# Fuses, 15.5 kV, Full-Range, Current-Limiting Capacitor



#### 1. Scope

This standard covers the requirements for 15.5 kV, full-range, outdoor, current-limiting capacitor fuses.

This standard applies to Seattle City Light (SCL) Stock No. 010316.

#### 2. Application

Capacitor fuses are designed with a fuse element that has both low and high fault current interrupting capability. They provide both short circuit and overload protection and are intended to protect against capacitor case rupture or dielectric failure within the capacitor.

Typical applications include use in high fault areas, fusing of individual capacitors, capacitive circuits requiring positive isolation, circuits where let-through current must be restricted, areas where burning debris cannot be tolerated and where high noise levels are undesirable.

These fuses are used at West Point Treatment Plant capacitor banks.

#### 3. Industry Standards

Fuses and accessories shall meet the applicable requirements of the latest revision of the following industry standards:

**IEEE C37.41**; IEEE Standard Design Tests for High-Voltage (>1000V) Fuses, Fuse and Disconnecting Cutouts, Distribution Enclosed Single-Pole Air Switches, Fuse Disconnecting Switches, and Fuse Links and Accessories used with These Devices

**IEEE C37.47**; IEEE Standard Specification for High-Voltage (>1000V) Distribution Class Current-Limiting Type Fuses and Fuse Disconnecting Switches

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# 4. Requirements

Fuses and their accessories shall meet the following requirements:

Class per IEEE C37.41	A
Type identification per IEEE 37.41	С
Top Terminal	Bolt mounting (1/2" x 13THD x 3/4" long bolt with lock washer
Bottom Terminal	11" leader wire
Fuse type	Expulsion
Voltage rating (kV)	15.5
Rated current, A (rms)	30
Rated minimum interrupting current, kA (rms), symmetrical	50
Fuse tube material	Reinforced fiberglass or equivalent

# **Figure 4. Fuse Dimensions**



# 5. Testing

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

# 6. Marking

Fuse units shall be marked according to the requirements of IEEE C37.47, which includes:

- Manufacturer name or symbol
- Manufacturer type or identification
- Rated continuous current
- Rated maximum voltage
- Rated maximum interrupting current
- Identifying date code (month and year)
- Type identification C following the rated continuous current

# 7. Packaging

Fuses shall be packaged as a single unit to prevent damage during shipping, handling, and storage. Each package shall be labeled so that its contents is easily and properly identified. Each package shall be legibly marked with:

- Manufacturer name
- Manufacturer catalog number
- Product description
- Seattle City Light stock number

Each shipping container shall be legibly marked with:

- Manufacturer identification
- Seattle City Light purchase order number

# 8. Issuance

#### Stock Unit: EA

## 9. Approved Manufacturers

Description	Cooper Power Systems, Inc. Part No.
Fuse, NXC type, 30 A, current-limiting capacitor	FA6J30

#### 10. Sources

**Fusing Equipment Catalog Data CA132047EN**; "NXC full-range current-limiting capacitor fuse," Cooper Power Series, November 2015

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