| 5416A-4/0-CU | 054007-44094 | 0.84"-1.38" (21,3-35,1 mm) | 4/0 AWG                        | 10008              | 1         |
| 5416A-250-AL | 054007-44096 | 0.84"-1.38" (21,3-35,1 mm) | 250 kcmil                      | 20009              |           |
| 5416A-250-CU | 054007-44097 | 0.84"-1.38" (21,3-35,1 mm) | 250 kcmil                      | 10009              | 1         |
| 5416A-350-AL | 054007-44098 | 0.84"-1.38" (21,3-35,1 mm) | 350 kcmil                      | 20011              | 1         |
| 5416A-350-CU | 054007-44099 | 0.84"-1.38" (21,3-35,1 mm) | 350 kcmil                      | 10011              | 1         |

## 3M™ Cold Shrink QS-III Inline CN/JCN Splice Kits 5415A, 5416A, 5417A and 5418A Series (continued)

| Order No.     | UPC          | Insulation O.D. Range      | Conductor Size                               | Connector Included | Case Qty. |
|---------------|--------------|----------------------------|----------------------------------------------|--------------------|-----------|
| 5417A         | 054007-42124 | 1.04"-1.70" (26,4-43,2 mm) | 350-750 kcmil<br>(185-325 mm <sup>2</sup> )  | -                  | 1         |
| 5417A-350-AL  | 054007-42125 | 1.04"-1.70" (26,4-43,2 mm) | 350 kcmil                                    | 20011              | 1         |
| 5417A-350-CU  | 054007-44234 | 1.04"-1.70" (26,4-43,2 mm) | 350 kcmil                                    | 10011              | 1         |
| 5417A-500-AL  | 054007-42126 | 1.04"-1.70" (26,4-43,2 mm) | 500 kcmil                                    | 20014              | 1         |
| 5417A-500-CU  | 054007-44235 | 1.04"-1.70" (26,4-43,2 mm) | 500 kcmil                                    | 10014              | 1         |
| 5417A-750-AL  | 054007-04587 | 1.04"-1.70" (26,4-43,2 mm) | 750 kcmil                                    | 20019              | 1         |
| 5417A-750-CU  | 054007-04588 | 1.04"-1.70" (26,4-43,2 mm) | 750 kcmil                                    | 10019              | 1         |
| 5417A-WG      | 054007-44090 | 1.04"-1.70" (26,4-43,2 mm) | 350-750 kcmil<br>(185-325 mm <sup>2</sup> )  | -                  | 1         |
| 5418A         | 054007-42128 | 1.08"-1.70" (27,4-43,2 mm) | 500-1000 kcmil<br>(240-500 mm <sup>2</sup> ) | -                  | 1         |
| 5418A-500-AL  | 054007-44403 | 1.08"-1.70" (27,4-43,2 mm) | 500 kcmil                                    | 20014              | 1         |
| 5418A-500-CU  | 054007-44404 | 1.08"-1.70" (27,4-43,2 mm) | 500 kcmil                                    | 10014              | 1         |
| 5418A-750-AL  | 054007-42129 | 1.08"-1.70" (27,4-43,2 mm) | 750 kcmil                                    | 20019              | 1         |
| 5418A-750-CU  | 054007-44236 | 1.08"-1.70" (27,4-43,2 mm) | 750 kcmil                                    | 10019              | 1         |
| 5418A-1000-AL | 054007-42130 | 1.08"-1.70" (27,4-43,2 mm) | 1000 kcmil                                   | 20024              | 1         |
| 5418A-1000-CU | 054007-44237 | 1.08"-1.70" (27,4-43,2 mm) | 1000 kcmil                                   | 10024              | 1         |
| 5418A-WG      | 054007-44091 | 1.08"-1.70" (27,4-43,2 mm) | 500-1000 kcmil<br>(240-500 mm <sup>2</sup> ) | -                  | 1         |

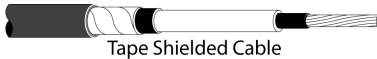
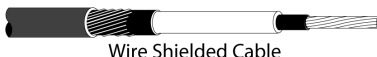
## 15 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C): Inline

### 3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5513A, 5514A, 5515A and 5516A Series

The 3M™ Cold Shrink QS-III Shielded Cable Splices 5513A, 5514A, 5515A and 5516A Series are 15 kV class inline splices for joining tape shield, wire shield, UniShield® or longitudinally corrugated (LC) shielded power cables. It is a cold shrink design sized to fit Type MV-90 or Type MV-105 cables with copper, or aluminum conductor sizes ranging from 2 AWG-1000 kcmil (35-500 mm²). The cold shrink splice body is a one-piece molded design made of special formulated silicone rubbers, while the cold shrink jacketing is made of EPDM rubber for physical protection. Each splice manufactured is factory tested to provide reliability.

The splices can be used with standard copper (Cu) or aluminum (Al/Cu) inline compression (crimp type) connectors, and can be used for size transitions within the listed kit size range. They are designed to exceed minimum industry test standards, and have a BIL rating of 150 kV (equal to a 25 kV voltage class). The 5513A, 5514A, 5515A and 5516A QS-III splices meet or exceed the 15 kV Voltage Class rating requirements of IEEE 404. Each kit makes one splice.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                             |                                                                             |                                                                                    |                                                                                     |
|-----------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>Voltage</b>              | 15 kV                                                                       |  |  |
| <b>Number of Conductors</b> | Single Conductor                                                            |  |                                                                                     |
| <b>Shielding Type</b>       | Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC) Shield |  |                                                                                     |
| <b>Splice Type</b>          | Inline                                                                      |  |                                                                                     |
| <b>Technology</b>           | Cold Shrink                                                                 |                                                                                    |                                                                                     |

| Order No.    | UPC          | Insulation O.D. Range      | Conductor Size    | Connector Included | Case Qty. |
|--------------|--------------|----------------------------|-------------------|--------------------|-----------|
| 5513A        | 051128-53480 | 0.64"-1.01" (16,3-25,7 mm) | 2-4/0 AWG         | —                  | 1         |
| 5513A-2-AL   | 051128-53481 | 0.64"-1.01" (16,3-25,7 mm) | 2 AWG             | 20003              | 1         |
| 5513A-2-CU   | 051128-53482 | 0.64"-1.01" (16,3-25,7 mm) | 2 AWG             | 10003              | 1         |
| 5513A-1-AL   | 051128-53483 | 0.64"-1.01" (16,3-25,7 mm) | 1 AWG             | 20004              | 1         |
| 5513A-1-CU   | 051128-53484 | 0.64"-1.01" (16,3-25,7 mm) | 1 AWG             | 10004              | 1         |
| 5513A-1/0-AL | 051128-53485 | 0.64"-1.01" (16,3-25,7 mm) | 1/0 AWG           | 20005              | 1         |
| 5513A-1/0-CU | 051128-53486 | 0.64"-1.01" (16,3-25,7 mm) | 1/0 AWG           | 10005              | 1         |
| 5513A-2/0-AL | 051128-53487 | 0.64"-1.01" (16,3-25,7 mm) | 2/0 AWG           | 20006              | 1         |
| 5513A-2/0-CU | 051128-53488 | 0.64"-1.01" (16,3-25,7 mm) | 2/0 AWG           | 10006              | 1         |
| 5513A-3/0-AL | 051128-53489 | 0.64"-1.01" (16,3-25,7 mm) | 3/0 AWG           | 20007              | 1         |
| 5513A-3/0-CU | 051128-53490 | 0.64"-1.01" (16,3-25,7 mm) | 3/0 AWG           | 10007              | 1         |
| 5513A-4/0-AL | 051128-53491 | 0.64"-1.01" (16,3-25,7 mm) | 4/0 AWG           | 20008              | 1         |
| 5513A-4/0-CU | 051128-53492 | 0.64"-1.01" (16,3-25,7 mm) | 4/0 AWG           | 10008              | 1         |
| 5514A        | 054007-44101 | 0.84"-1.38" (21,3-35,1 mm) | 4/0 AWG-500 kcmil | —                  | 1         |
| 5514A-CA-1   | 051128-57151 | 0.64"-1.38" (16,3-35,1 mm) | 2 AWG-500 kcmil   | —                  | 1         |
| 5514A-4/0-AL | 054007-44102 | 0.84"-1.38" (21,3-35,1 mm) | 4/0 AWG           | 20008              | 1         |
| 5514A-4/0-CU | 054007-44103 | 0.84"-1.38" (21,3-35,1 mm) | 4/0 AWG           | 10008              | 1         |
| 5514A-250-AL | 054007-44104 | 0.84"-1.38" (21,3-35,1 mm) | 250 kcmil         | 20009              | 1         |
| 5514A-250-CU | 054007-44105 | 0.84"-1.38" (21,3-35,1 mm) | 250 kcmil         | 10009              | 1         |
| 5514A-350-AL | 054007-44106 | 0.84"-1.38" (21,3-35,1 mm) | 350 kcmil         | 20011              | 1         |
| 5514A-350-CU | 054007-44107 | 0.84"-1.38" (21,3-35,1 mm) | 350 kcmil         | 10011              | 1         |
| 5514A-500-AL | 054007-44407 | 0.84"-1.38" (21,3-35,1 mm) | 500 kcmil         | 20014              | 1         |
| 5514A-500-CU | 054007-44408 | 0.84"-1.38" (21,3-35,1 mm) | 500 kcmil         | 10014              | 1         |
| 5515A        | 054007-42134 | 1.04"-1.70" (26,4-43,2 mm) | 350-750 kcmil     | —                  | 1         |
| 5515A-350-AL | 054007-42135 | 1.04"-1.70" (26,4-43,2 mm) | 350 kcmil         | 20011              | 1         |
| 5515A-350-CU | 054007-42898 | 1.04"-1.70" (26,4-43,2 mm) | 350 kcmil         | 10011              | 1         |
| 5515A-500-AL | 054007-42899 | 1.04"-1.70" (26,4-43,2 mm) | 500 kcmil         | 20014              | 1         |
| 5515A-500-CU | 054007-42136 | 1.04"-1.70" (26,4-43,2 mm) | 500 kcmil         | 10014              | 1         |
| 5515A-750-AL | 054007-42900 | 1.04"-1.70" (26,4-43,2 mm) | 750 kcmil         | 20019              | 1         |

## 15 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C): Inline

## 3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5513A, 5514A, 5515A and 5516A Series (continued)

| Order No.     | UPC          | Insulation O.D. Range      | Conductor Size | Connector Included | Case Qty. |
|---------------|--------------|----------------------------|----------------|--------------------|-----------|
| 5515A-750-CU  | 054007-42137 | 1.04"-1.70" (26,4-43,2 mm) | 750 kcmil      | 10019              | 1         |
| 5516A         | 054007-42139 | 1.08"-1.70" (27,4-43,2 mm) | 500-1000 kcmil | —                  | 1         |
| 5516A-500-AL  | 054007-44405 | 1.08"-1.70" (27,4-43,2 mm) | 500 kcmil      | 20014              | 1         |
| 5516A-500-CU  | 054007-44406 | 1.08"-1.70" (27,4-43,2 mm) | 500 kcmil      | 10014              | 1         |
| 5516A-750-AL  | 054007-43254 | 1.08"-1.70" (27,4-43,2 mm) | 750 kcmil      | 20019              | 1         |
| 5516A-750-CU  | 054007-43255 | 1.08"-1.70" (27,4-43,2 mm) | 750 kcmil      | 10019              | 1         |
| 5516A-1000-AL | 054007-42901 | 1.08"-1.70" (27,4-43,2 mm) | 1000 kcmil     | 20024              | 1         |
| 5516A-1000-CU | 054007-42106 | 1.08"-1.70" (27,4-43,2 mm) | 1000 kcmil     | 10024              | 1         |

## 15 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C): Branch

## 3M™ Cold Shrink Branch Splice Kit QS-2001B and 3M™ Cold Shrink Branch Splice Adapter QS-2000BA

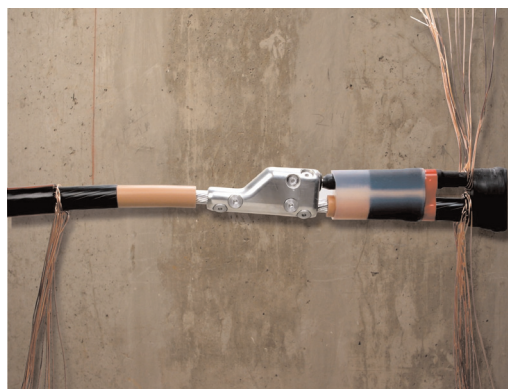
The 3M™ Cold Shrink Branch Splice QS-2001B molded rubber splice kit is designed to connect extruded dielectric power cables rated 15 kV. The basic kit handles the main and branch cable range from 350–500 kcmil. (See note below for cable between 2 AWG–250 kcmil.) This kit utilizes the QS-2000 cold shrink technology and consists of a multi-layer silicone rubber splice and stress control body, each expanded on a removable, supporting polymeric core.

Kits contain sufficient material to make one branch splice.

Note: For 2 AWG–250 kcmil cable, the 3M™ Cold Shrink Branch Splice Adapter QS-2000BA must be ordered and used in conjunction with the 3M™ Cold Shrink Branch Splice Kit QS-2001B. The adapter kit will increase the cable insulation O.D. so that the cable will work with the splice body. Order one adapter kit for each cable end (3 maximum/splice) below 350 kcmil (185 mm<sup>2</sup>) conductor size.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                                                                                  |
|----------------------|--------------------------------------------------------------------------------------------------|
| Voltage              | 15 kV                                                                                            |
| Number of Conductors | Single Conductor Branch Splice                                                                   |
| Shielding Type       | Concentric Neutral (CN), Jacketed Concentric Neutral (JCN), Tape Shield, UniShield®, Wire Shield |
| Technology           | Cold Shrink                                                                                      |



| Order No. | UPC          | Insulation O.D. Range                                                                | Conductor Size                                                                                                            | Product Type | Suggested Accessory                                 | Case Qty. |
|-----------|--------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------------------------|-----------|
| QS2001B   | 051128-55254 | 1.00"-1.35" (25,4-34,3 mm); or 0.64"-1.01" (16,2-25,6 mm) with QS-2000BA Adapter Kit | 2 AWG-500 kcmil (35-240 mm <sup>2</sup> )<br>Must use QS-2000BA Adapter Kit for 2 AWG-250 kcmil (35-150 mm <sup>2</sup> ) | Splice       | 3M™ Cold Shrink Branch Splice Adapter Kit QS-2000BA | 1         |
| QS2000B-A | 051128-55255 | N/A                                                                                  | N/A                                                                                                                       | Accessory    | N/A                                                 | 1         |

## 15 kV: 3M™ Cold Shrink Splice Kits: Three Conductor (3/C)

**3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splice Kits 5775A-MT, 5776A-MT & 5777A-MT for 15 kV**

3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splices 5775A-MT, 5776A-MT and 5777A-MT Series are designed for splicing 3-conductor, armored and non-armored, shielded power cables. The kits are rated for use on 5/8 kV cables with conductor sizes from 3/0 AWG-1000 kcmil (95-500 mm<sup>2</sup>) or 15 kV cables with conductor sizes from 2 AWG-750 kcmil (35-325 mm<sup>2</sup>). The kits are designed to be used with 3M™ Scotchlok™ Connectors 10000 and 20000 Series or other UL listed inline compression connectors that fit within the dimension limits listed in the data sheet. Meets the requirements of IEEE-404.

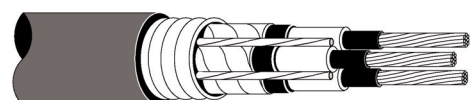
Kits include material necessary to make one 3/C splice. Connectors are not included and must be ordered separately. The completed splice is designed for use in cable trays, weather exposed or direct burial locations.

The splice utilizes several technologies to accommodate the various functions of a 3/C shielded power cable: 3M™ Cold Shrink QS-III Splice Bodies, Scotch® Tapes for moisture sealing, Constant Force Springs for connecting ground braid jumpers and armorcast for replacing the cable armor and/or jacket.

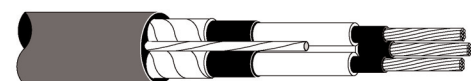
Note: When making a trifurcating splice, the 3M™ Cold Shrink MT-C or MT-E Trifurcating Accessory Kit must be used along with the splice kit.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                 |
|----------------------|---------------------------------|
| Voltage              | 5/8 kV, 15 kV                   |
| Number of Conductors | Three Conductors                |
| Shielding Type       | Shielded Armored or Non-Armored |
| Splice Type          | Inline, Trifurcating            |
| Technology           | Cold Shrink, Armorcast          |



**Three-Conductor Armored, Shielded Cable**



**Three-Conductor Non-Armored, Shielded Cable**

| Order No. | UPC          | Insulation O.D. Range         | Conductor Size, 15 kV                          | Typical Splice Length | Suggested Accessory                                                                                                                  | Case Qty. |
|-----------|--------------|-------------------------------|------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 5775A-MT  | 051128-53493 | 0.64"-1.01"<br>(16,3-25,7 mm) | 2-4/0 AWG<br>(35-95 mm <sup>2</sup> )          | 52.0"<br>(1320,8 mm)  | 3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-C                                                                       | 1         |
| 5776A-MT  | 054007-44112 | 0.84"-1.38"<br>(21,3-35,1 mm) | 4/0 AWG-500 kcmil<br>(95-240 mm <sup>2</sup> ) | 54.0"<br>(1371,6 mm)  | 3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-C; or<br>3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E | 1         |
| 5777A-MT  | 054007-44289 | 1.04"-1.70"<br>(26,4-43,2 mm) | 350-750 kcmil<br>(185-325 mm <sup>2</sup> )    | 58.0"<br>(1473,2 mm)  | 3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E                                                                       | 1         |

## 15 kV: 3M™ Cold Shrink Splice Kits: Three Conductor (3/C)

## 3M™ Cold Shrink MT-C & MT-E Trifurcating Accessory Kits (One 3/C to Three 1/C) for 15 kV

3M™ Cold Shrink MT-C and MT-E Trifurcating Accessory Kits are used to break out and seal a transition from 3/C to three 1/C.

