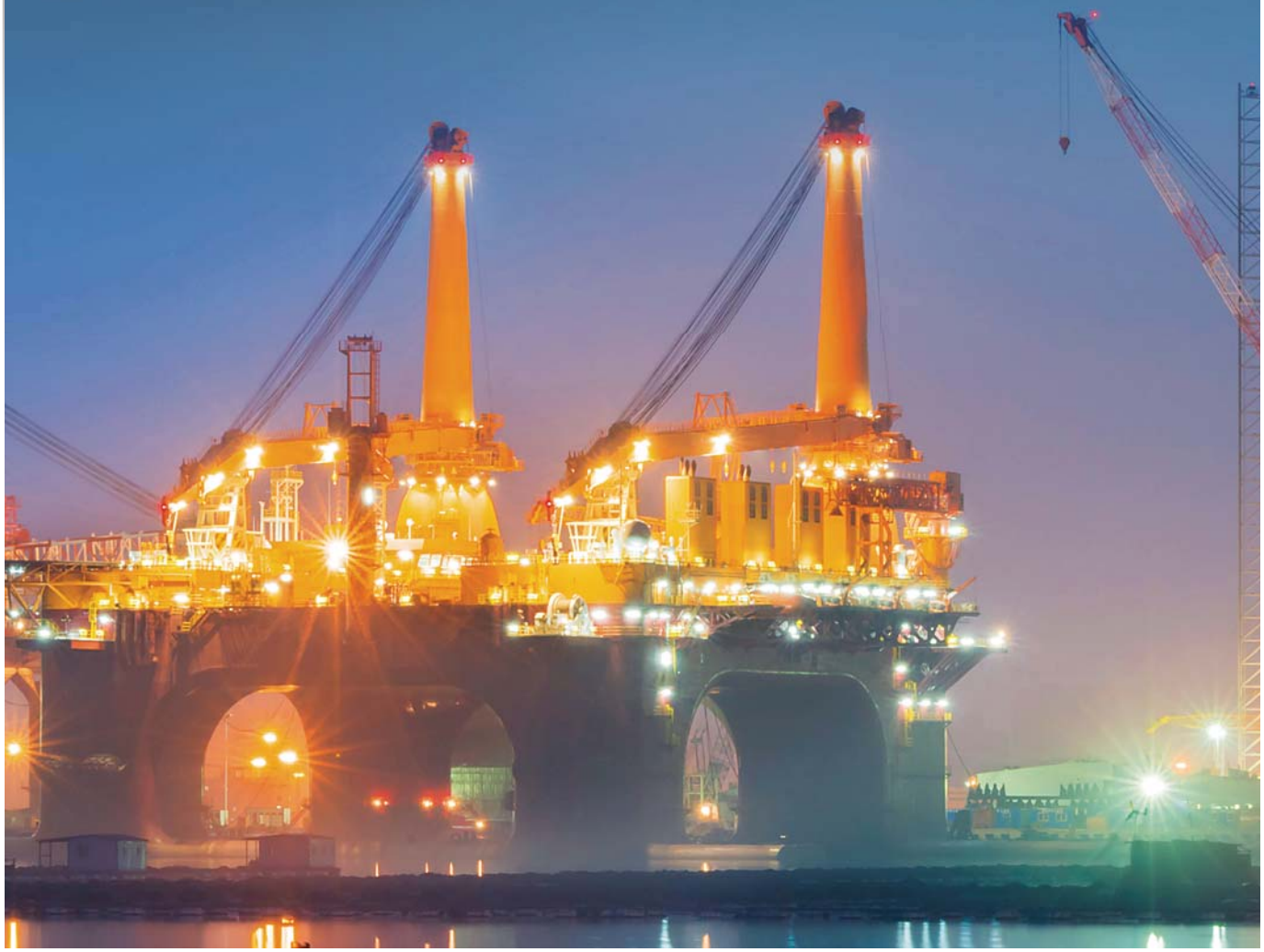
Bussmann series IEC High speed catalogue

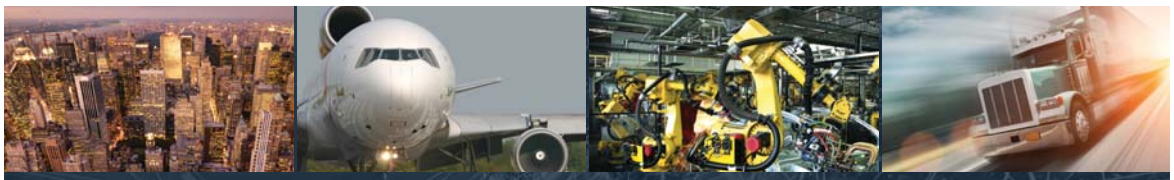
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With a continual commitment to meet our customers' needs with innovative high quality products with ISO 902 'approval systems', Eaton's Bussmann business is the supplier of choice for high speed circuit protection solutions.

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# North American fuse links

## FWA

## 130 V a.c./V d.c.(UL), 1000 to 4000 A




### Specifications

**Description**

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

**Technical data**

Rated voltage: 130 V a.c./V d.c. (UL).

Rated current: 1000-4000 A.

Breaking capacity:

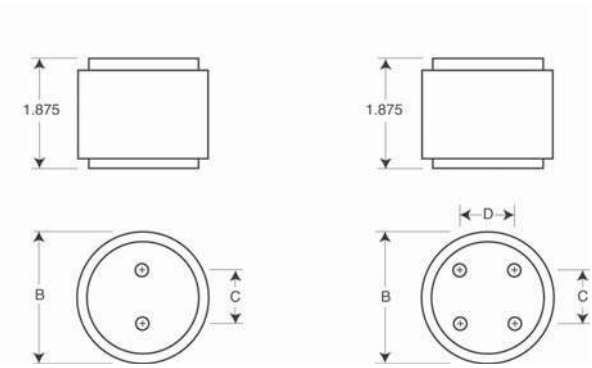
- 200 kA RMS Sym at 130 V a.c.
- 50 kA at 130 V d.c..

**Standards / Agency information**

CE, UL Recognised JFHR2.E91958 on 1000 - 2000 A fuse links.

| Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 130 V a.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|
| 130 V a.c./V d.c. (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 |

**Dimensions — in**




**1000-3000 A** **4000 A**

| Rated current (Amps) | B | C | D | Thread depth |
|---|---|---|---|---|
| 1000 to 2000 | 2 | 1 | - | Tapped 3/8"-24 x 1/2" UNF |
| 2500 to 3000 | 3 | 1.5 | - | Tapped 1/2"-20 x 1/2" UNF |
| 4000 | 3.5 | 1.5 | 1.5 | Tapped 1/2"-20 x 1/2" UNF |

1" = 25.4mm

Data sheets: 720001, 5785301

# FWA

## 150 V a.c./V d.c. (UL), 70 to 1000 A



### Specifications

**Description**

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

**Technical Data**

Rated voltage:

- 150 V a.c./V d.c. (UL)
- 80 V d.c. 1000 A only

Rated current: 70-1000 A.

Breaking capacity:

- 100 kA RMS Sym. (70-400 A).
- 200 kA RMS Sym. (450-1000 A).
- 20 kA at 150 V a.c./V d.c. (70-800 A)
- 100 kA at 80 V d.c. (70-1000 A)

**Standards / Agency information**

CE, UL Recognised JFHR2.E91958.

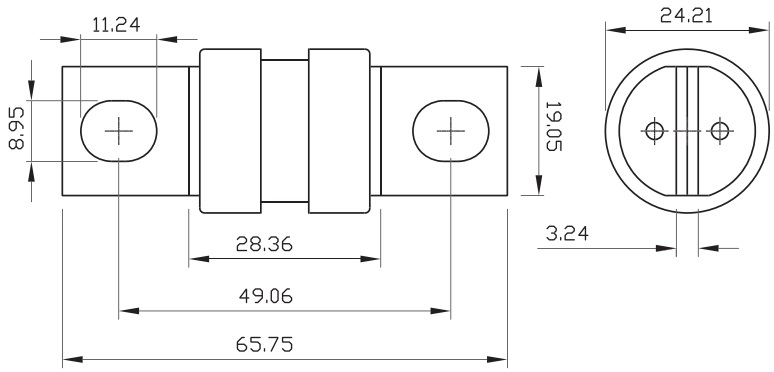
| Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 150 V a.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|
| 150 V a.c./V d.c. (UL) | 70 | 470 | 4000 | 6.9 | FWA-70B |
| | 80 | 670 | 6000 | 7.7 | FWA-80B |
| | 100 | 1200 | 12,000 | 9 | 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 | 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 | FWA-500A |
| | 600 | 46,000 | 140,000 | 47 | FWA-600A |
| | 700 | 75,000 | 220,000 | 49 | FWA-700A |
| | 800 | 92,000 | 280,000 | 58 | FWA-800A |
| 80 V d.c. | 1000 | 170,000 | 510,000 | 60 | FWA-1000A |

Data sheets: 720002, 5785310

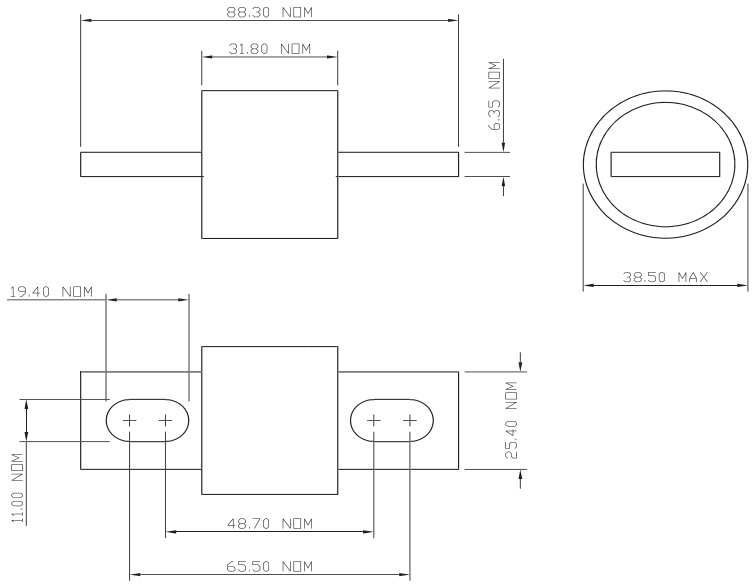
# FWA

## 150 V a.c./V d.c. (UL), 70 to 1000 A

**Dimensions - mm**




**70-400 A**




**500-1000 A**

Data sheets: 720002, 5785310

# FWX

## 250 V a.c./V d.c. (UL), 35 to 2500 A

### Specifications




#### Description

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

#### Technical Data

Rated voltage: 250 V a.c./V d.c. (UL).

Rated current: 35-2500 A.

Breaking capacity:

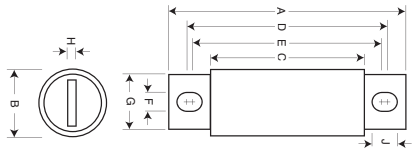
- 200 kA RMS Sym.
- 20 kA at 250 V d.c. (35-800 A).

#### Standards / Agency information

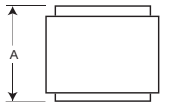
CE, UL Recognised file JFHR2.E56412 and CSA component acceptance on 35-800 A fuse links (20 kA IR at 250 V d.c.).

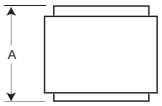
| Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 250 V a.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|
| 250 V a.c./ V d.c. (UL) | 35 | 50 | 230 | 4.2 | FWX-35A |
| | 40 | 60 | 310 | 5.2 | FWX-40A |
| | 45 | 80 | 390 | 5.7 | FWX-45A |
| | 50 | 100 | 520 | 6 | 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 | FWX-90A |
| | 100 | 740 | 3150 | 10 | 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 | FWX-200A |
| | 225 | 3210 | 14,700 | 24 | FWX-225A |
| | 250 | 3960 | 18,100 | 27 | FWX-250A |
| | 275 | 4720 | 21,600 | 31 | FWX-275A |
| | 300 | 6000 | 27,300 | 32 | FWX-300A |
| | 350 | 10,600 | 48,600 | 39 | FWX-350A |
| | 400 | 14,500 | 66,100 | 44 | FWX-400A |
| | 450 | 22,100 | 101,000 | 49 | FWX-450A |
| | 500 | 28,000 | 128,000 | 54 | FWX-500A |
| | 600 | 41,100 | 188,000 | 62 | FWX-600A |
| | 700 | 48,800 | 190,000 | 72 | FWX-700A |
| | 800 | 59,000 | 230,000 | 84 | FWX-800A |
| | 1000 | 44,000 | 360,000 | 100 | FWX-1000AH |
| | 1200 | 92,000 | 750,000 | 103 | FWX-1200AH |
| | 1500 | 120,000 | 880,000 | 140 | FWX-1500AH |
| | 1600 | 160,000 | 1,200,000 | 140 | FWX-1600AH |
| | 2000 | 320,000 | 2,300,000 | 151 | FWX-2000AH |
| | 2500 | 670,000 | 4,700,000 | 163 | FWX-2500AH |

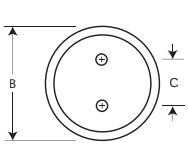
#### Dimensions - in



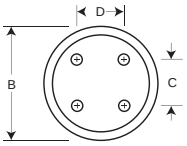

35-800 A




1000-1200 A




1500-2500 A

| Amp range | A | B | C | D | E | F | G | H | J | Tapped 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 | 0.19 | 0.47 | - |
| 225-600 | 3.84 | 1.5 | 1.59 | 2.94 | 2.25 | 0.41 | 1 | 0.25 | 0.75 | - |
| 700-800 | 3.84 | 2 | 1.59 | 3.03 | 2.28 | 0.41 | 1.5 | 0.25 | 0.78 | - |
| 1000-1200 | 2.59 | 3 | 1.5 | - | - | - | - | - | - | 3/8"-24 x 1/2" UNF |
| 1500-2500 | 2.59 | 3.5 | 1.5 | 1.5 | - | - | - | - | - | |

1" = 25.4mm

Data sheets: 720005, 359 (35-800 A), 5785299 (100-2500 A)

# FWH

## 500 V a.c./V d.c.[1] (UL), 35 to 1600 A

### Specifications

**Description**

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

**Technical data**

Rated voltage:

- 500 V a.c. (UL).
- 500 V d.c. (35-800 A only)

Rated current: 35-1600 A.

Breaking capacity:

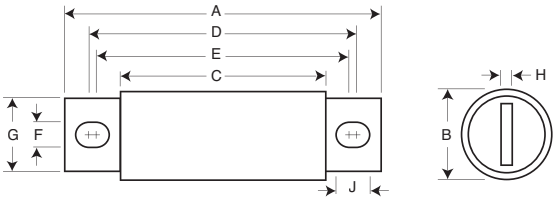
- 200 kA RMS Sym.
- 50 kA at 500 V d.c..

**Standards / Agency information**

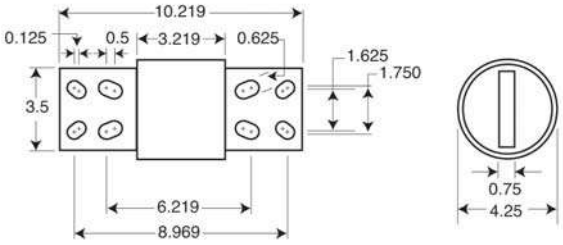
CE, UL Recognition JFHR2.E91958 FWH-_B (35-200 A) and FWH-_A (1000 and 1200 A), JFHR2.E56412 FWH-_A (225-800 A), CSA Component Acceptance Class 1422-30, File 53787 (35-1600 A)




**Dimensions - in**




**35-1200 A**




**1400-1600 A - in**

| Rated voltage | Rated current (Amps) | I²t (A² Sec) Pre-arcing | I²t (A² Sec) Clearing at 250 V a.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|
| 500 V a.c./ V d.c. (UL) | 35 | 34 | 150 | 8 | 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 | FWH-90B |
| | 100 | 475 | 2000 | 17 | FWH-100B |
| | 125 | 800 | 3500 | 25 | FWH-125B |
| | 150 | 1100 | 4600 | 30 | FWH-150B |
| | 175 | 1450 | 6200 | 35 | FWH-175B |
| | 200 | 1900 | 8500 | 40 | FWH-200B |
| 500 V a.c./ V d.c. (UL) | 225 | 4600 | 23,300 | 39 | FWH-225A |
| | 250 | 6300 | 32,200 | 41 | FWH-250A |
| | 275 | 7900 | 40,300 | 46 | FWH-275A |
| | 300 | 9800 | 49,800 | 51 | FWH-300A |
| | 325 | 13,700 | 63,800 | 53 | FWH-325A |
| | 350 | 14,500 | 72,900 | 58 | FWH-350A |
| | 400 | 19,200 | 96,700 | 65 | FWH-400A |
| | 450 | 24,700 | 127,000 | 74 | FWH-450A |
| | 500 | 29,200 | 149,000 | 84 | FWH-500A |
| | 600 | 41,300 | 206,000 | 108 | FWH-600A |
| | 700 | 55,000 | 298,000 | 120 | FWH-700A |
| | 800 | 76,200 | 409,000 | 129 | FWH-800A |
| 500 V a.c./ (UL) | 1000 | 92,000 | 450,000 | 145 | FWH-1000A |
| | 1200 | 122,000 | 600,000 | 180 | FWH-1200A |
| | 1400 | 200,000 | 1,000,000 | 210 | FWH-1400A |
| | 1600 | 290,000 | 1,400,000 | 230 | FWH-1600A |

| 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 | 0.19 | 0.41 |
| 225-400 | 4.34 | 1.5 | 2.09 | 3.44 | 2.75 | 0.41 | 1 | 0.25 | 0.75 |
| 450-600 | 14.34 | 2 | 2.09 | 3.53 | 2.78 | 0.41 | 1.5 | 0.25 | 0.78 |
| 700-800 | 6.34 | 2.5 | 2.09 | 4.97 | 3.44 | 0.53 | 2 | 0.38 | 1.30 |
| 1000-1200 | 6.97 | 3 | 3.22 | 5.47 | 4.48 | 0.62 | 2.38 | 0.44 | 1.12 |
| 1400-1600 | refer to drawing | | | | | | | | |

1" = 25.4mm

[1] 500 V d.c. for 35-800 A only.

Data sheets: 720007, 360 (225-800 A), 5785304 (35-200 A, 1000-1600 A)

# KAC

## 600 V a.c. (UL), 1 to 1000 A

### Specifications

**Description**

North American style bolted tags high speed fuse links. These fuse links are supplied as replacements only. For new installations, Bussmann recommends the 700 V FWP see pages 13-14.

**Technical Data**

Rated voltage: 600 V a.c. (UL).

Rated curent: 1-1000 A.

Breaking capacity: 200 kA RMS Sym.

**Standards / Agency information**

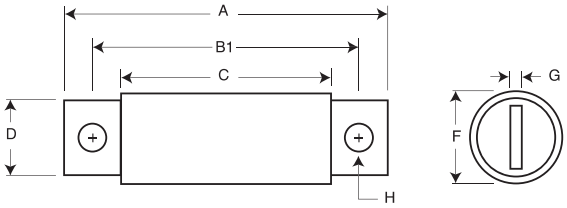
CE, UL file JFHR2.E56413 (1-600 A only).

| Rated voltage | Rated current (Amps) | Catalogue numbers |
|---|---|---|
| | 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 |
| 600 V a.c. (UL) | 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 |

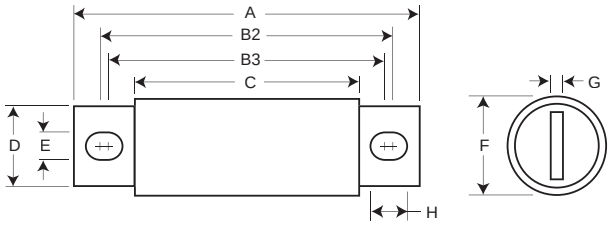
Data sheet: 720009




**Dimensions - in**




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




**35-400 A**

| Rated current (Amps) | A | B1 | B2 | B3 | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|---|---|
| 1-30 | 2.88 | 2.5 | - | - | 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 | - | 4.06 | 3.66 | 2.75 | 0.75 | 0.41 | 1 | 0.13 | 0.61 |
| 110-200 | 5.14 | - | 4.39 | 3.77 | 2.91 | 1 | 0.41 | 1.5 | 0.19 | 0.72 |
| 225-400 | 6.18 | - | 4.82 | 4.57 | 3 | 1.63 | 0.56 | 2 | 0.25 | 0.69 |
| 450-800 | 6.25 | 4.75 | - | | 3.06 | 2 | - | 2.5 | 0.25 | 0.56 |
| 1000 | 7.25 | 4.75 | - | | 3.06 | 2.75 | - | 3.5 | 0.38 | 0.56 |

1" = 25.4mm

# KBC

## 600 V a.c. (UL), 35 to 800 A

### Specifications

**Description**

North American style bolted tags and flush-end high speed fuse links. These fuse links are supplied as replacements only. For new installations, Eaton's Bussmann business recommends the 700 V FWP fuse links, see pages 13-14.

**Technical data**

Rated voltage: 600 V a.c. (UL).

Rated current: 35-800 A.

Breaking capacity: 200 kA RMS Sym.

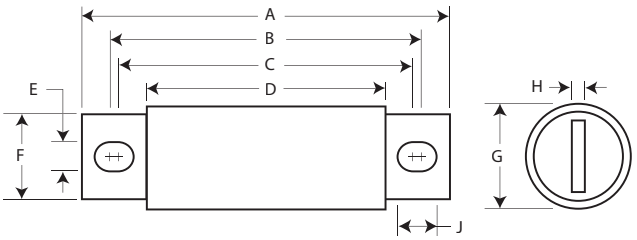
**Standards / Agency information**

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

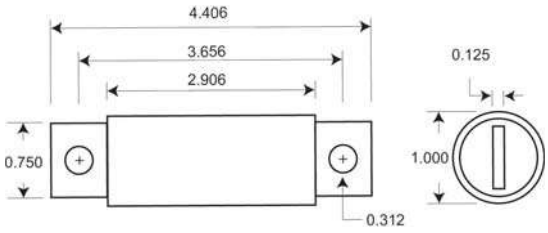
| Rated voltage | Rated current (Amps) | Catalogue numbers |
|---|---|---|
| 600 V a.c. (UL) | 35 | KBC-35 |
| | 40 | KBC-40 |
| | 45 | KBC-45 |
| | 50 | KBC-50 |
| | 60 | KBC-60 |
| | 70 | KBC-70 |
| | 80 | KBC-80 |
| | 90 | KBC-90 |
| | 100 | KBC-100 |
| | 110 | KBC-110 |
| | 125 | KBC-125 |
| | 150 | 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 |



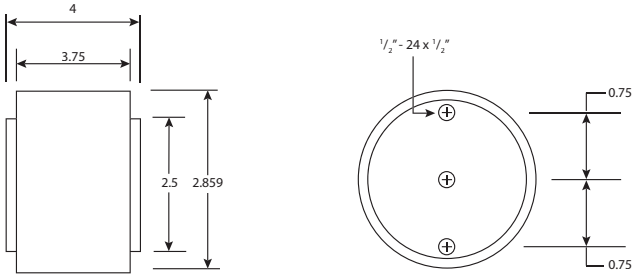

**Dimensions - in**




**35-60 & 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 | 1.5 | 0.25 | 0.72 |
| 450-600 | 5.13 | 4.39 | 3.69 | 2.88 | 0.41 | 1.5 | 2 | 0.25 | 0.76 |
| 800 | Refer to drawing | | | | | | | | |

1" = 25.4mm

Data sheet: 720010

# FWP

## 700 V a.c./V d.c.(UL), 5 to 1200 A




### Specifications

**Description**

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

**Technical data**

Rated voltage: 700 V a.c./V d.c. (UL).

Rated current: 5-1200 A.

Breaking capacity:

- 200 kA RMS Sym.
- 50 kA at 700 V d.c. (type A)
- 50 kA at 500 V d.c. (type B)

**Standards / Agency information**

CE, UL Recognition JFHR2.E91958 FWP-_B (5-100 A, 700 -1200 A), JFHR2.E56412 FWP-_A (125-600 A) and CSA Component Acceptance file class 1422-30, (53787) on 5-800 A

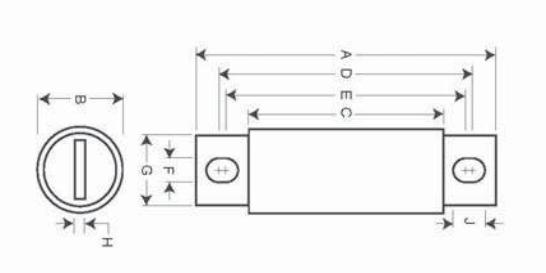
| Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|
| | | Pre-arcing | Clearing at 700 V a.c. | | |
| 700 V a.c./V d.c. (UL) | 5 | 1.6 | 11 | 1.5 | FWP-5B |
| | 10 | 3.6 | 22 | 4 | FWP-10B |
| | 15 | 10 | 70 | 5.5 | FWP-15B |
| | 20 | 26 | 180 | 6 | FWP-20B |
| | 25 | 44 | 320 | 7 | FWP-25B |
| | 30 | 58 | 450 | 9 | FWP-30B |
| | 35 | 34 | 160 | 12 | FWP-35B |
| | 40 | 76 | 320 | 12 | FWP-40B |
| | 50 | 135 | 600 | 12 | FWP-50B |
| | 60 | 210 | 950 | 15.5 | FWP-60B |
| | 70 | 305 | 2000 | 18 | FWP-70B |
| | 80 | 360 | 2400 | 21 | FWP-80B |
| | 90 | 415 | 2700 | 25 | FWP-90B |
| | 100 | 540 | 3500 | 27 | FWP-100B |
| | 125 | 1800 | 7300 | 28 | FWP-125A |
| | 150 | 2900 | 11,700 | 32 | FWP-150A |
| | 175 | 4200 | 16,700 | 35 | FWP-175A |
| | 200 | 5500 | 22,000 | 43 | FWP-200A |
| | 225 | 7700 | 31,300 | 45 | FWP-225A |
| | 250 | 10,500 | 42,500 | 48 | FWP-250A |
| | 300 | 17,600 | 71,200 | 58 | FWP-300A |
| | 350 | 23,700 | 95,600 | 65 | FWP-350A |
| | 400 | 31,000 | 125,000 | 78 | FWP-400A |
| | 450 | 36,400 | 137,000 | 94 | FWP-450A |
| | 500 | 45,200 | 170,000 | 107 | FWP-500A |
| | 600 | 66,700 | 250,000 | 122 | FWP-600A |
| | 700 | 54,000 | 300,000 | 125 | FWP-700A |
| | 800 | 78,000 | 450,000 | 140 | FWP-800A |
| | 900 | 91,500 | 530,000 | 150 | FWP-900A |
| | 1000 | 120,000 | 600,000 | 170 | FWP-1000A |
| | 1200 | 195,000 | 1,100,000 | 190 | FWP-1200A |

Data sheets: 720012, 5785316 (5-30 A), 361 (125-600 A), 5785308 (35-100 A, 700-1200 A)

# FWP

## 700 V a.c./V d.c.(UL), 5 to 1200 A

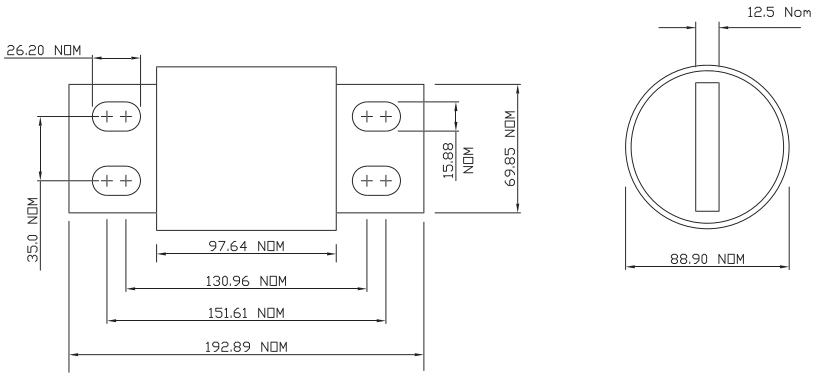
### Dimensions



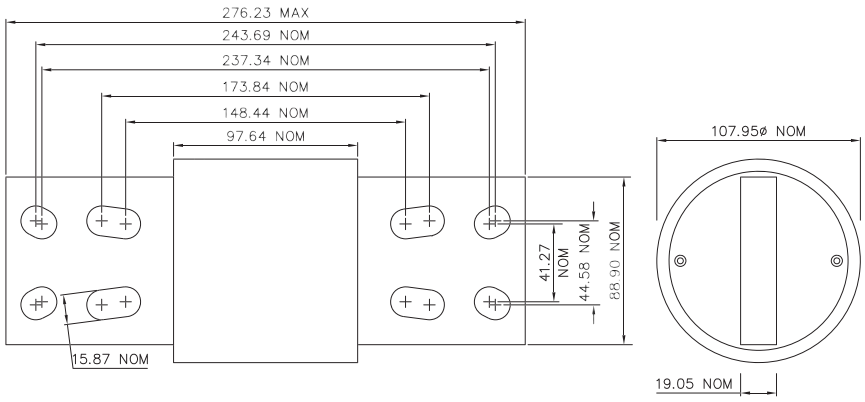

**5-800 A - in**

| 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 | 1.5 | 2.84 | 4.19 | 3.5 | 0.41 | 1 | 0.25 | 0.75 |
| 225-400 | 5.09 | 2 | 2.84 | 4.28 | 3.53 | 0.41 | 1.5 | 0.25 | 0.78 |
| 450-600 | 7.09 | 2.5 | 2.84 | 5.72 | 4.19 | 0.53 | 2 | 0.38 | 1.3 |
| 700-800 | 6.63 | 2 | 2.76 | 5.56 | 5.06 | 0.63 | 1.5 | 0.25 | 0.88 |
| 900-1000 | Refer to drawing | | | | | | | | |
| 1200 | Refer to drawing | | | | | | | | |

1" = 25.4mm




**900-1000 A - mm**




**1200 A - mm**

Data sheets: 720012, 5785316 (5-30 A), 361 (125-600 A), 5785308 (35-100 A, 700-1200 A)

# FWJ

## 1000 V a.c. / 800 V d.c. (UL), 35 to 2000 A

### Specifications

**Description**

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

**Technical data**

Rated voltage:

- 1000 V a.c. (UL)
- 800 V d.c. (UL)

Rated current: 35-2000 A.

Breaking capacity:

- 25kA RMS Sym. (35-200 A).
- 100 kA RMS Sym. (250-2000 A).
- 50 kA at 800 V d.c. (35-200 A and 450-600 A).

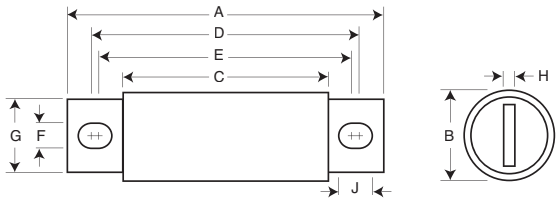
**Standards / Agency information**

CE, UL Recognition JFHR8.E91958 on 50-600 A only

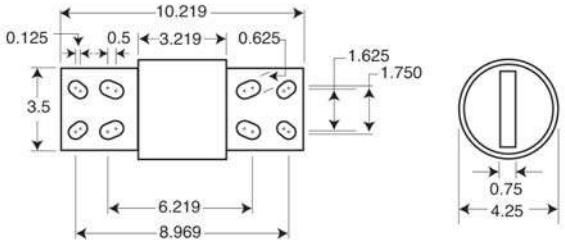
| Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|
| | | Pre-arcing | Clearing at 1000 V a.c. | | |
| 1000 V a.c. 800 V d.c. (UL) | 35 | 210 | 2000 | 7 | FWJ-35A |
| | 40 | 300 | 2500 | 8 | FWJ-40A |
| | 50 | 470 | 3500 | 10 | 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 |




**Dimensions - in**




**35-1200 A**




**1400-2000 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 | 0.19 | 0.41 |
| 225-400 | 4.34 | 1.5 | 2.09 | 3.44 | 2.75 | 0.41 | 1 | 0.25 | 0.75 |
| 450-600 | 14.34 | 2 | 2.09 | 3.53 | 2.78 | 0.41 | 1.5 | 0.25 | 0.78 |
| 700-800 | 6.34 | 2.5 | 2.09 | 4.97 | 3.44 | 0.53 | 2 | 0.38 | 1.30 |
| 1000-1200 | 6.97 | 3 | 3.22 | 5.47 | 4.48 | 0.62 | 2.38 | 0.44 | 1.12 |
| 1400-1600 | refer to drawing | | | | | | | | |

1" = 25.4mm

Data sheets: 720027, 5785303 (35-600 A), 5785309 (800-2000 A),

# British Standard BS88 fuse links

## LCT, LET

## 240 V a.c./150 V d.c. (IEC),

## 250-280 V a.c./150 V d.c. (UL), 6 to 180 A



### Specifications

**Description**

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

**Technical Data**

Rated voltage:

- LCT 240 V a.c./150 V d.c. (IEC)
  250 V a.c./150 V d.c. (UL).
- LET 280 V a.c./150 V d.c. (UL, 25-160 A).
  250 V a.c./150 V d.c. (UL 180 A).

Rated current: 6-180 A.

Breaking capacity:

- 200 kA RMS Sym.
- 50 kA DC at 125V d.c..
- 100 kA at 80 V d.c. (70-1000 A).

Operating Class: aR.

**Standards / Agency information**

CE, designed and tested to BS88 part 4, IEC 60269 Part 4, UL Recognised and CCC (LCT only). All fuse links have been tested at 318V a.c.. Consult Eaton's Bussmann business for specific UL recognition status.

| Fuse link type | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 240 V a.c. | | |
| LCT | 240 V a.c. / 150 V d.c. (IEC)<br>250 V a.c. / 150 V d.c. (UL) | 6 | 2 | 9 | 1 | 6LCT |
| | | 10 | 3.8 | 22 | 2.5 | 10LCT |
| | | 12 | 7 | 32 | 2.5 | 12LCT |
| | | 16 | 20 | 100 | 2.5 | 16LCT |
| | | 20 | 25 | 160 | 4 | 20LCT |
| LET | 280 V a.c. / 150 V d.c. (UL) | 25 | 18 | 250 | 4 | 25LET |
| | | 32 | 32 | 450 | 5 | 32LET |
| | | 35 | 50 | 600 | 5 | 35LET |
| | | 50 | 100 | 1400 | 7 | 50LET |
| | | 63 | 180 | 2200 | 9 | 63LET |
| | | 80 | 300 | 3800 | 10 | 80LET |
| | | 100 | 600 | 7500 | 10 | 100LET |
| | | 125 | 600 | 7500 | 16 | 125LET |
| | | 160 | 1100 | 16,000 | 20 | 160LET |
| | 250 V a.c. / 150 V d.c. (UL) | 180 | 1600 | 29,000 | 21 | 180LET |

Note: 7LET, 10LET, 12LET and 16LET are available for replacement purposes on existing equipment.

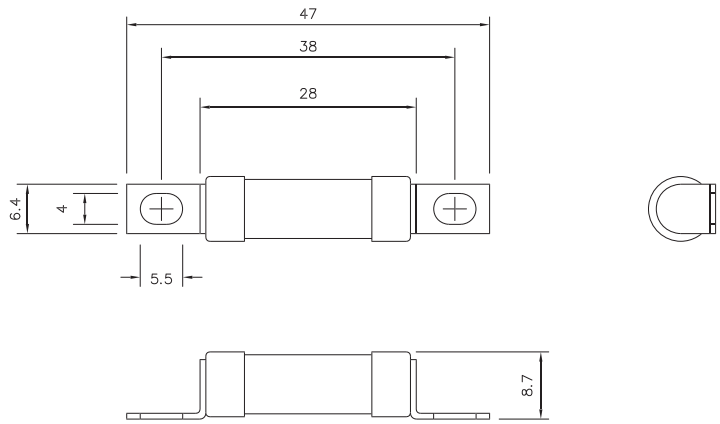
Data sheets: 720004, 5785296 (LCT), 5785293 (LET)

# LCT, LET

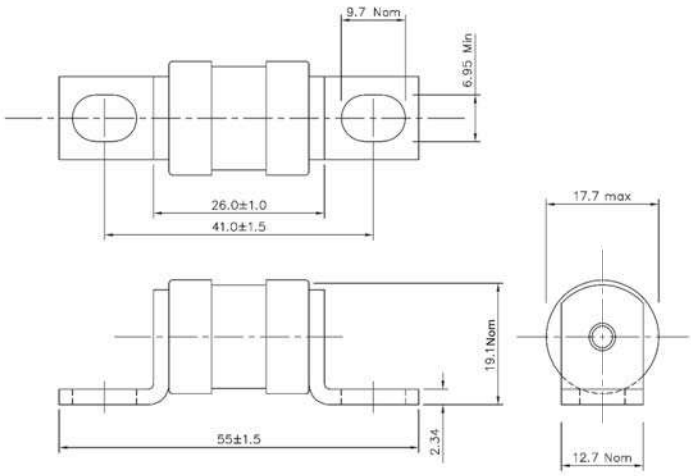
## 240 V a.c./150 V d.c. (IEC),

## 250-280 V a.c./150 V d.c. (UL), 6 to 180 A

**Dimensions - mm**




**LCT**




**LET**

Indicator (optional).

Data sheets: 720004, 5785296 (LCT), 5785293 (LET)

# LMT, LMMT

## 240 V a.c./150 V d.c. (IEC), 250 V a.c./150 V d.c. (UL), 160 to 900 A



### Specifications

**Description**

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

**Technical Data**

Rated voltage:

- 240 V a.c./150 V d.c. (IEC)
- 250 V a.c./150 V d.c. (UL).

Rated current:

- 160-900 A.

Breaking capacity:

- 200 kA RMS Sym., 40 kA at 150 V d.c. (IEC).
- 200 kA RMS Sym., 50 kA at 150 V d.c. (UL).

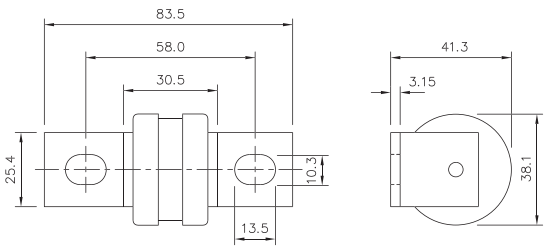
Operating Class: aR.

**Standards / Agency information**

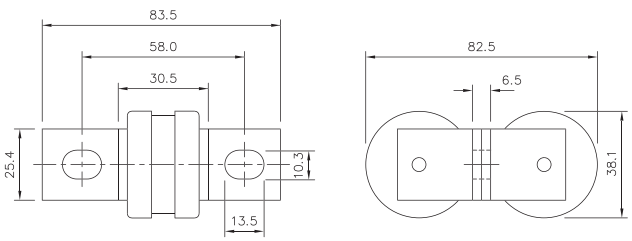
CE, designed and tested to BS88 part 4, IEC 60269 Part 4, UL recognised and CCC. All fuse links have been tested at 318V a.c.. Consult Eaton's Bussmann business for specific UL recognition status.

| Fuse link type | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 120 V a.c. | $I^2t$ ($A^2$ Sec) Clearing at 240 V a.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|---|
| LMT | 240 V a.c. / 150 V d.c. (IEC) 250 V a.c. / 150 V d.c. (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 V a.c. / 150 V d.c. (IEC) 250 V a.c. / 150 V d.c. (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 |

**Dimensions - mm**




**LMT Indicator (optional)**




**LMMT Indicator (optional)**

Data sheets: 720004, 5785294 (LMT), 5785295 (LMMT)

# CT, ET, FE, EET, FEE

## 690 V a.c./500 V d.c. (IEC), 700 V a.c./500 V d.c. (UL), 6 to 200 A




### Specifications

**Description**

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

**Technical data**

Rated voltage:

- 690 V a.c./500 V d.c. (IEC)
- 700 V a.c./500 V d.c. (UL).

Rated current: 6-200 A.

Breaking capacity:

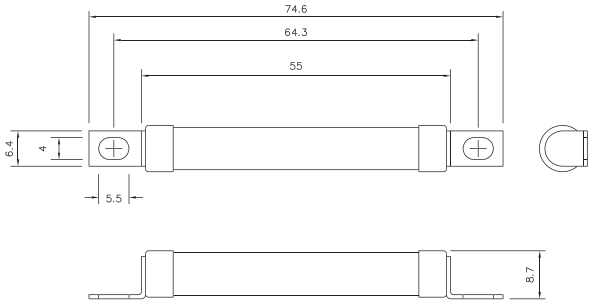
- CT: 90 kA RMS Sym., 40 kA at 500 V d.c. (IEC).
- 200 kA RMS Sym., 50 kA at 500 V d.c. (UL).
- ET, EET, FE and FEE: 200 kA RMS Sym.,50 kA at 500 V d.c..

Operating Class: aR.

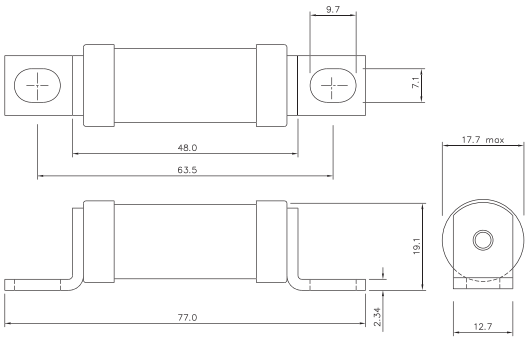
**Standards / Agency information**

CE, designed and tested to BS88 part 4, IEC 60269 Part 4, Consult Eaton's Bussmann business for specific UL Recognition status. CCC for ET, FE, EET, FEE.

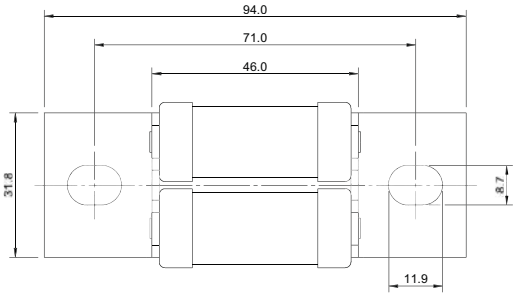
**Dimensions - mm**



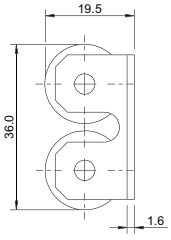

**CT**




**ET, FE**




**EET, FEE**




Data sheets: 5785312 (CT, ET), 5785314 (FE), 5785313 (EET), 5785292 (FEE)

# CT, ET, FE, EET, FEE

## 690 V a.c./500 V d.c. (IEC), 700 V a.c./500 V d.c. (UL), 6 to 200 A

| Fuse link type | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 415V a.c. | Clearing at 660 V a.c. | | |
| CT | 690 V a.c. / 500 V d.c. (IEC)<br>700 V a.c. / 500 V d.c. (UL) | 6 | 1.8 | 8.5 | 12 | 2 | 6CT |
| | | 10 | 7 | 30 | 48 | 3 | 10CT |
| | | 12 | 10 | 40 | 65 | 3 | 12CT |
| | | 16 | 16 | 66 | 110 | 7 | 16CT |
| | | 20 | 32 | 150 | 220 | 7 | 20CT |
| ET | 690 V a.c. / 500 V d.c. (IEC)<br>700 V a.c. / 500 V d.c. (UL) | 25 | 25 | 150 | 250 | 7 | 25ET |
| | | 32 | 32 | 190 | 350 | 11 | 32ET |
| | | 35 | 52 | 310 | 500 | 11 | 35ET |
| | | 40 | 103 | 600 | 900 | 9 | 40ET |
| | | 45 | 103 | 680 | 1100 | 11 | 45ET |
| | | 56 | 135 | 950 | 1500 | 14 | 56ET |
| | | 63 | 171 | 1200 | 2000 | 16 | 63ET |
| | | 80 | 360 | 2500 | 4000 | 18 | 80ET |
| FE | 690 V a.c. / 500 V d.c. (IEC)<br>700 V a.c. / 500 V d.c. (UL) | 35 | 33 | 130 | 200 | 9 | 35FE |
| | | 40 | 52 | 180 | 300 | 9 | 40FE |
| | | 45 | 76 | 270 | 450 | 11 | 45FE |
| | | 50 | 103 | 380 | 600 | 11 | 50FE |
| | | 63 | 135 | 480 | 750 | 12 | 63FE |
| | | 71 | 210 | 600 | 950 | 17 | 71FE |
| | | 80 | 250 | 900 | 1500 | 20 | 80FE |
| | | 90 | 360 | 1300 | 2100 | 20 | 90FE |
| | | 100 | 470 | 1800 | 2800 | 23 | 100FE |
| EET | 690 V a.c. / 500 V d.c. (IEC)<br>700 V a.c. / 500 V d.c. (UL) | 90 | 490 | 300 | 4500 | 19 | 90EET |
| | | 110 | 600 | 4000 | 6500 | 27 | 110EET |
| | | 140 | 1050 | 7000 | 12,000 | 35 | 140EET |
| | | 160 | 1500 | 10,000 | 17,000 | 39 | 160EET |
| FEE | 690 V a.c. / 500 V d.c. (IEC)<br>700 V a.c. / 500 V d.c. (UL) | 100 | 400 | 1600 | 2400 | 24 | 100FEE |
| | | 120 | 540 | 1900 | 3100 | 32 | 120FEE |
| | | 140 | 850 | 2500 | 3800 | 36 | 140FEE |
| | | 160 | 1000 | 3700 | 5700 | 46 | 160FEE |
| | | 180 | 1400 | 5300 | 8400 | 46 | 180FEE |
| | | 200 | 1900 | 7100 | 11,400 | 52 | 200FEE |

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

Data sheets: 5785312 (CT, ET), 5785314 (FE), 5785313 (EET), 5785292 (FEE)

# FM, FMM, MT, MMT

## 690 V a.c./350-450 V d.c. (IEC), 700 V a.c./500 V d.c. (UL), 160 to 710 A




### Specifications

**Description**

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

**Technical data**

Rated voltage:

- FM: 690 V a.c./450 V d.c. (IEC); 700 V a.c./500 V d.c. (UL).
- FMM: 690 V a.c./450 V d.c. (IEC); 700 V a.c. (UL).
- MT and MMT: 690 V a.c./350 V d.c. (IEC); 700 V a.c. (UL).

Rated current: 160-710 A.

Breaking capacity:

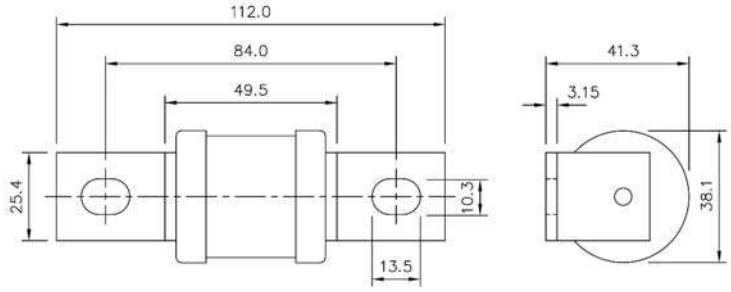
- FM: 200 kA RMS Sym. (IEC/UL), 40 kA at 450 V d.c. (IEC), 50 kA at 500 V d.c. (UL).
- FMM: 200 kA RMS Sym. (IEC/UL), 40 kA at 450 V d.c. (IEC).
- MT & MMT: 200 kA RMS Sym. (IEC/UL), 40 kA at 350 V d.c. (IEC).

Operating Class: aR.

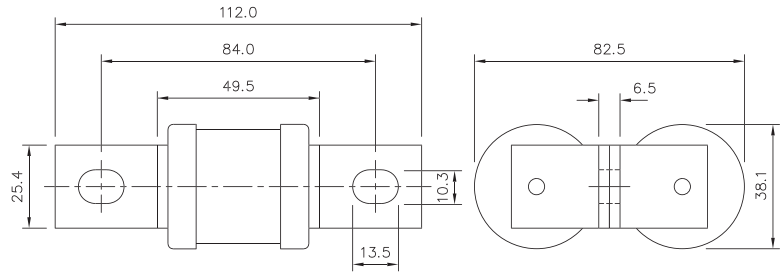
**Standards / Agency information**

CE, designed and tested to BS88 part 4, IEC 60269 Part 4, UL Recognised. MT and MMT 350 V d.c. (IEC) rating. Consult Eaton's Bussmann business for specific UL Recognition status. CCC for FM and FMM.

**Dimensions - mm**




**FM, MT Indicator (optional)**




**FMM, MMT Indicator (optional)**

Data sheets: 5785314 (FM), 5785313 (MT), 5785292 (FMM), 5785311 (MMT)

# FM, FMM, MT, MMT

## 690 V a.c./350-450 V d.c. (IEC), 700 V a.c./500 V d.c. (UL), 160 to 710 A

| Fuse link type | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 415V a.c. | Clearing at 660 V a.c. | | |
| FM | 690 V a.c. / 450 V d.c. (IEC)<br>700 V a.c. / 500 V d.c. (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 V a.c. / 450 V d.c. (IEC)<br>700 V a.c. (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 V a.c. / 350 V d.c. (IEC)<br>700 V a.c. (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 V a.c. / 350 V d.c. (IEC)<br>700 V a.c. (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 |

Data sheets: 5785314 (FM), 5785313 (MT), 5785292 (FMM), 5785311 (MMT)

# Ferrule fuse links

## 10 x 38 mm and 21 x 51 mm, FWA

## 150 V a.c./V d.c. (UL), 5 to 60 A




### Specifications

**Description**

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

**Technical data**

Rated voltage: 150 V a.c. (UL).

