

# FEB, FEC, FEX, FEY

600 Volt In-Line Fuse Holders

## FUSE BLOCKS & HOLDERS



FB

Mersen's complete line of single and dual pole in-line fuse holders accommodate either 1-1/2" x 13/32" (10 x 38 mm) midget or Class CC fuses. The fuse holders are designed for quick installation. Securing nuts or screws are captive thus speeding installation by reducing the need to locate and assemble loose components in the field. Three internal O-rings per pole seal the fuse holder providing a water-resistant compartment for the fuse. The captive O-rings are colored (blue for single pole and red for dual pole) for quick detection. Optional cone shaped insulator boots can be slipped on to provide a watertight seal (breakaway versions come with boots standard). Both single and dual pole versions have an optional breakaway feature which safely disconnects the load in case of a pole knockdown. Fuses remain safely encapsulated within the watertight fuse holder on the load side. Once the pole has been reinstalled the fuse holder can be easily reconnected.

## RECOMMENDED FUSE USAGE:

### FEB and FEX holders use with:

Midget (1-1/2" x 13/32", 10 x 38 mm): ATQ, ATM, TRM, OTM, GGU, GFN, A13X-2, A25Z-2, A60Q-2, A6Y-2B

### FEC and FEY holders use with:

Class CC: ATDR, ATMR, ATQR

## RATINGS:

- **Volts:** 600VAC / DC
- **Amps:** 30A Maximum
- **SCCR:** 200kA (Class CC Fuses); 100kA (Midget Fuses)
- **Temperature Rating:** 155°C

## APPLICATIONS:

- Street lighting
- Parking lot lighting
- Traffic signaling
- Sports lighting
- Boats and marinas
- Humid/corrosive environments

## APPROVALS:

- UL Listed Class CC Guide IZLT, File E52283
- UL Recognized Component Midget Guide IZLT2, File E52283
- CSA Certified Class CC and Midget Class 6225, File 32169



## HIGHLIGHTS:

- Breakaway version quickly disconnects line side during pole knockdown in compliance with state and federal highway commission standards
- 3 O-rings per pole for water tight applications
- Colored O-rings for quick detection
- Single and dual poles
- Accepts midget or Class CC fuses
- Wide assortment of terminal variations
- High heat, impact resistant insulator
- Captive nut or screw for quick installations
- Polarized dual pole provides simultaneous disconnection
- Permanently installed neutral versions quickly identified by white nuts
- Tulip fuse clip for improved contact and low losses
- Environmentally friendly-no lead solder used
- Highly visible catalog number even with insulation boots installed
- Wire gauge size identified on insulation boots for quick, accurate trimming
- Time delay for motor starting and transformer inrush

## CATALOG NUMBERING SYSTEM

| Family | Load Terminal | Line Terminal | Option |
|--------|---------------|---------------|--------|
| FEB-   | 1             | 1             | -BA    |

## NOMENCLATURE LEGEND

| Family | Description          |
|--------|----------------------|
| FEB    | Single pole midget   |
| FEC    | Single pole Class CC |
| FEX    | Dual Pole midget     |
| FEY    | Dual pole Class CC   |
| FEBN   | Single pole neutral  |

### Notes:

1. Non-breakaway units do not include insulator boots. These optional cone shaped boots are available to provide a watertight installation. The insulator boots are designed to form a watertight seal over conductors, but due to varying wire insulation sizes it is suggested that tape wrap be utilized for best results.  
FSB1 = Single conductor boot (used to cover all crimp type & single set screw terminals)  
FSB2 = Double conductor boot (used to cover all double set screw (Y-type) terminals)  
Insulator boot trimming instructions: Locate wire gage size to be utilized marking on the boot and cut just beneath it.
2. Tightening torque for single and double set screw terminations: 35 lbs.-in.
3. Tightening torque for dual pole fastening screw: 10-15 lbs.-in.
4. FEBN versions have a permanently mounted dummy fuse for neutral applications.

| Terminal End View | Terminal | Load or Line Terminal Type |                   |             |                   |                  | Option Description                                                                                                        |
|-------------------|----------|----------------------------|-------------------|-------------|-------------------|------------------|---------------------------------------------------------------------------------------------------------------------------|
|                   |          | Type                       | Wire              | No. Per     | Solid             | Stranded         |                                                                                                                           |
|                   | 11       | Cu Crimp                   | #8-#12<br>#12-#14 | 1<br>2      | Yes<br>Yes        | Yes<br>Yes       | BA<br>(breakaway version equipped with breakaway stud, breakaway boot, and insulating boots for both line and load sides) |
|                   | 21       | Cu Crimp                   | #10<br>#6<br>#4   | 2<br>1<br>1 | Yes<br>Yes<br>Yes | Yes<br>Yes<br>No |                                                                                                                           |
|                   | 31       | Cu Crimp                   | #10<br>#4         | 2<br>1      | Yes<br>No         | Yes<br>Yes       |                                                                                                                           |
|                   | 41       | Cu Crimp                   | #6<br>#2          | 2<br>1      | Yes<br>No         | Yes<br>Yes       |                                                                                                                           |
|                   | 81       | Cu single Set Screw        | #2-#12            | 1           | Yes               | Yes              |                                                                                                                           |
|                   | 91       | Cu Double Set Screw        | #2-#12            | 1<br>each   | Yes               | Yes              |                                                                                                                           |
|                   | 82       | Al single Set Screw        | #2-#12            | 1           | Yes               | Yes              |                                                                                                                           |
|                   | 92       | Al double Set Screw        | #2-#12            | 1<br>each   | Yes               | Yes              |                                                                                                                           |
|                   | S        | Cu Stud                    | N/A               | 1           | N/A               | N/A              |                                                                                                                           |

