

# ANTREX Electronics

## Electronic Components Sourcing Information

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### Product Reference Information

|                      |                              |
|----------------------|------------------------------|
| <b>Part Number:</b>  | 4405                         |
| <b>Manufacturer:</b> | Eaton - Electronics Division |
| <b>Package:</b>      | Bulk                         |
| <b>Availability:</b> | Please confirm with sales    |

#### Product Page:

<https://antrexco.com/product/details/eaton-electronics-division/4405.html>

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#### Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

Save up to 65% panel space with Bussmann series power distribution fuse blocks



## Contents

| Fuse size/class                   | Description                                                               | Section page |
|-----------------------------------|---------------------------------------------------------------------------|--------------|
| <b>Quick guide</b>                |                                                                           | <b>2-3</b>   |
| <b>Control panel applications</b> |                                                                           |              |
| <b>1/4" diameter</b>              |                                                                           |              |
|                                   | Panel mount blocks 8000, 4405, 4406, 4574, 2499, 3828, 4520, 4393         | 4-5          |
| <b>Class CC and midget</b>        |                                                                           |              |
|                                   | Modular blocks BCM, BMM                                                   | 6-7          |
|                                   | DIN-Rail holders CHCC, CHM, NDNF1, OPM                                    | 8-13         |
|                                   | Panel mount blocks 3743, 4421, 4515                                       | 14           |
| <b>Class G</b>                    |                                                                           |              |
|                                   | Panel mount blocks BG, G                                                  | 15           |
| <b>14mm diameter</b>              |                                                                           |              |
|                                   | DIN-Rail holder CH14                                                      | 16           |
|                                   | Panel mount block J70032                                                  |              |
| <b>22mm diameter</b>              |                                                                           |              |
|                                   | DIN-Rail holder CH22                                                      | 17           |
|                                   | Modular block JM70100                                                     | 18           |
|                                   | Modular power distribution blocks JM70100_MW_                             |              |
| <b>Class H(K)/R</b>               |                                                                           |              |
|                                   | Modular blocks HM, RM                                                     | 19-23        |
|                                   | Modular power distribution blocks HM__MW_, RM__MW_                        | 24-27        |
| <b>Class J</b>                    |                                                                           |              |
|                                   | DIN-Rail holders CH30J, CH60J                                             | 28           |
|                                   | Safety J™ JT(N)600                                                        | 29           |
|                                   | Panel mount pyramid block JP                                              | 30           |
|                                   | Modular blocks JM60_                                                      | 31-32        |
|                                   | Modular power distribution blocks JM60__MW_                               | 33-34        |
| <b>Class T</b>                    |                                                                           |              |
|                                   | 300 V panel mount blocks T300                                             | 35-36        |
|                                   | 600 V panel mount blocks T600                                             | 37-38        |
| <b>High speed fuses</b>           |                                                                           |              |
|                                   | Open center panel mount blocks BH, C5268, 1BS                             | 39           |
| <b>NH fuses</b>                   |                                                                           |              |
|                                   | DIN-Rail/panel mount blocks SD00, SD1, SD2, SD3, SD4, TD00, TD1, TD2, TD3 | 40           |
| <b>Through-panel applications</b> |                                                                           |              |
| <b>5mm diameter</b>               | HTC, HTB                                                                  | 41-42        |
| <b>1/4" diameter</b>              | HTB, HJL, HK, HKP, HLD                                                    | 42-44        |
| <b>13/32" diameter</b>            | HPF, HPC-D, HPD, HPG, HPM, HPS, HPS2                                      | 45-47        |
| <b>In-line applications</b>       |                                                                           |              |
| <b>5mm diameter</b>               | HHT                                                                       | 48           |
| <b>1/4" diameter</b>              | HFA, HFB, HHB, HR/HM, HRK                                                 | 48-50        |
| <b>Class G</b>                    | Class G SC fuses; single-pole HEC, HEG, HEH, HEJ non-breakaway            | 51-52        |
| <b>13/32" diameter</b>            | HEB single-pole breakaway and non-breakaway                               | 53-54        |
| <b>Class CC</b>                   | HEZ waterproof single-pole breakaway and non-breakaway                    | 54           |
| <b>13/32" diameter</b>            | HEX, Class CC HEY dual-pole breakaway and non-breakaway                   | 55-56        |

## Quick guide

These tables list various fuse classes, sizes and voltages along with their available blocks and holders. Catalog pages are denoted parenthetically "(" next to their catalog symbol. E.g.: BCM603 (8-6) is in Section 8, page 6.

| Fuse class/<br>size             | Catalog<br>symbol*                | Amp<br>range | Fuse blocks**                                               | DIN—Rail<br>holders**                                            | In-line<br>holders**     | Panel mount<br>holders**                                                                                          | Open center<br>blocks** |
|---------------------------------|-----------------------------------|--------------|-------------------------------------------------------------|------------------------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------|-------------------------|
| Class CC                        | FNQ-R<br>KTK-R<br>LP-CC           | Up to 30     | BCM603 (8-6)                                                | CHCC (8-8)<br>OPM-NG (8-13)<br>OPM-1038 (8-12)                   | HEY (8-55)<br>HEZ (8-54) | HPF-RR (8-45)<br>HPS-RR (8-47)                                                                                    | —                       |
| Class G                         | SC                                | 1/2-15       | BG301 (8-15)                                                | —                                                                | HEG (8-51)               | HPG-EE (8-46)<br>HPS-EE (8-47)                                                                                    | —                       |
|                                 |                                   | 20           | BG302 (8-15)                                                |                                                                  | HEH (8-51)               | HPS-JJ (8-47)                                                                                                     |                         |
|                                 |                                   | 25-30        | BG303 (8-15)                                                |                                                                  | HEC (8-51)               | HPS-FF (8-47)                                                                                                     |                         |
|                                 |                                   | 35-60        | G30060 (8-15)                                               |                                                                  | HEJ (8-51)               | —                                                                                                                 |                         |
| Class J                         | DFJ<br>JKS<br>LPJ                 | Up to 60     | JM60030 (8-31)<br>JM60030_MW_*** (8-33)<br>JP60030-3 (8-30) | CH_J (8-28)<br>JT(N)600_ (8-29)                                  | —                        | —                                                                                                                 | —                       |
|                                 |                                   | 70-400       | JM60100 (8-31)<br>JM60100_MW_*** (8-33)                     | 1BS101 (8-39)<br>BH-0111 (8-39)                                  |                          |                                                                                                                   |                         |
|                                 |                                   | 110-200      | JM60200 (8-31)<br>JM60200_MW_*** (8-33)                     | —                                                                |                          |                                                                                                                   | —                       |
|                                 |                                   | 250-400      | JM60400 (8-31)<br>JM60400_MW_*** (8-33)                     | BH-3145 (8-39)                                                   |                          |                                                                                                                   |                         |
|                                 |                                   | 450-600      | JM60600 (8-31)                                              | BH-3144 (8-39)                                                   |                          |                                                                                                                   |                         |
| 250 V Class<br>H/K5             | NON                               | Up to 60     | HM250_ (8-19)<br>HM250_-_MW_*** (8-24)                      | CH14 (8-16)                                                      | —                        | —                                                                                                                 | —                       |
|                                 |                                   | 70-600       | HM25___ (8-19)                                              |                                                                  |                          |                                                                                                                   |                         |
| 600 V Class<br>H/K5             | NOS                               | Up to 60     | HM600_ (8-19)<br>HM600_0_-_MW_*** (8-24)                    | —                                                                | —                        | —                                                                                                                 | —                       |
|                                 |                                   | 70-600       | HM60___ (8-19)                                              |                                                                  |                          |                                                                                                                   |                         |
| Class L                         | KLU<br>KRP-C<br>KRP-CL<br>KTU     | 601-1200     | 51215 (1-pole)†<br>51235 (3-pole)†                          | —                                                                | —                        | —                                                                                                                 | —                       |
| 250 V Class<br>RK1/RK5          | FRN-R<br>KTN-R<br>KWN-R<br>LPN-RK | Up to 60     | RM250_ (8-21)<br>RM250_0_MW_*** (8-26)                      | —                                                                | —                        | —                                                                                                                 | —                       |
|                                 |                                   | 70-600       | RM25___ (8-21)                                              |                                                                  |                          |                                                                                                                   |                         |
| 600 V Class<br>RK1/RK5          | FRS-R<br>KTS-R<br>KWS-R<br>LPS-RK | Up to 60     | RM600_ (8-21)<br>RM600_-_MW_*** (8-26)                      | —                                                                | —                        | —                                                                                                                 | —                       |
|                                 |                                   | 70-600       | RM60___0 (8-21)                                             |                                                                  |                          |                                                                                                                   |                         |
| 300 V Class T                   | JJN                               | Up to 600    | T30___ (8-35)                                               | —                                                                | —                        | —                                                                                                                 | —                       |
|                                 |                                   | 250-400      | T30400 (8-35)                                               |                                                                  |                          | BH-1133 (8-39)                                                                                                    |                         |
|                                 |                                   | 450-600      | T30600 (8-35)                                               |                                                                  |                          | BH-3144 (8-39)                                                                                                    |                         |
| 600 V Class T                   | JJS                               | Up to 60     | T600_ (8-37)                                                | —                                                                | —                        | —                                                                                                                 | —                       |
|                                 |                                   | 70-100       | T60100 (8-37)                                               |                                                                  |                          | BH-0111 (8-39)                                                                                                    |                         |
|                                 |                                   | 110-200      | T60200 (8-37)                                               |                                                                  |                          | BH-1132 (8-39)                                                                                                    |                         |
|                                 |                                   | 250-400      | T60400 (8-37)                                               |                                                                  |                          | BH-1133 (8-39)                                                                                                    |                         |
|                                 |                                   | 450-600      | T60600 (8-37)                                               |                                                                  |                          | BH-3144 (8-39)                                                                                                    |                         |
| Supplemental<br>13/32" x 1-1/2" | BAF<br>FNM<br>FNQ<br>KLM<br>KTK   | Up to 30     | BMM603 (8-6)<br>3743 (8-14)<br>4421 (8-14)<br>4515 (8-14)   | CHM (8-8)<br>NDNF1-WH (8-11)<br>OPM-1038 (8-12)<br>OPM-NG (8-13) | HEB (8-53)<br>HEX (8-55) | HPC-D (8-45)<br>HPD (8-46)<br>HPF (8-45)<br>HPG (8-46)<br>HPM (8-46)<br>HPM-D (8-46)<br>HPS2 (8-47)<br>HPS (8-47) | —                       |
| Supplemental<br>13/32" x 1-3/8" | BBS                               | Up to 30     | BMM603 (8-6)<br>3743 (8-14)<br>4421 (8-14)<br>4515 (8-14)   | —                                                                | HEH (8-51)               | HPS-L (8-47)                                                                                                      | —                       |

| Fuse class/<br>size | Catalog<br>symbol*                                                              | Amp<br>range | Fuse blocks**                                                                                                         | DIN—Rail<br>holders** | In-line<br>holders**                                                           | Panel mount<br>holders**                                                           | Open center<br>blocks** |
|---------------------|---------------------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------|
| 1/4 x 7/8           | AGW                                                                             | Up to 30     | —                                                                                                                     | —                     | HHB (8-49)<br>HM (8-50)<br>HR (8-50)<br>HRK (8-50)                             | HJL (8-43)                                                                         | —                       |
| 1/4 x 1             | AGX                                                                             | Up to 30     | 3828 (8-5)<br>4520 (8-5)<br>4393 (8-5)                                                                                | —                     | HHB (8-49)<br>HM (8-50)<br>HR (8-50)<br>HRK (8-50)                             | HJL (8-43)                                                                         | —                       |
| 1/4 x 1-1/4         | ABC<br>AGC<br>GBB<br>MDA<br>MDL<br>MDQ                                          | Up to 30     | S-8000 family (8-4)<br>2499 (8-4)<br>3828 (8-5)<br>4393 (8-5)<br>4406 (8-4)<br>4505 (8-4)<br>4520 (8-5)<br>4574 (8-4) | —                     | HFA (8-48)<br>HFB (8-49)<br>HHB (8-49)<br>HM (8-50)<br>HR (8-50)<br>HRK (8-50) | HKP (8-44)<br>HTB (8-42)<br>HK (8-43)<br>HLD (8-44)                                | —                       |
| 5x15mm              | C515<br>C517<br>C518<br>C519<br>C520                                            | Up to 7      | —                                                                                                                     | —                     | HHT (8-48)                                                                     | —                                                                                  | —                       |
| 5x20mm              | GDA<br>GDB<br>GDC<br>GMA<br>GMC<br>GMD<br>S500<br>S501<br>S505<br>S505H<br>S506 | Up to 15     | —                                                                                                                     | —                     | HHT (8-48)                                                                     | HTB (8-42)<br>HTC-35M (8-41)<br>HTC-40M (8-41)<br>HTC-55M (8-41)<br>HTC-70M (8-41) | —                       |

\* Refer to data sheets for applicable fuse voltage and interrupting ratings and agency information.

\*\* Fuse blocks and fused switches are available in a variety of pole and terminal configurations, and voltage and withstand ratings (SCCRs). Refer to data sheets for complete catalog numbers.

\*\*\* This is a UL Listed power distribution fuse block, combining a fuse block and power distribution block into one unit.

† Not shown in this catalog. Contact customer service for details.

## S-8000 bolt-in and snap-in mount open blocks for 1/4" x 1-1/4" fuses

### Ratings

Volts 300 V

Amps 30 A max\*

\* See catalog number tables for agency limitations.

### Agency information

- UL Recognized, Guide IZLT2, File E14853, CSA Certified Class 6225-01, File 47235, RoHS compliant, CE

### Single pole anti-rotation pin

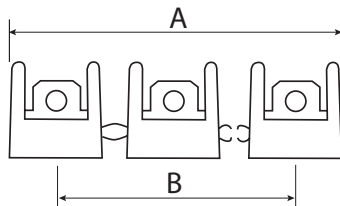
- Single-pole blocks may be ordered without the anti-rotational pin. Add an "X" to the number of poles, e.g., BK/S-8000-1X.

| Catalog no.†         | Poles | Terminal                | Terminal angle | Max amps           |
|----------------------|-------|-------------------------|----------------|--------------------|
| <b>Bolt-in mount</b> |       |                         |                |                    |
| S-8001-(poles)-R     | 1-12  | Solder                  | 0°             | UL 30              |
| S-8002-(poles)-R     |       |                         | 40°            | CSA 21             |
| S-8101-(poles)-R     |       | 3/16" quick-connect     | 0°             | UL 20              |
| S-8102-(poles)-R     |       |                         | 40°            | CSA 13             |
| S-8201-(poles)-R     |       | 1/4" quick-connect      | 0°             | UL 30              |
| S-8202-(poles)-R     |       |                         | 40°            | CSA 16             |
| S-8203-1-R           | 1     | Side 1/4" quick-connect |                |                    |
| S-8301-(poles)-R     | 1-12  | Screw                   | —              | UL 30 A<br>CSA 25A |
| <b>Snap-in mount</b> |       |                         |                |                    |
| S-8001-1-SNP-R       | 1     | Solder                  | 0°             | UL 25              |
| S-8002-1-SNP-R       |       |                         | 40°            | CSA 21             |
| S-8101-1-SNP-R       |       | 3/16" quick-connect     | 0°             | UL 20              |
| S-8102-1-SNP-R       |       |                         | 40°            | CSA 13             |
| S-8201-1-SNP-R       |       | 1/4" quick-connect      | 0°             | UL 20              |
| S-8203-1-SNP-R       |       |                         | Side           | CSA 16             |

† Quantities for regular and bulk (BK/ prefix) catalog numbers varies with the number of poles. Contact customer satisfaction team for details.

### Mounting dimensions — in\*

| No. of Poles | A     | B     |
|--------------|-------|-------|
| 1            | —     | —     |
| 2            | 1-1/8 | 5/8   |
| 3            | 1-3/4 | 1-1/4 |
| 4            | 2-3/8 | 1-7/8 |
| 5            | 3     | 2-1/2 |
| 6            | 3-5/8 | 3-1/8 |
| 7            | 4-1/4 | 3-3/4 |
| 8            | 4-7/8 | 4-3/8 |
| 9            | 5-1/2 | 5     |
| 10           | 6-1/8 | 5-5/8 |
| 11           | 6-3/4 | 6-1/4 |
| 12           | 7-3/8 | 6-7/8 |



\* Block length varies by specific termination and mounting. See data sheet 2101 for details.

## Open single-pole blocks for 1/4" x 1-1/4"



4405 integral solder terminals and clip



4574 spare fuse block (no terminals)



4406 side solder terminal



2499 side 1/4" quick-connect

### Ratings

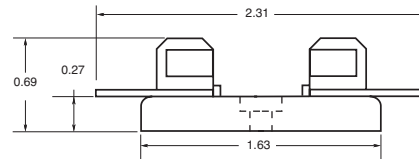
- Volts 250 V
- Amps 30 A max\*

\* 2499 15 A max.

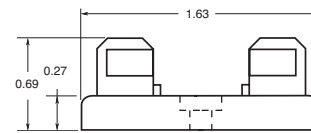
### Agency information

- 2499 only — UL Recognized, Guide IZLT2, File E14853, 15 A max.
- RoHS compliant

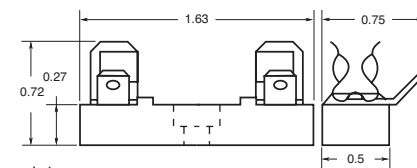
### Dimensions — in\*\*



4405 0° integral solder terminals clips



4406 side solder terminal and 4574 spare fuse block (no terminals)



2499 side 1/4" quick-connect

\*\* Mounting screw hole diameter is 0.147", counterbore diameter 0.636". Max #6 mounting screw.

### 3828 open blocks with solder terminals for 1/4" x 1" fuses

#### 3828

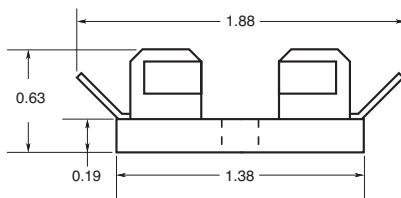
#### Ratings

- Volts 250 V
- Amps 30 A



| Catalog no. | Poles | Base width — in (mm) |
|-------------|-------|----------------------|
| 3828-1      | 1     | 1/2 (12.7)           |
| 3828-2      | 2     | 1-1/8 (28.6)         |
| 3828-3      | 3     | 1-3/4 (44.5)         |
| 3828-4      | 4     | 2-3/8 (60.3)         |
| 3828-5      | 5     | 3 (76.2)             |
| 3828-6      | 6     | 3 5/8 (92.1)         |
| 3828-7      | 7     | 4-1/4 (108.0)        |
| 3828-8      | 8     | 4-7/8 (123.8)        |
| 3828-10     | 10    | 6-1/8 (155.6)        |
| 3828-12     | 12    | 7-3/8 (187.3)        |

#### Dimensions — in\*\*



\*\*Mounting screw hole diameter is 0.147." Max #6 mounting screw.

### 4520 and 4393 open blocks with solder terminals for 1/4" x 1" fuses

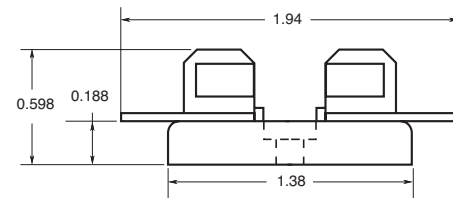
#### Ratings

- Volts 250 V
- Amps 30 A

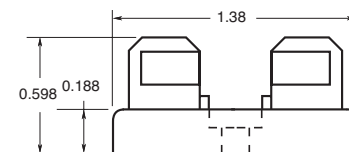


| Catalog no. | Description                                 |
|-------------|---------------------------------------------|
| 4520        | Integral clip and straight solder terminals |
| 4393        | Spare fuse block - no terminals             |

#### Dimensions — in\*



4520 integral clip and straight solder terminals



4393 spare fuse block, no terminals

\* Mounting screw hole diameter is 0.147". Counterbore 0.636" diameter. Max #6 mounting screw.

## BCM (Class CC) and BMM (supplemental 13/32 x 1-1/2" / 10x38mm) modular style fuse blocks with optional covers.

The BCM and BMM modular fuse blocks contain features that add versatility, reduce labor and enhance safety of any panel design. Optional IP20 finger-safe covers enhance safety with a lockout/tagout feature along with optional open fuse indication to speed troubleshooting.

### Ratings

- Volts 600 V
- Amps 30 A
- SCCR 200 kA RMS Sym.

### Agency information

- Class CC BCM blocks
  - UL Listed E14853 - IZLT
  - CSA Certified 47235-6225-01
  - RoHS Compliant
- 13/32" x 1-1/2" BMM blocks
  - UL Recognized, E14853 - IZLT2
  - CSA Certified 47235-6225-01
- CE
- RoHS compliant

### Covers\*

- Covers are included in the overall UL Listing/Recognition and CSA Certification

\* Covers sold separately in multiples of three units. Order one unit per pole.

### Poles

- 1-, 2-, 3-pole units factory assembled
- Single-pole units snap together to create desired number of poles

### Flammability ratings

- Blocks UL 94V0, self-extinguishing
- Covers UL 94HB, self-extinguishing

### Operating and storage temperature range

- Blocks -40°C to +120°C
- Non indicating covers -40°C to +120°C
- Indicating covers -20°C to +90°C\*\*

\*\*Indication requires minimum 90 V and closed circuit to illuminate.

### Cover catalog numbers

- For blocks with quick-connect terminals — CVR(I)-CCM-QC
- All other terminal options — CVR(I)-CCM

Data sheet no. 10241



BMM603-3C with CVRI-CCM covers and TM26CB marker labels



BCM603-3PQ with pressure plate and 1/4" quick-connect terminals

### Marker labels

- Order Bussmann series catalog number TM26CB

### Recommended Bussmann series fuses

- Class CC: LP-CC, FNQ-R, KTK-R
- UL 13/32" x 1-1/2": KTK, FNQ, KLM, FNM, BAF
- IEC 10x38mm: C10G, C10M, FWA, FWC

### Recommended DIN-Rail end stops

- Catalog no. BRKT-ND
- Catalog no. BRKT-NDSCRW2

### Features

- Available in 1-, 2- and 3-pole configurations to meet stocking requirements
- Blocks are fully modular with a snap-together design that provides toolless assembly of multiple pole blocks at point-of-use to reduce inventory and save assembly time and labor
- DIN-Rail and panel mount versatility allows one product to be used for multiple applications, lowering inventory cost
- Compact footprint consumes minimal panel space
- Optional see-through cover enhances safety with IP20 finger-safe protection, lockout/tagout capability and open circuit indication
- Easy circuit identification with available universal marker labels for fuse block covers
- Tin-plated bimetallic copper fuse clips deliver superior fatigue resistance compared to traditional spring brass
- Terminal options to meet application needs including 1/4" spade quick-connect terminals for faster panel assembly

### Terminals for 75/90°C Cu and AL wire

| Terminal type                      | AWG range         | AWG     | Torque<br>lb-in<br>(N·m) |
|------------------------------------|-------------------|---------|--------------------------|
| Box lug (C)                        | Cu 2-14<br>Al 2-8 | Cu 2-3  | 50 (5.6)                 |
|                                    |                   | Cu 4-6  | 45 (5.1)                 |
|                                    |                   | Cu 8-14 | 35 (4.0)                 |
|                                    |                   | Al 2-6  | 50 (5.6)                 |
|                                    |                   | Al 8    | 40 (4.5)                 |
| Screw (S)                          |                   |         |                          |
| Screw/quick-connect* (SQ)          | Cu 10-18          | 10-18   | 20 (2.3)                 |
| Pressure plate (P)                 |                   |         |                          |
| Pressure plate/quick-connect* (PQ) |                   |         |                          |

\* 1/4" quick-connect terminal maximum amps dependent on female spade connector and wire ratings.

### Recommended cover†

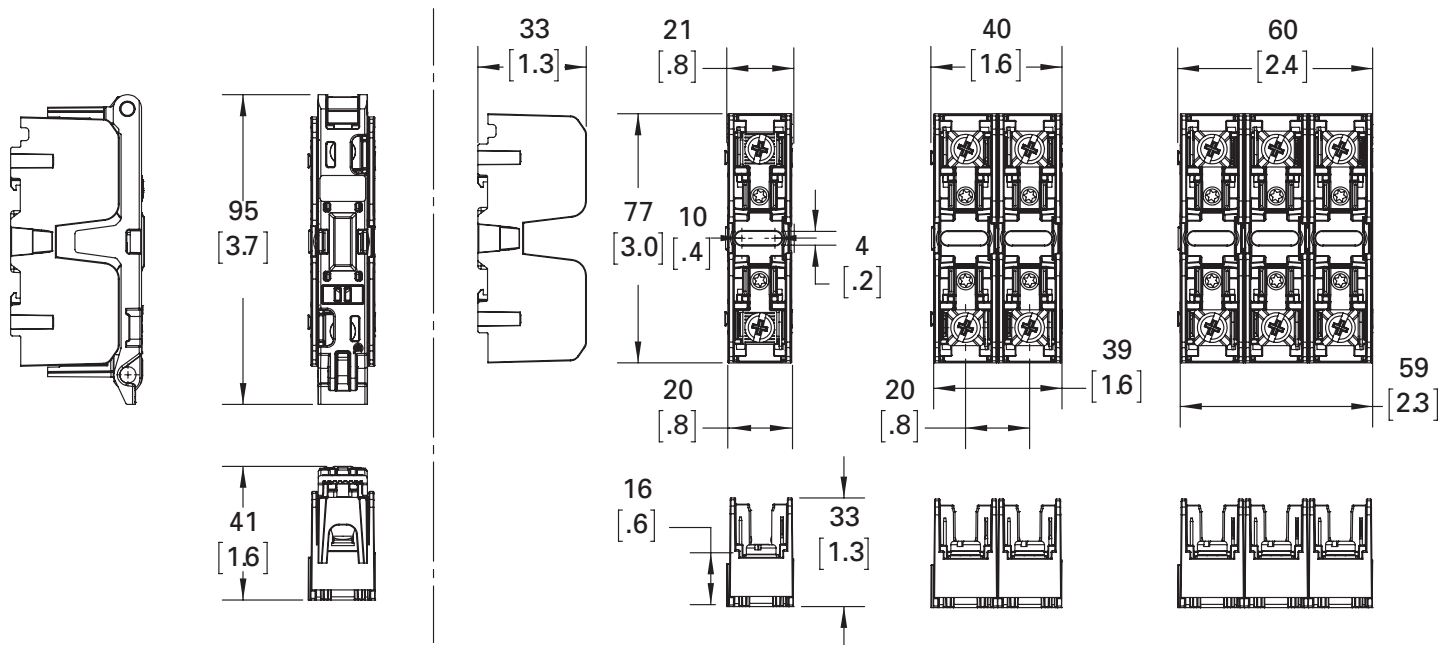
| Terminal type                     | Cover catalog no. |                |
|-----------------------------------|-------------------|----------------|
|                                   | Indicating        | Non indicating |
| Box lug (C)                       | CVRI-CCM          | CVR-CCM        |
| Screw (S)                         | CVRI-CCM          | CVR-CCM        |
| Screw/quick-connect (SQ)          | CVRI-CCM-QC       | CVR-CCM-QC     |
| Pressure plate (P)                | CVRI-CCM          | CVR-CCM        |
| Pressure plate/quick-connect (PQ) | CVRI-CCM-QC       | CVR-CCM-QC     |

† For use with 4 AWG max conductors.

| Catalog no.           |                           |                |                                    |           |       |                                                                                          |
|-----------------------|---------------------------|----------------|------------------------------------|-----------|-------|------------------------------------------------------------------------------------------|
| Terminal type         |                           |                |                                    |           |       |                                                                                          |
| 10-32 Phil-slot screw | Screw with quick-connect* | Pressure plate | Pressure plate with quick-connect* | Box lug   | Poles | Fuse/class                                                                               |
| BCM603-1S             | BCM603-1SQ                | BCM603-1P      | BCM603-1PQ                         | BCM603-1C | 1     | CC                                                                                       |
| BCM603-2S             | BCM603-2SQ                | BCM603-2P      | BCM603-2PQ                         | BCM603-2C | 2     | CC                                                                                       |
| BCM603-3S             | BCM603-3SQ                | BCM603-3P      | BCM603-3PQ                         | BCM603-3C | 3     | CC                                                                                       |
| —                     | BMM603-1SQ                | —              | BMM603-1PQ                         | BMM603-1C | 1     | 10x38 (13/32"x1-1/2")                                                                    |
| —                     | BMM603-2SQ                | —              | BMM603-2PQ                         | BMM603-2C | 2     | 10x38 (13/32"x1-1/2")                                                                    |
| —                     | BMM603-3SQ                | —              | BMM603-3PQ                         | BMM603-3C | 3     | 10x38 (13/32"x1-1/2")                                                                    |
| —                     | BCCMM603-3SQ              | —              | BCCMM603-3PQ                       | —         | 3     | 3-Pole control circuit transformer block 2-pole CC with 1-pole 10x38mm (13/32" x 1-1/2") |

\* 1/4" quick-connect terminal maximum amps dependent on female spade connector and wire ratings.

### Dimensions — mm (in)



## CH modular, IP20 finger-safe DIN-Rail holders for Class CC, midget and PV fuses

Bussmann series CH DIN-Rail fuse holders are for UL Class CC and midget fuses, and IEC 10x38mm fuses. They are available with and without indication in 1-, 2- and 3-pole IP20 finger-safe versions. A variety of accessories extends their application flexibility and they may be ganged together to meet specific application requirements.



### Ratings

- Volts
  - 600 V (or less) UL
  - 690 V (or less) IEC
  - 1000 Vdc (or less) photovoltaic (PV)
- Amps
  - 30 A UL
  - 32 A IEC
- SCCR
  - 33 kA photovoltaic
  - 200 kA RMS Sym. (CHCC, CHM\*)

\* CHM SCCR is fuse interrupting rating dependent.

### Agency information

- CHCC, CHM; UL Listed Guide IZLT, Recognized Guide IZLT2, File E14853
- CHPV, UL Listed to 4248-19, Guide IZMR, File E348242
- CSA File 47235, CHPV and CHM - Class 6225-30, CHCC - Class 6225-01
- IEC 60269-2 (CHM, CHPV)
- CCC
- RoHS compliant

### Mounting: 35mm DIN-Rail

### Wire range

- 75°C and 90°C Cu
- 18-4 AWG (0.8-21.1mm<sup>2</sup>)
- Solid, stranded and fine stranded\*

\* See data sheet 10430 for application details.