Rated current: 5-60 A.

Breaking capacity:

- 200 kA RMS Sym.
- 50 kA DC at 150 V d.c..

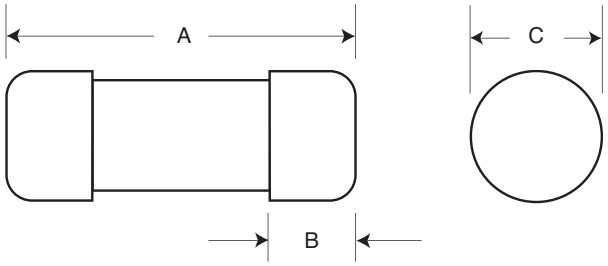
Operating class: aR.

**Standards / Agency information**

CE, UL recognised.

| Fuse link size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 150 V a.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|
| 10 x 38 mm (13/32" x 1½") | 150 V a.c. / V d.c. (UL) | 5 | 1.6 | 8 | 2 | FWA-5A10F |
| | | 10 | 3.6 | 16 | 2.7 | FWA-10A10F |
| | | 15 | 14 | 50 | 3.3 | FWA-15A10F |
| | | 20 | 33 | 130 | 3.8 | FWA-20A10F |
| | | 25 | 58 | 220 | 4.9 | FWA-25A10F |
| | | 30 | 100 | 400 | 4.9 | FWA-30A10F |
| 21 x 51 mm (13/16" x 2") | 150 V a.c. / V d.c. (UL) | 35 | 75 | 800 | 4.5 | FWA-35A21F |
| | | 40 | 100 | 1000 | 5.1 | FWA-40A21F |
| | | 45 | 130 | 1300 | 6 | FWA-45A21F |
| | | 50 | 170 | 1600 | 7.3 | FWA-50A21F |
| | | 60 | 250 | 2400 | 8 | FWA-60A21F |

**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 (50.8) | 0.63 (15.9) | 0.81 (20.6) |

Data sheets: 720003,5785317 (5-30 A), 5785305 (35-60 A)

# 14 x 51 mm, FWX

## 250 V a.c./V d.c. (UL), 1 to 50 A




### Specifications

**Description**

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

**Technical data**

Rated voltage:

- 250 V a.c. (UL, all ratings)
- 250 V d.c. (UL, 5-50 A only).

Rated current: 1-50 A.

Breaking capacity:

- 200 kA RMS Sym. (UL, all ratings)
- 50 kA at 250 V d.c. (UL, 5-30 A only).

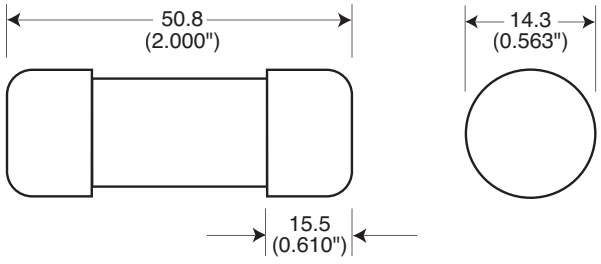
Operating class: aR.

**Standards / Agency information**

CE, UL recognised 1-50 A & CSA component acceptance: 5-30 A.

| Fuse link size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 250 V a.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|
| 14 x 51mm (9/16" x 2") | 250 V a.c. (UL) | 1 | 0.03 | 0.4 | 5.7 | FWX-1A14F |
| | | 2 | 0.08 | 0.1 | 8.6 | FWX-2A14F |
| | | 3 | 0.11 | 0.26 | 2.8 | FWX-3A14F |
| | | 4 | 0.1 | 0.23 | 3 | FWX-4A14F |
| | 250 V a.c./V d.c. (UL) | 5 | 1.6 | 13 | 1.3 | FWX-5A14F |
| | | 10 | 3.6 | 24 | 3.4 | FWX-10A14F |
| | | 15 | 14 | 83 | 3.8 | FWX-15A14F |
| | | 20 | 33 | 200 | 4.6 | FWX-20A14F |
| | | 25 | 58 | 300 | 5.3 | FWX-25A14F |
| | | 30 | 100 | 500 | 5.9 | FWX-30A14F |
| | | 50 | 200 | 1800 | 5.7 | FWX-50A14F |

**Dimensions - mm (in)**




Data sheets: 720006, 5785302

# 6 x 32 mm, FWH

## 500 V a.c. (UL), 0.25 to 30 A




### Specifications

**Description**

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

**Technical data**

Rated voltage:

- 500 V a.c. (UL)
- 600 V d.c. (UL, 2A and 5A only).

Rated current: 0.25-30 A.

Breaking capacity:

- 50 kA (0.25-20 A)
- 20 kA (25-30 A)[1]
- 50 kA at 600 V d.c. (UL 2 and 5A only).

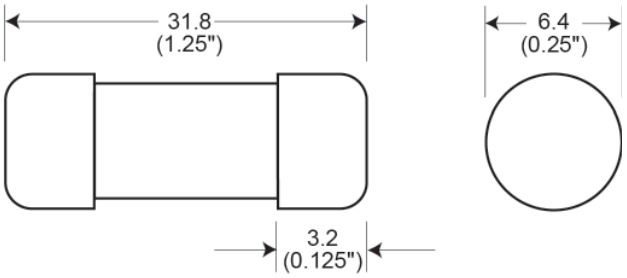
Operating class: aR.

**Standards / Agency information**

CE, UL recognised 0.25-30 A including 2A at 1000 V a.c., CSA component Acceptance: 0.25-7 A.

| Fuse link size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 500 V a.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|
| 6 x 32 mm (¼" x 1¼") | 500 V a.c. (UL) | 0.25 | 0.01 | 0.05 | 2.7 | FWH-250A6F |
| | | 0.5 | 0.05 | 0.25 | 1.2 | FWH-500A6F |
| | | 1 | 0.4 | 2 | 1.7 | FWH-001A6F |
| | 500 V a.c. / 600 V d.c. (UL) | 2 | 1.3 | 3.5 | 3.2 | FWH-002A6F |
| | 500 V a.c. (UL) | 3.15 | 3.1 | 7.7 | 2.9 | FWH-3-15A6F |
| | 500 V a.c. / 600 V d.c. (UL) | 5 | 15 | 40 | 2.1 | FWH-005A6F |
| | 500 V a.c. (UL) | 6.3 | 36 | 90 | 2.3 | FWH-6-30A6F |
| | | 7 | 50 | 125 | 2.5 | FWH-007A6F |
| | | 10 | 9.9 | 139 | 2.86 | FWH-010A6F |
| | | 12.5 | 20 | 60 | 3.53 | FWH-12-5A6F |
| | | 15 | 44 | 146 | 3.08 | FWH-015A6F |
| | | 16 | 48 | 177 | 4.48 | FWH-016A6F |
| | | 20 | 75 | 259 | 4.26 | FWH-020A6F |
| | | 25 | 126 | 345 | - | FWH-025A6F |
| | | 30 | 145 | 430 | - | FWH-030A6F |

**Dimensions - mm (in)**




[1] Tested at PF = 76%.

Data sheets: 720038, 5785256 (0.25-7A), 50955 (10-30 A)

# 14 x 51 mm, FWH

## 500 V a.c./V d.c. (UL), 1 to 30 A




### Specifications

**Description**

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

**Technical data**

Rated voltage:

- 500 V a.c. (UL, all ratings)
- 500 V d.c. (UL, 5-30 A only)

Rated current: 1-30 A

Breaking capacity:

- 200 kA RMS Sym. all ratings
- 50 kA at 500 V d.c. 5-30 A only

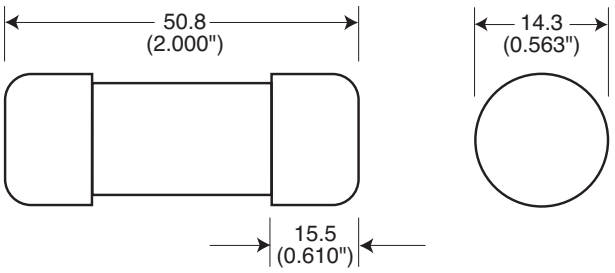
Operating class: aR

**Standards / Agency information**

CE, UL Recognised 1-30 A & CSA Component Acceptance: 5-30 A.

| Fuse link size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 500 V a.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|
| 14 x 51 mm ($^9/_{16}$" x 2") | 500 V a.c. (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 | 0.1 | 0.2 | 3 | FWH-4A14F |
| | 500 V a.c./V d.c. (UL) | 5 | 2 | 7 | 1.5 | FWH-5A14F |
| | | 6 | 2 | 7 | 1.5 | FWH-6A14F |
| | | 10 | 4 | 15 | 4 | FWH-10A14F |
| | | 12 | 7 | 25 | 4.3 | FWH-12A14F |
| | | 15 | 10 | 40 | 5.5 | FWH-15A14F |
| | | 20 | 26 | 100 | 6.5 | FWH-20A14F |
| | | 25 | 49 | 200 | 7 | FWH-25A14F |
| | | 30 | 58 | 240 | 9 | FWH-30A14F |

**Dimensions - mm (in)**




Data sheets: 720008, 5785298

# 10 x 38 mm, FWC

## 600-700 V a.c./700 V d.c. (UL), 1 to 32A




### Specifications

**Description**

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

**Technical data:**

Rated voltage:

- 700 V a.c./dc (UL, 1-4 A)
- 600 V a.c. (UL, 6-32 A), 700 V d.c. (UL, 6-25 A)

Rated current: 1-32 A

Breaking capacity:

- 200 kA RMS Sym. at 600 V a.c. (6-32 A)
- 200 kA RMS Sym. at 700 V a.c. (1-4 A)
- 10 kA DC at 700 V d.c. (1-25 A)

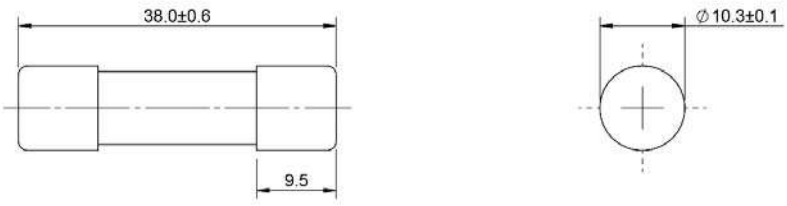
Operating class: aR

**Standards / Agency information**

CE, UL Recognised: 6-32 A.

| Fuse link size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 600 V a.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|
| 10 x 38 mm (13/32" x 1½") | 700 V a.c./V d.c. (UL) | 1 | 0.2 | 1.2 | 0.5 | FWC-1A10F |
| | | 2 | 0.5 | 3 | 1.2 | FWC-2A10F |
| | | 3 | 1.6 | 11 | 1.5 | FWC-3A10F |
| | | 4 | 5.2 | 32 | 1.5 | FWC-4A10F |
| | 600 V a.c./ 700 V d.c. (UL) | 6 | 4 | 30 | 1.5 | FWC-6A10F |
| | | 8 | 6 | 50 | 2 | FWC-8A10F |
| | | 10 | 9 | 70 | 2.5 | FWC-10A10F |
| | | 12 | 15 | 120 | 3 | FWC-12A10F |
| | | 16 | 25 | 150 | 3.5 | FWC-16A10F |
| | | 20 | 34 | 260 | 4.8 | FWC-20A10F |
| | | 25 | 60 | 390 | 6 | FWC-25A10F |
| | 600 V a.c. (UL) | 32 | 95 | 600 | 7.5 | FWC-32A10F |

**Dimensions - mm (in)**




Data sheets: 720011, 5785306

# 14 x 51 mm, FWP

## 690 V a.c. (IEC), 700 V a.c. (UL), 600 - 700 V d.c. (UL), 1 to 50 A




### Specifications

**Description**

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

**Technical data**

Rated voltage:

- Without striker: see table.
- With striker: 700 V a.c. / 600 V d.c. (UL).

Rated current: 1-50 A.

Breaking capacity:

- 200 kA RMS Sym.
- 50 kA at 800 V d.c. (5-50 A non striker version).
- 600 V d.c. for striker version.

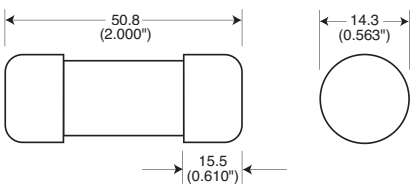
Operating class: aR

**Standards / Agency information**

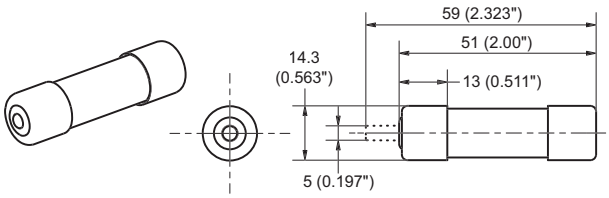
CE, UL recognised & CSA component acceptance for versions without striker only.

| Fuse link type | Fuse link size | Rated voltage | Rated current (Amps) | I²t (A² Sec) Pre-arcing | I²t (A² Sec) Clearing at 700 V a.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|---|
| Without striker | 14 x 51 mm (9/16" x 2") | 700 V a.c. (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 | 0.1 | 0.23 | 3 | FWP-4A14F |
| | | 690 V a.c. (IEC) 700 V a.c./700 V d.c. (UL) | 5 | 2 | 11 | 1.5 | FWP-5A14F |
| | | | 10 | 4 | 22 | 4 | FWP-10A14F |
| | | | 15 | 10 | 70 | 5.5 | FWP-15A14F |
| | | | 20 | 26 | 180 | 6.5 | FWP-20A14F |
| | | | 25 | 49 | 320 | 7 | FWP-25A14F |
| | | | 30 | 58 | 400 | 9 | FWP-30A14F |
| | | | 32 | 68 | 600 | 8 | FWP-32A14F |
| | | | 40 | 84 | 750 | 8 | FWP-40A14F |
| | | | 50 | 200 | 1800 | 9 | FWP-50A14F |
| With striker | 14 x 51 mm (9/16" x 2") | 700 V a.c. / 600 V d.c. (UL) | 10 | 4 | 32 | 2 | FWP-10A14FI |
| | | | 15 | 7 | 63 | 4 | FWP-15A14FI |
| | | | 20 | 26 | 234 | 4 | FWP-20A14FI |
| | | | 25 | 42 | 378 | 4 | FWP-25A14FI |
| | | | 30 | 52 | 468 | 6 | FWP-30A14FI |
| | | | 32 | 68 | 600 | 8 | FWP-32A14FI |
| | | | 40 | 84 | 750 | 8 | FWP-40A14FI |
| | | | 50 | 200 | 1800 | 9 | FWP-50A14FI |

**Dimensions - mm (in)**




**Without striker**




**With striker**

Data sheets: 720025, 5781724 fuses without striker; 5785566 fuses with striker

# 22 x 58 mm, FWP

## 700 V a.c./V d.c. (UL), 20 to 100 A




### Specifications

**Description**

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

**Technical data**

Rated voltage: 700 V a.c./ V d.c. (UL)

Rated current: 20-100 A

Breaking capacity:

- 200 kA RMS Sym.
- 50 kA at 700 V d.c., t/c 5 ms

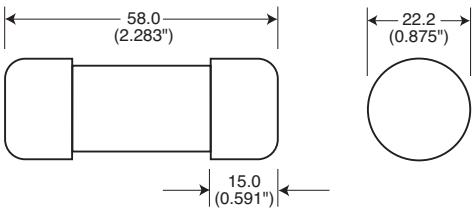
Operating Class: aR

**Standards / Agency information**

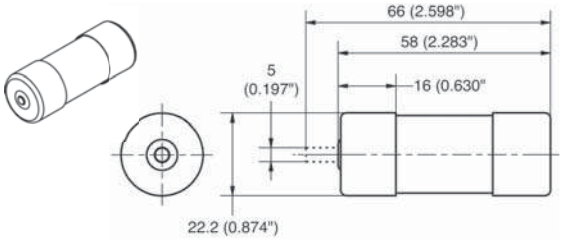
CE, UL Recognised, CSA Component Acceptance for versions without striker only.

| Fuse link type | Fuse link size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 700 V a.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|---|
| Without striker | 22 x 58 mm (7/8" x 2 9/32") | 700 V a.c./ 700 V d.c. (UL) | 20 | 23 | 330 | 5 | FWP-20A22F |
| | | | 25 | 37 | 530 | 6 | FWP-25A22F |
| | | | 32 | 55 | 780 | 8 | FWP-32A22F |
| | | | 40 | 68 | 960 | 12 | FWP-40A22F |
| | | | 50 | 155 | 2200 | 12.5 | FWP-50A22F |
| | | | 63 | 280 | 4000 | 15 | FWP-63A22F |
| | | | 80 | 550 | 7800 | 15 | FWP-80A22F |
| | | | 100 | 1100 | 15,600 | 16.5 | FWP-100A22F |
| With striker | 22 x 58 mm (7/8" x 2 9/32") | 700 V a.c./ 700 V d.c. (UL) | 20 | 19 | 260 | 5 | FWP-20A22FI |
| | | | 25 | 34 | 410 | 6 | FWP-25A22FI |
| | | | 32 | 53.5 | 605 | 8 | FWP-32A22FI |
| | | | 40 | 68 | 750 | 9 | FWP-40A22FI |
| | | | 50 | 135 | 1600 | 9.5 | FWP-50A22FI |
| | | | 63 | 280 | 3080 | 11 | FWP-63A22FI |
| | | | 80 | 600 | 6600 | 13.5 | FWP-80A22FI |
| | | | 100 | 1100 | 12,500 | 16 | FWP-100A22FI |

**Dimensions - mm (in)**




**Without striker**




**With striker**

Data sheets: 720026, 5781723

# 20 x 127 mm and 25 x 146 mm, FWK

# 750 V d.c. (IEC), 5 to 60 A




## Specifications

### Description

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

### Technical Data

Rated voltage: 750 V d.c. (IEC)

Rated current:

- 5-30 A (20 x 127 mm)
- 35-60 A (25 x 146 mm)

Breaking capacity: 50 kA at 750 V d.c., L/R 10-15ms

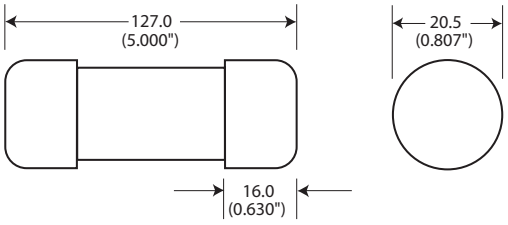
Operating class: gG

### Standards / Agency information:

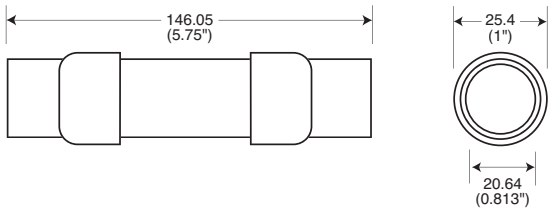
CE.

| Fuse link size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 750 V a.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|
| 20 x 127 mm (13/16" x 5") | 750 V d.c. (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 | FWK-15A20F |
| | | 20 | 125 | 315 | 7.8 | FWK-20A20F |
| | | 25 | 400 | 1100 | 6.5 | FWK-25A20F |
| | | 30 | 800 | 2600 | 6.5 | FWK-30A20F |
| 25 x 146 mm (1" x 5 3/4") | 750 V d.c. (IEC) | 35 | 1300 | 4600 | 6 | 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 |

### Dimensions - mm (in)




**20 x 127 mm 5-30 A**




**25 x 146 mm 35-60 A**

Data sheets: 720039, 5785031

# 14 x 67 mm, FWJ

## 1000 V a.c./ 800 V d.c. (UL), 20 to 30 A




### Specifications

**Description**

Ferrule style high speed fuse links 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.

**Technical data**

Rated voltage: 1000 V a.c./ 800 V d.c.

Rated current: 20-30 A

Breaking capacity:

- 25kA RMS Sym.
- 50 kA at 800 V d.c.

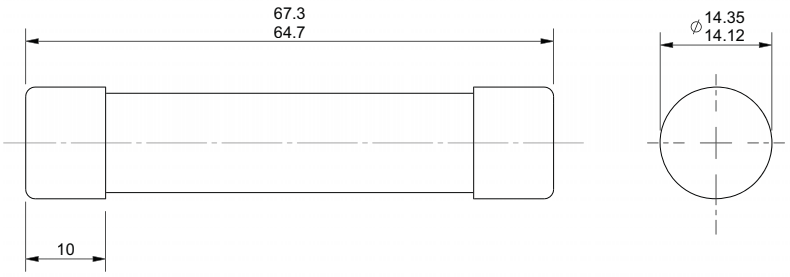
Operating class: a–R

**Standards / Agency information**

CE, UL Recognised.

| Fuse link size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 1000 V a.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|
| 14 x 67 mm (9/16" x 2 5/8") | 1000 V a.c./ 800 V d.c. (UL) | 20 | 25 | 220 | 9 | FWJ-20A14F |
| | | 25 | 33 | 350 | 11 | FWJ-25A14F |
| | | 30 | 52 | 450 | 14 | FWJ-30A14F |

**Dimensions - mm**




Data sheets: 720028, 5785315

# 20 x 127 mm, FWL

## 1200 V a.c./1000 V d.c. (IEC), 20 to 30 A




### Specifications

**Description**

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

**Technical data**

Rated voltage: 1200 V a.c./1000 V d.c. (IEC)

Rated current: 20-30 A

Breaking capacity:

- 50 kA RMS Sym.
- 50 kA at 1000 V d.c.

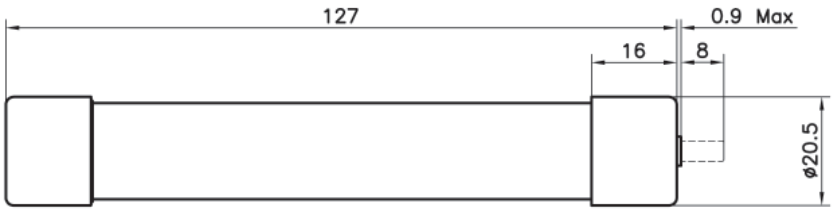
Operating Class: gR

**Standards / Agency information:**

CE.

| Fuse link size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 1000 V a.c. | Watts loss (W) | Catalogue numbers Without indicator | Catalogue numbers With indicator |
|---|---|---|---|---|---|---|---|
| 20 x 127 mm (13/16" x 5") | 1200 V a.c./ 1000 V d.c. (IEC) | 20 | 675 | 1550 | 5.9 | FWL-20A20F | FWL-20A20FI |
| | | 25 | 1200 | 2760 | 6.5 | FWL-25A20F | FWL-25A20FI |
| | | 30 | 1850 | 4300 | 7.5 | FWL-30A20F | FWL-30A20FI |

**Dimensions - mm**




Data sheets: 720040, 5785455

# 20 x 127 mm, FWS

## 1400 - 2000 V a.c./1000 V d.c. (IEC), 2 to 15 A




### Specifications

**Description**

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

**Technical Data**

Rated voltage:

- 2000 V a.c./1000 V d.c. (IEC, 2-8 A)
- 1400 V a.c./1000 V d.c. (IEC, 10-15 A)

Rated current: 2-15 A

Breaking capacity:

- 50 kA RMS Sym.
- 50 kA at 1000 V d.c. (2-10 A only)

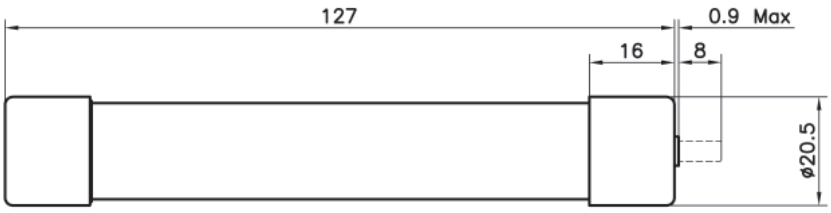
Operating class: gG

**Standards/Agency Information:**

CE.

| Fuse link size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Cataloguenumbers | |
|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 1000 V a.c. | | Without indicator | With indicator |
| 20 x 127 mm ($^{13}/_{16}$" x 5") | 2000 V a.c./ 1000 V d.c. (IEC) | 2 | 0.8 | 2.4 | 4.4 | FWS-2A20F | FWS-2A20FI |
| | | 6 | 27 | 81 | 6.7 | FWS-6A20F | FWS-6A20FI |
| | | 8 | 64 | 192 | 7.6 | FWS-8A20F | FWS-8A20FI |
| | 1400 V a.c./ 1000 V d.c. (IEC) | 10 | 118 | 277 | 3 | FWS-10A20F | FWS-10A20FI |
| | | 12 | 170 | 380 | 3.4 | FWS-12A20F | FWS-12A20FI |
| | | 15 | 209 | 500 | 5 | FWS-15A20F | FWS-15A20FI |

**Dimensions - mm**




Data sheets: 720040, 5785109

# Square body fuse links

## Size 000 and 00, DIN 43653, 170M

## 690 V a.c. (IEC), 700 V a.c./V d.c. (UL), 10 to 400 A




### Specifications

**Description**

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

**Technical data**

Rated voltage:

- 690 V a.c. (IEC, size 000 and 00)
- 700 V a.c. (UL, size 000; size 00 100-400 A only)
- 700 V d.c. (UL, size 000)

Rated current: 10-400 A

Breaking capacity:

- 200 kA RMS Sym.
- 50 kA at 700 V d.c. (size 000 only)

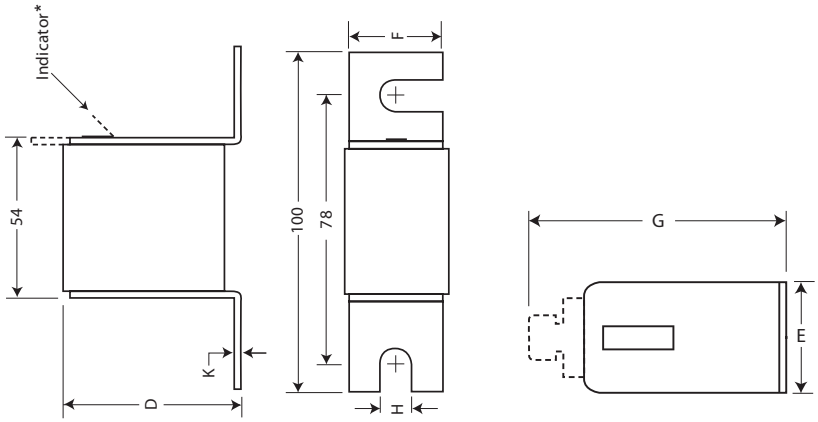
Operating class

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

**Standards/Agency Information**

CE, Designed and tested to IEC 60269 part 4. UL Recognised/CSA Component Acceptance on Size 000. CCC approved.

**Dimensions - mm**




* Indication for Size 00 fuses is a red pin.

The dotted line illustrates the Type T indicator fuse link.

| 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 |

Data sheets: 170K6310 (Size 000), 170K6312 (Size 00)

## Size 000 and 00, DIN 43653, 170M

## 690 V a.c. (IEC), 700 V a.c./V d.c. (UL), 10 to 400 A

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Catalogue numbers | | |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-Arcing | Clearing at 660 V a.c. | | -U/80 Without indicator | -/80 Visual indicator | -TN/80 Type T indicator for micro |
| 000 | 690 V a.c. (IEC) 700 V a.c./V d.c. (UL) | 10 | 3.8 | 25.5 | 3 | 170M1308 | 170M1358 | 170M1408 |
| | | 16 | 7.2 | 48 | 5.5 | 170M1309 | 170M1359 | 170M1409 |
| | | 20 | 11.5 | 78 | 7 | 170M1310 | 170M1360 | 170M1410 |
| | | 25 | 19 | 130 | 9 | 170M1311 | 170M1361 | 170M1411 |
| | | 32 | 40 | 270 | 10 | 170M1312 | 170M1362 | 170M1412 |
| | | 40 | 69 | 460 | 12 | 170M1313 | 170M1363 | 170M1413 |
| | | 50 | 115 | 770 | 15 | 170M1314 | 170M1364 | 170M1414 |
| | | 63 | 215 | 1450 | 16 | 170M1315 | 170M1365 | 170M1415 |
| | | 80 | 380 | 2550 | 19 | 170M1316 | 170M1366 | 170M1416 |
| | | 100 | 695 | 4650 | 24 | 170M1317 | 170M1367 | 170M1417 |
| | | 125 | 1250 | 8500 | 28 | 170M1318 | 170M1368 | 170M1418 |
| | | 160 | 2350 | 16,000 | 32 | 170M1319 | 170M1369 | 170M1419 |
| | | 200 | 4200 | 28,000 | 37 | 170M1320 | 170M1370 | 170M1420 |
| | | 250 | 7750 | 51,500 | 42 | 170M1321 | 170M1371 | 170M1421 |
| | | 315 | 12,000 | 80,500 | 53 | 170M1322 | 170M1372 | 170M1422 |
| 00 | 690 V a.c. (IEC) | 25 | 19 | 130 | 6 | | 170M2608 | 170M2658 |
| | | 32 | 28.5 | 195 | 7 | | 170M2609 | 170M2659 |
| | | 40 | 50 | 360 | 9 | | 170M2610 | 170M2660 |
| | | 50 | 95 | 640 | 10 | | 170M2611 | 170M2661 |
| | | 63 | 170 | 1200 | 12 | | 170M2612 | 170M2662 |
| | | 80 | 310 | 2100 | 15 | | 170M2613 | 170M2663 |
| 00 | 690 V a.c. (IEC) 700 V a.c. (UL) | 100 | 620 | 4150 | 20 | | 170M2614 | 170M2664 |
| | | 125 | 1000 | 6950 | 25 | | 170M2615 | 170M2665 |
| | | 160 | 1900 | 13,000 | 30 | | 170M2616 | 170M2666 |
| | | 200 | 3400 | 23,000 | 35 | | 170M2617 | 170M2667 |
| | | 250 | 6250 | 42,000 | 45 | | 170M2618 | 170M2668 |
| | | 315 | 10,000 | 68,500 | 55 | | 170M2619 | 170M2669 |
| | | 350 | 13,500 | 91,500 | 60 | | 170M2620 | 170M2670 |
| | | 400 | 18,000 | 125,000 | 70 | | 170M2621 | 170M2671 |

Data sheets: 170K6310 (Size 000), 170K6312 (Size 00)

# Size 1* to 3, DIN 43653, 170M

## 690 V a.c. (IEC), 700 V a.c. (UL), 40 to 2000 A




### Specifications

**Description**

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

**Technical data**

Rated voltage: 690 V a.c. (IEC)/700 V a.c. (UL)

Rated current: 40-2000 A

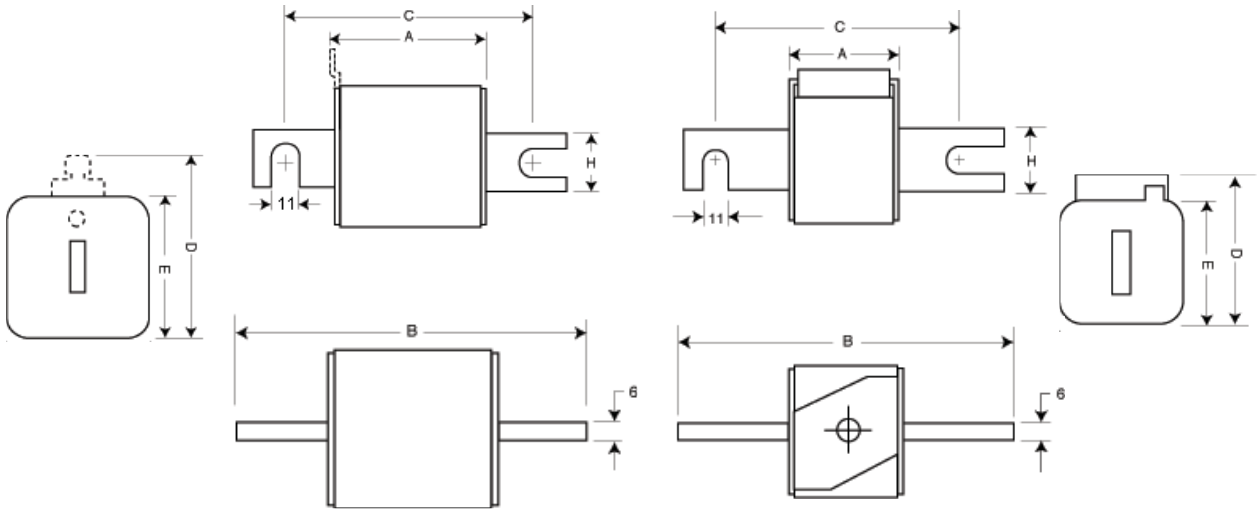
Breaking capacity: 200 kA RMS Sym.

Operating class: aR

**Standards / Agency information**

CE, Designed and tested to IEC60269 Part 4. Consult Eaton's Bussmann business for UL Recognition/CSA Component Acceptance status. CCC except where noted.

**Dimensions - mm**




| 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 links type -/110, -TN/110.
[2] Valid for Fuse type -TN/80 and -TN/110.

1mm = 0.0394"

| 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 links type -KN/110.
1mm = 0.0394"

Data sheets: 170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

## Size 1* to 3, DIN 43653, 170M

## 690 V a.c. (IEC), 700 V a.c. (UL), 40 to 2000 A

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Catalogue numbers | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 660 V a.c. | | -/80 Visual indicator | -TN/80 Type T indicator for micro | -KN/80 Type K indicator for micro | -/110 Visual indicator | -TN/110 Type T indicator for micro | -KN/110 Type K indicator for micro |
| 1* | 690 V a.c. (IEC) 700 V a.c. (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 V a.c. (IEC) 700 V a.c. (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 V a.c. (IEC) 700 V a.c. (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 V a.c. (IEC) 700 V a.c. (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 |

[1] Not UL Approved [2] Rated voltage: 550 V a.c. IEC [3] Rated voltage: 600 V a.c. IEC, 700 V a.c. UL [4] Rated voltage: 600 V a.c. IEC, 500 V a.c. UL [5] Rated voltage: 550 V a.c. IEC, 500 V a.c. UL

Data sheets: 170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

# Size 00, DIN 43653, 170M

## 1000 V a.c. (IEC and UL), 20 to 315A




### Specifications

**Description**

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

**Technical data**

Rated voltage:

- 1000 V a.c. (IEC and UL 20-250 A)
- 900 V a.c. (IEC, 315 A)

Rated current: 20-315 A

Breaking capacity: 125 kA RMS Sym.

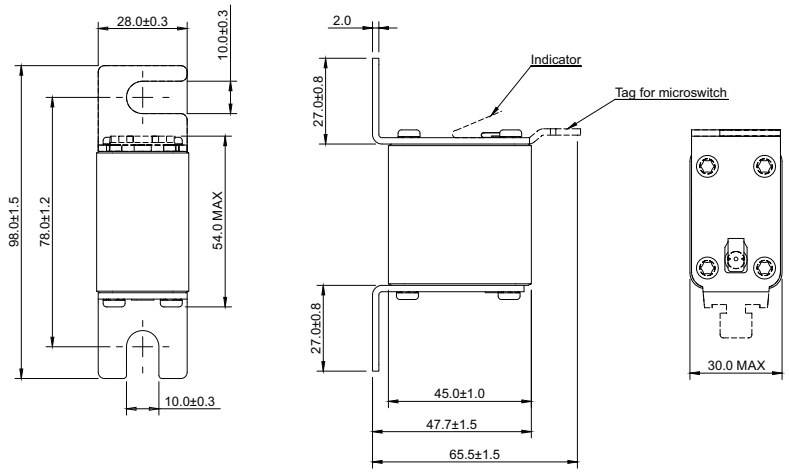
Operating class: aR

**Standards / Agency information**

CE, Designed and tested to IEC60269 Part 4, UL Recognised/CSA component acceptance status (20-250 A).

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at rated voltage | Watts loss (W) | Catalogue numbers 00/80 Visual indicator | Catalogue numbers 00TN/80 Type T indicator for micro |
|---|---|---|---|---|---|---|---|
| 00 | 1000 V a.c. (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 V a.c. (IEC) | 315 | 18,000 | 115,000 | 58 | 170M4815 | 170M4835 |

**Dimensions - mm**




Data sheet: 170K8504

# Size 1* to 3, DIN 43653, 170M

## 1000 V a.c. (IEC and UL), 50 to 1400 A

### Specifications




**Description**

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

**Technical data**

Rated voltage:

- 1000 V a.c. (IEC, 50-1250 A), 900 V a.c. (IEC, 1400 A)
- 1000 V a.c. (UL size 2, size 3, 315-1100 A only)

Rated current: 50-1400 A

Breaking Capacity: 125kA RMS Sym.

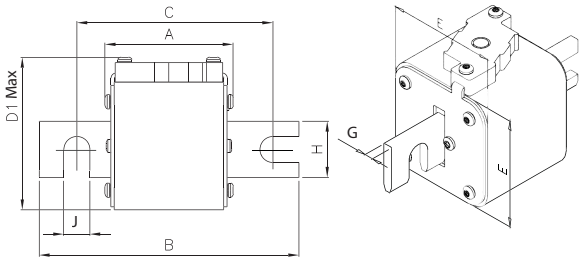
Operating Class: aR

**Standards/Agency Information**

CE, Designed and tested to IEC60269 Part 4, UL Recognised (only sizes 2 & 3)

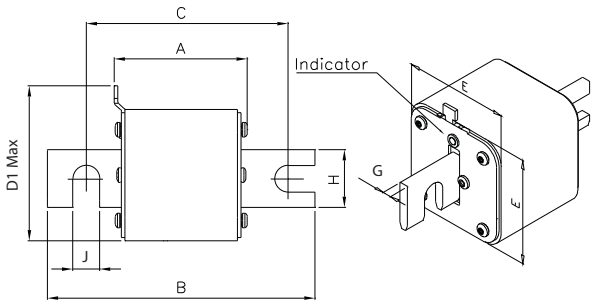
CCC only size 3 (315-1100 A)

**Dimensions - mm**




**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 |

Data sheets: 170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

## Size 1* to 3, DIN 43653, 170M

## 1000 V a.c. (IEC and UL), 50 to 1400 A

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Catalogue numbers | |
|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at rated voltage | | -KN/110 Type K indicator for micro | -TN/110 Type T indicator for micro |
| 1* | 1000 V a.c. (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 V a.c. (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 V a.c. (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 V a.c. (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 V a.c. (IEC) | 1250 | 575,000 | 3,400,000 | 175 | 170M8626 | 170M8641 |
| | 900 V a.c. (IEC) | 1400 | 795,000 | 4,200,000 | 185 | 170M8627 | 170M8642 |

Data sheets: 170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

# Size 1* to 3, DIN 43653, 170M

## 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 to 1400 A




### Specifications

**Description**

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

**Technical data**

Rated voltage: see table page 42

Rated current: 50-1400 A

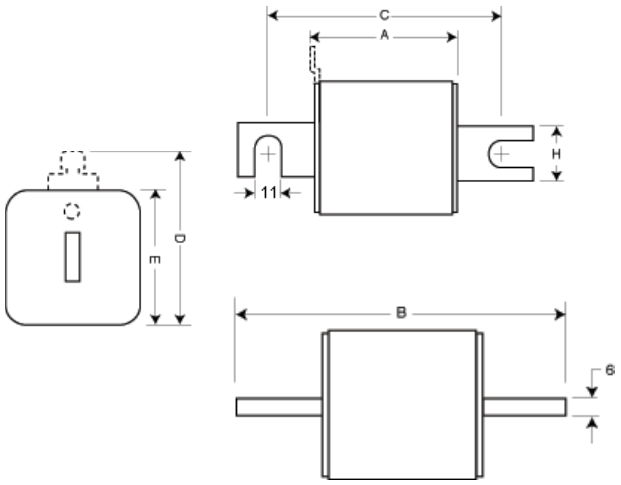
Breaking capacity: 100 kA RMS Sym.

Operating class: aR

**Standards / Agency information**

CE, Designed and tested to IEC60269 Part 4. Consult Eaton's Bussmann business for UL Recognition/CSA Component Acceptance status.

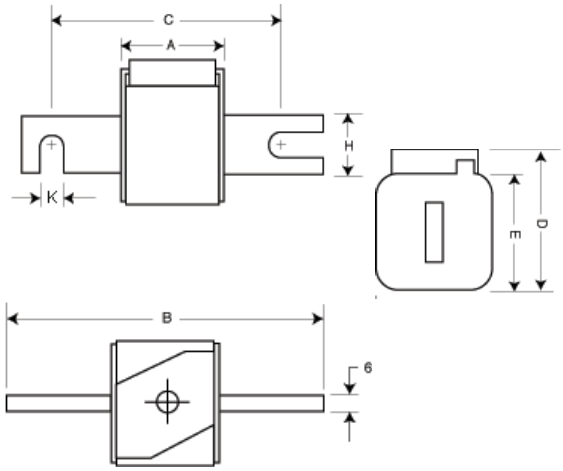
**Dimensions - mm**




**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 fuse links -TN//110.
1mm = 0.0394"




**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 |

1mm = 0.0394"

Data sheets: 170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

## Size 1* to 3, DIN 43653, 170M

## 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 to 1400 A

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | | Watts loss (W) | Catalogue numbers | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 1000 V a.c. | Clearing at 1250 V a.c. | | -/110 Visual indicator | -TN/110 Type T indicator for micro | -KN/110 Type K indicator for micro |
| 1* | 1250 V a.c. (IEC) 1300 V a.c. (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 V a.c. (IEC) 1300 V a.c. (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 V a.c. (IEC) | 630 | 130,000 | 660,000 | N/A | 100 | 170M4147[1] | 170M4197[1] | 170M4247[1] |
| 2 | 1250 V a.c. (IEC) 1300 V a.c. (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 V a.c. (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 V a.c. (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 V a.c. (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] |

[1] These fuse links are not UL recognised.

Data sheets: 170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

# Size 00 to 3, DIN 43620, Full range (gR), 170M

# 690 V a.c. (IEC), 10 to 800 A




## Specifications

### Description

Square body DIN 43653 blade high speed fuse links. Full range protection fuse links provide both overload and short-circuit protection.

### Technical data

Rated voltage: 690 V a.c. (IEC)

Rated current: 10-800 A

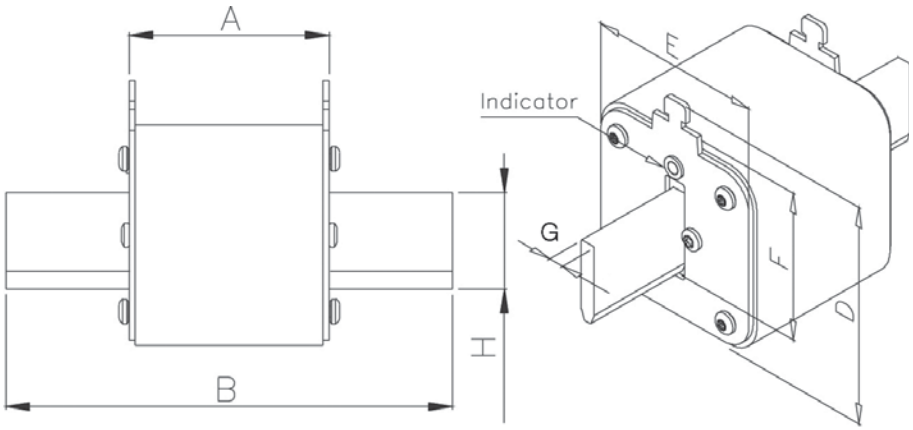
Breaking capacity: 200 kA RMS Sym.

Operating class: gR

### Standards / Agency information

CE, Designed and tested to IEC60269 Part 4.

### 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 |

Data sheets: 170K6412 (Size 00), 170K6416 (Size 1), 170K6418 (Size 2), 170K6420 (Size 3)

## Size 00 to 3, DIN 43620, Full range (gR), 170M

## 690 V a.c. (IEC), 10 to 800 A

| Fuse link body size | Rated voltage | Rated current (Amps)[1] | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 690 V a.c. | Watts loss (W) | Catalogue numbers Type T indicator for micro |
|---|---|---|---|---|---|---|
| 00 | 690 V a.c. (IEC) | 10 | 3.8 | 20 | 3.5 | 170M2691 |
| | | 16 | 7.2 | 38 | 5.5 | 170M2692 |
| | | 20 | 13 | 70 | 6 | 170M2693 |
| | | 25 | 24 | 125 | 8 | 170M2694 |
| | | 32 | 53 | 275 | 9 | 170M2695 |
| | | 40 | 95 | 490 | 10 | 170M2696 |
| | | 50 | 185 | 1000 | 11 | 170M2697 |
| | | 63 | 345 | 1800 | 14 | 170M2698 |
| | | 80 | 695 | 3600 | 16 | 170M2699 |
| | | 100 | 1250 | 6650 | 19 | 170M2700 |
| | | 125 | 2300 | 12,000 | 23 | 170M2701 |
| | | 160 | 4350 | 22,500 | 29 | 170M2702 |
| 1 | 690 V a.c. (IEC) | 50 | 135 | 705 | 12 | 170M4176 |
| | | 63 | 245 | 1300 | 15 | 170M4177 |
| | | 80 | 500 | 2600 | 17 | 170M4178 |
| | | 100 | 950 | 4850 | 20 | 170M4179 |
| | | 125 | 1850 | 9500 | 23 | 170M4180 |
| | | 160 | 3450 | 18,000 | 28 | 170M4181 |
| | | 200 | 6750 | 34,500 | 31 | 170M4182 |
| | | 250 | 13,500 | 70,500 | 35 | 170M4183 |
| | | 315 | 26,000 | 135,000 | 41 | 170M4184 |
| | | 350 | 34,000 | 175,000 | 45 | 170M4185 |
| | | 400 | 48,500 | 250,000 | 48 | 170M4186 |
| 2 | 690 V a.c. (IEC) | 200 | 5650 | 29,000 | 33 | 170M5881 |
| | | 250 | 10,000 | 52,500 | 40 | 170M5882 |
| | | 315 | 19,500 | 105,000 | 46 | 170M5883 |
| | | 350 | 26,000 | 135,000 | 50 | 170M5884 |
| | | 400 | 39,500 | 205,000 | 53 | 170M5885 |
| | | 450 | 55,500 | 290,000 | 59 | 170M5886 |
| | | 500 | 73,000 | 375,000 | 66 | 170M5887 |
| | | 550 | 100,000 | 515,000 | 70 | 170M5888 |
| | | 630 | 150,000 | 770,000 | 79 | 170M5889 |
| 3 | 690 V a.c. (IEC) | 350 | 23,000 | 120,000 | 55 | 170M6080 |
| | | 400 | 34,000 | 175,000 | 59 | 170M6081 |
| | | 450 | 48,500 | 250,000 | 62 | 170M6082 |
| | | 500 | 64,000 | 330,000 | 67 | 170M6083 |
| | | 550 | 84,500 | 435,000 | 70 | 170M6084 |
| | | 630 | 125,000 | 645,000 | 85 | 170M6085 |
| | | 700 | 160,000 | 840,000 | 93 | 170M6086 |
| | | 800 | 245,000 | 1,300,000 | 99 | 170M6087 |

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

Data sheets: 170K6412 (Size 00), 170K6416 (Size 1), 170K6418 (Size 2), 170K6420 (Size 3)

# Size 000 to 3, DIN 43620, Dual indicator fuse links, 170M

## 690 V a.c. (IEC), 700 V a.c. (UL), 10 to 1600 A

### Specifications




**Description**

Square body DIN 43620 blade high speed fuse links 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 fuse links for the protection of UPS, soft starters, solid state relays, variable speed drives, rectifiers and inverters.

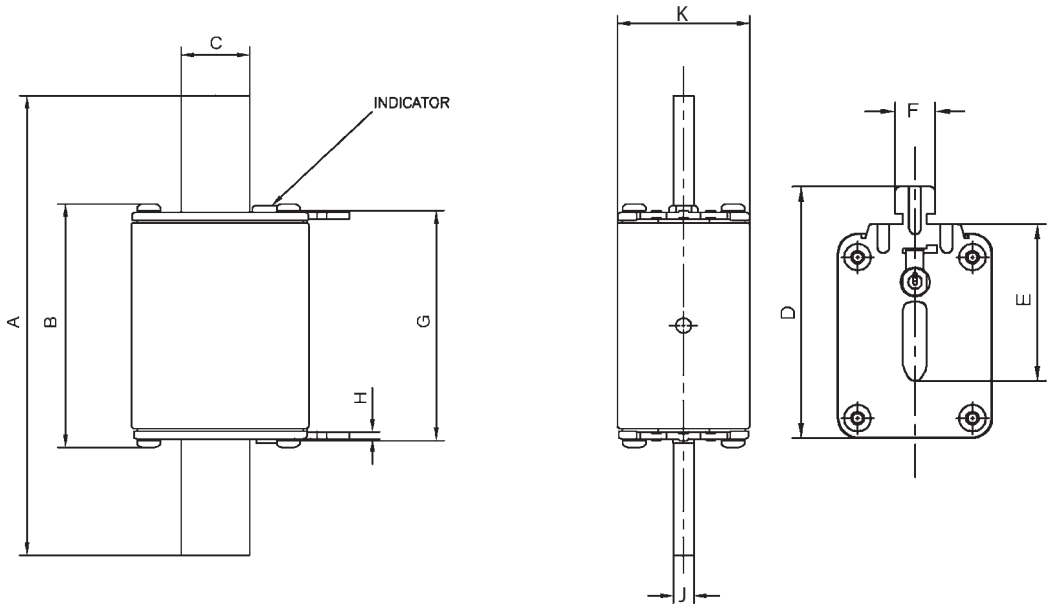
**Technical data**

| | |
|---|---|
| Rated voltage: | 690 V a.c. (IEC), 700 V a.c. (UL) |
| Rated current: | 10-1600 A |
| Breaking capacity: | 200 kA RMS Sym. |
| Operating class: | gR (size 000, 10-63A), aR (others) |

**Standards / Agency information**

CE, IEC60269 Part 4, UL and CSA Recognised.