For use with 3M™ Cold Shrink QS-III Splicing Series 5700A-MT.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

**Voltage:** 15 kV

**Number of Conductors:** One 3/C to three 1/C



### Selection Table

| 3M™ Splice 57XXA-MT                      | 15 kV (175/220 mil) | Appropriate MT Transition Kit |
|------------------------------------------|---------------------|-------------------------------|
| Typical Conductor Size Range – AWG/kcmil |                     |                               |
| 5775A-MT                                 | 2-4/0               | MT-C                          |
| 5776A-MT                                 | 4/0-250             | MT-C                          |
| 5776A-MT                                 | 350-500             | MT-E                          |

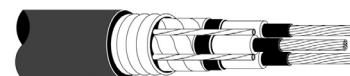
| Order No. | UPC          | Single Conductor Jacket O.D. | Kits per Case |
|-----------|--------------|------------------------------|---------------|
| MT-C      | 051128-55208 | 0.62"-1.13" (15,7-28,7 mm)   | 1             |
| MT-E      | 051128-54318 | 1.13"-1.80" (28,7-45,7 mm)   | 1             |

## 3M™ Cold Shrink 3/C Inline Shielded, Armored or Non-Armored Splice Kits 5760 Series for 15 kV

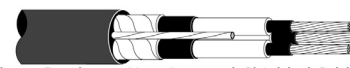
These splice kits are designed for splicing shielded armored and non-armored cables, 5/8 kV and 15 kV. Each kit makes one 3/C splice. Connectors are not included and must be ordered separately.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                             |                                 |
|-----------------------------|---------------------------------|
| <b>Voltage</b>              | 5/8 kV, 15 kV                   |
| <b>Number of Conductors</b> | Three Conductors                |
| <b>Shielding Type</b>       | Shielded Armored or Non-Armored |
| <b>Splice Type</b>          | Inline                          |
| <b>Technology</b>           | Cold Shrink, Resin              |
| <b>RoHS 2011/65/EU</b>      | Yes                             |



Three-Conductor Armored, Shielded Cable



Three-Conductor Non-Armored, Shielded Cable



| Order No. | UPC          | Insulation O.D. Range         | Conductor Size, 15 kV                                                                                      | Max. Connector O.D. | Max. Connector Length | Typical Splice Length | Case Qty. |
|-----------|--------------|-------------------------------|------------------------------------------------------------------------------------------------------------|---------------------|-----------------------|-----------------------|-----------|
| 5761      | 051128-59172 | 0.65"-1.00"<br>(16,5-25,4 mm) | 2-3/0 AWG<br>(35-80 mm <sup>2</sup> )                                                                      | 0.90"<br>(22,9 mm)  | 2.75"<br>(69,9 mm)    | 29.0"<br>(737 mm)     | 1         |
| 5762      | 051128-59170 | 0.93"-1.94"<br>(23,6-49,3 mm) | Cu: 4/0 AWG-750 kcmil<br>(120-325 mm <sup>2</sup> )<br>Al: 4/0 AWG-500 kcmil<br>(120-250 mm <sup>2</sup> ) | 1.40"<br>(35,5 mm)  | 5.00"<br>(127,0 mm)   | 44.0"<br>(1118 mm)    | 1         |

## 15 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

### 3M™ Molded Rubber QS-II Inline JCN/CN Splice Kits 5411, 5411A and 5412 Series

3M™ Molded Rubber QS-II Inline JCN/CN Splices 5411, 5411A and 5412 Series are one-piece inline splices designed for use on 15 kV rated CN and JCN cable. Meets the requirements of IEEE 404. Splice can be ordered with the special CI-Series connector packed in the kit, or the kit and connector can be ordered as separate items.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

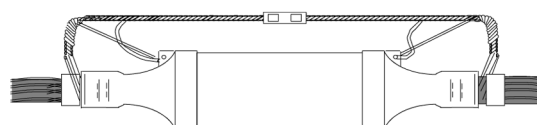
|                      |                                                            |
|----------------------|------------------------------------------------------------|
| Voltage              | 15 kV                                                      |
| Number of Conductors | Single Conductor                                           |
| Shielding Type       | Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) |
| Splice Type          | Inline                                                     |
| Technology           | Molded Rubber                                              |



Concentric Neutral (CN) Cable



Jacketed Concentric Neutral (JCN) Cable



| Order No.    | UPC          | Insulation O.D. Range        | Conductor Size, Stranded                                  | Conductor Size, Solid | Connector Included | Case Qty. |
|--------------|--------------|------------------------------|-----------------------------------------------------------|-----------------------|--------------------|-----------|
| 5411         | 054007-11852 | 0.637"-0.900" (16,2-22,9 mm) | 4 - 2/0 AWG (175 mil)                                     | 2-1/0 AWG             | -                  | 1         |
| 5411-CI-1/0  | 054007-11855 | 0.637"-0.900" (16,2-22,9 mm) | 1/0 AWG                                                   | -                     | CI-1/0             | 1         |
| 5411-CI-2    | 054007-08005 | 0.637"-0.900" (16,2-22,9 mm) | 2 AWG                                                     | 1 AWG                 | CI-2               | 1         |
| 5411-CI-21   | 054007-11853 | 0.637"-0.900" (16,2-22,9 mm) | 2 AWG, 1 AWG                                              | 1 AWG, 1/0 AWG        | CI-21              | 1         |
| 5411-CI-22   | 054007-11854 | 0.637"-0.900" (16,2-22,9 mm) | 4 AWG (220 mil)                                           | 2 AWG                 | CI-22              | 1         |
| 5411-20006   | 054007-11861 | 0.637"-0.900" (16,2-22,9 mm) | 2/0 AWG (175 mil)                                         | -                     | 20006              | 1         |
| 5411A        | 054007-09937 | 0.775"-0.900" (19,7-22,9 mm) | 1 AWG (220 mil)<br>1/0 AWG (220 mil)<br>2/0 AWG (175 mil) | 1/0 AWG (220 mil)     | -                  | 1         |
| 5411A-CI-1   | 054007-09938 | 0.775"-0.900" (19,7-22,9 mm) | 1 AWG (220 mil)                                           | 1/0 AWG (220 mil)     | CI-1               | 1         |
| 5411A-CI-1/0 | 054007-09939 | 0.775"-0.900" (19,7-22,9 mm) | 1/0 AWG (220 mil)                                         | -                     | CI-1/0             | 1         |
| 5411A-20006  | 054007-09940 | 0.775"-0.900" (19,7-22,9 mm) | 2/0 AWG (175 mil)                                         | -                     | 20006              | 1         |
| 5412         | 054007-11862 | 0.840"-1.050" (21,3-26,7 mm) | 2/0 AWG (220 mil)<br>3/0-4/0 AWG<br>250 kcmil (175 mil)   | -                     | -                  | 1         |
| 5412-CI-2/0  | 054007-11865 | 0.840"-1.050" (21,3-26,7 mm) | 2/0 AWG (220 mil)                                         | -                     | CI-2/0             | 1         |
| 5412-CI-3/0  | 054007-11863 | 0.840"-1.050" (21,3-26,7 mm) | 3/0 AWG                                                   | -                     | CI-3/0             | 1         |
| 5412-CI-4/0  | 054007-11864 | 0.840"-1.050" (21,3-26,7 mm) | 4/0 AWG                                                   | -                     | CI-4/0             | 1         |

## 15 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

## 3M™ Molded Rubber QS Inline JCN/CN Splice Kits 5400 Series

3M™ Molded Rubber QS Inline JCN/CN Splice Kits 5400 Series are inline splices designed for use on 15 kV concentric neutral (CN) or jacketed concentric neutral (JCN) cable. The continuous current rating of each splice is equal to the current rating of the cable it is sized to accommodate. Meets requirements of IEEE 404 for cable joints. Jacketing kit is needed for JCN cable.

Each kit makes one splice. Connectors, unless specified, are not included in the kit, and must be ordered separately.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

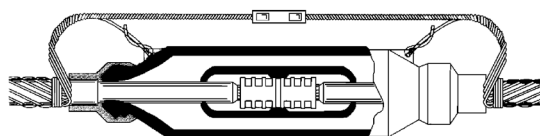
|                      |                                                            |
|----------------------|------------------------------------------------------------|
| Voltage              | 15 kV                                                      |
| Number of Conductors | Single Conductor                                           |
| Splice Type          | Inline                                                     |
| Shielding Type       | Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) |
| Technology           | Molded Rubber                                              |



Concentric Neutral (CN) Cable



Jacketed Concentric Neutral (JCN) Cable



| Order No.    | UPC          | Insulation O.D. Range        | Conductor Size, Stranded | Connector Included | Case Qty. |
|--------------|--------------|------------------------------|--------------------------|--------------------|-----------|
| 5403         | 054007-11818 | 0.795"-0.940" (20,2-23,9 mm) | 2/0-4/0 AWG              | —                  | 1         |
| 5404         | 054007-11826 | 0.920"-1.080" (23,4-27,4 mm) | 2/0-4/0 AWG              | —                  | 1         |
| 5405         | 054007-11834 | 0.920"-1.080" (23,4-27,4 mm) | 250-350 kcmil            | —                  | 1         |
| 5406         | 054007-11842 | 1.060"-1.210" (26,9-30,7 mm) | 250 (220 mil)-350 kcmil  | —                  | 1         |
| 5406-CI-350  | 054007-41907 | 1.060"-1.210" (26,9-30,7 mm) | 350 kcmil                | CI-350             | 1         |
| 5407         | 054007-25602 | 1.120"-1.320" (28,5-33,5 mm) | 500 kcmil                | —                  | 1         |
| 5407-CI-500  | 054007-02315 | 1.120"-1.320" (28,5-33,5 mm) | 500 kcmil                | CI-500             | 1         |
| 5408         | 054007-25610 | 1.320"-1.520" (33,5-38,6 mm) | 750 kcmil                | —                  | 1         |
| 5408-CI-750  | 054007-02314 | 1.320"-1.520" (33,5-38,6 mm) | 750 kcmil                | CI-750             | 1         |
| 5408-CCI-750 | 054007-41709 | 1.320"-1.520" (33,5-38,6 mm) | 750 kcmil                | CCI-750            | 1         |
| 5409         | 054007-11859 | 1.490"-1.660" (37,8-42,2 mm) | 750 kcmil                | —                  | 1         |
| 5409-CI-750  | 054007-30209 | 1.490"-1.660" (37,8-42,2 mm) | 750 kcmil                | CI-750             | 1         |

## 15 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

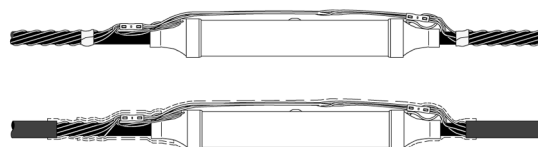
### 3M™ Molded Rubber QS-II JCN/CN Cable Repair Splice Kits 5411R and 5412R Series

3M™ Molded Rubber QS-II JCN/CN Cable Repair Splice Kit 5411R and 5412R Series are specially elongated molded rubber splices designed to repair damaged cable. They can be used on 15 kV copper or aluminum, CN or JCN cables. It is designed to replace up to 6" (152 mm) of damaged cable, thus virtually eliminating the need to splice in a new section of cable with two separate splices.

Meets the requirements of IEEE 404. The 5411R/5412R can be ordered with the special CIR-Series connector packed in the kit or the kit and connector can be ordered as separate items. Each kit makes one repair splice.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                                            |
|----------------------|------------------------------------------------------------|
| Voltage              | 15 kV                                                      |
| Number of Conductors | Single Conductor                                           |
| Shielding Type       | Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) |
| Splice Type          | Inline Repair                                              |
| Technology           | Molded Rubber                                              |



| Order No.             | UPC          | Insulation O.D. Range           | Conductor Size, Stranded           | Conductor Size, Solid | Connector Included            | Case Qty. |
|-----------------------|--------------|---------------------------------|------------------------------------|-----------------------|-------------------------------|-----------|
| 5411R                 | 054007-09352 | 0.637"-0.900"<br>(16,3-22,9 mm) | 4 AWG (220 mil only);<br>2-1/0 AWG | 2-1/0 AWG             | -                             | 1         |
| 5411R-CIR-2           | 051128-55097 | 0.637"-0.900"<br>(16,3-22,9 mm) | 2 AWG                              | -                     | CIR-2                         | 1         |
| 5411R-CIR-1/0         | 054007-09355 | 0.637"-0.900"<br>(16,3-22,9 mm) | 1/0 AWG                            | -                     | CIR-1/0                       | 1         |
| 5411R-CIR-1/0-2-10002 | 054007-44273 | 0.637"-0.900"<br>(16,3-22,9 mm) | 1/0 AWG                            | -                     | One CIR-1/0; and<br>Two 10002 | 1         |
| 5411R-CIR-21          | 054007-09354 | 0.637"-0.900"<br>(16,3-22,9 mm) | 2-1 AWG                            | 1-1/0 AWG             | CIR-21                        | 1         |
| 5411R-CIR-22          | 054007-09353 | 0.637"-0.900"<br>(16,3-22,9 mm) | 4 AWG (220 mil only)               | 2 AWG                 | CIR-22                        | 1         |
| 5412R-CIR-2/0         | 051128-57179 | 0.870"-1.055"<br>(22,1-26,9 mm) | 2/0 AWG (220 mil)                  | -                     | CIR-2/0                       | 1         |
| 5412R-CIR-3/0         | 054007-43501 | 0.870"-1.055"<br>(22,1-26,9 mm) | 3/0 AWG                            | -                     | CIR-3/0                       | 1         |
| 5412R-CIR-4/0         | 054007-50101 | 0.870"-1.055"<br>(22,1-26,9 mm) | 4/0 AWG                            | -                     | CIR-4/0                       | 1         |

## 15 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

## 3M™ Molded Rubber QS-II Inline Shielded Cable Splice Kits 5500 Series

3M™ Molded Rubber QS-II Inline Shielded Cable Splices 5500 Series are inline splices designed for use on 15 kV copper or aluminum Tape Shielded, Wire Shielded and UniShield® cable from 4 AWG-750 kcmil. The continuous current rating of each splice is equal to the current rating of the cable it is sized to accommodate. Meets requirements of IEEE 404.

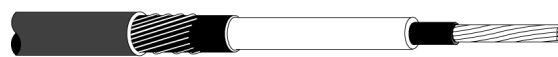
Each kit makes one splice. A special CI-Series Connector is necessary to complete the splice. Order the connector separately or as part of the kit.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

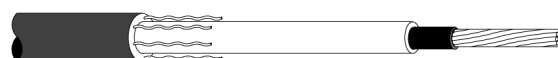
|                      |                                      |
|----------------------|--------------------------------------|
| Voltage              | 15 kV                                |
| Number of Conductors | Single Conductor                     |
| Shielding Type       | Tape Shield, Wire Shield, UniShield® |
| Splice Type          | Inline                               |
| Technology           | Molded Rubber                        |



Tape Shielded Cable



Wire Shielded Cable



UniShield® Cable

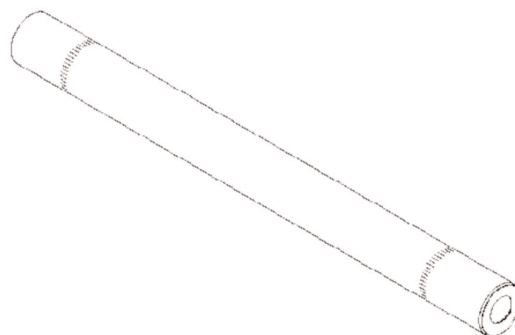
| Order No.   | UPC          | Insulation O.D. Range        | Conductor Size, Stranded, Cu or Al                      | Conductor Size, Solid, Cu or Al | Connector Included | Case Qty. |
|-------------|--------------|------------------------------|---------------------------------------------------------|---------------------------------|--------------------|-----------|
| 5501        | 054007-12293 | 0.637"-0.900" (16,2-22,9 mm) | 4-1/0 AWG<br>2/0 AWG (175 mil)                          | 2-1/0 AWG                       | -                  | 1         |
| 5501-CI-21  | 054007-09628 | 0.637"-0.900" (16,2-22,9 mm) | 2-1 AWG                                                 | 1-1/0 AWG                       | CI-21              | 1         |
| 5501-CI-1/0 | 054007-09629 | 0.637"-0.900" (16,2-22,9 mm) | 1/0 AWG                                                 | -                               | CI-1/0             | 1         |
| 5501-20006  | 054007-09630 | 0.637"-0.900" (16,2-22,9 mm) | 2/0 AWG (175 mil)                                       | -                               | 20006              | 1         |
| 5502        | 054007-12294 | 0.840"-1.050" (21,3-26,7 mm) | 2/0 AWG (220 mil)<br>3/0-4/0 AWG<br>250 kcmil (175 mil) | 4/0 AWG                         | -                  | 1         |
| 5502-CI-2/0 | 054007-09631 | 0.840"-1.050" (21,3-26,7 mm) | 2/0 AWG (220 mil)                                       | -                               | CI-2/0             | 1         |
| 5502-CI-3/0 | 054007-09632 | 0.840"-1.050" (21,3-26,7 mm) | 3/0 AWG                                                 | 4/0 AWG                         | CI-3/0             | 1         |
| 5502-CI-4/0 | 054007-09633 | 0.840"-1.050" (21,3-26,7 mm) | 4/0 AWG                                                 | -                               | CI-4/0             | 1         |
| 5502-20009  | 054007-09634 | 0.840"-1.050" (21,3-26,7 mm) | 250 kcmil (175 mil)                                     | -                               | 20009              | 1         |
| 5503        | 054007-12295 | 1.060"-1.210" (26,9-30,7 mm) | 250 kcmil (220 mil)<br>350 kcmil                        | -                               | -                  | 1         |
| 5503-CI-250 | 054007-09635 | 1.060"-1.210" (26,9-30,7 mm) | 250 kcmil (220 mil)                                     | -                               | CI-250             | 1         |
| 5503-CI-350 | 054007-09636 | 1.060"-1.210" (26,9-30,7 mm) | 350 kcmil                                               | -                               | CI-350             | 1         |
| 5504        | 054007-12296 | 1.120"-1.320" (28,4-33,5 mm) | 500 kcmil                                               | -                               | -                  | 1         |
| 5504-CI-500 | 054007-09637 | 1.120"-1.320" (28,4-33,5 mm) | 500 kcmil                                               | -                               | CI-500             | 1         |
| 5505        | 054007-12297 | 1.320"-1.520" (33,5-38,6 mm) | 750 kcmil                                               | -                               | -                  | 1         |
| 5505-CI-750 | 054007-09638 | 1.320"-1.520" (33,5-38,6 mm) | 750 kcmil                                               | -                               | CI-750             | 1         |

