Standard Number: **6863.18**

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Housing Kits, Separable Connector, Deadbreak, Cold-Shrink, 600 A, 125 kV BIL



Scope

This standard covers the requirements for 125 kV BIL, 600 A, cold-shrink, deadbreak, separable connector, cold-shrink housing kits.

Cold-shrink housing is also known as a cold-shrink sleeve.

This standard applies to the following Seattle City Light (SCL) stock numbers:

Stock No.	Conductor Range (AWG/kcmil)
015067	#1 to 1/0
015068	350 to 500
015069	750 to 1000

2. Application

Cold-shrink housing is designed to work with bolted cable joint bus bars as described in SCL 6863.16.

The cold-shrink housing kit specified in this standard is a substitute for the standard housing kit, Stock No. 687429. Each kit eliminates the need for size specific compression lug, size specific cable adapter, size specific cable adapter retaining ring, and the jacket cutback seal.

Industry Standards

Housing kits shall meet the applicable requirements of the latest revision of the following industry standards:

IEEE 386; Standard for Separable Insulated Connector Systems for Power Distribution Systems Rated 2.5 kV through 35 kV

IEEE 404; IEEE Standard for Extruded and Laminated Dielectric Shielded Cable Joints Rated 2.5 kV to 500 kV

IEEE 592; Standard for Exposed Semiconducting Shields on High-Voltage Cable Joints and Separable Connectors

Standard Coordinator

Standards Engineering Supervisor

Division Director Bob Risch

Mu L Stehl Met Human

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4. Requirements

Cold shrink housing shall have the following electrical ratings and attributes:

Voltage class	25 kV
Maximum operating voltage (phase-to-ground)	15.2 kV
Corona voltage level (partial discharge extinction voltage)	19 kV
AC Withstand (1 minute)	40 kV
Impulse Withstand Voltage (BIL)	125 kV
Continuous current rating	Aluminum: 600 A Copper: 40 kA 10c. and 10 kA, 3s
Short-time current rating	Aluminum: 25 kA 10c. and 10 kA, 3s Copper: 40 kA 10c. and 10 kA, 3s

Cold-shrink housing kits shall include all the necessary parts to complete the connection, including:

- Shear bolt lug
- Barrier bolt
- Sleeve restraint
- Shield adapter
- Cable prep pack

Figure 4. Cold Housing Kit Contents



Not Shown: Cable Prep Pack and Instructions

5. Packaging

Cold-shrink housing kits shall be individually packaged in heavy duty, clear plastic bags or cardboard boxes, as appropriate for their size and weight, to prevent damage and/or contamination during shipping, handling, and storage.

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

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

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

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

6. Issuance

Stock Unit: EA

7. Approved Manufacturers

Housing Kit Stock No.	Cable Stock No.	Conductor Range (AWG/kcmil)	Insulation Diameter, Min. (in)	Insulation Diameter, Max. (in)	Richards Part No.
015067	602027 012098	#1 stranded 1/0 solid	0.725	1.360	P625JSCS2OR1-SCL
015068	012099 012100	350 500	0.990	1.650	P625JSCS2PR3-SCL
015069	012101 012102	750 1000	1.268	2.145	P625JSCS2QR5-SCL

8. References

SCL Material Standard 6863.16; "Separable Connector, Bolted Type, Deadbreak, Cable Joint Parts and Kits, 600 A, 125 kV BIL"

Sources

Shetab, Muneer; SCL Standards Engineer and originator of 6863.18

www.richards-mfg.com

www.wago.com