**Dimensions - mm**




| Size | A | B | C | D | E | F | G | H | J | K |
|---|---|---|---|---|---|---|---|---|---|---|
| 000 | 78.5 | 53 | 15 | 52 | 35 | 10 | 49.7 | 1.5 | 6 | 20.5 |
| 00 | 78.5 | 53 | 15 | 59 | 35 | 10 | 49.7 | 2 | 6 | 30 |
| 1 | 135 | 71.4 | 20 | 64 | 40 | 10 | 67.5 | 2 | 6 | 40 |
| 2 | 150 | 71.4 | 25.1 | 72 | 48 | 10 | 67.5 | 2 | 6 | 54 |
| 3 | 150 | 72.4 | 32 | 87 | 60 | 10 | 68.5 | 2.5 | 6 | 71 |

Data sheets: 170K6386 (Size 000 and 00), 170K6388 (Size 1), 170K6390 (Size 2), 170K6392 (Size 3)

# Size 000 to 3, DIN 43620, Dual indicator fuse links, 170M

## 690 V a.c. (IEC), 700 V a.c. (UL), 10 to 1600 A

| Fuse link body size | Rated voltage | Rated current (Amps) | Max permissible load current | $I^2t$ ($A^2$ Sec) | | Watts loss (W)[3] | Catalogue numbers |
|---|---|---|---|---|---|---|---|
| | | | | Pre-arcing | Clearing at 690 V a.c. | | Dual indicator |
| 000 | 690 V a.c. (IEC)<br>700 V a.c. (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 V a.c. (IEC) / 700 V a.c. (UL) | 315 | 315 | 12,000 | 84,500 | 45 | 170M1572D |
| 1 | 690 V a.c. (IEC)<br>700 V a.c. (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 V a.c. (IEC)<br>700 V a.c. (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 V a.c. (IEC)<br>700 V a.c. (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 recognised.
[3] Given at maximum load Rated current, please refer to data sheets for further details.

Data sheets: 170K6386 (Size 000 and 00), 170K6388 (Size 1), 170K6390 (Size 2), 170K6392 (Size 3)

# Size 00, DIN 43620, 170M

## 1000 V a.c. (IEC and UL), 20 to 225 A




### Specifications

**Description**

Square body DIN 43620 blade style high speed fuse links for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.

**Technical data**

Rated voltage:

- 1000 V a.c. (IEC and UL)
- 900 V a.c. (200 and 225A)

Rated current: 20-225A

Breaking capacity: 125kA RMS Sym.

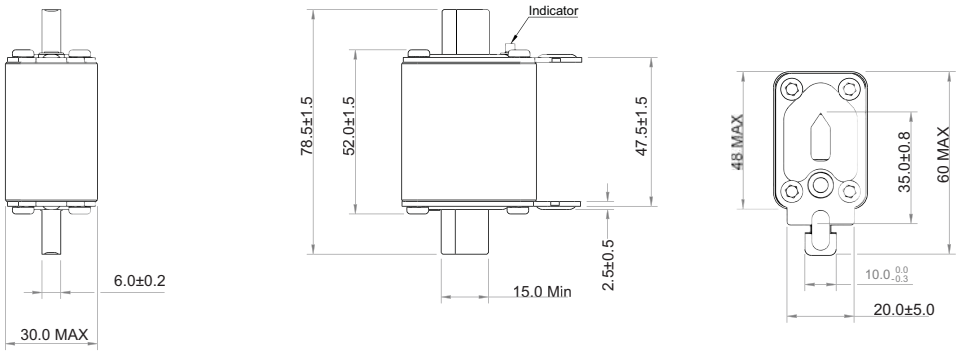
Operating class: aR

**Standards / Agency information**

CE, Designed and tested to IEC60269 Part 4, UL Recognised/CSA Component Acceptance status (20-160 A).

| Fuse link body size | Rated voltage | Rated current Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 1000 V a.c. | Watts loss (W) | Catalogue numbers Type T indicator for micro |
|---|---|---|---|---|---|---|
| 00 | 1000 V a.c. (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 V a.c. (IEC) | 200 | 12,000 | 86,500 | 31 | 170M2684 |
| | | 225 | 18,000 | 115,000 | 33 | 170M2685 |

**Dimensions - mm**




Data sheet: 170K8506

# Size 1* to 3, French style, 170M

## 690 V a.c. (IEC), 700 V a.c. (UL), 40 to 1600 A




### Specifications

**Description**

Square body French style high speed fuse links for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.

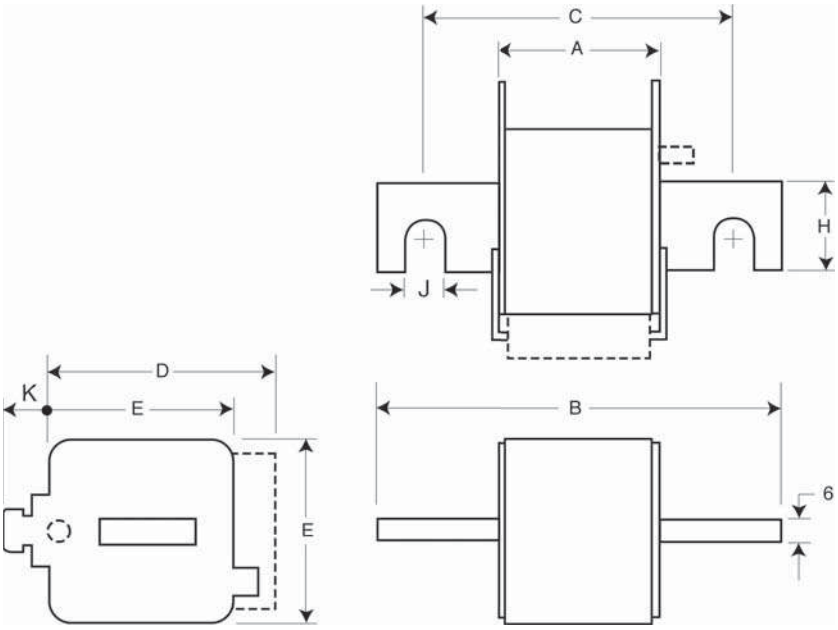
**Technical data**

| | |
|---|---|
| Rated voltage: | 690 V a.c. (IEC), 700 V a.c. (UL) |
| Rated current: | 40-1600 A |
| Breaking capacity: | 200 kA RMS Sym. |
| Operating class: | aR |

**Standards / Agency information**

CE, Designed and tested to IEC60269 Part 4, UL Recognised. For CCC approval, please consult Eaton's Bussmann business bulehighspeedtechnical@eaton.com.

**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 |

Data sheets: 170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

## Size 1* to 3, French style, 170M

## 690 V a.c. (IEC), 700 V a.c. (UL), 40 to 1600 A

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Catalogue numbers | |
|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 660 V a.c. | | -E/- Type T indicator for micro | -EKN/- Type K indicator for micro |
| 1* | 690 V a.c. (IEC) 700 V a.c.(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 V a.c. (IEC) 700 V a.c.(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 V a.c. (IEC) 700 V a.c.(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 V a.c. (IEC) 700 V a.c.(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 |

Data sheets: 170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

# Size 1* to 3, US style, 170M

## 690 V a.c. (IEC), 700 V a.c. (UL), 40 to 2000 A




### Specifications

**Description**

Square body US style bolted tags high speed fuse links for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.

**Technical data**

Rated voltage: see table page 51

Rated current: 40-2000 A

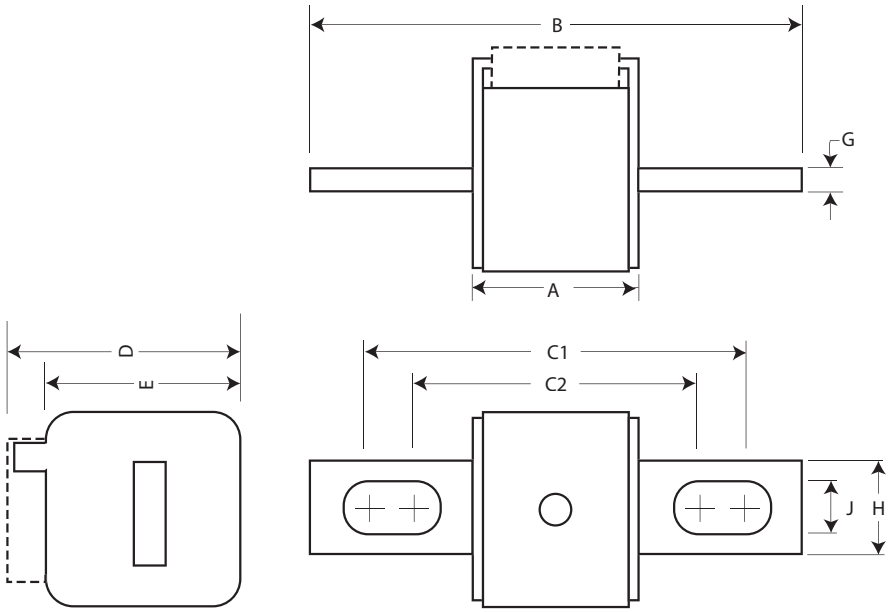
Breaking capacity: 200 kA RMS Sym.

Operating class: aR

**Standards / Agency information**

CE, Designed and tested to IEC60269 Part 4. Consult Eaton's Bussmann business for UL Recognition/CSA Component Acceptance status and CCC approvals.

**Dimensions - mm**




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

| Size | A | B | B1 | C1 | C1[1] | C2 | C2[1] | 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 |

[1] Valid for fuse links type -FU/115 & -FKE/115.
1mm = 0.0394"

Data sheets: 170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Catalogue numbers | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 660 V a.c. | | -FU/- without indicator | -FKE/- Type K indicator for micro | -FU/115 without indicator | -FKE/115 Type K indicator for micro |
| 1* | 690 V a.c. (IEC) 700 V a.c. (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 V a.c. (IEC) 700 V a.c. (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 V a.c. (IEC) | 900 | 155,000 | 850,000 | 100 | 170M4619 | 170M4669 | 170M4719 | 170M4769 |
| 2 | 690 V a.c. (IEC) 700 V a.c. (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 V a.c. (IEC) 700 V a.c. (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 V a.c. (IEC) 700 V a.c. (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 V a.c. (IEC)/500 V a.c. (UL) | 1800 | 880,000 | 5,250,000 | 165 | 170M6620 | 170M6670[1] | 170M6720 | 170M6770 |
| | 550 V a.c. (IEC)/500 V a.c. (UL) | 2000 | 1,150,000 | 6,350,000 | 175 | 170M6621 | 170M6671[2] | 170M6721 | 170M6771 |

[1] 170M6670 600 V a.c. (IEC)/550 V a.c. [2] 170M6671 550 V a.c. (IEC and UL).

Data sheets: 170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

# Size 1* to 3, US style, 170M

## 1000 V a.c. (IEC), 50 to 1400 A




### Specifications

**Description**

Square body US style bolted tags high speed fuse links for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters.

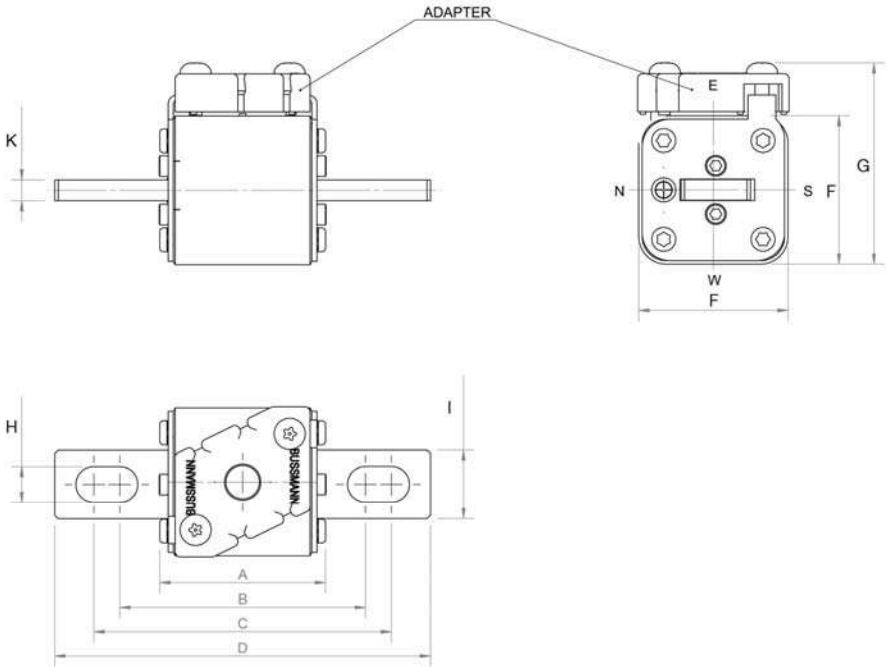
**Technical data**

| | |
|---|---|
| Rated voltage: | 1000 V a.c. (IEC), 900 V a.c. (IEC, 1400 A) |
| Rated current: | 50-1400 A |
| Breaking capacity: | 125kA RMS Sym. |
| Operating class: | aR |

**Standards / Agency information**

CE, Designed and tested to IEC60269 Part 4. UL Recognised/CSA Component Acceptance status for size 2 and 3 (315-1100 A) and CCC approval for size 2 only.

**Dimensions - mm**




| Size | A | B | C | D | F | G | H | I | K |
|---|---|---|---|---|---|---|---|---|---|
| 1*FKE/115 | 74 | 101 | 130 | 156 | 43 | 60 | 10.4 | 20 | 6 |
| 1FKE/115 | 76 | 102 | 128 | 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 | 36 | 6 |

1mm = 0.0394”

Data sheets: 170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

## Size 1* to 3, US style, 170M

## 1000 V a.c. (IEC), 50 to 1400 A

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 1000 V a.c. | | -FKE/115 Type K indicator for micro |
| 1* | 1000 V a.c. (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 V a.c. (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 V a.c. (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 V a.c. (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 V a.c. (IEC) | 1250 | 575,000 | 3,400,000 | 175 | 170M8543 |
| | 900 V a.c. (IEC) | 1400 | 795,000 | 4,200,000 | 185 | 170M8544 |

Data sheets: 170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

# Size 1* to 3, US style, 170M

## 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 to 1400 A




### Specifications

**Description**

Square body US style bolted tags high speed fuse links for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.

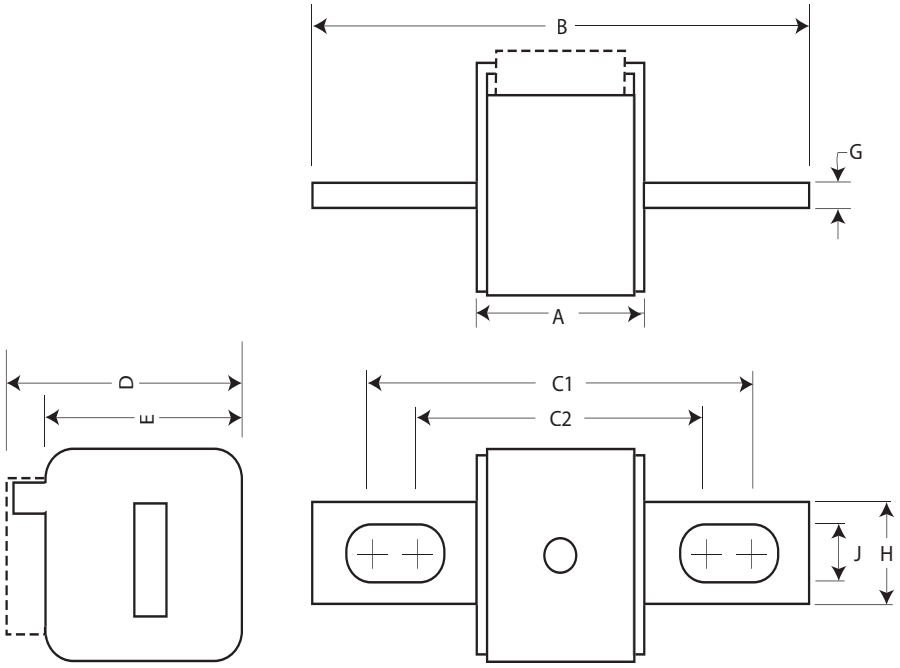
**Technical data**

| | |
|---|---|
| Rated voltage: | 1250 V a.c. (IEC), 1300 V a.c. (UL) |
| Rated current: | 50-1400 A |
| Breaking capacity: | 100 kA RMS Sym. |
| Operating class: | aR |

**Standards / Agency information**

CE, Designed and tested to IEC 60269 part 4. Consult Eaton's Bussmann business for UL Recognition/CSA Component Acceptance status and CCC approvals.

**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 |

Data sheets: 170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

## Size 1* to 3, US style, 170M

## 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 to 1400 A

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | | Watts loss (W) | Catalogue numbers | |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 1000 V a.c. | Clearing at 1250 V a.c. | | -FU/115 without indicator | -FKE/115 Type K indicator for micro |
| 1* | 1250 V a.c. (IEC) 1300 V a.c. (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 V a.c. (IEC) 1300 V a.c. (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 V a.c. IEC | 500 | 69,500 | 340,000 | N/A | 85 | 170M4695 | 170M4745 |
| | | 550 | 95,000 | 465,000 | N/A | 95 | 170M4696 | 170M4746 |
| | 1000 V a.c. IEC | 630 | 130,000 | 660,000 | N/A | 100 | 170M4697 | 170M4747 |
| 2 | 1250 V a.c. (IEC) 1300 V a.c. (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 V a.c. IEC | 700 | 160,000 | 795,000 | N/A | 125 | 170M5697 | 170M5747 |
| | | 800 | 245,000 | 1,200,000 | N/A | 130 | 170M5698 | 170M5748 |
| | 1000 V a.c. 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 V a.c. (IEC) 1300 V a.c. (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 V a.c. (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 V a.c. (IEC) 1000 V a.c. (UL) | 1000 | 450,000 | 2,150,000 | N/A | 135 | 170M6698 | 170M6748 |
| | | 1100 | 575,000 | 2,800,000 | N/A | 160 | 170M6699 | 170M6749 |
| | 1000 V a.c. 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 |

Data sheets: 170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

# Size 00, Flush end contact, 170M

## 690 V a.c., 25 to 400 A




### Specifications

**Description**

Square body flush end contact high speed fuse links, for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced rated voltage starters.

**Technical data**

Rated voltage: 690 V a.c. (IEC)

Rated current: 25-400 A

Breaking capacity: 200 kA RMS Sym.

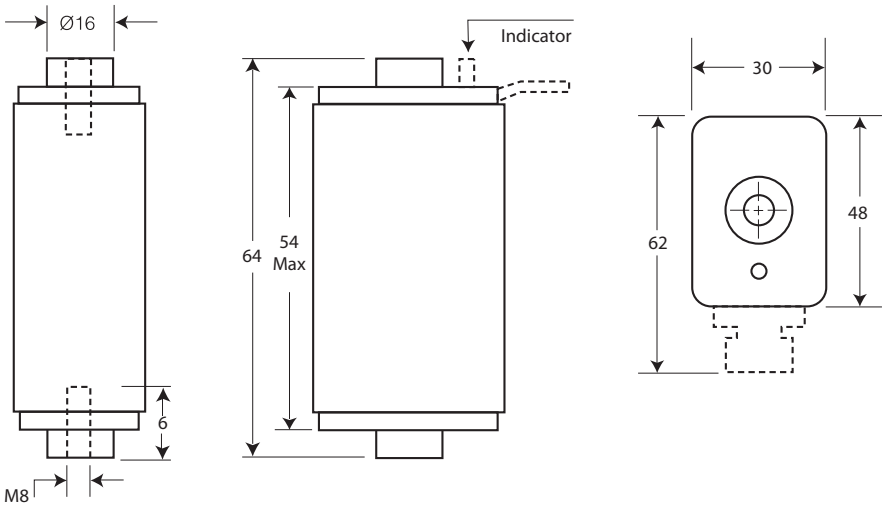
Operating class: gR (25-80 A), aR (100-400 A)

**Standards / Agency information**

CE, Designed and tested to IEC 60269 Part 4.

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 660 V a.c. | Watts loss (W) | Catalogue numbers 00B/60 visual indicator | Catalogue numbers 00BTN/60 Type T indicator for micro |
|---|---|---|---|---|---|---|---|
| 00 | 690 V a.c. (IEC) | 25 | 19 | 130 | 6 | 170M2708 | 170M2758 |
| | | 32 | 28.5 | 195 | 7 | 170M2709 | 170M2759 |
| | | 40 | 50 | 360 | 9 | 170M2710 | 170M2760 |
| | | 50 | 95 | 640 | 10 | 170M2711 | 170M2761 |
| | | 63 | 170 | 1200 | 12 | 170M2712 | 170M2762 |
| | | 80 | 310 | 2100 | 15 | 170M2713 | 170M2763 |
| | | 100 | 620 | 4150 | 20 | 170M2714 | 170M2764 |
| | | 125 | 1000 | 6950 | 25 | 170M2715 | 170M2765 |
| | | 160 | 1900 | 13,000 | 30 | 170M2716 | 170M2766 |
| | | 200 | 3400 | 23,000 | 35 | 170M2717 | 170M2767 |
| | | 250 | 6250 | 42,000 | 45 | 170M2718 | 170M2768 |
| | | 315 | 10,000 | 68,500 | 55 | 170M2719 | 170M2769 |
| | | 350 | 13,500 | 91,500 | 60 | 170M2720 | 170M2770 |
| | | 400 | 18,000 | 125,000 | 70 | 170M2721 | 170M2771 |

**Dimensions - mm**




Data sheet: 170K6312

# Size 1* to 3, Flush end contact, 170M

## 690 V a.c. (IEC), 700 V a.c. (UL), 40 to 2000 A

### Specifications




**Description**

Square body flush end contact high speed fuse links, for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.

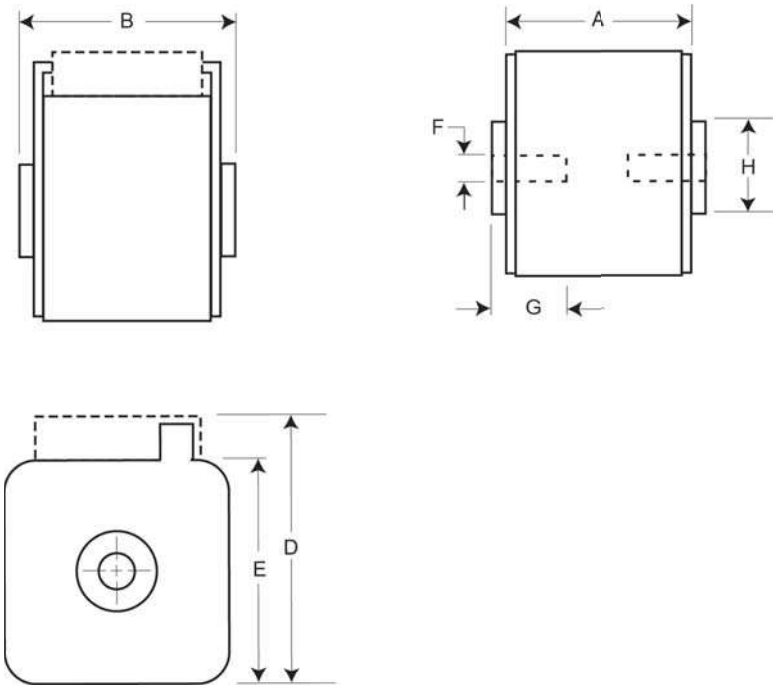
**Technical data**

| | |
|---|---|
| Rated voltage: | see table page 58 |
| Rated current: | 40-2000 A |
| Breaking capacity: | 200 kA RMS Sym. |
| Operating class: | aR |

**Standards / Agency information**

CE, Designed and tested to IEC 60269 Part 4. Consult Eaton's Bussmann business for UL Recognition, CSA Component Acceptance Status and CCC approvals.

**Dimensions - mm**




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

| Size | A | B | D[3] | E | F | F[1] (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 | ½" -13 UNC-2B | 10 | N30 |

[1] Valid for fuse links type -G- & -GKN/.
[3] Valid for fuse links type -BKN/ and -GKN/.

Data sheets: 170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Catalogue numbers | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 660 V a.c. | | -B/- visual indicator | -BKN/- Type K indicator for micro | -G/- visual indicator | -GKN/- Type K indicator for micro |
| 1* | 690 V a.c. (IEC) 700 V a.c. (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 V a.c. (IEC) 700 V a.c. (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 V a.c. (IEC) | 900 | 155,000 | 850,000 | 100 | 170M4419 | 170M4469 | 170M4519 | 170M4569 |
| 2 | 690 V a.c. (IEC) 700 V a.c. (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 V a.c. (IEC) 700 V a.c. (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 V a.c. (IEC) 700 V a.c. (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 V a.c. (IEC)/500 V a.c. (UL) | 1800 | 880,000 | 5,250,000 | 165 | 170M6420 | 170M6470 | 170M6520 | 170M6570 |
| | 550 V a.c. (IEC)/500 V a.c. (UL) | 2000 | 1,150,000 | 6,350,000 | 175 | 170M6421 | 170M6471 | 170M6521 | 170M6571 |

Data sheets: 170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

# Size 1* to 3, Flush end contact, 170M

## 1000 V a.c. (IEC and UL), 50 to 1400 A




### Specifications

**Description**

Square body flush end contact high speed fuse links, for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.

**Technical data**

Rated voltage:

- 1000 V a.c. (IEC, 50-1250 A),
- 1000 V a.c. (UL, 250-1100 A)
- 900 V a.c. (IEC, 1400 A

Rated current: 50-1400 A

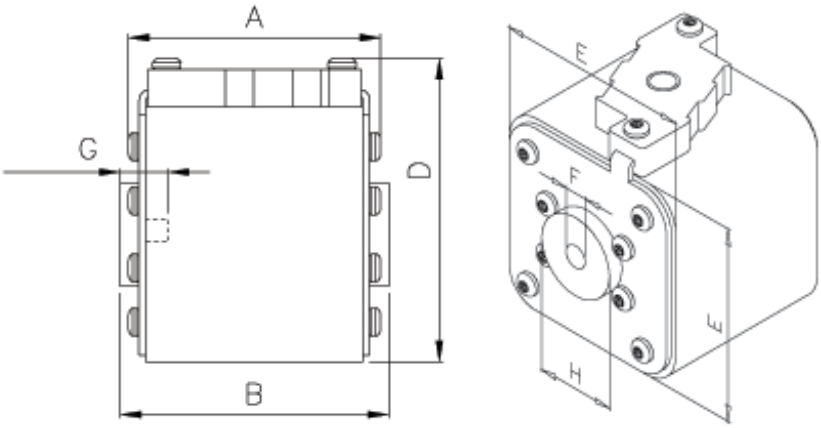
Breaking capacity: 125kA RMS Sym.

Operating class: aR

**Standards / Agency information**

CE, Designed and tested to IEC 60269 Part 4, UL Recognised for size 2 and 3 (only up to 1100 A).

**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 | 61 | 43 | M8 | 5/16"18 UNC-2B | 5 | 17.5 |
| 1 | BKN/75 + GKN/75 | 73.2 | 74 | 69 | 52 | M8 | 5/16" 18 UNC-2B | 8 | 20 |
| 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 | ½" 13 UNC-2B | 10 | 30 |
| 3 | BKN/90 + GKN/90 | 80.3 | 91.4 | 92 | 74 | M12 | ½"13 UNC-2B | 10 | 30 |

[1] Valid for fuses type -GKN/-.

Data sheets: 170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

## Size 1* to 3, Flush end contact, 170M

## 1000 V a.c. (IEC and UL), 50 to 1400 A

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Catalogue numbers | |
|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at rated voltage | | -BKN/- Type K indicator for micro | -GKN/- Type K indicator for micro |
| 1* | 1000 V a.c. (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 V a.c. (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 V a.c. (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 V a.c. (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 V a.c. (IEC) | 1250 | 575,000 | 3,400,000 | 175 | 170M8612[1] | 170M8512[1] |
| | 900 V a.c. (IEC) | 1400 | 795,000 | 4,200,000 | 185 | 170M8613[1] | 170M8513[1] |

[1] Overall length is 90 mm, for all other fuse links the overall length is 75 mm.

Data sheets: 170K8564 (Size 1*), 170K8566 (Size 1), 170K8568 (Size 2), 170K8570 (Size 3)

# Size 1* to 3, Flush end contact, 170M

## 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 to 1400 A




### Specifications

**Description**

Square body flush end contact high speed fuse links, for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.

**Technical data**

Rated voltage:

- 1250 V a.c. (IEC)
- 1300 V a.c. (UL)

Rated current: 50-1400 A

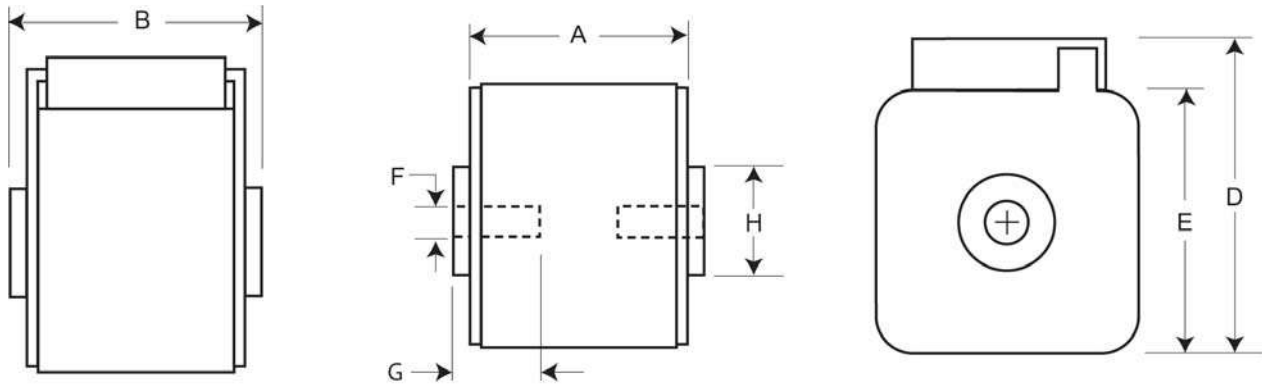
Breaking capacity: 100 kA RMS Sym.

Operating class: aR

**Standards / Agency information**

CE, Designed and tested to IEC 60269 Part 4. Consult Eaton's Bussmann business for UL Recognition/CSA Component Acceptance Status.

**Dimensions - mm**




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

| Size | Type | A | B | D | E | F | F[1] (in) | Min G | H |
|---|---|---|---|---|---|---|---|---|---|
| 1* | BKN + GKN/75 | 74 | 75 | 59 | 45 | M8 | 5/16" -18 UNC-2B | 5 | Ø17 |
| 1* | BKN/80 | 80 | 81 | 59 | 45 | M8 | | 5 | Ø17 |
| 1 | BKN + GKN/75 | 74 | 75 | 69 | 53 | M8 | 5/16" -18 UNC-2B | 8 | Ø20 |
| 1 | BKN/80 | 80 | 81 | 69 | 53 | M8 | | 8 | Ø20 |
| 2 | BKN + GKN/75 | 74 | 75 | 77 | 61 | M10 | 3/8" -16 UNC-2B | 10 | Ø24 |
| 2 | BKN/80 | 80 | 81 | 77 | 61 | M10 | | 10 | Ø24 |
| 2 | BKN + GKN/90 | 80 | 91 | 77 | 61 | M10 | 3/8" -16 UNC-2B | 10 | Ø24 |
| 3 | BKN + GKN/75 | 74 | 76 | 92 | 76 | M12 | ½" -13 UNC-2B | 10 | Ø30 |
| 3 | BKN/80 | 81 | 83 | 92 | 76 | M12 | | 10 | Ø30 |
| 3 | BKN + GKN/90 | 81 | 91 | 92 | 76 | M12 | ½" -13 UNC-2B | 10 | Ø30 |

[1] Valid for fuses type -GKN/-.

Data sheets: 170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

## Size 1* to 3, Flush end contact, 170M

## 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 to 1400 A

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 1000 V a.c. | $I^2t$ ($A^2$ Sec) Clearing at 1250 V a.c. | Watts loss (W) | Catalogue numbers -BKN/75 Type K indicator for micro | -BKN/80 Type K indicator for micro | -BKN/90 Type K Indicator for micro | -GKN/75 Type K Indicator for micro | -GKN/90 Type K Indicator for micro |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1* | 1250 V a.c. (IEC) 1300 V a.c. (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 V a.c. (IEC) 1300 V a.c. (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 V a.c. (IEC) 1300 V a.c. (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 V a.c. (IEC) 1300 V a.c. (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] |

[1] Rated voltage 1100 V a.c. (IEC), 1000 V a.c. (UL).
[2] Rated voltage 1000 V a.c. (IEC and UL).
[3] Rated voltage 1100 V a.c. (IEC and UL).
[4] Rated voltage (IEC) 1100 V a.c.
[5] Rated voltage (IEC) 1000 V a.c.

Data sheets: 170K6630 (Size 1*), 170K6632 (Size 1), 170K6634 (Size 2), 170K6636 (Size 3)

# Size 4, Flush end contact, 170M

## 690 V a.c. (IEC), 700 V a.c. (UL), 1000 to 4000 A

### Specifications




**Description**

Square body, flush end contact, high speed fuse links, for the protection of power rectifiers.

**Technical data**

Rated voltage:

- 690 V a.c. (IEC)/700 V a.c. (UL) 1000-3500 A
- 600 V a.c. (IEC and UL, 4000 A)

Rated current: 1000-4000 A

Breaking capacity: 200 kA RMS Sym.

Operating class: aR

**Standards / Agency information**

CE, Designed and tested to IEC 60269 Part 4, UL Recognised.

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Catalogue numbers | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 660 V a.c. | | -B/65 visual indicator | -BKN/65 Type K indicator | -G/65 visual indicator | -GKN/65 Type K indicator |
| 4 | 690 V a.c. (IEC) 700 V a.c. (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 V a.c. (IEC & UL) | 4000 | 4,700,000 | 28,000,000[1] | 355 | 170M7066 | 170M7086 | 170M7106 | 170M7126 |

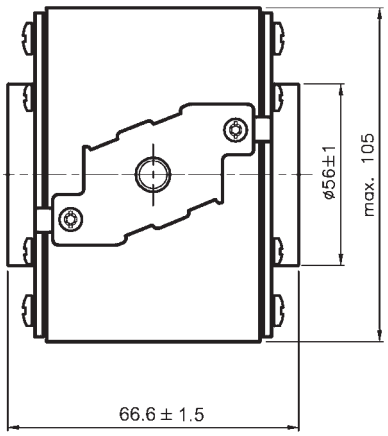
[1] Clearing at 600 V a.c.

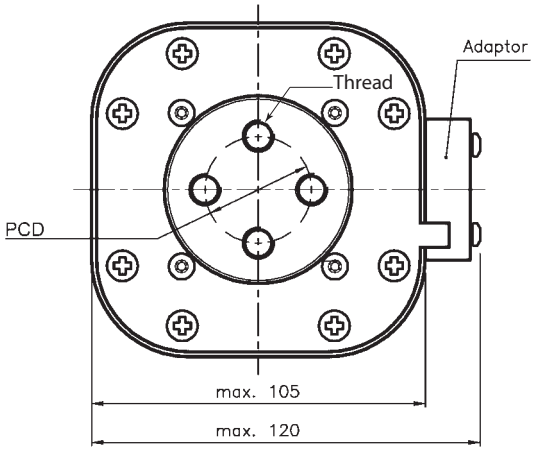
Data sheet: 170K6328

## Size 4, Flush end contact, 170M

## 690 V a.c. (IEC), 700 V a.c. (UL), 1000 to 4000 A

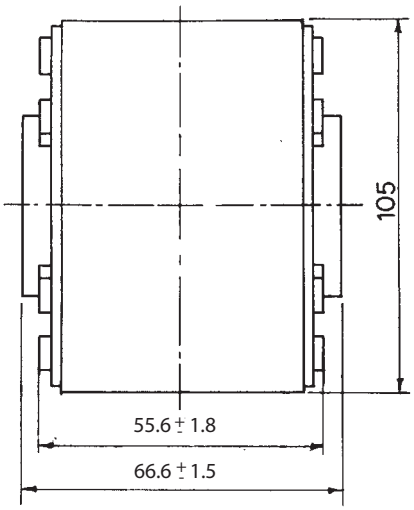
**Dimensions - mm**

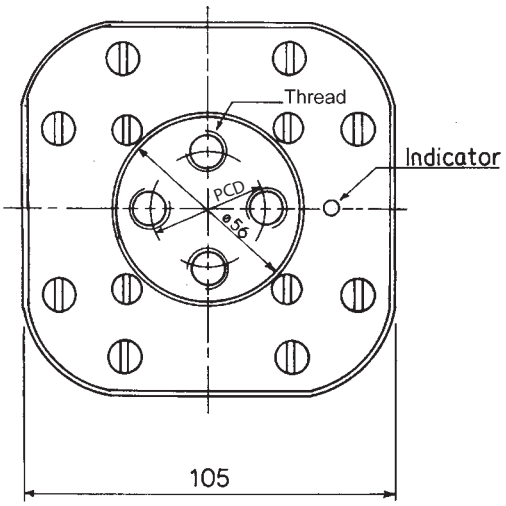



**Type -BKN/65, -GKN/65**

| Type | PCD | Thread |
|---|---|---|
| -GKN/65 | Ø 38.1 | UNC ½" - 13 |
| -BKN/65 | Ø 33 | M-10 |




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

| | PCD | Thread |
|---|---|---|
| -G/65 | Ø 38.1 | UNC ½" - 13 |
| -B/65 | Ø 33 | M-10 |

Data sheet: 170K6328

# Size 4, Flush end contact, 170M

## 1000 V a.c. (IEC), 1000 to 3000 A



### Specifications

**Description**

Square body, flush end contact, high speed fuse links, for the protection of power rectifiers.

**Technical data**

Rated voltage: 1000 V a.c. (IEC)

Rated current: 1000-3000 A

Breaking capacity: 200 kA RMS Sym.

Operating class: aR

**Standards / Agency information**

CE, Designed and tested to IEC 60269 Part 4.

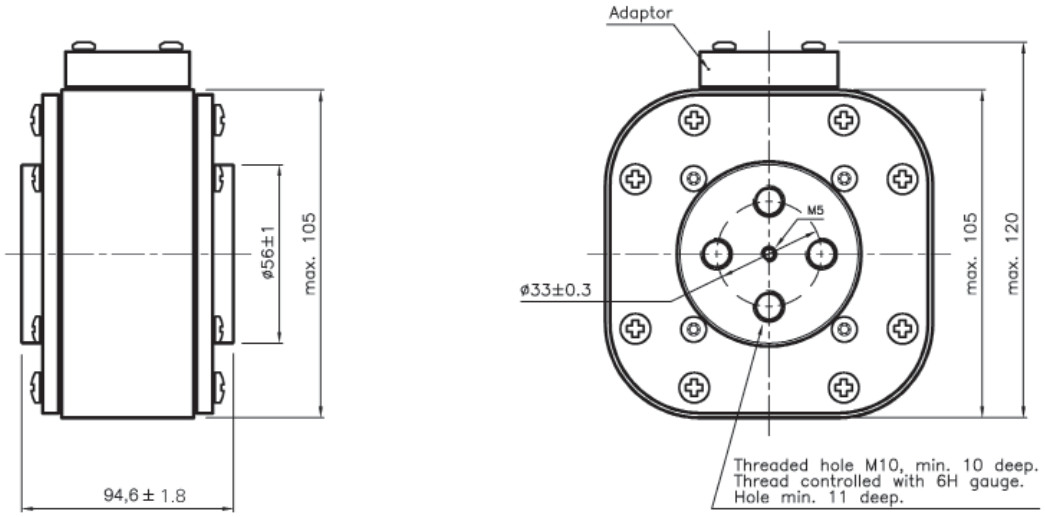
| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Catalogue numbers | |
|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 1000 V a.c. | | -BKN/95 Type K indicator | -SBKN/90 Type K indicator |
| 4 | 1000 V a.c. | 1000 | 180,000 | 1,100,000 | 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 |

Data sheets: 170K8520, 170K8520-R

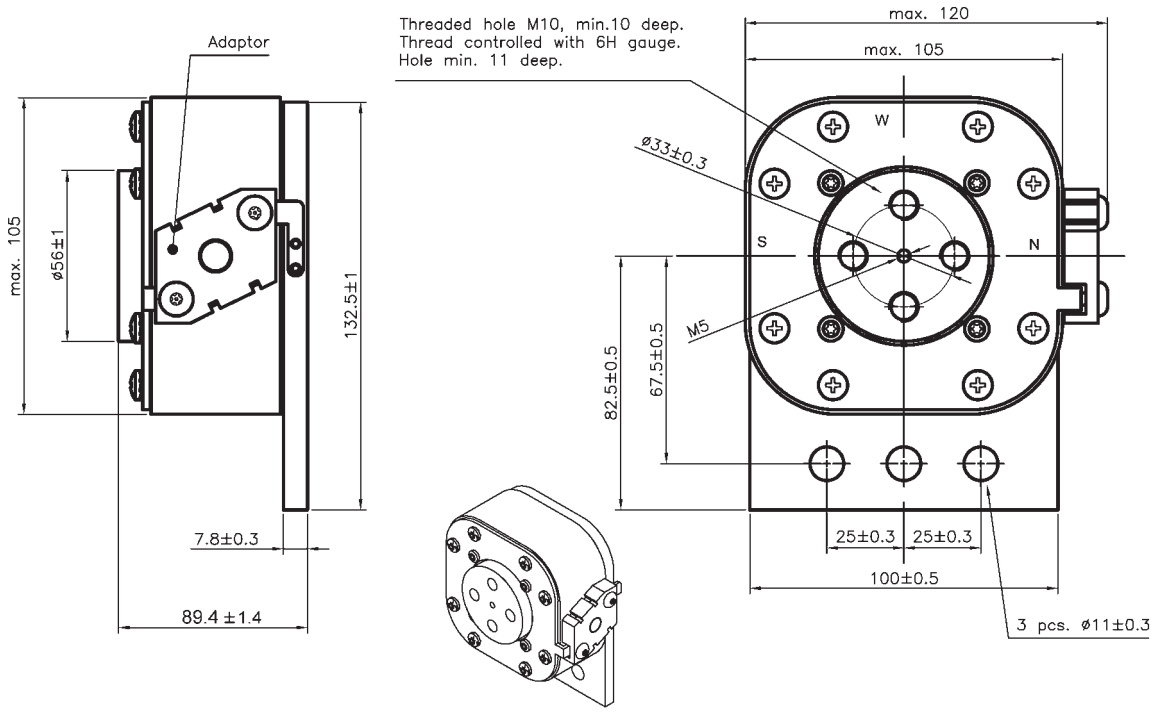
## Size 4, Flush end contact, 170M

## 1000 V a.c. (IEC), 1000 to 3000 A

**Dimensions - mm**




**Type 4BKN/95**




**Type 4SBKN/90**

Data sheets: 170K8520, 170K8520-R

# Size 4, Flush end contact, 170M

## 1250 V a.c. (IEC), 800 to 2500 A




### Specifications

**Description**

Square body, flush end contact, high speed fuse links, for the protection of power rectifiers.

**Technical data**

Rated voltage:

- 1250 V a.c. (IEC)
- 1200 V d.c. (UL)

Rated current: 800-2500 A

Breaking capacity:

- 200 kA RMS Sym.
- 85 kA d.c. (2ms TC)

Operating class: aR

**Standards / Agency information**

CE, Designed and tested to IEC 60269 Part 4, UL

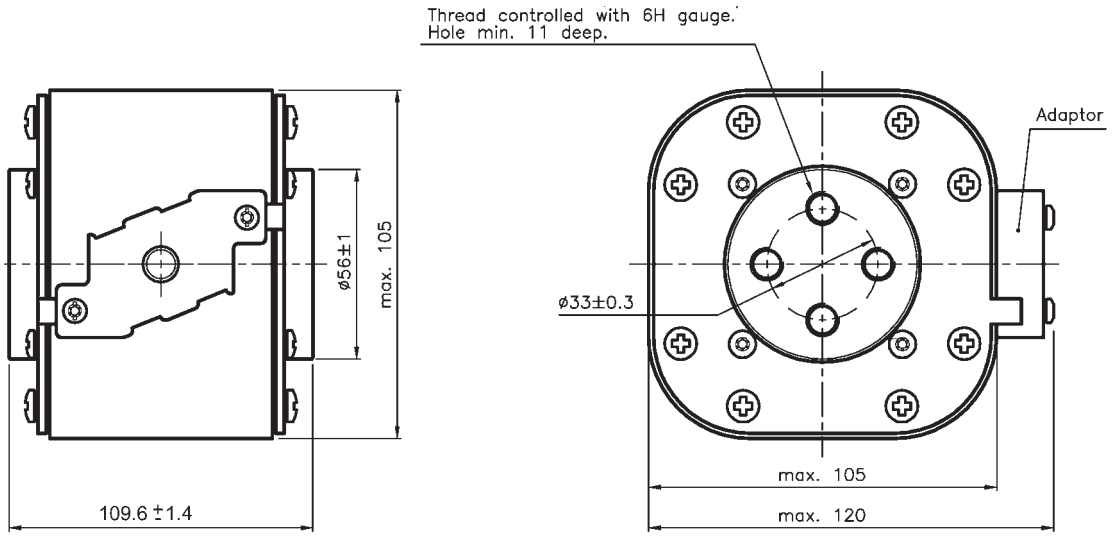
| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Catalogue numbers | |
|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 1250 V a.c. | | -BKN/105 Type K indicator | -SBKN/105 Type K indicator |
| 4 | 1250 V a.c. (IEC) 1200 V d.c. (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 |

Data sheets: 170K6640 (1400-2400 A), 170K6642 (800-1200, 2500 A)

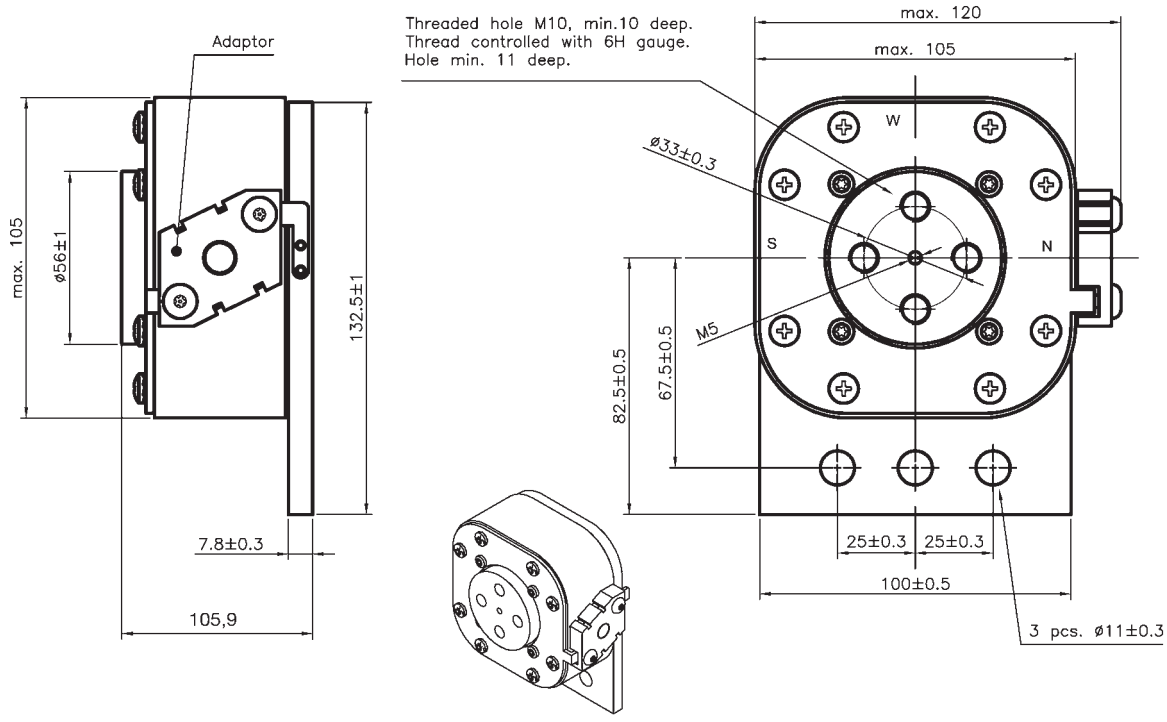
## Size 4, Flush end contact, 170M

## 1250 V a.c. (IEC), 800 to 2500 A

**Dimensions - mm**




**Type 4BKN/105**




**Type 4SBKN/105**

Data sheets: 170K6640 (1400-2400 A), 170K6642 (800-1200, 2500 A)

# Size 23, Flush end contact, 170M

# 660 V a.c. (IEC), 1000 to 4000 A

## Specifications




### Description

Square body, flush end contact, high speed fuse links, for the protection of power rectifiers.