## 15 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

## 3M™ Aluminum Repair Connectors CIR Series for 3M™ Rubber Splices 5411R & 5412R Series

Meets the requirements of ANSI C119.4

Connector Base Metal Aluminum  
For use with Aluminum or Copper Conductor

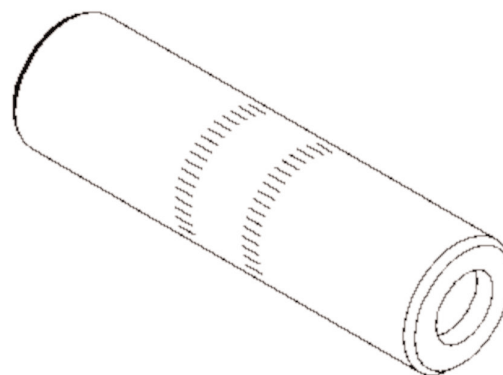


| Order No. | UPC          | Conductor Size, Stranded          | Conductor Size, Solid | Length          | Outside Diameter (O.D.) | Compatible with   | Case Qty. |
|-----------|--------------|-----------------------------------|-----------------------|-----------------|-------------------------|-------------------|-----------|
| CIR-22    | 054007-09356 | 4 AWG (220 mil insulation only)   | 2 AWG                 | 8.0" (203,2 mm) | 0.64" (16,2 mm)         | 5411R Splice Body | 10        |
| CIR-2     | 054007-11966 | 2 AWG                             | -                     | 8.0" (203,2 mm) | 0.64" (16,2 mm)         | 5411R Splice Body | 10        |
| CIR-21    | 054007-09357 | 2 AWG, 1 AWG                      | 1 AWG, 1/0 AWG        | 8.0" (203,2 mm) | 0.64" (16,2 mm)         | 5411R Splice Body | 10        |
| CIR-1/0   | 054007-09358 | 1/0 AWG                           | -                     | 8.0" (203,2 mm) | 0.64" (16,2 mm)         | 5411R Splice Body | 10        |
| CIR-2/0   | 054007-41964 | 2/0 AWG (220 mil insulation only) | -                     | 9.0" (228,6 mm) | 0.91" (23,1 mm)         | 5412R Splice Body | 10        |
| CIR-3/0   | 054007-41965 | 3/0 AWG                           | -                     | 9.0" (228,6 mm) | 0.91" (23,1 mm)         | 5412R Splice Body | 10        |
| CIR-4/0   | 054007-50228 | 4/0 AWG                           | -                     | 9.0" (228,6 mm) | 0.91" (23,1 mm)         | 5412R Splice Body | 10        |

## 3M™ Connectors CI Series for 3M™ Rubber Splices 5400 & 5500 Series

Meets the requirements of ANSI C119.4

Connector Base Metal Aluminum  
For use with Aluminum or Copper Conductor



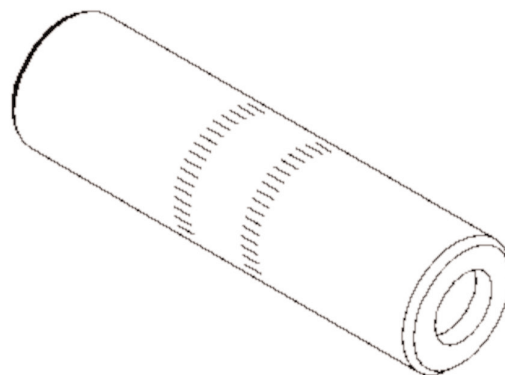
| Order No. | UPC          | Conductor Size, Stranded, Cu or Al | Connector O.D.   | Case Qty. |
|-----------|--------------|------------------------------------|------------------|-----------|
| CI-2/0    | 054007-11875 | 2/0 AWG                            | 0.910" (23,1 mm) | 10        |
| CI-3/0    | 054007-11883 | 3/0 AWG                            | 0.910" (23,1 mm) | 10        |
| CI-4/0    | 054007-11891 | 4/0 AWG                            | 0.910" (23,1 mm) | 10        |
| CI-250    | 054007-11909 | 250 kcmil                          | 1.125" (28,6 mm) | 10        |
| CI-350    | 054007-11925 | 350 kcmil                          | 1.125" (28,6 mm) | 10        |
| CI-450    | 054007-11933 | 500 kcmil (Compact)                | 1.312" (33,3 mm) | 10        |
| CI-500    | 054007-25644 | 500 kcmil                          | 1.312" (33,3 mm) | 10        |
| CI-650    | 054007-11941 | 750 kcmil (Compact)                | 1.590" (40,4 mm) | 10        |
| CI-750    | 054007-25651 | 750 kcmil                          | 1.590" (40,4 mm) | 10        |

## 15 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

## 3M™ Connectors CI Series for 3M™ Rubber Splices 5411, 5411A, 5412 &amp; 5500 Series

Meets the requirements of ANSI C119.4

Connector Base Metal Aluminum  
For use with Aluminum or Copper Conductor

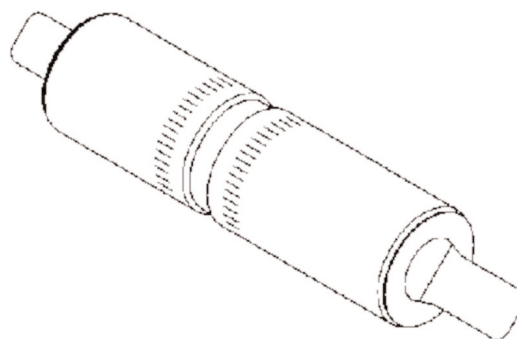


| Order No. | UPC          | Conductor Size, Stranded, Cu or Al | Conductor Size, Solid, Cu or Al | Connector O.D.   | Case Qty. |
|-----------|--------------|------------------------------------|---------------------------------|------------------|-----------|
| 20006     | 054007-13285 | 2/0 AWG                            | -                               | 0.687" (17,4 mm) | 10        |
| 20009     | 054007-13319 | 250 kcmil                          | -                               | 0.906" (23,0 mm) | 3         |
| CI-1/0    | 054007-11867 | 1/0 AWG                            | -                               | 0.640" (16,2 mm) | 10        |
| CI-2      | 054007-11651 | 2 AWG                              | 1 AWG                           | 0.640" (16,2 mm) | 10        |
| CI-2/0    | 054007-11875 | 2/0 AWG                            | -                               | 0.910" (23,1 mm) | 10        |
| CI-21     | 054007-11856 | 2, 1 AWG                           | 1, 1/0 AWG                      | 0.640" (16,2 mm) | 10        |
| CI-22     | 054007-25636 | 4 AWG                              | 2 AWG                           | 0.640" (16,2 mm) | 10        |
| CI-3/0    | 054007-11883 | 3/0 AWG                            | -                               | 0.910" (23,1 mm) | 10        |
| CI-4/0    | 054007-11891 | 4/0 AWG                            | -                               | 0.910" (23,1 mm) | 10        |

## 3M™ Aluminum Transition Connectors CI-T Series for 5411 &amp; 5500 Series

Meets the requirements of ANSI C119.4

Connector Base Metal Aluminum  
For use with Aluminum or Copper Conductor



| Order No. | UPC          | Conductor Size, Cable A – Stranded (Solid) | Conductor Size, Cable B – Stranded (Solid) | Outside Diameter (O.D.) | Case Qty. |
|-----------|--------------|--------------------------------------------|--------------------------------------------|-------------------------|-----------|
| CI-T-1    | 054007-11958 | 4 AWG (2 AWG )                             | 1 AWG (1/0 AWG )                           | 0.64" (16,2 mm)         | 10        |
| CI-T-2    | 054007-11966 | 2 AWG (1 AWG )                             | 1 AWG (1/0 AWG )                           | 0.64" (16,2 mm)         | 10        |
| CI-T-3    | 054007-11974 | 4 AWG (2 AWG)                              | 1/0 AWG Stranded                           | 0.64" (16,2 mm)         | 10        |
| CI-T-4    | 054007-11982 | 2 AWG (1 AWG)                              | 1/0 AWG Stranded                           | 0.64" (16,2 mm)         | 10        |
| CI-T-5    | 054007-11990 | 2 AWG (1 AWG)                              | 4 AWG (2 AWG)                              | 0.64" (16,2 mm)         | 10        |
| CI-T-9    | 054007-44533 | 1 AWG (1/0 AWG)                            | 1/0 AWG Stranded                           | 0.64" (16,2 mm)         | 10        |

## 15 kV: 3M™ PILC Splice Kits: Single Conductor (1/C)

## 3M™ Cold Shrink QS-III 1/C Inline Transition Splice Kits 5510A-1T-PILC Series

3M™ Cold Shrink QS-III 1/C Inline Transition Splice Kit 5510A-1T-PILC Series (which includes 5513A-1T-PILC, 5514A-1T-PILC, 5515A-1T-PILC, and 5516A-1T-PILC) are 15 kV class inline splices designed to transition single-conductor PILC to Poly/EPR cable and meet the 15 kV voltage class rating requirements of IEEE 404.

The splice kits include an oil barrier system based on a cold shrink tube design of specially formulated, oil-resistant polymer, that is laboratory tested to nominal internal pressures of 40 psi with no oil leakage. The splice body itself is a one-piece molded QS-III design made of specially formulated silicone rubber. An EPDM rubber fold-back cold shrink jacket is included for physical protection and environmental sealing.

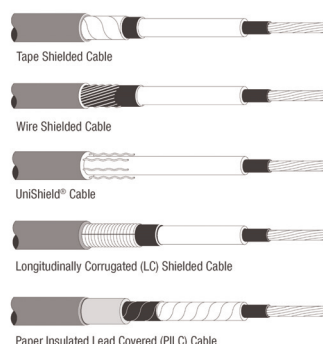
Each kit contains sufficient material to make one splice. Connector is not provided with the kits due to customer specific application requirements. To ensure a positive oil stop, a non-tapered, sealed connector (with a solid center barrier) should be used.

\*4 AWG requires use of Al connector as #4 Cu connector is below min. O.D. for the 5513A-1T-PILC kit.

\*\*2/0 AWG & 3/0 AWG require use of Al connector as Cu connectors are below min. O.D. for the 5514A-1T-PILC kit.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                     |
|----------------------|-------------------------------------|
| Voltage              | 15 kV                               |
| Number of Conductors | Single Conductor                    |
| Shielding Type       | Paper Insulated Lead Covered (PILC) |
| Splice Type          | Inline PILC Transition              |
| Technology           | Cold Shrink                         |



| Order No.     | UPC<br>051138- | Max. O.D. Over<br>Lead Sheath | PILC Cable<br>Insul. O.D. | Poly/EPR Cable<br>Insul. O.D. | PILC Cable Conductor<br>Size 100%  | PILC Cable Conductor<br>Size 133%   | Poly/EPR Cable<br>Conductor Size  | Case<br>Qty. |
|---------------|----------------|-------------------------------|---------------------------|-------------------------------|------------------------------------|-------------------------------------|-----------------------------------|--------------|
| 5513A-1T-PILC | 94339          | 1.01"<br>(25,6 mm)            | 0.59"-0.83"<br>(15-21 mm) | 0.64"-1.01"<br>(16-26 mm)     | *4-4/0 AWG<br>(22-95 mm²)          | *4-1/0 AWG<br>(22-50 mm²)           | 2-4/0 AWG<br>(35-95 mm²)          | 1            |
| 5514A-1T-PILC | 94340          | 1.23"<br>(31,2 mm)            | 0.79"-1.07"<br>(20-27 mm) | 0.84"-1.38"<br>(22-35 mm)     | 4/0 AWG-500 kcmil<br>(120-240 mm²) | **2/0 AWG-250 kcmil<br>(70-120 mm²) | 4/0 AWG-500 kcmil<br>(95-240 mm²) | 1            |
| 5515A-1T-PILC | 94341          | 1.53"<br>(38,9 mm)            | 1.07"-1.32"<br>(28-33 mm) | 1.04"-1.70"<br>(27-43 mm)     | 500-750 kcmil<br>(300-325 mm²)     | 250-550 kcmil<br>(150-250 mm²)      | 300-750 kcmil<br>(185-325 mm²)    | 1            |
| 5516A-1T-PILC | 94342          | 1.85"<br>(47,0 mm)            | 1.24"-1.63"<br>(32-41 mm) | 1.08"-1.70"<br>(28-43 mm)     | 750-1000 kcmil<br>(400-500 mm²)    | 500-1000 kcmil<br>(300-500 mm²)     | 500-1000 kcmil<br>(240-500 mm²)   | 1            |

## 15 kV: 3M™ PILC Splice Kits: Single Conductor (1/C)

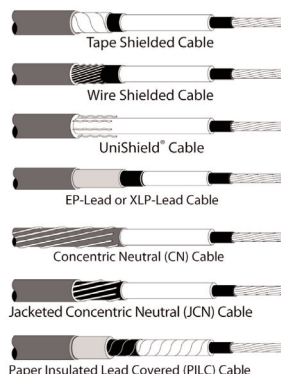
## 3M™ Cold Shrink Splice Kits QS-2000T 1/C PILC to 1/C Poly/EPR or 1/C PILC to 1/C PILC Cable Splices

The 3M™ Cold Shrink Splice Kit QS-2000T Series allows you to splice either single-conductor PILC cable to single-conductor PILC cable, or single-conductor PILC cable to single-conductor Poly/EPR cable. Because of the design of the splice, size transitions can also be accommodated rather easily. The 3M™ Cold Shrink Splice Kit QS-2000T Series meets the requirements of IEEE 404.

Use 3M™ Scotchlok™ Connectors 2000T Series with these splice kits. Each kit contains sufficient quantities of material to make one splice.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                       |
|----------------------|---------------------------------------|
| Voltage              | 15 kV                                 |
| Number of Conductors | Single Conductor                      |
| Shielding Type       | Paper Insulated Lead Covered (PILC)   |
| Splice Type          | Inline PILC Transition or Inline PILC |
| Technology           | Cold Shrink                           |



| Order No. | UPC<br>054007- | PILC Cable Insul. O.D.<br>Range | PILC Cable Conductor<br>Size      | Poly/EPR Cable Insul.<br>O.D. Range | Poly/EPR<br>Cable<br>Conductor<br>Size | Connector<br>O.D. Range       | Connector Max. Length                  | Case<br>Qty. |
|-----------|----------------|---------------------------------|-----------------------------------|-------------------------------------|----------------------------------------|-------------------------------|----------------------------------------|--------------|
| QS2011T   | 50546          | 0.56-0.88"<br>(14,2-22,4 mm)    | 4-3/0 AWG<br>(25-70 mm²)          | 0.70"-1.07"<br>(17,8-27,2 mm)       | 1-4/0 AWG<br>(50-95 mm²)               | 0.70"-1.02"<br>(17,8-25,8 mm) | Al: 5.0" (127 mm)<br>Cu: 5.5" (140 mm) | 1            |
| QS2012T   | 50547          | 0.74"-1.17"<br>(18,8-29,7 mm)   | 3/0 AWG-350 kcmil<br>(95-185 mm²) | 0.88"-1.36"<br>(22,0-34,6 mm)       | 4/0 AWG-500<br>kcmil<br>(120-240 mm²)  | 0.90"-1.30"<br>(23,0-51,0 mm) | Al: 5.2" (132 mm)<br>Cu: 5.5" (140 mm) | 1            |
| QS2013T   | 50555          | 0.98"-1.56"<br>(24,9-39,6 mm)   | 400-1000 kcmil<br>(200-500 mm²)   | 1.12"-1.70"<br>(28,4-43,2 mm)       | 500-1000 kcmil<br>(240-500 mm²)        | 1.10"-1.66"<br>(28,0-42,0 mm) | Al: 6.5" (165 mm)<br>Cu: 7.5" (190 mm) | 1            |

## 15 kV: 3M™ PILC Splice Kits: Three Conductor (3/C)

## 3M™ Cold Shrink Splice Kits QS-2000-3T and QS-2000-3T-WS 3/C PILC to 1/C Poly/EPR Cable Trifurcating Splices

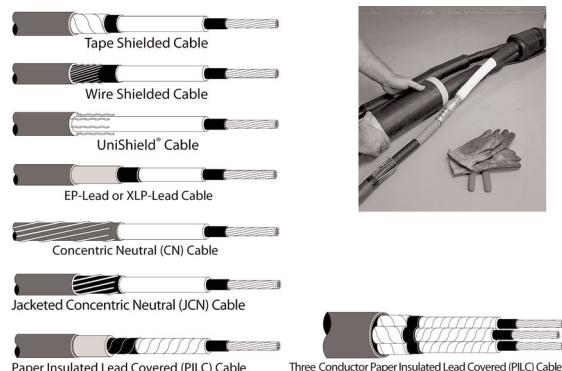
3M™ Cold Shrink Splice Kit QS-2000-3T and QS-2000-3T-WS Trifurcating Transition Splices are rated 15 kV. They are specially designed splice kits for connecting one 3/C Paper Insulated Lead Covered (PILC) cable to three 1/C Poly/EPR insulated cables. Splices meet the requirements of IEEE 404.

