**Automotive and hardware/home center product catalog**

BUSSMANN SERIES

# Circuit protection technology

## for automotive, home, marine and RVs.

EATON

*Powering Business Worldwide*

# New Bussmann series product packaging coming 2017

Greater product display per linear foot with new, compact card sizes.

Tri-lingual packaging meets today's marketing needs.

Enhanced shopability with large product and amp rating text.

Quick identification with product family color coding.

Bussmann yellow stays prominent.

## Bold new look.

## Package options

In addition to boxed product, Bussmann™ series products are also available in packaging that is designed for various retail environments and needs. These package options do not apply to every product. Check the Bussmann series price sheet for availability. Below are explanations of the various packaging you'll see listed in the product tables of this catalog. For more information, visit Eaton.com/BussmannConsumer.

## Traditional packs - automotive

**Tins**
Examples: ATC-20, SFE-14

Blade fuses and glass tube fuses may be ordered in tins. A tin holds FIVE fuses with the exception of MAXI™ fuses which are packed ONE fuse per tin.

**Polybags and boxes**
Examples: CB123-20HB, FMX-20, HHM

Larger fuses like female MAXI, cartridge fuses and circuit breakers are packed ONE fuse per bag. High amp circuit breakers and fuse holders are packed in boxes.

## Retail packs - automotive

Retail packs may be placed on a pegboard and come in blister packs and clamshells. They are generally ordered by adding the prefix "BP/" and suffix "-RP" or "-RPP" to the catalog number.

**Single amp packs**
Examples: BP/ATM-30-RP, BP/ATC-20ID

These packs contain ONE to FIVE fuses of the same amp rating. Smaller parts are placed in blister packs while larger parts are placed in clamshells.

**Multiple amp assortment packs**
Examples: AGC-EK, ATC-ID-SK, BP/ATM-A5-RP, NO. 44

These packs house multiple fuses of varying amp ratings. Some packs come with a fuse puller. See pages 24 and 25 for more details.

## sAdditional packaging - automotive

**Value packs**
Examples: VP/ATC-30ID, VP/ATM-25-RP, VP/FMX-A5-RP

Ideal for small shops, mobile technicians, and avid car enthusiasts, these re-sealable clamshells and blister packs house 10 *easy*ID™ fuses or 25 standard blade fuses.

**Bulk packs**
Examples: BK/AGC-30, BK/ATM-10LP, BK/MAX-20ID

Available on select products, bulk pack fuses are available in plastic bags or boxes. Ask your Bussmann series sales rep or distributor for product availability.

**Reload packs**
Examples: ATM-2RLD, ATC-40RLD

Available on select products, re-loads are bulk fuses packed in a clear polybag with product label and bar code. They are designed for re-loading product into installer assortments and tilt-bins like the NO.225.

**Installer assortments**
Examples: NO. 290, FUSE-CADDY2, CDY10TRY-ATC

Contain a variety of circuit protection products for service technicians and repair shops.

## Retail packs - electrical

**Single amp assortment packs**
Examples: BP/GMA-2A, BP/FRN-R-30ID, BP/FRS-R-60

These packs contain ONE to FIVE fuses of the same amp rating. Glass fuses are placed in 1.77"W x 3.71"H cards.

**Assortment packs**
Examples: BP/ABC-A, NON-EK, TL-EK

These packs contain multiple fuses of varying amp ratings. Some packs come with a fuse puller. See page 48 for more details.

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Not all products are listed in this catalog. If additional amperages are needed, contact your Bussmann series product representative. Some catalog numbers shown in this catalog are non-stock items and require longer lead times. Always check the latest price sheet for product status and availability.

Bussmann series solutions comply with major industrial standards and agency requirements such as: BS, IEC, DIN, UL, NEMA, SAE, CSA, CE, C-UL, etc. and are manufactured at facilities that are ISO 9000 certified. This catalog is intended to present product data and provide technical information that will help the end user with design application. Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this catalog. Once a product has been selected, it should be tested by the user in all possible applications. Further, Eaton takes no responsibility for errors or omissions contained in this catalog, or for misapplication of any Bussmann series product. Extensive product information is available in the Bussmann series product data sheets available online at Eaton.com/BussmannConsumer.

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# Automotive products and accessories

The industry standard - used in most domestic and imported cars today. All Bussmann series blade fuses meet or exceed OEM and SAE standards.

## ATR blade fuses

### 2-Leg micro fuses

These space-saving fuses are used on newer vehicles.

| Color code | Amps | Trad'l pack* | Retail pack** | Bulk pack*** |
|---|---|---|---|---|
| Tan | 5 | ATR-5 | BP/ATR-5-RP | BP/ATR-5-RP |
| Brown | 7-1/2 | ATR-7-1/2 | BP/ATR-7-1/2-RP | BP/ATR-7-1/2-RP |
| Red | 10 | ATR-10 | BP/ATR-10-RP | BP/ATR-10-RP |
| Blue | 15 | ATR-15 | BP/ATR-15-RP | BP/ATR-15-RP |
| Yellow | 20 | ATR-20 | BP/ATR-20-RP | BP/ATR-20-RP |
| Clear | 25 | ATR-25 | BP/ATR-25-RP | BP/ATR-25-RP |
| Green | 30 | ATR-30 | BP/ATR-30-RP | BP/ATR-30-RP |

* 5 Fuses per pack, 20 packs per shelf carton.
** 5 Fuses per pack, 5 packs per shelf carton.
*** 50 Fuses per pack.

## ATM blade fuses

**See page 8 for *easy*ID illuminating versions**

ATM fuses feature an enclosed element for electrical isolation, corrosion resistance and longer service life.

| Color code | Amps | Trad'l pack* | Reload** | Retail pack*** | Value pack† | Bulk pack‡ |
|---|---|---|---|---|---|---|
| Black | 1 | ATM-1 | — | — | — | BK/ATM-1 |
| Gray | 2 | ATM-2 | ATM-2RLD | BP/ATM-2-RP | VP/ATM-2-RP | BK/ATM-2 |
| Violet | 3 | ATM-3 | ATM-3RLD | BP/ATM-3-RP | VP/ATM-3-RP | BK/ATM-3 |
| Pink | 4 | ATM-4 | — | BP/ATM-4-RP | VP/ATM-4-RP | BK/ATM-4 |
| Tan | 5 | ATM-5 | ATM-5RLD | BP/ATM-5-RP | VP/ATM-5-RP | BK/ATM-5 |
| Brown | 7-1/2 | ATM-7-1/2 | ATM-7-1/2-RLD | BP/ATM-7-1/2-RP | VP/ATM-71/2-RP | BK/ATM-7-1/2 |
| Red | 10 | ATM-10 | ATM-10RLD | BP/ATM-10-RP | VP/ATM-10-RP | BK/ATM-10 |
| Blue | 15 | ATM-15 | ATM-15RLD | BP/ATM-15-RP | VP/ATM-15-RP | BK/ATM-15 |
| Yellow | 20 | ATM-20 | ATM-20RLD | BP/ATM-20-RP | VP/ATM-20-RP | BK/ATM-20 |
| Clear | 25 | ATM-25 | ATM-25RLD | BP/ATM-25-RP | VP/ATM-25-RP | BK/ATM-25 |
| Green | 30 | ATM-30 | ATM-30RLD | BP/ATM-30-RP | VP/ATM-30-RP | BK/ATM-30 |

* 5 Fuses per pack, 20 packs per shelf carton.
** 10 Fuses per pack.
*** 5 Fuses per pack, 5 packs per shelf carton.
† 25 Fuses per pack, 5 packs per shelf carton.
‡ 500 Fuses per pack.

## Low-profile ATM blade fuses

Low-profile ATM fuses have the same ratings and universal color-coding as ATM and ATC fuses.

| Color code | Amps | Trad'l pack* | Retail pack** | Value pack*** | Bulk pack† |
|---|---|---|---|---|---|
| Gray | 2 | ATM-2LP | — | — | — |
| Violet | 3 | ATM-3LP | — | — | — |
| Pink | 4 | ATM-4LP | — | — | — |
| Tan | 5 | ATM-5LP | BP/ATM-5LP-RP | — | BK/ATM-5LP |
| Brown | 7-1/2 | ATM-7-1/2LP | BP/ATM-7-1/2LP-RP | — | BK/ATM-7-1/2LP |
| Red | 10 | ATM-10LP | BP/ATM-10LP-RP | VP/ATM-10LP-RP | BK/ATM-10LP |
| Blue | 15 | ATM-15LP | BP/ATM-15LP-RP | VP/ATM-15LP-RP | BK/ATM-15LP |
| Yellow | 20 | ATM-20LP | BP/ATM-20LP-RP | VP/ATM-20LP-RP | BK/ATM-20LP |
| Clear | 25 | ATM-25LP | BP/ATM-25LP-RP | — | BK/ATM-25LP |
| Green | 30 | ATM-30LP | BP/ATM-30LP-RP | — | BK/ATM-30LP |

* 5 Fuses per pack, 20 packs per shelf carton.
** 5 Fuses per pack, 5 packs per shelf carton.
*** 25 Fuses per pack, 5 packs per shelf carton.
† 500 Fuses per pack.

## ATL blade fuses

### 3-Leg micro fuses

These space-saving fuses are used on newer vehicles. The ATL fuses combine protection for two circuits in one package.

| Color code | Amps | Trad'l pack* | Bulk pack** |
|---|---|---|---|
| Tan | 5 | ATL-5 | BK/ATL-5 |
| Brown | 7-1/2 | ATL-7-1/2 | BK/ATL-7-1/2 |
| Red | 10 | ATL-10 | BK/ATL-10 |
| Blue | 15 | ATL-15 | BK/ATL-15 |

* 5 Fuses per pack, 5 packs per shelf carton.
** 50 Fuses per pack.

## ATC blade fuses

**See page 8 for *easy*ID illuminating versions**

ATC blade fuses use the industry standard color-coding to indicate amp rating. Bussmann series ATC fuses are UL Recognized and feature an enclosed element for electrical isolation, corrosion resistance and longer service life. BK/ATC-5 through 30 A also available with open body. Refer to data sheet No. 2009 for available options.

| Color code | Amps | Trad'l pack* | Reload** | Retail pack*** | Value pack† | Bulk pack‡ |
|---|---|---|---|---|---|---|
| Black | 1 | ATC-1 | — | BP/ATC-1-RP | — | BK/ATC-1 |
| Gray | 2 | ATC-2 | — | BP/ATC-2-RP | — | BK/ATC-2 |
| Violet | 3 | ATC-3 | ATC-3RLD | BP/ATC-3-RP | VP/ATC-3-RP | BK/ATC-3 |
| Pink | 4 | ATC-4 | ATC-4RLD | BP/ATC-4-RP | VP/ATC-4-RP | BK/ATC-4 |
| Tan | 5 | ATC-5 | ATC-5RLD | BP/ATC-5-RP | VP/ATC-5-RP | BK/ATC-5 |
| Brown | 7-1/2 | ATC-7-1/2 | ATC-7-1/2RLD | BP/ATC-7-1/2-RP | VP/ATC-7-1/2-RP | BK/ATC-7-1/2 |
| Red | 10 | ATC-10 | ATC-10RLD | BP/ATC-10-RP | VP/ATC-10-RP | BK/ATC-10 |
| Blue | 15 | ATC-15 | ATC-15RLD | BP/ATC-15-RP | VP/ATC-15-RP | BK/ATC-15 |
| Yellow | 20 | ATC-20 | ATC-20RLD | BP/ATC-20-RP | VP/ATC-20-RP | BK/ATC-20 |
| Clear | 25 | ATC-25 | ATC-25RLD | BP/ATC-25-RP | VP/ATC-25-RP | BK/ATC-25 |
| Green | 30 | ATC-30 | ATC-30RLD | BP/ATC-30-RP | VP/ATC-30-RP | BK/ATC-30 |
| Bl-Gn | 35 | ATC-35 | — | — | — | BK/ATC-35 |
| Orange | 40 | ATC-40 | — | BP/ATC-40-RP | VP/ATC-40-RP | BK/ATC-40 |

* 5 Fuses per pack, 20 packs per shelf carton.
** 25 Fuses per pack.
*** 5 Fuses per pack, 5 packs per shelf carton.
† 25 Fuses per pack, 5 packs per shelf carton.
‡ 2000 Fuses per pack.

## MAXI™ (MAX) blade fuses

**See page 8 for *easy*ID illuminating versions**

MAXI fuses protect circuits in the wiring harness - usually found under the hood, in a fuse panel or supplementary panel near the battery. Ideal for aftermarket accessories (such as high-end stereos) that require protection up to 80 amps.

| Color code | Amps | Trad'l. pack* | Retail pack** | Bulk pack*** |
|---|---|---|---|---|
| Yellow | 20 | MAX-20 | BP/MAX-20-RP | BK/MAX-20 |
| Gray | 25 | MAX-25 | — | BK/MAX-25 |
| Green | 30 | MAX-30 | BP/MAX-30-RP | BK/MAX-30 |
| Brown | 35 | MAX-35 | — | — |
| Orange | 40 | MAX-40 | BP/MAX-40-RP | BK/MAX-40 |
| Red | 50 | MAX-50 | BP/MAX-50-RP | BK/MAX-50 |
| Blue | 60 | MAX-60 | BP/MAX-60-RP | BK/MAX-60 |
| Tan | 70 | MAX-70 | BP/MAX-70-RP | BK/MAX-70 |
| Clear | 80 | MAX-80 | BP/MAX-80-RP | BK/MAX-80 |

* 1 Fuse per pack, 20 packs per shelf carton.
** 1 Fuse per pack, 5 packs per shelf carton.
*** 250 Fuses per pack.

## Finding the open fuse is easy with the Bussmann series *easy*ID blade fuses and holders

These drop-in replacements are available for applications that can benefit from open fuse indication. The *easy*ID illuminating blade fuses and holders use LED technology that makes blown fuses easy to spot in fuse panels tucked up under dark dashboards.

In-line *easy*ID fuse holders allow adding fused circuits with blown fuse indication using regular ATM, ATC and MAXI fuses.

Trilingual packaging in English, Spanish and French.

### *easy*ID ATM fuses

Following on the popularity and wide application of ATM fuses, the *easy*ID illuminating ATM fuse is available in popular amp ratings with trilingual packaging that's designed for easy selling.

See page 12 for *easy*ID fuse holders.

| Color code | Amps | Retail pack* | Value pack** | Bulk pack*** |
|---|---|---|---|---|
| Violet | 3 | BP/ATM-3ID | — | BK/ATM-3ID |
| Tan | 5 | BP/ATM-5ID | — | BK/ATM-5ID |
| Brown | 7-1/2 | BP/ATM-7-1/2ID | — | BK/ATM-7-1/2ID |
| Red | 10 | BP/ATM-10ID | VP/ATM-10ID | BK/ATM-10ID |
| Blue | 15 | BP/ATM-15ID | VP/ATM-15ID | BK/ATM-15ID |
| Yellow | 20 | BP/ATM-20ID | VP/ATM-20ID | BK/ATM-20ID |
| Clear | 25 | BP/ATM-25ID | VP/ATM-25ID | BK/ATM-25ID |
| Green | 30 | BP/ATM-30ID | VP/ATM-30ID | BK/ATM-30ID |

* 2 Fuses per pack, 5 packs per shelf carton.
** 10 Fuses per pack, 5 packs per shelf carton.
*** 50 Fuses per pack.

**BP/ATM-AID fuse assortment**
Contains one each of 10, 15, 20, 25 and 30 amp fuses.

**ATM-FP-AID fuse emergency kit**
Contains one each of 10, 15, 20, 25 and 30 amp fuses plus a fuse puller.

**ATM-ID-SK fuse service kit**
Contains six each of 5, 10, 15, 20, 25 and 30 amp fuses, making this service kit ideal for fleet maintenance departments.

### *easy*ID FMX female MAXI fuses

Following on the popularity and wider application of FMX fuses for late-model vehicles, the *easy*ID FMX fuse, with LED blown fuse indication, is available in popular amp ratings with trilingual packaging that's designed for easy selling.

| Color | Amps | Retail pack* |
|---|---|---|
| Blue | 20 | BP/FMX-20ID |
| Pink | 30 | BP/FMX-30ID |
| Green | 40 | BP/FMX-40ID |
| Red | 50 | BP/FMX-50ID |
| Yellow | 60 | BP/FMX-60ID |

* 1 Fuse per pack, 5 packs per shelf carton.

### *easy*ID ATC fuses

With a large installed base, the ATC *easy*ID illuminating fuse has great selling potential in popular amp ratings with trilingual packaging that's designed for easy selling.

See page 12 for *easy*ID fuse holders.

| Color code | Amps | Retail pack* | Value pack** | Bulk pack*** |
|---|---|---|---|---|
| Violet | 3 | BP/ATC-3ID | — | BK/ATC-3ID |
| Tan | 5 | BP/ATC-5ID | — | BK/ATC-5ID |
| Brown | 7-1/2 | BP/ATC-7-1/2ID | — | BK/ATC-7-1/2ID |
| Red | 10 | BP/ATC-10ID | VP/ATC-10ID | BK/ATC-10ID |
| Blue | 15 | BP/ATC-15ID | VP/ATC-15ID | BK/ATC-15ID |
| Yellow | 20 | BP/ATC-20ID | VP/ATC-20ID | BK/ATC-20ID |
| Clear | 25 | BP/ATC-25ID | VP/ATC-25ID | BK/ATC-25ID |
| Green | 30 | BP/ATC-30ID | VP/ATC-30ID | BK/ATC-30ID |
| Blue-Green | 35 | BP/ATC-35ID | — | — |
| Orange | 40 | BP/ATC-40ID | — | BK/ATC-40ID |

* 2 Fuses per pack, 5 packs per shelf carton.
** 10 Fuses per pack, 5 packs per shelf carton.
*** 50 Fuses per pack.

**BP/ATC-AID fuse assortment**
Contains one each of 10, 15, 20, 25 and 30 amp fuses.

**ATC-FP-AID fuse emergency kit**
Contains one each of 10, 15, 20, 25 and 30 amp fuses plus a fuse puller.

**ATC-ID-SK fuse service kit**
Contains seven each of 5, 10, 15, 20, 25 and 30 amp fuses, making this kit ideal for fleet maintenance departments.

### *easy*ID MAXI™ (MAXI) fuses

With ratings up to 100 amps, the Bussmann series *easy*ID MAXI illuminating fuse line is a sure seller with trilingual retail packaging that's designed for easy selling.

See page 12 for *easy*ID fuse holders.

| Color code | Amps | Retail pack* | Bulk pack** |
|---|---|---|---|
| Yellow | 20 | BP/MAX-20ID | — |
| Green | 30 | BP/MAX-30ID | BK/MAX-30ID |
| Orange | 40 | BP/MAX-40ID | BK/MAX-40ID |
| Red | 50 | BP/MAX-50ID | BK/MAX-50ID |
| Blue | 60 | BP/MAX-60ID | BK/MAX-60ID |
| Tan | 70 | BP/MAX-70ID | — |
| Clear | 80 | BP/MAX-80ID | BK/MAX-80ID |
| Violet | 100 | BP/MAX-100ID | — |

* 1 Fuse per pack, 5 packs per shelf carton.
** 250 Fuses per pack.

## Multi-pole fuses

Bussmann series multi-pole fuses (MPFs) provide sales-making opportunities formerly only dealerships and online parts websites enjoyed.

Multi-pole fuses are OEM fuses that combine multiple circuits in to a single design to reduce the weight, space and cost of traditional fusing solutions. These fuses have been used since 2002 in popular models of Nissan®, Infiniti®, Toyota®, and Lexus models.

These fuses are easy to replace by service technicians and DIYers alike using the same female maxi-type fuse puller.

### MPF

**32 Vdc multi-pole fuses**

| Color code | Amps | Trad'l pack* | Bulk pack** | OEM no. | Vehicle make |
|---|---|---|---|---|---|
| Pink | 40, 30, 30 | MPF-433X | BK/MPF-433X | 24370-C9902 | Nissan, Infiniti |
| Green | 40, 40, 40 | MPF-444X | BK/MPF-444X | 24370-C9900 | Nissan, Infiniti |
| Red | 50, 30, 30 | MPF-533X | BK/MPF-533X | 24370-C9906 | Nissan, Infiniti |
| Blue | 50, 30, 40 | MPF-534X | BK/MPF-633X | 24370-C9907 | Nissan, Infiniti |
| Yellow | 60, 30, 30 | MPF-633X | BK/MPF-534X | 24370-C9904 | Nissan |

* 1 Fuse per pack, 10 packs per shelf carton.
** 50 Fuses per pack.

### MPF2

**58 Vdc multi-pole fuses**

| Color code | Amps | Trad'l pack* | Bulk pack** | OEM no. | Vehicle make |
|---|---|---|---|---|---|
| Yellow | 30, 20, 40 | MPF2-324X | BK/MPF2-324X | 24370-C991C | Nissan |
| Pink | 40, 30, 30 | MPF2-433X | BK/MPF2-433X | 24370-C991A | Nissan |
| | | | | 90982-08308 | Toyota, Lexus |
| Green | 40, 40, 40 | MPF2-444X | BK/MPF2-444X | 24370-C991B | Nissan, Infiniti |
| | | | | 90982-08299 | Toyota, Lexus |
| Red | 50, 30, 30 | MPF2-533X | BK/MPF2-533X | 24370-C992A | Nissan, Infiniti |
| | | | | 90982-08300 | Toyota, Lexus |
| Blue | 50, 30, 40 | MPF2-534X | BK/MPF2-534X | 24370-C992B | Nissan, Infiniti |
| | | | | 90982-08301 | Toyota, Lexus |
| Black | 50, 30, 50 | MPF2-535X | BK/MPF2-535X | 24370-C992C | Nissan, Infiniti |
| | | | | 90982-08302 | Toyota, Lexus |
| Maroon | 50, 50, 50 | MPF2-555X | BK/MPF2-555X | 90982-08303 | Lexus |

* 1 Fuse per pack, 10 packs per shelf carton.
** 50 Fuses per pack.

## Female MAXI fuses

Developed to meet the demand for smaller components, the FMX and low-profile FMX female MAXI fuses offer high amp protection in compact packages. Both FMX and low-profile FMX fuses are available in amp ratings from 20 to 60 A.

**See page 8 for *easy*ID FMX female Maxi fuses**

### FMX

**Female MAXI fuses**

| Color code | Amps | Trad'l pack* | Retail pack** |
|---|---|---|---|
| Blue | 20 | FMX-20 | BP/FMX-20-RP |
| White | 25 | FMX-25 | BP/FMX-25-RP |
| Pink | 30 | FMX-30 | BP/FMX-30-RP |
| Green | 40 | FMX-40 | BP/FMX-40-RP |
| Red | 50 | FMX-50 | BP/FMX-50-RP |
| Yellow | 60 | FMX-60 | BP/FMX-60-RP |

* 1 Fuse per pack, 10 packs per shelf carton.
** 1 Fuse per pack, 5 packs per shelf carton.

### FMX-LP

**Low-profile female MAXI fuses**

| Color code | Amps | Trad'l pack* | Retail pack** |
|---|---|---|---|
| Blue | 20 | FMX-20LP | BP/FMX-20LP-RP |
| White | 25 | FMX-25LP | BP/FMX-25LP-RP |
| Pink | 30 | FMX-30LP | BP/FMX-30LP-RP |
| Green | 40 | FMX-40LP | BP/FMX-40LP-RP |
| Red | 50 | FMX-50LP | BP/FMX-50LP-RP |
| Yellow | 60 | FMX-60LP | BP/FMX-60LP-RP |

* 1 Fuse per pack, 10 packs per shelf carton.
** 1 Fuse per pack, 5 packs per shelf carton.

### FMM

**Micro fuses**

The new FMM micro slow-blow fuse meets the latest demand for smaller, high current circuit protection products being found on new model vehicles.

| Color code | Amps | Trad'l pack* | Retail pack** | Bulk pack*** |
|---|---|---|---|---|
| Grey | 15 | FMM-15 | BP/FMM-15-RP | BK/FMM-15 |
| Blue | 20 | FMM-20 | BP/FMM-20-RP | BK/FMM-20 |
| White | 25 | FMM-25 | BP/FMM-25-RP | BK/FMM-25 |
| Pink | 30 | FMM-30 | BP/FMM-30-RP | BK/FMM-30 |
| Green | 40 | FMM-40 | BP/FMM-40-RP | BK/FMM-40 |

* 1 Fuse per pack, 10 packs per shelf carton.
** 1 Fuse per pack, 5 packs per shelf carton.
*** 50 Fuses per pack.

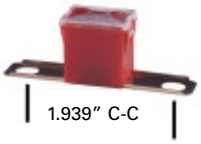
## FL family of cartridge fuses

Used primarily in Japanese-designed vehicles for wiring harness protection.

### FLB

**Bolt-mount fuses**

Fits 13/16" bolt terminal fuse block.




| Color code | Amps | Trad'l pack* | Retail pack** |
|---|---|---|---|
| Pink | 30 | FLB-30 | BP/FLB-30-RP |
| Green | 40 | FLB-40 | BP/FLB-40-RP |
| Red | 50 | FLB-50 | BP/FLB-50-RP |
| Yellow | 60 | FLB-60 | BP/FLB-60-RP |
| Brown | 70 | FLB-70 | BP/FLB-70-RP |
| Black | 80 | FLB-80 | BP/FLB-80-RP |
| Blue | 100 | FLB-100 | BP/FLB-100-RP |
| Gray | 120 | FLB-120 | BP/FLB-120-RP |
| Maroon | 140 | FLB-140 | BP/FLB-140-RP |

* 1 Fuse per pack, 10 packs per shelf carton.
** 1 Fuse per pack, 5 packs per shelf carton.