### Technical data

Rated voltage:

- 660 V a.c. (IEC, 1000-3000 A)
- 600 V a.c. (IEC, 3500 A)
- 550 V a.c. (IEC, 4000 A)

Rated current: 1000-4000 A

Breaking capacity: 100 kA RMS Sym.

Operating class: aR

### Standards / Agency information

CE, Designed and tested to IEC 60269 Part 4.

| | | | $I^2t$ ($A^2$ Sec) | | | Catalogue numbers | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fuse link body size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 660 V a.c. | Watts loss (W) | -BU/55 | -BKE/55 Type K indicator | -BKN/55 Type K indicator | -GU/55 | -GKE/55 Type K Indicator | -GKN/55 Type K Indicator |
| 23 | 660 V a.c. (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 V a.c. (IEC) | 3500 | 3,450,000 | 21,000,000[1] | 315 | 170M6869 | 170M6909 | 170M6889 | 170M6929 | 170M6969 | 170M6949 |
| | 550 V a.c. (IEC) | 4000 | 5,000,000 | 27,500,000[2] | 340 | 170M6870 | 170M6910 | 170M6890 | 170M6930 | 170M6970 | 170M6950 |

[1] Clearing at 600 V a.c.

[2] Clearing at 550 V a.c.

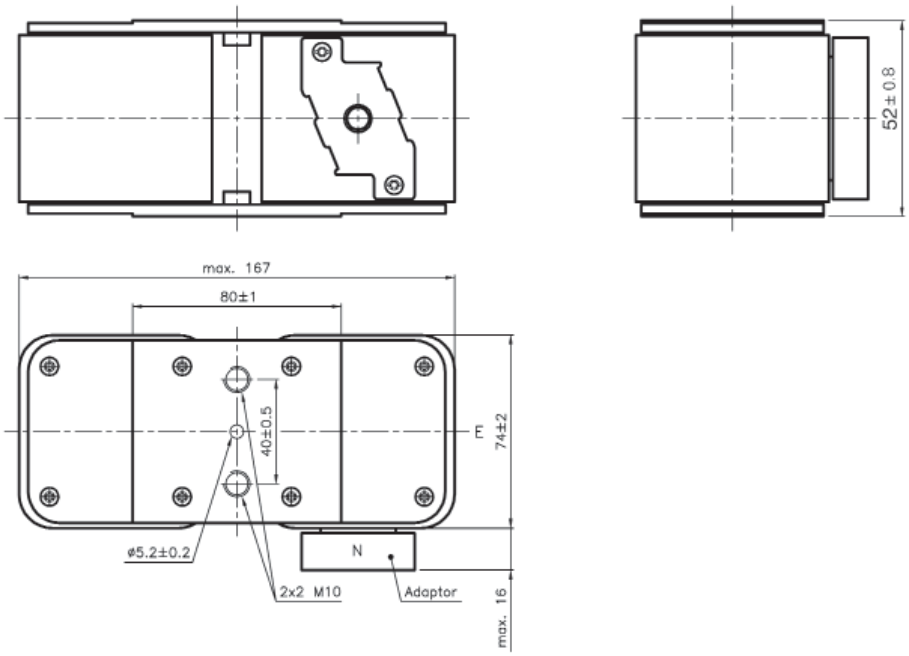
When using these fuse links, please consult Eaton's Bussmann business for application assistance at bulehighspeedtechnical@eaton.com.

Data sheet: 170K6326

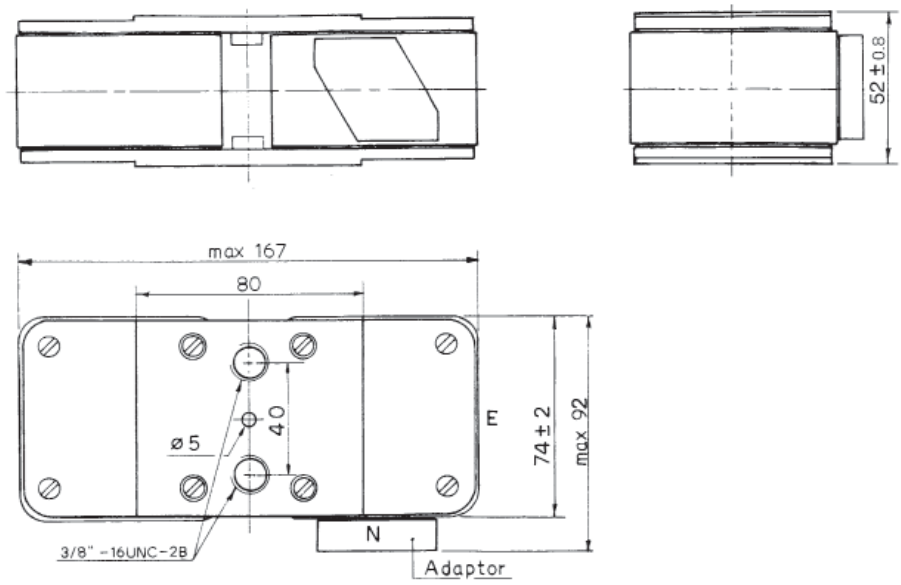
## Size 23, Flush end contact, 170M

## 660 V a.c. (IEC), 1000 to 4000 A

**Dimensions - mm**




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




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

When using these fuse links, please consult Eaton's Bussmann business for application assistance at bulehighspeedtechnical@eaton.com.

Data sheet: 170K6326

# Size 23, Flush end contact, 170M

## 1250 V a.c. (IEC), 630 to 2800 A



### Specifications

**Description**

Square body, flush end contact, high speed fuse links, for the protection of power rectifiers.

**Technical data**

Rated voltage:

- 1250 V a.c. (IEC 630 to 2200 A)
- 1100 V a.c. (IEC 2500 and 2800 A)

Rated current: 630-2800 A

Breaking capacity: 125kA RMS Sym.

Operating class: aR

**Standards / Agency information**

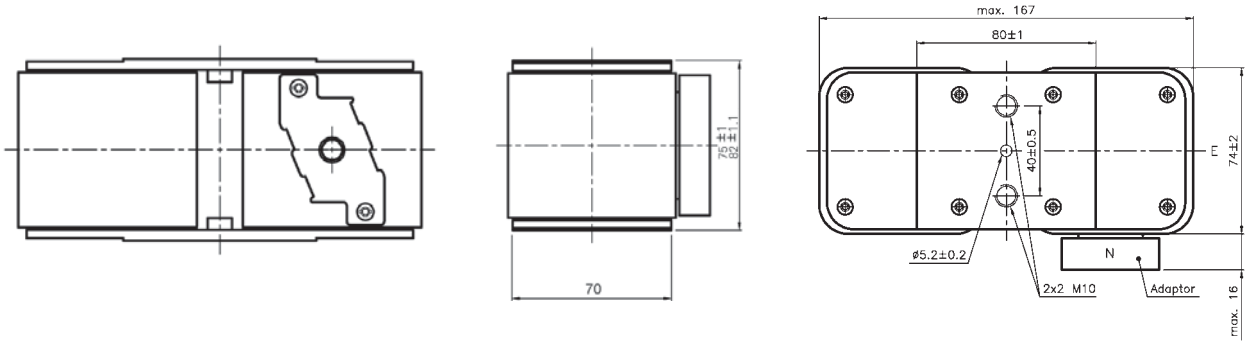
CE, Designed and tested to IEC 60269 Part 4.

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 1250 V a.c. | Watts loss (W) | Catalogue numbers -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 V a.c. (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 V a.c. (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 |

[1] Clearing at 1000 V

When using these fuse links, please consult Eaton's Bussmann business for application assistance at bulehighspeedtechnical@eaton.com.

**Dimensions - mm**




Data sheet: 170K6638

# Size 24, Flush end contact, 170M

## 690 V a.c. (IEC), 2000 to 7500 A



### Specifications

**Description**

Square body, flush end contact, high speed fuse links, for the protection of power rectifiers.

**Technical data**

Rated voltage:

- 690 V a.c. (IEC 2000 to 7000 A)
- 500 V a.c. (IEC 7500 A)

Rated current: 2000-7500 A

Breaking capacity: 200 kA RMS Sym.

Operating class: aR

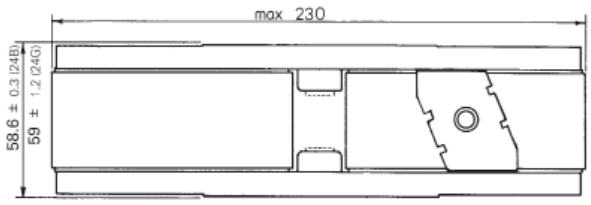
**Standards / Agency information**

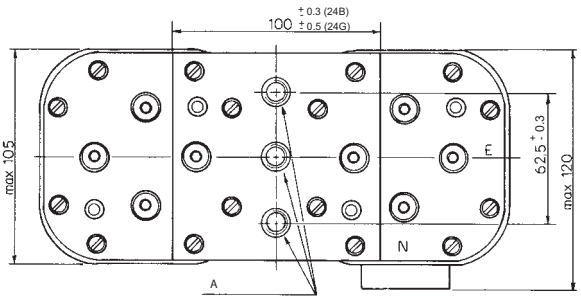
CE, Designed and tested to IEC 60269 Part 4.

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Catalogue numbers | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 660 V a.c. | | -BU/60 Without indicator | -BKN/60 Type K indicator | -GU/60 Without indicator | -GKN/60 Type K indicator |
| 24 | 690 V a.c. (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 V a.c. (IEC) | 7500 | 18,500,000 | 93,000,000[1] | 660 | 170M7149 | 170M7169 | 170M7209 | 170M7229 |

[1] Clearing at 500 V a.c.

**Dimensions - mm**




| Size | Type | A |
|---|---|---|
| 24 | BKN | 2x3 M12 |
| 24 | GKN | 2x3½" -13 UNC-2B |

When using these fuse links, please consult Eaton's Bussmann business for application assistance at bulehighspeedtechnical@eaton.com.

Data sheet: 170K6332

# Size 24, Flush end contact, 170M

## 1000 V a.c. (IEC), 2000 to 5000 A



### Specifications

**Description**

Square body, flush end contact, high speed fuse links, for the protection of power rectifiers.

**Technical data**

Rated voltage: 1000 V a.c. (IEC)

Rated current: 2000-5000 A

Breaking capacity: 300 kA RMS Sym.

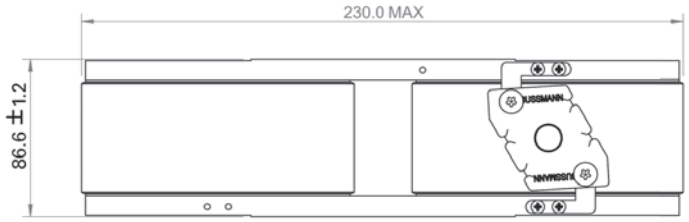
Operating class: aR

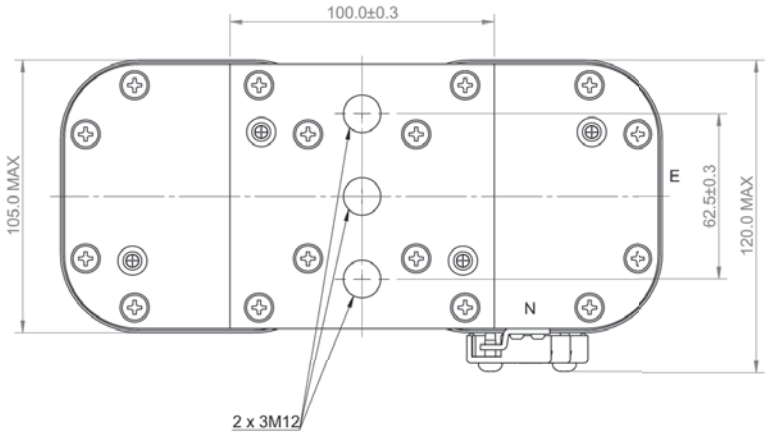
**Standards / Agency information**

CE, Designed and tested to IEC 60269 Part 4.

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|
| | | | Pre-arcing | Clearing at 1000 V a.c. | | -BKN/85 Type K indicator |
| 24 | 1000 V a.c. (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 |

**Dimensions - mm**




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

When using these fuse links, please consult Eaton's Bussmann business for application assistance at bulehighspeedtechnical@eaton.com.

Data sheets: 170K8514

# Size 5, Flush end contact, 170M

## 1100-2000 V a.c. (IEC), 1800 to 5500 A



### Specifications

**Description**

Square body flush end contact high speed fuse links, for the protection or isolation for components such as diodes, silicon controlled rectifiers (SCRs), Gate Turn-Off Thrystors (GTOs) and IGBTs. Typical application include AC and DC drives, high power rectifiers.

**Technical data**

| | |
|---|---|
| Rated voltage: | 1100-2000 V a.c. (IEC) |
| Rated current: | 1800-5500 A |
| Breaking capacity: | 300 kA RMS Sym. estimated: 197 kA tested. |
| Operating class: | aR |

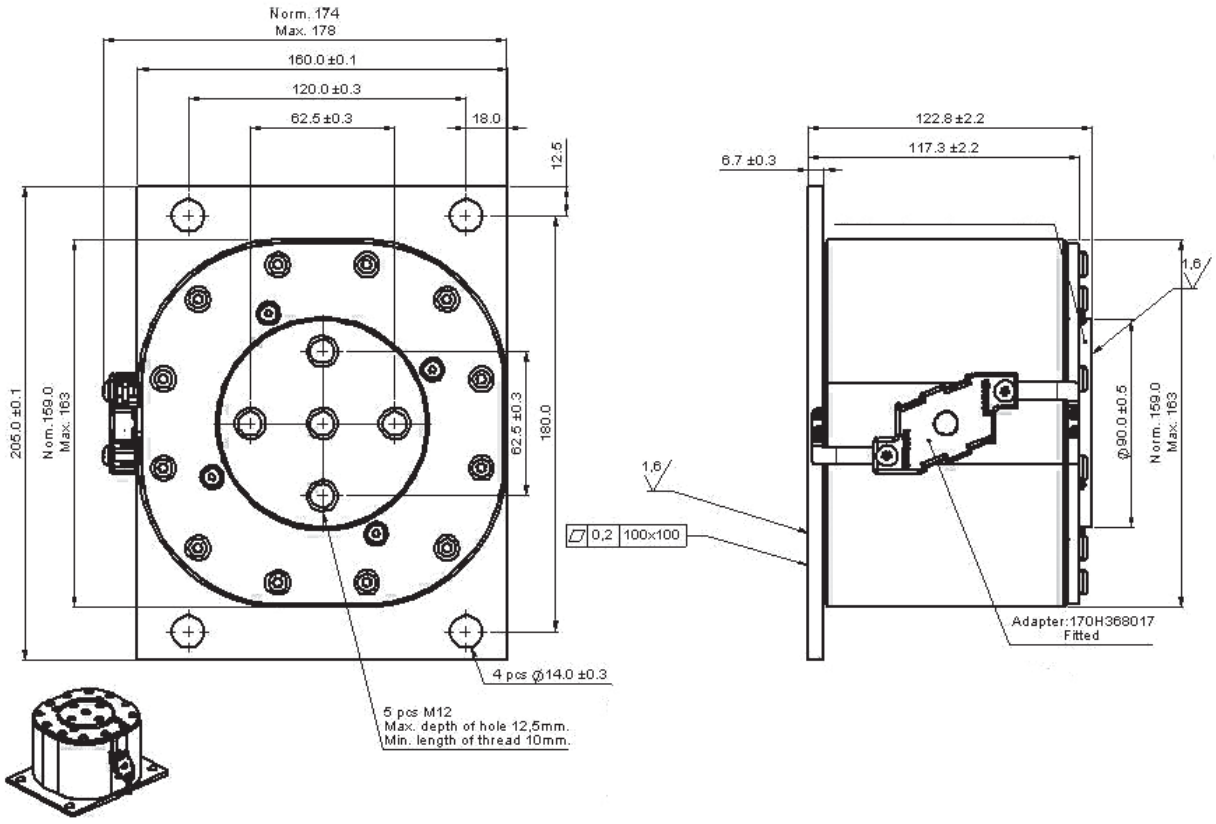
**Standards / Agency information**

Consult Eaton's Bussmann business bulehighspeedtechnical@eaton.com.

**Catalogue Numbers**

Consult Eaton's Bussmann business bulehighspeedtechnical@eaton.com.

**Dimensions - mm**




**This dimension drawing is an example of the range of size 5 fuse links available.**

# Drive fuse links

## DFJ

## 600 V a.c./450 V d.c. (UL), 1 to 600 A

### Specifications




**Description**

Bolted tags high speed fuse links that provide maximum protection for AC and DC drives and controllers. The DFJ fuse link has the lowest I2t of any branch circuit fuse to protect power semi-conductor devices that utilise diodes, GTOs, SCRs and SSRs. The DFJ fuse links combine the performance of high speed fuse links and the convenience of Class J branch circuit fuse links, allowing the use of readily available Class J fuse blocks, holders and switches.

**Technical data**

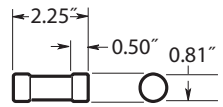
| | |
|---|---|
| Rated voltage: | 600 V a.c./450 V d.c. (UL) |
| Rated current: | 1-600 A |
| Breaking capacity: | 200 kA RMS Sym., 100 kA DC |
| Operating class: | aR |

**Standards / Agency information**

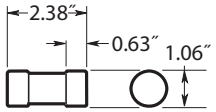
UL Listed, Std 248-8, Class J, Guide JDDZ, File E4273 CSA Certified, C22-2 No 248.8, Class 1422-02, File 53787 meets NEC branch circuit protection.

| Rated voltage | Rated current (Amps) | Catalogue numbers |
|---|---|---|
| 600 V a.c./ 450 V d.c. (UL) | 1 | DFJ-1 |
| | 2 | DFJ-2 |
| | 3 | DFJ-3 |
| | 4 | DFJ-4 |
| | 5 | DFJ-5 |
| | 6 | DFJ-6 |
| | 8 | DFJ-8 |
| | 10 | DFJ-10 |
| | 12 | DFJ-12 |
| | 15 | DFJ-15 |
| | 20 | DFJ-20 |
| | 25 | DFJ-25 |
| | 30 | DFJ-30 |
| | 40 | DFJ-40 |
| | 45 | DFJ-45 |
| | 50 | DFJ-50 |
| | 60 | DFJ-60 |
| | 70 | DFJ-70 |
| | 80 | DFJ-80 |
| | 90 | DFJ-90 |
| | 100 | DFJ-100 |
| | 110 | DFJ-110 |
| | 125 | DFJ-125 |
| | 150 | DFJ-150 |
| | 175 | DFJ-175 |
| | 100 | DFJ-100 |
| | 225 | DFJ-225 |
| | 250 | DFJ-250 |
| | 300 | DFJ-300 |
| | 350 | DFJ-350 |
| | 400 | DFJ-400 |
| | 450 | DFJ-450 |
| | 500 | DFJ-500 |
| | 600 | DFJ-600 |

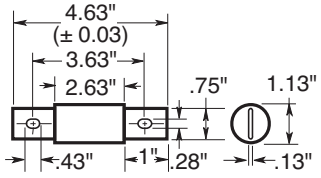
**Dimensions - in**



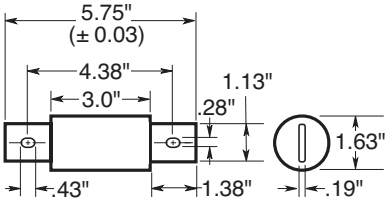

**1 to 30 A**



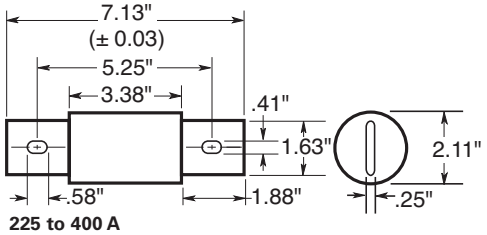

**35 to 60 A**



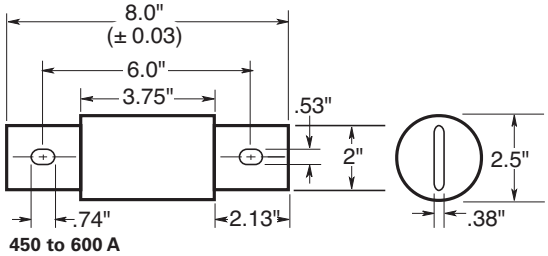

**70 to 100 A**




**110 to 200 A**




**225 to 400 A**




**450 to 600 A**

Data sheet: 1048

# IGBT fuse links

## Size 000 and 230, 170M

## 750 V d.c. (IEC), 800 V d.c. (UL), 25 to 630 A




### Specifications

#### Description

Bolted tags high speed fuse links for the protection of IGBT modules, optimised for use in IGBT inverter circuits with DC link rated voltages up to 750 V d.c.. Low inductance ≤ 15nH.

#### Technical data

Rated voltage:

- 750 V d.c. tested at 863V d.c. according to IEC 60269-4
- 800 V d.c. tested at 800 V d.c. according to UL 248-1

Rated current: 25-630 A

Breaking capacity: 50 kA DC (1ms tc) at 800 V d.c.

Operating class: aR

#### Standards / Agency information

UL DC Recognised, 800 V d.c. L/R 1 mS max.

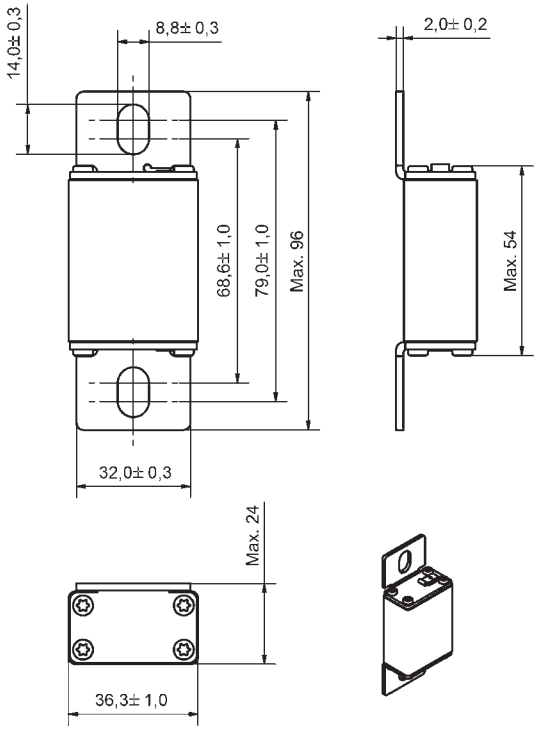
| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 690 V a.c. | Watts loss (W) | Catalogue numbers -FU/70 | Catalogue numbers -FN/70 |
|---|---|---|---|---|---|---|---|
| 000 | 750 V d.c. (IEC) 800 V d.c. (UL) | 25 | 25 | 135 | 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 V d.c. (IEC) 800 V d.c. (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 |

Data sheets: 170K6422 (Size 000), 170K6426 (Size 230)

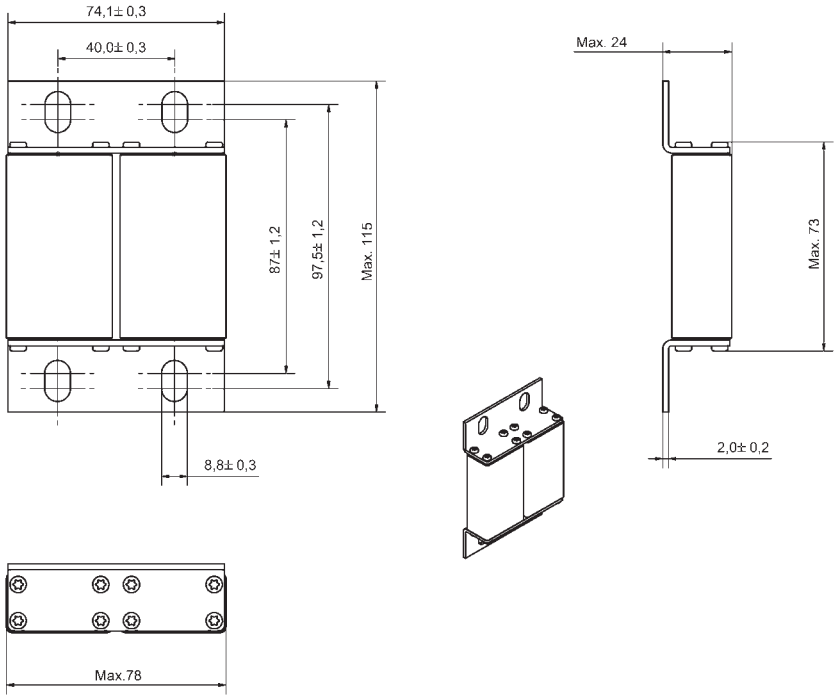
# Size 000 and 230, 170M

## 750 V d.c. (IEC), 800 V d.c. (UL), 25 to 630 A

**Dimensions - mm**




**Size 000**




**Size 230**

Data sheets: 170K6422 (Size 000), 170K6426 (Size 230)

# Size 000 and 230, 170M

## 1000 V d.c. (IEC and UL), 25 to 500 A

### Specifications

**Description**

High speed bolted tags high speed fuse links for the protection of IGBT modules, optimised for use in IGBT inverter circuits with DC link rated voltages up to 1000 V d.c.. Low inductance ≤ 20nH.




**Technical data**

Rated voltage:

- 1000 V d.c. tested at 1150 V d.c. according to IEC 60269-4
- 1000 V d.c. tested at 1000 V d.c. according to UL 248-1

Rated current: 25-500 A

Breaking capacity: 50 kA DC (1ms tc)

Operating class: aR

**Standards / Agency information**

UL DC Recognised, 1000 V d.c. L/R 1mS max.

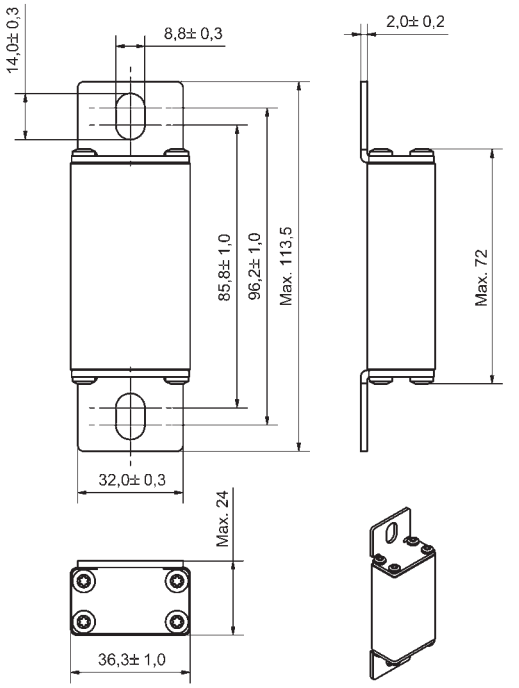
| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 1000 V a.c. | Watts loss (W) | Catalogue numbers -FU/90 | Catalogue numbers -FN/90 |
|---|---|---|---|---|---|---|---|
| 000 | 1000 V d.c. (IEC/UL) | 25 | 19 | 95 | 14 | 170M1802 | 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 V d.c. (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 |

Data sheets: 170K6680 (Size 000), 170K6682 (Size 230)

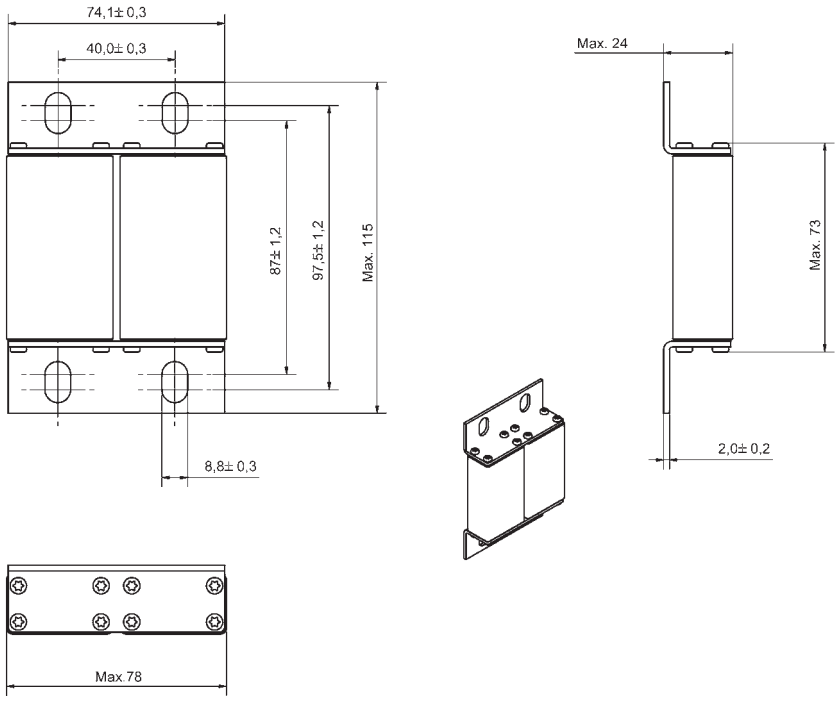
# Size 000 and 230, 170M

## 1000 V d.c. (IEC and UL), 25 to 500 A

**Dimensions - mm**




**Size 000**




**Size 230**

Data sheets: 170K6680 (Size 000), 170K6682 (Size 230)

# Traction fuse links

## Size 1*, 3 and 23, Square body fuse links, 170M

## 750 V d.c. (IEC), 50 to 1600 A




### Specifications

**Description**

Traction flush end square body high speed fuse links for superior protection of DC third rail applications up to 750 V d.c..

**Technical data**

Rated voltage: 750 V d.c. (IEC)

Rated current: 50-1600 A

Breaking capacity:

- Size 1*: 85 kA at 750 V d.c., L/R 95ms
  80 kA at 950 V d.c., L/R 40ms
- Size 3 and 23: 110 kA at 750 V d.c., L/R 40ms

Operating class:

- aR size 1*
- gR size 3 and 23

**Standards / Agency information**

IEC 60269

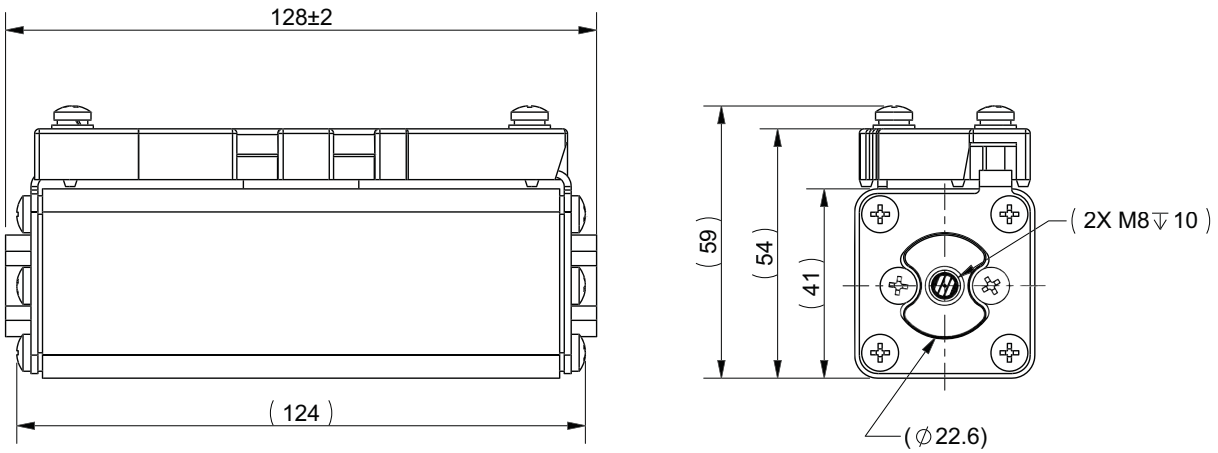
| Fuse link type | Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | | Catalogue numbers |
|---|---|---|---|---|---|---|---|---|
| | | | | Pre-arcing | Clearing at 750 V d.c. | 0.8 $I_n$ | $I_n$ | |
| Flush end | 1* | 750 V d.c. (IEC) | 50 | 390 | 1300 | 15 | 27 | 170M2000 |
| | | | 63 | 610 | 2050 | 18 | 35 | 170M2001 |
| | | | 80 | 670 | 2250 | 19 | 37 | 170M2002 |
| | | | 100 | 2450 | 8150 | 21 | 40 | 170M2003 |
| | | | 125 | 2950 | 9800 | 24 | 47 | 170M2004 |
| | | | 160 | 5500 | 18,250 | 29 | 56 | 170M2005 |
| Flush end | 3 | 750 V d.c. (IEC) | 450 | 65,700 | 272,300 | 46 | 87 | 170M2010 |
| | | | 500 | 83,200 | 344,800 | 52 | 98 | 170M2011 |
| | | | 550 | 136,700 | 566,500 | 67 | 126 | 170M2012 |
| | | | 630 | 173,500 | 719,000 | 75 | 142 | 170M2013 |
| | | | 700 | 268,000 | 1,110,500 | 78 | 156 | 170M2014 |
| | | | 750 | 307,600 | 1,275,000 | 83 | 167 | 170M2015 |
| | | | 800 | 349,900 | 1,450,000 | 89 | 178 | 170M2016 |
| Parallel | 23 | 750 V d.c. (IEC) | 1000 | 476,300 | 1,973,700 | 112 | 187 | 170M2017 |
| | | | 1250 | 694,000 | 2,875,800 | 134 | 224 | 170M2018 |
| | | | 1400 | 1,071,600 | 4,440,500 | 152 | 254 | 170M2019 |
| | | | 1500 | 1,230,200 | 5,097,700 | 165 | 275 | 170M2020 |
| | | | 1600 | 1,399,700 | 5,800,100 | 180 | 300 | 170M2021 |

Data sheet: 720140

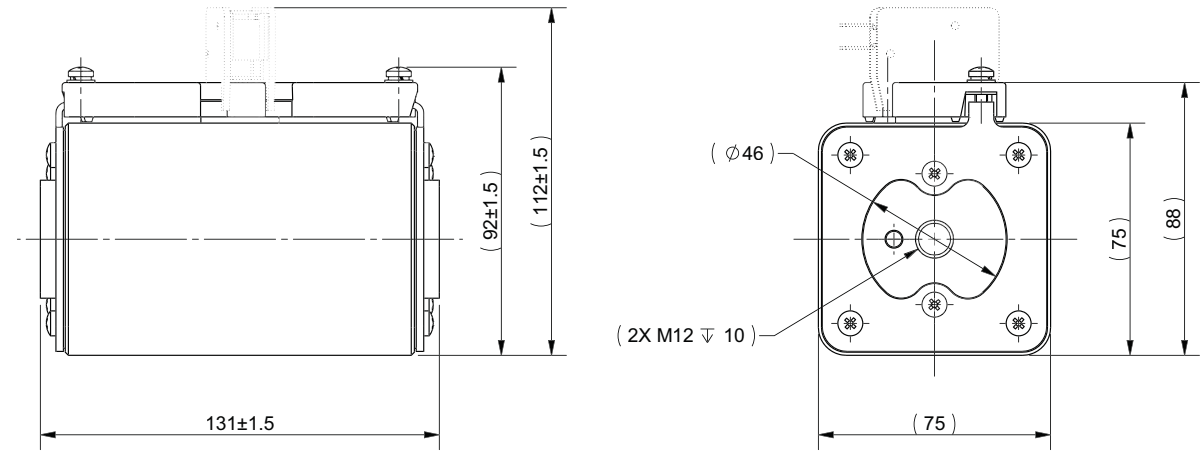
## Size 1*, 3 and 23, Square body fuse links, 170M

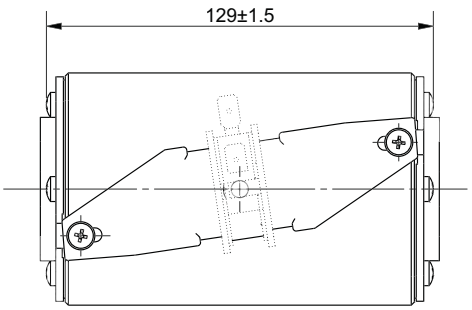
## 750 V d.c. (IEC), 50 to 1600 A

**Dimensions - mm**




**170M2000 to 170M2005 - Flush End - Size 1***



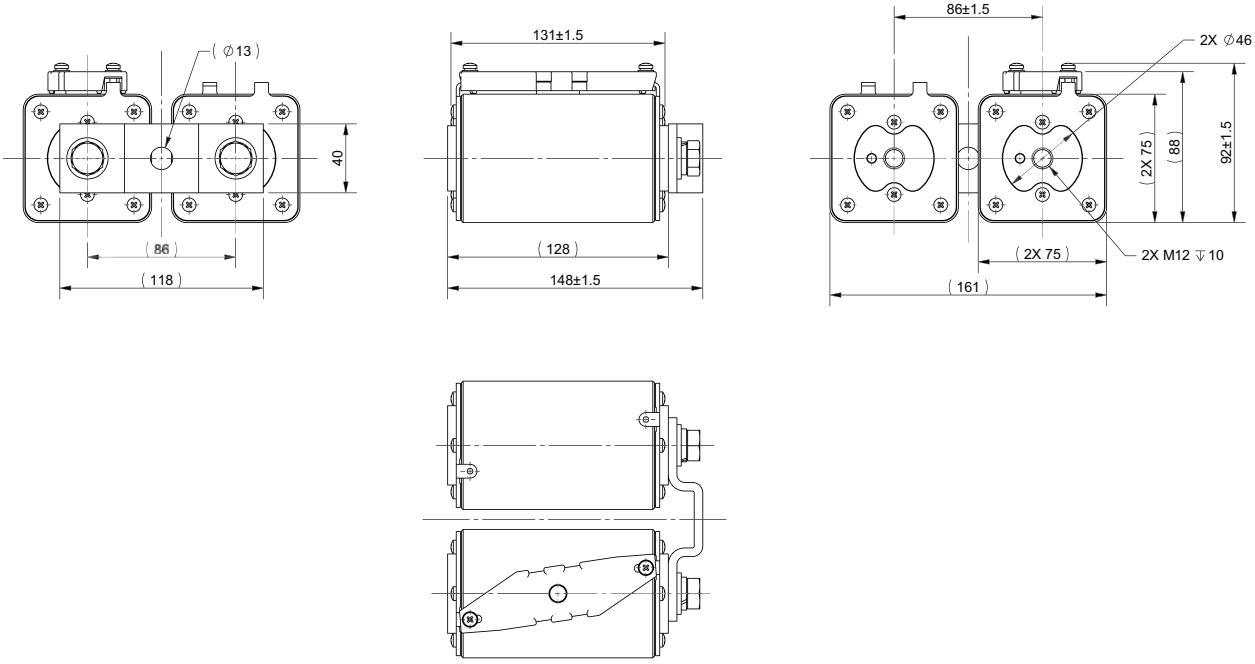

**170M2010 to 170M2016 - Flush End - Size 3**

Data sheet: 720140

# Size 1*, 3 and 23, Square body fuse links, 170M

## 750 V d.c. (IEC), 50 to 1600 A

**Dimensions - mm**




**170M2017 to 170M2021 - Parallel - Size 23**

Data sheet: 720140

# Size 1*, 1, 2 and 3, Square body fuse links, 170E

# 750 V d.c. (IEC), 63 to 500 A




## Specifications

### Description

Traction flush end square body high speed fuse links for superior protection of DC third rail applications up to 750 V d.c..

### Technical data

Rated voltage: 750 V d.c. (IEC)

Rated current: 63-500 A

Breaking capacity:

- 100 kA at 1000 V d.c., L/R 40ms
- 100 kA at 750 V d.c., L/R 100ms

Operating class: gR

### Standards / Agency information

Consult Eaton's Bussmann business bulehighspeedtechnical@eaton.com

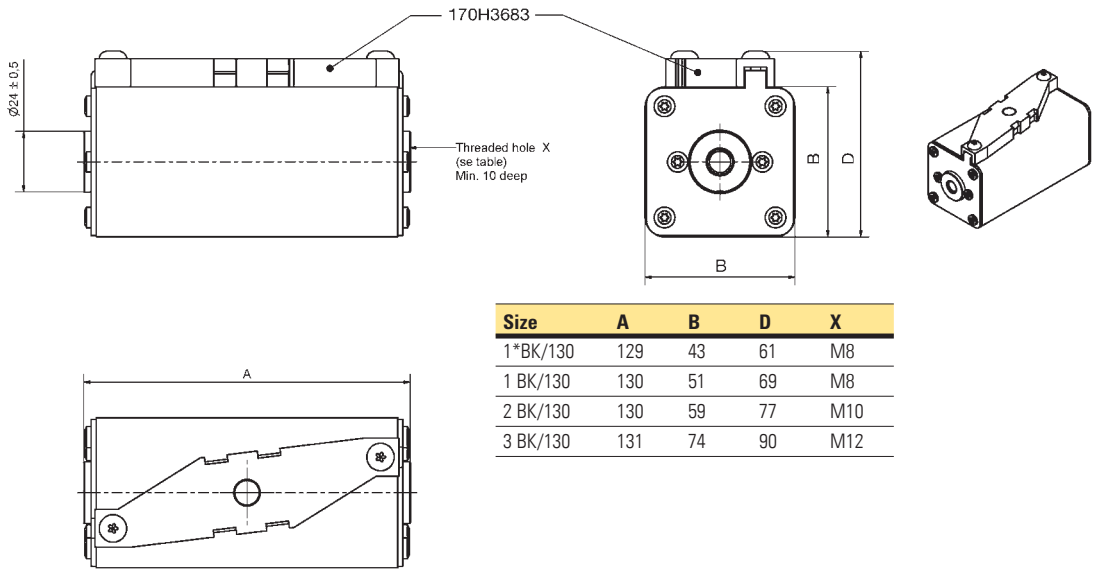
| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2s$) Pre-arcing | Watts loss (W) | Catalogue numbers -BK flush end | Fuse link type | Catalogue numbers -EK knife blade | Fuse link type |
|---|---|---|---|---|---|---|---|---|
| 1* | 750 V d.c. (IEC) | 63 | 1100 | 10 | 170E3577 | BK/130 | 170E3583 | EK/155 |
| | | 80 | 1750 | 13 | 170E3578 | | 170E3584 | |
| | | 100 | 3000 | 16 | 170E3579 | | 170E3585 | |
| | | 125 | 4500 | 21 | 170E3580 | | 170E3586 | |
| | | 160 | 7700 | 26 | 170E3581 | | 170E3587 | |
| 1 | 750 V d.c. (IEC) | 200 | 11,000 | 37 | 170E5417 | | 170E5420 | EK/165 |
| | | 250 | 18,000 | 46 | 170E5418 | | 170E5421 | |
| 2 | 750 V d.c. (IEC) | 250 | 17,000 | 47 | 170E8335 | | 170E8345 | EK/170 |
| | | 315 | 28,000 | 57 | 170E8336 | | 170E8346 | |
| | | 400 | 55,000 | 73 | 170E8337 | | 170E8347 | |
| 3 | 750 V d.c. (IEC) | 500 | 75,500 | 93 | 170E9681 | | 170E9685 | EK/170 |

Data sheets: Size 1* 170K3620, Size 1 170k3622, Size 2 170K3624, Size 3 170K3626-A

# Size 1*, 1, 2 and 3, Square body fuse links, 170E

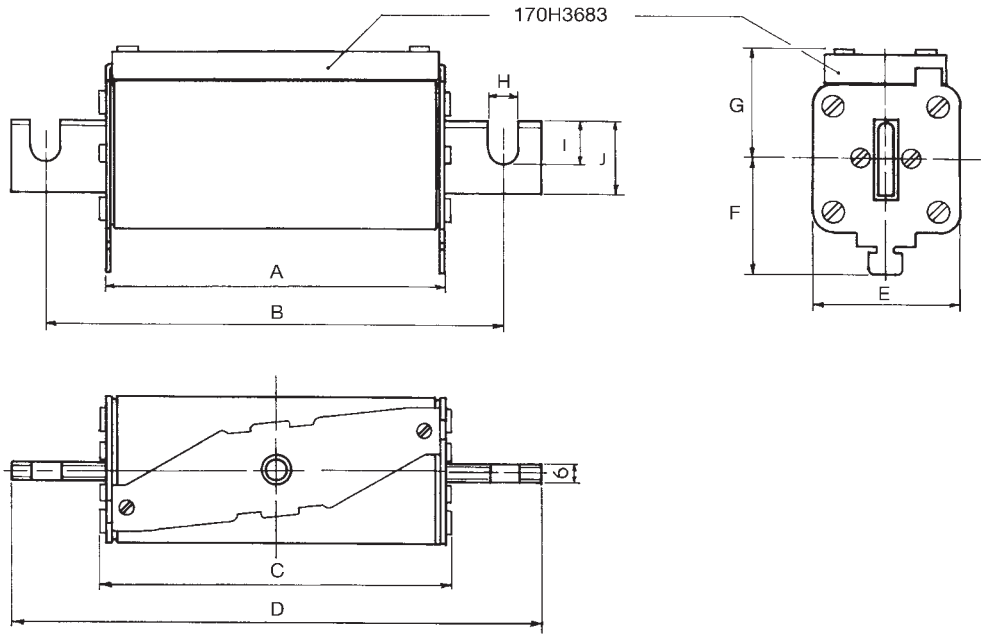
## 750 V d.c. (IEC), 63 to 500 A

**Dimensions - mm**




| Size | A | B | D | X |
|---|---|---|---|---|
| 1*BK/130 | 129 | 43 | 61 | M8 |
| 1 BK/130 | 130 | 51 | 69 | M8 |
| 2 BK/130 | 130 | 59 | 77 | M10 |
| 3 BK/130 | 131 | 74 | 90 | M12 |

**Type –BK/130**




**Type –EK/-**

| Size | A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|---|
| 1*EK/155 | 124 | 156 | 129 | 180 | 43 | 36 | 41 | 9 | 9 | 18 |
| 1 EK/165 | 124 | 166 | 129 | 191 | 51 | 37 | 41 | 11 | 14 | 25 |
| 2 EK/170 | 124 | 170 | 129 | 205 | 59 | 42 | 48 | 13 | 21 | 30 |
| 3 EK/170 | 125 | 170 | 130 | 206 | 74 | 51 | 56 | 13 | 20 | 36 |

Data sheets: Size 1* 170K3620, Size 1 170k3622, Size 2 170K3624, Size 3 170K3626-A

# Size 4, Square body fuse links, 170M7217

## 1250 V a.c. / 850 V d.c. (IEC), 1400 A



### Specifications

**Description**

Traction flush end square body high speed fuse link suitable for use in third rail collector systems to protect high speed DC breakers in low time constant, high fault conditions. Suitable for 1250 V a.c./850 V d.c. systems.

**Technical data**

Rated voltage: 1250 V a.c. / 850 V d.c. (IEC)

Rated current: 1400 A

Tested breaking capacity:

- 100 kA at 1250 V a.c.
- 80 kA at 850 V d.c., L/R 8ms

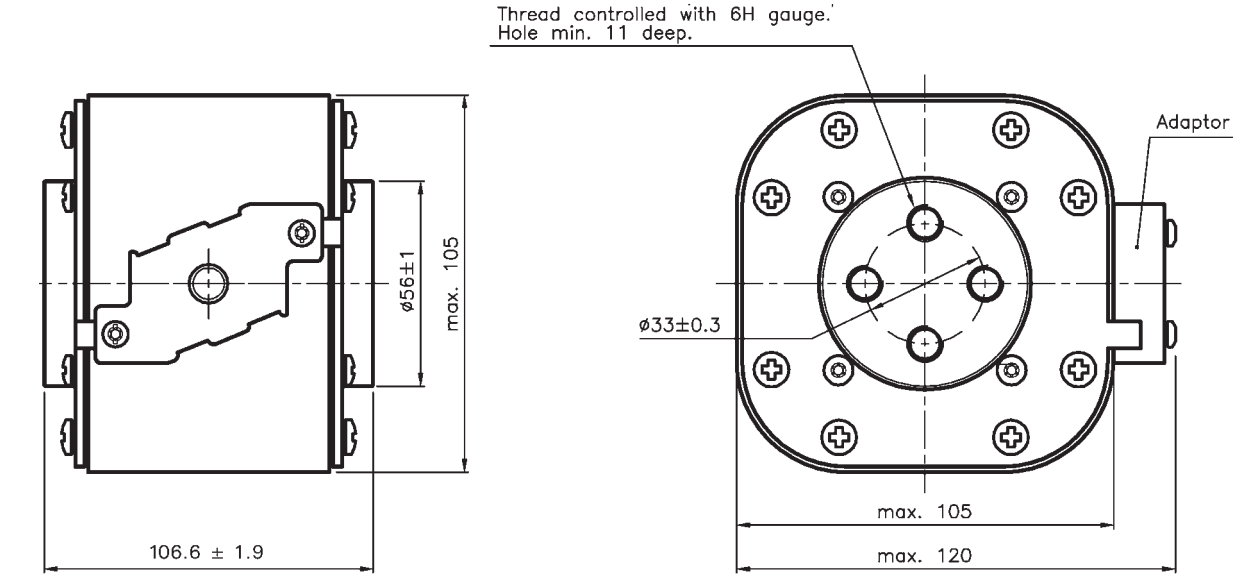
Operating class: aR

**Standards / Agency information**

Consult Eaton's Bussmann business bulehighspeedtechnical@eaton.com

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 1250 V a.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|
| 4 | 850 V d.c./ 1250 V a.c. (IEC) | 1400 | 800,000 | 5,000,000 | 195 | 170M7217 |

**Dimensions - mm**




Data sheets: 170K6640, 170K6642

# Size 1*, Square body fuse links, 170M

## 1200 V d.c. (IEC), 20 to 215A



### Specifications

**Description**

Traction bolted tags square body high speed fuse links for superior protection of DC third rail applications up to 1200 V d.c..

