General
Eaton protects both distribution apparatus from damaging currents and distribution systems from failed apparatus with its Cooper Power™ series dual element Bay-O-Net fuse link that is used in Eaton’s Cooper Power series Bay-O-Net fuse assemblies (see Catalog CA132015EN Sidewall-Mounted and Cover-Mounted Bay-O-Net Fuse Assembly).

Dual element links sense not only secondary faults, excessive load currents and transformer faults, but also transformer fluid temperature. They will limit long-term transformer heating caused by overloads and high temperature environments.

Application
Bay-O-Net fuses can be used on single-phase conventional and self-protected distribution transformers and on three-phase equipment.

Its ideal use is in a two-fuse protection scheme with a current-limiting backup fuse. In this arrangement, secondary faults and overload currents are cleared by the Bay-O-Net fuse, and high level faults are cleared by the current-limiting fuse. The two fuses are connected in series, and are coordinated so that the current-limiting fuse operates only upon internal equipment failure. (See Catalog CA132013EN ELSP Current-Limiting Backup Fuse to order an ELSP Current-Limiting Backup Fuse). If the Bay-O-Net fuse will not be used in series with a current-limiting fuse, an isolation link is required. (See Catalog CA132012EN Isolation Link.)

Bay-O-Net fuses are comparable in cost to internal cartridge fuses but have the advantages of being field-replaceable. Bay-O-Net fuses can easily be coordinated with upstream devices.

Installation
No special tools are required. A hotstick is used to remove the Bay-O-Net fuse cartridge holder from non-pressurized apparatus. The fuse cartridge is then replaced, and the holder reinserted using a hotstick. Refer to Service Information MN132002EN 23 and 38 kV Bay-O-Net Fuse Re-Fusing Installation Instructions for re-fusing details.
ORDERING INFORMATION

To order a Dual Element Bay-O-Net Fuse Link, determine the requirements of the application from Tables 3 and 4 and specify the fuse required from Table 2.

Method A

Using the Correlation Tables

Use the following correlation information (Tables 3 and 4) to complete Catalog Number 4038108___.

For 19.9 kV single-phase and 34.5 kV three-phase applications, an ELSP current-limiting backup fuse is recommended. (See Catalog CA132013EN for more information).

If the Bay-O-Net link is not used with a current-limiting fuse, an isolation link is required. (See Catalog CA132012EN).

Method B

Using Time Current Curves

To determine or confirm the dual element Bay-O-Net fuse that will coordinate with upstream and downstream system requirements, use time-current characteristic curves and specify the fuse indicated from Table 2.

Long term overload curves for selected transformer ratings are also available.

For full size TCC curves R240-91-57, long term overload curves and further information regarding either of these ordering methods, contact your Eaton representative.