Contents


| Fuse section | Volts | Amp range | Catalog symbol/size | Section page |
|---|---|---|---|---|
| **Compact high speed fuses** | | | | |
| **Fuses** | 500 Vac/dc | 50 to 400 | CHSF | 3 |
| **UL Class J full range drive fuse** | | | | |
| **Fuses** | 600 Vac/450 Vdc | 1 to 600 | DFJ | 4 |
| **North American fuses** | | | | |
| **Fuses** | 130 Vac/dc | 1000 to 4000 | FWA | 5 |
| | 150 Vac/dc | 70 to 1000 | FWA | 6 |
| | 250 Vac/dc | 35 to 2500 | FWX | 7 |
| | 500 Vac/dc | 35 to 1600 | FWH | 8 |
| | 600 Vac | 1 to 1000 | KAC | 9 |
| | 600 Vac | 35 to 800 | KBC | 10 |
| | 700 Vac/dc | 5 to 1200 | FWP | 11-12 |
| | 1000 Vac/800 Vdc | 35 to 2000 | FWJ | 13 |
| **Accessories** | Modular fuse blocks | | | 14 |
| **British Standard BS88 fuses** | | | | |
| **Fuses** | 240-250-280 Vac/150 Vdc | 6 to 180 | LCT, LET | 15 |
| | 240-250 Vac/150 Vdc | 160 to 900 | LMT, LMMT | 16 |
| | 690-700 Vac/500 Vdc | 6 to 200 | CT, ET, FE, EET and FEE | 17-18 |
| | 690-700 Vac/350-450-500 Vdc | 160 to 710 | FM, FMM, MT and MMT | 19-20 |
| **Accessories** | Trip indicators, clips and microswitches | | | 21 |


**Continued next page**



## Lead the charge with compact designs




Bussmann series 50-400 amp compact high speed fuses use **up to 48% less enclosure space**

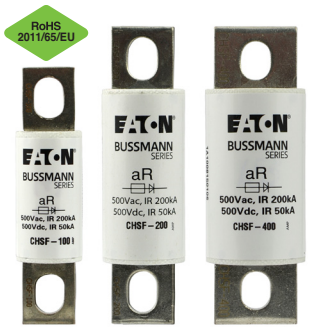
## Contents


| Fuse section | Volts | Amp range | Catalog symbol/size | Section page |
|---|---|---|---|---|
| **Ferrule fuses** | | | | |
| **Fuses** | 150 Vac/dc | 5 to 30 | FWA-_A10F (10x38mm) | 22 |
| | 150 Vac/dc | 35 to 60 | FWA-_A21F (21x51mm) | |
| | 250 Vac/dc | 1 to 50 | FWX (14x51mm) | 23 |
| | 500 Vac | 0.25 to 30 | FWH-_A6F (6x32mm) | 24 |
| | 500 Vac/dc | 1 to 30 | FWH-_14F (14x51mm) | 25 |
| | 600-700 Vac/700 Vdc | 1 to 32 | FWC (10x38mm) | 26 |
| | 690 Vac | 4 to 32 | FWP-_G10F (10x38mm) | 27 |
| | 690-700 Vac/600-700 Vdc | 1 to 50 | FWP-_A14F (14x51mm) | 28 |
| | 690 Vac | 4 to 50 | FWP-_G14F_ (14x51mm) | 29 |
| | 700 Vac/dc | 20 to 100 | FWP-_A22F (22x58mm) | 30 |
| | 690 Vac | 20 to 100 | FWP-_G22F_ (22x58mm) | 31 |
| | 750 Vdc | 5 to 30 | FWK-_A20F (20x127mm) | 32 |
| | 750 Vdc | 35-60 | FWK-_A25F (25x146mm) | |
| | 1000 Vac/800 Vdc | 20 to 30 | FWJ (14x67mm) | 33 |
| | 1200 Vac/1000 Vdc | 20 to 30 | FWL (20x127mm) | 34 |
| | 1400-2000 Vac/1000 Vdc | 2 to 15 | FWS (20x127mm) | 35 |
| **Accessories** | J70032 700 V panel mount block for FWP 14x51mm fuses | | | 36 |
| | JM70100 700 V DIN-Rail/panel mount modular blocks for FWP 22x58mm fuses | | | |
| | CHM modular holders for FWA and FWC 10x38mm fuses | | | |
| | CH14 modular holders for FWX, FWH and FWP 14x51mm fuses | | | 37 |
| | CH22 modular holders for FWP 22x58mm fuses | | | |
| **Square body fuses** | | | | |
| **DIN 43653** | 690-700 Vac/ 700 Vdc | 10 to 400 | 170M — size 000 and 00 | 38-39 |
| | 690-700 Vac | 40 to 2000 | 170M — size 1* to 3 | 40-41 |
| | 1000 Vac | 20 to 315 | 170M — size 00 | 42 |
| | 1000 Vac | 50 to 1400 | 170M — size 1* to 3 | 43-44 |
| | 1250-1300 Vac | 50 to 1400 | 170M — size 1* to 3 | 45-46 |
| **DIN 43620** | 690 Vac | 10 to 800 | 170M — size 00 to 3 | 47-48 |
| | 690-700 Vac | 10 to 1600 | 170M — size 000 to 3 dual indicator | 49-50 |
| | 1000 Vac | 20 to 225 | 170M — size 00 | 51 |
| **French style** | 690-700 Vac | 40 to 1600 | 170M — size 1* to 3 | 52-53 |
| **US style** | 690-700 Vac | 40 to 2000 | 170M — size 1* to 3 | 54-55 |
| | 1000 Vac | 50 to 1400 | 170M — size 1* to 3 | 56-57 |
| | 1250-1300 Vac | 50 to 1400 | 170M — size 1* to 3 | 58-59 |
| **Flush-end contact** | 690 Vac | 25 to 400 | 170M — size 00 | 60 |
| | 690-700 Vac | 40 to 2000 | 170M — size 1* to 3 | 61-62 |
| | 1000 Vac | 50 to 1400 | 170M — size 1* to 3 | 63-64 |
| | 1250-1300 Vac | 50 to 1400 | 170M — size 1* to 3 | 65-66 |
| | 690-700 Vac | 1000 to 4000 | 170M — size 4 | 67-68 |
| | 1000 Vac | 1000 to 3000 | 170M — size 4 | 69 |
| | 1250 Vac | 800 to 2500 | 170M — size 4 | 70 |
| | 660 Vac | 1000 to 4000 | 170M — size 23 | 71-72 |
| | 1250 Vac | 630 to 2800 | 170M — size 23 | 73 |
| | 690 Vac | 2000 to 7500 | 170M — size 24 | 74 |
| | 1000 Vac | 2000 to 5000 | 170M — size 24 | 75 |
| **Accessories** | Fixed center blocks for DIN 43653 fuses | | | 76-77 |
| | Indicators | | | 78 |
| | Microswitches | | | 78 |
| **IGBT fuses** | | | | |
| **Fuses** | 750-800 Vdc | 25 to 630 | 170M — size 000 and 230 | 79-80 |
| | 1000 Vdc | 25 to 500 | 170M — size 000 and 230 | 81-82 |

# CHSF — UL compact high speed fuse

## 500 Vac/dc (UL), 50 to 400 A

Bussmann™ series compact high speed fuses feature space-saving case sizes for protecting semiconductor devices up to 500 Vac/dc in ratings from 50 to 400 amps.




### Ratings

- Volts
  - 500 Vac/dc (UL)
- Amps 50-400 A
- Interrupting rating
  - Max AC – 200 kA
  - Min AC 400%
  - Max DC – 50 kA
  - Min DC 800%

### Operating class aR

### Agency information

- UL Recognized, Guide JFHR2, File E56412
- CSA Component Acceptance, Class 1422-30, File 53787
- IEC aR (self certified)
- RoHS compliant
- CE

### Features

- Requires up to 48% less enclosure space to help reduce the overall assembly size
- Innovative design allows for a significantly smaller package without compromising heat rise performance, preventing extensive equipment redesign
- Global acceptance with UL, CSA, IEC and RoHS for products sold worldwide
- Bolt-on design provides design flexibility for installation in fuse blocks or direct mounting on busbars
- Meets JASO D622 spec for thermal shock, humidity, and vibration
- Superior current cycling performance helps withstand demanding applications

### Recommended fuse blocks
### Up to 100 amps

| Catalog no. | AWG wire size | Stud size |
|---|---|---|
| BH-0111 | 14-2/0 Cu | 1/4-20 |
| BH-0112 | 14-2/0 Cu | 5/16-18 |
| BH-0121 | (2) 14-1/0 Cu | 1/4-20 |
| BH-0122 | (2) 14-1/0 Cu | 5/16-18 |
| 1BS101 | 14-2/0 Cu | 1/4-20 x 1/2 |
| See data sheet no. 1200 (BH-01_) and 1206 (1BS101) for details. | | |

### Up to 400 amps

| Catalog no. | AWG wire size | Stud size |
|---|---|---|
| BH-1131 | 6-250kcmil Cu | 1/4-20 |
| BH-1132 | 6-250kcmil Cu | 5/16-18 |
| 1BS102 | 6-250kcmil Cu | 1/4-20 x 1/2 |
| See data sheet no. 1201 (BH-11_) and 1207 (1BS102) for details. | | |

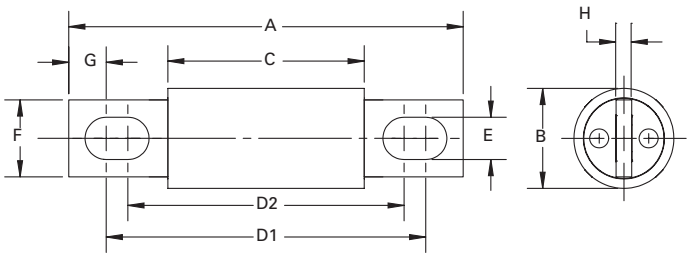


| | | | | | Watts loss / percent of rated current | |
|---|---|---|---|---|---|---|
| Catalog no. | Amps | AC/DC $I^2t$ ($A^2s$) pre-arcing | AC* $I^2t$ ($A^2s$) total clear | DC** $I^2t$ ($A^2s$) total clear | @ 80% | @ 50% |
| CHSF-50 | 50 | 304 | 1875 | 935 | 3.8 | 1.3 |
| CHSF-60 | 60 | 438 | 2700 | 1346 | 4.5 | 1.5 |
| CHSF-70 | 70 | 596 | 3675 | 1833 | 5.3 | 1.8 |
| CHSF-80 | 80 | 778 | 4800 | 2394 | 6.1 | 2.0 |
| CHSF-100 | 100 | 1216 | 7500 | 3740 | 7.6 | 2.5 |
| CHSF-125 | 125 | 2042 | 12,721 | 6465 | 12.0 | 3.6 |
| CHSF-150 | 150 | 2941 | 18,318 | 9309 | 14.3 | 4.3 |
| CHSF-175 | 175 | 4003 | 24,933 | 12,671 | 16.7 | 5.1 |
| CHSF-200 | 200 | 5228 | 32,566 | 16,550 | 19.1 | 5.8 |
| CHSF-225 | 225 | 6835 | 48,028 | 21,278 | 26.1 | 7.0 |
| CHSF-250 | 250 | 8438 | 59,293 | 26,270 | 29.0 | 7.8 |
| CHSF-300 | 300 | 12,151 | 85, 382 | 37,828 | 34.8 | 9.4 |
| CHSF-350 | 350 | 16,539 | 116,215 | 51,488 | 40.6 | 10.9 |
| CHSF-400 | 400 | 21,603 | 151,791 | 67,250 | 46.4 | 12.5 |

* @ 200 kA/500 Vac.
**@ 50 kA/500 Vdc.

### Dimensions — mm

| Amps | A | B | C | D1 | D2 | E | F | G | H |
|---|---|---|---|---|---|---|---|---|---|
| 50-100 | 81 | 20 | 40 | 61 | 57 | 8.7 | 16 | 7.7 | 3.2 |
| 125-200 | 92 | 25 | 53 | 77 | 68 | 8.7 | 19 | 7.8 | 3.2 |
| 225-400 | 92 | 30 | 53 | 74 | 68 | 8.7 | 25 | 9.0 | 4.8 |




**Data sheet no. 10414**

## DFJ — UL Class J full range high speed fuse

### 600 Vac/450 Vdc (UL), 1 to 600 A

UL Class J high speed, full range current-limiting fuses provide maximum protection for AC and DC drives and controllers. The UL Class J Bussmann series DFJ fuse has the lowest $I^2t$ of any branch circuit fuse to protect power semiconductor devices that utilize diodes, GTOs, SCRs and SSRs. The DFJ fuse combines the performance of high speed fuses in a full range Class J branch circuit package, allowing the use of readily available Class J fuse blocks, holders and switches. The DFJ uses standard Class J holders and blocks. See section 8 for available catalog numbers.

### Ratings

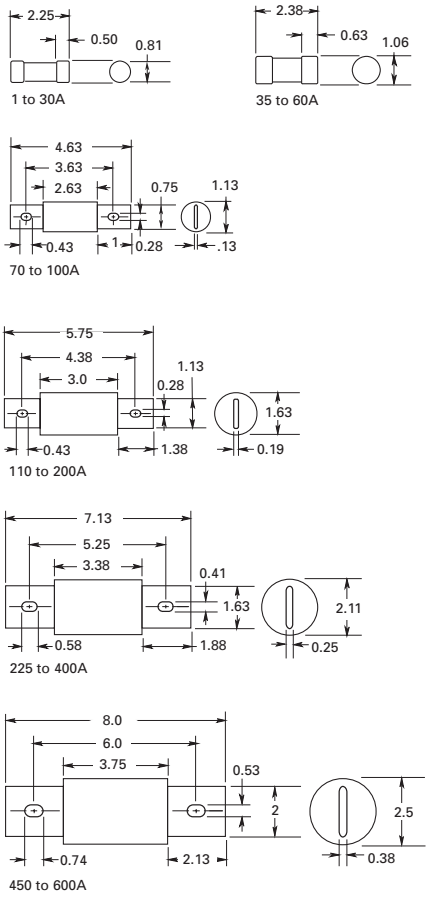
- Volts
  - 600 Vac (UL)
  - 450 Vdc (UL 15-600 A)
- Amps 1-600 A
- IR
  - 200 kA RMS Sym.
  - 100 kA DC

### Operating class aR

### Agency information

- UL Listed, Std 248-8, Class J, Guide JDDZ, File E4273
- CSA Certified, C22-2 No 248.8, Class 1422-02, File 53787

### Dimensions — in







| Catalog no. | Amps | $I^2t$ ($A^2Sec$) @ 600 Vac/100 kA Pre-arc | Clearing | Watts loss* |
|---|---|---|---|---|
| DFJ-1 | 1 | — | — | — |
| DFJ-2 | 2 | — | — | — |
| DFJ-3 | 3 | — | — | — |
| DFJ-4 | 4 | — | — | — |
| DFJ-5 | 5 | — | — | — |
| DFJ-6 | 6 | — | — | — |
| DFJ-8 | 8 | — | — | — |
| DFJ-10 | 10 | — | — | — |
| DFJ-12 | 12 | — | — | — |
| DFJ-15 | 15 | 4 | 110 | 4.1 |
| DFJ-17.5 | 17.5 | — | — | — |
| DFJ-20 | 20 | 8 | 365 | 4.0 |
| DFJ-25 | 25 | 12 | 610 | 4.9 |
| DFJ-30 | 30 | 20 | 1000 | 5.5 |
| DFJ-35 | 35 | 55 | 1100 | 6.8 |
| DFJ-40 | 40 | 90 | 1900 | 8.6 |
| DFJ-50 | 50 | 140 | 2800 | 8.7 |
| DFJ-60 | 60 | 290 | 6000 | 8.5 |
| DFJ-70 | 70 | 450 | 3100 | 12 |
| DFJ-80 | 80 | 650 | 4600 | 13 |
| DFJ-90 | 90 | 1010 | 7200 | 13 |
| DFJ-100 | 100 | 1460 | 10,500 | 13 |
| DFJ-110 | 110 | 1710 | 9500 | 17 |
| DFJ-125 | 125 | 3580 | 20,000 | 15 |
| DFJ-150 | 150 | 5080 | 28,000 | 19 |
| DFJ-175 | 175 | 6310 | 35,000 | 23 |
| DFJ-200 | 200 | 9850 | 54,500 | 24 |
| DFJ-225 | 225 | 11,420 | 51,000 | 29 |
| DFJ-250 | 250 | 17,000 | 74,500 | 30 |
| DFJ-300 | 300 | 23,500 | 103,000 | 36 |
| DFJ-350 | 350 | 38,800 | 170,000 | 39 |
| DFJ-400 | 400 | 62,200 | 272,000 | 40 |
| DFJ-450 | 450 | 44,600 | 270,000 | 56 |
| DFJ-500 | 500 | 79,500 | 480,000 | 52 |
| DFJ-600 | 600 | 138,000 | 830,000 | 57 |

* Watts loss at rated current.

**Data sheet no. 1048**

## FWA — North American

### 130 Vac/dc (UL), 1000 to 4000 A




North American style flush-end high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.

### Ratings

- Volts 130 Vac/dc
- Amps 1000-4000 A
- IR
  - 200 kA RMS Sym at 130 Vac
  - 50 kA at 130 Vdc

### Agency information

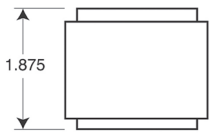
- UL Recognized, JFHR2, E91958 on 1000-2000 A fuses
- CE



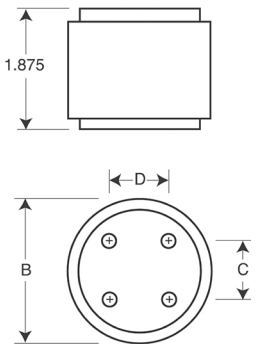
| | | $I^2t$ ($A^2s$) | | | |
|---|---|---|---|---|---|
| **Rated voltage** | **Rated current (amps)** | **Pre-arcing** | **Clearing at 130 Vac** | **Watts loss (W)*** | **Catalog no.** |
| 130 Vac/dc (UL) | 1000 | 170,000 | 460,000 | 60 | FWA-1000AH |
| | 1200 | 270,000 | 730,000 | 70 | FWA-1200AH |
| | 1500 | 520,000 | 1,400,000 | 78 | FWA-1500AH |
| | 2000 | 860,000 | 2,400,000 | 108 | FWA-2000AH |
| | 2500 | 1,500,000 | 4,100,000 | 130 | FWA-2500AH |
| | 3000 | 2,100,000 | 5,700,000 | 150 | FWA-3000AH |
| | 4000 | 3,400,000 | 9,200,000 | 257 | FWA-4000AH |

* Watts loss at rated current.

### Dimensions — in




**1000-3000 A**




**4000 A**

| Amps | B | C | D | Thread / depth |
|---|---|---|---|---|
| 1000 to 2000 | 2.0 | 1.0 | — | 3/8-24 x 1/2" UNF |
| 2500 to 3000 | 3.0 | 1.5 | — | 1/2-20 x 1/2" UNF |
| 4000 | 3.5 | 1.5 | 1.5 | 1/2-20 x 1/2" UNF |

1" = 25.4mm

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720001, 5785301

## FWA — North American

### 150 Vac/dc (UL), 70 to 1000 A



North American style bolted tag high speed fuses used for the protection of DC common bus, DC drives, power converters / rectifiers and reduced rated voltage starters.

### Ratings

- Volts
  - 150 Vac/dc (UL)
  - 80 Vdc 1000 A only
- Amps 70-1000 A
- IR
  - 100 kA RMS Sym. (70-400 A)
  - 200 kA RMS Sym. (450-1000 A)
  - 20 kA at 150 Vac/ Vdc (70-800 A)
  - 100 kA at 80 Vdc (70-1000 A)

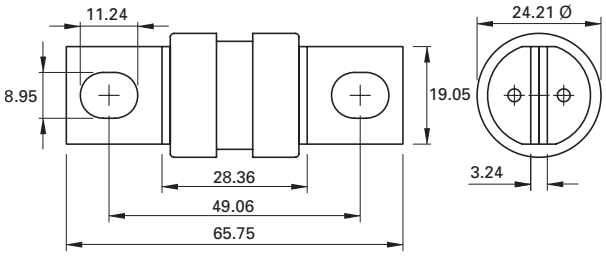
### Agency information

- UL Recognized JFHR2, E91958
- CE

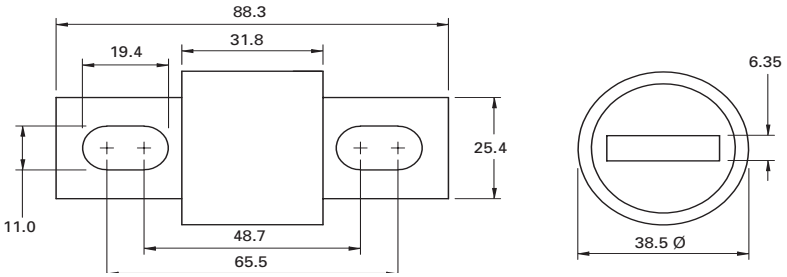
| Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at 150 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|
| 150 Vac/dc (UL) | 70 | 470 | 4000 | 6.9 | FWA-70B |
| | 80 | 670 | 6000 | 7.7 | FWA-80B |
| | 100 | 1200 | 12,000 | 9.0 | FWA-100B |
| | 125 | 1870 | 18,000 | 11.2 | FWA-125B |
| | 150 | 2700 | 26,000 | 13.5 | FWA-150B |
| | 200 | 4780 | 45,000 | 17.6 | FWA-200B |
| | 250 | 7470 | 70,000 | 22.5 | FWA-250B |
| | 300 | 10,760 | 100,000 | 27.0 | FWA-300B |
| | 350 | 15,700 | 140,000 | 30.6 | FWA-350B |
| | 400 | 20,300 | 180,000 | 35.2 | FWA-400B |
| | 500 | 39,000 | 120,000 | 35.0 | FWA-500A |
| | 600 | 46,000 | 140,000 | 47.0 | FWA-600A |
| | 700 | 75,000 | 220,000 | 49.0 | FWA-700A |
| | 800 | 92,000 | 280,000 | 58.0 | FWA-800A |
| 80 Vdc | 1000 | 170,000 | 510,000 | 60.0 | FWA-1000A |

* Watts loss at rated current.

### Dimensions — mm




**70-400 A**




**500-1000 A**

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720002, 5785310

# FWX — North American

## 250 Vac/dc (UL), 35 to 2500 A

North American style bolted tags and flush-end high speed fuses for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters.

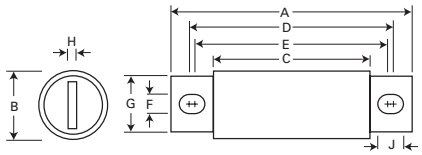
### Ratings

- Volts 250 Vac/dc (UL)
- Amps 35-2500 A
- IR
  - 200 kA RMS Sym.
  - 20 kA at 250 Vdc (35-800 A)

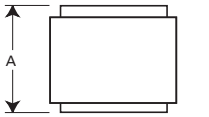
### Agency information

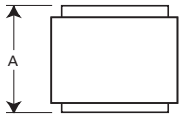
- UL Recognized, JFHR2, E56412
- CSA Class 1422-30, (53787) on 35-800 A fuses (20 kA IR at 250 Vdc)
- CE

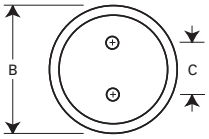
### Dimensions — in



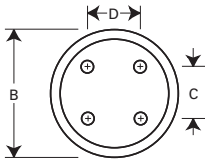

**35-800 A**




**1000-1200 A**




**1500-2500 A**

| Amp range | A | B | C | D | E | F | G | H | J | Thread / depth |
|---|---|---|---|---|---|---|---|---|---|---|
| 35-60 | 3.19 | 0.81 | 1.59 | 2.59 | 2.25 | 0.34 | 0.63 | 0.13 | 0.52 | — |
| 70-200 | 3.13 | 1.22 | 1.59 | 2.44 | 2.19 | 0.34 | 1.00 | 0.19 | 0.47 | — |
| 225-600 | 3.84 | 1.50 | 1.59 | 2.94 | 2.25 | 0.41 | 1.00 | 0.25 | 0.75 | — |
| 700-800 | 3.84 | 2.00 | 1.59 | 3.03 | 2.28 | 0.41 | 1.50 | 0.25 | 0.78 | — |
| 1000-1200 | 2.59 | 3.00 | 1.50 | — | — | — | — | — | — | 3/8-24 x 1/2" UNF |
| 1500-2500 | 2.59 | 3.50 | 1.50 | 1.50 | — | — | — | — | — | |

1" = 25.4mm




| Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 250 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|
| 250 Vac/dc (UL) | 35 | 50 | 230 | 4.2 | FWX-35A |
| | 40 | 60 | 310 | 5.2 | FWX-40A |
| | 45 | 80 | 390 | 5.7 | FWX-45A |
| | 50 | 100 | 520 | 6.0 | FWX-50A |
| | 60 | 140 | 740 | 8.1 | FWX-60A |
| | 70 | 330 | 1400 | 7.2 | FWX-70A |
| | 80 | 430 | 1850 | 8.1 | FWX-80A |
| | 90 | 570 | 2450 | 9.0 | FWX-90A |
| | 100 | 740 | 3150 | 10.0 | FWX-100A |
| | 125 | 1130 | 4850 | 12.5 | FWX-125A |
| | 150 | 1620 | 6950 | 15.7 | FWX-150A |
| | 175 | 2170 | 9300 | 18.5 | FWX-175A |
| | 200 | 2790 | 12,000 | 22.0 | FWX-200A |
| | 225 | 3210 | 14,700 | 24.0 | FWX-225A |
| | 250 | 3960 | 18,100 | 27.0 | FWX-250A |
| | 275 | 4720 | 21,600 | 31.0 | FWX-275A |
| | 300 | 6000 | 27,300 | 32.0 | FWX-300A |
| | 350 | 10,600 | 48,600 | 39.0 | FWX-350A |
| | 400 | 14,500 | 66,100 | 44.0 | FWX-400A |
| | 450 | 22,100 | 101,000 | 49.0 | FWX-450A |
| | 500 | 28,000 | 128,000 | 54.0 | FWX-500A |
| | 600 | 41,100 | 188,000 | 62.0 | FWX-600A |
| | 700 | 48,800 | 190,000 | 72.0 | FWX-700A |
| | 800 | 59,000 | 230,000 | 84.0 | FWX-800A |
| | 1000 | 44,000 | 360,000 | 100.0 | FWX-1000AH |
| | 1200 | 92,000 | 750,000 | 103.0 | FWX-1200AH |
| | 1500 | 120,000 | 880,000 | 140.0 | FWX-1500AH |
| | 1600 | 160,000 | 1,200,000 | 140.0 | FWX-1600AH |
| | 2000 | 320,000 | 2,300,000 | 151.0 | FWX-2000AH |
| | 2500 | 670,000 | 4,700,000 | 163.0 | FWX-2500AH |

* Watts loss at rated current.



For details on electrical characteristics, contact Application Engineering and ask for data sheets:720005, 359 (35-800 A), 5785299 (100-2500 A)

## FWH — North American

### 500 Vac/dc (UL), 35 to 1600 A



North American style bolted tags high speed fuses, for the protection of DC common bus, power converters/rectifiers and reduced rated voltage starters.

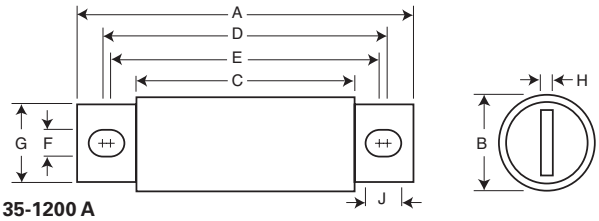
### Ratings

- Volts
  - 500 Vac (UL)
  - 500 Vdc (35-800 A only)
- Amps 35-1600 A
- IR
  - 200 kA RMS Sym.
  - 50 kA at 500 Vdc

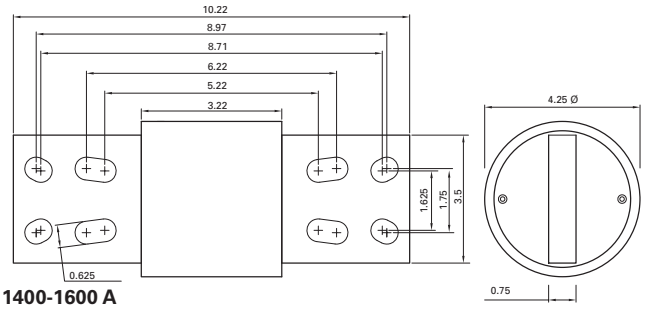
### Agency information

- UL Recognized, JFHR2, E91958, FWH-_B (35-200 A) and FWH-_A (1000 and 1200 A), JFHR2, E56412 FWH-_A (225-800 A)
- CSA Class 1422-30, File 53787 (35-1600 A)
- CE

### Dimensions — in




35-1200 A




1400-1600 A

| Amp range | A | B | C | D | E | F | G | H | J |
|---|---|---|---|---|---|---|---|---|---|
| 35-60 | 3.19 | 0.81 | 1.59 | 2.54 | 2.19 | 0.34 | 0.72 | 0.13 | 0.52 |
| 70-100 | 3.62 | 0.95 | 1.74 | 2.85 | 2.81 | 0.35 | 0.75 | 0.13 | 0.38 |
| 125-200 | 3.62 | 1.16 | 1.84 | 2.89 | 2.77 | 0.34 | 1.00 | 0.19 | 0.41 |
| 225-400 | 4.34 | 1.50 | 2.09 | 3.44 | 2.75 | 0.41 | 1.00 | 0.25 | 0.75 |
| 450-600 | 4.34 | 2.00 | 2.09 | 3.53 | 2.78 | 0.41 | 1.50 | 0.25 | 0.78 |
| 700-800 | 6.34 | 2.50 | 2.09 | 4.97 | 3.44 | 0.53 | 2.00 | 0.38 | 1.30 |
| 1000-1200 | 6.97 | 3.00 | 3.22 | 5.47 | 4.48 | 0.62 | 2.38 | 0.44 | 1.12 |
| 1400-1600 | Refer to drawing | | | | | | | | |

1" = 25.4mm

| Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 250 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|
| 500 Vac/dc (UL) | 35 | 34 | 150 | 8.0 | FWH-35B |
| | 40 | 76 | 320 | 7.5 | FWH-40B |
| | 45 | 105 | 450 | 7.5 | FWH-45B |
| | 50 | 135 | 670 | 7.5 | FWH-50B |
| | 60 | 210 | 900 | 9.9 | FWH-60B |
| | 70 | 210 | 900 | 10.6 | FWH-70B |
| | 80 | 305 | 1400 | 12.7 | FWH-80B |
| | 90 | 360 | 1600 | 15.0 | FWH-90B |
| | 100 | 475 | 2000 | 17.0 | FWH-100B |
| | 125 | 800 | 3500 | 25.0 | FWH-125B |
| | 150 | 1100 | 4600 | 30.0 | FWH-150B |
| | 175 | 1450 | 6200 | 35.0 | FWH-175B |
| | 200 | 1900 | 8500 | 40.0 | FWH-200B |
| 500 Vac/dc (UL) | 225 | 4600 | 23,300 | 39.0 | FWH-225A |
| | 250 | 6300 | 32,200 | 41.0 | FWH-250A |
| | 275 | 7900 | 40,300 | 46.0 | FWH-275A |
| | 300 | 9800 | 49,800 | 51.0 | FWH-300A |
| | 325 | 13,700 | 63,800 | 53.0 | FWH-325A |
| | 350 | 14,500 | 72,900 | 58.0 | FWH-350A |
| | 400 | 19,200 | 96,700 | 65.0 | FWH-400A |
| | 450 | 24,700 | 127,000 | 74.0 | FWH-450A |
| | 500 | 29,200 | 149,000 | 84.0 | FWH-500A |
| | 600 | 41,300 | 206,000 | 108.0 | FWH-600A |
| | 700 | 55,000 | 298,000 | 120.0 | FWH-700A |
| | 800 | 76,200 | 409,000 | 129.0 | FWH-800A |
| 500 Vac (UL) | 1000 | 92,000 | 450,000 | 145.0 | FWH-1000A |
| | 1200 | 122,000 | 600,000 | 180.0 | FWH-1200A |
| | 1400 | 200,000 | 1,000,000 | 210.0 | FWH-1400A |
| | 1600 | 290,000 | 1,400,000 | 230.0 | FWH-1600A |

* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720007, 360 (225-800 A), 5785304 (35-200 A, 1000-1600 A)

# KAC — North American

## 600 Vac (UL), 1 to 1000 A

North American style bolted tags high speed fuses. These fuses are supplied as replacements only. For new installations, Eaton recommends the 700 V FWP. See page 4-11.




### Ratings

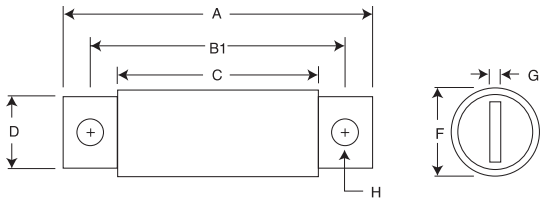
- Volts 600 Vac
- Amps 1-1000 A
- IR 200 kA RMS Sym.

### Agency information

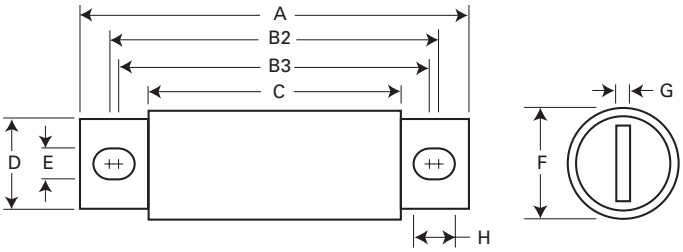
- UL Recognized, JFHR2, E56413 (1-600 A only)
- CE

| Rated voltage | Rated current (amps) | Catalog no. |
|---|---|---|
| 600 Vac (UL) | 1 | KAC-1 |
| | 2 | KAC-2 |
| | 3 | KAC-3 |
| | 4 | KAC-4 |
| | 5 | KAC-5 |
| | 6 | KAC-6 |
| | 7 | KAC-7 |
| | 8 | KAC-8 |
| | 9 | KAC-9 |
| | 10 | KAC-10 |
| | 12 | KAC-12 |
| | 15 | KAC-15 |
| | 17.5 | KAC-17.5 |
| | 20 | KAC-20 |
| | 25 | KAC-25 |
| | 30 | KAC-30 |
| | 35 | KAC-35 |
| | 40 | KAC-40 |
| | 45 | KAC-45 |
| | 50 | KAC-50 |
| | 60 | KAC-60 |
| | 70 | KAC-70 |
| | 80 | KAC-80 |
| | 90 | KAC-90 |
| | 100 | KAC-100 |
| | 110 | KAC-110 |
| | 125 | KAC-125 |
| | 150 | KAC-150 |
| | 175 | KAC-175 |
| | 200 | KAC-200 |
| | 225 | KAC-225 |
| | 250 | KAC-250 |
| | 300 | KAC-300 |
| | 350 | KAC-350 |
| | 400 | KAC-400 |
| | 450 | KAC-450 |
| | 500 | KAC-500 |
| | 600 | KAC-600 |
| | 700 | KAC-700 |
| | 800 | KAC-800 |
| | 1000 | KAC-1000 |

### Dimensions — in




**1-30 A and 450-1000 A**




**35-400 A**

| Rated current (amps) | A | B1 | B2 | B3 | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|---|---|
| 1-30 | 2.88 | 2.50 | — | — | 1.88 | 0.41 | — | 0.56 | 0.06 | 0.26 |
| 35-60 | 4.38 | — | 3.75 | 3.50 | 2.75 | 0.63 | 0.34 | 0.81 | 0.09 | 0.47 |
| 70-100 | 5.00 | — | 4.06 | 3.66 | 2.75 | 0.75 | 0.41 | 1.00 | 0.13 | 0.61 |
| 110-200 | 5.14 | — | 4.39 | 3.77 | 2.91 | 1.00 | 0.41 | 1.50 | 0.19 | 0.72 |
| 225-400 | 6.18 | — | 4.82 | 4.57 | 3.00 | 1.63 | 0.56 | 2.00 | 0.25 | 0.69 |
| 450-800 | 6.25 | 4.75 | — | | 3.06 | 2.00 | — | 2.50 | 0.25 | 0.56 |
| 1000 | 7.25 | 4.75 | — | | 3.06 | 2.75 | — | 3.50 | 0.38 | 0.56 |

1" = 25.4mm

## KBC — North American

### 600 Vac (UL), 35 to 800 A




North American style bolted tags and flush-end high speed fuses. These fuses are supplied as replacements only. For new installations, Eaton recommends the 700 V FWP fuses. See page 4-11.

### Ratings

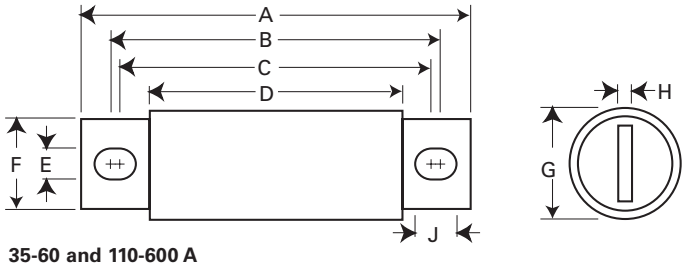
- Volts 600 Vac (UL)
- Amps 35-800 A
- IR 200 kA RMS Sym.

### Agency information

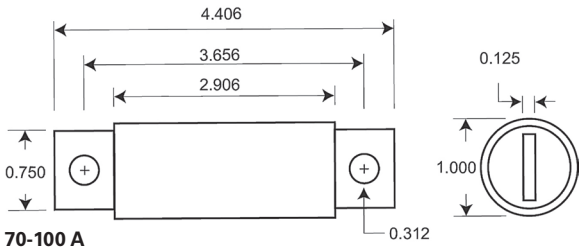
- UL Recognized, JFHR2, E56412 (35-600 A only)
- CE

| Rated voltage | Rated current (amps) | Catalog no. |
|---|---|---|
| 600 Vac (UL) | 35 | KBC-35 |
| | 40 | KBC-40 |
| | 45 | KBC-45 |
| | 50 | KBC-50 |
| | 60 | KBC-60 |
| | 70 | KBC-70 |
| | 80 | KBC-80 |
| | 90 | KBC-90 |
| | 100 | KBC-100 |
| | 110 | KBC-110 |
| | 125 | KBC-125 |
| | 150 | KBC-150 |
| | 175 | KBC-175 |
| | 200 | KBC-200 |
| | 225 | KBC-225 |
| | 250 | KBC-250 |
| | 300 | KBC-300 |
| | 350 | KBC-350 |
| | 400 | KBC-400 |
| | 450 | KBC-450 |
| | 500 | KBC-500 |
| | 600 | KBC-600 |
| | 800 | KBC-800 |

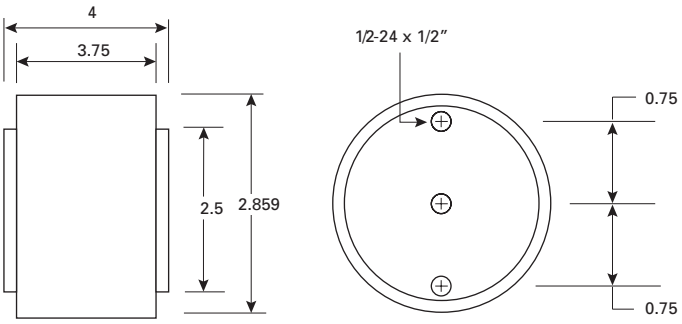
### Dimensions — in




**35-60 and 110-600 A**




**70-100 A**




**800 A**

| Rated current (amps) | A | B | C | D | E | F | G | H | J |
|---|---|---|---|---|---|---|---|---|---|
| 35-60 | 4.38 | 3.75 | 3.50 | 2.75 | 0.34 | 0.63 | 0.81 | 0.09 | 0.47 |
| 70-100 | Refer to drawing | | | | | | | | |
| 110-200 | 4.41 | 3.72 | 3.59 | 2.91 | 0.31 | 0.88 | 1.22 | 0.19 | 0.38 |
| 225-400 | 5.13 | 4.19 | 3.56 | 2.91 | 0.41 | 1.00 | 1.50 | 0.25 | 0.72 |
| 450-600 | 5.13 | 4.39 | 3.69 | 2.88 | 0.41 | 1.50 | 2.00 | 0.25 | 0.76 |
| 800 | Refer to drawing | | | | | | | | |

1" = 25.4mm

**Data sheet no. 720010**

## FWP — North American

### 700 Vac/dc (UL), 5 to 1200 A




North American style bolted tags high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers, reduced rated voltage starters.

### Ratings

- Volts 700 Vac/dc (UL)
- Amps 5-1200 A
- IR
  - 200 kA RMS Sym.
  - 50 kA at 700 Vdc (Type A)
  - 50 kA at 500 Vdc (Type B)

### Agency information

- UL Recognized, JFHR2, E91958 FWP-_B (5-100 A, 700-1200 A), JFHR2, E56412 FWP-_A (125-600 A)
- CSA Class 1422-30, (53787) on 5-800 A
- CE



| Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at 700 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|
| 700 Vac/dc (UL) | 5 | 1.6 | 11 | 1.5 | FWP-5B |
| | 10 | 3.6 | 22 | 4.0 | FWP-10B |
| | 15 | 10.0 | 70 | 5.5 | FWP-15B |
| | 20 | 26.0 | 180 | 6.0 | FWP-20B |
| | 25 | 44.0 | 320 | 7.0 | FWP-25B |
| | 30 | 58.0 | 450 | 9.0 | FWP-30B |
| | 35 | 34.0 | 160 | 12.0 | FWP-35B |
| | 40 | 76.0 | 320 | 12.0 | FWP-40B |
| | 50 | 135.0 | 600 | 12.0 | FWP-50B |
| | 60 | 210.0 | 950 | 15.5 | FWP-60B |
| | 70 | 305.0 | 2000 | 18.0 | FWP-70B |
| | 80 | 360.0 | 2400 | 21.0 | FWP-80B |
| | 90 | 415.0 | 2700 | 25.0 | FWP-90B |
| | 100 | 540.0 | 3500 | 27.0 | FWP-100B |
| | 125 | 1800.0 | 7300 | 28.0 | FWP-125A |
| | 150 | 2900.0 | 11,700 | 32.0 | FWP-150A |
| | 175 | 4200.0 | 16,700 | 35.0 | FWP-175A |
| | 200 | 5500.0 | 22,000 | 43.0 | FWP-200A |
| | 225 | 7700.0 | 31,300 | 45.0 | FWP-225A |
| | 250 | 10,500.0 | 42,500 | 48.0 | FWP-250A |
| | 300 | 17,600.0 | 71,200 | 58.0 | FWP-300A |
| | 350 | 23,700.0 | 95,600 | 65.0 | FWP-350A |
| | 400 | 31,000.0 | 125,000 | 78.0 | FWP-400A |
| | 450 | 36,400.0 | 137,000 | 94.0 | FWP-450A |
| | 500 | 45,200.0 | 170,000 | 107.0 | FWP-500A |
| | 600 | 66,700.0 | 250,000 | 122.0 | FWP-600A |
| | 700 | 54,000.0 | 300,000 | 125.0 | FWP-700A |
| | 800 | 78,000.0 | 450,000 | 140.0 | FWP-800A |
| | 900 | 91,500.0 | 530,000 | 150.0 | FWP-900A |
| | 1000 | 120,000.0 | 600,000 | 170.0 | FWP-1000A |
| | 1200 | 195,000.0 | 1,100,000 | 190.0 | FWP-1200A |

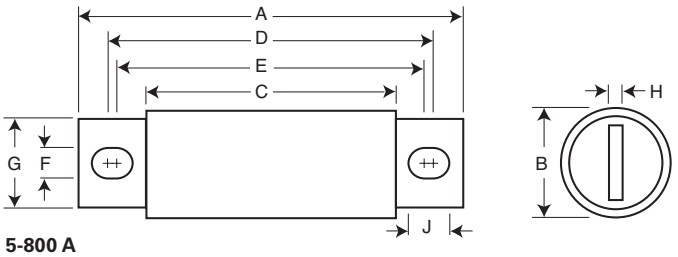
* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720012, 5785316 (5-30 A), 361 (125-600 A), 5785308 (35-100 A, 700-1200 A)

## FWP — North American

### 700 Vac/dc (UL), 5 to 1200 A

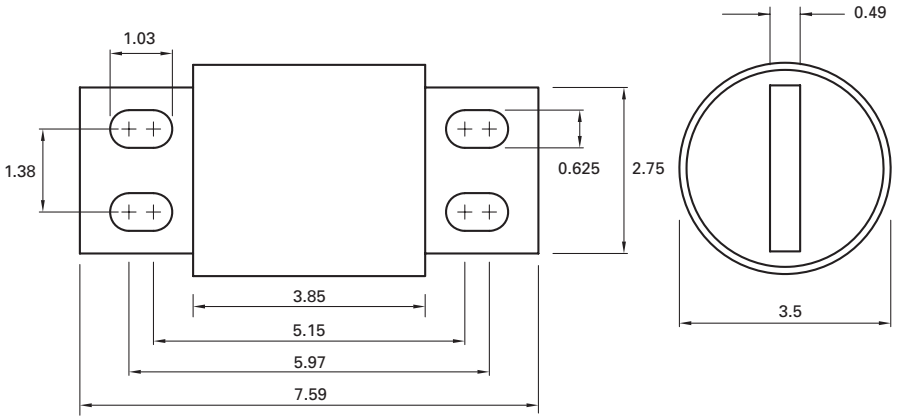
#### Dimensions — in



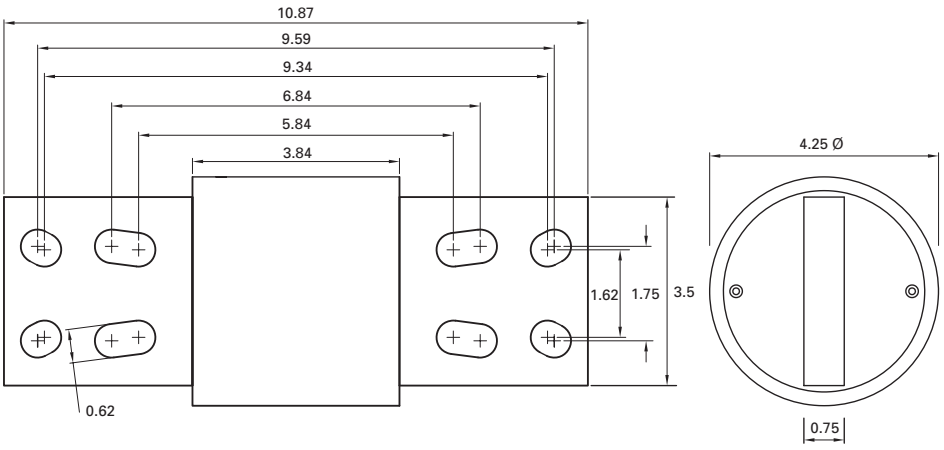

**5-800 A**

| Amp range | A | B | C | D | E | F | G | H | J |
|---|---|---|---|---|---|---|---|---|---|
| 5-30 | 2.87 | 0.56 | 1.86 | 2.48 | 2.48 | 0.25 | 0.41 | 0.06 | 0.25 |
| 35-60 | 4.38 | 0.81 | 2.75 | 3.71 | 3.31 | 0.34 | 0.73 | 0.13 | 0.54 |
| 70-100 | 4.41 | 0.95 | 2.59 | 3.63 | 3.56 | 0.34 | 0.75 | 0.13 | 0.38 |
| 125-200 | 5.09 | 1.50 | 2.84 | 4.19 | 3.5 | 0.41 | 1.00 | 0.25 | 0.75 |
| 225-400 | 5.09 | 2.00 | 2.84 | 4.28 | 3.53 | 0.41 | 1.50 | 0.25 | 0.78 |
| 450-600 | 7.09 | 2.50 | 2.84 | 5.72 | 4.19 | 0.53 | 2.00 | 0.38 | 1.30 |
| 700-800 | 6.63 | 2.00 | 2.76 | 5.56 | 5.06 | 0.63 | 1.50 | 0.25 | 0.88 |
| 900-1000 | Refer to drawing | | | | | | | | |
| 1200 | | | | | | | | | |

1" = 25.4mm




**900-1000 A -mm**



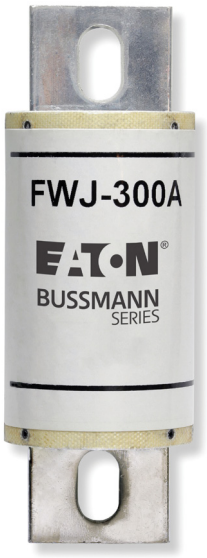

**1200 A -mm**

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720012, 5785316 (5-30 A), 361 (125-600 A), 5785308 (35-100 A, 700-1200 A)

# FWJ — North American

## 1000 Vac /800 Vdc (UL), 35 to 2000 A

North American style bolted tags high speed fuses for the protection of DC common bus, DC drives power converters/rectifiers, reduced rated voltage starters.




### Ratings

- Volts
  - 1000 Vac
  - 800 Vdc
- Amps 35-2000 A
- IR
  - 25 kA RMS Sym. (35-200 A)
  - 100 kA RMS Sym. (250-2000 A)
  - 50 kA at 800 Vdc (35-200 A and 450-600 A)

### Agency information

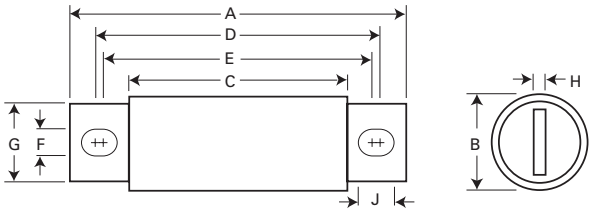
- UL Recognized, JFHR8, E91958 on 50-600 A only
- CE



| Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|
| 1000 Vac/ 800 Vdc (UL) | 35 | 210 | 2000 | 7 | FWJ-35A |
| | 40 | 300 | 2500 | 8 | FWJ-40A |
| | 50 | 470 | 3500 | 10 | FWJ-50A |
| | 60 | 670 | 5000 | 11 | FWJ-60A |
| | 70 | 1100 | 6900 | 12 | FWJ-70A |
| | 80 | 1550 | 9700 | 13 | FWJ-80A |
| | 90 | 1900 | 12,000 | 14 | FWJ-90A |
| | 100 | 2800 | 17,500 | 15 | FWJ-100A |
| | 125 | 4800 | 35,000 | 16 | FWJ-125A |
| | 150 | 6300 | 45,000 | 25 | FWJ-150A |
| | 175 | 7500 | 65,000 | 30 | FWJ-175A |
| | 200 | 11,700 | 80,000 | 32 | FWJ-200A |
| | 250 | 16,000 | 112,000 | 50 | FWJ-250A |
| | 300 | 23,500 | 164,000 | 56 | FWJ-300A |
| | 350 | 33,000 | 231,000 | 62 | FWJ-350A |
| | 400 | 47,000 | 330,000 | 67 | FWJ-400A |
| | 500 | 39,500 | 329,000 | 95 | FWJ-500A |
| | 600 | 61,000 | 520,000 | 105 | FWJ-600A |
| | 800 | 87,000 | 500,000 | 182 | FWJ-800A |
| | 1000 | 190,000 | 1,100,000 | 206 | FWJ-1000A |
| | 1200 | 370,000 | 2,100,000 | 240 | FWJ-1200A |
| | 1400 | 470,000 | 2,700,000 | 248 | FWJ-1400A |
| | 1600 | 700,000 | 4,000,000 | 267 | FWJ-1600A |
| | 1800 | 925,000 | 5,300,000 | 239 | FWJ-1800A |
| | 2000 | 1,330,000 | 7,600,000 | 244 | FWJ-2000A |

* Watts loss at rated current.

**Dimensions — in**




| Amp range | A | B | C | D | E | F | G | H | J |
|---|---|---|---|---|---|---|---|---|---|
| 35-60 | 5.00 | 0.94 | 3.11 | 4.24 | 4.18 | 0.35 | 0.75 | 0.13 | 0.38 |
| 70-100 | 4.93 | 1.13 | 3.09 | 4.27 | 4.16 | 0.35 | 1.00 | 0.19 | 0.41 |
| 125-200 | 5.69 | 1.53 | 3.26 | 4.80 | 4.06 | 0.45 | 1.00 | 0.25 | 0.82 |
| 250-400 | 5.77 | 2.00 | 3.50 | 4.81 | 4.15 | 0.43 | 1.50 | 0.25 | 0.76 |
| 500-600 | 7.20 | 2.50 | 3.47 | 5.98 | 4.71 | 0.56 | 2.00 | 0.38 | 1.20 |
| 800-2000 | 6.81 | 3.50 | 3.31 | 5.47 | 4.96 | 0.63 | 2.75 | 0.50 | 0.88 |

1" = 25.4mm

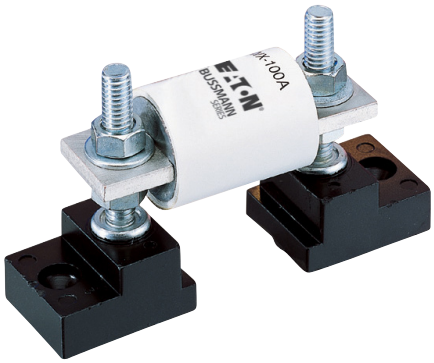
For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720027, 5785303 (35-600 A), 5785309 (800-2000 A),

## North American Accessories

### Modular fuse blocks

Bussmann series line of fuse blocks provides the user with design and manufacturing flexibility. Two identical half blocks make up a modular assembly that can be panel mounted any distance apart to accommodate any length fuse.

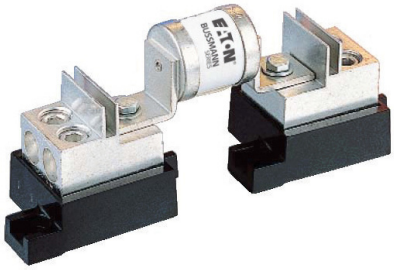
### C5268 stud type



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 installation labor. 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 | 200 | 5/16-18 x 1-3/4" |
| C5268-3 | 200 | 5/16-18 x 3/4" |
| C5268-4 | 100 | 1/4-20 x 1" |
| C5268-5 | 100 | 1/4-20 x 1-3/4" |

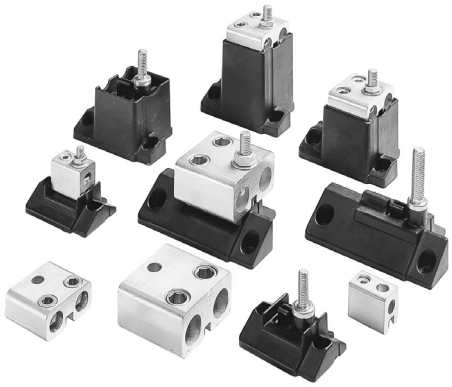
### 1BS10x connector type



Bussmann series 1BS10 blocks utilize a tin-plated connector for wire termination and heat dissipation), and a plated-steel stud for fuse mounting. The connector type block is available in the 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 | 600 | 400 |
| 1BS103 | 600 | 400 |
| 1BS104 | 600 | 600 |

### BH modular type



BH modular blocks provide a wide range of mounting configurations for Bussmann series high speed semiconductors fuses. BH fuse blocks have a short-circuit current rating up to 200 kA RMS Sym.

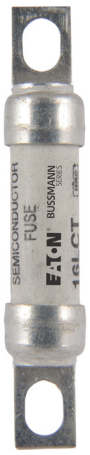
| Catalog no. | Max rated voltage | Max fuse amp rating |
|---|---|---|
| BH-0 | 700 | 100 |
| BH-1 | 2500 | 400 |
| BH-2 | 5000 | 600 |
| BH-3 | 1250 | 700 |

Data sheets: 1200 (BH-0), 1201 (BH-1), 1202 (BH-2), 1203 (BH-3), 1206 (1BS101), 1207 (1BS102), 1208 (1BS103), 1209 (1BS104)

# LCT, LET BS88

## 240 Vac/150 Vdc (IEC), 250-280 Vac/150 Vdc (UL), 6 to 180 A

BS88 style bolted tag high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Low watts loss in a compact size.




### Ratings

- Volts
  - LCT 240 Vac/150 Vdc (IEC), 250 Vac/150 Vdc (UL)
  - LET 280 Vac/150 Vdc (UL, 25-160 A), 250 Vac/150 Vdc (UL 180 A)
- Amps 6-180 A
- IR
  - 200 kA RMS Sym.
  - 50 kA DC at 125 Vdc
  - 100 kA at 80 Vdc (70-1000 A)

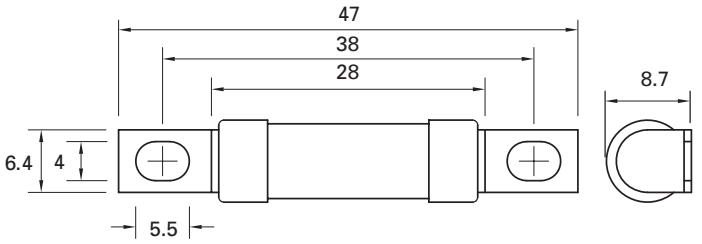
### Operating class aR.

### Agency information

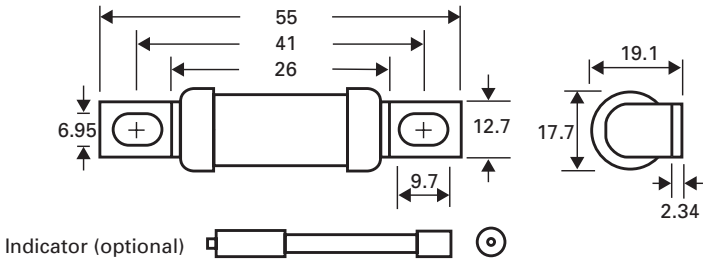
- Designed and tested to BS88 Part 4 and IEC 60269 Part 4
- UL Recognized*
- CCC (LCT only)
- CE

* All fuses have been tested at 318 Vac. Consult Bussmann series product representative for UL Recognized status.

### Dimensions — mm




**LCT**




**LET — indicator optional**

| Fuse symbol | Rated voltage | Rated current(amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 240 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|
| LCT | 240 Vac/150 Vdc (IEC) 250 Vac/150 Vdc (UL) | 6 | 2.0 | 9 | 1.0 | 6LCT |
| | | 10 | 3.8 | 22 | 2.5 | 10LCT |
| | | 12 | 7.0 | 32 | 2.5 | 12LCT |
| | | 16 | 20.0 | 100 | 2.5 | 16LCT |
| | | 20 | 25.0 | 160 | 4.0 | 20LCT |
| LET | 280 Vac/150 Vdc (UL) | 25 | 18.0 | 250 | 4.0 | 25LET |
| | | 32 | 32.0 | 450 | 5.0 | 32LET |
| | | 35 | 50.0 | 600 | 5.0 | 35LET |
| | | 50 | 100.0 | 1400 | 7.0 | 50LET |
| | | 63 | 180.0 | 2200 | 9.0 | 63LET |
| | | 80 | 300.0 | 3800 | 10.0 | 80LET |
| | | 100 | 600.0 | 7500 | 10.0 | 100LET |
| | | 125 | 600.0 | 7500 | 16.0 | 125LET |
| | | 160 | 1100.0 | 16,000 | 20.0 | 160LET |
| | 250 Vac/150 Vdc (UL) | 180 | 1600.0 | 29,000 | 21.0 | 180LET |

* Watts loss at rated current.
Note: 7LET, 10LET, 12LET and 16LET are available for replacement purposes on existing equipment.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720004, 5785296 (LCT), 5785293 (LET)

## LMT, LMMT BS88

### 240 Vac/150 Vdc (IEC), 250 Vac/150 Vdc (UL), 160 to 900 A

BS88 style bolted tags high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Low watts loss in a compact size.



### Ratings

- Volts
  - 240 Vac/150 Vdc (IEC)
  - 250 Vac/150 Vdc (UL)
- Amps 160-900 A
- IR
  - 200 kA RMS Sym., 40 kA at 150 Vdc (IEC)
  - 200 kA RMS Sym., 50 kA at 150 Vdc (UL)

### Operating class aR

### Agency information

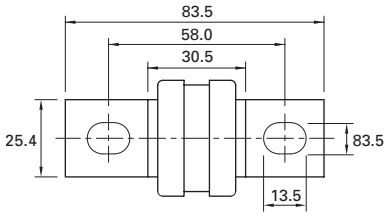
- Designed and tested to BS88 Part 4 and IEC 60269 Part 4
- UL Recognized*
- CCC
- CE

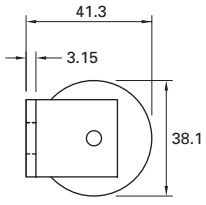
* All fuses have been tested at 318 Vac. Consult Bussmann series product representative for UL Recognized status.

| Fuse symbol | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 120 Vac | I²t (A²s) Clearing at 240 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|---|
| LMT | 240 Vac /150 Vdc (IEC)<br>250 Vac /150 Vdc (UL) | 160 | 1100 | 7000 | 16,000 | 17 | 160LMT |
| | | 200 | 1500 | 10,000 | 20,000 | 28 | 200LMT |
| | | 250 | 3200 | 20,000 | 40,000 | 28 | 250LMT |
| | | 315 | 6000 | 35,000 | 75,000 | 35 | 315LMT |
| | | 355 | 8000 | 50,000 | 100,000 | 35 | 355LMT |
| | | 400 | 14,000 | 70,000 | 160,000 | 40 | 400LMT |
| | | 450 | 18,000 | 100,000 | 220,000 | 42 | 450LMT |
| LMMT | 240 Vac /150 Vdc (IEC)<br>250 Vac /150 Vdc (UL) | 400 | 6000 | 35,000 | 80,000 | 60 | 400LMMT |
| | | 500 | 14,000 | 80,000 | 170,000 | 64 | 500LMMT |
| | | 630 | 24,000 | 150,000 | 300,000 | 75 | 630LMMT |
| | | 710 | 32,000 | 200,000 | 460,000 | 77 | 710LMMT |
| | | 800 | 52,000 | 300,000 | 600,000 | 82 | 800LMMT |
| | | 900 | 75,000 | 400,000 | 800,000 | 97 | 900LMMT |

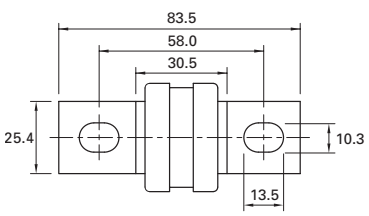
* Watts loss at rated current.

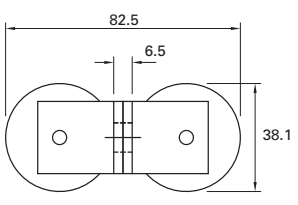
### Dimensions — mm




**LMT — indicator optional**




**LMMT — indicator optional**

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720004, 5785294 (LMT), 5785295 (LMMT)

# CT, ET, FE, EET, FEE BS88

## 690 Vac/500 Vdc (IEC), 700 Vac/500 Vdc (UL), 6 to 200 A




BS88 style bolted tags high speed fuses for the protection of DC common bus, DC drives, power converters /rectifiers and reduced rated voltage starters.

### Ratings

- Volts
  - 690 Vac/500 Vdc (IEC)
  - 700 Vac/500 Vdc (UL)
- Amps 6-200 A
- IR
  - CT: 90 kA RMS Sym., 40 kA at 500 Vdc (IEC), 200 kA RMS Sym., 50 kA at 500 Vdc (UL)
  - ET, EET, FE and FEE: 200 kA RMS Sym.,50 kA at 500 Vdc

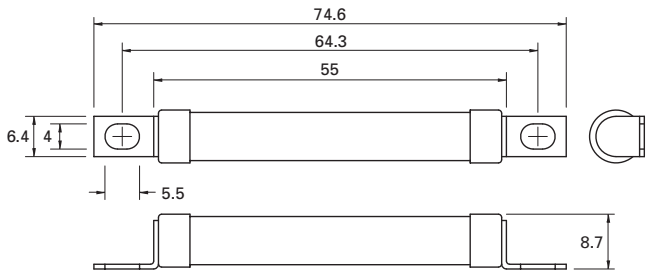
### Operating class aR

### Agency information

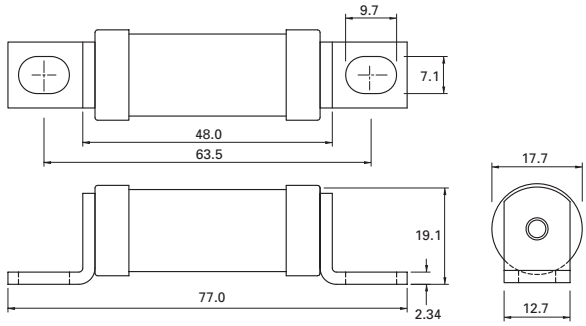
- Designed and tested to BS88 part 4 and IEC 60269 Part 4
- UL Recognized*
- CCC for ET, FE, EET, FEE
- CE

* Consult your Bussmann series product representative for UL Recognized status.

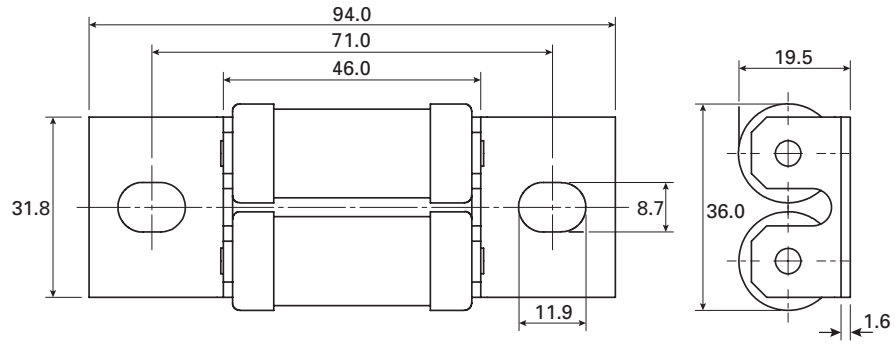
### Dimensions — mm




**CT**




**ET, FE — indicator optional**




**EET, FEE — indicator optional**

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 5785312 (CT, ET), 5785314 (FE), 5785313 (EET), 5785292 (FEE)

## CT, ET, FE, EET, FEE BS88

### 690 Vac/500 Vdc (IEC), 700 Vac/500 Vdc (UL), 6 to 200 A

| Fuse symbol | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 415 Vac | I²t (A²s) Clearing at 660 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|---|
| CT | 690 Vac/500 Vdc (IEC) 700 Vac/500 Vdc (UL) | 6 | 1.8 | 8.5 | 12 | 2 | 6CT |
| | | 10 | 7.0 | 30.0 | 48 | 3 | 10CT |
| | | 12 | 10.0 | 40.0 | 65 | 3 | 12CT |
| | | 16 | 16.0 | 66.0 | 110 | 7 | 16CT |
| | | 20 | 32.0 | 150.0 | 220 | 7 | 20CT |
| ET | 690 Vac/500 Vdc (IEC) 700 Vac/500 Vdc (UL) | 25 | 25.0 | 150.0 | 250 | 7 | 25ET |
| | | 32 | 32.0 | 190.0 | 350 | 11 | 32ET |
| | | 35 | 52.0 | 310.0 | 500 | 11 | 35ET |
| | | 40 | 103.0 | 600.0 | 900 | 9 | 40ET |
| | | 45 | 103.0 | 680.0 | 1100 | 11 | 45ET |
| | | 56 | 135.0 | 950.0 | 1500 | 14 | 56ET |
| | | 63 | 171.0 | 1200.0 | 2000 | 16 | 63ET |
| | | 80 | 360.0 | 2500.0 | 4000 | 18 | 80ET |
| FE | 690 Vac/500 Vdc (IEC) 700 Vac/500 Vdc (UL) | 35 | 33.0 | 130.0 | 200 | 9 | 35FE |
| | | 40 | 52.0 | 180.0 | 300 | 9 | 40FE |
| | | 45 | 76.0 | 270.0 | 450 | 11 | 45FE |
| | | 50 | 103.0 | 380.0 | 600 | 11 | 50FE |
| | | 63 | 135.0 | 480.0 | 750 | 12 | 63FE |
| | | 71 | 210.0 | 600.0 | 950 | 17 | 71FE |
| | | 80 | 250.0 | 900.0 | 1500 | 20 | 80FE |
| | | 90 | 360.0 | 1300.0 | 2100 | 20 | 90FE |
| | | 100 | 470.0 | 1800.0 | 2800 | 23 | 100FE |
| EET | 690 Vac/500 Vdc (IEC) 700 Vac/500 Vdc (UL) | 90 | 490.0 | 300.0 | 4500 | 19 | 90EET |
| | | 110 | 600.0 | 4000.0 | 6500 | 27 | 110EET |
| | | 140 | 1050.0 | 7000.0 | 12,000 | 35 | 140EET |
| | | 160 | 1500.0 | 10,000.0 | 17,000 | 39 | 160EET |
| FEE | 690 Vac/500 Vdc (IEC) 700 Vac/500 Vdc (UL) | 100 | 400.0 | 1600.0 | 2400 | 24 | 100FEE |
| | | 120 | 540.0 | 1900.0 | 3100 | 32 | 120FEE |
| | | 140 | 850.0 | 2500.0 | 3800 | 36 | 140FEE |
| | | 160 | 1000.0 | 3700.0 | 5700 | 46 | 160FEE |
| | | 180 | 1400.0 | 5300.0 | 8400 | 46 | 180FEE |
| | | 200 | 1900.0 | 7100.0 | 11,400 | 52 | 200FEE |

* Watts loss at rated current.

**Note:** FC, 8ET, 12ET, 15ET, 20ET, 65EET and 75EET are available for replacement purposes on existing equipment.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 5785312 (CT, ET), 5785314 (FE), 5785313 (EET), 5785292 (FEE)

# FM, FMM, MT, MMT BS88

## 690 Vac/350-450 Vdc (IEC),700 Vac/500 Vdc (UL), 160 to 710 A




BS88 style bolted tags high speed fuses for the protection of DC common bus, DC drives, power converters /rectifiers and reduced rated voltage starters.

### Ratings

- Volts
  - FM: 690 Vac/450 Vdc (IEC); 700 Vac/500 Vdc (UL)
  - FMM: 690 Vac/450 Vdc (IEC); 700 Vac (UL)
  - MT and MMT: 690 Vac/350 Vdc (IEC); 700 Vac (UL)
- Amps 160-710 A
- IR
  - FM: 200 kA RMS Sym. (IEC/UL), 40 kA at 450 Vdc (IEC), 50 kA at 500 Vdc (UL)
  - FMM: 200 kA RMS Sym. (IEC/UL), 40 kA at 450 Vdc (IEC).
  - MT and MMT: 200 kA RMS Sym. (IEC/UL), 40 kA at 350 Vdc (IEC).

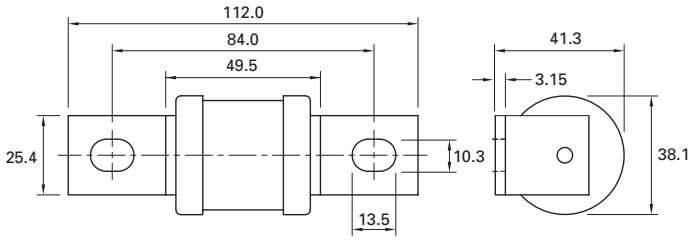
### Operating class aR

### Agency information

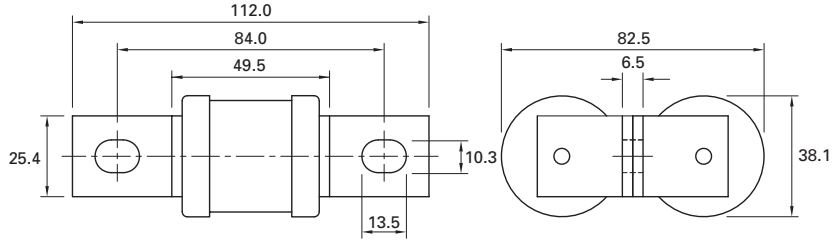
- Designed and tested to BS88 Part 4 and IEC 60269 Part 4
- UL Recognized MT and MMT 350 Vdc (IEC) rating*
- CCC for FM and FMM
- CE

Consult your Bussmann series product representative for UL Recognized status.

### Dimensions — mm




**FM, MT — indicator optional**




**FMM, MMT — indicator optional**

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 5785314 (FM), 5785313 (MT), 5785292 (FMM), 5785311 (MMT)

## FM, FMM, MT, MMT BS88

### 690 Vac/350-450 Vdc (IEC), 700 Vac/500 Vdc (UL), 160 to 710 A

| Fuse symbol | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) | | | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 415 Vac | Clearing at 660 Vac | | |
| FM | 690 Vac/450 Vdc (IEC) 700 Vac/500 Vdc (UL) | 180 | 1400 | 7500 | 13,500 | 40 | 180FM |
| | | 200 | 2600 | 10,500 | 18,500 | 40 | 200FM |
| | | 225 | 3700 | 14,500 | 26,500 | 44 | 225FM |
| | | 250 | 5200 | 20,500 | 37,500 | 48 | 250FM |
| | | 280 | 7000 | 30,500 | 55,000 | 48 | 280FM |
| | | 315 | 10,000 | 40,000 | 77,000 | 55 | 315FM |
| | | 350 | 15,000 | 60,000 | 105,000 | 55 | 350FM |
| FMM | 690 Vac/450 Vdc (IEC) 700 Vac (UL) | 400 | 10,000 | 40,000 | 72,500 | 85 | 400FMM |
| | | 450 | 15,000 | 60,000 | 105,000 | 90 | 450FMM |
| | | 500 | 20,000 | 82,000 | 150,000 | 100 | 500FMM |
| | | 550 | 30,000 | 120,000 | 215,000 | 100 | 550FMM |
| | | 630 | 45,000 | 180,000 | 310,000 | 100 | 630FMM |
| | | 700 | 60,000 | 245,000 | 420,000 | 120 | 700FMM |
| MT | 690 Vac/350 Vdc (IEC) 700 Vac (UL) | 160 | 2400 | 15,000 | 25,000 | 26 | 160MT |
| | | 180 | 3800 | 25,000 | 38,000 | 26 | 180MT |
| | | 200 | 6000 | 40,000 | 58,000 | 27 | 200MT |
| | | 250 | 11,500 | 80,000 | 110,000 | 32 | 250MT |
| | | 280 | 16,500 | 100,000 | 150,000 | 35 | 280MT |
| | | 315 | 19,000 | 125,000 | 180,000 | 42 | 315MT |
| | | 355 | 22,000 | 160,000 | 200,000 | 51 | 355MT |
| MMT | 690 Vac/350 Vdc (IEC) 700 Vac (UL) | 180 | 1650 | 12,000 | 18,000 | 42 | 180MMT |
| | | 200 | 2200 | 16,000 | 23,000 | 42 | 200MMT |
| | | 225 | 3700 | 26,000 | 40,000 | 42 | 225MMT |
| | | 280 | 6600 | 47,000 | 70,000 | 47 | 280MMT |
| | | 315 | 8600 | 62,000 | 91,000 | 51 | 315MMT |
| | | 355 | 13,500 | 97,000 | 140,000 | 54 | 355MMT |
| | | 400 | 21,000 | 150,000 | 220,000 | 60 | 400MMT |
| | | 450 | 30,000 | 220,000 | 320,000 | 57 | 450MMT |
| | | 500 | 42,000 | 300,000 | 450,000 | 64 | 500MMT |
| | | 560 | 60,000 | 430,000 | 640,000 | 64 | 560MMT |
| | | 630 | 68,500 | 500,000 | 720,000 | 86 | 630MMT |
| | | 710 | 78,000 | 600,000 | 850,000 | 105 | 710MMT |

* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 5785314 (FM), 5785313 (MT), 5785292 (FMM), 5785311 (MMT)

# BS 88 Accessories

## Trip indicator

Trip-indicator fuses are available for use in parallel with the main BS88-4 fuses. They can either be attached to the associated fuse or mounted separately in panel mounted fuse clips. Push-on adapters with microswitch (catalog numbers MAI and MBI) are available for use with the trip indicator to provide a means for remote indication.