## MERSEN IN-LINE FUSE HOLDER FAMILY - TYPICAL COMBINATION CHART

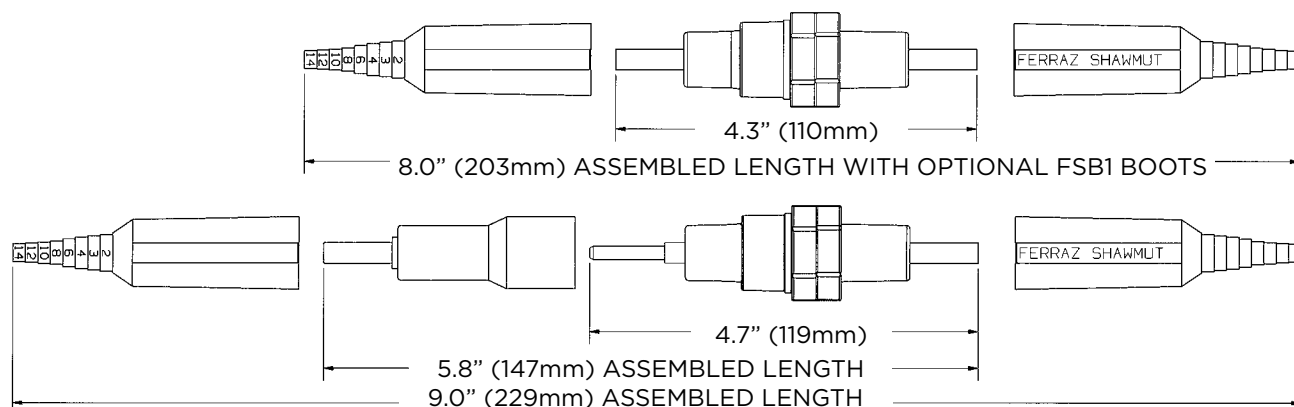
| Midget<br>10x38mm | Midget<br>10x38mm<br>Breakaway | Class CC  | Class CC<br>Breakaway | Midget<br>10x38mm<br>Dual Pole | Midget<br>10x38mm<br>Dual Pole<br>Breakaway | Class CC<br>Dual Pole | Class CC<br>Dual Pole<br>Breakaway |
|-------------------|--------------------------------|-----------|-----------------------|--------------------------------|---------------------------------------------|-----------------------|------------------------------------|
| FEB-11-11         | FEB-11-11-BA                   | FEC-11-11 | FEC-11-11-BA          | FEX-11-11                      | FEX-11-11-BA                                | FEY-11-11             | FEY-11-11-BA                       |
| FEB-11-21         | FEB-11-21-BA                   | FEC-11-21 | FEC-11-21-BA          | FEX-11-21                      | FEX-11-21-BA                                | FEY-11-21             | FEY-11-21-BA                       |
| FEB-11-31         |                                |           |                       | FEX-11-31                      |                                             | FEY-11-31             |                                    |
| FEB-11-41         | FEB-11-41-BA                   |           |                       | FEX-11-41                      | FEX-11-41-BA                                | FEY-11-41             |                                    |
|                   | FEB-11-81-BA                   |           |                       |                                |                                             |                       |                                    |
| FEB-11-82         | FEB-11-82-BA                   |           |                       |                                |                                             |                       |                                    |
| FEB-11-91         | FEB-11-91-BA                   | FEC-11-91 | FEC-11-91-BA          |                                |                                             |                       | FEY-11-91-BA                       |
| FEB-11-92         | FEB-11-92-BA                   |           |                       |                                |                                             |                       |                                    |
| FEB-11-S          |                                |           |                       |                                |                                             |                       |                                    |
| FEB-21-11         |                                |           |                       |                                |                                             |                       |                                    |
| FEB-21-21         | FEB-21-21-BA                   | FEC-21-21 | FEC-21-21-BA          | FEX-21-21                      | FEX-21-21-BA                                | FEY-21-21             | FEY-21-21-BA                       |
| FEB-21-91         | FEB-21-91-BA                   |           |                       |                                |                                             |                       |                                    |
| FEB-31-31         | FEB-31-31-BA                   |           |                       |                                |                                             |                       |                                    |
| FEB-41-41         | FEB-41-41-BA                   |           |                       |                                |                                             |                       |                                    |
| FEB-81-81         | FEB-81-81-BA                   | FEC-81-81 | FEC-81-81-BA          | FEX-81-81                      |                                             |                       | FEY-81-81-BA                       |
| FEB-81-91         | FEB-81-91-BA                   |           |                       | FEX-81-91                      | FEX-81-91-BA                                | FEY-81-91             |                                    |
| FEB-81-S          |                                |           |                       |                                |                                             |                       |                                    |
| FEB-82-82         | FEB-82-82-BA                   |           |                       |                                |                                             |                       |                                    |
| FEB-82-92         | FEB-82-92-BA                   |           |                       |                                |                                             |                       |                                    |
|                   | FEB-91-91-BA                   |           |                       |                                | FEX-81-91-BA                                |                       |                                    |
| FEBN-11-11        | FEBN-11-11-BA                  |           |                       |                                |                                             |                       |                                    |
| FEBN-11-91        | FEBN-11-91-BA                  |           |                       |                                |                                             |                       |                                    |
| FEBN-81-81        | FEBN-81-81-BA                  |           |                       |                                |                                             |                       |                                    |
| FEB-SS            |                                |           |                       |                                |                                             |                       |                                    |
|                   |                                |           |                       |                                | FEX-81-91-BA                                |                       |                                    |