### FLD

**Bolt-mount fuses**

Fits 9/16" bolt terminal fuse block.

| Color code | Amps | Trad'l pack* | Retail pack** |
|---|---|---|---|
| Pink | 30 | FLD-30 | BP/FLD-30-RP |
| Green | 40 | FLD-40 | BP/FLD-40-RP |
| Red | 50 | FLD-50 | BP/FLD-50-RP |
| Yellow | 60 | FLD-60 | BP/FLD-60-RP |
| Brown | 70 | FLD-70 | BP/FLD-70-RP |
| Black | 80 | FLD-80 | BP/FLD-80-RP |
| Blue | 100 | FLD-100 | BP/FLD-100-RP |
| Gray | 120 | FLD-120 | BP/FLD-120-RP |
| Maroon | 140 | FLD-140 | BP/FLD-140-RP |

* 1 Fuse per pack, 10 packs per shelf carton.
** 1 Fuse per pack, 5 packs per shelf carton.

### FLF

**Female fuses**

| Color code | Amps | Trad'l pack* | Retail pack** |
|---|---|---|---|
| Lt-Blue | 20 | FLF-20 | BP/FLF-20-RP |
| Pink | 30 | FLF-30 | BP/FLF-30-RP |
| Green | 40 | FLF-40 | BP/FLF-40-RP |
| Red | 50 | FLF-50 | BP/FLF-50-RP |
| Yellow | 60 | FLF-60 | BP/FLF-60-RP |

* 1 Fuse per pack, 10 packs per shelf carton.
** 1 Fuse per pack, 5 packs per shelf carton.

### FLG

**Female fuses**

| Color code | Amps | Trad'l pack* | Retail pack** |
|---|---|---|---|
| Red | 50 | FLG-50 | BP/FLG-50-RP |
| Yellow | 60 | FLG-60 | BP/FLG-60-RP |
| Black | 80 | FLG-80 | BP/FLG-80-RP |

* 1 Fuse per pack, 10 packs per shelf carton.
** 1 Fuse per pack, 5 packs per shelf carton.

### FLM

**Male fuses**

| Color code | Amps | Trad'l pack* | Retail pack** |
|---|---|---|---|
| Pink | 30 | FLM-30 | BP/FLM-30-RP |
| Green | 40 | FLM-40 | BP/FLM-40-RP |
| Yellow | 60 | FLM-60 | BP/FLM-60-RP |
| Black | 80 | FLM-80 | BP/FLM-80-RP |
| Blue | 100 | FLM-100 | BP/FLM-100-RP |
| Gray | 120 | FLM-120 | BP/FLM-120-RP |
| Violet | 140 | FLM-140 | — |

* 1 Fuse per pack, 10 packs per shelf carton.
** 1 Fuse per pack, 5 packs per shelf carton.

### FLN

**Female fuses with tab**

| Color code | Amps | Trad'l pack* | Retail pack** |
|---|---|---|---|
| Brown | 25 | FLN-25 | BP/FLN-25-RP |
| Green | 30 | FLN-30 | BP/FLN-30-RP |

* 1 Fuse per pack, 10 packs per shelf carton.
** 1 Fuse per pack, 5 packs per shelf carton.

### FLS

**Miniature female fuses**

| Color code | Amps | Trad'l pack* | Retail pack** |
|---|---|---|---|
| Pink | 30 | FLS-30 | BP/FLS-30-RP |
| Green | 40 | FLS-40 | BP/FLS-40-RP |

* 1 Fuse per pack, 10 packs per shelf carton.
** 1 Fuse per pack, 5 packs per shelf carton.

### Battery terminal fuses

Bussmann series battery terminal fuses (BTFs) provide sales-making opportunities formerly only dealerships and online parts websites enjoyed.

These fuses have been used since 2001 in popular models of Chrysler®, Ford®, Lexus, Lincoln, Mercury, Mitsubishi, Nissan®, Scion, Subaru, Suzuki, and Toyota® models.

Bussmann series BTFs are OEM fuses that contain one or more circuits in a single design to reduce the weight, space and cost of traditional fusing solutions to protect the cables coming off the battery and other electrical components.

These fuses are easy to replace by service technicians and DIYers alike using common hand tools.

**See page 22 for battery switches, and pages 32 and 33 for isolators and separators**

### BTF

**Battery terminal fuses**

| Amps | Trad'l pack* | OEM part no. | Vehicle make |
|---|---|---|---|
| 80 | BTF-1P-80 | 82211AG150 | Subaru |
| | | 3673-950J00 | Suzuki |
| 100 | BTF-1P-100 | MN164187 | Mitsubishi |
| | | 3673-952J00 | Suzuki |
| 120 | BTF-1P-120 | MN164188 | Mitsubishi |
| | | 3673-966J00 | Suzuki |
| 140 | BTF-1P-140 | 82620-33040 | Lexus, Scion, Toyota |
| | | 24380-JA70A | Nissan |
| 180, 120 | BTF-2P-180120 | 68164797-AA | Chrysler |
| 200, 100 | BTF-2P-200100 | BR3Z-14526-AA | Ford |
| | | AE5Z-14526-BA | Ford, Lincoln, Mercury |
| 250, 125 | BTF-2P-250125 | AL3Z-14526-AA | Ford |
| 120, 60, 80 | BTF-3P-1206080** | 82620-52080A | Scion, Toyota |
| 120, 80, 80 | BTF-3P-1208080** | 82620-52060A | Scion, Toyota |

* 1 Fuse per pack, 5 packs per shelf carton.
** 1 Fuse per pack, 24 packs per master carton.

### CBBF battery fuses

These fuses are suitable for main and auxiliary circuit protection (alternator outputs, starter motor inputs and accessories) in demanding environments or tight space constraints. Marine-rated under SAE J1171 for ignition protection. Use with CBBF-MBC mounting bar.

| Amps | Trad'l pack* |
|---|---|
| 30 | CBBF-30 |
| 40 | CBBF-40 |
| 50 | CBBF-50 |
| 60 | CBBF-60 |
| 70 | CBBF-75 |
| 80 | CBBF-80 |
| 90 | CBBF-90 |
| 100 | CBBF-100 |
| 125 | CBBF-125 |
| 150 | CBBF-150 |
| 175 | CBBF-175 |
| 200 | CBBF-200 |
| 250 | CBBF-250 |
| 300 | CBBF-300 |

* 1 Fuse per pack, 10 packs per shelf carton.

### CBBF-MBC mounting bar

Mounting bar with 1/4-20 stud, nut and cover for the CBBF battery fuse.

Order catalog number CBBF-MBC*.

* 1 Bar per pack, 10 packs per shelf carton.

### AMG

**Stud-mount fuses**

AMG fuses are for high current applications on select late model vehicles and available in ratings from 80 to 500 A. Use with the HMEG fuse block - see below.

| Amps | Trad'l pack* | Retail pack** |
|---|---|---|
| 80 | AMG-80 | — |
| 100 | AMG-100 | — |
| 125 | AMG-125 | — |
| 150 | AMG-150 | — |
| 175 | AMG-175 | BP/AMG-175-RP |
| 200 | AMG-200 | — |
| 225 | AMG-225 | — |
| 250 | AMG-250 | — |
| 300 | AMG-300 | — |
| 400 | AMG-400 | — |
| 450 | AMG-450 | — |
| 500 | AMG-500 | — |

* 1 Fuse per pack, 10 packs per shelf carton.
** 1 Fuse per pack, 5 packs per shelf carton.

### HMEG

**Fuse block**

For use with up to 500 amp AMG fuses, the HMEG bolt-in fuse holder features an impact resistant base and elastomer cover for full access and ease of wiring using 8 AWG to 1/0 wire.

Order catalog number **HMEG*** or bulk catalog number **FMG-211.****

*1 fuse block per pack, 24 packs per master carton.
** 100 fuse blocks per pack.

### AMI

**Stud-mount fuses**

Used in some late model vehicle systems for high power distribution. Use with HMID fuse holder - see below.

| Amps | Trad'l pack* |
|---|---|
| 30 | AMI-30 |
| 40 | AMI-40 |
| 50 | AMI-50 |
| 60 | AMI-60 |
| 70 | AMI-70 |
| 80 | AMI-80 |
| 100 | AMI-100 |
| 125 | AMI-125 |
| 150 | AMI-150B |
| 200 | AMI-200 |

* 1 Fuse per pack, 10 packs per shelf carton.

### HMID

**Fuse block**

Use with up to 80 amp AMI fuses. Multiple blocks can be dovetailed together to form an assembly.

Removable, splash resistant cover for full access and ease of wiring using 8 AWG to 1/0 wire.

Order catalog number **HMID.***

* 1 Fuse block per pack, 10 packs per shelf carton.

We offer a complete line of Bussmann series fuse holders to install blade or glass tube fuses. Choose water resistant and/or splash-proof versions for extra protection in special applications. Five available connector types meet the needs of technicians and do-it-yourselfers:

- **Wire loop:** To install, simply cut the wire, strip ends and attach each end to the circuit. Requires using additional connectors. See catalog numbers HHK, HMJ, HMK, HRI, HRJ and HRK.
- **Open wire:** To install, simply strip lead ends and attach each end to the circuit. Requires using additional connectors. See catalog numbers ATC-FHID, ATM-FHID, MAX-FHID, HHC, HHD, HHF, HHG, HHL, HHM, HHN, HHR, HHU and HHX.
- **Crimp-on:** Strip the wire, insert into fuse holder and crimp tightly, and you're done. No additional hardware needed. See catalog numbers HFA, HFB and HHB.
- **Self-stripping:** To install, simply locate fuse holder at a convenient spot along the wire. Snap fuse holder closed around wire to automatically pierce insulation. See catalog number HHS.
- **Solder:** To install, simply solder the wire onto the holder's terminals. See catalog number HKP.
- **Quick-connect:** Attach fully insulated female terminal onto the 1/4" quick-connect terminals. See catalog numbers HKP-HH, HTB-26I, HTB-38I, HTB-68I and HTB-88I.

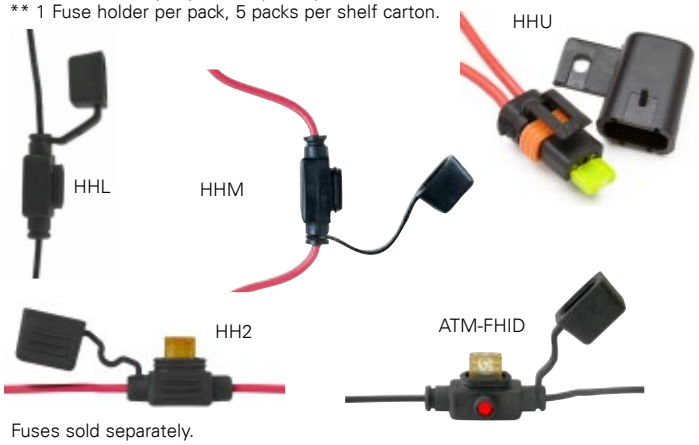
Select fuse holders by matching it to the wire size being fused. An undersized fuse holder will increase electrical resistance and reduce performance in the circuit.

NOTE: Never install a fuse with a larger amp rating than specified for the application, holder or wire size.

### In-line ATR and ATM fuse holders

| Trad'l pack* | Retail pack** | Max volts/amps | Leadwire | Description |
|---|---|---|---|---|
| **ATR** | | | | |
| HH2 | — | 32 V/15 A | 2x4"/#16 | Holder with cover |
| **ATM** | | | | |
| HHL | BP/HHL-RP | 32 V/20 A | 2x4"/#16 | Holder with cover |
| HHM | BP/HHM-RP | 32 V/30 A | 2x4"/#12 | Holder with cover |
| HHU | BP/HHU | 32 V/30 A | 2x4"/#12 | Water-resistant holder |
| ATM-FHID | BP/ATM-FHID | 32 V/20 A | 2x4"/#16 | Holder with protective cover and open fuse illuminating LED |

* 1 Fuse holder per pack, 10 packs per shelf carton.
** 1 Fuse holder per pack, 5 packs per shelf carton.

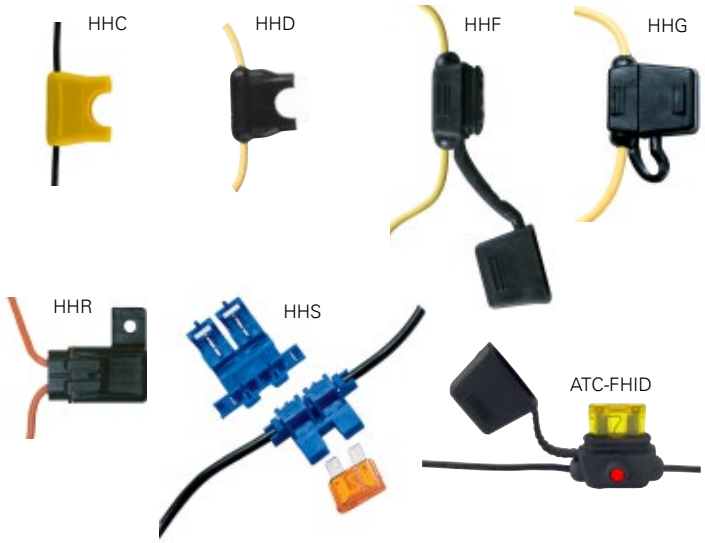



Fuses sold separately.

### In-line ATC fuse holders

| Trad'l pack* | Retail pack** | Max volts/amps | Leadwire | Description |
|---|---|---|---|---|
| HHC | BP/HHC-RP | 32 V/20 A | 2x4"/#16 | Yellow fuse holder |
| HHD | BP/HHD-RP | 32 V/30 A | 2x4"/#12 | Black fuse holder |
| — | BP/HHD-30-RP | 32 V/30 A | 2x4"/#12 | Holder with ATC-30 A fuse |
| HHF | BP/HHF-RP | 32 V/20 A | 2x4"/#16 | Holder with protective cover |
| HHG | BP/HHG-RP | 32 V/30 A | 2x4"/#12 | Heavy-duty holder with cover |
| HHR | BP/HHR | 32 V/30 A | 2x5"/#12 | Heavy-duty water-resistant holder |
| — | BP/HHS-RP | 32 V/20 A | #18 to 14 | Self-stripping fuse holder |
| ATC-FHID | BP/ATC-FHID | 32 V/20 A | 2x6"/#16 | Holder with protective cover and open fuse illuminating LED |

* 1 Fuse holder per pack, 10 packs per shelf carton.
** 1 Fuse holder per pack, 5 packs per shelf carton.

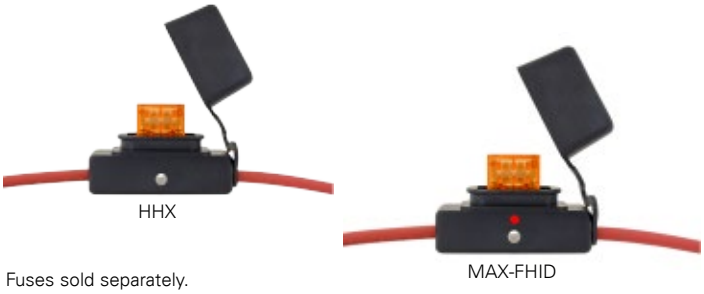



Fuses sold separately.

### In-line MAXI fuse holders

| Catalog no.* | Retail pack** | Max volts /amps | Lead-wire | Description |
|---|---|---|---|---|
| HHX | — | 32 V/60 A | 2x5"/#6 | Fuse holder with cover |
| MAX-FHID | | 32 V/60 A | 2x5"/#6 | Fuse holder with protective cap and open fuse illuminating LED |

** 1 Fuse holder per pack, 10 packs per shelf carton.
** 1 Fuse holder per pack, 5 packs per shelf carton.




Fuses sold separately.

### ATR, low-profile ATM, ATM and ATC add-a-circuits and fuse taps

| Retail pack* | Description |
|---|---|
| BP/ATM-TAP-RP | Taps into existing ATM fuse for additional non-fused circuit, includes crimp-on connector - fuses not included |
| BP/ATC-TAP-RP | Taps into existing ATC fuse by fitting over the leg for additional non-fused circuit, includes crimp-on connector - fuses not included |
| BP/HHTR-RP | Adds a 10 A max ATR 2-leg micro fuse circuit by inserting into an existing ATR fuse block with 5 inch #16 leadwire and crimp connector - fuses not included |
| BP/HHLP-RP | Adds a 10 A max low-profile ATM fuse circuit by inserting into an existing ATM fuse block with 5 inch #16 leadwire and crimp connector - fuses not included |
| BP/HHH-RP | Adds a 10 A max ATM fuse circuit by inserting into an existing ATM fuse block with 5 inch #16 leadwire and crimp connector - fuses not included |
| BP/HHA-RP | Adds a 10 A max ATC fuse circuit by inserting into an existing ATC fuse block with 5 inch #16 leadwire and crimp connector - fuses not included |

* 1 Part per pack, 5 packs per shelf carton.a

BP/ATM-TAP-RP

For ATM fuse

BP/ATC-TAP-RP

For ATC fuse

BP/HHTR-RP

For ATR 2-leg micro fuse

BP/HHLP-RP

For low-profile ATM fuse

BP/HHH-RP

For ATM fuse

BP/HHA-RP

For ATC fuse

Fuses sold separately.

### Glass tube in-line holders for 1/4" diameter fuses

| Trad'l pack* | Retail pack** | Fuse/size | Max volts/amps | Leads/terminals | Description/feature |
|---|---|---|---|---|---|
| HFA | — | 1/4" x 1-1/4" | 250 V/20 A | Crimp #12 to 16 wire | Water-resistant - black body |
| HFB-R | BP/HFB-RP | 1/4" x 1-1/4" | 32 V/30 A | Crimp #12 to 18 wire | Water-resistant - yellow body |
| HHB | BP/HHB-RP | 1/4" x 7/8" to 1-1/4" | 32 V/30 A | Crimp #12 to 16 wire | Universal - yellow body |
| HHK | BP/HHK-RP | 1/4" x 5/8" to 1-1/4" and SFE-20 | 32 V/20 A | #14 leadwire/yellow | Universal nylon, twist lock, no fuse - black body |
| HHN† | BP/HHN-RP | 1/4" x 1-1/4" | 32 V/30 A | #12 leadwire/yellow | Nylon heavy-duty with AGC-30 fuse - white body |
| HLR | — | For GMF fuse, see page 38 | 300 V/15 A | 6" of #18 leadwire/red | Holder with installed lineside terminal wire for GMF fuses |
| HMJ | BP/HMJ-RP | For SFE-20 (included) | 32 V/20 A | 8" of #14 leadwire/ black | With fuse and wire loop leads - black body |
| HMK | BP/HMK-RP | 1/4" x 1-1/4" and SFE-20 | 32 V/30 A | #12 leadwire/black | No fuse, wire loop leads - black body |
| HRH | — | For SFE-9 (included) | 32 V/9 A | 19" of #14 leadwire | With fuse and wire loop leads - black body |
| HRI | — | For SFE-14 (included) | 32 V/14 A | 19" of #14 leadwire/ black | With fuse and wire loop leads - gray body |
| HRJ | — | For SFE-20 (included) | 32 V/20 A | 19" of #14 leadwire/ black | With fuse and wire loop leads - black body |
| HRK | BP/HRK-RP | 1/4" dia. x 7/8" to 1-1/4" | 32 V/20 A | #14 leadwire/black | Universal with wire loop leads and springs for different fuse lengths - black body |

* 1 Fuse holder per pack, 10 packs per shelf carton.
** 1 Fuse holder per pack, 5 packs per shelf carton.
† Traditional pack not sold with AGC-30 fuse.

HFA

HFB

HHB

HHK

HHN

HLR

HMJ

HMK

HRI

HRJ

HRK

### Panel-mount holders for 1/4" x 1-1/4" fuses

| Trad'l pack* | Retail pack** | Description/mounting | Max. panel thickness | Knob type | Terminals | Max volts/amps |
|---|---|---|---|---|---|---|
| HKP | — | High-profile cover knob, rear hexnut | 0.3" | Knob | Solder terminals | 250 V/30 A |
| HKP-HH | BP/HKP-HH-RP | High-profile cover knob, rear hexnut | 0.3" | Knob | 1/4" quick-connect terminals | 250 V/15 A |
| HTB-26I | — | Low-profile cover knob, rear hexnut | 0.3" | Knob | In-line 1/4" quick-connect terminals | 250 V/20 A |
| HTB-38I | — | Low-profile cover knob, rear hexnut | 0.3" | Screwdriver/ Slotted | Right angle 1/4" quick-connect terminals | 250 V/20 A |
| HTB-68I | — | Low-profile cover knob, front hexnut | 0.3" | Knob | Right angle 1/4" quick-connect terminals | 250 V/20 A |
| HTB-88I | — | Low-profile cover knob, through-hole snap | 0.125" | Knob | Right angle 1/4" quick-connect terminals | 250 V/20 A |

* 1 Fuse holder per pack, 10 packs per shelf carton.
** 1 Fuse holder per pack, 5 packs per shelf carton.

HKP

HKP-HH

HTB-26I

HTB-38I

HTB-68I

HTB-88I

### Splash-proof ATR, ATM and ATC fuse blocks

The Bussmann series FB fuse blocks are available in 4-, 6-, 8- and 10-pole versions for ATR micro, ATM and ATC fuses. The clear plastic cover allows viewing for installed fuse amp ratings and blown fuses when used with *easy*ID™ ATM and ATC fuses. The cover's O-ring provides a splash-proof IPX4 rating and ensures a positive fit to reduce infiltration of dirt and other contaminants. The plastic back plate provides additional isolation from ground sources when mounted on any chassis surface. All blocks are rated 32 V and 20 amps per pole, with maximum total amps per block not to exceed the value shown in the catalog number table.

Mounting requires two customer-supplied #10 screws. Electrical connection is easily made with readily available, customer supplied 1/4" quick-connect terminals and 12 to 16 AWG* wire.

*Wire size dependent on length of run.

| Fuse type | Poles | Retail pack* | Max. total amps per block |
|---|---|---|---|
| ATR micro | 4 | BP/FB4-ATR | 30 |
| | 6 | BP/FB6-ATR | 45 |
| | 8 | BP/FB8-ATR | 60 |
| | 10 | BP/FB10-ATR | 90 |
| ATM mini | 4 | BP/FB4-ATM | 30 |
| | 6 | BP/FB6-ATM | 45 |
| | 8 | BP/FB8-ATM | 60 |
| | 10 | BP/FB10-ATM | 90 |
| ATC | 4 | BP/FB4-ATC | 30 |
| | 6 | BP/FB6-ATC | 45 |
| | 8 | BP/FB8-ATC | 60 |
| | 10 | BP/FB10-ATC | 90 |

* 1 Per pack, 5 packs per shelf carton.

### RTMF ATM fuse panel

The Rear Terminal 20 Position (RTMF) fuse panel for ATM fuses provides efficient power distribution in a rugged compact package. The RTMF offers a weather-tight enclosure (IP66/67) for ATM fuses and circuit breakers when cover, cable seals, and cavity plugs are installed.*

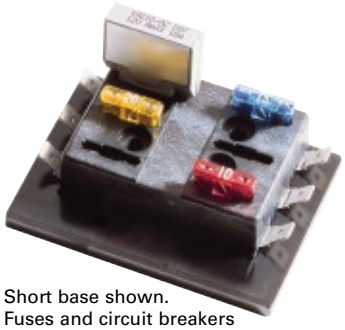
* Electrical terminals, cable seals and cavity plugs are either Delphi Packard Metri-Pack® 280 Series terminals (sealed/tangless) or AMP® terminals. They accept #12-22 AWG wire sizes. Delphi Packard 280 Series cavity plugs are installed where wires are not used. Seals and cavity plugs not sold by Eaton.

Shown with deep cover. Fuses and circuit breakers sold separately.

| Catalog no.* | Description |
|---|---|
| RTMF | 20 position fuse block |
| RTMF-SC | 20 position fuse block with shallow cover |
| RTMF-DC | 20 position fuse block with deep cover |

* 1 Per box, 10 boxes per shelf carton.

### 15600 fuse panels



Short base shown. Fuses and circuit breakers sold separately.

A single, common power input makes it simple to wire multiple fused circuits - each rated to 20 amps (95 amps max per panel), up to 32 volts. Molded of high grade thermoplastic, for superior performance, the 15600 fuse panel features 1/4" quick-connect terminals for easy installation. Recessed fuse contacts provide finger-safe protection.

Available in short base (without ground pad terminal strip) and long base (includes ground pad terminal strip that provides 1/4" quick connect terminals for separate ground lead connection).

**Note:** The 15600 ATC fuse panels are not intended for installation under the hood or in an environment that would expose them to water or extreme temperatures.

| Fuse positions | Short base catalog no.* | Short base retail pack** | Long base catalog no. |
|---|---|---|---|
| 4 | 15600-04-20 | — | 15600-04-21 |
| 6 | 15600-06-20 | BP/15600-06-20 | 15600-06-21 |
| 8 | 15600-08-20 | — | 15600-08-21 |
| 10 | 15600-10-20 | — | 15600-10-21 |
| 12 | 15600-12-20 | — | 15600-12-21 |
| 14 | 15600-14-20 | — | 15600-14-21 |
| 16 | 15600-16-20 | — | 15600-16-21 |
| 18 | 15600-18-20 | — | 15600-18-21 |
| 20 | 15600-20-20 | — | 15600-20-21 |

* 1 Per pack.
** 1 Per pack, 5 boxes per shelf carton.

### Power distribution relay module and fuse block

The sealed power FMX fuse module (CBPFM) and power relay module (CBPRM) are compact power distribution modules for high current applications having extreme moisture and high vibration.

The CBPFM power fuse module has two FMX fuse positions for separate circuits.

The 24 volt CBPRM power relay module contains a 35 amp relay and two FMX fuse positions (one protects the relay and the other a single-circuit in-line fuse).

CBPFM
Power fuse module

Both the CBPRM and CBPFM feature rugged M8 power input studs, and an IP66 removable, weather-tight cover to protect the fuse positions.