Fuse ratings of 20 A and below cannot usually accommodate a trip fuse in parallel.

When a trip-indicator is to be attached to the main fuse, an accessory pack comprising a pair of mounting clips and an appropriate trip indicator is required. The clips are snapped onto the fuse and the indicator is pressed into clips as shown below.

### Trip indicator kit catalog numbers (indicator + clips)

| For fuse symbol | Catalog no. |
|---|---|
| ET | EC-600 |
| EET | EC-600 |
| FE | EC-600 |
| FEE | EC-600 |
| LET | EC-250 |
| FM | MC-600 |
| FMM | MC-600 |
| LMT | MC-250 |
| LMMT | MC-250 |

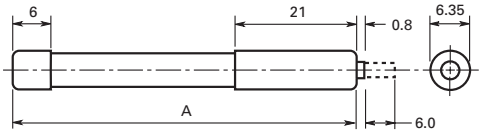


### Indicator only

| Catalog no. | Rated current | Dim. 'A' (mm) |
|---|---|---|
| TI250 | 250 | 37.6 |
| TI500 | 500 | 47.5 |
| TI600 | 600 | 55.7 |
| TI700 | 700 | 61.8 |
| TI1100 | 1100 | 98.4 |
| TI1500 | 1500 | 120.8 |
| TI2000 | 2000 | 147.5 |
| TI2500 | 2500 | 198.3 |



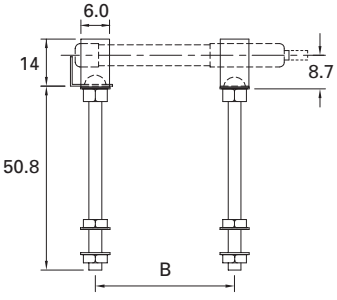

### Indicator dimensions — mm




## Indicator panel mount clips

CL1 panel mount fuse clips are available for mounting a trip-indicator directly to a PCB or insulated panel, or when mounting directly on the fuse is impractical. Order catalog number CL1.

### CL1 dimensions — mm



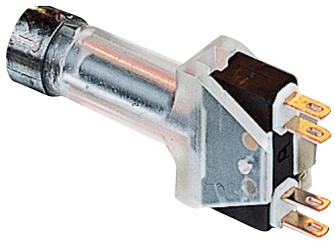

## Microswitches

### Microswitch/adapter: MAI and MBI

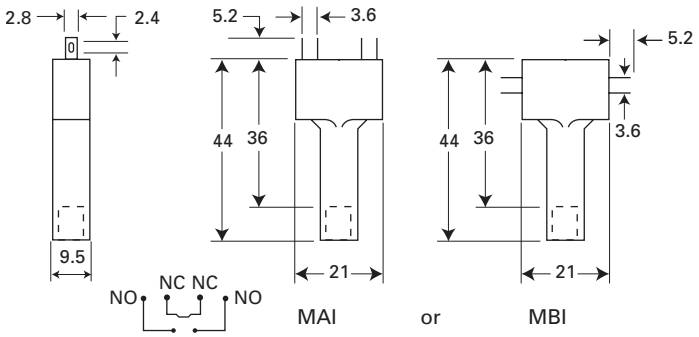
To provide a means of remote indication with the trip indicators, we offer two microswitch/adapters. The microswitches are provided with double pole, single throw contacts, having both a normally open (NO) and a normally closed (NC) position. A special material is used in the construction of the adapter to provide reliable operation in the temperatures ranges associated with standard operating conditions and during fuse operation.

| Catalog no. | Description | Terminal orientation |
|---|---|---|
| MAI | Trip indicator adapter and microswitch | Back |
| MBI | Trip indicator adapter and microswitch | Side |

| Microswitch ratings (MAI and MBI) | |
|---|---|
| **Terminals** | **Quick connect** |
| **Current rating** | |
| AC 50/60 Hz resistive load | 4 A @ 250 V RMS |
| | 6 A @ 127 V RMS |
| DC, resistive load | 0.7 A @ 110 Vdc |
| | 2 A @ 30 Vdc |
| **Maximum working voltage** | |
| Contact-to-contact (RMS) | 1000 V |
| | 1500 V |
| Maximum DC volts | 110 Vdc |



### Microswitch/adapter dimensions — mm



## FWA Ferrule

### 150 Vac/dc (UL), 10x38mm and 21x51mm, 5 to 60 A




Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters /rectifiers and reduced rated voltage starters.

### Ratings

- Volts 150 Vac/dc (UL)
- Amps 5-60 A
- IR
  - 200 kA RMS Sym.
  - 50 kA DC at 150 Vdc

### Operating class aR

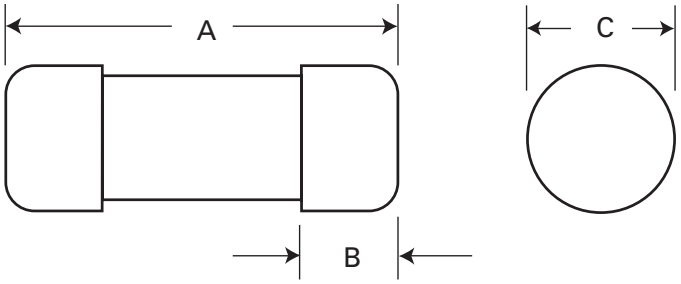
### Agency information

- UL Recognized, JFHR2, E91958
- CE

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 150 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|
| 10x38mm (13/32"x1-1/2") | 150 Vac/dc (UL) | 5 | 1.6 | 8 | 2 | FWA-5A10F |
| | | 10 | 3.6 | 16 | 2.7 | FWA-10A10F |
| | | 15 | 14.0 | 50 | 3.3 | FWA-15A10F |
| | | 20 | 33.0 | 130 | 3.8 | FWA-20A10F |
| | | 25 | 58.0 | 220 | 4.9 | FWA-25A10F |
| | | 30 | 100.0 | 400 | 4.9 | FWA-30A10F |
| 21x51mm (13/16"x2") | 150 Vac/dc (UL) | 35 | 75.0 | 800 | 4.5 | FWA-35A21F |
| | | 40 | 100.0 | 1000 | 5.1 | FWA-40A21F |
| | | 45 | 130.0 | 1300 | 6 | FWA-45A21F |
| | | 50 | 170.0 | 1600 | 7.3 | FWA-50A21F |
| | | 60 | 250.0 | 2400 | 8 | FWA-60A21F |

* Watts loss at rated current.

### Dimensions — in (mm)




| Amp range | A | B | C |
|---|---|---|---|
| 5-30 | 1.5 (38.1) | 0.38 (9.5) | 0.41 (10.3) |
| 35-60 | 2.0 (50.8) | 0.63 (15.9) | 0.81 (20.6) |

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720003,5785317 (5-30 A), 5785305 (35-60 A)

## FWX Ferrule

### 250 Vac/dc (UL), 14x51mm, 1 to 50 A




Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers rated voltage starters.

### Ratings

- Volts
  - 250 Vac (UL, all ratings)
  - 250 Vdc (UL, 5-50 A only)
- Amps 1-50 A
- IR
  - 200 kA RMS Sym. (UL, all ratings)
  - 50 kA at 250 Vdc (UL, 5-30 A only)

### Operating class aR

### Agency information

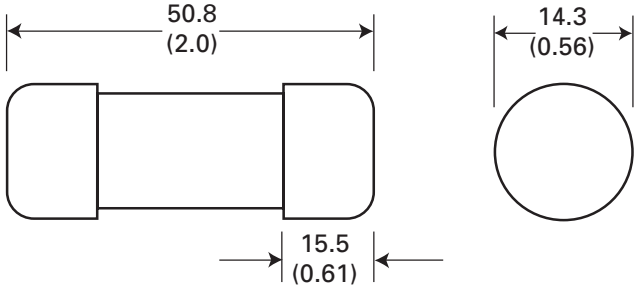
- UL Recognized, JFHR2, E91958 1-50 A
- CSA Class 1422-30, 1422-90 (53787) 5-30 A
- CE



| Fuse size | Rated voltage | Rated current(amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 250 Vac | Watts loss(W)* | Catalog no. |
|---|---|---|---|---|---|---|
| 14x51mm (9/16"x2") | 250 Vac (UL) | 1 | 0.03 | 0.40 | 5.7 | FWX-1A14F |
| | | 2 | 0.08 | 0.10 | 8.6 | FWX-2A14F |
| | | 3 | 0.11 | 0.26 | 2.8 | FWX-3A14F |
| | | 4 | 0.1 | 0.23 | 3.0 | FWX-4A14F |
| | 250 Vac/dc (UL) | 5 | 1.6 | 13.00 | 1.3 | FWX-5A14F |
| | | 10 | 3.6 | 24.00 | 3.4 | FWX-10A14F |
| | | 15 | 14.0 | 83.00 | 3.8 | FWX-15A14F |
| | | 20 | 33.0 | 200.00 | 4.6 | FWX-20A14F |
| | | 25 | 58.0 | 300.00 | 5.3 | FWX-25A14F |
| | | 30 | 100.0 | 500.00 | 5.9 | FWX-30A14F |
| | | 50 | 200.0 | 1800.00 | 5.7 | FWX-50A14F |

* Watts loss at rated current.

### Dimensions — mm (in)




For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720006, 5785302

## FWH Ferrule

### 500 Vac (UL), 6x32mm, 0.25 to 30 A

RoHS 2011/65/EU

Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.

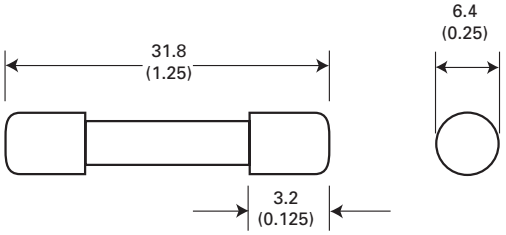



### Ratings

- Volts
  - 500 Vac (UL — 0.25-1 A and 3.15-30 A)
  - 1000 Vac (UL — 2 A)
  - 600 Vdc (UL — 1-5 A)
- Amps 0.25-30 A
- IR
  - 50 kA AC (0.25-1 A and 3.15-20 A)
  - 30 kA AC (2 A)
  - 20 kA AC (25-30 A)[1]
  - 50 kA DC (1-5 A))

[1] Tested at PF = 76%.

### Dimensions — mm (in)




### Operating class aR

### Agency information

- UL Recognized, JFHR2, E91958 (0.25-7 A) and JDYX2, E19180 (10-30 A)
- CSA Component Acceptance Class 1422-30, 1422-90 (53787) 0.25-7 A
- RoHS compliant
- CE

### Opening times

| Amp range | 150% | 200% | 300% | Min IR |
|---|---|---|---|---|
| 0.25-7 | >30 min | >30 min | ≤ 10 sec | 300 % |
| 10-30 | | | | 200 % |

| | Rated voltage | | $I^2t$ ($A^2s$) | | | Catalog no. | |
|---|---|---|---|---|---|---|---|
| Amps | Vac | Vdc | Pre-arcing | Clearing @ 500Vac | Watts loss (W)* | Standard | RoHS compliant |
| 0.25 | 500 | — | 0.01 | 0.05 | 2.7 | | FWH-.250A6F |
| 0.5 | | | 0.05 | 0.25 | 1.2 | | FWH-.500A6F |
| 1 | 1000 | 600 | 0.4 | 2 | 1.7 | | FWH-001A6F |
| 2 | | | 1.3 | 3.5 | 3.2 | | FWH-002A6F |
| 3.15 | 500 | | 3.1 | 7.7 | 2.9 | — | FWH-3.15A6F |
| 4 | | | — | — | — | | FWH-004A6F |
| 5 | | | 15 | 40 | 2.1 | | FWH-005A6F |
| 6.3 | | | 36 | 90 | 2.3 | | FWH-6.30A6F |
| 7 | | | 50 | 125 | 2.5 | | FWH-007A6F |
| 10 | | | 9.9 | 139 | 2.86 | FWH5-010A6F | FWH5-010A6FR |
| 12.5 | | | 20 | 60 | 3.53 | FWH5-12-5A6F | FWH5-12-5A6FR |
| 15 | | — | 44 | 146 | 3.08 | FWH5-015A6F | FWH5-015A6FR |
| 16 | | | 48 | 177 | 4.48 | FWH5-016A6F | FWH5-016A6FR |
| 20 | | | 75 | 259 | 4.26 | FWH5-020A6F | FWH5-020A6FR |
| 25 | | | 126 | 345 | — | FWH-025A6F | FWH-025A6FR |
| 30 | | | 145 | 430 | — | FWH-030A6F | FWH-030A6FR |

* Watts loss at rated current.

**Data sheet no.720038**

## FWH Ferrule

### 500 Vac/ Vdc (UL), 14x51mm, 1 to 30 A

Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.




### Ratings

- Volts
  - 500 Vac (UL, all ratings)
  - 500 Vdc (UL, 5-30 A only)
- Amps 1-30 A
- IR
  - 200 kA RMS Sym. all ratings
  - 50 kA at 500 Vdc 5-30 A only

### Operating class aR

### Agency information

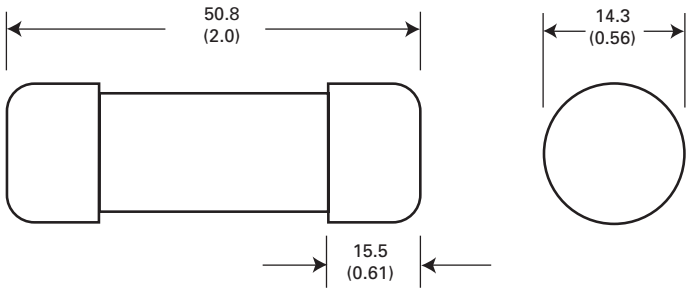
- UL Recognized 1-30 A
- CSA Class 1422-30, (53787) 5-30 A
- CE



| Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at 500 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|
| 14x51mm (9/16"x2") | 500 Vac (UL) | 1 | 0.04 | 0.2 | 5.7 | FWH-1A14F |
| | | 2 | 0.08 | 0.1 | 8.7 | FWH-2A14F |
| | | 3 | 0.11 | 0.2 | 2.8 | FWH-3A14F |
| | | 4 | 0.10 | 0.2 | 3.0 | FWH-4A14F |
| | 500 Vac/dc (UL) | 5 | 2.00 | 7.0 | 1.5 | FWH-5A14F |
| | | 6 | 2.00 | 7.0 | 1.5 | FWH-6A14F |
| | | 10 | 4.00 | 15.0 | 4.0 | FWH-10A14F |
| | | 12 | 7.00 | 25.0 | 4.3 | FWH-12A14F |
| | | 15 | 10.00 | 40.0 | 5.5 | FWH-15A14F |
| | | 20 | 26.00 | 100.0 | 6.5 | FWH-20A14F |
| | | 25 | 49.00 | 200.0 | 7.0 | FWH-25A14F |
| | | 30 | 58.00 | 240.0 | 9.0 | FWH-30A14F |

* Watts loss at rated current.

### Dimensions — mm (in)




For details on electrical characteristics, contact Application Engineering and ask for data sheets:720008, 5785298

## FWC Ferrule

### 600-700 Vac/700 Vdc (UL), 10x38mm, 1 to 32 A




Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.

### Ratings

- Volts
  - 700 Vac/dc (UL, 1-4 A)
  - 600 Vac (UL, 6-32 A), 700 Vdc (UL, 6-25 A)
- Amps 1-32 A
- IR
  - 200 kA RMS Sym. at 600 Vac (6-32 A)
  - 200 kA RMS Sym. at 700 Vac (1-4 A)
  - 10 kA DC at 700 Vdc (1-25 A)

### Operating class aR

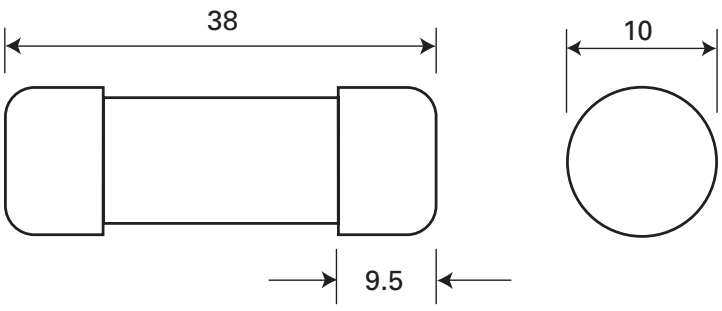
### Agency information

- UL Recognized, JFHR8, E91958 6-32 A
- CSA Class 1422-30, (53787) 6-32 A
- CE

| Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at 600 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|
| 10x38mm (13/32"x1-1/2") | 700 Vac/dc (UL) | 1 | 0.2 | 1.2 | 0.5 | FWC-1A10F |
| | | 2 | 0.5 | 3.0 | 1.2 | FWC-2A10F |
| | | 3 | 1.6 | 11.0 | 1.5 | FWC-3A10F |
| | | 4 | 5.2 | 32.0 | 1.5 | FWC-4A10F |
| | 600 Vac/700 Vdc (UL) | 6 | 4.0 | 30.0 | 1.5 | FWC-6A10F |
| | | 8 | 6.0 | 50.0 | 2.0 | FWC-8A10F |
| | | 10 | 9.0 | 70.0 | 2.5 | FWC-10A10F |
| | | 12 | 15.0 | 120.0 | 3.0 | FWC-12A10F |
| | | 16 | 25.0 | 150.0 | 3.5 | FWC-16A10F |
| | | 20 | 34.0 | 260.0 | 4.8 | FWC-20A10F |
| | | 25 | 60.0 | 390.0 | 6.0 | FWC-25A10F |
| | 600 Vac (UL) | 32 | 95.0 | 600.0 | 7.5 | FWC-32A10F |

* Watts loss at rated current.

### Dimensions — mm




For details on electrical characteristics, contact Application Engineering and ask for data sheets:720011, 5785306

## FWP Ferrule

### 690 Vac (IEC) 10x38mm, 4 to 32 A



Ferrule style Class gR high speed fuses for the protection of AC/DC drives and semiconductors.

### Ratings

- Volts 690 Vac
- Amps 4-32 A
- IR
  - 200 kA RMS Sym.

### Operating class gR

### Agency information

- UL 248-13
- Designed and tested to IEC 60269, Part 4
- CE



| Fuse type | Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | Watts loss (W)* Clearing at 690 Vac $0.8I_n$ | Watts loss (W)* Clearing at 690 Vac $I_n$ | Catalog no. |
|---|---|---|---|---|---|---|---|
| Without striker | 10x38mm | 690 Vac (IEC) | 4 | 5.6 | 17 | 1.13 | 2.05 | FWP-4G10F |
| | | | 6 | 16 | 48 | 1.56 | 3.0 | FWP-6G10F |
| | | | 8 | 4.3 | 38 | 0.97 | 1.68 | FWP-8G10F |
| | | | 10 | 6.6 | 59 | 1.20 | 2.09 | FWP-10G10F |
| | | | 12 | 9.6 | 84 | 1.69 | 2.99 | FWP-12G10F |
| | | | 16 | 17 | 150 | 2.31 | 4.27 | FWP-16G10F |
| | | | 20 | 23.5 | 200 | 2.86 | 5.35 | FWP-20G10F |
| | | | 25 | 60.2 | 512 | 2.94 | 5.52 | FWP-25G10F |
| | | | 32** | 94 | 800 | 3.82 | 7.43 | FWP-32G10F |

* Watts loss at rated current.
**32 A rated current with 25mm² conductors, derate to 27 A with 6mm² conductors.

## FWP Ferrule

### 690 Vac (IEC), 700 Vac (UL), 600 - 700 Vdc (UL), 14x51mm, 1 to 50 A




Ferrule style Class aR high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Available with or without striker.

### Ratings

- Volts 690 Vac (IEC), 700 Vac/600 Vdc (UL) with striker (see table for striker version)
- Amps 1-50 A
- IR
  - 200 kA RMS Sym.
  - 50 kA at 800 Vdc (5-50 A non striker version)
  - 600 Vdc for striker version

### Operating class aR

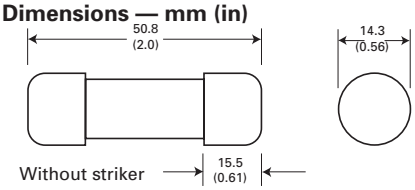
### Agency information

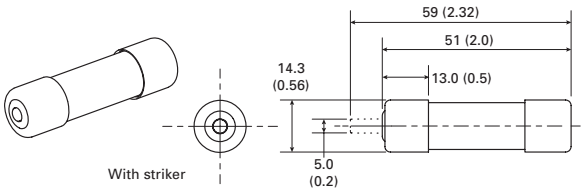
- UL Recognized, (without striker only) JFHR2, E91958
- CSA (without striker only) Class 1422-30, 1422-90 (53787)
- Designed and tested to IEC 60269, Part 4
- CE

| Fuse type | Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 700 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|---|
| Without striker | 14x51mm (9/16"x2") | 700 Vac (UL) | 1 | 0.04 | 0.41 | 5.7 | FWP-1A14F |
| | | | 2 | 0.08 | 0.11 | 8.7 | FWP-2A14F |
| | | | 3 | 0.11 | 0.26 | 2.8 | FWP-3A14F |
| | | | 4 | 0.10 | 0.23 | 3.0 | FWP-4A14F |
| | | 690 Vac (IEC) 700 Vac/dc (UL) | 5 | 2.00 | 11.00 | 1.5 | FWP-5A14F |
| | | | 10 | 4.00 | 22.00 | 4.0 | FWP-10A14F |
| | | | 15 | 10.00 | 70.00 | 5.5 | FWP-15A14F |
| | | | 20 | 26.00 | 180.00 | 6.5 | FWP-20A14F |
| | | | 25 | 49.00 | 320.00 | 7.0 | FWP-25A14F |
| | | | 30 | 58.00 | 400.00 | 9.0 | FWP-30A14F |
| | | | 32 | 68.00 | 600.00 | 8.0 | FWP-32A14F |
| | | | 40 | 84.00 | 750.00 | 8.0 | FWP-40A14F |
| | | | 50 | 200.00 | 1800.00 | 9.0 | FWP-50A14F |
| With striker | 14x51mm (9/16"x2") | 700 Vac/600 Vdc (UL) | 10 | 4.00 | 32.00 | 2.0 | FWP-10A14FI |
| | | | 15 | 7.00 | 63.00 | 4.0 | FWP-15A14FI |
| | | | 20 | 26.00 | 234.00 | 4.0 | FWP-20A14FI |
| | | | 25 | 42.00 | 378.00 | 4.0 | FWP-25A14FI |
| | | | 30 | 52.00 | 468.00 | 6.0 | FWP-30A14FI |
| | | | 32 | 68.00 | 600.00 | 8.0 | FWP-32A14FI |
| | | | 40 | 84.00 | 750.00 | 8.0 | FWP-40A14FI |
| | | | 50 | 200.00 | 1800.00 | 9.0 | FWP-50A14FI |

* Watts loss at rated current.

### Dimensions — mm (in)




For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720025, 5781724 fuses without striker; 5785566 fuses with striker

## FWP Ferrule

### 690 Vac 14x51mm, 1 to 50 A

Ferrule style Class gR high speed fuses for the protection of AC/DC drives and semiconductors. Available with or without striker.




### Ratings

- Volts 690 Vac
- Amps 4-50 A
- IR 200 kA RMS Sym.

### Operating class gR

### Agency information

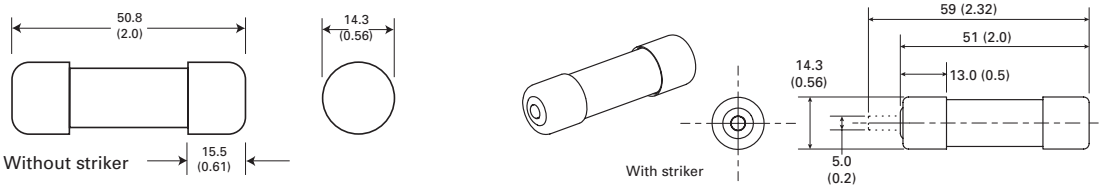
- UL 248-13
- Designed and tested to IEC 60269, Part 4
- CE



| Fuse type | Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | Watts loss (W)* Clearing at 690 Vac | 0.8$I_n$ | $I_n$ | Catalog no. |
|---|---|---|---|---|---|---|---|---|
| | | | 4 | 5.6 | 17 | 1.56 | 2.94 | FWP-4G14F |
| | | | 6 | 16 | 48 | 2.25 | 4.2 | FWP-6G14F |
| | | | 8 | 3.8 | 30 | 1.18 | 2.0 | FWP-8G14F |
| | | | 10 | 5.9 | 47 | 1.41 | 2.52 | FWP-10G14F |
| | | | 12 | 8.4 | 68 | 1.95 | 3.54 | FWP-12G14F |
| Without striker | 14x51mm (9/16"x2") | 690 Vac (IEC) | 16 | 15 | 120 | 5.67 | 4.83 | FWP-16G14F |
| | | | 20 | 27 | 170 | 2.91 | 5.4 | FWP-20G14F |
| | | | 25 | 53 | 333 | 3.38 | 6.0 | FWP-25G14F |
| | | | 32 | 108 | 679 | 3.72 | 6.93 | FWP-32G14F |
| | | | 40 | 211 | 1331 | 4.13 | 7.52 | FWP-40G14F |
| | | | 50 | 350 | 2200 | 5.36 | 9.8 | FWP-50G14F |
| | | | 8 | 3.8 | 30 | 1.18 | 2.0 | FWP-8G14FI |
| | | | 10 | 5.9 | 47 | 1.41 | 2.52 | FWP-10G14FI |
| | | | 12 | 8.4 | 68 | 1.95 | 3.54 | FWP-12G14FI |
| | | | 16 | 15 | 120 | 5.67 | 4.83 | FWP-16G14FI |
| With striker | 14x51mm (9/16"x2") | 690 Vac (IEC) | 20 | 27 | 170 | 2.91 | 5.4 | FWP-20G14FI |
| | | | 25 | 53 | 333 | 3.38 | 6.0 | FWP-25G14FI |
| | | | 32 | 108 | 679 | 3.72 | 6.93 | FWP-32G14FI |
| | | | 40 | 211 | 1331 | 4.13 | 7.52 | FWP-40G14FI |
| | | | 50 | 350 | 2200 | 5.36 | 9.8 | FWP-50G14FI |

* Watts loss at rated current.

### Dimensions — mm (in)




### Data sheet no. 10468

## FWP Ferrule

### 700 Vac/dc (UL), 22x58mm, 20 to 100 A




Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Available with or without striker.

### Ratings

- Volts 700 Vac/dc (UL)
- Amps 20-100 A
- IR
  - 200 kA RMS Sym.
  - 50 kA at 700 Vdc, L/R 5 ms

### Operating class aR

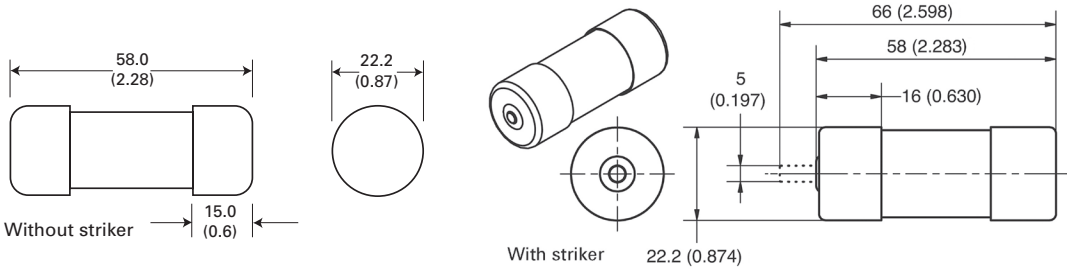
### Agency information

- UL Recognized, (without striker only) JFHR2, E91958
- CSA (without striker only) Class 1422-30, 1422-90 (53787)
- CE

| Fuse type | Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 700 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|---|
| Without striker | 22x58mm (7/8"x2-9/32") | 700 Vac/dc (UL) | 20 | 23.0 | 330 | 5.0 | FWP-20A22F |
| | | | 25 | 37.0 | 530 | 6.0 | FWP-25A22F |
| | | | 32 | 55.0 | 780 | 8.0 | FWP-32A22F |
| | | | 40 | 68.0 | 960 | 12.0 | FWP-40A22F |
| | | | 50 | 155.0 | 2200 | 12.5 | FWP-50A22F |
| | | | 63 | 280.0 | 4000 | 15.0 | FWP-63A22F |
| | | | 80 | 550.0 | 7800 | 15.0 | FWP-80A22F |
| | | | 100 | 1100.0 | 15,600 | 16.5 | FWP-100A22F |
| With striker | 22x58mm (7/8"x2-9/32") | 700 Vac/dc (UL) | 20 | 19.0 | 260 | 5.0 | FWP-20A22FI |
| | | | 25 | 34.0 | 410 | 6.0 | FWP-25A22FI |
| | | | 32 | 53.5 | 605 | 8.0 | FWP-32A22FI |
| | | | 40 | 68.0 | 750 | 9.0 | FWP-40A22FI |
| | | | 50 | 135.0 | 1600 | 9.5 | FWP-50A22FI |
| | | | 63 | 280.0 | 3080 | 11.0 | FWP-63A22FI |
| | | | 80 | 600.0 | 6600 | 13.5 | FWP-80A22FI |
| | | | 100 | 1100.0 | 12,500 | 16.0 | FWP-100A22FI |

* Watts loss at rated current.

### Dimensions — mm (in)




For details on electrical characteristics, contact Application Engineering and ask for data sheets:720026, 5781723

## FWP Ferrule

### 690 Vac, 500 Vdc 22x58mm, 20 to 100 A

Ferrule style Class gR high speed fuses for the protection of AC/DC drives and semiconductors. Available with or without striker.




### Ratings

- Volts
  - 690 Vac
  - 500 Vdc
- Amps 20-100 A
- IR
  - 200 kA RMS Sym.
  - 50 kA DC

### Operating class gR

### Agency information

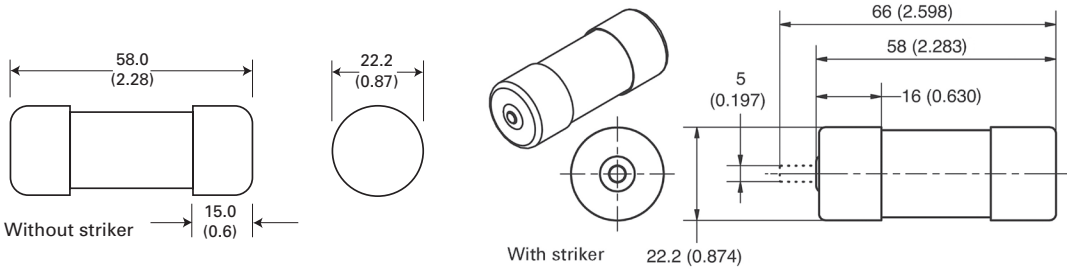
- UL 248-13
- Designed and tested to IEC 60269, Part 4
- CE



| Fuse type | Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | Watts loss (W)* Clearing at 690 Vac | Watts loss (W)* 0.8$I_n$ | Watts loss (W)* $I_n$ | Catalog no. |
|---|---|---|---|---|---|---|---|---|
| Without striker | 22x58mm (7/8"x2-9/32") | 690 Vac, 500Vdc | 20 | 24 | 154 | 3.23 | 6.00 | FWP-20G22F |
| | | | 25 | 43 | 274 | 3.66 | 6.65 | FWP-25G22F |
| | | | 32 | 97 | 616 | 4.86 | 9.21 | FWP-32G22F |
| | | | 40 | 180 | 899 | 4.50 | 8.24 | FWP-40G22F |
| | | | 50 | 273 | 1362 | 6.26 | 11.85 | FWP-50G22F |
| | | | 63 | 516 | 2575 | 7.35 | 13.80 | FWP-63G22F |
| | | | 80 | 1092 | 5448 | 8.40 | 1400 | FWP-80G22F |
| | | | 100 | 2065 | 10,300 | 9.40 | 17.70 | FWP-100G22F |
| With striker | 22x58mm (7/8"x2-9/32") | 690 Vac, 500Vdc | 20 | 24 | 154 | 3.23 | 6.00 | FWP-20G22FI |
| | | | 25 | 43 | 274 | 3.66 | 6.65 | FWP-25G22FI |
| | | | 32 | 97 | 616 | 4.86 | 9.21 | FWP-32G22FI |
| | | | 40 | 180 | 899 | 4.50 | 8.24 | FWP-40G22FI |
| | | | 50 | 273 | 1362 | 6.26 | 11.85 | FWP-50G22FI |
| | | | 63 | 516 | 2575 | 7.35 | 13.80 | FWP-63G22FI |
| | | | 80 | 1092 | 5448 | 8.40 | 1400 | FWP-80G22FI |
| | | | 100 | 2065 | 10,300 | 9.40 | 17.70 | FWP-100G22FI |

* Watts loss at rated current.

### Dimensions — mm (in)




### Data sheet no. 10469

## FWK Ferrule

### 750 Vdc (IEC), 20x127mm and 25x146mm, 5 to 60 A




Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.

### Ratings

- Volts 750 Vdc (IEC)
- Amps
  - 5-30 A (20x127mm)
  - 35-60 A (25x146mm)
- IR 50 kA at 750 Vdc, L/R 10-15 ms

### Operating class gG

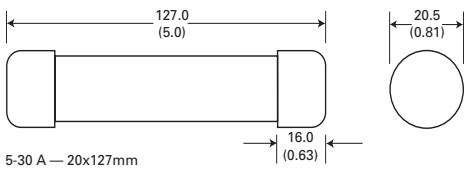
### Agency information

- CE

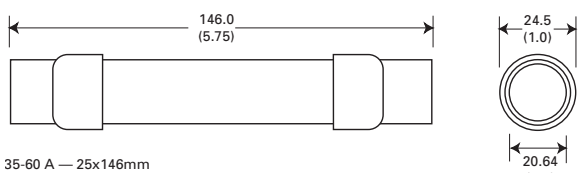
| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 750 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|
| 20x127mm (13/32"x5") | 750 Vdc (IEC) | 5 | 8.5 | 16 | 6.7 | FWK-5A20F |
| | | 8 | 50 | 100 | 8.8 | FWK-8A20F |
| | | 10 | 95 | 200 | 8.5 | FWK-10A20F |
| | | 15 | 100 | 240 | 5.0 | FWK-15A20F |
| | | 20 | 125 | 315 | 7.8 | FWK-20A20F |
| | | 25 | 400 | 1100 | 6.5 | FWK-25A20F |
| | | 30 | 800 | 2600 | 6.5 | FWK-30A20F |
| 25x146mm (1"x5-3/4") | 750 Vdc (IEC) | 35 | 1300 | 4600 | 6.0 | FWK-35A25F |
| | | 40 | 1600 | 5300 | 6.8 | FWK-40A25F |
| | | 50 | 3100 | 12,000 | 7.3 | FWK-50A25F |
| | | 60 | 5900 | 24,000 | 7.7 | FWK-60A25F |

* Watts loss at rated current.

### Dimensions — mm (in)



5-30 A — 20x127mm



35-60 A — 25x146mm

For details on electrical characteristics, contact Application Engineering and ask for data sheets:720039, 5785031

## FWJ Ferrule

### 1000 Vac/800 Vdc (UL), 14x67mm, 20 to 30 A

Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Available with or without striker for remote indication.




### Ratings

- Volts 1000 Vac/800 Vdc
- Amps 20-30 A
- IR
  - 25 kA RMS Sym.
  - 50 kA at 800 Vdc

### Operating class aR

### Agency information

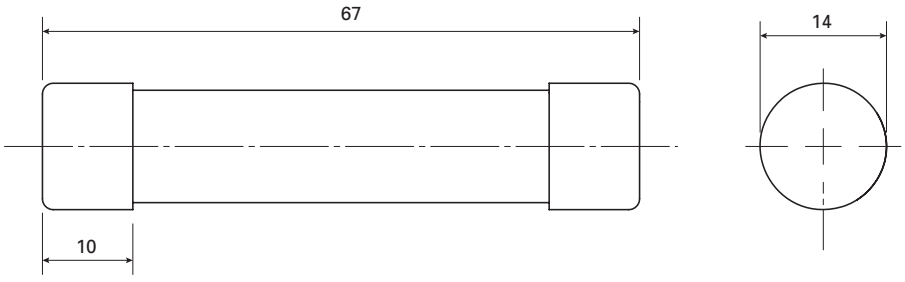
- UL Recognized, JFHR2, E91958
- CE



| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|
| 14x67mm (9/16"x2-5/8") | 1000 Vac/ 800 Vdc (UL) | 20 | 25 | 220 | 9 | FWJ-20A14F |
| | | 25 | 33 | 350 | 11 | FWJ-25A14F |
| | | 30 | 52 | 450 | 14 | FWJ-30A14F |

* Watts loss at rated current.

### Dimensions — mm




For details on electrical characteristics, contact Application Engineering and ask for data sheets:720028, 5785315

## FWL Ferrule

### 1200 Vac/1000 Vdc (IEC), 20x127mm, 20 to 30 A

Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Available with indicator.




### Ratings

- Volts
  - 1200 Vac (IEC)
  - 1000 Vdc (IEC)
- Amps 20-30 A
- IR
  - 50 kA RMS Sym.
  - 50 kA at 1000 Vdc

### Operating class gR

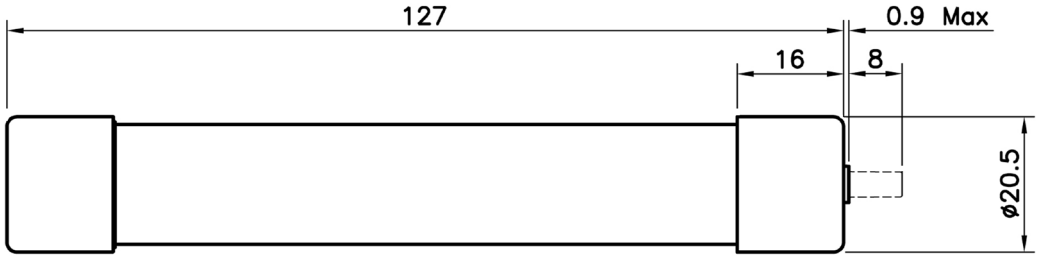
### Agency information

- IEC 60077
- CE

| Fuse type | Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|---|
| Without indicator | 20x127mm (13/16"x5") | 1200 Vac/1000 Vdc (IEC) | 20 | 675 | 1550 | 5.9 | FWL-20A20F |
| | | | 25 | 1200 | 2760 | 6.5 | FWL-25A20F |
| | | | 30 | 1850 | 4300 | 7.5 | FWL-30A20F |
| With indicator | 20x127mm (13/16"x5") | 1200 Vac/1000 Vdc (IEC) | 20 | 675 | 1550 | 5.9 | FWL-20A20FI |
| | | | 25 | 1200 | 2760 | 6.5 | FWL-25A20FI |
| | | | 30 | 1850 | 4300 | 7.5 | FWL-30A20FI |

* Watts loss at rated current.

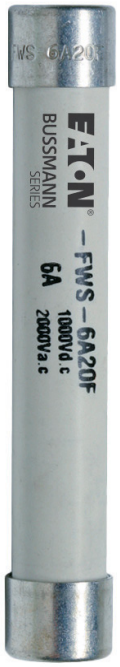
### Dimensions — mm




For details on electrical characteristics, contact Application Engineering and ask for data sheets:720040, 5785455

## FWS Ferrule

### 1400 - 2000 Vac/1000 Vdc (IEC), 20x127mm, 2 to 15 A




Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Available with indicator.

### Ratings

- Volts
  - 2000 Vac/1000 Vdc (IEC, 2-8 A)
  - 1400 Vac/1000 Vdc (IEC, 10-15 A)
- Amps 2-15 A
- IR
  - 50 kA RMS Sym.
  - 50 kA at 1000 Vdc (2-10 A only)

### Operating class gG

### Agency information

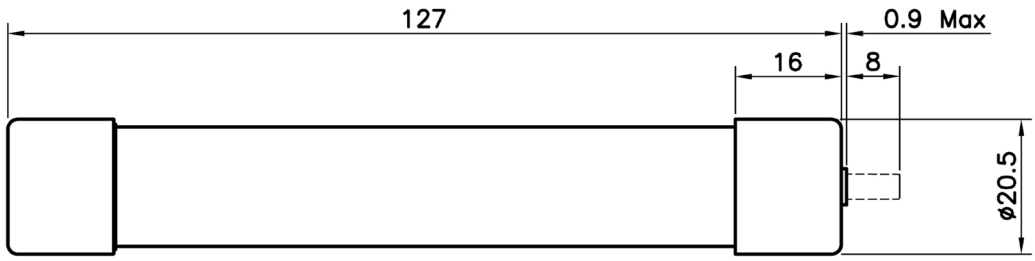
- IEC 60077
- CE



| Fuse type | Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|---|
| Without indicator | 20x127mm (13/16"x5") | 2000 Vac/1000 Vdc (IEC) | 2 | 0.8 | 2.4 | 4.4 | FWS-2A20F |
| | | | 6 | 27.0 | 81.0 | 6.7 | FWS-6A20F |
| | | | 8 | 64.0 | 192.0 | 7.6 | FWS-8A20F |
| | | 1400 Vac/1000 Vdc (IEC) | 10 | 118.0 | 277.0 | 3.0 | FWS-10A20F |
| | | | 12 | 170.0 | 380.0 | 3.4 | FWS-12A20F |
| | | | 15 | 209.0 | 500.0 | 5.0 | FWS-15A20F |
| With indicator | 20x127mm (13/16"x5") | 2000 Vac/1000 Vdc (IEC) | 2 | 0.8 | 2.4 | 4.4 | FWS-2A20FI |
| | | | 6 | 27.0 | 81.0 | 6.7 | FWS-6A20FI |
| | | | 8 | 64.0 | 192.0 | 7.6 | FWS-8A20FI |
| | | 1400 Vac/1000 Vdc (IEC) | 10 | 118.0 | 277.0 | 3.0 | FWS-10A20FI |
| | | | 12 | 170.0 | 380.0 | 3.4 | FWS-12A20FI |
| | | | 15 | 209.0 | 500.0 | 5.0 | FWS-15A20FI |

* Watts loss at rated current.

### Dimensions — mm

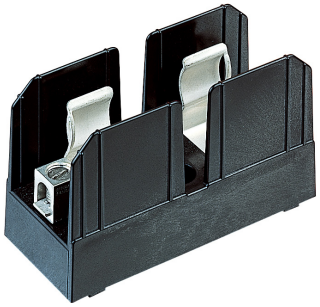



For details on electrical characteristics, contact Application Engineering and ask for data sheets:720040, 5785109

## Ferrule fuse accessories

### 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 | | |

### JM70100 DIN-Rail/panel mount block for 22x58mm fuses

Modular, open-style fuse blocks for 22x58mm cylindrical fuses feature versatile 35mm DIN-Rail or screw-to-panel mounting. Available optional IP20 finger-safe covers with lockout/tagout capability come in indicating and non-indicating versions. For use with FWP fuses.



#### Ratings

- Volts 700 Vac
- Amps 100 A
- Withstand rating 200 kA

#### Agency information

- UL Recognized, Guide IZTL2, File 14853

| Catalog no. | Poles | Terminal type | Optional IP20 cover catalog no.* | |
|---|---|---|---|---|
| | | | Indicating** | Non-indicating |
| JM70100-1CR | 1 | Box lug | CVRI-J-60060 | CVR-J-60060 |
| JM70100-2CR | 2 | | | |
| JM70100-3CR | 3 | | | |

* Order separately, one cover per pole.
**Indication requires 90 V minimum and energized, closed circuit.

**Data sheet no. 10496**

### CHM modular DIN-Rail mount holders for 10x38mm fuses



Bussmann series compact IP20 finger-safe modular DIN-Rail mount fuse holders for 10x38mm cylindrical fuses.

| Catalog no. | | Rated voltage and rated current | Agency markings | Number of poles | Terminal rating | Rated withstand capacity | Compatible Bussmann series fuses |
|---|---|---|---|---|---|---|---|
| With indicator | Without indicator | | | | | | |
| CHM1DIU | CHM1DU | IEC 690 Vac/32 A UL 600 Vac/30 A; | IEC 60269-2 UR; CSA; CCC | 1 | IEC: 1 to 25mm² 70°C PVC/copper cable, solid, stranded, fine stranded, fork lug, comb busbar; single and dual | IEC 120 kA rms sym UL 200 kA rms sym CCC 100 kA rms sym | FWA, FWC. |
| CHM2DIU | CHM2DU | | | 2 | | | |
| CHM3DIU | CHM3DU | | | 3 | | | |
| CHM4DIU | CHM4DU | | | 4 | | | |
| CHM1DNIU | CHM1DNU | | IEC 60269-2 | 1-pole + 1 neutral | | | |
| CHM3DNIU | CHM3DNU | | | 3-pole + 1 neutral | | | |
| — | CHM1DNXU | IEC 690 Vac/32 A | IEC 60269-2 | 1 neutral | | N/A | N/A |

**Data sheet no. 10430**

## Ferrule fuse accessories

### CH14 and CH22 modular DIN-Rail holders

Bussmann series compact DIN-Rail mount fuse holders for 14x51mm and 22x58mm cylindrical fuses. Available in different versions with neutral and microswitch.

### Mounting

- 35mm DIN-Rail
- Panel mount (2xM4 screws)


CH14


CH22

| Catalog no. | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Without indicator** | **With indicator** | **Description** | **Rated voltage and current** | **Agency markings** | **Terminal rating** | **Rated withstand capacity** | **Compatible Bussmann series fuses** |
| **14x51mm** | | | | | | | |
| CH141DNXU | — | Neutral only | 690 Vac/50 A<br>750 Vdc/50 A | IEC 60269-1<br>IEC 60269-2 | Size: 2.5-50mm²<br>Torque: 3 N•m max | 120 kA AC | FWX-A14F[1],<br>FWH-A14F[1],<br>FWP-A14F[1, 2] |
| CH141DU | CH141DIU | 1 pole | | | | | |
| CH142DU | CH142DIU | 2 pole | | | | | |
| CH143DU | CH143DIU | 3 pole | | | | | |
| CH144DU | CH144DIU | 4 pole | | | | | |
| CH141DNU | CH141DNIU | 1 pole + neutral | | | | | |
| CH143DNU | CH143DNIU | 3 pole + neutral | | | | | |
| CH141DMSU-F | — | 1 pole with microswitch | | | | | |
| CH143DMSU-F | — | 3 pole with microswitch | | | | | |
| CH143DNMSU-F | — | 3 pole +neutral with microswitch | | | | | |
| **22x58mm** | | | | | | | |
| CH221DNXU | — | Neutral holder | 690 Vac/125 A<br>1000 Vdc/125 A | IEC 60269-1<br>IEC 60269-2 | Size: 4 - 50mm²<br>Torque: 4 N•m max | 120 kA AC<br>50 kA DC | FWP ferrule[1, 2] |
| CH221DU | CH221DIU | 1 pole fuse holder | | | | | |
| CH222DU | CH222DIU | 2 pole fuse holder | | | | | |
| CH223DU | CH223DIU | 3 pole fuse holder | | | | | |
| CH224DU | CH224DIU | 4 pole fuse holder | | | | | |
| CH221DNU | CH221DNIU | 1 pole + neutral | | | | | |
| CH223DNU | CH223DNIU | 3 pole + neutral | | | | | |
| — | CH221DMSU-F | 1 pole with microswitch | | | | | |
| — | CH223DMSU-F | 3 pole with microswitch | | | | | |
| — | CH223DNMSU-F | 3 pole with microswitch + neutral | | | | | |

[1] Maximum allowed continuous current applies. Please refer to data sheet for details.
[2] Please consult our application engineers if you wish to use a FWP fuse with a striker option.

### CH14 and CH22 accessories

| Catalog no. | Description | For holder |
|---|---|---|
| AL-D | Multi-pole ganging clips, one kit will gang up to 4-poles together | CH14 and CH22 |
| CH14-P | Multi-pole handle pins, one kit will gang up to 12 handles together | CH14 and CH22 |
| CH14-L | Lockout padlock support, it will accept up to 5mm diameter padlock shank | CH14 |
| CH22-L | Lockout padlock support, it will accept up to 5mm diameter padlock shank | CH22 |
| CH14-IP20 | IP20 protection accessory, provides IP20 protection to terminals with 10mm² or less cable | CH14 |
| CH22-IP20 | | CH22 |
| CH14-MS1 | 1-pole microswitch for blown fuse monitoring | CH14 |
| CH22-MS1 | | CH22 |
| CH14-MS3 | 3-pole microswitch for blown fuse monitoring | CH14 |
| CH22-MS3 | | CH22 |

## 170M — Square Body size 000 and 00, DIN 43653

### 690 Vac (IEC), 700 Vac/dc (UL), 10 to 400 A




Square body DIN 43653 bolted tags high speed fuses, for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters. Available with and without visual indicator, and Type T indicator for a microswitch.

### Ratings

- Volts
  - 690 Vac (IEC, size 000 and 00)
  - 700 Vac (UL, size 000; size 00 100-400 A only)
  - 700 Vdc (UL, size 000)
- Amps 10-400 A
- IR
  - 200 kA RMS Sym.
  - 50 kA at 700 Vdc (size 000 only)

### Operating class

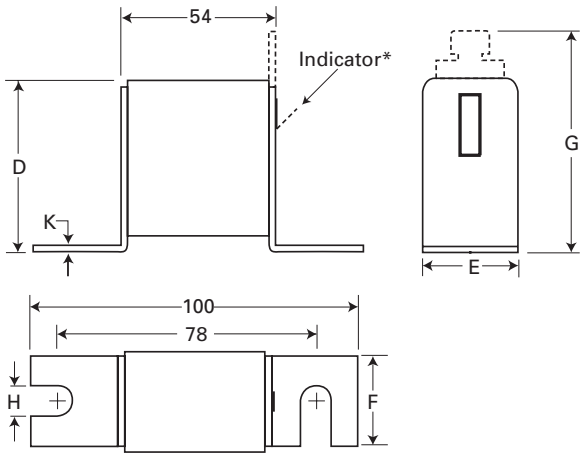
- gR - size 000 (10-63 A), size 00 (25-80 A)
- aR - size 000 (>63 A), size 00 (>80 A)

### Agency Information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CSA Class 53787, File 1422-30 on size 000
- CCC approved
- CE

### Dimensions — mm

The dotted line illustrates the Type T indicator fuse.




**Type -U/80, -/80, -TN/80**

| Size | D | E | F | G | H | K |
|---|---|---|---|---|---|---|
| 000 | 40 | 21 | 20 | 51 | 8 | 2 |
| 00 | 51 | 30 | 28 | 67 | 10 | 2 |

* Indicatior for size 00 fuses is a red pin.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6310 (Size 000), 170K6312 (Size 00)

## 170M — Square Body size 000 and 00, DIN 43653

### 690 Vac (IEC), 700 Vac/dc (UL), 10 to 400 A

| | | | $I^2t$ ($A^2s$) | | | Catalog no. | | |
|---|---|---|---|---|---|---|---|---|
| Fuse size | Rated voltage | Rated current (amps) | Pre-Arcing | Clearing at 660 Vac | Watts loss (W)* | -U/80 without indicator | -/80 with indicator | -TN/80 Type T indicator for microswitch |
| 000 | 690 Vac (IEC) 700 Vac/dc (UL) | 10 | 3.8 | 25.5 | 3.0 | 170M1308 | 170M1358 | 170M1408 |
| | | 16 | 7.2 | 48.0 | 5.5 | 170M1309 | 170M1359 | 170M1409 |
| | | 20 | 11.5 | 78.0 | 7.0 | 170M1310 | 170M1360 | 170M1410 |
| | | 25 | 19.0 | 130.0 | 9.0 | 170M1311 | 170M1361 | 170M1411 |
| | | 32 | 40.0 | 270.0 | 10.0 | 170M1312 | 170M1362 | 170M1412 |
| | | 40 | 69.0 | 460.0 | 12.0 | 170M1313 | 170M1363 | 170M1413 |
| | | 50 | 115.0 | 770.0 | 15.0 | 170M1314 | 170M1364 | 170M1414 |
| | | 63 | 215.0 | 1450.0 | 16.0 | 170M1315 | 170M1365 | 170M1415 |
| | | 80 | 380.0 | 2550.0 | 19.0 | 170M1316 | 170M1366 | 170M1416 |
| | | 100 | 695.0 | 4650.0 | 24.0 | 170M1317 | 170M1367 | 170M1417 |
| | | 125 | 1250.0 | 8500.0 | 28.0 | 170M1318 | 170M1368 | 170M1418 |
| | | 160 | 2350.0 | 16,000.0 | 32.0 | 170M1319 | 170M1369 | 170M1419 |
| | | 200 | 4200.0 | 28,000.0 | 37.0 | 170M1320 | 170M1370 | 170M1420 |
| | | 250 | 7750.0 | 51,500.0 | 42.0 | 170M1321 | 170M1371 | 170M1421 |
| | | 315 | 12,000.0 | 80,500.0 | 53.0 | 170M1322 | 170M1372 | 170M1422 |
| 00 | 690 Vac (IEC) | 25 | 19.0 | 130.0 | 6.0 | | 170M2608 | 170M2658 |
| | | 32 | 28.5 | 195.0 | 7.0 | | 170M2609 | 170M2659 |
| | | 40 | 50.0 | 360.0 | 9.0 | | 170M2610 | 170M2660 |
| | | 50 | 95.0 | 640.0 | 10.0 | | 170M2611 | 170M2661 |
| | | 63 | 170.0 | 1200.0 | 12.0 | | 170M2612 | 170M2662 |
| | | 80 | 310.0 | 2100.0 | 15.0 | | 170M2613 | 170M2663 |
| 00 | 690 Vac (IEC) 700 Vac (UL) | 100 | 620.0 | 4150.0 | 20.0 | | 170M2614 | 170M2664 |
| | | 125 | 1000.0 | 6950.0 | 25.0 | | 170M2615 | 170M2665 |
| | | 160 | 1900.0 | 13,000.0 | 30.0 | | 170M2616 | 170M2666 |
| | | 200 | 3400.0 | 23,000.0 | 35.0 | | 170M2617 | 170M2667 |
| | | 250 | 6250.0 | 42,000.0 | 45.0 | | 170M2618 | 170M2668 |
| | | 315 | 10,000.0 | 68,500.0 | 55.0 | | 170M2619 | 170M2669 |
| | | 350 | 13,500.0 | 91,500.0 | 60.0 | | 170M2620 | 170M2670 |
| | | 400 | 18,000.0 | 125,000.0 | 70.0 | | 170M2621 | 170M2671 |

* Watts loss at rated current.



For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6310 (Size 000), 170K6312 (Size 00)

## 170M — Square Body size 1* to 3, DIN 43653

### 690 Vac (IEC), 700 Vac (UL), 40 to 2000 A




Square body DIN 43653 bolted tags high speed fuses, for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters. Available with visual indicator, and Type K and T indicator for a microswitch.

Ratings

- Volts 690 Vac (IEC)/700 Vac (UL)
- Amps 40-2000 A
- IR 200 kA RMS Sym.

### Operating class aR

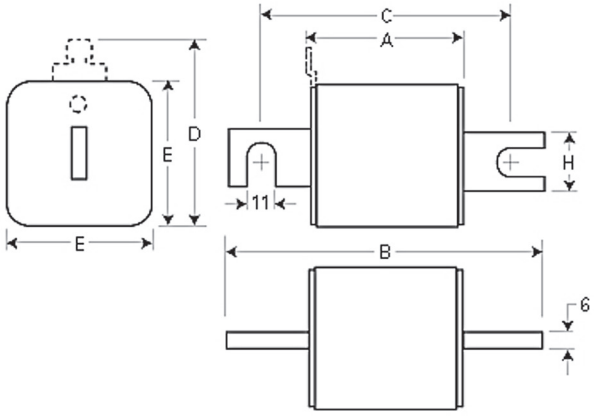
### Agency information

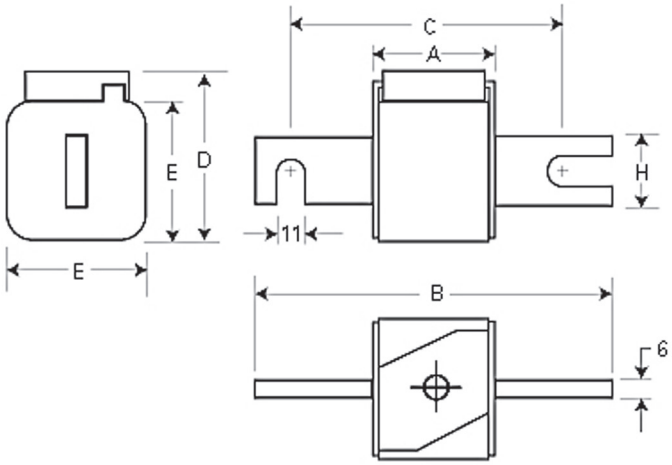
- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2*, E125085
- CSA Class 53787, File 1422-30*
- CCC except where noted
- CE

* Consult your Bussmann series product representative for status.

### Dimensions — mm

1mm = 0.0394"




**Type -/80, -TN/80, -/110, -TN/110**

| Size | A | B | B[1] | C | C[1] | D[2] | E | H |
|---|---|---|---|---|---|---|---|---|
| 1* | 50 | 104 | 134 | 78 | 108 | 58 | 45 | 22 |
| 1 | 50 | 108 | 138 | 78 | 108 | 66 | 53 | 25 |
| 2 | 50 | 108 | 138 | 78 | 108 | 75 | 61 | 25 |
| 3 | 51 | 109 | 139 | 78 | 108 | 90 | 76 | 30 |

1 Valid for fuse Types -/110 and -TN/110.
2 Valid for fuse Types -TN/80 and -TN/110.

**Type -KN/80, -KN/110**

| Size | A | B | B[3] | C | C[3] | D | E | H |
|---|---|---|---|---|---|---|---|---|
| 1* | 50 | 104 | 134 | 78 | 108 | 59 | 45 | 22 |
| 1 | 50 | 108 | 138 | 78 | 108 | 69 | 53 | 25 |
| 2 | 50 | 108 | 138 | 78 | 108 | 77 | 61 | 25 |
| 3 | 51 | 109 | 139 | 78 | 108 | 92 | 76 | 30 |

3 Valid for fuse Type -KN/110.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

## 170M — Square Body size 1* to 3, DIN 43653

### 690 Vac (IEC), 700 Vac (UL), 40 to 2000 A

| | | | $I^2t$ ($A^2s$) | | | Catalog no. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fuse size | Rated voltage | Rated current (amps) | Pre-arcing | Clearing at 660 Vac | Watts loss (W)* | -/80 with indicator | -TN/80 Type T indicator for micro | -KN/80 Type K indicator for micro | -/110 with indicator | -TN/110 Type T indicator for micro | -KN/110 Type K indicator for micro |
| 1* | 690 Vac (IEC) 700 Vac (UL) | 40 | 40 | 270 | 9 | 170M3008 | 170M3058 | 170M3108 | 170M3158 | 170M3208 | 170M3258 |
| | | 50 | 77 | 515 | 11 | 170M3009 | 170M3059 | 170M3109 | 170M3159 | 170M3209 | 170M3259 |
| | | 63 | 115 | 770 | 14 | 170M3010 | 170M3060 | 170M3110 | 170M3160 | 170M3210 | 170M3260 |
| | | 80 | 185 | 1250 | 18 | 170M3011 | 170M3061 | 170M3111 | 170M3161 | 170M3211 | 170M3261 |
| | | 100 | 360 | 2450 | 21 | 170M3012 | 170M3062 | 170M3112 | 170M3162 | 170M3212 | 170M3262 |
| | | 125 | 550 | 3700 | 26 | 170M3013 | 170M3063 | 170M3113 | 170M3163 | 170M3213 | 170M3263 |
| | | 160 | 1100 | 7500 | 30 | 170M3014 | 170M3064 | 170M3114 | 170M3164 | 170M3214 | 170M3264 |
| | | 200 | 2200 | 15,000 | 35 | 170M3015 | 170M3065 | 170M3115 | 170M3165 | 170M3215 | 170M3265 |
| | | 250 | 4200 | 28,500 | 40 | 170M3016 | 170M3066 | 170M3116 | 170M3166 | 170M3216 | 170M3266 |
| | | 315 | 7000 | 46,500 | 50 | 170M3017 | 170M3067 | 170M3117 | 170M3167 | 170M3217 | 170M3267 |
| | | 350 | 10,000 | 68,500 | 55 | 170M3018 | 170M3068 | 170M3118 | 170M3168 | 170M3218 | 170M3268 |
| | | 400 | 15,000 | 105,000 | 60 | 170M3019 | 170M3069 | 170M3119 | 170M3169 | 170M3219 | 170M3269 |
| | | 450 | 21,000 | 140,000 | 65 | 170M3020 | 170M3070 | 170M3120 | 170M3170 | 170M3220 | 170M3270 |
| | | 500 | 27,000 | 180,000 | 70 | 170M3021 | 170M3071 | 170M3121 | 170M3171 | 170M3221 | 170M3271 |
| | | 550 | 34,000 | 230,000 | 75 | 170M3022 | 170M3072 | 170M3122 | 170M3172 | 170M3222 | 170M3272 |
| | | 630 | 48,500 | 325,000 | 80 | 170M3023 | 170M3073 | 170M3123 | 170M3173 | 170M3223 | 170M3273 |
| 1 | 690 Vac (IEC) 700 Vac (UL) | 200 | 1650 | 11,500 | 45 | 170M4008 | 170M4058 | 170M4108 | 170M4158 | 170M4208 | 170M4258 |
| | | 250 | 3100 | 21,000 | 55 | 170M4009 | 170M4059 | 170M4109 | 170M4159 | 170M4209 | 170M4259 |
| | | 315 | 6200 | 42,000 | 58 | 170M4010 | 170M4060 | 170M4110 | 170M4160 | 170M4210 | 170M4260 |
| | | 350 | 8500 | 59,000 | 60 | 170M4011 | 170M4061 | 170M4111 | 170M4161 | 170M4211 | 170M4261 |
| | | 400 | 13,500 | 91,500 | 65 | 170M4012 | 170M4062 | 170M4112 | 170M4162 | 170M4212 | 170M4262 |
| | | 450 | 17,000 | 120,000 | 70 | 170M4013 | 170M4063 | 170M4113 | 170M4163 | 170M4213 | 170M4263 |
| | | 500 | 25,000 | 170,000 | 72 | 170M4014 | 170M4064 | 170M4114 | 170M4164 | 170M4214 | 170M4264 |
| | | 550 | 34,000 | 230,000 | 75 | 170M4015 | 170M4065 | 170M4115 | 170M4165 | 170M4215 | 170M4265 |
| | | 630 | 52,000 | 350,000 | 80 | 170M4016 | 170M4066 | 170M4116 | 170M4166 | 170M4216 | 170M4266 |
| | | 700 | 69,500 | 465,000 | 85 | 170M4017 | 170M4067 | 170M4117 | 170M4167 | 170M4217 | 170M4267 |
| | | 800 | 105,000 | 725,000 | 95 | 170M4018 | 170M4068 | 170M4118 | 170M4168 | 170M4218 | 170M4268 |
| | | 900[2] | 155,000 | 850,000[2] | 100 | 170M4019[1] | 170M4069[1] | 170M4119[1] | 170M4169[1] | 170M4219[1] | 170M4269[1] |
| 2 | 690 Vac (IEC) 700 Vac (UL) | 400 | 11,000 | 74,000 | 65 | 170M5008 | 170M5058 | 170M5108 | 170M5158 | 170M5208 | 170M5258 |
| | | 450 | 15,500 | 105,000 | 70 | 170M5009 | 170M5059 | 170M5109 | 170M5159 | 170M5209 | 170M5259 |
| | | 500 | 21,500 | 145,000 | 75 | 170M5010 | 170M5060 | 170M5110 | 170M5160 | 170M5210 | 170M5260 |
| | | 550 | 28,000 | 190,000 | 80 | 170M5011 | 170M5061 | 170M5111 | 170M5161 | 170M5211 | 170M5261 |
| | | 630 | 41,000 | 275,000 | 90 | 170M5012 | 170M5062 | 170M5112 | 170M5162 | 170M5212 | 170M5262 |
| | | 700 | 60,500 | 405,000 | 95 | 170M5013 | 170M5063 | 170M5113 | 170M5163 | 170M5213 | 170M5263 |
| | | 800 | 86,000 | 575,000 | 105 | 170M5014 | 170M5064 | 170M5114 | 170M5164 | 170M5214 | 170M5264 |
| | | 900 | 125,000 | 840,000 | 110 | 170M5015 | 170M5065 | 170M5115 | 170M5165 | 170M5215 | 170M5265 |
| | | 1000 | 180,000 | 1,250,000 | 115 | 170M5016 | 170M5066 | 170M5116 | 170M5166 | 170M5216 | 170M5266 |
| | | 1100[3] | 245,000 | 1,600,000 | 120 | 170M5017 | 170M5067 | 170M5117 | 170M5167 | 170M5217 | 170M5267 |
| | | 1250[3] | 365,000 | 2,400,000 | 130 | 170M5018 | 170M5068 | 170M5118 | 170M5168 | 170M5218 | 170M5268 |
| 3 | 690 Vac (IEC) 700 Vac (UL) | 500 | 14,000 | 95,000 | 95 | 170M6008 | 170M6058 | 170M6108 | 170M6158 | 170M6208 | 170M6258 |
| | | 550 | 19,500 | 135,000 | 100 | 170M6009 | 170M6059 | 170M6109 | 170M6159 | 170M6209 | 170M6259 |
| | | 630 | 31,000 | 210,000 | 105 | 170M6010 | 170M6060 | 170M6110 | 170M6160 | 170M6210 | 170M6260 |
| | | 700 | 44,500 | 300,000 | 110 | 170M6011 | 170M6061 | 170M6111 | 170M6161 | 170M6211 | 170M6261 |
| | | 800 | 69,500 | 465,000 | 115 | 170M6012 | 170M6062 | 170M6112 | 170M6162 | 170M6212 | 170M6262 |
| | | 900 | 100,000 | 670,000 | 120 | 170M6013 | 170M6063 | 170M6113 | 170M6163 | 170M6213 | 170M6263 |
| | | 1000 | 140,000 | 945,000 | 125 | 170M6014 | 170M6064 | 170M6114 | 170M6164 | 170M6214 | 170M6264 |
| | | 1100 | 190,000 | 1,300,000 | 130 | 170M6015 | 170M6065 | 170M6115 | 170M6165 | 170M6215 | 170M6265 |
| | | 1250 | 290,000 | 1,950,000 | 140 | 170M6016 | 170M6066 | 170M6116 | 170M6166 | 170M6216 | 170M6266 |
| | | 1400 | 370,000 | 2,450,000 | 155 | 170M6017 | 170M6067 | 170M6117 | 170M6167 | 170M6217 | 170M6267 |
| | | 1500 | 460,000 | 3,100,000 | 160 | 170M6018 | 170M6068 | 170M6118 | 170M6168 | 170M6218 | 170M6268 |
| | | 1600 | 580,000 | 3,900,000 | 160 | 170M6019 | 170M6069 | 170M6119 | 170M6169 | 170M6219 | 170M6269 |
| | | 1800[4] | 880,000 | 5,250,000[4] | 165 | 170M6020 | 170M6070 | 170M6120 | 170M6170 | 170M6220 | 170M6270 |
| | | 2000[5] | 1,150,000 | 6,350,000[5] | 175 | 170M6021 | 170M6071 | 170M6121 | 170M6171 | 170M6221 | 170M6271 |

* Watts loss at rated current.

1 Not UL Approved, 2 Rated voltage: 550 Vac IEC, 3 Rated voltage: 600 Vac IEC, 700 Vac UL, 4 Rated voltage: 600 Vac IEC, 500 Vac UL, 5 Rated voltage: 550 Vac IEC, 500 Vac UL.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

## 170M — Square Body size 00, DIN 43653

### 1000 Vac (IEC and UL), 20 to 315 A




Square body DIN 43653 bolted tags high speed fuses, for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters. Available with indicator or Type T indicator for a microswitch.

### Ratings

- Volts
  - 1000 Vac (IEC and UL 20-250 A)
  - 900 Vac (IEC, 315 A)
- Amps 20-315 A
- IR 125 kA RMS Sym.

### Operating class aR

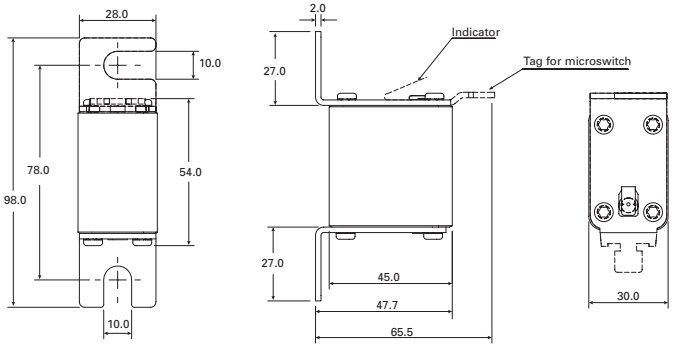
### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, E125085, JFHR2 (20-250 A)
- CSA Class 53787, File 1422-30 (20-250 A) with the exception of catalog numbers. 170M4815 and 170M4835
- CE

| | | | $I^2t$ ($A^2s$) | | | Catalog no. | |
|---|---|---|---|---|---|---|---|
| Fuse size | Rated voltage | Rated current (amps) | Pre-arcing | Clearing at rated voltage | Watts loss (W)* | 00/80 with indicator | 00TN/80 Type T indicator for micro |
| 00 | 1000 Vac (IEC/UL) | 20 | 20 | 140 | 5 | 170M4802 | 170M4822 |
| | | 25 | 30 | 210 | 7 | 170M4803 | 170M4823 |
| | | 32 | 55 | 390 | 9 | 170M4804 | 170M4824 |
| | | 35 | 69 | 500 | 10 | 170M4805 | 170M4825 |
| | | 40 | 100 | 690 | 11 | 170M4806 | 170M4826 |
| | | 50 | 170 | 1200 | 13 | 170M4807 | 170M4827 |
| | | 63 | 280 | 2000 | 18 | 170M4808 | 170M4828 |
| | | 80 | 500 | 3500 | 22 | 170M4809 | 170M4829 |
| | | 100 | 950 | 6850 | 25 | 170M4810 | 170M4830 |
| | | 125 | 1500 | 11,500 | 33 | 170M4811 | 170M4831 |
| | | 160 | 3000 | 22,000 | 37 | 170M4812 | 170M4832 |
| | | 200 | 5600 | 40,500 | 40 | 170M4813 | 170M4833 |
| | | 250 | 10,000 | 74,000 | 48 | 170M4814 | 170M4834 |
| | 900 Vac (IEC) | 315 | 18,000 | 115,000 | 58 | 170M4815 | 170M4835 |

* Watts loss at rated current.

### Dimensions — mm




For details on electrical characteristics, contact Application Engineering and ask for Data sheet no. 170K8504

# 170M — Square Body size 1* to 3, DIN 43653

## 1000 Vac (IEC and UL), 50 to 1400 A

Square body DIN 43653 bolted tags high speed fuses, for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters. Available with a Type T or K indicator for a microswitch.




### Ratings

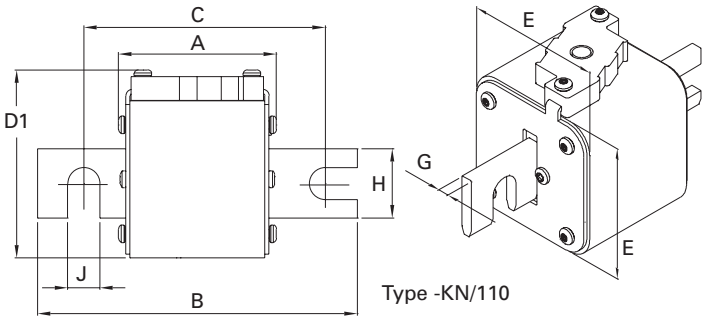
- Volts
  - 1000 Vac (IEC, 50-1250 A), 900 Vac (IEC, 1400 A)
  - 1000 Vac (UL size 2, size 3, 315-1100 A only)
- Amps 50-1400 A
- IR 125 kA RMS Sym.