### Terminals

- Single or dual conductors
- Comb busbar
- Terminal screws
  - Standard phil-slot
  - Optional hex head (order by adding "-H" suffix to the catalog number, e.g., CHM1DU-H)

### Torque

- 30 lb-in (3.4 N•m) maximum

### Data sheet no. 10430

### Flammability

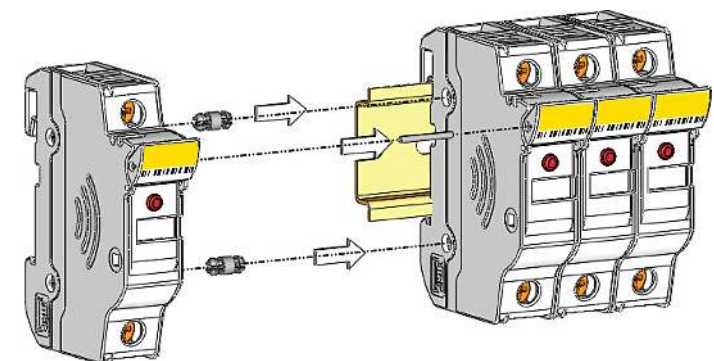
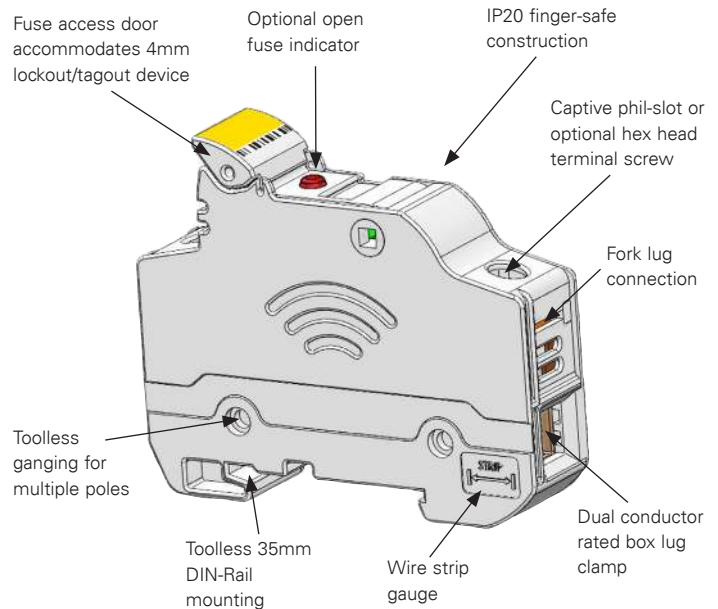
- UL 94V0, self-extinguishing

### Storage and operating temperature

- -4°F (-20°C) to +194°F (90°C) indicating
- -4°F (-20°C) to +248°F (120°C) non-indicating

### Features

- High SCCR rated, UL Listed Class CC holder with optional open fuse indication for 600 V and 48 Vdc (see catalog number table for details)
- Enhanced safety with IP20 finger-safe construction
- UL Recognized midget and IEC 10x38mm holders with factory assembled neutral pole option
- Agency ratings up to 1000 Vdc for use with PV fuses.
- Available remote PLC indication module
- Wiring flexibility with terminals rated for use with 75°C or 90°C solid, stranded and fine stranded wire, and spade terminals and comb-bus bars. (Use any higher temperature insulations at the 90°C ampacity with appropriate derating.)
- Complete range of UL Listed and high SCCR rated one- and three-phase finger-safe comb-bus bars and power feed lugs



Gang multiple poles to meet application requirements using kit catalog number JV-L (gangs up to four poles).

## UL midget and IEC 10x38



| Catalog no.†     |                    | Volts and amps                |                 | Agency marks                    | Poles       | SCCR                             | Recommended Bussmann series fuses                                                                                               |
|------------------|--------------------|-------------------------------|-----------------|---------------------------------|-------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| With indication* | Without indication | UL                            | IEC             |                                 |             |                                  |                                                                                                                                 |
| CHM1DIU          | CHM1DU             | 600 V/<br>30 A                | 690 V/<br>32 A  | UR, CSA,<br>IEC 60269-2,<br>CCC | 1           | 200 kA<br>RMS Sym.††             | BAF, BAN,<br>FNM, FNQ,<br>FWA, FWC,<br>KLM, KTK,<br>AGU, C10G_, C10M_                                                           |
| CHM2DIU          | CHM2DU             |                               |                 |                                 | 2           |                                  |                                                                                                                                 |
| CHM3DIU          | CHM3DU             |                               |                 |                                 | 3           |                                  |                                                                                                                                 |
| CHM4DIU          | CHM4DU             |                               |                 |                                 | 4           |                                  |                                                                                                                                 |
| CHM1DNIU         | CHM1DNU            |                               |                 | IEC 60269-2                     | 1 + neutral |                                  |                                                                                                                                 |
| CHM3DNIU         | CHM3DNU            |                               |                 |                                 | 3 + neutral |                                  |                                                                                                                                 |
| CHM1DI-48U       | —                  | 48 Vdc/<br>30 A               | 48 Vdc/<br>32 A | UR, CSA,<br>IEC 60269-2,<br>CCC | 1           | N/A                              | N/A                                                                                                                             |
| —                | CHM1DNXU           | —                             | 690 V/<br>32 A  | IEC 60269-2                     |             |                                  |                                                                                                                                 |
| CHM1DCIU         | CHM1DCU            | 600 Vac,<br>1000 Vdc,<br>30 A | 690 V,<br>32 A  | UR, CSA,<br>IEC 60269-2         | 1           | 200 kA<br>RMS Sym.††<br>33 kA DC | 600/690 V<br>BAF, BAN,<br>FNM, FNQ,<br>FWA, FWC,<br>KLM, KTK,<br>AGU, C10G_, C10M_,<br>1000 Vdc<br>PV-(amp)A10F,<br>PV10M-(amp) |
| CHM2DCIU         | CHM2DCU            |                               |                 |                                 | 2           |                                  |                                                                                                                                 |
| CHM3DCIU         | CHM3DCU            |                               |                 |                                 | 3           |                                  |                                                                                                                                 |
| CHM4DCIU         | CHM4DCU            |                               |                 |                                 | 4           |                                  |                                                                                                                                 |

## UL Class CC



| Catalog no. †    |                    | Volts / amps | Agency marks | Poles | SCCR               | Recommended Bussmann series fuses |
|------------------|--------------------|--------------|--------------|-------|--------------------|-----------------------------------|
| With indication* | Without indication |              |              |       |                    |                                   |
| CHCC1DIU         | CHCC1DU            | 600 V/30 A   | UL, CSA, CCC | 1     | 200 kA<br>RMS Sym. | LP-CC,<br>FNQ-R,<br>KTK-R         |
| CHCC2DIU         | CHCC2DU            |              |              | 2     |                    |                                   |
| CHCC3DIU         | CHCC3DU            |              |              | 3     |                    |                                   |
| CHCC1DI-48U      | —                  | 48 Vdc/30 A  |              | 1     | 33 kA DC           |                                   |

## UL and IEC photovoltaic



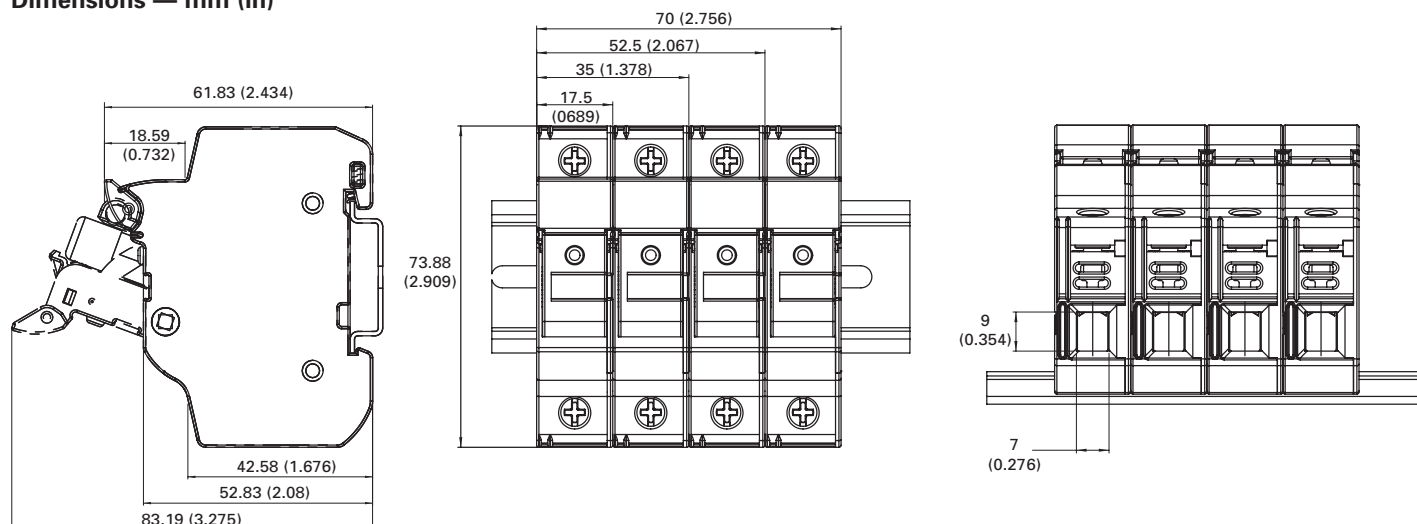
| Catalog no. †    |                    | Volts / amps  | Agency marks                                  | Poles | SCCR     | Recommended Bussmann series fuses |
|------------------|--------------------|---------------|-----------------------------------------------|-------|----------|-----------------------------------|
| With indication* | Without indication |               |                                               |       |          |                                   |
| CHPV1IU          | CHPV1U             | 1000 Vdc/30 A | UL, CSA, , UL<br>4248-18, IEC<br>60269-1, CCC | 1     | 33 kA DC | PV-(amp)A10F,<br>PV10M-(amp)      |
| CHPV2IU          | CHPV2U             |               |                                               | 2     |          |                                   |

† Available with optional hex head terminal screws. To order, add "-H" suffix to the desired catalog number.

†† SCCR is limited to the interrupting rating of the installed fuse or 200 kA, which ever is less.

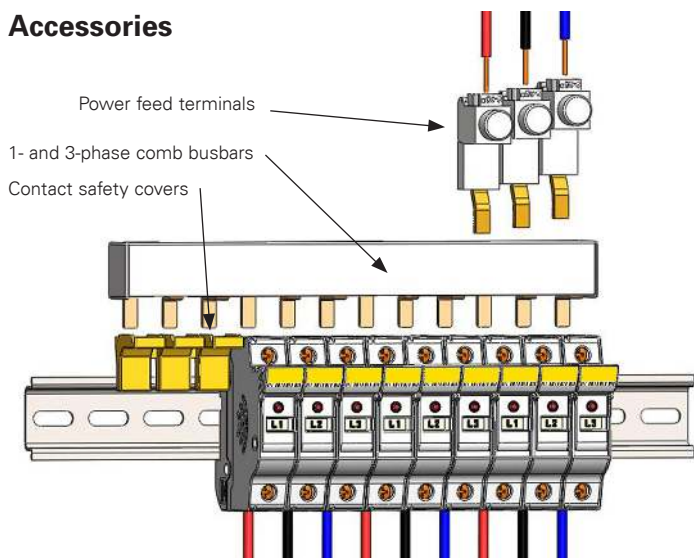
\* All models require 90 V minimum for illumination, except CHM1DI-48U that requires 15 V minimum.

## Dimensions — mm (in)



Fuse blocks and holders

## Accessories



## Comb busbars

- Easily distribute power in single- or three-phase systems
- Flexible cut-to-length busbars do not compromise the finger-safe protection (requires using endcaps)
- 100 kA SCCR when protected by a max 200 A Class J fuse
- Single-phase busbars rated to 1000 Vdc and 100 A
- Three-phase busbars rated to 600 V and 100 A
- Power feed terminals for single- and three-phase systems

## Agency information

- UL 508, File E195399

## Pitch 17.8mm

## Ratings

- Volts
  - 600 V max. (three-phase)
  - 1000 Vdc/600 Vac max. (single-phase)
- Amps 100 A max.
- SCCR
  - 10 kA (default)
  - 100 kA (with upstream Class J max 200 A fuses)

| Catalog no. | Phase  | No. of pins     | Endcaps* |
|-------------|--------|-----------------|----------|
| BB1P100M3   | Single | 3               | Yes*     |
| BB1P100M6   |        | 6               |          |
| BB1P100M9   |        | 9               |          |
| BB1P100M12  |        | 12              |          |
| BB1P100M15  |        | 15              |          |
| BB1P100M57  | Three  | 57 pin cuttable | No**     |
| BB3P100M6   |        | 6               |          |
| BB3P100M9   |        | 9               |          |
| BB3P100M12  |        | 12              |          |
| BB3P100M15  |        | 15              |          |
| BB3P100M57  |        | 57 pin cuttable |          |

\* With endcaps assembled. If cut to length, order additional endcaps separately.

\*\* Order end caps separately, ECAP1P for single-phase busbars and ECAPMP for three-phase busbars.

## Data sheet no. 10430

## Power feed terminals

PWR1PLP — Single-phase, low profile power feed terminal

## Ratings

- Volts 1000 V
- Amps 115 A
- Wire range 1/0-10 AWG Cu, max torque 50 lb-in (5.6 N•m)
- Wire rating 60°C†



PWR35MM — 35mm<sup>2</sup> three-phase power feed terminal for three-phase busbars

## Ratings

- Volts 1000 V
- Amps 115 A
- Wire range 1/0-10 AWG Cu, max torque 50 lb-in (5.6 N•m)
- Wire rating 60°C†



PWR50MM — 50mm<sup>2</sup> direct feed power terminal

## Ratings

- Volts 1000 V
- Amps 115 A
- Wire range 1-14 AWG Cu, max torque 35 lb-in (3.9 N•m)
- Wire rating 75°C†



† Higher temperature rated wire may be used with appropriate derating.

## Comb busbar safety covers and end caps

### FSCVR

Spare comb busbar pin safety protection covers (used to cover exposed pins on comb busbars). Sold in quantity of ten strips of five covers each. (FSCVR comes with five covers on a strip. Minimum order is 10 strips or 50 safety covers total.)



### ECAP1P

End cap for single-phase comb busbars. Sold in quantity of fifty.



### ECAPMP

End cap for three-phase comb busbars. Sold in quantity of fifty.



## Accessory catalog numbers

| Catalog no. | Description                                                                  | Carton quantity                                           |
|-------------|------------------------------------------------------------------------------|-----------------------------------------------------------|
| PWR1PLP     | Single-phase low-profile power feed terminal (115 A, 1000 V)                 | 10                                                        |
| PWR35MM     | 35mm <sup>2</sup> power feed terminal for three-phase busbar (115 A, 1000 V) | 10                                                        |
| PWR50MM     | 50mm <sup>2</sup> direct power feed terminal (1000 V)                        | 10                                                        |
| ECAP1P      | Single-phase busbar endcap                                                   | 50                                                        |
| ECAPMP      | Three-phase comb busbar end cap                                              | 50                                                        |
| FSCVR       | Spare comb busbar pin safety protection covers                               | 10 strips of five covers each, total 50 individual covers |

## PLC remote fuse monitor

The Bussmann series resettable remote fuse monitor permits easy integration with a Programmable Logic Controller (PLC) or other monitoring and control equipment. Signals up to three-phases. Includes 0.11" (2.8mm) quick-connects for power, signal and ground connections.

When the fuse opens, the output signal is sent high and will remain high until the unit is reset.

- Power input: 24 Vdc / 5 mA
- Sensing voltage: 600 V/30 mA
- Digital output signals
  - 0 Vdc (low) – fuse is good
  - 24 Vdc (high) – fuse has opened
- Rated impulse voltage 8 kV
- Local indication
  - Two distinct LEDs indicate unit power (green) and open fuse (red)
  - Upon fuse replacement, the actuation of the reset switch will reset the open fuse LED



## Agency information

- UL 508, cULus to CSA Standard 22.2 No.14

## Flammability rating UL 94V0

## Wiring

- For power, signal and ground connections use shielded twisted pair 22-24 AWG (0.34-0.25mm<sup>2</sup>) 300 V rated wire.

## Minimum circuit voltage

- Minimum circuit voltage required across the CH holder is 100 Vac for the remote indication device to operate

## Installation

- Mounts on the left side of the fuse holder and mechanically interlocks with the fuse holder switch handle with hardware provided

## Degree of protection IP20 finger-safe

## Storage and operating temperature

- -4°F (-20°C) to +167°F (+75°C)

## PLC programming

- The CH-PLC signal line is designed to provide a digital input to a PLC I/O card
- Programmable Logic Control program must be written to properly interpret the input signal to the PLC
- The PLC program should check for consecutive high signals before taking action on a critical process

## To order

- Specify catalog number CH-PLC (one unit)

Data sheet no. 10430

## NDNF1-WH single-pole DIN-Rail mount fuse holding terminal block for 13/32" x 1-1/2" (10x38mm) fuses

### Ratings

Volts 600 V

Amps 30 A

### Wire range

AWG 8-22 Cu

### Torque rating

- 18 lb-in

### Mounting

- 35mm DIN-Rail
- C-rail

### Fuse pullers

- PF1-WH (white)
- PF1-BK (black)

### Max operating temperature

- 105°C

### Circuit jumper

- Catalog number **JF1** for 2 circuits



## Optima™ fuse holder module and module with disconnect switch

### OPM-1038(R)(C) without switch

### OPM-1038(R)SW(C) with switch

OPM-1038(R)(C) is a 3-pole modular fuse holder 13/32" x 1-1/2" (10x38mm) and Class CC fuses.

OPM-1038(R)SW(C)\* is a 3-pole load break modular fuse holder and disconnect switch for 13/32" x 1-1/2" (10x38mm) and Class CC fuses.

Both the OPM-1038(R)SW(C) and OPM-1038(R)(C) are available with optional communications for interfacing with programmable logic controllers.

\* Recommend using the UL 98 Listed CCP disconnect switch. See page 11-2.



### Ratings

- See catalog numbers table

### Agency information

- See catalog numbers table

### Flammability rating UL 94V0

### OPM-1038(R)SW(C) switch horsepower ratings

| 3-phase volts | 240 | 480 | 600 |
|---------------|-----|-----|-----|
| HP            | 5   | 10  | 15  |

### Recommended Bussmann series fuses

- Class CC; LP-CC, FNQ-R, KTK-R
- UL 13/32" x 1-1/2"; KTK, FNQ, KLM, FNM, BAF
- IEC 10x38mm; C10G, C10M, FWA, FWC

### Physical characteristics

- Small size matches 45mm IEC starter width
- Accepts Cu AWG stranded 8-18 and solid 10-18 wire
- OPM-1038(R)SW(C) switch version requires a handle and shaft for through the door operation

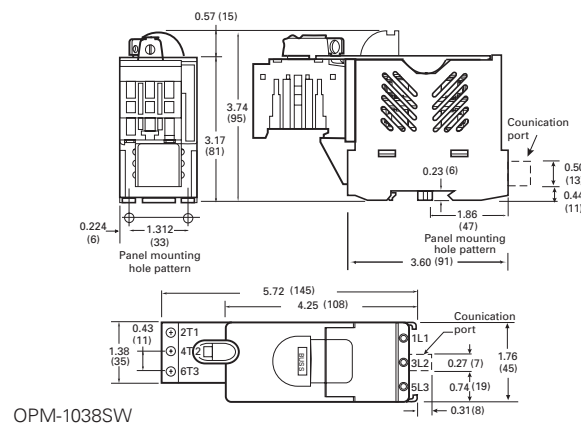
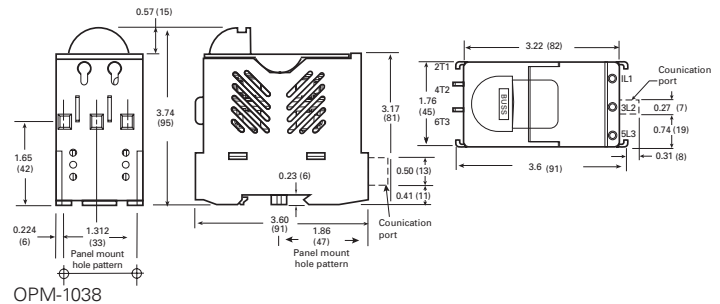
### Features

- Padlockable with finger-safe terminals for safety. Qualified as IP20 per IEC 60529
- Cam-action handle for easy fuse module removal, offered with Class CC rejection clips or 13/32 x 1-1/2 (10x38mm) clips to meet global needs
- Wire ready with 35mm DIN-Rail or screw panel mounting (#8 screw, 1-1/4" long) saves installation time
- Fuse indication lights with optional communications for remote fuse status available. See data sheet for additional wiring details.

### Typical applications

- Industrial control
- Process control systems
- Automated warehouse systems
- Individual control circuits

### Dimensions — in (mm)



| Catalog no.                       |                    |                                          |                           |                   |        |                                                                                                                       |
|-----------------------------------|--------------------|------------------------------------------|---------------------------|-------------------|--------|-----------------------------------------------------------------------------------------------------------------------|
| Without communication             | With communication | Fuse type/size                           | Volts                     | Amps              | SCCR   | Agency information                                                                                                    |
| <b>OPM with disconnect switch</b> |                    |                                          |                           |                   |        |                                                                                                                       |
| OPM-1038SW                        | OPM-1038SWC*       | Non-rejection, 13/32" x 1-1/2 or 10x38mm | 600 Vac UL/CSA, 660 V IEC | 30 A UL, 32 A IEC | **     | UL 508 Recognized, Guide NLRV2, File E161278, CSA Certified, C22.2 No. 39, Class 6225-01, File 47235, IEC 60947-3, CE |
| OPM-1038RSW                       | OPM-1038RSWC*      | Class CC                                 | 600 Vac UL/CSA            | 30 A              | 100 kA | UL 508 Listed, Guide NLRV, File E161278, CSA Certified, C22.2 No. 39, Class 6225-01, File 47235, IEC 60947-3, CE      |
| <b>OPM without switch</b>         |                    |                                          |                           |                   |        |                                                                                                                       |
| OPM-1038                          | OPM-1038C*         | Non-rejection, 13/32" x 1-1/2 or 10x38mm | 600 Vac UL/CSA, 660 V IEC | 30 A UL, 32 A IEC | **     | UL Recognized, Guide IZLT2, File E114853, CSA Certified, C22.2 No. 39, Class 6225-01, File 47235, IEC 60269-2-1, CE   |
| OPM-1038R                         | OPM-1038RC*        | Class CC                                 | 600 Vac UL/CSA            | 30 A              | 200 kA | UL Listed, Guide IZLT2, File E114853, CSA Certified, C22.2 No. 39, Class 6225-01, File 47235, IEC 60269-2-1, CE       |

\* With communication not CE.

\*\*Rating varies depending on fuse used in module; 10 kA default, higher SCCR requires testing and certification.

### Data sheets no. 1002 (OPM-1038) and 1103 (OPM-1038SW)

## OPM-NG Optima three-pole overcurrent protection module

The OPM-NG is a 3-pole protection module that's available in versions for Class CC, and UL 13/32" x 1-1/2" supplemental and 10x38mm IEC fuses.

### Catalog numbers

- OPM-NG-SC3 (Class CC)
- OPM-NG-SM3 (UL/IEC)

### Ratings

- Volts
  - 600 Vac (or less) UL and CSA
  - 690 Vac (or less) IEC
- Amps
  - 30 A UL and CSA
  - 32 A IEC
- SCCR
  - 200 kA Class CC
  - UL supplemental and IEC same as fuse IR up to 200 kA max

### Agency information

- UL; OPM-NG-SC3 UL Listed, UL 4248, File E14853, Guide IZLT. OPM-NG-SM3, UL Recognized, UL 4248, File E14853, Guide IZLT2. CSA Certified, C22.2 No. 4248, Class 6225-01, File 47235. IEC 60947-3 Utilization Category AC20B, CE

### Recommended Bussmann series fuses

- Class CC: LP-CC, FNQ-R, KTK-R
- UL 13/32" x 1-1/2": KTK, FNQ, KLM, FNM, BAF
- IEC 10x38mm: C10G, C10M, FWA, FWC

### Features

- 45mm width matches IEC starters
- 35mm DIN-Rail or panel mount. Max. screw size #8 (M4).
- Pressure plate terminations with dual-wire rated terminals (see wire table) and optional auxiliary contacts
- Integrated collapsible handle and fuse carrier cannot be removed from holder base
- Padlockable and IP20 finger-safe to IEC 60529

### Typical applications

- Mass produced control systems
- Process control systems
- Automated warehouse systems
- Individual control circuits



### Fuse holder AWG wire range (75°C Cu only)\*

- 18-12, single/dual, torque 15 lb-in (1.7 N•m)
- 10-8, single/dual, torque 20 lb-in (2.2 N•m)

\* Dual wire with same gauge and type

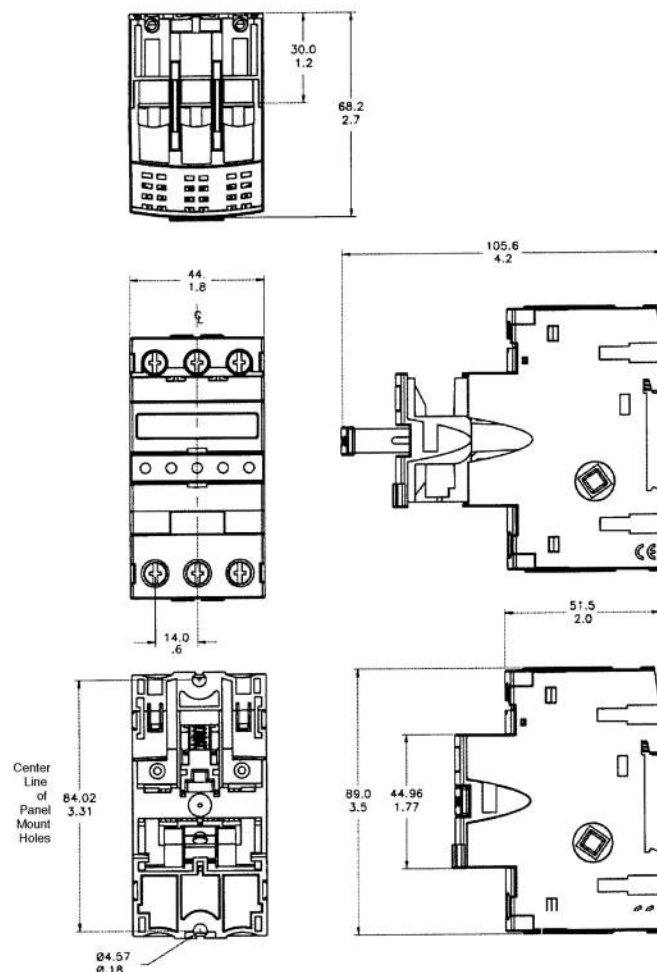
### Input power terminal wire range (AWG)

| Wire     | AWG (mm²) range      | Torque lb-in (N•m) |             |
|----------|----------------------|--------------------|-------------|
|          |                      | Connector          | Screw clamp |
| Solid    | Single 14-2 (1.5-25) | 20 (2.2)           | 15 (1.7)    |
|          | Dual 14-6 (1.5-10)   |                    |             |
| Stranded | Single 14-2 (1.5-25) | 20 (2.2)           | 15 (1.7)    |
|          | Dual 12-6 (2.5-10)   |                    |             |

### Flammability rating

- UL V2

### Dimensions — mm (in)



## 3743 open, add-on block for 13/32" x 1-1/2" (10x38mm) fuses

Single pole blocks lock into each other and can be added at any time. Each has a single end barrier.

### Ratings

Volts 600 V

Amps 30 A

### Agency information

- UL Recognized, Guide IZLT2, File E14853, CE



3743 open, add-on block



3742 end barrier only

## 4421 and 4515 open single pole blocks for 13/32" x 1-1/2" (10x38mm) fuses.

### Ratings

- Volts 250 V
- Amps 30 A

### Agency information

- CE



4421 solder terminal

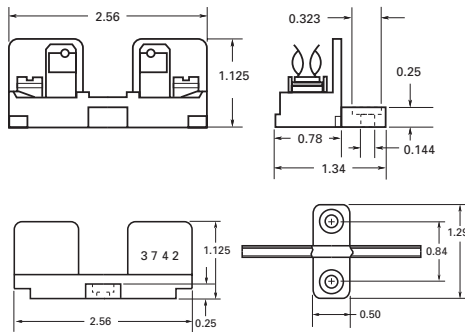


4515 screw terminal

| Catalog no. | Terminals | Base width  |
|-------------|-----------|-------------|
| 4421        | Solder    | 5/8" (16mm) |
| 4515        | Screw     | 3/4" (19mm) |

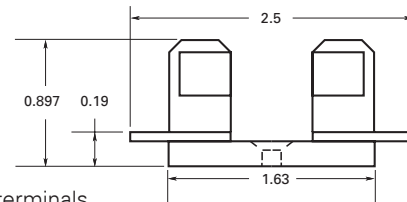
| Catalog no. | Description                                         |
|-------------|-----------------------------------------------------|
| 3743        | Add-on fuse block                                   |
| 3742        | End barrier                                         |
| 3723        | Block and end barrier marking strip (length 9-3/8") |

### Dimensions — in\*

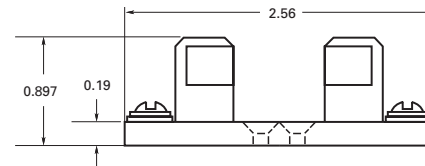


\* Mounting screw hole diameter 0.147" (3.7mm). Counterbore diameter 0.636" (8mm). Max. #6 mounting screw.

### Dimensions — in\*



4421 solder terminals



4515 with screw terminals

\* Mounting screw hole diameter 0.147". Counterbore diameter 0.312". Max. #6 mounting screw.

## BG and G Class G fuse blocks

Bussmann series open style BG and G fuse blocks are available in 1-, 2- and 3-pole configurations and offer a variety of terminal options.

### Ratings

- Volts
  - 600 V (0-20 A)
  - 480 V (25-60 A)
- Amps up to 60 A
- SCCR 100 kA RMS Sym.



### Agency information

- UL Listed, 4248-5, Guide IZLT, File E14853
- 1-60 A CSA Certified, C22.2 No. 39, Class 6225-01, File 47235
- RoHS compliant

### Mounting

- Panel
- DIN-Rail with DRA-1 adapter

| Catalog no./terminal |                         |                                  |                                                           |                           |       |
|----------------------|-------------------------|----------------------------------|-----------------------------------------------------------|---------------------------|-------|
| Amps                 | Screw w/ quick-connect* | Pressure plate w/ quick-connect* | Box lug                                                   | Box lug w/ retaining clip | Poles |
| Up to 15             | BG3011SQ                | BG3011PQ                         | BG3011B                                                   | —                         | 1     |
|                      | BG3012SQ                | BG3012PQ                         | BG3012B                                                   | —                         | 2     |
|                      | BG3013SQ                | BG3013PQ                         | BG3013B                                                   | —                         | 3     |
| 20                   | BG3021SQ                | BG3021PQ                         | BG3021B                                                   | —                         | 1     |
|                      | BG3022SQ                | BG3022PQ                         | BG3022B                                                   | —                         | 2     |
|                      | BG3023SQ                | BG3023PQ                         | BG3023B                                                   | —                         | 3     |
| 25-30                | BG3031S                 | BG3031P                          | BG3031B                                                   | —                         | 1     |
|                      | BG3032S                 | BG3032P                          | BG3032B                                                   | —                         | 2     |
|                      | BG3033S                 | BG3033P                          | BG3033B                                                   | —                         | 3     |
| 35-60                | —                       | —                                | —                                                         | G30060-1CR                | 1     |
|                      | —                       | —                                | —                                                         | G30060-2CR                | 2     |
|                      | —                       | —                                | G30060-3C**                                               | G30060-3CR                | 3     |
| AWG wire range/type  | 10-14 Cu                | 10-18 Cu                         | 6-14 Cu (1-30 A)<br>2-14 Cu (35-60 A)<br>2-8 Al (35-60 A) | 2-14 Cu<br>2-8 Al         |       |

\* Quick-connect rated 20 A max.

\*\*Not RoHS compliant.

