3MTM UF Splice Kit Underground Feeder Cable

Data Sheet December 2012

Product Description

3M[™] UF Splice Kit is designed to provide a reliable, moisture-proof electrical connection for Type UF-B cable rated for 600 volts ranging from #14/3 without ground wire up to #8/3 with ground wire. 3M UF Splice Kit is offered in two versions:

Standard Kit includes a 1.8" length terminal connector; 8" length of heavy wall, adhesive lined heat shrinks tube.

Stretcher Kit offers a 11.5" length terminal connector; 20" length of heavy wall, adhesive lined heat shrink tube.

Product Features

- Reliable and proven
- UL Listed for direct burial, submersible applications
- Fast and easy installation
- Heavy wall tubing provides excellent puncture/abrasion resistance
- Straight forward U F Terminal Connector design
- Heavy wall tubing provides high level of moisture protection

Applications

Repair of underground feeder UF-B cables rated for 600 volts, ranging from size #14/3 without ground wire up to #8/3 with ground wire. In cases of dig-in repair or extensions, the 3M U F Splice Kit, Standard or Stretcher versions, will produce a connection that is insulated and moisture resistant.

Application Temperature 0°F to 120°F(-18°C to 49°C)

Operation Temperature -67°F to 230°F(-55°C to 110°C)

Engineering Specification

The 3M UF Splice Kit(s) Standard or Stretcher shall splice and effectively moisture seal U F-B cables for direct burial. When assembled per instructions, the 3M U F Splice provides a strong, environmental resistant splice. UL Listed per UL 486 D for use in direct burial locations or below grade.

UL Listed for use in Direct Burial locations, "Submersible" per UL 486D. UL Rated at 600 volts Wire Range:

#14/3 without ground to #8/3 with ground / UF cable (Direct Burial) / Copper wire only (600 volts maximum) UL File Number E102356

Performance Test

3M UF Splice Kits, "Standard" or "Stretcher," have been submitted to Underwriters Laboratories Inc. for conformance testing to UL Test Standard 486 D and have passed all requirements of this specification.

The UF Terminal connector has also passed requirements of UL Test Standard 486 C.



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Installation **Techniques**

WARNING: Turn power off before installing or removing terminal or connector. All work should be done according to appropriate electrical codes.

To complete a splice of 14 to 8 gauge UF copper wire, follow steps 1 through 9:

- 1. Remove 2" of jacket from UF cable.
- 2. Strip 5/8" of insulation from conductors.
- 3. Clean cable surface and wipe dry, approximately 4 inches per side of the splice. Lightly abrade the two clean insulation surfaces. Clean cable surface and wipe dry again.
- 4. Slide the enclosed long piece of heat shrink tube over one end of the wire.
- 5. Insert wires, one at a time, into the brass connector making sure that the wires of desired connection are in the same brass sleeve. Make sure that the wires are inserted an equal length into the brass sleeve so that the set screw can engage into the copper of each wire. (Figure #1)
- 6. Tighten screws with 8 inch pounds of torque. (Figure #1)



Figure #1

7. Slide long piece of heat shrink over connection centering it with respect to the brass/plastic connector assembly. (Figure #2)

Figure #2

Adhesive should be visible at each end of the shrink tubing

8. Apply heat to the shrink tube with a torch or heat gun starting in the middle of the shrink

tube, moving out to each end. (Figure #3)

Figure #3 Properly installed, shrink tube will be smooth and conform to the cable.

9. Apply heat to tube until adhesive flows out on both ends of tube. (Figure #3)

$3M^{\text{TM}}$ UF Splice Kit Underground Feeder Cable

Shelf Life & Storage	3M [™] UF Splice Kit, Standard or Stretcher, are not affected by normal storage conditions, 65°F to 95°F (18° C to 35° C) have a 5-year shelf life from date of manufacture.
Availability	Please contact your local distributor; available from 3M.com/electrical [Where to Buy] or call 1.800.245.3573.
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Availability	Please contact your local distributor; available from 3M.com/electrical [Where to Buy] or call 1.800.245.3573.
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