Seattle City Light MATERIAL STANDARD

Accessories, Separable Connector, 600 A, 150 k BIL, Deadbreak



1. Scope

This standard covers the requirements for 600 A, 150 kV BIL, deadbreak, separable connector accessories, such as connecting and insulating plugs and caps. 150 kV BIL, multi-way junction boxes (J-boxes) are non-stock items.

The requirements for 150 kV BIL, deadbreak, separable connector dielectric components are specified in SCL 6863.25.

The requirements for 600 A, 125 kV BIL, deadbreak, separable connector accessories are specified in SCL 6863.17.

This standard applies to the following Seattle City Light Stock Numbers:

Stock
NumberDescription687260Connecting plug with one stud687270Insulated plug with test point
cap687280Insulated plug with test point
cap and one loose stud687340Insulated cap

2. Application

The cable accessories specified in this standard are intended to be used in conjunction with 150 kV BIL, deadbreak separable connector dielectric components (T-bodies and cable adapters), SCL 6863.25, to construct complete connector systems.

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3. Industry Standards

150 kV BIL T-bodies and cable adapters *cannot* be used interchangeably with 125 kV BIL dielectric components. New construction should utilize 125 kV BIL material, except in cases where the equipment being connected to has 150 kV BIL bushings.

Separable connectors (elbows) shall meet the applicable requirements of the following industry standard:

IEEE 386-2006 – Standard for Separable Insulated Connector Systems for Power Distribution Systems Above 600 V

4. General Requirements

600 A interfaces shall have the following electrical ratings and attributes:

voltage class	35 kV
maximum voltage rating (ph-g)	21.1 kV RMS
BIL	150 kV crest
continuous current rating	600 A RMS
short-time current rating	25 kA RMS, symmetrical
IEEE 386 interface	Figure 13

Insulated caps shall be provided with grounding tab for the purpose of attaching a drain wire lead.

5. Testing

Separable connector (elbow) accessories shall be tested according to the requirements of IEEE 386, Section 7.

6. Design Changes

Manufacturer shall inform Seattle City Light in writing of all design changes that could affect the product's understood or published capabilities.

7. Marking

Separable connector (elbow) accessories shall be marked according to the requirements of IEEE 386, Section 6.1.

8. Packaging

Separable connector (elbow) accessories 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.

10. Approved Manufacturers

8. Packaging, continued

Each individual package shall be marked with the following information:

- Manufacturer's identification
- Product description

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

- Manufacturer's identification
- Product description
- Quantity contained
- Seattle City Light's Purchase Order Number
- Seattle City Light's Stock Number
- 9. Issuance

ΕA

Stock Number:	687260	
Description:	Connecting plug	with one stud
Application:	A connector that pr bushing interfaces.	
Cooper Power Systems	DCP635AS	
Richards Manufacturing Co.	P635CPR-LS	
Thomas & Betts (Elastimold)	750CPS	Same Same

Stock Number:	687270
Description:	Insulated plug with test point cap
Application:	An accessory device designed to electrically insulate, electrically shield, and mechanically seal an elbow interface. Test point cap is removable to allow access to capacitive test point. Requires stud.
Cooper Power Systems	DIP635A
Richards Manufacturing Co.	P635HIP
Thomas & Betts (Elastimold)	750BIP

10. Approved Manufacturers, continued

Stock Number:	687280	
Description:	Insulated plug with test point cap and one loose stud	
Application:	An accessory device designed to electrically insulate, electrically shield, and mechanically seal an elbow interface. Test point cap is removable to allow access to capacitive test point.	
Cooper Power Systems (formerly Patton & Cooke)	DIP635AS	
Richards Manufacturing Co.	P635HIP-S	
Thomas & Betts (Elastimold)	750BIPS	
Stock Number:	687340 (no longer available for purchase)	
Description:	Insulated cap	. 1
Application:	An accessory device designed to electrically insulate, electrically shield, and mechanically seal a bushing insert or integral bushing. For 35 kV loadbreak, transformer and junction box bushings.	
Cooper Power Systems (formerly Patton & Cooke)	-	
Richards Manufacturing Co.	-	
Thomas & Betts (Elastimold)		

11. References

SCL Material Standard 6863.25; "Separable Connector, Deadbreak, Dielectric Components, 150 kV BIL"

SCL Material Standard 6864.17; "Accessories, Separable Connector (Elbow), 200 A, 125 kV BIL, Deadbreak"

12. Sources

B100-02024; Components Master Catalog; 5 kV-35 kV Electrical Distribution Systems, Specifiers Guide; Cooper Power Systems

Components & Protective Equipment UD (Underground Distribution) Manual; Cooper Power Systems; 1993 PG-CA-0506; Cable Accessories for 5 kV-35 kV Distribution Systems, Product Selection Guide; Elastimold Shipek, John; SCL Standards Engineering Supervisor and originator of 6863.27