### Operating class aR

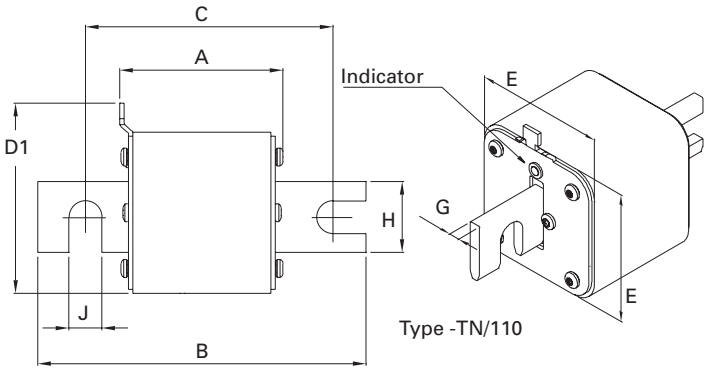
### Agency Information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085 (only sizes 2 and 3)
- CCC (only size 3, 315-1100 A)
- CE

### Dimensions — mm




Type -KN/110




Type -TN/110

**Type -KN/110**

| Size | A | B | C | D1 (max) | E | G | H | J |
|---|---|---|---|---|---|---|---|---|
| 1*KN/110 | 80 | 138 | 108 | 61 | 43 | 6 | 22 | 11 |
| 1KN/110 | 80 | 138 | 108 | 69 | 51 | 6 | 25 | 11 |
| 2KN/110 | 80 | 138 | 108 | 77 | 59 | 6 | 25 | 11 |
| 3KN/110 | 81 | 139 | 108 | 92 | 74 | 6 | 30 | 11 |

**Type -TN/110**

| Size | A | B | C | D1 (max) | E | G | H | J |
|---|---|---|---|---|---|---|---|---|
| 1*TN/110 | 80 | 138 | 108 | 61 | 43 | 6 | 22 | 11 |
| 1TN/110 | 80 | 138 | 108 | 69 | 51 | 6 | 25 | 11 |
| 2TN/110 | 80 | 138 | 108 | 75 | 59 | 6 | 25 | 11 |
| 3TN/110 | 81 | 139 | 108 | 90 | 74 | 6 | 30 | 11 |

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

## 170M — Square Body size 1* to 3, DIN 43653

### 1000 Vac (IEC and UL), 50 to 1400 A

| Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at rated voltage | Watts loss (W)* | Catalog no. -KN/110 Type K indicator for microswitch | Catalog no. -TN/110 Type T indicator for microswitch |
|---|---|---|---|---|---|---|---|
| 1* | 1000 Vac (IEC) | 50 | 135 | 815 | 20 | 170M3965 | 170M3981 |
| | | 63 | 215 | 1300 | 25 | 170M3966 | 170M3982 |
| | | 80 | 460 | 2750 | 30 | 170M3967 | 170M3983 |
| | | 100 | 860 | 5100 | 35 | 170M3968 | 170M3984 |
| | | 125 | 1450 | 8600 | 40 | 170M3969 | 170M3985 |
| | | 160 | 2850 | 17,500 | 45 | 170M3970 | 170M3986 |
| | | 200 | 4950 | 29,500 | 50 | 170M3971 | 170M3987 |
| | | 250 | 9550 | 57,000 | 55 | 170M3972 | 170M3988 |
| | | 315 | 21,500 | 130,000 | 65 | 170M3973 | 170M3989 |
| | | 350 | 29,000 | 175,000 | 70 | 170M3974 | 170M3990 |
| | | 400 | 42,000 | 250,000 | 75 | 170M3975 | 170M3991 |
| 1 | 1000 Vac (IEC) | 160 | 2200 | 13,500 | 40 | 170M4965 | 170M4980 |
| | | 200 | 4150 | 24,500 | 45 | 170M4966 | 170M4981 |
| | | 250 | 7750 | 46,000 | 52 | 170M4967 | 170M4982 |
| | | 315 | 16,500 | 98,500 | 60 | 170M4968 | 170M4983 |
| | | 350 | 21,500 | 130,000 | 65 | 170M4969 | 170M4984 |
| | | 400 | 31,000 | 185,000 | 70 | 170M4970 | 170M4985 |
| | | 450 | 44,500 | 265,000 | 80 | 170M4971 | 170M4986 |
| | | 500 | 63,000 | 375,000 | 85 | 170M4972 | 170M4987 |
| | | 550 | 84,500 | 500,000 | 90 | 170M4973 | 170M4988 |
| | | 630 | 125,000 | 755,000 | 98 | 170M4974 | 170M4989 |
| 2 | 1000 Vac (IEC and UL) | 250 | 6750 | 40,000 | 65 | 170M5966 | 170M5981 |
| | | 315 | 13,500 | 81,500 | 75 | 170M5967 | 170M5982 |
| | | 350 | 16,500 | 99,000 | 80 | 170M5968 | 170M5983 |
| | | 400 | 26,000 | 155,000 | 85 | 170M5969 | 170M5984 |
| | | 450 | 35,500 | 210,000 | 90 | 170M5970 | 170M5985 |
| | | 500 | 49,500 | 295,000 | 95 | 170M5971 | 170M5986 |
| | | 550 | 66,000 | 390,000 | 100 | 170M5972 | 170M5987 |
| | | 630 | 93,500 | 555,000 | 110 | 170M5973 | 170M5988 |
| | | 700 | 130,000 | 770,000 | 115 | 170M5974 | 170M5989 |
| | | 800 | 195,000 | 1,200,000 | 125 | 170M5975 | 170M5990 |
| 3 | 1000 Vac (IEC and UL) | 315 | 9200 | 54,500 | 90 | 170M8614 | 170M8629 |
| | | 350 | 13,000 | 77,500 | 95 | 170M8615 | 170M8630 |
| | | 400 | 19,000 | 115,000 | 105 | 170M8616 | 170M8631 |
| | | 450 | 27,000 | 160,000 | 107 | 170M8617 | 170M8632 |
| | | 500 | 37,500 | 225,000 | 110 | 170M8618 | 170M8633 |
| | | 550 | 52,000 | 310,000 | 115 | 170M8619 | 170M8634 |
| | | 630 | 82,500 | 490,000 | 120 | 170M8620 | 170M8635 |
| | | 700 | 115,000 | 700,000 | 125 | 170M8621 | 170M8636 |
| | | 800 | 170,000 | 1,050,000 | 135 | 170M8622 | 170M8637 |
| | | 900 | 250,000 | 1,500,000 | 145 | 170M8623 | 170M8638 |
| | | 1000 | 340,000 | 2,050,000 | 150 | 170M8624 | 170M8639 |
| | | 1100 | 460,000 | 2,750,000 | 155 | 170M8625 | 170M8640 |
| | 1000 Vac (IEC) | 1250 | 575,000 | 3,400,000 | 175 | 170M8626 | 170M8641 |
| | 900 Vac (IEC) | 1400 | 795,000 | 4,200,000 | 185 | 170M8627 | 170M8642 |

* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

# 170M — Square Body size 1* to 3, DIN 43653

## 1250 Vac (IEC), 1300 Vac (UL), 50 to 1400 A

Square body DIN 43653 bolted tags high speed fuses, for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters.




### Ratings

- Volts see catalog number table
- Amps 50-1400 A
- IR 100 kA RMS Sym.

### Operating class aR

### Agency information

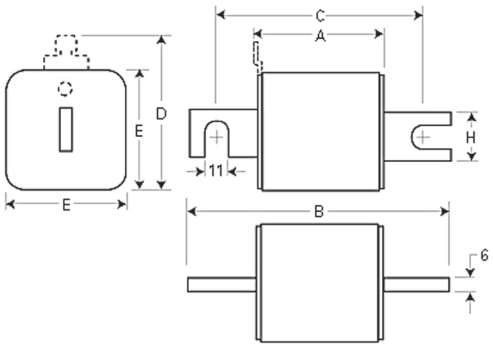
- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2*, E125085
- CSA Class 53787, File 1422-30*
- CE

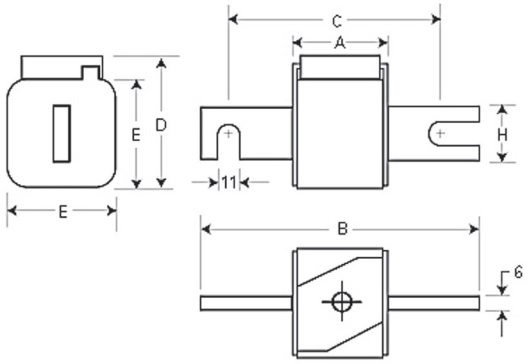
* Consult your Bussmann series product representative for status.

### Dimensions — mm

1mm = 0.0394"






### Type-/110-TN/110

| Size | A | B | C | D[1] | E | H | K |
|---|---|---|---|---|---|---|---|
| 1* | 80 | 138 | 108 | 58 | 45 | 20 | 11 |
| 1 | 80 | 138 | 108 | 66 | 53 | 25 | 11 |
| 2 | 80 | 138 | 108 | 75 | 61 | 25 | 11 |
| 3 | 81 | 139 | 108 | 90 | 76 | 30 | 11 |

1 Clip on microswitch valid for -TN/110 fuses.

### Type-KN/110

| Size | A | B | C | D | E | H | K |
|---|---|---|---|---|---|---|---|
| 1* | 80 | 138 | 108 | 60 | 45 | 20 | 11 |
| 1 | 80 | 138 | 108 | 69 | 53 | 25 | 11 |
| 2 | 80 | 138 | 108 | 77 | 61 | 25 | 11 |
| 3 | 81 | 139 | 108 | 92 | 76 | 30 | 11 |

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

## 170M — Square Body size 1* to 3, DIN 43653, 170M

### 1250 Vac (IEC), 1300 Vac (UL), 50 to 1400 A

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | I²t (A²s) Clearing at 1250 Vac | Watts loss (W)† | Catalog no. -/110 with indicator | Catalog no. -TN/110 Type T indicator for microswitch | Catalog no. -KN/110 Type K indicator for microswitch |
|---|---|---|---|---|---|---|---|---|---|
| 1* | 1250 Vac (IEC) 1300 Vac (UL) | 50 | 135 | 815 | 1100 | 15 | 170M3138 | 170M3188 | 170M3238 |
| | | 63 | 215 | 1300 | 1750 | 20 | 170M3139 | 170M3189 | 170M3239 |
| | | 80 | 420 | 2500 | 3350 | 25 | 170M3140 | 170M3190 | 170M3240 |
| | | 100 | 750 | 4450 | 5950 | 30 | 170M3141 | 170M3191 | 170M3241 |
| | | 125 | 1450 | 9000 | 11,500 | 35 | 170M3142 | 170M3192 | 170M3242 |
| | | 160 | 2600 | 16,000 | 21,000 | 40 | 170M3143 | 170M3193 | 170M3243 |
| | | 200 | 5150 | 31,000 | 41,000 | 45 | 170M3144 | 170M3194 | 170M3244 |
| | | 250 | 9200 | 54,500 | 73,000 | 55 | 170M3145 | 170M3195 | 170M3245 |
| | | 315 | 18,500 | 115,000 | 150,000 | 60 | 170M3146 | 170M3196 | 170M3246 |
| | | 350 | 27,000 | 165,000 | 220,000 | 65 | 170M3147 | 170M3197 | 170M3247 |
| | | 400 | 53,000 | 265,000 | 335,000 | 70 | 170M3148 | 170M3198 | 170M3248 |
| 1 | 1250 Vac (IEC) 1300 Vac (UL) | 160 | 1900 | 11,500 | 15,500 | 45 | 170M4138 | 170M4188 | 170M4238 |
| | | 200 | 3800 | 22,500 | 30,000 | 50 | 170M4139 | 170M4189 | 170M4239 |
| | | 250 | 7750 | 46,000 | 61,500 | 60 | 170M4140 | 170M4190 | 170M4240 |
| | | 315 | 15,000 | 90,000 | 120,000 | 65 | 170M4141 | 170M4191 | 170M4241 |
| | | 350 | 20,000 | 125,000 | 165,000 | 70 | 170M4142 | 170M4192 | 170M4242 |
| | | 400 | 29,500 | 175,000 | 235,000 | 75 | 170M4143 | 170M4193 | 170M4243 |
| | | 450 | 42,000 | 250,000 | 335,000 | 80 | 170M4144 | 170M4194 | 170M4244 |
| | | 500 | 69,500 | 340,000 | 435,000 | 85 | 170M4145 | 170M4195 | 170M4245 |
| | | 550 | 95,000 | 465,000 | 590,000 | 95 | 170M4146 | 170M4196 | 170M4246 |
| | 1100 Vac (IEC) | 630 | 130,000 | 660,000 | N/A | 100 | 170M4147[1] | 170M4197[1] | 170M4247[1] |
| 2 | 1250 Vac (IEC) 1300 Vac (UL) | 250 | 6500 | 38,500 | 51,500 | 65 | 170M5138 | 170M5188 | 170M5238 |
| | | 280 | 9350 | 55,500 | 74,500 | 70 | 170M5139 | 170M5189 | 170M5239 |
| | | 315 | 13,000 | 77,500 | 105,000 | 75 | 170M5140 | 170M5190 | 170M5240 |
| | | 350 | 16,500 | 97,500 | 135,000 | 80 | 170M5141 | 170M5191 | 170M5241 |
| | | 400 | 23,000 | 140,000 | 180,000 | 85 | 170M5142 | 170M5192 | 170M5242 |
| | | 450 | 34,000 | 205,000 | 270,000 | 90 | 170M5143 | 170M5193 | 170M5243 |
| | | 500 | 48,000 | 285,000 | 380,000 | 95 | 170M5144 | 170M5194 | 170M5244 |
| | | 550 | 62,000 | 370,000 | 495,000 | 100 | 170M5145 | 170M5195 | 170M5245 |
| | | 630 | 115,000 | 575,000 | 730,000 | 120 | 170M5146 | 170M5196 | 170M5246 |
| | | 700 | 160,000 | 795,000 | 1,050,000 | 125 | 170M5147 | 170M5197 | 170M5247 |
| | | 800 | 245,000 | 1,200,000 | 1,550,000 | 130 | 170M5148 | 170M5198 | 170M5248 |
| | 1100 Vac (IEC/UL) | 900 | 360,000 | 1,750,000 | N/A | 135 | 170M5149 | 170M5199 | 170M5249 |
| | | 1000 | 480,000 | 2,350,000 | N/A | 145 | 170M5150 | 170M5200 | 170M5250 |
| 3 | 1300 Vac (UL) | 315 | 9500 | 58,000 | 77,500 | 85 | 170M6138 | 170M6188 | 170M6238 |
| | | 350 | 13,500 | 81,500 | 110,000 | 90 | 170M6139 | 170M6189 | 170M6239 |
| | | 400 | 19,500 | 120,000 | 160,000 | 95 | 170M6140 | 170M6190 | 170M6240 |
| | | 450 | 31,000 | 185,000 | 245,000 | 100 | 170M6141 | 170M6191 | 170M6241 |
| | | 500 | 39,000 | 235,000 | 310,000 | 105 | 170M6142 | 170M6192 | 170M6242 |
| | | 550 | 55,000 | 325,000 | 435,000 | 110 | 170M6143 | 170M6193 | 170M6243 |
| | | 630 | 83,500 | 495,000 | 665,000 | 115 | 170M6144 | 170M6194 | 170M6244 |
| | | 700 | 115,000 | 705,000 | 940,000 | 120 | 170M6145 | 170M6195 | 170M6245 |
| | | 800 | 205,000 | 995,000 | 1,300,000 | 125 | 170M6146 | 170M6196 | 170M6246[1] |
| | | 900 | 305,000 | 1,500,000 | 1,900,000 | 130 | 170M6147 | 170M6197 | 170M6247[1] |
| | | 1000 | 450,000 | 2,150,000 | 2,750,000 | 135 | 170M6148 | 170M6198 | 170M6248[1] |
| | | 1100 | 575,000 | 2,800,000 | 3,600,000 | 160 | 170M6149 | 170M6199 | 170M6249[1] |
| | 1100 Vac (IEC) | 1250 | 810,000 | 3,950,000 | N/A | 170 | 170M6150[1] | 170M6200[1] | 170M6250[1] |
| | | 1400 | 1,250,000 | 6,000,000 | N/A | 175 | 170M6151[1] | 170M6201[1] | 170M6251[1] |

† Watts loss at rated current.
1 Not UL Recognized.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

# 170M — Square Body size 00 to 3, DIN 43620, full range (gR)

## 690 Vac (IEC), 10 to 800 A




Square body DIN 43653 blade high speed fuses. Full range protection fuses provide both overload and short-circuit protection. Fuses come with Type T indicator for a microswitch.

### Ratings

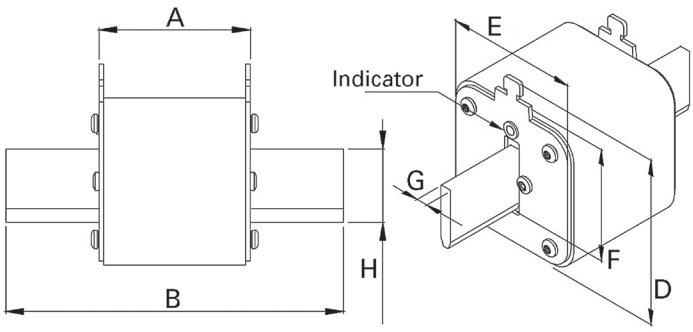
- Volts 690 Vac (IEC)
- Amps 10-800 A
- IR 200 kA RMS Sym.

### Operating class gR

### Agency information

- Designed and tested to IEC 60269 Part 4
- CE

### Dimensions — mm




| Size | A | B | D (max) | E (max) | F | G | H (min) |
|---|---|---|---|---|---|---|---|
| 00 | 49 | 78.5 | 60 | 30 | 35 | 6 | 15 |
| 1 | 68 | 135 | 66 | 52 | 40 | 6 | 20 |
| 2 | 68 | 150 | 74 | 60 | 48 | 6 | 25 |
| 3 | 68 | 150 | 89 | 75 | 60 | 6 | 32 |



For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6412 (Size 00), 170K6416 (Size 1), 170K6418 (Size 2), 170K6420 (Size 3)

## 170M — Square Body size 00 to 3, DIN 43620, full range (gR)

### 690 Vac (IEC), 10 to 800 A

| Fuse size | Rated voltage | Rated current (amps)[1] | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 690 Vac | Watts loss (W)* | Catalog no. with Type T indicator for microswitch |
|---|---|---|---|---|---|---|
| 00 | 690 Vac (IEC) | 10 | 3.8 | 20 | 3.5 | 170M2691 |
| | | 16 | 7.2 | 38 | 5.5 | 170M2692 |
| | | 20 | 13.0 | 70 | 6.0 | 170M2693 |
| | | 25 | 24.0 | 125 | 8.0 | 170M2694 |
| | | 32 | 53.0 | 275 | 9.0 | 170M2695 |
| | | 40 | 95.0 | 490 | 10.0 | 170M2696 |
| | | 50 | 185.0 | 1000 | 11.0 | 170M2697 |
| | | 63 | 345.0 | 1800 | 14.0 | 170M2698 |
| | | 80 | 695.0 | 3600 | 16.0 | 170M2699 |
| | | 100 | 1250.0 | 6650 | 19.0 | 170M2700 |
| | | 125 | 2300.0 | 12,000 | 23.0 | 170M2701 |
| | | 160 | 4350.0 | 22,500 | 29.0 | 170M2702 |
| 1 | 690 Vac (IEC) | 50 | 135.0 | 705 | 12.0 | 170M4176 |
| | | 63 | 245.0 | 1300 | 15.0 | 170M4177 |
| | | 80 | 500.0 | 2600 | 17.0 | 170M4178 |
| | | 100 | 950.0 | 4850 | 20.0 | 170M4179 |
| | | 125 | 1850.0 | 9500 | 23.0 | 170M4180 |
| | | 160 | 3450.0 | 18,000 | 28.0 | 170M4181 |
| | | 200 | 6750.0 | 34,500 | 31.0 | 170M4182 |
| | | 250 | 13,500.0 | 70,500 | 35.0 | 170M4183 |
| | | 315 | 26,000.0 | 135,000 | 41.0 | 170M4184 |
| | | 350 | 34,000.0 | 175,000 | 45.0 | 170M4185 |
| | | 400 | 48,500.0 | 250,000 | 48.0 | 170M4186 |
| 2 | 690 Vac (IEC) | 200 | 5650.0 | 29,000 | 33.0 | 170M5881 |
| | | 250 | 10,000.0 | 52,500 | 40.0 | 170M5882 |
| | | 315 | 19,500.0 | 105,000 | 46.0 | 170M5883 |
| | | 350 | 26,000.0 | 135,000 | 50.0 | 170M5884 |
| | | 400 | 39,500.0 | 205,000 | 53.0 | 170M5885 |
| | | 450 | 55,500.0 | 290,000 | 59.0 | 170M5886 |
| | | 500 | 73,000.0 | 375,000 | 66.0 | 170M5887 |
| | | 550 | 100,000.0 | 515,000 | 70.0 | 170M5888 |
| | | 630 | 150,000.0 | 770,000 | 79.0 | 170M5889 |
| 3 | 690 Vac (IEC) | 350 | 23,000.0 | 120,000 | 55.0 | 170M6080 |
| | | 400 | 34,000.0 | 175,000 | 59.0 | 170M6081 |
| | | 450 | 48,500.0 | 250,000 | 62.0 | 170M6082 |
| | | 500 | 64,000.0 | 330,000 | 67.0 | 170M6083 |
| | | 550 | 84,500.0 | 435,000 | 70.0 | 170M6084 |
| | | 630 | 125,000.0 | 645,000 | 85.0 | 170M6085 |
| | | 700 | 160,000.0 | 840,000 | 93.0 | 170M6086 |
| | | 800 | 245,000.0 | 1,300,000 | 99.0 | 170M6087 |

* Watts loss at rated current.

1 The RMS Amp rating of this fuses range is given with open fuse blocks connected to copper conductors according to IEC 60269, Part 1, table 10. When used in enclosed fuse blocks/disconnects, derating factors have to be observed. Please contact Eaton's Bussmann Division for application assistance bulehighspeedtechnical@eaton.com.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6412 (Size 00), 170K6416 (Size 1), 170K6418 (Size 2), 170K6420 (Size 3)

# 170M — Square Body size 000 to 3, DIN 43620, dual indicator fuses

## 690 Vac (IEC), 700 Vac (UL), 10 to 1600 A




Square body DIN 43620 blade high speed fuses with dual indicator system: one indicator in the fuse body and another one in the metallic end plate. Interchangeable with existing high speed DIN 43620 fuses for the protection of UPS, soft starters, solid state relays, variable speed drives, rectifiers and inverters.

### Ratings

- Volts
  - 690 Vac (IEC)
  - 700 Vac (UL)
- Amps 10-1600 A
- IR 200 kA RMS Sym.

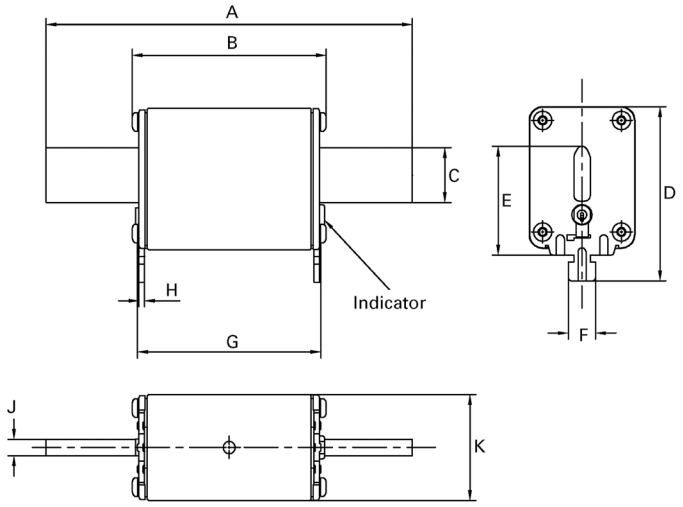
### Operating class

- gR (size 000, 10-63 A)
- aR (others)

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CSA Class 1422-30, (53787) with the exception of catalog number 170M4867D
- CE

### Dimensions — mm




| Size | A | B | C | D | E | F | G | H | J | K |
|---|---|---|---|---|---|---|---|---|---|---|
| 000 | 78.5 | 53.0 | 15.0 | 52 | 35 | 10 | 49.7 | 1.5 | 6 | 20.5 |
| 00 | 78.5 | 53.0 | 15.0 | 59 | 35 | 10 | 49.7 | 2.0 | 6 | 30.0 |
| 1 | 135.0 | 71.4 | 20.0 | 64 | 40 | 10 | 67.5 | 2.0 | 6 | 40.0 |
| 2 | 150.0 | 71.4 | 25.1 | 72 | 48 | 10 | 67.5 | 2.0 | 6 | 54.0 |
| 3 | 150.0 | 72.4 | 32.0 | 87 | 60 | 10 | 68.5 | 2.5 | 6 | 71.0 |

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6386 (Size 000 and 00), 170K6388 (Size 1), 170K6390 (Size 2), 170K6392 (Size 3)

## 170M — Square Body size 000 to 3, DIN 43620, dual indicator fuses

### 690 Vac (IEC), 700 Vac (UL), 10 to 1600 A

| Fuse size | Rated voltage | Rated current (amps) | Max permissible load current | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at 690 Vac | Watts loss (W)[3] | Catalog no. |
|---|---|---|---|---|---|---|---|
| 000 | 690 Vac (IEC) 700 Vac (UL) | 10 | 10 | 4 | 27 | 2.5 | 170M1558D |
| | | 16 | 16 | 7 | 51 | 4 | 170M1559D |
| | | 20 | 20 | 11.5 | 82.5 | 5 | 170M1560D |
| | | 25 | 25 | 19 | 140 | 6 | 170M1561D |
| | | 32 | 32 | 40 | 285 | 7 | 170M1562D |
| | | 40 | 40 | 65 | 490 | 8.5 | 170M1563D |
| | | 50 | 50 | 115 | 815 | 9.5 | 170M1564D |
| | | 63 | 63 | 215 | 1550 | 11.5 | 170M1565D |
| | | 80 | 80 | 380 | 2700 | 15 | 170M1566D |
| | | 100 | 100 | 695 | 4950 | 16.5 | 170M1567D |
| | | 125 | 125 | 1180 | 8250 | 21.5 | 170M1568D |
| | | 160 | 160 | 2300 | 16,500 | 25 | 170M1569D |
| | | 200 | 200 | 4350 | 31,000 | 29.5 | 170M1570D |
| | | 250 | 250 | 7900 | 56,000 | 35.5 | 170M1571D |
| 00 | 690 Vac (IEC) /700 Vac (UL) | 315 | 315 | 12,000 | 84,500 | 45 | 170M1572D |
| 1 | 690 Vac (IEC) 700 Vac (UL) | 40 | 25 | 40 | 285 | 4 | 170M3808D |
| | | 50 | 30 | 78 | 550 | 4.5 | 170M3809D |
| | | 63 | 38 | 120 | 850 | 6.5 | 170M3810D |
| | | 80 | 50 | 185 | 1350 | 8.5 | 170M3811D |
| | | 100 | 60 | 360 | 2600 | 10 | 170M3812D |
| | | 125 | 75 | 550 | 3900 | 11 | 170M3813D |
| | | 160 | 95 | 1150 | 8250 | 12 | 170M3814D |
| | | 200 | 120 | 2300 | 16,500 | 12.5 | 170M3815D |
| | | 250 | 150 | 4350 | 31,000 | 16 | 170M3816D |
| | | 315 | 190 | 7300 | 52,000 | 20 | 170M3817D |
| | | 350 | 210 | 10,000 | 73,000 | 21.5 | 170M3818D |
| | | 400 | 240 | 16,000 | 115,000 | 23 | 170M3819D |
| | | 450 | 270 | 21,500 | 155,000 | 26.5 | 170M4863D |
| | | 500 | 300 | 27,000 | 190,000 | 28.5 | 170M4864D |
| | | 550 | 330 | 33,500 | 240,000 | 33 | 170M4865D |
| | | 630 | 380 | 48,500 | 345,000 | 37.5 | 170M4866D |
| | | 700 | 420 | 69,500 | 495,000 | 39 | 170M4867D[1] |
| 2 | 690 Vac (IEC) 700 Vac (UL) | 400 | 240 | 11,000 | 79,000 | 29 | 170M5808D |
| | | 450 | 270 | 16,000 | 115,000 | 32 | 170M5809D |
| | | 500 | 300 | 21,500 | 155,000 | 34 | 170M5810D |
| | | 550 | 330 | 29,000 | 215,000 | 36 | 170M5811D |
| | | 630 | 380 | 41,000 | 295,000 | 42 | 170M5812D |
| | | 700 | 420 | 60,500 | 430,000 | 43 | 170M5813D |
| | | 800 | 480 | 86,000 | 610,000 | 48 | 170M5814D |
| | | 900 | 540 | 125,000 | 895,000 | 52 | 170M5820D |
| | | 1000 | 600 | 180,000 | 1,300,000 | 53 | 170M5816D |
| | | 1100 | 660 | 245,000 | 1,750,000 | 56 | 170M5817D |
| 3 | 690 Vac (IEC) 700 Vac (UL) | 500 | 300 | 14,000 | 99,500 | 43 | 170M6808D |
| | | 550 | 330 | 19,500 | 140,000 | 44 | 170M6809D |
| | | 630 | 380 | 31,000 | 220,000 | 45 | 170M6810D |
| | | 700 | 420 | 45,000 | 320,000 | 46 | 170M6811D |
| | | 800 | 480 | 69,500 | 490,000 | 48 | 170M6812D |
| | | 900 | 540 | 100,000 | 720,000 | 50 | 170M6813D |
| | | 1000 | 600 | 140,000 | 985,000 | 56 | 170M6814D |
| | | 1100 | 660 | 190,000 | 1,400,000 | 57 | 170M6892D |
| | | 1250 | 750 | 300,000 | 2,150,000 | 61 | 170M8554D |
| | | 1400 | 840 | 380,000 | 2,700,000 | 70 | 170M8555D |
| | | 1500 | 900 | 470,000 | 3,350,000 | 72 | 170M8556D |
| | | 1600 | 960 | 585,000 | 4,150,000 | 74 | 170M8557D |

1 170M4867D is not UL Recognized.
3 Given at maximum load rated current, please refer to data sheets for further details.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6386 (Size 000 and 00), 170K6388 (Size 1), 170K6390 (Size 2), 170K6392 (Size 3)

# 170M — Square Body size 00, DIN 43620

## 1000 Vac (IEC and UL), 20 to 225 A




Square body DIN 43620 blade style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Fuses come with Type T indicator for microswitches.

### Ratings

- Volts
  - 1000 Vac (IEC and UL)
  - 900 Vac (200 and 225 A)
- Amps 20-225 A
- IR 125 kA RMS Sym.

### Operating class aR

### Agency information

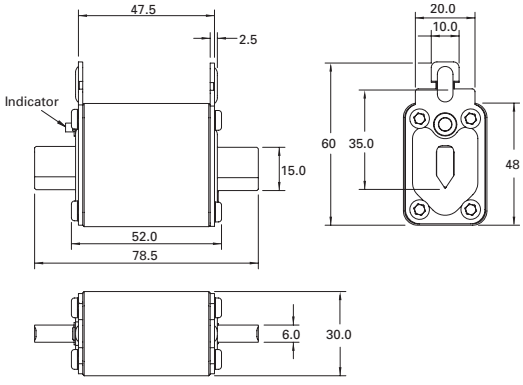
- Designed and tested to IEC 60269 Part 4
- UL Recognized (20-160 A)
- CSA (20-160 A)
- CE



| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. with Type T indicator for microswitch |
|---|---|---|---|---|---|---|
| 00 | 1000 Vac (IEC/UL) | 20 | 15 | 110 | 8.5 | 170M2673 |
| | | 25 | 28.5 | 210 | 9.5 | 170M2674 |
| | | 32 | 53 | 390 | 11 | 170M2675 |
| | | 35 | 69 | 500 | 12 | 170M2676 |
| | | 40 | 105 | 760 | 13 | 170M2677 |
| | | 50 | 215 | 1550 | 14 | 170M2678 |
| | | 63 | 380 | 2750 | 16 | 170M2679 |
| | | 80 | 815 | 5900 | 18 | 170M2680 |
| | | 100 | 1550 | 11,500 | 21 | 170M2681 |
| | | 125 | 3000 | 22,000 | 23 | 170M2682 |
| | | 160 | 6250 | 45,000 | 26 | 170M2683 |
| 00 | 900 Vac (IEC) | 200 | 12,000 | 86,500 | 31 | 170M2684 |
| | | 225 | 18,000 | 115,000 | 33 | 170M2685 |

* Watts loss at rated current.

### Dimensions — mm




For details on electrical characteristics, contact Application Engineering and ask for Data sheet no. 170K8506

## 170M — Square Body size 1* to 3, French style

### 690 Vac (IEC), 700 Vac (UL), 40 to 1600 A




Square body French style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Available with Type T or K indicators for microswitches.

### Ratings

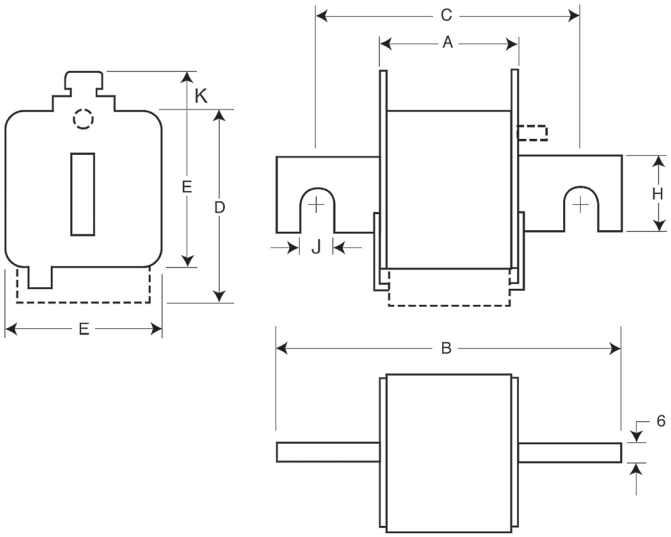
- Volts
  - 690 Vac (IEC)
  - 700 Vac (UL)
- Amps 40-1600 A
- IR 200 kA RMS Sym.

### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CSA Class 1422-30, (53787) on sizes (1, 2, 3) only
- CCC (please consult bulehighspeedtechnical@eaton.com for status)
- CE

### Dimensions — mm




### Type -E/-, -EKN/-

| Size | A | B | C | D | E | H | J | K |
|---|---|---|---|---|---|---|---|---|
| 1* | 50 | 102 | 76 | 59 | 45 | 18 | 9 | 13 |
| 1 | 50 | 111 | 86 | 69 | 53 | 25 | 11 | 11 |
| 2 | 50 | 126 | 91 | 77 | 61 | 30 | 13 | 12 |
| 3 | 51 | 126 | 91 | 92 | 76 | 36 | 13 | 13 |

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

## 170M —Square Body size 1* to 3, French style

### 690 Vac (IEC), 700 Vac (UL), 40 to 1600 A

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 660 Vac | Watts loss (W)* | Catalog no. -E/- Type T indicator for microswitch | Catalog no. -EKN/- Type K indicator for microswitch |
|---|---|---|---|---|---|---|---|
| 1* | 690 Vac (IEC) 700 Vac (UL) | 40 | 40 | 270 | 9 | 170M3308 | 170M3358 |
| | | 50 | 77 | 515 | 11 | 170M3309 | 170M3359 |
| | | 63 | 115 | 770 | 14 | 170M3310 | 170M3360 |
| | | 80 | 185 | 1250 | 18 | 170M3311 | 170M3361 |
| | | 100 | 360 | 2450 | 21 | 170M3312 | 170M3362 |
| | | 125 | 550 | 3700 | 26 | 170M3313 | 170M3363 |
| | | 160 | 1100 | 7500 | 30 | 170M3314 | 170M3364 |
| | | 200 | 2200 | 15,000 | 35 | 170M3315 | 170M3365 |
| | | 250 | 4200 | 28,500 | 40 | 170M3316 | 170M3366 |
| | | 315 | 7000 | 46,500 | 50 | 170M3317 | 170M3367 |
| | | 350 | 10,000 | 68,500 | 55 | 170M3318 | 170M3368 |
| | | 400 | 15,000 | 105,000 | 60 | 170M3319 | 170M3369 |
| | | 450 | 21,000 | 140,000 | 65 | 170M3320 | 170M3370 |
| | | 500 | 27,000 | 180,000 | 70 | 170M3321 | 170M3371 |
| 1 | 690 Vac (IEC) 700 Vac (UL) | 200 | 1650 | 11,500 | 45 | 170M4308 | 170M4358 |
| | | 250 | 3100 | 21,000 | 55 | 170M4309 | 170M4359 |
| | | 315 | 6200 | 42,000 | 58 | 170M4310 | 170M4360 |
| | | 350 | 8500 | 59,000 | 60 | 170M4311 | 170M4361 |
| | | 400 | 13,500 | 91,500 | 65 | 170M4312 | 170M4362 |
| | | 450 | 17,000 | 120,000 | 70 | 170M4313 | 170M4363 |
| | | 500 | 25,000 | 170,000 | 72 | 170M4314 | 170M4364 |
| | | 550 | 34,000 | 230,000 | 75 | 170M4315 | 170M4365 |
| | | 630 | 52,000 | 350,000 | 80 | 170M4316 | 170M4366 |
| | | 700 | 69,500 | 465,000 | 85 | 170M4317 | 170M4367 |
| | | 800 | 105,000 | 725,000 | 95 | 170M4318 | 170M4368 |
| 2 | 690 Vac (IEC) 700 Vac (UL) | 400 | 11,000 | 74,000 | 65 | 170M5308 | 170M5358 |
| | | 450 | 15,500 | 105,000 | 70 | 170M5309 | 170M5359 |
| | | 500 | 21,500 | 145,000 | 75 | 170M5310 | 170M5360 |
| | | 550 | 28,000 | 190,000 | 80 | 170M5311 | 170M5361 |
| | | 630 | 41,000 | 275,000 | 90 | 170M5312 | 170M5362 |
| | | 700 | 60,500 | 405,000 | 95 | 170M5313 | 170M5363 |
| | | 800 | 86,000 | 575,000 | 105 | 170M5314 | 170M5364 |
| | | 900 | 125,000 | 840,000 | 110 | 170M5315 | 170M5365 |
| | | 1000 | 180,000 | 1,250,000 | 115 | 170M5316 | 170M5366 |
| 3 | 690 Vac (IEC) 700 Vac (UL) | 500 | 14,000 | 95,000 | 95 | 170M6308 | 170M6358 |
| | | 550 | 19,500 | 135,000 | 100 | 170M6309 | 170M6359 |
| | | 630 | 31,000 | 210,000 | 105 | 170M6310 | 170M6360 |
| | | 700 | 44,500 | 300,000 | 110 | 170M6311 | 170M6361 |
| | | 800 | 69,500 | 465,000 | 115 | 170M6312 | 170M6362 |
| | | 900 | 100,000 | 670,000 | 120 | 170M6313 | 170M6363 |
| | | 1000 | 140,000 | 945,000 | 125 | 170M6314 | 170M6364 |
| | | 1100 | 190,000 | 1,300,000 | 130 | 170M6315 | 170M6365 |
| | | 1250 | 290,000 | 1,950,000 | 140 | 170M6316 | 170M6366 |
| | | 1400 | 370,000 | 2,450,000 | 155 | 170M6317 | 170M6367 |
| | | 1500 | 460,000 | 3,100,000 | 160 | 170M6318 | 170M6368 |
| | | 1600 | 580,000 | 3,900,000 | 160 | 170M6319 | 170M6369 |

* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

## 170M — Square Body size 1* to 3, US style

### 690 Vac (IEC), 700 Vac (UL), 40 to 2000 A




Square body US style bolted tags high speed fuses for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters. Available with Type K indicator for a microswitch.

### Ratings

- Volts see catalog numbers table
- Amps 40-2000 A
- IR 200 kA RMS Sym.

### Operating class aR

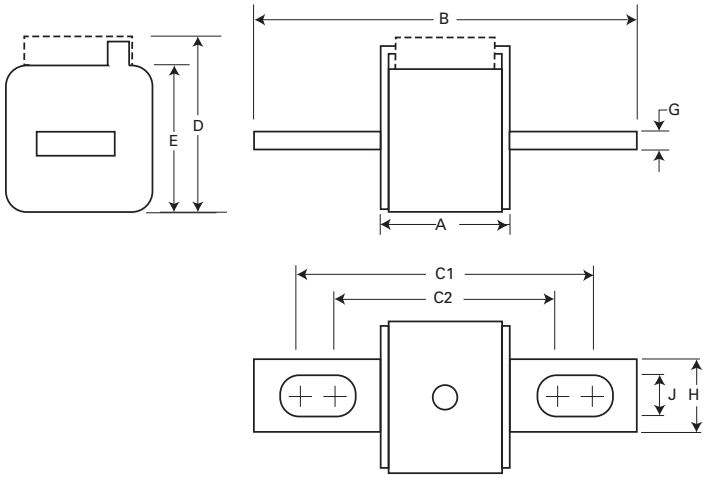
### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2*, E125085
- CSA Class 53787, File 1422-30*
- CCC*
- CE

* Consult your Bussmann series product representative for status.

### Dimensions — mm

1mm = 0.0394″




**Type -FU/-, -FKE/-, FU/115-, -FKE/115**

| Size | A | B | B1 | C1 | C1† | C2 | C2† | D | E | G | H | J |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1* | 50 | 110 | 148 | 85 | 123 | 72 | 110 | 59 | 45 | 6 | 20 | 10 |
| 1 | 50 | 136 | 157 | 104 | 126 | 78 | 100 | 69 | 53 | 6 | 25 | 14 |
| 2 | 50 | 135 | 159 | 105 | 125 | 78 | 99 | 77 | 61 | 6 | 25 | 14 |
| 3 | 51 | 135 | 155 | 106 | 125 | 77 | 97 | 92 | 76 | 6 | 36 | 16 |

† Valid for fuss types -FU/115 and -FKE/115.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

## 170M — Square Body size 1* to 3, US style

### 690 Vac (IEC), 700 Vac (UL), 40 to 2000 A

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 660 Vac | Watts loss (W)* | Catalog no. -FU/- without indicator | Catalog no. -FKE/- Type K indicator for microswitch | Catalog no. -FU/115 without indicator | Catalog no. -FKE/115 Type K indicator for microswitch |
|---|---|---|---|---|---|---|---|---|---|
| 1* | 690 Vac (IEC) 700 Vac (UL) | 40 | 40 | 270 | 9 | 170M3608 | 170M3658 | 170M3708 | 170M3758 |
| | | 50 | 70 | 515 | 11 | 170M3609 | 170M3659 | 170M3709 | 170M3759 |
| | | 63 | 115 | 770 | 14 | 170M3610 | 170M3660 | 170M3710 | 170M3760 |
| | | 80 | 185 | 1250 | 18 | 170M3611 | 170M3661 | 170M3711 | 170M3761 |
| | | 100 | 360 | 2450 | 21 | 170M3612 | 170M3662 | 170M3712 | 170M3762 |
| | | 125 | 550 | 3700 | 26 | 170M3613 | 170M3663 | 170M3713 | 170M3763 |
| | | 160 | 1100 | 7500 | 30 | 170M3614 | 170M3664 | 170M3714 | 170M3764 |
| | | 200 | 2200 | 15,000 | 35 | 170M3615 | 170M3665 | 170M3715 | 170M3765 |
| | | 250 | 4200 | 28,500 | 40 | 170M3616 | 170M3666 | 170M3716 | 170M3766 |
| | | 315 | 7000 | 46,500 | 50 | 170M3617 | 170M3667 | 170M3717 | 170M3767 |
| | | 350 | 10,000 | 68,500 | 55 | 170M3618 | 170M3668 | 170M3718 | 170M3768 |
| | | 400 | 15,000 | 105,000 | 60 | 170M3619 | 170M3669 | 170M3719 | 170M3769 |
| | | 450 | 21,000 | 140,000 | 65 | 170M3620 | 170M3670 | 170M3720 | 170M3770 |
| | | 500 | 27,000 | 180,000 | 70 | 170M3621 | 170M3671 | 170M3721 | 170M3771 |
| | | 550 | 34,000 | 230,000 | 75 | 170M3622 | 170M3672 | 170M3722 | 170M3772 |
| | | 630 | 48,500 | 325,000 | 80 | 170M3623 | 170M3673 | 170M3723 | 170M3773 |
| 1 | 690 Vac (IEC) 700 Vac (UL) | 200 | 1650 | 11,500 | 45 | 170M4608 | 170M4658 | 170M4708 | 170M4758 |
| | | 250 | 3100 | 21,000 | 55 | 170M4609 | 170M4659 | 170M4709 | 170M4759 |
| | | 315 | 6200 | 42,000 | 58 | 170M4610 | 170M4660 | 170M4710 | 170M4760 |
| | | 350 | 8500 | 59,000 | 60 | 170M4611 | 170M4661 | 170M4711 | 170M4761 |
| | | 400 | 13,500 | 91,500 | 65 | 170M4612 | 170M4662 | 170M4712 | 170M4762 |
| | | 450 | 17,000 | 120,000 | 70 | 170M4613 | 170M4663 | 170M4713 | 170M4763 |
| | | 500 | 25,000 | 170,000 | 72 | 170M4614 | 170M4664 | 170M4714 | 170M4764 |
| | | 550 | 34,000 | 230,000 | 75 | 170M4615 | 170M4665 | 170M4715 | 170M4765 |
| | | 630 | 52,000 | 350,000 | 80 | 170M4616 | 170M4666 | 170M4716 | 170M4766 |
| | | 700 | 69,500 | 465,000 | 85 | 170M4617 | 170M4667 | 170M4717 | 170M4767 |
| | | 800 | 105,000 | 725,000 | 95 | 170M4618 | 170M4668 | 170M4718 | 170M4768 |
| | 550 Vac (IEC) | 900 | 155,000 | 850,000 | 100 | 170M4619 | 170M4669 | 170M4719 | 170M4769 |
| 2 | 690 Vac (IEC) 700 Vac (UL) | 400 | 11,000 | 74,000 | 65 | 170M5608 | 170M5658 | 170M5708 | 170M5758 |
| | | 450 | 15,500 | 105,000 | 70 | 170M5609 | 170M5659 | 170M5709 | 170M5759 |
| | | 500 | 21,500 | 145,000 | 75 | 170M5610 | 170M5660 | 170M5710 | 170M5760 |
| | | 550 | 28,000 | 190,000 | 80 | 170M5611 | 170M5661 | 170M5711 | 170M5761 |
| | | 630 | 41,000 | 275,000 | 90 | 170M5612 | 170M5662 | 170M5712 | 170M5762 |
| | | 700 | 60,500 | 405,000 | 95 | 170M5613 | 170M5663 | 170M5713 | 170M5763 |
| | | 800 | 86,000 | 575,000 | 105 | 170M5614 | 170M5664 | 170M5714 | 170M5764 |
| | | 900 | 125,000 | 840,000 | 110 | 170M5615 | 170M5665 | 170M5715 | 170M5765 |
| | | 1000 | 180,000 | 1,250,000 | 115 | 170M5616 | 170M5666 | 170M5716 | 170M5766 |
| | 600 Vac (IEC) 700 Vac (UL) | 1100 | 245,000 | 1,600,000 | 120 | 170M5617 | 170M5667 | 170M5717 | 170M5767 |
| | | 1250 | 365,000 | 2,400,000 | 130 | 170M5618 | 170M5668 | 170M5718 | 170M5768 |
| 3 | 690 Vac (IEC) 700 Vac (UL) | 500 | 14,000 | 95,000 | 95 | 170M6608 | 170M6658 | 170M6708 | 170M6758 |
| | | 550 | 19,500 | 135,000 | 100 | 170M6609 | 170M6659 | 170M6709 | 170M6759 |
| | | 630 | 31,000 | 210,000 | 105 | 170M6610 | 170M6660 | 170M6710 | 170M6760 |
| | | 700 | 44,500 | 300,000 | 110 | 170M6611 | 170M6661 | 170M6711 | 170M6761 |
| | | 800 | 69,500 | 465,000 | 115 | 170M6612 | 170M6662 | 170M6712 | 170M6762 |
| | | 900 | 100,000 | 670,000 | 120 | 170M6613 | 170M6663 | 170M6713 | 170M6763 |
| | | 1000 | 140,000 | 945,000 | 125 | 170M6614 | 170M6664 | 170M6714 | 170M6764 |
| | | 1100 | 190,000 | 1,300,000 | 130 | 170M6615 | 170M6665 | 170M6715 | 170M6765 |
| | | 1250 | 290,000 | 1,950,000 | 140 | 170M6616 | 170M6666 | 170M6716 | 170M6766 |
| | | 1400 | 370,000 | 2,450,000 | 155 | 170M6617 | 170M6667 | 170M6717 | 170M6767 |
| | | 1500 | 460,000 | 3,100,000 | 160 | 170M6618 | 170M6668 | 170M6718 | 170M6768 |
| | | 1600 | 580,000 | 3,900,000 | 160 | 170M6619 | 170M6669 | 170M6719 | 170M6769 |
| | 600 Vac (IEC) 500 Vac (UL) | 1800 | 880,000 | 5,250,000 | 165 | 170M6620 | 170M6670[1] | 170M6720 | 170M6770 |
| | 550 Vac (IEC) 500 Vac (UL) | 2000 | 1,150,000 | 6,350,000 | 175 | 170M6621 | 170M6671[2] | 170M6721 | 170M6771 |

* Watts loss at rated current.
1 170M6670 600 Vac (IEC)/550 Vac.
2 170M6671 550 Vac (IEC and UL).

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

## 170M — Square Body size 1* to 3, US style

### 1000 Vac (IEC), 50 to 1400 A




Square body US style bolted tags high speed fuses for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters. Fuses come with Type K indicator for microswitches.

### Ratings

- Volts 1000 Vac (IEC) (1400 A 900 Vac)
- Amps 50-1400 A
- IR 125 kA RMS Sym.

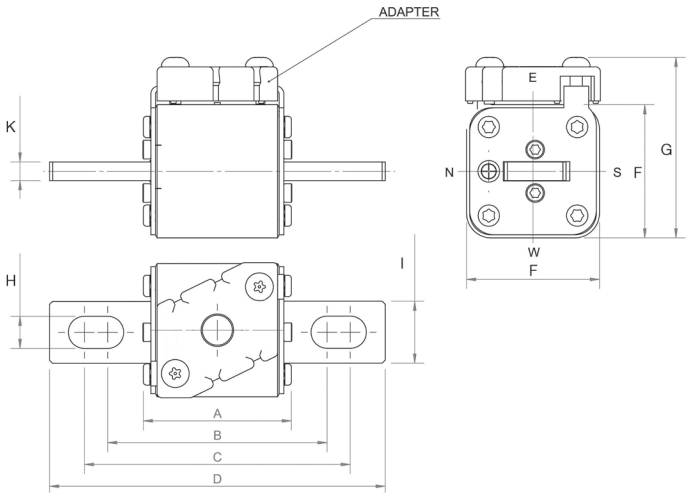
### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085 for size 2 and 3 (315-1100 A)
- CSA Class 53787, File 1422-30 for size 2 and 3 (315-1100 A)
- CCC approval for size 2 only
- CE

### Dimensions — mm

1mm = 0.0394”




| Size | A | B | C | D | F | G | H | I | K |
|---|---|---|---|---|---|---|---|---|---|
| 1*FKE/115 | 74 | 101.0 | 130.0 | 156 | 43 | 60 | 10.4 | 20 | 6 |
| 1FKE/115 | 76 | 102.0 | 128.0 | 160 | 51 | 68 | 14.3 | 25 | 6 |
| 2FKE/115 | 76 | 101.1 | 127.5 | 160 | 59 | 76 | 14.4 | 25 | 6 |
| 3FKE/115 | 76 | 101.1 | 127.5 | 158 | 74 | 91 | 16.0 | 36 | 6 |

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

## 170M — Square Body size 1* to 3, US style, 170M

### 1000 Vac (IEC), 50 to 1400 A

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. for -FKE/115 Type K indicator for microswitch |
|---|---|---|---|---|---|---|
| 1* | 1000 Vac (IEC) | 50 | 135 | 815 | 20 | 170M3531 |
| | | 63 | 215 | 1300 | 25 | 170M3532 |
| | | 80 | 460 | 2750 | 30 | 170M3533 |
| | | 100 | 860 | 5100 | 35 | 170M3534 |
| | | 125 | 1450 | 8600 | 40 | 170M3535 |
| | | 160 | 2850 | 17,500 | 45 | 170M3536 |
| | | 200 | 4950 | 29,500 | 50 | 170M3537 |
| | | 250 | 9550 | 57,000 | 55 | 170M3538 |
| | | 315 | 21,500 | 130,000 | 65 | 170M3539 |
| | | 350 | 29,000 | 175,000 | 70 | 170M3540 |
| | | 400 | 42,000 | 250,000 | 75 | 170M3541 |
| 1 | 1000 Vac (IEC) | 160 | 2200 | 13,500 | 40 | 170M4531 |
| | | 200 | 4150 | 24,500 | 50 | 170M4532 |
| | | 250 | 7750 | 46,000 | 55 | 170M4533 |
| | | 315 | 16,500 | 98,500 | 65 | 170M4534 |
| | | 350 | 21,500 | 130,000 | 70 | 170M4535 |
| | | 400 | 31,000 | 185,000 | 75 | 170M4536 |
| | | 450 | 44,500 | 265,000 | 80 | 170M4537 |
| | | 500 | 63,000 | 375,000 | 85 | 170M4538 |
| | | 550 | 84,500 | 500,000 | 90 | 170M4539 |
| | | 630 | 125,000 | 755,000 | 98 | 170M4540 |
| 2 | 1000 Vac (IEC/UL) | 250 | 6750 | 40,000 | 65 | 170M5531 |
| | | 315 | 13,500 | 81,500 | 75 | 170M5532 |
| | | 350 | 16,500 | 99,000 | 80 | 170M5533 |
| | | 400 | 26,000 | 155,000 | 85 | 170M5534 |
| | | 450 | 35,500 | 210,000 | 90 | 170M5535 |
| | | 500 | 49,500 | 295,000 | 95 | 170M5536 |
| | | 550 | 66,000 | 390,000 | 100 | 170M5337 |
| | | 630 | 93,500 | 555,000 | 110 | 170M5538 |
| | | 700 | 130,000 | 770,000 | 115 | 170M5539 |
| | | 800 | 195,000 | 1,200,000 | 125 | 170M5540 |
| 3 | 1000 Vac (IEC/UL) | 315 | 9200 | 54,500 | 90 | 170M8531 |
| | | 350 | 13,000 | 77,500 | 95 | 170M8532 |
| | | 400 | 19,000 | 115,000 | 105 | 170M8533 |
| | | 450 | 27,000 | 160,000 | 107 | 170M8534 |
| | | 500 | 37,500 | 225,000 | 110 | 170M8535 |
| | | 550 | 52,000 | 310,000 | 115 | 170M8536 |
| | | 630 | 82,500 | 490,000 | 120 | 170M8537 |
| | | 700 | 115,000 | 700,000 | 125 | 170M8538 |
| | | 800 | 170,000 | 1,050,000 | 135 | 170M8539 |
| | | 900 | 250,000 | 1,500,000 | 145 | 170M8540 |
| | | 1000 | 340,000 | 2,050,000 | 150 | 170M8541 |
| | | 1100 | 460,000 | 2,750,000 | 155 | 170M8542 |
| | 1000 Vac (IEC) | 1250 | 575,000 | 3,400,000 | 175 | 170M8543 |
| | 900 Vac (IEC) | 1400 | 795,000 | 4,200,000 | 185 | 170M8544 |

* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

## 170M — Square Body size 1* to 3, US style

### 1250 Vac (IEC), 1300 Vac (UL), 50 to 1400 A




Square body US style bolted tags high speed fuses for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters. Available with Type K indicator for microswitches.

### Ratings

- Volts
  - 1250 Vac (IEC)
  - 1300 Vac (UL)
- Amps 50-1400 A
- IR 100 kA RMS Sym.

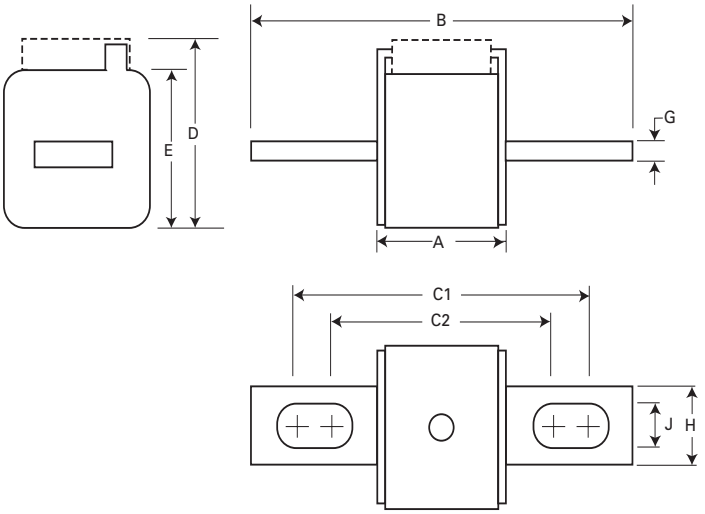
### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized†
- CSA†
- CCC†
- CE

† Consult your Bussmann series product representative for status.

### Dimensions — mm




### Type-FU/115,-FKE/115

| Size | A | B | C1 | C2 | D | E | G | H | J |
|---|---|---|---|---|---|---|---|---|---|
| 1* | 74 | 156 | 130 | 101 | 59 | 45 | 6 | 20 | 10 |
| 1 | 76 | 160 | 127 | 102 | 69 | 53 | 6 | 25 | 14 |
| 2 | 76 | 160 | 127 | 102 | 77 | 61 | 6 | 25 | 14 |
| 3 | 76 | 159 | 128 | 101 | 92 | 76 | 6 | 36 | 16 |

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

## 170M — Square Body size 1* to 3, US style

### 1250 Vac (IEC), 1300 Vac (UL), 50 to 1400 A

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | I²t (A²s) Clearing at 1250 Vac | Watts loss (W)* | Catalog no. -FU/115 without indicator | Catalog no. -FKE/115 Type K indicator for microswitch |
|---|---|---|---|---|---|---|---|---|
| 1* | 1250 Vac (IEC) 1300 Vac (UL) | 50 | 135 | 815 | 1100 | 15 | 170M3688 | 170M3738 |
| | | 63 | 215 | 1300 | 1750 | 20 | 170M3689 | 170M3739 |
| | | 80 | 420 | 2500 | 3350 | 25 | 170M3690 | 170M3740 |
| | | 100 | 750 | 4450 | 5950 | 30 | 170M3691 | 170M3741 |
| | | 125 | 1450 | 9000 | 11,500 | 35 | 170M3692 | 170M3742 |
| | | 160 | 2600 | 16,000 | 21,000 | 40 | 170M3693 | 170M3743 |
| | | 200 | 5150 | 31,000 | 41,000 | 45 | 170M3694 | 170M3744 |
| | | 250 | 9200 | 54,500 | 73,000 | 55 | 170M3695 | 170M3745 |
| | | 315 | 18,500 | 115,000 | 150,000 | 60 | 170M3696 | 170M3746 |
| | | 350 | 27,000 | 165,000 | 220,000 | 65 | 170M3697 | 170M3747 |
| 1 | 1250 Vac (IEC) 1300 Vac (UL) | 160 | 1900 | 11,500 | 15,500 | 45 | 170M4688 | 170M4738 |
| | | 200 | 3800 | 22,500 | 30,000 | 50 | 170M4689 | 170M4739 |
| | | 250 | 7750 | 46,000 | 61,500 | 60 | 170M4690 | 170M4740 |
| | | 315 | 15,000 | 90,000 | 120,000 | 65 | 170M4691 | 170M4741 |
| | | 350 | 20,000 | 125,000 | 165,000 | 70 | 170M4692 | 170M4742 |
| | | 400 | 29,500 | 175,000 | 235,000 | 75 | 170M4693 | 170M4743 |
| | | 450 | 42,000 | 250,000 | 335,000 | 80 | 170M4694 | 170M4744 |
| | 1100 Vac IEC | 500 | 69,500 | 340,000 | N/A | 85 | 170M4695 | 170M4745 |
| | | 550 | 95,000 | 465,000 | N/A | 95 | 170M4696 | 170M4746 |
| | 1000 Vac IEC | 630 | 130,000 | 660,000 | N/A | 100 | 170M4697 | 170M4747 |
| 2 | 1250 Vac (IEC) 1300 Vac (UL) | 250 | 6500 | 38,500 | 51,500 | 65 | 170M5688 | 170M5738 |
| | | 280 | 9350 | 55,500 | 74,500 | 70 | 170M5689 | 170M5739 |
| | | 315 | 13,000 | 77,500 | 105,000 | 75 | 170M5690 | 170M5740 |
| | | 350 | 16,500 | 97,500 | 135,000 | 80 | 170M5691 | 170M5741 |
| | | 400 | 23,000 | 140,000 | 180,000 | 85 | 170M5692 | 170M5742 |
| | | 450 | 34,000 | 205,000 | 270,000 | 90 | 170M5693 | 170M5743 |
| | | 500 | 48,000 | 285,000 | 380,000 | 95 | 170M5694 | 170M5744 |
| | | 550 | 62,000 | 370,000 | 495,000 | 100 | 170M5695 | 170M5745 |
| | | 630 | 115,000 | 575,000 | 730,000 | 120 | 170M5696 | 170M5746 |
| | 1100 Vac IEC | 700 | 160,000 | 795,000 | N/A | 125 | 170M5697 | 170M5747 |
| | | 800 | 245,000 | 1,200,000 | N/A | 130 | 170M5698 | 170M5748 |
| | 1000 Vac IEC | 900 | 360,000 | 1,750,000 | N/A | 135 | 170M5699 | 170M5749 |
| | | 1000 | 480,000 | 2,350,000 | N/A | 145 | 170M5700 | 170M5750 |
| 3 | 1250 Vac (IEC) 1300 Vac (UL) | 315 | 9500 | 58,000 | 77,500 | 85 | 170M6688 | 170M6738 |
| | | 350 | 13,500 | 81,500 | 110,000 | 90 | 170M6689 | 170M6739 |
| | | 400 | 19,000 | 120,000 | 160,000 | 95 | 170M6690 | 170M6740 |
| | | 450 | 31,000 | 185,000 | 245,000 | 100 | 170M6691 | 170M6741 |
| | | 500 | 39,000 | 235,000 | 310,000 | 105 | 170M6692 | 170M6742 |
| | | 550 | 55,000 | 325,000 | 435,000 | 110 | 170M6693 | 170M6743 |
| | | 630 | 83,500 | 495,000 | 665,000 | 115 | 170M6694 | 170M6744 |
| | | 700 | 115,000 | 705,000 | 940,000 | 120 | 170M6695 | 170M6745 |
| | 1250 Vac (IEC) | 800 | 205,000 | 995,000 | 1,300,000 | 125 | 170M6696 | 170M6746 |
| | | 900 | 305,000 | 1,500,000 | 1,900,000 | 130 | 170M6697 | 170M6747 |
| | 1100 Vac (IEC) 1000 Vac (UL) | 1000 | 450,000 | 2,150,000 | N/A | 135 | 170M6698 | 170M6748 |
| | | 1100 | 575,000 | 2,800,000 | N/A | 160 | 170M6699 | 170M6749 |
| | 1000 Vac (IEC/UL) | 1250 | 810,000 | 3,950,000 | N/A | 170 | 170M6700 | 170M6750 |
| | | 1400 | 1,250,000 | 6,000,000 | N/A | 175 | 170M6701 | 170M6751 |

* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

## 170M — Square Body size 00, flush-end contact

### 690 Vac, 25 to 400 A




Square body flush-end contact high speed fuses, for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Catalog numbers available with visual indicator and Type T indicator for a microswitch.

### Ratings

- Volts 690 Vac (IEC)
- Amps 25-400 A
- IR 200 kA RMS Sym.

### Operating class

- gR (25-80 A)
- aR (100-400 A)

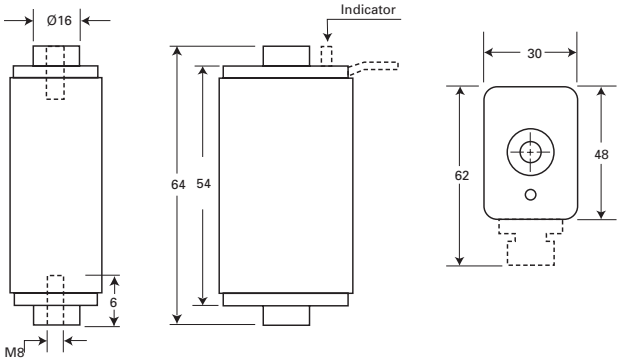
### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CSA Class 53787, File 1422-30 on size 000
- CE

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 660 Vac | Watts loss (W)* | Catalog no. 00B/60 visual indicator | Catalog no. 00BTN/60 Type T indicator for microswitch |
|---|---|---|---|---|---|---|---|
| 00 | 690 Vac (IEC) | 25 | 19.0 | 130 | 6 | 170M2708 | 170M2758 |
| | | 32 | 28.5 | 195 | 7 | 170M2709 | 170M2759 |
| | | 40 | 50.0 | 360 | 9 | 170M2710 | 170M2760 |
| | | 50 | 95.0 | 640 | 10 | 170M2711 | 170M2761 |
| | | 63 | 170.0 | 1200 | 12 | 170M2712 | 170M2762 |
| | | 80 | 310.0 | 2100 | 15 | 170M2713 | 170M2763 |
| | | 100 | 620.0 | 4150 | 20 | 170M2714 | 170M2764 |
| | | 125 | 1000.0 | 6950 | 25 | 170M2715 | 170M2765 |
| | | 160 | 1900.0 | 13,000 | 30 | 170M2716 | 170M2766 |
| | | 200 | 3400.0 | 23,000 | 35 | 170M2717 | 170M2767 |
| | | 250 | 6250.0 | 42,000 | 45 | 170M2718 | 170M2768 |
| | | 315 | 10,000.0 | 68,500 | 55 | 170M2719 | 170M2769 |
| | | 350 | 13,500.0 | 91,500 | 60 | 170M2720 | 170M2770 |
| | | 400 | 18,000.0 | 125,000 | 70 | 170M2721 | 170M2771 |

* Watts loss at rated current.

### Dimensions — mm




For details on electrical characteristics, contact Application Engineering and ask for Data sheet no. 170K6312

# 170M — Square Body size 1* to 3, flush-end contact

## 690 Vac (IEC), 700 Vac (UL), 40 to 2000 A




Square body flush-end contact high speed fuses, for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Catalog numbers available with visual indicator and Type K indicator for a microswitch.

### Ratings

- Volts see catalog number table
- Amps 40-2000 A
- IR 200 kA RMS Sym.

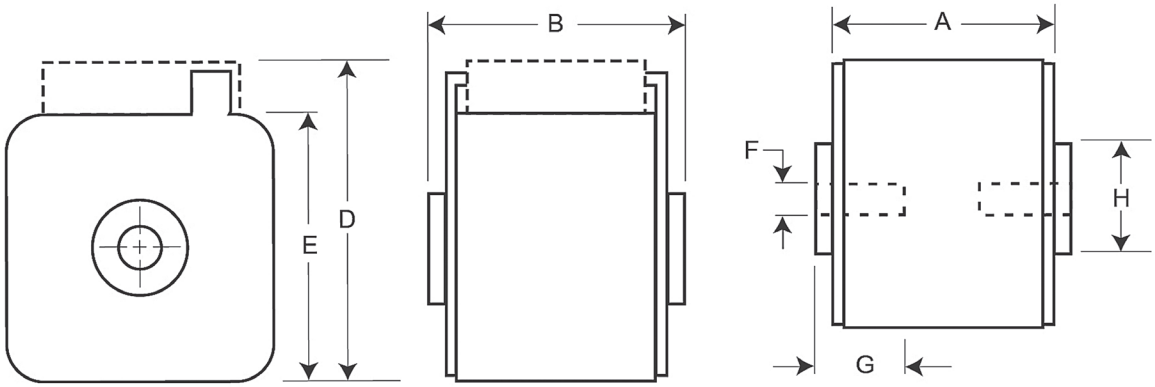
### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085†
- CSA Class 53787, File 1422-30†
- CCC†
- CE

† Consult your Bussmann series product representative for status.

### Dimensions — mm




**Type -B/- , -BKN/- , -G/- , -GKN/-**

| Size | A | B | D[1] | E | F | F[2] (in) | G | H |
|---|---|---|---|---|---|---|---|---|
| 1* | 50 | 51 | 59 | 45 | M8 | 5/16-18 UNC-2B | 5 | N17 |
| 1 | 50 | 51 | 69 | 53 | M8 | 5/16-18 UNC-2B | 8 | N20 |
| 2 | 50 | 51 (400 - 1000 A)<br>65 (1100 and 1250 A) | 77 | 61 | M10 | 3/8-16 UNC-2B | 10 | N24 |
| 3 | 51 | 53 (500 - 1500 A)<br>65 (1600 - 2000 A) | 92 | 76 | M12 | 1/2-13 UNC-2B | 10 | N30 |

1 Valid for fuse Types -BKN/ and -GKN/.
2 Valid for fuse Types -G- and -GKN/.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

## 170M — Square Body size 1* to 3, flush-end contact

### 690 Vac (IEC), 700 Vac (UL), 40 to 2000 A

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 660 Vac | Watts loss (W)† | Catalog no. -B/- visual indicator | Catalog no. -BKN/- Type K indicator for microswitch | Catalog no. -G/- visual indicator | Catalog no. -GKN/- Type K indicator for microswitch |
|---|---|---|---|---|---|---|---|---|---|
| 1* | 690 Vac (IEC) 700 Vac (UL) | 40 | 40 | 270 | 9 | 170M3408 | 170M3458 | 170M3508 | 170M3558 |
| | | 50 | 77 | 515 | 11 | 170M3409 | 170M3459 | 170M3509 | 170M3559 |
| | | 63 | 115 | 770 | 14 | 170M3410 | 170M3460 | 170M3510 | 170M3560 |
| | | 80 | 185 | 1250 | 18 | 170M3411 | 170M3461 | 170M3511 | 170M3561 |
| | | 100 | 360 | 2450 | 21 | 170M3412 | 170M3462 | 170M3512 | 170M3562 |
| | | 125 | 550 | 3700 | 26 | 170M3413 | 170M3463 | 170M3513 | 170M3563 |
| | | 160 | 1100 | 7500 | 30 | 170M3414 | 170M3464 | 170M3514 | 170M3564 |
| | | 200 | 2200 | 15,000 | 35 | 170M3415 | 170M3465 | 170M3515 | 170M3565 |
| | | 250 | 4200 | 28,500 | 40 | 170M3416 | 170M3466 | 170M3516 | 170M3566 |
| | | 315 | 7000 | 46,500 | 50 | 170M3417 | 170M3467 | 170M3517 | 170M3567 |
| | | 350 | 10,000 | 68,500 | 55 | 170M3418 | 170M3468 | 170M3518 | 170M3568 |
| | | 400 | 15,000 | 105,000 | 60 | 170M3419 | 170M3469 | 170M3519 | 170M3569 |
| | | 450 | 21,000 | 140,000 | 65 | 170M3420 | 170M3470 | 170M3520 | 170M3570 |
| | | 500 | 27,000 | 180,000 | 70 | 170M3421 | 170M3471 | 170M3521 | 170M3571 |
| | | 550 | 34,000 | 230,000 | 75 | 170M3422 | 170M3472 | 170M3522 | 170M3572 |
| | | 630 | 48,500 | 325,000 | 80 | 170M3423 | 170M3473 | 170M3523 | 170M3573 |
| 1 | 690 Vac (IEC) 700 Vac (UL) | 200 | 1650 | 11,500 | 45 | 170M4408 | 170M4458 | 170M4508 | 170M4558 |
| | | 250 | 3100 | 21,000 | 55 | 170M4409 | 170M4459 | 170M4509 | 170M4559 |
| | | 315 | 6200 | 42,000 | 58 | 170M4410 | 170M4460 | 170M4510 | 170M4560 |
| | | 350 | 8500 | 59,000 | 60 | 170M4411 | 170M4461 | 170M4511 | 170M4561 |
| | | 400 | 13,500 | 91,500 | 65 | 170M4412 | 170M4462 | 170M4512 | 170M4562 |
| | | 450 | 17,000 | 120,000 | 70 | 170M4413 | 170M4463 | 170M4513 | 170M4563 |
| | | 500 | 25,000 | 170,000 | 72 | 170M4414 | 170M4464 | 170M4514 | 170M4564 |
| | | 550 | 34,000 | 230,000 | 75 | 170M4415 | 170M4465 | 170M4515 | 170M4565 |
| | | 630 | 52,000 | 350,000 | 80 | 170M4416 | 170M4466 | 170M4516 | 170M4566 |
| | | 700 | 69,500 | 465,000 | 85 | 170M4417 | 170M4467 | 170M4517 | 170M4567 |
| | | 800 | 105,000 | 725,000 | 95 | 170M4418 | 170M4468 | 170M4518 | 170M4568 |
| | 550 Vac (IEC) | 900 | 155,000 | 850,000 | 100 | 170M4419 | 170M4469 | 170M4519 | 170M4569 |
| 2 | 690 Vac (IEC) 700 Vac (UL) | 400 | 11,000 | 74,000 | 65 | 170M5408 | 170M5458 | 170M5508 | 170M5558 |
| | | 450 | 15,500 | 105,000 | 70 | 170M5409 | 170M5459 | 170M5509 | 170M5559 |
| | | 500 | 21,500 | 145,000 | 75 | 170M5410 | 170M5460 | 170M5510 | 170M5560 |
| | | 550 | 28,000 | 190,000 | 80 | 170M5411 | 170M5461 | 170M5511 | 170M5561 |
| | | 630 | 41,000 | 275,000 | 90 | 170M5412 | 170M5462 | 170M5512 | 170M5562 |
| | | 700 | 60,500 | 405,000 | 95 | 170M5413 | 170M5463 | 170M5513 | 170M5563 |
| | | 800 | 86,000 | 575,000 | 105 | 170M5414 | 170M5464 | 170M5514 | 170M5564 |
| | | 900 | 125,000 | 840,000 | 110 | 170M5415 | 170M5465 | 170M5515 | 170M5565 |
| | | 1000 | 180,000 | 1,250,000 | 115 | 170M5416 | 170M5466 | 170M5516 | 170M5566 |
| | 600 Vac (IEC) 700 Vac (UL) | 1100 | 245,000 | 1,600,000 | 120 | 170M5417 | 170M5467 | 170M5517 | 170M5567 |
| | | 1250 | 365,000 | 2,400,000 | 130 | 170M5418 | 170M5468 | 170M5518 | 170M5568 |
| 3 | 690 Vac (IEC) 700 Vac (UL) | 500 | 14,000 | 95,000 | 95 | 170M6408 | 170M6458 | 170M6508 | 170M6558 |
| | | 550 | 19,500 | 135,000 | 100 | 170M6409 | 170M6459 | 170M6509 | 170M6559 |
| | | 630 | 31,000 | 210,000 | 105 | 170M6410 | 170M6460 | 170M6510 | 170M6560 |
| | | 700 | 44,500 | 300,000 | 110 | 170M6411 | 170M6461 | 170M6511 | 170M6561 |
| | | 800 | 69,500 | 465,000 | 115 | 170M6412 | 170M6462 | 170M6512 | 170M6562 |
| | | 900 | 100,000 | 670,000 | 120 | 170M6413 | 170M6463 | 170M6513 | 170M6563 |
| | | 1000 | 140,000 | 945,000 | 125 | 170M6414 | 170M6464 | 170M6514 | 170M6564 |
| | | 1100 | 190,000 | 1,300,000 | 130 | 170M6415 | 170M6465 | 170M6515 | 170M6565 |
| | | 1250 | 290,000 | 1,950,000 | 140 | 170M6416 | 170M6466 | 170M6516 | 170M6566 |
| | | 1400 | 370,000 | 2,450,000 | 155 | 170M6417 | 170M6467 | 170M6517 | 170M6567 |
| | | 1500 | 460,000 | 3,100,000 | 160 | 170M6418 | 170M6468 | 170M6518 | 170M6568 |
| | | 1600 | 580,000 | 3,900,000 | 160 | 170M6419 | 170M6469 | 170M6519 | 170M6569 |
| | 600 Vac (IEC) 500 Vac (UL) | 1800 | 880,000 | 5,250,000 | 165 | 170M6420 | 170M6470 | 170M6520 | 170M6570 |
| | 550 Vac (IEC) 500 Vac (UL) | 2000 | 1,150,000 | 6,350,000 | 175 | 170M6421 | 170M6471 | 170M6521 | 170M6571 |

† Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

# 170M — Square Body size 1* to 3, flush-end contact

## 1000 Vac (IEC and UL), 50 to 1400 A




Square body flush-end contact high speed fuses, for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Catalog numbers come with Type K indicator for use with microswitches.

### Ratings

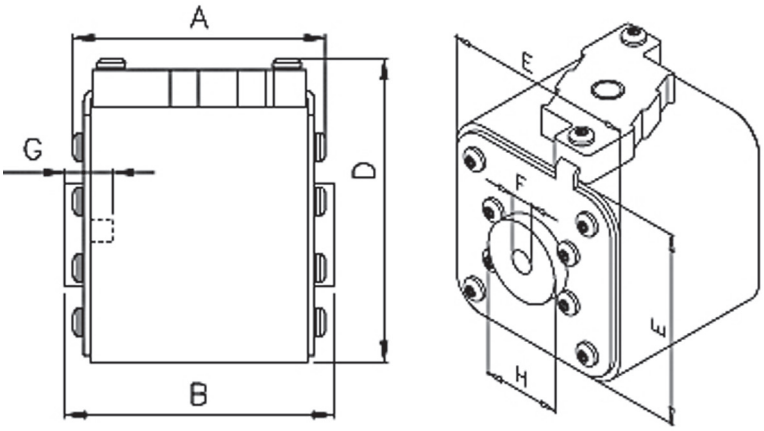
- Volts
  - 1000 Vac (IEC, 50-1250 A)
  - 1000 Vac (UL, 250-1100 A)
  - 900 Vac (IEC, 1400 A
- Amps 50-1400 A
- IR 125 kA RMS Sym.

### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085 (only sizes 2 and 3 up to 1100 A)
- CE

### Dimensions — mm




### Type -BKN/- and -GKN/-

| Size | Type | A | B | D (max) | E | F | F[1] (in) | G (min) | H |
|---|---|---|---|---|---|---|---|---|---|
| 1* | BKN/75 + GKN/75 | 72.5 | 74.0 | 61 | 43 | M8 | 5/16-18 UNC-2B | 5 | 17.5 |
| 1 | BKN/75 + GKN/75 | 73.2 | 74.0 | 69 | 52 | M8 | 5/16-18 UNC-2B | 8 | 20.0 |
| 2 | BKN/75 + GKN/75 | 73.2 | 74.4 | 77 | 59 | M10 | 3/8-16 UNC-2B | 10 | 24.5 |
| 3 | BKN/75 + GKN/75 | 73.3 | 75.4 | 92 | 74 | M12 | 1/2-13 UNC-2B | 10 | 30.0 |
| 3 | BKN/90 + GKN/90 | 80.3 | 91.4 | 92 | 74 | M12 | 1/2-13 UNC-2B | 10 | 30.0 |

1 Valid for fuse Types -GKN/-.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

## 170M — Square Body size 1* to 3, flush-end contact

### 1000 Vac (IEC and UL), 50 to 1400 A

| Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at rated voltage | Watts loss (W)† | Catalog no. -BKN/- Type K indicator for microswitch | Catalog no. -GKN/- Type K indicator for microswitch |
|---|---|---|---|---|---|---|---|
| 1* | 1000 Vac (IEC) | 50 | 135 | 815 | 20 | 170M3951 | 170M3921 |
| | | 63 | 215 | 1300 | 25 | 170M3952 | 170M3922 |
| | | 80 | 460 | 2750 | 30 | 170M3953 | 170M3923 |
| | | 100 | 860 | 5100 | 35 | 170M3954 | 170M3924 |
| | | 125 | 1450 | 8600 | 40 | 170M3955 | 170M3925 |
| | | 160 | 2850 | 17,500 | 45 | 170M3956 | 170M3926 |
| | | 200 | 4950 | 29,500 | 50 | 170M3957 | 170M3927 |
| | | 250 | 9550 | 57,000 | 55 | 170M3958 | 170M3928 |
| | | 315 | 21,500 | 130,000 | 65 | 170M3959 | 170M3929 |
| | | 350 | 29,000 | 175,000 | 70 | 170M3960 | 170M3930 |
| | | 400 | 42,000 | 250,000 | 75 | 170M3961 | 170M3931 |
| 1 | 1000 Vac IEC) | 160 | 2200 | 13,500 | 40 | 170M4951 | 170M4921 |
| | | 200 | 4150 | 24,500 | 45 | 170M4952 | 170M4922 |
| | | 250 | 7750 | 46,000 | 52 | 170M4953 | 170M4923 |
| | | 315 | 16,500 | 98,500 | 60 | 170M4954 | 170M4924 |
| | | 350 | 21,500 | 130,000 | 65 | 170M4955 | 170M4925 |
| | | 400 | 31,000 | 185,000 | 70 | 170M4956 | 170M4926 |
| | | 450 | 44,500 | 265,000 | 80 | 170M4957 | 170M4927 |
| | | 500 | 63,000 | 375,000 | 85 | 170M4958 | 170M4928 |
| | | 550 | 84,500 | 500,000 | 90 | 170M4959 | 170M4929 |
| | | 630 | 125,000 | 755,000 | 98 | 170M4960 | 170M4930 |
| 2 | 1000 Vac (IEC/UL) | 250 | 6750 | 40,000 | 65 | 170M5952 | 170M5922 |
| | | 315 | 13,500 | 81,500 | 75 | 170M5953 | 170M5923 |
| | | 350 | 16,500 | 99,000 | 80 | 170M5954 | 170M5924 |
| | | 400 | 26,000 | 155,000 | 85 | 170M5955 | 170M5925 |
| | | 450 | 35,500 | 210,000 | 90 | 170M5956 | 170M5926 |
| | | 500 | 49,500 | 295,000 | 95 | 170M5957 | 170M5927 |
| | | 550 | 66,000 | 390,000 | 100 | 170M5958 | 170M5928 |
| | | 630 | 93,500 | 555,000 | 110 | 170M5959 | 170M5929 |
| | | 700 | 130,000 | 770,000 | 115 | 170M5960 | 170M5930 |
| | | 800 | 195,000 | 1,200,000 | 125 | 170M5961 | 170M5931 |
| 3 | 1000 Vac (IEC/UL) | 315 | 9200 | 54,500 | 90 | 170M8600 | 170M8500 |
| | | 350 | 13,000 | 77,500 | 95 | 170M8601 | 170M8501 |
| | | 400 | 19,000 | 115,000 | 105 | 170M8602 | 170M8502 |
| | | 450 | 27,000 | 160,000 | 107 | 170M8603 | 170M8503 |
| | | 500 | 37,500 | 225,000 | 110 | 170M8604 | 170M8504 |
| | | 550 | 52,000 | 310,000 | 115 | 170M8605 | 170M8505 |
| | | 630 | 82,500 | 490,000 | 120 | 170M8606 | 170M8506 |
| | | 700 | 115,000 | 700,000 | 125 | 170M8607 | 170M8507 |
| | | 800 | 170,000 | 1,050,000 | 135 | 170M8608 | 170M8508 |
| | | 900 | 250,000 | 1,500,000 | 145 | 170M8609 | 170M8509 |
| | | 1000 | 340,000 | 2,050,000 | 150 | 170M8610 | 170M8510 |
| | | 1100 | 460,000 | 2,750,000 | 155 | 170M8611 | 170M8511 |
| | 1000 Vac (IEC) | 1250 | 575,000 | 3,400,000 | 175 | 170M8612[1] | 170M8512[1] |
| | 900 Vac (IEC) | 1400 | 795,000 | 4,200,000 | 185 | 170M8613[1] | 170M8513[1] |

† Watts loss at rated current.
1 Overall length is 90mm, for all other fuses the overall length is 75mm.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

# 170M — Square Body size 1* to 3, flush-end contact

## 1250 Vac (IEC), 1300 Vac (UL), 50 to 1400 A




Square body flush-end contact high speed fuses, for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Catalog numbers come with Type K indicator for use with microswitches.

### Ratings

- Volts
  - 1250 Vac (IEC)
  - 1300 Vac (UL)
- Amps 50-1400 A
- IR 100 kA RMS Sym.

### Operating class aR

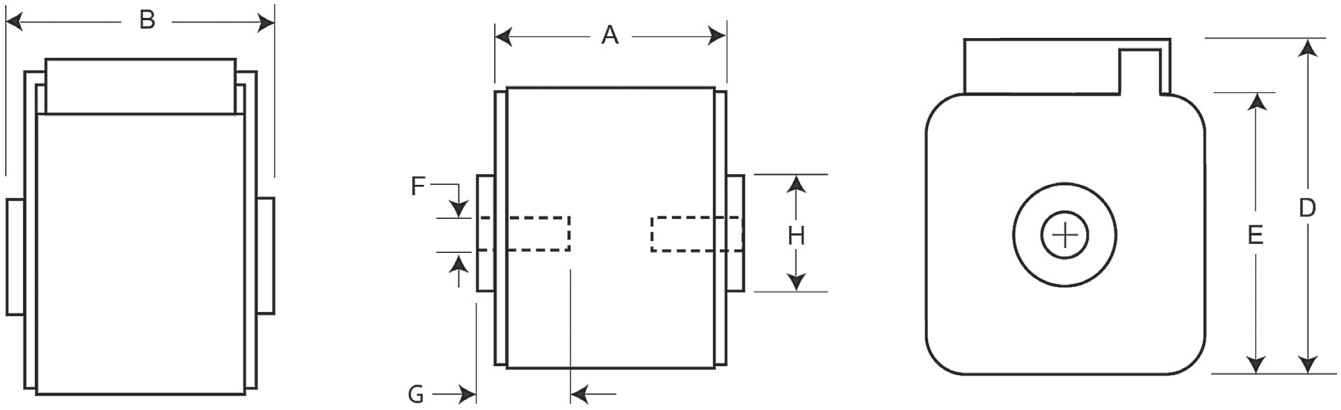
### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085†
- CSA Class 53787, File 1422-30†
- CE

† Consult your Bussmann series product representative status.



### Dimensions — mm




**Type -BKN/- and -GKN/-**

| Size | Type | A | B | D | E | F | F[1] (in) | Min G | HØ |
|---|---|---|---|---|---|---|---|---|---|
| 1* | BKN + GKN/75 | 74 | 75 | 59 | 45 | M8 | 5/16-18 UNC-2B | 5 | 17 |
| 1* | BKN/80 | 80 | 81 | 59 | 45 | M8 | | 5 | 17 |
| 1 | BKN + GKN/75 | 74 | 75 | 69 | 53 | M8 | | 8 | 20 |
| 1 | BKN/80 | 80 | 81 | 69 | 53 | M8 | | 8 | 20 |
| 2 | BKN + GKN/75 | 74 | 75 | 77 | 61 | M10 | 3/8-16 UNC-2B | 10 | 24 |
| 2 | BKN/80 | 80 | 81 | 77 | 61 | M10 | | 10 | 24 |
| 2 | BKN + GKN/90 | 80 | 91 | 77 | 61 | M10 | | 10 | 24 |
| 3 | BKN + GKN/75 | 74 | 76 | 92 | 76 | M12 | 1/2-13 UNC-2B | 10 | 30 |
| 3 | BKN/80 | 81 | 83 | 92 | 76 | M12 | | 10 | 30 |
| 3 | BKN + GKN/90 | 81 | 91 | 92 | 76 | M12 | | 10 | 30 |

1 Valid for fuse Types -GKN/-.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

## 170M — Square Body size 1* to 3, flush-end contact

### 1250 Vac (IEC), 1300 Vac (UL), 50 to 1400 A

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | I²t (A²s) Clearing at 1250 Vac | Watts loss (W)† | Catalog no. -BKN/75 Type K indicator for micro | Catalog no. -BKN/80 Type K indicator for micro | Catalog no. -BKN/90 Type K indicator for micro | Catalog no. -GKN/75 Type K indicator for micro | Catalog no. -GKN/90 Type K indicator for micro |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1* | 1250 Vac (IEC) 1300 Vac (UL) | 50 | 135 | 815 | 1100 | 15 | 170M3388 | 170M3438 | — | 170M3488 | — |
| | | 63 | 215 | 1300 | 1750 | 20 | 170M3389 | 170M3439 | — | 170M3489 | — |
| | | 80 | 420 | 2500 | 3350 | 25 | 170M3390 | 170M3440 | — | 170M3490 | — |
| | | 100 | 750 | 4450 | 5950 | 30 | 170M3391 | 170M3441 | — | 170M3491 | — |
| | | 125 | 1450 | 9000 | 11,500 | 35 | 170M3392 | 170M3442 | — | 170M3492 | — |
| | | 160 | 2600 | 16,000 | 21,000 | 40 | 170M3393 | 170M3443 | — | 170M3493 | — |
| | | 200 | 5150 | 31,000 | 41,000 | 45 | 170M3394 | 170M3444 | — | 170M3494 | — |
| | | 250 | 9200 | 54,500 | 73,000 | 55 | 170M3395 | 170M3445 | — | 170M3495 | — |
| | | 315 | 18,500 | 115,000 | 150,000 | 60 | 170M3396 | 170M3446 | — | 170M3496 | — |
| | | 350 | 27,000 | 165,000 | 220,000 | 65 | 170M3397 | 170M3447 | — | 170M3497 | — |
| | | 400 | 53,000 | 265,000 | 335,000 | 70 | — | 170M3448 | — | — | — |
| 1 | 1250 Vac (IEC) 1300 Vac (UL) | 160 | 1900 | 11,500 | 15,500 | 45 | 170M4388 | 170M4438 | — | 170M4488 | — |
| | | 200 | 3800 | 22,500 | 30,000 | 50 | 170M4389 | 170M4439 | — | 170M4489 | — |
| | | 250 | 7750 | 46,000 | 61,500 | 60 | 170M4390 | 170M4440 | — | 170M4490 | — |
| | | 315 | 15,000 | 90,000 | 120,000 | 65 | 170M4391 | 170M4441 | — | 170M4491 | — |
| | | 350 | 20,000 | 125,000 | 165,000 | 70 | 170M4392 | 170M4442 | — | 170M4492 | — |
| | | 400 | 29,500 | 175,000 | 235,000 | 75 | 170M4393 | 170M4443 | — | 170M4493 | — |
| | | 450 | 42,000 | 250,000 | 335,000 | 80 | 170M4394 | 170M4444 | — | 170M4494 | — |
| | | 500 | 69,500 | 340,000 | 435,000 | 85 | 170M4395[4] | 170M4445 | — | 170M4495[4] | — |
| | | 550 | 95,000 | 465,000 | 590,000 | 95 | 170M4396[5] | 170M4446 | — | 170M4496[5] | — |
| | | 630 | 130,000 | 660,000 | N/A | 110 | 170M4397[5] | 170M4447[4] | — | 170M4497[5] | — |
| 2 | 1250 Vac (IEC) 1300 Vac (UL) | 250 | 6500 | 38,500 | 51,500 | 65 | 170M5388 | 170M5438 | — | 170M5588 | — |
| | | 280 | 9350 | 55,500 | 74,500 | 70 | 170M5389 | 170M5439 | — | 170M5589 | — |
| | | 315 | 13,000 | 77,500 | 105,000 | 75 | 170M5390 | 170M5440 | — | 170M5590 | — |
| | | 350 | 16,500 | 97,500 | 135,000 | 80 | 170M5391 | 170M5441 | — | 170M5591 | — |
| | | 400 | 23,000 | 140,000 | 180,000 | 85 | 170M5392 | 170M5442 | — | 170M5592 | — |
| | | 450 | 34,000 | 205,000 | 270,000 | 90 | 170M5393 | 170M5443 | — | 170M5593 | — |
| | | 500 | 48,000 | 285,000 | 380,000 | 95 | 170M5394 | 170M5444 | 170M5494 | 170M5594 | 170M5644 |
| | | 550 | 62,000 | 370,000 | 495,000 | 100 | 170M5395 | 170M5445 | 170M5495 | 170M5595 | 170M5645 |
| | | 630 | 115,000 | 575,000 | 730,000 | 120 | 170M5396[4] | 170M5446 | 170M5496 | 170M5596[4] | 170M5646 |
| | | 700 | 160,000 | 795,000 | 1,050,000 | 125 | 170M5397[5] | 170M5447[1] | 170M5497 | 170M5597[5] | 170M5647 |
| | | 800 | 245,000 | 1,200,000 | 1,550,000 | 130 | 170M5398[5] | 170M5448[2] | 170M5498 | 170M5598[5] | 170M5648 |
| | | 900 | 360,000 | 1,750,000 | N/A | 135 | — | — | 170M5499[3] | — | 170M5649[3] |
| | | 1000 | 480,000 | 2,350,000 | N/A | 145 | — | — | 170M5500[3] | — | 170M5650[3] |
| 3 | 1250 Vac (IEC) 1300 Vac (UL) | 315 | 9500 | 58,000 | 77,500 | 85 | 170M6338 | 170M6538 | — | 170M6588 | — |
| | | 350 | 13,500 | 81,500 | 110,000 | 90 | 170M6339 | 170M6539 | — | 170M6589 | — |
| | | 400 | 19,500 | 120,000 | 160,000 | 95 | 170M6340 | 170M6540 | — | 170M6590 | — |
| | | 450 | 31,000 | 185,000 | 245,000 | 100 | 170M6341 | 170M6541 | — | 170M6591 | — |
| | | 500 | 39,000 | 235,000 | 310,000 | 105 | 170M6342 | 170M6542 | — | 170M6592 | — |
| | | 550 | 55,000 | 325,000 | 435,000 | 110 | 170M6343 | 170M6543 | — | 170M6593 | — |
| | | 630 | 83,500 | 495,000 | 665,000 | 115 | 170M6344 | 170M6544 | 170M6494 | 170M6594 | 170M6644 |
| | | 700 | 115,000 | 705,000 | 940,000 | 120 | 170M6345 | 170M6545 | 170M6495 | 170M6595 | 170M6645 |
| | | 800 | 205,000 | 995,000 | 1,300,000 | 125 | 170M6346[4] | 170M6546 | 170M6496 | 170M6596[4] | 170M6646 |
| | | 900 | 305,000 | 1,500,000 | 1,900,000 | 130 | 170M6347[5] | 170M6547[1] | 170M6497 | 170M6597[5] | 170M6647 |
| | | 1000 | 450,000 | 2,150,000 | 2,750,000 | 135 | 170M6348[5] | 170M6548[1] | 170M6498 | 170M6598[5] | 170M6648 |
| | | 1100 | 575,000 | 2,800,000 | 3,600,000 | 160 | 170M6349[5] | 170M6549[2] | 170M6499 | 170M6599[5] | 170M6649 |
| | | 1250 | 810,000 | 3,950,000 | N/A | 170 | — | — | 170M6500[3] | — | 170M6650[4] |
| | | 1400 | 1,250,000 | 6,000,000 | N/A | 175 | — | — | 170M6501[3] | — | 170M6651[4] |

† Watts loss at rated current.
1 Rated voltage 1100 Vac (IEC), 1000 Vac (UL).
2 Rated voltage 1000 Vac (IEC and UL).
3 Rated voltage 1100 Vac (IEC and UL).
4 Rated voltage (IEC) 1100 Vac.
5 Rated voltage (IEC) 1000 Vac.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

# 170M — Square Body size 4, flush-end contact

## 690 Vac (IEC), 700 Vac (UL), 1000 to 4000 A

Square body, flush-end contact, high speed fuses, for the protection of power rectifiers. Catalog numbers come with visual indicator or Type K indicator for use with microswitches.




### Ratings

- Volts
  - 690 Vac (IEC)/700 Vac (UL) 1000-3500 A
  - 600 Vac (IEC and UL, 4000 A)
- Amps 1000-4000 A
- IR 200 kA RMS Sym.

### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CE



| Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at 660 Vac | Watts loss (W)* | Catalog no. -B/65 visual indicator | Catalog no. -BKN/65 Type K indicator | Catalog no. -G/65 visual indicator | Catalog no. -GKN/65 Type K indicator |
|---|---|---|---|---|---|---|---|---|---|
| 4 | 690 Vac (IEC) 700 Vac (UL) | 1000 | 76,000 | 505,000 | 175 | 170M7058 | 170M7078 | 170M7098 | 170M7118 |
| | | 1250 | 145,000 | 965,000 | 195 | 170M7059 | 170M7079 | 170M7099 | 170M7119 |
| | | 1400 | 205,000 | 1,400,000 | 205 | 170M7060 | 170M7080 | 170M7100 | 170M7120 |
| | | 1600 | 305,000 | 2,050,000 | 220 | 170M7061 | 170M7081 | 170M7101 | 170M7121 |
| | | 2000 | 600,000 | 3,950,000 | 245 | 170M7062 | 170M7082 | 170M7102 | 170M7122 |
| | | 2500 | 1,200,000 | 7,800,000 | 275 | 170M7063 | 170M7083 | 170M7103 | 170M7123 |
| | | 3000 | 2,000,000 | 13,500,000 | 305 | 170M7064 | 170M7084 | 170M7104 | 170M7124 |
| | | 3500 | 3,250,000 | 22,000,000 | 325 | 170M7065 | 170M7085 | 170M7105 | 170M7125 |
| | 600 Vac (IEC/UL) | 4000 | 4,700,000 | 28,000,000[1] | 355 | 170M7066 | 170M7086 | 170M7106 | 170M7126 |

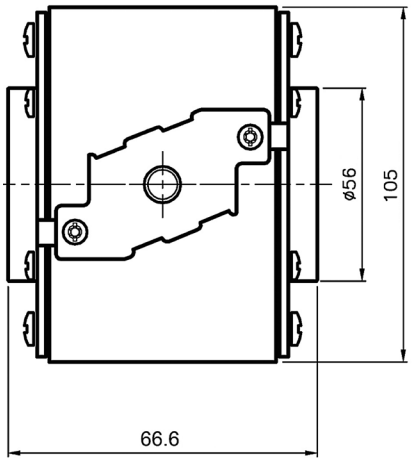
* Watts loss at rated current.
1 Clearing at 600 Vac.

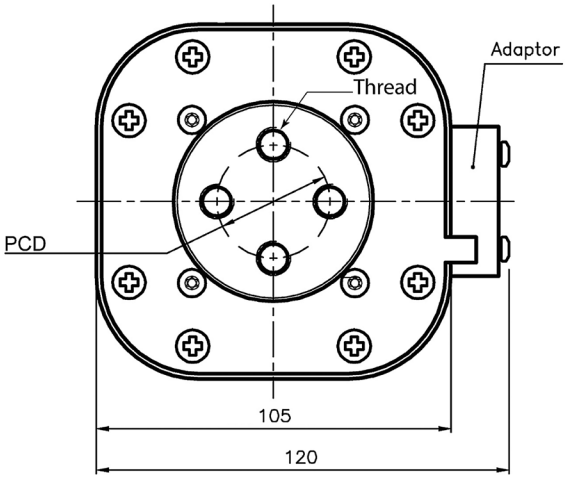
For details on electrical characteristics, contact Application Engineering and ask for Data sheet no. 170K6328

## 170M — Square Body size 4, flush-end contact

**690 Vac (IEC), 700 Vac (UL), 1000 to 4000 A**

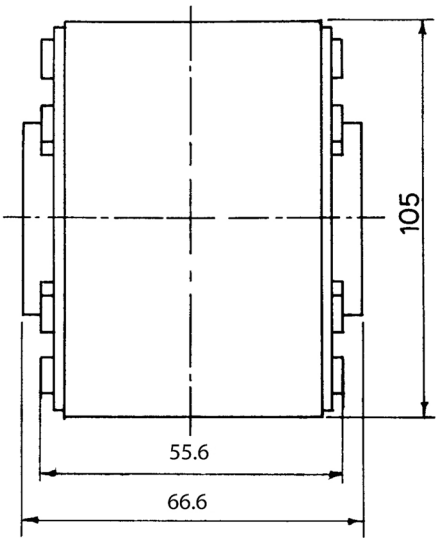
**Dimensions — mm**

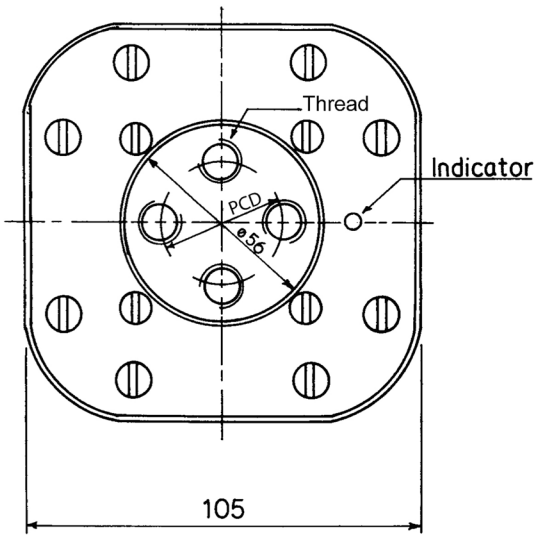



**Type -BKN/65, -GKN/65**

| Type | PCD | Thread |
|---|---|---|
| -GKN/65 | Ø 38.1 | 1/2-13 UNC |
| -BKN/65 | Ø 33.0 | M-10 |




**Type -B/65, -G/65**

| Type | PCDØ | Thread |
|---|---|---|
| -G/65 | 38.1 | 1/2-13 UNC |
| -B/65 | 33.0 | M-10 |

For details on electrical characteristics, contact Application Engineering and ask for Data sheet no.170K6328

# 170M — Square Body size 4, flush-end contact

## 1000 Vac (IEC), 1000 to 3000 A

Square body, flush-end contact, high speed fuses, for the protection of power rectifiers. Catalog numbers come with visual indicator or Type K indicator for use with microswitches.



### Ratings

- Volts 1000 Vac (IEC)
- Amps 1000-3000 A
- IR 200 kA RMS Sym.

### Operating class aR

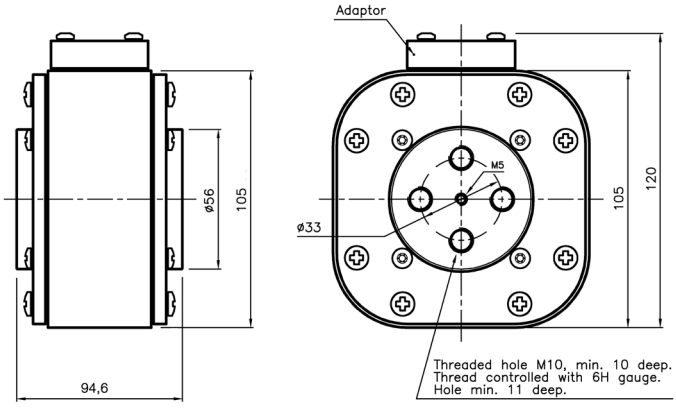
### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CE

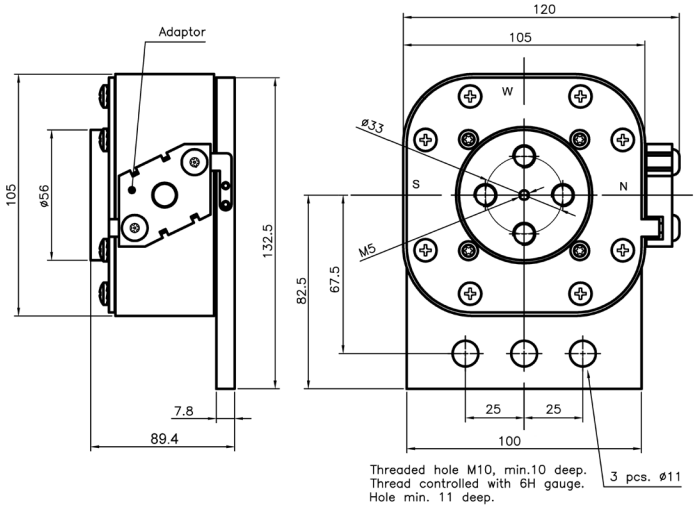
| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. -BKN/95 Type K indicator | Catalog no. -SBKN/90 Type K indicator |
|---|---|---|---|---|---|---|---|
| 4 | 1000 Vac | 1000 | 180,000 | 1,100,000 | 195 | — | 170M7542 |
| | | 1100 | 250,000 | 1,500,000 | 200 | — | 170M7031 |
| | | 1500 | 600,000 | 3,600,000 | 250 | 170M7636 | 170M7548 |
| | | 1700 | 850,000 | 5,000,000 | 260 | 170M7639 | 170M7034 |
| | | 1800 | 1,000,000 | 5,950,000 | 265 | 170M7661 | 170M7053 |
| | | 2000 | 1,450,000 | 8,600,000 | 270 | 170M7963 | 170M7544 |
| | | 2200 | 2,000,000 | 12,000,000 | 280 | 170M7090 | 170M7035 |
| | | 2500 | 3,000,000 | 18,000,000 | 295 | 170M7640 | 170M7036 |
| | | 2700 | 3,700,000 | 22,000,000 | 310 | 170M7658 | 170M7037 |
| | | 3000 | 4,700,000 | 28,000,000 | 380 | 170M7962 | 170M7156 |

* Watts loss at rated current.

### Dimensions — mm




Type 4BKN/95




Type 4SBKN/90

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K8520, 170K8520-R

## 170M — Square Body size 4, flush-end contact

### 1250 Vac (IEC), 800 to 2500 A

Square body, flush-end contact, high speed fuses, for the protection of power rectifiers. Catalog numbers come with visual indicator or Type K indicator for use with microswitches.



### Ratings

- Volts
  - 1250 Vac (IEC)
  - 1200 Vdc (UL)
- Amps 800-2500 A
- IR
  - 200 kA RMS Sym.
  - 85 kA DC (L/R 2 ms)

### Operating class aR

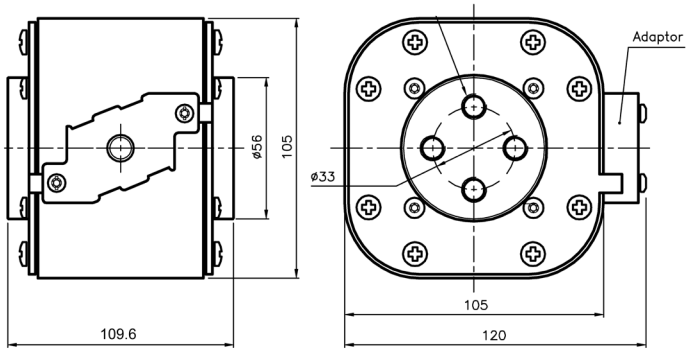
### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- cURus JFHR2, E125085
- CE

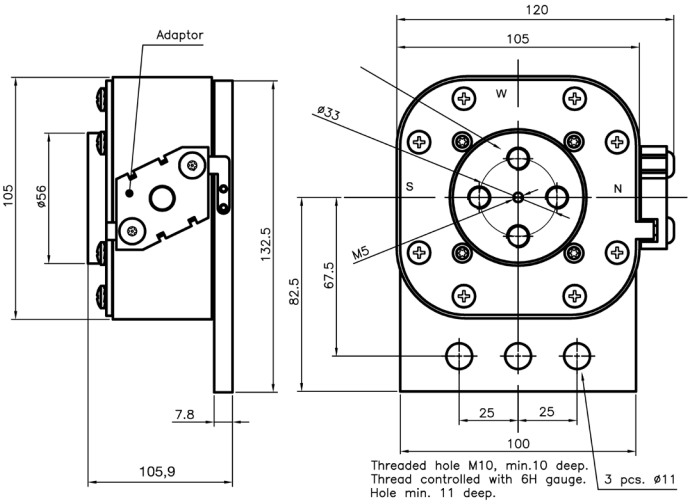
| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1250 Vac | Watts loss (W)* | Catalog no. -BKN/105 Type K indicator | Catalog no. -SBKN/105 Type K indicator |
|---|---|---|---|---|---|---|---|
| 4 | 1250 Vac (IEC) 1200 Vdc (UL) | 800 | 145,000 | 905,000 | 195 | 170M7802 | — |
| | | 1000 | 275,000 | 1,750,000 | 220 | 170M7803 | — |
| | | 1200 | 495,000 | 3,100,000 | 240 | 170M7804 | — |
| | | 1400 | 800,000 | 5,000,000 | 250 | 170M7217 | 170M7512 |
| | | 1500 | 1,000,000 | 6,200,000 | 260 | 170M7597 | 170M7510 |
| | | 1700 | 1,400,000 | 8,700,000 | 275 | 170M7676 | 170M7511 |
| | | 1800 | 1,700,000 | 11,000,000 | 280 | 170M7532 | 170M7976 |
| | | 2000 | 2,300,000 | 14,500,000 | 305 | 170M7633 | 170M7513 |
| | | 2200 | 3,100,000 | 19,500,000 | 315 | 170M7592 | 170M7546 |
| | | 2400 | 4,000,000 | 25,000,000 | 330 | 170M7107 | 170M7516 |
| | | 2500 | 4,500,000 | 28,000,000 | 340 | 170M7595 | 170M7978 |

* Watts loss at rated current.

### Dimensions — mm




Type 4BKN/105




Type 4SBKN/105

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6640 (1400-2400 A), 170K6642 (800-1200, 2500 A)

## 170M — Square Body size 23, flush-end contact

### 660 Vac (IEC), 1000 to 4000 A




Square body, flush-end contact, high speed fuses, for the protection of power rectifiers. Catalog numbers available with Type K indicator for use with microswitches.

### Ratings

- Volts
  - 660 Vac (IEC, 1000-3000 A)
  - 600 Vac (IEC, 3500 A)
  - 550 Vac (IEC, 4000 A)
- Amps 1000-4000 A
- IR 100 kA RMS Sym.

### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CE



| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 660 Vac | Watts loss (W)* | Catalog no. -BU/55 | Catalog no. -BKE/55 Type K indicator | Catalog no. -BKN/55 Type K indicator | Catalog no. -GU/55 | Catalog no. -GKE/55 Type K indicator | Catalog no. -GKN/55 Type K indicator |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 23 | 660 Vac (IEC) | 1000 | 79,000 | 530,000 | 170 | 170M6858 | 170M6898 | 170M6878 | 170M6918 | 170M6958 | 170M6938 |
| | | 1100 | 95,000 | 635,000 | 185 | 170M6859 | 170M6899 | 170M6879 | 170M6919 | 170M6959 | 170M6939 |
| | | 1250 | 155,000 | 1,050,000 | 190 | 170M6860 | 170M6900 | 170M6880 | 170M6920 | 170M6960 | 170M6940 |
| | | 1400 | 200,000 | 1,350,000 | 210 | 170M6861 | 170M6901 | 170M6881 | 170M6921 | 170M6961 | 170M6941 |
| | | 1500 | 240,000 | 1,650,000 | 215 | 170M6862 | 170M6902 | 170M6882 | 170M6922 | 170M6962 | 170M6942 |
| | | 1600 | 315,000 | 2,150,000 | 220 | 170M6863 | 170M6903 | 170M6883 | 170M6923 | 170M6963 | 170M6943 |
| | | 1800 | 450,000 | 3,050,000 | 230 | 170M6864 | 170M6904 | 170M6884 | 170M6924 | 170M6964 | 170M6944 |
| | | 2000 | 625,000 | 4,200,000 | 240 | 170M6865 | 170M6905 | 170M6885 | 170M6925 | 170M6965 | 170M6945 |
| | | 2200 | 805,000 | 5,400,000 | 255 | 170M6866 | 170M6906 | 170M6886 | 170M6926 | 170M6966 | 170M6946 |
| | | 2500 | 1,250,000 | 8,350,000 | 265 | 170M6867 | 170M6907 | 170M6887 | 170M6927 | 170M6967 | 170M6947 |
| | | 3000 | 2,250,000 | 15,500,000 | 285 | 170M6868 | 170M6908 | 170M6888 | 170M6928 | 170M6968 | 170M6948 |
| | 600 Vac (IEC) | 3500 | 3,450,000 | 21,000,000[1] | 315 | 170M6869 | 170M6909 | 170M6889 | 170M6929 | 170M6969 | 170M6949 |
| | 550 Vac (IEC) | 4000 | 5,000,000 | 27,500,000[2] | 340 | 170M6870 | 170M6910 | 170M6890 | 170M6930 | 170M6970 | 170M6950 |

* Watts loss at rated current.
1 Clearing at 600 Vac.
2 Clearing at 550 Vac.

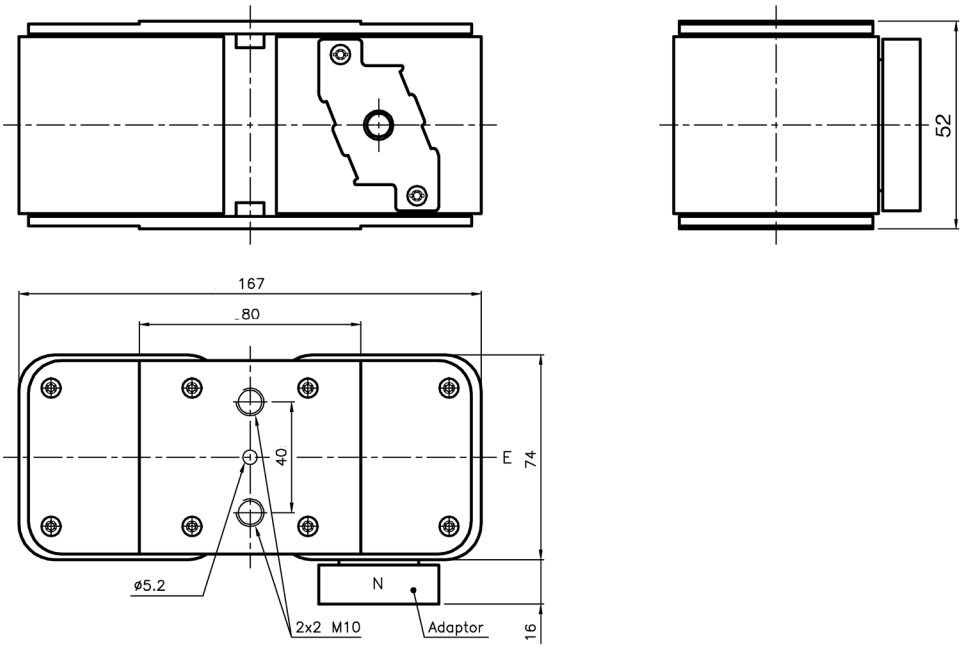
When using these fuses, please consult our application engineers.

For details on electrical characteristics, contact Application Engineering and ask for Data sheet no. 170K6326

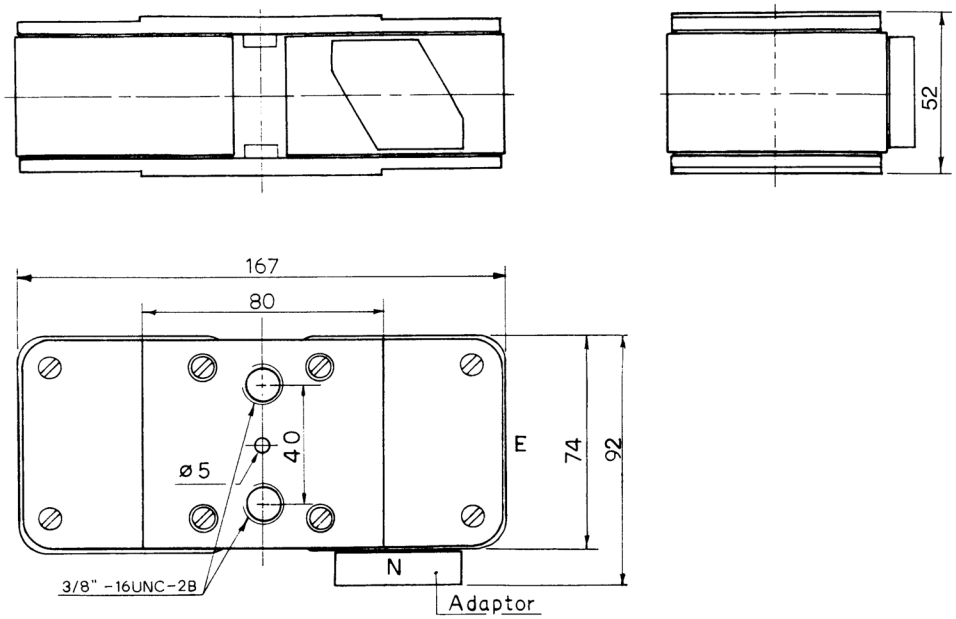
## 170M — Square Body size 23, flush-end contact

### 660 Vac (IEC), 1000 to 4000 A

**Dimensions — mm**




**Type -BU/55, -BKE/55, -BKN/55**




**Type -GU/55, -GKE/55, -GKN/55**

When using these fuses, please consult our application engineers.

For details on electrical characteristics, contact Application Engineering and ask for Data sheet no.170K6326

## 170M — Square Body size 23, flush-end contact

### 1250 Vac (IEC), 630 to 2800 A



Square body, flush-end contact, high speed fuses, for the protection of power rectifiers. Catalog numbers available with visual indicator or Type K indicator for use with microswitches.

### Ratings

- Volts
  - 1250 Vac (IEC 630 to 2200 A)
  - 1100 Vac (IEC 2500 and 2800 A)
- Amps 630-2800 A
- IR 125 kA RMS Sym.

### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized
- CE

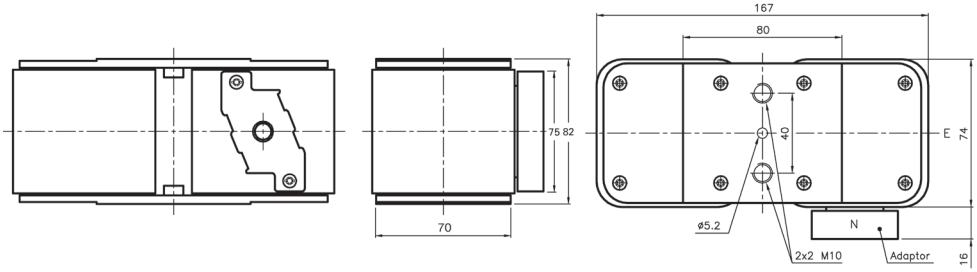


| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1250 Vac | Watts loss (W)* | Catalog no. -BU/75 visual indicator | -BKE/75 Type K indicator | -BKN/75 Type K indicator | -BU/80 visual indicator | -BKE/80 Type K indicator | -BKN/80 Type K indicator |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 23 | 1250 Vac (IEC) | 630 | 38,000 | 310,000 | 170 | 170M6775 | 170M6795 | 170M6785 | — | — | — |
| | | 700 | 54,000 | 440,000 | 180 | 170M6776 | 170M6796 | 170M6786 | — | — | — |
| | | 800 | 78,000 | 640,000 | 190 | 170M6777 | 170M6797 | 170M6787 | — | — | — |
| | | 900 | 120,000 | 980,000 | 200 | 170M6805 | 170M6807 | 170M6806 | — | — | — |
| | | 1000 | 155,000 | 1,250,000 | 210 | 170M6778 | 170M6798 | 170M6788 | — | — | — |
| | | 1100 | 220,000 | 1,750,000 | 220 | 170M6779 | 170M6799 | 170M6789 | — | — | — |
| | | 1250 | 330,000 | 2,700,000 | 230 | 170M6780 | 170M6800 | 170M6790 | — | — | — |
| | | 1400 | 460,000 | 3,800,000 | 240 | 170M6781 | 170M6801 | 170M6791 | — | — | — |
| | | 1600 | 820,000 | 5,200,000 | 250 | 170M6782 | 170M6802 | 170M6792 | — | — | — |
| | | 1800 | 1,200,000 | 7,600,000 | 260 | 170M6783 | 170M6803 | 170M6793 | — | — | — |
| | | 2000 | 1,800,000 | 11,000,000 | 270 | — | — | — | 170M6784 | 170M6804 | 170M6794 |
| | | 2200 | 2,300,000 | 14,500,000 | 280 | — | — | — | 170M6815 | 170M6833 | 170M6827 |
| | 1100 Vac (IEC) | 2500 | 3,200,000 | 16,000,000[1] | 290 | — | — | — | 170M6816 | 170M6834 | 170M6828 |
| | | 2800 | 5,000,000 | 24,000,000[1] | 300 | — | — | — | 170M6817 | 170M6835 | 170M6829 |

* Watts loss at rated current.
1 Clearing at 1000 V.

When using these fuses, please consult our application engineers.

### Dimensions — mm




For details on electrical characteristics, contact Application Engineering and ask for Data sheet no.170K6638

## 170M — Square Body size 24, flush-end contact

### 690 Vac (IEC), 2000 to 7500 A




Square body, flush-end contact, high speed fuses, for the protection of power rectifiers. Catalog numbers available with Type K indicator for use with microswitches.

### Ratings

- Volts
  - 690 Vac (IEC 2000 to 7000 A)
  - 500 Vac (IEC 7500 A)
- Amps 2000-7500 A
- IR 200 kA RMS Sym.

### Operating class aR

### Agency information

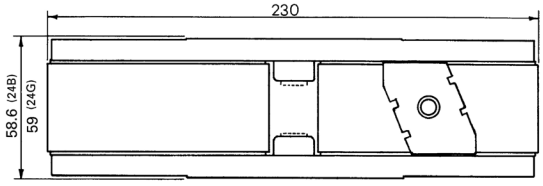
- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CE

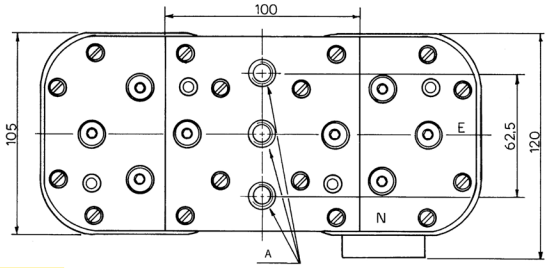
| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 660 Vac | Watts loss (W)* | Catalog no. -BU/60 without indicator | Catalog no. -BKN/60 Type K indicator | Catalog no. -GU/60 without indicator | Catalog no. -GKN/60 Type K indicator |
|---|---|---|---|---|---|---|---|---|---|
| 24 | 690 Vac (IEC) | 2000 | 340,000 | 2,300,000 | 340 | 170M7138 | 170M7158 | 170M7198 | 170M7218 |
| | | 2500 | 650,000 | 4,350,000 | 390 | 170M7139 | 170M7159 | 170M7199 | 170M7219 |
| | | 3000 | 1,100,000 | 7,300,000 | 430 | 170M7140 | 170M7160 | 170M7200 | 170M7220 |
| | | 3500 | 1,800,000 | 12,000,000 | 460 | 170M7141 | 170M7161 | 170M7201 | 170M7221 |
| | | 4000 | 2,700,000 | 18,000,000 | 490 | 170M7142 | 170M7162 | 170M7202 | 170M7222 |
| | | 4500 | 3,800,000 | 25,500,000 | 520 | 170M7143 | 170M7163 | 170M7203 | 170M7223 |
| | | 5000 | 5,450,000 | 36,500,000 | 540 | 170M7144 | 170M7164 | 170M7204 | 170M7224 |
| | | 5500 | 7,400,000 | 49,500,000 | 560 | 170M7145 | 170M7165 | 170M7205 | 170M7225 |
| | | 6000 | 9,600,000 | 64,000,000 | 580 | 170M7146 | 170M7166 | 170M7206 | 170M7226 |
| | | 6500 | 12,500,000 | 83,000,000 | 600 | 170M7147 | 170M7167 | 170M7207 | 170M7227 |
| | | 7000 | 15,000,000 | 100,000,000 | 630 | 170M7148 | 170M7168 | 170M7208 | 170M7228 |
| | 500 Vac (IEC) | 7500 | 18,500,000 | 93,000,000[1] | 660 | 170M7149 | 170M7169 | 170M7209 | 170M7229 |

* Watts loss at rated current.
1 Clearing at 500 Vac.

When using these fuses, please consult our application engineers.

### Dimensions — mm




| Size | Type | A |
|---|---|---|
| 24 | BKN | 2x3 M12 |
| 24 | GKN | 2x3 1/2-13 UNC-2B |

For details on electrical characteristics, contact Application Engineering and ask for Data sheet no.170K6332

# 170M — Square Body size 24, flush-end contact

## 1000 Vac (IEC), 2000 to 5000 A



Square body, flush-end contact, high speed fuses, for the protection of power rectifiers. Catalog numbers come with Type K indicator for use with microswitches.

### Ratings

- Volts 1000 Vac (IEC)
- Amps 2000-5000 A
- IR 300 kA RMS Sym.

### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CE

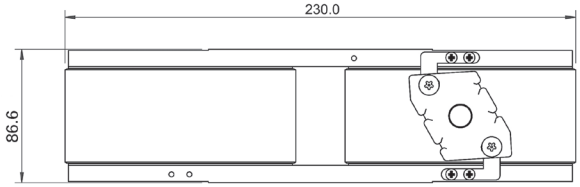


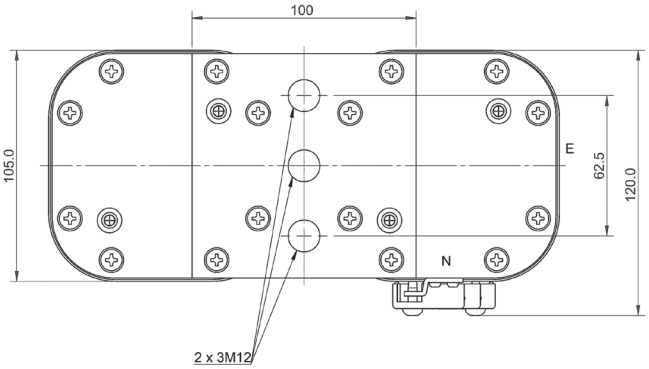
| Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. for -BKN/85 Type K indicator |
|---|---|---|---|---|---|---|
| 24 | 1000 Vac (IEC) | 2000 | 900,000 | 5,350,000 | 345 | 170M7608 |
| | | 3000 | 2,950,000 | 17,500,000 | 430 | 170M7680 |
| | | 3200 | 3,300,000 | 20,000,000 | 440 | 170M7567 |
| | | 3500 | 4,500,000 | 27,000,000 | 450 | 170M7568 |
| | | 4000 | 6,800,000 | 40,000,000 | 475 | 170M7569 |
| | | 4200 | 8,000,000 | 47,500,000 | 485 | 170M7498 |
| | | 4500 | 10,000,000 | 59,000,000 | 495 | 170M7488 |
| | | 5000 | 14,000,000 | 82,500,000 | 540 | 170M7622 |

* Watts loss at rated current.

When using these fuses, please consult our application engineers.

### Dimensions — mm



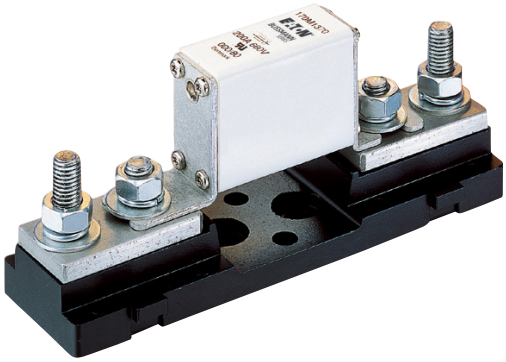

The normal position of the indicator is as shown position "N", position "E" on request only.

For details on electrical characteristics, contact Application Engineering and ask for Data sheet no.170K8514

## Square Body fuse accessories

### Fixed center fuse blocks for DIN 43653 fuses

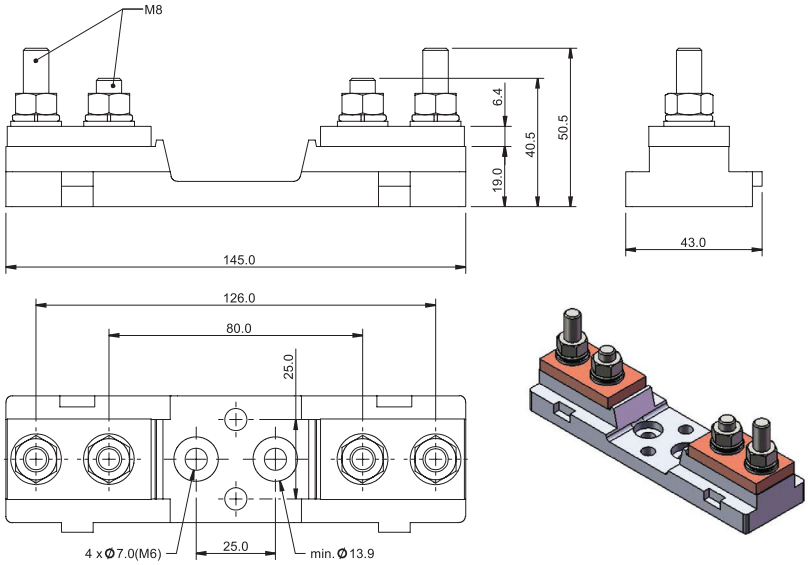
Fuse blocks for use with DIN 43653 square body fuses with center distances of 80 and 110mm. Available for sizes 000, 00, 1*, 1, 2 and 3.



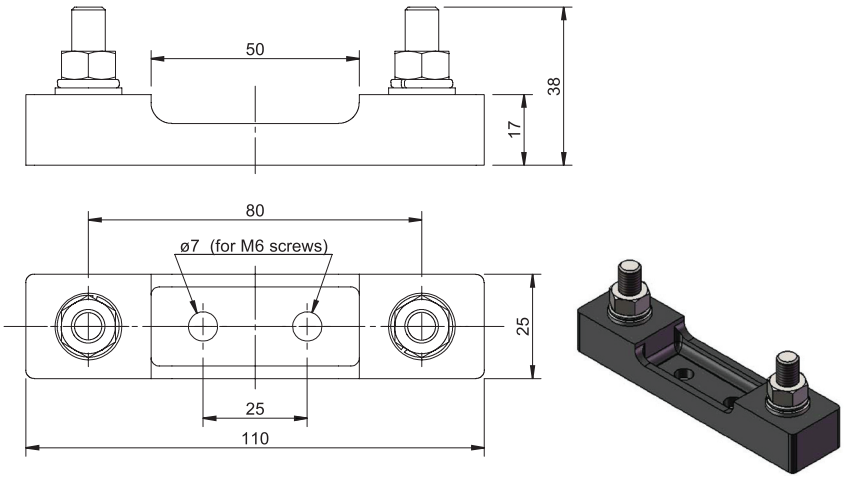
### Sizes 000 to 00

| Catalog no. | Max rated voltage | Max fuse amp rating | Center distance (mm) | Fuse sizes |
|---|---|---|---|---|
| 170H1007 | 1000 | 400 | 80 | 00, 000 |
| 170H1013 | 690 | 200 | 80 | 0000, 000 |

### Dimensions — mm



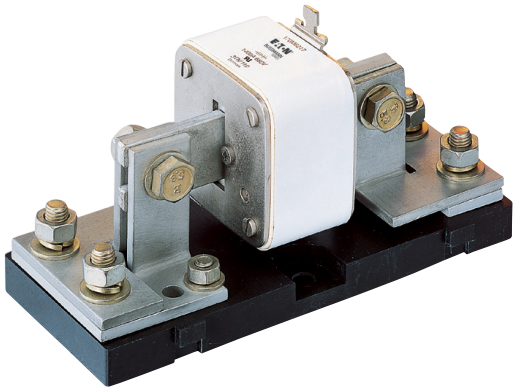

**170H1007**




**170H1013**

# Square Body fuse accessories

## Fixed center fuse blocks for DIN 43653 fuses



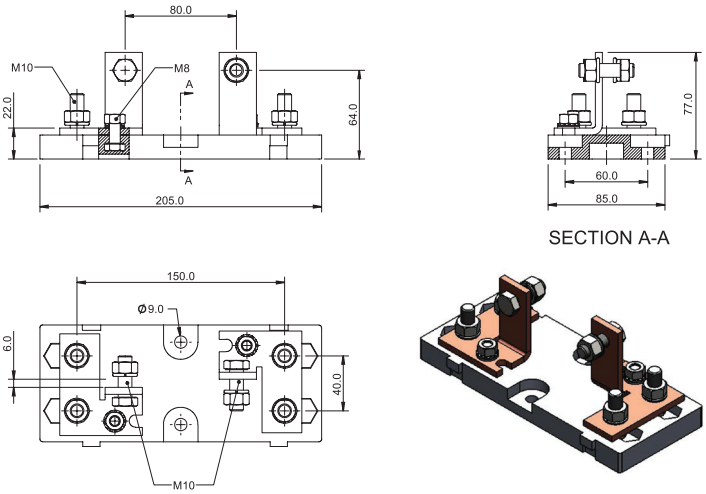
### Sizes 1* to 3

| Catalog no. | Max rated voltage | Max fuse amp rating | Center distance (mm) |
|---|---|---|---|
| 170H3003 | 1000 | 630 | 80 |
| 170H3004† | 1000 | 1250 | 80 |
| 170H3005 | 1400 | 630 | 110 |
| 170H3006† | 1400 | 1250 | 110 |

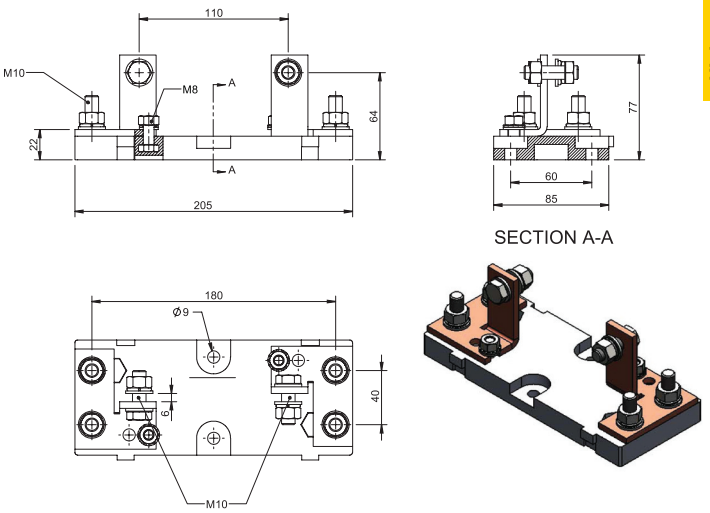
† Fuses with ratings higher than 1250 A can be used with 170H3004 or 170H3006 if the maximum load current is derated according to this table.

| Fuse amp rating | Max. amp load in fuse block |
|---|---|
| 1400 | 1325 |
| 1500 | 1400 |
| 1600 | 1500 |
| 1800 | 1650 |
| 2000 | 1800 |

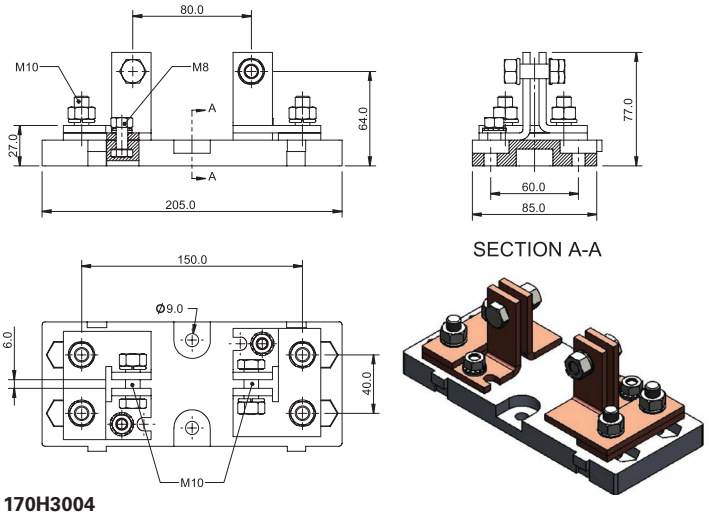
### Dimensions — mm



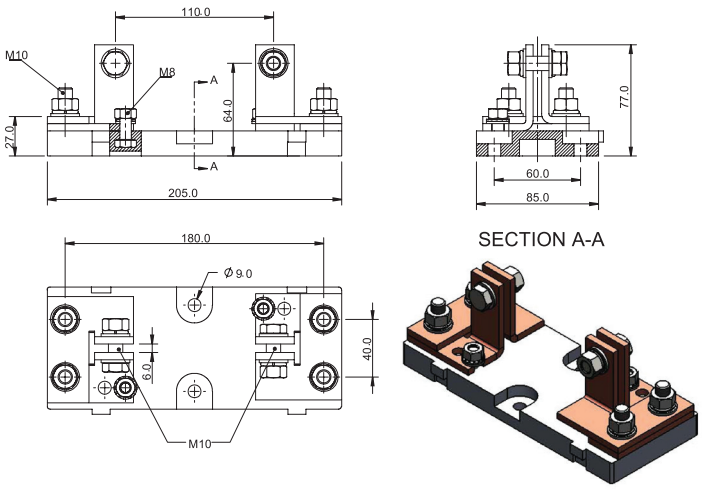

170H3003




170H3005




170H3004




170H3006

## Square Body fuse accessories

### Indicators

High speed square body fuses are available with the following indicators.

### Visual indicator

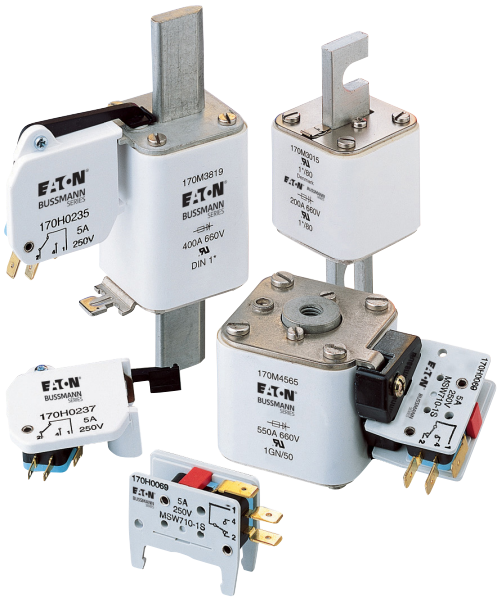
The indicator situated in one end plate is clearly visible as soon as the fuse has operated. The minimum rated voltage for operating the indicator is 20 V.

### Type T indicator

The indicator is situated on one cover plate with a cover plate tag to accommodate an auxiliary switch. The minimum rated voltage for operating the indicator is 20 V. A special low rated voltage indicator (1.5 V) is available on request.

### Type K indicator

The indicator is situated on the fuse body. It is covered by an adapter for snap-on mounting of a microswitch. The rated operating voltage of the indicator is 1.5 V. As a matter of safety, the factory mounted adapter must not be removed from the fuse.



## Microswitches

High speed square body fuses with either Type T or K indicators can be equipped with a microswitch for remote signaling of fuse operation. All microswitches have one normally open (NO) and one normally closed (NC) contact.




### Ratings

- Volts 250 Vac
- Amps 5 A

### Catalog numbers

| Fuse size | DIN 43653 | | DIN 43620 | | French style | | Flush-end | | US style | Quick connect terminal size (mm) |
|---|---|---|---|---|---|---|---|---|---|---|
| | Type T | Type K | aR | gR and dual indication | Type T | Type K | Type T | Type K | Type K | |
| 000 | 170H0236 | — | 170H0236 | 170H0236 | — | — | — | — | — | 6.3x0.8 |
| | 170H0238 | — | 170H0238 | 170H0238 | — | — | — | — | — | 2.8x0.5 |
| 00 | 170H0235 | — | 170H0236 | 170H0236 | — | — | 170H0235 | — | — | 6.3x0.8 |
| | 170H0237 | — | 170H0238 | 170H0238 | — | — | 170H0237 | — | — | 2.8x0.5 |
| 1* | 170H0235 | 170H0069 | 170H0235 | — | 170H0236 | 170H0069 | — | 170H0069 | 170H0069 | 6.3x0.8 |
| | 170H0237 | — | 170H0237 | — | 170H0238 | — | — | — | — | 2.8x0.5 |
| 1 | 170H0235 | 170H0069 | 170H0235[1] | 170H0236 | 170H0236 | 170H0069 | — | 170H0069 | 170H0069 | 6.3x0.8 |
| | 170H0237 | — | 170H0237[1] | 170H0238 | 170H0238 | — | — | — | — | 2.8x0.5 |
| 2 | 170H0235 | 170H0069 | 170H0235 | 170H0236 | 170H0236 | 170H0069 | — | 170H0069 | 170H0069 | 6.3x0.8 |
| | 170H0237 | — | 170H0237 | 170H0238 | 170H0238 | — | — | — | — | 2.8x0.5 |
| 3 | 170H0235 | 170H0069 | 170H0236 | 170H0236 | 170H0236 | 170H0069 | — | 170H0069 | 170H0069 | 6.3x0.8 |
| | 170H0237 | — | 170H0238 | 170H0238 | 170H0238 | — | — | — | — | 2.8x0.5 |
| 4 | — | — | — | — | — | — | — | 170H0069 | — | 6.3x0.8 |
| 23 | — | — | — | — | — | — | — | 170H0069 | — | 6.3x0.8 |
| 24 | — | — | — | — | — | — | — | 170H0069 | — | 6.3x0.8 |

1 DIN2* (55x55), if DIN2 then use microswitch 170H0236, 170H0238.
For special microswitches, double microswitches, microswitches with DC ratings, lower/higher signal levels and for insulation voltages please contact Eaton's Bussmann Division: bulehighspeedtechnical@eaton.com.

## 170M — IGBT size 000 and 230

### 750 Vdc (IEC), 800 Vdc (UL), 25 to 630 A

Bolted tag high speed fuses for the protection of IGBT modules, optimized for use in IGBT inverter circuits with DC fuse voltage ratings up to 750 Vdc. Low inductance ≤ 15nH.




### Ratings

- Volts
  - 750 Vdc tested at 863 Vdc according to IEC 60269-4
  - 800 Vdc tested at 800 Vdc according to UL 248-1
- Amps 25-630 A
- IR 50 kA DC (1ms tc) at 800 Vdc

### Operating class aR

### Agency information

- UL DC Recognized, 800 Vdc L/R 1 ms max



| | | | $I^2t$ ($A^2s$) | | | Catalog no. | |
|---|---|---|---|---|---|---|---|
| Fuse size | Rated voltage | Rated current (amps) | Pre-arcing | Clearing at 690 Vac | Watts loss (W)* | -FU/70 | -FN/70 |
| 000 | 750 Vdc (IEC) 800 Vdc (UL) | 25 | 25 | 135 | 12 | 170M1750 | 170M1730 |
| | | 32 | 45 | 240 | 13 | 170M1751 | 170M1731 |
| | | 40 | 75 | 395 | 14 | 170M1752 | 170M1732 |
| | | 50 | 135 | 695 | 16 | 170M1753 | 170M1733 |
| | | 63 | 260 | 1350 | 17 | 170M1754 | 170M1734 |
| | | 80 | 460 | 2350 | 20 | 170M1755 | 170M1735 |
| | | 100 | 795 | 4000 | 25 | 170M1756 | 170M1736 |
| | | 125 | 1300 | 6800 | 29 | 170M1757 | 170M1737 |
| | | 160 | 2550 | 13500 | 34 | 170M1758 | 170M1738 |
| | | 200 | 4350 | 22000 | 40 | 170M1759 | 170M1739 |
| | | 250 | 7400 | 37500 | 48 | 170M1760 | 170M1740 |
| | | 315 | 12,500 | 65000 | 60 | 170M1761 | 170M1741 |
| | | 350 | 17,000 | 88000 | 65 | 170M1762 | 170M1742 |
| 230 | 750 Vdc (IEC) 800 Vdc (UL) | 100 | 380 | 1950 | 35 | 170M1770 | 170M1785 |
| | | 125 | 645 | 3300 | 42 | 170M1771 | 170M1786 |
| | | 160 | 1350 | 7000 | 47 | 170M1772 | 170M1787 |
| | | 200 | 2550 | 13500 | 54 | 170M1773 | 170M1788 |
| | | 250 | 4950 | 25000 | 62 | 170M1774 | 170M1789 |
| | | 315 | 9350 | 47500 | 72 | 170M1775 | 170M1790 |
| | | 350 | 12,000 | 61000 | 78 | 170M1776 | 170M1791 |
| | | 400 | 18,500 | 94500 | 80 | 170M1777 | 170M1792 |
| | | 450 | 27,000 | 140000 | 85 | 170M1778 | 170M1793 |
| | | 500 | 37,500 | 190000 | 90 | 170M1779 | 170M1794 |
| | | 550 | 48,500 | 245000 | 95 | 170M1780 | 170M1795 |
| | | 630 | 69,500 | 355000 | 105 | 170M1781 | 170M1796 |

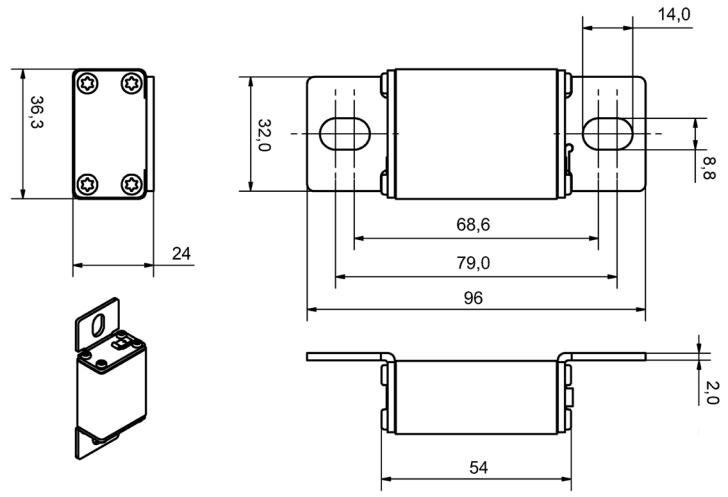
* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6422 (Size 000), 170K6426 (Size 230)

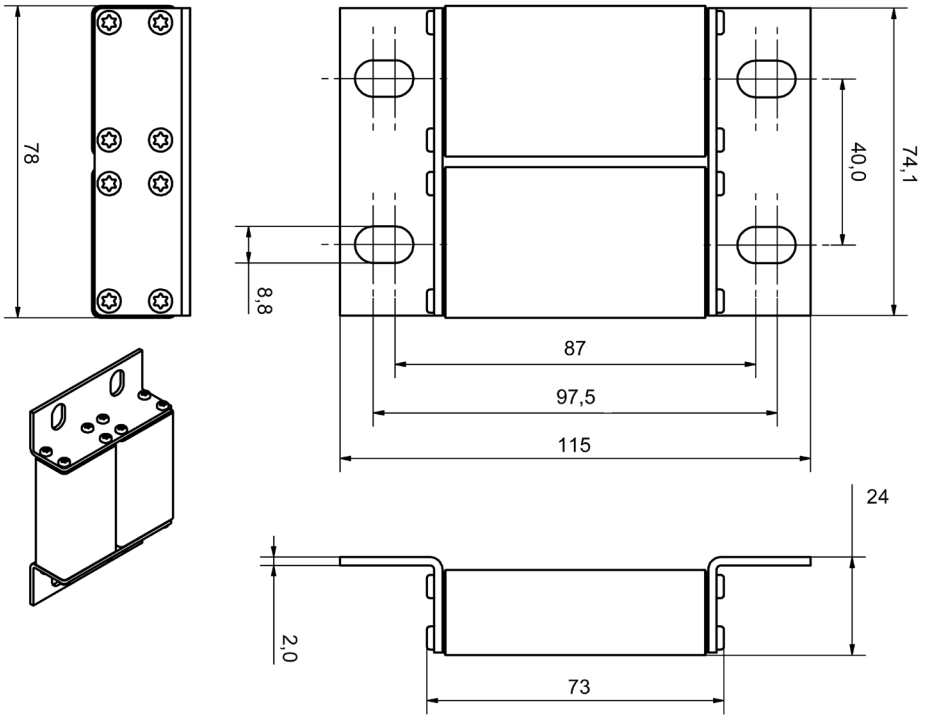
## 170M — IGBT size 000 and 230

**750 Vdc (IEC), 800 Vdc (UL), 25 to 630 A**

**Dimensions — mm**




**Size 000**




**Size 230**

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 170K6422 (Size 000), 170K6426 (Size 230)

## 170M — IGBT size 000 and 230

### 1000 Vdc (IEC and UL), 25 to 500 A




Bolted tag high speed fuses for the protection of IGBT modules, optimized for use in IGBT inverter circuits with DC fuse voltage ratings up to 1000 Vdc. Low inductance ≤ 20nH.