3M™ Scotchlok™ Connector 2000T Series are recommended for use with these kits and must be ordered separately. Each kit makes one 3/C to three 1/C splice.

\*QS-2000-3T-WS uses wrap around heat shrink re-jacketing.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                             |                                     |
|-----------------------------|-------------------------------------|
| <b>Voltage</b>              | 15 kV                               |
| <b>Number of Conductors</b> | Three Conductor to Single Conductor |
| <b>Shielding Type</b>       | Paper Insulated Lead Covered (PILC) |
| <b>Splice Type</b>          | PILC Trifurcating                   |
| <b>Technology</b>           | Cold Shrink                         |



| Order No.        | UPC<br>054007- | PILC Cable Conductor<br>Size                   | Poly/EPR Cable<br>Conductor Size                | Poly/EPR Cable Insul.<br>O.D. Range | Connector<br>O.D. Range       | Connector Max. Length                   | Case<br>Qty. |
|------------------|----------------|------------------------------------------------|-------------------------------------------------|-------------------------------------|-------------------------------|-----------------------------------------|--------------|
| QS2011-3T        | 42021          | 4-3/0 AWG<br>(25-70 mm <sup>2</sup> )          | 1-4/0 AWG<br>(50-95 mm <sup>2</sup> )           | 0.70"-1.07"<br>(17,8-27,2 mm)       | 0.70"-1.02"<br>(17,8-25,8 mm) | Al: 5.0" (127 mm);<br>Cu: 5.5" (140 mm) | 1            |
| QS2012-3T        | 42022          | 3/0 AWG-250 kcmil<br>(95-120 mm <sup>2</sup> ) | 4/0 AWG-500 kcmil<br>(120-240 mm <sup>2</sup> ) | 0.88"-1.36"<br>(22,0-34,6 mm)       | 0.90"-1.30"<br>(22,9-33,0 mm) | Al: 5.2" (132 mm);<br>Cu: 5.5" (140 mm) | 1            |
| QS2012/13-3T     | 44202          | 350-500 kcmil<br>(195-240 mm <sup>2</sup> )    | 250-500 kcmil<br>(120-240 mm <sup>2</sup> )     | 0.91"-1.36"<br>(23,0-34,6 mm)       | 0.90"-1.30"<br>(22,9-33,0 mm) | Al: 5.2" (132 mm);<br>Cu: 5.5" (140 mm) | 1            |
| QS2013-3T        | 42023          | 400-800 kcmil<br>(200-400 mm <sup>2</sup> )    | 500-1000 kcmil<br>(240-500 mm <sup>2</sup> )    | 1.12"-1.70"<br>(28,0-43,0 mm)       | 1.10"-1.66"<br>(28,0-42,0 mm) | Al: 6.5" (165 mm);<br>Cu: 7.5" (190 mm) | 1            |
| QS2011-3T-WS*    | 43248          | 4-3/0 AWG<br>(25-70 mm <sup>2</sup> )          | 1-4/0 AWG<br>(50-95 mm <sup>2</sup> )           | 0.70"-1.07"<br>(17,8-27,2 mm)       | 0.70"-1.02"<br>(17,8-25,8 mm) | Al: 5.0" (127 mm);<br>Cu: 5.5" (140 mm) | 1            |
| QS2012-3T-WS*    | 04211          | 3/0 AWG-250 kcmil<br>(95-120 mm <sup>2</sup> ) | 4/0 AWG-500 kcmil<br>(120-240 mm <sup>2</sup> ) | 0.88"-1.36"<br>(22,0-34,6 mm)       | 0.90"-1.30"<br>(22,9-33,0 mm) | Al: 5.2" (132 mm);<br>Cu: 5.5" (140 mm) | 1            |
| QS2012/13-3T-WS* | 04644          | 350-500 kcmil<br>(195-240 mm <sup>2</sup> )    | 250-500 kcmil<br>(120-240 mm <sup>2</sup> )     | 0.91"-1.36"<br>(23,0-34,6 mm)       | 0.90"-1.30"<br>(22,9-33,0 mm) | Al: 5.2" (132 mm);<br>Cu: 5.5" (140 mm) | 1            |
| QS2013-3T-WS*    | 04212          | 400-800 kcmil<br>(200-400 mm <sup>2</sup> )    | 500-1000 kcmil<br>(240-500 mm <sup>2</sup> )    | 1.12"-1.70"<br>(28,0-43,0 mm)       | 1.10"-1.66"<br>(28,0-42,0 mm) | Al: 6.5" (165 mm);<br>Cu: 7.5" (190 mm) | 1            |

## 15 kV: 3M™ PILC Splice Kits: Three Conductor (3/C)

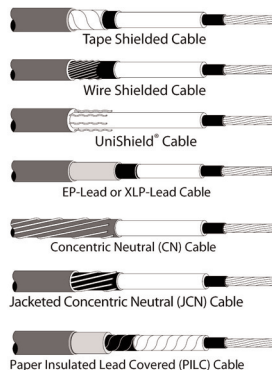
### 3M™ Cold Shrink 3/C PILC to 3/C Poly/EPR Cable Transition Splice Kit QS-2013-3T-3C

The 3M™ Cold Shrink Splice Kit QS-2013-3T-3C is rated for 15 kV cables. It is specially designed for connecting 3/C shielded or belted Paper Insulated Lead Covered (PILC) cable to 3/C shielded Poly/EPR insulated cables. The splice meets the requirements of IEEE 404.

3M™ Scotchlok™ Connector 2000T Series are recommended for this kit and must be ordered separately. Each kit has sufficient material to make one 3/C to 3/C splice.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                     |
|----------------------|-------------------------------------|
| Voltage              | 15 kV                               |
| Number of Conductors | Three Conductor                     |
| Shielding Type       | Paper Insulated Lead Covered (PILC) |
| Splice Type          | Inline PILC Transition              |
| Technology           | Cold Shrink                         |



| Order No.    | UPC<br>054007- | PILC Cable Conductor<br>Size   | Poly/EPR Cable<br>Conductor Size | Poly/EPR Cable Insul. O.D.<br>Range | Connector<br>O.D. Range       | Connector Max. Length                   | Case<br>Qty. |
|--------------|----------------|--------------------------------|----------------------------------|-------------------------------------|-------------------------------|-----------------------------------------|--------------|
| QS2013-3T-3C | 43247          | 400-800 kcmil<br>(200-400 mm²) | 500-750 kcmil<br>(240-325 mm²)   | 1.12"-1.70"<br>(28,4-43,2 mm)       | 1.10"-1.66"<br>(28,0-42,0 mm) | Al: 6.5" (165 mm);<br>Cu: 7.5" (190 mm) | 1            |

## 3M™ Scotchlok™ Connectors 2000T-CU for 15 kV

The 3M™ Scotchlok™ Connectors 2000T-CU Series are copper inline sleeves for use with copper conductor cables of the same size and are specifically designed for use with PILC power cable. They can be used on concentric, compressed, and compact stranded conductors. A rounding die is recommended to round out the sector shape of the connector when used with sector shaped conductors. The 2000T-CU connectors, like all 2000T series connectors, have a solid center oil stop and meet ANSI Standard C-119.4. They are designed for use with splice kits from the 3M™ Cold Shrink Splice Kit QS-2000T Series, the 3M™ Cold Shrink Splice Kit QS-2000-3T Series, the 3M™ Cold Shrink CS500Pb Series, and the Scotch® Tape Splice Kits 5700 Series. Meets the requirements of ANSI C119.4

Connector Base Metal Copper  
For use with Copper Conductor



| Order No.    | UPC          | Stranded Conductor Size | Length           | Outside Diameter (O.D.) | Min. Order Qty. | Case Qty. |
|--------------|--------------|-------------------------|------------------|-------------------------|-----------------|-----------|
| 2000T-2-CU   | 054007-42247 | 2 AWG                   | 5.32" (135,1 mm) | 0.700" (17,8 mm)        | 9               | 9         |
| 2000T-2/0-CU | 054007-42250 | 2/0 AWG                 | 5.32" (135,1 mm) | 0.700" (17,8 mm)        | 3               | 3         |
| 2000T-4/0-CU | 054007-42252 | 4/0 AWG                 | 5.25" (133,3 mm) | 0.880" (22,3 mm)        | 3               | 3         |
| 2000T-250-CU | 054007-42253 | 250 kcmil               | 5.25" (133,3 mm) | 0.880" (22,3 mm)        | 3               | 3         |
| 2000T-500-CU | 054007-42258 | 500 kcmil               | 6.90" (175,3 mm) | 1.125" (28,6 mm)        | 3               | 3         |
| 2000T-750-CU | 054007-42263 | 750 kcmil               | 6.90" (175,3 mm) | 1.300" (33,0 mm)        | 3               | 3         |

## 15 kV: 3M™ PILC Splice Kits: Three Conductor (3/C)

## 3M™ Scotchlok™ Reducer Series Connectors 2000T-CU/AL for 15 kV

The 3M™ Scotchlok™ Reducer Series Connectors 2000T-CU/ AL are aluminum inline sleeves that are applicable for both aluminum and copper conductors and specifically designed for use with PILC power cable. The barrel inner diameters on each end are different, allowing the connection of different size conductors. These connectors can be used on concentric, compressed, and compact stranded conductors. A rounding die is recommended to round out the sector shape of the connector when used with sector shaped conductors. The 2000T Reducer Series connectors, like all 2000T series connectors, have a solid center oil stop and meet ANSI Standard C-119.4. They are designed for use with splice kits from the 3M™ Scotchlok™ 2000T Series, the 3M™ Scotchlok™ 2000-3T Series, the 3M™ Cold Shrink Splice Kits Selection CS500Pb Series, and the Scotch® Tape Splice Kits 5700 Series. Each connector is electro-tin plated to resist electrolytic corrosion. Meets the requirements of ANSI C119.4



**Connector Base Metal** Aluminum

**For use with** Copper or Aluminum Conductor

| Order No.            | UPC          | Stranded Conductor Size | Length           | Outside Diameter (O.D.) | Min. Order Qty. | Case Qty. |
|----------------------|--------------|-------------------------|------------------|-------------------------|-----------------|-----------|
| 2000T 2-1/0 CU/AL    | 054007-42226 | 2–1/0 AWG               | 4.74" (120,4 mm) | 0.640" (16,2 mm)        | 9               | 9         |
| 2000T 1/0-2/0 CU/AL  | 054007-42228 | 1/0–2/0 AWG             | 4.70" (119,4 mm) | 0.910" (23,1 mm)        | 3               | 3         |
| 2000T 2/0-4/0 CU/AL  | 054007-42229 | 2/0–4/0 AWG             | 4.70" (119,4 mm) | 0.910" (23,1 mm)        | 3               | 3         |
| 2000T 250-350 CU/AL  | 054007-42232 | 250–350 kcmil           | 4.70" (119,4 mm) | 1.125" (28,6 mm)        | 3               | 3         |
| 2000T 350-500 CU/AL  | 054007-42234 | 350–500 kcmil           | 4.70" (119,4 mm) | 1.320" (33,5 mm)        | 3               | 3         |
| 2000T 500-750 CU/AL  | 054007-42236 | 500–750 kcmil           | 6.25" (158,7 mm) | 1.600" (40,6 mm)        | 3               | 3         |
| 2000T 500-1000 CU/AL | 054007-42238 | 500–1000 kcmil          | 6.25" (158,7 mm) | 1.625" (41,3 mm)        | 3               | 3         |
| 2000T 750-1000 CU/AL | 054007-42243 | 750–1000 kcmil          | 6.25" (158,7 mm) | 1.625" (41,3 mm)        | 3               | 3         |

## 15 kV: 3M™ Tape Splice Kits: Single Conductor (1/C)

### Scotch® Inline and Tee Tape Shielded Cable Splice Kits 5700 Series

Scotch® Inline and Tee Tape Shielded Cable Splice Kits 5700 Series handle inline and tee splices on tape shielded, wire shielded or UniShield® cables with copper (Cu) or aluminum (Al) conductors. Kits are rated 5 kV-15 kV, and each kit makes three splices. Use the selector chart to determine the proper kit needed. Connectors and Lugs need to be ordered separately. 3M does not offer tee connectors.

**Note: Cable sizes shown below are for standard insulation thickness.  
Final determining factor is cable insulation O.D.**

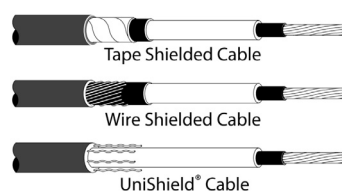
**Voltage:** 5 kV, 5/8 kV, 15 kV

**Number of Conductors:** Single Conductor

**Shielding Type:** Tape Shield, Wire Shield, UniShield®

**Splice Type:** Inline, Tee

**Technology:** Tape



| Inline Splices                                                                                        |               |                    |                    |                          |                   | Tee Splices*              |                   |                   |                   |                           |                |                           |               |           |
|-------------------------------------------------------------------------------------------------------|---------------|--------------------|--------------------|--------------------------|-------------------|---------------------------|-------------------|-------------------|-------------------|---------------------------|----------------|---------------------------|---------------|-----------|
| Product Number                                                                                        | UPC (054007-) | <u>5 and 8 kV</u>  |                    | <u>15 kV 100% 175mil</u> |                   | <u>15 kV 133% 220 mil</u> |                   | <u>5 and 8 kV</u> |                   | <u>15 kV 100% 175 mil</u> |                | <u>15 kV 133% 220 mil</u> |               | Case Qty. |
|                                                                                                       |               | Cu                 | Al                 | Cu                       | Al                | Cu                        | Al                | Cu                | Al                | Cu                        | Al             | Cu                        | Al            |           |
| Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable<br>See above for cable type illustrations. |               |                    |                    |                          |                   |                           |                   |                   |                   |                           |                |                           |               |           |
| 5717                                                                                                  | 12030         | 4-250 (22-125)     | 4-4/0 (2-100)      | 4-2 (22-30)              | —                 | 4                         | —                 | —                 | —                 | —                         | —              | —                         | —             | 1         |
| 5718                                                                                                  | 12048         | 300-500 (180-250)  | 250 (150)          | 1-4/0 (50-100)           | 4-2/0 (22-60)     | 2-1/0 (35-60)             | —                 | 4-2/0 (22-60)     | 4-1/0 (22-50)     | —                         | —              | —                         | —             | 1         |
| 5719                                                                                                  | 12055         | 550-1000 (300-500) | 300-500 (180-250)  | 250-500 (180-250)        | 3/0-250 (95-125)  | 2/0-350 (70-180)          | 4-3/0 (22-80)     | 3/0-350 (95-180)  | 2/0-4/0 (70-100)  | 4-1 (22-38)               | —              | —                         | —             | 1         |
| 5720                                                                                                  | 12063         | — (300-500)        | 500-1000 (300-500) | 550-1000 (300-500)       | 300-750 (180-325) | 400-750 (240-325)         | 4/0-500 (120-250) | 400-750 (240-325) | 250-500 (125-250) | 1/0-350 (60-180)          | 4-4/0 (22-100) | 4-250 (22-125)            | 4-3/0 (22-80) | 1         |

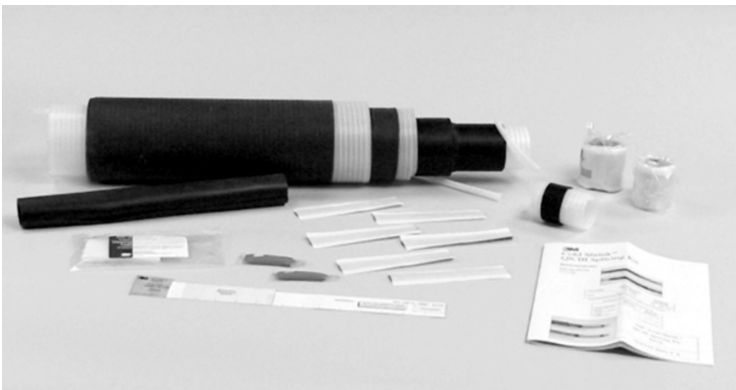
\*3M does not offer tee compression connectors.

**Note:** Larger-numbered kits may be used in place of smaller-numbered kits (with excess materials left over).

| Order No. | UPC          | Case Qty. |
|-----------|--------------|-----------|
| 5717      | 054007-12030 | 1         |
| 5718      | 054007-12048 | 1         |
| 5719      | 054007-12055 | 1         |
| 5720      | 054007-12063 | 1         |

# 25/28 kV Medium Voltage Splices

The following 3M products cover splicing needs for applications up to 25/28 kV, and promote dependable performance, stability and long life with every splice you make.



| Section                                                                                                     | Page    |
|-------------------------------------------------------------------------------------------------------------|---------|
| 25/28 kV.....                                                                                               | 210-221 |
| 3M™ Cold Shrink Splice Kits.....                                                                            | 211-215 |
| Single Conductor (1/C) .....                                                                                | 211-213 |
| 3M™ Cold Shrink QS-III Inline CN/JCN Cable Splice Kits 5456A, 5457A and 5458A Series .....                  | 211-212 |
| 3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5524A, 5525A and 5526A .....                       | 212-213 |
| Three Conductor (3/C) .....                                                                                 | 214-215 |
| 3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splice Kits 5786A-MT, 5787A-MT & 5788A-MT .....     | 214     |
| 3M™ Cold Shrink MT-C & MT-E Trifurcating Accessory Kits (One 3/C to Three 1/C) for 25/28 kV.....            | 215     |
| 3M™ Molded Rubber Splice Kits.....                                                                          | 216-219 |
| Single Conductor (1/C) .....                                                                                | 216-219 |
| 3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5420 Series .....                                   | 216     |
| 3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5450 Series .....                                   | 217     |
| 3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5451A Series .....                                  | 218-219 |
| 3M™ Connectors CI and CI-A Series.....                                                                      | 219     |
| 3M™ Molded Rubber Cable Repair Splice Kit 5451R .....                                                       | 220     |
| Single Conductor (1/C).....                                                                                 | 220     |
| 3M™ Molded Rubber QS-II JCN Cable Repair Splice Kits 5451R Series .....                                     | 220     |
| 3M™ Aluminum Repair Connector CIR Series for 3M™ Molded Rubber QS-II JCN Cable Repair Splice Kit 5451R..... | 220     |
| 3M™ PILC Splice Kits.....                                                                                   | 221     |
| Single Conductor (1/C).....                                                                                 | 221     |
| 3M™ Cold Shrink QS-III 1/C Transition Splice Kits 5520A-1T-PILC Series .....                                | 221     |

## 25/28 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C)

## 3M™ Cold Shrink QS-III Inline CN/JCN Cable Splice Kits 5456A, 5457A and 5458A Series

3M™ Cold Shrink QS-III Inline CN/JCN Cable Splices 5456A-WG, 5457A-WG and 5458A-WG are inline splices for joining 25/28 kV jacketed concentric neutral (JCN) or concentric neutral (CN) power cables. It is a cold shrink design. The cold shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the jacketing is made of EPDM rubber for its special physical properties. Each splice is high-voltage production tested to ensure reliability. Kits can be ordered with connectors packed in the kit or the kit and connector can be ordered as separate items. Meets requirements of IEEE 404.