Electrical terminations not supplied by Eaton, FMX fuses sold separately.

CBPRM
Power relay module

| Catalog no.* | Description |
|---|---|
| CBPFM | Power fuse module |
| CBPRM | Power relay module |

* 1 Per box.

### Bussmann series S-8202 300 volt, 20 amp glass tube fuse blocks

S-8202 blocks with 1/4" quick-connect 40° bend terminals are available in 1 up to 12 poles. Break-away design permits snapping off or combining poles to get the exact number required for the application. UL Recognized, 20 amps maximum.

| Fuse block poles | Trad'l pack* | Retail pack** |
|---|---|---|
| 1 | S-8202-1 | — |
| 2 | S-8202-2 | BP/S-8202-2-RP |
| 3 | S-8202-3 | — |
| 4 | S-8202-4 | BP/S-8202-4-RP |
| 5 | S-8202-5 | — |
| 10 | S-8202-10 | — |
| 12 | S-8202-12 | — |

* 1 Per pack, 10 packs per shelf carton.
** 1 Per pack, 5 packs per shelf carton.

### Bussmann series S-8301 300 volt, 30 amp glass tube fuse blocks

S-8301 blocks with screw connect terminals are available in 1 up to 12 poles. Break-away design permits snapping off or combining poles to get the exact number required for the application. UL Recognized, 30 amps maximum.

| Fuse block poles | Trad'l pack* |
|---|---|
| 1 | S-8301-1 |
| 2 | S-8301-2 |
| 3 | S-8301-3 |
| 4 | S-8301-4 |
| 5 | S-8301-5 |
| 6 | S-8301-6 |
| 8 | S-8301-8 |
| 12 | S-8301-12 |

* 1 Per pack, 10 packs per shelf carton.

### Fusible link wire

The BP/FL-14 and BP/FL-16 fusible link wire kits include 14 Vdc wire with printed wire gauge label. BP/FLW-14 is a six-foot coil of bulk fusible link wire.

| Retail pack* | Description |
|---|---|
| BP/FL-14 | 9 inches of 14 gauge fusible link wire with 3/8" and 5/16" terminals and crimp connector |
| BP/FL-16 | 9 inches of 16 gauge fusible link wire with 1/4" and 5/16" terminals and crimp connector |
| BP/FLW-14 | 6 foot coil of 14 gauge fusible link wire |

* 1 Fusible link per pack, 5 packs per shelf carton.

### ANN and ANL current limiters

Used to protect charging systems in battery-operated vehicles like forklifts and golf carts, the ANN and ANL limiters offer high amp ratings in a compact 7/8" x 3-3/16" size.

Durable glass-laminated melamine body and riveted construction provides a rugged package and clear window provides visual indication.

Both the ANN and ANL limiters use the SFR fuse block.

### ANN

**Very fast-acting limiters**

| Trad'l/pack catalog no. | | |
|---|---|---|
| ANN-10 | ANN-125 | ANN-325 |
| ANN-35 | ANN-150 | ANN-350 |
| ANN-40 | ANN-175 | ANN-400 |
| ANN-50 | ANN-200 | ANN-500 |
| ANN-60 | ANN-225 | ANN-600 |
| ANN-80 | ANN-250 | ANN-700 |
| ANN-90 | ANN-275 | ANN-800 |
| ANN-100 | ANN-300 | — |

* 1 Limiter per pack, 5 packs per shelf carton.

### ANL

**Non time-delay limiters**

| Trad'l/pack catalog no. | | |
|---|---|---|
| ANL-35 | ANL-150 | ANL-350 |
| ANL-40 | ANL-175 | ANL-400 |
| ANL-50 | ANL-200 | ANL-500 |
| ANL-60 | ANL-225 | ANL-600 |
| ANL-80 | ANL-250 | ANL-675 |
| ANL-100 | ANL-275 | ANL-750 |
| ANL-125 | ANL-300 | — |
| ANL-130 | ANL-325 | — |

* 1 Limiter per pack, 5 packs per shelf carton.

### SFR

**Block for ANL and ANN limiters**

Open stud fuse block handles up to 800 amps. Available only without cover.

Order catalog number **SFR**.*

* 1 Block per pack, 100 packs per master carton.

We offer a large selection of Bussmann series automotive circuit breakers including both OEM-style and fuse-replacement devices.

### High amp circuit breakers

High amp circuit breakers are available for automotive and marine applications in Type I and Type III reset modes. Typically used in auxiliary and accessory circuits for trucks, busses, RVs and boats, they are available in weatherproof/waterproof panel and flush mount versions. They can also be used in battery charging systems that use battery isolators to manage and protect batteries in multi-battery installations.

### Type I - automatic reset

Type I circuit breakers automatically reset after opening. If the fault or overcurrent condition still exists, the breaker will continue to cycle between ON and OFF positions until the overcurrent problem is corrected. These devices are sometimes called "cycling breakers." Type I/Automatic Reset circuit breakers do not address, or correct, overcurrent or fault conditions. They only react by cycling OFF and ON. Any overcurrent or fault condition that causes a Type I circuit breaker to operate should be corrected as soon as possible. Continued vehicle operation with an overcurrent or fault condition (causing the Type I circuit breaker to cycle) is NOT recommended.

### Type II - modified reset

Type II circuit breakers will remain “tripped” by an internal resistor (in the OFF position) as long as the circuit is powered. Type II breakers can be reset by turning the circuit OFF, or by turning the ignition switch to the OFF position. These devices are sometimes called "non-cycling breakers."

### Type III - manual reset

Type III circuit breakers will remain tripped (in the OFF position) until an indicator button or lever is manually reset. Some Type III breakers are available with a switch feature that allows the use of an external button to de-energize the circuit.

### Mini devices

Transorb, resistor and diode electrical protection devices easily install in common ATM fuse holders and blocks. These circuit protection devices provide voltage and current limiting functionality and are designed for the on- and off-highway requirements of trucks, RVs, construction, agriculture, ATV and material handling equipment.

- **Transorb** - Protects against voltage spikes.

  Clamp rating: 27 Vdc
  Power rating: 1500 W
- **Resistor** - Drops circuit voltage.

  Power rating: 5 W
  Resistance: 68 Ω
- **Diode** - Prevents reverse current flow.

  Amp rating: 6 A

| Trad'l pack* | Description |
|---|---|
| CB22901-1.5 | Transorb voltage spike protector |
| CB22902-68 | Resistor voltage drop device |
| CB22903-6 | Diode reverse current protector |
| CB22903-6V | Diode reverse current protector with wing key |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### ATM footprint circuit breakers

Type I, Type II and Type III circuit breakers match the ATM fuse footprint. Ultra-thin, to fit in tight spaces, they're the smallest automotive circuit breakers on the market and comply with SAE standard J553.

### CB211

**Type I ATM circuit breaker**

| Amps | Trad'l pack* | Retail pack** |
|---|---|---|
| 7-1/2 | CB211-7-1/2 | — |
| 10 | CB211-10 | BP/CB211-10-RP |
| 15 | CB211-15 | BP/CB211-15-RP |
| 20 | CB211-20 | BP/CB211-20-RP |
| 25 | CB211-25 | BP/CB211-25-RP |
| 30 | CB211-30 | BP/CB211-30-RP |

* 1 Circuit breaker per pack, 10 packs per shelf carton.
** 1 Circuit breaker per pack, 5 packs per shelf carton.

### CB212

**Type II ATM circuit breaker**

| Amps | Trad'l pack* |
|---|---|
| 10 | CB212-10 |
| 15 | CB212-15 |
| 20 | CB212-20 |
| 25 | CB212-25 |
| 30 | CB212-30 |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CB233

**Type III ATM circuit breaker**

| Color code | Amps | Trad'l pack* |
|---|---|---|
| Tan | 5 | CB233-05 |
| Brown | 7-1/2 | CB233-71/2 |
| Red | 10 | CB233-10 |
| Blue | 15 | CB233-15 |
| Yellow | 20 | CB233-20 |
| White | 25 | CB233-25 |
| Green | 30 | CB233-30 |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CB222OS

**Type II ATM circuit breaker with offset terminals**

| Amps | Trad'l pack* |
|---|---|
| 05 | CB222OS-05 |
| 10 | CB222OS-10 |
| 15 | CB222OS-15 |
| 20 | CB222OS-20 |
| 25 | CB222OS-25 |
| 30 | CB222OS-30 |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CB223OS

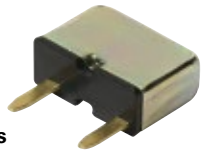
**Type III ATM circuit breaker with offset terminals**

| Amps | Trad'l pack* |
|---|---|
| 05 | CB223OS-05 |
| 7-1/2 | CB223OS-7-1/2 |
| 10 | CB223OS-10 |
| 15 | CB223OS-15 |
| 20 | CB223OS-20 |
| 25 | CB223OS-25 |
| 30 | CB223OS-30 |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### MMB

**Type I, wide ATM footprint circuit breaker for GM vehicles**



| Amps | Trad'l pack* | OEM part no. |
|---|---|---|
| 15 | MMB-15 | 12135171 |
| 20 | MMB-20 | 12135072 |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### ATC footprint circuit breakers

Type I, Type II and Type III circuit breakers match the ATC fuse footprint. They are the thinnest available in the aftermarket and comply with SAE standard J553.

CB227 complies with SAE J553 and SAE J1171 for ignition protection. We also offer the Bussmann series ACB-20, CCB-25, and FCB-20 breakers as replacements for specific OEM applications.

### ACB-20

**Type I ATC circuit breaker for GM vehicles**

| Amps | Trad'l pack* | OEM no. |
|---|---|---|
| 20 | ACB-20 | 12040816 |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CB221

**Type I ATC circuit breakers**

| Amps | Trad'l pack* |
|---|---|
| 7-1/2 | CB221-7-1/2 |
| 10 | CB221-10 |
| 15 | CB221-15 |
| 20 | CB221-20 |
| 25 | CB221-25 |
| 30 | CB221-30 |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CB222

**Type II ATC circuit breakers**

| Amps | Trad'l pack* |
|---|---|
| 10 | CB222-10 |
| 15 | CB222-15 |
| 20 | CB222-20 |
| 25 | CB222-25 |
| 30 | CB222-30 |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CB223

**Type III ATC circuit breakers**

| Amps | Trad'l pack* |
|---|---|
| 7-1/2 | CB223-7-1/2 |
| 10 | CB223-10 |
| 15 | CB223-15 |
| 20 | CB223-20 |
| 25 | CB223-25 |
| 30 | CB223-30 |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CB227

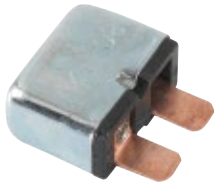
**Type III ATC low-profile circuit breakers**

| Color code | Amps | Trad'l pack* |
|---|---|---|
| Tan | 5 | CB227-05 |
| Moss Green | 6 | CB227-06 |
| Brown | 7-1/2 | CB227-7-1/2 |
| Red | 10 | CB227-10 |
| Blue | 15 | CB227-15 |
| Yellow | 20 | CB227-20 |
| White | 25 | CB227-25 |
| Green | 30 | CB227-30 |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CBB-30

**Type II ATC circuit breaker**



| Amps | Trad'l pack* | Retail pack** |
|---|---|---|
| 30 | CBB-30 | BP/CBB-30-RP |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CCB-25

**Type I ATC circuit breaker for Chrysler vehicles**

| Amps | Trad'l pack* | OEM no. |
|---|---|---|
| CCB-25 | CCB-25 | 4527053 |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### FCB-20

**Type II ATC circuit breaker for Ford vehicles**

| Amps | Trad'l pack* | Retail pack | OEM no. |
|---|---|---|---|
| 20 | FCB-20 | BP/FCB-20 | D9AB-14526-BA |

* 1 Fuse per pack, 10 packs per shelf carton.
** 1 Fuse per pack, 5 packs per shelf carton.

### UCB

**Type I ATC circuit breakers**

UCB breakers feature "snap-off" universal blades to fit tight fuse block spacing or recessed fuse terminals.

| Color code | Amps | Trad'l pack* | Retail pack** | Bulk pack*** |
|---|---|---|---|---|
| Plain | 6 | UCB-6 | — | — |
| Brown | 8 | UCB-8 | — | — |
| Red | 10 | UCB-10 | BP/UCB-10-RP | BK/UCB-10 |
| Blue | 15 | UCB-15 | BP/UCB-15-RP | BK/UCB-15 |
| Yellow | 20 | UCB-20 | BP/UCB-20-RP | BK/UCB-20 |
| Plain | 25 | UCB-25 | BP/UCB-25-RP | — |
| Green | 30 | UCB-30 | BP/UCB-30-RP | BK/UCB-30 |

* 1 Circuit breaker per pack, 10 packs per shelf carton.
** 1 Circuit breaker per pack, 5 packs per shelf carton.
*** 100 Circuit breakers per pack.

## MAXI footprint circuit breakers

Bussmann series MAXI circuit breakers are the first breakers on the market to match the MAXI fuse footprint and body dimensions.

### CB1911

**Type I MAXI circuit breakers**

| Amps | Traditional pack* |
|---|---|
| 10 | CB1911-10 |
| 15 | CB1911-15 |
| 20 | CB1911-20 |
| 25 | CB1911-25 |
| 30 | CB1911-30 |
| 35 | CB1911-35 |
| 40 | CB1911-40 |
| 50 | CB1911-50 |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CB1921

**Type II MAXI circuit breakers**

| Amps | Traditional pack* |
|---|---|
| 10 | CB1921-10 |
| 15 | CB1921-15 |
| 20 | CB1921-20 |
| 25 | CB1921-25 |
| 30 | CB1921-30 |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

## Glass tube footprint breakers

### CBF

**Type II circuit breakers for glass tube fuse blocks**

CBF circuit breakers can be used to replace glass fuses in blocks for 1/4" x 1-1/4" fuses.

| Amps | Trad'l pack* | Retail pack** |
|---|---|---|
| 10 | CBF-10 | — |
| 15 | CBF-15 | — |
| 20 | CBF-20 | BP/CBF-20-RP |
| 25 | CBF-25 | — |
| 30 | CBF-30 | BP/CBF-30-RP |
| 35 | CBF-35 | — |
| 40 | CBF-40 | — |

* 1 Circuit breaker per pack, 10 packs per shelf carton.
** 1 Circuit breaker per pack, 5 packs per shelf carton.

## Heavy-duty circuit breakers

Ideal for many heavy-duty and truck applications, Bussmann series stud-terminal and quick-connect circuit breakers are available with and without a mounting bracket and comply with SAE standard J553.

### CB123-B

**Type III 10-32 stud-terminal circuit breakers with crosswise bracket**

| Amps | Traditional pack* |
|---|---|
| 10 | CB123-10B |
| 15 | CB123-15B |
| 20 | CB123-20B |
| 30 | CB123-30B |
| 40 | CB123-40B |
| 50 | CB123-50B |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CB123-HB

**Type III 10-32 stud-terminal circuit breakers with lengthwise bracket**

| Amps | Traditional pack* |
|---|---|
| 10 | CB123-10HB |
| 15 | CB123-15HB |
| 20 | CB123-20HB |
| 30 | CB123-30HB |
| 40 | CB123-40HB |
| 50 | CB123-50HB |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CBC

**Type I 10-32 stud-terminal circuit breakers**

| Amps | Traditional pack* |
|---|---|
| 8 | CBC-8 |
| 10 | CBC-10 |
| 15 | CBC-15 |
| 20 | CBC-20 |
| 25 | CBC-25 |
| 30 | CBC-30 |
| 35 | CBC-35 |
| 40 | CBC-40 |
| 50 | CBC-50 |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CBC-B

**Type I 10-32 stud-terminal circuit breakers with crosswise bracket**

| Amps | Trad'l pack* | Retail pack** |
|---|---|---|
| 8 | CBC-8B | — |
| 10 | CBC-10B | — |
| 15 | CBC-15B | — |
| 20 | CBC-20B | BP/CBC-20B-RP |
| 25 | CBC-25B | — |
| 30 | CBC-30B | BP/CBC-30B-RP |
| 35 | CBC-35B | — |
| 40 | CBC-40B | BP/CBC-40B-RP |
| 50 | CBC-50B | BP/CBC-50B-RP |

* 1 Circuit breaker per pack,10 packs per shelf carton.
** 1 Circuit breaker per pack, 5 packs per shelf carton.

### CBC-BWP

**Type I 10-32 stud-terminal weatherproof circuit breakers with crosswise bracket**

| Amps | Traditional pack* |
|---|---|
| 20 | CBC-20BWP |
| 30 | CBC-30BWP |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CBC-HB

**Type I 10-32 stud-terminal circuit breakers with lengthwise bracket**

| Amps | Traditional pack* | Retail pack** |
|---|---|---|
| 10 | CBC-10HB | — |
| 15 | CBC-15HB | — |
| 20 | CBC-20HB | BP/CBC-20HB-RP |
| 25 | CBC-25HB | — |
| 30 | CBC-30HB | BP/CBC-30HB-RP |
| 40 | CBC-40HB | BP/CBC-40HB-RP |
| 50 | CBC-50HB | BP/CBC-50HB-RP |

* 1 Circuit breaker per pack, 10 packs per shelf carton.
** 1 Circuit breaker per pack, 5 packs per shelf carton.

### CBP-BA

**Type I 10-32 stud-terminal circuit breakers with crosswise bracket**

| Amps | Traditional pack* | Retail pack** |
|---|---|---|
| 20 | CBP-20BA | — |
| 25 | CBP-25BA | — |
| 30 | CBP-30BA | BP/CBP-30BA-RP |
| 40 | CBP-40BA | — |
| 50 | CBP-50BA | BP/CBP-50BA-RP |

* 1 Circuit breaker per pack, 10 packs per shelf carton.
** 1 Circuit breaker per pack, 5 packs per shelf carton.

### Splash proof covers

| Catalog no. | Description | Pack qty. | Shelf qty. | Master qty. |
|---|---|---|---|---|
| CB-CVR | Cover for stud terminal circuit breaker | 1 | 10 | 300 |
| BK/CB-CVR | Cover for stud terminal circuit breaker-BULK | — | 100 | 2000 |
| BP/CB20HB-CVR* | CB123-20HB with cover-retail pack | 1 | 5 | 120 |
| BP/CB40HB-CVR* | CB123-40HB with cover-retail pack | 1 | 5 | 120 |

* Packed with CB123-20HB and CB123-40HB.

### Quick-connect circuit breakers

For use in trucks, RVs, boats, buses, etc. featuring 1/4" quick-connect terminals for easy installation.

### CB174

**Type III panel-mount circuit breakers with 1/4" quick-connect terminals**

| Amps | Traditional pack* |
|---|---|
| 10 | CB174-10 |
| 15 | CB174-15 |
| 20 | CB174-20 |
| 30 | CB174-30 |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CBT-M

**Type II circuit breakers for Mack® trucks with 1/4" blades on 1" centers**

| Amps | Traditional pack* |
|---|---|
| 15 | CBT-15M |
| 20 | CBT-20M |
| 25 | CBT-25M |
| 30 | CBT-30M |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CBT-N

**Type II circuit breakers for Navistar® trucks with 1/4" blades on 1.08" centers**

| Amps | Traditional pack* |
|---|---|
| 20 | CBT-20N |
| 25 | CBT-25N |
| 30 | CBT-30N |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

### CBU

**Type I circuit breaker with 1/4" quick-connect terminals on 0.99" centers with crosswise bracket**

| Amps | Traditional pack* |
|---|---|
| 30 | CBU-30B |

* 1 Circuit breaker per pack, 10 packs per shelf carton.

## High amp circuit breakers

High amp circuit breakers are typically used in auxiliary and accessory circuits for trucks, buses, RVs and marine applications.

All high amp circuit breakers comply with the SAE J1171 standard for ignition protection and have applications in battery charging systems that use battery isolators to manage and protect batteries in multi-battery installations. Offered in flush-mount or panel-mount.

### CB181F

**Type I waterproof, flush-mount circuit breakers with SEMS nuts installed, 30 Vdc**

| Amps | Catalog no.* |
|---|---|
| 60 | CB181F-60 |
| 70 | CB181F-70 |
| 80 | CB181F-80 |
| 90 | CB181F-90 |
| 100 | CB181F-100 |
| 110 | CB181F-110 |
| 120 | CB181F-120 |
| 135 | CB181F-135 |
| 150 | CB181F-150 |

* 1 Circuit breaker per box, 20 boxes per master carton.

### CB184F

**Type III waterproof, flush-mount, manual reset circuit breakers with SEMS nuts installed, 48 Vdc**

| Amps | Catalog no.* |
|---|---|
| 25 | CB184F-25 |
| 30 | CB184F-30 |
| 35 | CB184F-35 |
| 40 | CB184F-40 |
| 50 | CB184F-50 |
| 60 | CB184F-60 |
| 70 | CB184F-70 |
| 80 | CB184F-80 |
| 90 | CB184F-90 |
| 100 | CB184F-100 |
| 110 | CB184F-110 |
| 120 | CB184F-120 |
| 135 | CB184F-135 |
| 150 | CB184F-150 |

* 1 Circuit breaker per box, 20 boxes per master carton.

### CB185

**Type III switchable, waterproof, flush-mount manual reset circuit breakers with 1/4-28 threaded stud terminals with SEMS nuts installed, and black reset lever, 48 Vdc**

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 25 | CB185-25 | — |
| 30 | CB185-30 | — |
| 35 | CB185-35 | — |
| 40 | CB185-40 | — |
| 50 | CB185-50 | BP/CB185-50 |
| 60 | CB185-60 | — |
| 70 | CB185-70 | BP/CB185-70 |
| 80 | CB185-80 | BP/CB185-80 |
| 90 | CB185-90 | — |
| 100 | CB185-100 | BP/CB185-100 |
| 110 | CB185-110 | — |
| 120 | CB185-120 | BP/CB185-120 |
| 135 | CB185-135 | BP/CB185-135 |
| 150 | CB185-150 | BP/CB185-150 |

* 1 Circuit breaker per box, 20 boxes per master carton.
** 1 Circuit breaker per pack, 4 packs per shelf carton.

See page 31 for marine-rated circuit breakers.

### CB185P

**Type III switchable, panel-mount, manual reset circuit breakers with SEMS nuts installed, 48 Vdc**

| Amps | Catalog no.* |
|---|---|
| 25 | CB185P-25 |
| 30 | CB185P-30 |
| 35 | CB185P-35 |
| 40 | CB185P-40 |
| 50 | CB185P-50 |
| 60 | CB185P-60 |
| 70 | CB185P-70 |
| 80 | CB185P-80 |
| 90 | CB185P-90 |
| 100 | CB185P-100 |
| 110 | CB185P-110 |
| 120 | CB185P-120 |
| 135 | CB185P-135 |
| 150 | CB185P-150 |

* 1 Circuit breaker per box, 20 boxes per master carton.

### CB285F

**Type III switchable, waterproof, flush-mount manual reset circuit breakers with M6 threaded stud terminals with stainless steel nuts and washers installed, and yellow reset lever, 42 Vdc**

| Amps | Catalog no.* |
|---|---|
| 30 | CB285F-30 |
| 40 | CB285F-40 |
| 50 | CB285F-50 |
| 60 | CB285F-60 |
| 70 | CB285F-70 |
| 80 | CB285F-80 |
| 90 | CB285F-90 |
| 100 | CB285F-100 |
| 120 | CB285F-120 |
| 150 | CB285F-150 |

* 1 Circuit breaker per box, 20 boxes per master carton.

### Junction blocks

**JB3816-2** Non-feed through stud-type junction block 3/8-16 thread/stud size, 250 amps max.

**NOTE:** Voltage rating dependent upon installation.

BP/JB3816-2

| Poles | Trad'l pack* | Retail pack** | Description/color | Stud thread |
|---|---|---|---|---|
| 1 | JB3816-2 | BP/JB3816-2 | Stud junction block - black | 3/8-16 |
| 1 | JB3816-3 | — | Stud junction block - red | 3/8-16 |

* 1 Junction block per pack, 50 per master pack.
** 1 Junction block per pack, 5 packs per shelf carton.

### Bussmann series double row barrier terminal blocks

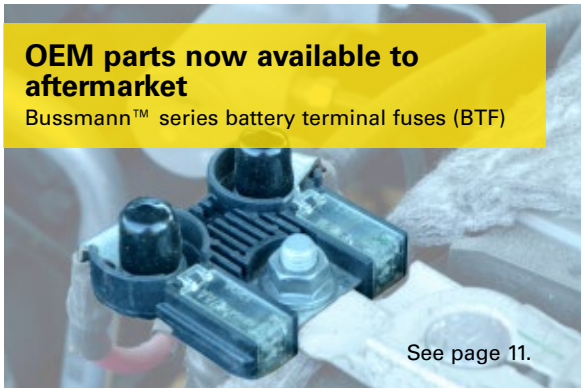
TB200 and TB300 double row barrier terminal blocks are nickel-plated brass with black thermoplastic construction.

| Poles | Trad'l pack* | Retail pack** | Terminal screw | Volts/amps |
|---|---|---|---|---|
| 4 | TB200-04B | BP/TB200-04-RP | 6-32 | 300 V/20 A |
| 6 | TB200-06B | — | 6-32 | 300 V/20 A |
| 8 | TB200-08B | — | 6-32 | 300 V/20 A |
| 10 | TB200-10B | — | 6-32 | 300 V/20 A |
| 15 | TB200-15B | — | 6-32 | 300 V/20 A |
| 4 | TB300-04B | — | 8-32 | 600 V/30 A |
| 6 | TB300-06B | — | 8-32 | 600 V/30 A |
| 8 | TB300-08B | — | 8-32 | 600 V/30 A |
| 10 | TB300-10B | — | 8-32 | 600 V/30 A |
| 12 | TB300-12B | — | 8-32 | 600 V/30 A |
| 20 | TB300-20B | — | 8-32 | 600 V/30 A |

* 1 Junction block per pack, 50 per master pack.
** 1 Junction block per pack, 5 packs per shelf carton.

