FAULT LIMITER
GENERAL PURPOSE CURRENT-LIMITING FUSE, TYPE "ET"

Description

This standard applies to high-voltage general purpose current-limiting fuses and accessories for use on an AC-grounded wye 27/15.5 kV system. These current-limiting fuses are to be used both in single-phase and three-phase applications.

The fuse shall be a non-expulsion silver element fuse and shall comply with the latest revision of ANSI C37.47 except as amended by this material specification.

This general purpose current-limiting fuse will be mounted in a air insulated submersible fuse holder and be used to protect distribution transformers and equipment against low-impedance, high current faults.

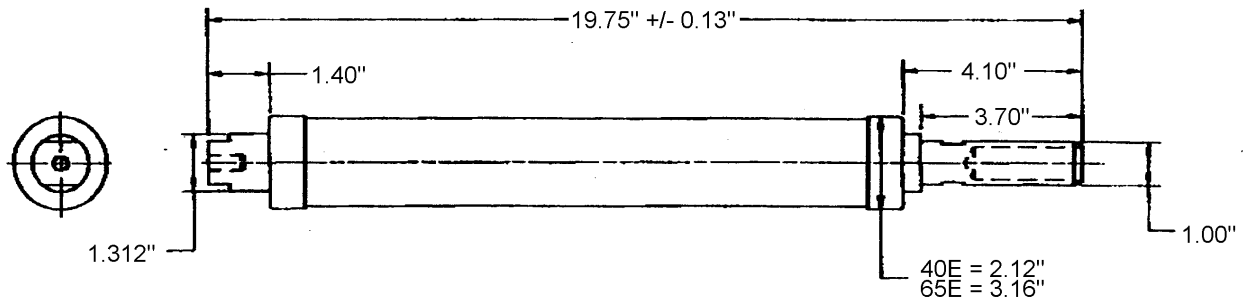
Construction

Weight: 12 pounds maximum

Housing: The tube shall be reinforced fiberglass. The fuse must have no external element solder joints.

Terminals: The top and bottom end terminals shall be of the dimensions shown in Figure 1 below.

FIGURE 1



Electrical Specifications

Voltage Rating	15.5 kV phase-to-neutral and 27-kV three-phase on solidly-grounded wye system
Rated Continuous Current	The fuse must meet ANSI 65E definition, or ANSI 40E definition, definition as specified.
Interrupting Rating	Shall be a minimum of 50,000 amperes RMS symmetrical
Basic Insulation	The BIL rating of the fuse shall be 125-kV
Radio Influence	The RIV of the complete device, fuse and fittings, shall not be greater than 30 microvolts at 1 megahertz when energized at 17.4 kV

Leakage Distance The leakage distance of the fuse and assembly shall be equivalent to 19 inches of porcelain and shall be a material of proven dielectric integrity.

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Labeling

In addition to the fuse markings as required under Section 6.2 of ANSI C37.47-1981, the manufacturer shall provide an identifying part number for the fuse, the date of manufacture, and the BIL rating. The fuse markings shall be legible and permanently installed on both the fuse and carton. The carton label shall also include the City Light stock number.

Packaging

Each fuse shall be packaged one to a carton, with instructions for mounting the fuse.

Test Requirement

The fuses must be 100% electrically tested before shipment to withstand 95% minimum melt energy without damage.

Data To Be Submitted for Qualification as an Approved Manufacturer

The manufacturer shall indicate any exceptions to this material specification and/or any test requirements as outlined in the latest revision of ANSI C37.47.

a. Time-Current characteristic graphs on standard-size transparencies

b. Maximum developed switching surge voltage

c. Maximum let-through Ampere-Squared-Seconds

d. Weight, dimensions, outside body material, and leakage distance

e. Certified test data on 15.5 kV interrupting tests at critical current (that current which allows maximum energy let-through)

f. Certified test data on interruption at 15.5 kV where the applied voltage immediately rises to 27 kV and is held for 10 minutes

g. Certified test data on interrupting three-phase and phase-to-phase faults

Warranty

The manufacturer shall warrant the fault limiter to be free of defects of workmanship and materials when used for the applications as stated in this specification (three-phase operation at 27 kV) for a period of five years from the date of shipment.

Stock No.	Size	MAX I^2T	Approved Mfg. Cat. No.
684935	40ET	20 kA	Cooper 15F040ET/SEA
684937	65ET	75 kA	Cooper 15F065ET/SEA

In November 2015, this standard was renumbered from 6840.1.1 to 6840.11.