Each kit makes one splice.

Note: 5456A-WG, 5457A-WG and 5458A-WG are partially jacketed splices containing built-in bleeder wires. Additional end user materials are required to convert to full jacketing.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                                            |
|----------------------|------------------------------------------------------------|
| Voltage              | 25/28 kV                                                   |
| Number of Conductors | Single Conductor                                           |
| Shielding Type       | Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) |
| Splice Type          | Inline                                                     |
| Technology           | Cold Shrink                                                |



| Order No.    | UPC          | Insulation O.D.            | Conductor Size                            | Connector Included | Case Qty. |
|--------------|--------------|----------------------------|-------------------------------------------|--------------------|-----------|
| 5456A        | 051128-53793 | 0.84"-1.36" (21,3-34,5 mm) | 1 AWG-250 kcmil (50-120 mm <sup>2</sup> ) | -                  | 1         |
| 5456A-1-AL   | 051128-53794 | 0.84"-1.36" (21,3-34,5 mm) | 1 AWG                                     | 20004              | 1         |
| 5456A-1-CU   | 051128-53795 | 0.84"-1.36" (21,3-34,5 mm) | 1 AWG                                     | 10004              | 1         |
| 5456A-1/0-AL | 051128-53796 | 0.84"-1.36" (21,3-34,5 mm) | 1/0 AWG                                   | 20005              | 1         |
| 5456A-1/0-CU | 051128-53797 | 0.84"-1.36" (21,3-34,5 mm) | 1/0 AWG                                   | 10005              | 1         |
| 5456A-2/0-AL | 051128-53798 | 0.84"-1.36" (21,3-34,5 mm) | 2/0 AWG                                   | 20006              | 1         |
| 5456A-2/0-CU | 051128-53799 | 0.84"-1.36" (21,3-34,5 mm) | 2/0 AWG                                   | 10006              | 1         |
| 5456A-3/0-AL | 051128-53800 | 0.84"-1.36" (21,3-34,5 mm) | 3/0 AWG                                   | 20007              | 1         |
| 5456A-3/0-CU | 051128-53801 | 0.84"-1.36" (21,3-34,5 mm) | 3/0 AWG                                   | 10007              | 1         |
| 5456A-4/0-AL | 051128-53802 | 0.84"-1.36" (21,3-34,5 mm) | 4/0 AWG                                   | 20008              | 1         |
| 5456A-4/0-CU | 051128-53803 | 0.84"-1.36" (21,3-34,5 mm) | 4/0 AWG                                   | 10008              | 1         |
| 5456A-250-AL | 051128-53935 | 0.84"-1.36" (21,3-34,5 mm) | 250 kcmil                                 | 20009              | 1         |
| 5456A-250-CU | 051128-53936 | 0.84"-1.36" (21,3-34,5 mm) | 250 kcmil                                 | 10009              | 1         |
| 5456A-WG     | 051128-53804 | 0.84"-1.36" (21,3-34,5 mm) | 1 AWG-250 kcmil (50-120 mm <sup>2</sup> ) | -                  | 1         |
| 5457A        | 054007-42149 | 1.07"-1.70" (27,2-43,2 mm) | 250-500 kcmil (120-240 mm <sup>2</sup> )  | -                  | 1         |
| 5457A-250-AL | 051128-53836 | 1.07"-1.70" (27,2-43,2 mm) | 250 kcmil                                 | 20009              | 1         |
| 5457A-250-CU | 051128-53837 | 1.07"-1.70" (27,2-43,2 mm) | 250 kcmil                                 | 10009              | 1         |
| 5457A-350-AL | 054007-42132 | 1.07"-1.70" (27,2-43,2 mm) | 350 kcmil                                 | 20011              | 1         |
| 5457A-350-CU | 054007-44238 | 1.07"-1.70" (27,2-43,2 mm) | 350 kcmil                                 | 10011              | 1         |
| 5457A-500-AL | 054007-42133 | 1.07"-1.70" (27,2-43,2 mm) | 500 kcmil                                 | 20014              | 1         |
| 5457A-500-CU | 054007-44239 | 1.07"-1.70" (27,2-43,2 mm) | 500 kcmil                                 | 10014              | 1         |
| 5457A-WG     | 054007-43416 | 1.07"-1.70" (27,2-43,2 mm) | 250-500 kcmil (120-240 mm <sup>2</sup> )  | -                  | 1         |
| 5458A        | 054007-42908 | 1.24"-2.07" (31,5-52,6 mm) | 500-1000 kcmil (240-500 mm <sup>2</sup> ) | -                  | 1         |
| 5458A-500-AL | 054007-04593 | 1.24"-2.07" (31,5-52,6 mm) | 500 kcmil                                 | 20014              | 1         |
| 5458A-500-CU | 054007-04594 | 1.24"-2.07" (31,5-52,6 mm) | 500 kcmil                                 | 10014              | 1         |
| 5458A-750-AL | 054007-42909 | 1.24"-2.07" (31,5-52,6 mm) | 750 kcmil                                 | 20019              | 1         |

## 25/28 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C)

## 3M™ Cold Shrink QS-III Inline CN/JCN Cable Splice Kits 5456A, 5457A and 5458A Series (continued)

| Order No.     | UPC          | Insulation O.D.            | Conductor Size                            | Connector Included | Case Qty. |
|---------------|--------------|----------------------------|-------------------------------------------|--------------------|-----------|
| 5458A-750-CU  | 054007-44240 | 1.24"-2.07" (31,5-52,6 mm) | 750 kcmil                                 | 10019              | 1         |
| 5458A-1000-AL | 054007-42910 | 1.24"-2.07" (31,5-52,6 mm) | 1000 kcmil                                | 20024              | 1         |
| 5458A-1000-CU | 054007-44241 | 1.24"-2.07" (31,5-52,6 mm) | 1000 kcmil                                | 10024              | 1         |
| 5458A-WG      | 054007-43417 | 1.24"-2.07" (31,5-52,6 mm) | 500-1000 kcmil (240-500 mm <sup>2</sup> ) | -                  | 1         |

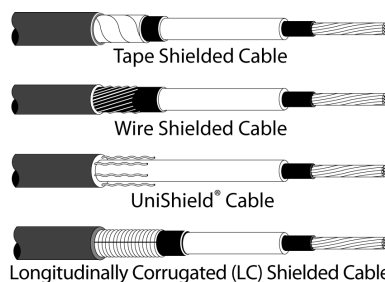
## 3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5524A, 5525A and 5526A

3M™ Cold Shrink QS-III Inline Shielded Cable Splices 5524A, 5525A and 5526A Series are inline splices for joining 25/28 kV tape shield, wire shield, UniShield® or longitudinally corrugated (LC) shielded power cables. It is a cold shrink design. The cold shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the jacketing is made of EPDM rubber for its special physical properties. Each splice is high-voltage production tested to ensure reliability. Kits can be ordered with connectors packed in the kit, or the kit and connector can be ordered as separate items. Meets requirements of IEEE 404.

Each kit makes one splice.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                             |                                                                      |
|-----------------------------|----------------------------------------------------------------------|
| <b>Voltage</b>              | 25/28 kV                                                             |
| <b>Number of Conductors</b> | Single Conductor                                                     |
| <b>Shielding Type</b>       | Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC) |
| <b>Splice Type</b>          | Inline                                                               |
| <b>Technology</b>           | Cold Shrink                                                          |



| Order No.    | UPC          | Insulation O.D.            | Conductor Size                            | Connector Included | Case Qty. |
|--------------|--------------|----------------------------|-------------------------------------------|--------------------|-----------|
| 5524A        | 051128-53922 | 0.84"-1.36" (21,3-34,5 mm) | 1 AWG-250 kcmil (50-120 mm <sup>2</sup> ) | -                  | 1         |
| 5524A-1-AL   | 051128-53923 | 0.84"-1.36" (21,3-34,5 mm) | 1 AWG                                     | 20004              | 1         |
| 5524A-1-CU   | 051128-53924 | 0.84"-1.36" (21,3-34,5 mm) | 1 AWG                                     | 10004              | 1         |
| 5524A-1/0-AL | 051128-53925 | 0.84"-1.36" (21,3-34,5 mm) | 1/0 AWG                                   | 20005              | 1         |
| 5524A-1/0-CU | 051128-53926 | 0.84"-1.36" (21,3-34,5 mm) | 1/0 AWG                                   | 10005              | 1         |
| 5524A-2/0-AL | 051128-53927 | 0.84"-1.36" (21,3-34,5 mm) | 2/0 AWG                                   | 20006              | 1         |
| 5524A-2/0-CU | 051128-53928 | 0.84"-1.36" (21,3-34,5 mm) | 2/0 AWG                                   | 10006              | 1         |
| 5524A-3/0-AL | 051128-53929 | 0.84"-1.36" (21,3-34,5 mm) | 3/0 AWG                                   | 20007              | 1         |
| 5524A-3/0-CU | 051128-53930 | 0.84"-1.36" (21,3-34,5 mm) | 3/0 AWG                                   | 10007              | 1         |
| 5524A-4/0-AL | 051128-53931 | 0.84"-1.36" (21,3-34,5 mm) | 4/0 AWG                                   | 20008              | 1         |
| 5524A-4/0-CU | 051128-53932 | 0.84"-1.36" (21,3-34,5 mm) | 4/0 AWG                                   | 10008              | 1         |
| 5524A-250-AL | 051128-53933 | 0.84"-1.36" (21,3-34,5 mm) | 250 kcmil                                 | 20009              | 1         |
| 5524A-250-CU | 051128-53934 | 0.84"-1.36" (21,3-34,5 mm) | 250 kcmil                                 | 10009              | 1         |
| 5525A        | 054007-42138 | 1.07"-1.70" (27,2-43,2 mm) | 250-750 kcmil (120-325 mm <sup>2</sup> )  | -                  | 1         |
| 5525A-250-AL | 051128-53845 | 1.07"-1.70" (27,2-43,2 mm) | 250 kcmil                                 | 20009              | 1         |
| 5525A-250-CU | 051128-53846 | 1.07"-1.70" (27,2-43,2 mm) | 250 kcmil                                 | 10009              | 1         |
| 5525A-350-AL | 054007-42140 | 1.07"-1.70" (27,2-43,2 mm) | 350 kcmil                                 | 20011              | 1         |
| 5525A-350-CU | 054007-42902 | 1.07"-1.70" (27,2-43,2 mm) | 350 kcmil                                 | 10011              | 1         |
| 5525A-500-AL | 054007-42141 | 1.07"-1.70" (27,2-43,2 mm) | 500 kcmil                                 | 20014              | 1         |
| 5525A-500-CU | 054007-42903 | 1.07"-1.70" (27,2-43,2 mm) | 500 kcmil                                 | 10014              | 1         |
| 5525A-750-AL | 054007-42904 | 1.07"-1.70" (27,2-43,2 mm) | 750 kcmil                                 | 20019              | 1         |
| 5525A-750-CU | 054007-42127 | 1.07"-1.70" (27,2-43,2 mm) | 750 kcmil                                 | 10019              | 1         |

25/28 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C)

## 3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5524A, 5525A and 5526A (continued)

| Order No.     | UPC          | Insulation O.D.            | Conductor Size                            | Connector Included | Case Qty. |
|---------------|--------------|----------------------------|-------------------------------------------|--------------------|-----------|
| 5526A         | 054007-42905 | 1.24"-2.07" (31,5-52,6 mm) | 500-1000 kcmil (240-500 mm <sup>2</sup> ) | -                  | 1         |
| 5526A-500-AL  | 054007-04597 | 1.24"-2.07" (31,5-52,6 mm) | 500 kcmil                                 | 20014              | 1         |
| 5526A-500-CU  | 054007-04598 | 1.24"-2.07" (31,5-52,6 mm) | 500 kcmil                                 | 10014              | 1         |
| 5526A-750-AL  | 054007-04595 | 1.24"-2.07" (31,5-52,6 mm) | 750 kcmil                                 | 20019              | 1         |
| 5526A-750-CU  | 054007-04596 | 1.24"-2.07" (31,5-52,6 mm) | 750 kcmil                                 | 10019              | 1         |
| 5526A-1000-AL | 054007-42906 | 1.24"-2.07" (31,5-52,6 mm) | 1000 kcmil                                | 20024              | 1         |
| 5526A-1000-CU | 054007-42907 | 1.24"-2.07" (31,5-52,6 mm) | 1000 kcmil                                | 10024              | 1         |

## 25/28 kV: 3M™ Cold Shrink Splice Kits: Three Conductor (3/C)

**3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splice Kits 5786A-MT, 5787A-MT & 5788A-MT**

3M™ Cold Shrink QS-III 3/C Inline Armored or Non-Armored Cable Splices 5786A-MT, 5787A-MT and 5788A-MT are designed for splicing 3-conductor, armored and non-armored, shielded power cables. The kits are rated for use on 25/28 kV cables with conductor sizes from 1 AWG-1000 kcmil (50-500 mm<sup>2</sup>). The kits are designed to be used with 3M™ Scotchlok™ Connectors 10000 and 20000 Series or other UL listed inline compression connectors that fit within the dimension limits listed in the connector dimensional requirements on the data sheet.

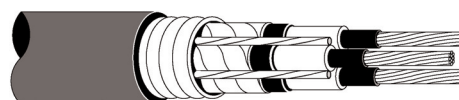
The splice utilizes several technologies to accommodate the various functions of a 3/C shielded power cable: 3M™ Cold Shrink QS-III Splice Bodies, Scotch® Tapes for moisture sealing, Constant Force Springs for connecting ground braid jumpers and Armorcast for replacing the cable armor and/or jacket. The completed splice is designed for use in cable trays, weather exposed or direct burial locations. Meets the requirements of IEEE 404.

Connectors are not included in the kit and must be ordered separately.

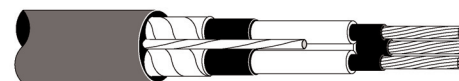
Note: When making a trifurcating splice, the 3M™ Cold Shrink MT-C or MT-E Trifurcating Accessory Kit must be used along with the splice kit.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                 |
|----------------------|---------------------------------|
| Voltage              | 25/28 kV                        |
| Number of Conductors | Three Conductor                 |
| Shielding Type       | Shielded Armored or Non-Armored |
| Splice Type          | Inline, Trifurcating            |
| Technology           | Cold Shrink                     |



**Three-Conductor Armored, Shielded Cable**



**Three-Conductor Non-Armored, Shielded Cable**

| Order No. | UPC          | Conductor Size                               | Insulation O.D.               | Connector O.D.                | Typical Splice Length | Suggested Accessory                                                                                                               | Case Qty. |
|-----------|--------------|----------------------------------------------|-------------------------------|-------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------|
| 5786A-MT  | 051128-53937 | 1 AWG-250 kcmil<br>(50-120 mm <sup>2</sup> ) | 0.84"-1.36"<br>(21,3-34,5 mm) | 0.46"-1.36"<br>(11,7-34,5 mm) | 57"<br>(1447,8 mm)    | 3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-C;<br>3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E | 1         |
| 5787A-MT  | 054007-43421 | 250-750 kcmil<br>(120-325 mm <sup>2</sup> )  | 1.07"-1.70"<br>(27,2-43,2 mm) | 0.75"-1.70"<br>(19,1-43,2 mm) | 62"<br>(1574,8 mm)    | 3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E                                                                    | 1         |
| 5788A-MT  | 054007-43422 | 500-1000 kcmil<br>(240-500 mm <sup>2</sup> ) | 1.24"-2.07"<br>(31,5-52,6 mm) | 1.05"-2.07"<br>(26,7-52,6 mm) | 66"<br>(1676,4 mm)    | 3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E                                                                    | 1         |

25/28 kV: 3M™ Cold Shrink Splice Kits: Three Conductor (3/C)

## 3M™ Cold Shrink MT-C & MT-E Trifurcating Accessory Kits (One 3/C to Three 1/C) for 25/28 kV

3M™ Cold Shrink MT-C and MT-E Trifurcating Accessory Kits are used to break out and seal a transition from 3/C to three 1/C.

For use with 3M™ Cold Shrink QS-III Splicing Series 5700A-MT.

