



Westinghouse Electric Corporation
Distribution Apparatus Division
Bloomington, Indiana
47401

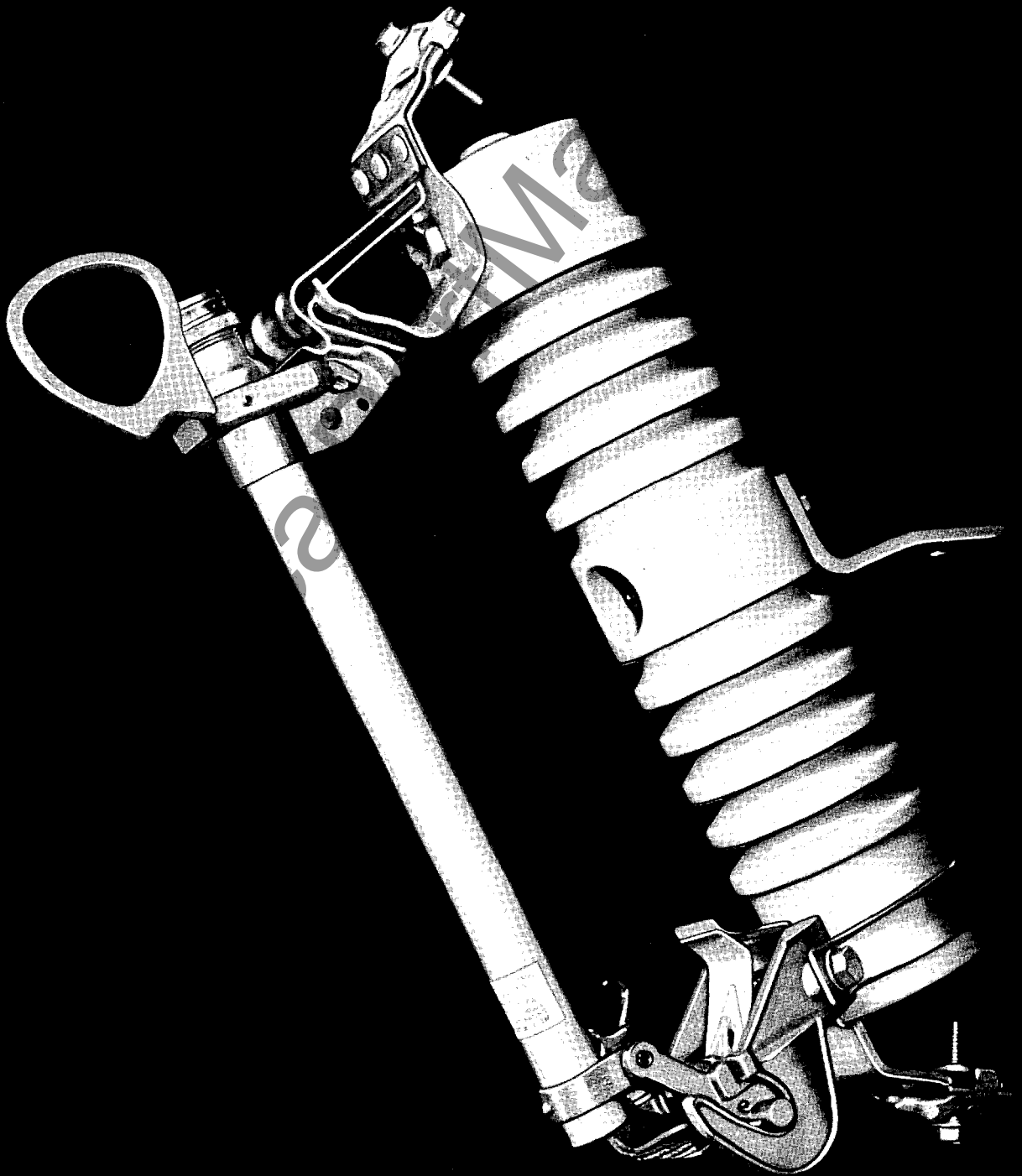
38-641 D WE A
Descriptive Bulletin

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Interrupting Capacity Up To
20,000 Amperes Assymetrical

Open-Fuse Cutout Type LDX



Description

The type LDX open fuse cutout provides fault protection for primary distribution systems. It provides overcurrent and short circuit protection of the highest dependability, convenience, and safety. The LDX fuse cutout also serves as a manual non-loadbreak disconnecting device.

The type LDX open fuse cutout is available in a variety of voltage ratings, continuous current ratings and interrupting current ratings.

The LDX fuse cutout is sturdily constructed to withstand high momentary and short circuit currents, and provide a long trouble free life. It is manufactured and tested in accordance with all applicable EEL, NEMA, USASI, and ANSI standards.