**Technical data**

Rated voltage: 1200 V d.c. (IEC)

Rated current: 20-215 A

Tested breaking capacity: 150 kA at 1350 V d.c., L/R 12ms

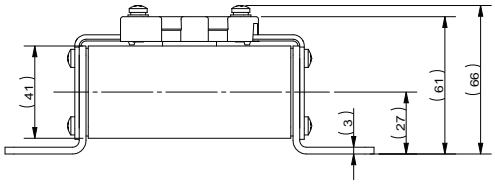
Operating class: aR

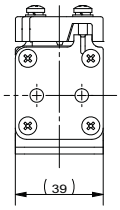
**Standards / Agency information**

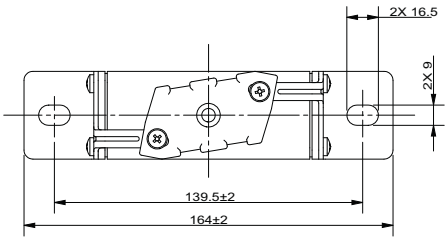
IEC 60269

| Fuse link type | Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 1200 V d.c. | Watts loss (W) 0.8 $I_n$ | Watts loss (W) $I_n$ | Catalogue numbers |
|---|---|---|---|---|---|---|---|---|
| Single slot tag | 1* | 1200 V d.c. (IEC) | 20 | 82 | 249 | 1 | 2 | 170M2100 |
| | | | 25 | 173 | 526 | 4 | 8 | 170M2101 |
| | | | 32 | 327 | 994 | 5 | 9 | 170M2102 |
| | | | 40 | 550 | 1675 | 1 | 9 | 170M2103 |
| | | | 50 | 950 | 2890 | 7 | 13 | 170M2104 |
| | | | 63 | 1310 | 3990 | 5 | 9 | 170M2105 |
| | | | 80 | 1970 | 6000 | 13 | 23 | 170M2106 |
| | | | 100 | 3800 | 11,600 | 14 | 26 | 170M2107 |
| | | | 125 | 8550 | 26,025 | 13 | 24 | 170M2108 |
| | | | 160 | 8770 | 26,700 | 24 | 44 | 170M2109 |
| | | | 200 | 15,200 | 46,300 | 29 | 52 | 170M2110 |
| | | | 215 | 16,430 | 50,000 | 32 | 58 | 170M2111 |

**Dimensions - mm**




Data sheet: 720141

# Size 2, Square body fuse links, 170F

## 1200 V d.c. (IEC), 160 to 420 A



### Specifications

**Description**

Traction bolted tags square body high speed fuse link for superior protection in DC traction applications up to 1200 V d.c..

**Technical data**

Rated voltage: 1200 V d.c. (IEC)

Rated current: 160-420 A

Breaking capacity:

- 100 kA at 1000 V d.c., L/R = 45ms
- 100 kA at 1200 V d.c., L/R = 15ms

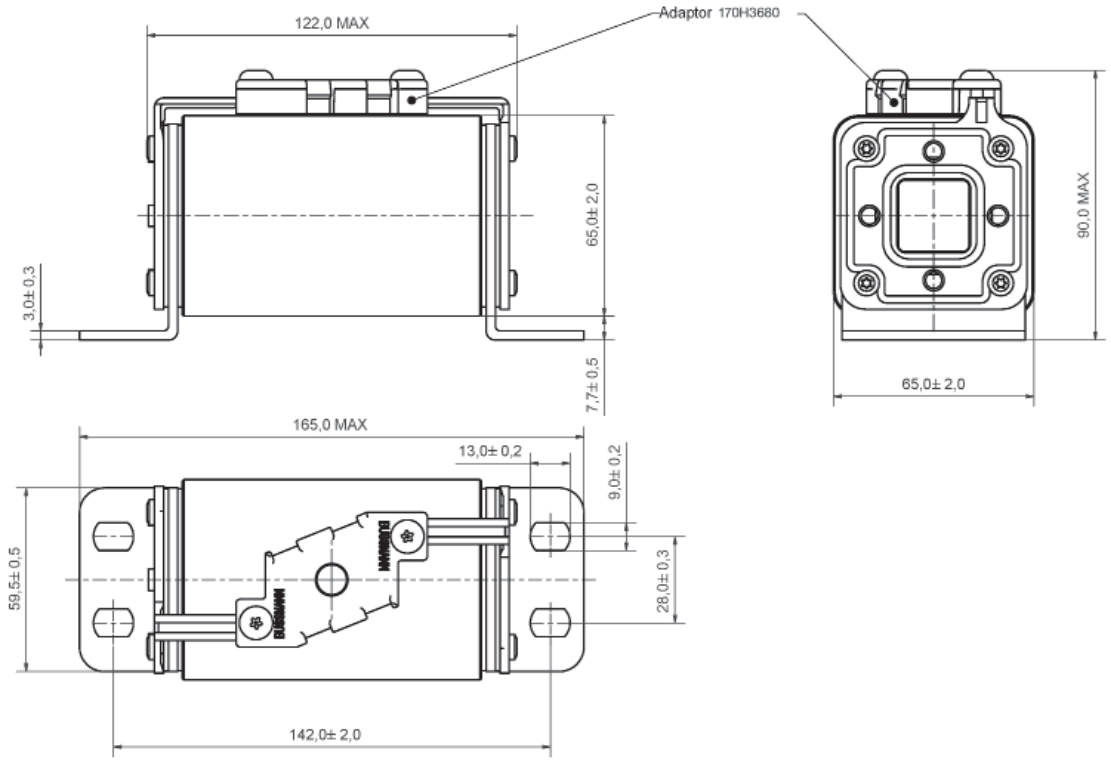
Operating class: aR

**Standards / Agency information**

Consult Eaton's Bussmann business bulehighspeedtechnical@eaton.com

| Fuse link type | Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) 1000 V d.c. L/R 15ms | $I^2t$ ($A^2$ Sec) 1000 V d.c. L/R 45ms | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|---|
| Double slotted tag | 2 | 1200 V d.c. (IEC) | 160 | 12,000 | 20,000 | 75 | 170F8230 |
| | | | 200 | 20,000 | 35,000 | 85 | 170F8231 |
| | | | 250 | 43,000 | 75,000 | 94 | 170F8232 |
| | | | 315 | 87,000 | 150,000 | 104 | 170F8233 |
| | | | 400 | 180,000 | 310,000 | 120 | 170F8234 |
| | | | 420 | 215,000 | 375,000 | 122 | 170F8235 |

**Dimensions - mm**




Data sheet: 170K5520

# Size 1*, Square body fuse links, 170E

## 2000 V d.c. (IEC), 10 to 80 A



### Specifications

**Description**

Traction bolted tags square body high speed fuse link which provides superior protection in DC traction applications up to 2000 V d.c..

**Technical data**

Rated voltage: 2000 V d.c. (IEC)

Rated current: 10-80 A

Tested breaking capacity: 40 kA at 2000 V d.c., L/R 30ms

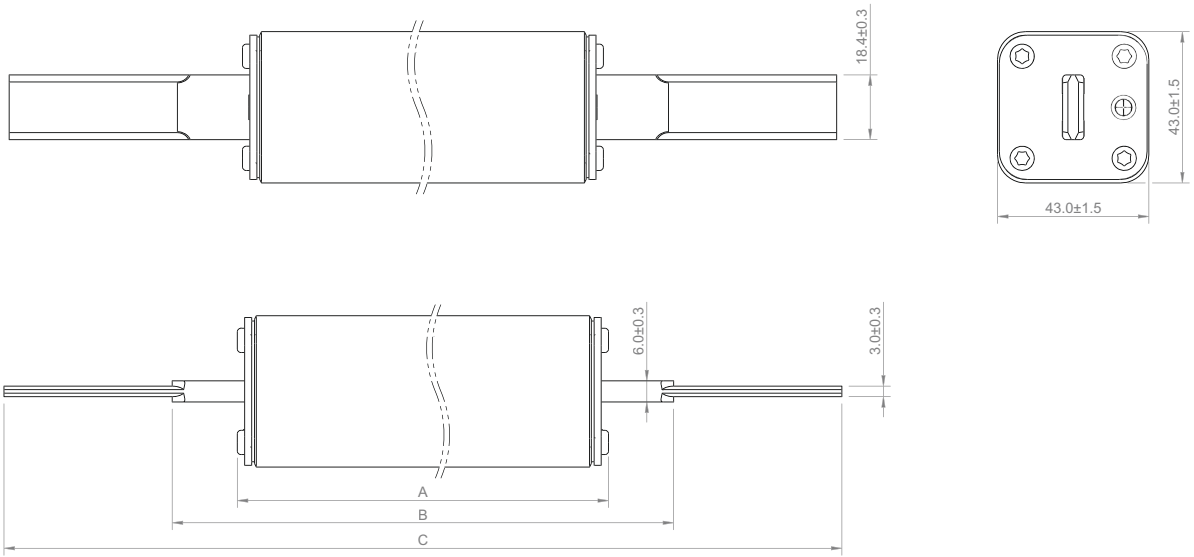
Operating class: gR

**Standards / Agency information**

Consult Eaton's Bussmann business bulehighspeedtechnical@eaton.com.

| Fuse link type | Fuse link body size | Rated voltage | Rated current (Amps) | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|
| Knife blade style | 1* | 2000 V d.c. (IEC) | 10 | 7 | 170E3977 |
| | | | 12 | 8 | 170E3982 |
| | | | 16 | 11 | 170E3971 |
| | | | 20 | 13 | 170E3906 |
| | | | 25 | 17 | 170E3907 |
| | | | 32 | 22 | 170E3908 |
| | | | 40 | 27 | 170E3909 |
| | | | 50 | 34 | 170E3910 |
| | | | 63 | 43 | 170E3911 |
| | | | 80 | 50 | 170E3912 |

**Dimensions - mm**

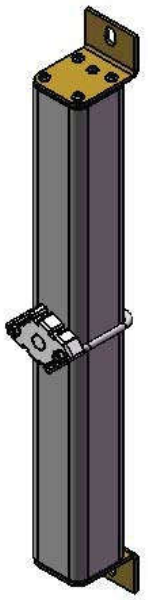



| A | B | C |
|---|---|---|
| 215 ± 2.5 | 250.5 ± 3.2 | 245.5 ± 3.5 |

Data sheet: 170K4538

# Size 1*, Square body fuse links, 170E

## 2000 V d.c. (IEC), 10 to 125 A



### Specifications

**Description**

Traction bolted tags square body high speed fuse link which provides superior protection in DC traction applications up to 2000 V d.c..

**Technical data**

Rated voltage: 2000 V d.c. (IEC)

Rated current: 10-125 A

Tested breaking capacity: 40 kA at 2000 V d.c., L/R 30ms

Operating class:

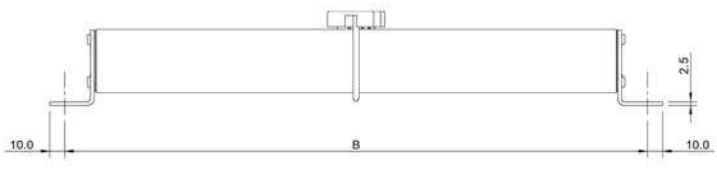
- aR (170E3937 to 170E3945)
- gR (170E3950 to 170E3956 and 170E3970 and 170E3976)

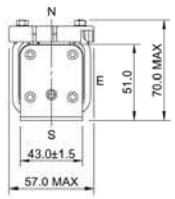
**Standards / Agency information**

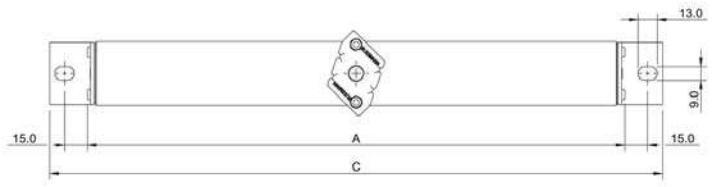
Contact Eaton's Bussmann business bulehighspeedtechnical@eaton.com

| Fuse link type | Fuse link body size | Rated voltage | Rated current (Amps) | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|
| Bolted blade Style | 1* | 2000 V d.c. (IEC) | 20 | 13 | 170E3937 |
| | | | 25 | 16 | 170E3938 |
| | | | 32 | 20 | 170E3939 |
| | | | 40 | 25 | 170E3940 |
| | | | 50 | 32 | 170E3941 |
| | | | 63 | 40 | 170E3942 |
| | | | 80 | 51 | 170E3943 |
| | | | 100 | 64 | 170E3944 |
| | | | 125 | 80 | 170E3945 |
| | | | 10 | 7 | 170E3976 |
| | | | 16 | 11 | 170E3970 |
| | | | 20 | 13 | 170E3950 |
| | | | 25 | 17 | 170E3951 |
| | | | 32 | 22 | 170E3952 |
| | | | 40 | 27 | 170E3953 |
| | | | 50 | 34 | 170E3954 |
| | | | 63 | 43 | 170E3955 |
| | | | 80 | 50 | 170E3956 |

**Dimensions - mm**




| A | B | C |
|---|---|---|
| 217 | 246 | 266 |

Data sheets: 170K4538 (IR = 30 kA), 170K4900 (IR = 60 kA)

# Square body fuse links, 170M
# 2000 V d.c. (IEC), 20 to 600 A



## Specifications

### Description

Traction bolted tags square body high speed fuse links which provides superior protection for DC traction third rail applications up to 2000 V d.c..

### Technical data

Rated voltage: 2000 V d.c. (IEC)

Rated current:

- 20-215 A Single slot tag
- 160-400 A Double slot tag
- 500-600 A Parallel double slot tag

Breaking capacity:

- 100 kA at 2000 V d.c., L/R <15ms
- 100 kA at 1500 V d.c., L/R <30ms

Operating class: aR

### Standards / Agency information

Tested in line with IEC 60269.

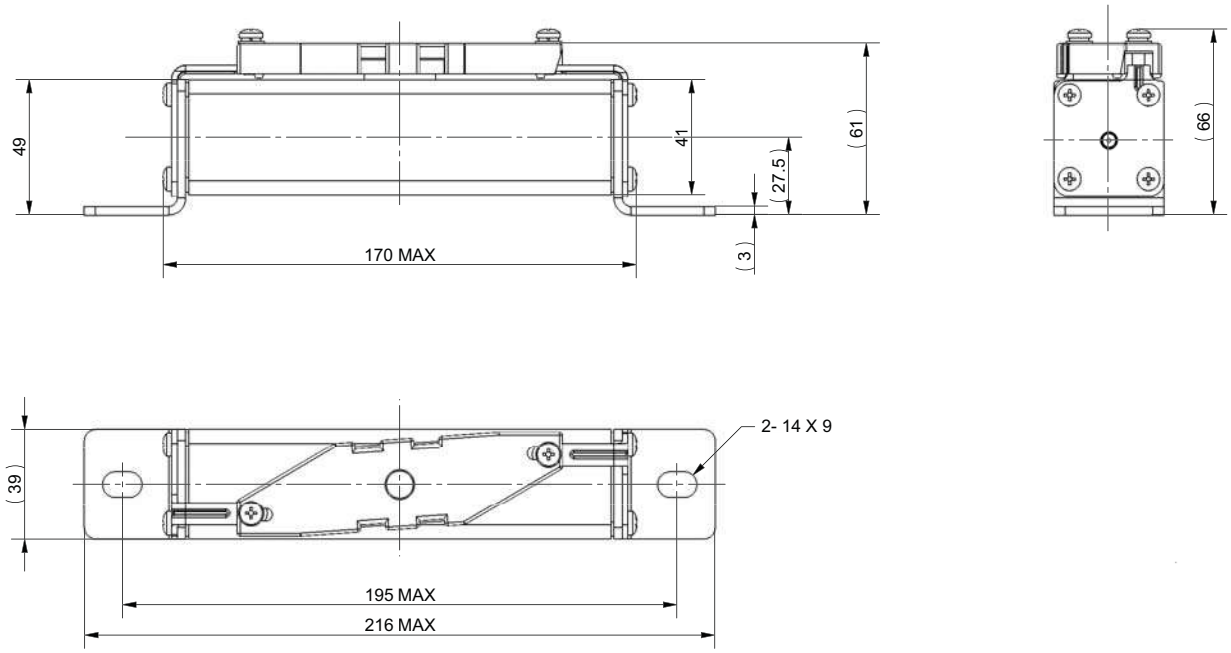
| Fuse link type | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | | Catalogue numbers |
|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Total at 2000 V d.c. | 0.8 $I_n$ | $I_n$ | |
| Single slot tag | 2000 V d.c. (IEC) | 20 | 85 | 240 | 9 | 12 | 170M2046 |
| | | 25 | 130 | 390 | 9 | 16 | 170M2047 |
| | | 32 | 220 | 645 | 11 | 18 | 170M2048 |
| | | 40 | 390 | 1140 | 12 | 20 | 170M2049 |
| | | 50 | 610 | 1780 | 17 | 33 | 170M2050 |
| | | 63 | 1030 | 3000 | 20 | 39 | 170M2051 |
| | | 80 | 1555 | 4550 | 28 | 53 | 170M2052 |
| | | 100 | 2680 | 7840 | 33 | 63 | 170M2053 |
| | | 125 | 4110 | 12,020 | 42 | 79 | 170M2054 |
| | | 160 | 6620 | 19,360 | 45 | 87 | 170M2055 |
| | | 200 | 10,720 | 31,360 | 50 | 95 | 170M2056 |
| | | 215 | 21,870 | 64,000 | 51 | 97 | 170M2057 |
| Double slot tag | 2000 V d.c. (IEC) | 160 | 7875 | 75,960 | 68 | 91 | 170M2039 |
| | | 200 | 12,300 | 118,670 | 85 | 113 | 170M2040 |
| | | 250 | 21,870 | 211,000 | 100 | 133 | 170M2041 |
| | | 315 | 38,880 | 375,110 | 119 | 158 | 170M2042 |
| | | 400 | 65,710 | 633,965 | 148 | 176 | 170M2043 |
| Parallel double slot tag | 2000 V d.c. (IEC) | 500 | 105,851 | 163,010 | 109 | 230 | 170M2044 |
| | | 600 | 188,179 | 289,796 | 153 | 305 | 170M2045 |

Data sheet: 720142

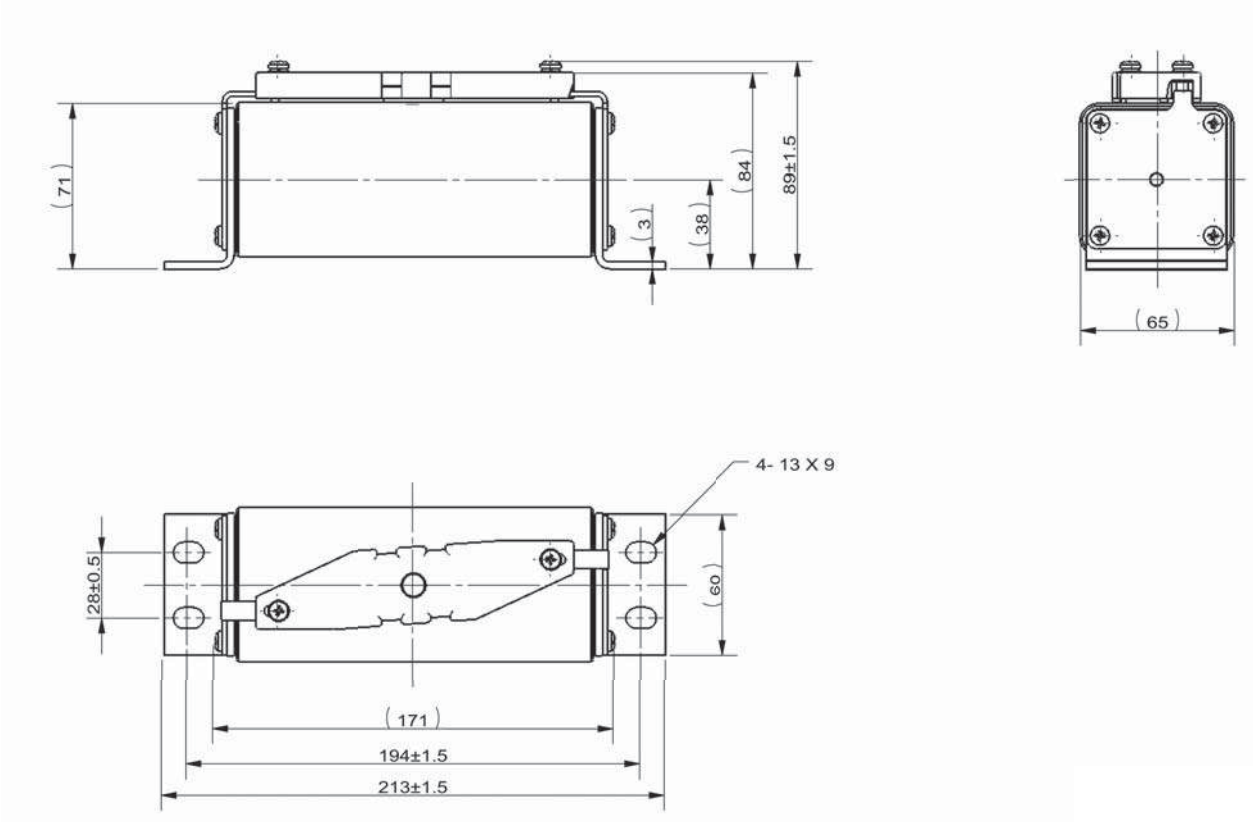
# Square body fuse links, 170M

## 2000 V d.c. (IEC), 20 to 600 A

**Dimensions - mm**




**170M2046 to 170M2057 - Single Slot Tag**



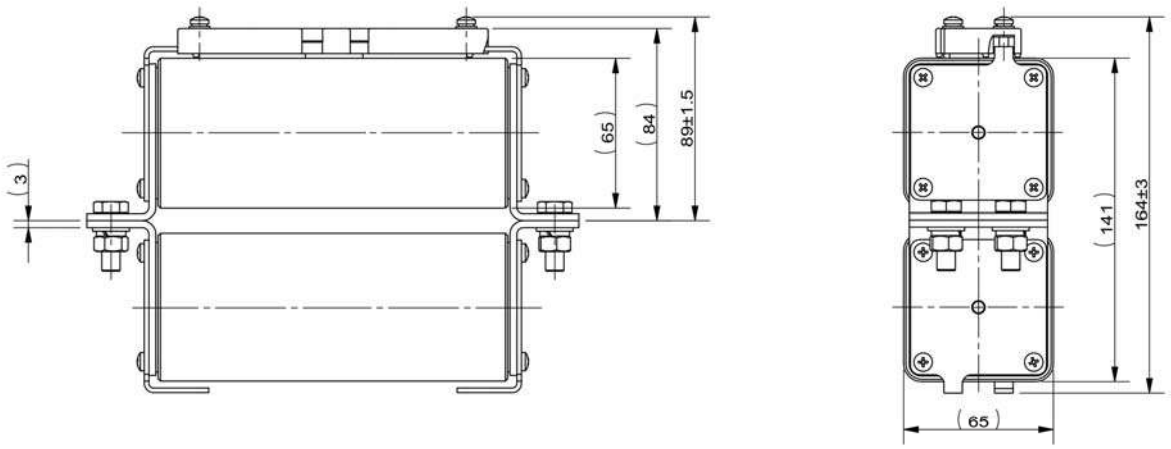

**170M2039 to 170M2043 - Double Slot Tag**

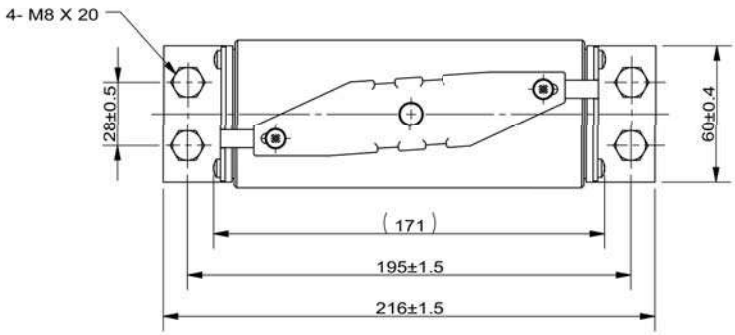
Data sheet: 720142

# Square body fuse links, 170M

## 2000 V d.c. (IEC), 20 to 600 A

**Dimensions - mm**




**170M2044 and 170M2045 - Parallel Double Slot Tag**

Data sheet: 720142

# Size 3, Square body fuse links, 170M

## 2400 V d.c. (IEC), 100 to 400 A



### Specifications

**Description**

Traction bolted tags square body high speed fuse links for superior protection of DC third rail applications up to 2400 V d.c..

**Technical data**

Rated voltage: 2400 V d.c. (IEC)

Rated current: 100-400 A

Tested breaking capacity:

- 100 kA at 2400 V d.c., L/R<15ms
- 100 kA at 2000 V d.c., L/R < 45ms

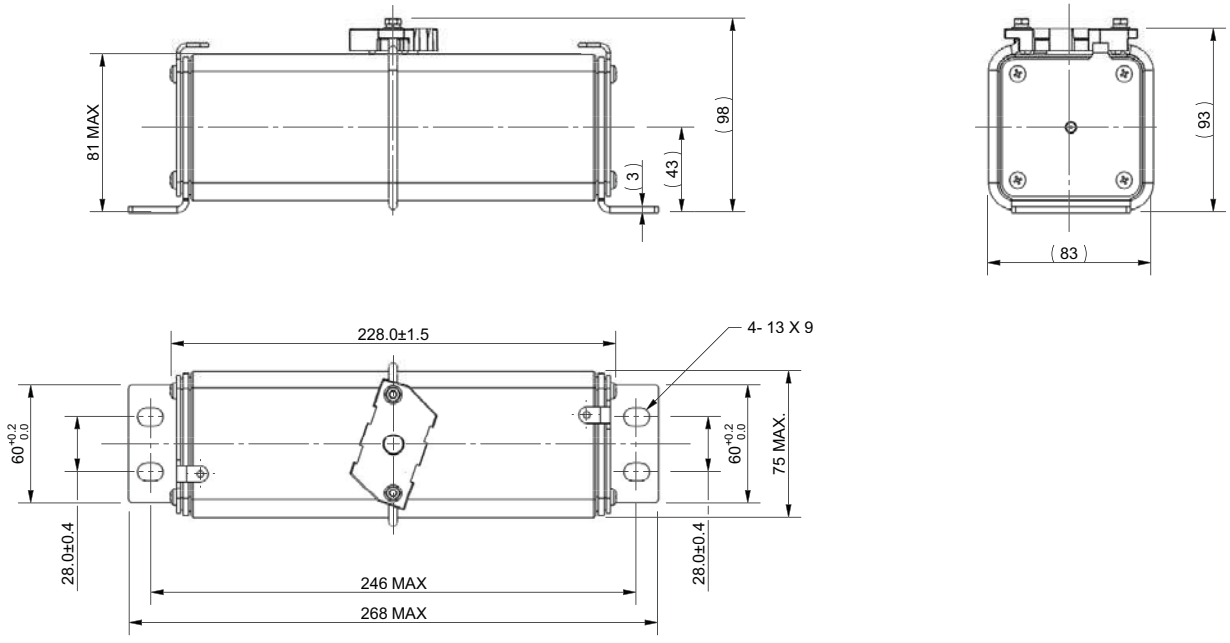
Operating class: aR

**Standards / Agency information**

Tested in line with IEC 60269.

| Fuse link type | Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | | Catalogue numbers |
|---|---|---|---|---|---|---|---|---|
| | | | | Pre-arcing | Total at 2000 V d.c. | 0.8 $I_n$ | $I_n$ | |
| Double slot tag | 3 | 2400 V d.c. (IEC) | 100 | 5468 | 15,457 | 20 | 39 | 170M2090 |
| | | | 160 | 16,427 | 46,439 | 43 | 84 | 170M2091 |
| | | | 200 | 25,667 | 72,561 | 53 | 97 | 170M2092 |
| | | | 250 | 36,960 | 104,488 | 60 | 103 | 170M2093 |
| | | | 315 | 66,977 | 189,346 | 82 | 162 | 170M2094 |
| | | | 350 | 87,480 | 247,309 | 89 | 175 | 170M2095 |
| | | | 400 | 110,717 | 313,000 | 103 | 203 | 170M2096 |

**Dimensions - mm**




Data sheet: 720142

# Size 1*, Square body fuse links, 170E

## 4000 V d.c. (IEC), 20 to 125A



### Specifications

**Description**

Traction bolted tags square body high speed fuse link for superior protection in DC traction applications up to 4000 V d.c..

**Technical data**

Rated voltage: 4000 V d.c. (IEC)

Rated current: 20-125 A

Tested breaking capacity: 50 kA at 4000 V d.c., L/R 10ms

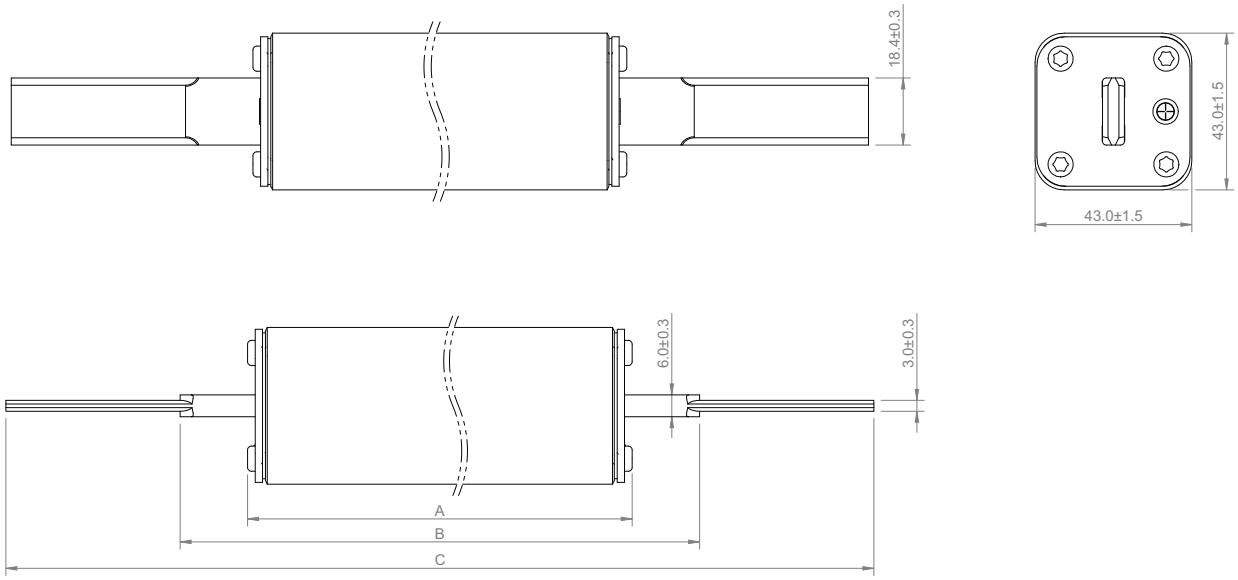
Operating class: aR

**Standards / Agency information**

Consult Eaton's Bussmann business bulehighspeedtechnical@eaton.com.

| Fuse link body size | Rated voltage | Rated current (Amps) | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|
| 1* | 4000 V d.c. (IEC) | 20 | 23 | 170E3924 |
| | | 25 | 28 | 170E3925 |
| | | 32 | 34 | 170E3926 |
| | | 40 | 45 | 170E3927 |
| | | 50 | 57 | 170E3928 |
| | | 63 | 72 | 170E3929 |
| | | 80 | 91 | 170E3930 |
| | | 100 | 114 | 170E3931 |
| | | 125 | 143 | 170E3932 |

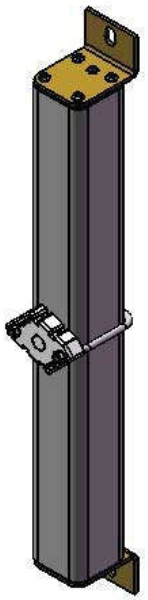
**Dimensions - mm**




Data sheet: 170K6600

# Size 1*, 2 and 2//2, Square body fuse links, 170E

## 4000 V d.c. (IEC), 20 to 450 A



### Specifications

**Description**

Traction bolted tags square body high speed fuse link for superior protection in DC traction applications up to 4000 V d.c..

**Technical data**

Rated voltage: 4000 V d.c. (IEC)

Rated current: 20-450 A

Breaking capacity: 60 kA at 4000 V d.c., L/R 25ms

Operating class: aR

**Standards / Agency information**

Consult Eaton's Bussmann business bulehighspeedtechnical@eaton.com.

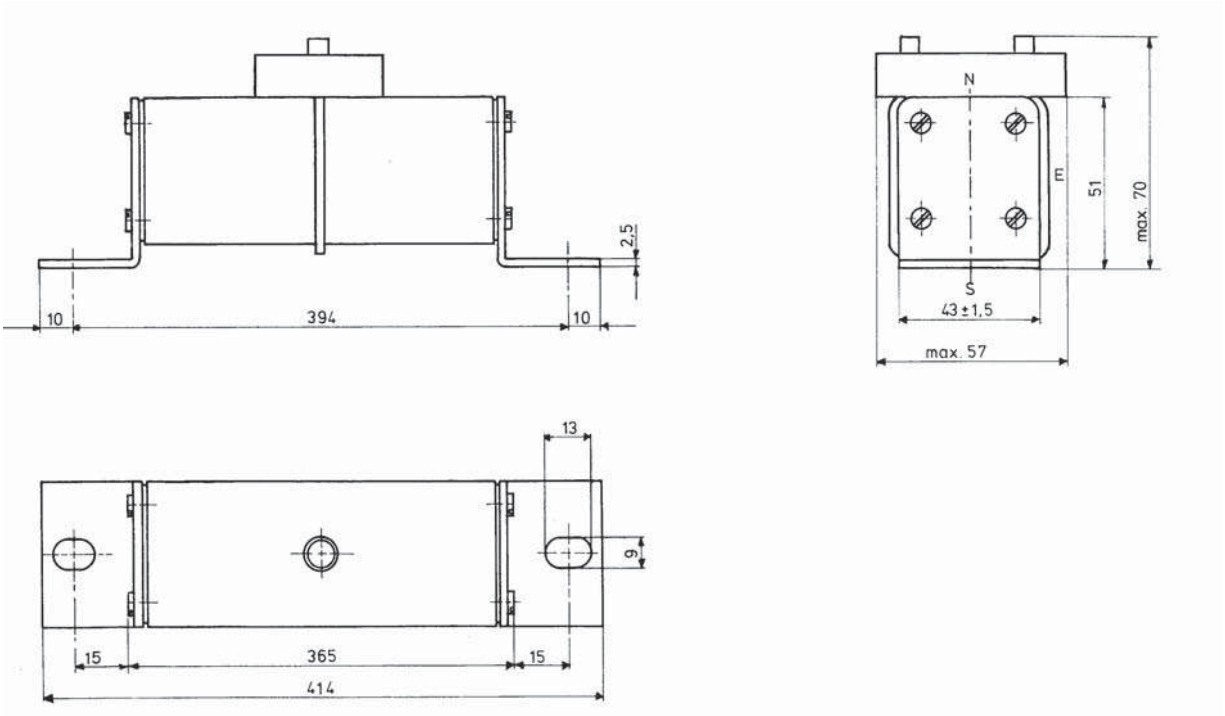
| Fuse link body size | Rated voltage | Rated current (Amps) | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|
| 1* | 4000 V d.c. (IEC) | 20 | 23 | 170E3914 |
| | | 25 | 28 | 170E3915 |
| | | 32 | 34 | 170E3916 |
| | | 40 | 45 | 170E3917 |
| | | 50 | 57 | 170E3918 |
| | | 63 | 72 | 170E3919 |
| | | 80 | 91 | 170E3984 |
| | | 100 | 114 | 170E3933 |
| | | 125 | 143 | 170E3922 |
| 2 | 4000 V d.c. (IEC) | 160 | 182 | 170E8882 |
| | | 200 | 228 | 170E8883 |
| | | 250 | 285 | 170E8884 |
| 2//2 | 4000 V d.c. (IEC) | 315 | 360 | 170E8885 |
| | | 350 | 400 | 170E8886 |
| | | 400 | 455 | 170E8887 |
| | | 450 | 515 | 170E8888 |

Data sheets: 1* 170K6600, 2 & 2/2 170K6604

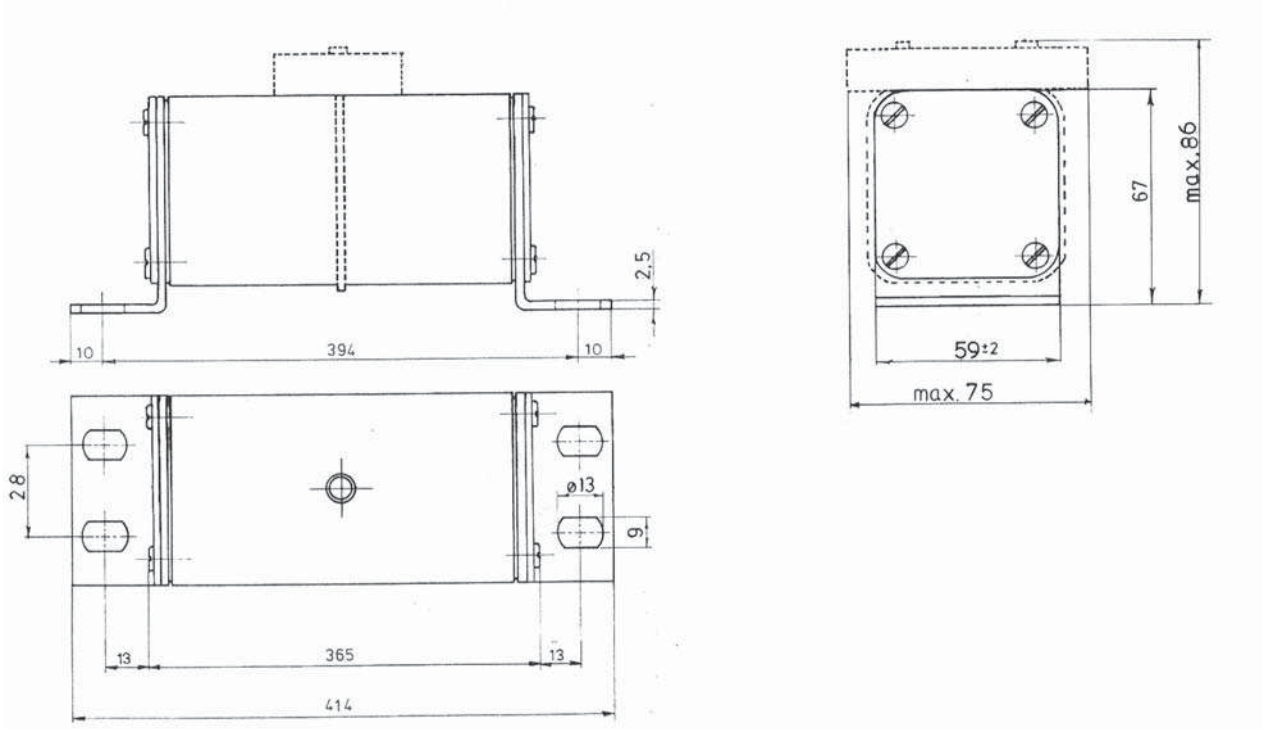
## Size 1*, 2 and 2//2, Square body fuse links, 170E

## 4000 V d.c. (IEC), 20 to 450 A

**Dimensions - mm**




**Type 1*SKN/394**



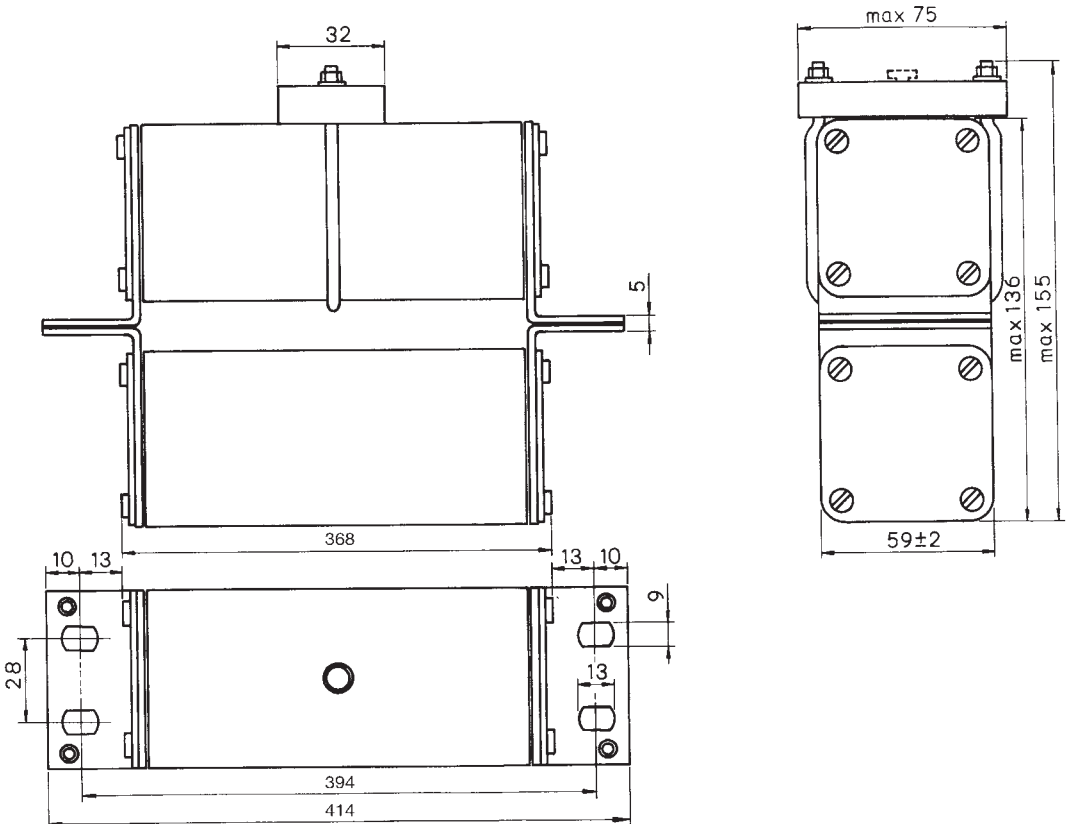

**Type 2SKN/394**

Data sheets: 1* 170K6600, 2 & 2/2 170K6604

## Size 1*, 2 and 2//2, Square body fuse links, 170E

## 4000 V d.c. (IEC), 20 to 450 A

**Dimensions - mm**




**Type 2//SKN/394**

Data sheets: 1* 170K6600, 2 & 2/2 170K6604

# 20 x 127 and 25 x 146 mm, Ferrule fuse links, FWK

# 750 V d.c. (IEC), 5 to 60 A




## Specifications

### Description

Ferrule high speed fuse links for light rail applications in auxiliary power and distribution equipment.

### Technical data

Rated voltage: 750 V d.c. (IEC)

Rated current:

- 5-30 A (20 x 127 mm)
- 35-60 A (25 x 146 mm)

Breaking capacity: 50 kA at 750 V d.c., L/R 10-15ms

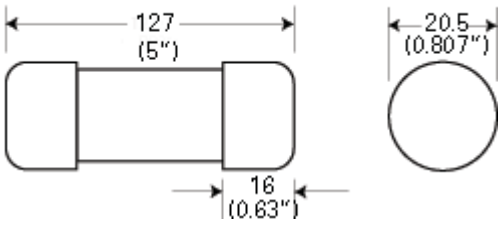
Operating class: gG

### Standards / Agency information

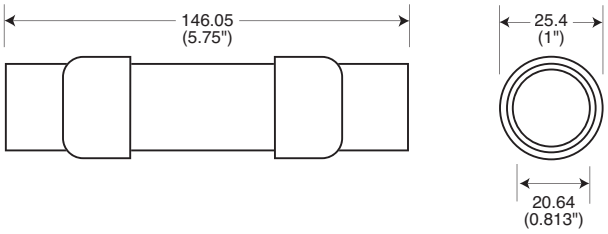
Tested in line with IEC 60269.

| Fuse link size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 750 V d.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|
| 20 x 127 mm (13/18" x 5") | 750 V d.c. (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 | FWK-15A20F |
| | | 20 | 125 | 315 | 7.8 | FWK-20A20F |
| | | 25 | 400 | 1100 | 6.5 | FWK-25A20F |
| | | 30 | 800 | 2600 | 6.5 | FWK-30A20F |
| 25 x 146 mm (1" x 5¾") | 750 V d.c. (IEC) | 35 | 1300 | 4300 | 6 | FWK-35A25F |
| | | 40 | 1600 | 5300 | 6.8 | FWK-40A25F |
| | | 50 | 3100 | 12000 | 7.3 | FWK-50A25F |
| | | 60 | 5900 | 24000 | 7.7 | FWK-60A25F |

### Dimensions - mm (in)




5-30 A




35-60 A

Data sheets: 720039, 35785031

# Ferrule fuse links, LRC750

## 750 V d.c. (IEC), 30 to 50 A




### Specifications

**Description**

Ferrule high speed fuse links for light rail applications in auxiliary power and distribution equipment. Also suitable for heavy rails applications in instrumentation and control circuits equipment.

**Technical data**

Rated voltage: 750 V d.c. (IEC)

Rated current: 30-50 A

Breaking capacity: 50 kA at 750 V d.c., L/R 15-20ms

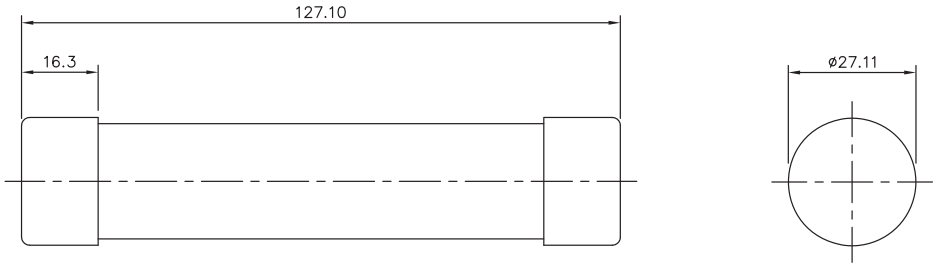
Operating class: gR

**Standards / Agency information**

Tested in line with IEC 60269.

| Fuse link type | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 750 V d.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|
| LRC750 | 750 V d.c. (IEC) | 30 | 700 | 2250 | 4.5 | 30LRC750 |
| | | 40 | 1800 | 5300 | 5.8 | 40LRC750 |
| | | 50 | 3100 | 12000 | 9.4 | 50LRC750 |

**Dimensions - mm**



# 20 x 127 mm, Ferrule fuse links, FWL and FWS

## 1200-1400-2000 V a.c. (IEC), 1000 V d.c. (IEC), 2 to 30 A




### Specifications

**Description**

Ferrule high speed fuse links for light rail applications in auxiliary power and distribution equipment.