TB200-_B

TB300-_B




### Stud junction terminal strips

**BP/C5237** Stud junction blocks are designed for trucks, RVs and wiring accessories. Available in 3, 6 and 8 terminal configurations, they are rated for applications to 30 A, 300 V (UL)/ 600 V (CSA).

| Poles | Retail pack* | Stud | Volts/amps |
|---|---|---|---|
| 3 | BP/C5237-3BC | 10-32 | 300 V/30 A |
| 6 | BP/C5237-6BC | 10-32 | 300 V/30 A |
| 8 | BP/C5237-8BC | 10-32 | 300 V/30 A |

* 1 Terminal strip per pack, 5 packs per shelf carton.

C5237-3BC

C5237-6BC

C5237-8BC

### Toggle and rocker switches

We offer a line of Bussmann series single pole toggle switches, rocker switches and duck-bill toggle switches, in a variety of styles, colors and finishes for replacement applications or custom installations.

### Toggle switches with quick connect terminals

| Color | Retail pack* | Function | Rating | Feature |
|---|---|---|---|---|
| Black | BP/SDN | ON/OFF | 12 V/20 A | — |
| Black | BP/STF | ON/OFF/ON | 12 V/20 A | — |
| Chrome | BP/STT | ON/OFF | 12 V/20 A | Red LED |

*1 Switch per pack, 5 packs per shelf carton.

BP/SDN

BP/STF

BP/STT

### Illuminated toggle switches with quick connect terminals

| Color | Retail pack* | Function | Rating | Feature |
|---|---|---|---|---|
| Amber | BP/STA | ON/OFF | 12 V/20 A | — |
| Blue | BP/STB | ON/OFF | 12 V/20 A | — |
| Green | BP/STG | ON/OFF | 12 V/20 A | — |
| Red | BP/STR | ON/OFF | 12 V/20 A | — |

*1 Switch per pack, 5 packs per shelf carton.

BP/STA

BP/STB

BP/STG

BP/STR

### Duckbill toggle switches with quick connect terminals

| Color | Retail pack* | Function | Rating | Feature |
|---|---|---|---|---|
| Amber | BP/SDA | ON/OFF | 12 V/20 A | Illuminated |
| Chrome | BP/STC | ON/OFF | 12 V/20 A | — |

*1 Switch per pack, 5 packs per shelf carton.

BP/SDA

BP/STC

### Metal housing toggle switches with screw terminals

| Color | Retail pack* | Function | Rating | Feature |
|---|---|---|---|---|
| Chrome | BP/STE | ON/OFF | 12 V/15 A | — |
| Chrome | BP/STJ | ON/OFF | 12 V/25 A | — |
| Chrome | BP/STK | ON/OFF/ON | 12 V/15 A | — |

*1 Switch per pack, 5 packs per shelf carton.

BP/STE

BP/STJ

BP/STK

### Rocker switches with quick connect terminals

| Color | Retail pack* | Function | Rating | Feature |
|---|---|---|---|---|
| Amber | BP/SRA | ON/OFF | 12 V/16 A | Illuminated |
| Blue | BP/SRB | ON/OFF | 12 V/16 A | Illuminated |
| Green | BP/SRG | ON/OFF | 12 V/16 A | Illuminated |
| Black | BP/SRN | ON/OFF | 12 V/16 A | — |
| Red | BP/SRR | ON/OFF | 12 V/16 A | Illuminated |

*1 Switch per pack, 5 packs per shelf carton.

BP/SRA

BP/SRB

BP/SRG

BP/SRN

BP/SRR

### Battery disconnect switches

#### BMS-1

Top post anti-theft battery switch. Complete with HHM fuse holder, ATM-20 fuse, ring terminals and stainless steel bolt and wing nut.

#### BMS-2

Side post anti-theft battery switch for GM vehicles. Complete with HHM fuse holder, ATM-20 fuse and ring terminals.

#### 15968-1

Heavy-duty switch is designed to open the circuit between the battery and load of a battery powered system - typically in large truck applications. Rated at 50 Vac/dc maximum, 400 A continuous, it can withstand cranking or surge currents up to 2000 A for 5 seconds maximum.

| Catalog no. | Description |
|---|---|
| BP/BMS-1* | Top post anti-theft master switch with HHM fuse holder, ATM-20 fuse, ring terminals and stainless steel bolt and wing nut |
| BP/BMS-2* | Side post anti-theft master switch with HHM fuse holder, ATM-20 fuse and ring terminals |
| 15968-1** | Heavy-duty disconnect; 50 Vac/dc, 400 A maximum |

* 1 Battery switch per pack, 5 packs per shelf carton.
** Non-stock part

We offer a complete line of Bussmann series flashers that meet SAE standards for a variety of vehicles. To select the proper replacement flasher, match these three specifications:

- **Specific versus variable load.** Specific load flashers flash only a certain number of lamps. Variable load flashers handle a range of amps, such as when pulling a trailer.
- **Lamp capacity.** Designates the total number of lamps in the circuit for the left or right directional signal.
- **Number of terminals.** Select the number of blades to match the socket in the panel.

### Thermal flashers

NO.535

NO.550

NO.552

NO.575

NO.577

Extra Loud

### Heavy-duty electronic flashers

NO.243

NO.244

NO.246

NO.726

NO.727

NO.756, 757, 758, 759, 760

NO.761

NO.762

NO.763 and 764

NO.850

NO.852

### Super heavy-duty electronic flashers

NO.232

NO.233

NO.234

### LED flashers

NO-727-LED

NO-750-LED

NO-758-LED

NO-760-LED

NO-762-LED

### Thermal and electronic 12 and 24 Vdc flashers

| Trad'l pack* | Retail pack** | Flasher type | No. of terminals | Volts | Amps | Number of bulbs |
|---|---|---|---|---|---|---|
| NO.535 | — | Thermal | 3 | 6 | 5.2 | 2-6 |
| NO.550 | BP/550-RP | Thermal | 3 | 12 | 12.8 | 2-6 |
| NO.552 | BP/552-RP | Thermal | 2 | 12 | 12.8 | 2-6 |
| NO.575 | BP/575-RP | Thermal | 2 | 12 | 12.8 | 1-8 |
| NO.577 | BP/577-RP | Therm./ex. loud | 2 | 12 | 14 | 2-6 |
| NO.243 | — | H-D electronic | 2 | 12 | 25 | 12 |
| NO.244 | — | H-D electronic | 3 | 12 | 25 | 12 |
| NO.246 | — | H-D electronic | 3 | 12 | 25 | Alternating |
| NO.726 | BP/726-RP | H-D electronic | 4 | 12 | 12.6 | 2-4 |
| NO.727 | BP/727-RP | H-D electronic | 5 | 12 | 12.6 | 2-4 |
| NO.756 | BP/756-RP | H-D electronic | 3 | 12 | 12.6 | 2-6 |
| NO.757 | BP/757-RP | H-D electronic | 3 | 12 | 12.6 | 2-6 |
| NO.758 | BP/758-RP | H-D electronic | 3 | 12 | 12.6 | 2-6 |
| NO.759 | BP/759-RP | H-D electronic | 3 | 12 | 12.6 | 3-6 |
| NO.760 | BP/760-RP | H-D electronic | 3 | 12 | 12.6 | 2-6 |
| NO.761 | BP/761-RP | H-D electronic | 3 | 12 | 12.6 | 2-6 |
| NO.762 | BP/762-RP | H-D electronic | 4 | 12 | 12.6 | 3-6 |
| NO.763 | — | H-D electronic | 2 | 12 | 12 | 16 |
| NO.764 | — | H-D electronic | 2 | 12 | 12 | 20 |
| NO.850 | — | H-D electronic | 3 | 12 | 25 | 10HZ/5TS |
| NO.852 | — | H-D electronic | 2 | 12 | 35 | 16HZ/8TS |
| NO.232 | BP/232-RP | S-D electronic | 2 | 12 | 20 | 1-10 |
| NO.233 | BP/233-RP | S-D electronic | 3 | 12 | 20 | 1-10 |
| NO.234 | BP/234-RP | S-D electronic | 3 | 24 | 20 | 1-10 |

* 1 Flasher per pack, 10 packs per shelf carton.
** 1 Flasher per pack, 5 packs per shelf carton.

### LED flashers

| Trad'l pack* | No. of terminals | Volts | Amps | Number of LED lamps |
|---|---|---|---|---|
| NO-727-LED | 5 | 12.8 | 12.6 | 2-6 |
| NO-758-LED | 3 | 12.8 | 12.6 | 2-6 |
| NO-759-LED | 3 | 12.8 | 12.6 | 3-6 |
| NO-760-LED | 3 | 12.8 | 12.6 | 2-4 |
| NO-762-LED | 3 | 12.8 | 12.6 | 2-6 |

* 1 Flasher per pack, 10 packs per shelf carton.

### Lighting control modules (LCM)

| Trad'l pack* | No. of terminals | Volts | Amps | Rated load range | Rated voltage |
|---|---|---|---|---|---|
| NO-455 | 10 | 12.8 | 2.1 | 1 to 6 SAE #1156 lamps | 11 to 15 Vdc |
| NO-468 | 9 | 12.8 | 2.1 | 1 to 6 SAE #1156 lamps | 11 to 15 Vdc |
| NO-470 | 5 | 12.8 | 2.1 | Fixed 2 for lamps 4 for hazards | 11 to 15 Vdc |
| NO-487 | 8 | 12.8 | 2.1 | 1 to 6 SAE #1156 lamps | 11 to 15 Vdc |

* 1 LCM per pack, 10 packs per shelf carton.

### Lighting control modules (LCM)

NO-455

NO-468

NO-470

NO-487

### Automotive assortments, emergency and diagnostic kits

Covering in-demand applications, fuse offerings include traditional glass tube and German automotive fuses, a wide selection of micro fuses, ATM, low-profile ATM, ATC and MAX in indicating and non-indicating versions, and higher amp cartridge fuses.

**Fuse assortments** provide customers a handy selection of fuses and fuse ratings for general replacement applications.

**Emergency kits** provide a range of fuses and fuse ratings, plus a fuse puller to make quick, emergency replacements easier.

**Diagnostic kits** provide the advantage of a fuse tester/puller along with an assortment of fuses and fuse ratings. The tester permits users to quickly determine whether a fuse is good or not.

**Bonus packs** increase the "basket ring" on your fuse assortment sales with large-count fuse packages that are great for small shops, do-it-yourself mechanics - or for stocking commercial / service vehicles.

### Glass tube fuse assortments and kits

**AGA**

| | |
|---|---|
| BP/AGA-AH8-RP | AGA high amp fuse assortment:-10 (2), 15 (2), 20 (2) and 30 (2) A |
| BP/AGA-AL8-RP | AGA low amp fuse assortment:-1, 2, 3 (2), 5 (2) and 7-1⁄2 (2) A |

**AGC**

| | |
|---|---|
| BP/AGC-A5-RP | AGC fuse assortment: 10, 15, 20, 25 and 30 A |
| BP/AGC-AH10-RP | AGC high amp fuse assortment: 7-1⁄2, 10 (2), 15 (2), 20 (2), 25 and 30 (2) A |
| BP/AGC-AL10-RP | AGC low amp fuse assortment: 1 (2), 2 (2), 3 (2), 4, 5 (2) and 6 A |
| AGC-EK | AGC kit: (60 pieces/10 each) 5, 10, 15, 20, 25 and 30 A and FT-3 fuse tester/puller |
| MA-5 | AGC low amp marine assortment 1/2, 1, 1-1/2, 2, 3 A |

**AGW**

| | |
|---|---|
| BP/AGW-A8-RP | AGW fuse assortment: 5, 7-1⁄2, 15 (2), 20 (2) and 30 (2) A |

**AGX**

| | |
|---|---|
| BP/AGX-A8-RP | AGX fuse assortment: 5, 8, 20 (2), 25 (2) and 30 (2) A |

**SFE**

| | |
|---|---|
| BP/SFE-AH6-RP | SFE high amp fuse assortment: 14 (2), 20 (2) and 30 (2) A |
| BP/SFE-AL6-RP | SFE low amp fuse assortment: 4, 6, 7-1⁄2 (2) and SFE-9 (2) A |

**Glass tube fuse assortments**

| | |
|---|---|
| BP/AGC-SFE-A5-RP | AGC/SFE fuse assortment: AGC- 10, 15, 30 and SFE-14, 20 A |

**German automotive fuses**

| | |
|---|---|
| BP/GBC-A8-RP | GBC German fuse assortment: 5, 8 (2), 15, 16 (2) and 25 (2) A |

Automotive glass tube assortments

Example: BP/AGW-A8-RP

Automotive glass tube kit

Example: AGC-EK

## Blade fuses

### ATR

| | |
|---|---|
| BP/ATR-A7-RPP | ATR 2-leg micro fuse emergency kit: 5, 7-1⁄2, 10, 15, 20, 25 and 30 A and fuse puller |

### ATL

| | |
|---|---|
| BP/ATL-A4-RPP | ATL 3-leg micro fuse emergency kit: 5, 7-1⁄2, 10, 15 A and fuse puller |

### ATM

| | |
|---|---|
| ATM-FP-AID | *easy*ID indicating ATM emergency kit: 10, 15, 20, 25 and 30 A and FP-A3 fuse puller |
| BP/ATM-A5-RP | ATM 5-count fuse assortment: 10, 15, 20, 25 and 30 A |
| BP/ATM-A8-RP | ATM 8-count fuse assortment: 2, 5, 7-1⁄2, 10, 15, 20, 25 and 30 A |
| BP/ATM-AH8-RPP | ATM high amp fuse emergency kit: 10 (2), 15 (2), 20 (2), 25 and 30 A and FP-A3 fuse puller |
| BP/ATM-AL8-RP | ATM low amp assortment: 2, 3 (2), 4, 5 (2) and 7-1⁄2 (2) A |
| DIA-2 | ATM diagnostic kit: 2, 5, 7-1⁄2, 10, 15, 20, 25 and 30 A and FT-3 fuse tester/puller |
| NO.43 | ATM kit: 7 each of 5, 10, 15, 20, 25 and 30 A and FT-3 fuse tester/puller. Fuses are loose-packed for easy access in reclosable heavy-duty clamshell package. |
| ATM-ID-SK | *easy*ID ATM fuse service kit: 6 each 5, 10, 15, 20, 25 and 30 A |
| BP/ATM-AID | *easy*ID ATM fuse assortment: 10, 15, 20, 25 and 30 A |

### Low-profile ATM

| | |
|---|---|
| ATM-LP-EK | Low-profile ATM fuse emergency kit: (7 each) 5, 10, 15, 20, 25 and 30 A and FT-3 fuse tester/puller |
| BP/ATM-A6LP-RP | Low-profile ATM fuse assortment: 7-1⁄2, 10, 15, 20, 25 and 30 A |
| DIA-3 | Low-profile ATM diagnostic kit: 2, 5, 7-1/2, 10, 15, 20, 25 and 30 A and FT-3 fuse tester/puller |

### ATC

| | |
|---|---|
| ATC-FP-AID | *easy*ID indicating ATC emergency kit: 10, 15,20, 25 and 30 A and FP-A3 fuse puller |
| BP/ATC-A5-RP | ATC fuse assortment: 10, 15, 20, 25 and 30 A |
| BP/ATC-AH8-RPP | ATC fuse emergency kit: 10, 15 (2), 20 (2), 25, 30 and 40 A and FP-A3 fuse puller |
| BP/ATC-AL8-RP | ATC low amp fuse assortment: 1, 2, 3, 4, 5 (2) and 7-1⁄2 (2) A |
| DIA-1 | ATC diagnostic kit: 5, 10, 15, 20, 25 and 30 A and FT-3 fuse tester/puller. |
| NO.44 | ATC kit: 7 each of 5, 10, 15, 20, 25 and 30 A and FT-3 fuse tester/puller. Fuses are loose-packed for easy access in reclosable heavy-duty clamshell package. |
| NO.80 | ATC bulk assortment: (80 pieces/10 each) 3, 5, 7-1⁄2, 10, 15, 20, 25 and 30 A. Fuses are loose-packed for easy access. Reclosable, heavy-duty clamshell package stores easily in tool boxes. |
| ATC-ID-SK | *easy*ID ATC fuse service kit: 7 each 5, 10, 15, 20, 25 and 30 A |
| BP/ATC-AID | *easy*ID ATC fuse assortment: 10, 15, 20, 25 and 30 A |

## Multi-fuse family emergency/bonus kits

| | |
|---|---|
| ATM-FMX-EK | ATM and FMX emergency kit: 5 each of ATM-10, 15, 20, 25 and 30 A, 1 each of FMX-20, 30, 40, and 50 A, and FT-3 fuse tester/puller. |
| NO.24 | Emergency fuse safety kit: one each of ATM-10, 15, 20, 25, 30, ATM-10LP, 15LP, 20LP, 25LP, 30LP, ATC-3, 5, 7-1⁄2, 10, 15, 20, 25, 30, 40, MAX-30, 40, FMX-30, 40 and FT-3 fuse tester/puller. |
| NO.53 | ATC and MAXI fuse kit: (45 pieces) ATC-10, 15, 20, and 30A; MAX-30, 40 and 50A and FT-3 fuse tester/puller. |
| NO.64 | ATM and MAXI fuse kit: (64 pieces) ATM-2, 3, 4, 5, 7-1⁄2, 10, 15, 20 and 30 A; MAX 30, 40 and 50 A and FT-3 fuse tester/puller |
| VP-FMX-A5-RP | FMX female MAXI fuse value pack assortment: (5 pieces) 20, 30, 40, 50 and 60 A |

Multi-fuse bonus kits

Example: ATM-FMX-EK

Multi-fuse assortments

Example: BP/ATC-A5-RP

Multi-fuse emergency kits (includes a fuse puller)

Example: BP/ATC-AH8-RPP

Diagnostic kits

Example: DIA-1

*easy*ID assortments

Examples: ATM-FP-AID and ATC-ID-SK

**NO.136**

**ATR, ATL and FMM micro fuse assortment**

Selection of 135 ATR 2-leg and ATL 3-leg micro blade fuses, and FMM micro cartridge fuses plus a fuse puller. Fuses are loosely packed in 12-cavity, shatter-resistant plastic box. Contains ten each of ATR-5, 7-1/2, 10, 15, 20, 25 and 30, ten each of ATL-5, 7-1/2, 10, and 15, and five each of FMM-15, 20, 25, 30 and 40.

**NO.45**

**Cartridge fuse bulk assortment**

The top 16 assorted cartridge fuses for wiring harness protection. Comes with selection guide on inside lid. Contains one each of FLD-80, FLF-20, 30, 40, 50, FLM-80, 100, 120, FLS-30, 40, FMX-20, 30, 40, 50, 60 and FMX-30LP

**NO.60LP**

**Low-profile ATM fuses**

Assortment contains 60 fuses: ten each of ATM-7-1/2LP, 10LP, 15LP, 20LP, 25LP and 30LP.

**NO.105**

**Late model automotive fuse assortment**

Selection of low-profile and regular fuses loosely packed in 18-cavity, shatter-resistant plastic box. Contains: 10 each ATM-7-1/2LP, 10LP, 25LP and 30LP; 15 each ATM-15LP and 20LP; 3 each FMX-20, 30 and 40; 2 each FMX-50 and 60; 3 each FMX-20LP, 30LP and 40LP; 2 each FMX-50LP and 60LP; 2 each MAX-30 and 40; 1 each MAX-20, 50, 60 and 80.

**NO.95BK**

**ATC and ATM bulk assortment**

Selection of 95 ATC and ATM blade fuses. Fuses are loosely packed in 12-cavity, shatter-resistant plastic box. Contains five each of ATC-5, 15, 25, ATM-5, 10, 15, 25, 30, ten of ATM-20, fifteen of ATC-10, 20, 30.

**NO.160BK**

**ATC bulk assortment**

Selection of 160 ATC blade fuses loosely packed in 12-cavity, shatter-resistant plastic box. Contains ten fuses each of 3, 4, 7-1/2, 40, fifteen of 5, 10, 15, 25, thirty of 20, 30.

**NO.290**

**PRO PAK professional technician's assortment**

Contains the circuit protection products every service technician needs. The compact case organizes 290 of the most common circuit protection products to restore power fast.

Comes with a free, high-power white LED spotlight made of high-grade polished aluminum with metal clip and magnetic base. Features a locking ON/OFF switch with an LED mounted on an insulated flexible shaft. Batteries included: 3 AG13 button cell.

**PRO PAK contents**

- Fuse assortments: AGA-AL (1, 2, 3, 5 and 7-1/2 A), AGA-AH (10, 15, 20 and 30 A), AGW-A (5, 7-1/2, 15, 20 and 30 A) and AGX-A (5, 8, 20, 25 and 30 A).
- AGC glass fuses. One tin each containing five fuses: AGC-1, 2, 3, 4, 5, 7-1/2, 10, 15, 20, 25 and 30 A.
- SFE size-rejecting 1/4" glass fuses. One tin each containing five fuses: SFE-4, 7-1/2, 9, 14, 20 and 30 A.
- GBC German vehicle fuses. One tin each containing five fuses: GBC-8, 16 and 25 A.
- ATM blade fuses. One tin of each rating containing five fuses: ATM-5, 7-1/2, 10, 15, 20, 25 and 30 A.
- Low-profile ATM blade fuses. One tin each containing five fuses: ATM-7-1/2LP, 10LP, 15LP, 20LP, 25LP and 30LP.
- ATC blade fuses. One tin each containing five fuses: ATC-3, 4, 5, 7-1/2, 10, 15, 20, 25, 30, 35 and 40 A.
- MAXI blade fuses. MAX-20, (2)30, (2)40, 50, 60, 70 and 80 A.
- FLB bolt-mount cartridge fuses. One each: FLB-40, 50, 60, 70 and 80 A.
- FLD bolt-mount cartridge fuses. One FLD-80 A.
- FLF female termination cartridge fuses. One each: FLF-20, 30, 40, 50 and 60 A.
- FLM male termination cartridge fuses. One each: FLM-60, 80 and 100 A.
- FLS female miniature termination cartridge fuses. One each: FLS-30 and 40 A.
- FMX female MAXI fuses. One each: FMX-20, 30, 40, 50 and 60 A.
- FMX_LP low-profile female MAXI fuses. One each: FMX-20LP, 25LP, 30LP, 40LP, 50LP and 60LP.
- HHD 30 A in-line ATC fuse holder
- HHM 30 A in-line ATM fuse holder
- HHN in-line glass tube fuse holder with AGC-30 A fuse
- HMK heavy-duty in-line glass tube fuse holder
- CBB-30 Type II 30 A ATC blade-type circuit breaker
- CBC-30HB Type I stud-mount 30 A circuit breaker with lengthwise bracket
- UCB-20 universal 20 A ATC blade-type circuit breaker
- UCB-30 universal 30 A ATC blade-type circuit breaker
- FT-3 fuse puller/tester, FP-A3 3-way fuse puller

**Fuse caddies**

Bussmann series fuse caddies offer a full array of fuses for automotive repair facilities to meet your fuse replacement needs. Each caddy is specially stocked to cover the majority of cars, vans, light trucks, SUVs and RVs on the road today. Select from the five-tray caddy or the more comprehensive ten-tray caddy to offer your customers a convenient and secure means to store and transport their replacement fuse inventory.

**FUSE-CADDY1**

With convenient folding handle and security latch, this five-tray capacity caddy contains 275 fuses in popular ratings. Four, ten-cavity trays contain ATM, low-profile ATM, ATC and MAX fuses. One, five-cavity tray contains FMX fuses.

**Contains fuse tray catalog numbers**

CDY10TRY-ATM
CDY10TRY-ATM-LP
CDY10TRY-ATC
CDY10TRY-MAX
CDY5TRY-FMX

See fuse tray contents on page 28 for type, quantities and ratings for each tray catalog number.

Caddy measures 7.4"W x 4.5"D x 7.8"H (handle not extended)

**FUSE-CADDY2**

Caddy measures 14.8"W x 4.5"D x 7.8"H (handle not extended)

With convenient folding handle and security latches, this ten-tray capacity caddy contains 372 fuses in popular ratings. Seven, ten-cavity trays contain ATM, Low-profile ATM, ATC, MAX, FMM/low-profile FMX, FLF/FLS, ATR/ATL micro fuses. Three, five-cavity trays contain FMX, FLB/FLD/FLM and AMG/AMI fuses. Together, all ten trays meet virtually any automotive blade and high amp fuse replacement need.

**Contains fuse tray catalog numbers**

CDY10TRY-ATM
CDY10TRY-ATM-LP
CDY10TRY-ATC
CDY10TRY-MAX
CDY10TRY-FLNK1
CDY10TRY-FLNK2
CDY10TRY-MICRO
CDY5TRY-FMX
CDY5TRY-BMOUNT
CDY5TRY-SMOUNT

See fuse tray contents on page 28 for type, quantities and ratings for each tray catalog number.

## Fuse tray assortments

Bussmann series fuse trays make it convenient to sell popular fuse assortments that repair facilities need to keep on hand for today's cars, vans, light trucks and SUVs.

Clear, compact trays that measure 3.5"D x 7"W x 1"H are easy to store and allow quick, visual identification of fuses without the hassel of opening the tray.

Three, five-cavity tray assortments and eight, ten-cavity tray assortments cover the most popular fuse applications including the new, ATR and ATL 2- and 3-blade micro fuses and FMM micro cartridge fuses. Offer your customers the convenience of these five-tray and ten-tray fuse caddies.

Trays are easily restocked from traditional or value fuse packs.

Order individually or offer customers the convenience of the FUSECADDY-1 (five-tray) or FUSECADDY-2 (ten-tray) fuse caddies.

