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

1. Scope

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:

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>685101</td>
<td>Bay-O-Net Fuse Link, 8 A</td>
</tr>
<tr>
<td>685102</td>
<td>Bay-O-Net Fuse Link, 15 A</td>
</tr>
<tr>
<td>685103</td>
<td>Bay-O-Net Fuse Link, 25 A</td>
</tr>
</tbody>
</table>

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"
4. Requirements

Fuse links shall meet the following requirements:

<table>
<thead>
<tr>
<th>Voltage (kV)</th>
<th>Maximum Single-Phase Interrupting Current (A), rms symmetrical</th>
<th>Continuous Current Rating (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.5</td>
<td>2500</td>
<td>8</td>
</tr>
<tr>
<td>15.5</td>
<td>2500</td>
<td>15</td>
</tr>
<tr>
<td>15.5</td>
<td>1500</td>
<td>25</td>
</tr>
</tbody>
</table>

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

Stock Unit: EA
9. Approved Manufacturers

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Description</th>
<th>Cooper Power Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>685101</td>
<td>Bay-O-Net Fuse Link, 8 A</td>
<td>4000358C05B</td>
</tr>
<tr>
<td>685102</td>
<td>Bay-O-Net Fuse Link, 15 A</td>
<td>4000358C08B</td>
</tr>
<tr>
<td>685103</td>
<td>Bay-O-Net Fuse Link, 25 A</td>
<td>4000358C10B</td>
</tr>
</tbody>
</table>

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


**Shetab, Muneer;** SCL Standards Engineer, originator, and subject matter expert for 6839.15 (muneer.shetab@seattle.gov)

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