### Ratings

- Volts
  - 1000 Vdc tested at 1150 Vdc according to IEC 60269-4
  - 1000 Vdc tested at 1000 Vdc according to UL 248-1
- Amps 25-500 A
- IR 50 kA DC (1ms tc)

### Operating class aR

### Agency information

- UL DC Recognized, 1000 Vdc L/R 1ms max



| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. -FU/90 | Catalog no. -FN/90 |
|---|---|---|---|---|---|---|---|
| 000 | 1000 Vdc (IEC/UL) | 25 | 19 | 95 | 14 | 170M1802 | 170M1842 |
| | | 32 | 34 | 170 | 17 | 170M1803 | 170M1843 |
| | | 40 | 61 | 300 | 20 | 170M1804 | 170M1844 |
| | | 50 | 135 | 675 | 21 | 170M1805 | 170M1845 |
| | | 63 | 245 | 1200 | 22 | 170M1806 | 170M1846 |
| | | 80 | 505 | 2500 | 27 | 170M1807 | 170M1847 |
| | | 100 | 1050 | 5150 | 32 | 170M1808 | 170M1848 |
| | | 125 | 1900 | 9500 | 34 | 170M1809 | 170M1849 |
| | | 160 | 4050 | 20,000 | 37 | 170M1810 | 170M1850 |
| | | 200 | 8500 | 42,000 | 43 | 170M1811 | 170M1851 |
| | | 225 | 12,000 | 59,000 | 45 | 170M1812 | 170M1852 |
| | | 250 | 16,000 | 79,500 | 48 | 170M1813 | 170M1853 |
| 230 | 1000 Vdc (IEC/UL) | 100 | 600 | 3050 | 38 | 170M1824 | 170M1860 |
| | | 125 | 1200 | 6050 | 42 | 170M1825 | 170M1861 |
| | | 160 | 2550 | 13,000 | 48 | 170M1826 | 170M1862 |
| | | 200 | 4650 | 23,000 | 55 | 170M1827 | 170M1863 |
| | | 250 | 9300 | 45,500 | 62 | 170M1828 | 170M1864 |
| | | 315 | 18,500 | 91,500 | 68 | 170M1829 | 170M1865 |
| | | 350 | 24,500 | 125,000 | 75 | 170M1830 | 170M1866 |
| | | 400 | 37,500 | 185,000 | 80 | 170M1831 | 170M1867 |
| | | 450 | 52,000 | 260,000 | 85 | 170M1832 | 170M1868 |
| | | 500 | 69,500 | 340,000 | 90 | 170M1833 | 170M1869 |

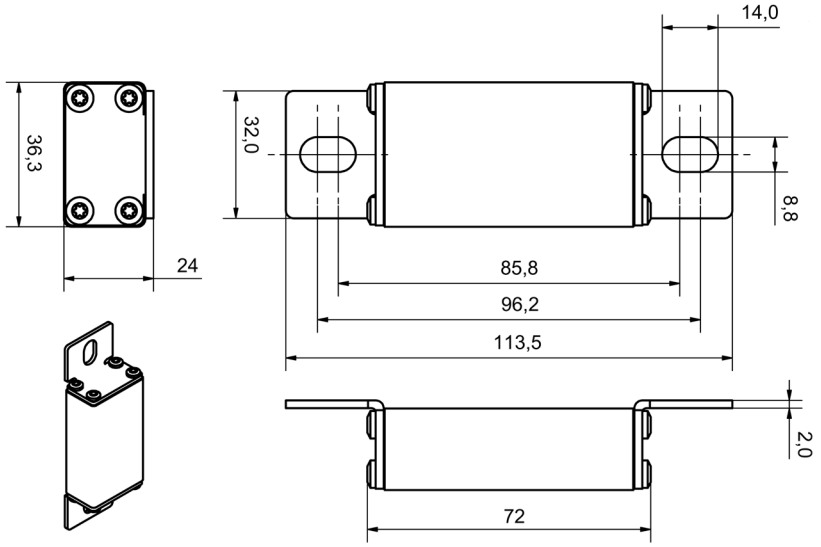
* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 170K6680 (Size 000), 170K6682 (Size 230)

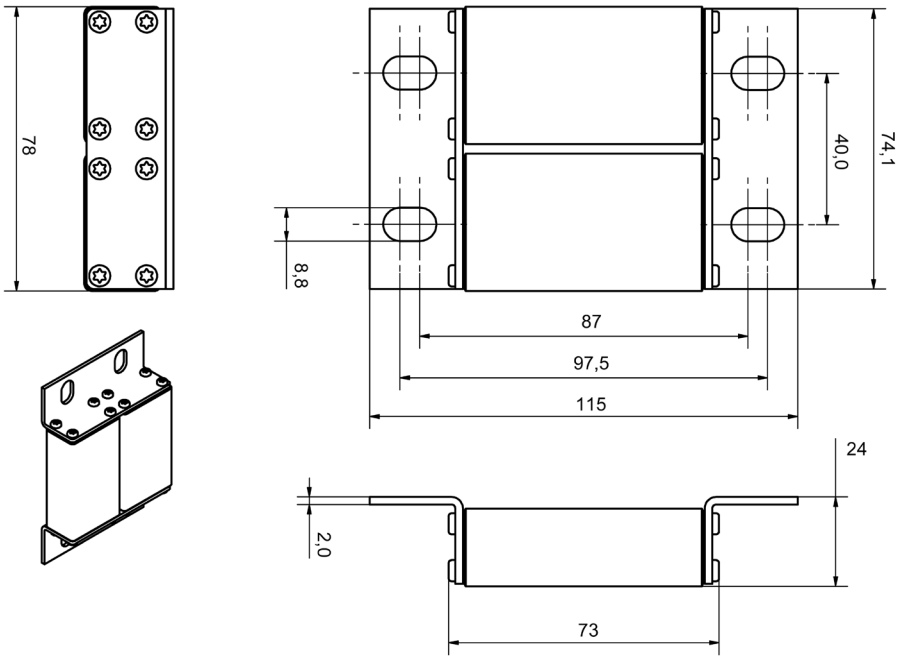
## 170M — size 000 and 230

### 1000 Vdc (IEC and UL), 25 to 500 A

**Dimensions — mm**




**Size 000**




**Size 230**

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6680 (Size 000), 170K6682 (Size 230)

Contents


| Fuse section | Volts | Amp range | Catalog symbol/size | Section page |
|---|---|---|---|---|
| **Compact high speed fuses** | | | | |
| **Fuses** | 500 Vac/dc | 50 to 400 | CHSF | 3 |
| **UL Class J full range drive fuse** | | | | |
| **Fuses** | 600 Vac/450 Vdc | 1 to 600 | DFJ | 4 |
| **North American fuses** | | | | |
| **Fuses** | 130 Vac/dc | 1000 to 4000 | FWA | 5 |
| | 150 Vac/dc | 70 to 1000 | FWA | 6 |
| | 250 Vac/dc | 35 to 2500 | FWX | 7 |
| | 500 Vac/dc | 35 to 1600 | FWH | 8 |
| | 600 Vac | 1 to 1000 | KAC | 9 |
| | 600 Vac | 35 to 800 | KBC | 10 |
| | 700 Vac/dc | 5 to 1200 | FWP | 11-12 |
| | 1000 Vac/800 Vdc | 35 to 2000 | FWJ | 13 |
| **Accessories** | Modular fuse blocks | | | 14 |
| **British Standard BS88 fuses** | | | | |
| **Fuses** | 240-250-280 Vac/150 Vdc | 6 to 180 | LCT, LET | 15 |
| | 240-250 Vac/150 Vdc | 160 to 900 | LMT, LMMT | 16 |
| | 690-700 Vac/500 Vdc | 6 to 200 | CT, ET, FE, EET and FEE | 17-18 |
| | 690-700 Vac/350-450-500 Vdc | 160 to 710 | FM, FMM, MT and MMT | 19-20 |
| **Accessories** | Trip indicators, clips and microswitches | | | 21 |


**Continued next page**



## Lead the charge with compact designs




Bussmann series 50-400 amp compact high speed fuses use **up to 48% less enclosure space**

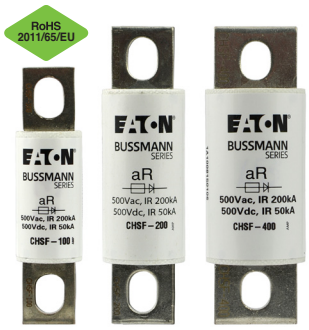
## Contents


| Fuse section | Volts | Amp range | Catalog symbol/size | Section page |
|---|---|---|---|---|
| **Ferrule fuses** | | | | |
| **Fuses** | 150 Vac/dc | 5 to 30 | FWA-_A10F (10x38mm) | 22 |
| | 150 Vac/dc | 35 to 60 | FWA-_A21F (21x51mm) | |
| | 250 Vac/dc | 1 to 50 | FWX (14x51mm) | 23 |
| | 500 Vac | 0.25 to 30 | FWH-_A6F (6x32mm) | 24 |
| | 500 Vac/dc | 1 to 30 | FWH-_14F (14x51mm) | 25 |
| | 600-700 Vac/700 Vdc | 1 to 32 | FWC (10x38mm) | 26 |
| | 690 Vac | 4 to 32 | FWP-_G10F (10x38mm) | 27 |
| | 690-700 Vac/600-700 Vdc | 1 to 50 | FWP-_A14F (14x51mm) | 28 |
| | 690 Vac | 4 to 50 | FWP-_G14F_ (14x51mm) | 29 |
| | 700 Vac/dc | 20 to 100 | FWP-_A22F (22x58mm) | 30 |
| | 690 Vac | 20 to 100 | FWP-_G22F_ (22x58mm) | 31 |
| | 750 Vdc | 5 to 30 | FWK-_A20F (20x127mm) | 32 |
| | 750 Vdc | 35-60 | FWK-_A25F (25x146mm) | |
| | 1000 Vac/800 Vdc | 20 to 30 | FWJ (14x67mm) | 33 |
| | 1200 Vac/1000 Vdc | 20 to 30 | FWL (20x127mm) | 34 |
| | 1400-2000 Vac/1000 Vdc | 2 to 15 | FWS (20x127mm) | 35 |
| **Accessories** | J70032 700 V panel mount block for FWP 14x51mm fuses | | | 36 |
| | JM70100 700 V DIN-Rail/panel mount modular blocks for FWP 22x58mm fuses | | | |
| | CHM modular holders for FWA and FWC 10x38mm fuses | | | |
| | CH14 modular holders for FWX, FWH and FWP 14x51mm fuses | | | 37 |
| | CH22 modular holders for FWP 22x58mm fuses | | | |
| **Square body fuses** | | | | |
| **DIN 43653** | 690-700 Vac/ 700 Vdc | 10 to 400 | 170M — size 000 and 00 | 38-39 |
| | 690-700 Vac | 40 to 2000 | 170M — size 1* to 3 | 40-41 |
| | 1000 Vac | 20 to 315 | 170M — size 00 | 42 |
| | 1000 Vac | 50 to 1400 | 170M — size 1* to 3 | 43-44 |
| | 1250-1300 Vac | 50 to 1400 | 170M — size 1* to 3 | 45-46 |
| **DIN 43620** | 690 Vac | 10 to 800 | 170M — size 00 to 3 | 47-48 |
| | 690-700 Vac | 10 to 1600 | 170M — size 000 to 3 dual indicator | 49-50 |
| | 1000 Vac | 20 to 225 | 170M — size 00 | 51 |
| **French style** | 690-700 Vac | 40 to 1600 | 170M — size 1* to 3 | 52-53 |
| **US style** | 690-700 Vac | 40 to 2000 | 170M — size 1* to 3 | 54-55 |
| | 1000 Vac | 50 to 1400 | 170M — size 1* to 3 | 56-57 |
| | 1250-1300 Vac | 50 to 1400 | 170M — size 1* to 3 | 58-59 |
| **Flush-end contact** | 690 Vac | 25 to 400 | 170M — size 00 | 60 |
| | 690-700 Vac | 40 to 2000 | 170M — size 1* to 3 | 61-62 |
| | 1000 Vac | 50 to 1400 | 170M — size 1* to 3 | 63-64 |
| | 1250-1300 Vac | 50 to 1400 | 170M — size 1* to 3 | 65-66 |
| | 690-700 Vac | 1000 to 4000 | 170M — size 4 | 67-68 |
| | 1000 Vac | 1000 to 3000 | 170M — size 4 | 69 |
| | 1250 Vac | 800 to 2500 | 170M — size 4 | 70 |
| | 660 Vac | 1000 to 4000 | 170M — size 23 | 71-72 |
| | 1250 Vac | 630 to 2800 | 170M — size 23 | 73 |
| | 690 Vac | 2000 to 7500 | 170M — size 24 | 74 |
| | 1000 Vac | 2000 to 5000 | 170M — size 24 | 75 |
| **Accessories** | Fixed center blocks for DIN 43653 fuses | | | 76-77 |
| | Indicators | | | 78 |
| | Microswitches | | | 78 |
| **IGBT fuses** | | | | |
| **Fuses** | 750-800 Vdc | 25 to 630 | 170M — size 000 and 230 | 79-80 |
| | 1000 Vdc | 25 to 500 | 170M — size 000 and 230 | 81-82 |

# CHSF — UL compact high speed fuse

## 500 Vac/dc (UL), 50 to 400 A

Bussmann™ series compact high speed fuses feature space-saving case sizes for protecting semiconductor devices up to 500 Vac/dc in ratings from 50 to 400 amps.




### Ratings

- Volts
  - 500 Vac/dc (UL)
- Amps 50-400 A
- Interrupting rating
  - Max AC – 200 kA
  - Min AC 400%
  - Max DC – 50 kA
  - Min DC 800%

### Operating class aR

### Agency information

- UL Recognized, Guide JFHR2, File E56412
- CSA Component Acceptance, Class 1422-30, File 53787
- IEC aR (self certified)
- RoHS compliant
- CE

### Features

- Requires up to 48% less enclosure space to help reduce the overall assembly size
- Innovative design allows for a significantly smaller package without compromising heat rise performance, preventing extensive equipment redesign
- Global acceptance with UL, CSA, IEC and RoHS for products sold worldwide
- Bolt-on design provides design flexibility for installation in fuse blocks or direct mounting on busbars
- Meets JASO D622 spec for thermal shock, humidity, and vibration
- Superior current cycling performance helps withstand demanding applications

### Recommended fuse blocks
### Up to 100 amps

| Catalog no. | AWG wire size | Stud size |
|---|---|---|
| BH-0111 | 14-2/0 Cu | 1/4-20 |
| BH-0112 | 14-2/0 Cu | 5/16-18 |
| BH-0121 | (2) 14-1/0 Cu | 1/4-20 |
| BH-0122 | (2) 14-1/0 Cu | 5/16-18 |
| 1BS101 | 14-2/0 Cu | 1/4-20 x 1/2 |
| See data sheet no. 1200 (BH-01_) and 1206 (1BS101) for details. | | |

### Up to 400 amps

| Catalog no. | AWG wire size | Stud size |
|---|---|---|
| BH-1131 | 6-250kcmil Cu | 1/4-20 |
| BH-1132 | 6-250kcmil Cu | 5/16-18 |
| 1BS102 | 6-250kcmil Cu | 1/4-20 x 1/2 |
| See data sheet no. 1201 (BH-11_) and 1207 (1BS102) for details. | | |

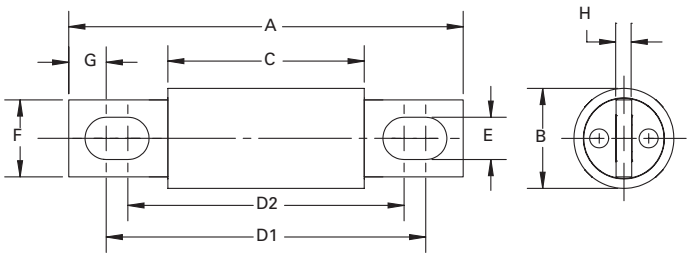


| | | | | | Watts loss / percent of rated current | |
|---|---|---|---|---|---|---|
| Catalog no. | Amps | AC/DC $I^2t$ ($A^2s$) pre-arcing | AC* $I^2t$ ($A^2s$) total clear | DC** $I^2t$ ($A^2s$) total clear | @ 80% | @ 50% |
| CHSF-50 | 50 | 304 | 1875 | 935 | 3.8 | 1.3 |
| CHSF-60 | 60 | 438 | 2700 | 1346 | 4.5 | 1.5 |
| CHSF-70 | 70 | 596 | 3675 | 1833 | 5.3 | 1.8 |
| CHSF-80 | 80 | 778 | 4800 | 2394 | 6.1 | 2.0 |
| CHSF-100 | 100 | 1216 | 7500 | 3740 | 7.6 | 2.5 |
| CHSF-125 | 125 | 2042 | 12,721 | 6465 | 12.0 | 3.6 |
| CHSF-150 | 150 | 2941 | 18,318 | 9309 | 14.3 | 4.3 |
| CHSF-175 | 175 | 4003 | 24,933 | 12,671 | 16.7 | 5.1 |
| CHSF-200 | 200 | 5228 | 32,566 | 16,550 | 19.1 | 5.8 |
| CHSF-225 | 225 | 6835 | 48,028 | 21,278 | 26.1 | 7.0 |
| CHSF-250 | 250 | 8438 | 59,293 | 26,270 | 29.0 | 7.8 |
| CHSF-300 | 300 | 12,151 | 85, 382 | 37,828 | 34.8 | 9.4 |
| CHSF-350 | 350 | 16,539 | 116,215 | 51,488 | 40.6 | 10.9 |
| CHSF-400 | 400 | 21,603 | 151,791 | 67,250 | 46.4 | 12.5 |

* @ 200 kA/500 Vac.
**@ 50 kA/500 Vdc.

### Dimensions — mm

| Amps | A | B | C | D1 | D2 | E | F | G | H |
|---|---|---|---|---|---|---|---|---|---|
| 50-100 | 81 | 20 | 40 | 61 | 57 | 8.7 | 16 | 7.7 | 3.2 |
| 125-200 | 92 | 25 | 53 | 77 | 68 | 8.7 | 19 | 7.8 | 3.2 |
| 225-400 | 92 | 30 | 53 | 74 | 68 | 8.7 | 25 | 9.0 | 4.8 |




**Data sheet no. 10414**

## DFJ — UL Class J full range high speed fuse

### 600 Vac/450 Vdc (UL), 1 to 600 A

UL Class J high speed, full range current-limiting fuses provide maximum protection for AC and DC drives and controllers. The UL Class J Bussmann series DFJ fuse has the lowest $I^2t$ of any branch circuit fuse to protect power semiconductor devices that utilize diodes, GTOs, SCRs and SSRs. The DFJ fuse combines the performance of high speed fuses in a full range Class J branch circuit package, allowing the use of readily available Class J fuse blocks, holders and switches. The DFJ uses standard Class J holders and blocks. See section 8 for available catalog numbers.

### Ratings

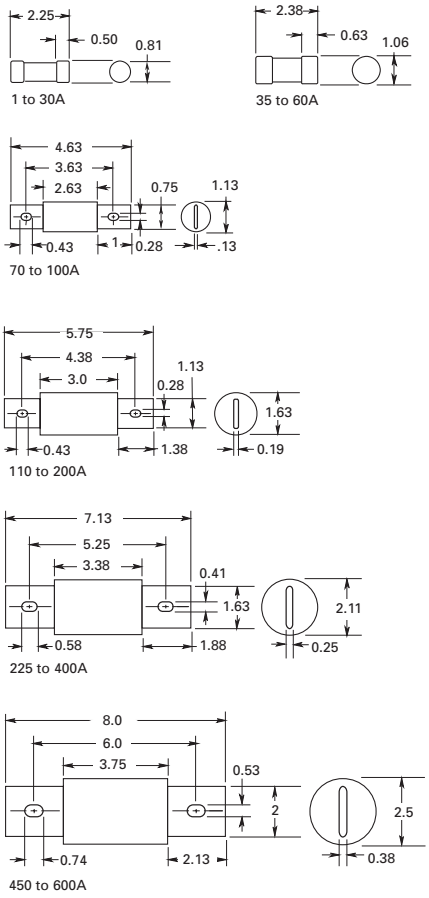
- Volts
  - 600 Vac (UL)
  - 450 Vdc (UL 15-600 A)
- Amps 1-600 A
- IR
  - 200 kA RMS Sym.
  - 100 kA DC

### Operating class aR

### Agency information

- UL Listed, Std 248-8, Class J, Guide JDDZ, File E4273
- CSA Certified, C22-2 No 248.8, Class 1422-02, File 53787

### Dimensions — in







| Catalog no. | Amps | $I^2t$ ($A^2Sec$) @ 600 Vac/100 kA Pre-arc | Clearing | Watts loss* |
|---|---|---|---|---|
| DFJ-1 | 1 | — | — | — |
| DFJ-2 | 2 | — | — | — |
| DFJ-3 | 3 | — | — | — |
| DFJ-4 | 4 | — | — | — |
| DFJ-5 | 5 | — | — | — |
| DFJ-6 | 6 | — | — | — |
| DFJ-8 | 8 | — | — | — |
| DFJ-10 | 10 | — | — | — |
| DFJ-12 | 12 | — | — | — |
| DFJ-15 | 15 | 4 | 110 | 4.1 |
| DFJ-17.5 | 17.5 | — | — | — |
| DFJ-20 | 20 | 8 | 365 | 4.0 |
| DFJ-25 | 25 | 12 | 610 | 4.9 |
| DFJ-30 | 30 | 20 | 1000 | 5.5 |
| DFJ-35 | 35 | 55 | 1100 | 6.8 |
| DFJ-40 | 40 | 90 | 1900 | 8.6 |
| DFJ-50 | 50 | 140 | 2800 | 8.7 |
| DFJ-60 | 60 | 290 | 6000 | 8.5 |
| DFJ-70 | 70 | 450 | 3100 | 12 |
| DFJ-80 | 80 | 650 | 4600 | 13 |
| DFJ-90 | 90 | 1010 | 7200 | 13 |
| DFJ-100 | 100 | 1460 | 10,500 | 13 |
| DFJ-110 | 110 | 1710 | 9500 | 17 |
| DFJ-125 | 125 | 3580 | 20,000 | 15 |
| DFJ-150 | 150 | 5080 | 28,000 | 19 |
| DFJ-175 | 175 | 6310 | 35,000 | 23 |
| DFJ-200 | 200 | 9850 | 54,500 | 24 |
| DFJ-225 | 225 | 11,420 | 51,000 | 29 |
| DFJ-250 | 250 | 17,000 | 74,500 | 30 |
| DFJ-300 | 300 | 23,500 | 103,000 | 36 |
| DFJ-350 | 350 | 38,800 | 170,000 | 39 |
| DFJ-400 | 400 | 62,200 | 272,000 | 40 |
| DFJ-450 | 450 | 44,600 | 270,000 | 56 |
| DFJ-500 | 500 | 79,500 | 480,000 | 52 |
| DFJ-600 | 600 | 138,000 | 830,000 | 57 |

* Watts loss at rated current.

**Data sheet no. 1048**

## FWA — North American

### 130 Vac/dc (UL), 1000 to 4000 A




North American style flush-end high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.

### Ratings

- Volts 130 Vac/dc
- Amps 1000-4000 A
- IR
  - 200 kA RMS Sym at 130 Vac
  - 50 kA at 130 Vdc

### Agency information

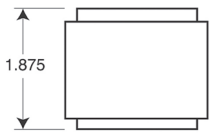
- UL Recognized, JFHR2, E91958 on 1000-2000 A fuses
- CE



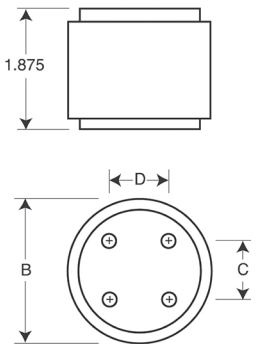
| | | $I^2t$ ($A^2s$) | | | |
|---|---|---|---|---|---|
| **Rated voltage** | **Rated current (amps)** | **Pre-arcing** | **Clearing at 130 Vac** | **Watts loss (W)*** | **Catalog no.** |
| 130 Vac/dc (UL) | 1000 | 170,000 | 460,000 | 60 | FWA-1000AH |
| | 1200 | 270,000 | 730,000 | 70 | FWA-1200AH |
| | 1500 | 520,000 | 1,400,000 | 78 | FWA-1500AH |
| | 2000 | 860,000 | 2,400,000 | 108 | FWA-2000AH |
| | 2500 | 1,500,000 | 4,100,000 | 130 | FWA-2500AH |
| | 3000 | 2,100,000 | 5,700,000 | 150 | FWA-3000AH |
| | 4000 | 3,400,000 | 9,200,000 | 257 | FWA-4000AH |

* Watts loss at rated current.

### Dimensions — in




**1000-3000 A**




**4000 A**

| Amps | B | C | D | Thread / depth |
|---|---|---|---|---|
| 1000 to 2000 | 2.0 | 1.0 | — | 3/8-24 x 1/2" UNF |
| 2500 to 3000 | 3.0 | 1.5 | — | 1/2-20 x 1/2" UNF |
| 4000 | 3.5 | 1.5 | 1.5 | 1/2-20 x 1/2" UNF |

1" = 25.4mm

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720001, 5785301

## FWA — North American

### 150 Vac/dc (UL), 70 to 1000 A



North American style bolted tag high speed fuses used for the protection of DC common bus, DC drives, power converters / rectifiers and reduced rated voltage starters.

### Ratings

- Volts
  - 150 Vac/dc (UL)
  - 80 Vdc 1000 A only
- Amps 70-1000 A
- IR
  - 100 kA RMS Sym. (70-400 A)
  - 200 kA RMS Sym. (450-1000 A)
  - 20 kA at 150 Vac/ Vdc (70-800 A)
  - 100 kA at 80 Vdc (70-1000 A)

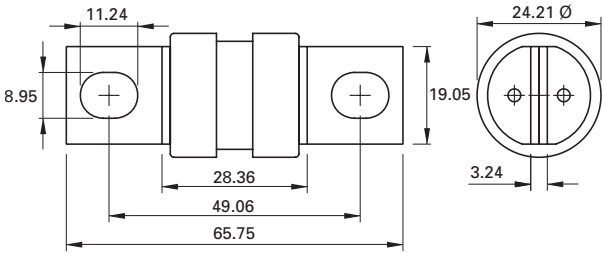
### Agency information

- UL Recognized JFHR2, E91958
- CE

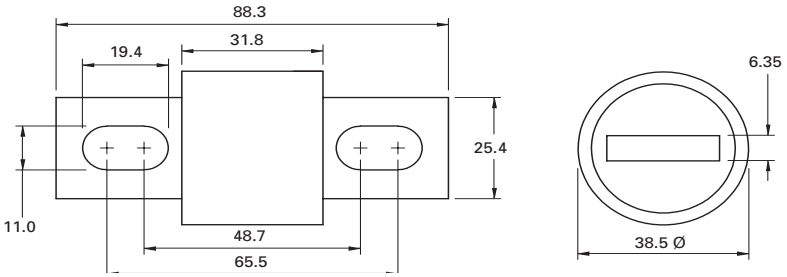
| Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at 150 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|
| 150 Vac/dc (UL) | 70 | 470 | 4000 | 6.9 | FWA-70B |
| | 80 | 670 | 6000 | 7.7 | FWA-80B |
| | 100 | 1200 | 12,000 | 9.0 | FWA-100B |
| | 125 | 1870 | 18,000 | 11.2 | FWA-125B |
| | 150 | 2700 | 26,000 | 13.5 | FWA-150B |
| | 200 | 4780 | 45,000 | 17.6 | FWA-200B |
| | 250 | 7470 | 70,000 | 22.5 | FWA-250B |
| | 300 | 10,760 | 100,000 | 27.0 | FWA-300B |
| | 350 | 15,700 | 140,000 | 30.6 | FWA-350B |
| | 400 | 20,300 | 180,000 | 35.2 | FWA-400B |
| | 500 | 39,000 | 120,000 | 35.0 | FWA-500A |
| | 600 | 46,000 | 140,000 | 47.0 | FWA-600A |
| | 700 | 75,000 | 220,000 | 49.0 | FWA-700A |
| | 800 | 92,000 | 280,000 | 58.0 | FWA-800A |
| 80 Vdc | 1000 | 170,000 | 510,000 | 60.0 | FWA-1000A |

* Watts loss at rated current.

### Dimensions — mm




**70-400 A**




**500-1000 A**

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720002, 5785310

# FWX — North American

## 250 Vac/dc (UL), 35 to 2500 A

North American style bolted tags and flush-end high speed fuses for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters.

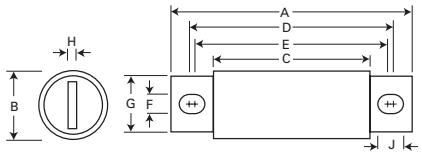
### Ratings

- Volts 250 Vac/dc (UL)
- Amps 35-2500 A
- IR
  - 200 kA RMS Sym.
  - 20 kA at 250 Vdc (35-800 A)

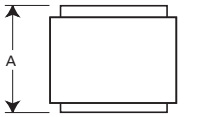
### Agency information

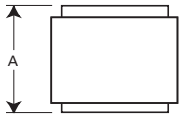
- UL Recognized, JFHR2, E56412
- CSA Class 1422-30, (53787) on 35-800 A fuses (20 kA IR at 250 Vdc)
- CE

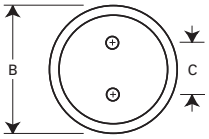
### Dimensions — in



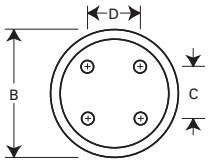

**35-800 A**




**1000-1200 A**




**1500-2500 A**

| Amp range | A | B | C | D | E | F | G | H | J | Thread / depth |
|---|---|---|---|---|---|---|---|---|---|---|
| 35-60 | 3.19 | 0.81 | 1.59 | 2.59 | 2.25 | 0.34 | 0.63 | 0.13 | 0.52 | — |
| 70-200 | 3.13 | 1.22 | 1.59 | 2.44 | 2.19 | 0.34 | 1.00 | 0.19 | 0.47 | — |
| 225-600 | 3.84 | 1.50 | 1.59 | 2.94 | 2.25 | 0.41 | 1.00 | 0.25 | 0.75 | — |
| 700-800 | 3.84 | 2.00 | 1.59 | 3.03 | 2.28 | 0.41 | 1.50 | 0.25 | 0.78 | — |
| 1000-1200 | 2.59 | 3.00 | 1.50 | — | — | — | — | — | — | 3/8-24 x 1/2" UNF |
| 1500-2500 | 2.59 | 3.50 | 1.50 | 1.50 | — | — | — | — | — | |

1" = 25.4mm




| Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 250 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|
| 250 Vac/dc (UL) | 35 | 50 | 230 | 4.2 | FWX-35A |
| | 40 | 60 | 310 | 5.2 | FWX-40A |
| | 45 | 80 | 390 | 5.7 | FWX-45A |
| | 50 | 100 | 520 | 6.0 | FWX-50A |
| | 60 | 140 | 740 | 8.1 | FWX-60A |
| | 70 | 330 | 1400 | 7.2 | FWX-70A |
| | 80 | 430 | 1850 | 8.1 | FWX-80A |
| | 90 | 570 | 2450 | 9.0 | FWX-90A |
| | 100 | 740 | 3150 | 10.0 | FWX-100A |
| | 125 | 1130 | 4850 | 12.5 | FWX-125A |
| | 150 | 1620 | 6950 | 15.7 | FWX-150A |
| | 175 | 2170 | 9300 | 18.5 | FWX-175A |
| | 200 | 2790 | 12,000 | 22.0 | FWX-200A |
| | 225 | 3210 | 14,700 | 24.0 | FWX-225A |
| | 250 | 3960 | 18,100 | 27.0 | FWX-250A |
| | 275 | 4720 | 21,600 | 31.0 | FWX-275A |
| | 300 | 6000 | 27,300 | 32.0 | FWX-300A |
| | 350 | 10,600 | 48,600 | 39.0 | FWX-350A |
| | 400 | 14,500 | 66,100 | 44.0 | FWX-400A |
| | 450 | 22,100 | 101,000 | 49.0 | FWX-450A |
| | 500 | 28,000 | 128,000 | 54.0 | FWX-500A |
| | 600 | 41,100 | 188,000 | 62.0 | FWX-600A |
| | 700 | 48,800 | 190,000 | 72.0 | FWX-700A |
| | 800 | 59,000 | 230,000 | 84.0 | FWX-800A |
| | 1000 | 44,000 | 360,000 | 100.0 | FWX-1000AH |
| | 1200 | 92,000 | 750,000 | 103.0 | FWX-1200AH |
| | 1500 | 120,000 | 880,000 | 140.0 | FWX-1500AH |
| | 1600 | 160,000 | 1,200,000 | 140.0 | FWX-1600AH |
| | 2000 | 320,000 | 2,300,000 | 151.0 | FWX-2000AH |
| | 2500 | 670,000 | 4,700,000 | 163.0 | FWX-2500AH |

* Watts loss at rated current.



For details on electrical characteristics, contact Application Engineering and ask for data sheets:720005, 359 (35-800 A), 5785299 (100-2500 A)

## FWH — North American

### 500 Vac/dc (UL), 35 to 1600 A



North American style bolted tags high speed fuses, for the protection of DC common bus, power converters/rectifiers and reduced rated voltage starters.

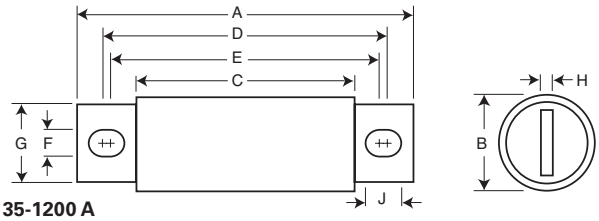
### Ratings

- Volts
  - 500 Vac (UL)
  - 500 Vdc (35-800 A only)
- Amps 35-1600 A
- IR
  - 200 kA RMS Sym.
  - 50 kA at 500 Vdc

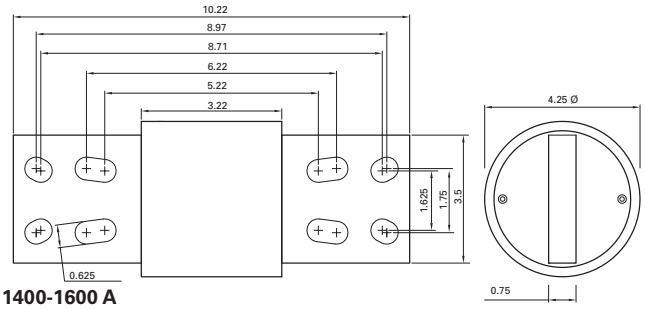
### Agency information

- UL Recognized, JFHR2, E91958, FWH-_B (35-200 A) and FWH-_A (1000 and 1200 A), JFHR2, E56412 FWH-_A (225-800 A)
- CSA Class 1422-30, File 53787 (35-1600 A)
- CE

### Dimensions — in




35-1200 A




1400-1600 A

| Amp range | A | B | C | D | E | F | G | H | J |
|---|---|---|---|---|---|---|---|---|---|
| 35-60 | 3.19 | 0.81 | 1.59 | 2.54 | 2.19 | 0.34 | 0.72 | 0.13 | 0.52 |
| 70-100 | 3.62 | 0.95 | 1.74 | 2.85 | 2.81 | 0.35 | 0.75 | 0.13 | 0.38 |
| 125-200 | 3.62 | 1.16 | 1.84 | 2.89 | 2.77 | 0.34 | 1.00 | 0.19 | 0.41 |
| 225-400 | 4.34 | 1.50 | 2.09 | 3.44 | 2.75 | 0.41 | 1.00 | 0.25 | 0.75 |
| 450-600 | 4.34 | 2.00 | 2.09 | 3.53 | 2.78 | 0.41 | 1.50 | 0.25 | 0.78 |
| 700-800 | 6.34 | 2.50 | 2.09 | 4.97 | 3.44 | 0.53 | 2.00 | 0.38 | 1.30 |
| 1000-1200 | 6.97 | 3.00 | 3.22 | 5.47 | 4.48 | 0.62 | 2.38 | 0.44 | 1.12 |
| 1400-1600 | Refer to drawing | | | | | | | | |

1" = 25.4mm

| Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 250 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|
| 500 Vac/dc (UL) | 35 | 34 | 150 | 8.0 | FWH-35B |
| | 40 | 76 | 320 | 7.5 | FWH-40B |
| | 45 | 105 | 450 | 7.5 | FWH-45B |
| | 50 | 135 | 670 | 7.5 | FWH-50B |
| | 60 | 210 | 900 | 9.9 | FWH-60B |
| | 70 | 210 | 900 | 10.6 | FWH-70B |
| | 80 | 305 | 1400 | 12.7 | FWH-80B |
| | 90 | 360 | 1600 | 15.0 | FWH-90B |
| | 100 | 475 | 2000 | 17.0 | FWH-100B |
| | 125 | 800 | 3500 | 25.0 | FWH-125B |
| | 150 | 1100 | 4600 | 30.0 | FWH-150B |
| | 175 | 1450 | 6200 | 35.0 | FWH-175B |
| | 200 | 1900 | 8500 | 40.0 | FWH-200B |
| 500 Vac/dc (UL) | 225 | 4600 | 23,300 | 39.0 | FWH-225A |
| | 250 | 6300 | 32,200 | 41.0 | FWH-250A |
| | 275 | 7900 | 40,300 | 46.0 | FWH-275A |
| | 300 | 9800 | 49,800 | 51.0 | FWH-300A |
| | 325 | 13,700 | 63,800 | 53.0 | FWH-325A |
| | 350 | 14,500 | 72,900 | 58.0 | FWH-350A |
| | 400 | 19,200 | 96,700 | 65.0 | FWH-400A |
| | 450 | 24,700 | 127,000 | 74.0 | FWH-450A |
| | 500 | 29,200 | 149,000 | 84.0 | FWH-500A |
| | 600 | 41,300 | 206,000 | 108.0 | FWH-600A |
| | 700 | 55,000 | 298,000 | 120.0 | FWH-700A |
| | 800 | 76,200 | 409,000 | 129.0 | FWH-800A |
| 500 Vac (UL) | 1000 | 92,000 | 450,000 | 145.0 | FWH-1000A |
| | 1200 | 122,000 | 600,000 | 180.0 | FWH-1200A |
| | 1400 | 200,000 | 1,000,000 | 210.0 | FWH-1400A |
| | 1600 | 290,000 | 1,400,000 | 230.0 | FWH-1600A |

* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720007, 360 (225-800 A), 5785304 (35-200 A, 1000-1600 A)

# KAC — North American

## 600 Vac (UL), 1 to 1000 A

North American style bolted tags high speed fuses. These fuses are supplied as replacements only. For new installations, Eaton recommends the 700 V FWP. See page 4-11.




### Ratings

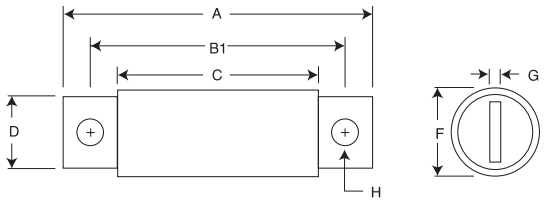
- Volts 600 Vac
- Amps 1-1000 A
- IR 200 kA RMS Sym.

### Agency information

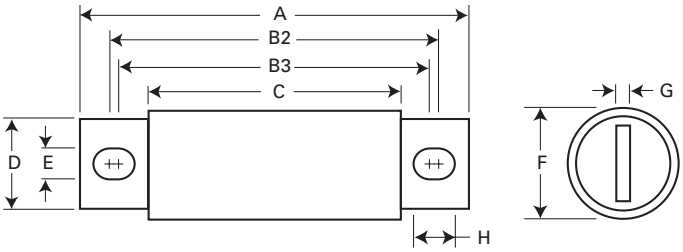
- UL Recognized, JFHR2, E56413 (1-600 A only)
- CE

| Rated voltage | Rated current (amps) | Catalog no. |
|---|---|---|
| 600 Vac (UL) | 1 | KAC-1 |
| | 2 | KAC-2 |
| | 3 | KAC-3 |
| | 4 | KAC-4 |
| | 5 | KAC-5 |
| | 6 | KAC-6 |
| | 7 | KAC-7 |
| | 8 | KAC-8 |
| | 9 | KAC-9 |
| | 10 | KAC-10 |
| | 12 | KAC-12 |
| | 15 | KAC-15 |
| | 17.5 | KAC-17.5 |
| | 20 | KAC-20 |
| | 25 | KAC-25 |
| | 30 | KAC-30 |
| | 35 | KAC-35 |
| | 40 | KAC-40 |
| | 45 | KAC-45 |
| | 50 | KAC-50 |
| | 60 | KAC-60 |
| | 70 | KAC-70 |
| | 80 | KAC-80 |
| | 90 | KAC-90 |
| | 100 | KAC-100 |
| | 110 | KAC-110 |
| | 125 | KAC-125 |
| | 150 | KAC-150 |
| | 175 | KAC-175 |
| | 200 | KAC-200 |
| | 225 | KAC-225 |
| | 250 | KAC-250 |
| | 300 | KAC-300 |
| | 350 | KAC-350 |
| | 400 | KAC-400 |
| | 450 | KAC-450 |
| | 500 | KAC-500 |
| | 600 | KAC-600 |
| | 700 | KAC-700 |
| | 800 | KAC-800 |
| | 1000 | KAC-1000 |

### Dimensions — in




**1-30 A and 450-1000 A**




**35-400 A**

| Rated current (amps) | A | B1 | B2 | B3 | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|---|---|
| 1-30 | 2.88 | 2.50 | — | — | 1.88 | 0.41 | — | 0.56 | 0.06 | 0.26 |
| 35-60 | 4.38 | — | 3.75 | 3.50 | 2.75 | 0.63 | 0.34 | 0.81 | 0.09 | 0.47 |
| 70-100 | 5.00 | — | 4.06 | 3.66 | 2.75 | 0.75 | 0.41 | 1.00 | 0.13 | 0.61 |
| 110-200 | 5.14 | — | 4.39 | 3.77 | 2.91 | 1.00 | 0.41 | 1.50 | 0.19 | 0.72 |
| 225-400 | 6.18 | — | 4.82 | 4.57 | 3.00 | 1.63 | 0.56 | 2.00 | 0.25 | 0.69 |
| 450-800 | 6.25 | 4.75 | — | | 3.06 | 2.00 | — | 2.50 | 0.25 | 0.56 |
| 1000 | 7.25 | 4.75 | — | | 3.06 | 2.75 | — | 3.50 | 0.38 | 0.56 |

1" = 25.4mm

## KBC — North American

### 600 Vac (UL), 35 to 800 A




North American style bolted tags and flush-end high speed fuses. These fuses are supplied as replacements only. For new installations, Eaton recommends the 700 V FWP fuses. See page 4-11.

### Ratings

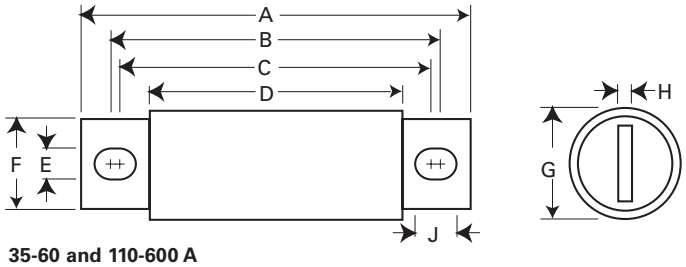
- Volts 600 Vac (UL)
- Amps 35-800 A
- IR 200 kA RMS Sym.

### Agency information

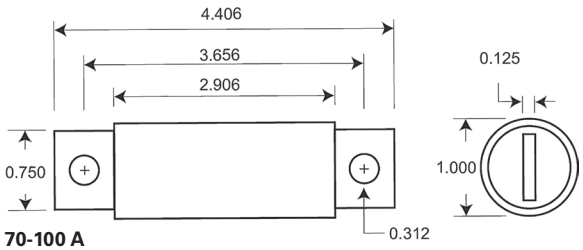
- UL Recognized, JFHR2, E56412 (35-600 A only)
- CE

| Rated voltage | Rated current (amps) | Catalog no. |
|---|---|---|
| 600 Vac (UL) | 35 | KBC-35 |
| | 40 | KBC-40 |
| | 45 | KBC-45 |
| | 50 | KBC-50 |
| | 60 | KBC-60 |
| | 70 | KBC-70 |
| | 80 | KBC-80 |
| | 90 | KBC-90 |
| | 100 | KBC-100 |
| | 110 | KBC-110 |
| | 125 | KBC-125 |
| | 150 | KBC-150 |
| | 175 | KBC-175 |
| | 200 | KBC-200 |
| | 225 | KBC-225 |
| | 250 | KBC-250 |
| | 300 | KBC-300 |
| | 350 | KBC-350 |
| | 400 | KBC-400 |
| | 450 | KBC-450 |
| | 500 | KBC-500 |
| | 600 | KBC-600 |
| | 800 | KBC-800 |

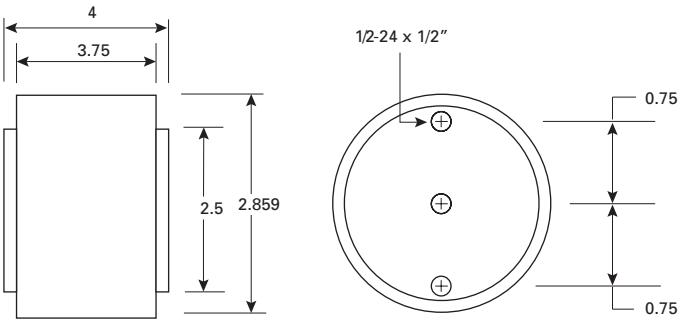
### Dimensions — in




**35-60 and 110-600 A**




**70-100 A**




**800 A**

| Rated current (amps) | A | B | C | D | E | F | G | H | J |
|---|---|---|---|---|---|---|---|---|---|
| 35-60 | 4.38 | 3.75 | 3.50 | 2.75 | 0.34 | 0.63 | 0.81 | 0.09 | 0.47 |
| 70-100 | Refer to drawing | | | | | | | | |
| 110-200 | 4.41 | 3.72 | 3.59 | 2.91 | 0.31 | 0.88 | 1.22 | 0.19 | 0.38 |
| 225-400 | 5.13 | 4.19 | 3.56 | 2.91 | 0.41 | 1.00 | 1.50 | 0.25 | 0.72 |
| 450-600 | 5.13 | 4.39 | 3.69 | 2.88 | 0.41 | 1.50 | 2.00 | 0.25 | 0.76 |
| 800 | Refer to drawing | | | | | | | | |

1" = 25.4mm

**Data sheet no. 720010**

## FWP — North American

### 700 Vac/dc (UL), 5 to 1200 A




North American style bolted tags high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers, reduced rated voltage starters.

### Ratings

- Volts 700 Vac/dc (UL)
- Amps 5-1200 A
- IR
  - 200 kA RMS Sym.
  - 50 kA at 700 Vdc (Type A)
  - 50 kA at 500 Vdc (Type B)

### Agency information

- UL Recognized, JFHR2, E91958 FWP-_B (5-100 A, 700-1200 A), JFHR2, E56412 FWP-_A (125-600 A)
- CSA Class 1422-30, (53787) on 5-800 A
- CE



| Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at 700 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|
| 700 Vac/dc (UL) | 5 | 1.6 | 11 | 1.5 | FWP-5B |
| | 10 | 3.6 | 22 | 4.0 | FWP-10B |
| | 15 | 10.0 | 70 | 5.5 | FWP-15B |
| | 20 | 26.0 | 180 | 6.0 | FWP-20B |
| | 25 | 44.0 | 320 | 7.0 | FWP-25B |
| | 30 | 58.0 | 450 | 9.0 | FWP-30B |
| | 35 | 34.0 | 160 | 12.0 | FWP-35B |
| | 40 | 76.0 | 320 | 12.0 | FWP-40B |
| | 50 | 135.0 | 600 | 12.0 | FWP-50B |
| | 60 | 210.0 | 950 | 15.5 | FWP-60B |
| | 70 | 305.0 | 2000 | 18.0 | FWP-70B |
| | 80 | 360.0 | 2400 | 21.0 | FWP-80B |
| | 90 | 415.0 | 2700 | 25.0 | FWP-90B |
| | 100 | 540.0 | 3500 | 27.0 | FWP-100B |
| | 125 | 1800.0 | 7300 | 28.0 | FWP-125A |
| | 150 | 2900.0 | 11,700 | 32.0 | FWP-150A |
| | 175 | 4200.0 | 16,700 | 35.0 | FWP-175A |
| | 200 | 5500.0 | 22,000 | 43.0 | FWP-200A |
| | 225 | 7700.0 | 31,300 | 45.0 | FWP-225A |
| | 250 | 10,500.0 | 42,500 | 48.0 | FWP-250A |
| | 300 | 17,600.0 | 71,200 | 58.0 | FWP-300A |
| | 350 | 23,700.0 | 95,600 | 65.0 | FWP-350A |
| | 400 | 31,000.0 | 125,000 | 78.0 | FWP-400A |
| | 450 | 36,400.0 | 137,000 | 94.0 | FWP-450A |
| | 500 | 45,200.0 | 170,000 | 107.0 | FWP-500A |
| | 600 | 66,700.0 | 250,000 | 122.0 | FWP-600A |
| | 700 | 54,000.0 | 300,000 | 125.0 | FWP-700A |
| | 800 | 78,000.0 | 450,000 | 140.0 | FWP-800A |
| | 900 | 91,500.0 | 530,000 | 150.0 | FWP-900A |
| | 1000 | 120,000.0 | 600,000 | 170.0 | FWP-1000A |
| | 1200 | 195,000.0 | 1,100,000 | 190.0 | FWP-1200A |

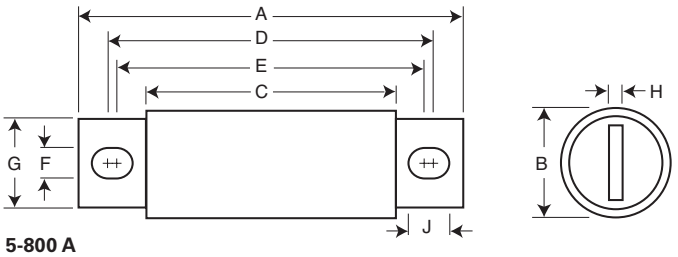
* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720012, 5785316 (5-30 A), 361 (125-600 A), 5785308 (35-100 A, 700-1200 A)

## FWP — North American

### 700 Vac/dc (UL), 5 to 1200 A

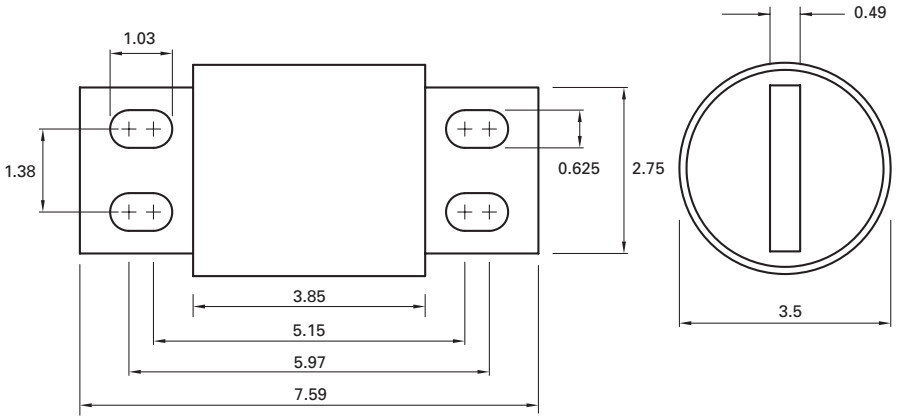
#### Dimensions — in



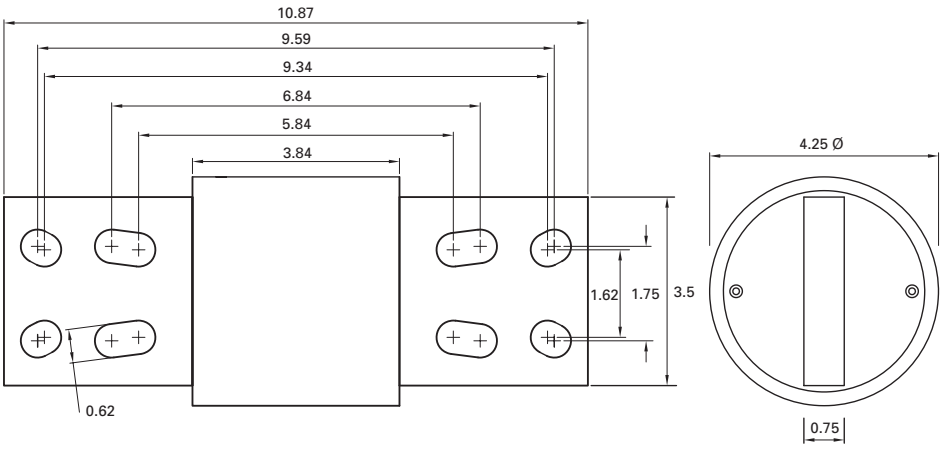

**5-800 A**

| Amp range | A | B | C | D | E | F | G | H | J |
|---|---|---|---|---|---|---|---|---|---|
| 5-30 | 2.87 | 0.56 | 1.86 | 2.48 | 2.48 | 0.25 | 0.41 | 0.06 | 0.25 |
| 35-60 | 4.38 | 0.81 | 2.75 | 3.71 | 3.31 | 0.34 | 0.73 | 0.13 | 0.54 |
| 70-100 | 4.41 | 0.95 | 2.59 | 3.63 | 3.56 | 0.34 | 0.75 | 0.13 | 0.38 |
| 125-200 | 5.09 | 1.50 | 2.84 | 4.19 | 3.5 | 0.41 | 1.00 | 0.25 | 0.75 |
| 225-400 | 5.09 | 2.00 | 2.84 | 4.28 | 3.53 | 0.41 | 1.50 | 0.25 | 0.78 |
| 450-600 | 7.09 | 2.50 | 2.84 | 5.72 | 4.19 | 0.53 | 2.00 | 0.38 | 1.30 |
| 700-800 | 6.63 | 2.00 | 2.76 | 5.56 | 5.06 | 0.63 | 1.50 | 0.25 | 0.88 |
| 900-1000 | Refer to drawing | | | | | | | | |
| 1200 | | | | | | | | | |

1" = 25.4mm




**900-1000 A -mm**



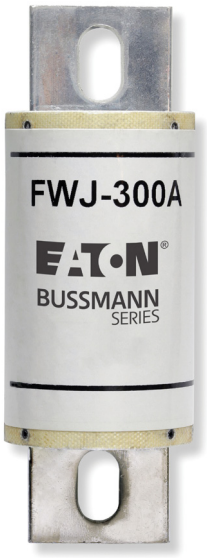

**1200 A -mm**

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720012, 5785316 (5-30 A), 361 (125-600 A), 5785308 (35-100 A, 700-1200 A)

# FWJ — North American

## 1000 Vac /800 Vdc (UL), 35 to 2000 A

North American style bolted tags high speed fuses for the protection of DC common bus, DC drives power converters/rectifiers, reduced rated voltage starters.




### Ratings

- Volts
  - 1000 Vac
  - 800 Vdc
- Amps 35-2000 A
- IR
  - 25 kA RMS Sym. (35-200 A)
  - 100 kA RMS Sym. (250-2000 A)
  - 50 kA at 800 Vdc (35-200 A and 450-600 A)

### Agency information

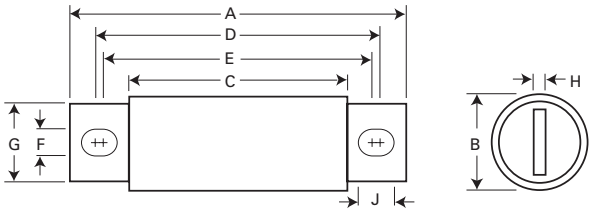
- UL Recognized, JFHR8, E91958 on 50-600 A only
- CE



| Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|
| 1000 Vac/ 800 Vdc (UL) | 35 | 210 | 2000 | 7 | FWJ-35A |
| | 40 | 300 | 2500 | 8 | FWJ-40A |
| | 50 | 470 | 3500 | 10 | FWJ-50A |
| | 60 | 670 | 5000 | 11 | FWJ-60A |
| | 70 | 1100 | 6900 | 12 | FWJ-70A |
| | 80 | 1550 | 9700 | 13 | FWJ-80A |
| | 90 | 1900 | 12,000 | 14 | FWJ-90A |
| | 100 | 2800 | 17,500 | 15 | FWJ-100A |
| | 125 | 4800 | 35,000 | 16 | FWJ-125A |
| | 150 | 6300 | 45,000 | 25 | FWJ-150A |
| | 175 | 7500 | 65,000 | 30 | FWJ-175A |
| | 200 | 11,700 | 80,000 | 32 | FWJ-200A |
| | 250 | 16,000 | 112,000 | 50 | FWJ-250A |
| | 300 | 23,500 | 164,000 | 56 | FWJ-300A |
| | 350 | 33,000 | 231,000 | 62 | FWJ-350A |
| | 400 | 47,000 | 330,000 | 67 | FWJ-400A |
| | 500 | 39,500 | 329,000 | 95 | FWJ-500A |
| | 600 | 61,000 | 520,000 | 105 | FWJ-600A |
| | 800 | 87,000 | 500,000 | 182 | FWJ-800A |
| | 1000 | 190,000 | 1,100,000 | 206 | FWJ-1000A |
| | 1200 | 370,000 | 2,100,000 | 240 | FWJ-1200A |
| | 1400 | 470,000 | 2,700,000 | 248 | FWJ-1400A |
| | 1600 | 700,000 | 4,000,000 | 267 | FWJ-1600A |
| | 1800 | 925,000 | 5,300,000 | 239 | FWJ-1800A |
| | 2000 | 1,330,000 | 7,600,000 | 244 | FWJ-2000A |

* Watts loss at rated current.

**Dimensions — in**




| Amp range | A | B | C | D | E | F | G | H | J |
|---|---|---|---|---|---|---|---|---|---|
| 35-60 | 5.00 | 0.94 | 3.11 | 4.24 | 4.18 | 0.35 | 0.75 | 0.13 | 0.38 |
| 70-100 | 4.93 | 1.13 | 3.09 | 4.27 | 4.16 | 0.35 | 1.00 | 0.19 | 0.41 |
| 125-200 | 5.69 | 1.53 | 3.26 | 4.80 | 4.06 | 0.45 | 1.00 | 0.25 | 0.82 |
| 250-400 | 5.77 | 2.00 | 3.50 | 4.81 | 4.15 | 0.43 | 1.50 | 0.25 | 0.76 |
| 500-600 | 7.20 | 2.50 | 3.47 | 5.98 | 4.71 | 0.56 | 2.00 | 0.38 | 1.20 |
| 800-2000 | 6.81 | 3.50 | 3.31 | 5.47 | 4.96 | 0.63 | 2.75 | 0.50 | 0.88 |

1" = 25.4mm

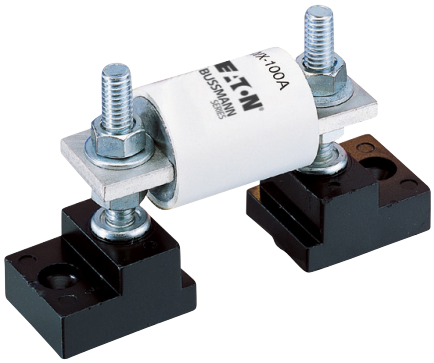
For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720027, 5785303 (35-600 A), 5785309 (800-2000 A),

## North American Accessories

### Modular fuse blocks

Bussmann series line of fuse blocks provides the user with design and manufacturing flexibility. Two identical half blocks make up a modular assembly that can be panel mounted any distance apart to accommodate any length fuse.

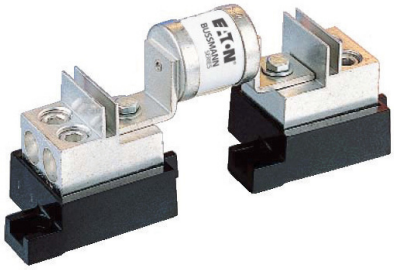
### C5268 stud type



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 installation labor. 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 | 200 | 5/16-18 x 1-3/4" |
| C5268-3 | 200 | 5/16-18 x 3/4" |
| C5268-4 | 100 | 1/4-20 x 1" |
| C5268-5 | 100 | 1/4-20 x 1-3/4" |

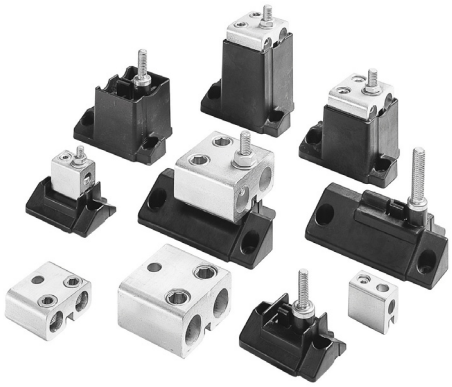
### 1BS10x connector type



Bussmann series 1BS10 blocks utilize a tin-plated connector for wire termination and heat dissipation), and a plated-steel stud for fuse mounting. The connector type block is available in the 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 | 600 | 400 |
| 1BS103 | 600 | 400 |
| 1BS104 | 600 | 600 |

### BH modular type



BH modular blocks provide a wide range of mounting configurations for Bussmann series high speed semiconductors fuses. BH fuse blocks have a short-circuit current rating up to 200 kA RMS Sym.

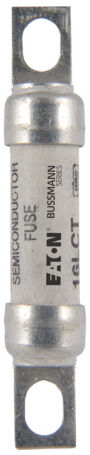
| Catalog no. | Max rated voltage | Max fuse amp rating |
|---|---|---|
| BH-0 | 700 | 100 |
| BH-1 | 2500 | 400 |
| BH-2 | 5000 | 600 |
| BH-3 | 1250 | 700 |

Data sheets: 1200 (BH-0), 1201 (BH-1), 1202 (BH-2), 1203 (BH-3), 1206 (1BS101), 1207 (1BS102), 1208 (1BS103), 1209 (1BS104)

# LCT, LET BS88

## 240 Vac/150 Vdc (IEC), 250-280 Vac/150 Vdc (UL), 6 to 180 A

BS88 style bolted tag high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Low watts loss in a compact size.




### Ratings

- Volts
  - LCT 240 Vac/150 Vdc (IEC), 250 Vac/150 Vdc (UL)
  - LET 280 Vac/150 Vdc (UL, 25-160 A), 250 Vac/150 Vdc (UL 180 A)
- Amps 6-180 A
- IR
  - 200 kA RMS Sym.
  - 50 kA DC at 125 Vdc
  - 100 kA at 80 Vdc (70-1000 A)

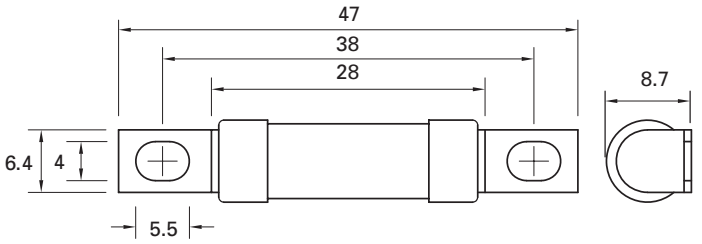
### Operating class aR.

### Agency information

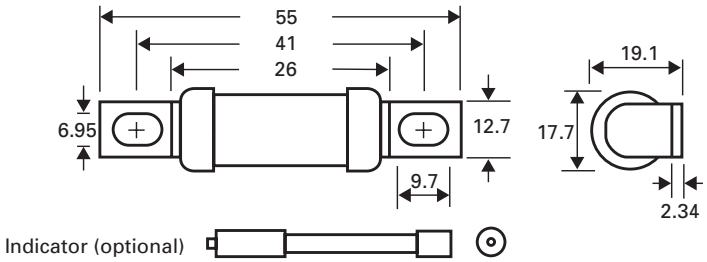
- Designed and tested to BS88 Part 4 and IEC 60269 Part 4
- UL Recognized*
- CCC (LCT only)
- CE

* All fuses have been tested at 318 Vac. Consult Bussmann series product representative for UL Recognized status.

### Dimensions — mm




**LCT**




**LET — indicator optional**

| Fuse symbol | Rated voltage | Rated current(amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 240 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|
| LCT | 240 Vac/150 Vdc (IEC) 250 Vac/150 Vdc (UL) | 6 | 2.0 | 9 | 1.0 | 6LCT |
| | | 10 | 3.8 | 22 | 2.5 | 10LCT |
| | | 12 | 7.0 | 32 | 2.5 | 12LCT |
| | | 16 | 20.0 | 100 | 2.5 | 16LCT |
| | | 20 | 25.0 | 160 | 4.0 | 20LCT |
| LET | 280 Vac/150 Vdc (UL) | 25 | 18.0 | 250 | 4.0 | 25LET |
| | | 32 | 32.0 | 450 | 5.0 | 32LET |
| | | 35 | 50.0 | 600 | 5.0 | 35LET |
| | | 50 | 100.0 | 1400 | 7.0 | 50LET |
| | | 63 | 180.0 | 2200 | 9.0 | 63LET |
| | | 80 | 300.0 | 3800 | 10.0 | 80LET |
| | | 100 | 600.0 | 7500 | 10.0 | 100LET |
| | | 125 | 600.0 | 7500 | 16.0 | 125LET |
| | | 160 | 1100.0 | 16,000 | 20.0 | 160LET |
| | 250 Vac/150 Vdc (UL) | 180 | 1600.0 | 29,000 | 21.0 | 180LET |

* Watts loss at rated current.
Note: 7LET, 10LET, 12LET and 16LET are available for replacement purposes on existing equipment.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720004, 5785296 (LCT), 5785293 (LET)

## LMT, LMMT BS88

### 240 Vac/150 Vdc (IEC), 250 Vac/150 Vdc (UL), 160 to 900 A

BS88 style bolted tags high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Low watts loss in a compact size.



### Ratings

- Volts
  - 240 Vac/150 Vdc (IEC)
  - 250 Vac/150 Vdc (UL)
- Amps 160-900 A
- IR
  - 200 kA RMS Sym., 40 kA at 150 Vdc (IEC)
  - 200 kA RMS Sym., 50 kA at 150 Vdc (UL)

### Operating class aR

### Agency information

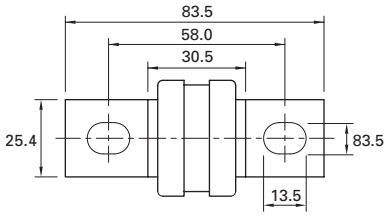
- Designed and tested to BS88 Part 4 and IEC 60269 Part 4
- UL Recognized*
- CCC
- CE

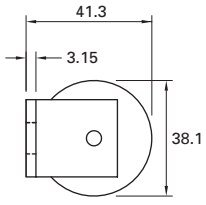
* All fuses have been tested at 318 Vac. Consult Bussmann series product representative for UL Recognized status.

| Fuse symbol | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 120 Vac | I²t (A²s) Clearing at 240 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|---|
| LMT | 240 Vac /150 Vdc (IEC)<br>250 Vac /150 Vdc (UL) | 160 | 1100 | 7000 | 16,000 | 17 | 160LMT |
| | | 200 | 1500 | 10,000 | 20,000 | 28 | 200LMT |
| | | 250 | 3200 | 20,000 | 40,000 | 28 | 250LMT |
| | | 315 | 6000 | 35,000 | 75,000 | 35 | 315LMT |
| | | 355 | 8000 | 50,000 | 100,000 | 35 | 355LMT |
| | | 400 | 14,000 | 70,000 | 160,000 | 40 | 400LMT |
| | | 450 | 18,000 | 100,000 | 220,000 | 42 | 450LMT |
| LMMT | 240 Vac /150 Vdc (IEC)<br>250 Vac /150 Vdc (UL) | 400 | 6000 | 35,000 | 80,000 | 60 | 400LMMT |
| | | 500 | 14,000 | 80,000 | 170,000 | 64 | 500LMMT |
| | | 630 | 24,000 | 150,000 | 300,000 | 75 | 630LMMT |
| | | 710 | 32,000 | 200,000 | 460,000 | 77 | 710LMMT |
| | | 800 | 52,000 | 300,000 | 600,000 | 82 | 800LMMT |
| | | 900 | 75,000 | 400,000 | 800,000 | 97 | 900LMMT |

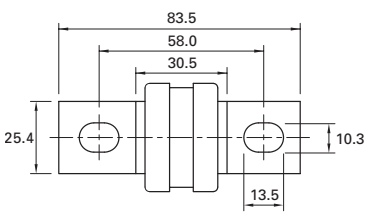
* Watts loss at rated current.

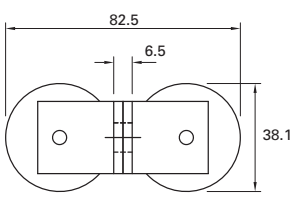
### Dimensions — mm




**LMT — indicator optional**




**LMMT — indicator optional**

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720004, 5785294 (LMT), 5785295 (LMMT)

# CT, ET, FE, EET, FEE BS88

## 690 Vac/500 Vdc (IEC), 700 Vac/500 Vdc (UL), 6 to 200 A




BS88 style bolted tags high speed fuses for the protection of DC common bus, DC drives, power converters /rectifiers and reduced rated voltage starters.

### Ratings

- Volts
  - 690 Vac/500 Vdc (IEC)
  - 700 Vac/500 Vdc (UL)
- Amps 6-200 A
- IR
  - CT: 90 kA RMS Sym., 40 kA at 500 Vdc (IEC), 200 kA RMS Sym., 50 kA at 500 Vdc (UL)
  - ET, EET, FE and FEE: 200 kA RMS Sym.,50 kA at 500 Vdc

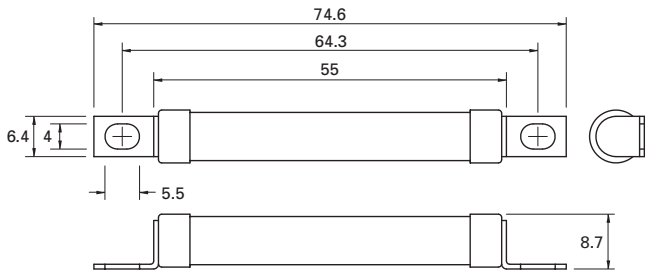
### Operating class aR

### Agency information

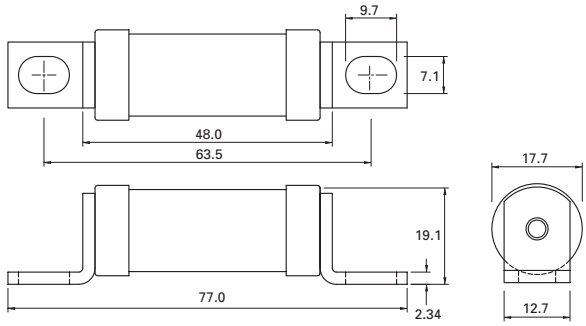
- Designed and tested to BS88 part 4 and IEC 60269 Part 4
- UL Recognized*
- CCC for ET, FE, EET, FEE
- CE

* Consult your Bussmann series product representative for UL Recognized status.

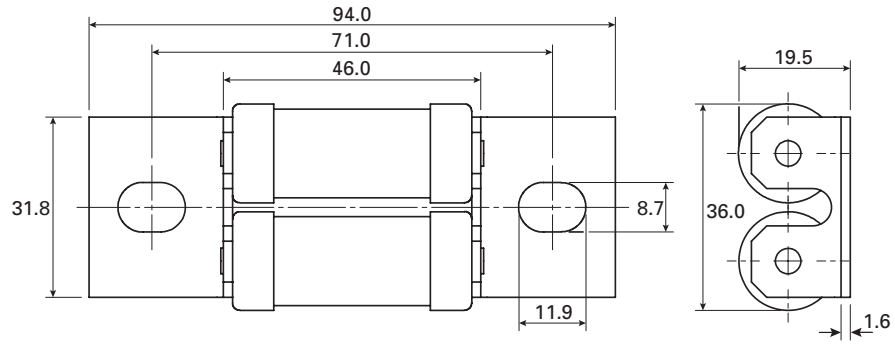
### Dimensions — mm




**CT**




**ET, FE — indicator optional**




**EET, FEE — indicator optional**

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 5785312 (CT, ET), 5785314 (FE), 5785313 (EET), 5785292 (FEE)

## CT, ET, FE, EET, FEE BS88

### 690 Vac/500 Vdc (IEC), 700 Vac/500 Vdc (UL), 6 to 200 A

| Fuse symbol | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 415 Vac | I²t (A²s) Clearing at 660 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|---|
| CT | 690 Vac/500 Vdc (IEC) 700 Vac/500 Vdc (UL) | 6 | 1.8 | 8.5 | 12 | 2 | 6CT |
| | | 10 | 7.0 | 30.0 | 48 | 3 | 10CT |
| | | 12 | 10.0 | 40.0 | 65 | 3 | 12CT |
| | | 16 | 16.0 | 66.0 | 110 | 7 | 16CT |
| | | 20 | 32.0 | 150.0 | 220 | 7 | 20CT |
| ET | 690 Vac/500 Vdc (IEC) 700 Vac/500 Vdc (UL) | 25 | 25.0 | 150.0 | 250 | 7 | 25ET |
| | | 32 | 32.0 | 190.0 | 350 | 11 | 32ET |
| | | 35 | 52.0 | 310.0 | 500 | 11 | 35ET |
| | | 40 | 103.0 | 600.0 | 900 | 9 | 40ET |
| | | 45 | 103.0 | 680.0 | 1100 | 11 | 45ET |
| | | 56 | 135.0 | 950.0 | 1500 | 14 | 56ET |
| | | 63 | 171.0 | 1200.0 | 2000 | 16 | 63ET |
| | | 80 | 360.0 | 2500.0 | 4000 | 18 | 80ET |
| FE | 690 Vac/500 Vdc (IEC) 700 Vac/500 Vdc (UL) | 35 | 33.0 | 130.0 | 200 | 9 | 35FE |
| | | 40 | 52.0 | 180.0 | 300 | 9 | 40FE |
| | | 45 | 76.0 | 270.0 | 450 | 11 | 45FE |
| | | 50 | 103.0 | 380.0 | 600 | 11 | 50FE |
| | | 63 | 135.0 | 480.0 | 750 | 12 | 63FE |
| | | 71 | 210.0 | 600.0 | 950 | 17 | 71FE |
| | | 80 | 250.0 | 900.0 | 1500 | 20 | 80FE |
| | | 90 | 360.0 | 1300.0 | 2100 | 20 | 90FE |
| | | 100 | 470.0 | 1800.0 | 2800 | 23 | 100FE |
| EET | 690 Vac/500 Vdc (IEC) 700 Vac/500 Vdc (UL) | 90 | 490.0 | 300.0 | 4500 | 19 | 90EET |
| | | 110 | 600.0 | 4000.0 | 6500 | 27 | 110EET |
| | | 140 | 1050.0 | 7000.0 | 12,000 | 35 | 140EET |
| | | 160 | 1500.0 | 10,000.0 | 17,000 | 39 | 160EET |
| FEE | 690 Vac/500 Vdc (IEC) 700 Vac/500 Vdc (UL) | 100 | 400.0 | 1600.0 | 2400 | 24 | 100FEE |
| | | 120 | 540.0 | 1900.0 | 3100 | 32 | 120FEE |
| | | 140 | 850.0 | 2500.0 | 3800 | 36 | 140FEE |
| | | 160 | 1000.0 | 3700.0 | 5700 | 46 | 160FEE |
| | | 180 | 1400.0 | 5300.0 | 8400 | 46 | 180FEE |
| | | 200 | 1900.0 | 7100.0 | 11,400 | 52 | 200FEE |

* Watts loss at rated current.

**Note:** FC, 8ET, 12ET, 15ET, 20ET, 65EET and 75EET are available for replacement purposes on existing equipment.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 5785312 (CT, ET), 5785314 (FE), 5785313 (EET), 5785292 (FEE)

# FM, FMM, MT, MMT BS88

## 690 Vac/350-450 Vdc (IEC),700 Vac/500 Vdc (UL), 160 to 710 A




BS88 style bolted tags high speed fuses for the protection of DC common bus, DC drives, power converters /rectifiers and reduced rated voltage starters.

### Ratings

- Volts
  - FM: 690 Vac/450 Vdc (IEC); 700 Vac/500 Vdc (UL)
  - FMM: 690 Vac/450 Vdc (IEC); 700 Vac (UL)
  - MT and MMT: 690 Vac/350 Vdc (IEC); 700 Vac (UL)
- Amps 160-710 A
- IR
  - FM: 200 kA RMS Sym. (IEC/UL), 40 kA at 450 Vdc (IEC), 50 kA at 500 Vdc (UL)
  - FMM: 200 kA RMS Sym. (IEC/UL), 40 kA at 450 Vdc (IEC).
  - MT and MMT: 200 kA RMS Sym. (IEC/UL), 40 kA at 350 Vdc (IEC).

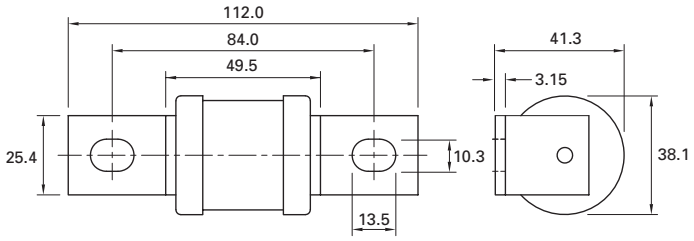
### Operating class aR

### Agency information

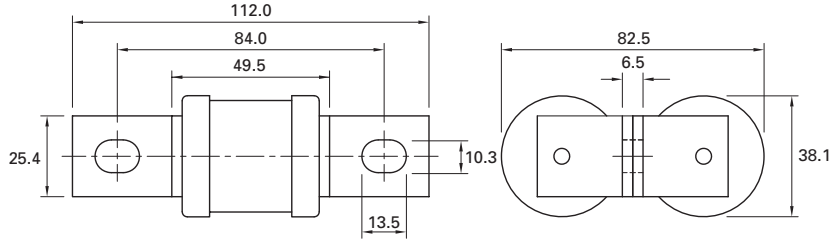
- Designed and tested to BS88 Part 4 and IEC 60269 Part 4
- UL Recognized MT and MMT 350 Vdc (IEC) rating*
- CCC for FM and FMM
- CE

Consult your Bussmann series product representative for UL Recognized status.

### Dimensions — mm




**FM, MT — indicator optional**




**FMM, MMT — indicator optional**

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 5785314 (FM), 5785313 (MT), 5785292 (FMM), 5785311 (MMT)

## FM, FMM, MT, MMT BS88

### 690 Vac/350-450 Vdc (IEC), 700 Vac/500 Vdc (UL), 160 to 710 A

| Fuse symbol | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) | | | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 415 Vac | Clearing at 660 Vac | | |
| FM | 690 Vac/450 Vdc (IEC) 700 Vac/500 Vdc (UL) | 180 | 1400 | 7500 | 13,500 | 40 | 180FM |
| | | 200 | 2600 | 10,500 | 18,500 | 40 | 200FM |
| | | 225 | 3700 | 14,500 | 26,500 | 44 | 225FM |
| | | 250 | 5200 | 20,500 | 37,500 | 48 | 250FM |
| | | 280 | 7000 | 30,500 | 55,000 | 48 | 280FM |
| | | 315 | 10,000 | 40,000 | 77,000 | 55 | 315FM |
| | | 350 | 15,000 | 60,000 | 105,000 | 55 | 350FM |
| FMM | 690 Vac/450 Vdc (IEC) 700 Vac (UL) | 400 | 10,000 | 40,000 | 72,500 | 85 | 400FMM |
| | | 450 | 15,000 | 60,000 | 105,000 | 90 | 450FMM |
| | | 500 | 20,000 | 82,000 | 150,000 | 100 | 500FMM |
| | | 550 | 30,000 | 120,000 | 215,000 | 100 | 550FMM |
| | | 630 | 45,000 | 180,000 | 310,000 | 100 | 630FMM |
| | | 700 | 60,000 | 245,000 | 420,000 | 120 | 700FMM |
| MT | 690 Vac/350 Vdc (IEC) 700 Vac (UL) | 160 | 2400 | 15,000 | 25,000 | 26 | 160MT |
| | | 180 | 3800 | 25,000 | 38,000 | 26 | 180MT |
| | | 200 | 6000 | 40,000 | 58,000 | 27 | 200MT |
| | | 250 | 11,500 | 80,000 | 110,000 | 32 | 250MT |
| | | 280 | 16,500 | 100,000 | 150,000 | 35 | 280MT |
| | | 315 | 19,000 | 125,000 | 180,000 | 42 | 315MT |
| | | 355 | 22,000 | 160,000 | 200,000 | 51 | 355MT |
| MMT | 690 Vac/350 Vdc (IEC) 700 Vac (UL) | 180 | 1650 | 12,000 | 18,000 | 42 | 180MMT |
| | | 200 | 2200 | 16,000 | 23,000 | 42 | 200MMT |
| | | 225 | 3700 | 26,000 | 40,000 | 42 | 225MMT |
| | | 280 | 6600 | 47,000 | 70,000 | 47 | 280MMT |
| | | 315 | 8600 | 62,000 | 91,000 | 51 | 315MMT |
| | | 355 | 13,500 | 97,000 | 140,000 | 54 | 355MMT |
| | | 400 | 21,000 | 150,000 | 220,000 | 60 | 400MMT |
| | | 450 | 30,000 | 220,000 | 320,000 | 57 | 450MMT |
| | | 500 | 42,000 | 300,000 | 450,000 | 64 | 500MMT |
| | | 560 | 60,000 | 430,000 | 640,000 | 64 | 560MMT |
| | | 630 | 68,500 | 500,000 | 720,000 | 86 | 630MMT |
| | | 710 | 78,000 | 600,000 | 850,000 | 105 | 710MMT |

* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 5785314 (FM), 5785313 (MT), 5785292 (FMM), 5785311 (MMT)

# BS 88 Accessories

## Trip indicator

Trip-indicator fuses are available for use in parallel with the main BS88-4 fuses. They can either be attached to the associated fuse or mounted separately in panel mounted fuse clips. Push-on adapters with microswitch (catalog numbers MAI and MBI) are available for use with the trip indicator to provide a means for remote indication.