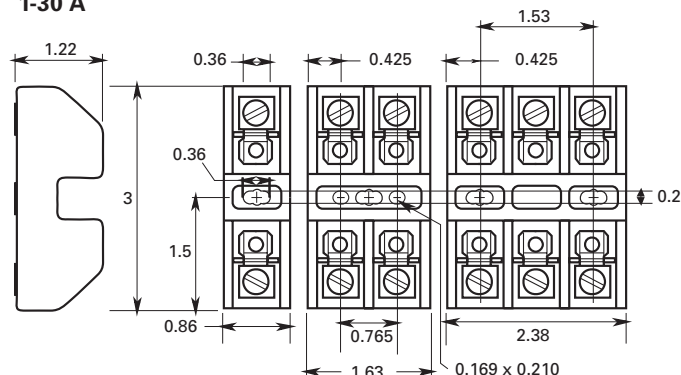
### Accessories

| Catalog no.† | Description       | Color |
|--------------|-------------------|-------|
| PF1-WH       | Fuse cover/puller | White |
| PF1-BK       |                   | Black |

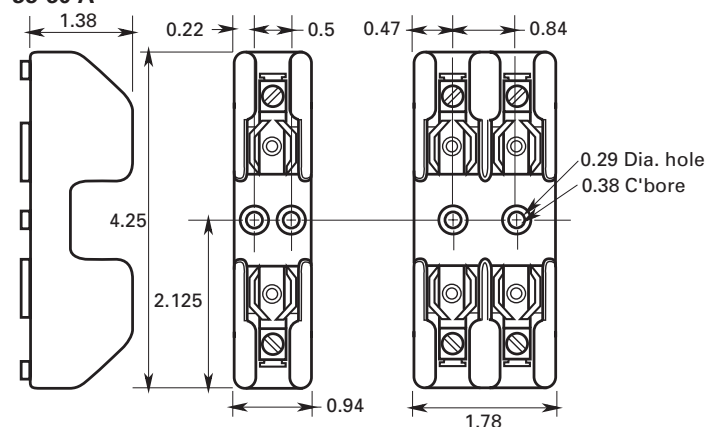
† Order one cover per pole.

### Dimensions — in

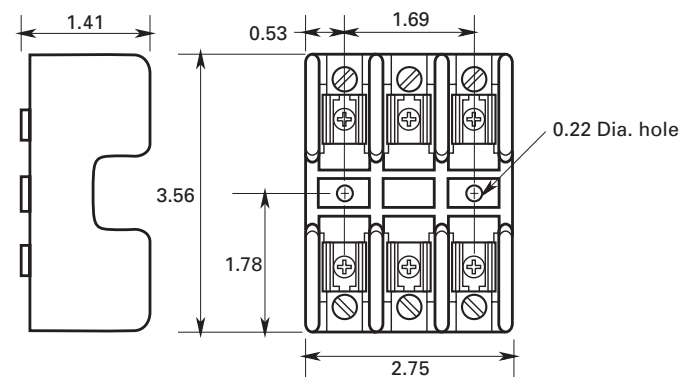
#### 1-30 A



#### 35-60 A



#### 35-60 A 3-Pole G30060-3C and G30060-3CR



## CH14 modular fuse holders for 14x51mm fuses

Bussmann series 14x51mm modular fuse holders are suitable for use with standard cylindrical fuses and high speed FW type ferrule fuses. With DIN-Rail or panel mount flexibility, their compact dimensions helps reduce space, allows for higher cable bending radius. Low watts loss and wide range of accessories make them ideally suited for most industrial applications.

## Ratings

- Volts
  - 690 Vac/750 Vdc (IEC)
  - 700 Vac (UL)
- Amps
  - 50 A
- SCCR
  - 120 kA AC
  - 10 kA DC (PV only)
- Power acceptance
  - 5 W to IEC 60269-2 (rated)
  - 6.2 W (max)
- Rated impulse withstand voltage ( $U_{imp}$ )
  - 6 kV
- Microswitch (IEC)
  - 250 Vac / 5 A



Shown with optional microswitch

## Agency information

- IEC 60269-1 and 2, UL Listed File E14853, CCC (UL/IEC)
- IEC 60269-1 and 2, UL Listed File E348242, CCC (PV)
- RoHS compliant

## Poles

1 to 4

## Protection index

- IP20

## Temperature range

- Storage
  - -40°C to +80°C (CH14D)
  - -20°C to +90°C (CHPV14 indicating)
  - -20°C to +120°C (CHPV14 non-indicating)
- Operating
  - -20°C to +70°C (CH14D)
  - -20°C to +90°C (CHPV14 indicating)
  - -20°C to +120°C (CHPV14 non-indicating)

## Features

- Ventilation zones optimized for better heat dissipation
- Built-in padlocking facility and IP20 degree of protection
- Photovoltaic version rated at 1500 Vdc (IEC only) for use with gPV fuses

Data sheet no. 10080

| Catalog no.                          | Poles | Description                              |
|--------------------------------------|-------|------------------------------------------|
| <b>UL/IEC holders</b>                |       |                                          |
| CH141DNXU                            | 1     | Neutral holder                           |
| CH141DU                              | 1     | Fuse holder                              |
| CH142DU                              | 2     |                                          |
| CH143DU                              | 3     |                                          |
| CH144DU                              | 4     |                                          |
| CH141DNU                             | 2     | 1-pole holder+ neutral                   |
| CH143DNU                             | 4     | 3-pole holder+ neutral                   |
| CH141DIU                             | 1     | Fuse holder with neon indicator          |
| CH142DIU                             | 2     |                                          |
| CH143DIU                             | 3     |                                          |
| CH144DIU                             | 4     |                                          |
| CH141DNIU                            | 2     | 1-pole holder + neutral + neon indicator |
| CH143DNIU                            | 4     | 3-pole holder + neutral + neon indicator |
| CH141DMSU-F                          | 1     | Holder + microswitch                     |
| CH143DMSU-F                          | 3     |                                          |
| CH143DNMSU-F                         | 4     | 3-pole holder+ neutral + microswitch     |
| CHPV141DI-48U                        | 1     | Holder with LED indicator                |
| <b>1500 Vdc photovoltaic holders</b> |       |                                          |
| CHPV141U                             | 1     | Holder                                   |
| CHPV141IU                            | 1     | Holder with neon indicator               |
| CHPV142U                             | 2     | Holder                                   |
| CHPV142IU                            | 2     | Holder with neon indicator               |

## Accessories

| Catalog no. | Description                                                                  |
|-------------|------------------------------------------------------------------------------|
| JV-L        | Multi-pole connector kit; one kit gangs up to 4 poles                        |
| CH14-SPS    | Microswitch for CH141D(I)U; 1 NO + 1 NC changeover type                      |
| CH14-TPS    | Microswitch for CH143D(I)U; 1 NO + 1 NC changeover type                      |
| CH14-CTP    | IP20 protection accessory for terminals with 10mm <sup>2</sup> or less cable |

## J70032 panel mount block for 14x51mm fuses

Open-style fuse blocks for 14x51mm cylindrical fuses. For use with Bussmann series FWX-A14F, FWH-A14F and FWP-A14F fuses.

## Ratings

- Volts 700 Vac
- Amps 32 A
- Withstand rating: 200 kA

## Agency information

- UL Recognized, Guide IZTL2, File 14853
- CE



| Catalog no. | Poles | Fuse size | Max AWG wire (Cu/AL) |
|-------------|-------|-----------|----------------------|
| J70032-1CR  | 1     | 14x51mm   | 2                    |
| J70032-2CR  | 2     |           |                      |
| J70032-3CR  | 3     |           |                      |

## CH22 modular fuse holders for 22x58mm fuses

Bussmann series 22x58mm modular fuse holders are suitable for use with standard cylindrical fuses and high speed FW type ferrule fuses. Their compact dimensions help reduce space and allow for higher cable bending radius. Low watts loss and wide range of accessories make them ideally suited for most industrial applications.

### Ratings

- Volts
  - 690 Vac/1000 Vdc (IEC)
  - 700 Vac (UL)
- Amps
  - 125 A (IEC)
  - 100 A (UL)
- SCCR
  - 120 kA AC
  - 50 kA DC
- Power acceptance
  - 9.5 W to IEC 60269-2
- Rated impulse withstand voltage ( $U_{imp}$ )
  - 6 kV
- Microswitch (IEC)
  - 250 Vac / 5 A



### Agency information

- IEC 60269-1 and 2, UL Listed File E14853, CCC, RoHS compliant

### Poles

1 to 4

### Protection index

- IP20 Finger-safe\*

\* Available protection accessory CH22-CTP for use with conductors of 10mm<sup>2</sup> or less

### Wire size (Cu only)

- 2.5-70mm<sup>2</sup>

### Temperature range

- Storage -40°C to +80°C
- Operating -20°C to +70°C

### Features

- Compact dimensions
- Ventilation zones optimized for a better heat dissipation
- Built-in padlocking facility
- IP20 degree of protection
- Flexibility to mount on DIN Rail and screw mounting
- Toolless DIN-Rail mounting, improves ease of use and reduces installation time and costs

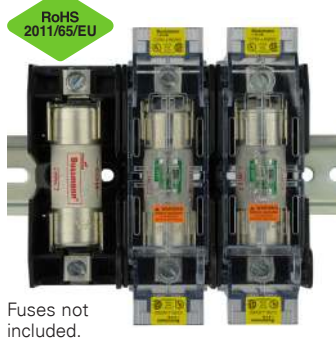
| Catalog no.  | Poles | Description                                                         |
|--------------|-------|---------------------------------------------------------------------|
| CH221DNXU    | 1     | Neutral holder                                                      |
| CH221DU      | 1     | Fuse holder                                                         |
| CH222DU      | 2     |                                                                     |
| CH223DU      | 3     |                                                                     |
| CH224DU      | 4     |                                                                     |
| CH221DIU     | 1     | Holder with neon indicator                                          |
| CH222DIU     | 2     |                                                                     |
| CH223DIU     | 3     |                                                                     |
| CH224DIU     | 4     |                                                                     |
| CH221DNU     | 2     | 1-pole holder + neutral                                             |
| CH223DNU     | 4     | 3-pole holder + neutral                                             |
| CH221DNIU    | 2     | 1-pole holder+ neutral + neon indicator                             |
| CH223DNIU    | 4     | 3-pole holder+ neutral + neon indicator                             |
| CH221DMSU-F  | 1     | Holder with microswitch (pre-breaking/fuse operation)               |
| CH223DMSU-F  | 3     | 3-pole holder + microswitch (pre-breaking/fuse operation)           |
| CH223DNMSU-F | 3     | 3-pole holder + neutral + microswitch (pre-breaking/fuse operation) |
| CH221DI-48U  | 1     | 1-pole holder with LED Indicator                                    |

### Accessories

| Catalog no. | Description                                                                  |
|-------------|------------------------------------------------------------------------------|
| JV-L        | Multi-pole connector kit; one kit gangs up to 4 poles                        |
| CH22-SPS    | Microswitch for CH221D(I)U; 1 NO + 1 NC changeover type                      |
| CH22-TPS    | Microswitch for CH223D(I)U; 1 NO + 1 NC changeover type                      |
| CH22-CTP    | IP20 protection accessory for terminals with 10mm <sup>2</sup> or less cable |

## JM70100 700 V modular fuse blocks and modular power distribution fuse blocks for 22x58mm IEC fuses

The patented JM70100 fuse block products are available for 22x58mm gG, aM and select high speed fuses as either a fuse block or power distribution fuse block. The power distribution fuse blocks eliminate the need for a separate power distribution block, and require up to 78 percent less panel space while reducing installation time and labor by an average of 36 percent.



All blocks are equipped with a fuse clip reinforcing spring to minimize temperature rise while maintaining reliable surface contact between the fuse and clip over the block's service life.

Rated for applications up to 700 V and 100 amps, their modular design allows for assembly of multiple pole configurations at the point of use. These blocks can also be ordered as factory configured 2- and 3-pole versions.

The versatile 35mm DIN-rail or panel mount capability allows using the same block for multiple applications and reducing inventory cost.

Optional IP20 finger-safe covers enhance electrical safety with a lockout/tagout feature and can be ordered with or without open fuse indication to speed troubleshooting.

The high 200 kA SCCR rating helps achieve a higher assembly short-circuit current rating (SCCR) for compliance with NEC® sections 110.10, 409.110(4), 409.22, 440.4(B), 670.3(A)(4) and 670.5.

Easy circuit identification with available universal labels for blocks and covers.

### Fuse class

- IEC 22x58mm gG, gL, aM and aR and gR high speed fuses

### Ratings

- Volts 700 V
- Amps 100 A
- SCCR 200 kA RMS Sym.

### Agency information

- Blocks; UL Recognized, Guide IZLT2, File E14853, CSA Component acceptance 47235 — 6225-01
- Covers UL Listed, Guide JDVS, File E58836
- RoHS compliant

### Poles

- 1-, 2-, 3-pole
- Single-pole units snap together to create desired number of poles

### Flammability ratings

- Blocks: UL 94V0, self-extinguishing
- Covers: UL 94HB, self-extinguishing

### Operating and storage temperature range

- Blocks -40°C to +120°C
- Covers; Non-indicating -40°C to +120°C, Indicating -20°C to +90°C

### Conductors

- 75°C Cu/Al\*

\* Conductors with higher temperature rating may be used, but at their 75°C ampacity.

### Accessories

- Optional IP20 finger-safe covers in indicating and non-indicating versions. Order one for each pole
- Universal marker labels, Bussmann series catalog number TM26CB

| Catalog no.                    | Optional covers*              | Fuse amp range | Poles    | Lineside conductors and torque |            |             | Loadside conductors and torque |                                                              |              |          |
|--------------------------------|-------------------------------|----------------|----------|--------------------------------|------------|-------------|--------------------------------|--------------------------------------------------------------|--------------|----------|
|                                |                               |                |          | Conductors                     | Size (AWG) | N·m (lb-in) | Conductors                     | Size (AWG)                                                   | N·m (lb-in)  |          |
| Fuse blocks                    |                               |                |          |                                |            |             |                                |                                                              |              |          |
| JM70100-1CR                    | CVR-J-60060<br>CVRI-J-60060** | Up to 100      | 1        | Cu 2-14<br>Al 2-8              | 2-3        | 5.6 (50)    | Cu 2-14<br>Al 2-8              | 2-3                                                          | 5.6 (50)     |          |
| JM70100-2CR                    |                               |                | 4-6      |                                | 5.1 (45)   | 4-6         |                                | 5.1 (45)                                                     |              |          |
|                                |                               |                | 8        |                                | 4.5 (40)   | 8           |                                | 4.5 (40)                                                     |              |          |
| JM70100-3CR                    |                               |                | 10-14    |                                | 4.0 (35)   | 10-14       |                                | 4.0 (35)                                                     |              |          |
| Power distribution fuse blocks |                               |                |          |                                |            |             |                                |                                                              |              |          |
| JM70100-1MW12                  | CVR-J-60060<br>CVRI-J-60060** | Up to 100      | 1        | Cu 2-14<br>Al 2-8              | 2-4        | 5.6 (50)    | Cu 2-14<br>Al 2-8              | 2-3                                                          | 5.6 (50)     |          |
| JM70100-2MW12                  |                               |                | 6-10     |                                | 4.5 (40)   | 4-6         |                                | 5.1 (45)                                                     |              |          |
|                                |                               |                |          |                                |            | 8           |                                | 4.5 (40)                                                     |              |          |
| JM70100-3MW12                  |                               |                | 12-14    |                                | 1.7 (15)   |             |                                | 10-14                                                        | 4.0 (35)     |          |
| JM70100-1MW14                  |                               |                | 1        |                                | 2-3        | 5.6 (50)    |                                | Cu (1) 8-18<br>Cu (2) 12-18<br>Al (1) 8 Str<br>Al (1) 10 Sol | Cu (1) 8     | 3.4 (30) |
| JM70100-2MW14                  |                               |                | 2        |                                | 4-6        | 5.1 (45)    |                                |                                                              | Cu (1) 10-18 | 2.8 (25) |
|                                |                               |                |          |                                | 8          | 4.5 (40)    |                                |                                                              | Cu (2) 12-18 | 3.4 (30) |
| JM70100-3MW14                  | 3                             | 10-14          | 4.0 (35) | Al (1) 8-10                    | 3.4 (30)   |             |                                |                                                              |              |          |

\* Covers sold separately, one cover per pole.

\*\* Open fuse indication requires 90 volts minimum and closed circuit to operate.

## HM modular 250 V and 600 V Class H(K) fuse blocks

Class H(K) modular fuse blocks enhance safety for any panel or electrical system design and are available for the full Class H(K) fuse amp range.

All blocks are available as snap-together single-pole versions for toolless assembly of multiple poles at point of use, or as factory configured 2-, and 3-pole versions to meet stocking requirements.

All blocks are equipped with a fuse clip reinforcing spring to minimize temperature rise while maintaining reliable surface contact between the fuse and clip over the block's service life.

30 and 60 amp ferrule fuse blocks save panel space with the smallest width dimension on the market and feature DIN-Rail and panel mount versatility.

100 to 600 amp knifeblade fuse blocks feature phase barriers between poles for additional safety with up to four mounting holes per pole to increase installation flexibility. All knifeblade blocks meet UL creep and clearance requirements for Industrial Power Circuits (UL 508 and UL 845), with the 200 to 600 amp blocks meeting the higher UL creep and clearance requirements for Power Distribution Standards (UL 98, UL 67, UL 489, UL 891 and UL 869A)

All blocks are available with optional IP20 finger-safe high clarity, see-through covers for inspecting wire terminations or thermography measurements without removal. All covers enhance safety by featuring probe holes for easier, safer testing and a lockout/tagout capability. These covers also have optional open fuse indication to speed troubleshooting.

Easy circuit identification is available for 30 and 60 amp blocks and covers with universal marker labels.



### Ratings

- Volts
  - 250 V
  - 600 V
- Amps up to 600
- SCCR 10 kA RMS Sym.

### Agency information

- Blocks; UL Listed, Guide IZLT and IZLT7, File E14853, CSA Certified 47235-6225-01, CE
- RoHS Compliant
- Covers; UL Listed, Guide JDVS, File E58836, CSA Certified 47235-6225-01 (30 and 60 A)
- RoHS Compliant

### Poles

- 1-, 2-, 3-pole units factory assembled
- Single-pole units snap together to create desired number of poles

### Flammability ratings

- Blocks: UL 94V0, self-extinguishing
- Covers: UL 94HB, self-extinguishing

### Operating and storage temperature range

- Blocks -40°C to +120°C
- Covers; Non-Indicating -40°C to +120°C, Indicating -20°C to +90°C\*

\* Indication requires minimum 90 V and closed circuit to illuminate.

### Conductors

- See catalog numbers for details and torque specifications

### Class K 30 and 60 amp blocks and covers

| Fuse<br>amp<br>range | Poles | Catalog no./terminal type |                      |                          |                             | Optional covers* |               |                    |
|----------------------|-------|---------------------------|----------------------|--------------------------|-----------------------------|------------------|---------------|--------------------|
|                      |       | Box lug/slot<br>screw     | Box lug/hex<br>screw | 10-32 Phil-slot<br>screw | Screw with<br>quick-connect | Pressure plate   | Indicating**  | Non-<br>indicating |
| 250 volt blocks      |       |                           |                      |                          |                             |                  |               |                    |
| up to 30             | 1     | HM25030-1CR               | HM25030-1CHR         | HM25030-1SR              | HM25030-1QR                 | HM25030-1PR      | CVRI-RH-25030 | CVR-RH-25030       |
|                      | 2     | HM25030-2CR               | HM25030-2CHR         | HM25030-2SR              | HM25030-2QR                 | HM25030-2PR      |               |                    |
|                      | 3     | HM25030-3CR               | HM25030-3CHR         | HM25030-3SR              | HM25030-3QR                 | HM25030-3PR      |               |                    |
| 35 to 60             | 1     | HM25060-1CR               | HM25060-1CHR         |                          |                             |                  | CVRI-RH-25060 | CVR-RH-25060       |
|                      | 2     | HM25060-2CR               | HM25060-2CHR         | —                        | —                           | —                |               |                    |
|                      | 3     | HM25060-3CR               | HM25060-3CHR         |                          |                             |                  |               |                    |
| 600 volt blocks      |       |                           |                      |                          |                             |                  |               |                    |
| up to 30             | 1     | HM60030-1CR               | HM60030-1CHR         | HM60030-1SR              |                             | HM60030-1PR      | CVRI-RH-60030 | CVR-RH-60030       |
|                      | 2     | HM60030-2CR               | HM60030-2CHR         | HM60030-2SR              |                             | HM60030-2PR      |               |                    |
|                      | 3     | HM60030-3CR               | HM60030-3CHR         | HM60030-3SR              | —                           | HM60030-3PR      |               |                    |
| 35 to 60             | 1     | HM60060-1CR               | HM60060-1CHR         |                          |                             |                  | CVRI-RH-60060 | CVR-RH-60060       |
|                      | 2     | HM60060-2CR               | HM60060-2CHR         | —                        |                             | —                |               |                    |
|                      | 3     | HM60060-3CR               | HM60060-3CHR         |                          |                             |                  |               |                    |

\* Covers sold separately, one cover per pole.

\*\* Open fuse indication requires 90 volts minimum and closed circuit to operate.

## Class H 100 to 600 amp knifeblade blocks and covers

| Fuse amp range  | Poles   | Catalog no.               | Optional covers* |               | Conductors***              |                            | Torque N·m (lb-in) |
|-----------------|---------|---------------------------|------------------|---------------|----------------------------|----------------------------|--------------------|
|                 |         |                           | Non-indicating   | Indicating**  | Solid and stranded         | Fine stranded              |                    |
| 250 volt blocks |         |                           |                  |               |                            |                            |                    |
| 70-100          | 1       | HM25100-1CR               | CVR-RH-25100     | CVRI-RH-25100 | —                          | Cu 1-3 AWG                 | 6.2 (55)           |
|                 |         | 1/0-3 AWG; (2) Cu 4-6 AWG |                  |               | Cu 4-6 AWG                 | 5.6 (50)                   |                    |
|                 | 2       | HM25100-2CR               |                  |               | 2 4-6 AWG; (2) Cu 8 AWG    | Cu 8 AWG                   | 5.1 (45)           |
|                 |         | 8 AWG; (2) Cu 10-14 AWG   |                  |               | —                          | 4.5 (40)                   |                    |
|                 |         | HM25100-3CR               |                  |               | Cu 10-14 AWG; Al 10-12 AWG | —                          | 4.0 (35)           |
| 110-200         | 1       | HM25200-1CR               | CVR-RH-25200     | CVRI-RH-25200 | 250kcmil-1 AWG             | Cu 3/0-1 AWG               | 42 (375)           |
|                 | 2       | HM25200-2CR               |                  |               | 2-6 AWG; (2) Cu 2-6 AWG    | Cu 2-6 AWG                 | 31 (275)           |
|                 | 3       | HM25200-3CR               |                  |               |                            |                            |                    |
| 225-400         | 1       | HM25400-1CR               | CVR-RH-25400     | CVRI-RH-25400 | 600kcmil                   | N/A                        | 57 (500)           |
|                 | 2       | HM25400-2CR               |                  |               | 500kcmil-4 AWG             |                            | 51 (450)           |
|                 |         | HM25400-3CR               |                  |               | (2) Cu 3/0 - 4 AWG         |                            | 57 (500)           |
|                 |         |                           |                  |               | (2) Al 3/0 - 4 AWG         |                            | 34 (300)           |
|                 | 450-600 | 1                         |                  |               | HM25600-1CR                |                            | CVR-RH-25600       |
| 2               |         | HM25600-2CR               |                  |               |                            |                            |                    |
| 3               |         | HM25600-3CR               |                  |               |                            |                            |                    |
| 600 volt blocks |         |                           |                  |               |                            |                            |                    |
| 70-100          | 1       | HM60100-1CR               | CVR-RH-60100     | CVRI-RH-60100 | —                          | Cu 1-3 AWG                 | 6.2 (55)           |
|                 |         | 1/0-3 AWG; (2) Cu 4-6 AWG |                  |               | Cu 4-6 AWG                 | 5.6 (50)                   |                    |
|                 | 2       | HM60100-2CR               |                  |               | 2 4-6 AWG; (2) Cu 8 AWG    | Cu 8 AWG                   | 5.1 (45)           |
|                 |         | 8 AWG; (2) Cu 10-14 AWG   |                  |               | —                          | 4.5 (40)                   |                    |
|                 |         | 3                         |                  |               | HM60100-3CR                | Cu 10-14 AWG; Al 10-12 AWG | —                  |
| 110-200         | 1       | HM60200-1CR               | CVR-RH-60200     | CVRI-RH-60200 | 250kcmil-1 AWG             | Cu 3/0-1 AWG               | 42 (375)           |
|                 | 2       | HM60200-2CR               |                  |               | 2-6 AWG; (2) Cu 2-6 AWG    | Cu 2-6 AWG                 | 31 (275)           |
|                 | 3       | HM60200-3CR               |                  |               |                            |                            |                    |
| 225-400         | 1       | HM60400-1CR               | CVR-RH-60400     | CVRI-RH-60400 | 600kcmil                   | N/A                        | 57 (500)           |
|                 | 2       | HM60400-2CR               |                  |               | 500kcmil-4 AWG             |                            | 51 (450)           |
|                 |         | HM60400-3CR               |                  |               | (2) Cu 3/0 - 4 AWG         |                            | 57 (500)           |
|                 |         |                           |                  |               | (2) Al 3/0 - 4 AWG         |                            | 34 (300)           |
|                 | 450-600 | 1                         |                  |               | HM60600-1CR                |                            | CVR-RH-60600       |
| 2               |         | HM60600-2CR               |                  |               |                            |                            |                    |
| 3               |         | HM60600-3CR               |                  |               |                            |                            |                    |

\* Covers sold separately.

\*\* Open fuse indication requires 90 volts minimum and closed circuit to operate.

\*\*\* Ratings for copper and aluminum conductors except where otherwise noted.

## Class K 30 and 60 amp block terminals and conductors

| Terminal type             | AWG type/range             | AWG   | Torque N·m (lb-in) |
|---------------------------|----------------------------|-------|--------------------|
| Box lug                   | 75°C<br>Cu 2-14,<br>AL 2-8 | 2-3   | 5.6 (50)           |
|                           |                            | 4-6   | 5.1 (45)           |
|                           |                            | 8     | 4.5 (40)           |
|                           |                            | 10-14 | 4.0 (35)           |
| 10-32 Phil-slot screw     | 75/90°C<br>Cu 10-18        | 10-18 | 2.3 (20)           |
| Screw with quick-connect* |                            |       |                    |
| Pressure plate            |                            |       |                    |

\* 3/16" quick-connect terminal maximum amps dependent on female spade connector and wire ratings.

## Recommended accessories for 30 and 60 amp blocks

| Catalog no.   | Description        |
|---------------|--------------------|
| BRKT-ND       | DIN-Rail end stops |
| BRKT-NDSCREW2 |                    |
| TM26CB        | Marker labels      |

## RM modular 250 V and 600 V Class R fuse blocks

Class R modular fuse blocks enhance safety for any panel or electrical system design and are available for the full Class R fuse amp range.

All blocks are available as snap-together single-pole versions for toolless assembly of multiple poles at point of use, or as factory configured 2-, and 3-pole versions to meet stocking requirements.

All blocks are equipped with a fuse clip reinforcing spring to minimize temperature rise while maintaining reliable surface contact between the fuse and clip over the block's service life.

30 and 60 amp ferrule fuse blocks save panel space with the smallest width dimension on the market and feature DIN-Rail and panel mount versatility.

100 to 600 amp knifeblade fuse blocks feature phase barriers between poles for additional safety with up to four mounting holes per pole to increase installation flexibility. All knifeblade blocks meet UL creep and clearance requirements for Industrial Power Circuits (UL 508 and UL 845), with the 200 to 600 amp blocks meeting the higher UL creep and clearance requirements for Power Distribution Standards (UL 98, UL 67, UL 489, UL 891 and UL 869A).

All blocks are available with optional IP20 finger-safe high clarity, see-through covers for inspecting wire terminations or thermography measurements without removal. All covers enhance safety by featuring probe holes for easier, safer testing and a lockout/tagout capability. These covers also have optional open fuse indication to speed troubleshooting.

Easy circuit identification is available for 30 and 60 amp blocks and covers with universal marker labels.



### Ratings

- Volts
  - 250 V
  - 600 V
- Amps up to 600
- SCCR 200 kA RMS Sym.

### Agency information

- Blocks; UL Listed Guide IZLT and IZLT7, File E14853, CSA Certified 47235-6225-01, CE
- Covers; UL Listed Guide JDVS, File E58836, CSA Certified 47235-6225-01 (30 and 60 A)
- RoHS Compliant

### Poles

- 1-, 2-, 3-pole units factory assembled
- Single-pole units snap together to create desired number of poles

### Flammability ratings

- Blocks: UL 94V0, self-extinguishing
- Covers: UL 94HB, self-extinguishing

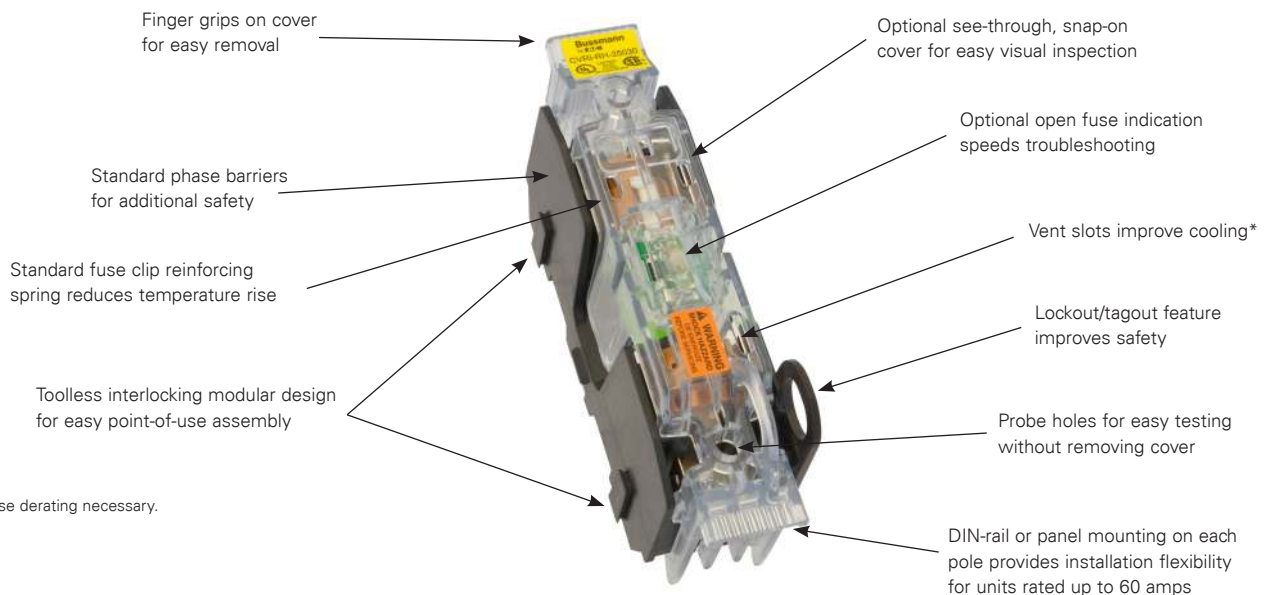
### Operating and storage temperature range

- Blocks -40°C to +120°C
- Covers; Non-Indicating -40°C to +120°C, Indicating -20°C to +90°C\*

\* Indication requires minimum 90 V and closed circuit to illuminate.