Ten- and five-tray fuse caddies conveniently store multiple fuse trays to efficiently organize an entire replacement fuse inventory.

## Fuse tray contents and quanities

**CDY10TRY-ATM**
**10 Cavity tray**
**80 ATM blade fuses**
**Fuse (Qty)**

| | |
|---|---|
| ATM-2 (5) | ATM-10 (15) |
| ATM-3 (5) | ATM-15 (15) |
| ATM-4 (5) | ATM-20 (15) |
| ATM-5 (5) | ATM-25 (5) |
| ATM-7-1/2 (5) | ATM-30 (5) |

**CDY10TRY-ATM-LP**
**10 Cavity tray**
**65 Low-profile ATM blade fuses**
**Fuse (Qty)**

| | |
|---|---|
| ATM-2LP (5) | ATM-10LP (10) |
| ATM-3LP (5) | ATM-15LP (10) |
| ATM-4LP (5) | ATM-20LP (10) |
| ATM-5LP (5) | ATM-25LP (5) |
| ATM-7-1/2LP (5) | ATM-30LP (5) |

**CDY10TRY-ATC***
**10 Cavity tray**
**100 ATC blade fuses**
**Fuse (Qty)**

| | |
|---|---|
| ATC-3 (5) | ATC-20 (15) |
| ATC-4 (5) | ATC-25 (10) |
| ATC-5 (5) | ATC-30 (15) |
| ATC-7-1/2 (5) | ATC-35 (10) |
| ATC-10 (10) | ATC-40 (10) |
| ATC-15 (10) | |

* Replaces NO.100BK

**CDY10TRY-EZID**
**10 Cavity tray**
**59 ATC/ATM/MAX blade fuses**
**Fuse (Qty)**

| | | |
|---|---|---|
| ATC-3ID (4) | ATM-3ID (4) | MAX-30ID (2) |
| ATC-5ID (2) | ATM-5ID (2) | MAX-40ID (2) |
| ATC-10ID (4) | ATM-10ID (4) | MAX-50ID (1) |
| ATC-15ID (4) | ATM-15ID (4) | MAX-60ID (1) |
| ATC-20ID (4) | ATM-20ID (4) | MAX-80ID (1) |
| ATC-25ID (4) | ATM-25ID (4) | |
| ATC-30ID (4) | ATM-30ID (4) | |

**CDY10TRY-MAX**
**10 Cavity tray**
**16 MAXI blade fuses**
**Fuse (Qty)**

| | |
|---|---|
| MAX-20 (1) | MAX-60 (3) |
| MAX-30 (1) | MAX-70 (2) |
| MAX-40 (3) | MAX-80 (2) |
| MAX-50 (3) | MAX-100ID (1)** |

** *easy*ID indicating fuse.

**CDY10TRY-MICRO**
**10 Cavity tray**
**55 ATR/ATL micro blade fuses**
**Fuse (Qty)**

| | |
|---|---|
| ATR-5 (5) | ATR-30 (5) |
| ATR-7-1/2 (5) | ATL-5 (5) |
| ATR-10 (5) | ATL-7-1/2 (5) |
| ATR-15 (5) | ATL-10 (5) |
| ATR-20 (5) | ATL-15 (5) |
| ATR-25 (5) | |

**CDY10TRY-FLNK1**
**10 Cavity tray**
**13 FMM/low-profile FMX fuses**
**Fuse (Qty)**

| | |
|---|---|
| FMM-15 (1) | FMX-25LP (1) |
| FMM-20 (1) | FMX-30LP (1) |
| FMM-25 (1) | FMX-40LP (1) |
| FMM-30 (1) | FMX-50LP (2) |
| FMM-40 (1) | FMX-60LP (2) |
| FMX-20LP (1) | |

**CDY10TRY-FLNK2**
**10 Cavity tray**
**7 FLF/FLS cartridge fuses**
**Fuse (Qty)**

| | |
|---|---|
| FLF-20 (1) | FLF-60 (1) |
| FLF-30 (1) | FLS-30 (1) |
| FLF-40 (1) | FLS-40 (1) |
| FLF-50 (1) | |

**CDY5TRY-FMX**
**5 Cavity tray**
**14 FMX high amp fuses**
**Fuse (Qty)**

| | |
|---|---|
| FMX-20 (2) | FMX-50 (3) |
| FMX-30 (3) | FMX-60 (3) |
| FMX-40 (3) | |

**CDY5TRY-BMOUNT**
**5 Cavity tray**
**10 FLB/FLD/FLM cartridge fuses**
**Fuse (Qty)**

| | |
|---|---|
| FLB-80 (1) | FLM-30 (1) |
| FLB-140 (1) | FLM-60 (1) |
| FLD-40 (1) | FLM-80 (1) |
| FLD-80 (1) | FLM-100 (1) |
| FLD-120 (1) | FLM-120 (1) |

**CDY5TRY-SMOUNT**
**5 Cavity tray**
**12 AMG/AMI high amp fuses**
**Fuse (Qty)**

| | |
|---|---|
| AMG-80 (1) | AMG-225 (1) |
| AMG-100 (1) | AMG-250 (1) |
| AMG-125 (1) | AMG-300 (1) |
| AMG-150 (1) | AMI-40 (1) |
| AMG-175 (1) | AMI-50 (1) |
| AMG-200 (1) | AMI-80 (1) |

### Retail automotive Plan-O-Gram

Color-coded packaging for fast, easy product selection. Fits standard four-foot wide gondola.

### Visual categorization

- Color-coded Bussmann series retail packaging.
- Fast and easy product identification.
- Provides increased shopability and faster merchandising.

### Merchandising ease

- Retail set is simple and straightforward.
- Color-coding encourages return of product to correct peg.
- Reduces need for assistance by store personnel.

### Consumer friendly

- Fuse center is easily located.
- Point-of-sale identifies fuse types.
- Package color codes identify product category.

4FTAUTO-KIT.

Peg hooks and gondola not included.

4FTAUTO-TAGS UPC reorder tags.

| Catalog no. | Description |
|---|---|
| 4FTAUTO-KIT | 151 SKU auto prepack. Includes one of each catalog number, a complete set of UPC reorder tags and a header card as pictured. |
| 4FTAUTO-TAGS | Replacement set of UPC reorder tags for the 4FTAUTO-KIT. Order tags through your Eaton Bussmann series rep. |

**For details on automotive Plan-O-Gram SKUs, visit Eaton.com/BussmannConsumerPOG**

All five units stacked together provide a complete fuse selection for the automotive repair technician or store display. Bins interlock and can be wall-mounted.

### Tilt-bin assortments

Turn any pegboard or shelf into a profit-building professional fuse center with interlocking tilt-bin sets from Eaton. Bin rows are stocked with assortments of the fastest-selling fuses, holders and accessories. Transparent, tilt-out bins make selection a snap, and let you check inventory at a glance.

Reload part numbers are available for AFC-225, NO.225 and NO.227. The reloads are packed in a polybag labeled with the catalog number and UPC code.

Bins can be stacked in any combination so you can modify your display to fit your customer's needs.

### AFC-90

Two tilt-bin sets containing five each of MAX-20, 30, 40, 50 and 60 A and FMX-20, 30 and 40 A fuses, FLB-70, FLF-20, 30, 40 and 60 A and FLM-60, 80 and 100 A and FLS-30 and 40 A cartridge fuses.

### AFC-225

Contains: 25 Each of glass tube fuses. AGC-5, 10, 15, 20, 25 and 30 A and SFE-14, 20 and 30 A.

### NO.225

Contains: 25 Each of ATC blade fuses. ATC-3, 4, 5, 7-1/2, 10, 15, 20, 25 and 30 A.

### NO.227

Contains: Ten each of ATM blade fuses. ATM-2, 3, 5, 7-1/2, 10, 15, 20, 25 and 30 A.

### Available reload packs

Reloads contain 10 and 25 fuses of the specified ampacity in a poly bag. See table below for available fuses and amp ratings.

| Catalog no. | Description |
|---|---|
| ATC-(amp)RLD | 25 fuses in a poly bag, available amps: 3, 4, 5, 7-1/2, 10, 15, 20, 25, 30 A |
| ATM-(amp)RLD | 10 fuses in a poly bag, available amps: 2, 3, 5, 7-1/2, 10, 15, 20, 25, 30 A |

# Marine and RV products

### Marine-rated circuit breakers

Specifically designed to meet the needs of marine applications, the CB187F and CB187P offer 5 kA @ 12 Vdc interrupting ratings and ignition protection per ABYC E-11. Usable as an ON/OFF switch, they have corrosion resistant plating on 15/16-18 copper terminals.

CB251 and CB255 offer an interrupting rating of 2.5 kA per ABYC E-11 and feature a "Push-to-Trip option and reset mechanism that provides visual indication of a tripped condition.

### CB185

**Type III switchable, waterproof, flush-mount manual reset circuit breakers with 1/4-28 threaded stud terminals with SEMS nuts installed, and black reset lever, 48 Vdc**

| Amps | Boxed | Retail pack |
|---|---|---|
| 25 | CB185-25 | — |
| 30 | CB185-30 | — |
| 35 | CB185-35 | — |
| 40 | CB185-40 | — |
| 50 | CB185-50 | BP/CB185-50 |
| 60 | CB185-60 | — |
| 70 | CB185-70 | BP/CB185-70 |
| 80 | CB185-80 | BP/CB185-80 |
| 90 | CB185-90 | — |
| 100 | CB185-100 | BP/CB185-100 |
| 110 | CB185-110 | — |
| 120 | CB185-120 | BP/CB185-120 |
| 135 | CB185-135 | BP/CB185-135 |
| 150 | CB185-150 | BP/CB185-150 |

### CB187F

**Type III marine-rated flush-mount, manual reset circuit breakers with switch function and nuts/lock washers installed, 48 Vdc**

| Catalog no. (amps) boxed only | |
|---|---|
| CB187F-25 | CB187F-80 |
| CB187F-30 | CB187F-100 |
| CB187F-35 | CB187F-110 |
| CB187F-40 | CB187F-120 |
| CB187F-50 | CB187F-135 |
| CB187F-60 | CB187F-150 |
| CB187F-70 | CB187F-200 |

### CB187P

**Type III marine-rated panel-mount, manual reset circuit breakers with switch function and nuts/lock washers installed, 48 Vdc**

| Catalog no. (amps) boxed only | |
|---|---|
| CB187P-25 | CB187P-80 |
| CB187P-30 | CB187P-90 |
| CB187P-35 | CB187P-100 |
| CB187P-40 | CB187P-110 |
| CB187P-50 | CB187P-120 |
| CB187P-60 | CB187P-135 |
| CB187P-70 | CB187P-150 |

### CB251

**Type I ignition protected, weatherproof panel-mount, manual reset circuit breakers with SEMS nuts installed, 32 Vdc**

| Catalog no. (amps) boxed only | |
|---|---|
| CB251-10 | CB251-30 |
| CB251-15 | CB251-35 |
| CB251-20 | CB251-40 |
| CB251-25 | CB251-50 |

### CB255

**Type III ignition protected, weatherproof panel-mount, manual reset circuit breakers with "Push-to-Trip" option and SEMS nuts installed, 32 Vdc**

| Catalog no. (amps) boxed only | |
|---|---|
| CB255-10 | CB255-30 |
| CB255-15 | CB255-35 |
| CB255-20 | CB255-40 |
| CB255-25 | CB255-50 |

### Marine assortments

#### NO.108BK

Marine circuit protection emergency kit in a sturdy, compact reclosable box for replacement of fuses and circuit breakers. A must for commercial or recreational marine applications.

**Fuses:** Five each of ABC-10, AGC-1-1/2, GMA-2 A, MDA-8, ten of AGC-3, 7-1/2, 15, 25, fifteen of AGC-20, 30.

**Circuit breakers:** Three CBF-30.

#### BP/AGC-AH10-RP

AGC fuse assortment for marine accessories and bilge pumps. Includes AGC-7-1/2, 10 (2), 15 (2), 20 (2), 25 and 30 (2) A.

#### BP/MDL-1

Marine motor protection fuses. Retail pack with two fuses per card. See page 37 for retail pack availability in ratings from 1/2 to 15 amps.

#### MA-5

Marine accessory assortment, Contains (1) each: AGC-1/2, 1, 1-1/2, 2 and 3 A.

#### BP/AGC-SFE-A5-RP

AGC and SFE fuse assortment for marine applications. Contains (1) each:
- AGC-10, 15 and 30 A
- SFE-14 and 20 A

**Water resistant holders available on pages 12 and 13.**

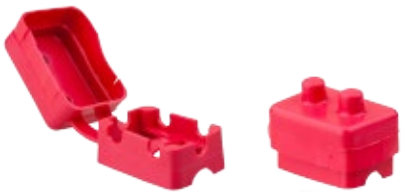
**See additional circuit breakers on pages 16 to 20.**

### JJN - Class T very fast-acting, current-limiting 300 Vac, 160 Vdc fuses

| Amps | Catalog no.* |
|---|---|
| 110 | JJN-110 |
| 125 | JJN-125 |
| 150 | JJN-150 |
| 175 | JJN-175 |
| 200 | JJN-200 |
| 225 | JJN-225 |
| 250 | JJN-250 |
| 300 | JJN-300 |
| 350 | JJN-350 |
| 400 | JJN-400 |

* 1 Fuse per pack, 5 packs per master carton.

### Splash proof covers



| Catalog no. | Description | Pack qty. | Shelf qty. | Master qty. |
|---|---|---|---|---|
| CB-CVR | Cover for stud terminal circuit breaker | 1 | 10 | 300 |
| BK/CB-CVR | Cover for stud terminal circuit breaker-BULK | — | 100 | 2000 |
| BP/CB20HB-CVR* | CB123-20HB with cover-retail pack | 1 | 5 | 120 |
| BP/CB40HB-CVR* | CB123-40HB with cover-retail pack | 1 | 5 | 120 |

* Packed with CB123-20HB and CB123-40HB.

### Battery separators manage batteries for reliable starts

- For vehicles and boats with main and auxiliary battery systems and alternator outputs up to 100 amps — or on systems incompatible with battery isolators.
- Battery separators from Sure Power actively manage multi-battery electrical systems to ensure greater reliability for main battery engine starting.
- Battery separators provide a solenoid priority system for multi-battery systems.
- When main battery is low, the separator will utilize auxiliary battery power to assist in vehicle starting.
- Separators disconnect main and auxiliary batteries from one another to protect them from excessive drain.
- Time-delay function prevents battery separator from reacting to temporary voltage fluctuations.

| Catalog no. | Description |
|---|---|
| RB-BS-1314 | Uni-directional 100 A battery separator — model no. 1314A* |
| RB-BS-1315 | Bi-directional 100 A battery separator — model no. 1315A* |

* Use the catalog numbers to order these products.

Uni-directional and bi-directional versions available.

Attractive retail packaging easily displays on peg boards or stacks on shelves.

### Multi-battery systems

Many vehicles and boats have accessories and other electrical loads, such as lights, entertainment systems and communications equipment that draw power when the engine is off. When applied to a single battery electrical system, main batteries can become drained and present an engine “no-start” condition. Adding an auxiliary battery to operate these additional loads helps avoid this, but it needs more than simply being wired into the electrical system — the auxiliary battery needs to be separated.

### Priority charging

The battery separator waits until the main battery’s active charging source reaches approximately 13.2 volts before it begins charging the auxiliary battery. The uni-directional battery separator RB-BS-1314 will only charge the auxiliary battery when the main battery reaches 13.2 volts. The bi-directional battery separator RB-BS-1315 will engage both main and auxiliary batteries and disconnect at approximately 12.8 volts.

### Charging system protection

Once the engine starts, the battery separator monitors the main battery and charging system voltage. When the charging system reaches 13.2 volts, the battery separator will engage, signaling a charged main battery. The auxiliary battery is then connected to the vehicle charging system. When the charging system reaches 12.8 volts, the battery separator will disconnect the auxiliary battery to protect the vehicle’s charging system. This process of managing the battery charging is repeated until the engine is turned off.

### Simple installation

The battery separators work with any 12 volt DC, negative ground charging system up to 100 amps. They easily connect to the main battery, auxiliary battery and ground. No system modifications are necessary.

### Optional engine start assist

When the engine starter is engaged, the battery separator will compare the voltage in both main and auxiliary batteries. If the main battery is lower than the auxiliary battery, the battery separator will engage the auxiliary battery to aid in engine start. The start signal must reach 3 volts in order for the auxiliary to main battery connection procedure to begin.

### Battery isolators ensure reliable engine starts

- Battery isolators prevent auxiliary batteries from draining main battery power in vehicle electrical systems.
- Suited for light truck, RV, select commercial and marine applications.
- Solid-state technology isolates each battery circuit to extend battery life by allowing each to charge and discharge according to need.
- Easily connects alternator to one main and one auxiliary battery.
- Designed by Sure Power, the leader in battery isolators, for superior performance that exceeds original equipment manufacturer specifications.
- Includes wiring and hardware for basic installation; an optional installation kit available for advanced installation.

| Catalog no. | Description |
|---|---|
| RB-BI-70A | 70 amp battery isolator w/wiring kit — model no. 702* |
| RB-BI-95A | 95 amp battery isolator w/wiring kit — model no. 9523A* |
| RB-BI-120A | 120 amp battery isolator w/wiring kit — model no. 12023A* |
| RB-BI-130A | 130 amp battery isolator w/wiring kit — model no. 13023A* |
| RB-BI-240A | 240 amp battery isolator w/wiring kit — model no. 24023A* |

* Use the catalog numbers to order these products.

### Multi-battery systems

Many vehicles and boats have accessories and other electrical loads, such as lights, entertainment systems and communications equipment that draw power when the engine is off. When applied to a single battery electrical system, main batteries can become drained and present an engine “no-start” condition. Adding an auxiliary battery to operate these additional loads helps avoid this, but it needs more than simply being wired into the electrical system — the auxiliary battery needs to be isolated.

### Why batteries need isolating

Multiple batteries connected in an electrical system can become problematic when a partially discharged,or dead, battery is connected to a fully charged battery. The current in the fully charged battery will flow to the less charged battery until both are equally discharged, or even worse, completely discharged and may prevent the engine from starting.

### Battery isolators manage battery power

A battery isolator can eliminate the problem of battery drain by acting as a check valve between the batteries to prevent current flowing from a fully charged battery to a partially charged battery. A battery isolator enables each battery to act as an independent power source so that the main battery can conserve power even if the auxiliary battery is fully discharged. When charging, the isolator gives priority to the main battery so that there is always a full charge to start the engine.

70 A and 95 A size

120 A and 130 A size

240 A size

Battery isolator models are available in 70 A, 95 A, 120 A, 130 A and 240 A versions for alternators with outputs from 70 to 240 amps.

Attractive 70 to 130 amp retail packaging easily mounts on peg boards or stacks on shelves. 240 amp isolator package for shelf display only.

### Battery isolator installation kit and Delco® alternator connector kit

Enhance your battery isolator sales by offering the instalation kit RB-BIK-1882 that contains the wire, connectors and hardware needed for an easier installation.

When customers are installing their isolator on a Delco/Delphi CS Series alternator system, also sell them the connector kit that’s required for OEM connector modification.

| Catalog no. | Description |
|---|---|
| RB-BIK-1882 | Battery isolator installation kit — model no. 1882* |
| RB-GM-KIT | GM Delco CS Series connector kit — model no. 144-CD* |

* Use the catalog numbers to order these products.

Installation kit and GM connector kit increases sales opportunities while easing installation for customers.

# Hardware and home products

### Automotive

Used in older-model cars, glass tube fuses today are found primarily in automotive accessory applications. The expansive Bussmann series line of glass fuses includes many types and sizes in addition to those listed in this catalog. Call Eaton for more product details if you have requirements which are not covered here.

### Appliances and consumer electronics

Glass and ceramic tube fuses are often used to protect appliances and consumer electronics. As electronic equipment becomes smaller, the circuits and components become more delicate and easily damaged. Fuses are the preferred method of protection due to their accuracy, small size and reliability. Fuses are available in a wide variety of amp ratings to provide precise protection. Generally, two sizes of user-replaceable fuses are found: the 1/4" x 1-1/4" and 5x20 mm. Each is available in a variety of volt and amp ratings.

### Fuse types

There are two basic types of fuses available for appliances and consumer electronics: fast-acting or time-delay. Any replacement fuse must match the one it's replacing. In general, fast-acting fuses are a single strand of wire or strip of metal. Time-delay fuses usually have a coiled wire, a thick element wrapped in wire, or a spring. Most electronic fuses will have the voltage and amp rating stamped on the end cap. The type of fuse can generally be visually identified. Also, owner's manuals will have the correct replacement fuse generically identified. For example: "Use a 2 amp, time-delay, 250 volt fuse."

### Glass and ceramic tube fuse sizes

Both glass and ceramic tube fuses vary by diameter and length. The chart below provides a visual reference for the various sizes of the Bussmann series fuse families. Images are shown to scale.

### Fuse selection criteria

- For electronic/electrical applications, fuses must be rated at 125 V or better.
- Voltage must match or exceed the fuse being replaced (125 V for household current; 12 V for auto; 24 V for heavy duty).
- Fuses must match required fuse characteristic – either fast-acting or time-delay.
- Amp rating must match that of the original fuse.

### A note on voltage rating

All fuses have a voltage rating. To maintain safety, this voltage rating should not be exceeded in application, although it is acceptable to use a higher voltage rated fuse in a lower voltage application. For example: A fuse rated for 125 volts is appropriate in household (110 V) or automotive (12 V), while a fuse rated for 32 volts is appropriate for automotive (12 V), but not for household (125 V). Always replace a fuse with one of the same or higher voltage rating.

**See page 50 for specifications.**

### Glass and ceramic tube fuse sizes (actual size)

**5 x 20 mm**
GDA
GDB
GDC
GMA
GMC
GMD

**1/4" x 5/8"**
AGA
SFE-4

**1/4" x 3/4"**
SFE-6

**1/4" x 7/8"**
AWG
SFE-7-1/2
SFE-9

**1/4" x 31/32"**
GBC

**1/4" x 1"**
AGX

**1/4" x 1-1/16"**
SFE-14

**1/4" x 1-1/4"**
ABC
AGC
GBB
SFE-20
MDA
MDL
MDQ

**1/4" x 1-7/16"**
SFE-30

**13/32" x 1-1/2"**
AGU
AGU_GP

**GMF***

* Mounts in HLR in-line holder, see page 13.

## Fast-acting 1/4" diameter automotive fuses

### AGA

**1/4" x 5/8" fast-acting glass tube fuses**

See page 24 for available assortments.

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 1/4 | AGA-1/4 | — |
| 1 | AGA-1 | — |
| 1-1/2 | AGA-1-1/2 | — |
| 2 | AGA-2 | — |
| 2-1/2 | AGA-2-1/2 | — |
| 3 | AGA-3 | — |
| 5 | AGA-5 | — |
| 6 | AGA-6 | — |
| 7-1/2 | AGA-7-1/2 | — |
| 10 | AGA-10 | — |
| 15 | AGA-15 | — |
| 20 | AGA-20 | BP/AGA-20-RP |
| 30 | AGA-30 | — |

* 5 Fuses per pack, 10 packs per shelf carton.
** 5 Fuses per pack, 5 packs per shelf carton.

### AGW

**1/4" x 7/8" fast-acting automotive glass tube fuses**

See page 24 for available assortment.

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 1 | AGW-1 | — |
| 1-1/2 | AGW-1-1/2 | — |
| 2-1/2 | AGW-2-1/2 | — |
| 3 | AGW-3 | — |
| 4 | AGW-4 | — |
| 5 | AGW-5 | — |
| 6 | AGW-6 | — |
| 7-1/2 | AGW-7-1/2 | — |
| 10 | AGW-10 | — |
| 15 | AGW-15 | BP/AGW-15-RP |
| 20 | AGW-20 | — |
| 30 | AGW-30 | — |

* 5 Fuses per pack, 10 packs per shelf carton.
** 5 Fuses per pack, 5 packs per shelf carton.

### AGX

**1/4" x 1" fast-acting automotive glass tube fuses**

See page 24 and 48 for available assortments.

| Amps | Catalog no.* |
|---|---|
| 1 | AGX-1 |
| 2 | AGX-2 |
| 2-1/2 | AGX-2-1/2 |
| 3 | AGX-3 |
| 5 | AGX-5 |
| 7 | AGX-7 |
| 8 | AGX-8 |
| 10 | AGX-10 |
| 15 | AGX-15 |
| 20 | AGX-20 |
| 25 | AGX-25 |
| 30 | AGX-30 |

* 5 Fuses per pack, 10 packs per shelf carton.

### GBB

**1/4" x 1-1/4" very fast-acting ceramic tube fuses**

| Amps | Catalog no.* |
|---|---|
| 1-1/4 | GBB-1-1/4-R |
| 10 | GBB-10-R |
| 15 | GBB-15-R |
| 30 | GBB-30-R |

* 5 Fuses per pack, 10 packs per shelf carton.

### ABC

**1/4" x 1-1/4" fast-acting ceramic tube fuses**

See page 48 for available assortment.

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 1/4 | ABC-1/4 | — |
| 1/2 | ABC-1/2 | — |
| 1 | ABC-1 | — |
| 2 | ABC-2 | — |
| 2-1/2 | ABC-2-1/2 | — |
| 3 | ABC-3 | — |
| 4 | ABC-4 | — |
| 5 | ABC-5 | — |
| 6 | ABC-6 | — |
| 7 | ABC-7 | — |
| 8 | ABC-8 | — |
| 10 | ABC-10 | BP/ABC-10 |
| 12 | ABC-12 | — |
| 15 | ABC-15 | BP/ABC-15 |
| 20 | ABC-20 | BP/ABC-20 |
| 25 | ABC-25 | — |
| 30 | ABC-30 | — |

* 5 Fuses per pack, 10 packs per shelf carton.
** 5 Fuses per pack, 5 packs per shelf carton.