Fuse ratings of 20 A and below cannot usually accommodate a trip fuse in parallel.

When a trip-indicator is to be attached to the main fuse, an accessory pack comprising a pair of mounting clips and an appropriate trip indicator is required. The clips are snapped onto the fuse and the indicator is pressed into clips as shown below.

### Trip indicator kit catalog numbers (indicator + clips)

| For fuse symbol | Catalog no. |
|---|---|
| ET | EC-600 |
| EET | EC-600 |
| FE | EC-600 |
| FEE | EC-600 |
| LET | EC-250 |
| FM | MC-600 |
| FMM | MC-600 |
| LMT | MC-250 |
| LMMT | MC-250 |

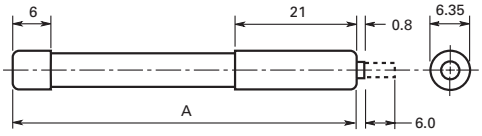


### Indicator only

| Catalog no. | Rated current | Dim. 'A' (mm) |
|---|---|---|
| TI250 | 250 | 37.6 |
| TI500 | 500 | 47.5 |
| TI600 | 600 | 55.7 |
| TI700 | 700 | 61.8 |
| TI1100 | 1100 | 98.4 |
| TI1500 | 1500 | 120.8 |
| TI2000 | 2000 | 147.5 |
| TI2500 | 2500 | 198.3 |



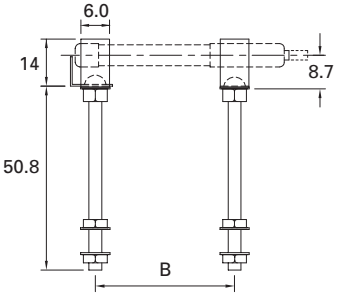

### Indicator dimensions — mm




## Indicator panel mount clips

CL1 panel mount fuse clips are available for mounting a trip-indicator directly to a PCB or insulated panel, or when mounting directly on the fuse is impractical. Order catalog number CL1.

### CL1 dimensions — mm



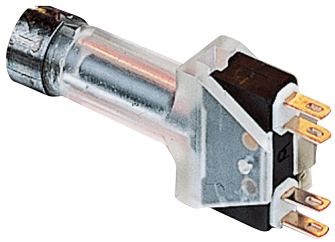

## Microswitches

### Microswitch/adapter: MAI and MBI

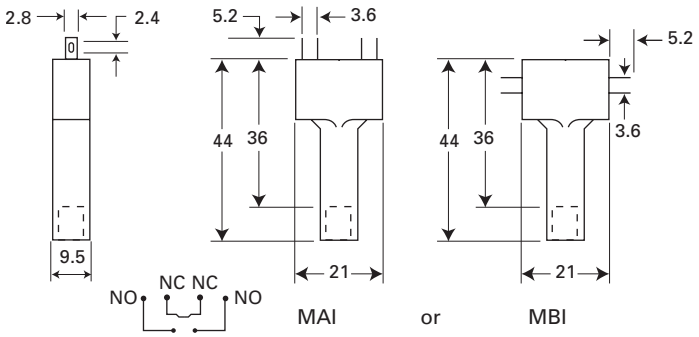
To provide a means of remote indication with the trip indicators, we offer two microswitch/adapters. The microswitches are provided with double pole, single throw contacts, having both a normally open (NO) and a normally closed (NC) position. A special material is used in the construction of the adapter to provide reliable operation in the temperatures ranges associated with standard operating conditions and during fuse operation.

| Catalog no. | Description | Terminal orientation |
|---|---|---|
| MAI | Trip indicator adapter and microswitch | Back |
| MBI | Trip indicator adapter and microswitch | Side |

| Microswitch ratings (MAI and MBI) | |
|---|---|
| **Terminals** | **Quick connect** |
| **Current rating** | |
| AC 50/60 Hz resistive load | 4 A @ 250 V RMS |
| | 6 A @ 127 V RMS |
| DC, resistive load | 0.7 A @ 110 Vdc |
| | 2 A @ 30 Vdc |
| **Maximum working voltage** | |
| Contact-to-contact (RMS) | 1000 V |
| | 1500 V |
| Maximum DC volts | 110 Vdc |



### Microswitch/adapter dimensions — mm



## FWA Ferrule

### 150 Vac/dc (UL), 10x38mm and 21x51mm, 5 to 60 A




Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters /rectifiers and reduced rated voltage starters.

### Ratings

- Volts 150 Vac/dc (UL)
- Amps 5-60 A
- IR
  - 200 kA RMS Sym.
  - 50 kA DC at 150 Vdc

### Operating class aR

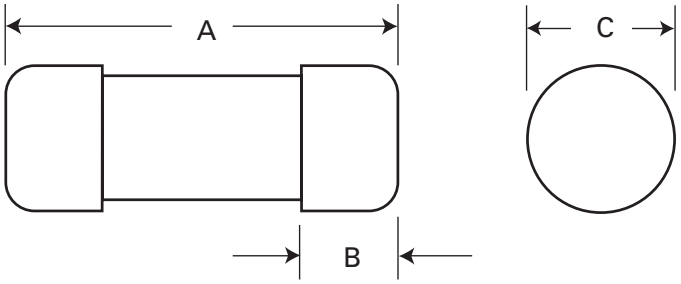
### Agency information

- UL Recognized, JFHR2, E91958
- CE

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 150 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|
| 10x38mm (13/32"x1-1/2") | 150 Vac/dc (UL) | 5 | 1.6 | 8 | 2 | FWA-5A10F |
| | | 10 | 3.6 | 16 | 2.7 | FWA-10A10F |
| | | 15 | 14.0 | 50 | 3.3 | FWA-15A10F |
| | | 20 | 33.0 | 130 | 3.8 | FWA-20A10F |
| | | 25 | 58.0 | 220 | 4.9 | FWA-25A10F |
| | | 30 | 100.0 | 400 | 4.9 | FWA-30A10F |
| 21x51mm (13/16"x2") | 150 Vac/dc (UL) | 35 | 75.0 | 800 | 4.5 | FWA-35A21F |
| | | 40 | 100.0 | 1000 | 5.1 | FWA-40A21F |
| | | 45 | 130.0 | 1300 | 6 | FWA-45A21F |
| | | 50 | 170.0 | 1600 | 7.3 | FWA-50A21F |
| | | 60 | 250.0 | 2400 | 8 | FWA-60A21F |

* Watts loss at rated current.

### Dimensions — in (mm)




| Amp range | A | B | C |
|---|---|---|---|
| 5-30 | 1.5 (38.1) | 0.38 (9.5) | 0.41 (10.3) |
| 35-60 | 2.0 (50.8) | 0.63 (15.9) | 0.81 (20.6) |

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720003,5785317 (5-30 A), 5785305 (35-60 A)

## FWX Ferrule

### 250 Vac/dc (UL), 14x51mm, 1 to 50 A




Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers rated voltage starters.

### Ratings

- Volts
  - 250 Vac (UL, all ratings)
  - 250 Vdc (UL, 5-50 A only)
- Amps 1-50 A
- IR
  - 200 kA RMS Sym. (UL, all ratings)
  - 50 kA at 250 Vdc (UL, 5-30 A only)

### Operating class aR

### Agency information

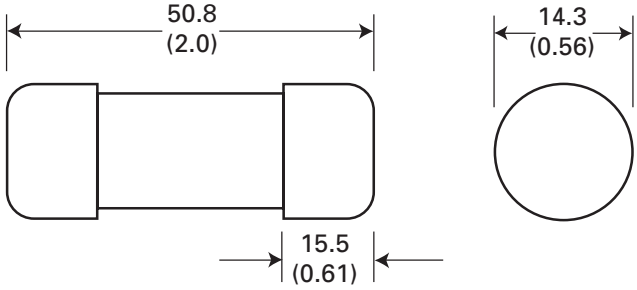
- UL Recognized, JFHR2, E91958 1-50 A
- CSA Class 1422-30, 1422-90 (53787) 5-30 A
- CE



| Fuse size | Rated voltage | Rated current(amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 250 Vac | Watts loss(W)* | Catalog no. |
|---|---|---|---|---|---|---|
| 14x51mm (9/16"x2") | 250 Vac (UL) | 1 | 0.03 | 0.40 | 5.7 | FWX-1A14F |
| | | 2 | 0.08 | 0.10 | 8.6 | FWX-2A14F |
| | | 3 | 0.11 | 0.26 | 2.8 | FWX-3A14F |
| | | 4 | 0.1 | 0.23 | 3.0 | FWX-4A14F |
| | 250 Vac/dc (UL) | 5 | 1.6 | 13.00 | 1.3 | FWX-5A14F |
| | | 10 | 3.6 | 24.00 | 3.4 | FWX-10A14F |
| | | 15 | 14.0 | 83.00 | 3.8 | FWX-15A14F |
| | | 20 | 33.0 | 200.00 | 4.6 | FWX-20A14F |
| | | 25 | 58.0 | 300.00 | 5.3 | FWX-25A14F |
| | | 30 | 100.0 | 500.00 | 5.9 | FWX-30A14F |
| | | 50 | 200.0 | 1800.00 | 5.7 | FWX-50A14F |

* Watts loss at rated current.

### Dimensions — mm (in)




For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720006, 5785302

## FWH Ferrule

### 500 Vac (UL), 6x32mm, 0.25 to 30 A

RoHS 2011/65/EU

Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.

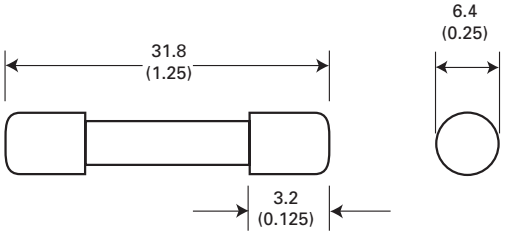



### Ratings

- Volts
  - 500 Vac (UL — 0.25-1 A and 3.15-30 A)
  - 1000 Vac (UL — 2 A)
  - 600 Vdc (UL — 1-5 A)
- Amps 0.25-30 A
- IR
  - 50 kA AC (0.25-1 A and 3.15-20 A)
  - 30 kA AC (2 A)
  - 20 kA AC (25-30 A)[1]
  - 50 kA DC (1-5 A))

[1] Tested at PF = 76%.

### Dimensions — mm (in)




### Operating class aR

### Agency information

- UL Recognized, JFHR2, E91958 (0.25-7 A) and JDYX2, E19180 (10-30 A)
- CSA Component Acceptance Class 1422-30, 1422-90 (53787) 0.25-7 A
- RoHS compliant
- CE

### Opening times

| Amp range | 150% | 200% | 300% | Min IR |
|---|---|---|---|---|
| 0.25-7 | >30 min | >30 min | ≤ 10 sec | 300 % |
| 10-30 | | | | 200 % |

| | Rated voltage | | $I^2t$ ($A^2s$) | | | Catalog no. | |
|---|---|---|---|---|---|---|---|
| Amps | Vac | Vdc | Pre-arcing | Clearing @ 500Vac | Watts loss (W)* | Standard | RoHS compliant |
| 0.25 | 500 | — | 0.01 | 0.05 | 2.7 | | FWH-.250A6F |
| 0.5 | | | 0.05 | 0.25 | 1.2 | | FWH-.500A6F |
| 1 | 1000 | 600 | 0.4 | 2 | 1.7 | | FWH-001A6F |
| 2 | | | 1.3 | 3.5 | 3.2 | | FWH-002A6F |
| 3.15 | 500 | | 3.1 | 7.7 | 2.9 | — | FWH-3.15A6F |
| 4 | | | — | — | — | | FWH-004A6F |
| 5 | | | 15 | 40 | 2.1 | | FWH-005A6F |
| 6.3 | | | 36 | 90 | 2.3 | | FWH-6.30A6F |
| 7 | | | 50 | 125 | 2.5 | | FWH-007A6F |
| 10 | | | 9.9 | 139 | 2.86 | FWH5-010A6F | FWH5-010A6FR |
| 12.5 | | | 20 | 60 | 3.53 | FWH5-12-5A6F | FWH5-12-5A6FR |
| 15 | | — | 44 | 146 | 3.08 | FWH5-015A6F | FWH5-015A6FR |
| 16 | | | 48 | 177 | 4.48 | FWH5-016A6F | FWH5-016A6FR |
| 20 | | | 75 | 259 | 4.26 | FWH5-020A6F | FWH5-020A6FR |
| 25 | | | 126 | 345 | — | FWH-025A6F | FWH-025A6FR |
| 30 | | | 145 | 430 | — | FWH-030A6F | FWH-030A6FR |

* Watts loss at rated current.

**Data sheet no.720038**

## FWH Ferrule

### 500 Vac/ Vdc (UL), 14x51mm, 1 to 30 A

Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.




### Ratings

- Volts
  - 500 Vac (UL, all ratings)
  - 500 Vdc (UL, 5-30 A only)
- Amps 1-30 A
- IR
  - 200 kA RMS Sym. all ratings
  - 50 kA at 500 Vdc 5-30 A only

### Operating class aR

### Agency information

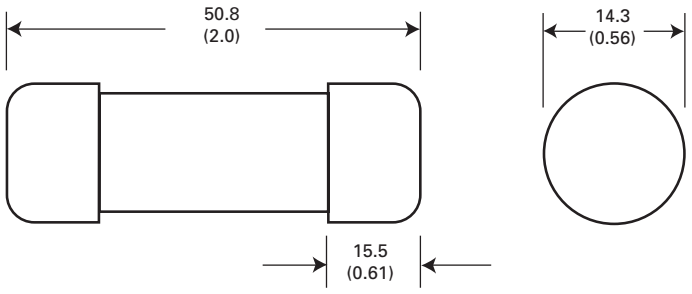
- UL Recognized 1-30 A
- CSA Class 1422-30, (53787) 5-30 A
- CE



| Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at 500 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|
| 14x51mm (9/16"x2") | 500 Vac (UL) | 1 | 0.04 | 0.2 | 5.7 | FWH-1A14F |
| | | 2 | 0.08 | 0.1 | 8.7 | FWH-2A14F |
| | | 3 | 0.11 | 0.2 | 2.8 | FWH-3A14F |
| | | 4 | 0.10 | 0.2 | 3.0 | FWH-4A14F |
| | 500 Vac/dc (UL) | 5 | 2.00 | 7.0 | 1.5 | FWH-5A14F |
| | | 6 | 2.00 | 7.0 | 1.5 | FWH-6A14F |
| | | 10 | 4.00 | 15.0 | 4.0 | FWH-10A14F |
| | | 12 | 7.00 | 25.0 | 4.3 | FWH-12A14F |
| | | 15 | 10.00 | 40.0 | 5.5 | FWH-15A14F |
| | | 20 | 26.00 | 100.0 | 6.5 | FWH-20A14F |
| | | 25 | 49.00 | 200.0 | 7.0 | FWH-25A14F |
| | | 30 | 58.00 | 240.0 | 9.0 | FWH-30A14F |

* Watts loss at rated current.

### Dimensions — mm (in)




For details on electrical characteristics, contact Application Engineering and ask for data sheets:720008, 5785298

## FWC Ferrule

### 600-700 Vac/700 Vdc (UL), 10x38mm, 1 to 32 A




Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.

### Ratings

- Volts
  - 700 Vac/dc (UL, 1-4 A)
  - 600 Vac (UL, 6-32 A), 700 Vdc (UL, 6-25 A)
- Amps 1-32 A
- IR
  - 200 kA RMS Sym. at 600 Vac (6-32 A)
  - 200 kA RMS Sym. at 700 Vac (1-4 A)
  - 10 kA DC at 700 Vdc (1-25 A)

### Operating class aR

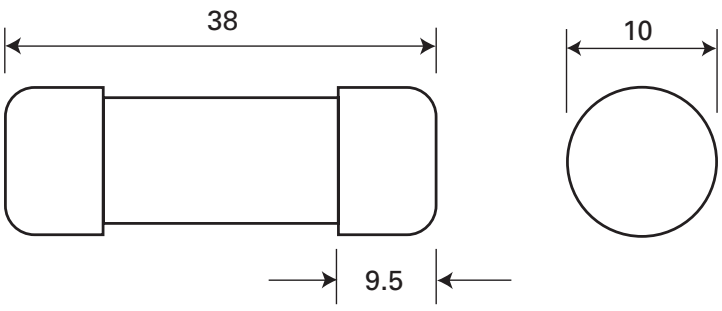
### Agency information

- UL Recognized, JFHR8, E91958 6-32 A
- CSA Class 1422-30, (53787) 6-32 A
- CE

| Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at 600 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|
| 10x38mm (13/32"x1-1/2") | 700 Vac/dc (UL) | 1 | 0.2 | 1.2 | 0.5 | FWC-1A10F |
| | | 2 | 0.5 | 3.0 | 1.2 | FWC-2A10F |
| | | 3 | 1.6 | 11.0 | 1.5 | FWC-3A10F |
| | | 4 | 5.2 | 32.0 | 1.5 | FWC-4A10F |
| | 600 Vac/700 Vdc (UL) | 6 | 4.0 | 30.0 | 1.5 | FWC-6A10F |
| | | 8 | 6.0 | 50.0 | 2.0 | FWC-8A10F |
| | | 10 | 9.0 | 70.0 | 2.5 | FWC-10A10F |
| | | 12 | 15.0 | 120.0 | 3.0 | FWC-12A10F |
| | | 16 | 25.0 | 150.0 | 3.5 | FWC-16A10F |
| | | 20 | 34.0 | 260.0 | 4.8 | FWC-20A10F |
| | | 25 | 60.0 | 390.0 | 6.0 | FWC-25A10F |
| | 600 Vac (UL) | 32 | 95.0 | 600.0 | 7.5 | FWC-32A10F |

* Watts loss at rated current.

### Dimensions — mm




For details on electrical characteristics, contact Application Engineering and ask for data sheets:720011, 5785306

## FWP Ferrule

### 690 Vac (IEC) 10x38mm, 4 to 32 A



Ferrule style Class gR high speed fuses for the protection of AC/DC drives and semiconductors.

### Ratings

- Volts 690 Vac
- Amps 4-32 A
- IR
  - 200 kA RMS Sym.

### Operating class gR

### Agency information

- UL 248-13
- Designed and tested to IEC 60269, Part 4
- CE



| Fuse type | Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | Watts loss (W)* Clearing at 690 Vac $0.8I_n$ | Watts loss (W)* Clearing at 690 Vac $I_n$ | Catalog no. |
|---|---|---|---|---|---|---|---|
| Without striker | 10x38mm | 690 Vac (IEC) | 4 | 5.6 | 17 | 1.13 | 2.05 | FWP-4G10F |
| | | | 6 | 16 | 48 | 1.56 | 3.0 | FWP-6G10F |
| | | | 8 | 4.3 | 38 | 0.97 | 1.68 | FWP-8G10F |
| | | | 10 | 6.6 | 59 | 1.20 | 2.09 | FWP-10G10F |
| | | | 12 | 9.6 | 84 | 1.69 | 2.99 | FWP-12G10F |
| | | | 16 | 17 | 150 | 2.31 | 4.27 | FWP-16G10F |
| | | | 20 | 23.5 | 200 | 2.86 | 5.35 | FWP-20G10F |
| | | | 25 | 60.2 | 512 | 2.94 | 5.52 | FWP-25G10F |
| | | | 32** | 94 | 800 | 3.82 | 7.43 | FWP-32G10F |

* Watts loss at rated current.
**32 A rated current with 25mm² conductors, derate to 27 A with 6mm² conductors.

## FWP Ferrule

### 690 Vac (IEC), 700 Vac (UL), 600 - 700 Vdc (UL), 14x51mm, 1 to 50 A




Ferrule style Class aR high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Available with or without striker.

### Ratings

- Volts 690 Vac (IEC), 700 Vac/600 Vdc (UL) with striker (see table for striker version)
- Amps 1-50 A
- IR
  - 200 kA RMS Sym.
  - 50 kA at 800 Vdc (5-50 A non striker version)
  - 600 Vdc for striker version

### Operating class aR

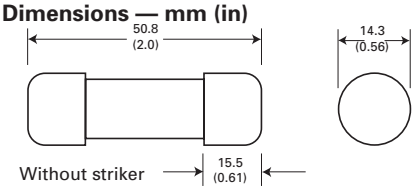
### Agency information

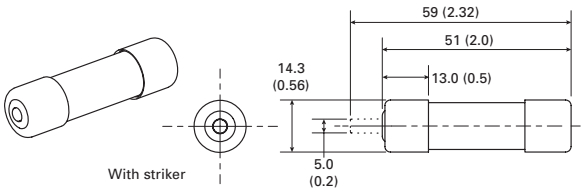
- UL Recognized, (without striker only) JFHR2, E91958
- CSA (without striker only) Class 1422-30, 1422-90 (53787)
- Designed and tested to IEC 60269, Part 4
- CE

| Fuse type | Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 700 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|---|
| Without striker | 14x51mm (9/16"x2") | 700 Vac (UL) | 1 | 0.04 | 0.41 | 5.7 | FWP-1A14F |
| | | | 2 | 0.08 | 0.11 | 8.7 | FWP-2A14F |
| | | | 3 | 0.11 | 0.26 | 2.8 | FWP-3A14F |
| | | | 4 | 0.10 | 0.23 | 3.0 | FWP-4A14F |
| | | 690 Vac (IEC) 700 Vac/dc (UL) | 5 | 2.00 | 11.00 | 1.5 | FWP-5A14F |
| | | | 10 | 4.00 | 22.00 | 4.0 | FWP-10A14F |
| | | | 15 | 10.00 | 70.00 | 5.5 | FWP-15A14F |
| | | | 20 | 26.00 | 180.00 | 6.5 | FWP-20A14F |
| | | | 25 | 49.00 | 320.00 | 7.0 | FWP-25A14F |
| | | | 30 | 58.00 | 400.00 | 9.0 | FWP-30A14F |
| | | | 32 | 68.00 | 600.00 | 8.0 | FWP-32A14F |
| | | | 40 | 84.00 | 750.00 | 8.0 | FWP-40A14F |
| | | | 50 | 200.00 | 1800.00 | 9.0 | FWP-50A14F |
| With striker | 14x51mm (9/16"x2") | 700 Vac/600 Vdc (UL) | 10 | 4.00 | 32.00 | 2.0 | FWP-10A14FI |
| | | | 15 | 7.00 | 63.00 | 4.0 | FWP-15A14FI |
| | | | 20 | 26.00 | 234.00 | 4.0 | FWP-20A14FI |
| | | | 25 | 42.00 | 378.00 | 4.0 | FWP-25A14FI |
| | | | 30 | 52.00 | 468.00 | 6.0 | FWP-30A14FI |
| | | | 32 | 68.00 | 600.00 | 8.0 | FWP-32A14FI |
| | | | 40 | 84.00 | 750.00 | 8.0 | FWP-40A14FI |
| | | | 50 | 200.00 | 1800.00 | 9.0 | FWP-50A14FI |

* Watts loss at rated current.

### Dimensions — mm (in)




For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720025, 5781724 fuses without striker; 5785566 fuses with striker

## FWP Ferrule

### 690 Vac 14x51mm, 1 to 50 A

Ferrule style Class gR high speed fuses for the protection of AC/DC drives and semiconductors. Available with or without striker.




### Ratings

- Volts 690 Vac
- Amps 4-50 A
- IR 200 kA RMS Sym.

### Operating class gR

### Agency information

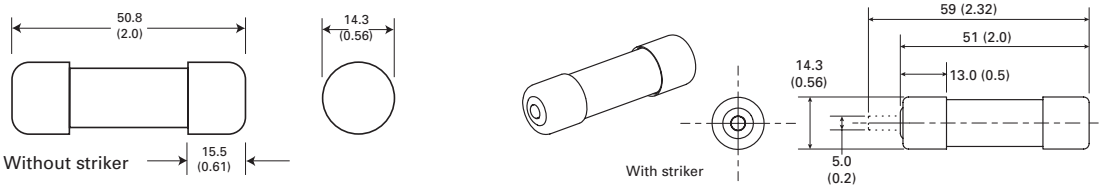
- UL 248-13
- Designed and tested to IEC 60269, Part 4
- CE



| Fuse type | Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | Watts loss (W)* Clearing at 690 Vac | 0.8$I_n$ | $I_n$ | Catalog no. |
|---|---|---|---|---|---|---|---|---|
| | | | 4 | 5.6 | 17 | 1.56 | 2.94 | FWP-4G14F |
| | | | 6 | 16 | 48 | 2.25 | 4.2 | FWP-6G14F |
| | | | 8 | 3.8 | 30 | 1.18 | 2.0 | FWP-8G14F |
| | | | 10 | 5.9 | 47 | 1.41 | 2.52 | FWP-10G14F |
| | | | 12 | 8.4 | 68 | 1.95 | 3.54 | FWP-12G14F |
| Without striker | 14x51mm (9/16"x2") | 690 Vac (IEC) | 16 | 15 | 120 | 5.67 | 4.83 | FWP-16G14F |
| | | | 20 | 27 | 170 | 2.91 | 5.4 | FWP-20G14F |
| | | | 25 | 53 | 333 | 3.38 | 6.0 | FWP-25G14F |
| | | | 32 | 108 | 679 | 3.72 | 6.93 | FWP-32G14F |
| | | | 40 | 211 | 1331 | 4.13 | 7.52 | FWP-40G14F |
| | | | 50 | 350 | 2200 | 5.36 | 9.8 | FWP-50G14F |
| | | | 8 | 3.8 | 30 | 1.18 | 2.0 | FWP-8G14FI |
| | | | 10 | 5.9 | 47 | 1.41 | 2.52 | FWP-10G14FI |
| | | | 12 | 8.4 | 68 | 1.95 | 3.54 | FWP-12G14FI |
| | | | 16 | 15 | 120 | 5.67 | 4.83 | FWP-16G14FI |
| With striker | 14x51mm (9/16"x2") | 690 Vac (IEC) | 20 | 27 | 170 | 2.91 | 5.4 | FWP-20G14FI |
| | | | 25 | 53 | 333 | 3.38 | 6.0 | FWP-25G14FI |
| | | | 32 | 108 | 679 | 3.72 | 6.93 | FWP-32G14FI |
| | | | 40 | 211 | 1331 | 4.13 | 7.52 | FWP-40G14FI |
| | | | 50 | 350 | 2200 | 5.36 | 9.8 | FWP-50G14FI |

* Watts loss at rated current.

### Dimensions — mm (in)




### Data sheet no. 10468

## FWP Ferrule

### 700 Vac/dc (UL), 22x58mm, 20 to 100 A




Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Available with or without striker.

### Ratings

- Volts 700 Vac/dc (UL)
- Amps 20-100 A
- IR
  - 200 kA RMS Sym.
  - 50 kA at 700 Vdc, L/R 5 ms

### Operating class aR

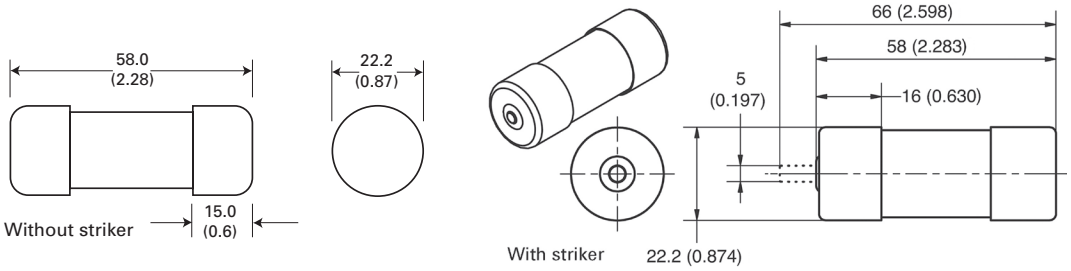
### Agency information

- UL Recognized, (without striker only) JFHR2, E91958
- CSA (without striker only) Class 1422-30, 1422-90 (53787)
- CE

| Fuse type | Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 700 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|---|
| Without striker | 22x58mm (7/8"x2-9/32") | 700 Vac/dc (UL) | 20 | 23.0 | 330 | 5.0 | FWP-20A22F |
| | | | 25 | 37.0 | 530 | 6.0 | FWP-25A22F |
| | | | 32 | 55.0 | 780 | 8.0 | FWP-32A22F |
| | | | 40 | 68.0 | 960 | 12.0 | FWP-40A22F |
| | | | 50 | 155.0 | 2200 | 12.5 | FWP-50A22F |
| | | | 63 | 280.0 | 4000 | 15.0 | FWP-63A22F |
| | | | 80 | 550.0 | 7800 | 15.0 | FWP-80A22F |
| | | | 100 | 1100.0 | 15,600 | 16.5 | FWP-100A22F |
| With striker | 22x58mm (7/8"x2-9/32") | 700 Vac/dc (UL) | 20 | 19.0 | 260 | 5.0 | FWP-20A22FI |
| | | | 25 | 34.0 | 410 | 6.0 | FWP-25A22FI |
| | | | 32 | 53.5 | 605 | 8.0 | FWP-32A22FI |
| | | | 40 | 68.0 | 750 | 9.0 | FWP-40A22FI |
| | | | 50 | 135.0 | 1600 | 9.5 | FWP-50A22FI |
| | | | 63 | 280.0 | 3080 | 11.0 | FWP-63A22FI |
| | | | 80 | 600.0 | 6600 | 13.5 | FWP-80A22FI |
| | | | 100 | 1100.0 | 12,500 | 16.0 | FWP-100A22FI |

* Watts loss at rated current.

### Dimensions — mm (in)




For details on electrical characteristics, contact Application Engineering and ask for data sheets:720026, 5781723

## FWP Ferrule

### 690 Vac, 500 Vdc 22x58mm, 20 to 100 A

Ferrule style Class gR high speed fuses for the protection of AC/DC drives and semiconductors. Available with or without striker.




### Ratings

- Volts
  - 690 Vac
  - 500 Vdc
- Amps 20-100 A
- IR
  - 200 kA RMS Sym.
  - 50 kA DC

### Operating class gR

### Agency information

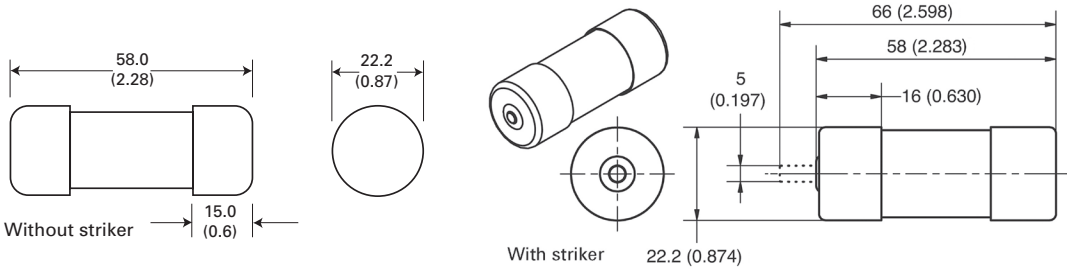
- UL 248-13
- Designed and tested to IEC 60269, Part 4
- CE



| Fuse type | Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | Watts loss (W)* Clearing at 690 Vac | Watts loss (W)* 0.8$I_n$ | Watts loss (W)* $I_n$ | Catalog no. |
|---|---|---|---|---|---|---|---|---|
| Without striker | 22x58mm (7/8"x2-9/32") | 690 Vac, 500Vdc | 20 | 24 | 154 | 3.23 | 6.00 | FWP-20G22F |
| | | | 25 | 43 | 274 | 3.66 | 6.65 | FWP-25G22F |
| | | | 32 | 97 | 616 | 4.86 | 9.21 | FWP-32G22F |
| | | | 40 | 180 | 899 | 4.50 | 8.24 | FWP-40G22F |
| | | | 50 | 273 | 1362 | 6.26 | 11.85 | FWP-50G22F |
| | | | 63 | 516 | 2575 | 7.35 | 13.80 | FWP-63G22F |
| | | | 80 | 1092 | 5448 | 8.40 | 1400 | FWP-80G22F |
| | | | 100 | 2065 | 10,300 | 9.40 | 17.70 | FWP-100G22F |
| With striker | 22x58mm (7/8"x2-9/32") | 690 Vac, 500Vdc | 20 | 24 | 154 | 3.23 | 6.00 | FWP-20G22FI |
| | | | 25 | 43 | 274 | 3.66 | 6.65 | FWP-25G22FI |
| | | | 32 | 97 | 616 | 4.86 | 9.21 | FWP-32G22FI |
| | | | 40 | 180 | 899 | 4.50 | 8.24 | FWP-40G22FI |
| | | | 50 | 273 | 1362 | 6.26 | 11.85 | FWP-50G22FI |
| | | | 63 | 516 | 2575 | 7.35 | 13.80 | FWP-63G22FI |
| | | | 80 | 1092 | 5448 | 8.40 | 1400 | FWP-80G22FI |
| | | | 100 | 2065 | 10,300 | 9.40 | 17.70 | FWP-100G22FI |

* Watts loss at rated current.

### Dimensions — mm (in)




### Data sheet no. 10469

## FWK Ferrule

### 750 Vdc (IEC), 20x127mm and 25x146mm, 5 to 60 A




Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.

### Ratings

- Volts 750 Vdc (IEC)
- Amps
  - 5-30 A (20x127mm)
  - 35-60 A (25x146mm)
- IR 50 kA at 750 Vdc, L/R 10-15 ms

### Operating class gG

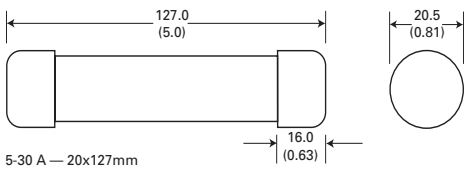
### Agency information

- CE

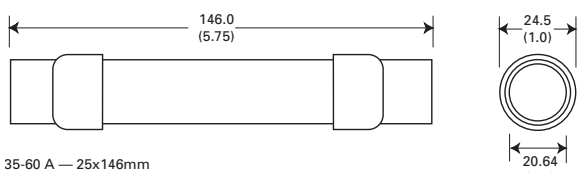
| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 750 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|
| 20x127mm (13/32"x5") | 750 Vdc (IEC) | 5 | 8.5 | 16 | 6.7 | FWK-5A20F |
| | | 8 | 50 | 100 | 8.8 | FWK-8A20F |
| | | 10 | 95 | 200 | 8.5 | FWK-10A20F |
| | | 15 | 100 | 240 | 5.0 | FWK-15A20F |
| | | 20 | 125 | 315 | 7.8 | FWK-20A20F |
| | | 25 | 400 | 1100 | 6.5 | FWK-25A20F |
| | | 30 | 800 | 2600 | 6.5 | FWK-30A20F |
| 25x146mm (1"x5-3/4") | 750 Vdc (IEC) | 35 | 1300 | 4600 | 6.0 | FWK-35A25F |
| | | 40 | 1600 | 5300 | 6.8 | FWK-40A25F |
| | | 50 | 3100 | 12,000 | 7.3 | FWK-50A25F |
| | | 60 | 5900 | 24,000 | 7.7 | FWK-60A25F |

* Watts loss at rated current.

### Dimensions — mm (in)



5-30 A — 20x127mm



35-60 A — 25x146mm

For details on electrical characteristics, contact Application Engineering and ask for data sheets:720039, 5785031

## FWJ Ferrule

### 1000 Vac/800 Vdc (UL), 14x67mm, 20 to 30 A

Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Available with or without striker for remote indication.




### Ratings

- Volts 1000 Vac/800 Vdc
- Amps 20-30 A
- IR
  - 25 kA RMS Sym.
  - 50 kA at 800 Vdc

### Operating class aR

### Agency information

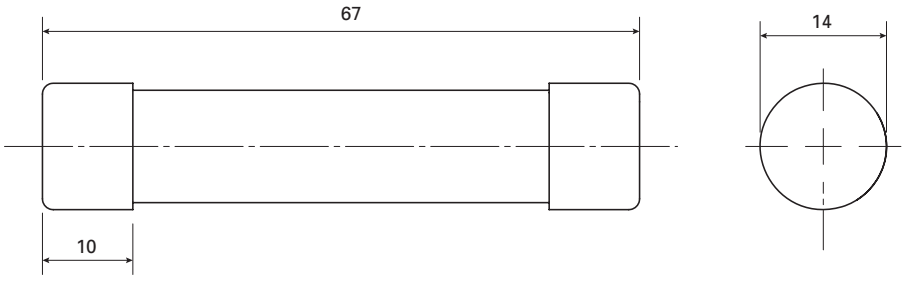
- UL Recognized, JFHR2, E91958
- CE



| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|
| 14x67mm (9/16"x2-5/8") | 1000 Vac/ 800 Vdc (UL) | 20 | 25 | 220 | 9 | FWJ-20A14F |
| | | 25 | 33 | 350 | 11 | FWJ-25A14F |
| | | 30 | 52 | 450 | 14 | FWJ-30A14F |

* Watts loss at rated current.

### Dimensions — mm




For details on electrical characteristics, contact Application Engineering and ask for data sheets:720028, 5785315

## FWL Ferrule

### 1200 Vac/1000 Vdc (IEC), 20x127mm, 20 to 30 A

Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Available with indicator.




### Ratings

- Volts
  - 1200 Vac (IEC)
  - 1000 Vdc (IEC)
- Amps 20-30 A
- IR
  - 50 kA RMS Sym.
  - 50 kA at 1000 Vdc

### Operating class gR

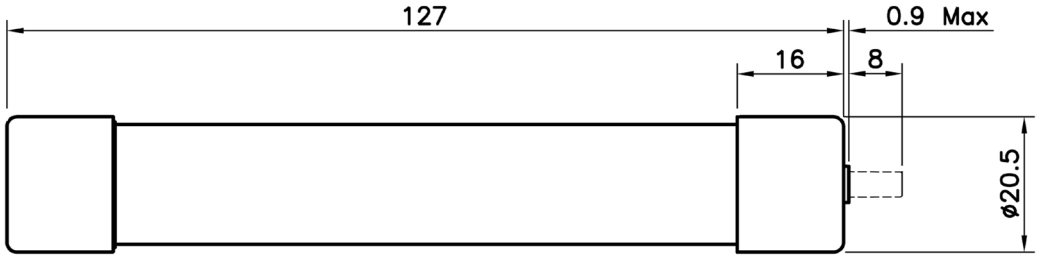
### Agency information

- IEC 60077
- CE

| Fuse type | Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|---|
| Without indicator | 20x127mm (13/16"x5") | 1200 Vac/1000 Vdc (IEC) | 20 | 675 | 1550 | 5.9 | FWL-20A20F |
| | | | 25 | 1200 | 2760 | 6.5 | FWL-25A20F |
| | | | 30 | 1850 | 4300 | 7.5 | FWL-30A20F |
| With indicator | 20x127mm (13/16"x5") | 1200 Vac/1000 Vdc (IEC) | 20 | 675 | 1550 | 5.9 | FWL-20A20FI |
| | | | 25 | 1200 | 2760 | 6.5 | FWL-25A20FI |
| | | | 30 | 1850 | 4300 | 7.5 | FWL-30A20FI |

* Watts loss at rated current.

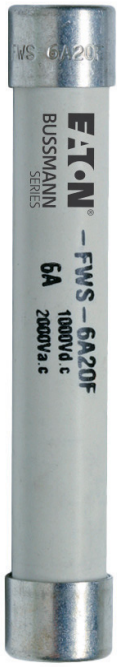
### Dimensions — mm




For details on electrical characteristics, contact Application Engineering and ask for data sheets:720040, 5785455

## FWS Ferrule

### 1400 - 2000 Vac/1000 Vdc (IEC), 20x127mm, 2 to 15 A




Ferrule style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Available with indicator.

### Ratings

- Volts
  - 2000 Vac/1000 Vdc (IEC, 2-8 A)
  - 1400 Vac/1000 Vdc (IEC, 10-15 A)
- Amps 2-15 A
- IR
  - 50 kA RMS Sym.
  - 50 kA at 1000 Vdc (2-10 A only)

### Operating class gG

### Agency information

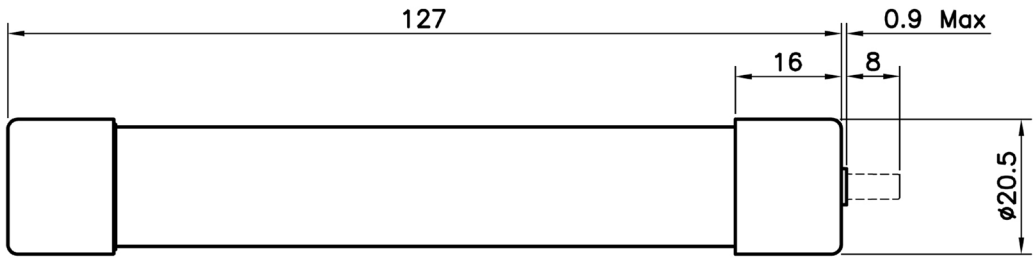
- IEC 60077
- CE



| Fuse type | Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. |
|---|---|---|---|---|---|---|---|
| Without indicator | 20x127mm (13/16"x5") | 2000 Vac/1000 Vdc (IEC) | 2 | 0.8 | 2.4 | 4.4 | FWS-2A20F |
| | | | 6 | 27.0 | 81.0 | 6.7 | FWS-6A20F |
| | | | 8 | 64.0 | 192.0 | 7.6 | FWS-8A20F |
| | | 1400 Vac/1000 Vdc (IEC) | 10 | 118.0 | 277.0 | 3.0 | FWS-10A20F |
| | | | 12 | 170.0 | 380.0 | 3.4 | FWS-12A20F |
| | | | 15 | 209.0 | 500.0 | 5.0 | FWS-15A20F |
| With indicator | 20x127mm (13/16"x5") | 2000 Vac/1000 Vdc (IEC) | 2 | 0.8 | 2.4 | 4.4 | FWS-2A20FI |
| | | | 6 | 27.0 | 81.0 | 6.7 | FWS-6A20FI |
| | | | 8 | 64.0 | 192.0 | 7.6 | FWS-8A20FI |
| | | 1400 Vac/1000 Vdc (IEC) | 10 | 118.0 | 277.0 | 3.0 | FWS-10A20FI |
| | | | 12 | 170.0 | 380.0 | 3.4 | FWS-12A20FI |
| | | | 15 | 209.0 | 500.0 | 5.0 | FWS-15A20FI |

* Watts loss at rated current.

### Dimensions — mm

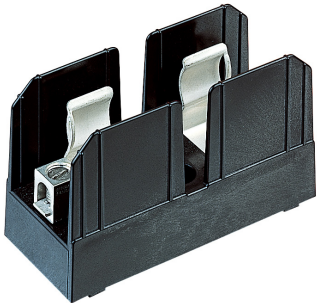



For details on electrical characteristics, contact Application Engineering and ask for data sheets:720040, 5785109

## Ferrule fuse accessories

### 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 | | |

### JM70100 DIN-Rail/panel mount block for 22x58mm fuses

Modular, open-style fuse blocks for 22x58mm cylindrical fuses feature versatile 35mm DIN-Rail or screw-to-panel mounting. Available optional IP20 finger-safe covers with lockout/tagout capability come in indicating and non-indicating versions. For use with FWP fuses.



#### Ratings

- Volts 700 Vac
- Amps 100 A
- Withstand rating 200 kA

#### Agency information

- UL Recognized, Guide IZTL2, File 14853

| Catalog no. | Poles | Terminal type | Optional IP20 cover catalog no.* | |
|---|---|---|---|---|
| | | | Indicating** | Non-indicating |
| JM70100-1CR | 1 | Box lug | CVRI-J-60060 | CVR-J-60060 |
| JM70100-2CR | 2 | | | |
| JM70100-3CR | 3 | | | |

* Order separately, one cover per pole.
**Indication requires 90 V minimum and energized, closed circuit.

**Data sheet no. 10496**

### CHM modular DIN-Rail mount holders for 10x38mm fuses



Bussmann series compact IP20 finger-safe modular DIN-Rail mount fuse holders for 10x38mm cylindrical fuses.

| Catalog no. | | Rated voltage and rated current | Agency markings | Number of poles | Terminal rating | Rated withstand capacity | Compatible Bussmann series fuses |
|---|---|---|---|---|---|---|---|
| With indicator | Without indicator | | | | | | |
| CHM1DIU | CHM1DU | IEC 690 Vac/32 A UL 600 Vac/30 A; | IEC 60269-2 UR; CSA; CCC | 1 | IEC: 1 to 25mm² 70°C PVC/copper cable, solid, stranded, fine stranded, fork lug, comb busbar; single and dual | IEC 120 kA rms sym UL 200 kA rms sym CCC 100 kA rms sym | FWA, FWC. |
| CHM2DIU | CHM2DU | | | 2 | | | |
| CHM3DIU | CHM3DU | | | 3 | | | |
| CHM4DIU | CHM4DU | | | 4 | | | |
| CHM1DNIU | CHM1DNU | | IEC 60269-2 | 1-pole + 1 neutral | | | |
| CHM3DNIU | CHM3DNU | | | 3-pole + 1 neutral | | | |
| — | CHM1DNXU | IEC 690 Vac/32 A | IEC 60269-2 | 1 neutral | | N/A | N/A |

**Data sheet no. 10430**

## Ferrule fuse accessories

### CH14 and CH22 modular DIN-Rail holders

Bussmann series compact DIN-Rail mount fuse holders for 14x51mm and 22x58mm cylindrical fuses. Available in different versions with neutral and microswitch.

### Mounting

- 35mm DIN-Rail
- Panel mount (2xM4 screws)


CH14


CH22

| Catalog no. | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Without indicator** | **With indicator** | **Description** | **Rated voltage and current** | **Agency markings** | **Terminal rating** | **Rated withstand capacity** | **Compatible Bussmann series fuses** |
| **14x51mm** | | | | | | | |
| CH141DNXU | — | Neutral only | 690 Vac/50 A<br>750 Vdc/50 A | IEC 60269-1<br>IEC 60269-2 | Size: 2.5-50mm²<br>Torque: 3 N•m max | 120 kA AC | FWX-A14F[1],<br>FWH-A14F[1],<br>FWP-A14F[1, 2] |
| CH141DU | CH141DIU | 1 pole | | | | | |
| CH142DU | CH142DIU | 2 pole | | | | | |
| CH143DU | CH143DIU | 3 pole | | | | | |
| CH144DU | CH144DIU | 4 pole | | | | | |
| CH141DNU | CH141DNIU | 1 pole + neutral | | | | | |
| CH143DNU | CH143DNIU | 3 pole + neutral | | | | | |
| CH141DMSU-F | — | 1 pole with microswitch | | | | | |
| CH143DMSU-F | — | 3 pole with microswitch | | | | | |
| CH143DNMSU-F | — | 3 pole +neutral with microswitch | | | | | |
| **22x58mm** | | | | | | | |
| CH221DNXU | — | Neutral holder | 690 Vac/125 A<br>1000 Vdc/125 A | IEC 60269-1<br>IEC 60269-2 | Size: 4 - 50mm²<br>Torque: 4 N•m max | 120 kA AC<br>50 kA DC | FWP ferrule[1, 2] |
| CH221DU | CH221DIU | 1 pole fuse holder | | | | | |
| CH222DU | CH222DIU | 2 pole fuse holder | | | | | |
| CH223DU | CH223DIU | 3 pole fuse holder | | | | | |
| CH224DU | CH224DIU | 4 pole fuse holder | | | | | |
| CH221DNU | CH221DNIU | 1 pole + neutral | | | | | |
| CH223DNU | CH223DNIU | 3 pole + neutral | | | | | |
| — | CH221DMSU-F | 1 pole with microswitch | | | | | |
| — | CH223DMSU-F | 3 pole with microswitch | | | | | |
| — | CH223DNMSU-F | 3 pole with microswitch + neutral | | | | | |

[1] Maximum allowed continuous current applies. Please refer to data sheet for details.
[2] Please consult our application engineers if you wish to use a FWP fuse with a striker option.

### CH14 and CH22 accessories

| Catalog no. | Description | For holder |
|---|---|---|
| AL-D | Multi-pole ganging clips, one kit will gang up to 4-poles together | CH14 and CH22 |
| CH14-P | Multi-pole handle pins, one kit will gang up to 12 handles together | CH14 and CH22 |
| CH14-L | Lockout padlock support, it will accept up to 5mm diameter padlock shank | CH14 |
| CH22-L | Lockout padlock support, it will accept up to 5mm diameter padlock shank | CH22 |
| CH14-IP20 | IP20 protection accessory, provides IP20 protection to terminals with 10mm² or less cable | CH14 |
| CH22-IP20 | | CH22 |
| CH14-MS1 | 1-pole microswitch for blown fuse monitoring | CH14 |
| CH22-MS1 | | CH22 |
| CH14-MS3 | 3-pole microswitch for blown fuse monitoring | CH14 |
| CH22-MS3 | | CH22 |

## 170M — Square Body size 000 and 00, DIN 43653

### 690 Vac (IEC), 700 Vac/dc (UL), 10 to 400 A




Square body DIN 43653 bolted tags high speed fuses, for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters. Available with and without visual indicator, and Type T indicator for a microswitch.

### Ratings

- Volts
  - 690 Vac (IEC, size 000 and 00)
  - 700 Vac (UL, size 000; size 00 100-400 A only)
  - 700 Vdc (UL, size 000)
- Amps 10-400 A
- IR
  - 200 kA RMS Sym.
  - 50 kA at 700 Vdc (size 000 only)

### Operating class

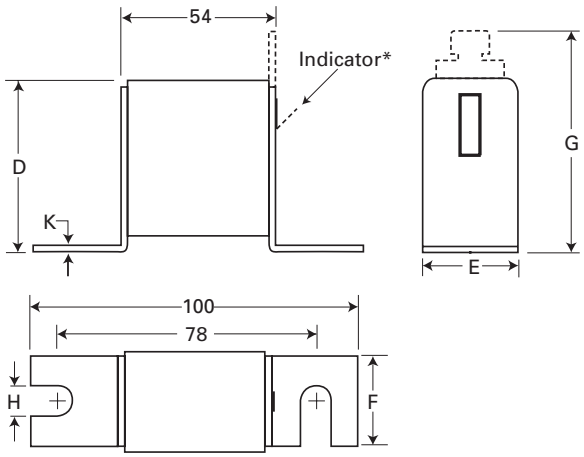
- gR - size 000 (10-63 A), size 00 (25-80 A)
- aR - size 000 (>63 A), size 00 (>80 A)

### Agency Information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CSA Class 53787, File 1422-30 on size 000
- CCC approved
- CE

### Dimensions — mm

The dotted line illustrates the Type T indicator fuse.




**Type -U/80, -/80, -TN/80**

| Size | D | E | F | G | H | K |
|---|---|---|---|---|---|---|
| 000 | 40 | 21 | 20 | 51 | 8 | 2 |
| 00 | 51 | 30 | 28 | 67 | 10 | 2 |

* Indicatior for size 00 fuses is a red pin.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6310 (Size 000), 170K6312 (Size 00)

## 170M — Square Body size 000 and 00, DIN 43653

### 690 Vac (IEC), 700 Vac/dc (UL), 10 to 400 A

| | | | $I^2t$ ($A^2s$) | | | Catalog no. | | |
|---|---|---|---|---|---|---|---|---|
| Fuse size | Rated voltage | Rated current (amps) | Pre-Arcing | Clearing at 660 Vac | Watts loss (W)* | -U/80 without indicator | -/80 with indicator | -TN/80 Type T indicator for microswitch |
| 000 | 690 Vac (IEC) 700 Vac/dc (UL) | 10 | 3.8 | 25.5 | 3.0 | 170M1308 | 170M1358 | 170M1408 |
| | | 16 | 7.2 | 48.0 | 5.5 | 170M1309 | 170M1359 | 170M1409 |
| | | 20 | 11.5 | 78.0 | 7.0 | 170M1310 | 170M1360 | 170M1410 |
| | | 25 | 19.0 | 130.0 | 9.0 | 170M1311 | 170M1361 | 170M1411 |
| | | 32 | 40.0 | 270.0 | 10.0 | 170M1312 | 170M1362 | 170M1412 |
| | | 40 | 69.0 | 460.0 | 12.0 | 170M1313 | 170M1363 | 170M1413 |
| | | 50 | 115.0 | 770.0 | 15.0 | 170M1314 | 170M1364 | 170M1414 |
| | | 63 | 215.0 | 1450.0 | 16.0 | 170M1315 | 170M1365 | 170M1415 |
| | | 80 | 380.0 | 2550.0 | 19.0 | 170M1316 | 170M1366 | 170M1416 |
| | | 100 | 695.0 | 4650.0 | 24.0 | 170M1317 | 170M1367 | 170M1417 |
| | | 125 | 1250.0 | 8500.0 | 28.0 | 170M1318 | 170M1368 | 170M1418 |
| | | 160 | 2350.0 | 16,000.0 | 32.0 | 170M1319 | 170M1369 | 170M1419 |
| | | 200 | 4200.0 | 28,000.0 | 37.0 | 170M1320 | 170M1370 | 170M1420 |
| | | 250 | 7750.0 | 51,500.0 | 42.0 | 170M1321 | 170M1371 | 170M1421 |
| | | 315 | 12,000.0 | 80,500.0 | 53.0 | 170M1322 | 170M1372 | 170M1422 |
| 00 | 690 Vac (IEC) | 25 | 19.0 | 130.0 | 6.0 | | 170M2608 | 170M2658 |
| | | 32 | 28.5 | 195.0 | 7.0 | | 170M2609 | 170M2659 |
| | | 40 | 50.0 | 360.0 | 9.0 | | 170M2610 | 170M2660 |
| | | 50 | 95.0 | 640.0 | 10.0 | | 170M2611 | 170M2661 |
| | | 63 | 170.0 | 1200.0 | 12.0 | | 170M2612 | 170M2662 |
| | | 80 | 310.0 | 2100.0 | 15.0 | | 170M2613 | 170M2663 |
| 00 | 690 Vac (IEC) 700 Vac (UL) | 100 | 620.0 | 4150.0 | 20.0 | | 170M2614 | 170M2664 |
| | | 125 | 1000.0 | 6950.0 | 25.0 | | 170M2615 | 170M2665 |
| | | 160 | 1900.0 | 13,000.0 | 30.0 | | 170M2616 | 170M2666 |
| | | 200 | 3400.0 | 23,000.0 | 35.0 | | 170M2617 | 170M2667 |
| | | 250 | 6250.0 | 42,000.0 | 45.0 | | 170M2618 | 170M2668 |
| | | 315 | 10,000.0 | 68,500.0 | 55.0 | | 170M2619 | 170M2669 |
| | | 350 | 13,500.0 | 91,500.0 | 60.0 | | 170M2620 | 170M2670 |
| | | 400 | 18,000.0 | 125,000.0 | 70.0 | | 170M2621 | 170M2671 |

* Watts loss at rated current.



For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6310 (Size 000), 170K6312 (Size 00)

## 170M — Square Body size 1* to 3, DIN 43653

### 690 Vac (IEC), 700 Vac (UL), 40 to 2000 A




Square body DIN 43653 bolted tags high speed fuses, for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters. Available with visual indicator, and Type K and T indicator for a microswitch.

Ratings

- Volts 690 Vac (IEC)/700 Vac (UL)
- Amps 40-2000 A
- IR 200 kA RMS Sym.

### Operating class aR

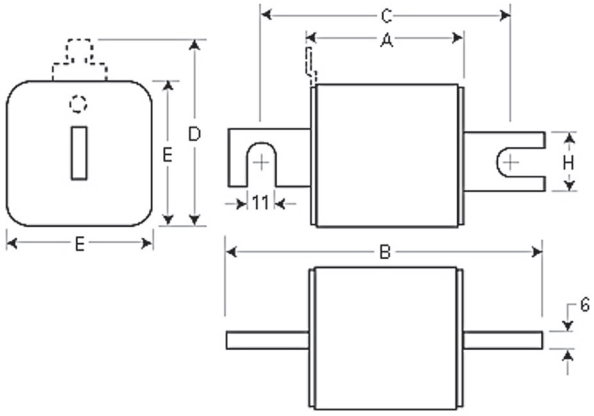
### Agency information

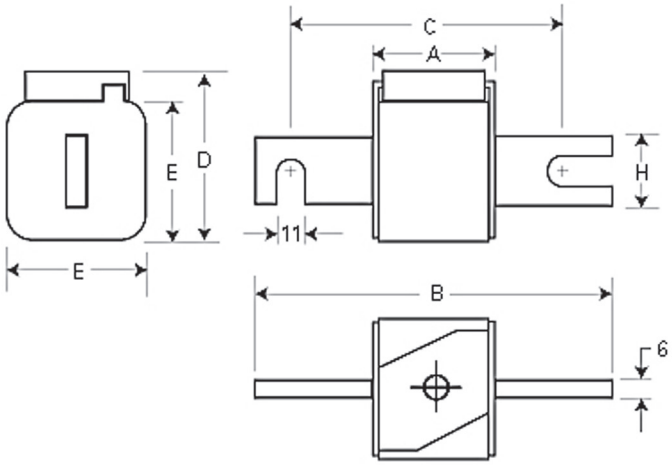
- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2*, E125085
- CSA Class 53787, File 1422-30*
- CCC except where noted
- CE

* Consult your Bussmann series product representative for status.

### Dimensions — mm

1mm = 0.0394"




**Type -/80, -TN/80, -/110, -TN/110**

| Size | A | B | B[1] | C | C[1] | D[2] | E | H |
|---|---|---|---|---|---|---|---|---|
| 1* | 50 | 104 | 134 | 78 | 108 | 58 | 45 | 22 |
| 1 | 50 | 108 | 138 | 78 | 108 | 66 | 53 | 25 |
| 2 | 50 | 108 | 138 | 78 | 108 | 75 | 61 | 25 |
| 3 | 51 | 109 | 139 | 78 | 108 | 90 | 76 | 30 |

1 Valid for fuse Types -/110 and -TN/110.
2 Valid for fuse Types -TN/80 and -TN/110.

**Type -KN/80, -KN/110**

| Size | A | B | B[3] | C | C[3] | D | E | H |
|---|---|---|---|---|---|---|---|---|
| 1* | 50 | 104 | 134 | 78 | 108 | 59 | 45 | 22 |
| 1 | 50 | 108 | 138 | 78 | 108 | 69 | 53 | 25 |
| 2 | 50 | 108 | 138 | 78 | 108 | 77 | 61 | 25 |
| 3 | 51 | 109 | 139 | 78 | 108 | 92 | 76 | 30 |

3 Valid for fuse Type -KN/110.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

## 170M — Square Body size 1* to 3, DIN 43653

### 690 Vac (IEC), 700 Vac (UL), 40 to 2000 A

| | | | $I^2t$ ($A^2s$) | | | Catalog no. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fuse size | Rated voltage | Rated current (amps) | Pre-arcing | Clearing at 660 Vac | Watts loss (W)* | -/80 with indicator | -TN/80 Type T indicator for micro | -KN/80 Type K indicator for micro | -/110 with indicator | -TN/110 Type T indicator for micro | -KN/110 Type K indicator for micro |
| 1* | 690 Vac (IEC) 700 Vac (UL) | 40 | 40 | 270 | 9 | 170M3008 | 170M3058 | 170M3108 | 170M3158 | 170M3208 | 170M3258 |
| | | 50 | 77 | 515 | 11 | 170M3009 | 170M3059 | 170M3109 | 170M3159 | 170M3209 | 170M3259 |
| | | 63 | 115 | 770 | 14 | 170M3010 | 170M3060 | 170M3110 | 170M3160 | 170M3210 | 170M3260 |
| | | 80 | 185 | 1250 | 18 | 170M3011 | 170M3061 | 170M3111 | 170M3161 | 170M3211 | 170M3261 |
| | | 100 | 360 | 2450 | 21 | 170M3012 | 170M3062 | 170M3112 | 170M3162 | 170M3212 | 170M3262 |
| | | 125 | 550 | 3700 | 26 | 170M3013 | 170M3063 | 170M3113 | 170M3163 | 170M3213 | 170M3263 |
| | | 160 | 1100 | 7500 | 30 | 170M3014 | 170M3064 | 170M3114 | 170M3164 | 170M3214 | 170M3264 |
| | | 200 | 2200 | 15,000 | 35 | 170M3015 | 170M3065 | 170M3115 | 170M3165 | 170M3215 | 170M3265 |
| | | 250 | 4200 | 28,500 | 40 | 170M3016 | 170M3066 | 170M3116 | 170M3166 | 170M3216 | 170M3266 |
| | | 315 | 7000 | 46,500 | 50 | 170M3017 | 170M3067 | 170M3117 | 170M3167 | 170M3217 | 170M3267 |
| | | 350 | 10,000 | 68,500 | 55 | 170M3018 | 170M3068 | 170M3118 | 170M3168 | 170M3218 | 170M3268 |
| | | 400 | 15,000 | 105,000 | 60 | 170M3019 | 170M3069 | 170M3119 | 170M3169 | 170M3219 | 170M3269 |
| | | 450 | 21,000 | 140,000 | 65 | 170M3020 | 170M3070 | 170M3120 | 170M3170 | 170M3220 | 170M3270 |
| | | 500 | 27,000 | 180,000 | 70 | 170M3021 | 170M3071 | 170M3121 | 170M3171 | 170M3221 | 170M3271 |
| | | 550 | 34,000 | 230,000 | 75 | 170M3022 | 170M3072 | 170M3122 | 170M3172 | 170M3222 | 170M3272 |
| | | 630 | 48,500 | 325,000 | 80 | 170M3023 | 170M3073 | 170M3123 | 170M3173 | 170M3223 | 170M3273 |
| 1 | 690 Vac (IEC) 700 Vac (UL) | 200 | 1650 | 11,500 | 45 | 170M4008 | 170M4058 | 170M4108 | 170M4158 | 170M4208 | 170M4258 |
| | | 250 | 3100 | 21,000 | 55 | 170M4009 | 170M4059 | 170M4109 | 170M4159 | 170M4209 | 170M4259 |
| | | 315 | 6200 | 42,000 | 58 | 170M4010 | 170M4060 | 170M4110 | 170M4160 | 170M4210 | 170M4260 |
| | | 350 | 8500 | 59,000 | 60 | 170M4011 | 170M4061 | 170M4111 | 170M4161 | 170M4211 | 170M4261 |
| | | 400 | 13,500 | 91,500 | 65 | 170M4012 | 170M4062 | 170M4112 | 170M4162 | 170M4212 | 170M4262 |
| | | 450 | 17,000 | 120,000 | 70 | 170M4013 | 170M4063 | 170M4113 | 170M4163 | 170M4213 | 170M4263 |
| | | 500 | 25,000 | 170,000 | 72 | 170M4014 | 170M4064 | 170M4114 | 170M4164 | 170M4214 | 170M4264 |
| | | 550 | 34,000 | 230,000 | 75 | 170M4015 | 170M4065 | 170M4115 | 170M4165 | 170M4215 | 170M4265 |
| | | 630 | 52,000 | 350,000 | 80 | 170M4016 | 170M4066 | 170M4116 | 170M4166 | 170M4216 | 170M4266 |
| | | 700 | 69,500 | 465,000 | 85 | 170M4017 | 170M4067 | 170M4117 | 170M4167 | 170M4217 | 170M4267 |
| | | 800 | 105,000 | 725,000 | 95 | 170M4018 | 170M4068 | 170M4118 | 170M4168 | 170M4218 | 170M4268 |
| | | 900[2] | 155,000 | 850,000[2] | 100 | 170M4019[1] | 170M4069[1] | 170M4119[1] | 170M4169[1] | 170M4219[1] | 170M4269[1] |
| 2 | 690 Vac (IEC) 700 Vac (UL) | 400 | 11,000 | 74,000 | 65 | 170M5008 | 170M5058 | 170M5108 | 170M5158 | 170M5208 | 170M5258 |
| | | 450 | 15,500 | 105,000 | 70 | 170M5009 | 170M5059 | 170M5109 | 170M5159 | 170M5209 | 170M5259 |
| | | 500 | 21,500 | 145,000 | 75 | 170M5010 | 170M5060 | 170M5110 | 170M5160 | 170M5210 | 170M5260 |
| | | 550 | 28,000 | 190,000 | 80 | 170M5011 | 170M5061 | 170M5111 | 170M5161 | 170M5211 | 170M5261 |
| | | 630 | 41,000 | 275,000 | 90 | 170M5012 | 170M5062 | 170M5112 | 170M5162 | 170M5212 | 170M5262 |
| | | 700 | 60,500 | 405,000 | 95 | 170M5013 | 170M5063 | 170M5113 | 170M5163 | 170M5213 | 170M5263 |
| | | 800 | 86,000 | 575,000 | 105 | 170M5014 | 170M5064 | 170M5114 | 170M5164 | 170M5214 | 170M5264 |
| | | 900 | 125,000 | 840,000 | 110 | 170M5015 | 170M5065 | 170M5115 | 170M5165 | 170M5215 | 170M5265 |
| | | 1000 | 180,000 | 1,250,000 | 115 | 170M5016 | 170M5066 | 170M5116 | 170M5166 | 170M5216 | 170M5266 |
| | | 1100[3] | 245,000 | 1,600,000 | 120 | 170M5017 | 170M5067 | 170M5117 | 170M5167 | 170M5217 | 170M5267 |
| | | 1250[3] | 365,000 | 2,400,000 | 130 | 170M5018 | 170M5068 | 170M5118 | 170M5168 | 170M5218 | 170M5268 |
| 3 | 690 Vac (IEC) 700 Vac (UL) | 500 | 14,000 | 95,000 | 95 | 170M6008 | 170M6058 | 170M6108 | 170M6158 | 170M6208 | 170M6258 |
| | | 550 | 19,500 | 135,000 | 100 | 170M6009 | 170M6059 | 170M6109 | 170M6159 | 170M6209 | 170M6259 |
| | | 630 | 31,000 | 210,000 | 105 | 170M6010 | 170M6060 | 170M6110 | 170M6160 | 170M6210 | 170M6260 |
| | | 700 | 44,500 | 300,000 | 110 | 170M6011 | 170M6061 | 170M6111 | 170M6161 | 170M6211 | 170M6261 |
| | | 800 | 69,500 | 465,000 | 115 | 170M6012 | 170M6062 | 170M6112 | 170M6162 | 170M6212 | 170M6262 |
| | | 900 | 100,000 | 670,000 | 120 | 170M6013 | 170M6063 | 170M6113 | 170M6163 | 170M6213 | 170M6263 |
| | | 1000 | 140,000 | 945,000 | 125 | 170M6014 | 170M6064 | 170M6114 | 170M6164 | 170M6214 | 170M6264 |
| | | 1100 | 190,000 | 1,300,000 | 130 | 170M6015 | 170M6065 | 170M6115 | 170M6165 | 170M6215 | 170M6265 |
| | | 1250 | 290,000 | 1,950,000 | 140 | 170M6016 | 170M6066 | 170M6116 | 170M6166 | 170M6216 | 170M6266 |
| | | 1400 | 370,000 | 2,450,000 | 155 | 170M6017 | 170M6067 | 170M6117 | 170M6167 | 170M6217 | 170M6267 |
| | | 1500 | 460,000 | 3,100,000 | 160 | 170M6018 | 170M6068 | 170M6118 | 170M6168 | 170M6218 | 170M6268 |
| | | 1600 | 580,000 | 3,900,000 | 160 | 170M6019 | 170M6069 | 170M6119 | 170M6169 | 170M6219 | 170M6269 |
| | | 1800[4] | 880,000 | 5,250,000[4] | 165 | 170M6020 | 170M6070 | 170M6120 | 170M6170 | 170M6220 | 170M6270 |
| | | 2000[5] | 1,150,000 | 6,350,000[5] | 175 | 170M6021 | 170M6071 | 170M6121 | 170M6171 | 170M6221 | 170M6271 |

* Watts loss at rated current.

1 Not UL Approved, 2 Rated voltage: 550 Vac IEC, 3 Rated voltage: 600 Vac IEC, 700 Vac UL, 4 Rated voltage: 600 Vac IEC, 500 Vac UL, 5 Rated voltage: 550 Vac IEC, 500 Vac UL.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

## 170M — Square Body size 00, DIN 43653

### 1000 Vac (IEC and UL), 20 to 315 A




Square body DIN 43653 bolted tags high speed fuses, for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters. Available with indicator or Type T indicator for a microswitch.

### Ratings

- Volts
  - 1000 Vac (IEC and UL 20-250 A)
  - 900 Vac (IEC, 315 A)
- Amps 20-315 A
- IR 125 kA RMS Sym.

### Operating class aR

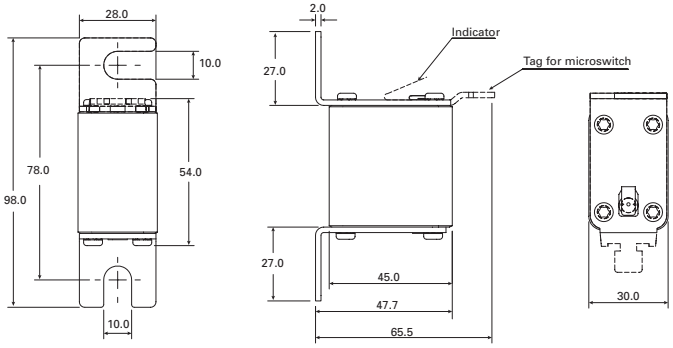
### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, E125085, JFHR2 (20-250 A)
- CSA Class 53787, File 1422-30 (20-250 A) with the exception of catalog numbers. 170M4815 and 170M4835
- CE

| | | | $I^2t$ ($A^2s$) | | | Catalog no. | |
|---|---|---|---|---|---|---|---|
| Fuse size | Rated voltage | Rated current (amps) | Pre-arcing | Clearing at rated voltage | Watts loss (W)* | 00/80 with indicator | 00TN/80 Type T indicator for micro |
| 00 | 1000 Vac (IEC/UL) | 20 | 20 | 140 | 5 | 170M4802 | 170M4822 |
| | | 25 | 30 | 210 | 7 | 170M4803 | 170M4823 |
| | | 32 | 55 | 390 | 9 | 170M4804 | 170M4824 |
| | | 35 | 69 | 500 | 10 | 170M4805 | 170M4825 |
| | | 40 | 100 | 690 | 11 | 170M4806 | 170M4826 |
| | | 50 | 170 | 1200 | 13 | 170M4807 | 170M4827 |
| | | 63 | 280 | 2000 | 18 | 170M4808 | 170M4828 |
| | | 80 | 500 | 3500 | 22 | 170M4809 | 170M4829 |
| | | 100 | 950 | 6850 | 25 | 170M4810 | 170M4830 |
| | | 125 | 1500 | 11,500 | 33 | 170M4811 | 170M4831 |
| | | 160 | 3000 | 22,000 | 37 | 170M4812 | 170M4832 |
| | | 200 | 5600 | 40,500 | 40 | 170M4813 | 170M4833 |
| | | 250 | 10,000 | 74,000 | 48 | 170M4814 | 170M4834 |
| | 900 Vac (IEC) | 315 | 18,000 | 115,000 | 58 | 170M4815 | 170M4835 |

* Watts loss at rated current.

### Dimensions — mm




For details on electrical characteristics, contact Application Engineering and ask for Data sheet no. 170K8504

# 170M — Square Body size 1* to 3, DIN 43653

## 1000 Vac (IEC and UL), 50 to 1400 A

Square body DIN 43653 bolted tags high speed fuses, for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters. Available with a Type T or K indicator for a microswitch.




### Ratings

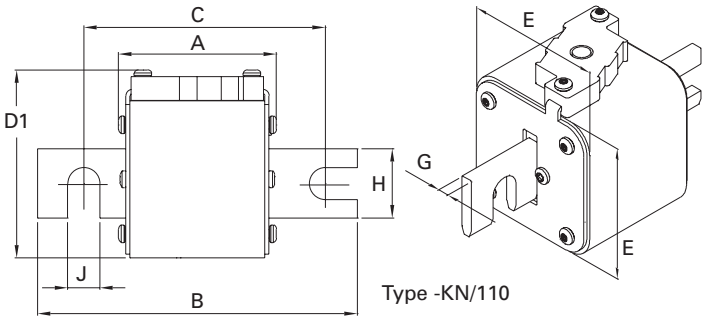
- Volts
  - 1000 Vac (IEC, 50-1250 A), 900 Vac (IEC, 1400 A)
  - 1000 Vac (UL size 2, size 3, 315-1100 A only)
- Amps 50-1400 A
- IR 125 kA RMS Sym.

### Operating class aR

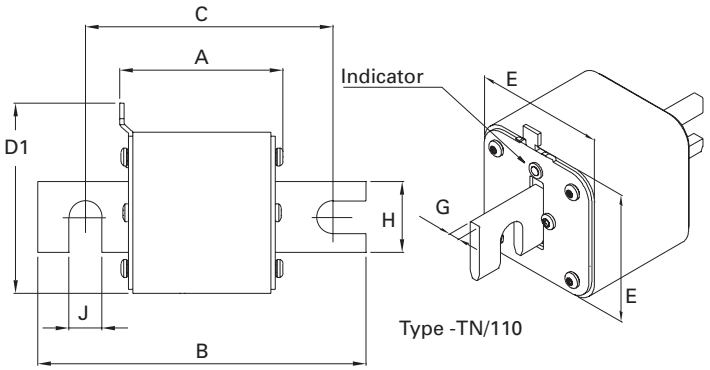
### Agency Information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085 (only sizes 2 and 3)
- CCC (only size 3, 315-1100 A)
- CE

### Dimensions — mm




Type -KN/110




Type -TN/110

**Type -KN/110**

| Size | A | B | C | D1 (max) | E | G | H | J |
|---|---|---|---|---|---|---|---|---|
| 1*KN/110 | 80 | 138 | 108 | 61 | 43 | 6 | 22 | 11 |
| 1KN/110 | 80 | 138 | 108 | 69 | 51 | 6 | 25 | 11 |
| 2KN/110 | 80 | 138 | 108 | 77 | 59 | 6 | 25 | 11 |
| 3KN/110 | 81 | 139 | 108 | 92 | 74 | 6 | 30 | 11 |

**Type -TN/110**

| Size | A | B | C | D1 (max) | E | G | H | J |
|---|---|---|---|---|---|---|---|---|
| 1*TN/110 | 80 | 138 | 108 | 61 | 43 | 6 | 22 | 11 |
| 1TN/110 | 80 | 138 | 108 | 69 | 51 | 6 | 25 | 11 |
| 2TN/110 | 80 | 138 | 108 | 75 | 59 | 6 | 25 | 11 |
| 3TN/110 | 81 | 139 | 108 | 90 | 74 | 6 | 30 | 11 |

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

## 170M — Square Body size 1* to 3, DIN 43653

### 1000 Vac (IEC and UL), 50 to 1400 A

| Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at rated voltage | Watts loss (W)* | Catalog no. -KN/110 Type K indicator for microswitch | Catalog no. -TN/110 Type T indicator for microswitch |
|---|---|---|---|---|---|---|---|
| 1* | 1000 Vac (IEC) | 50 | 135 | 815 | 20 | 170M3965 | 170M3981 |
| | | 63 | 215 | 1300 | 25 | 170M3966 | 170M3982 |
| | | 80 | 460 | 2750 | 30 | 170M3967 | 170M3983 |
| | | 100 | 860 | 5100 | 35 | 170M3968 | 170M3984 |
| | | 125 | 1450 | 8600 | 40 | 170M3969 | 170M3985 |
| | | 160 | 2850 | 17,500 | 45 | 170M3970 | 170M3986 |
| | | 200 | 4950 | 29,500 | 50 | 170M3971 | 170M3987 |
| | | 250 | 9550 | 57,000 | 55 | 170M3972 | 170M3988 |
| | | 315 | 21,500 | 130,000 | 65 | 170M3973 | 170M3989 |
| | | 350 | 29,000 | 175,000 | 70 | 170M3974 | 170M3990 |
| | | 400 | 42,000 | 250,000 | 75 | 170M3975 | 170M3991 |
| 1 | 1000 Vac (IEC) | 160 | 2200 | 13,500 | 40 | 170M4965 | 170M4980 |
| | | 200 | 4150 | 24,500 | 45 | 170M4966 | 170M4981 |
| | | 250 | 7750 | 46,000 | 52 | 170M4967 | 170M4982 |
| | | 315 | 16,500 | 98,500 | 60 | 170M4968 | 170M4983 |
| | | 350 | 21,500 | 130,000 | 65 | 170M4969 | 170M4984 |
| | | 400 | 31,000 | 185,000 | 70 | 170M4970 | 170M4985 |
| | | 450 | 44,500 | 265,000 | 80 | 170M4971 | 170M4986 |
| | | 500 | 63,000 | 375,000 | 85 | 170M4972 | 170M4987 |
| | | 550 | 84,500 | 500,000 | 90 | 170M4973 | 170M4988 |
| | | 630 | 125,000 | 755,000 | 98 | 170M4974 | 170M4989 |
| 2 | 1000 Vac (IEC and UL) | 250 | 6750 | 40,000 | 65 | 170M5966 | 170M5981 |
| | | 315 | 13,500 | 81,500 | 75 | 170M5967 | 170M5982 |
| | | 350 | 16,500 | 99,000 | 80 | 170M5968 | 170M5983 |
| | | 400 | 26,000 | 155,000 | 85 | 170M5969 | 170M5984 |
| | | 450 | 35,500 | 210,000 | 90 | 170M5970 | 170M5985 |
| | | 500 | 49,500 | 295,000 | 95 | 170M5971 | 170M5986 |
| | | 550 | 66,000 | 390,000 | 100 | 170M5972 | 170M5987 |
| | | 630 | 93,500 | 555,000 | 110 | 170M5973 | 170M5988 |
| | | 700 | 130,000 | 770,000 | 115 | 170M5974 | 170M5989 |
| | | 800 | 195,000 | 1,200,000 | 125 | 170M5975 | 170M5990 |
| 3 | 1000 Vac (IEC and UL) | 315 | 9200 | 54,500 | 90 | 170M8614 | 170M8629 |
| | | 350 | 13,000 | 77,500 | 95 | 170M8615 | 170M8630 |
| | | 400 | 19,000 | 115,000 | 105 | 170M8616 | 170M8631 |
| | | 450 | 27,000 | 160,000 | 107 | 170M8617 | 170M8632 |
| | | 500 | 37,500 | 225,000 | 110 | 170M8618 | 170M8633 |
| | | 550 | 52,000 | 310,000 | 115 | 170M8619 | 170M8634 |
| | | 630 | 82,500 | 490,000 | 120 | 170M8620 | 170M8635 |
| | | 700 | 115,000 | 700,000 | 125 | 170M8621 | 170M8636 |
| | | 800 | 170,000 | 1,050,000 | 135 | 170M8622 | 170M8637 |
| | | 900 | 250,000 | 1,500,000 | 145 | 170M8623 | 170M8638 |
| | | 1000 | 340,000 | 2,050,000 | 150 | 170M8624 | 170M8639 |
| | | 1100 | 460,000 | 2,750,000 | 155 | 170M8625 | 170M8640 |
| | 1000 Vac (IEC) | 1250 | 575,000 | 3,400,000 | 175 | 170M8626 | 170M8641 |
| | 900 Vac (IEC) | 1400 | 795,000 | 4,200,000 | 185 | 170M8627 | 170M8642 |

* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

# 170M — Square Body size 1* to 3, DIN 43653

## 1250 Vac (IEC), 1300 Vac (UL), 50 to 1400 A

Square body DIN 43653 bolted tags high speed fuses, for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters.




