Fuse Links, 15.5 kV, Bay-O-Net, Oil-Immersed, Dual Sensing



Scope 1.

This standard covers the requirements for 15.5 kV Bay-O-Net oil-immersed fuse links.

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

Stock No.	Description
685101	Bay-O-Net Fuse Link, 8 A
685102	Bay-O-Net Fuse Link, 15 A
685103	Bay-O-Net Fuse Link, 25 A

2. Application

SCL pad-mounted single-phase, three-phase, and submersible single-phase transformers use Bay-O-Net fuse assemblies for overcurrent protection. Isolation links are not installed with the Bay-O-Net fuses because each transformer is protected upstream by a back-up fault current limiter (FCL) fuse.

FCL fuses clear high-level faults and Bay-O-Net fuses clear secondary and overload currents.

The dual-sensing fuse links used in Bay-O-Net fuses also sense transformer fluid temperature. They limit long-term transformer heating caused by overloads and high temperature environments.

3. Industry Standards

Fuse links shall meet the applicable requirements of the following industry standards:

IEEE C37.41; "IEEE Standard Design Tests for High-Voltage (> 1000 V) Fuses and Accessories"

IEEE C37.42; "IEEE Standard Specification for High-Voltage (> 1000 V) Expulsion Type Distribution-Class Fuses, Fuse and Disconnecting Cutouts, Fuse Disconnecting Switches, and Fuse Links, and Accessories used with These Devices"

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4. Requirements

Fuse links shall meet the following requirements:

Voltage (kV)	Maximum Single-Phase Interrupting Current (A), rms symmetrical	Continuous Current Rating (A)
15.5	2500	8
15.5	2500	15
15.5	1500	25

Figure 4. Bay-O-Net Fuse Link Assembly



5. Testing

Data that establishes compliance with the requirements of the standards listed in Section 3, and this standard, shall be provided upon request.

6. Marking

Fuse links shall be marked according to the requirements of IEEE C37.42, Section 10.2, which includes:

- Manufacturer name or symbol
- Manufacturer type or identification
- Rated current
- Rated maximum voltage
- Rated maximum interrupting current
- Identifying date code (month and year)

7. Packaging

Fuse links shall be packaged as a single unit to prevent damage during shipping, handling, and storage.

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

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

8. Issuance

9. Approved Manufacturers

Stock No.	Description	Cooper Power Systems
685101	Bay-O-Net Fuse Link, 8 A	4000358C05B
685102	Bay-O-Net Fuse Link, 15 A	4000358C08B
685103	Bay-O-Net Fuse Link, 25 A	4000358C10B

10. Sources

Fusing Equipment Catalog Data CA132010EN; "Dual Sensing Bay-O-Net Fuse Link," Cooper Power Series, August 2012

Fusing Equipment MN132002EN; "23 and 38 kV Bay-O-Net Fuse Re-Fusing Installation Instructions," Cooper Power Series, January 2004

File Reference: CA132015EN; "38 kV Bay-O-Net Cartridge and Fuse Assemblies Certified Test Report," Cooper Power Series, March 2015

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