### Conductors

- See catalog numbers for details and torque specifications



\*No fuse derating necessary.

## Class R 30 and 60 amp blocks and covers

|                 |       | Catalog no./terminal type |                       |                          |                             | Optional covers* |               |                    |
|-----------------|-------|---------------------------|-----------------------|--------------------------|-----------------------------|------------------|---------------|--------------------|
| Fuse amp range  | Poles | Box lug/<br>slot screw    | Box lug/<br>hex screw | 10-32<br>Phil-slot screw | screw with<br>quick-connect | Pressure plate   | Indicating**  | Non-<br>indicating |
| 250 volt blocks |       |                           |                       |                          |                             |                  |               |                    |
| up to 30        | 1     | RM25030-1CR               | RM25030-1CHR          | RM25030-1SR              | RM25030-1QR                 | RM25030-1PR      | CVRI-RH-25030 | CVR-RH-25030       |
|                 | 2     | RM25030-2CR               | RM25030-2CHR          | RM25030-2SR              | RM25030-2QR                 | RM25030-2PR      |               |                    |
|                 | 3     | RM25030-3CR               | RM25030-3CHR          | RM25030-3SR              | RM25030-3QR                 | RM25030-3PR      |               |                    |
| 35 to 60        | 1     | RM25060-1CR               | RM25060-1CHR          | —                        | —                           | —                | CVRI-RH-25060 | CVR-RH-25060       |
|                 | 2     | RM25060-2CR               | RM25060-2CHR          |                          |                             |                  |               |                    |
|                 | 3     | RM25060-3CR               | RM25060-3CHR          |                          |                             |                  |               |                    |
| 600 volt blocks |       |                           |                       |                          |                             |                  |               |                    |
| up to 30        | 1     | RM60030-1CR               | RM60030-1CHR          | RM60030-1SR              | —                           | RM60030-1PR      | CVRI-RH-60030 | CVR-RH-60030       |
|                 | 2     | RM60030-2CR               | RM60030-2CHR          | RM60030-2SR              |                             | RM60030-2PR      |               |                    |
|                 | 3     | RM60030-3CR               | RM60030-3CHR          | RM60030-3SR              |                             | RM60030-3PR      |               |                    |
| 35 to 60        | 1     | RM60060-1CR               | RM60060-1CHR          | —                        | —                           | —                | CVRI-RH-60060 | CVR-RH-60060       |
|                 | 2     | RM60060-2CR               | RM60060-2CHR          |                          |                             |                  |               |                    |
|                 | 3     | RM60060-3CR               | RM60060-3CHR          |                          |                             |                  |               |                    |

\* Covers sold separately, order one cover per pole.

\*\*Open fuse indication requires 90 volts minimum and closed circuit to operate.

## Class R 30 and 60 amp block terminals and conductors

| Terminal type             | AWG type/range             | AWG   | Torque<br>N•m (lb-in) |
|---------------------------|----------------------------|-------|-----------------------|
| Box lug                   | 75°C<br>Cu 2-14,<br>AL 2-8 | 2-3   | 5.6 (50)              |
|                           |                            | 4-6   | 5.1 (45)              |
|                           |                            | 8     | 4.5 (40)              |
|                           |                            | 10-14 | 4.0 (35)              |
| 10-32 Phil-slot screw     | 75/90°C<br>Cu 10-18        | 10-18 | 2.3 (20)              |
| Pressure plate            |                            |       |                       |
| Screw with quick-connect* |                            |       |                       |

\* 3/16" quick-connect terminal maximum amps dependent on female spade connector and wire ratings.

## Recommended accessories for 30 and 60 amp blocks

| Catalog no.   | Description        |
|---------------|--------------------|
| BRKT-ND       | DIN-Rail end stops |
| BRKT-NDSCREW2 |                    |
| TM26CB        | Marker labels      |

**Class R 100 to 600 amp knifeblade blocks and covers**

| Fuse amp range  | Poles       | Catalog no.                | Optional covers* |                | Conductors***             |               | Torque N·m (lb-in) |
|-----------------|-------------|----------------------------|------------------|----------------|---------------------------|---------------|--------------------|
|                 |             |                            | Indicating**     | Non-indicating | Solid and stranded        | Fine stranded |                    |
| 250 volt blocks |             |                            |                  |                |                           |               |                    |
| 70-100          | 1           | RM25100-1CR                | CVR-RH-25100     | CVRI-RH-25100  | —                         | Cu 1-3 AWG    | 6.2 (55)           |
|                 | 2           | RM25100-2CR                |                  |                | 1/0-3 AWG; (2) Cu 4-6 AWG | Cu 4-6 AWG    | 5.6 (50)           |
|                 |             |                            |                  |                | 2 4-6 AWG; (2) Cu 8 AWG   | Cu 8 AWG      | 5.1 (45)           |
|                 |             |                            |                  |                | 8 AWG; (2) Cu 10-14 AWG   | —             | 4.5 (40)           |
| 3               | RM25100-3CR | Cu 10-14 AWG; Al 10-12 AWG | —                | 4.0 (35)       |                           |               |                    |
| 110-200         | 1           | RM25200-1CR                | CVR-RH-25200     | CVRI-RH-25200  | 250kcmil-1 AWG            | Cu 3/0-1 AWG  | 42 (375)           |
|                 | 2           | RM25200-2CR                |                  |                | 2-6 AWG; (2) Cu 2-6 AWG   | Cu 2-6 AWG    | 31 (275)           |
|                 | 3           | RM25200-3CR                |                  |                |                           |               |                    |
| 225-400         | 1           | RM25400-1CR                | CVR-RH-25400     | CVRI-RH-25400  | 600kcmil                  | N/A           | 57 (500)           |
|                 | 2           | RM25400-2CR                |                  |                | 500kcmil-4 AWG            |               | 51 (450)           |
|                 | 3           | RM25400-3CR                |                  |                | (2) Cu 3/0 - 4 AWG        |               | 57 (500)           |
|                 |             |                            |                  |                | (2) Al 3/0 - 4 AWG        |               | 34 (300)           |
| 450-600         | 1           | RM25600-1CR                | CVR-RH-25600     | CVRI-RH-25600  | 2 (2) 500kcmil-4 AWG      | N/A           | 51 (450)           |
|                 | 2           | RM25600-2CR                |                  |                |                           |               |                    |
|                 | 3           | RM25600-3CR                |                  |                |                           |               |                    |
| 600 volt blocks |             |                            |                  |                |                           |               |                    |
| 70-100          | 1           | RM60100-1CR                | CVR-RH-60100     | CVRI-RH-60100  | —                         | Cu 1-3 AWG    | 6.2 (55)           |
|                 | 2           | RM60100-2CR                |                  |                | 1/0-3 AWG; (2) Cu 4-6 AWG | Cu 4-6 AWG    | 5.6 (50)           |
|                 |             |                            |                  |                | 2 4-6 AWG; (2) Cu 8 AWG   | Cu 8 AWG      | 5.1 (45)           |
|                 |             |                            |                  |                | 8 AWG; (2) Cu 10-14 AWG   | —             | 4.5 (40)           |
| 3               | RM60100-3CR | Cu 10-14 AWG; Al 10-12 AWG | —                | 4.0 (35)       |                           |               |                    |
| 110-200         | 1           | RM60200-1CR                | CVR-RH-60200     | CVRI-RH-60200  | 250kcmil-1 AWG            | Cu 3/0-1 AWG  | 42 (375)           |
|                 | 2           | RM60200-2CR                |                  |                | 2-6 AWG; (2) Cu 2-6 AWG   | Cu 2-6 AWG    | 31 (275)           |
|                 | 3           | RM60200-3CR                |                  |                |                           |               |                    |
| 225-400         | 1           | RM60400-1CR                | CVR-RH-60400     | CVRI-RH-60400  | 600kcmil                  | N/A           | 57 (500)           |
|                 | 2           | RM60400-2CR                |                  |                | 500kcmil-4 AWG            |               | 51 (450)           |
|                 | 3           | RM60400-3CR                |                  |                | (2) Cu 3/0 - 4 AWG        |               | 57 (500)           |
|                 |             |                            |                  |                | (2) Al 3/0 - 4 AWG        |               | 34 (300)           |
| 450-600         | 1           | RM60600-1CR                | CVR-RH-60600     | CVRI-RH-60600  | 2 (2) 500kcmil-4 AWG      | N/A           | 51 (450)           |
|                 | 2           | RM60600-2CR                |                  |                |                           |               |                    |
|                 | 3           | RM60600-3CR                |                  |                |                           |               |                    |

\* Covers sold separately, order one cover per pole.

\*\* Open fuse indication requires 90 volts minimum and closed circuit to operate.

\*\*\* Ratings for copper and aluminum conductors except where otherwise noted.

## HM modular 250 V and 600 V Class H(K) power distribution fuse blocks

The patented 30 and 60 amp 250 V and 600 V Class H(K) power distribution fuse blocks use fewer wire connections to reduce watts loss and overall operating temperature of the panel, while simplifying panel layout. Available in ratings up to 400 amps, they use up to 57 percent less panel space while lowering inventory costs, and reducing installation time and labor by an average of 33 percent.

All blocks are equipped with a fuse clip reinforcing spring to minimize temperature rise while maintaining reliable surface contact between the fuse and clip over the block's service life.

Available as snap-together one-pole units for toolless assembly of multiple poles at point of use or factory configured 2- and 3-pole units to meet popular stocking requirements.

Optional see-through cover enhances safety with IP20 finger-safe protection, lockout/tagout capability and open circuit indication.

DIN-Rail and panel mount versatility allows one product to be used for multiple applications without incurring additional inventory cost.

### Ratings

- Volts
  - 250 V
  - 600 V
- Amps up to 60 A
- SCCR 10 kA RMS Sym.



### Agency information

- Blocks: UL Listed, Guide IZLT, File E14853, CSA Certified 47235 - 6225-01
- Covers: UL Listed, Guide JDVS, File E58836
- RoHS compliant

### Poles

- 1-, 2-, 3-pole
- Single-pole units snap together to create desired number of poles

### Flammability ratings

- Blocks: UL 94V0, self-extinguishing
- Covers: UL 94HB, self-extinguishing

### Operating and storage temperature range

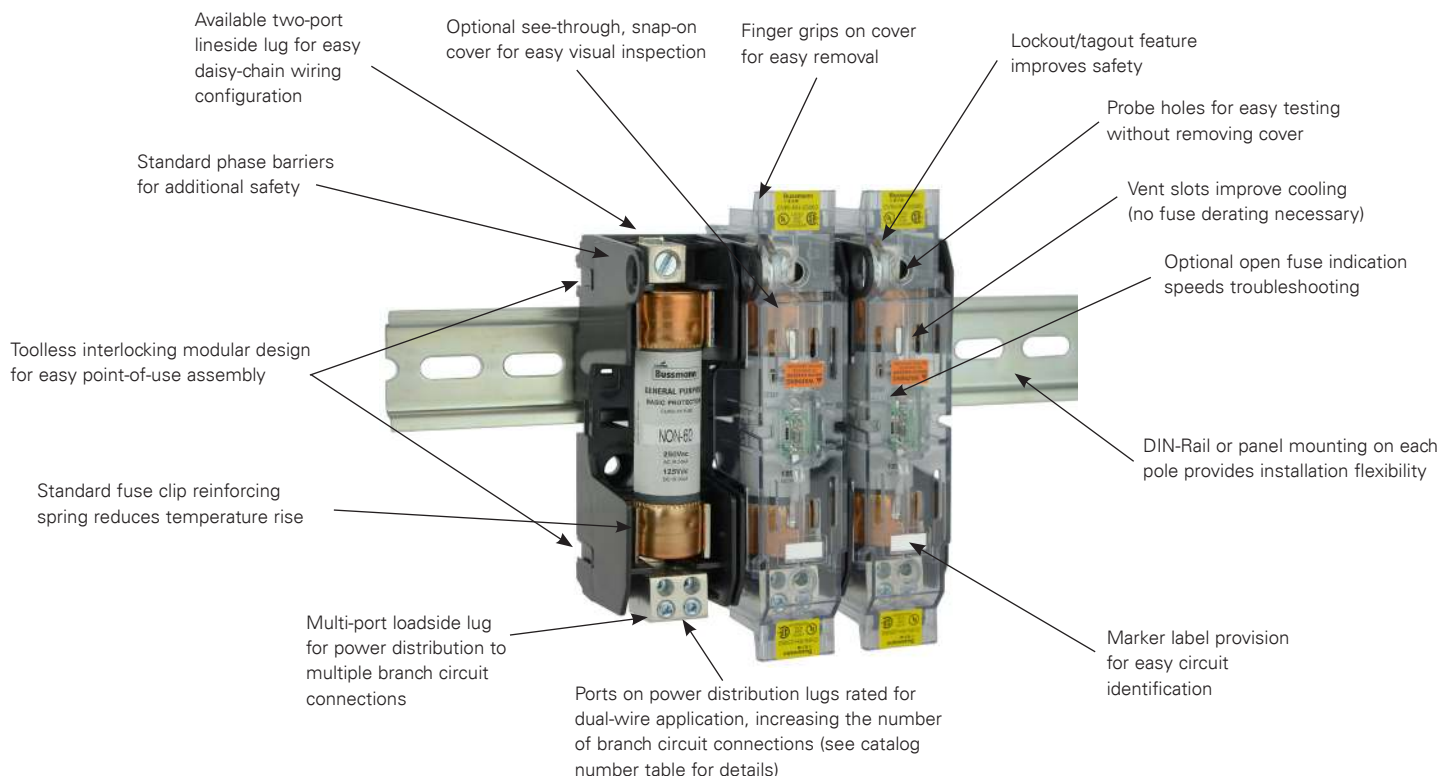
- Blocks: -40°C to +120°C
- Covers: Non-indicating -40°C to +120°C, Indicating -20°C to +90°C

### Conductors

- 75°C Cu/Al (unless otherwise noted)

### Accessories

- Optional IP20 finger-safe covers in indicating and non-indicating versions. Order one for each pole
- Universal marker labels, catalog number TM26CB
- DIN-Rail end stops, catalog numbers BRKT-ND or BRKT-NDSCRW2



| Catalog no.     | Optional covers*                | Fuse amp range | Lineside (conductors per port) |                   |                |            | Loadside (conductors per port)                                  |                                                                 |                |              |             |
|-----------------|---------------------------------|----------------|--------------------------------|-------------------|----------------|------------|-----------------------------------------------------------------|-----------------------------------------------------------------|----------------|--------------|-------------|
|                 |                                 |                | Poles                          | Conductors        | Ports/<br>pole | Torque AWG | N-m (lb-in)                                                     | Conductors                                                      | Ports/<br>pole | Torque AWG   | N-m (lb-in) |
| 250 volt blocks |                                 |                |                                |                   |                |            |                                                                 |                                                                 |                |              |             |
| HM25060-1MW12   | N/A                             | 35-60          | 1                              | Cu 2-14<br>Al 2-8 | 2              | 2-4        | 5.6 (50)                                                        | Cu 2-14<br>Al 2-8                                               | 1              | 2-3          | 5.6 (50)    |
| HM25060-2MW12   |                                 |                | 2                              |                   |                | 6-10       | 4.5 (40)                                                        |                                                                 |                | 4-6          | 5.1 (45)    |
| HM25060-3MW12   |                                 |                | 3                              |                   |                | 12-14      | 1.7 (15)                                                        |                                                                 |                | 8            | 4.5 (40)    |
|                 |                                 |                |                                |                   |                | 10-14      | 4.0 (35)                                                        |                                                                 |                |              |             |
| HM25060-1MW14   | CVR-RH-25060<br>CVRI-RH-25060** |                | 1                              | Cu 2-14<br>Al 2-8 | 1              | 2-3        | 5.6 (50)                                                        | Cu (1) 8-14<br>Cu (2) 12-14***<br>Al (1) 8 Str<br>Al (1) 10 Sol | 4              | Cu (1) 8     | 3.4 (30)    |
| HM25060-2MW14   |                                 |                | 2                              |                   |                | 4-6        | 5.1 (45)                                                        |                                                                 |                | Cu (1) 10-14 | 2.8 (25)    |
| HM25060-3MW14   |                                 |                | 3                              |                   |                | 8          | 4.5 (40)                                                        |                                                                 |                | Cu (2) 12-14 | 3.4 (30)    |
|                 |                                 |                |                                |                   |                | 10-14      | 4.0 (35)                                                        |                                                                 |                | Al (1) 8-10  | 3.4 (30)    |
| HM25060-1MW24†  | N/A                             |                | 1                              | Cu 2-14<br>Al 2-8 | 2              | 2-4        | 5.6 (50)                                                        | Cu (1) 8-14<br>Cu (2) 12-14***<br>Al (1) 8 Str<br>Al (1) 10 Sol | 4              | Cu (1) 8     | 3.4 (30)    |
| HM25060-2MW24†  |                                 |                | 2                              |                   |                | 6-10       | 4.5 (40)                                                        |                                                                 |                | Cu (1) 10-14 | 2.8 (25)    |
| HM25060-3MW24†  |                                 | 3              | 12-14                          |                   |                | 1.7 (15)   | Cu (2) 12-14                                                    |                                                                 |                | 3.4 (30)     |             |
|                 |                                 |                |                                |                   |                |            |                                                                 |                                                                 | Al (1) 8-10    | 3.4 (30)     |             |
| 600 volt blocks |                                 |                |                                |                   |                |            |                                                                 |                                                                 |                |              |             |
| HM60030-1MW14†  | N/A                             | up to 30       | 1                              | Cu 2-14<br>Al 2-8 | 1              | 2-3        | 5.6 (50)                                                        | Cu (1) 8-14<br>Cu (2) 12-14***<br>Al (1) 8 Str<br>Al (1) 10 Sol | 4              | Cu (1) 8     | 3.4 (30)    |
| HM60030-2MW14†  |                                 |                | 2                              |                   |                | 4-6        | 5.1 (45)                                                        |                                                                 |                | Cu (1) 10-14 | 2.8 (25)    |
| HM60030-3MW14†  |                                 |                | 3                              |                   |                | 8          | 4.5 (40)                                                        |                                                                 |                | Cu (2) 12-14 | 3.4 (30)    |
|                 |                                 |                |                                |                   |                | 10-14      | 4.0 (35)                                                        |                                                                 |                | Al (1) 8-10  | 3.4 (30)    |
| HM60060-1MW12   | CVR-RH-60060<br>CVRI-RH-60060** |                | 1                              | Cu 2-14<br>Al 2-8 | 2              | 2-4        | 5.6 (50)                                                        | Cu 2-14<br>Al 2-8                                               | 1              | 2-3          | 5.6 (50)    |
| HM60060-2MW12   |                                 |                | 2                              |                   |                | 6-10       | 4.5 (40)                                                        |                                                                 |                | 4-6          | 5.1 (45)    |
| HM60060-3MW12   |                                 |                | 3                              |                   |                | 12-14      | 1.7 (15)                                                        |                                                                 |                | 8            | 4.5 (40)    |
|                 |                                 |                |                                |                   |                |            |                                                                 |                                                                 |                | 10-14        | 4.0 (35)    |
| HM60060-1MW14   | CVR-RH-60060<br>CVRI-RH-60060** |                | 1                              | Cu 2-14<br>Al 2-8 | 1              | 2-3        | 5.6 (50)                                                        | Cu (1) 8-14<br>Cu (2) 12-14***<br>Al (1) 8 Str<br>Al (1) 10 Sol | 4              | Cu (1) 8     | 3.4 (30)    |
| HM60060-2MW14   |                                 |                | 2                              |                   |                | 4-6        | 5.1 (45)                                                        |                                                                 |                | Cu (1) 10-14 | 2.8 (25)    |
| HM60060-3MW14   |                                 | 3              | 8                              |                   |                | 4.5 (40)   | Cu (2) 12-14                                                    |                                                                 |                | 3.4 (30)     |             |
|                 |                                 |                |                                |                   |                | 10-14      | 4.0 (35)                                                        |                                                                 |                | Al (1) 8-10  | 3.4 (30)    |
| HM60060-1MW24†  | N/A                             | 1              | Cu 2-14<br>Al 2-8              | 2                 | 2-4            | 5.6 (50)   | Cu (1) 8-14<br>Cu (2) 12-14***<br>Al (1) 8 Str<br>Al (1) 10 Sol | 4                                                               | Cu (1) 8       | 3.4 (30)     |             |
| HM60060-2MW24†  |                                 | 2              |                                |                   | 6-10           | 4.5 (40)   |                                                                 |                                                                 | Cu (1) 10-14   | 2.8 (25)     |             |
| HM60060-3MW24†  |                                 | 3              |                                |                   | 12-14          | 1.7 (15)   |                                                                 |                                                                 | Cu (2) 12-14   | 3.4 (30)     |             |
|                 |                                 |                |                                |                   |                |            |                                                                 |                                                                 | Al (1) 8-10    | 3.4 (30)     |             |

\* Order one cover per pole.

\*\* With open fuse indication. 90 V minimum and closed circuit required for illumination.

\*\*\* Dual wire rated lugs with same wire size and stranding.

† Rated for use with 75°C/90°C Cu/Al conductors.

## RM modular 250 V and 600 V Class R power distribution fuse blocks

The patented 30 and 60 amp 250 V and 600 V Class R power distribution fuse blocks use fewer wire connections to reduce watts loss and overall operating temperature of the panel, while simplifying panel layout. Available in ratings up to 400 amps, they use up to 57 percent less panel space while lowering inventory costs, and reducing installation time and labor by an average of 33 percent.

High 200 kA SCCR helps achieve a higher assembly short-circuit current rating (SCCR) for compliance with NEC sections 110.10, 409.110(4), 409.22, 440.4(B), 670.3(A)(4) and 670.5.

All blocks are equipped with a fuse clip reinforcing spring to minimize temperature rise while maintaining reliable surface contact between the fuse and clip over the block's service life.

Available as snap-together one-pole units for toolless assembly of multiple poles at point of use or factory configured 2- and 3-pole units to meet popular stocking requirements.

Optional see-through cover enhances safety with IP20 finger-safe protection, lockout/tagout capability and open circuit indication.

DIN-Rail and panel mount versatility allows one product to be used for multiple applications without incurring additional inventory cost.

### Ratings

- Volts
  - 250 V
  - 600 V
- Amps up to 60 A
- SCCR 200 kA RMS Sym.



### Agency information

- Blocks; UL Listed Guide IZLT, File E14853, CSA Certified 47235 — 6225-01
- Covers; UL Listed Guide JDVS, File E58836
- RoHS compliant

### Poles

- 1-, 2-, 3-pole
- Single-pole units snap together to create desired number of poles

### Flammability ratings

- Blocks: UL 94V0, self-extinguishing
- Covers: UL 94HB, self-extinguishing

### Operating and storage temperature range

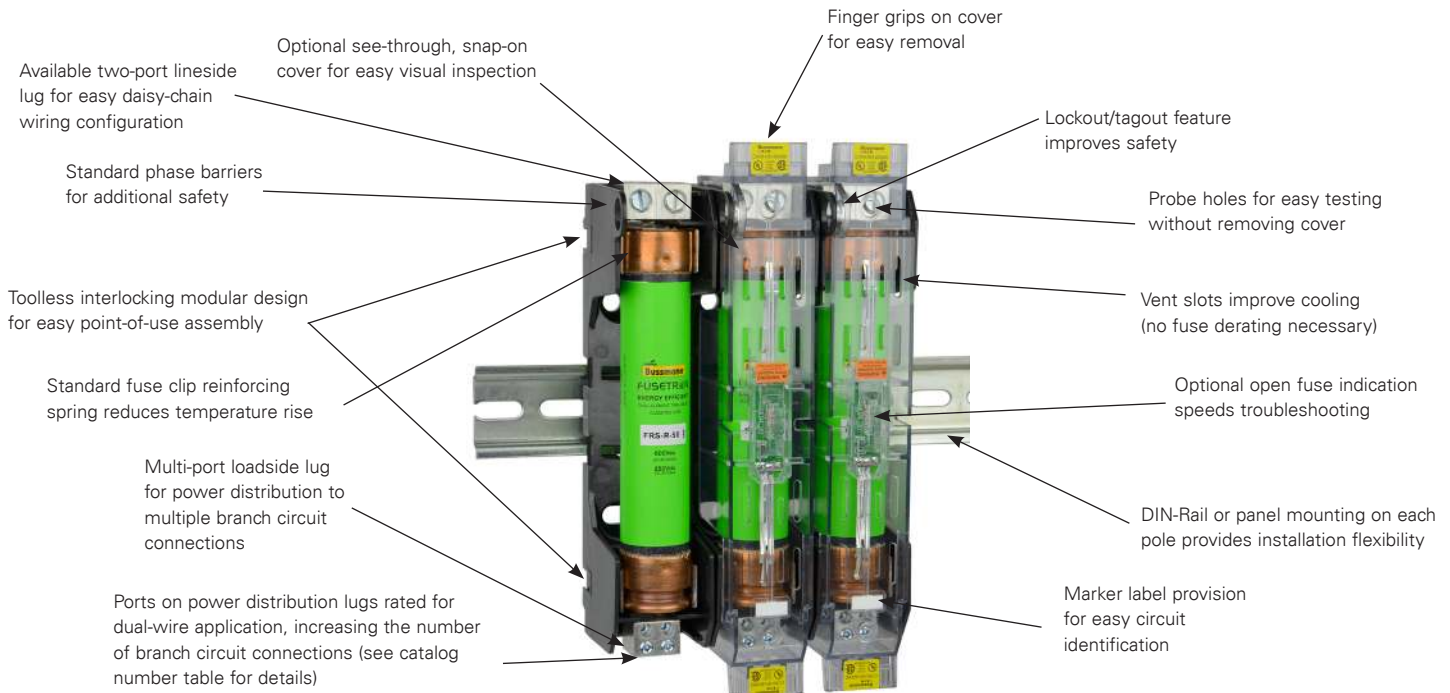
- Blocks: -40°C to +120°C
- Covers; Non-indicating -40°C to +120°C, Indicating -20°C to +90°C

### Conductors

- 75°C Cu/Al (unless otherwise noted)

### Accessories

- Optional IP20 finger-safe covers in indicating and non-indicating versions. Order one for each pole.
- Universal marker labels, catalog number TM26CB.
- DIN-Rail end stops, catalog numbers BRKT-ND or BRKT-NDSCRW2.



| Catalog no.    | Optional covers*                | Fuse amp range | Poles | Lineside (conductors per port) |                |            | Loadside (conductors per port) |                                                                 |                |               |                |          |
|----------------|---------------------------------|----------------|-------|--------------------------------|----------------|------------|--------------------------------|-----------------------------------------------------------------|----------------|---------------|----------------|----------|
|                |                                 |                |       | Conductors                     | Ports/<br>pole | Torque AWG | N-m<br>(lb-in)                 | Conductors                                                      | Ports/<br>pole | Torque<br>AWG | N-m<br>(lb-in) |          |
| 250 Volts      |                                 |                |       |                                |                |            |                                |                                                                 |                |               |                |          |
| RM25060-1MW12  | N/A                             | 35 - 60        | 1     | Cu 2-14<br>Al 2-8              | 2              | 2-4        | 5.6 (50)                       | Cu 2-14<br>Al 2-8                                               | 1              | 2-3           | 5.6 (50)       |          |
| RM25060-2MW12  |                                 |                | 2     |                                |                | 6-10       | 4.5 (40)                       |                                                                 |                | 4-6           | 5.1 (45)       |          |
| RM25060-3MW12  |                                 |                | 3     |                                |                | 12-14      | 1.7 (15)                       |                                                                 |                | 8             | 4.5 (40)       |          |
|                |                                 |                |       |                                |                |            |                                |                                                                 |                |               | 10-14          | 4.0 (35) |
| RM25060-1MW14  | CVR-RH-25060<br>CVRI-RH-25060** |                | 1     | Cu 2-14<br>Al 2-8              | 1              | 2-3        | 5.6 (50)                       | Cu (1) 8-14<br>Cu (2) 12-14***<br>Al (1) 8 Str<br>Al (1) 10 Sol | 4              | Cu (1) 8      | 3.4 (30)       |          |
| RM25060-2MW14  |                                 |                | 2     |                                |                | 4-6        | 5.1 (45)                       |                                                                 |                | Cu (1) 10-14  | 2.8 (25)       |          |
| RM25060-3MW14  |                                 |                | 3     |                                |                | 8          | 4.5 (40)                       |                                                                 |                | Cu (2) 12-14  | 3.4 (30)       |          |
|                |                                 |                |       |                                |                |            | 10-14                          | 4.0 (35)                                                        |                |               | Al (1) 8-10    | 3.4 (30) |
| RM25060-1MW24† | N/A                             |                | 1     | Cu 2-14<br>Al 2-8              | 2              | 2-4        | 5.6 (50)                       | Cu (1) 8-14<br>Cu (2) 12-14***<br>Al (1) 8 Str<br>Al (1) 10 Sol | 4              | Cu (1) 8      | 3.4 (30)       |          |
| RM25060-2MW24† |                                 |                | 2     |                                |                | 6-10       | 4.5 (40)                       |                                                                 |                | Cu (1) 10-14  | 2.8 (25)       |          |
| RM25060-3MW24† |                                 |                | 3     |                                |                | 12-14      | 1.7 (15)                       |                                                                 |                | Cu (2) 12-14  | 3.4 (30)       |          |
|                |                                 |                |       |                                |                |            |                                |                                                                 |                |               | Al (1) 8-10    | 3.4 (30) |
| 600 Volts      |                                 |                |       |                                |                |            |                                |                                                                 |                |               |                |          |
| RM60030-1MW14† | N/A                             | up to 30       | 1     | Cu 2-14<br>Al 2-8              | 1              | 2-3        | 5.6 (50)                       | Cu (1) 8-14<br>Cu (2) 12-14***<br>Al (1) 8 Str<br>Al (1) 10 Sol | 4              | Cu (1) 8      | 3.4 (30)       |          |
| RM60030-2MW14† |                                 |                | 2     |                                |                | 4-6        | 5.1 (45)                       |                                                                 |                | Cu (1) 10-14  | 2.8 (25)       |          |
| RM60030-3MW14† |                                 |                | 3     |                                |                | 8          | 4.5 (40)                       |                                                                 |                | Cu (2) 12-14  | 3.4 (30)       |          |
|                |                                 |                |       |                                |                | 10-14      | 4.0 (35)                       |                                                                 |                | Al (1) 8-10   | 3.4 (30)       |          |
| RM60060-1MW12  | CVR-RH-60060<br>CVRI-RH-60060** | 35-60          | 1     | Cu 2-14<br>Al 2-8              | 2              | 2-4        | 5.6 (50)                       | Cu 2-14<br>Al 2-8                                               | 1              | 2-3           | 5.6 (50)       |          |
| RM60060-2MW12  |                                 |                | 2     |                                |                | 6-10       | 4.5 (40)                       |                                                                 |                | 4-6           | 5.1 (45)       |          |
| RM60060-3MW12  |                                 |                | 3     |                                |                | 12-14      | 1.7 (15)                       |                                                                 |                | 8             | 4.5 (40)       |          |
|                |                                 |                |       |                                |                |            |                                |                                                                 |                |               | 10-14          | 4.0 (35) |
| RM60060-1MW14  | CVR-RH-60060<br>CVRI-RH-60060** |                | 1     | Cu 2-14<br>Al 2-8              | 1              | 2-3        | 5.6 (50)                       | Cu (1) 8-14<br>Cu (2) 12-14***<br>Al (1) 8 Str<br>Al (1) 10 Sol | 4              | Cu (1) 8      | 3.4 (30)       |          |
| RM60060-2MW14  |                                 |                | 2     |                                |                | 4-6        | 5.1 (45)                       |                                                                 |                | Cu (1) 10-14  | 2.8 (25)       |          |
| RM60060-3MW14  |                                 |                | 3     |                                |                | 8          | 4.5 (40)                       |                                                                 |                | Cu (2) 12-14  | 3.4 (30)       |          |
|                |                                 |                |       |                                |                |            | 10-14                          | 4.0 (35)                                                        |                |               | Al (1) 8-10    | 3.4 (30) |
| RM60060-1MW24† | N/A                             |                | 1     | Cu 2-14<br>Al 2-8              | 2              | 2-4        | 5.6 (50)                       | Cu (1) 8-14<br>Cu (2) 12-14***<br>Al (1) 8 Str<br>Al (1) 10 Sol | 4              | Cu (1) 8      | 3.4 (30)       |          |
| RM60060-2MW24† |                                 |                | 2     |                                |                | 6-10       | 4.5 (40)                       |                                                                 |                | Cu (1) 10-14  | 2.8 (25)       |          |
| RM60060-3MW24† |                                 |                | 3     |                                |                | 12-14      | 1.7 (15)                       |                                                                 |                | Cu (2) 12-14  | 3.4 (30)       |          |
|                |                                 |                |       |                                |                |            |                                |                                                                 |                |               | Al (1) 8-10    | 3.4 (30) |

\* Order one cover per pole.

