

## Network Protector Relays



### 1. Scope

This standard covers the requirements for network protector relays used in the SCL Network system.

This standard applies to Seattle City Light (SCL) Stock No. 014262.

The relay in this standard is for older Westinghouse/Eaton style network protectors that have not been upgraded to use network protector relay kits.

See SCL 4381.03 for network protector relay kits.

### 2. Application

Relays are used with other accessories to monitor and control network protectors in the SCL Network system.

SCL has two styles of network protectors installed in the Network system: Westinghouse/Eaton and GE. Each requires a unique relay or a transmitter:

- Westinghouse-style network protectors include the Eaton CMD, CM22, CM52 and Richards 313NP models.
- GE-style network protectors include GE and refurbished Richards models.

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### 3. Requirements

Network protector relays shall continually monitor voltage across an open breaker and current through a closed breaker, and perform the following functions:

- The trip contact will close upon balanced fault conditions if the positive sequence power flow is out of the network.
  - The close contact will close if the ensuing positive sequence power will be into the network.
  - The trip contact will close upon the flow of reverse magnetizing current of its associated transformer.
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### 4. Packaging

Relays and associated installation material shall be packaged to prevent damage during shipping, handling, and inside storage.

Relays and associated installation material shall be packaged together to prevent loss.

Individual packages shall be legibly marked with:

- Product description
- SCL stock number

Shipping containers shall be legibly marked with:

- SCL purchase order number
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### 5. Issuance

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### 6. Approved Manufacturers

<b>Manufacturer</b>	<b>Catalog No.</b>
Eaton	MPCV-2X 6417C83G03

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### 7. References

**SCL Material Standard 4381.03**; "Network Protector Relay Kits"

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### 8. Sources

**Hanson, Brett**; SCL Standards Engineer, originator, and subject matter expert for 4381.86

**SCL Stock Catalog page 30-3a**; March 9, 2017

**Instruction Booklet IB02402001E Instructions for the Eaton Type MPCV Network Protection Relay**, December 2010