Ratings

Westinghouse offers a variety of fault current interrupting ratings through the use of two different materials for fuse tube construction and by giving a choice of solid or expendable caps for each tube. A "heavy duty" fuse tube is made of horn fiber surrounded by a paper base Micarta shell. An "extra heavy duty" rating is achieved when a tube is used which consists of horn fiber surrounded by a glass filament-wound outer shell.

The single-vented rating of each type of fuse tube is doubled when an expendable cap replaces the solid cap (See PL 38-640 for additional information on ratings).

Application

Single voltage rated cutouts can be applied on any single phase or three phase system where the line-to-line voltage does not exceed the cutout rating.

Dual voltage rated cutouts are suitable for application on single phase circuits having a maximum line-to-ground voltage not in excess of the value shown to the left of the diagonal line. These cutouts may be used on three phase circuits which are solidly grounded, and the maximum line-to-line voltage does not exceed the value shown to the right of the diagonal line.

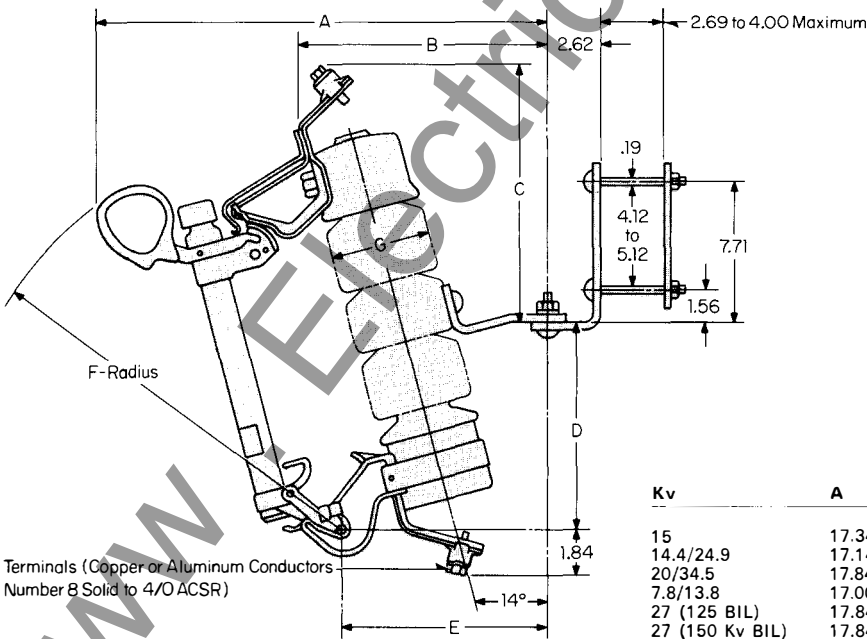
In selecting the proper fuse cutout for a given application, the following should be considered: circuit voltage, continuous load current, available fault current, BIL.