\*\* With open fuse indication. 90 V minimum and closed circuit required for illumination.

\*\*\* Dual wire rated lugs with same wire size and stranding.

† Rated for use with 75°C/90°C Cu/Al conductors.

**CH \_\_ J \_ Class J fuse holder**

The CH\_J\_ Class J fuse holders are available in 30 and 60 amp ratings featuring IP20 finger-safe construction that can be either DIN-Rail or panel mounted. Available as factory configured 1-, 2- or 3-pole holders they are available with optional open fuse indication to speed troubleshooting.

**Ratings**

- Volts 600 V (or less)
- Amps
  - 30 A
  - 60 A
- SCCR 200 kA

**Agency information**

- UL Listed, Guide IZLT, File E14853, UL 4248/CSA 22.2 No. 4248.P, CE

**Conductors**

- Single 1-18 AWG and dual 3-18 AWG Cu solid and stranded conductors

**Terminal torque ratings**

- 10-18 AWG 24 lb-in
- 1-8 AWG 35 lb-in

**Storage and operating temperature range\***

- -20°C to +75°C

\* For fuse selection on applications above or below 25°C, consult derating charts in the Bussmann Division publication no. 3002 "Selecting Protective Devices" (SPD).

**Flammability rating UL 94V0****Features**

- Choice of local fuse indication; *easyID*™ viewing window (for seeing indicator on LPJ-SPI indicating fuse) or neon lamp
- Versatile 1-, 2- and 3-pole versions for 0-30 A and 35-60 A fuses with dual wire rated connections simplify wiring
- Improved electrical safety with IP20 finger-safe construction with lock-out/tag-out feature. 3-phase fuse extraction assures all phases are opened for service work
- Flexible panel/35mm DIN-Rail mounting

**Dimensions — mm**

| Fuse amps  | Poles | W   | D  | H   |
|------------|-------|-----|----|-----|
| Up to 30 A | 1     | 32  | 70 | 115 |
|            | 2     | 64  |    |     |
|            | 3     | 96  |    |     |
| 35-60 A    | 1     | 40  | 83 | 125 |
|            | 2     | 80  |    |     |
|            | 3     | 120 |    |     |

**Catalog no.**

| Without indication* | With indication** | Poles | Amps | Volts (AC/DC) | IP20 finger-safe | AWG Cu wire range      | Padlockable | Mounting        |
|---------------------|-------------------|-------|------|---------------|------------------|------------------------|-------------|-----------------|
| CH30J1              | CH30J1I           | 1     | 30   | 600           | Yes              | Single 1-18, dual 3-18 | Yes         | 35mm DIN/ panel |
| CH30J2              | CH30J2I           | 2     |      |               |                  |                        |             |                 |
| CH30J3              | CH30J3I           | 3     |      |               |                  |                        |             |                 |
| CH60J1              | CH60J1I           | 1     | 60   | 600           | Yes              | Single 1-18, dual 3-18 | Yes         | 35mm DIN/ panel |
| CH60J2              | CH60J2I           | 2     |      |               |                  |                        |             |                 |
| CH60J3              | CH60J3I           | 3     |      |               |                  |                        |             |                 |

\* Local fuse indication 6 amps and above possible using Bussmann series LPJ\_SPI permanent indication fuses.

\*\*Neon indication non-fuse dependent, minimum voltage 90 V.

## JT(N)60030 and JT(N)60060 Safety J™ modular finger-safe Class J fuse holders

The Bussmann series Safety J™ modular fuse holders are available in indicating and non-indicating versions. Finger-safe construction improves electrical safety, while modular construction permits dovetailing the required number of poles\* at point of use. DIN-Rail mount provides for easy installation. Optional open fuse indication speeds troubleshooting.



30 A version

60 A version

\* JT(N)60030 cannot be dovetailed to JT(N)60060.

### Ratings

- Volts 600 Vac
- Amps
  - Up to 30 A (JT(N)60030)
  - 35–60 A (JT(N)60060)
- SCCR
  - 200 kA RMS Sym.
  - 300 kA self certified using Bussmann series LPJ\_SP fuses

### Agency information

- Listed to UL 4248: Guide IZLT, File 14853, CSA Certified: Class 6225-01, File 47235. IP20 per IEC 60529, CE

### Catalog numbers and conductor information

| Holder<br>amps | Catalog no.        |             | 75°C Cu conductor<br>size (AWG) and type | Terminal<br>torque<br>N·m (lb-in) |
|----------------|--------------------|-------------|------------------------------------------|-----------------------------------|
|                | Non-<br>indicating | Indicating* |                                          |                                   |
| 30             | JT60030            | JTN60030    | 8-18 stranded, single or dual**          | 2.26 (20)                         |
|                |                    |             | 10-18 solid, single or dual**            |                                   |
| 60             | JT60060            | JTN60060    | 4-14 stranded or solid, single           | 5.1 (45)                          |
|                |                    |             | 8-10 stranded, dual**                    |                                   |

\* Indication non-fuse dependent, minimum 90 V.

\*\* Dual wire applications must use conductors of the same size and type.

### Dimensions — in (mm)

#### JT60030, JTN60030 Flammability rating: UL 94V0

#### Open fuse indication

Min. voltage: 90 V; neon lamp “ON” when fuse opens, voltage source and current path are present.

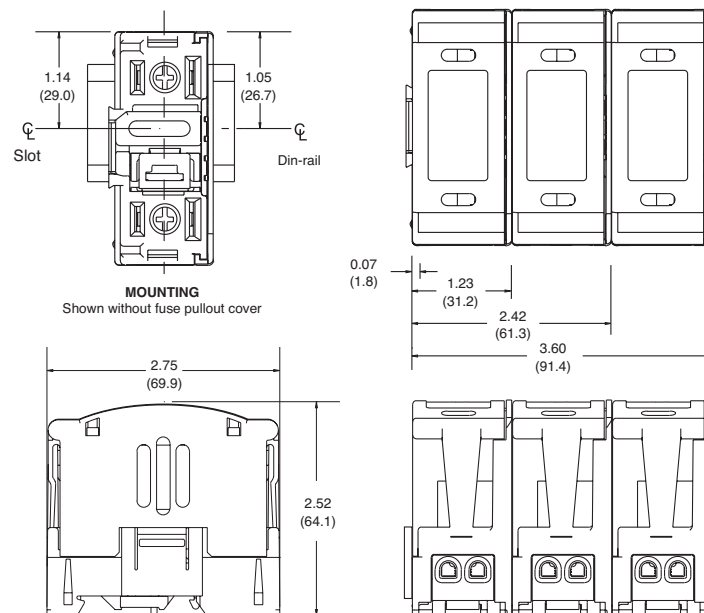
### Features

- 300 kA SCCR with Bussmann series LPJ\_SP fuses
- Rapid, flexible 35mm DIN-Rail mounting
- One piece interlocking design for assembling multiple pole blocks reduces inventory costs
- Removable fuse carrier allows fuse replacement away from base while maintaining finger-safe rating

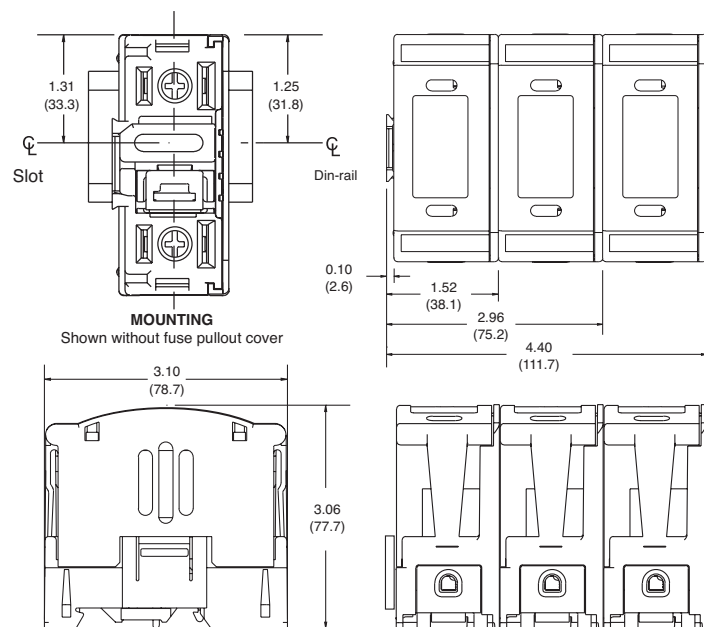
### Typical applications

- Industrial controls
- Process controls
- Small horsepower VFDs

### Dimensions — in (mm)



JT(N)60030



JT(N)60060

**JP pyramid style 3-pole Class J fuse block**

The Bussmann series JP (pyramid) open fuse block provides a means of mounting a three-pole 30 amp Class J fuse block with a footprint that is narrower than traditional solutions. See catalog numbers for terminals and conductor information.

**Ratings**

Volts 600 V

Amps 30 A

SCCR 200 kA RMS Sym.

**Agency information**

- UL Listed, UL 4248, Guide IZLT, File E14853, CSA Certified, C22.2 No. 39, Class 4225-04, File 47235, CE

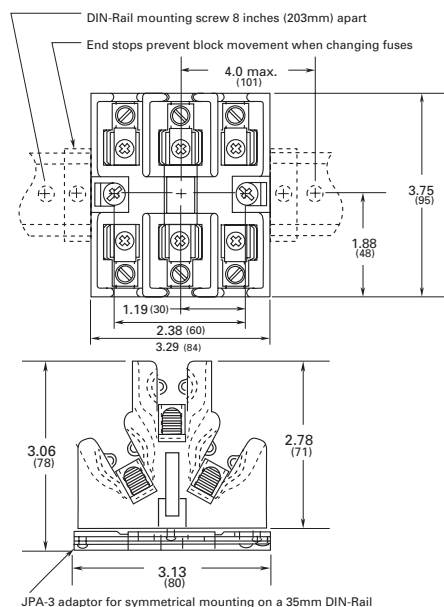
**Flammability rating UL 94V0****Mounting**

- Panel
- 35mm DIN-Rail\*

\* To order DIN-Rail, specify catalog number DRL35MMLO (1 meter).

| Catalog no.   | Mounting |           | Terminals/AWG wire range/type |            |
|---------------|----------|-----------|-------------------------------|------------|
|               | Panel    | DIN-Rail* | Pressure plate                | Box lug    |
| JP60030-3PR   | Yes      | No        | 10-14 Cu                      | —          |
| JP60030-3CR   | Yes      | No        | —                             | 2-14 Cu/Al |
| JP60030-3COR  | Yes      | No        | —                             | 2-14 Cu    |
| JP60030-3PRA  | No       | Yes       | 10-14 Cu                      | —          |
| JP60030-3CRA  | No       | Yes       | —                             | 2-14 Cu/Al |
| JP60030-3CORA | No       | Yes       | —                             | 2-14 Cu    |

\* Requires adapter, order catalog number JPA-3.

**Dimensions — in**

## JM modular Class J fuse blocks

Class J modular fuse blocks enhance safety for any panel or electrical system design and are available for the full Class J fuse amp range.

All blocks are available as single-pole versions that snap together at point of use, or as factory configured 2-, and 3-pole versions.

All blocks are equipped with a fuse clip reinforcing spring to minimize temperature rise while maintaining reliable surface contact between the fuse and clip over the block's service life.

Ferrule fuse blocks up to 60 amps have the smallest width dimension on the market and feature DIN-Rail or panel mount versatility. Easy circuit identification is available for 30 and 60 amp blocks and covers with universal marker labels.

Knifeblade fuse blocks from 100 to 600 amps feature phase barriers for additional safety with up to four mounting holes per pole for increased installation flexibility. All knifeblade blocks meet UL creep and clearance requirements for Industrial Power Circuits (UL 508 and UL 845). The 200 to 600 amp blocks also meet the higher UL creep and clearance requirements for Power Distribution Standards (UL 98, UL 67, UL 489, UL 891 and UL 869A)

All blocks have optional IP20 finger-safe high clarity, see-through covers for inspecting wire terminations or thermography measurements without removal. All covers enhance safety by featuring probe holes for easier, safer testing and a lockout/tagout capability. These covers also have optional open fuse indication to speed troubleshooting.



30 and 60 amp blocks are DIN-Rail and panel mount. Optional covers increase safety.



100 to 600 amp blocks are panel mount. Optional covers increase safety.

### Ratings

- Volts 600 V
- Amps up to 600 A
- SCCR 200 kA RMS Sym.

### Agency information

- Blocks; UL Listed E14853 — IZLT and IZLT7, CSA Certified 47235-6225-01, CE, RoHS Compliant
- Covers; UL Listed E58836 - JDVS, CSA Certified 47235-6225-01 (30 and 60 A), RoHS Compliant

### Poles

- 1-, 2-, 3-pole units factory assembled
- Single-pole units snap together to create desired number of poles

### Flammability ratings

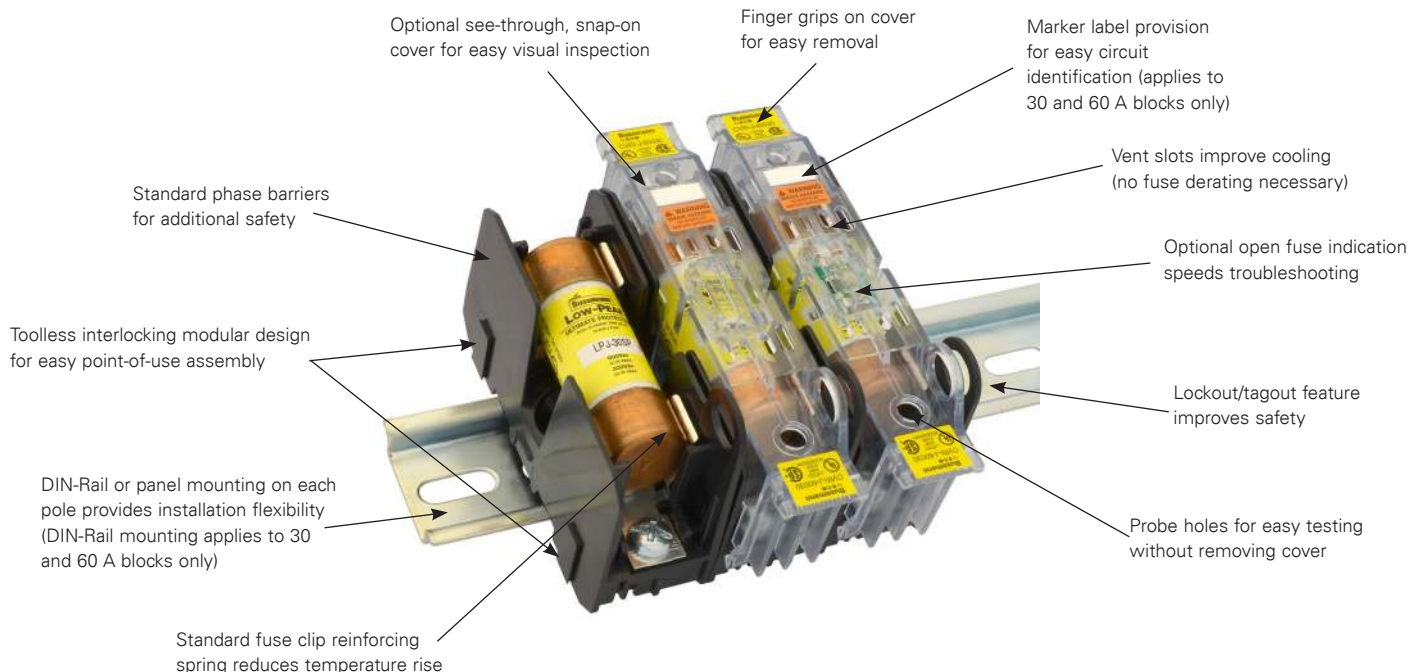
- Blocks: UL 94V0, self-extinguishing
- Covers: UL 94HB, self-extinguishing

### Operating and storage temperature range

- Blocks -40°C to +120°C
  - Covers; non-indicating -40°C to +120°C, indicating -20°C to +90°C\*
- \* Indication requires minimum 90 V and closed circuit to illuminate.

### Conductors

- See catalog numbers for details and torque specifications.



## 30 and 60 amp blocks and covers

| Fuse amp range | Poles | Catalog no./terminal type |                   |                       |                | Optional covers* |                |
|----------------|-------|---------------------------|-------------------|-----------------------|----------------|------------------|----------------|
|                |       | Box lug/slot screw        | Box lug/hex screw | 10-32 Phil-slot screw | Pressure plate | Indicating**     | Non-indicating |
| up to 30       | 1     | JM60030-1CR               | JM60030-1CHR      | JM60030-1SR           | JM60030-1PR    | CVRI-J-60030     | CVR-J-60030    |
|                | 2     | JM60030-2CR               | JM60030-2CHR      | JM60030-2SR           | JM60030-2PR    |                  |                |
|                | 3     | JM60030-3CR               | JM60030-3CHR      | JM60030-3SR           | JM60030-3PR    |                  |                |
| 35 to 60       | 1     | JM60060-1CR               | JM60060-1CHR      | —                     | —              | CVRI-J-60060     | CVR-J-60060    |
|                | 2     | JM60060-2CR               | JM60060-2CHR      |                       |                |                  |                |
|                | 3     | JM60060-3CR               | JM60060-3CHR      |                       |                |                  |                |

\* Covers sold separately, one cover per pole.

\*\* Open fuse indication requires 90 volts minimum and closed circuit to operate.

## 30 and 60 amp block terminals and conductors

| Terminal type         | AWG type/range             | AWG   | Torque N·m (lb-in) |
|-----------------------|----------------------------|-------|--------------------|
| Box lug               | 75°C<br>Cu 2-14,<br>Al 2-8 | 2-3   | 5.6 (50)           |
|                       |                            | 4-6   | 5.1 (45)           |
|                       |                            | 8     | 4.5 (40)           |
|                       |                            | 10-14 | 4.0 (35)           |
| 10-32 Phil-slot screw | 75/90°C<br>Cu 10-18        | 10-18 | 2.3 (20)           |
| Pressure plate        |                            |       |                    |

## 100 to 600 amp knifeblade blocks and covers

| Fuse amp range | Poles   | Catalog no.   | Optional covers*   |                | Conductors***              |               |                    |
|----------------|---------|---------------|--------------------|----------------|----------------------------|---------------|--------------------|
|                |         |               | Non-indicating     | Indicating**   | Solid and stranded         | Fine stranded | Torque N·m (lb-in) |
| 70-100         | 1       | JM60100-1CR   | CVR-J-60100-M      | CVRI-J-60100-M | —                          | Cu 1-3 AWG    | 6.2 (55)           |
|                | 2       | JM60100-2CR   |                    |                | 1/0-3 AWG; (2) Cu 4-6 AWG  | Cu 4-6 AWG    | 5.6 (50)           |
|                |         |               |                    |                | 2 4-6 AWG; (2) Cu 8 AWG    | Cu 8 AWG      | 5.1 (45)           |
|                |         |               |                    |                | 8 AWG; (2) Cu 10-14 AWG    | —             | 4.5 (40)           |
| 110-200        | 1       | JM60200-1CR   | CVR-J-60200-M      | CVRI-J-60200-M | Cu 10-14 AWG; Al 10-12 AWG | —             | 4.0 (35)           |
|                | 2       | JM60200-2CR   |                    |                | 250kcmil-1 AWG             | Cu 3/0-1 AWG  | 42 (375)           |
|                | 3       | JM60200-3CR   |                    |                | 2-6 AWG; (2) Cu 2-6 AWG    | Cu 2-6 AWG    | 31 (275)           |
|                | 225-400 | 1             |                    |                | JM60400-1CR                | CVR-J-60400-M | CVRI-J-60400-M     |
| 2              |         | JM60400-2CR   | 500kcmil-4 AWG     | 51 (450)       |                            |               |                    |
| 3              |         | JM60400-3CR   | (2) Cu 3/0 - 4 AWG | 57 (500)       |                            |               |                    |
| 1              |         | JM60400-1MW22 | (2) Al 3/0 - 4 AWG | N/A            | 51 (450)                   |               |                    |
| 2              |         | JM60400-2MW22 |                    |                |                            |               |                    |
| 3              |         | JM60400-3MW22 |                    |                |                            |               |                    |
| 450-600        | 1       | JM60600-1CR   | CVR-J-60600        | CVRI-J-60600   | 2 (2) 500kcmil-4 AWG       | N/A           | 51 (450)           |
|                | 2       | JM60600-2CR   |                    |                |                            |               |                    |
|                | 3       | JM60600-3CR   |                    |                |                            |               |                    |

\* Covers sold separately.

\*\* Open fuse indication requires 90 volts minimum and closed circuit to operate.

\*\*\* Ratings for copper and aluminum conductors except where otherwise noted.

## JM modular Class J power distribution fuse blocks

The patented Class J power distribution fuse blocks use fewer wire connections to reduce watts loss and overall operating temperature of the panel, while simplifying panel layout. Available in ratings up to 400 amps, they use up to 65 percent less panel space while lowering inventory costs, and reducing installation time and labor by an average of 33 percent.

All blocks are equipped with a fuse clip reinforcing spring to minimize temperature rise while maintaining reliable surface contact between the fuse and clip over the block's service life.

Available as snap-together one-pole units for toolless assembly of multiple poles at point of use or factory configured 2- and 3-pole units to meet popular stocking requirements.

The high 200 kA SCCR helps achieve a higher assembly short-circuit current rating (SCCR) for compliance with NEC sections 110.10, 409.110(4), 409.22, 440.4(B), 670.3(A)(4) and 670.5.

30 and 60 amp blocks feature DIN-Rail and panel mount versatility, while 100 to 400 amp blocks are panel mount.

All blocks are available with optional see-through cover to enhance safety with IP20 finger-safe protection, lockout/tagout capability and open circuit indication. See catalog number tables for details.

### Ratings

- Volts 600 V
- Amps up to 400 A
- SCCR 200 kA Sym. RMS



30 and 60 amp blocks.



100, 200 and 400 amp blocks.



### Agency information

- Blocks; UL Listed, Guide IZLT, File E14853, CSA Certified 47235 — 6225-01
- Covers; UL Listed, Guide JDVS, File E58836
- RoHS compliant

### Poles

- 1-, 2-, 3-pole
- Single-pole units snap together to create desired number of poles

### Mounting

- 30 and 60 amp blocks DIN-Rail and panel mount
- 100, 200 and 400 amp blocks panel mount only

### Flammability ratings

- Blocks, UL 94V0, self-extinguishing
- Covers; UL 94HB, self-extinguishing

### Operating and storage temperature range

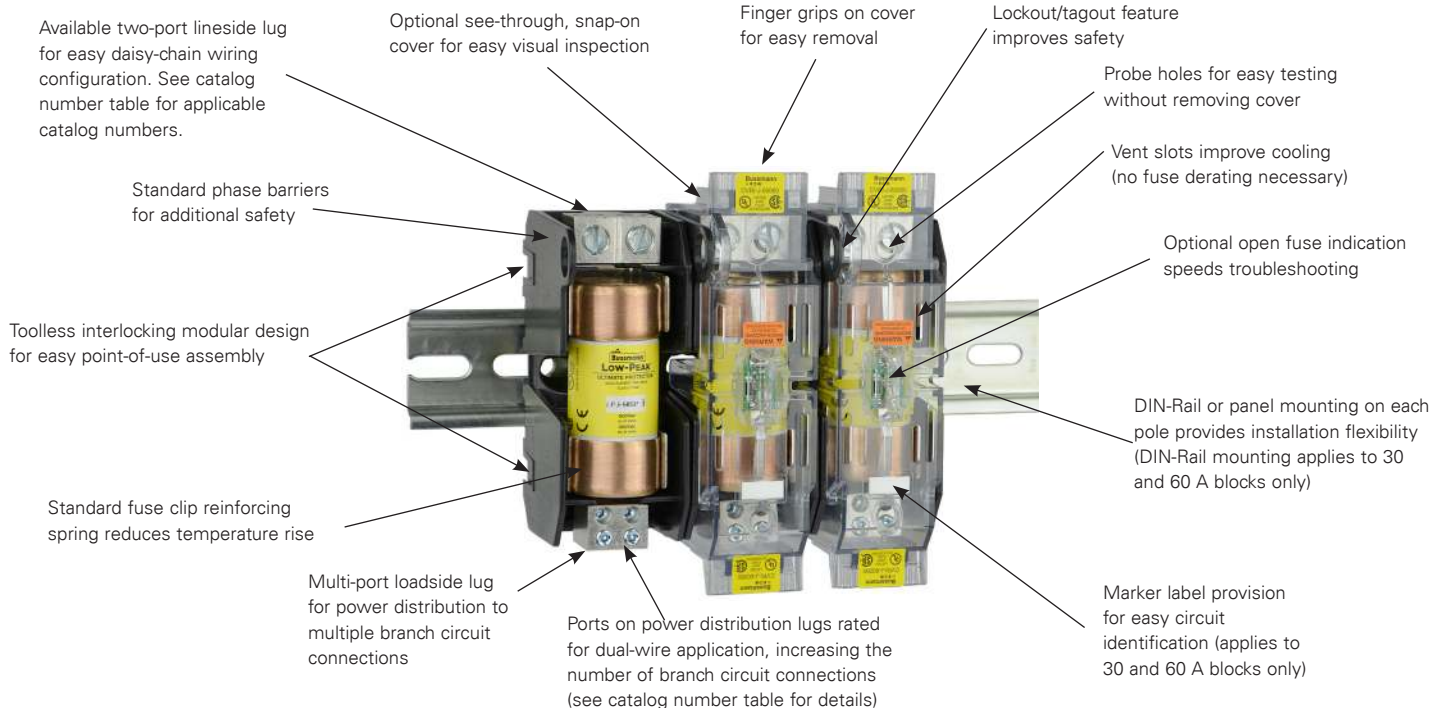
- Blocks, -40°C to +120°C
- Covers; non-indicating -40°C to +120°C, indicating -20°C to +90°C

### Conductors

- 75/90°C Cu/Al (unless otherwise noted)

### Accessories

- IP20 finger-safe covers in indicating and non-indicating versions. Order one for each pole.
- Universal marker labels for 30 and 60 amp blocks, catalog number TM26CB
- DIN-Rail end stops for blocks rated up to 60 amps, catalog numbers BRKT-ND or BRKT-NDSCRW2