Note: Consult factory for other configurations.

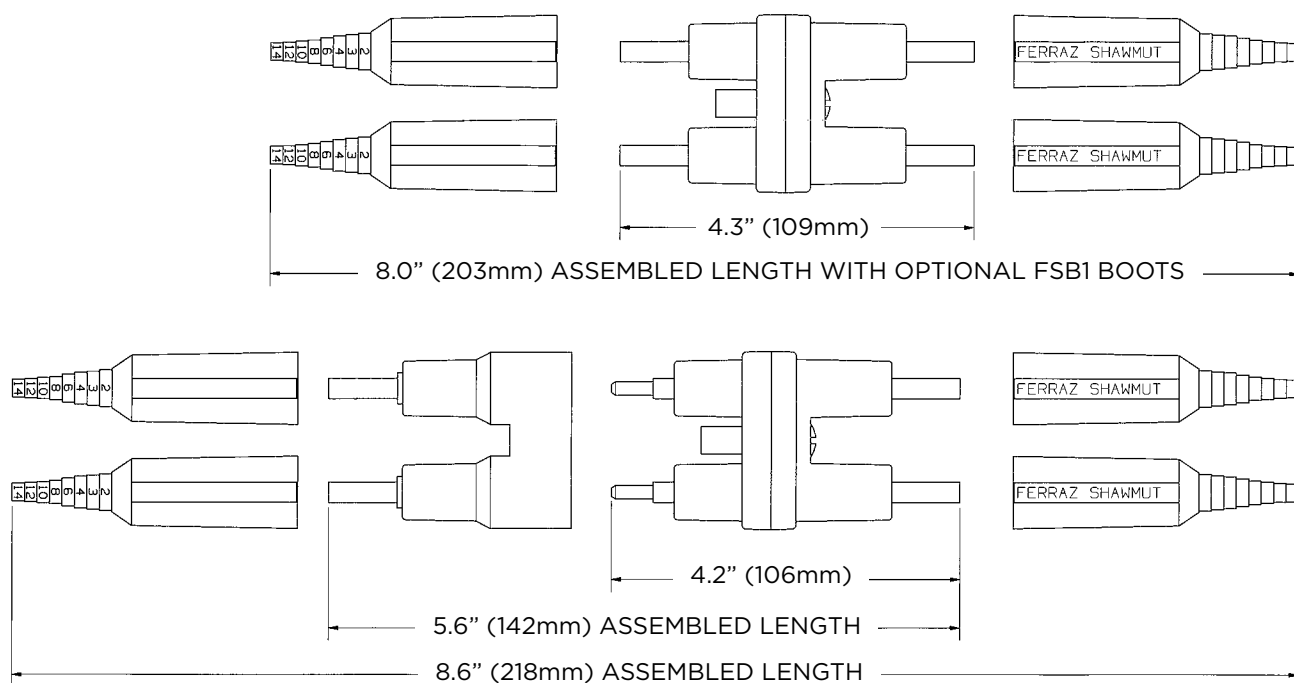
## CRIMPING TOOLS REFERENCE CHART, THE FOLLOWING CRIMPING TOOLS (OR EQUIVALENT) ARE RECOMMENDED:

| Terminal Type | FCI-Burndy | T&B                                 |
|---------------|------------|-------------------------------------|
| 1             | Y8MRB-1    | WT-111M                             |
| 2             | Y2MR       | TBM2/TBM5 BLUE DIE, WT-115-A DIE O  |
| 3             | Y2MR       | TBM2/TBM5 GREY DIE, WT-115-A DIE E  |
| 4             | Y2MR       | TBM2/TBM5 BROWN DIE, WT-115-A DIE F |

## FEB AND FEC, NON-BREAKAWAY AND BREAKAWAY ASSEMBLY DRAWINGS



## FEX AND FEY, NON-BREAKAWAY AND BREAKAWAY ASSEMBLY DRAWINGS



FB