### Ratings

- Volts see catalog number table
- Amps 50-1400 A
- IR 100 kA RMS Sym.

### Operating class aR

### Agency information

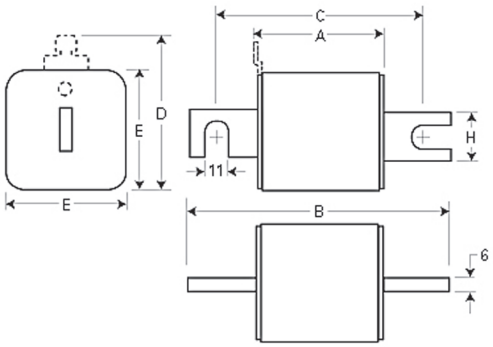
- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2*, E125085
- CSA Class 53787, File 1422-30*
- CE

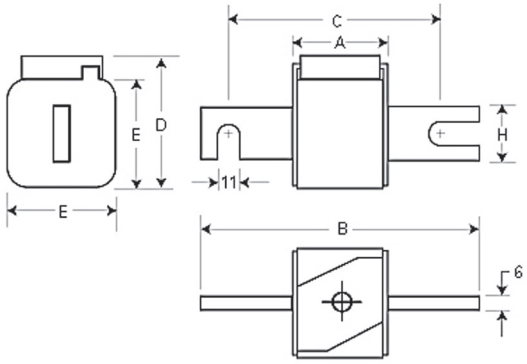
* Consult your Bussmann series product representative for status.

### Dimensions — mm

1mm = 0.0394"






### Type-/110-TN/110

| Size | A | B | C | D[1] | E | H | K |
|---|---|---|---|---|---|---|---|
| 1* | 80 | 138 | 108 | 58 | 45 | 20 | 11 |
| 1 | 80 | 138 | 108 | 66 | 53 | 25 | 11 |
| 2 | 80 | 138 | 108 | 75 | 61 | 25 | 11 |
| 3 | 81 | 139 | 108 | 90 | 76 | 30 | 11 |

1 Clip on microswitch valid for -TN/110 fuses.

### Type-KN/110

| Size | A | B | C | D | E | H | K |
|---|---|---|---|---|---|---|---|
| 1* | 80 | 138 | 108 | 60 | 45 | 20 | 11 |
| 1 | 80 | 138 | 108 | 69 | 53 | 25 | 11 |
| 2 | 80 | 138 | 108 | 77 | 61 | 25 | 11 |
| 3 | 81 | 139 | 108 | 92 | 76 | 30 | 11 |

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

## 170M — Square Body size 1* to 3, DIN 43653, 170M

### 1250 Vac (IEC), 1300 Vac (UL), 50 to 1400 A

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | I²t (A²s) Clearing at 1250 Vac | Watts loss (W)† | Catalog no. -/110 with indicator | Catalog no. -TN/110 Type T indicator for microswitch | Catalog no. -KN/110 Type K indicator for microswitch |
|---|---|---|---|---|---|---|---|---|---|
| 1* | 1250 Vac (IEC) 1300 Vac (UL) | 50 | 135 | 815 | 1100 | 15 | 170M3138 | 170M3188 | 170M3238 |
| | | 63 | 215 | 1300 | 1750 | 20 | 170M3139 | 170M3189 | 170M3239 |
| | | 80 | 420 | 2500 | 3350 | 25 | 170M3140 | 170M3190 | 170M3240 |
| | | 100 | 750 | 4450 | 5950 | 30 | 170M3141 | 170M3191 | 170M3241 |
| | | 125 | 1450 | 9000 | 11,500 | 35 | 170M3142 | 170M3192 | 170M3242 |
| | | 160 | 2600 | 16,000 | 21,000 | 40 | 170M3143 | 170M3193 | 170M3243 |
| | | 200 | 5150 | 31,000 | 41,000 | 45 | 170M3144 | 170M3194 | 170M3244 |
| | | 250 | 9200 | 54,500 | 73,000 | 55 | 170M3145 | 170M3195 | 170M3245 |
| | | 315 | 18,500 | 115,000 | 150,000 | 60 | 170M3146 | 170M3196 | 170M3246 |
| | | 350 | 27,000 | 165,000 | 220,000 | 65 | 170M3147 | 170M3197 | 170M3247 |
| | | 400 | 53,000 | 265,000 | 335,000 | 70 | 170M3148 | 170M3198 | 170M3248 |
| 1 | 1250 Vac (IEC) 1300 Vac (UL) | 160 | 1900 | 11,500 | 15,500 | 45 | 170M4138 | 170M4188 | 170M4238 |
| | | 200 | 3800 | 22,500 | 30,000 | 50 | 170M4139 | 170M4189 | 170M4239 |
| | | 250 | 7750 | 46,000 | 61,500 | 60 | 170M4140 | 170M4190 | 170M4240 |
| | | 315 | 15,000 | 90,000 | 120,000 | 65 | 170M4141 | 170M4191 | 170M4241 |
| | | 350 | 20,000 | 125,000 | 165,000 | 70 | 170M4142 | 170M4192 | 170M4242 |
| | | 400 | 29,500 | 175,000 | 235,000 | 75 | 170M4143 | 170M4193 | 170M4243 |
| | | 450 | 42,000 | 250,000 | 335,000 | 80 | 170M4144 | 170M4194 | 170M4244 |
| | | 500 | 69,500 | 340,000 | 435,000 | 85 | 170M4145 | 170M4195 | 170M4245 |
| | | 550 | 95,000 | 465,000 | 590,000 | 95 | 170M4146 | 170M4196 | 170M4246 |
| | 1100 Vac (IEC) | 630 | 130,000 | 660,000 | N/A | 100 | 170M4147[1] | 170M4197[1] | 170M4247[1] |
| 2 | 1250 Vac (IEC) 1300 Vac (UL) | 250 | 6500 | 38,500 | 51,500 | 65 | 170M5138 | 170M5188 | 170M5238 |
| | | 280 | 9350 | 55,500 | 74,500 | 70 | 170M5139 | 170M5189 | 170M5239 |
| | | 315 | 13,000 | 77,500 | 105,000 | 75 | 170M5140 | 170M5190 | 170M5240 |
| | | 350 | 16,500 | 97,500 | 135,000 | 80 | 170M5141 | 170M5191 | 170M5241 |
| | | 400 | 23,000 | 140,000 | 180,000 | 85 | 170M5142 | 170M5192 | 170M5242 |
| | | 450 | 34,000 | 205,000 | 270,000 | 90 | 170M5143 | 170M5193 | 170M5243 |
| | | 500 | 48,000 | 285,000 | 380,000 | 95 | 170M5144 | 170M5194 | 170M5244 |
| | | 550 | 62,000 | 370,000 | 495,000 | 100 | 170M5145 | 170M5195 | 170M5245 |
| | | 630 | 115,000 | 575,000 | 730,000 | 120 | 170M5146 | 170M5196 | 170M5246 |
| | | 700 | 160,000 | 795,000 | 1,050,000 | 125 | 170M5147 | 170M5197 | 170M5247 |
| | | 800 | 245,000 | 1,200,000 | 1,550,000 | 130 | 170M5148 | 170M5198 | 170M5248 |
| | 1100 Vac (IEC/UL) | 900 | 360,000 | 1,750,000 | N/A | 135 | 170M5149 | 170M5199 | 170M5249 |
| | | 1000 | 480,000 | 2,350,000 | N/A | 145 | 170M5150 | 170M5200 | 170M5250 |
| 3 | 1300 Vac (UL) | 315 | 9500 | 58,000 | 77,500 | 85 | 170M6138 | 170M6188 | 170M6238 |
| | | 350 | 13,500 | 81,500 | 110,000 | 90 | 170M6139 | 170M6189 | 170M6239 |
| | | 400 | 19,500 | 120,000 | 160,000 | 95 | 170M6140 | 170M6190 | 170M6240 |
| | | 450 | 31,000 | 185,000 | 245,000 | 100 | 170M6141 | 170M6191 | 170M6241 |
| | | 500 | 39,000 | 235,000 | 310,000 | 105 | 170M6142 | 170M6192 | 170M6242 |
| | | 550 | 55,000 | 325,000 | 435,000 | 110 | 170M6143 | 170M6193 | 170M6243 |
| | | 630 | 83,500 | 495,000 | 665,000 | 115 | 170M6144 | 170M6194 | 170M6244 |
| | | 700 | 115,000 | 705,000 | 940,000 | 120 | 170M6145 | 170M6195 | 170M6245 |
| | | 800 | 205,000 | 995,000 | 1,300,000 | 125 | 170M6146 | 170M6196 | 170M6246[1] |
| | | 900 | 305,000 | 1,500,000 | 1,900,000 | 130 | 170M6147 | 170M6197 | 170M6247[1] |
| | | 1000 | 450,000 | 2,150,000 | 2,750,000 | 135 | 170M6148 | 170M6198 | 170M6248[1] |
| | | 1100 | 575,000 | 2,800,000 | 3,600,000 | 160 | 170M6149 | 170M6199 | 170M6249[1] |
| | 1100 Vac (IEC) | 1250 | 810,000 | 3,950,000 | N/A | 170 | 170M6150[1] | 170M6200[1] | 170M6250[1] |
| | | 1400 | 1,250,000 | 6,000,000 | N/A | 175 | 170M6151[1] | 170M6201[1] | 170M6251[1] |

† Watts loss at rated current.
1 Not UL Recognized.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

# 170M — Square Body size 00 to 3, DIN 43620, full range (gR)

## 690 Vac (IEC), 10 to 800 A




Square body DIN 43653 blade high speed fuses. Full range protection fuses provide both overload and short-circuit protection. Fuses come with Type T indicator for a microswitch.

### Ratings

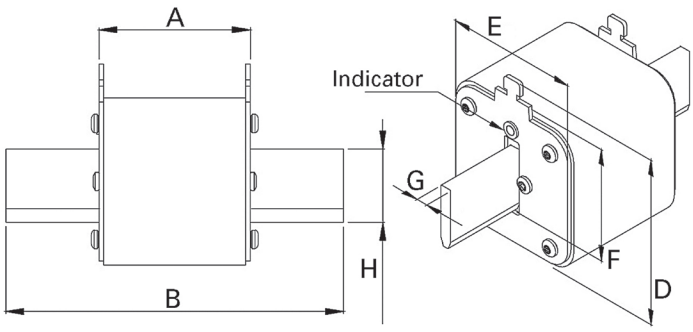
- Volts 690 Vac (IEC)
- Amps 10-800 A
- IR 200 kA RMS Sym.

### Operating class gR

### Agency information

- Designed and tested to IEC 60269 Part 4
- CE

### Dimensions — mm




| Size | A | B | D (max) | E (max) | F | G | H (min) |
|---|---|---|---|---|---|---|---|
| 00 | 49 | 78.5 | 60 | 30 | 35 | 6 | 15 |
| 1 | 68 | 135 | 66 | 52 | 40 | 6 | 20 |
| 2 | 68 | 150 | 74 | 60 | 48 | 6 | 25 |
| 3 | 68 | 150 | 89 | 75 | 60 | 6 | 32 |



For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6412 (Size 00), 170K6416 (Size 1), 170K6418 (Size 2), 170K6420 (Size 3)

## 170M — Square Body size 00 to 3, DIN 43620, full range (gR)

### 690 Vac (IEC), 10 to 800 A

| Fuse size | Rated voltage | Rated current (amps)[1] | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 690 Vac | Watts loss (W)* | Catalog no. with Type T indicator for microswitch |
|---|---|---|---|---|---|---|
| 00 | 690 Vac (IEC) | 10 | 3.8 | 20 | 3.5 | 170M2691 |
| | | 16 | 7.2 | 38 | 5.5 | 170M2692 |
| | | 20 | 13.0 | 70 | 6.0 | 170M2693 |
| | | 25 | 24.0 | 125 | 8.0 | 170M2694 |
| | | 32 | 53.0 | 275 | 9.0 | 170M2695 |
| | | 40 | 95.0 | 490 | 10.0 | 170M2696 |
| | | 50 | 185.0 | 1000 | 11.0 | 170M2697 |
| | | 63 | 345.0 | 1800 | 14.0 | 170M2698 |
| | | 80 | 695.0 | 3600 | 16.0 | 170M2699 |
| | | 100 | 1250.0 | 6650 | 19.0 | 170M2700 |
| | | 125 | 2300.0 | 12,000 | 23.0 | 170M2701 |
| | | 160 | 4350.0 | 22,500 | 29.0 | 170M2702 |
| 1 | 690 Vac (IEC) | 50 | 135.0 | 705 | 12.0 | 170M4176 |
| | | 63 | 245.0 | 1300 | 15.0 | 170M4177 |
| | | 80 | 500.0 | 2600 | 17.0 | 170M4178 |
| | | 100 | 950.0 | 4850 | 20.0 | 170M4179 |
| | | 125 | 1850.0 | 9500 | 23.0 | 170M4180 |
| | | 160 | 3450.0 | 18,000 | 28.0 | 170M4181 |
| | | 200 | 6750.0 | 34,500 | 31.0 | 170M4182 |
| | | 250 | 13,500.0 | 70,500 | 35.0 | 170M4183 |
| | | 315 | 26,000.0 | 135,000 | 41.0 | 170M4184 |
| | | 350 | 34,000.0 | 175,000 | 45.0 | 170M4185 |
| | | 400 | 48,500.0 | 250,000 | 48.0 | 170M4186 |
| 2 | 690 Vac (IEC) | 200 | 5650.0 | 29,000 | 33.0 | 170M5881 |
| | | 250 | 10,000.0 | 52,500 | 40.0 | 170M5882 |
| | | 315 | 19,500.0 | 105,000 | 46.0 | 170M5883 |
| | | 350 | 26,000.0 | 135,000 | 50.0 | 170M5884 |
| | | 400 | 39,500.0 | 205,000 | 53.0 | 170M5885 |
| | | 450 | 55,500.0 | 290,000 | 59.0 | 170M5886 |
| | | 500 | 73,000.0 | 375,000 | 66.0 | 170M5887 |
| | | 550 | 100,000.0 | 515,000 | 70.0 | 170M5888 |
| | | 630 | 150,000.0 | 770,000 | 79.0 | 170M5889 |
| 3 | 690 Vac (IEC) | 350 | 23,000.0 | 120,000 | 55.0 | 170M6080 |
| | | 400 | 34,000.0 | 175,000 | 59.0 | 170M6081 |
| | | 450 | 48,500.0 | 250,000 | 62.0 | 170M6082 |
| | | 500 | 64,000.0 | 330,000 | 67.0 | 170M6083 |
| | | 550 | 84,500.0 | 435,000 | 70.0 | 170M6084 |
| | | 630 | 125,000.0 | 645,000 | 85.0 | 170M6085 |
| | | 700 | 160,000.0 | 840,000 | 93.0 | 170M6086 |
| | | 800 | 245,000.0 | 1,300,000 | 99.0 | 170M6087 |

* Watts loss at rated current.

1 The RMS Amp rating of this fuses range is given with open fuse blocks connected to copper conductors according to IEC 60269, Part 1, table 10. When used in enclosed fuse blocks/disconnects, derating factors have to be observed. Please contact Eaton's Bussmann Division for application assistance bulehighspeedtechnical@eaton.com.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6412 (Size 00), 170K6416 (Size 1), 170K6418 (Size 2), 170K6420 (Size 3)

# 170M — Square Body size 000 to 3, DIN 43620, dual indicator fuses

## 690 Vac (IEC), 700 Vac (UL), 10 to 1600 A




Square body DIN 43620 blade high speed fuses with dual indicator system: one indicator in the fuse body and another one in the metallic end plate. Interchangeable with existing high speed DIN 43620 fuses for the protection of UPS, soft starters, solid state relays, variable speed drives, rectifiers and inverters.

### Ratings

- Volts
  - 690 Vac (IEC)
  - 700 Vac (UL)
- Amps 10-1600 A
- IR 200 kA RMS Sym.

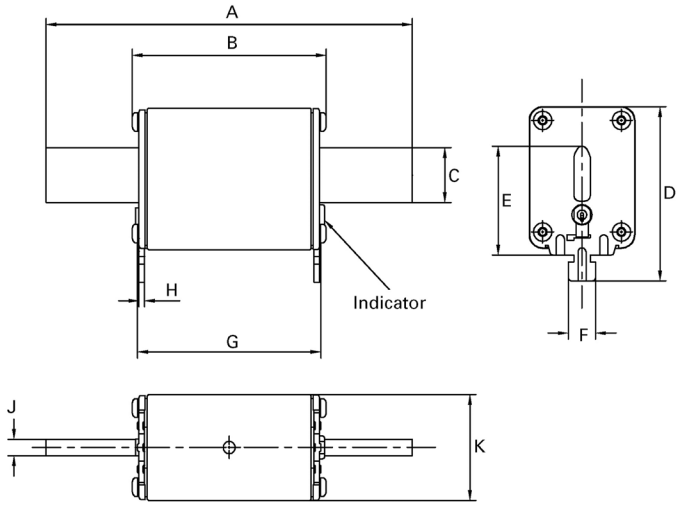
### Operating class

- gR (size 000, 10-63 A)
- aR (others)

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CSA Class 1422-30, (53787) with the exception of catalog number 170M4867D
- CE

### Dimensions — mm




| Size | A | B | C | D | E | F | G | H | J | K |
|---|---|---|---|---|---|---|---|---|---|---|
| 000 | 78.5 | 53.0 | 15.0 | 52 | 35 | 10 | 49.7 | 1.5 | 6 | 20.5 |
| 00 | 78.5 | 53.0 | 15.0 | 59 | 35 | 10 | 49.7 | 2.0 | 6 | 30.0 |
| 1 | 135.0 | 71.4 | 20.0 | 64 | 40 | 10 | 67.5 | 2.0 | 6 | 40.0 |
| 2 | 150.0 | 71.4 | 25.1 | 72 | 48 | 10 | 67.5 | 2.0 | 6 | 54.0 |
| 3 | 150.0 | 72.4 | 32.0 | 87 | 60 | 10 | 68.5 | 2.5 | 6 | 71.0 |

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6386 (Size 000 and 00), 170K6388 (Size 1), 170K6390 (Size 2), 170K6392 (Size 3)

## 170M — Square Body size 000 to 3, DIN 43620, dual indicator fuses

### 690 Vac (IEC), 700 Vac (UL), 10 to 1600 A

| Fuse size | Rated voltage | Rated current (amps) | Max permissible load current | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at 690 Vac | Watts loss (W)[3] | Catalog no. |
|---|---|---|---|---|---|---|---|
| 000 | 690 Vac (IEC) 700 Vac (UL) | 10 | 10 | 4 | 27 | 2.5 | 170M1558D |
| | | 16 | 16 | 7 | 51 | 4 | 170M1559D |
| | | 20 | 20 | 11.5 | 82.5 | 5 | 170M1560D |
| | | 25 | 25 | 19 | 140 | 6 | 170M1561D |
| | | 32 | 32 | 40 | 285 | 7 | 170M1562D |
| | | 40 | 40 | 65 | 490 | 8.5 | 170M1563D |
| | | 50 | 50 | 115 | 815 | 9.5 | 170M1564D |
| | | 63 | 63 | 215 | 1550 | 11.5 | 170M1565D |
| | | 80 | 80 | 380 | 2700 | 15 | 170M1566D |
| | | 100 | 100 | 695 | 4950 | 16.5 | 170M1567D |
| | | 125 | 125 | 1180 | 8250 | 21.5 | 170M1568D |
| | | 160 | 160 | 2300 | 16,500 | 25 | 170M1569D |
| | | 200 | 200 | 4350 | 31,000 | 29.5 | 170M1570D |
| | | 250 | 250 | 7900 | 56,000 | 35.5 | 170M1571D |
| 00 | 690 Vac (IEC) /700 Vac (UL) | 315 | 315 | 12,000 | 84,500 | 45 | 170M1572D |
| 1 | 690 Vac (IEC) 700 Vac (UL) | 40 | 25 | 40 | 285 | 4 | 170M3808D |
| | | 50 | 30 | 78 | 550 | 4.5 | 170M3809D |
| | | 63 | 38 | 120 | 850 | 6.5 | 170M3810D |
| | | 80 | 50 | 185 | 1350 | 8.5 | 170M3811D |
| | | 100 | 60 | 360 | 2600 | 10 | 170M3812D |
| | | 125 | 75 | 550 | 3900 | 11 | 170M3813D |
| | | 160 | 95 | 1150 | 8250 | 12 | 170M3814D |
| | | 200 | 120 | 2300 | 16,500 | 12.5 | 170M3815D |
| | | 250 | 150 | 4350 | 31,000 | 16 | 170M3816D |
| | | 315 | 190 | 7300 | 52,000 | 20 | 170M3817D |
| | | 350 | 210 | 10,000 | 73,000 | 21.5 | 170M3818D |
| | | 400 | 240 | 16,000 | 115,000 | 23 | 170M3819D |
| | | 450 | 270 | 21,500 | 155,000 | 26.5 | 170M4863D |
| | | 500 | 300 | 27,000 | 190,000 | 28.5 | 170M4864D |
| | | 550 | 330 | 33,500 | 240,000 | 33 | 170M4865D |
| | | 630 | 380 | 48,500 | 345,000 | 37.5 | 170M4866D |
| | | 700 | 420 | 69,500 | 495,000 | 39 | 170M4867D[1] |
| 2 | 690 Vac (IEC) 700 Vac (UL) | 400 | 240 | 11,000 | 79,000 | 29 | 170M5808D |
| | | 450 | 270 | 16,000 | 115,000 | 32 | 170M5809D |
| | | 500 | 300 | 21,500 | 155,000 | 34 | 170M5810D |
| | | 550 | 330 | 29,000 | 215,000 | 36 | 170M5811D |
| | | 630 | 380 | 41,000 | 295,000 | 42 | 170M5812D |
| | | 700 | 420 | 60,500 | 430,000 | 43 | 170M5813D |
| | | 800 | 480 | 86,000 | 610,000 | 48 | 170M5814D |
| | | 900 | 540 | 125,000 | 895,000 | 52 | 170M5820D |
| | | 1000 | 600 | 180,000 | 1,300,000 | 53 | 170M5816D |
| | | 1100 | 660 | 245,000 | 1,750,000 | 56 | 170M5817D |
| 3 | 690 Vac (IEC) 700 Vac (UL) | 500 | 300 | 14,000 | 99,500 | 43 | 170M6808D |
| | | 550 | 330 | 19,500 | 140,000 | 44 | 170M6809D |
| | | 630 | 380 | 31,000 | 220,000 | 45 | 170M6810D |
| | | 700 | 420 | 45,000 | 320,000 | 46 | 170M6811D |
| | | 800 | 480 | 69,500 | 490,000 | 48 | 170M6812D |
| | | 900 | 540 | 100,000 | 720,000 | 50 | 170M6813D |
| | | 1000 | 600 | 140,000 | 985,000 | 56 | 170M6814D |
| | | 1100 | 660 | 190,000 | 1,400,000 | 57 | 170M6892D |
| | | 1250 | 750 | 300,000 | 2,150,000 | 61 | 170M8554D |
| | | 1400 | 840 | 380,000 | 2,700,000 | 70 | 170M8555D |
| | | 1500 | 900 | 470,000 | 3,350,000 | 72 | 170M8556D |
| | | 1600 | 960 | 585,000 | 4,150,000 | 74 | 170M8557D |

1 170M4867D is not UL Recognized.
3 Given at maximum load rated current, please refer to data sheets for further details.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6386 (Size 000 and 00), 170K6388 (Size 1), 170K6390 (Size 2), 170K6392 (Size 3)

# 170M — Square Body size 00, DIN 43620

## 1000 Vac (IEC and UL), 20 to 225 A




Square body DIN 43620 blade style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Fuses come with Type T indicator for microswitches.

### Ratings

- Volts
  - 1000 Vac (IEC and UL)
  - 900 Vac (200 and 225 A)
- Amps 20-225 A
- IR 125 kA RMS Sym.

### Operating class aR

### Agency information

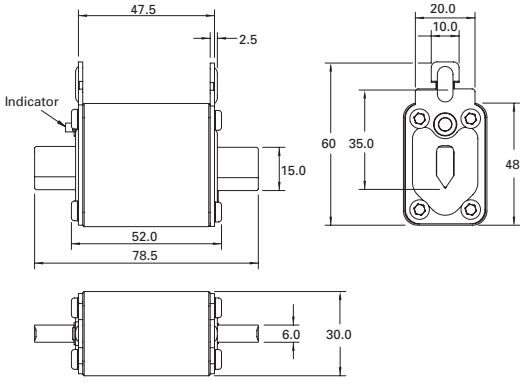
- Designed and tested to IEC 60269 Part 4
- UL Recognized (20-160 A)
- CSA (20-160 A)
- CE



| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. with Type T indicator for microswitch |
|---|---|---|---|---|---|---|
| 00 | 1000 Vac (IEC/UL) | 20 | 15 | 110 | 8.5 | 170M2673 |
| | | 25 | 28.5 | 210 | 9.5 | 170M2674 |
| | | 32 | 53 | 390 | 11 | 170M2675 |
| | | 35 | 69 | 500 | 12 | 170M2676 |
| | | 40 | 105 | 760 | 13 | 170M2677 |
| | | 50 | 215 | 1550 | 14 | 170M2678 |
| | | 63 | 380 | 2750 | 16 | 170M2679 |
| | | 80 | 815 | 5900 | 18 | 170M2680 |
| | | 100 | 1550 | 11,500 | 21 | 170M2681 |
| | | 125 | 3000 | 22,000 | 23 | 170M2682 |
| | | 160 | 6250 | 45,000 | 26 | 170M2683 |
| 00 | 900 Vac (IEC) | 200 | 12,000 | 86,500 | 31 | 170M2684 |
| | | 225 | 18,000 | 115,000 | 33 | 170M2685 |

* Watts loss at rated current.

### Dimensions — mm




For details on electrical characteristics, contact Application Engineering and ask for Data sheet no. 170K8506

## 170M — Square Body size 1* to 3, French style

### 690 Vac (IEC), 700 Vac (UL), 40 to 1600 A




Square body French style high speed fuses for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Available with Type T or K indicators for microswitches.

### Ratings

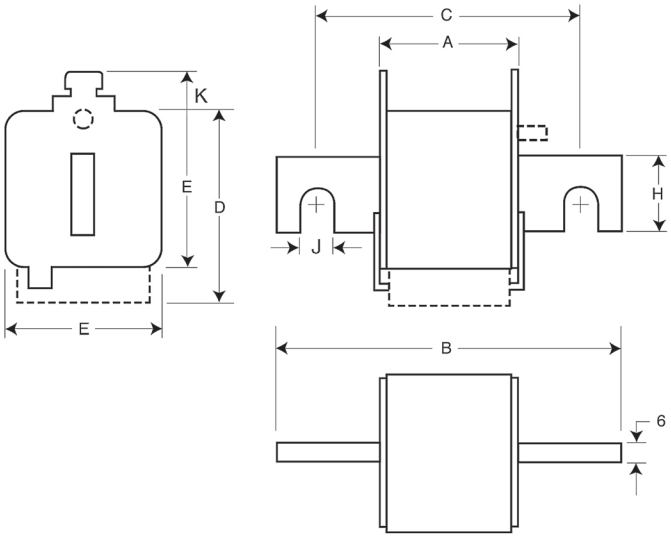
- Volts
  - 690 Vac (IEC)
  - 700 Vac (UL)
- Amps 40-1600 A
- IR 200 kA RMS Sym.

### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CSA Class 1422-30, (53787) on sizes (1, 2, 3) only
- CCC (please consult bulehighspeedtechnical@eaton.com for status)
- CE

### Dimensions — mm




### Type -E/-, -EKN/-

| Size | A | B | C | D | E | H | J | K |
|---|---|---|---|---|---|---|---|---|
| 1* | 50 | 102 | 76 | 59 | 45 | 18 | 9 | 13 |
| 1 | 50 | 111 | 86 | 69 | 53 | 25 | 11 | 11 |
| 2 | 50 | 126 | 91 | 77 | 61 | 30 | 13 | 12 |
| 3 | 51 | 126 | 91 | 92 | 76 | 36 | 13 | 13 |

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

## 170M —Square Body size 1* to 3, French style

### 690 Vac (IEC), 700 Vac (UL), 40 to 1600 A

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 660 Vac | Watts loss (W)* | Catalog no. -E/- Type T indicator for microswitch | Catalog no. -EKN/- Type K indicator for microswitch |
|---|---|---|---|---|---|---|---|
| 1* | 690 Vac (IEC) 700 Vac (UL) | 40 | 40 | 270 | 9 | 170M3308 | 170M3358 |
| | | 50 | 77 | 515 | 11 | 170M3309 | 170M3359 |
| | | 63 | 115 | 770 | 14 | 170M3310 | 170M3360 |
| | | 80 | 185 | 1250 | 18 | 170M3311 | 170M3361 |
| | | 100 | 360 | 2450 | 21 | 170M3312 | 170M3362 |
| | | 125 | 550 | 3700 | 26 | 170M3313 | 170M3363 |
| | | 160 | 1100 | 7500 | 30 | 170M3314 | 170M3364 |
| | | 200 | 2200 | 15,000 | 35 | 170M3315 | 170M3365 |
| | | 250 | 4200 | 28,500 | 40 | 170M3316 | 170M3366 |
| | | 315 | 7000 | 46,500 | 50 | 170M3317 | 170M3367 |
| | | 350 | 10,000 | 68,500 | 55 | 170M3318 | 170M3368 |
| | | 400 | 15,000 | 105,000 | 60 | 170M3319 | 170M3369 |
| | | 450 | 21,000 | 140,000 | 65 | 170M3320 | 170M3370 |
| | | 500 | 27,000 | 180,000 | 70 | 170M3321 | 170M3371 |
| 1 | 690 Vac (IEC) 700 Vac (UL) | 200 | 1650 | 11,500 | 45 | 170M4308 | 170M4358 |
| | | 250 | 3100 | 21,000 | 55 | 170M4309 | 170M4359 |
| | | 315 | 6200 | 42,000 | 58 | 170M4310 | 170M4360 |
| | | 350 | 8500 | 59,000 | 60 | 170M4311 | 170M4361 |
| | | 400 | 13,500 | 91,500 | 65 | 170M4312 | 170M4362 |
| | | 450 | 17,000 | 120,000 | 70 | 170M4313 | 170M4363 |
| | | 500 | 25,000 | 170,000 | 72 | 170M4314 | 170M4364 |
| | | 550 | 34,000 | 230,000 | 75 | 170M4315 | 170M4365 |
| | | 630 | 52,000 | 350,000 | 80 | 170M4316 | 170M4366 |
| | | 700 | 69,500 | 465,000 | 85 | 170M4317 | 170M4367 |
| | | 800 | 105,000 | 725,000 | 95 | 170M4318 | 170M4368 |
| 2 | 690 Vac (IEC) 700 Vac (UL) | 400 | 11,000 | 74,000 | 65 | 170M5308 | 170M5358 |
| | | 450 | 15,500 | 105,000 | 70 | 170M5309 | 170M5359 |
| | | 500 | 21,500 | 145,000 | 75 | 170M5310 | 170M5360 |
| | | 550 | 28,000 | 190,000 | 80 | 170M5311 | 170M5361 |
| | | 630 | 41,000 | 275,000 | 90 | 170M5312 | 170M5362 |
| | | 700 | 60,500 | 405,000 | 95 | 170M5313 | 170M5363 |
| | | 800 | 86,000 | 575,000 | 105 | 170M5314 | 170M5364 |
| | | 900 | 125,000 | 840,000 | 110 | 170M5315 | 170M5365 |
| | | 1000 | 180,000 | 1,250,000 | 115 | 170M5316 | 170M5366 |
| 3 | 690 Vac (IEC) 700 Vac (UL) | 500 | 14,000 | 95,000 | 95 | 170M6308 | 170M6358 |
| | | 550 | 19,500 | 135,000 | 100 | 170M6309 | 170M6359 |
| | | 630 | 31,000 | 210,000 | 105 | 170M6310 | 170M6360 |
| | | 700 | 44,500 | 300,000 | 110 | 170M6311 | 170M6361 |
| | | 800 | 69,500 | 465,000 | 115 | 170M6312 | 170M6362 |
| | | 900 | 100,000 | 670,000 | 120 | 170M6313 | 170M6363 |
| | | 1000 | 140,000 | 945,000 | 125 | 170M6314 | 170M6364 |
| | | 1100 | 190,000 | 1,300,000 | 130 | 170M6315 | 170M6365 |
| | | 1250 | 290,000 | 1,950,000 | 140 | 170M6316 | 170M6366 |
| | | 1400 | 370,000 | 2,450,000 | 155 | 170M6317 | 170M6367 |
| | | 1500 | 460,000 | 3,100,000 | 160 | 170M6318 | 170M6368 |
| | | 1600 | 580,000 | 3,900,000 | 160 | 170M6319 | 170M6369 |

* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

## 170M — Square Body size 1* to 3, US style

### 690 Vac (IEC), 700 Vac (UL), 40 to 2000 A




Square body US style bolted tags high speed fuses for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters. Available with Type K indicator for a microswitch.

### Ratings

- Volts see catalog numbers table
- Amps 40-2000 A
- IR 200 kA RMS Sym.

### Operating class aR

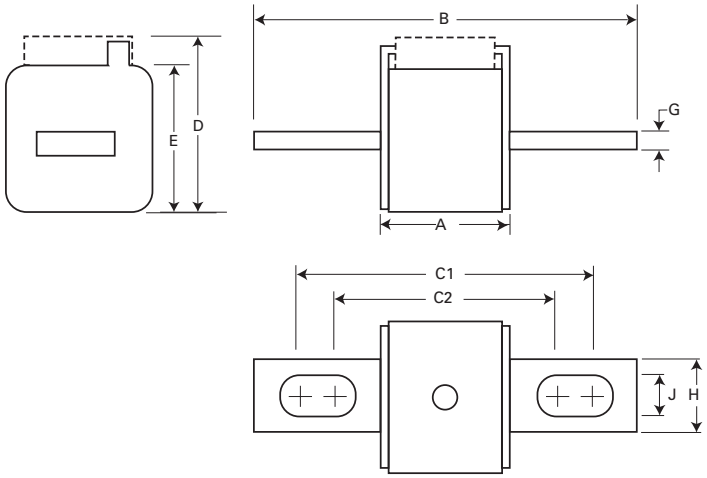
### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2*, E125085
- CSA Class 53787, File 1422-30*
- CCC*
- CE

* Consult your Bussmann series product representative for status.

### Dimensions — mm

1mm = 0.0394″




**Type -FU/-, -FKE/-, FU/115-, -FKE/115**

| Size | A | B | B1 | C1 | C1† | C2 | C2† | D | E | G | H | J |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1* | 50 | 110 | 148 | 85 | 123 | 72 | 110 | 59 | 45 | 6 | 20 | 10 |
| 1 | 50 | 136 | 157 | 104 | 126 | 78 | 100 | 69 | 53 | 6 | 25 | 14 |
| 2 | 50 | 135 | 159 | 105 | 125 | 78 | 99 | 77 | 61 | 6 | 25 | 14 |
| 3 | 51 | 135 | 155 | 106 | 125 | 77 | 97 | 92 | 76 | 6 | 36 | 16 |

† Valid for fuss types -FU/115 and -FKE/115.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

## 170M — Square Body size 1* to 3, US style

### 690 Vac (IEC), 700 Vac (UL), 40 to 2000 A

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 660 Vac | Watts loss (W)* | Catalog no. -FU/- without indicator | Catalog no. -FKE/- Type K indicator for microswitch | Catalog no. -FU/115 without indicator | Catalog no. -FKE/115 Type K indicator for microswitch |
|---|---|---|---|---|---|---|---|---|---|
| 1* | 690 Vac (IEC) 700 Vac (UL) | 40 | 40 | 270 | 9 | 170M3608 | 170M3658 | 170M3708 | 170M3758 |
| | | 50 | 70 | 515 | 11 | 170M3609 | 170M3659 | 170M3709 | 170M3759 |
| | | 63 | 115 | 770 | 14 | 170M3610 | 170M3660 | 170M3710 | 170M3760 |
| | | 80 | 185 | 1250 | 18 | 170M3611 | 170M3661 | 170M3711 | 170M3761 |
| | | 100 | 360 | 2450 | 21 | 170M3612 | 170M3662 | 170M3712 | 170M3762 |
| | | 125 | 550 | 3700 | 26 | 170M3613 | 170M3663 | 170M3713 | 170M3763 |
| | | 160 | 1100 | 7500 | 30 | 170M3614 | 170M3664 | 170M3714 | 170M3764 |
| | | 200 | 2200 | 15,000 | 35 | 170M3615 | 170M3665 | 170M3715 | 170M3765 |
| | | 250 | 4200 | 28,500 | 40 | 170M3616 | 170M3666 | 170M3716 | 170M3766 |
| | | 315 | 7000 | 46,500 | 50 | 170M3617 | 170M3667 | 170M3717 | 170M3767 |
| | | 350 | 10,000 | 68,500 | 55 | 170M3618 | 170M3668 | 170M3718 | 170M3768 |
| | | 400 | 15,000 | 105,000 | 60 | 170M3619 | 170M3669 | 170M3719 | 170M3769 |
| | | 450 | 21,000 | 140,000 | 65 | 170M3620 | 170M3670 | 170M3720 | 170M3770 |
| | | 500 | 27,000 | 180,000 | 70 | 170M3621 | 170M3671 | 170M3721 | 170M3771 |
| | | 550 | 34,000 | 230,000 | 75 | 170M3622 | 170M3672 | 170M3722 | 170M3772 |
| | | 630 | 48,500 | 325,000 | 80 | 170M3623 | 170M3673 | 170M3723 | 170M3773 |
| 1 | 690 Vac (IEC) 700 Vac (UL) | 200 | 1650 | 11,500 | 45 | 170M4608 | 170M4658 | 170M4708 | 170M4758 |
| | | 250 | 3100 | 21,000 | 55 | 170M4609 | 170M4659 | 170M4709 | 170M4759 |
| | | 315 | 6200 | 42,000 | 58 | 170M4610 | 170M4660 | 170M4710 | 170M4760 |
| | | 350 | 8500 | 59,000 | 60 | 170M4611 | 170M4661 | 170M4711 | 170M4761 |
| | | 400 | 13,500 | 91,500 | 65 | 170M4612 | 170M4662 | 170M4712 | 170M4762 |
| | | 450 | 17,000 | 120,000 | 70 | 170M4613 | 170M4663 | 170M4713 | 170M4763 |
| | | 500 | 25,000 | 170,000 | 72 | 170M4614 | 170M4664 | 170M4714 | 170M4764 |
| | | 550 | 34,000 | 230,000 | 75 | 170M4615 | 170M4665 | 170M4715 | 170M4765 |
| | | 630 | 52,000 | 350,000 | 80 | 170M4616 | 170M4666 | 170M4716 | 170M4766 |
| | | 700 | 69,500 | 465,000 | 85 | 170M4617 | 170M4667 | 170M4717 | 170M4767 |
| | | 800 | 105,000 | 725,000 | 95 | 170M4618 | 170M4668 | 170M4718 | 170M4768 |
| | 550 Vac (IEC) | 900 | 155,000 | 850,000 | 100 | 170M4619 | 170M4669 | 170M4719 | 170M4769 |
| 2 | 690 Vac (IEC) 700 Vac (UL) | 400 | 11,000 | 74,000 | 65 | 170M5608 | 170M5658 | 170M5708 | 170M5758 |
| | | 450 | 15,500 | 105,000 | 70 | 170M5609 | 170M5659 | 170M5709 | 170M5759 |
| | | 500 | 21,500 | 145,000 | 75 | 170M5610 | 170M5660 | 170M5710 | 170M5760 |
| | | 550 | 28,000 | 190,000 | 80 | 170M5611 | 170M5661 | 170M5711 | 170M5761 |
| | | 630 | 41,000 | 275,000 | 90 | 170M5612 | 170M5662 | 170M5712 | 170M5762 |
| | | 700 | 60,500 | 405,000 | 95 | 170M5613 | 170M5663 | 170M5713 | 170M5763 |
| | | 800 | 86,000 | 575,000 | 105 | 170M5614 | 170M5664 | 170M5714 | 170M5764 |
| | | 900 | 125,000 | 840,000 | 110 | 170M5615 | 170M5665 | 170M5715 | 170M5765 |
| | | 1000 | 180,000 | 1,250,000 | 115 | 170M5616 | 170M5666 | 170M5716 | 170M5766 |
| | 600 Vac (IEC) 700 Vac (UL) | 1100 | 245,000 | 1,600,000 | 120 | 170M5617 | 170M5667 | 170M5717 | 170M5767 |
| | | 1250 | 365,000 | 2,400,000 | 130 | 170M5618 | 170M5668 | 170M5718 | 170M5768 |
| 3 | 690 Vac (IEC) 700 Vac (UL) | 500 | 14,000 | 95,000 | 95 | 170M6608 | 170M6658 | 170M6708 | 170M6758 |
| | | 550 | 19,500 | 135,000 | 100 | 170M6609 | 170M6659 | 170M6709 | 170M6759 |
| | | 630 | 31,000 | 210,000 | 105 | 170M6610 | 170M6660 | 170M6710 | 170M6760 |
| | | 700 | 44,500 | 300,000 | 110 | 170M6611 | 170M6661 | 170M6711 | 170M6761 |
| | | 800 | 69,500 | 465,000 | 115 | 170M6612 | 170M6662 | 170M6712 | 170M6762 |
| | | 900 | 100,000 | 670,000 | 120 | 170M6613 | 170M6663 | 170M6713 | 170M6763 |
| | | 1000 | 140,000 | 945,000 | 125 | 170M6614 | 170M6664 | 170M6714 | 170M6764 |
| | | 1100 | 190,000 | 1,300,000 | 130 | 170M6615 | 170M6665 | 170M6715 | 170M6765 |
| | | 1250 | 290,000 | 1,950,000 | 140 | 170M6616 | 170M6666 | 170M6716 | 170M6766 |
| | | 1400 | 370,000 | 2,450,000 | 155 | 170M6617 | 170M6667 | 170M6717 | 170M6767 |
| | | 1500 | 460,000 | 3,100,000 | 160 | 170M6618 | 170M6668 | 170M6718 | 170M6768 |
| | | 1600 | 580,000 | 3,900,000 | 160 | 170M6619 | 170M6669 | 170M6719 | 170M6769 |
| | 600 Vac (IEC) 500 Vac (UL) | 1800 | 880,000 | 5,250,000 | 165 | 170M6620 | 170M6670[1] | 170M6720 | 170M6770 |
| | 550 Vac (IEC) 500 Vac (UL) | 2000 | 1,150,000 | 6,350,000 | 175 | 170M6621 | 170M6671[2] | 170M6721 | 170M6771 |

* Watts loss at rated current.
1 170M6670 600 Vac (IEC)/550 Vac.
2 170M6671 550 Vac (IEC and UL).

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

## 170M — Square Body size 1* to 3, US style

### 1000 Vac (IEC), 50 to 1400 A




Square body US style bolted tags high speed fuses for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters. Fuses come with Type K indicator for microswitches.

### Ratings

- Volts 1000 Vac (IEC) (1400 A 900 Vac)
- Amps 50-1400 A
- IR 125 kA RMS Sym.

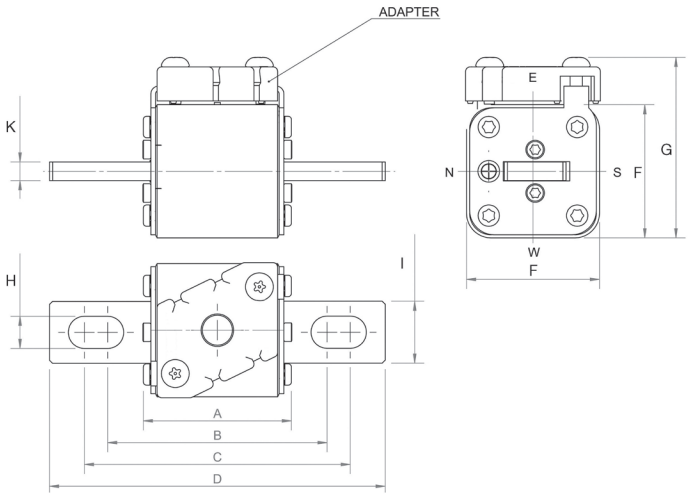
### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085 for size 2 and 3 (315-1100 A)
- CSA Class 53787, File 1422-30 for size 2 and 3 (315-1100 A)
- CCC approval for size 2 only
- CE

### Dimensions — mm

1mm = 0.0394”




| Size | A | B | C | D | F | G | H | I | K |
|---|---|---|---|---|---|---|---|---|---|
| 1*FKE/115 | 74 | 101.0 | 130.0 | 156 | 43 | 60 | 10.4 | 20 | 6 |
| 1FKE/115 | 76 | 102.0 | 128.0 | 160 | 51 | 68 | 14.3 | 25 | 6 |
| 2FKE/115 | 76 | 101.1 | 127.5 | 160 | 59 | 76 | 14.4 | 25 | 6 |
| 3FKE/115 | 76 | 101.1 | 127.5 | 158 | 74 | 91 | 16.0 | 36 | 6 |

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

## 170M — Square Body size 1* to 3, US style, 170M

### 1000 Vac (IEC), 50 to 1400 A

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. for -FKE/115 Type K indicator for microswitch |
|---|---|---|---|---|---|---|
| 1* | 1000 Vac (IEC) | 50 | 135 | 815 | 20 | 170M3531 |
| | | 63 | 215 | 1300 | 25 | 170M3532 |
| | | 80 | 460 | 2750 | 30 | 170M3533 |
| | | 100 | 860 | 5100 | 35 | 170M3534 |
| | | 125 | 1450 | 8600 | 40 | 170M3535 |
| | | 160 | 2850 | 17,500 | 45 | 170M3536 |
| | | 200 | 4950 | 29,500 | 50 | 170M3537 |
| | | 250 | 9550 | 57,000 | 55 | 170M3538 |
| | | 315 | 21,500 | 130,000 | 65 | 170M3539 |
| | | 350 | 29,000 | 175,000 | 70 | 170M3540 |
| | | 400 | 42,000 | 250,000 | 75 | 170M3541 |
| 1 | 1000 Vac (IEC) | 160 | 2200 | 13,500 | 40 | 170M4531 |
| | | 200 | 4150 | 24,500 | 50 | 170M4532 |
| | | 250 | 7750 | 46,000 | 55 | 170M4533 |
| | | 315 | 16,500 | 98,500 | 65 | 170M4534 |
| | | 350 | 21,500 | 130,000 | 70 | 170M4535 |
| | | 400 | 31,000 | 185,000 | 75 | 170M4536 |
| | | 450 | 44,500 | 265,000 | 80 | 170M4537 |
| | | 500 | 63,000 | 375,000 | 85 | 170M4538 |
| | | 550 | 84,500 | 500,000 | 90 | 170M4539 |
| | | 630 | 125,000 | 755,000 | 98 | 170M4540 |
| 2 | 1000 Vac (IEC/UL) | 250 | 6750 | 40,000 | 65 | 170M5531 |
| | | 315 | 13,500 | 81,500 | 75 | 170M5532 |
| | | 350 | 16,500 | 99,000 | 80 | 170M5533 |
| | | 400 | 26,000 | 155,000 | 85 | 170M5534 |
| | | 450 | 35,500 | 210,000 | 90 | 170M5535 |
| | | 500 | 49,500 | 295,000 | 95 | 170M5536 |
| | | 550 | 66,000 | 390,000 | 100 | 170M5337 |
| | | 630 | 93,500 | 555,000 | 110 | 170M5538 |
| | | 700 | 130,000 | 770,000 | 115 | 170M5539 |
| | | 800 | 195,000 | 1,200,000 | 125 | 170M5540 |
| 3 | 1000 Vac (IEC/UL) | 315 | 9200 | 54,500 | 90 | 170M8531 |
| | | 350 | 13,000 | 77,500 | 95 | 170M8532 |
| | | 400 | 19,000 | 115,000 | 105 | 170M8533 |
| | | 450 | 27,000 | 160,000 | 107 | 170M8534 |
| | | 500 | 37,500 | 225,000 | 110 | 170M8535 |
| | | 550 | 52,000 | 310,000 | 115 | 170M8536 |
| | | 630 | 82,500 | 490,000 | 120 | 170M8537 |
| | | 700 | 115,000 | 700,000 | 125 | 170M8538 |
| | | 800 | 170,000 | 1,050,000 | 135 | 170M8539 |
| | | 900 | 250,000 | 1,500,000 | 145 | 170M8540 |
| | | 1000 | 340,000 | 2,050,000 | 150 | 170M8541 |
| | | 1100 | 460,000 | 2,750,000 | 155 | 170M8542 |
| | 1000 Vac (IEC) | 1250 | 575,000 | 3,400,000 | 175 | 170M8543 |
| | 900 Vac (IEC) | 1400 | 795,000 | 4,200,000 | 185 | 170M8544 |

* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

## 170M — Square Body size 1* to 3, US style

### 1250 Vac (IEC), 1300 Vac (UL), 50 to 1400 A




Square body US style bolted tags high speed fuses for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters. Available with Type K indicator for microswitches.

### Ratings

- Volts
  - 1250 Vac (IEC)
  - 1300 Vac (UL)
- Amps 50-1400 A
- IR 100 kA RMS Sym.

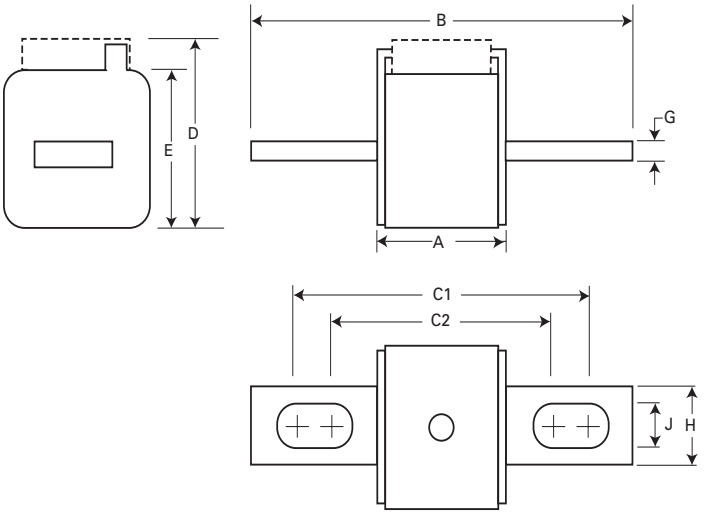
### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized†
- CSA†
- CCC†
- CE

† Consult your Bussmann series product representative for status.

### Dimensions — mm




### Type-FU/115,-FKE/115

| Size | A | B | C1 | C2 | D | E | G | H | J |
|---|---|---|---|---|---|---|---|---|---|
| 1* | 74 | 156 | 130 | 101 | 59 | 45 | 6 | 20 | 10 |
| 1 | 76 | 160 | 127 | 102 | 69 | 53 | 6 | 25 | 14 |
| 2 | 76 | 160 | 127 | 102 | 77 | 61 | 6 | 25 | 14 |
| 3 | 76 | 159 | 128 | 101 | 92 | 76 | 6 | 36 | 16 |

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

## 170M — Square Body size 1* to 3, US style

### 1250 Vac (IEC), 1300 Vac (UL), 50 to 1400 A

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | I²t (A²s) Clearing at 1250 Vac | Watts loss (W)* | Catalog no. -FU/115 without indicator | Catalog no. -FKE/115 Type K indicator for microswitch |
|---|---|---|---|---|---|---|---|---|
| 1* | 1250 Vac (IEC) 1300 Vac (UL) | 50 | 135 | 815 | 1100 | 15 | 170M3688 | 170M3738 |
| | | 63 | 215 | 1300 | 1750 | 20 | 170M3689 | 170M3739 |
| | | 80 | 420 | 2500 | 3350 | 25 | 170M3690 | 170M3740 |
| | | 100 | 750 | 4450 | 5950 | 30 | 170M3691 | 170M3741 |
| | | 125 | 1450 | 9000 | 11,500 | 35 | 170M3692 | 170M3742 |
| | | 160 | 2600 | 16,000 | 21,000 | 40 | 170M3693 | 170M3743 |
| | | 200 | 5150 | 31,000 | 41,000 | 45 | 170M3694 | 170M3744 |
| | | 250 | 9200 | 54,500 | 73,000 | 55 | 170M3695 | 170M3745 |
| | | 315 | 18,500 | 115,000 | 150,000 | 60 | 170M3696 | 170M3746 |
| | | 350 | 27,000 | 165,000 | 220,000 | 65 | 170M3697 | 170M3747 |
| 1 | 1250 Vac (IEC) 1300 Vac (UL) | 160 | 1900 | 11,500 | 15,500 | 45 | 170M4688 | 170M4738 |
| | | 200 | 3800 | 22,500 | 30,000 | 50 | 170M4689 | 170M4739 |
| | | 250 | 7750 | 46,000 | 61,500 | 60 | 170M4690 | 170M4740 |
| | | 315 | 15,000 | 90,000 | 120,000 | 65 | 170M4691 | 170M4741 |
| | | 350 | 20,000 | 125,000 | 165,000 | 70 | 170M4692 | 170M4742 |
| | | 400 | 29,500 | 175,000 | 235,000 | 75 | 170M4693 | 170M4743 |
| | | 450 | 42,000 | 250,000 | 335,000 | 80 | 170M4694 | 170M4744 |
| | 1100 Vac IEC | 500 | 69,500 | 340,000 | N/A | 85 | 170M4695 | 170M4745 |
| | | 550 | 95,000 | 465,000 | N/A | 95 | 170M4696 | 170M4746 |
| | 1000 Vac IEC | 630 | 130,000 | 660,000 | N/A | 100 | 170M4697 | 170M4747 |
| 2 | 1250 Vac (IEC) 1300 Vac (UL) | 250 | 6500 | 38,500 | 51,500 | 65 | 170M5688 | 170M5738 |
| | | 280 | 9350 | 55,500 | 74,500 | 70 | 170M5689 | 170M5739 |
| | | 315 | 13,000 | 77,500 | 105,000 | 75 | 170M5690 | 170M5740 |
| | | 350 | 16,500 | 97,500 | 135,000 | 80 | 170M5691 | 170M5741 |
| | | 400 | 23,000 | 140,000 | 180,000 | 85 | 170M5692 | 170M5742 |
| | | 450 | 34,000 | 205,000 | 270,000 | 90 | 170M5693 | 170M5743 |
| | | 500 | 48,000 | 285,000 | 380,000 | 95 | 170M5694 | 170M5744 |
| | | 550 | 62,000 | 370,000 | 495,000 | 100 | 170M5695 | 170M5745 |
| | | 630 | 115,000 | 575,000 | 730,000 | 120 | 170M5696 | 170M5746 |
| | 1100 Vac IEC | 700 | 160,000 | 795,000 | N/A | 125 | 170M5697 | 170M5747 |
| | | 800 | 245,000 | 1,200,000 | N/A | 130 | 170M5698 | 170M5748 |
| | 1000 Vac IEC | 900 | 360,000 | 1,750,000 | N/A | 135 | 170M5699 | 170M5749 |
| | | 1000 | 480,000 | 2,350,000 | N/A | 145 | 170M5700 | 170M5750 |
| 3 | 1250 Vac (IEC) 1300 Vac (UL) | 315 | 9500 | 58,000 | 77,500 | 85 | 170M6688 | 170M6738 |
| | | 350 | 13,500 | 81,500 | 110,000 | 90 | 170M6689 | 170M6739 |
| | | 400 | 19,000 | 120,000 | 160,000 | 95 | 170M6690 | 170M6740 |
| | | 450 | 31,000 | 185,000 | 245,000 | 100 | 170M6691 | 170M6741 |
| | | 500 | 39,000 | 235,000 | 310,000 | 105 | 170M6692 | 170M6742 |
| | | 550 | 55,000 | 325,000 | 435,000 | 110 | 170M6693 | 170M6743 |
| | | 630 | 83,500 | 495,000 | 665,000 | 115 | 170M6694 | 170M6744 |
| | | 700 | 115,000 | 705,000 | 940,000 | 120 | 170M6695 | 170M6745 |
| | 1250 Vac (IEC) | 800 | 205,000 | 995,000 | 1,300,000 | 125 | 170M6696 | 170M6746 |
| | | 900 | 305,000 | 1,500,000 | 1,900,000 | 130 | 170M6697 | 170M6747 |
| | 1100 Vac (IEC) 1000 Vac (UL) | 1000 | 450,000 | 2,150,000 | N/A | 135 | 170M6698 | 170M6748 |
| | | 1100 | 575,000 | 2,800,000 | N/A | 160 | 170M6699 | 170M6749 |
| | 1000 Vac (IEC/UL) | 1250 | 810,000 | 3,950,000 | N/A | 170 | 170M6700 | 170M6750 |
| | | 1400 | 1,250,000 | 6,000,000 | N/A | 175 | 170M6701 | 170M6751 |

* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

## 170M — Square Body size 00, flush-end contact

### 690 Vac, 25 to 400 A




Square body flush-end contact high speed fuses, for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Catalog numbers available with visual indicator and Type T indicator for a microswitch.

### Ratings

- Volts 690 Vac (IEC)
- Amps 25-400 A
- IR 200 kA RMS Sym.

### Operating class

- gR (25-80 A)
- aR (100-400 A)

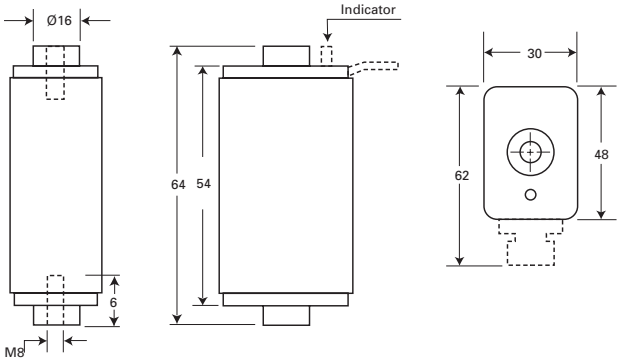
### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CSA Class 53787, File 1422-30 on size 000
- CE

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 660 Vac | Watts loss (W)* | Catalog no. 00B/60 visual indicator | Catalog no. 00BTN/60 Type T indicator for microswitch |
|---|---|---|---|---|---|---|---|
| 00 | 690 Vac (IEC) | 25 | 19.0 | 130 | 6 | 170M2708 | 170M2758 |
| | | 32 | 28.5 | 195 | 7 | 170M2709 | 170M2759 |
| | | 40 | 50.0 | 360 | 9 | 170M2710 | 170M2760 |
| | | 50 | 95.0 | 640 | 10 | 170M2711 | 170M2761 |
| | | 63 | 170.0 | 1200 | 12 | 170M2712 | 170M2762 |
| | | 80 | 310.0 | 2100 | 15 | 170M2713 | 170M2763 |
| | | 100 | 620.0 | 4150 | 20 | 170M2714 | 170M2764 |
| | | 125 | 1000.0 | 6950 | 25 | 170M2715 | 170M2765 |
| | | 160 | 1900.0 | 13,000 | 30 | 170M2716 | 170M2766 |
| | | 200 | 3400.0 | 23,000 | 35 | 170M2717 | 170M2767 |
| | | 250 | 6250.0 | 42,000 | 45 | 170M2718 | 170M2768 |
| | | 315 | 10,000.0 | 68,500 | 55 | 170M2719 | 170M2769 |
| | | 350 | 13,500.0 | 91,500 | 60 | 170M2720 | 170M2770 |
| | | 400 | 18,000.0 | 125,000 | 70 | 170M2721 | 170M2771 |

* Watts loss at rated current.

### Dimensions — mm




For details on electrical characteristics, contact Application Engineering and ask for Data sheet no. 170K6312

# 170M — Square Body size 1* to 3, flush-end contact

## 690 Vac (IEC), 700 Vac (UL), 40 to 2000 A




Square body flush-end contact high speed fuses, for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Catalog numbers available with visual indicator and Type K indicator for a microswitch.

### Ratings

- Volts see catalog number table
- Amps 40-2000 A
- IR 200 kA RMS Sym.

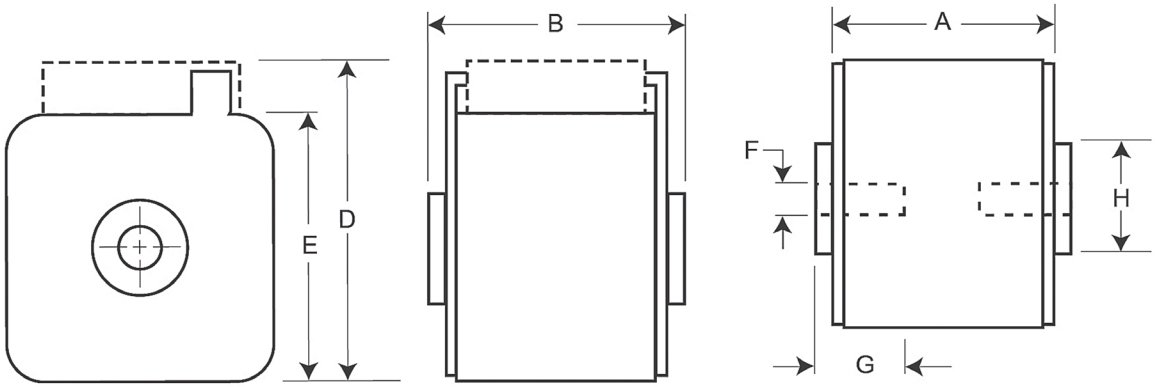
### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085†
- CSA Class 53787, File 1422-30†
- CCC†
- CE

† Consult your Bussmann series product representative for status.

### Dimensions — mm




**Type -B/- , -BKN/- , -G/- , -GKN/-**

| Size | A | B | D[1] | E | F | F[2] (in) | G | H |
|---|---|---|---|---|---|---|---|---|
| 1* | 50 | 51 | 59 | 45 | M8 | 5/16-18 UNC-2B | 5 | N17 |
| 1 | 50 | 51 | 69 | 53 | M8 | 5/16-18 UNC-2B | 8 | N20 |
| 2 | 50 | 51 (400 - 1000 A)<br>65 (1100 and 1250 A) | 77 | 61 | M10 | 3/8-16 UNC-2B | 10 | N24 |
| 3 | 51 | 53 (500 - 1500 A)<br>65 (1600 - 2000 A) | 92 | 76 | M12 | 1/2-13 UNC-2B | 10 | N30 |

1 Valid for fuse Types -BKN/ and -GKN/.
2 Valid for fuse Types -G- and -GKN/.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

## 170M — Square Body size 1* to 3, flush-end contact

### 690 Vac (IEC), 700 Vac (UL), 40 to 2000 A

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 660 Vac | Watts loss (W)† | Catalog no. -B/- visual indicator | Catalog no. -BKN/- Type K indicator for microswitch | Catalog no. -G/- visual indicator | Catalog no. -GKN/- Type K indicator for microswitch |
|---|---|---|---|---|---|---|---|---|---|
| 1* | 690 Vac (IEC) 700 Vac (UL) | 40 | 40 | 270 | 9 | 170M3408 | 170M3458 | 170M3508 | 170M3558 |
| | | 50 | 77 | 515 | 11 | 170M3409 | 170M3459 | 170M3509 | 170M3559 |
| | | 63 | 115 | 770 | 14 | 170M3410 | 170M3460 | 170M3510 | 170M3560 |
| | | 80 | 185 | 1250 | 18 | 170M3411 | 170M3461 | 170M3511 | 170M3561 |
| | | 100 | 360 | 2450 | 21 | 170M3412 | 170M3462 | 170M3512 | 170M3562 |
| | | 125 | 550 | 3700 | 26 | 170M3413 | 170M3463 | 170M3513 | 170M3563 |
| | | 160 | 1100 | 7500 | 30 | 170M3414 | 170M3464 | 170M3514 | 170M3564 |
| | | 200 | 2200 | 15,000 | 35 | 170M3415 | 170M3465 | 170M3515 | 170M3565 |
| | | 250 | 4200 | 28,500 | 40 | 170M3416 | 170M3466 | 170M3516 | 170M3566 |
| | | 315 | 7000 | 46,500 | 50 | 170M3417 | 170M3467 | 170M3517 | 170M3567 |
| | | 350 | 10,000 | 68,500 | 55 | 170M3418 | 170M3468 | 170M3518 | 170M3568 |
| | | 400 | 15,000 | 105,000 | 60 | 170M3419 | 170M3469 | 170M3519 | 170M3569 |
| | | 450 | 21,000 | 140,000 | 65 | 170M3420 | 170M3470 | 170M3520 | 170M3570 |
| | | 500 | 27,000 | 180,000 | 70 | 170M3421 | 170M3471 | 170M3521 | 170M3571 |
| | | 550 | 34,000 | 230,000 | 75 | 170M3422 | 170M3472 | 170M3522 | 170M3572 |
| | | 630 | 48,500 | 325,000 | 80 | 170M3423 | 170M3473 | 170M3523 | 170M3573 |
| 1 | 690 Vac (IEC) 700 Vac (UL) | 200 | 1650 | 11,500 | 45 | 170M4408 | 170M4458 | 170M4508 | 170M4558 |
| | | 250 | 3100 | 21,000 | 55 | 170M4409 | 170M4459 | 170M4509 | 170M4559 |
| | | 315 | 6200 | 42,000 | 58 | 170M4410 | 170M4460 | 170M4510 | 170M4560 |
| | | 350 | 8500 | 59,000 | 60 | 170M4411 | 170M4461 | 170M4511 | 170M4561 |
| | | 400 | 13,500 | 91,500 | 65 | 170M4412 | 170M4462 | 170M4512 | 170M4562 |
| | | 450 | 17,000 | 120,000 | 70 | 170M4413 | 170M4463 | 170M4513 | 170M4563 |
| | | 500 | 25,000 | 170,000 | 72 | 170M4414 | 170M4464 | 170M4514 | 170M4564 |
| | | 550 | 34,000 | 230,000 | 75 | 170M4415 | 170M4465 | 170M4515 | 170M4565 |
| | | 630 | 52,000 | 350,000 | 80 | 170M4416 | 170M4466 | 170M4516 | 170M4566 |
| | | 700 | 69,500 | 465,000 | 85 | 170M4417 | 170M4467 | 170M4517 | 170M4567 |
| | | 800 | 105,000 | 725,000 | 95 | 170M4418 | 170M4468 | 170M4518 | 170M4568 |
| | 550 Vac (IEC) | 900 | 155,000 | 850,000 | 100 | 170M4419 | 170M4469 | 170M4519 | 170M4569 |
| 2 | 690 Vac (IEC) 700 Vac (UL) | 400 | 11,000 | 74,000 | 65 | 170M5408 | 170M5458 | 170M5508 | 170M5558 |
| | | 450 | 15,500 | 105,000 | 70 | 170M5409 | 170M5459 | 170M5509 | 170M5559 |
| | | 500 | 21,500 | 145,000 | 75 | 170M5410 | 170M5460 | 170M5510 | 170M5560 |
| | | 550 | 28,000 | 190,000 | 80 | 170M5411 | 170M5461 | 170M5511 | 170M5561 |
| | | 630 | 41,000 | 275,000 | 90 | 170M5412 | 170M5462 | 170M5512 | 170M5562 |
| | | 700 | 60,500 | 405,000 | 95 | 170M5413 | 170M5463 | 170M5513 | 170M5563 |
| | | 800 | 86,000 | 575,000 | 105 | 170M5414 | 170M5464 | 170M5514 | 170M5564 |
| | | 900 | 125,000 | 840,000 | 110 | 170M5415 | 170M5465 | 170M5515 | 170M5565 |
| | | 1000 | 180,000 | 1,250,000 | 115 | 170M5416 | 170M5466 | 170M5516 | 170M5566 |
| | 600 Vac (IEC) 700 Vac (UL) | 1100 | 245,000 | 1,600,000 | 120 | 170M5417 | 170M5467 | 170M5517 | 170M5567 |
| | | 1250 | 365,000 | 2,400,000 | 130 | 170M5418 | 170M5468 | 170M5518 | 170M5568 |
| 3 | 690 Vac (IEC) 700 Vac (UL) | 500 | 14,000 | 95,000 | 95 | 170M6408 | 170M6458 | 170M6508 | 170M6558 |
| | | 550 | 19,500 | 135,000 | 100 | 170M6409 | 170M6459 | 170M6509 | 170M6559 |
| | | 630 | 31,000 | 210,000 | 105 | 170M6410 | 170M6460 | 170M6510 | 170M6560 |
| | | 700 | 44,500 | 300,000 | 110 | 170M6411 | 170M6461 | 170M6511 | 170M6561 |
| | | 800 | 69,500 | 465,000 | 115 | 170M6412 | 170M6462 | 170M6512 | 170M6562 |
| | | 900 | 100,000 | 670,000 | 120 | 170M6413 | 170M6463 | 170M6513 | 170M6563 |
| | | 1000 | 140,000 | 945,000 | 125 | 170M6414 | 170M6464 | 170M6514 | 170M6564 |
| | | 1100 | 190,000 | 1,300,000 | 130 | 170M6415 | 170M6465 | 170M6515 | 170M6565 |
| | | 1250 | 290,000 | 1,950,000 | 140 | 170M6416 | 170M6466 | 170M6516 | 170M6566 |
| | | 1400 | 370,000 | 2,450,000 | 155 | 170M6417 | 170M6467 | 170M6517 | 170M6567 |
| | | 1500 | 460,000 | 3,100,000 | 160 | 170M6418 | 170M6468 | 170M6518 | 170M6568 |
| | | 1600 | 580,000 | 3,900,000 | 160 | 170M6419 | 170M6469 | 170M6519 | 170M6569 |
| | 600 Vac (IEC) 500 Vac (UL) | 1800 | 880,000 | 5,250,000 | 165 | 170M6420 | 170M6470 | 170M6520 | 170M6570 |
| | 550 Vac (IEC) 500 Vac (UL) | 2000 | 1,150,000 | 6,350,000 | 175 | 170M6421 | 170M6471 | 170M6521 | 170M6571 |

† Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

# 170M — Square Body size 1* to 3, flush-end contact

## 1000 Vac (IEC and UL), 50 to 1400 A




Square body flush-end contact high speed fuses, for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Catalog numbers come with Type K indicator for use with microswitches.

### Ratings

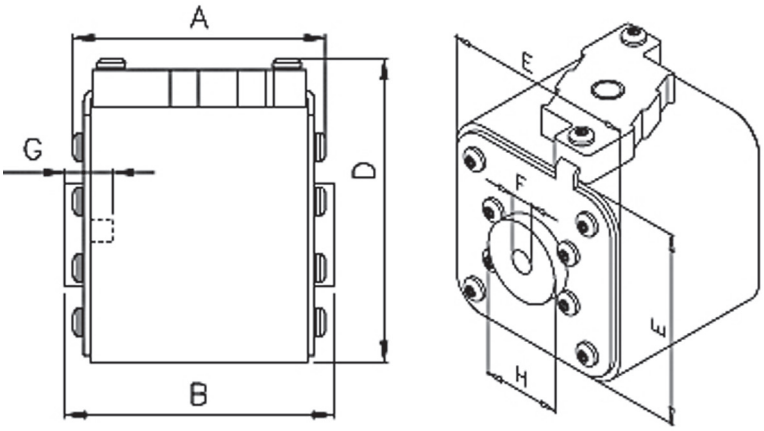
- Volts
  - 1000 Vac (IEC, 50-1250 A)
  - 1000 Vac (UL, 250-1100 A)
  - 900 Vac (IEC, 1400 A
- Amps 50-1400 A
- IR 125 kA RMS Sym.

### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085 (only sizes 2 and 3 up to 1100 A)
- CE

### Dimensions — mm




### Type -BKN/- and -GKN/-

| Size | Type | A | B | D (max) | E | F | F[1] (in) | G (min) | H |
|---|---|---|---|---|---|---|---|---|---|
| 1* | BKN/75 + GKN/75 | 72.5 | 74.0 | 61 | 43 | M8 | 5/16-18 UNC-2B | 5 | 17.5 |
| 1 | BKN/75 + GKN/75 | 73.2 | 74.0 | 69 | 52 | M8 | 5/16-18 UNC-2B | 8 | 20.0 |
| 2 | BKN/75 + GKN/75 | 73.2 | 74.4 | 77 | 59 | M10 | 3/8-16 UNC-2B | 10 | 24.5 |
| 3 | BKN/75 + GKN/75 | 73.3 | 75.4 | 92 | 74 | M12 | 1/2-13 UNC-2B | 10 | 30.0 |
| 3 | BKN/90 + GKN/90 | 80.3 | 91.4 | 92 | 74 | M12 | 1/2-13 UNC-2B | 10 | 30.0 |

1 Valid for fuse Types -GKN/-.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

## 170M — Square Body size 1* to 3, flush-end contact

### 1000 Vac (IEC and UL), 50 to 1400 A

| Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at rated voltage | Watts loss (W)† | Catalog no. -BKN/- Type K indicator for microswitch | Catalog no. -GKN/- Type K indicator for microswitch |
|---|---|---|---|---|---|---|---|
| 1* | 1000 Vac (IEC) | 50 | 135 | 815 | 20 | 170M3951 | 170M3921 |
| | | 63 | 215 | 1300 | 25 | 170M3952 | 170M3922 |
| | | 80 | 460 | 2750 | 30 | 170M3953 | 170M3923 |
| | | 100 | 860 | 5100 | 35 | 170M3954 | 170M3924 |
| | | 125 | 1450 | 8600 | 40 | 170M3955 | 170M3925 |
| | | 160 | 2850 | 17,500 | 45 | 170M3956 | 170M3926 |
| | | 200 | 4950 | 29,500 | 50 | 170M3957 | 170M3927 |
| | | 250 | 9550 | 57,000 | 55 | 170M3958 | 170M3928 |
| | | 315 | 21,500 | 130,000 | 65 | 170M3959 | 170M3929 |
| | | 350 | 29,000 | 175,000 | 70 | 170M3960 | 170M3930 |
| | | 400 | 42,000 | 250,000 | 75 | 170M3961 | 170M3931 |
| 1 | 1000 Vac IEC) | 160 | 2200 | 13,500 | 40 | 170M4951 | 170M4921 |
| | | 200 | 4150 | 24,500 | 45 | 170M4952 | 170M4922 |
| | | 250 | 7750 | 46,000 | 52 | 170M4953 | 170M4923 |
| | | 315 | 16,500 | 98,500 | 60 | 170M4954 | 170M4924 |
| | | 350 | 21,500 | 130,000 | 65 | 170M4955 | 170M4925 |
| | | 400 | 31,000 | 185,000 | 70 | 170M4956 | 170M4926 |
| | | 450 | 44,500 | 265,000 | 80 | 170M4957 | 170M4927 |
| | | 500 | 63,000 | 375,000 | 85 | 170M4958 | 170M4928 |
| | | 550 | 84,500 | 500,000 | 90 | 170M4959 | 170M4929 |
| | | 630 | 125,000 | 755,000 | 98 | 170M4960 | 170M4930 |
| 2 | 1000 Vac (IEC/UL) | 250 | 6750 | 40,000 | 65 | 170M5952 | 170M5922 |
| | | 315 | 13,500 | 81,500 | 75 | 170M5953 | 170M5923 |
| | | 350 | 16,500 | 99,000 | 80 | 170M5954 | 170M5924 |
| | | 400 | 26,000 | 155,000 | 85 | 170M5955 | 170M5925 |
| | | 450 | 35,500 | 210,000 | 90 | 170M5956 | 170M5926 |
| | | 500 | 49,500 | 295,000 | 95 | 170M5957 | 170M5927 |
| | | 550 | 66,000 | 390,000 | 100 | 170M5958 | 170M5928 |
| | | 630 | 93,500 | 555,000 | 110 | 170M5959 | 170M5929 |
| | | 700 | 130,000 | 770,000 | 115 | 170M5960 | 170M5930 |
| | | 800 | 195,000 | 1,200,000 | 125 | 170M5961 | 170M5931 |
| 3 | 1000 Vac (IEC/UL) | 315 | 9200 | 54,500 | 90 | 170M8600 | 170M8500 |
| | | 350 | 13,000 | 77,500 | 95 | 170M8601 | 170M8501 |
| | | 400 | 19,000 | 115,000 | 105 | 170M8602 | 170M8502 |
| | | 450 | 27,000 | 160,000 | 107 | 170M8603 | 170M8503 |
| | | 500 | 37,500 | 225,000 | 110 | 170M8604 | 170M8504 |
| | | 550 | 52,000 | 310,000 | 115 | 170M8605 | 170M8505 |
| | | 630 | 82,500 | 490,000 | 120 | 170M8606 | 170M8506 |
| | | 700 | 115,000 | 700,000 | 125 | 170M8607 | 170M8507 |
| | | 800 | 170,000 | 1,050,000 | 135 | 170M8608 | 170M8508 |
| | | 900 | 250,000 | 1,500,000 | 145 | 170M8609 | 170M8509 |
| | | 1000 | 340,000 | 2,050,000 | 150 | 170M8610 | 170M8510 |
| | | 1100 | 460,000 | 2,750,000 | 155 | 170M8611 | 170M8511 |
| | 1000 Vac (IEC) | 1250 | 575,000 | 3,400,000 | 175 | 170M8612[1] | 170M8512[1] |
| | 900 Vac (IEC) | 1400 | 795,000 | 4,200,000 | 185 | 170M8613[1] | 170M8513[1] |

† Watts loss at rated current.
1 Overall length is 90mm, for all other fuses the overall length is 75mm.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

# 170M — Square Body size 1* to 3, flush-end contact

## 1250 Vac (IEC), 1300 Vac (UL), 50 to 1400 A




Square body flush-end contact high speed fuses, for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters. Catalog numbers come with Type K indicator for use with microswitches.

### Ratings

- Volts
  - 1250 Vac (IEC)
  - 1300 Vac (UL)
- Amps 50-1400 A
- IR 100 kA RMS Sym.

### Operating class aR

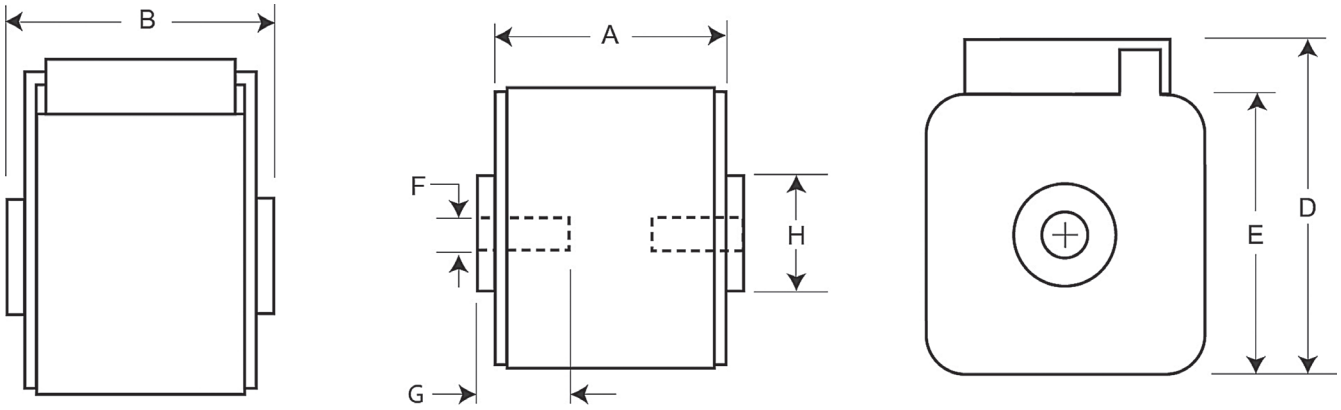
### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085†
- CSA Class 53787, File 1422-30†
- CE

† Consult your Bussmann series product representative status.



### Dimensions — mm




**Type -BKN/- and -GKN/-**

| Size | Type | A | B | D | E | F | F[1] (in) | Min G | HØ |
|---|---|---|---|---|---|---|---|---|---|
| 1* | BKN + GKN/75 | 74 | 75 | 59 | 45 | M8 | 5/16-18 UNC-2B | 5 | 17 |
| 1* | BKN/80 | 80 | 81 | 59 | 45 | M8 | | 5 | 17 |
| 1 | BKN + GKN/75 | 74 | 75 | 69 | 53 | M8 | | 8 | 20 |
| 1 | BKN/80 | 80 | 81 | 69 | 53 | M8 | | 8 | 20 |
| 2 | BKN + GKN/75 | 74 | 75 | 77 | 61 | M10 | 3/8-16 UNC-2B | 10 | 24 |
| 2 | BKN/80 | 80 | 81 | 77 | 61 | M10 | | 10 | 24 |
| 2 | BKN + GKN/90 | 80 | 91 | 77 | 61 | M10 | | 10 | 24 |
| 3 | BKN + GKN/75 | 74 | 76 | 92 | 76 | M12 | 1/2-13 UNC-2B | 10 | 30 |
| 3 | BKN/80 | 81 | 83 | 92 | 76 | M12 | | 10 | 30 |
| 3 | BKN + GKN/90 | 81 | 91 | 92 | 76 | M12 | | 10 | 30 |

1 Valid for fuse Types -GKN/-.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

## 170M — Square Body size 1* to 3, flush-end contact

### 1250 Vac (IEC), 1300 Vac (UL), 50 to 1400 A

| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | I²t (A²s) Clearing at 1250 Vac | Watts loss (W)† | Catalog no. -BKN/75 Type K indicator for micro | Catalog no. -BKN/80 Type K indicator for micro | Catalog no. -BKN/90 Type K indicator for micro | Catalog no. -GKN/75 Type K indicator for micro | Catalog no. -GKN/90 Type K indicator for micro |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1* | 1250 Vac (IEC) 1300 Vac (UL) | 50 | 135 | 815 | 1100 | 15 | 170M3388 | 170M3438 | — | 170M3488 | — |
| | | 63 | 215 | 1300 | 1750 | 20 | 170M3389 | 170M3439 | — | 170M3489 | — |
| | | 80 | 420 | 2500 | 3350 | 25 | 170M3390 | 170M3440 | — | 170M3490 | — |
| | | 100 | 750 | 4450 | 5950 | 30 | 170M3391 | 170M3441 | — | 170M3491 | — |
| | | 125 | 1450 | 9000 | 11,500 | 35 | 170M3392 | 170M3442 | — | 170M3492 | — |
| | | 160 | 2600 | 16,000 | 21,000 | 40 | 170M3393 | 170M3443 | — | 170M3493 | — |
| | | 200 | 5150 | 31,000 | 41,000 | 45 | 170M3394 | 170M3444 | — | 170M3494 | — |
| | | 250 | 9200 | 54,500 | 73,000 | 55 | 170M3395 | 170M3445 | — | 170M3495 | — |
| | | 315 | 18,500 | 115,000 | 150,000 | 60 | 170M3396 | 170M3446 | — | 170M3496 | — |
| | | 350 | 27,000 | 165,000 | 220,000 | 65 | 170M3397 | 170M3447 | — | 170M3497 | — |
| | | 400 | 53,000 | 265,000 | 335,000 | 70 | — | 170M3448 | — | — | — |
| 1 | 1250 Vac (IEC) 1300 Vac (UL) | 160 | 1900 | 11,500 | 15,500 | 45 | 170M4388 | 170M4438 | — | 170M4488 | — |
| | | 200 | 3800 | 22,500 | 30,000 | 50 | 170M4389 | 170M4439 | — | 170M4489 | — |
| | | 250 | 7750 | 46,000 | 61,500 | 60 | 170M4390 | 170M4440 | — | 170M4490 | — |
| | | 315 | 15,000 | 90,000 | 120,000 | 65 | 170M4391 | 170M4441 | — | 170M4491 | — |
| | | 350 | 20,000 | 125,000 | 165,000 | 70 | 170M4392 | 170M4442 | — | 170M4492 | — |
| | | 400 | 29,500 | 175,000 | 235,000 | 75 | 170M4393 | 170M4443 | — | 170M4493 | — |
| | | 450 | 42,000 | 250,000 | 335,000 | 80 | 170M4394 | 170M4444 | — | 170M4494 | — |
| | | 500 | 69,500 | 340,000 | 435,000 | 85 | 170M4395[4] | 170M4445 | — | 170M4495[4] | — |
| | | 550 | 95,000 | 465,000 | 590,000 | 95 | 170M4396[5] | 170M4446 | — | 170M4496[5] | — |
| | | 630 | 130,000 | 660,000 | N/A | 110 | 170M4397[5] | 170M4447[4] | — | 170M4497[5] | — |
| 2 | 1250 Vac (IEC) 1300 Vac (UL) | 250 | 6500 | 38,500 | 51,500 | 65 | 170M5388 | 170M5438 | — | 170M5588 | — |
| | | 280 | 9350 | 55,500 | 74,500 | 70 | 170M5389 | 170M5439 | — | 170M5589 | — |
| | | 315 | 13,000 | 77,500 | 105,000 | 75 | 170M5390 | 170M5440 | — | 170M5590 | — |
| | | 350 | 16,500 | 97,500 | 135,000 | 80 | 170M5391 | 170M5441 | — | 170M5591 | — |
| | | 400 | 23,000 | 140,000 | 180,000 | 85 | 170M5392 | 170M5442 | — | 170M5592 | — |
| | | 450 | 34,000 | 205,000 | 270,000 | 90 | 170M5393 | 170M5443 | — | 170M5593 | — |
| | | 500 | 48,000 | 285,000 | 380,000 | 95 | 170M5394 | 170M5444 | 170M5494 | 170M5594 | 170M5644 |
| | | 550 | 62,000 | 370,000 | 495,000 | 100 | 170M5395 | 170M5445 | 170M5495 | 170M5595 | 170M5645 |
| | | 630 | 115,000 | 575,000 | 730,000 | 120 | 170M5396[4] | 170M5446 | 170M5496 | 170M5596[4] | 170M5646 |
| | | 700 | 160,000 | 795,000 | 1,050,000 | 125 | 170M5397[5] | 170M5447[1] | 170M5497 | 170M5597[5] | 170M5647 |
| | | 800 | 245,000 | 1,200,000 | 1,550,000 | 130 | 170M5398[5] | 170M5448[2] | 170M5498 | 170M5598[5] | 170M5648 |
| | | 900 | 360,000 | 1,750,000 | N/A | 135 | — | — | 170M5499[3] | — | 170M5649[3] |
| | | 1000 | 480,000 | 2,350,000 | N/A | 145 | — | — | 170M5500[3] | — | 170M5650[3] |
| 3 | 1250 Vac (IEC) 1300 Vac (UL) | 315 | 9500 | 58,000 | 77,500 | 85 | 170M6338 | 170M6538 | — | 170M6588 | — |
| | | 350 | 13,500 | 81,500 | 110,000 | 90 | 170M6339 | 170M6539 | — | 170M6589 | — |
| | | 400 | 19,500 | 120,000 | 160,000 | 95 | 170M6340 | 170M6540 | — | 170M6590 | — |
| | | 450 | 31,000 | 185,000 | 245,000 | 100 | 170M6341 | 170M6541 | — | 170M6591 | — |
| | | 500 | 39,000 | 235,000 | 310,000 | 105 | 170M6342 | 170M6542 | — | 170M6592 | — |
| | | 550 | 55,000 | 325,000 | 435,000 | 110 | 170M6343 | 170M6543 | — | 170M6593 | — |
| | | 630 | 83,500 | 495,000 | 665,000 | 115 | 170M6344 | 170M6544 | 170M6494 | 170M6594 | 170M6644 |
| | | 700 | 115,000 | 705,000 | 940,000 | 120 | 170M6345 | 170M6545 | 170M6495 | 170M6595 | 170M6645 |
| | | 800 | 205,000 | 995,000 | 1,300,000 | 125 | 170M6346[4] | 170M6546 | 170M6496 | 170M6596[4] | 170M6646 |
| | | 900 | 305,000 | 1,500,000 | 1,900,000 | 130 | 170M6347[5] | 170M6547[1] | 170M6497 | 170M6597[5] | 170M6647 |
| | | 1000 | 450,000 | 2,150,000 | 2,750,000 | 135 | 170M6348[5] | 170M6548[1] | 170M6498 | 170M6598[5] | 170M6648 |
| | | 1100 | 575,000 | 2,800,000 | 3,600,000 | 160 | 170M6349[5] | 170M6549[2] | 170M6499 | 170M6599[5] | 170M6649 |
| | | 1250 | 810,000 | 3,950,000 | N/A | 170 | — | — | 170M6500[3] | — | 170M6650[4] |
| | | 1400 | 1,250,000 | 6,000,000 | N/A | 175 | — | — | 170M6501[3] | — | 170M6651[4] |

† Watts loss at rated current.
1 Rated voltage 1100 Vac (IEC), 1000 Vac (UL).
2 Rated voltage 1000 Vac (IEC and UL).
3 Rated voltage 1100 Vac (IEC and UL).
4 Rated voltage (IEC) 1100 Vac.
5 Rated voltage (IEC) 1000 Vac.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

# 170M — Square Body size 4, flush-end contact

## 690 Vac (IEC), 700 Vac (UL), 1000 to 4000 A

Square body, flush-end contact, high speed fuses, for the protection of power rectifiers. Catalog numbers come with visual indicator or Type K indicator for use with microswitches.




### Ratings

- Volts
  - 690 Vac (IEC)/700 Vac (UL) 1000-3500 A
  - 600 Vac (IEC and UL, 4000 A)
- Amps 1000-4000 A
- IR 200 kA RMS Sym.

### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CE



| Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at 660 Vac | Watts loss (W)* | Catalog no. -B/65 visual indicator | Catalog no. -BKN/65 Type K indicator | Catalog no. -G/65 visual indicator | Catalog no. -GKN/65 Type K indicator |
|---|---|---|---|---|---|---|---|---|---|
| 4 | 690 Vac (IEC) 700 Vac (UL) | 1000 | 76,000 | 505,000 | 175 | 170M7058 | 170M7078 | 170M7098 | 170M7118 |
| | | 1250 | 145,000 | 965,000 | 195 | 170M7059 | 170M7079 | 170M7099 | 170M7119 |
| | | 1400 | 205,000 | 1,400,000 | 205 | 170M7060 | 170M7080 | 170M7100 | 170M7120 |
| | | 1600 | 305,000 | 2,050,000 | 220 | 170M7061 | 170M7081 | 170M7101 | 170M7121 |
| | | 2000 | 600,000 | 3,950,000 | 245 | 170M7062 | 170M7082 | 170M7102 | 170M7122 |
| | | 2500 | 1,200,000 | 7,800,000 | 275 | 170M7063 | 170M7083 | 170M7103 | 170M7123 |
| | | 3000 | 2,000,000 | 13,500,000 | 305 | 170M7064 | 170M7084 | 170M7104 | 170M7124 |
| | | 3500 | 3,250,000 | 22,000,000 | 325 | 170M7065 | 170M7085 | 170M7105 | 170M7125 |
| | 600 Vac (IEC/UL) | 4000 | 4,700,000 | 28,000,000[1] | 355 | 170M7066 | 170M7086 | 170M7106 | 170M7126 |

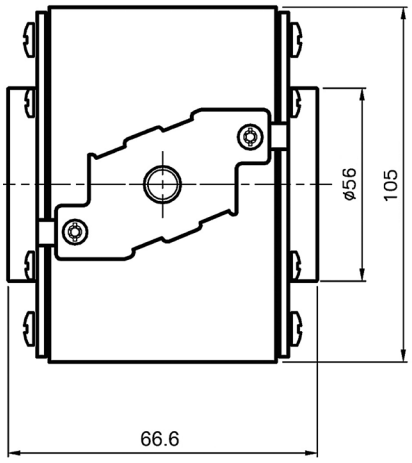
* Watts loss at rated current.
1 Clearing at 600 Vac.

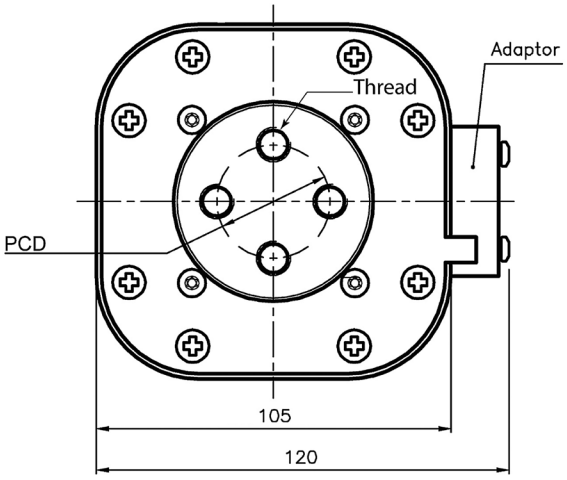
For details on electrical characteristics, contact Application Engineering and ask for Data sheet no. 170K6328

## 170M — Square Body size 4, flush-end contact

**690 Vac (IEC), 700 Vac (UL), 1000 to 4000 A**

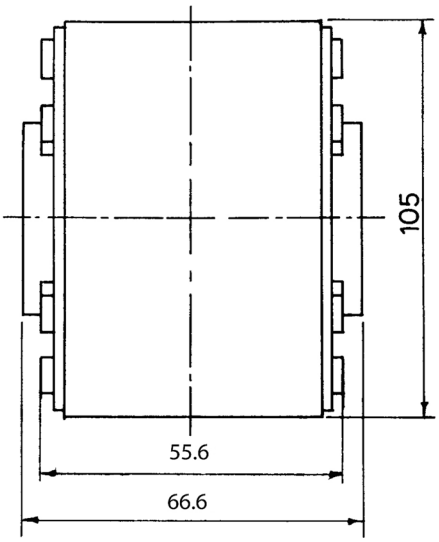
**Dimensions — mm**

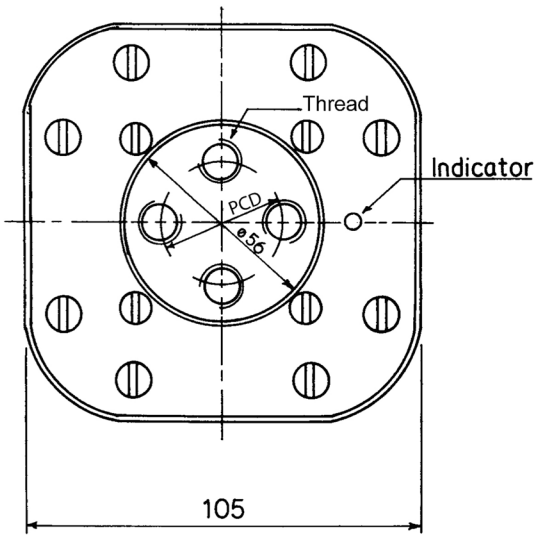



**Type -BKN/65, -GKN/65**

| Type | PCD | Thread |
|---|---|---|
| -GKN/65 | Ø 38.1 | 1/2-13 UNC |
| -BKN/65 | Ø 33.0 | M-10 |




**Type -B/65, -G/65**

| Type | PCDØ | Thread |
|---|---|---|
| -G/65 | 38.1 | 1/2-13 UNC |
| -B/65 | 33.0 | M-10 |

For details on electrical characteristics, contact Application Engineering and ask for Data sheet no.170K6328

# 170M — Square Body size 4, flush-end contact

## 1000 Vac (IEC), 1000 to 3000 A

Square body, flush-end contact, high speed fuses, for the protection of power rectifiers. Catalog numbers come with visual indicator or Type K indicator for use with microswitches.



### Ratings

- Volts 1000 Vac (IEC)
- Amps 1000-3000 A
- IR 200 kA RMS Sym.

### Operating class aR

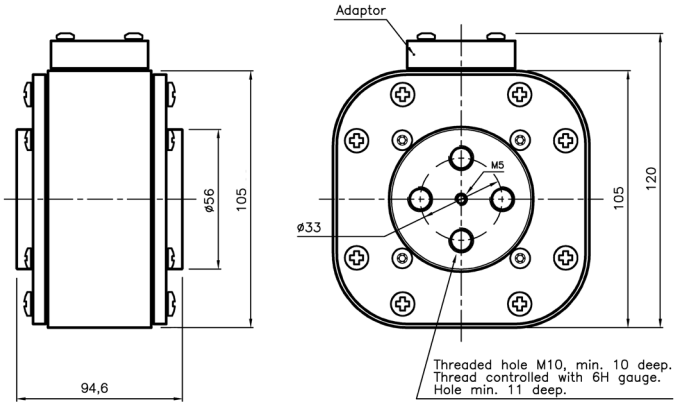
### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CE

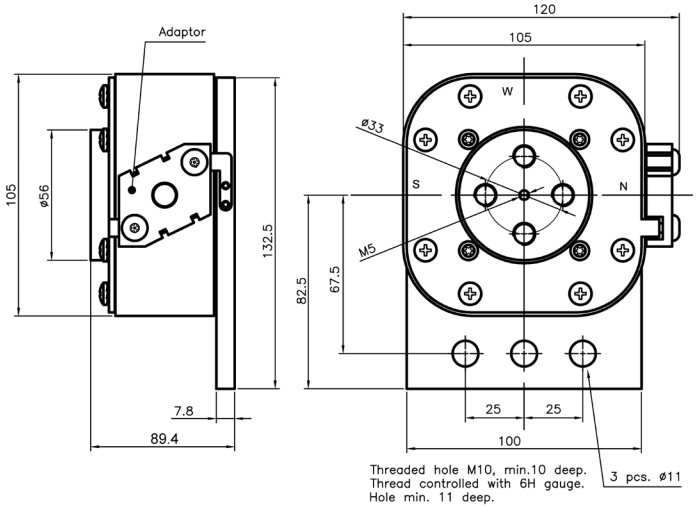
| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. -BKN/95 Type K indicator | Catalog no. -SBKN/90 Type K indicator |
|---|---|---|---|---|---|---|---|
| 4 | 1000 Vac | 1000 | 180,000 | 1,100,000 | 195 | — | 170M7542 |
| | | 1100 | 250,000 | 1,500,000 | 200 | — | 170M7031 |
| | | 1500 | 600,000 | 3,600,000 | 250 | 170M7636 | 170M7548 |
| | | 1700 | 850,000 | 5,000,000 | 260 | 170M7639 | 170M7034 |
| | | 1800 | 1,000,000 | 5,950,000 | 265 | 170M7661 | 170M7053 |
| | | 2000 | 1,450,000 | 8,600,000 | 270 | 170M7963 | 170M7544 |
| | | 2200 | 2,000,000 | 12,000,000 | 280 | 170M7090 | 170M7035 |
| | | 2500 | 3,000,000 | 18,000,000 | 295 | 170M7640 | 170M7036 |
| | | 2700 | 3,700,000 | 22,000,000 | 310 | 170M7658 | 170M7037 |
| | | 3000 | 4,700,000 | 28,000,000 | 380 | 170M7962 | 170M7156 |

* Watts loss at rated current.

### Dimensions — mm




Type 4BKN/95




Type 4SBKN/90

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K8520, 170K8520-R

## 170M — Square Body size 4, flush-end contact

### 1250 Vac (IEC), 800 to 2500 A

Square body, flush-end contact, high speed fuses, for the protection of power rectifiers. Catalog numbers come with visual indicator or Type K indicator for use with microswitches.



### Ratings

- Volts
  - 1250 Vac (IEC)
  - 1200 Vdc (UL)
- Amps 800-2500 A
- IR
  - 200 kA RMS Sym.
  - 85 kA DC (L/R 2 ms)

### Operating class aR

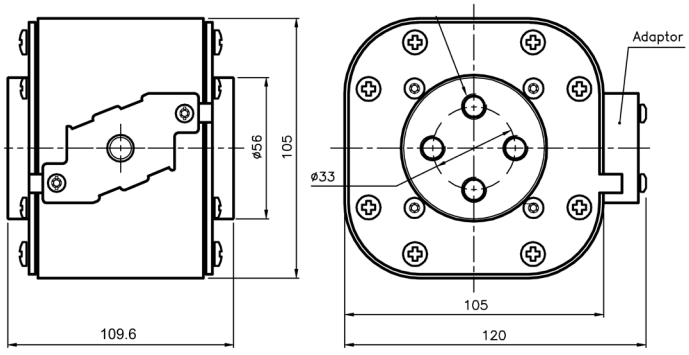
### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- cURus JFHR2, E125085
- CE

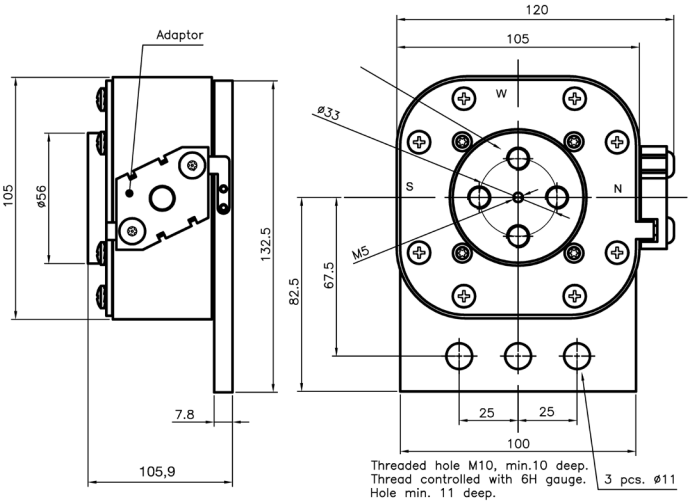
| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1250 Vac | Watts loss (W)* | Catalog no. -BKN/105 Type K indicator | Catalog no. -SBKN/105 Type K indicator |
|---|---|---|---|---|---|---|---|
| 4 | 1250 Vac (IEC) 1200 Vdc (UL) | 800 | 145,000 | 905,000 | 195 | 170M7802 | — |
| | | 1000 | 275,000 | 1,750,000 | 220 | 170M7803 | — |
| | | 1200 | 495,000 | 3,100,000 | 240 | 170M7804 | — |
| | | 1400 | 800,000 | 5,000,000 | 250 | 170M7217 | 170M7512 |
| | | 1500 | 1,000,000 | 6,200,000 | 260 | 170M7597 | 170M7510 |
| | | 1700 | 1,400,000 | 8,700,000 | 275 | 170M7676 | 170M7511 |
| | | 1800 | 1,700,000 | 11,000,000 | 280 | 170M7532 | 170M7976 |
| | | 2000 | 2,300,000 | 14,500,000 | 305 | 170M7633 | 170M7513 |
| | | 2200 | 3,100,000 | 19,500,000 | 315 | 170M7592 | 170M7546 |
| | | 2400 | 4,000,000 | 25,000,000 | 330 | 170M7107 | 170M7516 |
| | | 2500 | 4,500,000 | 28,000,000 | 340 | 170M7595 | 170M7978 |

* Watts loss at rated current.

### Dimensions — mm




Type 4BKN/105




Type 4SBKN/105

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6640 (1400-2400 A), 170K6642 (800-1200, 2500 A)

## 170M — Square Body size 23, flush-end contact

### 660 Vac (IEC), 1000 to 4000 A




Square body, flush-end contact, high speed fuses, for the protection of power rectifiers. Catalog numbers available with Type K indicator for use with microswitches.

### Ratings

- Volts
  - 660 Vac (IEC, 1000-3000 A)
  - 600 Vac (IEC, 3500 A)
  - 550 Vac (IEC, 4000 A)
- Amps 1000-4000 A
- IR 100 kA RMS Sym.

### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CE



| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 660 Vac | Watts loss (W)* | Catalog no. -BU/55 | Catalog no. -BKE/55 Type K indicator | Catalog no. -BKN/55 Type K indicator | Catalog no. -GU/55 | Catalog no. -GKE/55 Type K indicator | Catalog no. -GKN/55 Type K indicator |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 23 | 660 Vac (IEC) | 1000 | 79,000 | 530,000 | 170 | 170M6858 | 170M6898 | 170M6878 | 170M6918 | 170M6958 | 170M6938 |
| | | 1100 | 95,000 | 635,000 | 185 | 170M6859 | 170M6899 | 170M6879 | 170M6919 | 170M6959 | 170M6939 |
| | | 1250 | 155,000 | 1,050,000 | 190 | 170M6860 | 170M6900 | 170M6880 | 170M6920 | 170M6960 | 170M6940 |
| | | 1400 | 200,000 | 1,350,000 | 210 | 170M6861 | 170M6901 | 170M6881 | 170M6921 | 170M6961 | 170M6941 |
| | | 1500 | 240,000 | 1,650,000 | 215 | 170M6862 | 170M6902 | 170M6882 | 170M6922 | 170M6962 | 170M6942 |
| | | 1600 | 315,000 | 2,150,000 | 220 | 170M6863 | 170M6903 | 170M6883 | 170M6923 | 170M6963 | 170M6943 |
| | | 1800 | 450,000 | 3,050,000 | 230 | 170M6864 | 170M6904 | 170M6884 | 170M6924 | 170M6964 | 170M6944 |
| | | 2000 | 625,000 | 4,200,000 | 240 | 170M6865 | 170M6905 | 170M6885 | 170M6925 | 170M6965 | 170M6945 |
| | | 2200 | 805,000 | 5,400,000 | 255 | 170M6866 | 170M6906 | 170M6886 | 170M6926 | 170M6966 | 170M6946 |
| | | 2500 | 1,250,000 | 8,350,000 | 265 | 170M6867 | 170M6907 | 170M6887 | 170M6927 | 170M6967 | 170M6947 |
| | | 3000 | 2,250,000 | 15,500,000 | 285 | 170M6868 | 170M6908 | 170M6888 | 170M6928 | 170M6968 | 170M6948 |
| | 600 Vac (IEC) | 3500 | 3,450,000 | 21,000,000[1] | 315 | 170M6869 | 170M6909 | 170M6889 | 170M6929 | 170M6969 | 170M6949 |
| | 550 Vac (IEC) | 4000 | 5,000,000 | 27,500,000[2] | 340 | 170M6870 | 170M6910 | 170M6890 | 170M6930 | 170M6970 | 170M6950 |

* Watts loss at rated current.
1 Clearing at 600 Vac.
2 Clearing at 550 Vac.

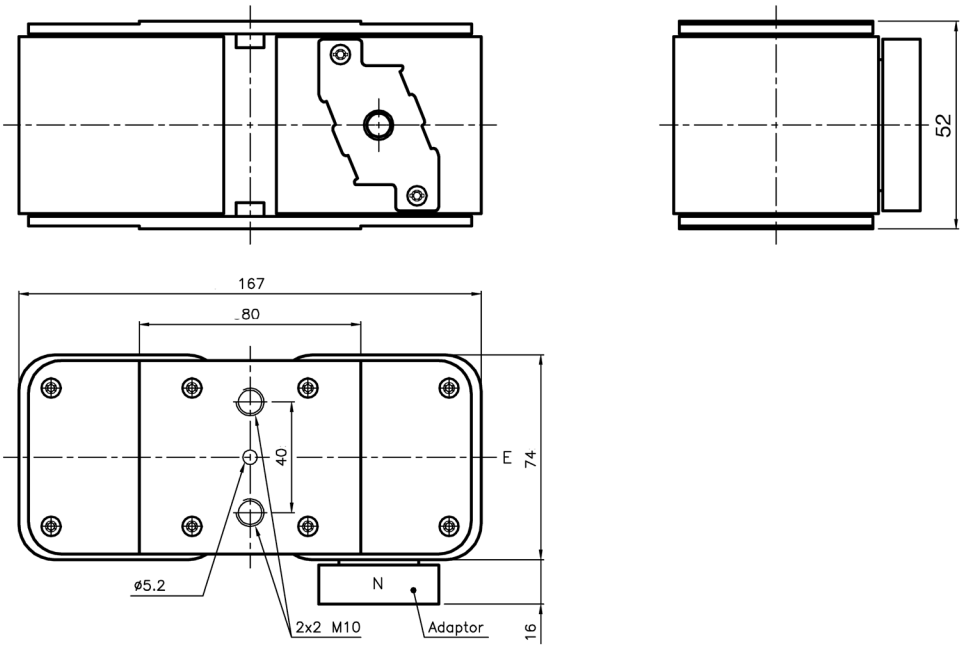
When using these fuses, please consult our application engineers.

For details on electrical characteristics, contact Application Engineering and ask for Data sheet no. 170K6326

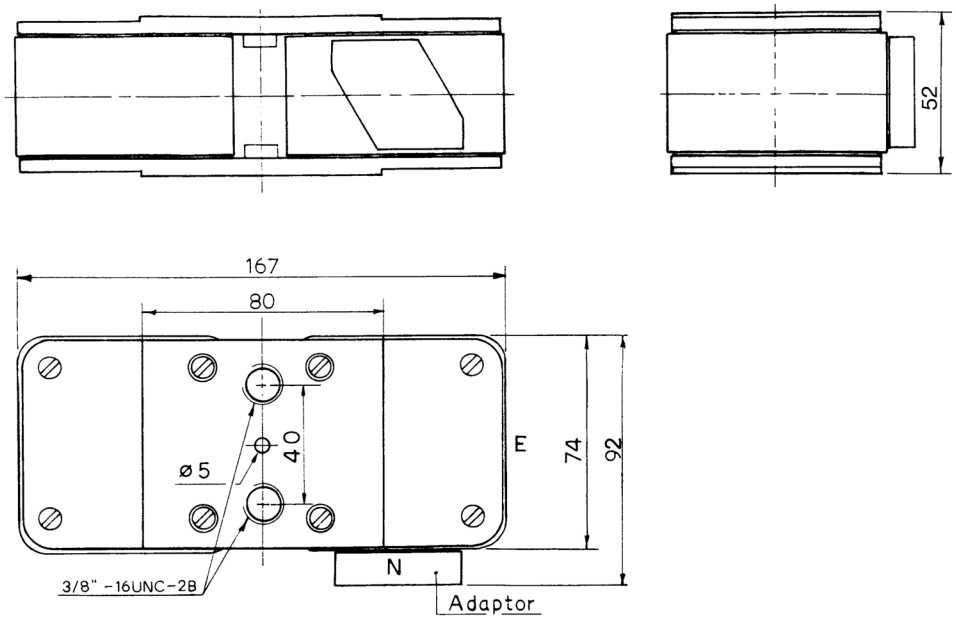
## 170M — Square Body size 23, flush-end contact

### 660 Vac (IEC), 1000 to 4000 A

**Dimensions — mm**




**Type -BU/55, -BKE/55, -BKN/55**




**Type -GU/55, -GKE/55, -GKN/55**

When using these fuses, please consult our application engineers.

For details on electrical characteristics, contact Application Engineering and ask for Data sheet no.170K6326

## 170M — Square Body size 23, flush-end contact

### 1250 Vac (IEC), 630 to 2800 A



Square body, flush-end contact, high speed fuses, for the protection of power rectifiers. Catalog numbers available with visual indicator or Type K indicator for use with microswitches.

### Ratings

- Volts
  - 1250 Vac (IEC 630 to 2200 A)
  - 1100 Vac (IEC 2500 and 2800 A)
- Amps 630-2800 A
- IR 125 kA RMS Sym.

### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized
- CE

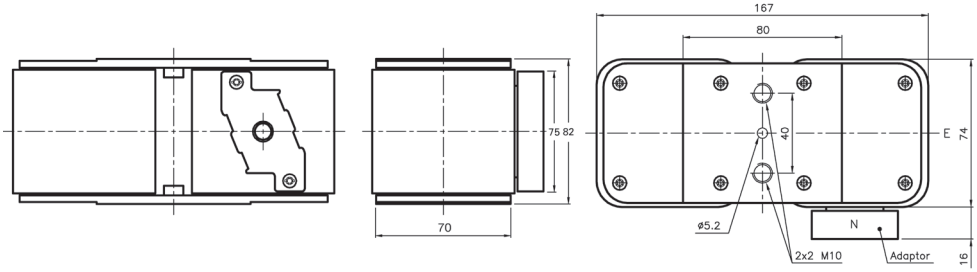


| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1250 Vac | Watts loss (W)* | Catalog no. -BU/75 visual indicator | -BKE/75 Type K indicator | -BKN/75 Type K indicator | -BU/80 visual indicator | -BKE/80 Type K indicator | -BKN/80 Type K indicator |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 23 | 1250 Vac (IEC) | 630 | 38,000 | 310,000 | 170 | 170M6775 | 170M6795 | 170M6785 | — | — | — |
| | | 700 | 54,000 | 440,000 | 180 | 170M6776 | 170M6796 | 170M6786 | — | — | — |
| | | 800 | 78,000 | 640,000 | 190 | 170M6777 | 170M6797 | 170M6787 | — | — | — |
| | | 900 | 120,000 | 980,000 | 200 | 170M6805 | 170M6807 | 170M6806 | — | — | — |
| | | 1000 | 155,000 | 1,250,000 | 210 | 170M6778 | 170M6798 | 170M6788 | — | — | — |
| | | 1100 | 220,000 | 1,750,000 | 220 | 170M6779 | 170M6799 | 170M6789 | — | — | — |
| | | 1250 | 330,000 | 2,700,000 | 230 | 170M6780 | 170M6800 | 170M6790 | — | — | — |
| | | 1400 | 460,000 | 3,800,000 | 240 | 170M6781 | 170M6801 | 170M6791 | — | — | — |
| | | 1600 | 820,000 | 5,200,000 | 250 | 170M6782 | 170M6802 | 170M6792 | — | — | — |
| | | 1800 | 1,200,000 | 7,600,000 | 260 | 170M6783 | 170M6803 | 170M6793 | — | — | — |
| | | 2000 | 1,800,000 | 11,000,000 | 270 | — | — | — | 170M6784 | 170M6804 | 170M6794 |
| | | 2200 | 2,300,000 | 14,500,000 | 280 | — | — | — | 170M6815 | 170M6833 | 170M6827 |
| | 1100 Vac (IEC) | 2500 | 3,200,000 | 16,000,000[1] | 290 | — | — | — | 170M6816 | 170M6834 | 170M6828 |
| | | 2800 | 5,000,000 | 24,000,000[1] | 300 | — | — | — | 170M6817 | 170M6835 | 170M6829 |

* Watts loss at rated current.
1 Clearing at 1000 V.

When using these fuses, please consult our application engineers.

### Dimensions — mm




For details on electrical characteristics, contact Application Engineering and ask for Data sheet no.170K6638

## 170M — Square Body size 24, flush-end contact

### 690 Vac (IEC), 2000 to 7500 A




Square body, flush-end contact, high speed fuses, for the protection of power rectifiers. Catalog numbers available with Type K indicator for use with microswitches.

### Ratings

- Volts
  - 690 Vac (IEC 2000 to 7000 A)
  - 500 Vac (IEC 7500 A)
- Amps 2000-7500 A
- IR 200 kA RMS Sym.

### Operating class aR

### Agency information

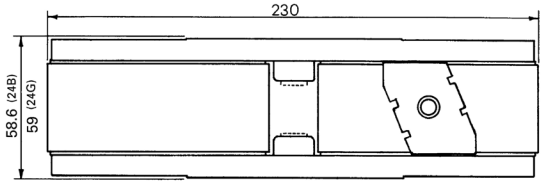
- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CE

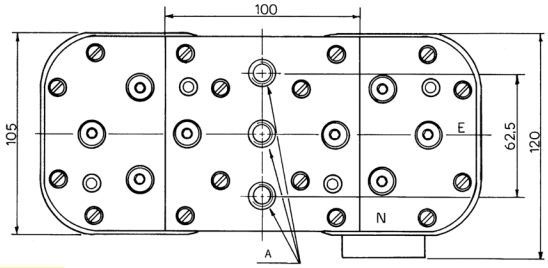
| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 660 Vac | Watts loss (W)* | Catalog no. -BU/60 without indicator | Catalog no. -BKN/60 Type K indicator | Catalog no. -GU/60 without indicator | Catalog no. -GKN/60 Type K indicator |
|---|---|---|---|---|---|---|---|---|---|
| 24 | 690 Vac (IEC) | 2000 | 340,000 | 2,300,000 | 340 | 170M7138 | 170M7158 | 170M7198 | 170M7218 |
| | | 2500 | 650,000 | 4,350,000 | 390 | 170M7139 | 170M7159 | 170M7199 | 170M7219 |
| | | 3000 | 1,100,000 | 7,300,000 | 430 | 170M7140 | 170M7160 | 170M7200 | 170M7220 |
| | | 3500 | 1,800,000 | 12,000,000 | 460 | 170M7141 | 170M7161 | 170M7201 | 170M7221 |
| | | 4000 | 2,700,000 | 18,000,000 | 490 | 170M7142 | 170M7162 | 170M7202 | 170M7222 |
| | | 4500 | 3,800,000 | 25,500,000 | 520 | 170M7143 | 170M7163 | 170M7203 | 170M7223 |
| | | 5000 | 5,450,000 | 36,500,000 | 540 | 170M7144 | 170M7164 | 170M7204 | 170M7224 |
| | | 5500 | 7,400,000 | 49,500,000 | 560 | 170M7145 | 170M7165 | 170M7205 | 170M7225 |
| | | 6000 | 9,600,000 | 64,000,000 | 580 | 170M7146 | 170M7166 | 170M7206 | 170M7226 |
| | | 6500 | 12,500,000 | 83,000,000 | 600 | 170M7147 | 170M7167 | 170M7207 | 170M7227 |
| | | 7000 | 15,000,000 | 100,000,000 | 630 | 170M7148 | 170M7168 | 170M7208 | 170M7228 |
| | 500 Vac (IEC) | 7500 | 18,500,000 | 93,000,000[1] | 660 | 170M7149 | 170M7169 | 170M7209 | 170M7229 |

* Watts loss at rated current.
1 Clearing at 500 Vac.

When using these fuses, please consult our application engineers.

### Dimensions — mm




| Size | Type | A |
|---|---|---|
| 24 | BKN | 2x3 M12 |
| 24 | GKN | 2x3 1/2-13 UNC-2B |

For details on electrical characteristics, contact Application Engineering and ask for Data sheet no.170K6332

# 170M — Square Body size 24, flush-end contact

## 1000 Vac (IEC), 2000 to 5000 A



Square body, flush-end contact, high speed fuses, for the protection of power rectifiers. Catalog numbers come with Type K indicator for use with microswitches.

### Ratings

- Volts 1000 Vac (IEC)
- Amps 2000-5000 A
- IR 300 kA RMS Sym.

### Operating class aR

### Agency information

- Designed and tested to IEC 60269 Part 4
- UL Recognized, JFHR2, E125085
- CE

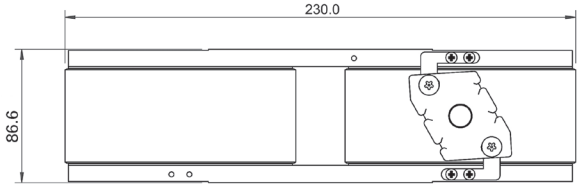


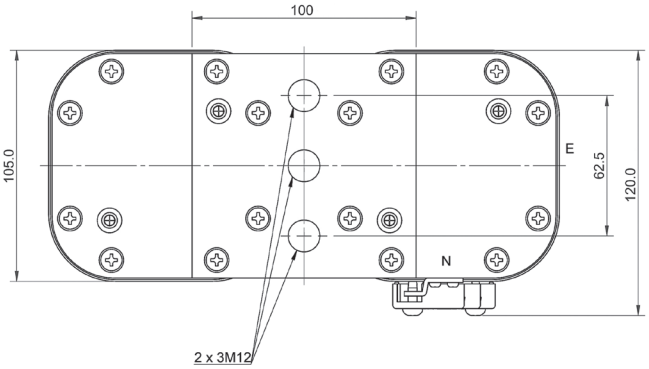
| Fuse size | Rated voltage | Rated current (amps) | $I^2t$ ($A^2s$) Pre-arcing | $I^2t$ ($A^2s$) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. for -BKN/85 Type K indicator |
|---|---|---|---|---|---|---|
| 24 | 1000 Vac (IEC) | 2000 | 900,000 | 5,350,000 | 345 | 170M7608 |
| | | 3000 | 2,950,000 | 17,500,000 | 430 | 170M7680 |
| | | 3200 | 3,300,000 | 20,000,000 | 440 | 170M7567 |
| | | 3500 | 4,500,000 | 27,000,000 | 450 | 170M7568 |
| | | 4000 | 6,800,000 | 40,000,000 | 475 | 170M7569 |
| | | 4200 | 8,000,000 | 47,500,000 | 485 | 170M7498 |
| | | 4500 | 10,000,000 | 59,000,000 | 495 | 170M7488 |
| | | 5000 | 14,000,000 | 82,500,000 | 540 | 170M7622 |

* Watts loss at rated current.

When using these fuses, please consult our application engineers.

### Dimensions — mm



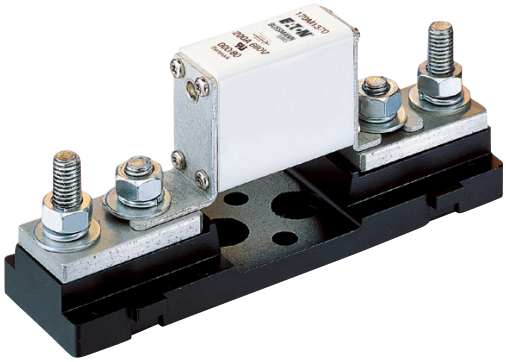

The normal position of the indicator is as shown position "N", position "E" on request only.

For details on electrical characteristics, contact Application Engineering and ask for Data sheet no.170K8514

## Square Body fuse accessories

### Fixed center fuse blocks for DIN 43653 fuses

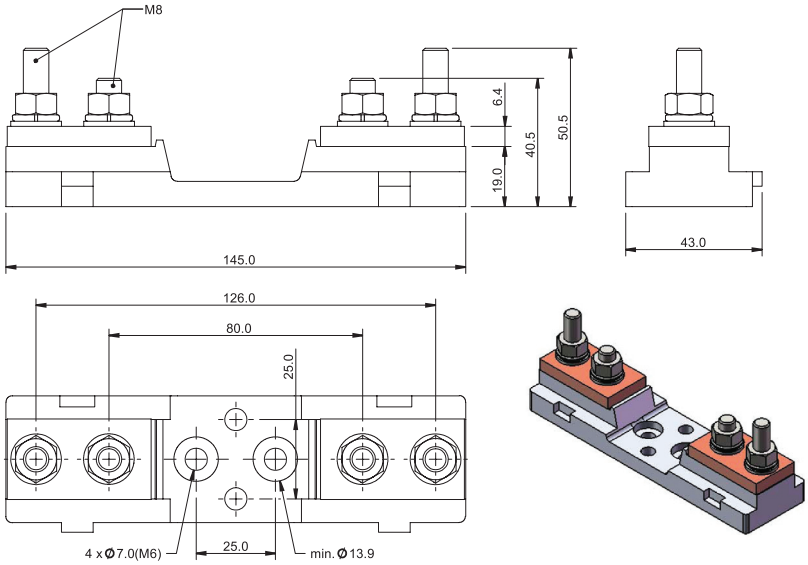
Fuse blocks for use with DIN 43653 square body fuses with center distances of 80 and 110mm. Available for sizes 000, 00, 1*, 1, 2 and 3.



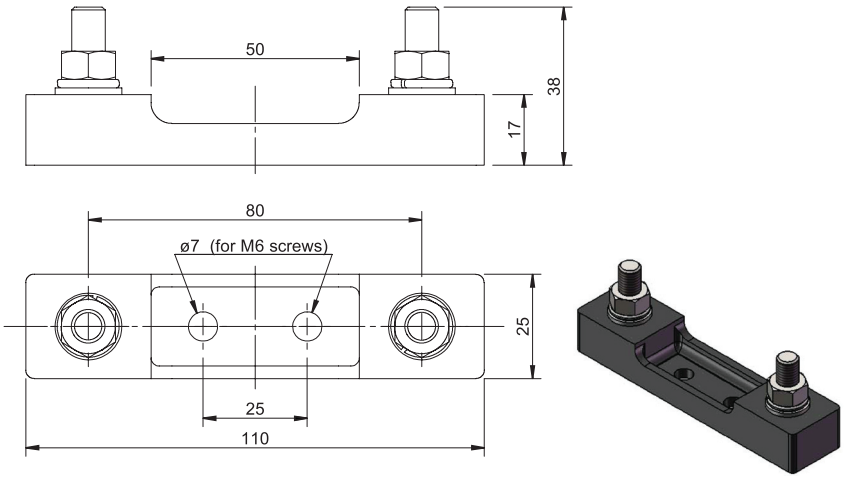
### Sizes 000 to 00

| Catalog no. | Max rated voltage | Max fuse amp rating | Center distance (mm) | Fuse sizes |
|---|---|---|---|---|
| 170H1007 | 1000 | 400 | 80 | 00, 000 |
| 170H1013 | 690 | 200 | 80 | 0000, 000 |

### Dimensions — mm



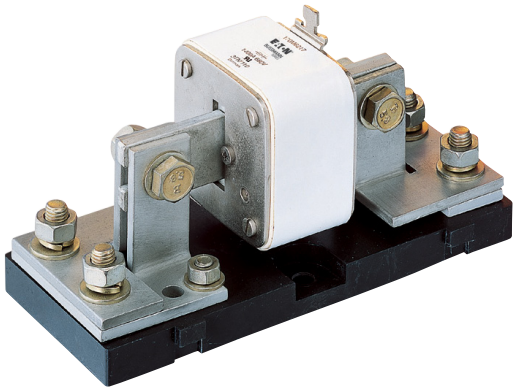

**170H1007**




**170H1013**

# Square Body fuse accessories

## Fixed center fuse blocks for DIN 43653 fuses



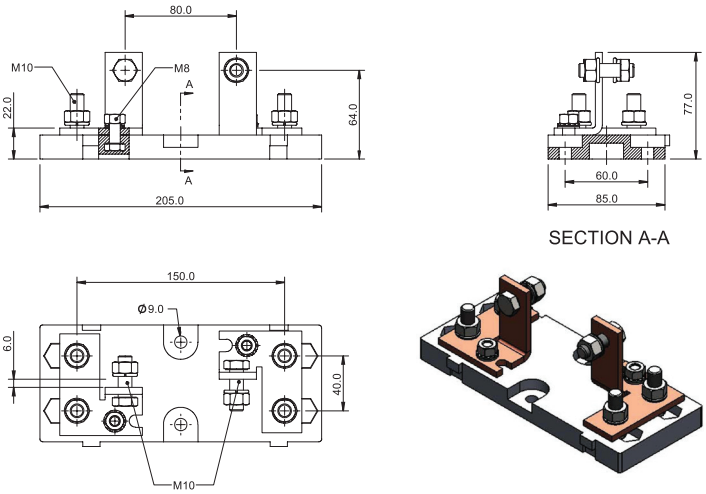
### Sizes 1* to 3

| Catalog no. | Max rated voltage | Max fuse amp rating | Center distance (mm) |
|---|---|---|---|
| 170H3003 | 1000 | 630 | 80 |
| 170H3004† | 1000 | 1250 | 80 |
| 170H3005 | 1400 | 630 | 110 |
| 170H3006† | 1400 | 1250 | 110 |

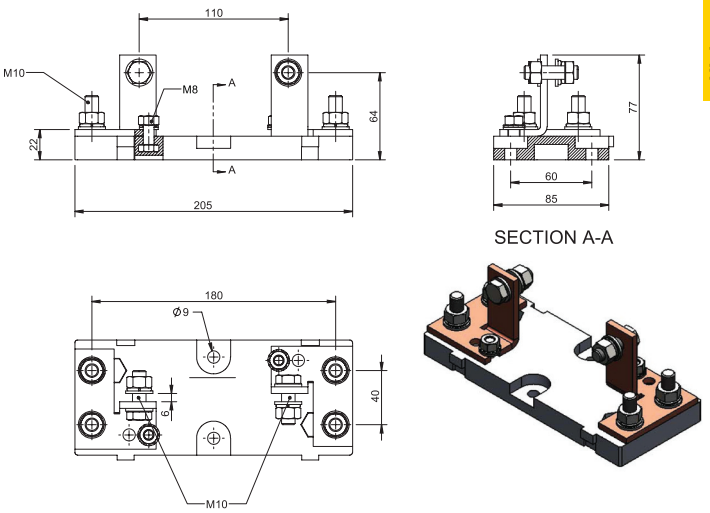
† Fuses with ratings higher than 1250 A can be used with 170H3004 or 170H3006 if the maximum load current is derated according to this table.

| Fuse amp rating | Max. amp load in fuse block |
|---|---|
| 1400 | 1325 |
| 1500 | 1400 |
| 1600 | 1500 |
| 1800 | 1650 |
| 2000 | 1800 |

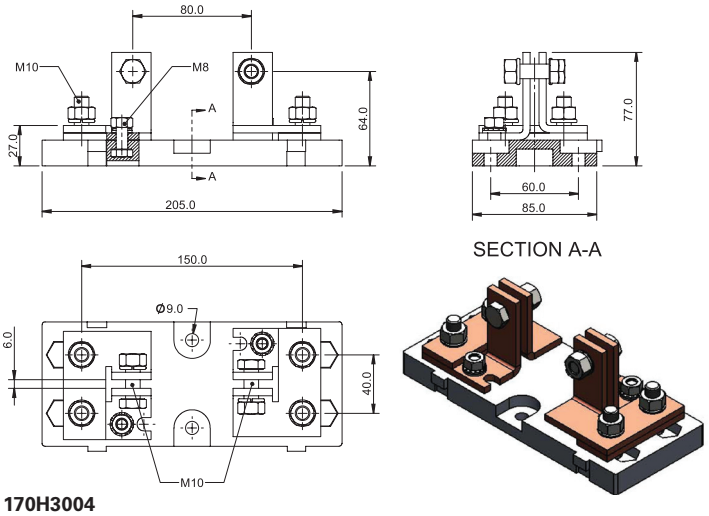
### Dimensions — mm



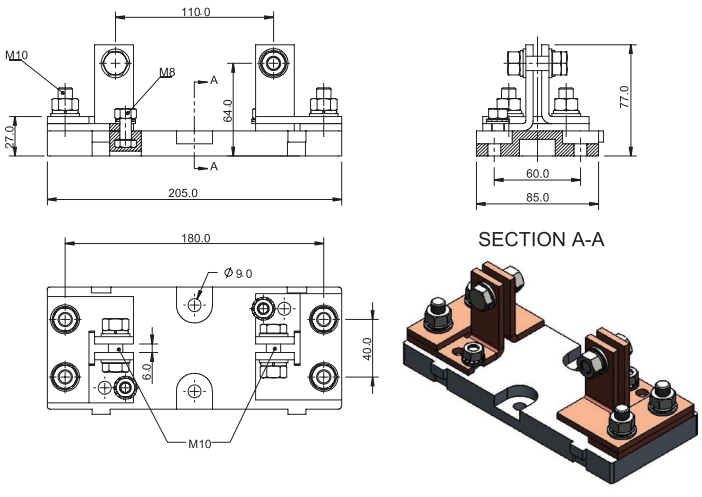

170H3003




170H3005




170H3004




170H3006

## Square Body fuse accessories

### Indicators

High speed square body fuses are available with the following indicators.

### Visual indicator

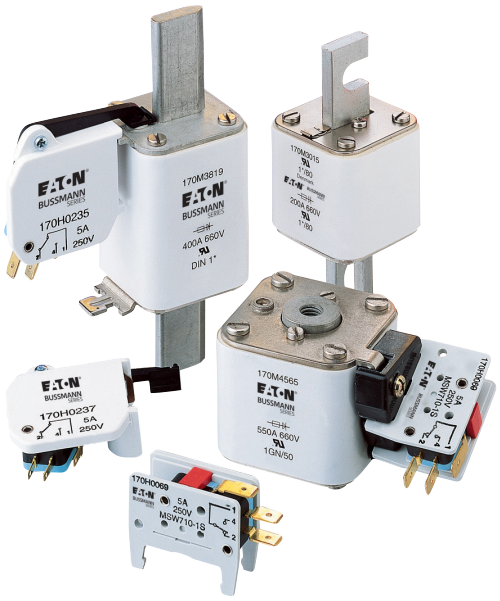
The indicator situated in one end plate is clearly visible as soon as the fuse has operated. The minimum rated voltage for operating the indicator is 20 V.

### Type T indicator

The indicator is situated on one cover plate with a cover plate tag to accommodate an auxiliary switch. The minimum rated voltage for operating the indicator is 20 V. A special low rated voltage indicator (1.5 V) is available on request.

### Type K indicator

The indicator is situated on the fuse body. It is covered by an adapter for snap-on mounting of a microswitch. The rated operating voltage of the indicator is 1.5 V. As a matter of safety, the factory mounted adapter must not be removed from the fuse.



## Microswitches

High speed square body fuses with either Type T or K indicators can be equipped with a microswitch for remote signaling of fuse operation. All microswitches have one normally open (NO) and one normally closed (NC) contact.




### Ratings

- Volts 250 Vac
- Amps 5 A

### Catalog numbers

| Fuse size | DIN 43653 | | DIN 43620 | | French style | | Flush-end | | US style | Quick connect terminal size (mm) |
|---|---|---|---|---|---|---|---|---|---|---|
| | Type T | Type K | aR | gR and dual indication | Type T | Type K | Type T | Type K | Type K | |
| 000 | 170H0236 | — | 170H0236 | 170H0236 | — | — | — | — | — | 6.3x0.8 |
| | 170H0238 | — | 170H0238 | 170H0238 | — | — | — | — | — | 2.8x0.5 |
| 00 | 170H0235 | — | 170H0236 | 170H0236 | — | — | 170H0235 | — | — | 6.3x0.8 |
| | 170H0237 | — | 170H0238 | 170H0238 | — | — | 170H0237 | — | — | 2.8x0.5 |
| 1* | 170H0235 | 170H0069 | 170H0235 | — | 170H0236 | 170H0069 | — | 170H0069 | 170H0069 | 6.3x0.8 |
| | 170H0237 | — | 170H0237 | — | 170H0238 | — | — | — | — | 2.8x0.5 |
| 1 | 170H0235 | 170H0069 | 170H0235[1] | 170H0236 | 170H0236 | 170H0069 | — | 170H0069 | 170H0069 | 6.3x0.8 |
| | 170H0237 | — | 170H0237[1] | 170H0238 | 170H0238 | — | — | — | — | 2.8x0.5 |
| 2 | 170H0235 | 170H0069 | 170H0235 | 170H0236 | 170H0236 | 170H0069 | — | 170H0069 | 170H0069 | 6.3x0.8 |
| | 170H0237 | — | 170H0237 | 170H0238 | 170H0238 | — | — | — | — | 2.8x0.5 |
| 3 | 170H0235 | 170H0069 | 170H0236 | 170H0236 | 170H0236 | 170H0069 | — | 170H0069 | 170H0069 | 6.3x0.8 |
| | 170H0237 | — | 170H0238 | 170H0238 | 170H0238 | — | — | — | — | 2.8x0.5 |
| 4 | — | — | — | — | — | — | — | 170H0069 | — | 6.3x0.8 |
| 23 | — | — | — | — | — | — | — | 170H0069 | — | 6.3x0.8 |
| 24 | — | — | — | — | — | — | — | 170H0069 | — | 6.3x0.8 |

1 DIN2* (55x55), if DIN2 then use microswitch 170H0236, 170H0238.
For special microswitches, double microswitches, microswitches with DC ratings, lower/higher signal levels and for insulation voltages please contact Eaton's Bussmann Division: bulehighspeedtechnical@eaton.com.

## 170M — IGBT size 000 and 230

### 750 Vdc (IEC), 800 Vdc (UL), 25 to 630 A

Bolted tag high speed fuses for the protection of IGBT modules, optimized for use in IGBT inverter circuits with DC fuse voltage ratings up to 750 Vdc. Low inductance ≤ 15nH.




### Ratings

- Volts
  - 750 Vdc tested at 863 Vdc according to IEC 60269-4
  - 800 Vdc tested at 800 Vdc according to UL 248-1
- Amps 25-630 A
- IR 50 kA DC (1ms tc) at 800 Vdc

### Operating class aR

### Agency information

- UL DC Recognized, 800 Vdc L/R 1 ms max



| | | | $I^2t$ ($A^2s$) | | | Catalog no. | |
|---|---|---|---|---|---|---|---|
| Fuse size | Rated voltage | Rated current (amps) | Pre-arcing | Clearing at 690 Vac | Watts loss (W)* | -FU/70 | -FN/70 |
| 000 | 750 Vdc (IEC) 800 Vdc (UL) | 25 | 25 | 135 | 12 | 170M1750 | 170M1730 |
| | | 32 | 45 | 240 | 13 | 170M1751 | 170M1731 |
| | | 40 | 75 | 395 | 14 | 170M1752 | 170M1732 |
| | | 50 | 135 | 695 | 16 | 170M1753 | 170M1733 |
| | | 63 | 260 | 1350 | 17 | 170M1754 | 170M1734 |
| | | 80 | 460 | 2350 | 20 | 170M1755 | 170M1735 |
| | | 100 | 795 | 4000 | 25 | 170M1756 | 170M1736 |
| | | 125 | 1300 | 6800 | 29 | 170M1757 | 170M1737 |
| | | 160 | 2550 | 13500 | 34 | 170M1758 | 170M1738 |
| | | 200 | 4350 | 22000 | 40 | 170M1759 | 170M1739 |
| | | 250 | 7400 | 37500 | 48 | 170M1760 | 170M1740 |
| | | 315 | 12,500 | 65000 | 60 | 170M1761 | 170M1741 |
| | | 350 | 17,000 | 88000 | 65 | 170M1762 | 170M1742 |
| 230 | 750 Vdc (IEC) 800 Vdc (UL) | 100 | 380 | 1950 | 35 | 170M1770 | 170M1785 |
| | | 125 | 645 | 3300 | 42 | 170M1771 | 170M1786 |
| | | 160 | 1350 | 7000 | 47 | 170M1772 | 170M1787 |
| | | 200 | 2550 | 13500 | 54 | 170M1773 | 170M1788 |
| | | 250 | 4950 | 25000 | 62 | 170M1774 | 170M1789 |
| | | 315 | 9350 | 47500 | 72 | 170M1775 | 170M1790 |
| | | 350 | 12,000 | 61000 | 78 | 170M1776 | 170M1791 |
| | | 400 | 18,500 | 94500 | 80 | 170M1777 | 170M1792 |
| | | 450 | 27,000 | 140000 | 85 | 170M1778 | 170M1793 |
| | | 500 | 37,500 | 190000 | 90 | 170M1779 | 170M1794 |
| | | 550 | 48,500 | 245000 | 95 | 170M1780 | 170M1795 |
| | | 630 | 69,500 | 355000 | 105 | 170M1781 | 170M1796 |

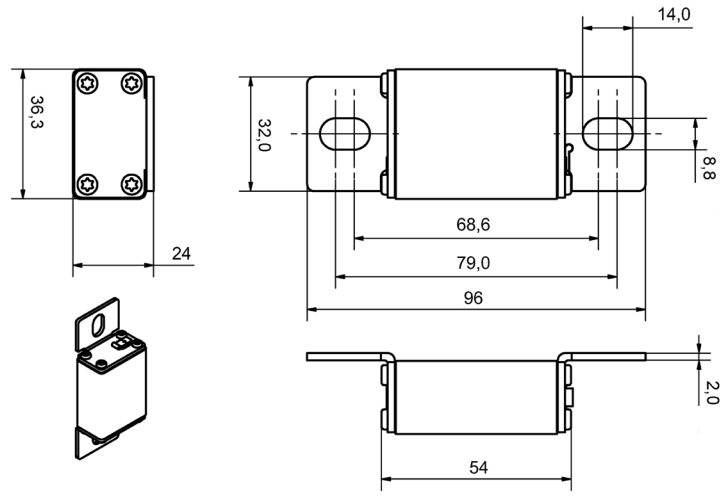
* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6422 (Size 000), 170K6426 (Size 230)

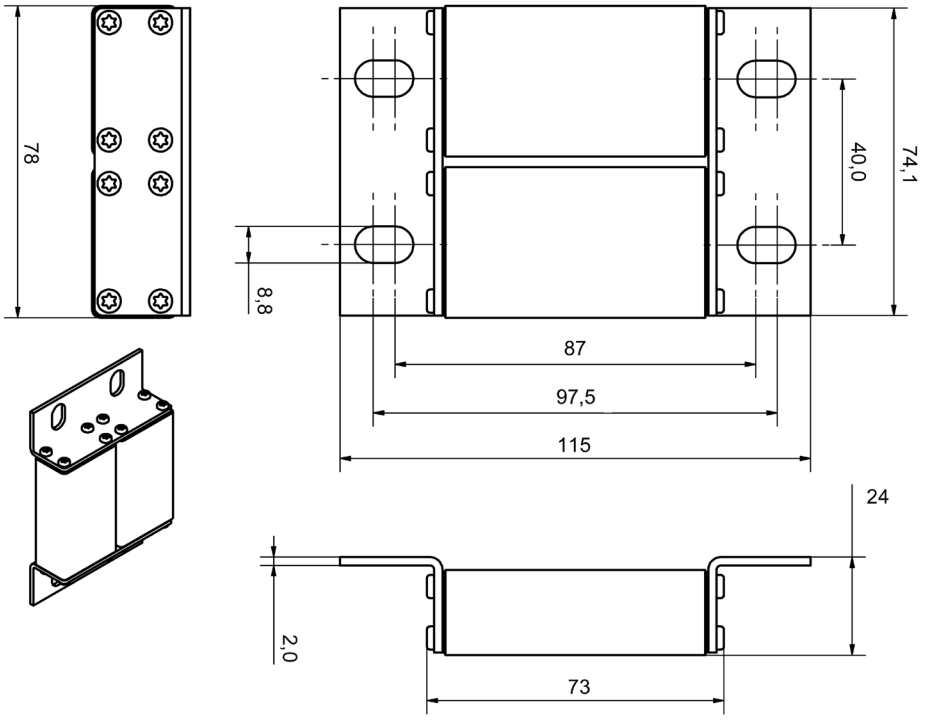
## 170M — IGBT size 000 and 230

**750 Vdc (IEC), 800 Vdc (UL), 25 to 630 A**

**Dimensions — mm**




**Size 000**




**Size 230**

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 170K6422 (Size 000), 170K6426 (Size 230)

## 170M — IGBT size 000 and 230

### 1000 Vdc (IEC and UL), 25 to 500 A




Bolted tag high speed fuses for the protection of IGBT modules, optimized for use in IGBT inverter circuits with DC fuse voltage ratings up to 1000 Vdc. Low inductance ≤ 20nH.

### Ratings

- Volts
  - 1000 Vdc tested at 1150 Vdc according to IEC 60269-4
  - 1000 Vdc tested at 1000 Vdc according to UL 248-1
- Amps 25-500 A
- IR 50 kA DC (1ms tc)

### Operating class aR

### Agency information

- UL DC Recognized, 1000 Vdc L/R 1ms max



| Fuse size | Rated voltage | Rated current (amps) | I²t (A²s) Pre-arcing | I²t (A²s) Clearing at 1000 Vac | Watts loss (W)* | Catalog no. -FU/90 | Catalog no. -FN/90 |
|---|---|---|---|---|---|---|---|
| 000 | 1000 Vdc (IEC/UL) | 25 | 19 | 95 | 14 | 170M1802 | 170M1842 |
| | | 32 | 34 | 170 | 17 | 170M1803 | 170M1843 |
| | | 40 | 61 | 300 | 20 | 170M1804 | 170M1844 |
| | | 50 | 135 | 675 | 21 | 170M1805 | 170M1845 |
| | | 63 | 245 | 1200 | 22 | 170M1806 | 170M1846 |
| | | 80 | 505 | 2500 | 27 | 170M1807 | 170M1847 |
| | | 100 | 1050 | 5150 | 32 | 170M1808 | 170M1848 |
| | | 125 | 1900 | 9500 | 34 | 170M1809 | 170M1849 |
| | | 160 | 4050 | 20,000 | 37 | 170M1810 | 170M1850 |
| | | 200 | 8500 | 42,000 | 43 | 170M1811 | 170M1851 |
| | | 225 | 12,000 | 59,000 | 45 | 170M1812 | 170M1852 |
| | | 250 | 16,000 | 79,500 | 48 | 170M1813 | 170M1853 |
| 230 | 1000 Vdc (IEC/UL) | 100 | 600 | 3050 | 38 | 170M1824 | 170M1860 |
| | | 125 | 1200 | 6050 | 42 | 170M1825 | 170M1861 |
| | | 160 | 2550 | 13,000 | 48 | 170M1826 | 170M1862 |
| | | 200 | 4650 | 23,000 | 55 | 170M1827 | 170M1863 |
| | | 250 | 9300 | 45,500 | 62 | 170M1828 | 170M1864 |
| | | 315 | 18,500 | 91,500 | 68 | 170M1829 | 170M1865 |
| | | 350 | 24,500 | 125,000 | 75 | 170M1830 | 170M1866 |
| | | 400 | 37,500 | 185,000 | 80 | 170M1831 | 170M1867 |
| | | 450 | 52,000 | 260,000 | 85 | 170M1832 | 170M1868 |
| | | 500 | 69,500 | 340,000 | 90 | 170M1833 | 170M1869 |

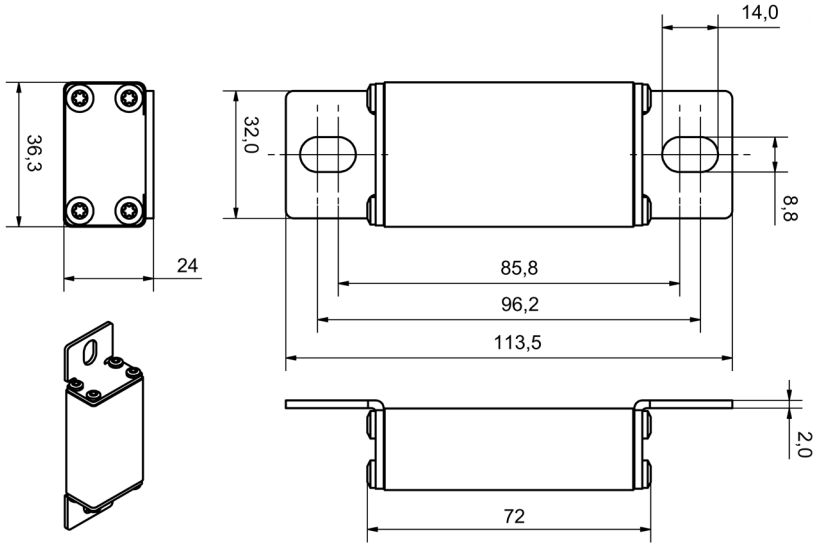
* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 170K6680 (Size 000), 170K6682 (Size 230)

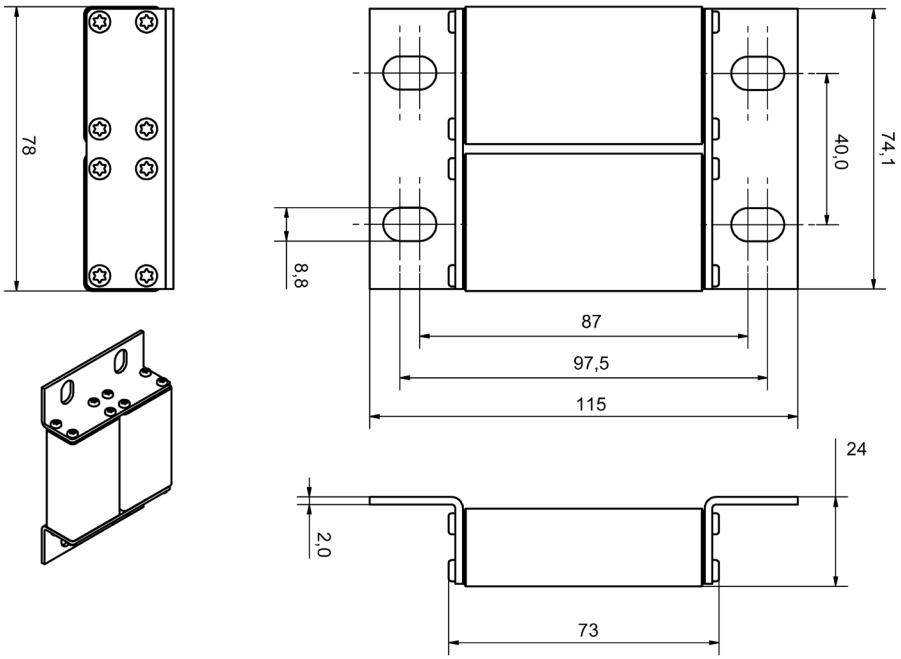
## 170M — size 000 and 230

### 1000 Vdc (IEC and UL), 25 to 500 A

**Dimensions — mm**




**Size 000**




**Size 230**

For details on electrical characteristics, contact Application Engineering and ask for data sheets:170K6680 (Size 000), 170K6682 (Size 230)