Data sheet no. 10192

| Catalog no.    | Optional covers*                  | Fuse amp range | Lineside (conductors per port)    |                                         |                      |                   | Loadside (conductors per port) |                                                                 |                |                                                                 |                |              |          |
|----------------|-----------------------------------|----------------|-----------------------------------|-----------------------------------------|----------------------|-------------------|--------------------------------|-----------------------------------------------------------------|----------------|-----------------------------------------------------------------|----------------|--------------|----------|
|                |                                   |                | Poles                             | Conductors                              | Ports/<br>pole       | Torque AWG        | N-m<br>(lb-in)                 | Conductors                                                      | Ports/<br>pole | Torque<br>AWG                                                   | N-m<br>(lb-in) |              |          |
| JM60030-1MW14  | N/A                               | Up to 30       | 1                                 | Cu 2-14<br>Al 2-8                       | 1                    | 2-3               | 5.6 (50)                       | Cu (1) 8-14<br>Cu (2) 12-14***<br>Al (1) 8 Str<br>Al (1) 10 Sol | 4              | Cu (1) 8                                                        | 3.4 (30)       |              |          |
| JM60030-2MW14  |                                   |                | 2                                 |                                         |                      | 4-6               | 5.1 (45)                       |                                                                 |                | Cu (1) 10-14                                                    | 2.8 (25)       |              |          |
| JM60030-3MW14  |                                   |                | 3                                 |                                         |                      | 8                 | 4.5 (40)                       |                                                                 |                | Cu (2) 12-14                                                    | 3.4 (30)       |              |          |
|                |                                   |                |                                   |                                         |                      | 10-14             | 4.0 (35)                       |                                                                 |                | Al (1) 8-10                                                     | 3.4 (30)       |              |          |
| JM60060-1MW12† | CVR-J-60060<br>CVRI-J-60060**     | 35 - 60        | 1                                 | Cu 2-14<br>Al 2-8                       | 2                    | 2-4               | 5.6 (50)                       | Cu 2-14<br>Al 2-8                                               | 1              | 2-3                                                             | 5.6 (50)       |              |          |
| JM60060-2MW12† |                                   |                | 2                                 |                                         |                      | 6-10              | 4.5 (40)                       |                                                                 |                | 4-6                                                             | 5.1 (45)       |              |          |
| JM60060-3MW12† |                                   |                | 3                                 |                                         |                      | 12-14             | 1.7 (15)                       |                                                                 |                | 8                                                               | 4.5 (40)       |              |          |
|                |                                   |                |                                   |                                         |                      | 10-14             | 4.0 (35)                       |                                                                 |                | 10-14                                                           | 4.0 (35)       |              |          |
| JM60060-1MW14† |                                   |                | CVR-J-60060<br>CVRI-J-60060**     | 35 - 60                                 | 1                    | Cu 2-14<br>Al 2-8 | 1                              | 2-3                                                             | 5.6 (50)       | Cu (1) 8-14<br>Cu (2) 12-14***<br>Al (1) 8 Str<br>Al (1) 10 Sol | 4              | Cu (1) 8     | 3.4 (30) |
| JM60060-2MW14† |                                   |                |                                   |                                         | 2                    |                   |                                | 4-6                                                             | 5.1 (45)       |                                                                 |                | Cu (1) 10-14 | 2.8 (25) |
| JM60060-3MW14† |                                   |                |                                   |                                         | 3                    |                   |                                | 8                                                               | 4.5 (40)       |                                                                 |                | Cu (2) 12-14 | 3.4 (30) |
|                |                                   |                |                                   |                                         |                      |                   |                                | 10-14                                                           | 4.0 (35)       |                                                                 |                | Al (1) 8-10  | 3.4 (30) |
| JM60060-1MW24  |                                   |                | CVR-J-60060<br>CVRI-J-60060**     | 35 - 60                                 | 1                    | Cu 2-14<br>Al 2-8 | 2                              | 2-4                                                             | 5.6 (50)       | Cu (1) 8-14<br>Cu (2) 12-14***<br>Al (1) 8 Str<br>Al (1) 10 Sol | 4              | Cu (1) 8     | 3.4 (30) |
| JM60060-2MW24  |                                   |                |                                   |                                         | 2                    |                   |                                | 6-10                                                            | 4.5 (40)       |                                                                 |                | Cu (1) 10-14 | 2.8 (25) |
| JM60060-3MW24  |                                   |                |                                   |                                         | 3                    |                   |                                | 12-14                                                           | 1.7 (15)       |                                                                 |                | Cu (2) 12-14 | 3.4 (30) |
|                |                                   |                |                                   |                                         |                      |                   |                                |                                                                 |                |                                                                 |                | Al (1) 8-10  | 3.4 (30) |
| JM60100-1MW14  | CVR-J-60100-M<br>CVRI-J-60100-M** | 70 - 100       | 1                                 | Cu 1/0-14<br>Al 1/0-12                  | 1                    | 1/0-3; Cu (2) 4-6 | 5.6 (50)                       | Cu (1) 4-14<br>Al (1) 4-8<br>Cu (2) 10-14***                    | 4              | 4-6                                                             | 4.0 (35)       |              |          |
| JM60100-2MW14  |                                   |                | 2                                 |                                         |                      | 4-6; Cu (2) 8     | 5.0 (45)                       |                                                                 |                | 8                                                               | 2.8 (25)       |              |          |
| JM60100-3MW14  |                                   |                | 3                                 |                                         |                      | 8; Cu (2) 10-14   | 4.5 (40)                       |                                                                 |                | Cu 10-14                                                        | 2.3 (20)       |              |          |
|                |                                   |                |                                   |                                         |                      | 10-14             | 4.0 (35)                       |                                                                 |                | (2) 10-14                                                       | 3.4 (30)       |              |          |
| JM60200-1MW16  | CVR-J-60200-M<br>CVRI-J-60200-M** | 110-200        | 1                                 | Cu/Al (1) 250kcmil-6<br>Cu (2) 2-6      | 1                    | 250kcmil-1        | 42 (375)                       | Cu (1) 4-14<br>Al (1) 4-8<br>Cu (2) 10-14***                    | 6              | 4-6                                                             | 4.0 (35)       |              |          |
| JM60200-2MW16  |                                   |                | 2                                 |                                         |                      |                   |                                |                                                                 |                | 8                                                               | 2.8 (25)       |              |          |
| JM60200-3MW16  |                                   |                | 3                                 |                                         |                      | 2-6               | 31 (275)                       |                                                                 |                | 10-14                                                           | 2.3 (20)       |              |          |
|                |                                   |                |                                   |                                         |                      |                   |                                |                                                                 |                | (2) 10-14                                                       | 3.4 (30)       |              |          |
| JM60400-1MW16  | CVR-J-60400-M<br>CVRI-J-60400-M** | 225-400        | 1                                 | Cu/Al (1) 600kcmil-4<br>Cu/Al (2) 3/0-4 | 1                    | 600kcmil          | 57 (500)                       | Cu (1) 2-14<br>Al (1) 2-8<br>Cu (2) 8-14***                     | 6              | 2-3                                                             | 5.6 (50)       |              |          |
| JM60400-2MW16  |                                   |                | 2                                 |                                         |                      |                   |                                |                                                                 |                | 4-6                                                             | 5.0 (45)       |              |          |
|                |                                   |                |                                   |                                         |                      |                   |                                |                                                                 |                | 8                                                               | 4.5 (40)       |              |          |
| JM60400-3MW16  |                                   |                | 3                                 |                                         |                      |                   |                                |                                                                 |                | (2) 8                                                           | 4.5 (40)       |              |          |
|                |                                   |                |                                   |                                         |                      |                   |                                |                                                                 |                | 10-14                                                           | 4.0 (35)       |              |          |
|                |                                   |                |                                   | Cu (2) 3/0-4<br>Al (2) (3/0-4           | 57 (500)<br>34 (300) | (2) 10-14         | 4.5 (40)                       |                                                                 |                |                                                                 |                |              |          |
| JM60400-1MW26  |                                   |                | CVR-J-60400-M<br>CVRI-J-60400-M** | 225-400                                 | 1                    | Cu/Al 350kcmil-6  | 2                              |                                                                 |                | Cu (1) 2-14<br>Al (1) 2-8<br>Cu (2) 8-14***                     | 6              | 2-3          | 5.6 (50) |
| JM60400-2MW26  |                                   |                |                                   |                                         | 2                    |                   |                                |                                                                 |                |                                                                 |                | 4-6          | 5.0 (45) |
| JM60400-3MW26  |                                   |                |                                   |                                         | 3                    |                   |                                | 350kcmil-1                                                      | 42 (375)       |                                                                 |                | 8            | 4.5 (40) |
|                |                                   |                |                                   |                                         |                      |                   |                                |                                                                 |                |                                                                 |                | (2) 8        | 4.5 (40) |
|                |                                   |                |                                   |                                         |                      |                   |                                | 2-6                                                             | 31 (275)       |                                                                 |                | 10-14        | 4.0 (35) |
|                |                                   |                |                                   |                                         |                      |                   |                                | (2) 10-14                                                       | 4.5 (40)       |                                                                 |                |              |          |

\* Order one cover per pole.

\*\* With open fuse indication. 90 V minimum and closed circuit required for illumination.

\*\*\* Dual wire rated lugs with same wire size and stranding.

† Rated for 75°C Cu/Al conductors. Conductors with higher ratings may be used with appropriate derating.

## T300 300 volt Class T fuse blocks

Busmann series T300 fuse blocks are open fuse blocks for use with Class T fuses up to 600 amps in various pole configurations from 1- to 4-poles. T300 blocks use Busmann series JJN fuses.

### Ratings

- Volts 300 V
- Amps up to 600 A
- SCCR 200 kA RMS Sym.

### Agency information

- UL Listed UL 4248, Guide IZLT, File E14853, CSA Certified, Class 6225-01, File 47235, CE

### Flammability rating UL 94V0

### Features

- Provide 1-, 2-, 3- and 4-pole housing for 300 Vac Class T fuses
- High 200 kA RMS Sym. Short-Circuit Current Rating
- Class T fuse blocks have a small foot print, providing substantial space savings in equipment

### Typical applications

- 300 V or less control systems
- 300 V or less individual control circuits

### Catalog numbers

| Catalog no./terminals |            | Amps     | Poles | Fig. | Terminal AWG wire range/type |
|-----------------------|------------|----------|-------|------|------------------------------|
| Screw                 | Box lug    |          |       |      |                              |
| T30030-2SR            | T30030-2CR | Up to 30 | 2     | 1    | SR 10-18 Cu<br>CR 6-14 Cu/Al |
| T30030-3SR            | T30030-3CR |          | 3     |      |                              |
| T30030-4SR            | T30030-4CR |          | 4     |      |                              |
| T30060-2SR            | T30060-2CR | 31-60    | 2     | 2    | CR 2-14 Cu/Al<br>SR 10-18 Cu |
| T30060-3SR            | T30060-3CR |          | 3     |      |                              |
| T30060-4SR            | T30060-4CR |          | 4     |      |                              |
| —                     | T30100-1CR | 61-100   | 1     | 3    | 1/0-8 Cu/Al                  |
| —                     | T30100-2CR |          | 2     |      |                              |
| —                     | T30100-3CR |          | 3     |      |                              |
| —                     | T30200-1C  | 101-200  | 1     | 4    | 250kcmil-6 Cu/Al             |
| —                     | T30200-3C  |          | 3     |      |                              |
| —                     | T30400-1C  | 201-400  | 1     | 5    | 600kcmil-2/0 Cu/Al           |
| —                     | T30600-1C  | 401-600  | 1     | 6    | (2) 600kcmil-4/0 Cu/Al       |

### Dimensions — in

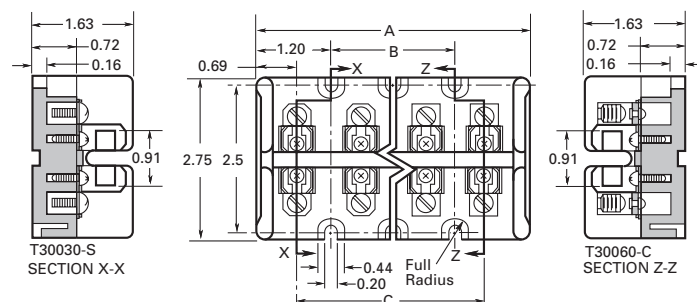


Figure 1. Up to 60 A

| Catalog no. | Dimensions — in |      |      |
|-------------|-----------------|------|------|
|             | A               | B    | C    |
| T30030-2    | 2.41            | —    | 1.03 |
| T30060-2    | 2.41            | —    | 1.03 |
| T30030-3    | 3.44            | 1.03 | 2.06 |
| T30060-3    | 3.44            | 1.03 | 2.06 |
| T30030-4    | 4.47            | 2.06 | 3.09 |
| T30060-4    | 4.47            | 2.06 | 3.09 |

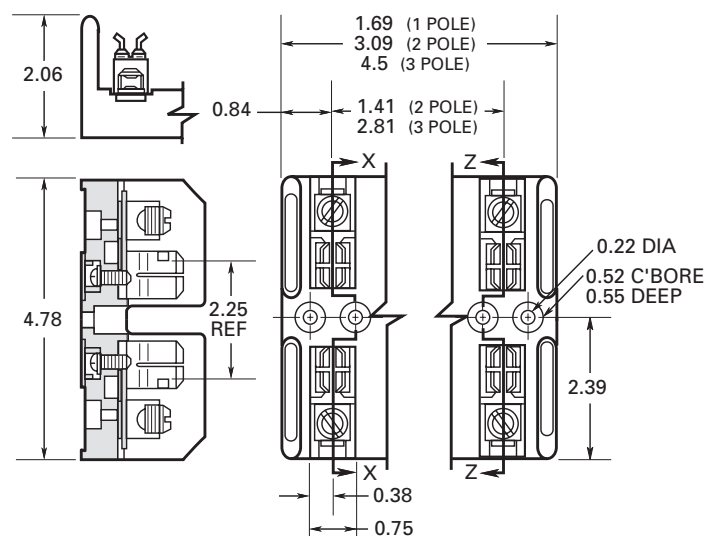


Figure 2. 61 to 100 A

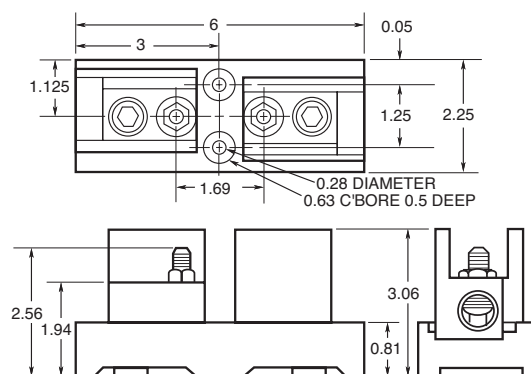
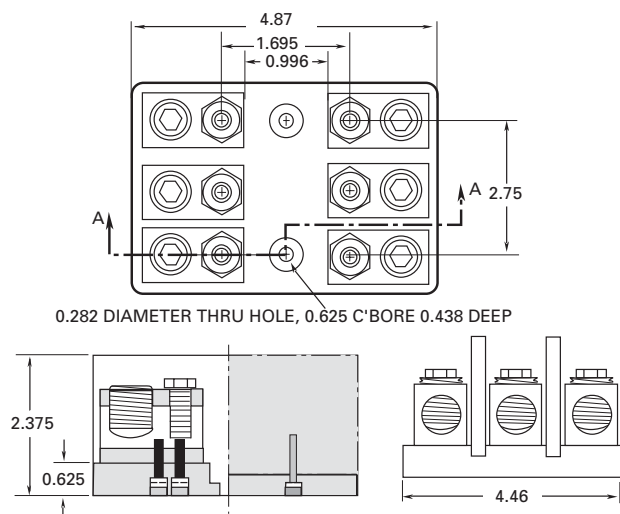
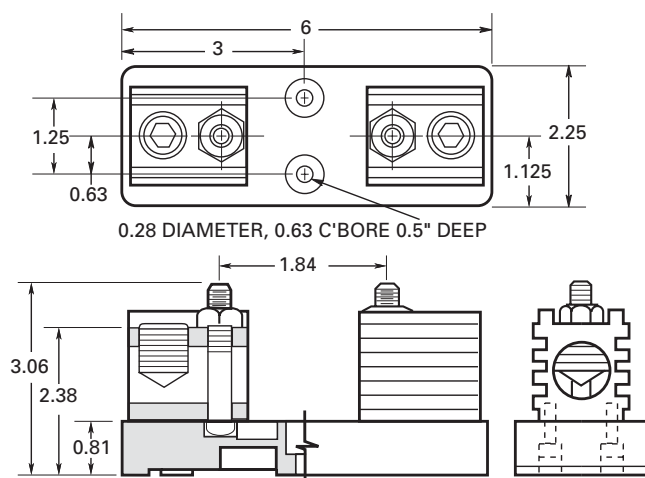


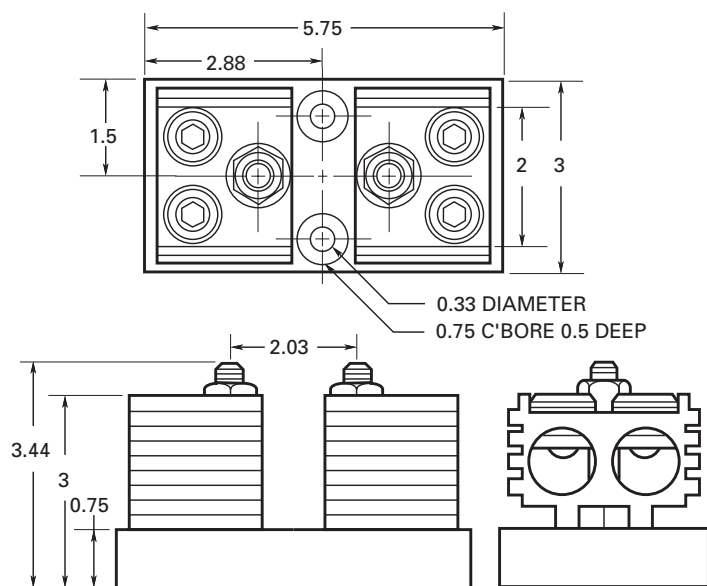
Figure 3. 101 to 200 A



**Figure 4. 200 A**



**Figure 5. 201 to 400 A**



**Figure 6. 401 to 600 A**

## T600 600 volt Class T fuse blocks

Bussmann series T600 fuse blocks are open fuse blocks for use with Class T fuses up to 600 amps in various pole configurations from 1- to 3-poles. T600 blocks use Bussmann series JJS fuses.



### Ratings

- Volts 600 V
- Amps up to 600 A
- SCCR 200 kA RMS Sym.

### Agency information

- UL Listed, UL 4248, Guide IZLT, File E14853, CSA Certified, Class 6225-01, File 47235, CE

### Flammability rating UL 94V0

### Features

- Provide 1-, 2- and 3-pole housing for 600 Vac Class T fuses.
- High 200 kA RMS Sym. Short-Circuit Current Ratings
- Class T fuse blocks have a small foot print, providing substantial space savings in equipment

### Typical applications

- 600 V or less control systems
- 600 V or less individual control circuits

| Catalog no./terminals |            | Amps     | Poles | Fig. | Terminal AWG range/type      |
|-----------------------|------------|----------|-------|------|------------------------------|
| Screw                 | Box lug    |          |       |      |                              |
| T60030-1SR            | T60030-1CR | Up to 30 | 1     | 1    | SR 10-18 Cu<br>CR 2-14 Cu/Al |
| T60030-2SR            | T60030-2CR |          | 2     |      |                              |
| T60030-3SR            | T60030-3CR |          | 3     |      |                              |
| T60060-1SR            | T60060-1CR | 31-60    | 1     | 2    | SR 10-18 Cu<br>CR 2-14 Cu/Al |
| T60060-2SR            | T60060-2CR |          | 2     |      |                              |
| T60060-3SR            | T60060-3CR |          | 3     |      |                              |
| —                     | T60100-1C  | 61-100   | 1     | 3    | 2/0-14 Cu/Al                 |
| —                     | T60100-2C  |          | 2     |      |                              |
| —                     | T60100-3C  |          | 3     |      |                              |
| —                     | T60200-1C  | 101-200  | 1     | 4    | 250kcmil-6 Cu/Al             |
| —                     | 1B0089*    |          | 3     | 5    |                              |
| —                     | T60400-1C  | 201-400  | 1     | 6    | 600kcmil-2/0 Cu/Al           |
| —                     | T60600-1C  | 401-600  | 1     | 7    | (2) 600kcmil-4/0 Cu/Al       |

\* UL Listed, Guide IZLT, File E14853, CSA Certified Class 6225-01, File 21455M18.

### Dimensions — in

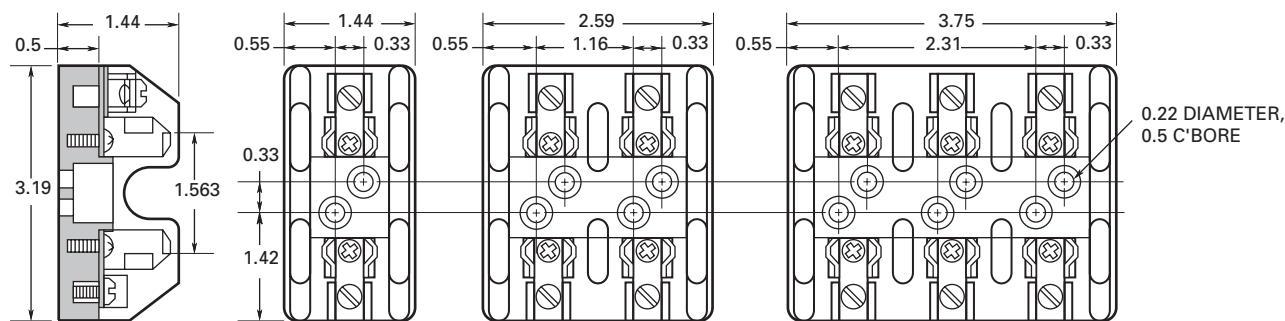


Figure 1. Up to 30 A

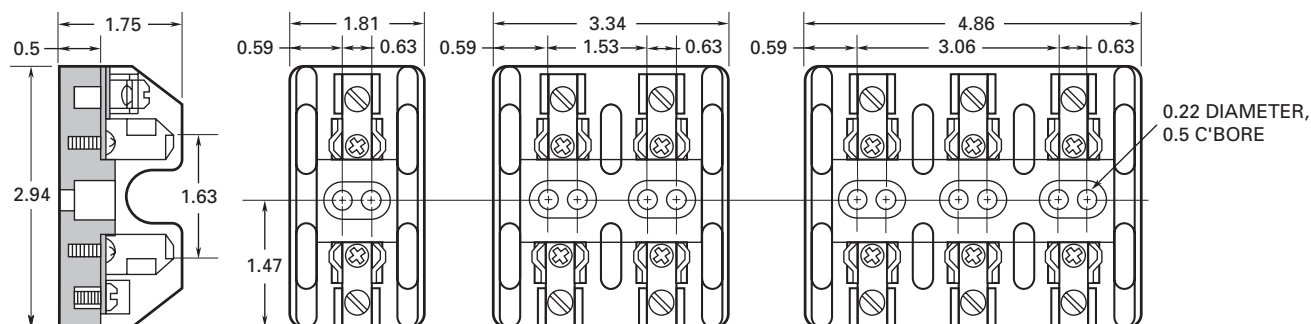


Figure 2. 31 to 60 A

Dimensions — in

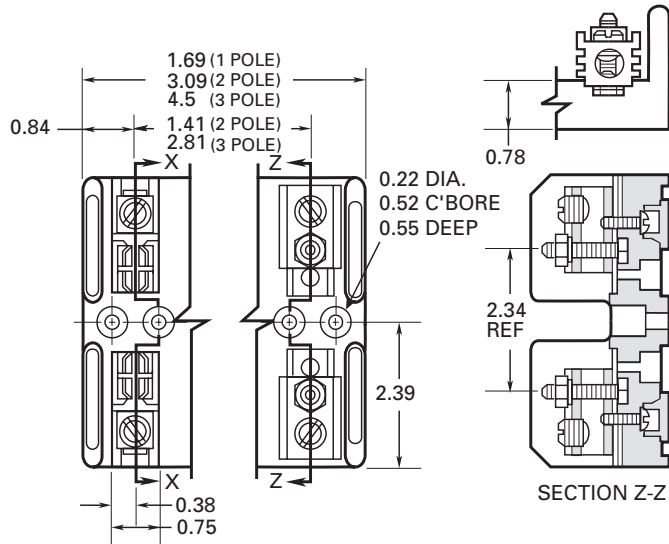


Figure 3. 61 to 100 A

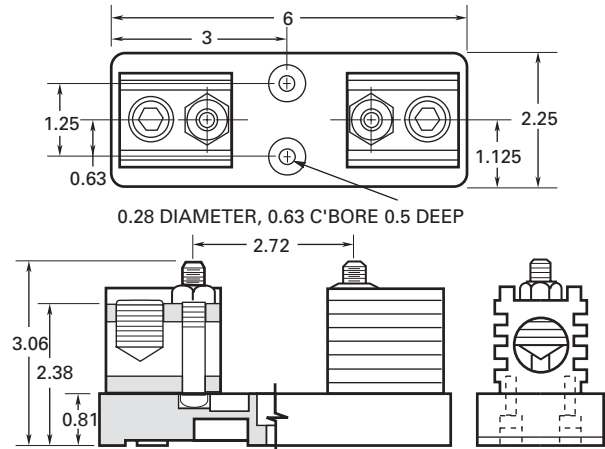


Figure 6. 201 to 400 A

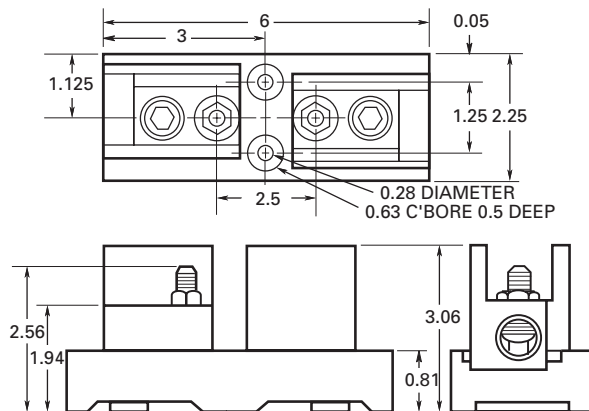


Figure 4. 101 to 200 A (T60200-1C)

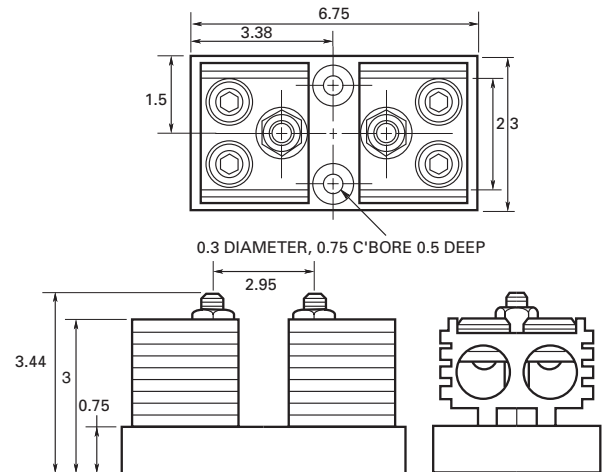


Figure 7. 401 to 600 A

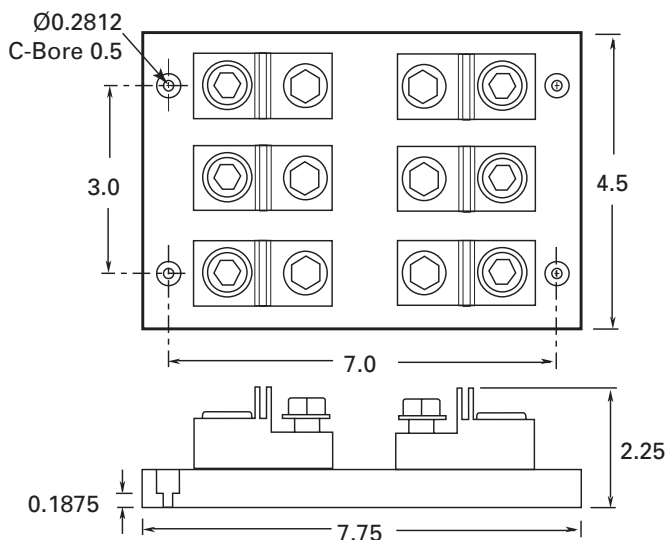


Figure 5. 101 to 200 A (1B0089)

## Modular open-center fuse blocks



### BH modular type

BH modular fuse blocks are for use with various blade and ferrule (cylindrical) Bussmann series high speed, and Class J and T fuses.

See the data sheets referenced in the catalog number table for block/fuse compatibility.

### Ratings

- Volts 700 V
- Amps
  - BH-0xxx 100 A
  - BH-1xxx and BH-2xxx 400 A
  - BH-3xxx 700 A
- SCCR 200 kA RMS Sym. or fuse IR, whichever is lower

### Agency information

- UL Recognized, Guide EZLT2, File No. E14853 up to 700 V, CSA Certified, Class 6225-01, File No. 47235 up to 700 V, RoHS compliant, CE

### Features

- A wide range of mounting configurations
- High Short-Circuit Current Rating (SCCR) based upon installed fuse up to 200 kA RMS Sym.

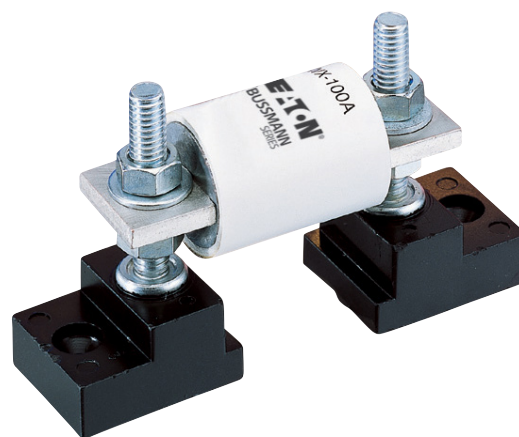
### Typical applications

- Solid state control circuits
- VFDs
- UPS systems

Refer to the data sheet numbers below for the catalog code description information.

| Cat no. | Data sheet | Cat no. | Data sheet | Cat no. | Data sheet | Cat no. | Data sheet |
|---------|------------|---------|------------|---------|------------|---------|------------|
| BH-0001 |            | BH-1001 |            | BH-2001 |            | BH-3003 |            |
| BH-0002 |            | BH-1002 |            | BH-2002 |            | BH-3004 |            |
| BH-0003 |            | BH-1003 |            | BH-2003 |            | BH-3033 |            |
| BH-0111 | 1200       | BH-1131 | 1201       | BH-2031 | 1202       | BH-3144 | 1203       |
| BH-0112 |            | BH-1132 |            | BH-2032 |            | BH-3145 |            |
| BH-0113 |            | BH-1133 |            | BH-2033 |            |         |            |
| BH-0121 |            |         |            |         |            |         |            |
| BH-0122 |            |         |            |         |            |         |            |

Data sheet no. 1200 (BH-0), 1201 (BH-1), 1202 (BH-2), 1203 (BH-3)



### C5268 stud type

The simpler design is the C5268 modular fuse block. With this design, the fuse terminal and cable (with termination) are mounted on the same stud, minimizing labor needed for installation. The stud type block is available in the configurations shown in the table below.

| Catalog no. | Max fuse amp rating | Stud             |
|-------------|---------------------|------------------|
| C5268-1     | 200                 | 5/16-18 x 1"     |
| C5268-2     |                     | 5/16-18 x 1-3/4" |
| C5268-3     |                     | 5/16-18 x 3/4"   |
| C5268-4     | 100                 | 1/4-20 x 1"      |
| C5268-5     |                     | 1/4-20 x 1-3/4"  |



### 1BS10x connector type

Eaton's Bussmann series also offers a modular style fuse block that utilizes a tin-plated connector for wire termination and heat dissipation) with a plated-steel stud for fuse mounting. The connector type fuse block is available in the RoHS compliant configurations shown below. Consult your Bussmann series product representative for additional product details.

| Catalog no. | Max rated voltage | Max fuse amp rating |
|-------------|-------------------|---------------------|
| 1BS101      | 600               | 100                 |
| 1BS102      |                   | 400                 |
| 1BS103      |                   | 600                 |
| 1BS104      |                   | 600                 |

Data sheet no. 1206 (1BS101), 1207 (1BS102), 1208 (1BS103), 1209 (1BS104)

## SD and TD blocks for NH size fuses

1-pole SD and 3-pole TD fuse blocks for NH fuse sizes 00 to 4 are specifically designed for use with Busmann series bladed NH fuses. See data sheet 720109 (690 V gG/gL) and 10164 (500 V gG/gL).

For NH 1 to 3 photovoltaic fuse applications, see the single-pole SD-PV blocks in the PV fuse section.

## Ratings

- Volts
  - 690 Vac
- Amps 160 to 1600 A
- SCCR up to 120 kA

## Agency information

- IEC 60269-1 and 2
- VDE 0636-1 and 2
- RoHS compliant

## Poles

- 1 and 3

## Protection level

- IEC - IP20 with shroud kit installed and shielding of any exposed terminal lugs
- UL - Installation of shroud kit decreases the likelihood of incidental terminal contact. To ensure compliance to IP20 specifications per UL the installer must make additional provisions.

## Temperature range

- Operating -20°C to +70°C
- Storage -40°C to +80°C

## Mounting

- 35mm DIN-Rail
- Panel



Shown with optional shroud kit



## Flammability rating

- UL 94V0

| Catalog no. | Poles | Description   | NH fuse size | Amps |
|-------------|-------|---------------|--------------|------|
| SD00-D      | 1     | NH fuse block | 000 and 00   | 160  |
| TD00-D      | 3     |               |              |      |
| TD00-DI*    |       |               |              |      |
| SD1-D       | 1     |               | 1            | 250  |
| TD1-D       | 3     |               |              |      |
| SD2-D       | 1     |               | 2            | 400  |
| TD2-D       | 3     |               |              |      |
| SD3-D       | 1     |               | 3            | 630  |
| TD3-D       | 3     |               |              |      |
| SD4-D       | 1     |               | 4            | 1250 |
| SD4-S1600** |       |               |              | 1600 |

\* 3-pole integral base molding.

\*\* Panel mount only.

## Accessories

## Fuse extraction handle

| Catalog no. | Size      | Amps       |
|-------------|-----------|------------|
| FEH         | NH00 to 3 | 160 to 630 |

## Shroud kits

| Catalog no.† | Fuse block | Fuse size | Amps | Description                         |
|--------------|------------|-----------|------|-------------------------------------|
| SD12-SK      | SD1/TD1    | NH1       | 250  | Includes 2 shrouds and 1 fuse cover |
| SD12-SK      | SD2/TD2    | NH2       | 400  |                                     |
| SD3-SK       | SD3/TD3    | NH3       | 630  |                                     |

† Order one kit per pole.