**Technical data**

Rated voltage:

- FWL: 1200 V a.c. (IEC) / 1000 V d.c.
- FWS: 2000 V a.c./1000 V d.c. (IEC, 2-8A)
  1400 V a.c./1000 V d.c. (IEC, 10-15A)

Rated current: 2-30 A

Breaking capacity: 50 kA at 1000 V d.c., L/R 15ms

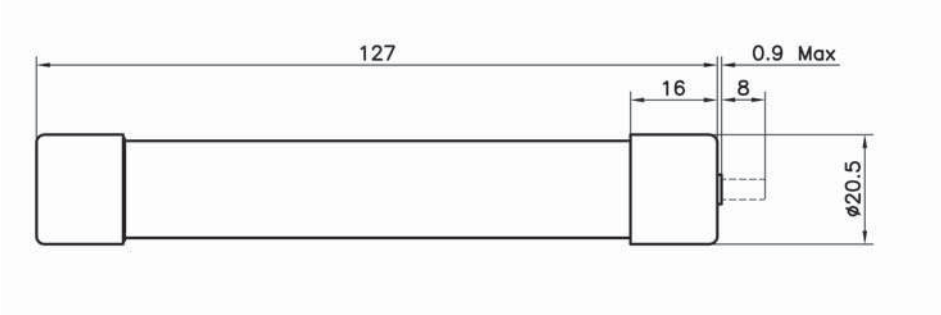
Operating class: gG

**Standards / Agency information**

Consult Eaton's Bussmann business bulehighspeedtechnical@eaton.com.

| Fuse link size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 1000 V d.c. | Watts loss (W) | Catalogue numbers Without indicator | Catalogue numbers With indicator |
|---|---|---|---|---|---|---|---|
| 20 x 127 mm ($^{13}/_{16}$" x 5) | 2000 V a.c./ 1000 V d.c. (IEC) | 2 | 0.8 | 2.4 | 4.4 | FWS-2A20F | FWS-2A20FI |
| | | 6 | 27 | 81 | 6.7 | FWS-6A20F | FWS-6A20FI |
| | | 8 | 64 | 192 | 7.6 | FWS-8A20F | FWS-8A20FI |
| | 1400 V a.c./ 1000 V d.c. (IEC) | 10 | 118 | 277 | 3.0 | FWS-10A20F | FWS-10A20FI |
| | | 12 | 170 | 380 | 3.4 | FWS-12A20F | FWS-12A20FI |
| | | 15 | 209 | 500 | 5.0 | FWS-15A20F | FWS-15A20FI |
| 20 x 127 mm ($^{13}/_{16}$" x 5) | 1200 V a.c./ 1000 V d.c. (IEC) | 20 | 675 | 1550 | 5.9 | FWL-20A20F | FWL-20A20FI |
| | | 25 | 1200 | 2760 | 6.5 | FWL-25A20F | FWL-25A20FI |
| | | 30 | 1850 | 4300 | 7.5 | FWL-30A20F | FWL-30A20FI |

**Dimensions - mm**




Data sheets: 720040, 5785109

# Round body fuse links, KC36

## 750 V d.c. (IEC), 5 to 60 A




### Specifications

**Description**

Ferrule high speed fuse links for light rail applications in auxiliary power and distribution equipment. Also suitable for heavy rails applications in instrumentation and control circuits equipment.

**Technical data**

Rated voltage: 750 V d.c. (IEC)

Rated current: 5-60 A

Breaking capacity: 50 kA at 750 V d.c., L/R 15-20ms

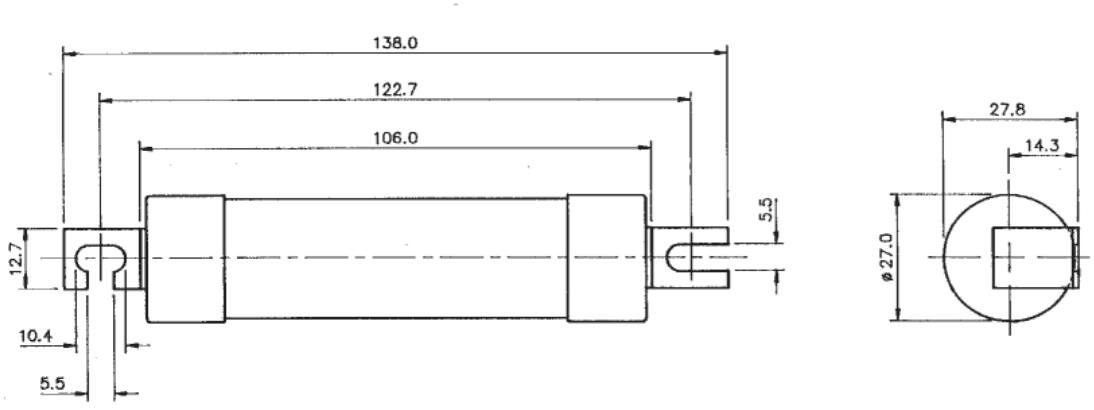
Operating class: gG

**Standards / Agency information**

Tested in line with IEC 60269.

| Fuse link type | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Clearing at 750 V d.c. | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|---|---|
| KC36 | 750 V d.c. (IEC) | 5 | 8.5 | 16 | 6.7 | 5KC36 |
| | | 8 | 50 | 100 | 8.8 | 8KC36 |
| | | 10 | 95 | 200 | 8.5 | 10KC36 |
| | | 15 | 100 | 240 | 5 | 15KC36 |
| | | 20 | 125 | 315 | 7.8 | 20KC36 |
| | | 25 | 400 | 1100 | 6.5 | 25KC36 |
| | | 30 | 800 | 2600 | 6.5 | 30KC36 |
| | | 35 | 1300 | 4300 | 6 | 35KC36 |
| | | 40 | 1600 | 5300 | 6.8 | 40KC36 |
| | | 50 | 3100 | 12,000 | 7.3 | 50KC36 |
| | | 60 | 5900 | 24,000 | 7.7 | 60KC36 |

**Dimensions - mm**




Data sheets: 5778844 and 5785049

# Round body fuse links, RC

## 750 V d.c. (IEC), 200 to 400 A




### Specifications

**Description**

Round bodied bolted tags high speed traction fuse links which provides protection for DC traction third rail applications.

**Technical data**

Rated voltage: 750 V d.c. (IEC)

Rated current: 200-400 A

Breaking capacity: Consult Eaton's Bussmann business bulehighspeedtechnical@eaton.com

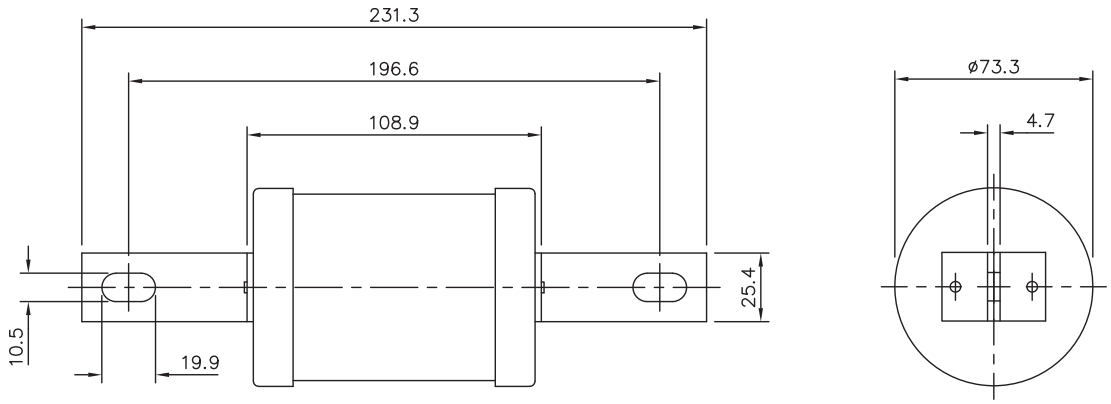
Operating class: gG

**Standards / Agency information**

Consult Eaton's Bussmann business bulehighspeedtechnical@eaton.com.

| Rated voltage | Rated current (Amps) | $I^2t$ ($A^2s$) | Watts loss (W) | Catalogue numbers |
|---|---|---|---|---|
| 750 V d.c. (IEC) | 200 | 85,000 | 31 | 200RC |
| | 250 | 225,000 | 33 | 250RC |
| | 300 | 340,000 | 37 | 300RC |
| | 350 | 530,000 | 41 | 350RC |
| | 400 | 756,000 | 48 | 400RC |

**Dimensions - mm**




Data sheets: 5778869, 5785107 and 5785207

# Round body fuse links, SF

## 900 V d.c. (IEC), 160 to 1000 A




### Specifications

**Description**

Round bodied flush end high speed traction fuse links which provides protection for DC traction third rail applications.

**Technical data**

Rated voltage: 900 V d.c. (IEC)

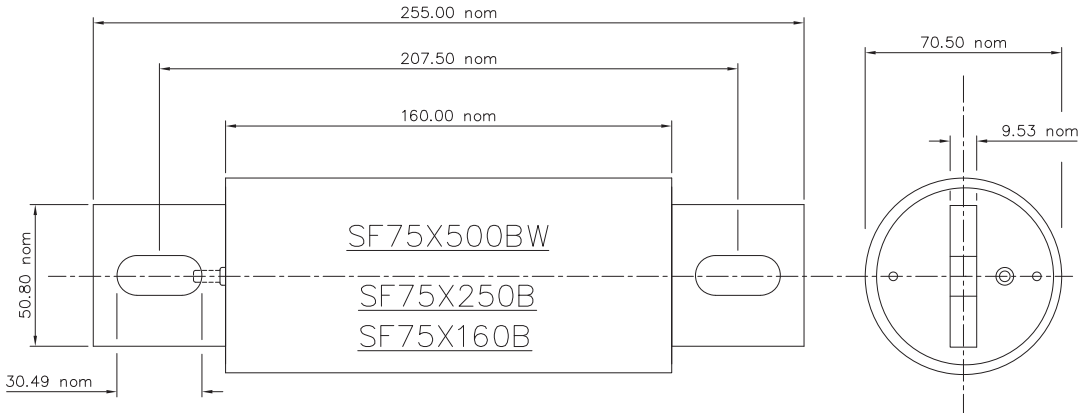
Rated current: 160-1000 A

Breaking capacity: 80 kA at 900 V d.c., L/R 80ms[1]

Operating class: aR (600 to 1000 A)/gR (160 to 320 A)

| Rated voltage | Rated current (Amps) | $I^2t$ ($A^2s$) | Total at 900 V d.c. | Catalogue numbers | |
|---|---|---|---|---|---|
| | | | | Blade contact | Flush end contact |
| 900 V d.c. (IEC) | 160 | 23,000 | 205,000 | SF75X160B | - |
| | 250 | 54,000 | 90,000 | SF75X250B | - |
| | 500 | 150,000 | 570,000 | SF75X500BW | - |
| | 600 | 585,000 | 4,000,000 | SF75X600BW | - |
| | 800 | 1,400,000 | 9,000,000 | SF75X800BW | SF75X800BB |
| | 1000 | - | - | SF100X1000 | SF100X1000HP |

**Dimensions - mm**




**Blade contact: SF75X160B, SF75X250B, SF75X500B**

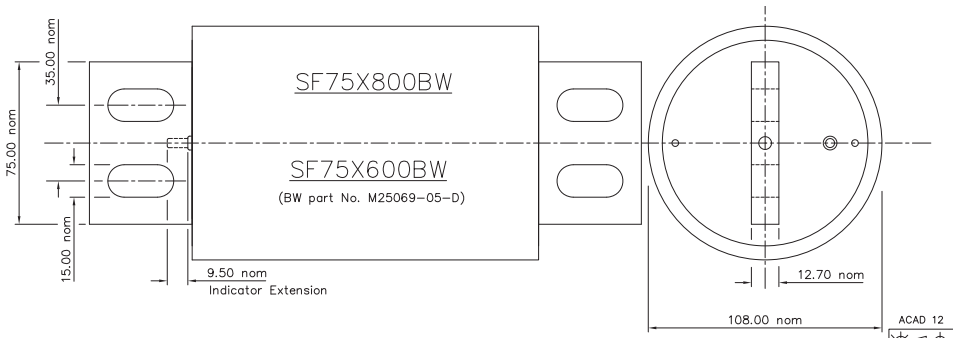
[1] Consult Eaton's Bussmann business for full details bulehighspeedtechnical@eaton.com.

Data sheets: 5785227, 5779017

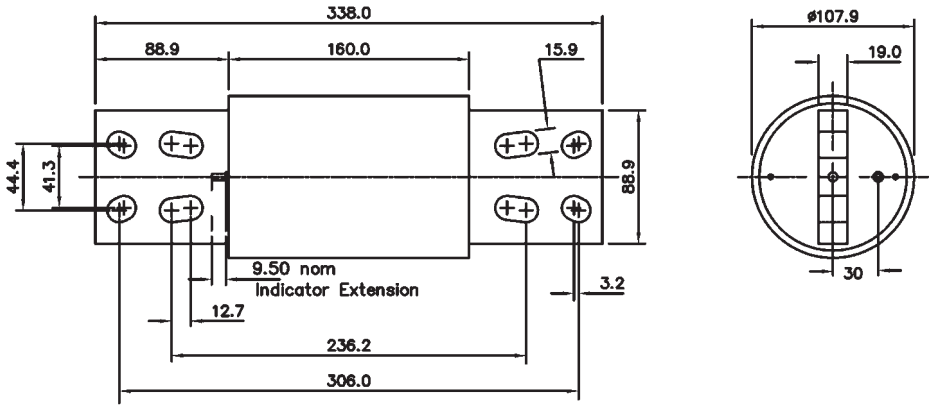
# Round body fuse links, SF

## 900 V d.c. (IEC), 160 to 1000 A

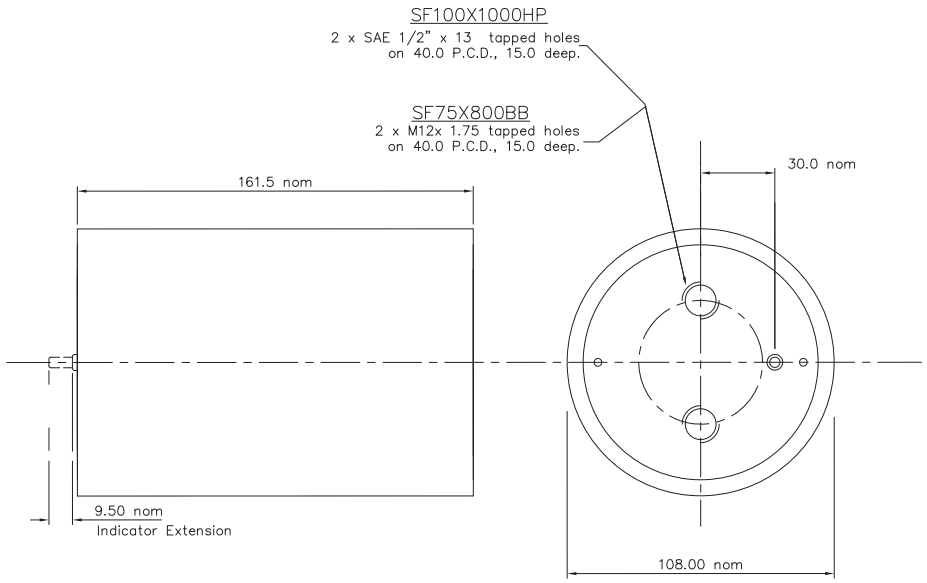
**Dimensions - mm**




Blade contact: SF75X600BW and SF75X800BW




**Blade contact: SF100X1000**




**Flush end: SF75X800BB and SF100X1000HP**

Data sheets: 5785227, 5779017

# Round body fuse links, NBC

## 1500 V d.c. (IEC), 25 to 200 A




### Specifications

**Description**

A range of round body bolted tags high speed fuse links for heavy rail applications such as auxiliary and distribution equipment.

**Technical data**

Rated voltage: 1500 V d.c. (IEC)

Rated current: 25-200 A

Breaking capacity: Consult Eaton's Bussmann business for interrupting rating and time constant capabilities.

Operating class: gR

**Standards / Agency information**

Consult Eaton's Bussmann business bulehighspeedtechnical@eaton.com.

| Fuse link type | Rated voltage | Rated current (Amps) | Catalogue numbers |
|---|---|---|---|
| NBC | 1500 V d.c. (IEC) | 25 | NBC-25 |
| | | 60 | NBC-60 |
| | | 70 | NBC-70 |
| | | 100 | NBC-100 |
| | | 150 | NBC-150 |
| | | 200 | NBC-200 |

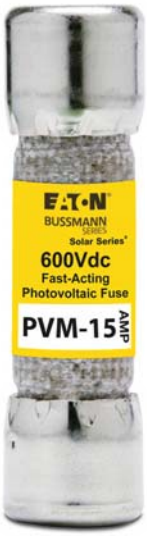
**Dimensions - mm**

Consult Eaton's Bussmann business bulehighspeedtechnical@eaton.com.

# Photovoltaic fuse links

## 10 x 38 mm, PVM

## 600 V d.c. (UL), 4 to 30 A




### Specifications

**Description**

A range of UL 2579 fast-acting 600 V d.c. midget fuse links specifically designed to protect solar power systems in extreme ambient temperature, high cycling and low level fault Rated current conditions (reverse rated current, multi-array fault).

**Technical data**

Rated voltage: 600 V d.c. to UL 2579

Rated current: 4-30 A

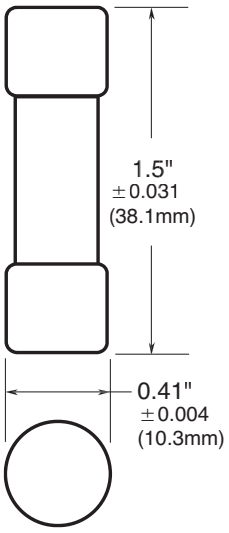
Breaking capacity: 50 kA DC (4-30 A)

**Standards / Agency information**

UL Listed 2579, Guide JFGA, File E335324, CSA Component Certified C22.2.

| Rated voltage | Rated current (Amps) | Power Loss (W) 0.8 x $I_n$ | Power Loss (W) 1 x $I_n$ | Catalogue numbers |
|---|---|---|---|---|
| 600 V d.c. (UL) | 4 | | | PVM-4 |
| | 5 | | | PVM-5 |
| | 6 | | | PVM-6 |
| | 7 | | | PVM-7 |
| | 8 | | | PVM-8 |
| | 9 | | | PVM-9 |
| | 10 | 1.04 | 1.86 | PVM-10 |
| | 12 | | | PVM-12 |
| | 15 | 1 | 1.72 | PVM-15 |
| | 20 | | | PVM-20 |
| | 25 | | | PVM-25 |
| | 30 | 1.65 | 2.91 | PVM-30 |

**Dimensions - in (mm)**




Data sheet: 2153

# 10 x 38 mm, PV-10F

## 1000 V d.c. (IEC/UL), 1 to 20 A




### Specifications

**Description**

A range of fuse links in a 10 x 38 mm package specifically designed for the protection and isolation of photovoltaic strings. The fuse links are capable of interrupting low overRated currents associated with faulted PV (reverse rated current, multi-array fault) string arrays.r

**Technical data**

Rated voltage: 1000 V d.c. (IEC/UL)

Rated current: 1-20 A

Breaking capacity: 50 kA

Operating class: gPV and UL PV fuse links

**Standards / Agency information**

IEC 60269-6, UL Recognised 2579 (File number E335324), CSA, CCC (1-15A), RoHS compliant.

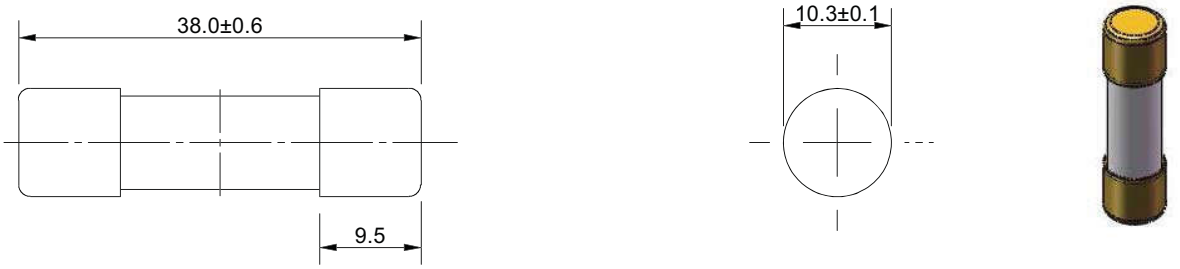
| | | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | | Catalogue numbers | | | |
|---|---|---|---|---|---|---|---|---|---|
| Rated voltage | Rated current (Amps) | Pre-arcing | Total at 1000 V d.c. | 0.8 $I_n$ | $I_n$ | Cylindrical | Bolt fixing | PCB fixing single pin | PCB fixing double pin |
| 1000 V a.c. (UL/IEC) | 1 | 0.15 | 0.4 | 0.8 | 1.5 | PV-1A10F | PV-1A10-T | PV-1A10-1P | PV-1A10-2P |
| | 2 | 1.2 | 3.4 | 0.6 | 1.0 | PV-2A10F | PV-2A10-T | PV-2A10-1P | PV-2A10-2P |
| | 3 | 4 | 11 | 0.8 | 1.3 | PV-3A10F | PV-3A10-T | PV-3A10-1P | PV-3A10-2P |
| | 3.5 | 6.6 | 18 | 0.9 | 1.4 | PV-3-5A10F | PV-3-5A10-T | PV-3-5A10-1P | PV-3-5A10-2P |
| | 4 | 9.5 | 26 | 1.0 | 1.5 | PV-4A10F | PV-4A10-T | PV-4A10-1P | PV-4A10-2P |
| | 5 | 19 | 50 | 1.0 | 1.6 | PV-5A10F | PV-5A10-T | PV-5A10-1P | PV-5A10-2P |
| | 6 | 30 | 90 | 1.1 | 1.8 | PV-6A10F | PV-6A10-T | PV-6A10-1P | PV-6A10-2P |
| | 8 | 3 | 32 | 1.2 | 2.1 | PV-8A10F | PV-8A10-T | PV-8A10-1P | PV-8A10-2P |
| | 10 | 7 | 70 | 1.2 | 2.3 | PV-10A10F | PV-10A10-T | PV-10A10-1P | PV-10A10-2P |
| | 12 | 12 | 120 | 1.5 | 2.7 | PV-12A10F | PV-12A10-T | PV-12A10-1P | PV-12A10-2P |
| | 15 | 22 | 220 | 1.7 | 2.9 | PV-15A10F | PV-15A10-T | PV-15A10-1P | PV-15A10-2P |
| | 20 | 34 | 350 | 2.1 | 3.6 | PV-20A10F | PV-20A10-T | PV-20A10-1P | PV-20A10-2P |

Data sheet: 720110

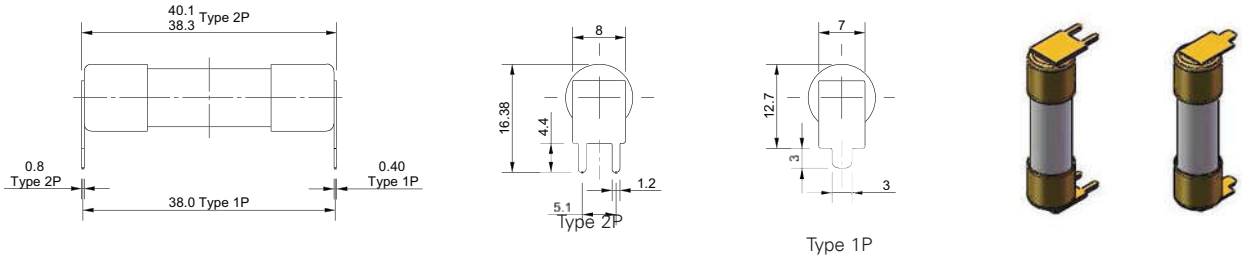
# 10 x 38 mm, PV-10F

## 1000 V d.c. (IEC/UL), 1 to 20 A

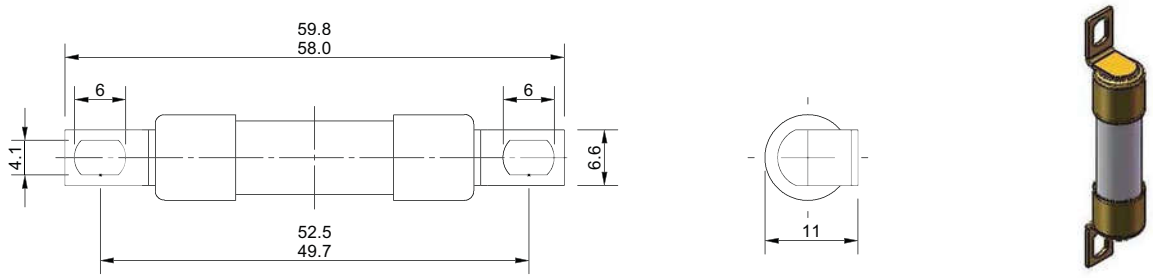
**Dimensions - mm**




**Cylindrical PV-**A10F**




**PCB Fixing PV-**A10-1P**




**Bolt Fixing PV-**A10-T**

Data sheet: 720110

# 14 x 51 mm, PV-14F

## 1000 and 1100 V d.c. (IEC/UL), 15 to 32 A




### Specifications

**Description**

A range of fuse links in a 14 x 51 mm package specifically designed for the protection and isolation of photovoltaic strings. The fuse links are capable of interrupting low overrated currents associated with faulted PV (reverse rated current, multi-array fault).

**Technical data**

Rated voltage:

- 1100 V d.c. (IEC and UL, 15 and 20 A)
- 1000 V d.c. (IEC and UL, 25 and 32 A)

Rated current: 15-32 A

Breaking capacity: 30 kA

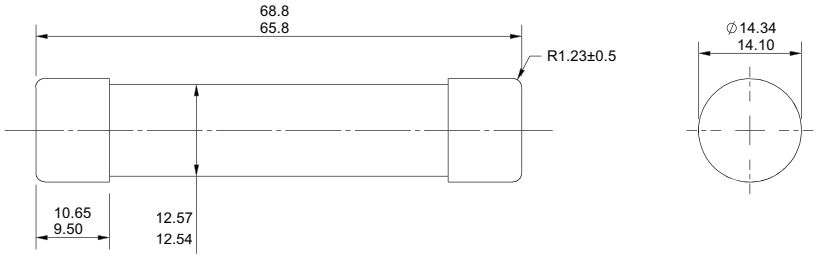
Operating class: gPV and UL PV fuse links

**Standards / Agency information**

IIEC 60269-6, UL Recognised 2579 (File number E335324), RoHS compliant. Pending: CCC.

| Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Total at rated voltage | Watts loss (W) 0.8 $I_n$ | Watts loss (W) $I_n$ | Catalogue numbers |
|---|---|---|---|---|---|---|
| 1100 V d.c. (IEC/UL) | 15 | 14 | 270 | 2.1 | 4 | PV-15A14F |
| | 20 | 27 | 570 | 2.9 | 5.5 | PV-20A14F |
| 1000 V d.c. (IEC/UL) | 25 | 65 | 950 | 2.8 | 5.3 | PV-25A14F |
| | 32 | 120 | 1750 | 4 | 7.5 | PV-32A14F |

**Dimensions - in (mm)**




Data sheet: 720132

# 14 x 65 mm, PV-14L

## 1300-1500 V d.c. (IEC and UL), 15 to 32 A




### Specifications

**Description**

A range of fuse links in a 14 x 65 mm package specifically designed for the protection and isolation of photovoltaic strings. The fuse links are capable of interrupting low overrated currents associated with faulted PV (reverse rated current, multi-array fault).

**Technical data**

Rated voltage:

- 1500 V d.c. (IEC and UL, 15 and 20 A)
- 1300 V d.c. (IEC and UL, 25 and 32 A)

Rated current: 15-32 A

Breaking capacity: 10 kA

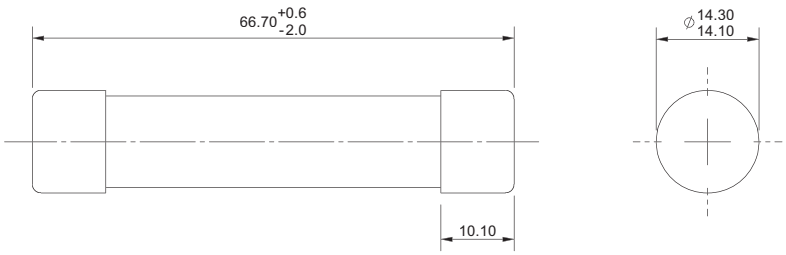
Operating class: gPV and UL PV fuse links

**Standards / Agency information**

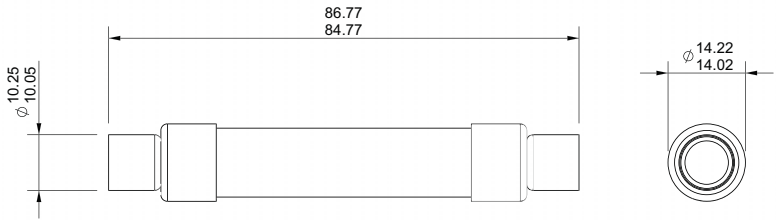
IEC 60269-6, UL Recognised 2579 (File number E335324), RoHS compliant, Pending: CCC.

| Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Total at rated voltage | Watts loss (W) 0.8 $I_n$ | Watts loss (W) $I_n$ | Catalogue numbers Cylindrical | Cylindrical with tags | Cylindrical with 10mm fixings |
|---|---|---|---|---|---|---|---|---|
| 1500 V d.c. (IEC/UL) | 15 | 14 | 160 | 3.2 | 5.8 | PV-15A14LF | PV-15A14L-T | PV-15A14LF10F |
| | 20 | 34 | 400 | 3.6 | 6.5 | PV-20A14LF | PV-20A14L-T | PV-20A14LF10F |
| 1300 V d.c. (IEC/UL) | 25 | 65 | 550 | 4.1 | 7.5 | PV-25A14LF | PV-25A14L-T | PV-25A14LF10F |
| | 32 | 105 | 900 | 5.7 | 10.4 | PV-32A14LF | PV-32A14L-T | PV-32A14LF10F |

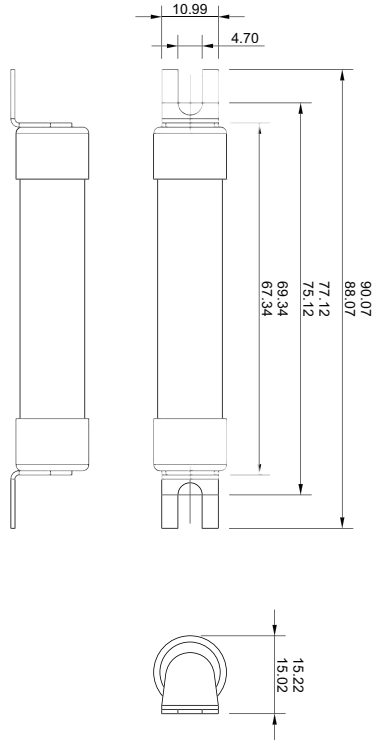
**Dimensions - mm**




**Cylindrical PV-(amp rating)A14LF**




**Cylindrical with 10mm Fixings PV-(amp rating)A14LF10F**




**Cylindrical with Tags PV-(amp rating)A14L-T**

Data sheet: 720139

# NH, PV-ANH

## 1000 V d.c. (IEC/UL), 32 to 400 A

### Specifications




**Description**

A range of NH size bladed fuse links specifically designed for protecting and isolating photovoltaic array combiners and disconnects. These fuse links are capable of interrupting low overrated currents associated with faulted PV systems (reverse rated current, multi-array fault).

**Technical data**

Rated voltage: 1000 V d.c. (IEC and UL)

Rated current: 32-400 A

Breaking capacity: 50 kA

Operating class: gPV and UL PV fuse links

**Standards / Agency information**

IEC 60269-6, UL Recognised file 2579 E335324 for size 1 only, RoHS compliant

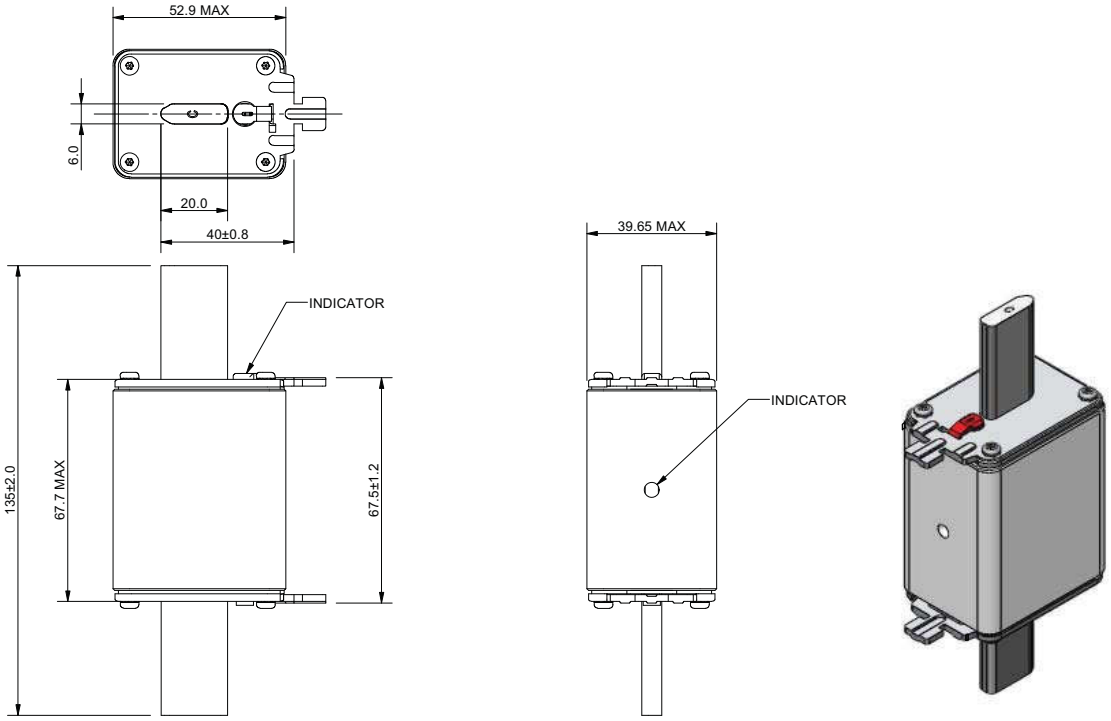
| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Total at 1000 V d.c. | Watts loss (W) 0.8 $I_n$ | Watts loss (W) $I_n$ | Catalogue numbers Blade without bolt holes | Blade with bolt holes | Blade with bolt holes and lugs |
|---|---|---|---|---|---|---|---|---|---|
| NH1 | 1000 V d.c. (IEC/UL) | 32 | 80 | 720 | 4 | 8 | PV-32ANH1 | | |
| | | 40 | 185 | 1670 | 5 | 9 | PV-40ANH1 | | |
| | | 50 | 400 | 3600 | 6 | 11 | PV-50ANH1 | | |
| | | 63 | 470 | 4300 | 6 | 12 | PV-63ANH1 | | |
| | | 80 | 640 | 5760 | 8 | 15 | PV-80ANH1 | | |
| | | 100 | 1300 | 11700 | 8 | 16 | PV-100ANH1 | | |
| | | 125 | 2600 | 23400 | 9 | 17 | PV-125ANH1 | | |
| | | 160 | 5200 | 46800 | 14 | 27 | PV-160ANH1 | | |
| | | 200 | 10200 | 82000 | 13 | 25 | PV-200ANH1 | | |
| NH2 | 1000 V d.c. (IEC/UL) | 160 | 4600 | 37000 | 14 | 28 | PV-160ANH2 | | |
| | | 200 | 9500 | 76000 | 16 | 32 | PV-200ANH2 | | |
| | | 250 | 17000 | 136000 | 19 | 38 | PV-250ANH2 | | |
| NH3 | 1000 V d.c. (IEC/UL) | 300 | 32000 | 260000 | 24 | 40 | PV-300ANH3 | | |
| | | 315 | 32000 | 260000 | 26 | 44 | PV-315ANH3 | | |
| | | 350 | 44500 | 370000 | 27 | 45 | PV-350ANH3 | | |
| | | 355 | 44500 | 370000 | 28 | 46 | PV-355ANH3 | | |
| | | 400 | 67500 | 550000 | 30 | 50 | PV-400ANH3 | | |
| NH1 | 1000 V d.c. (IEC/UL) | 63 | 470 | 4300 | 6 | 12 | | PV-63ANH1-B | PV-63ANH1-BL |
| | | 80 | 640 | 5760 | 8 | 15 | | PV-80ANH1-B | PV-80ANH1-BL |
| | | 100 | 1300 | 11700 | 8 | 16 | | PV-100ANH1-B | PV-100ANH1-BL |
| | | 125 | 2600 | 23400 | 9 | 17 | | PV-125ANH1-B | PV-125ANH1-BL |
| | | 160 | 5200 | 46800 | 14 | 27 | | PV-160ANH1-B | PV-160ANH1-BL |
| | | 200 | 10200 | 82000 | 13 | 25 | | PV-200ANH1-B | PV-200ANH1-BL |
| NH2 | 1000 V d.c. (IEC/UL) | 160 | 4600 | 37000 | 14 | 28 | | PV-160ANH2-B | PV-160ANH2-BL |
| | | 200 | 9500 | 76000 | 16 | 32 | | PV-200ANH2-B | PV-200ANH2-BL |
| | | 250 | 17000 | 136000 | 19 | 38 | | PV-250ANH2-B | PV-250ANH2-BL |
| NH3 | 1000 V d.c. (IEC/UL) | 315 | 32000 | 260000 | 26 | 44 | | PV-315ANH3-B | PV-315ANH3-BL |
| | | 355 | 38000 | 310000 | 29 | 48 | | PV-355ANH3-B | PV-355ANH3-BL |
| | | 400 | 61000 | 490000 | 32 | 50 | | PV-400ANH3-B | PV-400ANH3-BL |