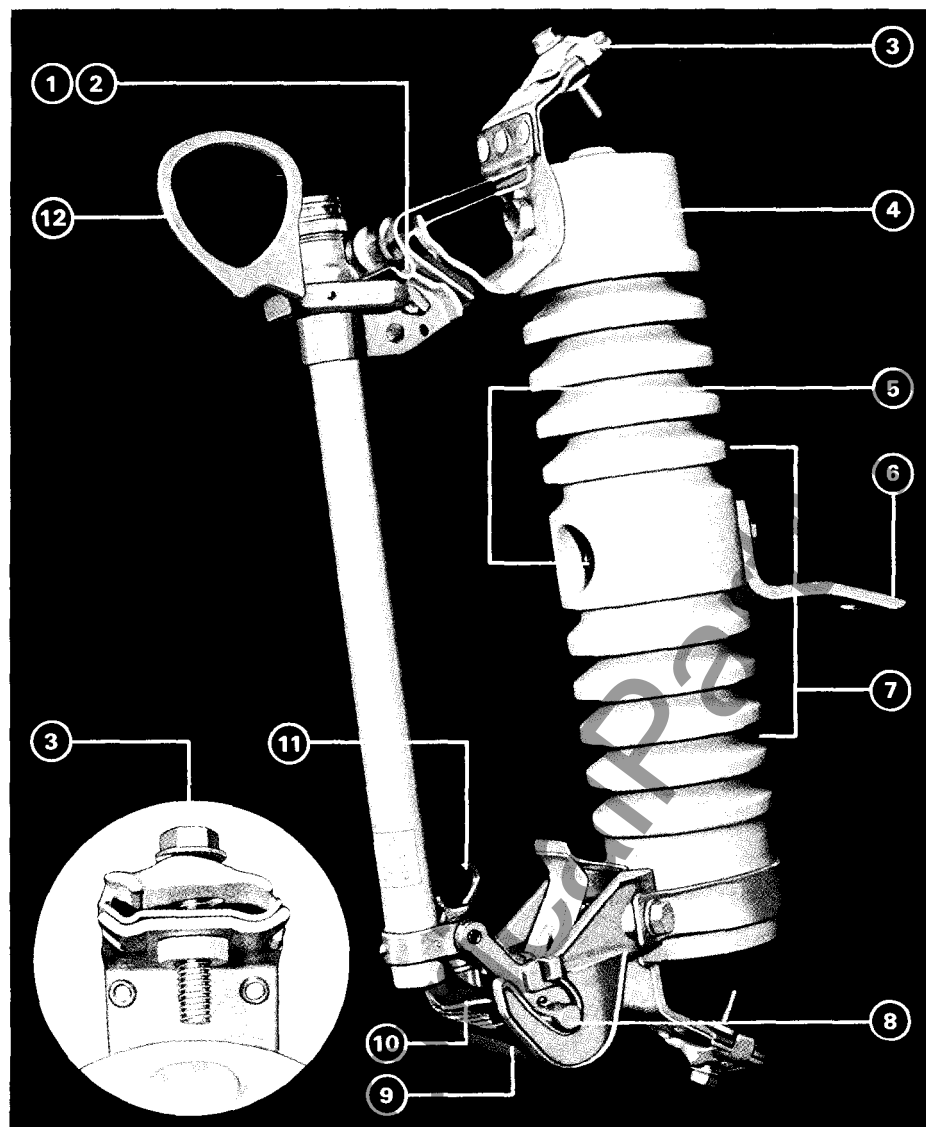
The selection of the appropriate fuse link size and type for a particular fuse cutout application is a function of the continuous load current to be carried, the type of equipment to be protected, and the required coordination with other overcurrent protective equipment, such as circuit breakers, power reclosers, or other fuse cutouts. Fuselink application information and tables are available in AD 38-663.

Additional Capability

For applications where the fault current exceeds the highest available interrupting rating or for applications where energy input (I^2t) into the protected equipment should be limited the LDX fuse support may be equipped with the FDL fuseholder. This device employs a partial range current limiting fuse in series with a "K" or "T" link. The FDL has an interrupting capability of 40,000 amps asymmetrical and due to its current limiting capability reduces the I^2t to provide a greater protective margin (For additional information see DB 38-631).

Dimensions in Inches





Design Features

(1) Positive Latch

The type LDX fuse cutout can only be unlatched by pulling down on the hookeye, thereby releasing the latch spring. The cutout cannot be inadvertently opened by mechanical shocks or high momentary currents.

(2) Silver-to-Silver Contacts

High conductivity and cool operation, as well as corrosion resistance, is assured by silver plating on all electrical contact surfaces.

(3) Tin Plated Terminals

Bronze alloy terminals are tin plated to accept both copper and aluminum conductors. Conductor range is from No. 8 to 4/0 ASCR. The 100 amp cutouts are equipped with parallel groove connectors. Eyebolt terminals are standard on the 200 amp cutouts.

(4) Solid Porcelain

The sky gray (ASA #70) insulator is made of a solid piece of high strength wet process porcelain, coated with a compressive non-tracking glaze, to provide strength and long life.

(5) Bird Proofing

Polyvinyl bird proofing is provided on the porcelain bolt recesses to limit flashover caused by small animals.

(6) Back Bracket

A heavy galvanized steel back bracket is solidly bolted to the porcelain insulator section. This bracket is capable of withstanding multiple high fault current interruptions.

(7) Coordinated Creep Distances

To assure proper insulation coordination the creep distance from live parts at the top of the cutout to the back bracket is greater than the creep distance from live parts at the bottom of the cutout to the back bracket. Thus, in the event of a flashover, the current will pass through the fuse link to ground and the cutout will clear the fault.

(8) Cams

The camming action of the bottom hinge provides assurance that the fuseholder will not bounce out of the cutout when it swings open. This same action insures that the fuseholder will remain engaged in the bottom hinge support during closing. The use of high quality castings for the hinge and hinge support assures smooth positive closing regardless of the angle through which the closing force is applied.

(9) Snubbing Post

The pigtail of small fuse links is wound around a snubbing post to prevent fraying of the fuse links when tightening the thumbscrew.

(10) Flipper Latch

The dual purpose flipper latch serves to eject the fuse link from the tube after fuse operation. It also absorbs the downward pressure exerted by the top contact, thereby avoiding excessive mechanical stress on small fuse links.

(11) Lifting Eye

An open lifting eye is provided to allow for easy insertion of the hook stick when removing or replacing of the fuseholder.

(12) Hookeye

A large hookeye on the top of the fuseholder provides for easy opening and closing of the cutout.