## Phase barrier kits

| Catalog no.†† | Fuse block | Fuse size | Amps | Description                          |
|---------------|------------|-----------|------|--------------------------------------|
| SD00-PB       | SD00/TD00  | NH00      | 160  | 2 phase barriers and 2 ganging links |
| SD12-PB       | SD1/TD1    | NH1       | 250  |                                      |
| SD12-PB       | SD2/TD2    | NH2       | 400  |                                      |
| SD3-PB        | SD3/TD3    | NH3       | 630  |                                      |

†† Order one kit per 3-pole assembly.

## Microswitches

| Catalog no. | Ratings     |
|-------------|-------------|
| BVL50       | 6 A 250 Vac |
| 170H0236    | 2 A 250 Vac |
| 170H0238    | 2 A 250 Vac |

## Neutral links

| Catalog no. | Fuse size | Amps |
|-------------|-----------|------|
| SDL-00      | NH00      | 160  |
| SDL-1       | NH1       | 250  |
| SDL-2       | NH2       | 400  |
| SDL-3       | NH3       | 630  |

## HTC panel mount holders for 5x20mm fuses

### Ratings

- Volts 250 V
- Amps 10 A (UL and VDE)
- Contact resistance  $\leq 10 \text{ m}\Omega$
- Insulation resistance  $\geq 10 \text{ M}\Omega$
- Dielectric strength  $\geq 2000 \text{ Vac}$

### Agency information

- cURus, VDE

### Solderability

- In accordance with IEC 68-2-20

### Shock safety

- PC2 (fuse holders)

### Materials

- Tin-plated brass terminals
- High temperature thermoplastic, flammability rating UL 94V0; glow wire test: 960°C per IEC 60695-2-1

### Packaging

- Standard quantity 10 (no prefix)
- Bulk quantity (prefix catalog number with BK/)



HTC-35M



HTC-40M



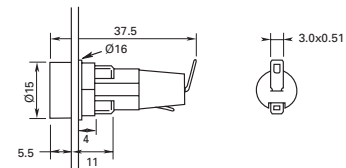
HTC-55M



HTC-70M

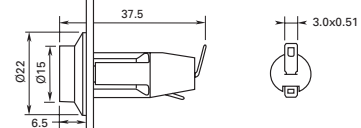
### HTC-35M

Threaded cap



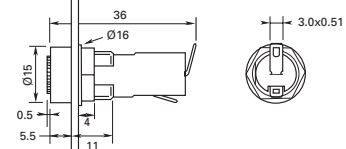
### HTC-40M

Screwdriver slot cap



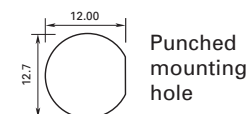
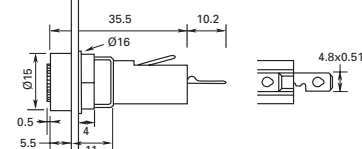
### HTC-55M

Bayonet type cap



### HTC-70M

Bayonet type cap



Punched  
mounting  
hole

## HTB panel mount fuse holders for 5x20mm and 1/4" x 1-1/4" fuses

Panel mount holders with knob-type and screwdriver-type carriers made from high temperature, flame retardant thermoplastic (UL 94V0) and tin-plated brass quick-connect terminals.

### Ratings\*

Volts 250 V

Amps 20 A max\*

- Insulation resistance (per IEC #257) 10,000 ohms @ 500 Vdc
- Contact resistance (per IEC #257) 0.005 ohms max @ 1 A
- Standoff voltage (per IEC #257) 480 V/Mil @ 0.125" thickness

\* See data sheet 2119 for ratings by holder configuration.

### Catalog numbers and dimensions — in (mm)



Knob-type fuse carrier

Screwdriver-type fuse carrier

### Agency information

- UL Recognized, Guide IZLT2, File E14853, 1/4" dia. fuse @ 20 A, 5mm dia. fuse @ 16 A @ 250 V, CSA Class 6225-01 File 47235 @ 16 A @ 250 V, VDE Certified, 136128, HTB-XXM, SEMKO Certification, Ref. 0146149/01, HTB-XXM, RoHS compliant, CE

### Operating temperature range

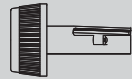
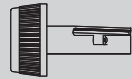
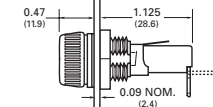
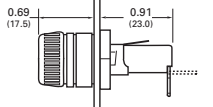
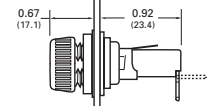
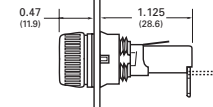
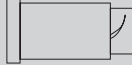
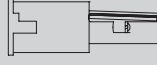
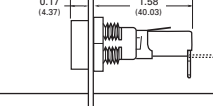
- -55°C to +85°C

### Mounting

- Rear hex nut; HTB-2\_, HTB3\_, HTB-4\_, HTB-5\_
- Front hex nut; HTB-6\_
- Snap-in; HTB-8\_, HTB-9\_

### Splash-proof versions

- Splash-proof versions available by adding "-SP" suffix to the catalog number.

| Holder dimensions                                                                  | Max panel thickness<br>— in<br>(mm) | Solder / 3/16" QC terminal                                                                   |                                                                                                | 1/4" QC terminal                                                                             |                                                                                                  | Fuse carrier*                                                                                             |                                                                                                          |
|------------------------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
|                                                                                    |                                     | <br>In-line | <br>Rt. angle | <br>In-line | <br>Rt. angle | <br>1/4"<br>I = inches | <br>5mm<br>M = metric |
| Knob-type carrier — common length 1.69 (43)                                        |                                     |                                                                                              |                                                                                                |                                                                                              |                                                                                                  |                        |                       |
|  | 0.3 (8)                             | HTB-22I-R                                                                                    | HTB-24I-R                                                                                      | HTB-26I-R                                                                                    | HTB-28I-R                                                                                        | X                                                                                                         |                                                                                                          |
|                                                                                    |                                     | HTB-22M-R                                                                                    | HTB-24M-R                                                                                      | HTB-26M-R                                                                                    | HTB-28M-R                                                                                        |                                                                                                           | X                                                                                                        |
|  | 0.125 (3)                           | HTB-42I-R                                                                                    | HTB-44I-R                                                                                      | HTB-46I-R                                                                                    | HTB-48I-R                                                                                        | X                                                                                                         |                                                                                                          |
|                                                                                    |                                     | HTB-42M-R                                                                                    | HTB-44M-R                                                                                      | HTB-46M-R                                                                                    | HTB-48M-R                                                                                        |                                                                                                           | X                                                                                                        |
|  | 0.3 (8)                             | HTB-62I-R                                                                                    | HTB-64I-R                                                                                      | HTB-66I-R                                                                                    | HTB-68I-R                                                                                        | X                                                                                                         |                                                                                                          |
|                                                                                    |                                     | HTB-62M-R                                                                                    | HTB-64M-R                                                                                      | HTB-66M-R                                                                                    | HTB-68M-R                                                                                        |                                                                                                           | X                                                                                                        |
|  | 0.125 (3)                           | HTB-82I-R                                                                                    | HTB-84I-R                                                                                      | HTB-86I-R                                                                                    | HTB-88I-R                                                                                        | X                                                                                                         |                                                                                                          |
|                                                                                    |                                     | HTB-82M-R                                                                                    | HTB-84M-R                                                                                      | HTB-86M-R                                                                                    | HTB-88M-R                                                                                        |                                                                                                           | X                                                                                                        |
| Screwdriver-type carrier — common length 1.75 (45)                                 |                                     |                                                                                              |                                                                                                |                                                                                              |                                                                                                  |                      |                     |
|  | 0.3 (8)                             | HTB-32I-R                                                                                    | HTB-34I-R                                                                                      | HTB-36I-R                                                                                    | HTB-38I-R                                                                                        | X                                                                                                         |                                                                                                          |
|                                                                                    |                                     | HTB-32M-R                                                                                    | HTB-34M-R                                                                                      | HTB-36M-R                                                                                    | HTB-38M-R                                                                                        |                                                                                                           | X                                                                                                        |
|  | 0.125 (3)                           | HTB-52I-R                                                                                    | HTB-54I-R                                                                                      | HTB-56I-R                                                                                    | HTB-58I-R                                                                                        | X                                                                                                         |                                                                                                          |
|                                                                                    |                                     | HTB-52M-R                                                                                    | HTB-54M-R                                                                                      | HTB-56M-R                                                                                    | HTB-58M-R                                                                                        |                                                                                                           | X                                                                                                        |
|  | 0.125 (3)                           | HTB-92I-R                                                                                    | HTB-94I-R                                                                                      | HTB-96I-R                                                                                    | HTB-98I-R                                                                                        | X                                                                                                         |                                                                                                          |
|                                                                                    |                                     | HTB-92M-R                                                                                    | HTB-94M-R                                                                                      | HTB-96M-R                                                                                    | HTB-98M-R                                                                                        |                                                                                                           | X                                                                                                        |

\* Fuse carriers may be ordered separately. Specify "FT" for knob-type or "ST" for screwdriver type, followed by "-I" for 1/4" fuses and "-M" for 5mm fuses.

### Data sheet no. 2119

## HJL panel mount neon lamp indicating holder for 1/4" x 1" fuses

### Ratings

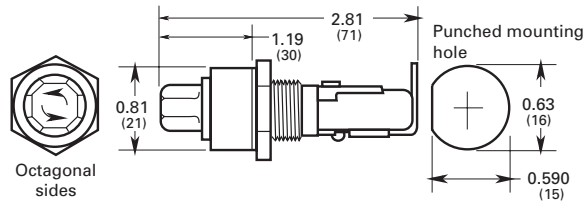
- Volts 250 V
- Amps 15 A



| Catalog no.* | Volts     | Lamp color | Knob type |
|--------------|-----------|------------|-----------|
| HJL          | 90 to 250 | Clear      | Octagonal |

\* Use with AGX, MKB, TCP70 and TDC fuses, for panels up to 1/8" thick.

### Dimensions — in (mm)



## HK panel mount neon and incandescent lamp indicating holders for 1/4" x 1" fuses

### Ratings

- Volts 250 V
- Amps
  - 15 A (HKL, HKL-X)
  - 20 A (HKR, HKT, HKU, HKX)



### Agency information

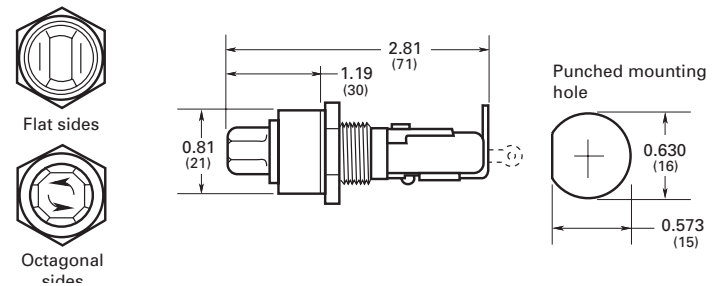
- UL Recognized, Guide IZLT2, File E14853), CSA Certified Class 6225-01, File 47235, CE

| Catalog no. | Lamp volts | Knob color/type |
|-------------|------------|-----------------|
| HKL *       | 90-250     | Clear/octagonal |
| HKL-X*      | 90-250     | Clear/flat side |
| HKR**       | 22-30      | Amber/octagonal |
| HKT**       | 13-22      | Amber/octagonal |
| HKU**       | 4-6        | Red/octagonal   |
| HKX**       | 22-33      | Amber/flat side |

\* Neon lamp UL Recognized and CSA Certified.

\*\*Incandescent lamp.

### Dimensions — in (mm)



## HKP panel mount holders for 1/4" x 1-1/4" fuses

Vibration resistant bayonet-type knob holders for panels up to 5/16" thick.

### Ratings

- Volts 250 V
- Amps up to 30 A\*

\* See data sheet 2106 for ratings by specific holder.

### Agency information

- UL Recognized Guide IZLT2, File E14853, CSA Certified, Class 6225-01, File 47235, CE (HKP, HKP-L, HKP-W, HKP-OO), RoHS compliant

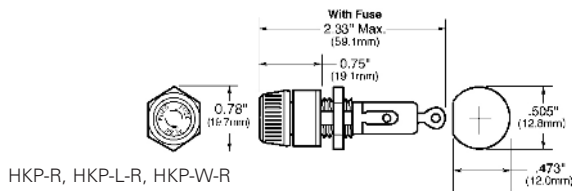


| Catalog no. | Description                                                                 |
|-------------|-----------------------------------------------------------------------------|
| HKP-R       | Standard fuse holder                                                        |
| HKP-L-R     | HKP with 2250 V stand-off barrier                                           |
| HKP-W-R     | HKP with drip-proof knob                                                    |
| HKP-BBHH-R  | HKP with 1/4" quick-connects, nut and washer assembled.                     |
| HKP-HH-R    | HKP with 1/4" quick-connect.                                                |
| HKP-LW-HH-R | HKP with drip-proof knob, 2250 V stand-off barrier and 1/4" quick-connects. |
| HKP-OO-R    | HKP with snap-lock                                                          |

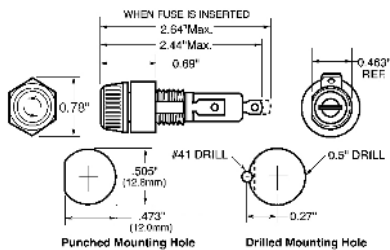
### Replacement parts

| Catalog no. | Description                      |
|-------------|----------------------------------|
| 9435-1/2    | Cap                              |
| BK/1A4287   | Plastic nut (100 pieces minimum) |
| BK/1A4806-2 | Metal nut (100 pieces minimum)   |
| 9732        | Washer                           |

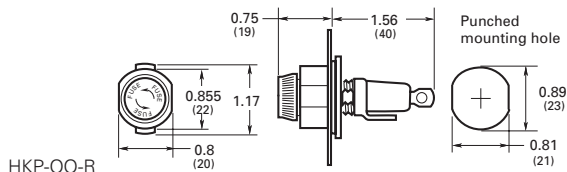
### Dimensions — in (mm)



HKP-R, HKP-L-R, HKP-W-R



HKP-BBHH-R, HKP-HH-R, HKP-LW-HH-R



HKP-OO-R

Data sheet no. 2106

## HLD panel mount holders for 1/4" x 1-1/4" pin indicating fuses

### Ratings

- Volts 250 V
- Amps 15 A

### Agency information

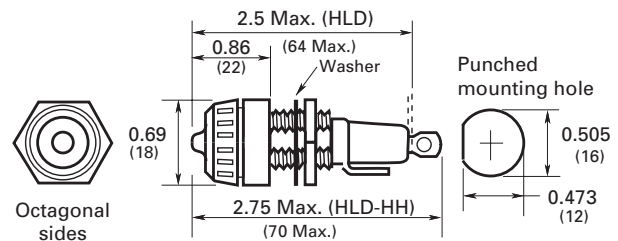
- CE, UL Recognized, Guide IZLT2, File E14853



| Catalog no.* | Terminals                    |
|--------------|------------------------------|
| HLD          | Solder terminals             |
| HLD-HH       | 1/4" quick-connect terminals |

\* Use with GBA or GLD fuses.

### Dimensions — in (mm)



Data sheet no. 2120

## HPF panel mount holders with screw-type knobs for 13/32" x 1-5/16" to 1-1/2" fuses

### Ratings\*

- Volts up to 600 V
- Amps up to 30 A
- \* See catalog numbers for ratings by specific holder.

### Agency information

- UL Recognized, Guide IZLT2, File E14853; CSA Certified, Class 6225-01, File 47235, CE

### Flammability rating: UL 94HB

### Terminals\*\*

- Combination 1/4" quick-connect/solder terminals
- \*\*Solder terminal 10 AWG wire max.

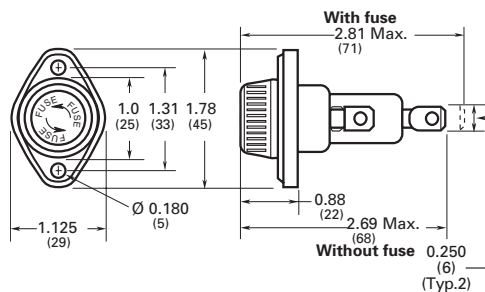
| Catalog no.         | Amps            | Volts (AC)       | Fuse/description/length          |
|---------------------|-----------------|------------------|----------------------------------|
| HPF                 | 30 <sup>2</sup> | 600              | 1-1/2" (38mm)                    |
| HPF-C               | 30 <sup>3</sup> | 600 <sup>3</sup> | Clear knob 1-1/2" (38mm)         |
| HPF-L               | 5               | 600              | BBS, 1-3/8" fuses.               |
| HPF-EE              | 15              | 600              | SC Class G up to 15 A, 1-5/16"   |
| HPF-JJ              | 20              | 600              | SC Class G 20 A, 1-13/32"        |
| HPF-FF <sup>1</sup> | 30 <sup>2</sup> | 480              | SC Class G 25 and 30 A, 1-5/8"   |
| HPF-RR              | 30 <sup>2</sup> | 600              | FNQ-R, KTK-R, LP-CC, Class CC    |
| HPF-WT              | 30 <sup>2</sup> | 600              | Splash-proof knob. 1-1/2" (38mm) |

1 Not CSA Certified.

2 20 A max when used with quick-connect terminals.

3 HPF-C ratings for CSA: 15 A, 250 V.

### Dimensions — in (mm)



## HPC-D flange panel mount, solder terminal (10 AWG max) holder with screw-type knob for 13/32" x 1-1/2" fuses. Supplied with O-ring and panel gasket

### Ratings

- Volts 600 V
- Amps 30 A\*

\* 20 A max when used with quick-connect terminals.

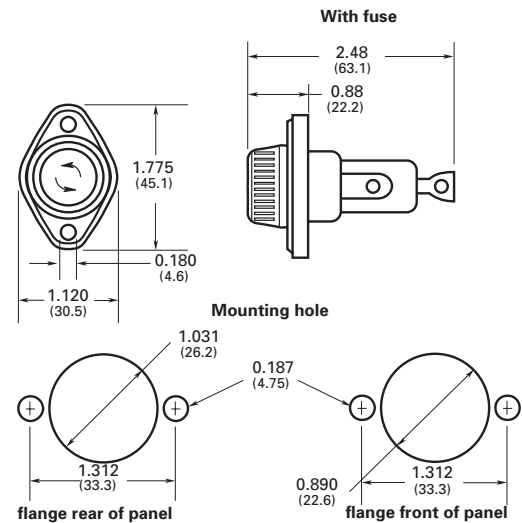
### Agency information

- UL Recognized, Guide IZLT2, File E14853, CE

### Flammability rating: UL 94HB

| Catalog no. | Description                              |
|-------------|------------------------------------------|
| HPC-D       | Flange mount in panels up to 1/4" thick. |
| BK/9987SA   | Replacement knob, bulk only, 50 pieces   |

### Dimensions — in (mm)



## HPD and HPG panel mount bayonet-type knob holders for 13/32" x 1-1/2" fuses

### Ratings

- Volts 600 V
- Amps
  - 30 A
  - 15 A (Class G only)

### Agency information

- UL Recognized, Guide IZLT2, File E14853, CE

### Flammability ratings

- Body UL 94V0
- Knob UL 94HB



HPD

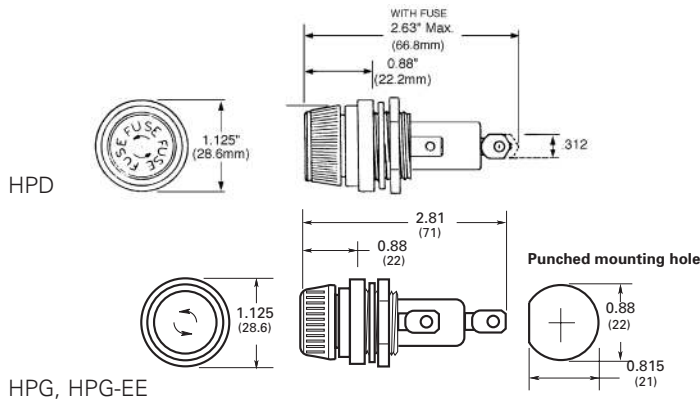


HPG, HPG-EE

| Catalog no. | Amps            | Volts (AC) | Fuse/description/length        |
|-------------|-----------------|------------|--------------------------------|
| HPD*        | 30 <sup>1</sup> | 600        | 1-1/2" (38mm)                  |
| HPG**       |                 |            |                                |
| HPG-EE**    | 15              |            | SC Class G up to 15 A, 1-5/16" |

- \* HPD has combination 1/4" quick-connect/solder terminal on loadside (side) terminal only. Lineside (rear) terminal is 3/16" shorter than and is solder only.
- \*\*HPG and HPG-EE has combination 1/4" quick-connect/solder terminals on both side (load) and rear (line) terminals.
- 1 20 A max when used with quick-connect terminals.

### Dimensions — in (mm)



## HPM panel mount holders with screw-type knob for 13/32" x 1-1/2" fuses.

### Ratings

Volts 600 V

Amps 30 A\*

- \* 20 A max when used with quick-connect terminals.



### Agency information

- UL Recognized, Guide IZLT2, File E14853; CSA Certified, Class 6225-01, File 47235, CE

### Flammability rating: UL 94HB

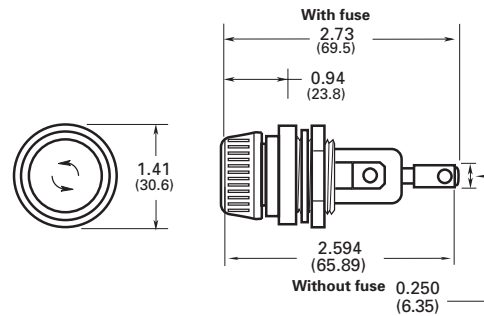
| Catalog no. | Description                            |
|-------------|----------------------------------------|
| HPM         | 1/4" quick-connect/solder              |
| HPM-D       | Splash-resistant knob**                |
| BK/9789-Y2  | Replacement knob, bulk only, 50 pieces |

\*\*HPM-D has 1/4" quick-connect/solder terminal on rear (load) terminal only. The side (line) terminal is 1/4" quick-connect only.

### Nut torque:

- 30 lb-in.

### Dimensions — in (mm)



## HPS panel mount bayonet-type knob holders for 13/32" x 1-5/16" to 1-1/2" fuses

### Ratings\*

- Volts up to 600 V
- Amps up to 30 A

\* See catalog numbers for ratings by specific holder.

### Agency information

- UL Recognized, Guide IZLT2, File E14853; CSA Certified, Class 6225-01, File 47235, CE

### Flammability rating: UL 94HB

### Terminals

- Combination 1/4" quick-connect/solder terminals.

| Catalog no. | Amps              | Volts (AC) | Fuse/description/length                  |
|-------------|-------------------|------------|------------------------------------------|
| HPS         | 30 <sup>1</sup> 2 | 600        | 1-1/2" (38mm)                            |
| HPS-L       | 5                 | 600        | BBS, 1-3/8"                              |
| HPS-EE*     | 15                | 600        | SC Class G up to 15 A, 1-5/16"           |
| HPS-JJ*     | 20                | 600        | SC Class G 20 A, 1-13/32"                |
| HPS-F-EE†   | 15                | 600        | Sleeve on body, leaded for 1-5/16" fuses |
| HPS-FF*†    | 30 <sup>1</sup>   | 480        | SC Class G 25 and 30 A, 1-5/8"           |
| HPS-RR*†    | 30 <sup>1</sup>   | 600        | FNQ-R KTK-R, LP-CC Class CC              |

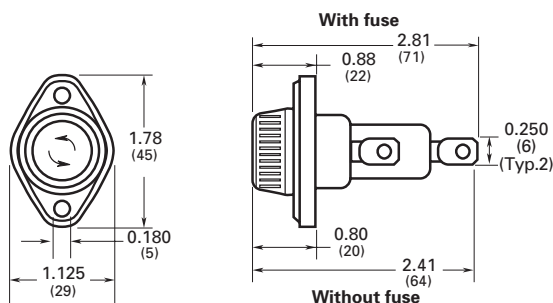
\* -EE, -JJ, -FF and -RR suffix versions are UL Recognized for applications requiring branch circuit protection.

† Not CSA Certified.

1 20 A max when used with quick-connect terminals.

2 HPS rated at 250 V for CSA.

### Dimensions — in (mm)



## HPS2 panel mount, 1/4" quick-connect/solder terminal (10 AWG max) holder with screw-type knob for 13/32" x 1-1/2" fuses. Supplied with O-ring and panel gasket

For fuse size 13/32" x 1-1/2", meeting UL 1598 requirement that both poles be removed simultaneously.

### Ratings

Volts 600 V

Amps 30 A\*

\* 20 A max when used with quick-connect terminals.

### Agency information

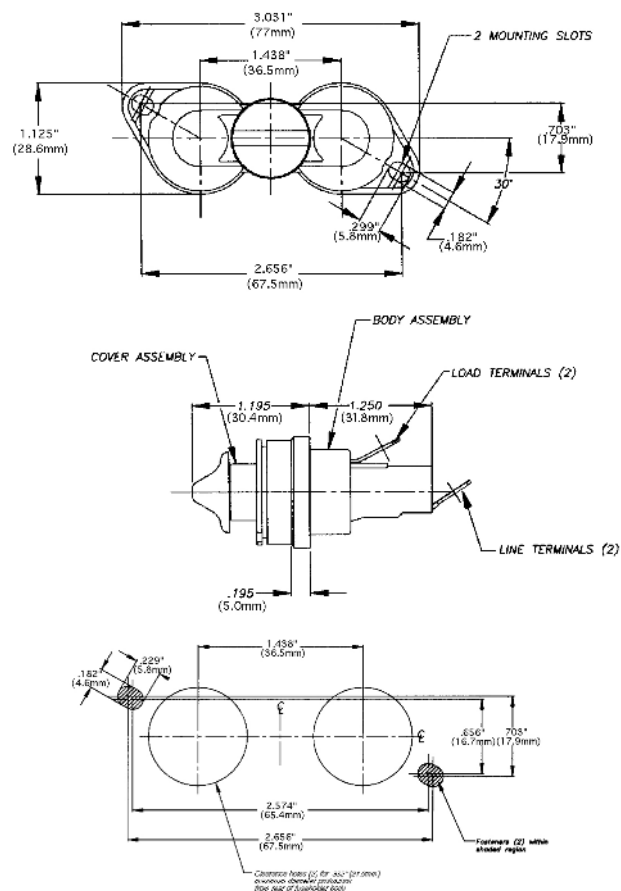
- UL 4248 Recognized, Guide IZLT2, File E14853, CSA certified Class 6225-01, File 47235

### Flammability rating: UL 94V0

Terminals: 1/4" quick-connect/solder.

| Catalog no. | Description           |
|-------------|-----------------------|
| HPS2        | Standard 10-in carton |
| BK/HPS2     | Bulk 100-in carton    |

### Dimensions — in (mm)



## HHT in-line fuse holder for 5x15mm to 20mm fuses

The HHT features a black thermoplastic body with brass contacts and 13 inch red AWG 16 leads.

### Ratings

- Volts
  - 250 Vac
  - 32 Vdc
- Amps
  - 5 A (5x15mm fuses)
  - 10 A (5x20mm fuses)



## HFA in-line water-resistant holders for 1/4" x 1-1/4" fuses

The HFA is a waterproof, crimp or quick-connect terminal holder for exposed locations made of high temperature, flame retardant phenolic material meeting UL 94 HB. Recommended crimp tools include Thomas & Betts WT-112M or ERG-2002 and Channelock No. 909.

### Ratings

- Volts 250 V
- Amps 20 A max.

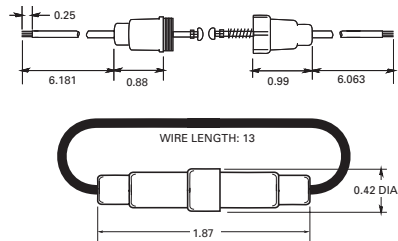


### Agency information

- UL Recognized, Guide IZLT2, File E14853 using AWG 12 copper conductors

| Catalog no.      | Fuse size (mm) |
|------------------|----------------|
| HHT (100-in)     | 5x15 and 5x20  |
| BK/HHT (1000-in) |                |

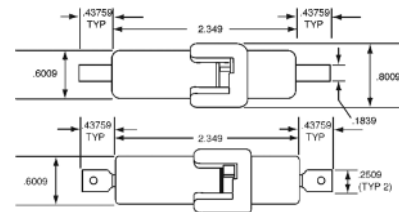
### Dimensions — in



| Catalog no.                          | Terminals/AWG      |
|--------------------------------------|--------------------|
| HFA (10-in)                          | Crimp/12-16        |
| HFA-R (10-in, RoHS compliant)        |                    |
| BK/HFA-R (20-in, RoHS compliant)     |                    |
| HFA-HH* (10-in)                      | 1/4" quick-connect |
| HFA-HH-R* (10-in, RoHS compliant)    |                    |
| BK/HFA-HH-R* (20-in, RoHS compliant) |                    |

\* Not UL Recognized.

### Dimensions — in



## HFB and HFB-10 in-line holders for 1/4" x 7/8" to 1-1/4" fuses

Water-resistant in-line fuse holder for 1/4" x 1-1/4" fuses made of a thermoplastic rubber body with tin-plated, copper contacts.

### Ratings

- Volts 32 V
- Amps 30 A max.



| Catalog no. | Description                       |
|-------------|-----------------------------------|
| HFB-R*      | Standard pack (10-in)             |
| BK/HFB-R*   | Bulk pack (100-in)                |
| HFB-10-R**  | Standard pack (10-in)             |
| BK/1A2294   | HFB replacement contact clip      |
| 1A2294-01   | HFB-10** replacement contact clip |

\* HFB-R accepts #12 to #18 wire leads (not provided). See data sheet 2102 for recommended crimp tools.

\*\*HFB-10-R accepts #10 wire leads (not provided). See data sheet 2102 for recommended crimp tools.

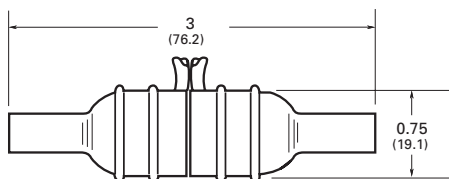
### Features

- Simple assembly with one-piece thermoplastic (important information molded into body)
- High visibility yellow color for easy identification in dark or hard-to-access locations
- Ideal for shock and vibration environments; withstands many organic solvents; temperature range -40°C to +150°C

### Typical applications

- Supplemental, low voltage, low amperage control circuits

### Dimensions — in (mm)



## HHB universal in-line holders for 1/4" x 7/8", 1" and 1-1/4" fuses

Universal in-line fuse holder for 1/4" diameter fuses in lengths from 7/8" to 1-1/4" made of a nylon body with tin-plated, copper contacts.

### Ratings

- Volts 32 V
- Amps 30 A max.



| Catalog no.                                                 | Description                |
|-------------------------------------------------------------|----------------------------|
| <b>Holder without leads*</b>                                |                            |
| HHB-R**                                                     | Standard pack (10-in)      |
| BK/HHB-R**                                                  | Bulk pack (1000-in)        |
| <b>Holder with pre-attached 14 AWG insulated lead wires</b> |                            |
| BK/HHB-Y408                                                 | 8" yellow leads (1000-in)  |
| BK/HHB-R408**                                               | 8" red leads (1000-in)     |
| BK/HHB-B408                                                 | 8" black leads (1000-in)   |
| BK/HHB-Y419                                                 | 19" yellow leads (1000-in) |
| BK/HHB-R419                                                 | 19" red leads (1000-in)    |
| BK/HHB-B419                                                 | 19" black leads (1000-in)  |

\* Accepts #12 to #16 wire leads (not provided with basic fuse holder). See data sheet 2103 for recommended crimp tools.