Data sheet: 720133

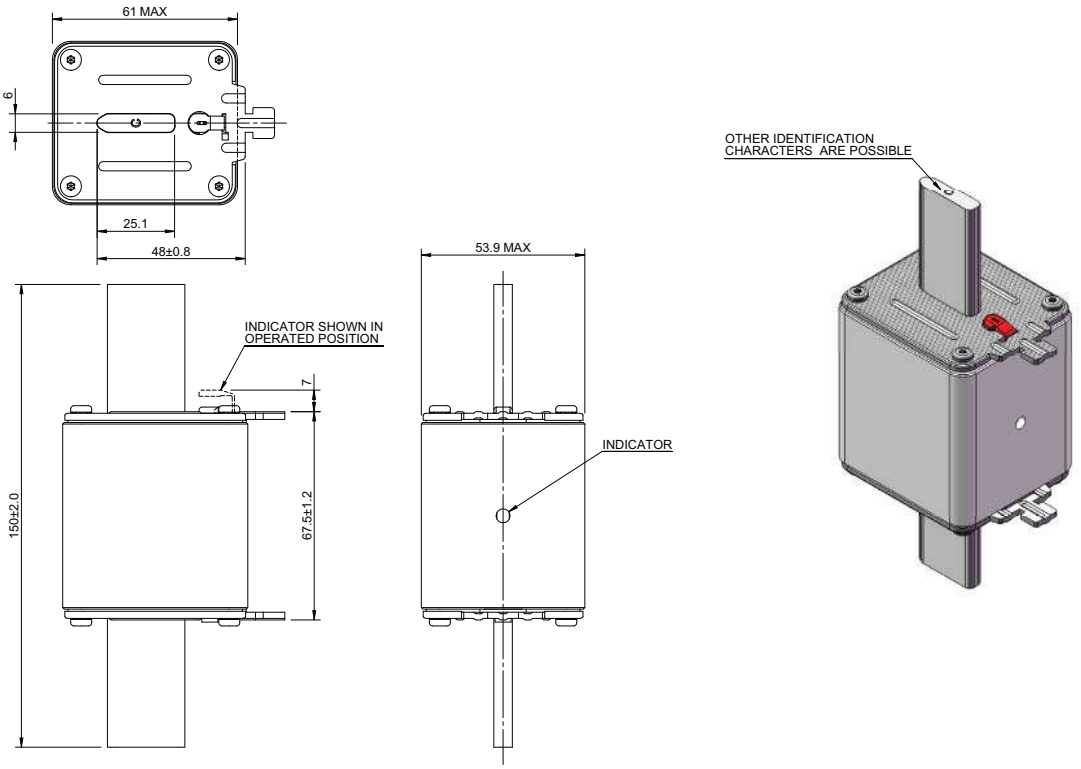
# NH, PV-ANH

## 1000 V d.c. (IEC/UL), 32 to 400 A

**Dimensions - Blade without bolt holes - mm**




**NH Size 1**



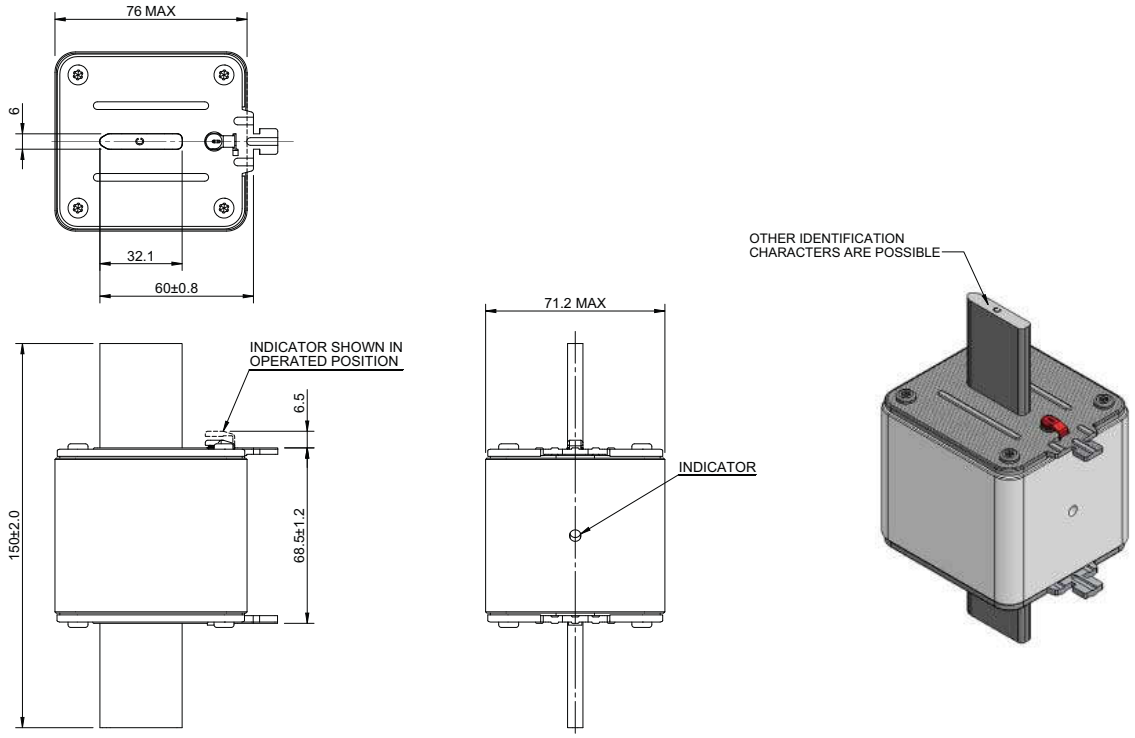

**NH Size 2**

Data sheet: 720133

# NH, PV-ANH

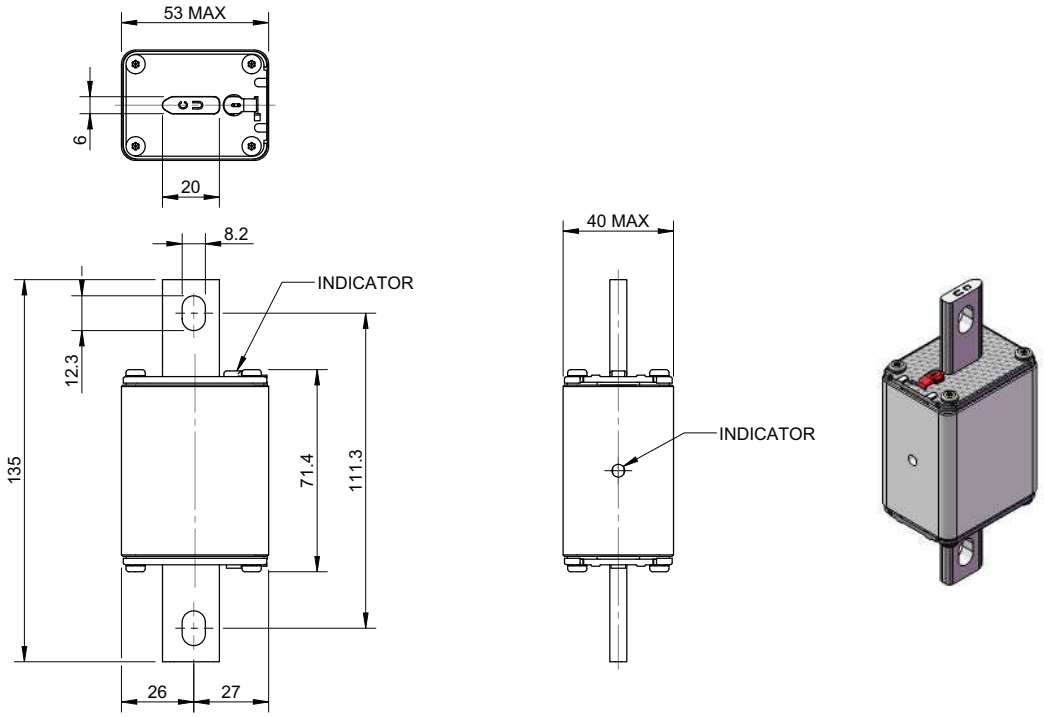
## 1000 V d.c. (IEC/UL), 32 to 400 A

**Dimensions - Blade without bolt holes - mm**




**NH Size 3**

**Dimensions - Blade with bolt holes - mm**



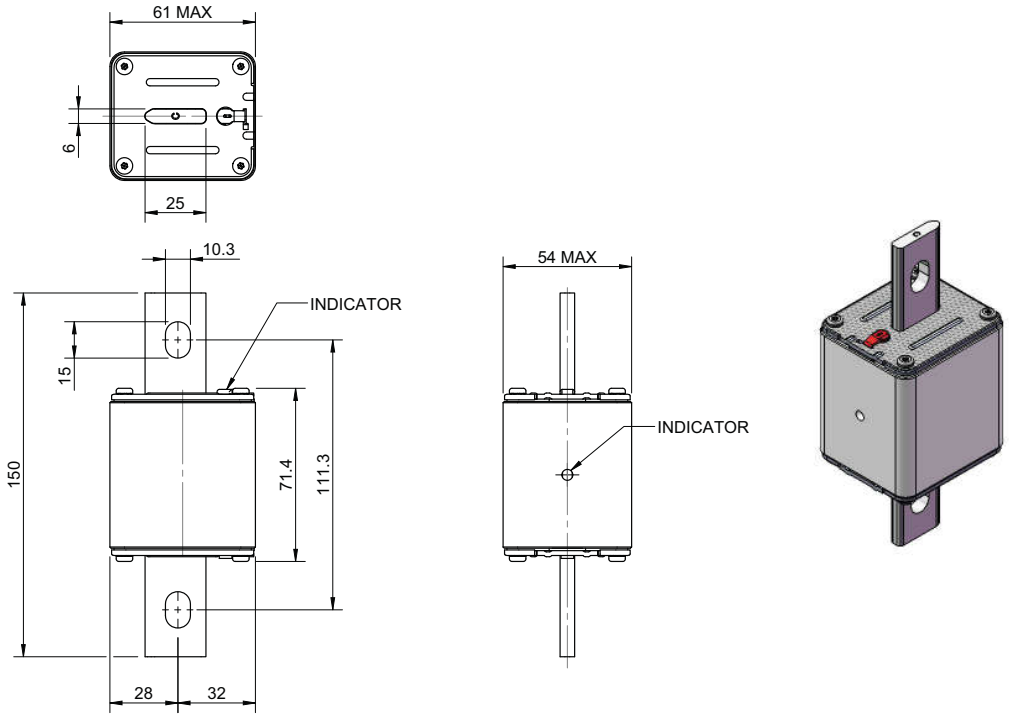

**NH Size 1**

Data sheet: 720133

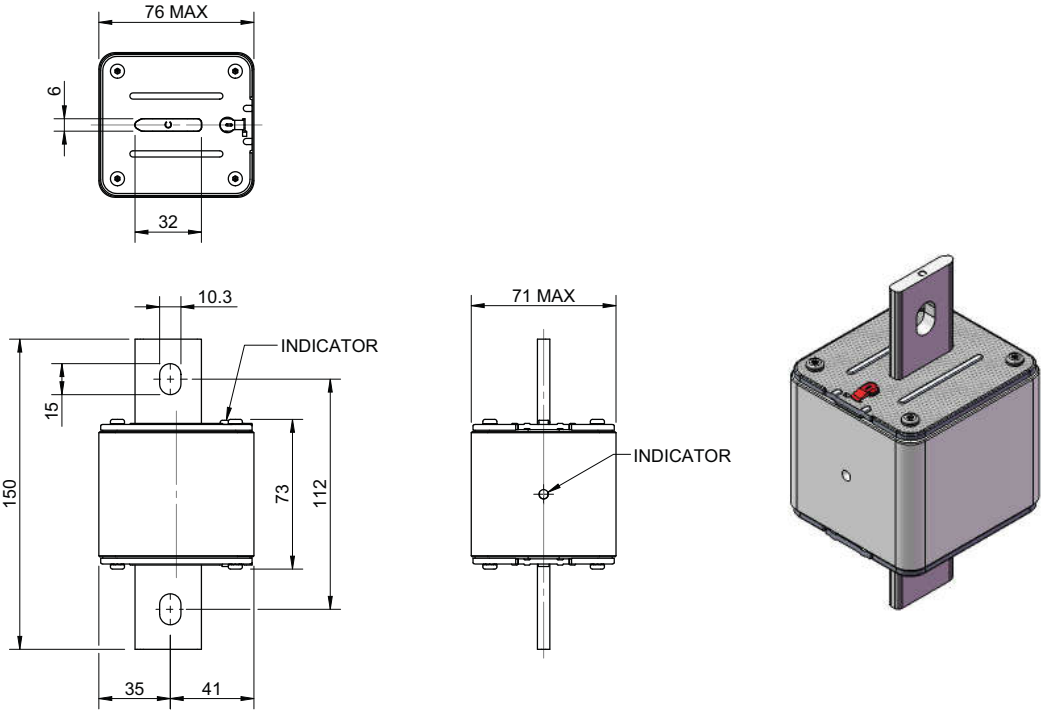
# NH, PV-ANH

## 1000 V d.c. (IEC/UL), 32 to 400 A

**Dimensions - Blade with bolt holes - mm**




**NH Size 2**



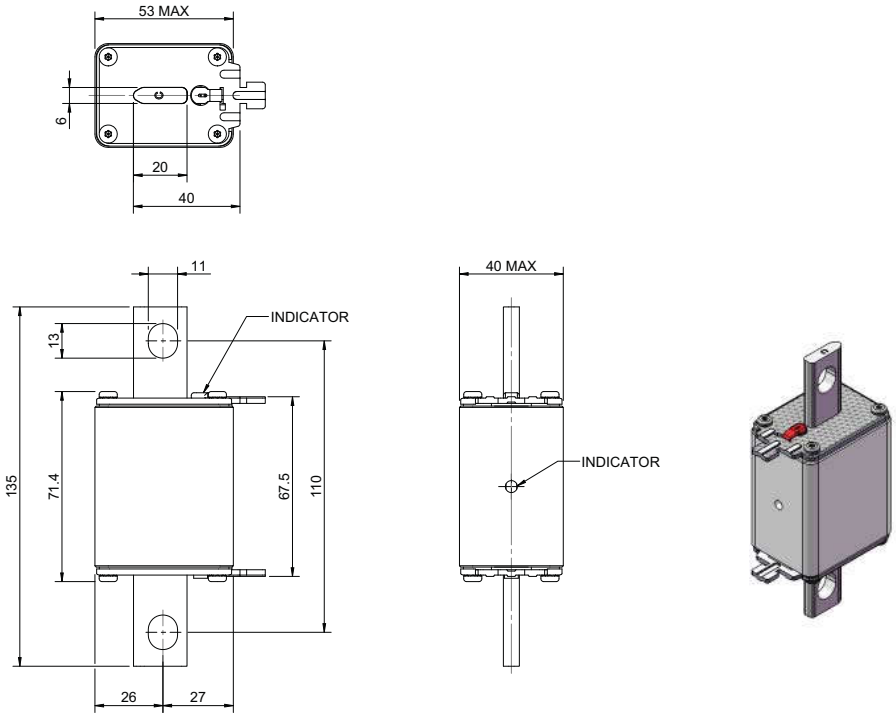

**NH Size 3**

Data sheet: 720133

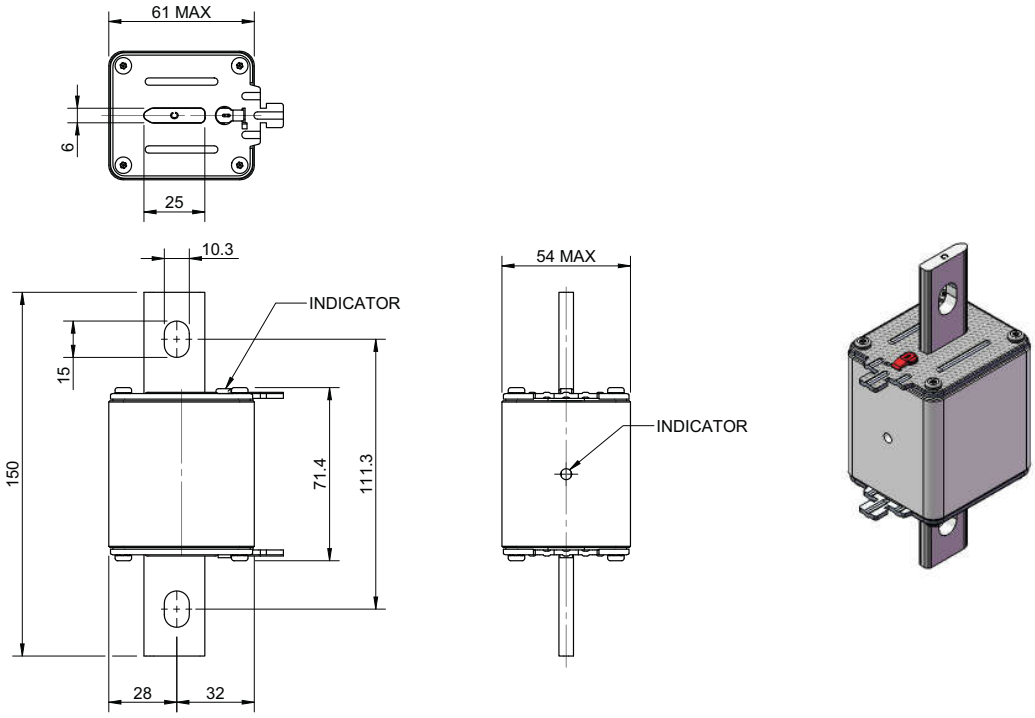
# NH, PV-ANH

## 1000 V d.c. (IEC/UL), 32 to 400 A

**Dimensions - Blade with bolt holes and lugs - mm**




**NH Size 1**



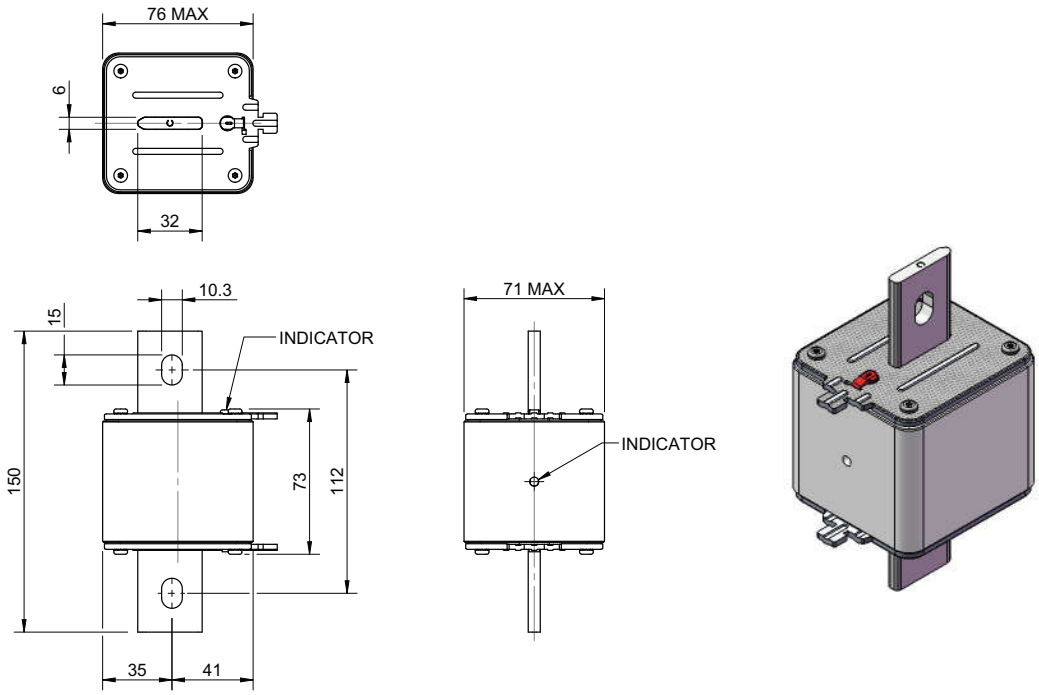

**NH Size 2**

Data sheet: 720133

# NH, PV-ANH

## 1000 V d.c. (IEC/UL), 32 to 400 A

**Dimensions - Blade with bolt holes and lugs - mm**




**NH Size 3**

Data sheet: 720133

# Flush end, PV-AF

## 1000 V d.c. (IEC/UL), 160 to 400 A

### Specifications



**Description**

A range of flush end fuse links specifically designed for protecting and isolating photovoltaic array combiners and disconnects. These fuse links are capable of interrupting low overrated currents associated with faulted PV systems (reverse rated current, multi-array fault).

**Technical data**

Rated voltage: 1000 V d.c. (IEC and UL)

Rated current: 160-400 A

Breaking capacity: 50 kA

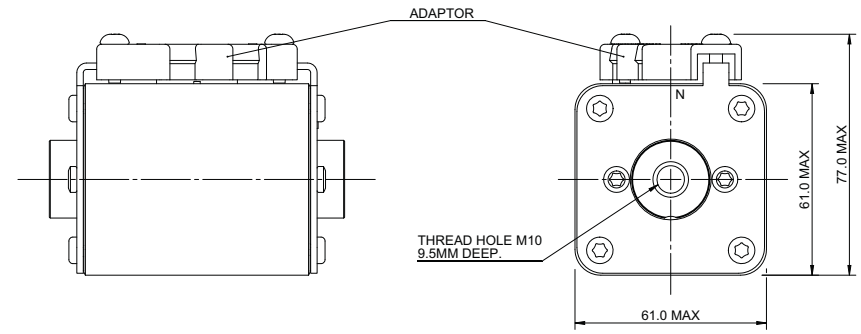
Operating class: gPV and UL PV fuse links

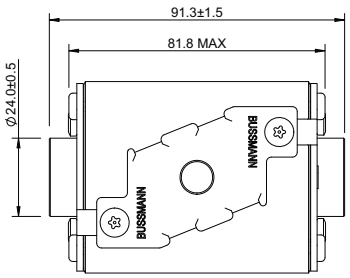
**Standards / Agency information**

IEC 60269-6, UL Recognised file 2579 E335324

| Fuse link type | Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) Pre-arcing | $I^2t$ ($A^2$ Sec) Total at 1000 V d.c. | Watts loss (W) 0.8 $I_n$ | Watts loss (W) $I_n$ | Catalogue numbers |
|---|---|---|---|---|---|---|---|---|
| Flush end | 2 | 1000 V d.c.(IEC/UL) | 160 | 4600 | 37,000 | 15 | 30 | PV-160AF2 |
| | | | 200 | 9500 | 76,000 | 17 | 34 | PV-200AF2 |
| | | | 250 | 17,000 | 136,000 | 19 | 38 | PV-250AF2 |
| | | | 315 | 27,000 | 240,000 | 30 | 49 | PV-315AF3 |
| | 3 | | 355 | 37,000 | 350,000 | 31 | 51 | PV-355AF3 |
| | | | 400 | 61,500 | 550,000 | 32 | 52 | PV-400AF3 |

**Dimensions - mm**





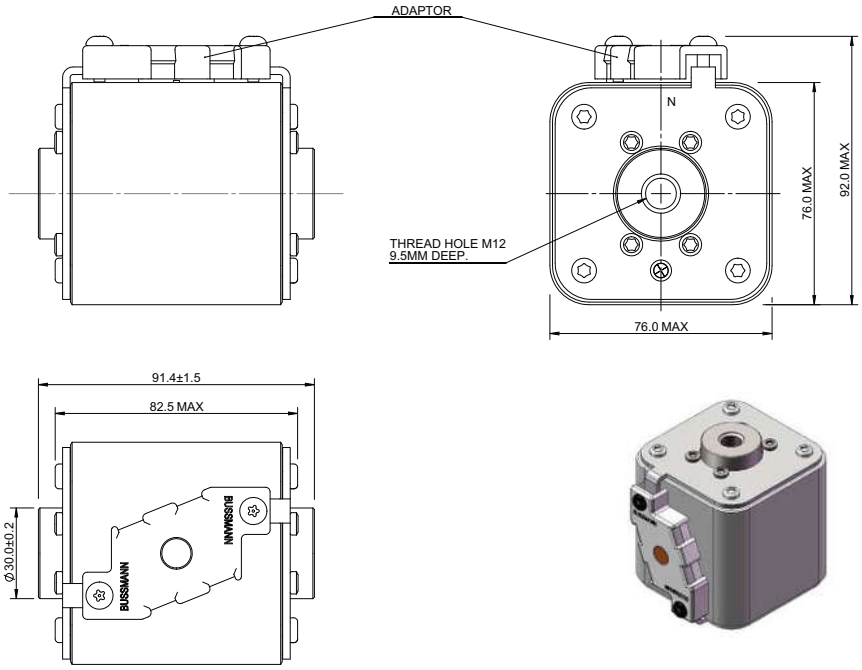

**NH Size 2**

Data sheet: 10370

# Flush end, PV-AF

## 1000 V d.c. (IEC/UL), 160 to 400 A

**Dimensions - mm**




**NH Size 3**

# XL Style, PV-XL

## 1000-1500 V d.c. (IEC/UL), 50 to 600 A




### Specifications

**Description**

A range of XL package bladed fuse links specifically designed for protecting and isolating photovoltaic array combiners and disconnects. These fuse links are capable of interrupting low overrated currents associated with faulted PV systems (reverse rated current, multi-array fault).

**Technical data**

Rated voltage:

- 1000 V d.c. (IEC and UL 63 to 600 A)
- 1200 V d.c. (IEC and UL 160 A)
- 1500 V d.c. (IEC and UL 50 to 400 A)

Rated current: 50-600 A

Breaking capacity:

- Size 01 and 3: 50 kA at 1000 V d.c., 30 kA at 1500 V d.c.
- Size 1 and 2: 33 kA at 1000 V d.c., 30 kA at 1500 V d..c

Operating class: gPV and UL PV fuse links

**Standards / Agency information**

IEC 60269-6, UL Recognised file 2579 E335324, RoHS compliant, pending: CCC.

| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | | Catalogue numbers | |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Total at 1000 V d.c. | 0.8 $I_n$ | $I_n$ | Bladed version | Bolted version |
| 01 | 1000 V d.c. (IEC/UL) | 63 | 260 | 1900 | 13 | 24 | PV-63A-01XL | PV-63A-01XL-B |
| | | 80 | 490 | 3600 | 17 | 29 | PV-80A-01XL | PV-80A-01XL-B |
| | | 100 | 870 | 6300 | 18 | 32 | PV-100A-01XL | PV-100A-01XL-B |
| | | 125 | 1930 | 13,900 | 20 | 40 | PV-125A-01XL | PV-125A-01XL-B |
| | | 160 | 3900 | 28,100 | 22 | 44 | PV-160A-01XL | PV-160A-01XL-B |
| 1 | 1000 V d.c. (IEC/UL) | 200 | 9400 | 27,260 | 31 | 60 | PV-200A-1XL | PV-200A-1XL-B |
| 2 | 1000 V d.c. (IEC/UL) | 160 | 2780 | 21,000 | 25 | 44 | PV-160A-2XL | PV-160A-2XL-B |
| | | 200 | 4950 | 37,000 | 28 | 50 | PV-200A-2XL | PV-200A-2XL-B |
| | | 250 | 9450 | 70,000 | 34 | 60 | PV-250A-2XL | PV-250A-2XL-B |
| | | 315 | 16,600 | 123,000 | 40 | 66 | PV-315A-2XL | PV-315A-2XL-B |
| | | 355 | 26,000 | 192,000 | 42 | 68 | PV-355A-2XL | PV-355A-2XL-B |
| 3 | 1000 V d.c. (IEC/UL) | 350 | 31,000 | 161,200 | 40 | 65 | PV-350A-3L | PV-350A-3L-B |
| | | 400 | 44,500 | 231,400 | 48 | 82 | PV-400A-3L | PV-400A-3L-B |
| | | 500 | 85,000 | 442,000 | 50 | 85 | PV-500A-3L | PV-500A-3L-B |
| | | 600 | 137,000 | 712,400 | 80 | 108 | PV-600A-3L | PV-600A-3L-B |

Data sheet: 720134

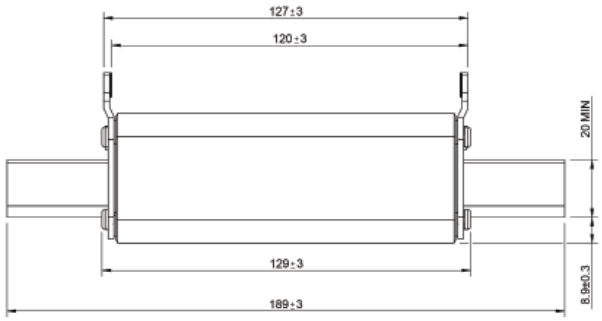
# XL Style, PV-XL

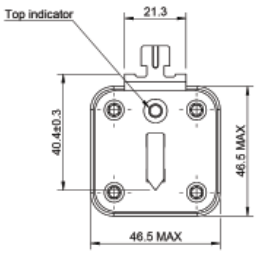
## 1000-1500 V d.c. (IEC/UL), 50 to 600 A

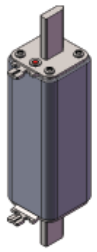
| Fuse link body size | Rated voltage | Rated current (Amps) | $I^2t$ ($A^2$ Sec) | | Watts loss (W) | | Catalogue numbers — 1500 V d.c.[1] | |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-arcing | Total at 1500 V[1] | 0.8 $I_n$ | $I_n$ | Bladed version | Bolted version |
| 01 | 1500 V d.c. (IEC/UL) | 50 | 175 | 1000 | 14 | 25 | PV-50 A-01XL-15 | PV-50 A-01XL-B-15 |
| | | 63 | 362 | 2250 | 15 | 26 | PV-63A-01XL-15 | PV-63A-01XL-B-15 |
| | | 80 | 565 | 3300 | 19 | 35 | PV-80 A-01XL-15 | PV-80 A-01XL-B-15 |
| | | 100 | 1100 | 6600 | 22 | 40 | PV-100 A-01XL-15 | PV-100 A-01XL-B-15 |
| | | 125 | 2200 | 10,500 | 23 | 42 | PV-125A-01XL-15 | PV-125A-01XL-B-15 |
| | 1200 V d.c. (IEC/UL) | 160 | 5000 | 24,0001 | 26 | 52 | PV-160 A-01XL-12 | PV-160 A-01XL-B-12 |
| 1 | 1500 V d.c. (IEC/UL) | 100 | 1250 | 6000 | 24 | 43 | PV-100 A-1XL-15 | PV-100 A-1XL-B-15 |
| | | 125 | 1950 | 9360 | 25 | 52 | PV-125A-1XL-15 | PV-125A-1XL-B-15 |
| | | 160 | 4200 | 20,160 | 30 | 58 | PV-160 A-1XL-15 | PV-160 A-1XL-B-15 |
| | | 200 | 9400 | 45,120 | 31 | 61 | PV-200 A-1XL-15 | PV-200 A-1XL-B-15 |
| 2 | 1500 V d.c. (IEC/UL) | 125 | 2200 | 15,000 | 25 | 44 | PV-125A-2XL-15 | PV-125A-2XL-B-15 |
| | | 160 | 5000 | 32,000 | 29 | 48 | PV-160 A-2XL-15 | PV-160 A-2XL-B-15 |
| | | 200 | 8800 | 51,000 | 32 | 57 | PV-200 A-2XL-15 | PV-200 A-2XL-B-15 |
| | | 250 | 16,600 | 85,000 | 40 | 70 | PV-250 A-2XL-15 | PV-250 A-2XL-B-15 |
| 3 | 1500 V d.c. (IEC/UL) | 250 | 22,300 | 92,000 | 32 | 50 | PV-250 A-3L-15 | PV-250 A-3L-B-15 |
| | | 315 | 38,000 | 160,000 | 36 | 66 | PV-315A-3L-15 | PV-315A-3L-B-15 |
| | | 355 | 44,500 | 184,000 | 44 | 80 | PV-355A-3L-15 | PV-355A-3L-B-15 |
| | | 400 | 58,000 | 240,000 | 49 | 91 | PV-400 A-3L-15 | PV-400 A-3L-B-15 |

[1]1200 V d.c. for 160 A.

**Dimensions - mm**



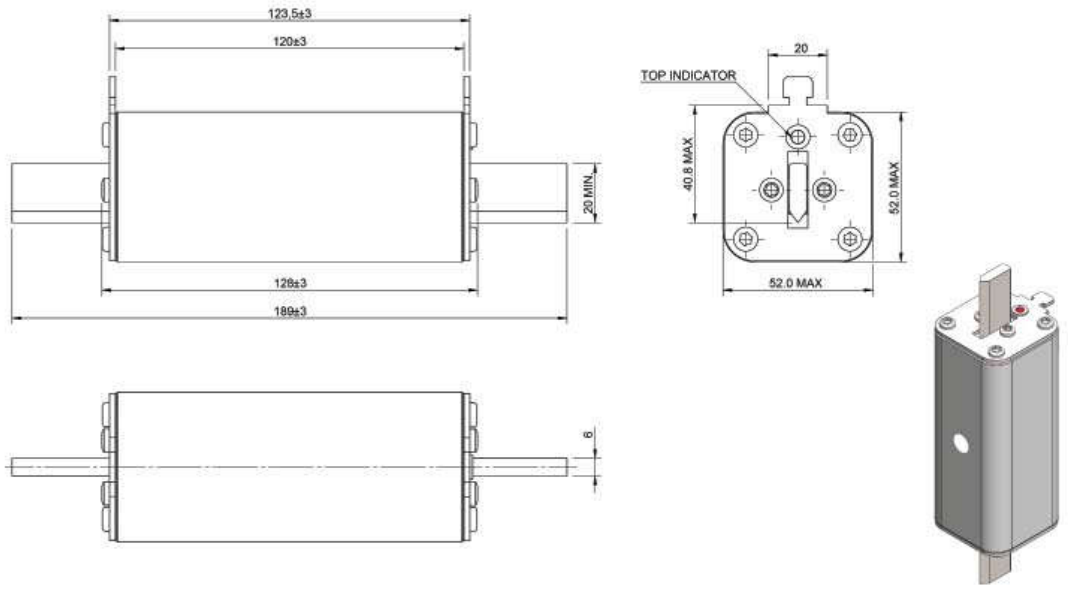
**Bladed - size 01**

Data sheet: 720134

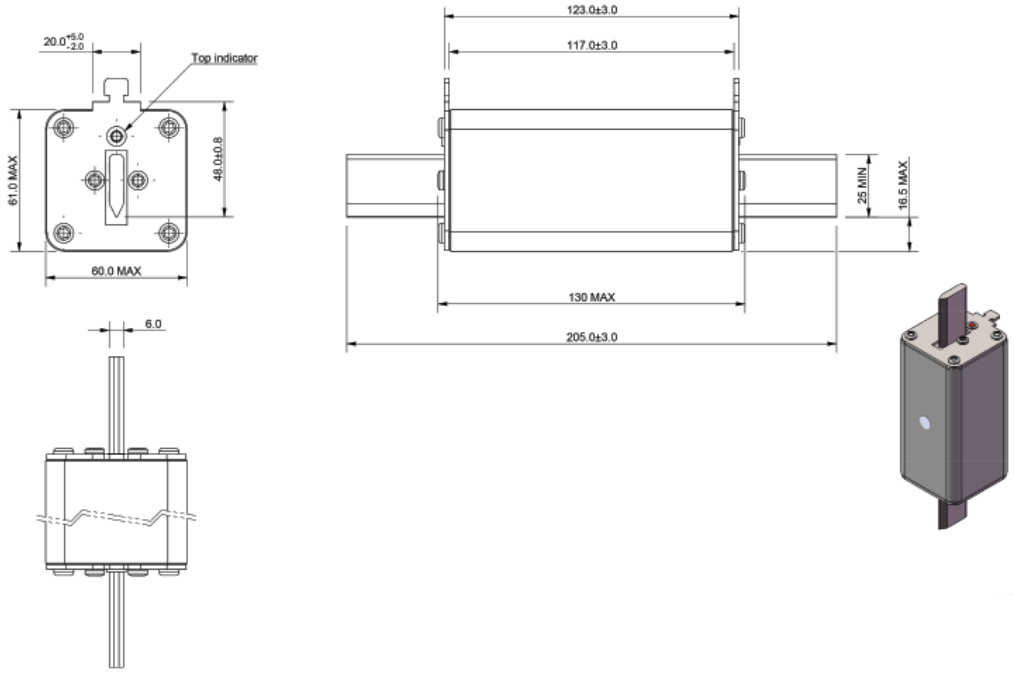
# XL Style, PV-XL

## 1000-1500 V d.c. (IEC/UL), 50 to 600 A

**Dimensions - mm**




**Bladed - size 1**



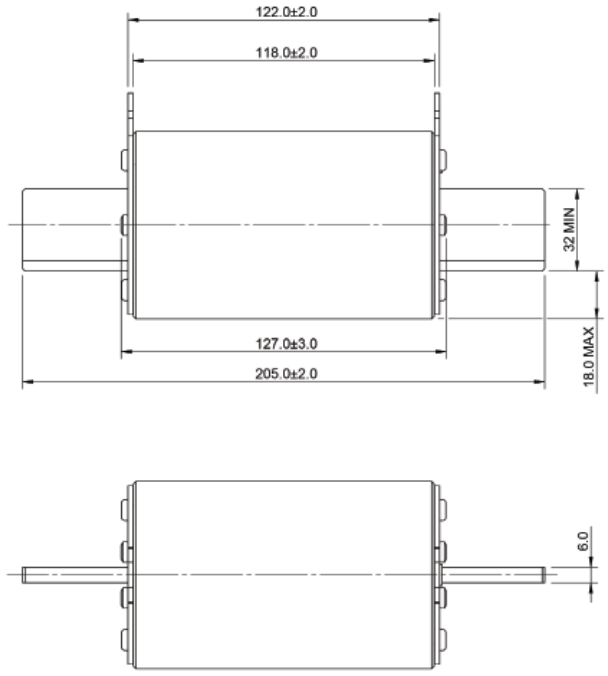

**Bladed - size 2**

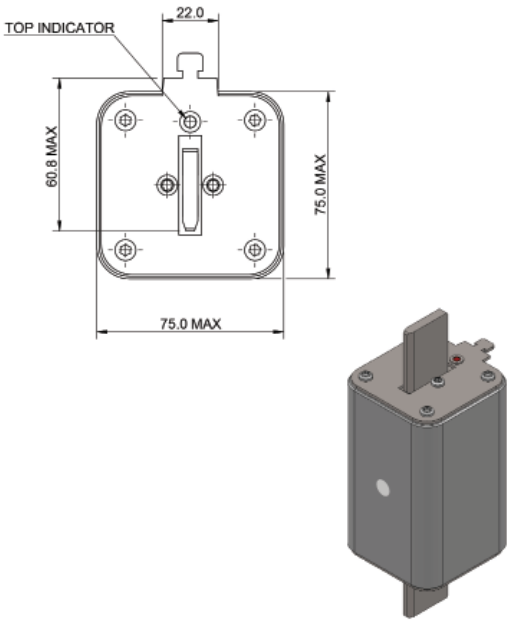
Data sheet: 720134

# XL Style, PV-XL

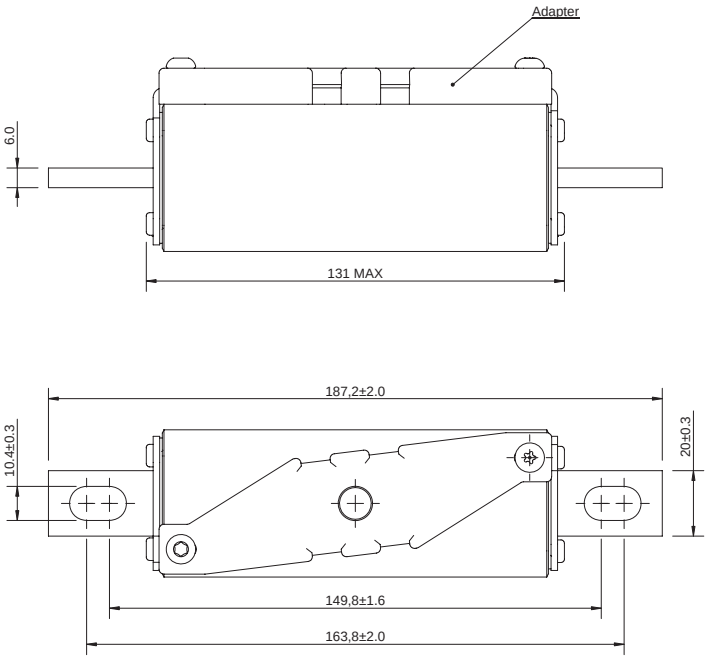
## 1000-1500 V d.c. (IEC/UL), 50 to 600 A

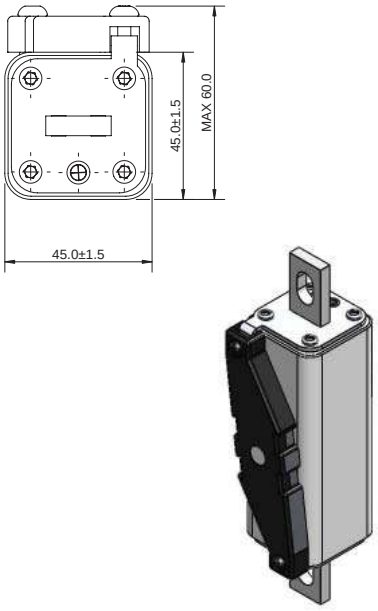
**Dimensions - mm**




**Bladed - size 3**



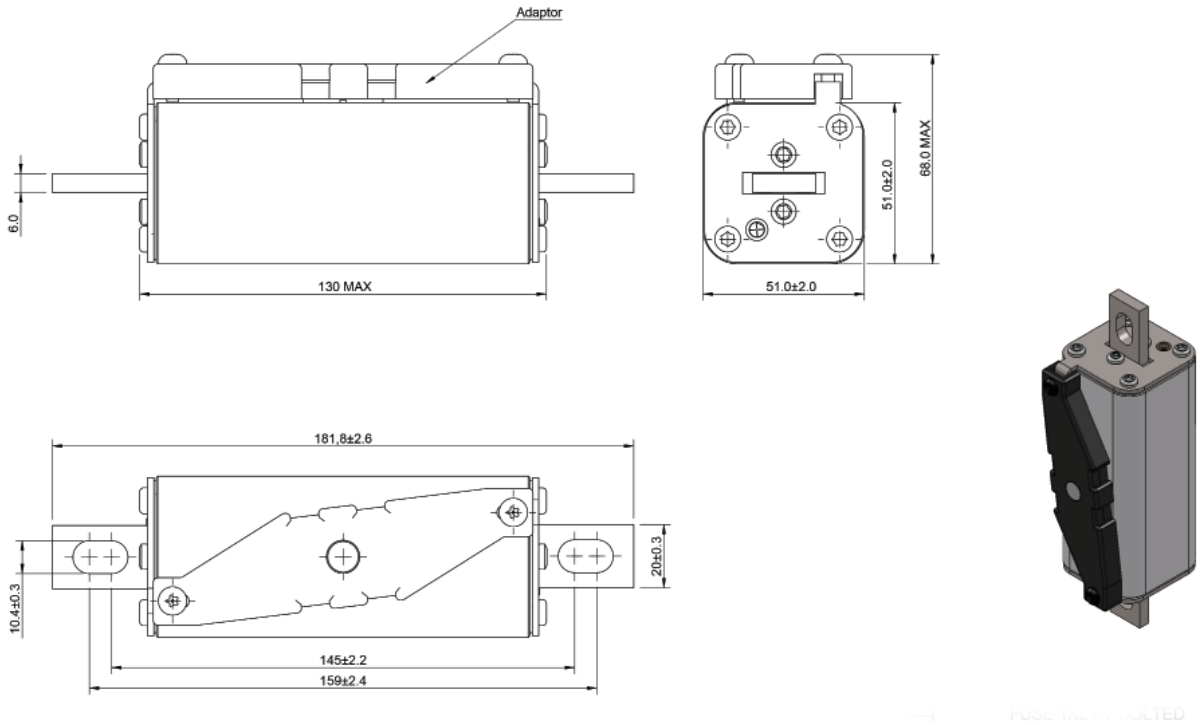

**Bolted - Size 01**

Data sheet: 720134

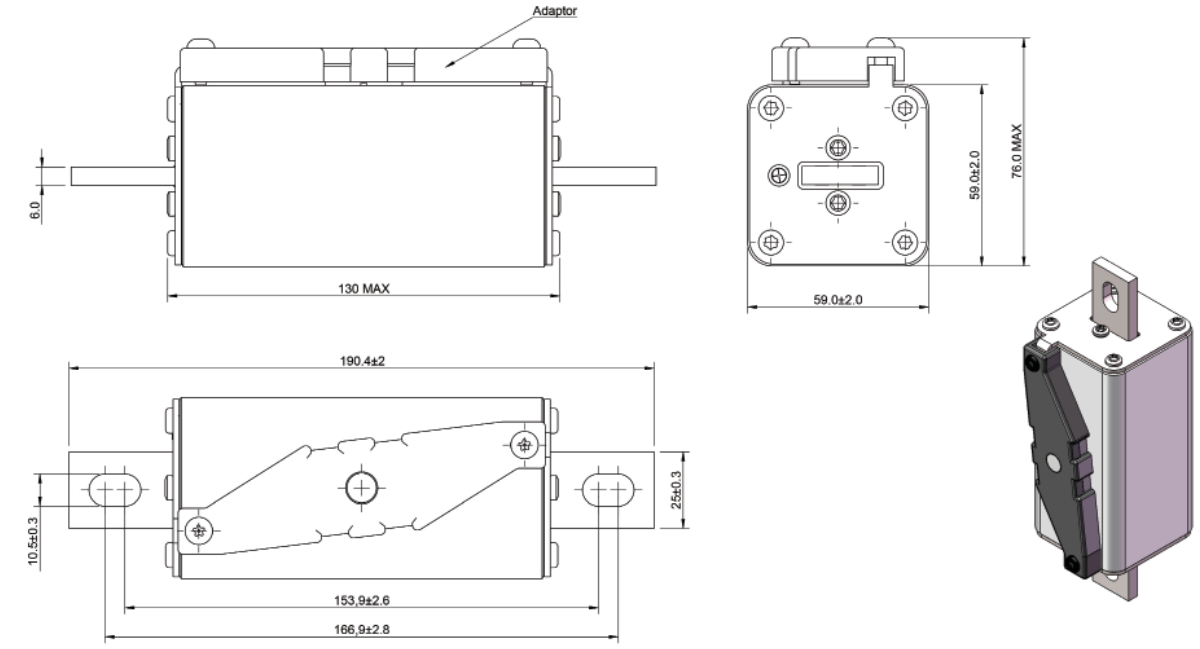
# XL Style, PV-XL

## 1000-1500 V d.c. (IEC/UL), 50 to 600 A

**Dimensions - mm**




**Bolted - Size 1**



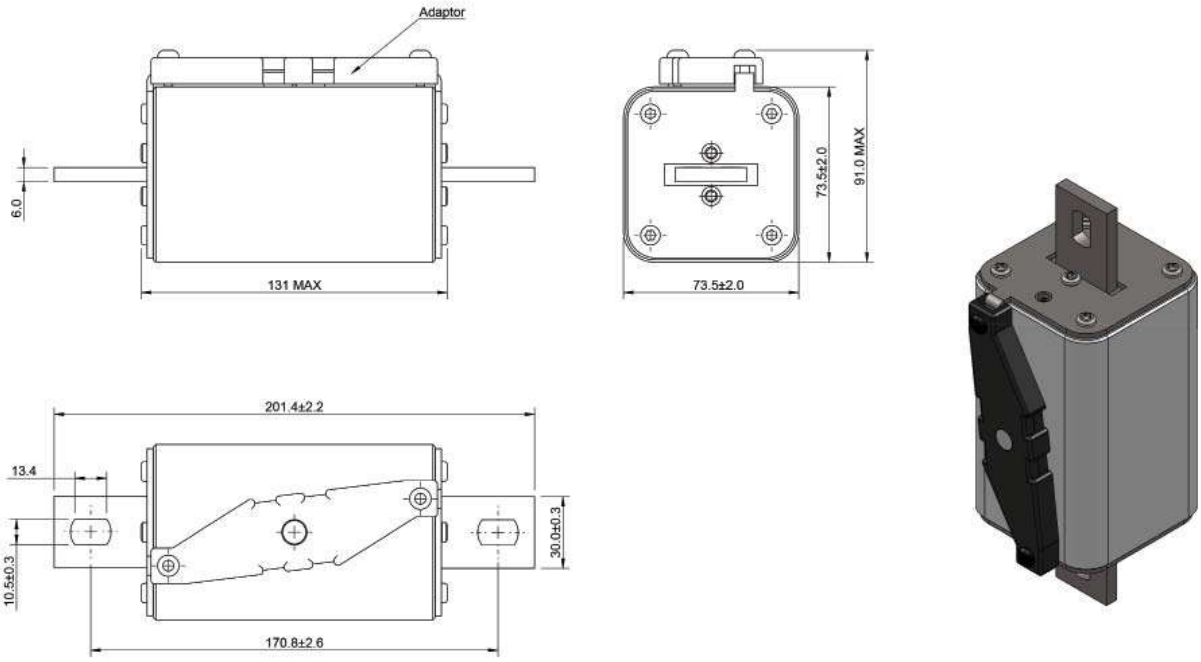

**Bolted - Size 2**

Data sheet: 720134

# XL Style, PV-XL

## 1000-1500 V d.c. (IEC/UL), 50 to 600 A

**Dimensions - mm**




**Bolted - Size 3**

Data sheet: 720134

# Fuse bases for North American, British and square body fuse links

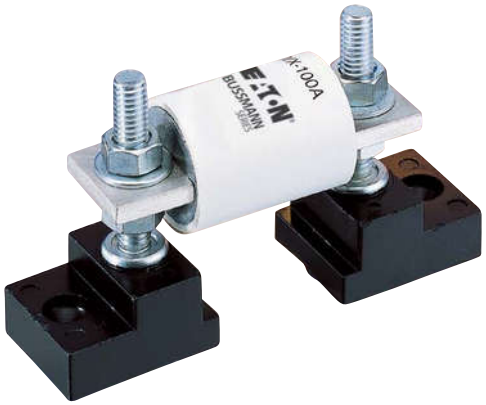
## Modular style

### Description

Eaton's Bussmann series offers a comprehensive line of fuse bases that provide the user with design and manufacturing flexibility. Two identical half bases make up a Bussmann series modular fuse base. These 'split' units can be panel mounted any distance apart to accomodate any length fuse.

### 1 - Stud type

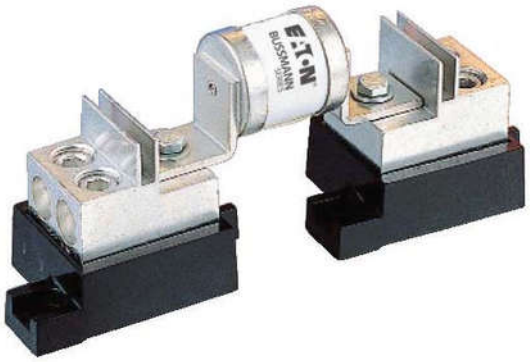
The simpler design is the C5268 modular fuse base. With this design, the fuse terminal and cable (with termination) are mounted on the same stud, minimizing labor needed for installation.
The stud type base is available in the configurations shown in the table below.




| Catalogue numbers | Max fuse amp rating | Stud height (in) | Stud dia. & threads |
|---|---|---|---|
| C5268-1 | 200 | 1 | 5/16"-18 |
| C5268-2 | 200 | 1.75 | 5/16"-18 |
| C5268-3 | 200 | 0.75 | 5/16"-18 |
| C5268-4 | 100 | 1 | 1/4"-20 |
| C5268-5 | 100 | 1.75 | 1/4"-20 |

### 2 - Connector Type

Eaton's Bussmann series also offers a modular style fuse base that utilises a tin-plated connector for wire termination and heat dissipation) and a plated-steel stud (for fuse mounting).
The connector type fuse base is available in the configurations shown below. Consult Eaton's Bussmann business for additional product details.




| Catalogue numbers | Max rated voltage | Max fuse Amp rating |
|---|---|---|
| 1BS101 | 600 | 100 |
| 1BS102 | 600 | 400 |
| 1BS103 | 600 | 400 |
| 1BS104 | 600 | 600 |

### 3 - BH

BH fuse blocks provide a wide range of mounting configurations for Bussmann High Speed semi-conductors fuse links. BH fuse blocks have a Short-Circuit rated current rating of any installed fuse up to 200 kA RMS Sym.



| Catalogue numbers | Max rated voltage | Max fuse Amp rating |
|---|---|---|
| BH-0 | 700 | 100 |
| BH-1 | 2500 | 400 |
| BH-2 | 5000 | 600 |
| BH-3 | 1250 | 700 |

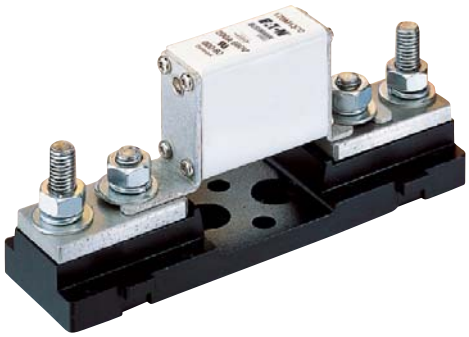
Data sheets: 1200 (BH-0), 1201 (BH-1), 1202 (BH-2), 1203 (BH-3), 1206 (1BS101), 1207 (1BS102), 1208 (1BS103), 1209 (1BS104)

# Fuse bases for square body fuse links

## Fixed center fuse bases for DIN 43653 fuse links

### Description

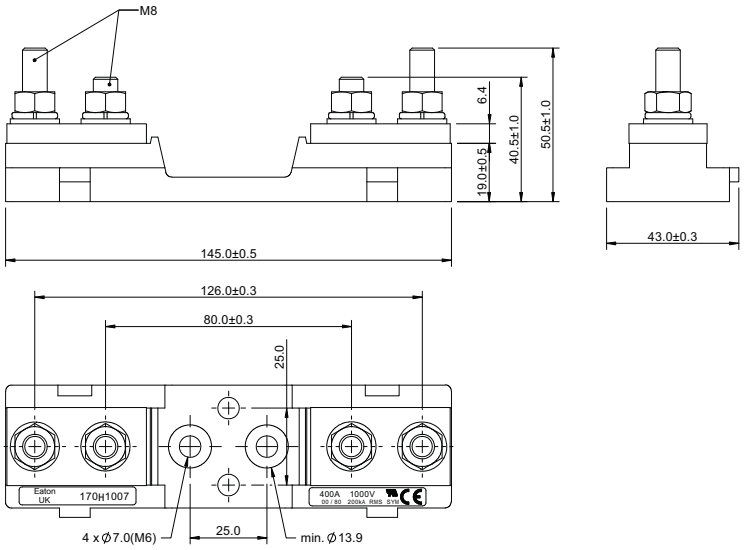
Fuse bases (blocks) to be used with DIN 43653 square body fuse links with centre distances of 80 and 110mm. Available for sizes 000, 00, 1*, 1, 2 and 3.

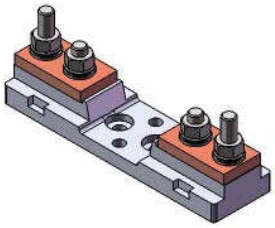


### Sizes 000 to 00 Fuse bases

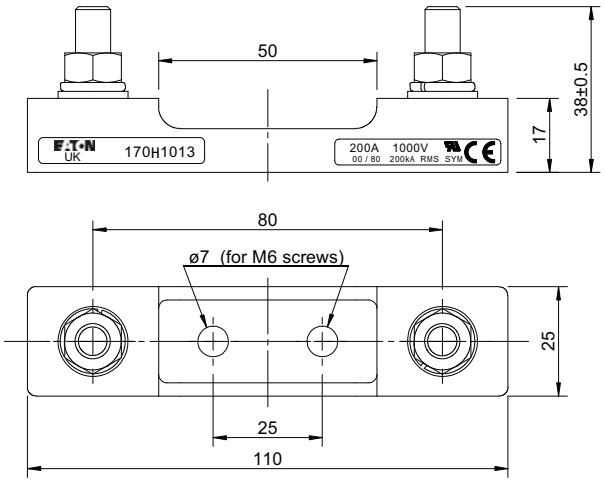
| Catalogue numbers | Max rated voltage (Volts) | Max fuse Amp rating (Amps) | Centre distance (mm) | Fuse sizes |
|---|---|---|---|---|
| 170H1007 | 1000 | 400 | 80 | 00, 000 |
| 170H1013 | 690 | 200 | 80 | 0000, 000 |

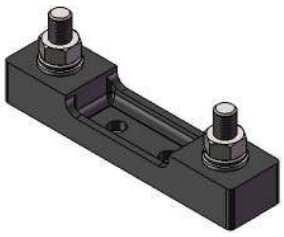
### Dimensions - mm



**170H1007**



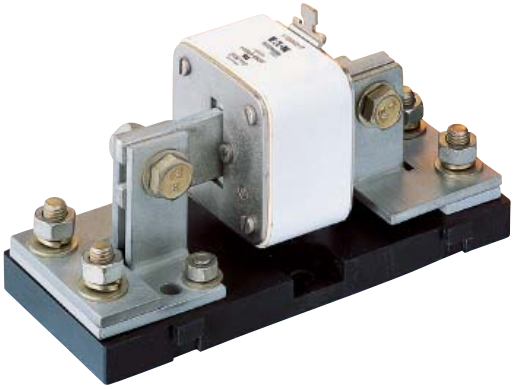
**170H1013**

# Fuse bases for square body fuse links

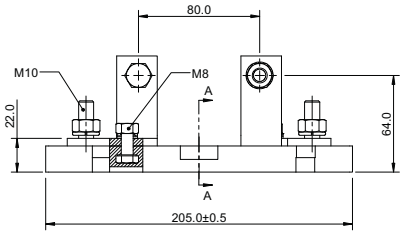
## Fixed center fuse bases for DIN 43653 fuse links

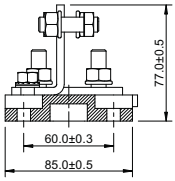
**Sizes 1* to 3**

| Catalogue numbers | Max rated voltage (Volts) | Max fuse Amp rating (Amps) | Centre distance (mm) |
|---|---|---|---|
| 170H3003 | 1000 | 630 | 80 |
| 170H3004 | 1000 | 1250 | 80 |
| 170H3005 | 1400 | 630 | 110 |
| 170H3006 | 1400 | 1250 | 110 |

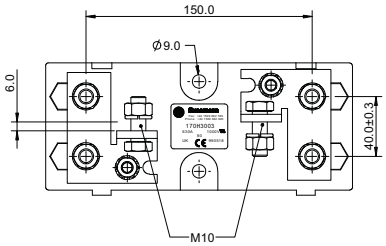


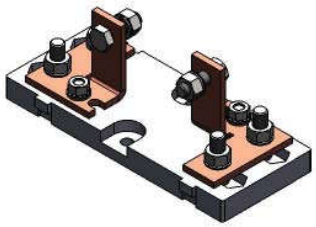
**Dimensions - mm**



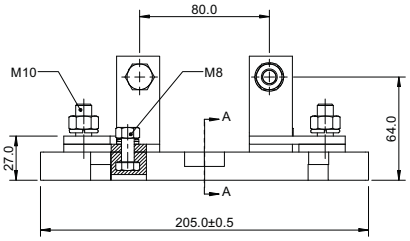



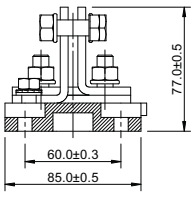

SECTION A-A



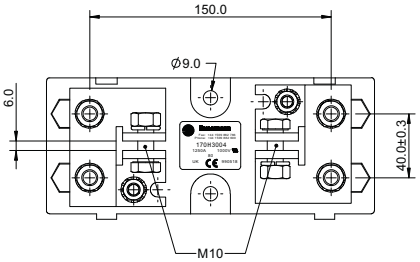



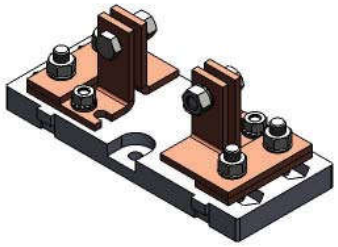
**170H3003**




SECTION A-A



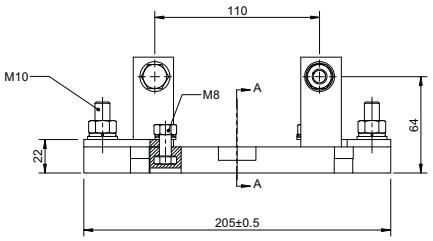



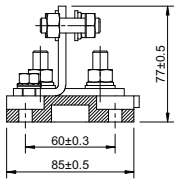
**170H3004**

# Fuse bases for square body fuse links

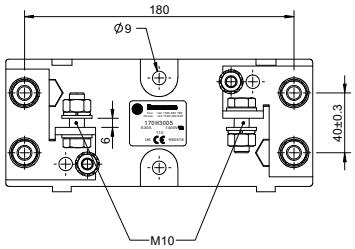
## Fixed center fuse bases for DIN 43653 fuse links

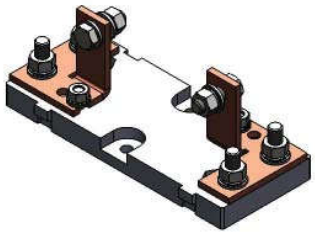
**Dimensions - mm**



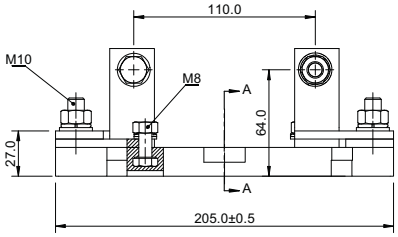



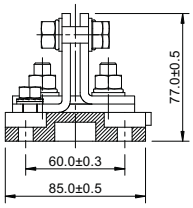

SECTION A-A



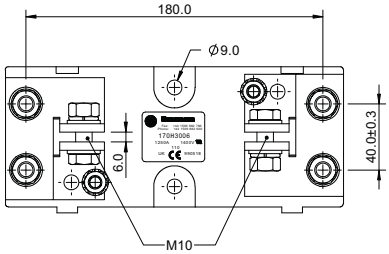



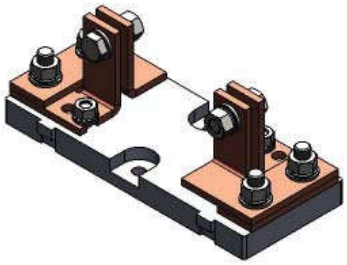
**170H3005**




SECTION A-A



**170H3006**

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

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

# NH fuse bases for NH style photovoltaic fuse links

## 1500 V d.c. (IEC), 1000 V d.c. (UL/CSA)

## 250 to 630 A, sizes 1 to 3



### Description

Sizes 1 to 3 NH Fuse bases specifically designed for use with the Bussmann series range of NH PV (Photovoltaic) fuse links.