### AGC

**1/4" x 1-1/4" fast-acting automotive glass tube fuses**

See pages 24, 29 and 48 for available assortments.

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 1/8 | AGC-1/8 | — |
| 3/10 | AGC-3/10 | — |
| 1/4 | AGC-1/4 | — |
| 3/8 | AGC-3/8 | — |
| 1/2 | AGC-1/2 | BP/AGC-1/2-RP |
| 3/4 | AGC-3/4 | — |
| 1 | AGC-1 | BP/AGC-1-RP |
| 1-1/4 | AGC-1-1/4 | — |
| 1-1/2 | AGC-1-1/2 | BP/AGC-1-1/2-RP |
| 2 | AGC-2 | BP/AGC-2-RP |
| 2-1/2 | AGC-2-1/2 | BP/AGC-2-1/2-RP |
| 3 | AGC-3 | BP/AGC-3-RP |
| 32/10 | AGC-3-2/10 | — |
| 3-1/2 | AGC-3-1/2 | — |
| 4 | AGC-4 | BP/AGC-4-RP |
| 5 | AGC-5 | BP/AGC-5-RP |
| 6 | AGC-6 | BP/AGC-6-RP |
| 6-1/4 | AGC-6-1/4 | — |
| 7 | AGC-7 | — |
| 7-1/2 | AGC-7-1/2 | BP/AGC-7-1/2-RP |
| 8 | AGC-8 | — |
| 10 | AGC-10 | BP/AGC-10-RP |
| 12 | AGC-12 | — |
| 15 | AGC-15 | BP/AGC-15-RP |
| 20 | AGC-20 | BP/AGC-20-RP |
| 25 | AGC-25 | BP/AGC-25-RP |
| 30 | AGC-30 | BP/AGC-30-RP |
| 35 | AGC-35 | BP/AGC-35-RP |
| 40 | AGC-40 | — |
| 50 | AGC-50 | — |

* 5 Fuses per pack, 10 packs per shelf carton.
** 5 Fuses per pack, 5 packs per shelf carton.

## Fast-acting fuses

### GBC

**1/4" x 31/32" fast-acting German automotive fuses**

See page 24 for available assortment.

| Color code | Amps | Catalog no.* | Retail pack** |
|---|---|---|---|
| Yellow | 5 | GBC-5 | — |
| White | 8 | GBC-8 | BP/GBC-8-RP |
| Red | 16 | GBC-16 | BP/GBC-16-RP |
| Blue | 25 | GBC-25 | BP/GBC-25-RP |

* 5 Fuses per pack, 10 packs per shelf carton.
** 5 Fuses per pack, 5 packs per shelf carton.

### SFE

**1/4" size-rejecting fast-acting automotive glass tube fuses**

See pages 24 and 29 for available assortments.

| Amps | Fuse length | Catalog no.* | Retail pack** |
|---|---|---|---|
| 4 | 5/8" | SFE-4 | BP/SFE-4-RP |
| 6 | 3/4" | SFE-6 | BP/SFE-6-RP |
| 7-1/2 | 7/8" | SFE-7-1/2 | — |
| 9 | 7/8" | SFE-9 | BP/SFE-9-RP |
| 14 | 11/16" | SFE-14 | BP/SFE-14-RP |
| 20 | 11/4" | SFE-20 | BP/SFE-20-RP |
| 30 | 17/16" | SFE-30 | BP/SFE-30-RP |

* 5 Fuses per pack, 10 packs per shelf carton.
** 5 Fuses per pack, 5 packs per shelf carton.

### AGU

**13/32" x 1-1/2" fast-acting automotive glass tube fuses**

Available with gold-plated end caps for high-end stereo and AV markets.

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| **Nickel-plated** | | |
| 10 | AGU-10 | — |
| 15 | AGU-15 | — |
| 20 | AGU-20 | — |
| 25 | AGU-25 | — |
| 30 | AGU-30 | — |
| 40 | AGU-40 | BP/AGU-40-RP |
| 50 | AGU-50 | BP/AGU-50-RP |
| 60 | AGU-60 | BP/AGU-60-RP |
| **Gold-plated** | | |
| 10 | AGU-10GP | — |
| 15 | AGU-15GP | — |
| 20 | AGU-20GP | — |
| 25 | AGU-25GP | — |
| 30 | AGU-30GP | — |
| 35 | AGU-35GP | — |
| 40 | AGU-40GP | BP/AGU-40GP-RP |
| 50 | AGU-50GP | BP/AGU-50GP-RP |
| 60 | AGU-60GP | BP/AGU-60GP-RP |

* 5 Fuses per pack, 10 packs per shelf carton.
** 5 Fuses per pack, 5 packs per shelf carton.

## Time-delay 1/4" diameter fuses

### MDA

**1/4" x 1-1/4" time-delay ceramic tube fuses**

| Amps | Catalog no.* |
|---|---|
| 1 | MDA-1 |
| 1-1/2 | MDA-1-1/2 |
| 2 | MDA-2 |
| 2-1/2 | MDA-2-1/2 |
| 3 | MDA-3 |
| 4 | MDA-4 |
| 5 | MDA-5 |
| 6 | MDA-6 |
| 7 | MDA-7 |
| 8 | MDA-8 |
| 10 | MDA-10 |
| 12 | MDA-12 |
| 15 | MDA-15 |
| 20 | MDA-20 |
| 25 | MDA-25 |
| 30 | MDA-30 |

* 5 Fuses per pack, 10 packs per shelf carton.

### MDL

**1/4" x 1-1/4" time-delay glass tube fuses**

See page 48 for available assortment.

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 1/16 | MDL-1/16 | — |
| 1/8 | MDL-1/8 | — |
| 1/4 | MDL-1/4 | BP/MDL-1/4 |
| 3/8 | MDL-3/8 | — |
| 1/2 | MDL-1/2 | BP/MDL-1/2 |
| 3/4 | MDL-3/4 | — |
| 1 | MDL-1 | BP/MDL-1 |
| 1-1/4 | MDL-1-1/4 | — |
| 1-1/2 | MDL-1-1/2 | BP/MDL-1-1/2 |
| 2 | MDL-2 | BP/MDL-2 |
| 2-1/2 | MDL-2-1/2 | BP/MDL-2-1/2 |
| 3 | MDL-3 | BP/MDL-3 |
| 3-2/10 | MDL-32/10 | — |
| 3-1/2 | MDL-3-1/2 | — |
| 4 | MDL-4 | BP/MDL-4 |
| 5 | MDL-5 | BP/MDL-5 |
| 6 | MDL-6 | BP/MDL-6 |
| 6-1/4 | MDL-6-1/4 | — |
| 7 | MDL-7 | BP/MDL-7 |
| 7-1/2 | MDL-7-1/2 | — |
| 8 | MDL-8 | BP/MDL-8 |
| 10 | MDL-10 | BP/MDL-10 |
| 12 | MDL-12 | — |
| 15 | MDL-15 | BP/MDL-15 |
| 20 | MDL-20 | BP/MDL-20 |
| 25 | MDL-25 | BP/MDL-25 |
| 30 | MDL-30 | BP/MDL-30 |
| 40 | MDL-40 | — |

* 5 Fuses per pack, 10 packs per shelf carton.
** 5 Fuses per pack, 5 packs per shelf carton.

### MDQ

**1/4" x 1-1/4" dual-element, time-delay glass tube fuses**

| Amps | Catalog no.* |
|---|---|
| 2 | MDQ-2 |
| 4 | MDQ-4 |
| 5 | MDQ-5 |
| 6 | MDQ-6 |

* 5 Fuses per pack, 10 packs per shelf carton.

## Fast-acting 5x20 mm fuses

### GDA

**IEC 5x20 mm high-breaking capacity fast-acting ceramic tube fuses**

| Amps | Catalog no.* |
|---|---|
| 500 mA | GDA-500MA |
| 630 mA | GDA-630MA |
| 1 | GDA-1A |
| 1.25 | GDA-1.25A |
| 1.6 | GDA-1.6A |
| 2 | GDA-2A |
| 2.5 | GDA-2.5A |
| 3.15 | GDA-3.15A |
| 4 | GDA-4A |
| 5 | GDA-5A |
| 6.3 | GDA-6.3A |

* 5 Fuses per pack, 10 packs per shelf carton.

### GDB

**IEC 5x20 mm fast-acting glass tube fuses**

| Amps | Catalog no.* |
|---|---|
| 160 mA | GDB-160MA |
| 2 | GDB-2A |
| 4 | GDB-4A |
| 6.3 | GDB-6.3A |
| 8 | GDB-8A |
| 10 | GDB-10A |

* 5 Fuses per pack, 10 packs per shelf carton.

### GMA

**UL 5x20 mm fast-acting glass tube fuses**

See page 48 for available assortments.

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 63 mA | GMA-63MA | — |
| 100 mA | GMA-100MA | — |
| 125 mA | GMA-125MA | — |
| 200 mA | GMA-200MA | BP/GMA-200MA |
| 250 mA | GMA-250MA | BP/GMA-250MA |
| 300 mA | GMA-300MA | — |
| 315 mA | GMA-315MA | — |
| 500 mA | GMA-500MA | BP/GMA-500MA |
| 600 mA | GMA-600MA | — |
| 750 mA | GMA-750MA | BP/GMA-750MA |
| 800 mA | GMA-800MA | — |
| 1 | GMA-1A | BP/GMA-1A |
| 1.25 | GMA-1.25A | — |
| 1.5 | GMA-1.5A | — |
| 1.6 | GMA-1.6A | — |
| 2 | GMA-2A | BP/GMA-2A |
| 2.5 | GMA-2.5A | — |
| 3 | GMA-3A | BP/GMA-3A |
| 3.15 | GMA-3.15A | — |
| 3.5 | GMA-3.5A | — |
| 4 | GMA-4A | — |
| 5 | GMA-5A | BP/GMA-5A |
| 6 | GMA-6A | BP/GMA-6A |
| 7 | GMA-7A | BP/GMA-7A |
| 8 | GMA-8A | — |
| 10 | GMA-10A | BP/GMA-10A |

* 5 Fuses per pack, 10 packs per shelf carton.
** 5 Fuses per pack, 5 packs per shelf carton.

## Time-delay 5x20 mm fuses

### GDC

**IEC 5x20 mm time-delay glass tube fuses**

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 500 mA | GDC-500MA | — |
| 1 | GDC-1A | — |
| 1.6 | GDC-1.6A | — |
| 2 | GDC-2A | — |
| 2.5 | GDC-2.5A | — |
| 3.15 | GDC-3.15A | — |
| 4 | GDC-4A | — |
| 5 | GDC-5A | BP/GDC-5A |
| 6.3 | GDC-6.3A | — |

* 5 Fuses per pack, 10 packs per shelf carton.
** 5 Fuses per pack, 5 packs per shelf carton.

### GMC

**UL 5x20 mm medium time-delay glass tube fuses**

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 500 mA | GMC-500MA | BP/GMC-500MA |
| 630 mA | GMC-630MA | — |
| 1 | GMC-1A | — |
| 1.5 | GMC-1.5A | — |
| 1.6 | GMC-1.6A | — |
| 2 | GMC-2A | — |
| 3 | GMC-3A | — |
| 3.5 | GMC-3.5A | — |
| 4 | GMC-4A | — |
| 5 | GMC-5A | BP/GMC-5 |
| 6 | GMC-6A | — |
| 7 | GMC-7A | BP/GMC-7 |

* 5 Fuses per pack, 10 packs per shelf carton.
** 5 Fuses per pack, 5 packs per shelf carton.

### GMD

**UL 5x20 mm medium time-delay glass tube fuses**

| Amps | Catalog no.* |
|---|---|
| 500 mA | GMD-500 MA |
| 1 | GMD-1A |
| 2 | GMD-2A |
| 3 | GMD-3A |

* 5 Fuses per pack, 10 packs per shelf carton.

### GMF

**Non-rejection time-delay in-line fuse with cap**

Use with HLR in-line fuse holder page 13.

| Amps | Catalog no.* |
|---|---|
| 2-1/2 | GMF-2-1/2 |
| 2-8/10 | GMF-2-8/10 |
| 3 | GMF-3 |
| 3-2/10 | GMF-3-2/10 |
| 4 | GMF-4 |

* 5 Fuses per pack, 10 packs per shelf carton.

Cartridge fuses are used to protect motors and branch circuits where higher amps or volt ratings are required. They are available in a wide variety of sizes, amp and volt ratings up to 600 Vac and 600 amps. Cartridge fuses are used extensively in commercial, industrial and agricultural applications as well as residential fuse panels, air conditioning, pumps, appliances and other equipment.

Cartridge fuses are available in two types. General purpose fuses have no time-delay and protect fuse panels, appliances and branch circuits. Heavy-duty fuses have a time-delay feature, allowing momentary motor startups.

Both are available in 250 Vac and 600 Vac versions with catalog symbol and amp rating stamped on the knife blade or end cap.

### General purpose one-time NON and NOS

Used in lighting circuits, main panel protection and other circuits that don't contain large electric motors or inductive loads. Up to 60 amp fuses UL Listed Class K5 (IR: 50 kA). 70 to 600 A fuses UL Class H (IR: 10 kA).

### Cartridge fuse dimensions - in (mm)

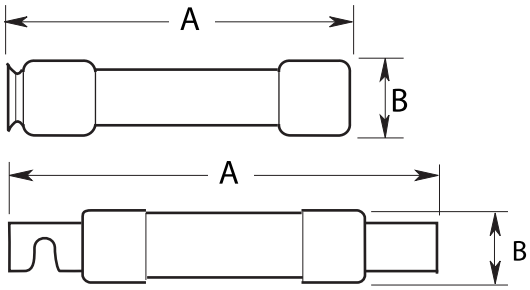
**Ferrule styles***

| Amp range | 250 Vac | | 600 Vac | |
|---|---|---|---|---|
| | A | B | A | B |
| 1/10-30 | 2 (50.8) | 0.56 (14.3) | 5.0 (127.0) | 0.81 (20.6) |
| 35-60 | 3 (76.2) | 0.81 (20.6) | 5.5 (139.7) | 1.06 (27.0) |

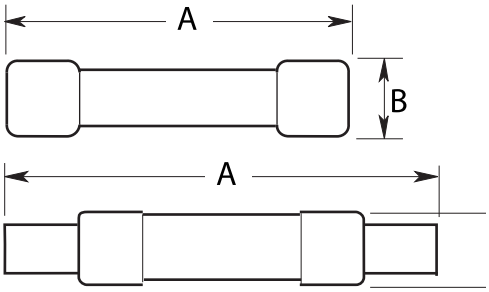
**Blade styles***

| Amp range | 250 Vac | | 600 Vac | |
|---|---|---|---|---|
| | A | B | A | B |
| 70-100 | 5.88 (149.2) | 1.06 (26.9) | 7.88 (200.0) | 1.34 (34.0) |
| 110-200 | 7.13 (181.0) | 1.56 (39.6) | 9.63 (244.5) | 1.84 (46.7) |
| 225-400 | 8.63 (219.1) | 2.06 (52.3) | 11.63 (295.3) | 2.59 (65.8) |
| 450-600 | 10.38 (263.5) | 2.59 (65.8) | 13.38 (339.7) | 3.13 (79.5) |

* NON and NOS one-time fuses do not have a rejection feature.




Class R fuses with rejection feature (FRN-R and FRS-R).




Class H fuses without rejection feature (NON/NOS and CDN/PON).

### NON

**250 Vac general purpose non current-limiting Class K5 and H fuses**

See page 48 for available assortments and emergency kits.

35-60 A

70 A and over

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 2 | NON-2 | — |
| 3 | NON-3 | — |
| 5 | NON-5 | — |
| 6 | NON-6 | — |
| 10 | NON-10 | — |
| 15 | NON-15 | BP/NON-15 |
| 20 | NON-20 | BP/NON-20 |
| 25 | NON-25 | BP/NON-25 |
| 30 | NON-30 | BP/NON-30 |
| 35 | NON-35 | BP/NON-35 |
| 40 | NON-40 | BP/NON-40 |
| 45 | NON-45 | BP/NON-45 |
| 50 | NON-50 | BP/NON-50 |
| 60 | NON-60 | BP/NON-60 |
| 70 | NON-70 | — |
| 80 | NON-80 | — |
| 90 | NON-90 | — |
| 100 | NON-100 | BP/NON-100 |
| 125 | NON-125 | — |
| 150 | NON-150 | — |
| 200 | NON-200 | — |
| 250 | NON-250 | — |
| 300 | NON-300 | — |
| 400 | NON-400 | — |

* Refer to packaging spec file for individual fuse packaging options.
** 70 and 100 amp fuses 1 fuse per pack, 15 to 60 amps, 2 fuses per pack, 5 packs per shelf carton.

### NOS

**600 Vac general purpose non current-limiting Class K5 and H fuse**

Up to 60 A

70 A and over

| Amps | Catalog no. |
|---|---|
| 6 | NOS-6 |
| 10 | NOS-10 |
| 15 | NOS-15 |
| 20 | NOS-20 |
| 25 | NOS-25 |
| 30 | NOS-30 |
| 35 | NOS-35 |
| 40 | NOS-40 |
| 50 | NOS-50 |
| 60 | NOS-60 |
| 100 | NOS-100 |
| 200 | NOS-200 |

* Refer to packaging spec file for individual fuse packaging options.

### Fusetron™ energy efficient FRN-R fuses

Bussmann series Fusetron cartridge fuses are 23% more energy efficient* and offer the best time-delay performance. Their dual-element feature allows closer sizing to load for superior protection of motors and transformers. These Class RK5 fuses with a 200 kA interrupting rating can be used in a broad range of applications.

When sized correctly, they help protect motors from burnout caused by overloads or single-phasing. The time-delay feature allows the initial startup current surge for typical motors to pass, but opens prior to motor burnout when longer, dangerous overloads are present. In addition, the dual-element design opens in as little as 0.004 second if the fuse experiences short-circuit conditions. All fuses are UL Listed Class R (IR: 200 kA). Groove in end cap or notch in knife blade permit the fuse to be used in only Class H, Class K or Class R fuse blocks.

* Test results are based on weighted sales volume of Fusetron and Ferraz Shawmut (Mersen) fuses by selected amp and volt rating combination. Next leading brand refers to Ferraz Shawmut based on third-party fuse market share data for a twenty-seven month period (July 2008 through September 2010).

**FRN-R**

**250 Vac non-indicating dual-element, time-delay Class RK5 fuses**

See page 48 for available assortments.

Up to 60 A

70 A and over

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 1 | FRN-R-1 | — |
| 2 | FRN-R-2 | — |
| 3 | FRN-R-3 | — |
| 4 | FRN-R-4 | — |
| 5 | FRN-R-5 | — |
| 6 | FRN-R-6 | — |
| 6-1/4 | FRN-R-6-1/4 | — |
| 7 | FRN-R-7 | — |
| 8 | FRN-R-8 | — |
| 10 | FRN-R-10 | BP/FRN-R-10 |
| 12 | FRN-R-12 | — |
| 15 | FRN-R-15 | BP/FRN-R-15 |
| 17-1/2 | FRN-R-17-1/2 | — |
| 20 | FRN-R-20 | BP/FRN-R-20 |
| 25 | FRN-R-25 | BP/FRN-R-25 |
| 30 | FRN-R-30 | BP/FRN-R-30 |
| 35 | FRN-R-35 | BP/FRN-R-35 |
| 40 | FRN-R-40 | BP/FRN-R-40 |
| 45 | FRN-R-45 | BP/FRN-R-45 |
| 50 | FRN-R-50 | BP/FRN-R-50 |
| 60 | FRN-R-60 | BP/FRN-R-60 |
| 70 | FRN-R-70 | — |
| 75 | FRN-R-75 | — |
| 80 | FRN-R-80 | — |
| 90 | FRN-R-90 | — |
| 100 | FRN-R-100 | BP/FRN-R-100 |
| 150 | FRN-R-150 | — |
| 200 | FRN-R-200 | — |

* Refer to packaging spec file for individual fuse packaging options.
** 10 to 60 amp fuses, 2 per pack; 100 amp fuse, 1 fuse per pack, 5 packs per shelf carton.

### FRN-R fuses with *easy*ID blown fuse indication

Featuring the same energy efficiency and electrical performance characteristics as their green label non-indicating versions, *easy*ID FRN-R fuses offer consumers the additional advantage of blown fuse status that makes finding the open fuse easier and faster.

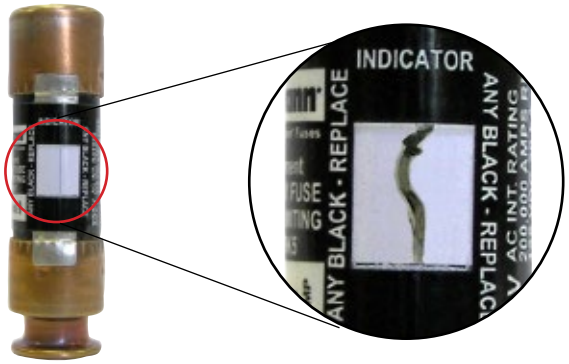
**FRN-R**

**250 Vac indicating dual-element, time-delay Class RK5 fuses**

| Amps | Catalog no.* | *easy*ID retail pack** |
|---|---|---|
| 15 | FRN-R-15ID | BP/FRN-R-15ID |
| 20 | FRN-R-20ID | BP/FRN-R-20ID |
| 30 | FRN-R-30ID | BP/FRN-R-30ID |
| 40 | FRN-R-40ID | BP/FRN-R-40ID |
| 50 | FRN-R-50ID | BP/FRN-R-50ID |
| 60 | FRN-R-60ID | BP/FRN-R-60ID |

* Refer to packaging spec file for individual fuse packaging options.
** 2 Fuses per pack, 5 packs per shelf carton.

## *easy*ID blown fuse indication




Good

Indicator shows when fuse is blown

### Fusetron energy efficient FRS-R fuses

These cartridge fuses are 23% more energy efficient* and offer the best time-delay performance. Their dual-element feature allows closer sizing to load for superior protection of motors and transformers. These Class RK5 fuses with a 200 kA interrupting rating can be used in a broad range of applications.

When sized correctly, they help protect motors from burnout caused by overloads or single-phasing. The time-delay feature allows the initial startup current surge for typical motors to pass, but opens prior to motor burnout when longer, dangerous overloads are present. In addition, the dual-element design opens in as little as 0.004 second if the fuse experiences short-circuit conditions. All fuses are UL Listed Class R (IR: 200 kA).

* Test results are based on weighted sales volume of Fusetron and Ferraz Shawmut (Mersen) fuses by selected amp and volt rating combination. Next leading brand refers to Ferraz Shawmut based on third-party fuse market share data for a twenty-seven month period (July 2008 through September 2010).

### FRS-R

#### 600 Vac indicating and non-indicating dual-element, time-delay Class RK5 fuses

Up to 60 A

65 A and over

| Amps | Catalog no.* | With *easy*ID indication | Retail pack** |
|---|---|---|---|
| 2 | FRS-R-2 | — | — |
| 3 | FRS-R-3 | — | — |
| 3-1/2 | FRS-R-3-1/2 | — | — |
| 4 | FRS-R-4 | — | — |
| 5 | FRS-R-5 | — | — |
| 6 | FRS-R-6 | FRS-R-6ID | — |
| 6-1/4 | FRS-R-6-1/4 | FRS-R-6-1/4ID | — |
| 7 | FRS-R-7 | FRS-R-7ID | — |
| 8 | FRS-R-8 | FRS-R-8ID | — |
| 10 | FRS-R-10 | FRS-R-10ID | — |
| 12 | FRS-R-12 | FRS-R-12ID | — |
| 15 | FRS-R-15 | FRS-R-15ID | BP/FRS-R-15 |
| 17-1/2 | FRS-R-17-1/2 | FRS-R-17-1/2ID | — |
| 20 | FRS-R-20 | FRS-R-20ID | BP/FRS-R-20 |
| 25 | FRS-R-25 | FRS-R-25ID | — |
| 30 | FRS-R-30 | FRS-R-30ID | BP/FRS-R-30 |
| 35 | FRS-R-35 | FRS-R-35ID | — |
| 40 | FRS-R-40 | FRS-R-40ID | — |
| 45 | FRS-R-45 | FRS-R-45ID | — |
| 50 | FRS-R-50 | FRS-R-50ID | — |
| 60 | FRS-R-60 | FRS-R-60ID | BP/FRS-R-60 |
| 70 | FRS-R-70 | — | — |
| 80 | FRS-R-80 | — | — |
| 90 | FRS-R-90 | — | — |
| 100 | FRS-R-100 | — | — |
| 125 | FRS-R-125 | — | — |
| 150 | FRS-R-150 | — | — |
| 175 | FRS-R-175 | — | — |
| 200 | FRS-R-200 | — | — |

* Refer to packaging spec file for individual fuse packaging options.
** 1 Fuse per pack, 5 packs per shelf carton.

### CDN Type D and PON Type P CSA Certified standard code fuses

Economical fuses for a variety of applications where available short-circuit current is relatively low.

### CDN

#### 250 Vac CSA Type D time-delay fuses

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 10 | CDN10 | — |
| 12 | CDN12 | — |
| 15 | CDN15 | BP/CDN10 |
| 20 | CDN20 | BP/CDN20 |
| 25 | CDN25 | BP/CDN25 |
| 30 | CDN30 | BP/CDN30 |
| 35 | CDN35 | BP/CDN35 |
| 40 | CDN40 | BP/CDN40 |
| 45 | CDN45 | BP/CDN45 |
| 50 | CDN50 | BP/CDN50 |
| 60 | CDN60 | BP/CDN60 |
| 100 | CDN100 | — |
| 110 | CDN110 | — |
| 175 | CDN175 | — |
| 200 | CDN200 | — |

* Refer to packaging spec file for individual fuse packaging options.
** 1 Fuse per pack, 5 packs per shelf carton.