\*\*RoHS compliant.

### Flammability rating: UL 94V2

### Pull force

- 5 lbs minimum to separate fuse holder housing with fuse installed

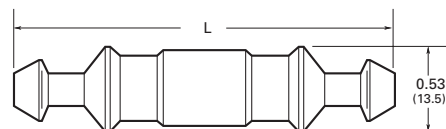
### Features

- Universal application for 1/4" x 7/8", 1" and 1-1/4" fuses

### Typical applications

- Supplemental, low voltage, low amperage control circuits

### Dimensions — in (mm)



| Fuse length | Fuse                         | Max. holder length "L" |
|-------------|------------------------------|------------------------|
| 7/8"        | AWG                          | 2.10                   |
| 1"          | AGX                          | 2.25                   |
| 1-1/4"      | ABC, AGC, GBB, MDA, MDL, MDQ | 2.42                   |

## HM, HR and HH in-line holders

HM and HR in-line fuse holders feature 8 and 19 inch 14 AWG length leads with a size-rejecting SFE fuse. Also accommodates various length 1/4" diameter fuses from 5/8" to 1-1/4".

### Ratings

- Volts 32 V
- Amps 20 A max.



| Catalog no. | Included SFE fuse | Lead length (in) | Fuse length (in) |
|-------------|-------------------|------------------|------------------|
| HMJ*        | SFE-20            | 8                | 1-1/4            |
| HMI         | SFE-14            |                  | 1-1/16           |
| HMH         | SFE-9             |                  | 7/8              |
| HME         | SFE-7-1/2         |                  | 7/8              |
| HMG         | SFE-6             |                  | 3/4              |
| HMF         | SFE-4             |                  | 5/8              |
| HRJ**       | SFE-20            | 19               | 1-1/4            |
| HRI         | SFE-14            |                  | 1-1/16           |
| HRH         | SFE-9             |                  | 7/8              |
| HRE         | SFE-7-1/2         |                  | 7/8              |
| HRG         | SFE-6             |                  | 3/4              |
| HRF         | SFE-4             |                  | 5/8              |

\* Also available as in-line fuse holder only with lead wire contacts, HMJ-LESS-fuse.

\*\* Also available as in-line fuse holder only with lead wire contacts, HRJ-LESS-fuse.

| Catalog no. | Fuse length (in) | Holder description       | AWG wire range | Max amps |
|-------------|------------------|--------------------------|----------------|----------|
| HHJ-A       | 1-1/4            | No wire or fuse included | 18-22          | 10       |
| HHJ-B       |                  |                          | 12-16          | 30       |
| HHI-A       | 1-1/16           |                          | 18-22          | 10       |
| HHI-B       |                  |                          | 12-16          | 30       |

### Replacement contacts

| Contact catalog no. | For holder catalog no. |
|---------------------|------------------------|
| 9838                | HHJ-A and HHI-A        |
| 9841                | HHJ-B and HHI-B        |

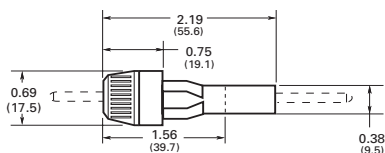
### Features

- Universal application for SFE and various length 1/4" diameter fuses.
- 14 AWG lead wires simplify electrical connection.

### Typical applications

- Supplemental, low voltage, low amperage control circuits

### Dimensions — in (mm)



Data sheet no. 2122

8-50

BUSSMANN SERIES FULL LINE CATALOG 1007 — JUNE 2017

## HRK Universal in-line holder for 1/4" x 7/8" to 1-1/4" fuses

Universal in-line fuse holder with 8" (203mm) 14 AWG lead wires for 1/4" diameter fuses in lengths from 7/8" to 1-1/4".



### Ratings

- Volts 32 V
- Amps 15 A max.

| Catalog no. | Accepts fuse length | Fuse                         |
|-------------|---------------------|------------------------------|
| HRK-R*      | 7/8"                | AWG                          |
|             | 1"                  | AGX                          |
|             | 1-1/4"              | ABC, AGC, GBB, MDA, MDL, MDQ |

\* Three springs furnished with fuse holder to accommodate different length 1/4" fuses.

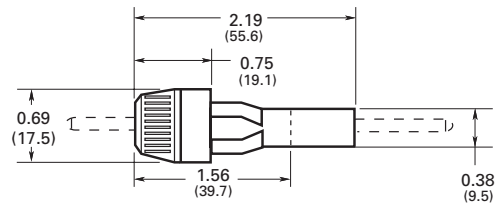
### Features

- Universal application for 1/4" x 7/8", 1" and 1-1/4" fuses
- 14 AWG lead wires simplify electrical connection.
- RoHS compliant

### Typical applications

- Supplemental, low voltage, low amperage control circuits

### Dimensions — in (mm)



Data sheet no. 2111

Eaton.com/bussmannseries

## HEC, HEG, HEH and HEJ single-pole Class G fuse non-breakaway in-line holders

Class G size-rejecting non-breakaway submersible, single-pole in-line fuse holders available with many terminal options to meet application needs. Optional insulating boots provide additional protection from dust and moisture ingress (order separately). The HEC is also available in a breakaway version.

### Ratings\*

Volts up to 600 V

Amps up to 60 A

SCCR 200 kA RMS Sym.

\* Dependant upon fuse and conductor rating.

### Insulating boots

Insulating boots are not included. Two insulating boots must be ordered separately, if required, for each holder ordered. When insulating boots are utilized, extra heat retention requires that fuses are sized at a minimum of 200 percent of the RMS load current.

To order insulating boots for Class G holders, use these catalog numbers.



| Catalog no. | Description      |
|-------------|------------------|
| 2A0660      | Single conductor |
| 2A0661      | Dual conductor   |

### HEG

- 600 V
- 15 A



### HEH

- 600 V
- 20 A



### HEC

- 480 V
- 25-30 A



### HEJ

- 480 V
- 35-60 A



## Recommended crimping tools

This list is not intended to exclude the use of other crimping tools that can provide similar crimps or indents.

| Terminal code | T & B P/N (Die)                    | Terminal code | T & B P/N (Die)                    |
|---------------|------------------------------------|---------------|------------------------------------|
| A             | WT-111M (C)<br>Sta-Kon ERG4002 (C) | D             | TBM5 (Brown)<br>TBM8 (Brown)       |
| B             | WT-115A (D)                        |               | WT-115A (F)                        |
| C             | TBM5 (Grey)<br>WT-115A (E)         | Z             | WT-111M (A)<br>Sta-Kon ERG4002 (A) |
| N, P, Q, R, T | TBM8 (Orange)                      |               |                                    |

## HET neutral

The HET holder is a single-pole in-line holder with a permanent, solid neutral for use along with the Class G in-line holders to provide a means of conductor continuity. The HET holder is identified by a white, plastic coupling nut. Available HET holder counterparts to their Class G holder equivalents are listed in the following catalog number tables. See data sheet no. 2125 for details on the HET holder.



## HEC breakaway Class G fuse in-line holder



The HEC breakaway holder includes insulating boots.

| Amps  | Catalog no.  | Line and load terminal | AWG      |
|-------|--------------|------------------------|----------|
| 25-30 | HEC-RW-RLB-R | Al crimp               | 1-2 str. |

## Non-breakaway catalog number system

HE - A A

| Amps  | Catalog symbol | Loadside terminal | Lineside terminal | Loadside terminal |                 | Lineside terminal |                 |                        |
|-------|----------------|-------------------|-------------------|-------------------|-----------------|-------------------|-----------------|------------------------|
|       |                |                   |                   | Terminal type     | AWG Wire range* | Terminal type     | AWG wire range* | HET neutral equivalent |
| 15    | HEG            | A                 | A                 | Cu crimp          | 8-16; (2) 12-16 | Cu crimp          | 8-16; (2) 12-16 | HET-AA                 |
| 20    | HEH            | A                 | A                 | Cu crimp          | 8-16; (2) 12-16 | Cu crimp          | 8-16; (2) 12-16 | HET-AA                 |
|       |                |                   | D                 | Cu crimp          | 8-16; (2) 12-16 | Cu crimp          | 2 str; (2) 6    | —                      |
| 25-30 | HEC            | A                 | A                 | Cu crimp          | 8-16; (2) 12-16 | Cu crimp          | 8-16; (2) 12-16 | HET-AA                 |
| 35-60 | HEJ            | A                 | A                 | Cu crimp          | 8-16; (2) 12-16 | Cu crimp          | 8-16; (2) 12-16 | HET-AA                 |
|       |                |                   | B                 | Cu crimp          | 8-16; (2) 12-16 | Cu crimp          | 6; (2) 10       | HET-AB                 |
|       |                | B                 | B                 | Cu crimp          | 6; (2) 10       | Cu crimp          | 6; (2) 10       | HET-BB                 |
|       |                | C                 | C                 | Cu crimp          | 4 str; (2) 8    | Cu crimp          | 4 str; (2) 8    | —                      |
|       |                | D                 | D                 | Cu crimp          | 2 str; (2) 6    | Cu crimp          | 2 str; (2) 6    | —                      |
|       |                | J                 | J                 | Cu setscrew       | 3-12            | Cu setscrew       | 3-12            | HET-JJ                 |
|       |                |                   | K                 | Cu setscrew       | 3-12            | Cu dual setscrew  | 2-12†           | HET-JK                 |
|       |                | L                 | L<br>LB††         | Al setscrew       | 2-12            | Al setscrew       | 2-12            | —                      |
|       |                | P                 | P                 | Al crimp          | 4 sol; 6 str    | Al crimp          | 4 sol; 6 str    | —                      |
|       |                | Q                 | Q                 | Al crimp          | 2 sol; 3-4 str  | Al crimp          | 2 sol; 3-4 str  | —                      |
|       |                | W                 | W                 | Cu solid          | -               | Cu solid          | -               | —                      |

\* Solid/stranded conductors unless otherwise noted.

† Not dual wire rated. One wire per opening.

†† Same as catalog number as HEJ-LL, but packaged with two 2A0660 single conductor insulating boots.

**To order:** specify catalog symbol and the loadside terminal code. Then select a lineside terminal code that is available with the loadside terminal. Example: HEJ-BB defines a non-breakaway holder with a loadside copper crimp terminal for a single #6 or two #10 wires with a lineside copper crimp terminal for a single #6 or two #10 wires.

## HEB single-pole breakaway and non-breakaway in-line holders for 13/32" x 1-1/2" supplemental fuses

Breakaway and non-breakaway submersible, single-pole in-line fuse holders available with many terminal options to meet application needs. Breakaway versions come with insulating boots to provide submersibility per UL IP67. Non-breakaway versions require ordering optional insulating boots for submersibility.

### Ratings

Volts 600 V

Amps up to 30 A limited by conductor size

SCCR 200 kA RMS Sym.\*

\* Dependant upon fuse interrupting rating.

### Agency information

UL Recognized, Guide IZLT2, File E14853, CSA Certified, Class 622501, File 47235, CE, RoHS compliant\*\*

\*\*See terminal data for exceptions.



### Insulating boots

Two insulating boots come standard with the breakaway holder configurations. Insulating boots are not included as standard with non-breakaway holders. Two insulating boots must be ordered separately, if required, for each non-breakaway holder ordered. When insulating boots are utilized, extra heat retention requires that fuses are sized at a minimum of 200 percent of the RMS load current.

To order insulating boots for a non-breakaway HEB holder, use these catalog numbers.

| Catalog no. | Description      |
|-------------|------------------|
| 2A0660      | Single conductor |
| 2A0661      | Dual conductor   |

### Recommended crimping tools

This list is not intended to exclude the use of other crimping tools that can provide similar crimps or indents.

| Terminal code | T & B P/N (Die)     | Terminal code | T & B P/N (Die)     |
|---------------|---------------------|---------------|---------------------|
| A             | WT-111M (C)         | D             | TBM5 (Brown)        |
|               | Sta-Kon ERG4002 (C) |               | TBM8 (Brown)        |
| B             | WT-115A (D)         |               | WT-115A (F)         |
|               | TBM5 (Grey)         | Z             | WT-111M (A)         |
| C             | WT-115A (E)         |               | Sta-Kon ERG4002 (A) |
| N, P, Q, R, T | TBM8 (Orange)       |               |                     |

### HET neutral

The HET holder is a single-pole in-line holder with a permanent, solid neutral for use along with the HEB holder to provide a means of conductor continuity. The HET holder is identified by a white, plastic coupling nut. Available HET holder counterparts to their HEB equivalents are listed in the following catalog number tables. See data sheet no. 2125 for details on the HET holder.



### Breakaway catalog number system

#### HEB - A W - RYC

| Catalog symbol | Loadside terminal | Lineside terminal | Agency Information |     | Loadside terminal |                 | Lineside terminal |                 | HET neutral equivalent |
|----------------|-------------------|-------------------|--------------------|-----|-------------------|-----------------|-------------------|-----------------|------------------------|
|                |                   |                   | UL                 | CSA | Terminal type     | AWG wire range* | Terminal type     | AWG wire range* |                        |
| A              |                   | RLC-A             | X                  | X   | Cu crimp          | 8-16; (2) 12-16 | Cu crimp          | 8-16; (2) 12-16 | HET-AW-RLC-A           |
|                |                   | RLC-B             | X                  | —   | Cu crimp          | 8-16; (2) 12-16 | Cu crimp          | 6; (2) 10       | HET-AW-RLC-B           |
|                |                   | RLC-C             | X                  | —   | Cu crimp          | 8-16; (2) 12-16 | Cu crimp          | 4 str; (2) 8    | HET-AW-RLC-C           |
|                |                   | RLC-J             | X                  | —   | Cu crimp          | 8-16; (2) 12-16 | Cu setscrew       | 3-12            | HET-AW-RLC-J           |
|                |                   | RYC               | X                  | —   | Cu crimp          | 8-16; (2) 12-16 | Cu dual setscrew  | 2-12†           | HET-AW-RYC             |
|                |                   | RLA               | —                  | —   | Cu crimp          | 8-16; (2) 12-16 | Al setscrew       | 2-12            | —                      |
|                |                   | RYA               | —                  | —   | Cu crimp          | 8-16; (2) 12-16 | Al dual setscrew  | 2-12†           | —                      |
| HEB            | B                 | RLC-A             | X                  | —   | Cu crimp          | 6; (2) 10       | Cu crimp          | 8-16; (2) 12-16 | —                      |
|                |                   | RLC-B             | X                  | —   | Cu crimp          | 6; (2) 10       | Cu crimp          | 6; (2) 10       | HET-BW-RLC-B           |
|                |                   | RYC               | X                  | —   | Cu crimp          | 6; (2) 10       | Cu dual setscrew  | 2-12†           | —                      |
|                | J                 | RLC-J             | X                  | —   | Cu setscrew       | 3-12            | Cu setscrew       | 3-12            | HET-JW-RLC-J           |
|                |                   | RYC               | X                  | —   | Cu setscrew       | 3-12            | Cu dual setscrew  | 2-12†           | HET-JW-RYC             |
|                | K                 | RLC-J             | X                  | —   | Cu dual setscrew  | 2-12†           | Cu setscrew       | 3-12            | —                      |
|                |                   | RYC               | X                  | —   | Cu dual setscrew  | 2-12†           | Cu dual setscrew  | 2-12†           | —                      |
|                | L                 | RLA               | —                  | —   | Al setscrew       | 2-12            | Al setscrew       | 2-12            | —                      |
|                |                   | RLC-J             | —                  | —   | Al setscrew       | 2-12            | Cu setscrew       | 3-12            | —                      |
|                |                   | RYA               | —                  | —   | Al setscrew       | 2-12            | Al dual setscrew  | 2-12†           | —                      |

\* Solid/stranded conductors unless otherwise noted.

† Not dual wire rated. One wire per opening.

**To order:** specify catalog symbol HEB and the loadside terminal code plus the letter "W." Then select a lineside terminal code that is available with the loadside terminal. Example: HEB-BW-RCL-B defines a breakaway holder with a loadside copper crimp terminal for a single #6 or two #10 wires with a lineside copper crimp terminal for a single #6 or two #10 wires.

## Non-breakaway catalog number system

## HEB - A A

| Catalog symbol | Loadside terminal | Lineside terminal | Agency information |     | Loadside terminal |                 | Lineside terminal |                 | HET neutral equivalent |
|----------------|-------------------|-------------------|--------------------|-----|-------------------|-----------------|-------------------|-----------------|------------------------|
|                |                   |                   | UL                 | CSA | Terminal type     | AWG Wire range* | Terminal type     | AWG wire range* |                        |
| HEB            | A                 | A                 | X                  | X   | Cu crimp          | 8-16; (2) 12-16 | Cu crimp          | 8-16; (2) 12-16 | HET-AA                 |
|                |                   | B                 | X                  | X   | Cu crimp          | 8-16; (2) 12-16 | Cu crimp          | 6; (2) 10       | HET-AB                 |
|                |                   | C                 | X                  | X   | Cu crimp          | 8-16; (2) 12-16 | Cu crimp          | 4 str; (2) 8    | —                      |
|                |                   | D                 | X                  | X   | Cu crimp          | 8-16; (2) 12-16 | Cu crimp          | 2 str; (2) 6    | —                      |
|                |                   | J                 | X                  | —   | Cu crimp          | 8-16; (2) 12-16 | Cu setscrew       | 3-12            | —                      |
|                |                   | K                 | X                  | —   | Cu crimp          | 8-16; (2) 12-16 | Cu dual setscrew  | 2-12†           | —                      |
|                |                   | R                 | —                  | —   | Cu crimp          | 8-16; (2) 12-16 | Al crimp          | 1-2             | —                      |
|                |                   | L                 | —                  | —   | Cu crimp          | 8-16; (2) 12-16 | Al setscrew       | 2-12            | —                      |
|                |                   | W                 | —                  | —   | Cu crimp          | 8-16; (2) 12-16 | Cu solid          | —               | HET-AW                 |
|                | B                 | Y                 | —                  | —   | Cu crimp          | 8-16; (2) 12-16 | Al dual setscrew  | 2-12†           | —                      |
|                |                   | A                 | X                  | X   | Cu crimp          | 6; (2) 10       | Cu crimp          | 8-16; (2) 12-16 | —                      |
|                |                   | B                 | X                  | X   | Cu crimp          | 6; (2) 10       | Cu crimp          | 6; (2) 10       | HET-BB                 |
|                |                   | C                 | X                  | X   | Cu crimp          | 6; (2) 10       | Cu crimp          | 4 str; (2) 8    | —                      |
|                |                   | D                 | X                  | X   | Cu crimp          | 6; (2) 10       | Cu crimp          | 2 str; (2) 6    | —                      |
|                | C                 | W                 | —                  | —   | Cu crimp          | 6; (2) 10       | Cu solid          | —               | —                      |
|                |                   | C                 | X                  | X   | Cu crimp          | 4 str; (2) 8    | Cu crimp          | 4 str; (2) 8    | —                      |
|                |                   | D                 | X                  | X   | Cu crimp          | 2 str; (2) 6    | Cu crimp          | 2 str; (2) 6    | —                      |
|                | J                 | Z                 | A                  | —   | Cu crimp          | 18-20           | Cu crimp          | 8-16; (2) 12-16 | —                      |
|                |                   | J                 | X                  | —   | Cu setscrew       | 3-12            | Cu setscrew       | 3-12            | HET-JJ                 |
|                |                   | K                 | X                  | —   | Cu setscrew       | 3-12            | Cu dual setscrew  | 2-12†           | HET-JK                 |
|                |                   | L                 | —                  | —   | Cu setscrew       | 3-12            | Al setscrew       | 2-12            | —                      |
|                |                   | W                 | —                  | —   | Cu setscrew       | 3-12            | Cu solid          | —               | —                      |
|                |                   | Y                 | —                  | —   | Cu setscrew       | 3-12            | Al dual setscrew  | 2-12†           | —                      |
|                | L                 | L                 | —                  | —   | Al setscrew       | 2-12            | Al setscrew       | 2-12            | —                      |
|                | N                 | N                 | —                  | —   | Al crimp          | 6 sol; 8 str    | Al crimp          | 6 sol; 8 str    | —                      |
|                | P                 | P                 | —                  | X   | Al crimp          | 4 sol; 6 str    | Al crimp          | 4 sol; 6 str    | —                      |
|                | Q                 | Q                 | —                  | X   | Al crimp          | 2 sol; 3-4 str  | Al crimp          | 2 sol; 3-4 str  | —                      |
|                | R                 | R                 | —                  | X   | Al crimp          | 1-2 str         | Al crimp          | 1-2 str         | —                      |
|                | T                 | T                 | —                  | X   | Al crimp          | 1/0 str         | Al crimp          | 1/0 str         | —                      |
|                | W                 | W                 | —                  | —   | Cu solid          | —               | Cu solid          | —               | —                      |

\* Solid/stranded conductors unless otherwise noted.

† Not dual wire rated. One wire per opening.

**To order:** specify catalog symbol HEB and the loadside terminal code. Then select a lineside terminal code that is available with the loadside terminal. Example: HEB-BB defines a non-breakaway holder with a loadside copper crimp terminal for a single #6 or two #10 wires with a lineside copper crimp terminal for a single #6 or two #10 wires.

## Data sheet no. 2127

## HEZ waterproof single-pole breakaway and non-breakaway Class CC in-line holder

HEZ submersible, single-pole in-line rejection fuse holders are for UL Class CC fuses. They are available in non-breakaway and breakaway versions with terminal options to meet application needs. Breakaway versions come with insulating boots (for details, see HEB insulating boot information) to provide submersibility per UL IP67. The non-breakaway version requires ordering optional insulating boots for submersibility.



## Ratings

- Volts 600 V
- Amps up to 30 A limited by conductor size
- Withstand 200 kA RMS Sym.

## Data sheet no. 2130

8-54

BUSSMANN SERIES FULL LINE CATALOG 1007 — JUNE 2017

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## Agency information

- UL Listed, Guide IZLT, File E14853
- CSA Certified, Class 6225-01, File 47235
- RoHS compliant
- CE

| Catalog no.  | Type          | Terminal               | AWG range      |
|--------------|---------------|------------------------|----------------|
| HEZ-AA       | Non-breakaway | Line/load Cu crimp     | 8-16 (2) 12-16 |
| HEZ-AW-RLC-A | Breakaway     | Line/load Cu crimp     | 8-16 (2) 12-16 |
| HEZ-AW-RYC   |               | Line Cu crimp          | 8-16 (2) 12-16 |
|              |               | Load Cu dual setscrew† | 2-12           |

† Not dual wire rated, one wire per opening.

## HEX (13/32" x 1-1/2" supplemental) and HEY (Class CC) dual-pole breakaway and non-breakaway in-line holders

Breakaway and non-breakaway submersible, dual-pole in-line fuse holders available with terminal options to meet application needs. Breakaway versions come with insulating boots to provide submersibility per UL IP67. Non-breakaway versions require ordering optional insulating boots for submersibility.



### Ratings

Volts 600 V

Amps

- Up to 30 A limited by conductor size (UL)
- Up to 15 A limited by conductor size (CSA)

SCCR

- 200 kA RMS Sym.\*

\* Dependant upon fuse interrupting rating.

### Agency information

- HEX; UL Recognized, Guide IZLT2, File E14853, CSA Certified, Class 6225-01, File 47235, RoHS compliant\*\*, CE
- HEY; UL Listed, Guide IZLT, File E14853, CSA Certified, Class 6225-01, File 47235, RoHS compliant\*\*, CE

\*\*See terminal data for exceptions.

### Breakaway catalog number system

#### HE - A W - RYC

| Catalog symbol                    | Loadside terminal | Lineside terminal | Agency Information |     | Loadside terminal |                   | Lineside terminal |                   | HET neutral equivalent |
|-----------------------------------|-------------------|-------------------|--------------------|-----|-------------------|-------------------|-------------------|-------------------|------------------------|
|                                   |                   |                   | UL                 | CSA | Terminal type     | AWG wire range*   | Terminal type     | AWG wire range*   |                        |
| 13/32" x 1-1/2" supplemental fuse |                   |                   |                    |     |                   |                   |                   |                   |                        |
| HEX                               | A                 | DRLC-A            | X                  | X   | Cu crimp          | 8-16; (2) 12-16   | Cu crimp          | 8-16; (2) 12-16   | HET-AW_RLC-A           |
|                                   |                   | DRLC-B            | X                  | —   | Cu crimp          | 8-16; (2) 12-16   | Cu crimp          | 6; (2) 10         | HET-AW_RLC-B           |
|                                   | J                 | DRYC              | X                  | —   | Cu crimp          | 8-16; (2) 12-16   | Cu dual setscrew  | 2-12 <sup>†</sup> | HET-AW_RYC             |
|                                   |                   | DRYC              | X                  | —   | Cu setscrew       | 3-12              | Cu dual setscrew  | 2-12 <sup>†</sup> | HET-JW-RYC             |
|                                   |                   | DRYC              | X                  | —   | Cu dual setscrew  | 2-12 <sup>†</sup> | Cu dual setscrew  | 2-12 <sup>†</sup> | —                      |
| Class CC rejection fuse           |                   |                   |                    |     |                   |                   |                   |                   |                        |
| HEY                               | A                 | DRLC-A            | X                  | X   | Cu crimp          | 8-16; (2) 12-16   | Cu crimp          | 8-16; (2) 12-16   | HET-AW_RLC-A           |
|                                   |                   | DRLC-B            | X                  | —   | Cu crimp          | 8-16; (2) 12-16   | Cu crimp          | 6; (2) 10         | HET-AW_RLC-B           |
|                                   |                   | DRLC-J            | X                  | —   | Cu crimp          | 8-12; (2) 12-16   | Cu setscrew       | 3-12              | HET-AW_RLC-J           |
|                                   |                   | DRYC              | X                  | —   | Cu crimp          | 8-16; (2) 12-16   | Cu dual setscrew  | 2-12 <sup>†</sup> | HET-AW_RYC             |

\* Solid/stranded conductors unless otherwise noted.

† Not dual wire rated. One wire per opening.

**To order:** specify catalog symbol HEX and the loadside terminal code plus the letter "W." Then select a lineside terminal code that is available with the loadside terminal. Example: HEX-AW-DRCL-B defines a breakaway holder with a loadside copper crimp terminal for a single #8-16 or two #12-16 wires with a lineside copper crimp terminal for a single #6 or two #10 wires.

### Insulating boots

Two insulating boots come standard with the breakaway holder configurations. Insulating boots are not included as standard with non-breakaway holders. Two insulating boots must be ordered separately, if required, for each non-breakaway holder ordered. When insulating boots are utilized, extra heat retention requires that fuses are sized at a minimum of 200 percent of the RMS load current.

To order insulating boots for a non-breakaway HEB holder, use these catalog numbers.

| Catalog no. | Description      |
|-------------|------------------|
| 2A0660      | Single conductor |
| 2A0661      | Dual conductor   |

### Recommended crimping tools

This list is not intended to exclude the use of other crimping tools that can provide similar crimps or indents.

| HEB terminal  | T & B P/N (Die)     | HEB terminal | T & B P/N (Die)     |
|---------------|---------------------|--------------|---------------------|
| A             | WT-111M (C)         | D            | TBM5 (Brown)        |
|               | Sta-Kon ERG4002 (C) |              | TBM8 (Brown)        |
| B             | WT-115A (D)         |              | WT-115A (F)         |
| C             | TBM5 (Grey)         | Z            | WT-111M (A)         |
|               | WT-115A (E)         |              | Sta-Kon ERG4002 (A) |
| N, P, Q, R, T | TBM8 (Orange)       |              |                     |

### HET neutral

The HET holder is a single-pole in-line holder with a permanent, solid neutral for use along with the HEB holder to provide a means of conductor continuity. The HET holder is identified by a white, plastic coupling nut. Available HET holder counterparts to their HEB equivalents are listed in the following catalog number tables. See data sheet no. 2125 for details on the HET holder.



## Non-breakaway catalog number system

HE - A A

| Catalog symbol                    | Loadside terminal | Lineside terminal | Agency information |             | Loadside terminal |                  | Lineside terminal |                 | HET neutral equivalent |
|-----------------------------------|-------------------|-------------------|--------------------|-------------|-------------------|------------------|-------------------|-----------------|------------------------|
|                                   |                   |                   | UL                 | CSA         | Terminal type     | AWG Wire range*  | Terminal type     | AWG wire range* |                        |
| 13/32" x 1-1/2" supplemental fuse |                   |                   |                    |             |                   |                  |                   |                 |                        |
| HEX                               | A                 | A                 | X                  | X           | Cu crimp          | 8-16; (2) 12-16  | Cu crimp          | 8-16; (2) 12-16 | HET-AA                 |
|                                   |                   | B                 | X                  | X           | Cu crimp          | 8-16; (2) 12-16  | Cu crimp          | 6; (2) 10       | HET-AB                 |
|                                   |                   | C                 | X                  | X           | Cu crimp          | 8-16; (2) 12-16  | Cu crimp          | 4 str; (2) 8    | —                      |
|                                   |                   | D                 | X                  | X           | Cu crimp          | 8-16; (2) 12-16  | Cu crimp          | 2 str; (2) 6    | —                      |
|                                   |                   | E                 | X                  | X           | Cu crimp          | 8-16; (2) 12-16  | Cu crimp          | (2) 4           | —                      |
|                                   | B                 | B                 | X                  | X           | Cu crimp          | 6; (2) 10        | Cu crimp          | 6; (2) 10       | HET-BB                 |
|                                   | C                 | C                 | X                  | X           | Cu crimp          | 4 str; (2) 8     | Cu crimp          | 4 str; (2) 8    | —                      |
|                                   | J                 | J                 | X                  | —           | Cu setscrew       | 3-12             | Cu setscrew       | 3-12            | HET-JJ                 |
|                                   | K                 | X                 | —                  | Cu setscrew | 3-12              | Cu dual setscrew | 2-12†             | HET-JK          |                        |
| Class CC rejection fuse           |                   |                   |                    |             |                   |                  |                   |                 |                        |
| HEY                               | A                 | A                 | X                  | X           | Cu crimp          | 8-16; (2) 12-16  | Cu crimp          | 8-16; (2) 12-16 | HET-AA                 |
|                                   |                   | B                 | X                  | X           | Cu crimp          | 8-16; (2) 12-16  | Cu crimp          | 6; (2) 10       | HET-AB                 |
|                                   |                   | C                 | X                  | X           | Cu crimp          | 8-16; (2) 12-16  | Cu crimp          | 4 str; (2) 8    | —                      |
|                                   |                   | D                 | X                  | X           | Cu crimp          | 8-16; (2) 12-16  | Cu crimp          | 2 str; (2) 6    | —                      |
|                                   |                   | E                 | X                  | X           | Cu crimp          | 8-16; (2) 12-16  | Cu crimp          | (2) 4           | —                      |
|                                   | B                 | B                 | X                  | X           | Cu crimp          | 6; (2) 10        | Cu crimp          | 6; (2) 10       | HET-BB                 |
|                                   | J                 | J                 | X                  | —           | Cu setscrew       | 3-12             | Cu setscrew       | 3-12            | HET-JJ                 |

\* Solid/stranded conductors unless otherwise noted.

† Not dual wire rated. One wire per opening.

**To order:** specify catalog symbol HE\_ and the loadside terminal code. Then select a lineside terminal code that is available with the loadside terminal. Example: HEX-BB defines a non-breakaway holder with a loadside copper crimp terminal for a single #6 or two #10 wires with a lineside copper crimp terminal for a single #6 or two #10 wires.