**Voltage:** 25/28 kV

**Number of Conductors:** One 3/C to three 1/C



## Selection Table

| 3M™ Splice 57XXA-MT                       | 25/28 kV (260/280 mil) | Appropriate MT Transition Kit |
|-------------------------------------------|------------------------|-------------------------------|
| Typical Conductor Size Range – AWG/kcmil* |                        |                               |
| 5786A-MT                                  | 1- 2/0                 | MT-C                          |
| 5786A-MT                                  | 3/0-250                | MT-E                          |
| 5787A-MT                                  | 250-500                | MT-E                          |
| 5788A-MT                                  | 500                    | MT-E                          |

| Order No. | UPC          | Single Conductor Jacket O.D. | Kits per Case |
|-----------|--------------|------------------------------|---------------|
| MT-C      | 051128-55208 | 0.62"-1.13" (15,7-28,7 mm)   | 1             |
| MT-E      | 051128-54318 | 1.13"-1.80" (28,7-45,7 mm)   | 1             |

## 25/28 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

## 3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5420 Series

3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5420 Series are inline splices designed for use on 25 kV CN or JCN cable. The continuous current rating of each splice is equal to the current rating of the cable it is sized to accommodate. Meets requirements of IEEE 404 for cable joints.

Each kit makes one splice. Connectors, unless specified, are not included in the kit, and must be ordered separately.

Note: If connector is desired packed with any of the kits shown above, add the connector number after the splice number (example: 5420-CI-22A). Jacketing kit is needed for JCN cable.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

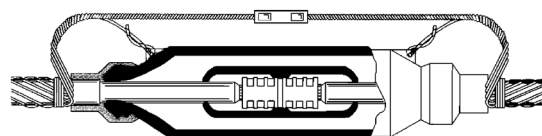
|                      |                                                            |
|----------------------|------------------------------------------------------------|
| Voltage              | 25/28 kV                                                   |
| Number of Conductors | Single Conductor                                           |
| Shielding Type       | Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) |
| Splice Type          | Inline                                                     |
| Technology           | Molded Rubber                                              |



Concentric Neutral (CN) Cable



Jacketed Concentric Neutral (JCN) Cable



| Order No.   | UPC          | Insulation O.D.              | Conductor Size                           | Connector Included | Case Qty. |
|-------------|--------------|------------------------------|------------------------------------------|--------------------|-----------|
| 5420        | 054007-15819 | 0.795"-0.940" (20,2-23,9 mm) | 2-1/0 AWG (35-50 mm <sup>2</sup> )       | -                  | 1         |
| 5420-CI-22A | 054007-15820 | 0.795"-0.940" (20,2-23,9 mm) | 2 AWG Solid                              | CI-22A             | 1         |
| 5421        | 054007-15827 | 0.920"-1.080" (23,4-27,4 mm) | 1/0-3/0 AWG (60-80 mm <sup>2</sup> )     | -                  | 1         |
| 5422        | 054007-15835 | 1.060"-1.210" (26,9-30,7 mm) | 3/0-4/0 AWG (95-100 mm <sup>2</sup> )    | -                  | 1         |
| 5423        | 054007-15843 | 1.120"-1.320" (28,4-33,5 mm) | 250-350 kcmil (125-180 mm <sup>2</sup> ) | -                  | 1         |
| 5423-CI-350 | 054007-08384 | 1.120"-1.320" (28,4-33,5 mm) | 350 kcmil                                | CI-350             | 1         |
| 5424        | 054007-15850 | 1.320"-1.520" (33,5-38,6 mm) | 500 kcmil                                | -                  | 1         |
| 5425        | 054007-09240 | 1.390"-1.590" (35,0-40,0 mm) | 750 kcmil compact                        | -                  | 1         |
| 5426        | 054007-09239 | 1.550"-1.710" (39,4-43,4 mm) | 750 kcmil                                | -                  | 1         |
| 5426-CI-750 | 054007-09177 | 1.550"-1.710" (39,4-43,4 mm) | 750 kcmil                                | CI-750             | 1         |

## 25/28 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

## 3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5450 Series

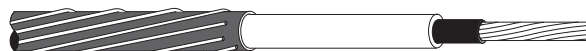
The 3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5450 Series kits are one-piece inline splices designed for use on 25/28 kV CN and JCN cable. Meets requirements of IEEE 404 for cable joints.

Each kit makes one splice. Connectors, unless specified, are not included in the kit, and must be ordered separately.

Use the primary insulation O.D. range for final conductor size ordering criteria. If connector is desired packed with any of the kits shown above, add the connector number after the splice number (example: 5451-CI-1/0A). Jacketing kit is needed for JCN cable.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                                            |
|----------------------|------------------------------------------------------------|
| Voltage              | 25/28 kV                                                   |
| Number of Conductors | Single Conductor                                           |
| Shielding Type       | Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) |
| Splice Type          | Inline                                                     |
| Technology           | Molded Rubber                                              |



Concentric Neutral (CN) Cable



Jacketed Concentric Neutral (JCN) Cable

| Order No.       | UPC          | Insulation O.D. Range      | Conductor Size                    | Connector Included | Case Qty. |
|-----------------|--------------|----------------------------|-----------------------------------|--------------------|-----------|
| 5451            | 054007-09127 | 0.83"-1.04" (21,1-26,4 mm) | 2-2/0 AWG (60 mm <sup>2</sup> )   | -                  | 1         |
| 5451-CI-2A      | 054007-09152 | 0.83"-1.04" (21,1-26,4 mm) | 2 AWG (33 mm <sup>2</sup> )       | CI-2A              | 1         |
| 5451-CI-1A      | 054007-09935 | 0.83"-1.04" (21,1-26,4 mm) | 1 AWG (42 mm <sup>2</sup> )       | CI-1A              | 1         |
| 5451-CI-21-840  | 054007-09154 | 0.83"-1.04" (21,1-26,4 mm) | 2-1 AWG (33-42 mm <sup>2</sup> )  | CI-21-840          | 1         |
| 5451-CI-1/0A    | 054007-09153 | 0.83"-1.04" (21,1-26,4 mm) | 1/0 AWG (53 mm <sup>2</sup> )     | CI-1/0A            | 1         |
| 5451-CI-1/0-840 | 054007-09155 | 0.83"-1.04" (21,1-26,4 mm) | 1/0 AWG (53 mm <sup>2</sup> )     | CI-1/0-840         | 1         |
| 5452            | 054007-09128 | 1.00"-1.15" (25,4-29,2 mm) | 3/0-4/0 AWG (95 mm <sup>2</sup> ) | -                  | 1         |

## 25/28 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

## 3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5451A Series

The 3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5451A Series is a 25/28 kV class inline splice designed for joining concentric neutral (CN) and jacketed concentric neutral (JCN) distribution class power cables. The splice is a one-piece molded design made of specially formulated, peroxide cured EPDM rubbers. Each splice is production tested on CN cable to ensure reliability. The splice is designed for use with special CI-series Inline Compression Connectors for connecting either aluminum or copper conductors. The 5451A Quick Splice II splice meets the 25 kV voltage rating requirements of IEEE 404.

Each kit makes one splice. Jacketing kit is needed for JCN cable. Connectors, unless specified, are not included in the kit, and must be ordered separately. Refer to the index to find CI, CI-840 and CI-A series connectors.

Note: CI-A series connectors are sized for 5/8 crimping die; CI-2/0 and CI-840 series connectors are sized for 840 crimping die.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

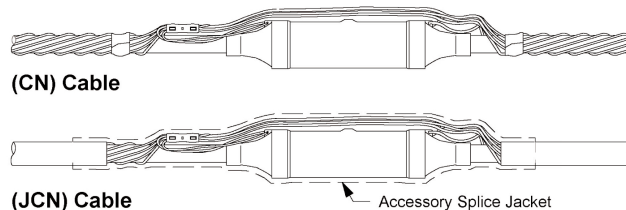
**Voltage:** 25/28 kV

**Number of Conductors:** Single Conductor

**Shielding Type:** Concentric Neutral (CN), Jacketed Concentric Neutral (JCN)

**Splice Type:** Inline

**Technology:** Molded Rubber



## 3M™ Cable Splice 5451A Series Selection—For Thick Wall (Insulation) Cable

| Product Series                                                         | UPC<br>(054007-) | Insulation<br>O.D. Range       | Conductor    |              | Cable Insulation<br>Thickness    | Specified<br>Connector | Case<br>Qty. |
|------------------------------------------------------------------------|------------------|--------------------------------|--------------|--------------|----------------------------------|------------------------|--------------|
|                                                                        |                  |                                | Stranded     | Solid        |                                  |                        |              |
| Concentric Neutral (CN) Cable, Jacketed Concentric Neutral (JCN) Cable |                  |                                |              |              |                                  |                        |              |
| 5451A                                                                  | 49527            | 0.905-1.055"<br>(23,0-26,8 mm) | 2 AWG        | 1 AWG        | 295 mils                         | CI-2A or CI-21-840     | 1            |
|                                                                        |                  |                                | 1 AWG        | 1/0 AWG      | 280 mils                         | CI-1A or CI-21-840     | 1            |
|                                                                        |                  |                                | 1/0 AWG      | —            | 295 mils                         | CI-1/0A or CI-1/0-840  | 1            |
|                                                                        |                  |                                |              |              | 260 mils                         |                        |              |
|                                                                        |                  |                                |              |              | 280 mils                         |                        |              |
| 2/0 AWG                                                                | —                | 295 mils                       | CI-2/0       | 1            |                                  |                        |              |
|                                                                        |                  |                                | 260 mils     |              |                                  |                        |              |
| 5451A-CI-1A                                                            | 49529            | 0.905-1.055"<br>(23,0-26,8 mm) | 1 AWG        | 1/0 AWG      | 280 mils<br>295 mils             | CI-1A                  | 1            |
| 5451A-CI-1/0A                                                          | 49530            | 0.905-1.055"<br>(23,0-26,8 mm) | 1/0 AWG      | —            | 260 mils<br>280 mils<br>295 mils | CI-1/0A                | 1            |
| 5451A-CI-21-840                                                        | 49532            | 0.905-1.055"<br>(23,0-26,8 mm) | 2 or 1 AWG   | 1 or 1/0 AWG | 295 mils                         | CI-21-840              | 1            |
| 5451A-CI-1/0-840                                                       | 49528            | 0.905-1.055"<br>(23,0-26,8 mm) | 1/0 AWG      | —            | 260 mils<br>280 mils<br>295 mils | CI-1/0-840             | 1            |
| 5451A-CI-2/0                                                           | 49531            | 0.905-1.055"<br>(23,0-26,8 mm) | 2/0 AWG      | —            | 260 mils<br>280 mils             | CI-2/0                 | 1            |
| Order No.                                                              |                  |                                | UPC          |              |                                  | Case Qty.              |              |
| 5451A                                                                  |                  |                                | 054007-49527 |              |                                  | 1                      |              |
| 5451A-CI-1A                                                            |                  |                                | 054007-49529 |              |                                  | 1                      |              |

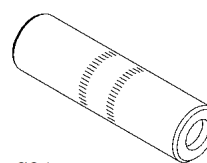
25/28 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

## 3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5451A Series (continued)

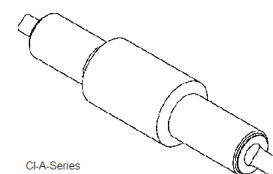
| Order No.        | UPC          | Case Qty. |
|------------------|--------------|-----------|
| 5451A-CI-1/0A    | 054007-49530 | 1         |
| 5451A-CI-21-840  | 054007-49532 | 1         |
| 5451A-CI-1/0-840 | 054007-49528 | 1         |
| 5451A-CI-2/0     | 054007-49531 | 1         |

## 3M™ Connectors CI and CI-A Series

Meets the requirements of ANSI C119.4



CI-Series



CI-A-Series

| Order No.  | UPC          | Conductor Size                    | Connector O.D. | Connectors per Case |
|------------|--------------|-----------------------------------|----------------|---------------------|
| CI-22A     | 054007-15868 | 2 AWG Solid                       | 0.910" (23 mm) | 10                  |
| CI-2A      | 054007-00721 | 2 AWG Stranded, 1 AWG Solid       | 0.910" (23 mm) | 10                  |
| CI-1A      | 054007-00722 | 2-1 AWG Stranded, 1-1/0 AWG Solid | 0.910" (23 mm) | 10                  |
| CI-21-840  | 054007-09136 | 2-1 AWG Stranded, 1-1/0 AWG Solid | 0.910" (23 mm) | 10                  |
| CI-1/0A    | 054007-14176 | 1/0 AWG Stranded                  | 0.910" (23 mm) | 10                  |
| CI-1/0-840 | 054007-09137 | 1/0 AWG Stranded                  | 0.910" (23 mm) | 10                  |
| CI-2/0     | 054007-11875 | 2/0 AWG Stranded                  | 0.910" (23 mm) | 10                  |
| CI-3/0     | 054007-11883 | 3/0 AWG Stranded                  | 0.910" (23 mm) | 10                  |
| CI-4/0     | 054007-11891 | 4/0 AWG Stranded                  | 0.910" (23 mm) | 10                  |
| CI-250     | 054007-11909 | 250 kcmil Stranded                | 1.125" (29 mm) | 10                  |
| CI-350     | 054007-11925 | 350 kcmil Stranded                | 1.125" (29 mm) | 10                  |
| CI-450     | 054007-11933 | 500 kcmil Compact                 | 1.312" (33 mm) | 10                  |
| CI-500     | 054007-25644 | 500 kcmil Stranded                | 1.312" (33 mm) | 10                  |
| CI-650     | 054007-11941 | 750 kcmil Compact                 | 1.590" (43 mm) | 10                  |
| CI-750     | 054007-25651 | 750 kcmil Stranded                | 1.590" (43 mm) | 10                  |

## 25/28 kV: 3M™ Molded Rubber Cable Repair Splice Kit 5451R: Single Conductor (1/C)

### 3M™ Molded Rubber QS-II JCN Cable Repair Splice Kits 5451R Series

The 3M™ Molded Rubber QS-II JCN Cable Repair Splice Kit 5451R Series is a 25/28 kV class inline splice designed to serve as a cable repair for concentric neutral (CN) and jacketed concentric neutral (JCN) distribution class power cables. It is designed to replace up to 6" (15,24 cm) of damaged cable, thus virtually eliminating the need to splice in a new section of cable with two separate splices.

The splice is a one-piece molded design made of specially formulated, peroxide cured EPDM rubbers. Each splice is production tested on CN cable to ensure reliability. The splice is designed for use with the special 3M™ CIR–Series Inline Compression Connector provided, for connecting either aluminum or copper conductors. The 3M™ Molded Rubber QS-II Splice meets the 25 kV voltage rating requirements of IEEE 404. Jacketing kit is needed for JCN Cable.

Note: 3M™ Repair Connector CIR-A series connectors are sized for 5/8 crimping die; 3M™ Repair Connector CIR-840 series connectors are sized for 840 crimping die.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                                            |
|----------------------|------------------------------------------------------------|
| Voltage              | 25/28 kV                                                   |
| Number of Conductors | Single Conductor                                           |
| Shielding Type       | Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) |
| Splice Type          | Inline Repair                                              |
| Technology           | Molded Rubber                                              |



Concentric Neutral (CN) Cable



Jacketed Concentric Neutral (JCN) Cable



| Order No.         | UPC          | Insulation O.D. Range        | Conductor Size, Stranded | Conductor Size, Solid | Connector Included | Case Qty. |
|-------------------|--------------|------------------------------|--------------------------|-----------------------|--------------------|-----------|
| 5451R-CIR-21A     | 054007-49479 | 0.870"-1.055" (22,1-26,8 mm) | 2-1 AWG                  | 1-1/0 AWG             | CIR-21A            | 1         |
| 5451R-CIR-21-840  | 054007-49478 | 0.870"-1.055" (22,1-26,8 mm) | 2-1 AWG                  | 1-1/0 AWG             | CIR-21-840         | 1         |
| 5451R-CIR-1/0A    | 054007-49476 | 0.870"-1.055" (22,1-26,8 mm) | 1/0 AWG                  | -                     | CIR-1/0A           | 1         |
| 5451R-CIR-1/0-840 | 054007-49477 | 0.870"-1.055" (22,1-26,8 mm) | 1/0 AWG                  | -                     | CIR-1/0-840        | 1         |

### 3M™ Aluminum Repair Connector CIR Series for 3M™ Molded Rubber QS-II JCN Cable Repair Splice Kit 5451R

3M™ Aluminum Repair Connector CIR Series are extra long connectors which are used to bridge gaps up to 6" (15,24 cm) when a piece of damaged cable is removed. They can be used with copper or aluminum conductors.

3M™ CIR Series Repair Connectors are specially designed for use with 3M™ Cable Repair Splice Kits. They are aluminum connectors for use on aluminum or copper cable conductors. When used with the appropriate splice kit, these connectors allow up to 6" (15,24 cm) of damaged cable conductor to be removed, virtually eliminating the need to splice in a new section of cable. CIR series connectors meet the requirements of ANSI C119.4.

|                      |                              |
|----------------------|------------------------------|
| Connector Base Metal | Aluminum                     |
| For use with         | Aluminum or Copper Conductor |

| Order No.   | UPC          | Conductor Size, Stranded | Conductor Size, Solid | Length          | Outside Diameter (O.D.) | Case Qty. |
|-------------|--------------|--------------------------|-----------------------|-----------------|-------------------------|-----------|
| CIR-1/0-840 | 054007-09137 | 1/0 AWG                  | -                     | 9.0" (228,6 mm) | 0.91" (23,1 mm)         | 10        |
| CIR-1/0A    | 054007-50226 | 1/0 AWG                  | -                     | 9.0" (228,6 mm) | 0.91" (23,1 mm)         | 10        |
| CIR-21-840  | 054007-09136 | 2-1/0 AWG                | 1-1/0 AWG             | 9.0" (228,6 mm) | 0.91" (23,1 mm)         | 10        |
| CIR-21A     | 054007-50227 | 2-1 AWG                  | 1-1/0 AWG             | 9.0" (228,6 mm) | 0.91" (23,1 mm)         | 10        |

## 25/28 kV: 3M™ PILC Splice Kits: Single Conductor (1/C)

## 3M™ Cold Shrink QS-III 1/C Transition Splice Kits 5520A-1T-PILC Series

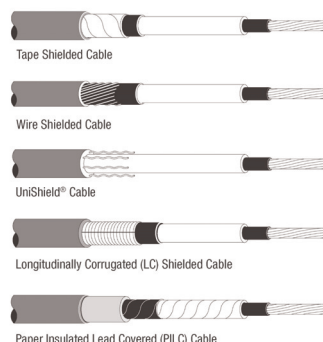
3M™ Cold Shrink QS-III 1/C Transition Splice Kits, 5520A-1T-PILC Series (which includes 5524A-1T-PILC, 5525A-1T-PILC, and 5526A-1T-PILC) are 25/28 kV class inline splices designed to transition single-conductor PILC to Poly/EPR cable and meet the 25 kV voltage class rating requirements of IEEE 404.

