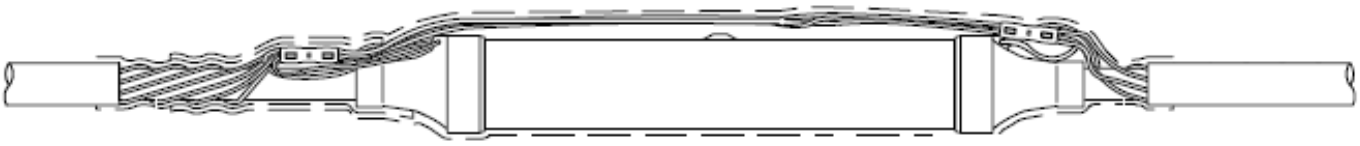
Molded Rubber Cable Repair Splicing Kits, 200 kV BIL



1. Scope

This standard covers the requirements for 200 kV BIL cable repair splicing kits.

This standard applies to Seattle City Light (SCL) Stock No. 687163.

2. Application

Cable repair splicing kits are for the inline repair of direct-buried, jacketed and unjacketed, concentric neutral, 28 kV, 1/0 AWG solid aluminum, TRXLPE-insulated cable. This kit can also be used to repair 28 kV, #1 AWG stranded aluminum cable.

Cable repair splicing kits include a special, one-piece connector that bridges the gap resulting from the removal of damaged cable. The elongated splice body allows for the removal of up to 6 inches of damaged cable.

For damaged *jacketed* cable it is recommended to also install an accessory splice jacket (not included in kit).

This splice kit is intended for repair only. Use Stock No. 014193 for new construction.

3. Industry Standards

Cable repair kit components shall meet the applicable requirements of the following industry standards:

IEEE 404-2012; Standard for Extruded and Laminated Dielectric Shielded Cable Joints Rated 2500 V to 500 000 V

ANSI C119.4–2016; American National Standard for Electric Connectors-Connectors for Use between Aluminum-to-Aluminum and Aluminum-to-Copper Conductors Designed for Normal Operation at or Below 93 deg. C and Copper-to-Copper Conductors Designed for Normal Operation at or Below 100 deg. C

4. Requirements

Kits shall be appropriate for use on for use on a nominal 26.4 kV, three-phase, 4-wire, solidly-grounded, wye-connected, 60 Hz power system.

Kits shall be appropriate for use on cable with the characteristics cited in Table 4.

Table 4. Cable Characteristics

Attribute	Value
Class	28 kV
Conductor size, (AWG)	
Solid	#1 or 1/0
Stranded	#2 or #1
Conductor material	Copper or aluminum
Insulation thickness (mil)	280
Outside diameter, (in)	
Minimum	0.870
Maximum	1.055

Each repair splice kit shall contain:

- Molded rubber splice body (1 ea)
- Connector (3M CIR-840 Series) (1 ea)
- Silicone grease packets (2 ea)
- Template (1 ea)
- Instruction sheet (1 ea)

5. Testing

Cable repair splices shall be tested according to the requirements of IEEE 404, Section 7, for a 25 kV rating.

Test results shall be provided upon request.

6. Marking

Kit connectors shall be permanently marked with the manufacturer name.

7. Packaging

Cable repair splice kits shall be packaged one per box.

Each standard package shall be legibly marked with the following information:

- Manufacturer identification
- Product description
- Seattle City Light stock number

Each shipping container shall be legibly marked with the following information:

- Manufacturer identification
- Product description
- Seattle City Light purchase order number

8. Issuance

Stock Unit: EA

9. Approved Manufacturers

3M Kit Number 5451R-CIR-21-840

10. Sources

3M, Instructions, Quick Splice II, Molded Rubber Cable Repair Splicing Kit, IEEE, Std. No. 404-1986, 25/28 kV Class, 200 kV BIL, 34-7031-4503-6, Issue date 12/12/91

3M, Quick Splice II, 5451R, 25/28 kV Molded Rubber Cable Repair Splicing Kit Data Sheet, 80-6108-5074-7, 1995

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