### PON

#### 250 Vac CSA Type P one-time fuses

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 15 | PON15 | BP/PON15 |
| 20 | PON20 | BP/PON20 |
| 25 | PON25 | BP/PON25 |
| 30 | PON30 | BP/PON30 |
| 35 | PON35 | BP/PON35 |
| 40 | PON40 | BP/PON40 |
| 45 | PON45 | BP/PON45 |
| 50 | PON50 | BP/PON50 |
| 60 | PON60 | BP/PON60 |

* Refer to packaging spec file for individual fuse packaging options.
** 1 Fuse per pack, 5 packs per shelf carton.

### Midget fuses

Midget fuses are 13/32" x 1-1/2" cartridge fuses in a wide variety of volt and amp ratings to provide supplemental protection to industrial, commercial, agricultural, heating, ventilating and air conditioning equipment. Small size midget fuses often protect control circuit wiring, motor control transformers or small motors. The National Electrical Code® (NEC®) now requires more protection of these components creating an increased replacement demand for these fuses.

**BAF**

**250 Vac fast-acting**
**13/32" x 1-1/2" midget fuses**

| Amps | Catalog no.* |
|---|---|
| 1 | BAF-1 |
| 3 | BAF-3 |
| 5 | BAF-5 |
| 6 | BAF-6 |
| 10 | BAF-10 |
| 15 | BAF-15 |
| 20 | BAF-20 |
| 25 | BAF-25 |
| 30 | BAF-30 |

* Refer to packaging spec file for individual fuse packaging options.

**KTK**

**600 Vac fast-acting**
**13/32" x 1-1/2" midget fuses**

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 1 | KTK-1 | BP/KTK-1 |
| 2 | KTK-2 | BP/KTK-2 |
| 3 | KTK-3 | BP/KTK-3 |
| 4 | KTK-4 | — |
| 5 | KTK-5 | BP/KTK-5 |
| 6 | KTK-6 | — |
| 10 | KTK-10 | BP/KTK-10 |
| 15 | KTK-15 | BP/KTK-15 |
| 20 | KTK-20 | BP/KTK-20 |
| 25 | KTK-25 | — |
| 30 | KTK-30 | BP/KTK-30 |

* 10 Fuses per shelf carton.
** 1 Fuse per pack, 5 packs per shelf carton.

### Class CC fuses

The rejection Midget fuses are Class CC and are suitable for both branch circuit and supplemental protection.

**KTK-R**

**600 Vac fast-acting**
**13/32" x 1-1/2"**
**Class CC branch circuit fuses**

| Amps | Catalog no.* |
|---|---|
| 1/2 | KTK-R-1/2 |
| 1 | KTK-R-1 |
| 2 | KTK-R-2 |
| 3 | KTK-R-3 |
| 4 | KTK-R-4 |
| 5 | KTK-R-5 |
| 6 | KTK-R-6 |
| 8 | KTK-R-8 |
| 10 | KTK-R-10 |
| 12 | KTK-R-12 |
| 15 | KTK-R-15 |
| 20 | KTK-R-20 |
| 25 | KTK-R-25 |
| 30 | KTK-R-30 |

* Refer to packaging spec file for individual fuse packaging options.

**Did you know? There's more**

Talk to your Bussmann series sales representative about other available amp ratings.

## FNM

**250 Vac time-delay 13/32" x 1-1/2" midget fuses**

See page 48 for available assortments.

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 1/2 | FNM-1/2 | — |
| 6/10 | FNM-6/10 | — |
| 1 | FNM-1 | — |
| 2 | FNM-2 | BP/FNM-2 |
| 2-1/2 | FNM-2-1/2 | — |
| 3 | FNM-3 | — |
| 3-2/10 | FNM-32/10 | — |
| 3-1/2 | FNM-3-1/2 | — |
| 4 | FNM-4 | — |
| 5 | FNM-5 | BP/FNM-5 |
| 6 | FNM-6 | — |
| 6-1/4 | FNM-6-1/4 | — |
| 7 | FNM-7 | — |
| 8 | FNM-8 | — |
| 9 | FNM-9 | — |
| 10 | FNM-10 | BP/FNM-10 |
| 12 | FNM-12 | BP/FNM-12 |
| 15 | FNM-15 | BP/FNM-15 |
| 20 | FNM-20 | BP/FNM-20 |
| 25 | FNM-25 | — |
| 30 | FNM-30 | BP/FNM-30 |

* 10 Fuses per shelf carton.
** 2 Fuses per pack, 5 packs per shelf carton.

## FNQ

**500 Vac time-delay 13/32" x 1-1/2" midget fuses**

| Amps | Catalog no.* |
|---|---|
| 1/2 | FNQ-1/2 |
| 1 | FNQ-1 |
| 1-1/2 | FNQ-11/2 |
| 2 | FNQ-2 |
| 2-1/2 | FNQ-2-1/2 |
| 3 | FNQ-3 |
| 4 | FNQ-4 |
| 5 | FNQ-5 |
| 6 | FNQ-6 |
| 7 | FNQ-7 |
| 8 | FNQ-8 |
| 10 | FNQ-10 |
| 12 | FNQ-12 |
| 15 | FNQ-15 |
| 20 | FNQ-20 |
| 25 | FNQ-25 |
| 30 | FNQ-30 |

* 10 Fuses per shelf carton.

## FNQ-R

**600 Vac time-delay 13/32" x 1-1/2" Class CC branch circuit fuses**

| Amps | Catalog no.* |
|---|---|
| 1/2 | FNQ-R-1/2 |
| 1 | FNQ-R-1 |
| 2 | FNQ-R-2 |
| 3 | FNQ-R-3 |
| 4 | FNQ-R-4 |
| 5 | FNQ-R-5 |
| 6 | FNQ-R-6 |
| 6-1/4 | FNQ-R-6-1/4 |
| 7-1/2 | FNQ-R-7-1/2 |
| 8 | FNQ-R-8 |
| 10 | FNQ-R-10 |
| 12 | FNQ-R-12 |
| 15 | FNQ-R-15 |
| 20 | FNQ-R-20 |
| 30 | FNQ-R-30 |

* 10 Fuses per shelf carton.

## SC

**Specialty Class G rejection fuses**

- 600 Vac fast-acting (1⁄2-6 A)
- 600 Vac time-delay (7-20 A)
- 480 Vac time-delay (25-60 A)

| Amps | Fuse Length | Catalog no.* | Retail pack** |
|---|---|---|---|
| 2 | 1.31″ | SC-2 | — |
| 3 | 1.31″ | SC-3 | — |
| 5 | 1.31″ | SC-5 | — |
| 6 | 1.31″ | SC-6 | — |
| 8 | 1.31″ | SC-8 | — |
| 10 | 1.31″ | SC-10 | — |
| 15 | 1.31″ | SC-15 | BP/SC-15 |
| 20 | 1.41″ | SC-20 | BP/SC-20 |
| 25 | 1.62″ | SC-25 | BP/SC-25 |
| 30 | 1.62″ | SC-30 | BP/SC-30 |
| 40 | 2.25″ | SC-40 | — |
| 60 | 2.25″ | SC-60 | — |

* 10 Fuses per shelf carton.
** 2 Fuses per pack, 5 packs per shelf carton.

These highly compact branch circuit fuses are used in residential, mobile home and industrial applications. They have a minimum 300 volt rating and are available up to 60 A. All SC fuses are 13/32″ in diameter with varying lengths to provide a rejection feature that prevents over fusing (installing a 30 amp fuse in a 20 A circuit). One half to 6 A SC fuses are fast-acting, while 7 to 60 A SC fuses are time-delay to permit temporary overloads to pass without nuisance openings.

See page 48 for available assortment.

## Plug fuses

Plug fuses thread into receptacles. Two types of threaded fuses are available: Edison base (brass) and rejection base (porcelain). The two are not interchangeable. TL and SL medium-duty fuses are regular duty fuses. T and S are heavy duty fuses for more demanding applications with high inrush currents. They feature a dual-element design that provides superior short-circuit and overload protection.

Plug fuses are often used in residential applications to protect furnace blower motors, pumps, power tools, garage door openers, etc. Edison base plug fuses for motor protection are often used in conjunction with branch circuit protection and located in a box cover unit (see page 46).

Plug fuses provide a compact and economical method to prevent electric motor damage, reduce downtime and lower maintenance costs by opening when an overload is present.

When used for residential branch circuit protection, fuses are typically located in the main fuse panel.

## Edison base plug fuses

The Edison base plug fuse uses the same thread as a light bulb base. All ampacities will fit the same fuse receptacle. To help prevent overfusing a circuit — installing a fuse with a greater amp rating than the circuit can handle — it is recommended to install the correctly sized SA rejection base fuse adapter and use a correctly rated S or SL fuse.

## Type BP/MB

### 125 Vac Edison base UL circuit breakers

For replacing Edison base plug fuses in residential fuse panels. Not for use in box cover units.

| Amps | Retail pack* |
|---|---|
| 15 | BP/MB-15 |
| 20 | BP/MB-20 |

* 1 Circuit breaker per pack, 5 packs per shelf carton.

## Type T

### 125 Vac dual-element, time-delay, Edison base plug fuses

Heavy duty T fuses are used for air conditioners, furnace blower motors, swimming pool pumps, deep freezers or any circuit where motors frequently turn ON and OFF. The T plug fuse is an industrial strength and provides superior protection that will resist nuisance openings under repeated motor startups. Available in a wide amp range to permit exact sizing to motor load.

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 1-1/4 | T-1-1/4 | — |
| 1-6/10 | T-1-6/10 | — |
| 3-2/10 | T-3-2/10 | BP/T-3-2/10 |
| 4 | T-4 | — |
| 5 | T-5 | — |
| 6-1/4 | T-6-1/4 | BP/T-6-1/4 |
| 8 | T-8 | BP/T-8 |
| 10 | T-10 | BP/T-10 |
| 12 | T-12 | BP/T-12 |
| 15 | T-15 | BP/T-15 |
| 20 | T-20 | BP/T-20 |
| 25 | T-25 | BP/T-25 |
| 30 | T-30 | BP/T-30 |

* 4 fuses per box, 25 packs per shelf carton.
** Less than 15 amps, 1 fuse per pack, 15 to 30 amps, 2 fuses per pack, 5 packs per shelf carton.

## Type TL

### 125 Vac time-delay Edison base plug fuses

Medium duty TL fuses are used for residential motor circuits in kitchens, workshops, garages and utility rooms.

See page 48 for available emergency kits.

| Amps | Catalog no.* | Retail box* | Retail pack** |
|---|---|---|---|
| 15 | TL-15 | TL-15PK4 | BP/TL-15 |
| 20 | TL-20 | TL-20PK4 | BP/TL-20 |
| 25 | TL-25 | TL-25PK4 | BP/TL-25 |
| 30 | TL-30 | TL-30PK4 | BP/TL-30 |

* 4 Fuses per box.
** 3 Fuses per pack, 5 packs per shelf carton.

### Rejection base plug fuses

The rejection base threads prevent installing a larger amp fuse, e.g., a 30 amp fuse cannot be installed in a 20 amp receptacle.

### Type S

**125 Vac dual-element, time-delay, rejection base plug fuses**

UL and CSA heavy-duty S fuses are for use in air conditioners, furnace blower motors, swimming pool pumps, deep freezers or where motors frequently turn ON and OFF. The S rejection base plug fuse is an industrial strength product and provides superior protection that will resist nuisance openings under repeated motor startups. Available in a wide amp range to permit exact sizing to motor load.

| Amps | Catalog no.* | Retail pack** |
|---|---|---|
| 11/4 | S-11/4 | BP/S-11/4 |
| 16/10 | S-16/10 | BP/S-16/10 |
| 2-1/2 | S-2-1/2 | — |
| 3-2/10 | S-3-2/10 | BP/S-32/10 |
| 3-1/2 | S-3-1/2 | — |
| 4 | S-4 | — |
| 5 | S-5 | — |
| 6-1/4 | S-6-1/4 | BP/S-6-1/4 |
| 7 | S-7 | — |
| 8 | S-8 | BP/S-8 |
| 10 | S-10 | BP/S-10 |
| 12 | S-12 | BP/S-12 |
| 15 | S-15 | BP/S-15 |
| 20 | S-20 | BP/S-20 |
| 25 | S-25 | BP/S-25 |
| 30 | S-30 | BP/S-30 |

* 4 Fuses per box.
** Less than 15 amps, 1 fuse per pack; 15 to 30 amps, 2 fuses per pack, 5 packs per shelf carton.

### Type SL

**125 Vac time-delay, rejection base plug fuses**

SL fuses for residential motor circuits in kitchens, workshops, garages and utility rooms.

See page 48 for available emergency kits.

| Amps | Catalog no.* | Retail box* | Retail pack** |
|---|---|---|---|
| 15 | SL-15 | SL-15PK4 | BP/SL-15 |
| 20 | SL-20 | SL-20PK4 | BP/SL-20 |
| 25 | SL-25 | SL-25PK4 | BP/SL-25 |
| 30 | SL-30 | SL-30PK4 | BP/SL-30 |

* 4 Fuses per box.
** 3 Fuses per pack, 5 packs per shelf carton.

### Type SA

**Fustat adapters for using S and SL rejection plug fuses in Edison base sockets**

SA adapters convert Edison base receptacles to accept a rejection base fuse. SA adapters limit the fuse amp rating that can be installed to protect circuits from being overfused and are available in a variety of sizes to deliver the desired fuse rejection.

See page 48 for available assortment.

| Amp range | Catalog no.* | Retail pack** |
|---|---|---|
| 1 or less | SA-1 | — |
| 1.25 or less | SA-1-1/4 | — |
| 1.6 or less | SA-1-6/10 | — |
| 3.5 to 6.25 | SA-6-1/4 | — |
| 7 to 15 | SA-15 | BP/SA-15 |
| 20 | SA-20 | BP/SA-20 |
| 20 to 30 | SA-30 | BP/SA-30 |

* 4 SA Adapters per box.
** 3 SA Adapters per pack, 5 packs per shelf carton.

### CSA Edison base plug fuses

The base is the same as a light bulb base. All sizes fit the same fuse receptacle.

### Type TC

**125 Vac CSA Type D dual-element time-delay Edison base plug fuses**

Heavy duty TC fuses are used for residential motor circuits in kitchens, workshops, garages and utility rooms.

| Amps | Retail box* | Retail pack** |
|---|---|---|
| 15 | TC-15PK4 | BP/TC-15 |
| 20 | TC-20PK4 | BP/TC-20 |
| 25 | TC-25PK4 | BP/TC-25 |
| 30 | TC-30PK4 | BP/TC-30 |

* 4 Fuses per box.
** 2 Fuses per pack, 5 packs per shelf carton.

See page 48 for available emergency kits.

### Type P

**125 Vac CSA Type P dual-element one-time Edison base plug fuses**

Medium-duty P fuses are used for non-inductive loads such as lighting and heating circuits.

| Amps | Retail box* | Retail pack** |
|---|---|---|
| 15 | P-15PK4 | BP/P-15 |
| 20 | P-20PK4 | BP/P-20 |
| 25 | P-25PK4 | BP/P-25 |
| 30 | P-30PK4 | BP/P-30 |

* 4 Fuses per box.
** 2 Fuses per pack, 5 packs per shelf carton.

See page 48 for available emergency kits.

### Type CP/MB

**125 Vac CSA Edison base circuit breakers**

For replacing Edison base plug fuses in residential fuse panels. Not for use in box cover units.

| Amps | Retail pack* |
|---|---|
| 15 | CP/MB-15 |
| 20 | CP/MB-20 |

* 1 Circuit breaker per pack, 5 packs per shelf carton.

## Box cover units

### For supplemental circuit and small motor protection

Box cover units are available in a variety of styles that fit standard electrical boxes, to provide an efficient and economical method to protect motors from overloads. Often, branch circuit protection cannot protect small motors, e.g., a 6-1/4 amp rated motor will likely burn up before a 30 amp breaker trips. A box cover unit permits using a fuse sized close to the motor's load so that it opens when the motor draws too much current.

| Catalog no* | Retail pack** | Max Hp/volts/amps | Box type | Description |
|---|---|---|---|---|
| SOU | BP/SOU | 3/4 Hp/125 Vac/15 A | 2-1/4" handy | Fuse holder only |
| SRU | BP/SRU | 1/2 Hp/125 Vac/15 A | 2-1/4" handy | Fuse holder/ three-prong receptacle |
| SSN | — | 1/2 Hp/125 Vac/15 A | Single gang | Weatherproof fuse holder/switch |
| SSU | BP/SSU | 1/2 Hp/125 Vac/15 A | 2-1/4" handy | Fuse holder/switch |
| SSY | BP/SSY† | 1/2 Hp/125 Vac/15 A | 4" square | Fuse holder/switch |
| SSY-RL | — | 1/2 Hp/125 Vac/15 A | 4" square | Fuse holder/switch, three-prong receptacle and switch light |
| STY | — | 1/2 Hp/125 Vac/15 A | 4" square | Twin fuse holders/double pole switch |

* 1 Box cover unit per pack, 10 packs per shelf carton.
** 1 Box cover unit per pack, 3 packs per shelf carton.
† 1 Box cover unit per pack, 2 packs per shelf carton.

SOU

SRU

SSU

SSY

SSY-RL

STY *

SSN

* Double pole switch opens both sides of the circuit. Can be used for two separate motors with common switch or a single motor (3/4 Hp, 250 Vac max.)

## SurgePOD™ PRO Type 1 power surge protective device

### The value Type 1 SPD for sensitive residential applications

- Type 1 UL and cULus Listed 1449 4th Edition SPD is easily installed on the loadside or lineside of the service entrance overcurrent protective device.
- For 240 Vac, split-phase electrical systems.
- 200 kA SCCR.
- Compact UV resistant NEMA 4X enclosure for indoor or outdoor applications.
- *easy*ID LED status indicators provide surge protection status at a glance.
- Voltage specific model protects electrical systems, equipment, appliances and consumer electronics better than "One-Size-Fits-All" economy SPDs.
- Two-year warranty (see warranty statement 3A1502 for details).
- Thermal disconnect MOV technology eliminates the need for additional fusing.

See data sheet No. 10033 for technical specifications.

| Retail pack* | System voltage | Description |
|---|---|---|
| RB-SPP-240PN | 240 Vac | Split-phase, 3 wire, 3 connection points |

* 1 SurgePOD PRO per pack, 4 packs per master carton.

### Automotive blade and glass tube fuse pullers and testers

Remove automotive fuses quickly and easily with the FP-A3 fuse puller. The innovative tool design lets you remove or install both blade-type and glass fuses.

The FT-3 combination fuse tester/puller is designed for easy one-handed testing of glass and blade fuses. Light glows when fuse is good.

### Cartridge fuse pullers

Bussmann series cartridge fuse pullers are heavy-duty tools for safely removing fuses from their blocks. Can be used with all cartridge fuses matching fuse diameter range.

| Catalog no.* | Retail pack** | Description |
|---|---|---|
| **Automotive fuse pullers** | | |
| FP-A3 | BP/FP-A3-RP | Fuse puller only |
| — | BP/FT-2 | Fuse tester only |
| FT-3 | BP/FT-3-RP | Fuse puller and tester |
| **Cartridge fuse pullers** | | |
| FP-2 | BP/FP-2 | Puller - 1 to 60 A (13/32" to 1-3/16" Dia.) |
| FP-3 | BP/FP-3 | Puller - 70 to 200 A (1" to 1-1/4" Dia.) |
| FP-4 | — | Puller - 225 to 600 A (1-3/4" to 2-1/2" Dia.) |
| FP-6 | — | Puller - 0 to 60 A Class T fuses |

* FP-A3 and FT-3, 1 fuse puller per pack, 10 packs per shelf carton.
** 1 Fuse puller per pack, 5 packs per shelf carton.

FP-A3

FT-2

FT-3

FP-2

FP-3

FP-4

FP-6

### NON and FRN-R 250 volt fuse reducers

Fuse reducers allow a smaller size fuse to be installed in a fuse block intended for a larger fuse. For example: a 30 amp fuse is two inches long and will not fit into a 60 amp fuse block (which is three inches between clips). A NO.263 reducer installed on the fuse permits it to be installed in a 60 amp fuse block. Reducers are particularly useful when equipment is being converted. Proper protection can be maintained without the expense of replacing the fuse block. Catalog numbers with the "-R" suffix (NO.263-R) fit rejection Class R fuse blocks. Consult your Bussmann™ series sales rep or distributor for 600 volt and Class J reducers.

| Catalog no.* | Fuse block size (amps) | Fuse size (amps) |
|---|---|---|
| **NON 250 Vac Class H reducers** | | |
| NO.263 | 60 | 30 |
| **FRN-R 250 Vac Class R reducers** | | |
| NO.263-R | 60 | 30 |
| NO.216-R | 100 | 60 |
| NO.2621-R | 200 | 100 |

*10 Fuse reducers per shelf carton.

NO.263 NON fuse reducer

NO.263-R 60/30 A FRN-R fuse reducers

NO.216-R 100/60 A FRN-R fuse reducers

NO.2621-R 200/100 A FRN-R fuse reducers

### Retail hardware fuse assortments

Popular fuse assortments and kits to meet the needs of residential circuit protection.

| | |
|---|---|
| **BP/ABC-A** | Microwave oven fuse assortment, ABC-10, (2)15 and (2)20 A |
| **BP/FNM-AH** | High amp FNM cartridge fuse assortment: FNM-15 and 20 A |
| **BP/FNM-AL** | Low amp FNM cartridge fuse assortment: FNM-5 and 10 A |
| **BP/FRN-AH** | High amp FRN-R Class RK5 fuse assortment: FRN-R-35 and 50 A |
| **BP/FRN-AL** | Low amp FRN-R Class RK5 fuse assortment: FRN-R-15 and 25 A |
| **BP/GMA-AH** | High amp GMA electronic glass tube fuse assortment: two each GMA-3, 5 and 6 A |
| **BP/GMA-AL** | Low amp GMA electronic glass tube fuse assortment: two each GMA-500 MA, 1 and 2 A |
| **BP/MDL-AL** | Low amp MDL electronic glass tube fuse assortment: one each MDL-1⁄2, 1, 2, 3, 5 |
| **BP/NON-AL** | Low amp NON cartridge fuse assortment: NON-15 and 25 A |
| **BP/SA-A** | Fustat rejection base plug fuse adapter assortment: SA-15 and 20 A |
| **BP/SC-A** | SC Class G fuse assortment: SC-15 and 20 A |
| **HEF-1** | Mobile phone, electronic equipment and stereos assortment: (2)AGC-1, (1)2 and (2)3 A. |
| **HEF-2** | Computers and peripherals assortment: MDL-1/2, 1 and 2 A; GDC-1 and 2 A |

### Retail hardware fuse emergency kits

| | |
|---|---|
| **NON-EK** | NON cartridge fuse kit: 20, (2)30, 40 and (2)60 A and FT-2 fuse tester |
| **SL-EK** | SL rejection base plug Fuse kit: (3)15, (2)20 and 30 A and FT-3 fuse tester/puller |
| **TL-EK** | TL Edison base plug fuse kit: 15, (2)20 and (3)30 A and FT-3 fuse tester/puller |
| **TC-EK** | CSA Type D Edison base plug fuse kit: (3)15, (1)20, (2)30 A and FT-3 fuse tester/puller |
| **P-EK** | CSA Type P Edison base plug fuse kit: (3)15, (1)20, (2)30 A and FT-3 fuse tester/puller |

Look for new holiday graphics to order for the 2018 season.

### Retail hardware holiday light fuses

Useful year-round, these fuses come in handy for keeping the lights on and the festivities going strong.

### Year-round holiday and party light fuses

| | |
|---|---|
| **BP/MAS-3A*** | MAS 3x10 mm fast-acting 3 amp fuses. Five fuses per pack. |
| **BP/GMA-5A*** | GMA 5x20 mm fast-acting 5 amp fuses. Two fuses per pack. |
| **BP/MAS-3A-CS** | One carton of 10 BP/MAS-3A with clip strip included. |

*Five packs per shelf pack.

### Christmas light counter displays with two clip strips*

| | |
|---|---|
| **BP/GMA-5XM** | GMA 5x20 mm fast-acting 5 amp fuses. Five fuses per pack. |
| **BP/MAS-3X5** | MAS 3x10 mm fast-acting 3 amp fuses. Five fuses per pack. |
| **BP/AGX-7X5** | AGX 1/4" x 1-1/4" fast-acting 7 amp fuses. Five fuses per pack. |
| **BP/XMAS-6F Assortment** | AGC-7, AGX-7, (2)GMA-5 and MAS-3 A fuses. Total five fuses per pack. |

*20 Packs per display.

20-pack counter display with clip strips

BP/GMA-5XM

BP/MAS-3X5

BP/MAS-3A

BP/GMA-5A

### Retail hardware Plan-O-Gram

Color-coded packaging for fast, easy product selection.
Fits standard three-foot wide gondola.

### Visual categorization

- Color-coded Bussmann series retail packaging.
- Fast and easy product identification.
- Provides increased shopability and faster merchandising.

### Merchandising ease

- Retail set is simple and straightforward.
- Color-coding encourages return of product to correct gondola peg.
- Reduces need for assistance by store personnel.

### Consumer friendly

- Fuse center is easily located.
- Point-of-sale identifies fuse types.
- Package color codes identify product category.

| Catalog no. | Description |
|---|---|
| 3FTHDWR-KIT | Three foot hardware/electrical SKU prepak. Prepak includes header and reorder tags for all SKUs. |
| 3FTHDWR-TAGS | Replacement set of UPC reorder tags for the 3FTHDWR-KIT.<br>Allows for creating a custom Plan-O-Gram.<br>Order tags through your Eaton Bussmann series rep. |

**For details on hardware Plan-O-Gram product SKUs, visit Eaton.com/BussmannConsumerPOG**

3FTHDWR-TAGS UPC reorder tags.