The splice kits include an oil barrier system based on a cold shrink tube design of specially formulated, oil-resistant polymer, and laboratory tested to nominal internal pressures of 40 psi with no oil leakage. The splice body itself is a one-piece molded design made of specially formulated silicone rubber. An EPDM rubber foldback cold shrink jacket is included for physical protection and environmental sealing.

Each kit contains sufficient material to make one splice. Connector is not provided with the kits due to customer specific application requirements. To ensure a positive oil stop, a non-tapered, sealed connector (with a solid center barrier) should be used.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

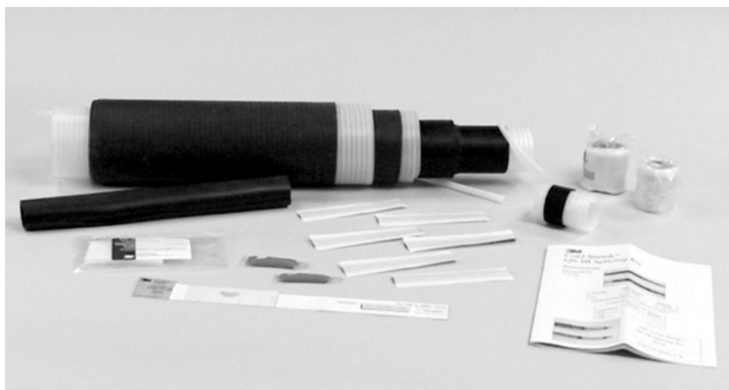
|                             |                                     |
|-----------------------------|-------------------------------------|
| <b>Voltage</b>              | 25/28 kV                            |
| <b>Number of Conductors</b> | Single Conductor                    |
| <b>Shielding Type</b>       | Paper Insulated Lead Covered (PILC) |
| <b>Splice Type</b>          | Inline PILC Transition              |
| <b>Technology</b>           | Cold Shrink                         |



| Order No.     | UPC<br>051128- | Max. O.D. Over Lead<br>Sheath | PILC Cable Insul.<br>O.D.     | Poly/EPR Cable<br>Insul. O.D. | PILC Cable Conductor<br>Size 100%            | PILC Cable<br>Conductor<br>Size 133%            | Poly/EPR<br>Cable<br>Conductor<br>Size             | Case<br>Qty. |
|---------------|----------------|-------------------------------|-------------------------------|-------------------------------|----------------------------------------------|-------------------------------------------------|----------------------------------------------------|--------------|
| 5524A-1T-PILC | -57198         | 1.35"<br>(34 mm)              | 0.87"-1.16"<br>(22,1-29,5 mm) | 0.84"-1.32"<br>(21,3-33,5 mm) | 1 AWG-250 kcmil<br>(50-120 mm <sup>2</sup> ) | 1-2/0 AWG<br>(50-60 mm <sup>2</sup> )           | 1 AWG-250<br>kcmil<br>(50-120 mm <sup>2</sup> )    | 1            |
| 5525A-1T-PILC | -57199         | 1.79"<br>(45 mm)              | 1.14"-1.57"<br>(29,0-39,9 mm) | 1.07"-1.70"<br>(27,2-43,2 mm) | 300-650 kcmil<br>(150-325 mm <sup>2</sup> )  | 250-500 kcmil<br>(120-240 mm <sup>2</sup> )     | 250-750<br>kcmil<br>(120-325<br>mm <sup>2</sup> )  | 1            |
| 5526A-1T-PILC | -57200         | 2.14"<br>(54 mm)              | 1.49"-1.91"<br>(37,8-48,5 mm) | 1.24"-2.07"<br>(31,5-52,6 mm) | 700-1000 kcmil<br>(400-500 mm <sup>2</sup> ) | 550-1000<br>kcmil<br>(300-500 mm <sup>2</sup> ) | 550-1000<br>kcmil<br>(300-500<br>mm <sup>2</sup> ) | 1            |

## 35 kV Medium Voltage Splices

The following 3M products cover splicing needs for applications up to 35 kV, and promote dependable performance, stability and long life with every splice you make.



| Section                                                                                                     | Page    |
|-------------------------------------------------------------------------------------------------------------|---------|
| 35 kV .....                                                                                                 | 222-230 |
| 3M™ Cold Shrink Splice Kits.....                                                                            | 223-227 |
| Single Conductor (1/C) .....                                                                                | 223-225 |
| 3M™ Cold Shrink QS-III Inline CN/JCN Cable Splice Kits 5467A and 5468A Series .....                         | 223     |
| 3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5535A and 5536A.....                               | 224     |
| 3M™ Cold Shrink QS-III CN/JCN Cable Shield-Break Splice Kits 5467A-XB and 5468A-XB .....                    | 225     |
| Three Conductor (3/C) .....                                                                                 | 226-227 |
| 3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Splice Kits 5797A-MT and 5798A-MT .....                   | 226     |
| 3M™ Cold Shrink MT-E Trifurcating Accessory Kit (One 3/C to Three 1/C) for 35 kV .....                      | 227     |
| 3M™ Molded Rubber Splice Kits.....                                                                          | 228-229 |
| Single Conductor (1/C) .....                                                                                | 228-229 |
| 3M™ Molded Rubber QS CN/JCN Cable Splice Kits 5432 and 5433.....                                            | 228     |
| 3M™ Molded Rubber QS-II CN/JCN Cable Splice Kits 5461 .....                                                 | 229     |
| 3M™ Connectors CI-A and CI-840 Series for 3M™ Molded Rubber QS Cable Splice Kits 5432 and 5461 Series ..... | 229     |
| 3M™ PILC Splice Kits.....                                                                                   | 230     |
| Single Conductor (1/C).....                                                                                 | 230     |
| 3M™ Cold Shrink QS-III 1/C Transition Splice Kits 5530A-1T-PILC Series .....                                | 230     |

## 35 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C)

## 3M™ Cold Shrink QS-III Inline CN/JCN Cable Splice Kits 5467A and 5468A Series

3M™ Cold Shrink QS-III Inline CN/JCN Cable Splices 5467A, 5467A-WG, 5468A and 5468A-WG are inline splices for joining 35 kV jacketed concentric neutral (JCN) or concentric neutral (CN) power cables. It is a cold shrink design. The cold shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the jacketing is made of EPDM rubber for its special physical properties. Each splice is high-voltage production tested to ensure reliability.

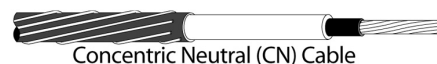
The splices can be used with standard copper (Cu) or aluminum (Al/Cu) inline compression (crimp type) connectors, and can be used for size transitions within the listed kit size range. They are designed to exceed minimum industry test standards, and have a BIL rating of 250 kV (equal to a 46 kV voltage class). The 3M™ Cold Shrink QS-III Splices 5467A, 5467A-WG, 5468A and 5468A-WG meet or exceed the 35 kV Voltage Class rating requirements of IEEE 404.

Kits can be ordered with connectors packed in the kit, or the kit and connector can be ordered as separate items. Each kit makes one splice.

Note: 5467A-WG and 5468A-WG are partially jacketed splices containing built-in bleeder wires. Additional end user materials are required to convert to full jacketing.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                                            |
|----------------------|------------------------------------------------------------|
| Voltage              | 35 kV                                                      |
| Number of Conductors | Single Conductor                                           |
| Shielding Type       | Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) |
| Splice Type          | Inline                                                     |
| Technology           | Cold Shrink                                                |



| Order No.     | UPC          | Insulation O.D. Range      | Conductor Size                              | Connector Included | Case Qty. |
|---------------|--------------|----------------------------|---------------------------------------------|--------------------|-----------|
| 5467A         | 054007-43051 | 1.07"-1.70" (27,2-43,2 mm) | 1/0 AWG-350 kcmil (60-185 mm <sup>2</sup> ) | -                  | 1         |
| 5467A-1/0-AL  | 054007-43052 | 1.07"-1.70" (27,2-43,2 mm) | 1/0 AWG                                     | 20005              | 1         |
| 5467A-1/0-CU  | 054007-43057 | 1.07"-1.70" (27,2-43,2 mm) | 1/0 AWG                                     | 10005              | 1         |
| 5467A-2/0-AL  | 054007-43053 | 1.07"-1.70" (27,2-43,2 mm) | 2/0 AWG                                     | 20006              | 1         |
| 5467A-2/0-CU  | 054007-43058 | 1.07"-1.70" (27,2-43,2 mm) | 2/0 AWG                                     | 10006              | 1         |
| 5467A-3/0-AL  | 054007-43054 | 1.07"-1.70" (27,2-43,2 mm) | 3/0 AWG                                     | 20007              | 1         |
| 5467A-3/0-CU  | 054007-43059 | 1.07"-1.70" (27,2-43,2 mm) | 3/0 AWG                                     | 10007              | 1         |
| 5467A-4/0-AL  | 054007-43055 | 1.07"-1.70" (27,2-43,2 mm) | 4/0 AWG                                     | 20008              | 1         |
| 5467A-4/0-CU  | 054007-43060 | 1.07"-1.70" (27,2-43,2 mm) | 4/0 AWG                                     | 10008              | 1         |
| 5467A-250-AL  | 054007-43056 | 1.07"-1.70" (27,2-43,2 mm) | 250 kcmil                                   | 20009              | 1         |
| 5467A-250-CU  | 054007-43061 | 1.07"-1.70" (27,2-43,2 mm) | 250 kcmil                                   | 10009              | 1         |
| 5467A-350-AL  | 054007-04589 | 1.07"-1.70" (27,2-43,2 mm) | 350 kcmil                                   | 20011              | 1         |
| 5467A-350-CU  | 054007-04590 | 1.07"-1.70" (27,2-43,2 mm) | 350 kcmil                                   | 10011              | 1         |
| 5467A-WG      | 051128-53883 | 1.07"-1.70" (27,2-43,2 mm) | 1/0 AWG-350 kcmil (60-185 mm <sup>2</sup> ) | -                  | 1         |
| 5468A         | 054007-43062 | 1.24"-2.07" (31,5-52,6 mm) | 350-1000 kcmil (185-500 mm <sup>2</sup> )   | -                  | 1         |
| 5468A-350-AL  | 054007-43063 | 1.24"-2.07" (31,5-52,6 mm) | 350 kcmil                                   | 20011              | 1         |
| 5468A-350-CU  | 054007-43067 | 1.24"-2.07" (31,5-52,6 mm) | 350 kcmil                                   | 10011              | 1         |
| 5468A-500-AL  | 054007-43064 | 1.24"-2.07" (31,5-52,6 mm) | 500 kcmil                                   | 20014              | 1         |
| 5468A-500-CU  | 054007-43068 | 1.24"-2.07" (31,5-52,6 mm) | 500 kcmil                                   | 10014              | 1         |
| 5468A-750-AL  | 054007-43065 | 1.24"-2.07" (31,5-52,6 mm) | 750 kcmil                                   | 20019              | 1         |
| 5468A-750-CU  | 054007-43069 | 1.24"-2.07" (31,5-52,6 mm) | 750 kcmil                                   | 10019              | 1         |
| 5468A-1000-AL | 054007-43066 | 1.24"-2.07" (31,5-52,6 mm) | 1000 kcmil                                  | 20024              | 1         |
| 5468A-1000-CU | 054007-43070 | 1.24"-2.07" (31,5-52,6 mm) | 1000 kcmil                                  | 10024              | 1         |
| 5468A-WG      | 051128-53909 | 1.24"-2.07" (31,5-52,6 mm) | 350-1000 kcmil (185-500 mm <sup>2</sup> )   | -                  | 1         |

## 35 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C)

## 3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5535A and 5536A

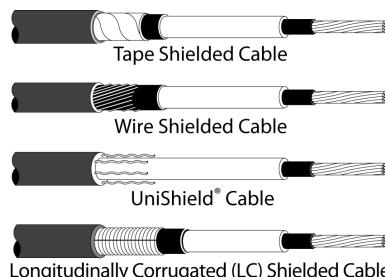
3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5535A and 5536A Series are inline splices for joining 35 kV tape shield, wire shield, UniShield® or longitudinally corrugated (LC) shielded power cables. The cold shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the jacketing is made of EPDM rubber for its special physical properties. Each splice is high-voltage production tested to ensure reliability.

The splices can be used with standard copper (Cu) or aluminum (Al/Cu) inline compression (crimp type) connectors, and can be used for size transitions within the listed kit size range. They are designed to exceed minimum industry test standards, and have a BIL rating of 250 kV (equal to a 46 kV voltage class). The 3M™ Cold Shrink QS-III Splices 5535A and 5536A meet or exceed the 35 kV Voltage Class rating requirements of IEEE 404.

Kits can be ordered with connectors packed in the kit, or the kit and connector can be ordered as separate items. Each kit makes one splice.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                             |                                                                      |
|-----------------------------|----------------------------------------------------------------------|
| <b>Voltage</b>              | 35 kV                                                                |
| <b>Number of Conductors</b> | Single Conductor                                                     |
| <b>Shielding Type</b>       | Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC) |
| <b>Splice Type</b>          | Inline                                                               |
| <b>Technology</b>           | Cold Shrink                                                          |



| Order No.     | UPC          | Insulation O.D. Range      | Conductor Size                 | Connector Included | Case Qty. |
|---------------|--------------|----------------------------|--------------------------------|--------------------|-----------|
| 5535A         | 054007-43071 | 1.07"-1.70" (27,2-43,2 mm) | 1/0 AWG-350 kcmil (60-185 mm²) | -                  | 1         |
| 5535A-1/0-AL  | 054007-43072 | 1.07"-1.70" (27,2-43,2 mm) | 1/0 AWG                        | 20005              | 1         |
| 5535A-1/0-CU  | 054007-43077 | 1.07"-1.70" (27,2-43,2 mm) | 1/0 AWG                        | 10005              | 1         |
| 5535A-2/0-AL  | 054007-43073 | 1.07"-1.70" (27,2-43,2 mm) | 2/0 AWG                        | 20006              | 1         |
| 5535A-2/0-CU  | 054007-43078 | 1.07"-1.70" (27,2-43,2 mm) | 2/0 AWG                        | 10006              | 1         |
| 5535A-3/0-AL  | 054007-43074 | 1.07"-1.70" (27,2-43,2 mm) | 3/0 AWG                        | 20007              | 1         |
| 5535A-3/0-CU  | 054007-43079 | 1.07"-1.70" (27,2-43,2 mm) | 3/0 AWG                        | 10007              | 1         |
| 5535A-4/0-AL  | 054007-43075 | 1.07"-1.70" (27,2-43,2 mm) | 4/0 AWG                        | 20008              | 1         |
| 5535A-4/0-CU  | 054007-43080 | 1.07"-1.70" (27,2-43,2 mm) | 4/0 AWG                        | 10008              | 1         |
| 5535A-250-AL  | 054007-43076 | 1.07"-1.70" (27,2-43,2 mm) | 250 kcmil                      | 20009              | 1         |
| 5535A-250-CU  | 054007-43081 | 1.07"-1.70" (27,2-43,2 mm) | 250 kcmil                      | 10009              | 1         |
| 5535A-350-AL  | 054007-04591 | 1.07"-1.70" (27,2-43,2 mm) | 350 kcmil                      | 20011              | 1         |
| 5535A-350-CU  | 054007-04592 | 1.07"-1.70" (27,2-43,2 mm) | 350 kcmil                      | 10011              | 1         |
| 5536A         | 054007-43082 | 1.24"-2.07" (31,5-52,6 mm) | 350-1000 kcmil (185-500 mm²)   | -                  | 1         |
| 5536A-350-AL  | 054007-43083 | 1.24"-2.07" (31,5-52,6 mm) | 350 kcmil                      | 20011              | 1         |
| 5536A-350-CU  | 054007-43087 | 1.24"-2.07" (31,5-52,6 mm) | 350 kcmil                      | 10011              | 1         |
| 5536A-500-AL  | 054007-43084 | 1.24"-2.07" (31,5-52,6 mm) | 500 kcmil                      | 20014              | 1         |
| 5536A-500-CU  | 054007-43088 | 1.24"-2.07" (31,5-52,6 mm) | 500 kcmil                      | 10014              | 1         |
| 5536A-750-AL  | 054007-43085 | 1.24"-2.07" (31,5-52,6 mm) | 750 kcmil                      | 20019              | 1         |
| 5536A-750-CU  | 054007-43089 | 1.24"-2.07" (31,5-52,6 mm) | 750 kcmil                      | 10019              | 1         |
| 5536A-1000-AL | 054007-43086 | 1.24"-2.07" (31,5-52,6 mm) | 1000 kcmil                     | 20024              | 1         |
| 5536A-1000-CU | 054007-43090 | 1.24"-2.07" (31,5-52,6 mm) | 1000 kcmil                     | 10024              | 1         |

## 35 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C)

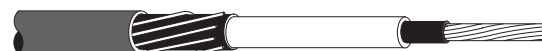
## 3M™ Cold Shrink QS-III CN/JCN Cable Shield-Break Splice Kits 5467A-XB and 5468A-XB

3M™ Cold Shrink QS-III Shield-Break Splice Kits 5467A-XB and 5468A-XB Series are inline splices designed for providing a shield-break in the joining of 35 kV jacketed concentric neutral (JCN) or concentric neutral (CN) power cables. It is a cold shrink design sized to fit Type MV-90 or type MV-105 cables with copper or aluminum conductor sizes ranging from 1/0-1000 kcmil (185-500 mm<sup>2</sup>). The shield-break allows the splice to be used for shield-break and cross-bounding installations. Each splice is high-voltage production tested to ensure reliability. Meets the requirements of IEEE 404.