3FTHDWR-KIT.

Peg hooks and gondola not included.

| Fuse type | Catalog symbol | Class | Constuction/ size | Volts | Amps | IR | Type | Agency file information | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | UL List | UL Rec | SAE | RoHS | CSA |
| Blade<br>*easyID illuminating version | ATL | — | 3-leg micro blade fuse | 32 Vdc | 5-15 | 1 kA | Fast-acting | — | — | — | X | — |
| | ATM/ATM-_ID* | — | Miniature blade fuse | 32 Vdc | 1-30 | 1 kA | Fast-acting | AU 169 2-30 A non-indicating ATM | — | — | X | — |
| | ATM_LP | — | | 32 Vdc | 2-30 | 1 kA | Fast-acting | — | — | — | X | — |
| | ATC/ATC-_ID* | — | | 32 Vdc | 1-40 | 1 kA | Fast-acting | — | E56412 | J1284 | X | — |
| | ATR | — | | 32 Vdc | 5-30 | 1 kA | Fast-acting | — | — | — | X | — |
| | MAX/MAX-_ID* | — | | 32 Vdc | 20-100 | 1 kA | Fast-acting | — | — | — | X | — |
| Glass tube | ABC | — | 1/4" x 1-1/4" ceramic | 250 Vdc | 1/4-1<br>1-1/2-3<br>4-10<br>12-15<br>20<br>25-30 | 35 A<br>100 A<br>200 A<br>750 A<br>400 A<br>200 A | Fast-acting | E19180, 1/4-15 A | E19180, 18-30 A | — | X | 53787, 1/4-30 A |
| | AGA | — | 1/4" x 5/8" | 125 Vac<br>125 Vac<br>32 Vac | 1-1-1/2<br>2-5<br>6-30 | 10 kA<br>200 kA<br>1 kA | Fast-acting | E19180, 0-3 1/2 A | JDYX2, 12-30 A | — | — | — |
| | AGC | — | 1/4" x 1-1/4" | 250 Vac<br>250 Vac<br>250 Vac<br>32 Vac<br>32 Vac<br>32 Vac | 1/20-1<br>1-1/4-3<br>4-10<br>12-30<br>35<br>40-50 | 35 A<br>100 A<br>200 A<br>1 kA<br>70 A<br>80 A | Fast-acting | E19180, 0-10 A | E19180, 12-30 A | — | X | 053787, 1/20-30 A |
| | AGU<br>AGU-(amp)GP | Midget | Glass tube ferrule 13/32" x 1-1/2" | 250 Vac<br>32 Vac | 1-3 A<br>4-60 A | 10 kA<br>10 KA | Fast-acting | — | — | — | — | — |
| | AGW | — | 1/4" x 7/8" | 32 Vac | 1-30 A | 1 kA | Fast-acting | — | — | — | — | — |
| | AGX | — | 1/4" x 1-1/4" | 250 Vac<br>250 Vac<br>125 Vac<br>125 Vac<br>32 Vac | 1/500-1/2 A<br>3/4-2 A<br>2-1/2-5 A<br>6-7 A<br>8-30 A | 35 A<br>100A<br>100 A<br>1 kA<br>1 kA | Fast-acting | E19180, 0-10 A | E19180, 15-30 A | — | X | 53787, 15-30 A |
| | GBB | — | 1/4" x 1-1/4" ceramic | 250 Vac<br>125 Vac | 1-30 A<br>1-15 A | 200 kA<br>10 kA | Fast-acting | — | E56412, 1-30 A, 125 Vdc/ 250 Vac | — | X | 53787, 1-30 A, 125 Vdc/ 250 Vac |
| | GBC | — | 1/4" x 31/32" | 32 V | 5-25 A | — | Fast-acting | — | — | — | — | — |
| | GDA | — | 5 x 20 mm ceramic | 250 Vac | 50 mA-6.3 A | 1.5 kA | Fast-acting | — | E19180 | — | X | 53787 |
| | GDB | — | 5 x 20 mm | 250 Vac | 32 mA-16 A | 35 A | Fast-acting | — | E19180 | — | — | — |
| | GDC | — | 5 x 20 mm | 250 Vac | 32 mA-6.3 A | 35 A | Fast-acting | — | E19180 | — | — | — |
| | GMA | | 5 x 20 mm | 250 Vac<br>250 Vac<br>125 Vac<br>125 Vac<br>125 Vac | 32 mA-1 A<br>1.2-3 A<br>3.15-6 A<br>7-10 A<br>15 A | 35 A<br>100 A<br>1 kA<br>200 A<br>150 A | Fast-acting | E19180, 0-6 A | E19180, 7-15 A | — | X | 53787, 0-6 A |
| | GMC | | 5 x 20 mm | 250 Vac<br>250 Vac<br>125 Vac<br>125 Vac | 63 mA-1 A<br>1.25-3.15 A<br>3.5-6.3 A<br>7-10 A | 35 A<br>100 A<br>10 kA<br>200 kA | Time-delay | E19180, 0-6.3 A | E19180, 7-8 A | — | X | 53787, 0-6.3 A |
| | GMD | — | 5 x 20 mm | 250 Vac<br>250 Vac | 125 mA-3 A<br>4 A | 100 A<br>200 A | Time-delay | E19180, 125 mA-3 A | E19180, 4 A | — | X | 53787, 0-4 A |
| | MDA | — | 1/4" x 1-1/4" ceramic | 250 Vac<br>250 Vac<br>250 Vac<br>250 Vac<br>125 Vac | 1/4-1 A<br>1 1/2-2 A<br>2 1/2-10 A<br>12-15 A<br>20-30 A | 35 A<br>100 A<br>200 A<br>750 A<br>1.5 kA | Time-delay | E19180, 0-20 A | E19180, 25-30 A | — | X | 1422-30, 25-30 A |

| Fuse type | Catalog symbol | Class | Constuction/ size | Volts | Amps | IR | Type | Agency file information UL List | UL Rec | SAE | RoHS | CSA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Glass tube | MDL | — | 1/4" x 1-1/4" | 250 Vac<br>250 Vac<br>250 Vac<br>32 Vac | 1/16-1 A<br>1 1/4-3 A<br>4-8 A<br>9-40 A | 35 A<br>100 A<br>200 A<br>1 kA | Time-delay | E19180, 1/16-8 A | E19180, 9-30 A | — | X | E19180, 1/16-8 A |
| | MDQ | — | 1/4" x 1-1/4" | 250 Vac<br>250 Vac<br>250 Vac<br>32 Vac | 1/16-1 A<br>1 1/4-3 A<br>4-7 A<br>8-30 A | 35 A<br>100 A<br>200 A<br>1 kA | Time-delay | E19180, 1/16-7 A | E19180, 7.1-30 A | — | — | 47233, 1/16-7 A |
| | SFE | — | 1/4" x various length | 32 V | 4-30 A | — | Fast-acting | AU169 | — | — | X | — |
| High amp<br>*easyID illuminating version | AMG | — | Bolt-in fuse | 32 Vdc | 80-500 A | 1 kA | — | — | — | — | X | — |
| | AMI | — | Bolt-in fuse | 32 Vdc | 30-200 A | 2 kA | — | — | — | — | X | — |
| | CBBF | — | Bolt-in | 58 Vdc | 30-300 A | 2 kA | — | — | — | — | — | — |
| | FMM | — | Micro FMX fuse | 32 Vdc | 15-40 A | 1 kA | Time-delay | — | — | — | X | — |
| | FMX, FMX_ID* Female Maxi | — | 6 mm blade on 5.5 mm centers | 32 Vdc | 20-60 A | 1 kA | Time-delay | — | — | — | X | — |
| | FMX_LP Low-profile FMXfuse | | Low-profile 6 mm blade on 5.5 mm centers | 58 Vdc | 20-60 A | 1 kA @ 32 Vdc | Time-delay | — | — | — | — | — |
| | MPF<br>MPF2 | | Multi-amp | 32 Vdc<br>58 Vdc | 30-60 A<br>20-50 A | 1 kA<br>1 kA | —<br>— | —<br>— | —<br>— | —<br>— | X<br>X | —<br>— |
| Current limiters | ANN | — | Bolt-in fuse 2.44 mm blade centers | 125 Vac/ 80 Vdc | 10 to 800 A | 2.5 kA Vac 2.7 kA Vdc | Very fast-acting | — | E56412 | — | X | 53787 |
| | ANL | — | Bolt-in fuse 2.44 mm blade centers | 32 Vac/ 80 Vdc | 35 to 750 A | 6 kA Vac 2.7 kA Vdc | Non time-delay | — | E56412 | — | X | 53787 |
| Auto cartridge fuses | FLB | — | Bolt mount | 32 Vdc | 30-140 A | 10 kA | — | — | — | — | X | — |
| | FLD | — | Bolt mount | 32 Vdc | 30-140 A | 10 kA | — | — | — | — | X | — |
| | FLF | — | Female terminals | 32 Vdc | 20-60 A | 10 kA | — | — | — | — | X | — |
| | FLG | — | Female terminals | 32 Vdc | 50-80 A | 10 kA | — | — | — | — | X | — |
| | FLM | — | Male terminals | 32 Vdc | 30-120 A | 10 kA | — | — | — | — | X | — |
| | FLN | — | Female terminals with lock tab | 32 Vdc | 25-30 A | 10 kA | — | — | — | — | X | — |
| | FLS | — | Female mini terminals | 32 Vdc | 30-40 A | 10 kA | — | — | — | — | X | — |
| Battery terminal fuses | BTF | — | Multi-amp | 32 Vdc | 80-250 A | 1 kA | — | — | — | — | X | — |

| Circuit breakers | Catalog symbol | SAE type | Constuction/ size | Volts | Amps | IR | Type | Agency file information UL List | UL Rec | SAE | RoHS | CSA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ATM footprint | CB211 | I | ATM footprint | 14 Vdc | 7-1/2-30 A<br>15 A<br>20 A<br>25-30 A | 150 A<br>225 A<br>300 A<br>450 A | Automatic | — | — | J553 | — | — |
| | CB212 | II | ATM footprint | 14 Vdc | 7-1/2-30 A<br>15 A<br>20 A<br>25-30 A | 150 A<br>225 A<br>300 A<br>450 A | Modified | — | — | J553 | — | — |
| | CB22OS | II | ATM offset footprint | 14 Vdc | 5-10 A<br>15 A<br>20 A<br>25-30 A | 150 A<br>225 A<br>300 A<br>450 A | Modified | — | — | J553<br>J1171 | — | — |
| | CB223OS | III | ATM offset footprint | 28 Vdc | 5-10 A<br>15 A<br>20 A<br>25-30 A | 150 A<br>225 A<br>300 A<br>450 A | Manual | — | — | J553<br>J1171 | — | — |
| | CB233 | III | ATM footprint | 28 Vdc | 5-10 A<br>15 A<br>20 A<br>25-30 A | 100 A<br>150 A<br>200 A<br>300 A | Manual | — | — | J553 | — | — |
| | MMB | I | ATM footprint | 12 Vdc | 15-20 A | 300 A | Automatic | — | — | J553 | — | — |

| Circuit breakers | Catalog symbol | SAE type | Constuction/ size | Volts | Amps | IR | Type | Agency file information | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | UL List | UL Rec | SAE | RoHS | CSA |
| ATC footprint | ACB | I | ATC footprint | — | — | — | Automatic | — | — | | — | — |
| | CB221 | I | ATC footprint | 14 Vdc | 7-1/2-30 A | 150 A | Automatic | — | — | | — | — |
| | CB222 | II | ATC footprint | 12 Vdc | 10-30 A | 150 A | Modified | — | — | J553, | — | — |
| | CB223 | III | ATC footprint | 28 Vdc | 7-1/2-30 A | 150 A | Manual | — | — | JH71 | — | — |
| | CB227 | III | ATC footprint/ color coded | 28 Vdc | 5-30 A | 2 kA | Manual | — | — | | — | — |
| | CBB-30 | II | ATC footprint | 24 Vdc | 30 A | — | Modified | — | — | J553 | — | — |
| | CCB-25 | I | ATC footprint | — | 25 A | — | Automatic | — | — | J553 | — | — |
| | FCB-20 | II | ATC footprint | 14.5 Vdc | 20 A | — | Modified | — | — | J553 | — | — |
| | UCB | I | ATC footprint/ color coded | 12 Vdc | 6-30 A | — | Automatic | — | — | J553 | — | — |
| MAXI footprint | CB1911 | I | MAX footprint | 14 Vdc | 10-50 A | 150 A* | Automatic | — | — | J553 | — | — |
| | CB1921 | II | MAX footprint | 12 Vdc | 10-30 A | 150 A | Modified | | | J553 | — | — |
| Glass tube | CBF | II | 1/4" x 1-1/4" | 12 Vdc | 6-40 A | — | Modified | — | — | — | — | — |
| Stud terminal | CB123-(amp)B | III | 10-32 studs 0.69" centers | 28 Vdc | 10-50 A | 1.5 kA@12 Vdc | Manual | — | — | J553, J1171 | — | — |
| | CB123-(amp)HB | III | 10-32 studs 0.69" centers | 28 Vdc | 10-50 A | 1.5 kA@12 Vdc | Manual | — | — | J553, J1171 | — | — |
| | CBC | I | 10-32 studs 0.69" centers | 14 Vdc | 8-50 A | 1.5 kA | Automatic | — | — | J553, J1171 | — | — |
| | CBC-(amp)B | I | 10-32 studs 0.69" centers | 14 Vdc | 8-50 A | 1.5 kA | Automatic | — | — | J553, J1171 | — | — |
| | CBC-(amp)BWP | I | 10-32 studs 0.69" centers | 12 Vdc | 20-30 A | 1.5 kA | Automatic | — | — | J553, J1171 | — | — |
| | CBC-(amp)HB | I | 10-32 studs 0.69" centers | 14 Vdc | 10-50 A | 1.5 kA | Automatic | — | — | J553, J1171 | — | — |
| | CBP-(amp)BA | I | 10-32 studs 0.69" centers | 14 Vdc | 20-50 A | 1.5 kA | Automatic | — | — | J553, J1171 | — | — |
| Panel mount | CB174 | III | 1/4" quick-connect terminals | 250 Vac/ 32 Vdc | 10-30 A | 200 A | Manual | — | — | — | — | — |
| Quick connect | CBT-(amp)M | II | 1/4" quick-connect terminals | — | 10-30 A | — | Modified | — | — | — | — | — |
| | CBT-(amp)N | II | 1/4" quick-connect terminals | — | 10-30 A | — | Modified | — | — | — | — | — |
| | CBU-6 | I | 1/4" quick-connect terminals | — | 6 A | — | Automatic | — | — | — | — | — |
| | CBU-30B | I | 1/4" quick-connect terminals | — | 30 A | — | Automatic | — | — | — | — | — |
| High amp | CB181F | I | Flush-mt. water-proof 1/4-28 stud | 30 Vdc | 60-150 A | 3 kA | Automatic | — | — | J553, J1171 | X | — |
| | CB184F | III | Flush-mt. water-proof 1/4-28 stud | 48 Vdc | 25-150 A | 3 kA | Manual | — | — | J553, J1171 | X | — |
| | CB185 | III | Flush-mt. water-proof 1/4-28 stud | 48 Vdc | 25-150 A | 3 kA | Manual | — | — | J553, J1171 | — | — |
| | CB185P | III | Flush-mt. water-proof 1/4-28 stud | 48 Vdc | 25-150 A | 3 kA | Manual | — | — | J553, J1171 | X | — |
| | CB187F | III | Panel-mt. weatherproof 5/16-18 stud | 48 Vdc | 25-200 A | 5 kA@ 12 Vdc | Manual | — | — | J553, J1171 | — | — |
| | CB187P | III | Panel-mt. weatherproof 5/16-18 stud | 48 Vdc | 25-150 A | 5 kA@ 12 Vdc | Manual | — | — | J553, J1171 | X | — |
| | CB251 | I | Panel-mt. weatherproof 10-32 stud | 32 Vdc | 10-50 A | 2.5 kA | Automatic | — | — | J553, J1171 | — | — |
| | CB255 | III | Panel-mt. weatherproof 10-32 stud | 32 Vdc | 10-50 A | 2.5 kA | Manual | — | — | J553, J1171 | — | — |
| | CB285 | III | Flush-mt. water-proof M6 stud | 42 Vdc | 30-150 A | 2.5 kA | Manual | — | — | J553, J1171 | — | — |

* Interrupting rating varies with circuit breaker amp rating.

| Fuse type | Catalog symbol | Class | Constuction/ size | Volts | Amps | IR | Type | Agency file information UL List | UL Rec | SAE | RoHS | CSA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plug | TL | — | Edison thread base | 125 Vac | 15-30 A | 10 kA | Time-delay | E12112 | — | — | — | — |
| | T | — | Edison thread base | 125 Vac | 3/16-30 A | 10 kA | Heavy-duty time-delay | E56412, 0-6-1/4 A E12112 7-30 A | — | — | — | 53787 |
| | TC | CSA Type D | Edison thread base | 125 Vac | 15-30 A | — | Dual-element time-delay | — | — | — | — | 53787 |
| | P | CSA Type P | Edison thread base | 125 Vac | 15-30 A | — | General purpose | — | — | — | — | 53787 |
| | SL | — | Rejection thread base | 125 Vac | 15-30 A | 10 kA | Time-delay | E12112 | — | — | — | — |
| | S | — | Rejection thread base | 125 Vac | 1/4-30 A | 10 kA | Heavy-duty time-delay | E56412, 0-6-1/4 A E12112 7-30 A | — | — | — | 53787 |
| Cartridge *easyID illuminating version | BAF | Midget | 13/32" x 1-1/2" ferrule | 250 Vdc<br>250 Vdc<br>250 Vdc<br>250 Vdc<br>125 Vdc | 2/10-1 A<br>1 1/2-2 1/2 A<br>3-9 A<br>10-15 A<br>20-30 A | 35 kA<br>100 kA<br>200 kA<br>750 kA<br>10 kA | Fast-acting<br>Fast-acting<br>Fast-acting<br>Fast-acting<br>Fast-acting | E19180 | — | — | X | 53787 |
| | CDN | CSA Type D | Ferrule style<br>Blade style | 250 Vac<br>250 Vac | 1-60 A<br>70-600 A | 10 kA<br>10 kA | Gen. Purpose<br>Time-delay | — | — | — | — | C22.2, No.59.1 |
| | FNM | Midget | 13/32" x 1-1/2" ferrule | 250 Vac<br>250 Vac<br>250 Vac<br>125 Vac | 1/10-1 A<br>1 1/8-3 1/2 A<br>4-10 A<br>12-30 A | 35 kA<br>100 A<br>200 A<br>10 kA | Time-delay | E19180 | — | — | X | 53787 |
| | FNQ | Midget | 13/32" x 1-1/2" ferrule | 500 Vac | 1/10-30 A | 10 kA | Time-delay | E19180 | — | — | X | 53787 |
| | FNQ-R | CC | 13/32" x 1-1/2" ferrule | 600 Vac | 1/4-30 A | 200 kA | Time-delay | E4273 | — | — | X | 53787 |
| | FRN-R<br>FRN-R_ ID** | RK5 | Ferrule style<br>Blade style | 250 Vac<br>250 Vac | 1/10-60 A<br>70-600 A | 200 kA<br>200 kA | Time-delay | E4273 | — | — | — | 53787 |
| | FRS-R<br>FRS-R_ ID** | RK5 | Ferrule style (1-60 A)<br>Blade style (64-600 A) | 600 Vac<br>600 Vac | 1/16-60 A<br>65-600 A | 200 kA<br>200 kA | Time-delay | E4273 | — | — | — | 53787 |
| | JJN | T | Blade style | 300 Vac | 110-400 A | 200 kA | Very fast-acting | E4273 | — | — | X | 53787 |
| | KTK | Midget | 13/32" x 1-1/2" ferrule | 600 Vac | 1/10-30 A | 100 kA | Fast-acting | E19180 | — | — | X | 53787 |
| | KTK-R | CC | 13/32" x 1-1/2" ferrule | 600 Vac | 1/10-30 A | 200 kA | Fast-acting | E4273 | — | — | X | 53787 |
| | NON | K5<br>H | Ferrule style<br>Blade style | 250 Vac<br>250 Vac | 1/8-60 A<br>65-600 A | 50 kA<br>10 kA | General Purpose | E4273 | — | — | — | 53787 |
| | NOS | K5<br>H | Ferrule style<br>Blade style | 600 Vac<br>600 Vac | 1-60 A<br>70-600 A | 50 kA<br>10 kA | General Purpose | E4273 | — | — | — | 53787 |
| | PON | CSA Type P | Ferrule style<br>Blade style | 250 Vac<br>250 Vac | 1-60 A<br>70-600 A | 10 kA<br>10 kA | General Purpose | — | — | — | — | C22.2, No.59.1 |
| | SC | G | 13/32" x 15/16" ferrule<br>13/32" x 15/16" ferrule<br>13/32" x 1-13/32" ferrule<br>13/32" x 1-5/8" ferrule<br>13/32" x 2-1/4" ferrule | 600 Vac<br>600 Vac<br>600 Vac<br>480 Vac<br>480 Vac | 1-6 A<br>7-15 A<br>20 A<br>25-30 A<br>35-60 A | 100 kA<br>100 kA<br>100 kA<br>100 kA<br>100 kA | Fast-acting<br>Time-delay<br>Time-delay<br>Time-delay<br>Time-delay | E4273 | — | — | x | 53787 |

| Circuit breakers | Catalog symbol | Constuction/ size | Volts | Amps | IR | Reset type | Agency file information UL List | UL Rec | RoHS | CSA |
|---|---|---|---|---|---|---|---|---|---|---|
| | BP/MB<br>CP/MB | Edison base plug thread CSA version | 125 Vac<br>125 Vac | 15 and 20 A<br>15 and 20 A | —<br>— | Manual<br>Manual | E14942<br>— | —<br>— | —<br>— | —<br>013089 |

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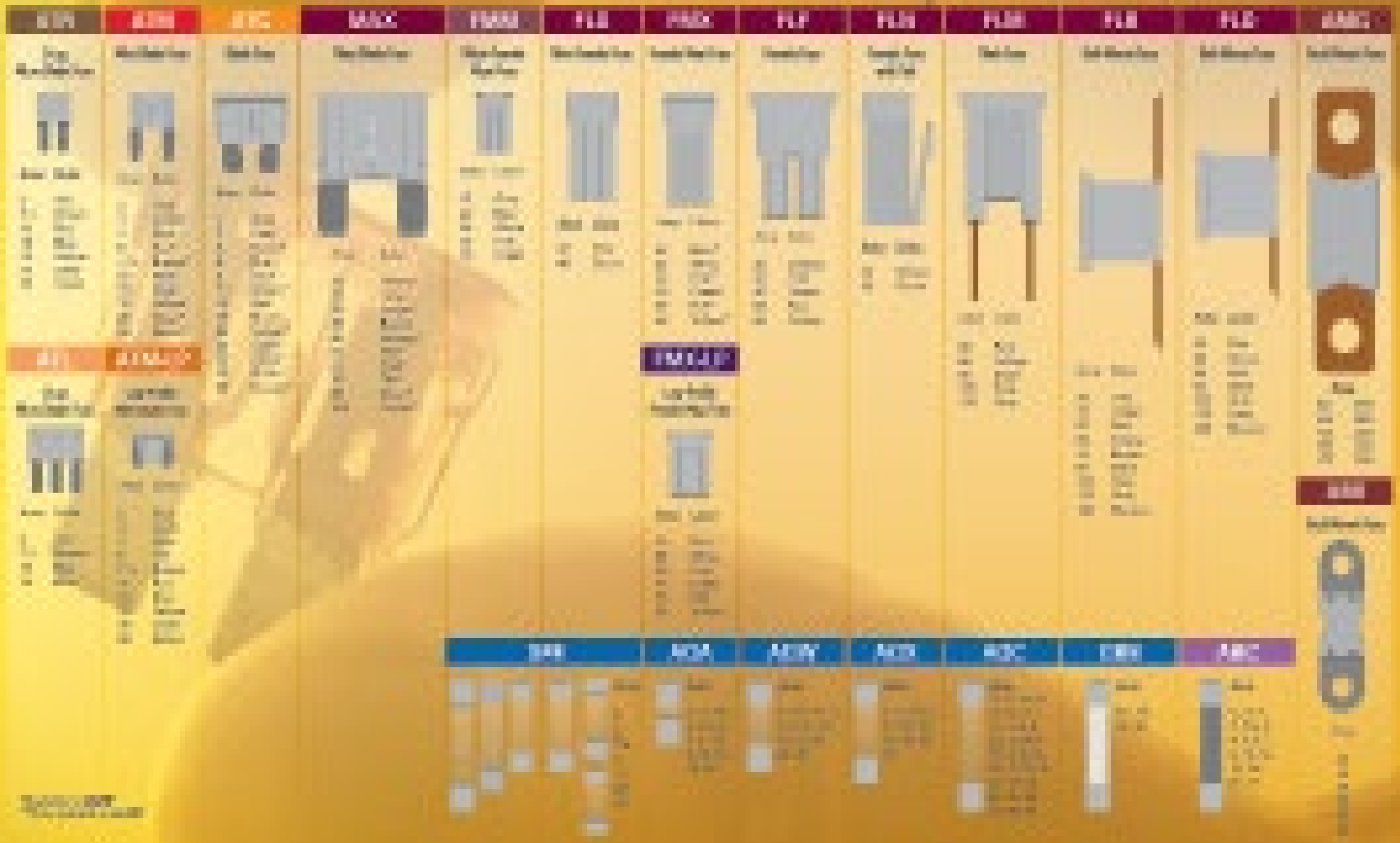

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