Each kit makes one shield-break splice.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                             |                                                               |
|-----------------------------|---------------------------------------------------------------|
| <b>Voltage</b>              | 35 kV                                                         |
| <b>Number of Conductors</b> | Single Conductor                                              |
| <b>Shielding Type</b>       | Concentric Neutral (CN), Jacketed<br>Concentric Neutral (JCN) |
| <b>Splice Type</b>          | Inline Cross-Bond                                             |
| <b>Technology</b>           | Cold Shrink                                                   |



Jacketed Concentric Neutral (JCN) Cable

| Order No. | UPC          | Insulation O.D. Range      | Conductor Size                              | Typical Splice Length | Case Qty. |
|-----------|--------------|----------------------------|---------------------------------------------|-----------------------|-----------|
| 5467A-XB  | 051128-54939 | 1.07"-1.70" (27,2-43,2 mm) | 1/0 AWG-350 kcmil (60-185 mm <sup>2</sup> ) | 62.0" (1574,8 mm)     | 1         |
| 5468A-XB  | 051128-54940 | 1.24"-2.07" (31,5-52,6 mm) | 350-1000 kcmil (185-500 mm <sup>2</sup> )   | 66.0" (1676,4 mm)     | 1         |

## 35 kV: 3M™ Cold Shrink Splice Kits: Three Conductor (3/C)

## 3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Splice Kits 5797A-MT and 5798A-MT

The 3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Splice Kits 5797A-MT and 5798A-MT Series are designed for splicing 3/C, armored and non-armored, shielded power cables. The kits are rated for use on 35 kV cables with conductor sizes from 1/0 AWG-1000 kcmil (60-500 mm<sup>2</sup>). The kits are designed to be used with 3M™ Scotchlok™ Connectors 10000 and 20000 Series or other UL listed inline compression connectors that fit within the dimension limits listed in the Connector Dimensional Requirements Table on the data sheet.

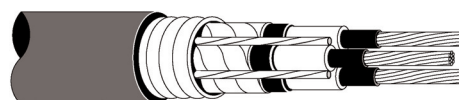
The splice utilizes several technologies to accommodate the various functions of a 3/C shielded power cable: 3M™ Cold Shrink QS-III Splice Bodies, Scotch® Tapes for moisture sealing, Constant Force Springs for connecting ground braid jumpers and Armorcast for replacing the cable armor and/or jacket. The completed splice is designed for use in cable trays, weather exposed or direct burial locations. Meets the requirements of IEEE 404.

Connectors are not included in the kit and must be ordered separately.

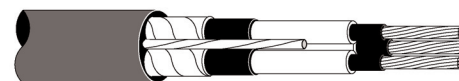
Note: When making a trifurcating splice, the 3M™ Cold Shrink MT-E Trifurcating Accessory Kit must be used along with the splice kit.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                 |
|----------------------|---------------------------------|
| Voltage              | 35 kV                           |
| Number of Conductors | Three Conductor                 |
| Shielding Type       | Shielded Armored or Non-Armored |
| Splice Type          | Inline, Trifurcating            |
| Technology           | Cold Shrink                     |



**Three-Conductor Armored, Shielded Cable**



**Three-Conductor Non-Armored, Shielded Cable**

| Order No. | UPC          | Insulation O.D. Range         | Conductor Size                                 | Suggested Accessory                                            | Case Qty. |
|-----------|--------------|-------------------------------|------------------------------------------------|----------------------------------------------------------------|-----------|
| 5797A-MT  | 054007-43419 | 1.07"-1.70"<br>(27,2-43,2 mm) | 1/0 AWG-350 kcmil<br>(60-185 mm <sup>2</sup> ) | 3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E | 1         |
| 5798A-MT  | 054007-43420 | 1.24"-2.07"<br>(31,5-52,6 mm) | 350-1000 kcmil<br>(185-500 mm <sup>2</sup> )   | 3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E | 1         |

## 35 kV: 3M™ Cold Shrink Splice Kits: Three Conductor (3/C)

## 3M™ Cold Shrink MT-E Trifurcating Accessory Kit (One 3/C to Three 1/C) for 35 kV

3M™ Cold Shrink MT-E Trifurcating Accessory Kit is used to break out and seal a transition from 3/C to three 1/C.

For use with 3M™ Cold Shrink QS-III Splicing Series 5700A-MT.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**



**Voltage:** 35 kV

**Number of Conductors:** One 3/C to three 1/C

### Selection Table

| 3M™ Splice 57XXA-MT                       |              | 35 kV (345 mil)              | Appropriate MT Transition Kit |
|-------------------------------------------|--------------|------------------------------|-------------------------------|
| *Typical Conductor Size Range – AWG/kcmil |              |                              |                               |
| 5797A-MT                                  |              | 1/0- 350                     | MT-E                          |
| 5798A-MT                                  |              | 350                          | MT-E                          |
| Order No.                                 | UPC          | Single Conductor Jacket O.D. | Kits per Case                 |
| MT-E                                      | 051128-54318 | 1.13"-1.80" (28,7-45,7 mm)   | 1                             |

## 35 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

## 3M™ Molded Rubber QS CN/JCN Cable Splice Kits 5432 and 5433

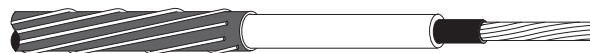
3M™ Molded Rubber QS CN/JCN Cable Splice Kits 5432 and 5433 are inline splices designed for use on 35 kV CN or JCN cable. Meets requirements of IEEE 404.

Important: On all QS kits use the primary insulation O.D. range for final ordering criteria. For copper or aluminum conductor cable, select the correct splice with connector from the table provided. Jacketing kit is needed for JCN cable.

Each kit makes one splice. Connectors are packed in kits when indicated.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                                            |
|----------------------|------------------------------------------------------------|
| Voltage              | 35 kV                                                      |
| Number of Conductors | Single Conductor                                           |
| Shielding Type       | Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) |
| Splice Type          | Inline                                                     |
| Technology           | Molded Rubber                                              |



Concentric Neutral (CN) Cable



Jacketed Concentric Neutral (JCN) Cable

| Order No.    | UPC          | Insulation O.D. Range      | Conductor Size                       | Connector Included | Case Qty. |
|--------------|--------------|----------------------------|--------------------------------------|--------------------|-----------|
| 5432         | 054007-02338 | 1.06"-1.21" (26,9-30,7 mm) | 2-1/0 AWG                            | -                  | 1         |
| 5432-CI-1A   | 054007-08357 | 1.06"-1.21" (26,9-30,7 mm) | 1 AWG (Stranded);<br>1/0 AWG (Solid) | CI-1A              | 1         |
| 5432-CI-1/0A | 054007-31222 | 1.06"-1.21" (26,9-30,7 mm) | 1/0 AWG (Stranded)                   | CI-1/0A            | 1         |
| 5433         | 054007-02339 | 1.12"-1.32" (28,4-33,5 mm) | 3/0-4/0 AWG                          | -                  | 1         |
| 5433-CI-3/0B | 054007-49485 | 1.12"-1.32" (28,4-33,5 mm) | 3/0 AWG                              | CI-3/0B            | 1         |
| 5433-CI-4/0B | 054007-49486 | 1.12"-1.32" (28,4-33,5 mm) | 4/0 AWG                              | CI-4/0B            | 1         |

## 35 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

## 3M™ Molded Rubber QS-II CN/JCN Cable Splice Kits 5461

3M™ Molded Rubber QS-II CN/JCN Cable Splice Kits 5461 Series are inline splices designed for use on 35 kV CN or JCN cable. Meets requirements of IEEE 404.

Important: On all QS kits use the primary insulation O.D. range for final ordering criteria. For copper or aluminum conductor cable, select the correct splice with connector from the table provided. Jacketing kit is needed for JCN cable.

Each kit makes one splice. Connectors are packed in kits when indicated.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|                      |                                                            |
|----------------------|------------------------------------------------------------|
| Voltage              | 35 kV                                                      |
| Number of Conductors | Single Conductor                                           |
| Shielding Type       | Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) |
| Splice Type          | Inline                                                     |
| Technology           | Molded Rubber                                              |



Concentric Neutral (CN) Cable



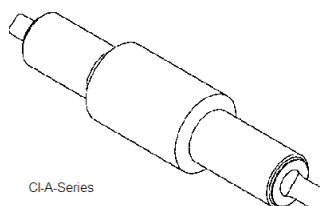
Jacketed Concentric Neutral (JCN) Cable

| Order No.       | UPC          | Insulation O.D. Range      | Conductor Size | Connector Included | Case Qty. |
|-----------------|--------------|----------------------------|----------------|--------------------|-----------|
| 5461            | 054007-09129 | 1.00"-1.15" (25,4-29,2 mm) | 1-1/0 AWG      | -                  | 1         |
| 5461-CI-1/0A    | 054007-09156 | 1.00"-1.15" (25,4-29,2 mm) | 1/0 AWG        | CI-1/0A            | 1         |
| 5461-CI-1/0-840 | 054007-09157 | 1.00"-1.15" (25,4-29,2 mm) | 1/0 AWG        | CI-1/0-840         | 1         |

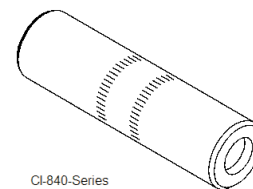
## 3M™ Connectors CI-A and CI-840 Series for 3M™ Molded Rubber QS Cable Splice Kits 5432 and 5461 Series

3M™ Aluminum Connectors CI Series are for splicing applications on aluminum or copper cable conductors.

The aluminum connectors CI Series are specially designed for use with 3M™ Molded Rubber QS Cable Splice Bodies. These connectors meet the requirements of ANSI C119.4.



CI-A-Series



CI-840-Series

|                         |                               |
|-------------------------|-------------------------------|
| Barrel Style            | Standard Barrel               |
| Connector Base Material | Aluminum                      |
| For use with            | Aluminum or Copper Conductors |

| Order No.  | UPC          | Stranded Conductor Size, Cu or Al | Solid Conductor Size, Cu or Al | Connector O.D.  | Case Qty. |
|------------|--------------|-----------------------------------|--------------------------------|-----------------|-----------|
| CI-1A      | 054007-00722 | 2-1 AWG                           | 1-1/0 AWG                      | 0.91" (23,1 mm) | 10        |
| CI-1/0A    | 054007-14176 | 1/0 AWG                           | -                              | 0.91" (23,1 mm) | 10        |
| CI-1/0-840 | 054007-09137 | 1/0 AWG                           | -                              | 0.91" (23,1 mm) | 10        |
| CI-3/0B    | -            | 3/0 AWG                           | 3/0 AWG                        | 0.91" (23,1 mm) | 10        |
| CI-4/0B    | -            | 4/0 AWG                           | 4/0 AWG                        | 0.91" (23,1 mm) | 10        |

## 35 kV: 3M™ PILC Splice Kits: Single Conductor (1/C)

### 3M™ Cold Shrink QS-III 1/C Transition Splice Kits 5530A-1T-PILC Series

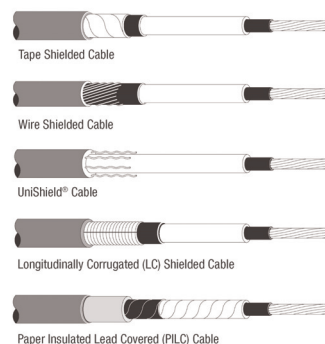
3M™ Cold Shrink QS-III 1/C Transition Splice Kits, 5530A-1T-PILC Series (which includes 5535A-1T-PILC, 5536A-1T-PILC, and 5537A-1T-PILC) are 35 kV class inline splices designed to transition single-conductor PILC to Poly/EPR cable and meet the 35 kV voltage class rating requirements of IEEE Std. 404.

The splice kits include an oil barrier system based on a cold shrink tube design of specially formulated, oil-resistant polymer, and laboratory tested to nominal internal pressures of 40 psi with no oil leakage. The splice body itself is a one-piece molded design made of specially formulated silicone rubber. An EPDM rubber foldback cold shrink jacket is included for physical protection and environmental sealing.

Each kit contains sufficient material to make one splice. Connector is not provided with the kits due to customer specific application requirements. To ensure a positive oil stop, a non-tapered, sealed connector (with a solid center barrier) should be used.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

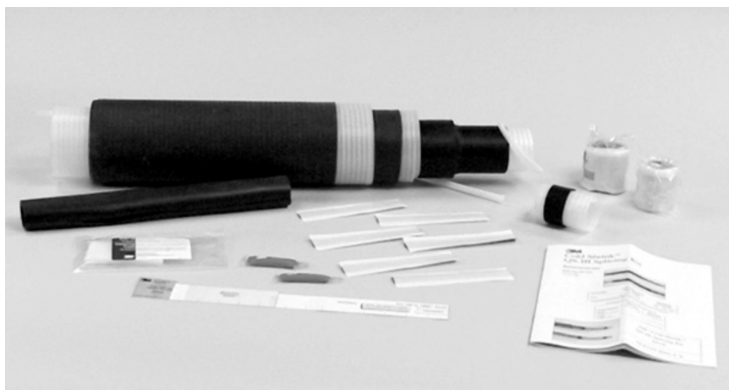
|                      |                                     |
|----------------------|-------------------------------------|
| Voltage              | 35 kV                               |
| Number of Conductors | Single Conductor                    |
| Shielding Type       | Paper Insulated Lead Covered (PILC) |
| Splice Type          | Inline PILC Transition              |
| Technology           | Cold Shrink                         |



| Order No.     | UPC<br>051128- | Max. O.D. Over Lead<br>Sheath | PILC Cable Insul.<br>O.D.     | Poly/EPR Cable<br>Insul. O.D. | PILC Cable<br>Conductor<br>Size 100% | PILC Cable Conductor<br>Size 133% | Poly/EPR<br>Cable<br>Conductor<br>Size | Case<br>Qty. |
|---------------|----------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------------|-----------------------------------|----------------------------------------|--------------|
| 5535A-1T-PILC | -57201         | 1.50"<br>(38,1 mm)            | 1.10"-1.31"<br>(27,9-33,3 mm) | 1.07"-1.70"<br>(27,2-43,2 mm) | 1/0-4/0 AWG<br>(60-95 mm²)           | 1/0-2/0 AWG<br>(60 mm²)           | 1/0 AWG-350<br>kcmil<br>(60-185 mm²)   | 1            |
| 5536A-1T-PILC | -57202         | 1.88"<br>(47,8 mm)            | 1.32"-1.67"<br>(33,5-42,4 mm) | 1.11"-1.70"<br>(28,2-43,2 mm) | 250-450 kcmil<br>(150-200 mm²)       | 3/0 AWG-450 kcmil<br>(95-200 mm²) | 3/0 AWG-500<br>kcmil<br>(95-240 mm²)   | 1            |
| 5537A-1T-PILC | -57203         | 2.23"<br>(56,6 mm)            | 1.57"-2.0"<br>(39,9-50,8 mm)  | 1.24"-2.07"<br>(31,5-52,6 mm) | 500-1000<br>kcmil<br>(240-500 mm²)   | 500-900 kcmil<br>(240-400 mm²)    | 500-1000<br>kcmil<br>(240-500<br>mm²)  | 1            |

## 46 kV Medium Voltage Splices

The following 3M products cover splicing needs for applications up to 46 kV, and promote dependable performance, stability and long life with every splice you make.



| Section                                                       | Page    |
|---------------------------------------------------------------|---------|
| 46 kV .....                                                   | 231-232 |
| 3M™ Cold Shrink Splice Kits .....                             | 232     |
| Single Conductor (1/C) .....                                  | 232     |
| 3M™ Cold Shrink QS-III Inline Shielded Splice Kit 5545A ..... | 232     |

## 46 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C)

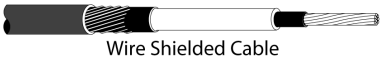
## 3M™ Cold Shrink QS-III Inline Shielded Splice Kit 5545A

3M™ Cold Shrink QS-III Splice Kit 5545A Series are inline splices for joining 46 kV Tape, Wire, LC, and UniShield® power cables. The cold shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the jacketing is made of EPDM rubber for its special physical properties. Each splice is high-voltage production tested to ensure reliability.

The splice can be used with standard copper (Cu) or aluminum (Al/Cu) inline compression (crimp type) connectors, and can be used for size transitions within the listed kit size range. The kit is designed to exceed minimum industry test standards, and has a BIL rating of 250 kV. The 3M™ Cold Shrink QS-III Splice 5545A meets or exceeds the 46 kV Voltage Class rating requirements of IEEE 404.

Each kit makes one splice. Connectors are not included in the kit and must be ordered separately.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

|  |                      |                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                     |
|--|----------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | Voltage              | 46 kV                                                                |  Tape Shielded Cable<br> Wire Shielded Cable<br> UniShield® Cable<br> Longitudinally Corrugated (LC) Shielded Cable |  |
|  | Number of Conductors | Single Conductor                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                     |
|  | Shielding Type       | Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC) |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                     |
|  | Splice Type          | Inline                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                     |
|  | Technology           | Cold Shrink                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                     |

| Order No. | UPC          | Insulation O.D. Range         | Conductor Size                                                                                                                                            | Connector | Case Qty. |
|-----------|--------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|
| 5545A     | 051128-55089 | 1.24"-2.07"<br>(31,5-52,6 mm) | 4/0-1000 kcmil* (120-500 mm²)<br>*4/0 AWG - 250 kcmil cable may be used with aluminum connectors only - do not use 4/0 AWG or 250 kcmil copper connector. | -         | 1         |