### Technical data

Rated voltage:

- 1500 V d.c. (IEC)
- 1000 V d.c. (UL/CSA)

Rated current:

- 250 A (SD1)
- 400 A (SD2)
- 630 A (SD3)

Fuse base size: 1 to 3

Compatible fuse links: PV-(amps)ANH(size), see pages 111-116

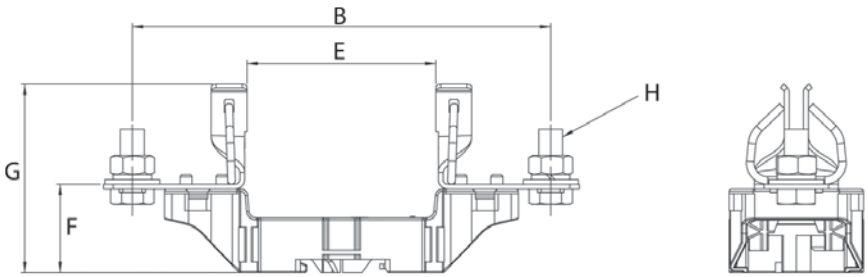
### Standards / Agency information

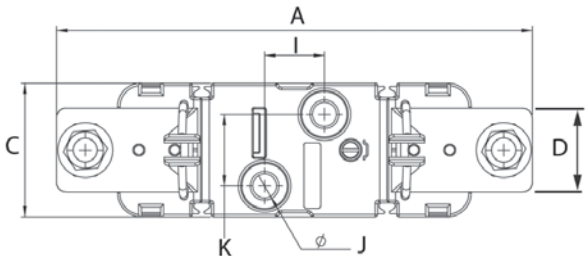
IEC 60269-1, UL Listed - UL File #E348242, CSA file #47235

### Accessories:

Microswitches - 170H0236 or 170H0238, BVL50
IP20 Finger-Safe Protection Kit - TD1-IP20, TD2-IP20, TD3-IP20.

### Dimensions - mm




**1-pole, Sizes 1, 2 and 3**

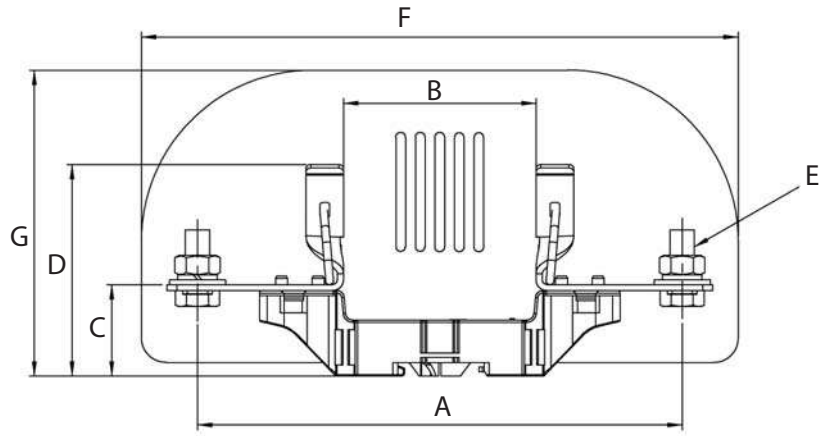
| Catalogue numbers | Poles/Type | A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SD1-D-PV | 1-pole | 199 | 175 | 56 | 35 | 79 | 37 | 78 | M10x25 | 25 | 10 | 30 |
| SD2-D-PV | 1 pole | 224 | 199 | 56 | 35 | 79 | 37.5 | 86 | M10x25 | 25 | 10 | 30 |
| SD3-D-PV | 1-pole | 239 | 209 | 56 | 36 | 82 | 37.5 | 88 | M12x30 | 25 | 10 | 30 |

Data sheet: 720149

# 1500 V d.c. (IEC), 1000 V d.c. (UL/CSA)

## 250 to 630 A, sizes 1 to 3

**Dimensions - mm**




**With phase barriers 1-pole sizes 1, 2 and 3**

| Catalogue numbers | Poles/Type | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|---|
| SD1-D-PV | 1-pole | 175 | 79 | 37 | 78 | M10x25 | 245 | 125.5 |
| SD2-D-PV | 1 pole | 199 | 79 | 37.5 | 86 | M10x25 | 245 | 125.5 |
| SD3-D-PV | 1-pole | 209 | 82 | 37.5 | 88 | M12x30 | 260 | 137.5 |

# XL fuse bases for XL style photovoltaic fuse links

## 1500 V d.c. (IEC), 250 to 630 A, sizes 1 to 3



**Description**

Sizes 1 to 3 XL Fuse bases specifically designed for use with the Bussmann series range of XL PV (Photovoltaic) fuse links.

**Technical data**

Rated voltage: 1500 V d.c. (IEC)

Rated current: 250 to 630 A

Fuse base size: 1 to 3

Compatible fuse links: PV XL see pages 119-124

**Standards / Agency information**

IEC 60269-1

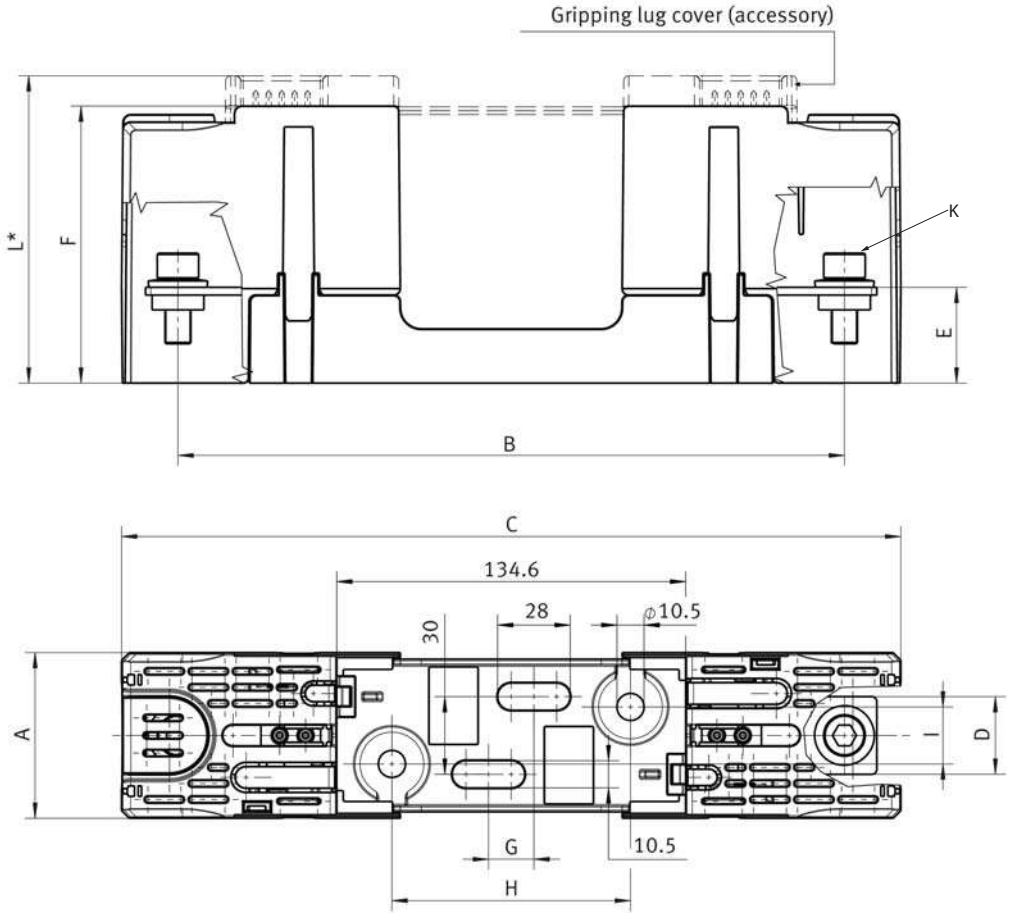
**Accessories:**

Fuse extraction handle available in sizes 01XL to 3L

Part numbers: FEH1500

Unit packing: 1

**Dimensions - mm**




| Catalogue numbers | XL Style fuse link size | Maximum fuse rated current | Power acceptance | A | B | C | D | E | F | G | H | I | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB1XL-S | 01XL, 1XL | 250 | 56W | 59 | 257 | 300.5 | 30 | 37 | 102.5 | 17.5 | 92 | 22 | M10x25 | 111 |
| SB2XL-S | 2XL | 400 | 70W | 64 | 257 | 300.5 | 30 | 37 | 107 | 17.5 | 92 | 22 | M10x25 | 119 |
| SB3L-S | 3L | 630 | 96W | 80 | 270 | 328 | 40 | 38 | 122.5 | 25 | 96 | 26 | M12x30 | 134.5 |

Data sheet: 10066

# Fuse bases for ferrule fuse links

## BMM

## 600 V a.c. (UL), 30 A




### Specifications

**Description**

Modular, open-style fuse blocks for cylindrical industrial fuse links. Versatile 35mm DIN rail or screw-to-panel mounting.

**Technical data**

Rated voltage: 600 V a.c. (UL)

Rated current:

- 30 A (box lug terminal)
- 20 A (with quick connector terminal)

Compatible fuse links: FWA-A10F, FWC-A10F, PVM and PV-A10F

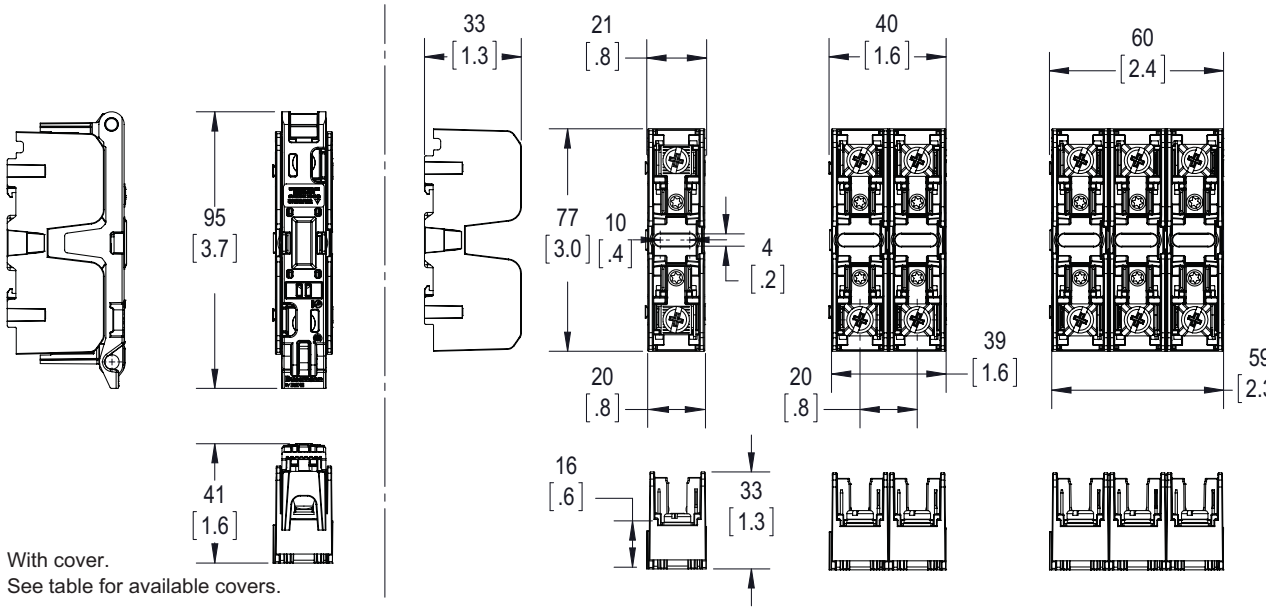
**Standards / Agency information**

- UL Recognised E14853-IZLT2
- CSA Certified 47235-6225-01
- CE
- RoHS compliant
- Conflict mineral free
- Reach declaration available upon request

| Terminal type | | | | |
|---|---|---|---|---|
| Screw w/quick connect[1] | Pressure plate w/quick connect[1] | Box lug | Fuse link size | Number of poles |
| BMM603-1SQ | BMM603-1PQ | BMM603-1C | 10 x 38 (13/32" x 1-1/2") | 1 |
| BMM603-2SQ | BMM603-2PQ | BMM603-2C | 10 x 38 (13/32" x 1-1/2") | 2 |
| BMM603-3SQ | BMM603-3PQ | BMM603-3C | 10 x 38 (13/32" x 1-1/2") | 3 |

[1] Quick connect terminals rated for 20 A maximum.

**Dimensions - mm (in)**



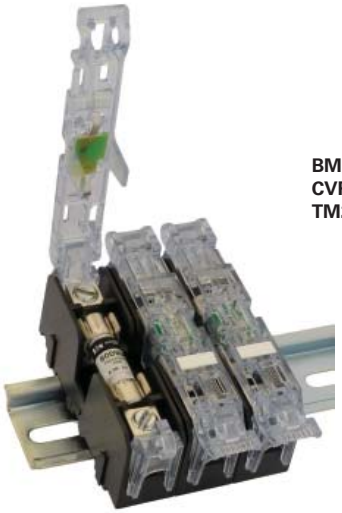

Data sheet: 1104

# BMM

## 600 V a.c. (UL), 30 A

### Recommended covers

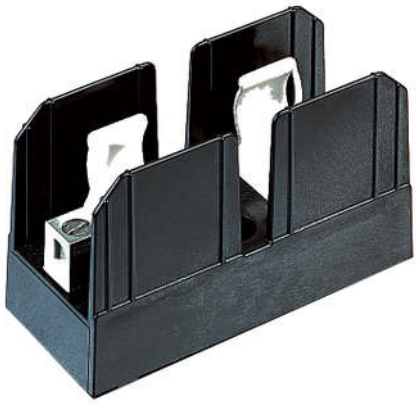
| Terminal type | Cover part numbers | |
|---|---|---|
| | Indicating | Non indicating |
| Box lug (CR) | CVRI-CCM | CVR-CCM |
| Screw/quick connect (SQ) | CVRI-CCM-QC | CVR-CCM-QC |
| Pressure plate/quick connect (PQ) | CVRI-CCM-QC | CVR-CCM-QC |



**BMM603-3C with CVRI-CCM covers and TM27CB marker labels**

# JM70100

## 700 V a.c. (UL), 100 A



### Specifications

#### Description

Modular, open-style fuse blocks for cylindrical industrial fuse links.
Versatile 35mm DIN rail or screw-to-panel mounting.

#### Technical data

Rated voltage: 700 V a.c. (UL)

Rated current: 100 A

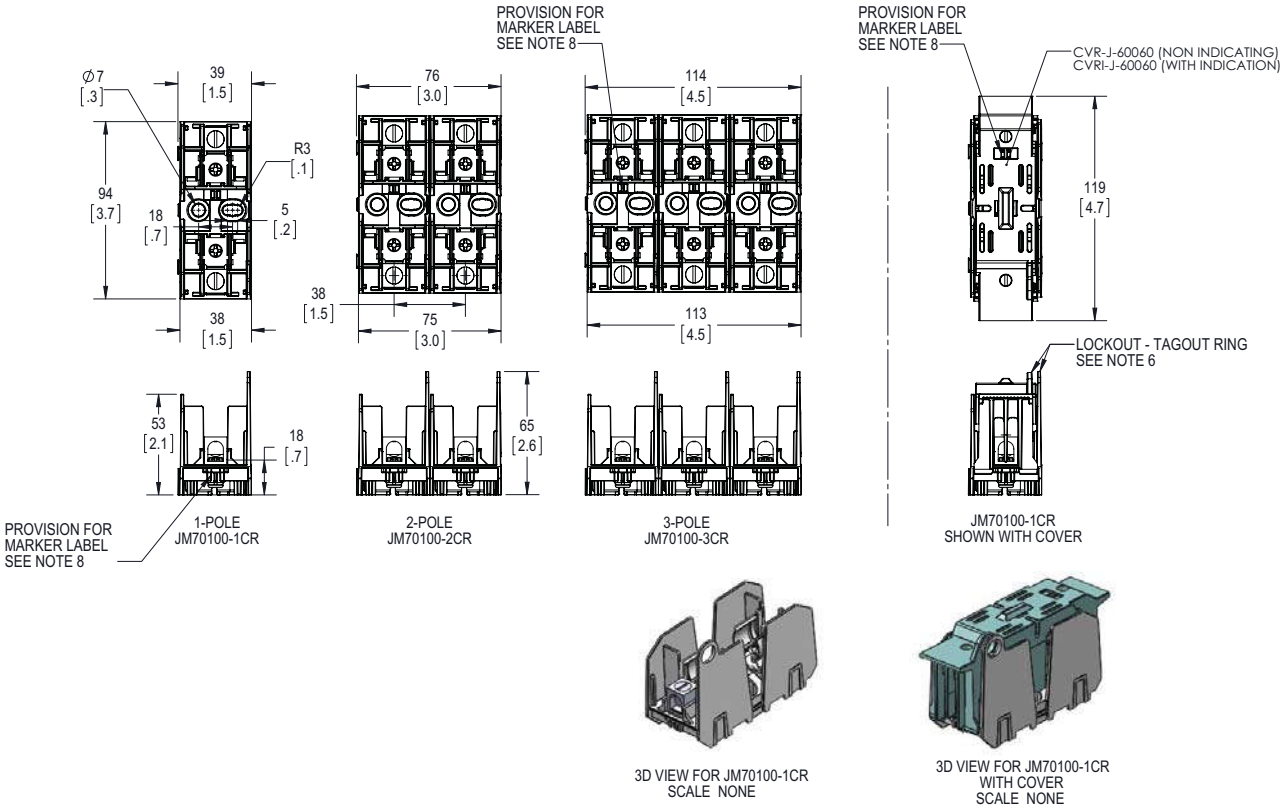
Compatible fuse links: FWP-A22F(I) see page 29

#### Standards / Agency information

UL Recognised, Guide IZTL2, File 14853.

| Terminal type | | |
|---|---|---|
| Box lug with retaining clip | Fuse link size | Number of poles |
| JM70100-1CR | 22 x 58 mm | 1 |
| JM70100-2CR | | 2 |
| JM70100-3CR | | 3 |

#### Dimensions - mm (in)




Data sheet: 1211

# Modular knifeblade fuse blocks

## JM60

## 600 V a.c. (UL), 70 to 600 A



### Specifications

**Description**

Industry's first modular fuse block simplifies design and enhances safety

**Technical data**

Rated voltage: 600V a.c. (UL)

Rated current: see table below

Compatible fuse links: DFJ (see page 75)

**Standards / Agency information**

Blocks

- UL - Listed cULus E14853 - IZLT & IZLT7
- CSA - Certified 47235-6225-01

Covers

- UL - Listed UL E58836 - JDVS2
- CSA - Certified 47235-6225-01

| Catalogue numbers | | | Rated voltage | Rated current (Amps) | Number of poles | Compatible Bussmann series fuse links |
|---|---|---|---|---|---|---|
| Class J Block | Covers without indication* | Covers with indication* | | | | |
| JM60100-1CR | CVR-J-60100 | CVRI-J-60100 | 600 V a.c. | 70-100 | 1 | DFJ |
| JM60100-2CR | | | | | 2 | |
| JM60100-3CR | | | | | 3 | |
| JM60200-1CR | CVR-J-60200 | CVRI-J-60200 | 600 V a.c. | 110-200 | 1 | |
| JM60200-2CR | | | | | 2 | |
| JM60200-3CR | | | | | 3 | |
| JM60400-1CR | CVR-J-60400-M | CVRI-J-60400-M | 600 V a.c. | 225-400 | 1 | |
| JM60400-2CR | | | | | 2 | |
| JM60400-3CR | | | | | 3 | |
| JM60600-1CR | CVR-J-60600 | CVRI-J-60600 | 600 V a.c. | 450-600 | 1 | |
| JM60600-2CR | | | | | 2 | |
| JM60600-3CR | | | | | 3 | |

* Covers sold separately. Blown fuse indication requires 90 volts minimum and closed circuit to operate.

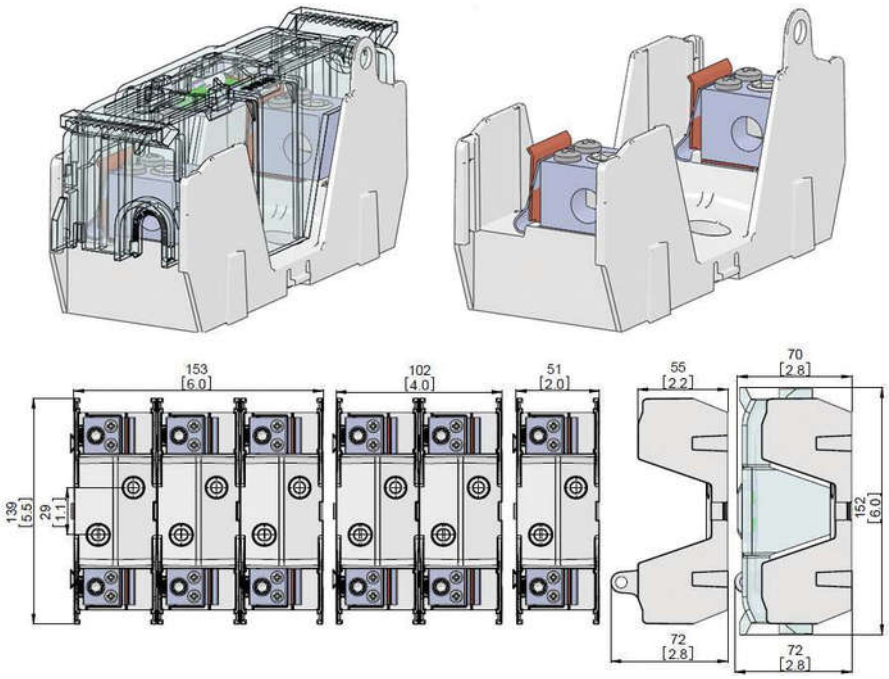
**Wire range and torque values**

| Catalogue numbers | Wire range (solid and stranded) | Wire range (fine stranded) | Torque N•m (Lb-in) |
|---|---|---|---|
| Class J Block | | | |
| JM60100-1CR | 1/0-3 AWG; (2) Cu 4-6 AWG<br>4-6 AWG; (2) Cu 8 AWG<br>8 AWG; (2) Cu 10-14 AWG<br>Cu 10-14 AWG; Al 10-12 AWG | 1-3 AWG<br>4-6 AWG<br>8 AWG | 6.2 (55)<br>5.6 (50)<br>5.1 (45)<br>4.5 (40)<br>4.0 (35) |
| JM60100-2CR | | | |
| JM60100-3CR | | | |
| JM60200-1CR | 250 MCM -1 AWG<br>2-6 AWG; (2) Cu 2-6 AWG | 3/0-1 AWG<br>2-6 AWG | 42 (375)<br>31 (275) |
| JM60200-2CR | | | |
| JM60200-3CR | | | |
| JM60400-1CR | 600kcmil<br>500kcmil-4 AWG<br>(2) Cu 3/0 - 4 AWG<br>(2) Al 3/0 - 4 AWG | N/A | 57 (500)<br>51 (450)<br>57 (500)<br>34 (300) |
| JM60400-2CR | | | |
| JM60400-3CR | | | |
| JM60600-1CR | (2) 500kcmil-4 AWG | N/A | 51 (450) |
| JM60600-2CR | | | |

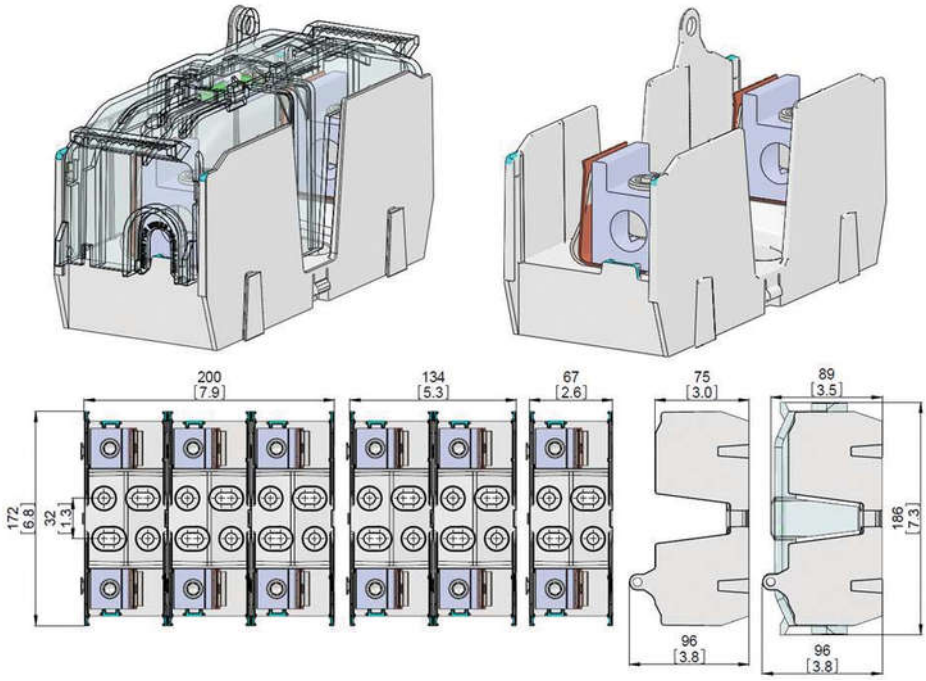
# JM60

## 600 V a.c. (UL), 70 to 600 A

**Dimensions - mm (in)**




**100 A**

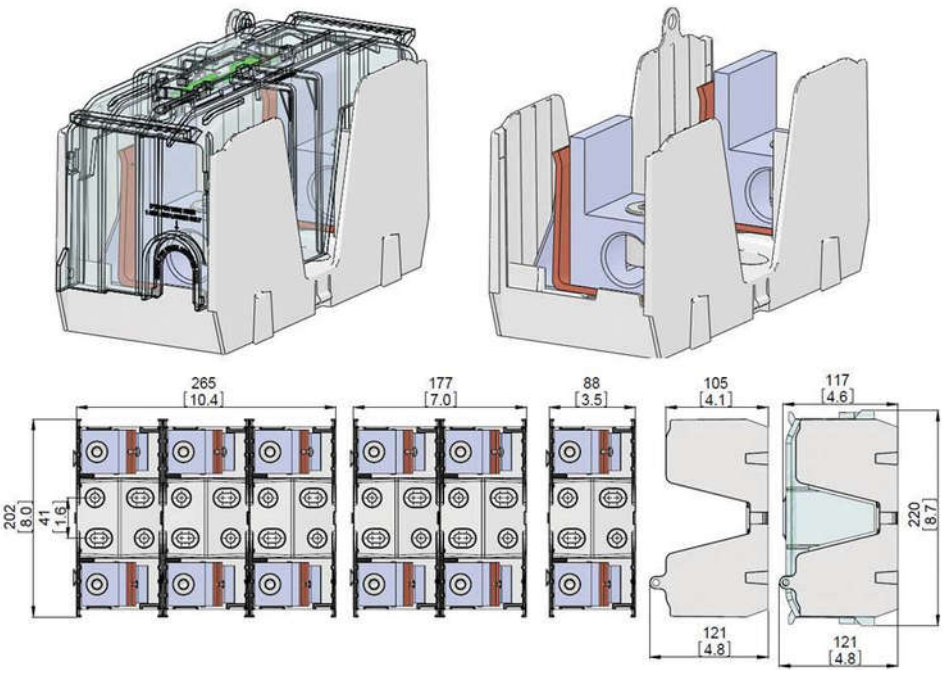



**200 A**

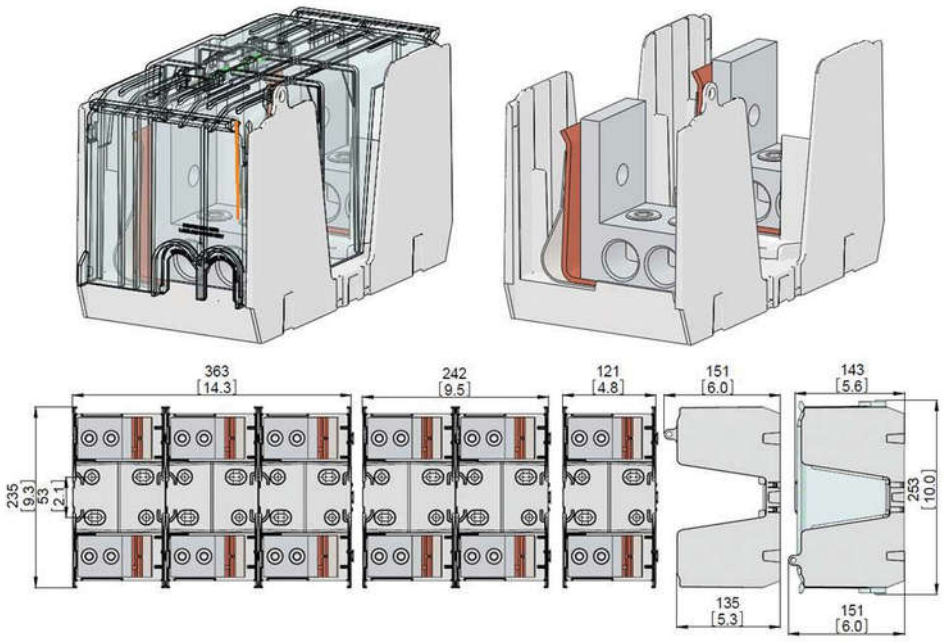
# JM60

## 600 V a.c. (UL), 70 to 600 A

**Dimensions - mm (in)**




**400 A**




**600 A**

# Modular fuse holders

## 10 x 38 mm, CH




### Specifications

**Description**

Compact DIN-Rail mounting fuse holders for 10 x 38 mm cylindrical fuse links

**Technical data**

Rated voltage & Rated current: see tables below

**Compatible fuse links**

See table below

**Standards / Agency information**

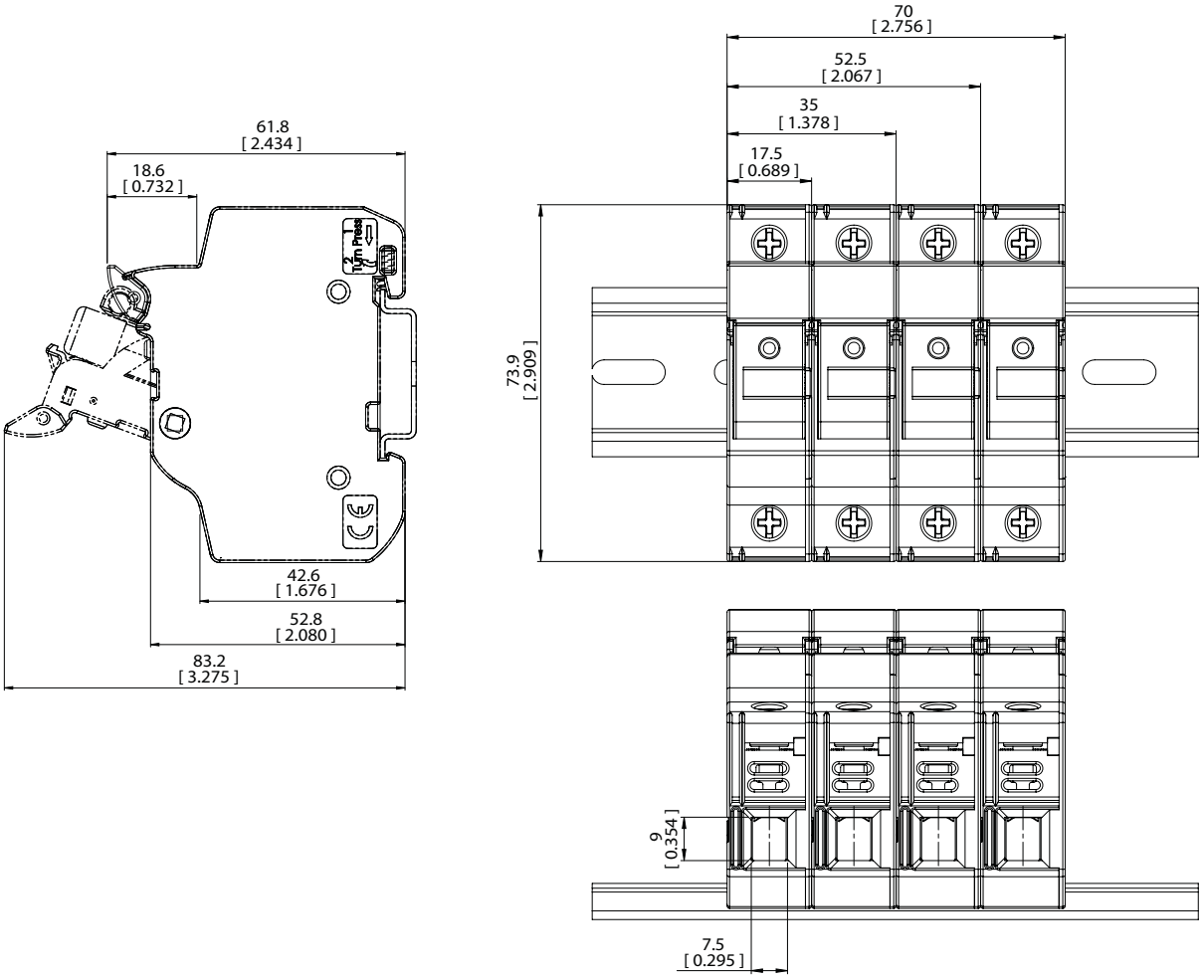
see table below

| Size | Catalogue numbers | | Rated voltage & rated current | Agency markings | Number of poles | Terminal rating | Rated breaking withstand capactiy | Compatible Bussmann series fuse links |
|---|---|---|---|---|---|---|---|---|
| | With indicator | Without indicator | | | | | | |
| CHM 10x38 and Midget | CHM1DIU | CHM1DU | IEC 690 V a.c./32A UL 600 V a.c./30 A; | IEC 60269-2 UR; CSA; CCC | 1 | IEC: 1 to 25mm² 70°C PVC/Copper Cable Solid, Stranded, Fine Stranded, Spade Lug, Comb Bus Bar; Single and Dual | IEC 120 kA rms sym UL 200 kA rms sym CCC 100 kA rms sym | IEC: C10 UL: FNQ, KLM, FNM, KTK, BAF, FWA, PVM, AGU, BAN, 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 | | | |
| | CHM1DI-48U | N/A | IEC 48V d.c./32A UL 48V d.c./30 A; | IEC 60269-2; UR; CSA; CCC | 1 | | | |
| | N/A | CHM1DNXU | IEC 690 V a.c./32A | IEC 60269-2 | 1 neutral | | N/A | N/A |
| CHPV Photovoltaic | CHPV1IU | CHPV1U | IEC 1000 V d.c./32A UL 1000 V d.c./30 A; | IEC 60269-1 UR; CSA; CCC UL4248-18 | 1 | | 33kA | Solar PV , PVM, PV-xxA10F |
| | CHPV2IU | CHPV2U | | | 2 | | | |
| CHCC Class CC | CHCC1DIU | CHCC1DU | UL 600 V a.c./30 A 600 V d.c./30 A | UL; CSA; CCC | 1 | Cable 75°C and 90°C Cu cable | 200 kA rms sym | LP-CC, FNQ-R, KTK-R |
| | CHCC2DIU | CHCC2DU | | | 2 | | | |
| | CHCC3DIU | CHCC3DU | | | 3 | | | |
| | N/A | CHCC1DI-48U | UL 48V d.c./30 A | | 1 | | | |

Data sheet: 720147

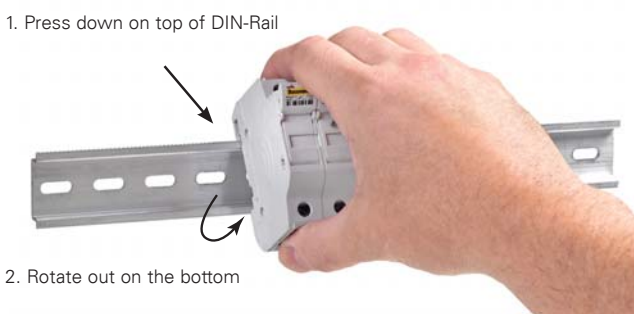
# 10 x 38 mm, CH

**Dimensions - mm (in)**




**Removing Instructions**

1. Press down on top of DIN-Rail



2. Rotate out on the bottom

Data sheet: 720147

# 14 x 51 mm, CH14

# 690 V a.c. / 750 and 1500V d.c., 50 A



## Specifications

### Description

Compact DIN-Rail mount fuse holders for 14 x 51 mm cylindrical fuse links. Available in different versions with neutral and microswitch.

### Technical data

Rated voltage & Rated current: see table below

### Compatible fuse links

- C14G and C14M14 x 51 mm gG and gM cylindrical fuse links
- FW Ferrule
  - FWH-A14F see page 26
  - FWX-A14F see page 24
  - FWP-A14F see page 28 (please consult Eaton's Bussmann business application engineers if you wish to use a FWP fuse link with a striker option)
- PV-A14F see page 109

### Standards / Agency information

IEC 60269-1 and 60269-2

| Type | Catalogue numbers | | Description | Rated voltage & rated current | Agency markings | Terminal rating | Rated breaking withstand capactiy | Compatible Bussmann series fuse links |
|---|---|---|---|---|---|---|---|---|
| | Without indicator | With indicator | | | | | | |
| CH14 | CH141DNXU | - | Neutral only | 690 V a.c.<br>750 V d.c.<br><br>50 A | IEC 60269-1 and 2 | Cable size: 2.5-50 $mm^2$<br><br>Terminal torque: 3 Nm maximum<br><br>Mounting 35 mm DIN-Rail or 2 x M4 panel mounting screws | 120 kA a.c. | C14G and C14M<br><br>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 micro-switch | | | | | |
| CHPV Photovoltaic | CHPV141U | CHPV141IU | 1 pole | 1500 V d.c.<br>50 A | IEC 60269-1 and 2 | | 10 kA d.c. | PV-A14F |
| | CHPV142U | CHPV142IU | 2 pole | | | | | |

[1] Maximum allowed continuous current applies. Please refer to data sheet for details.
[2] Please contact Eaton's Bussmann business application engineers if you wish to use a FWP fuse link with a striker option.

### Accessories

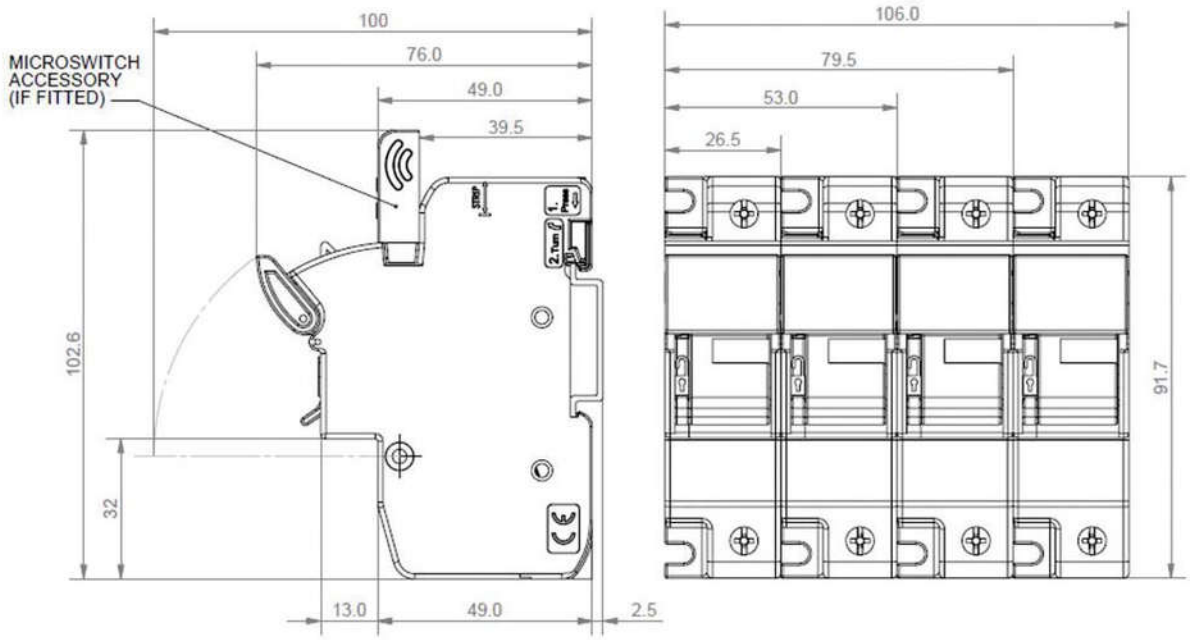
| Catalogue numbers | Description | Unit packing |
|---|---|---|
| AL-D | Multi-pole ganging clips, one kit will gang up to 4-poles together | 12 |
| CH14-P | Multi-pole handle pins, one kit will gang up to 12 handles together | 12 |
| CH14-L | Lockout padlock support, it will accept up to 5mm diameter padlock shank | 5 |
| CH14-IP20 | IP20 protection accessory, provides IP20 protection to terminals with 10mm2 or less cable | 12 |
| CH14-MS1 | 1-pole microswitch accessory, provides detection of a blown fuse link | 5 |
| CH14-MS3 | 3-pole microswitch accessory, provides detection of a blown fuse link | 3 |

Data sheet: 10080

## 14 x 51 mm, CH14

## 690 V a.c. / 750 and 1500V d.c., 50 A

**Dimensions - mm**




Data sheet: 10080

# 22 x 58 mm, CH22

## 690 V a.c. / 1500V d.c., 125 A



### Specifications

**Description**

Compact DIN-Rail mount fuse holders for 22 x 58 mm cylindrical fuse links. Available in different versions with neutral and microswitch.

**Technical data**

Rated voltage & Rated current: see table below

**Compatible fuse links**

- C22G and C22M 22 x 58 mm gG and gM cylindrical fuse links
- FWP-A22F Ferrule see page 29 (please consult Eaton's Bussmann business application engineers for derating information buletechnical@eaton.com

**Standards / Agency information**

IEC 60269-1 and 60269-2

| Size | Catalogue numbers | | Description | Rated voltage & rated current | Agency markings | Terminal rating | Rated breaking withstand capactiy | Compatible Bussmann series fuse links |
|---|---|---|---|---|---|---|---|---|
| | Without indicator | With indicator | | | | | | |
| 22 x 58 mm | CH221DNXU | - | Neutral holder | 690 V a.c.<br>1000 V d.c.<br><br>125 A | IEC 60269-1 and 2 | Cable size: 4 - 50 $mm^2$<br><br>Terminal torque: 4 Nm maximum<br><br>Mounting 35 mm DIN-Rail or 2 x M4 panel mounting screws | 120 kA a.c.<br><br>50 kA d.c. | 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 contact Eaton's Bussmann business application engineers if you wish to use a FWP fuse link with a striker option.

**Accessories**

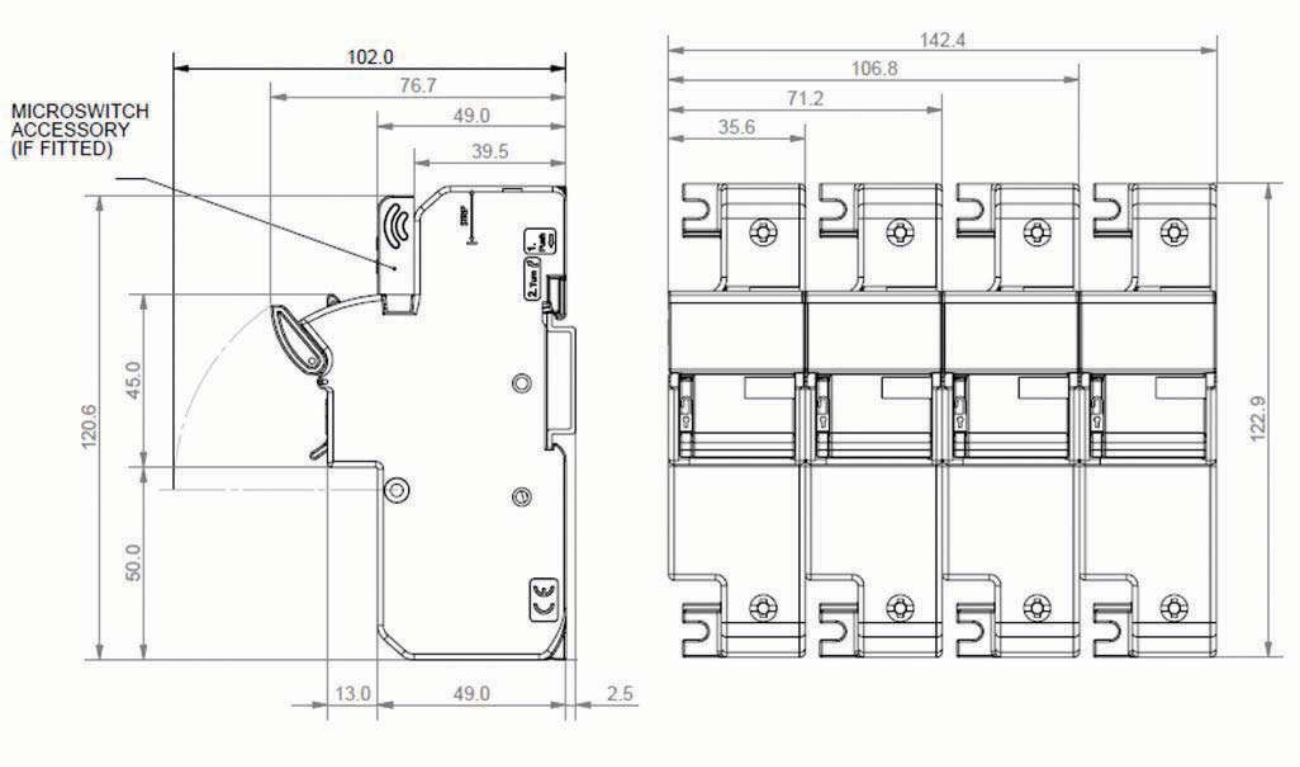
| Catalogue numbers | Description | Unit packing |
|---|---|---|
| AL-D | Multi-pole ganging clips, one kit will gang up to 4-poles together | 12 |
| CH14-P | Multi-pole handle pins, one kit will gang up to 12 handles together | 12 |
| CH22-L | Lockout padlock support, it will accept up to 5mm diameter padlock shank | 5 |
| CH22-IP20 | IP20 protection accessory, provides IP20 protection to terminals with 10mm2 or less cable | 12 |
| CH22-MS1 | 1-pole microswitch accessory, for blown fuse link monitoring | 5 |
| CH22-MS3 | 3-pole microswitch accessory, for blown fuse link monitoring | 3 |

Data sheet: 10115

## 22 x 58 mm, CH22

## 690 V a.c. / 1500V d.c., 125 A

**Dimensions - mm**

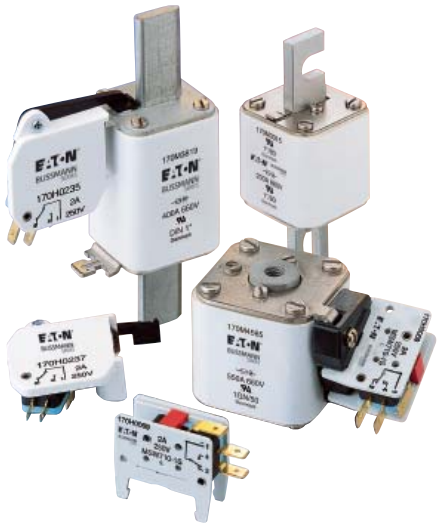



Data sheet: 10115

# Microswitches for square body fuse links

## Indicator systems

High Speed square body fuse links are available with three different indicators.



**1 - Visual Indicator**

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

**2 - Type T Indicator**

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

**3 - Type K Indicator**

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

## Microswitches




**Specifications**

High Speed square body fuse links with either Type T indicator or Type K indicator can be equiped with a microswitch. For remote electrical indication of fuse link operations. All microswitches have one normally open and one normally closed contact.

**Technical data**

Rated voltage: 10-250 V a.c.

Rated current: 30mA-2A

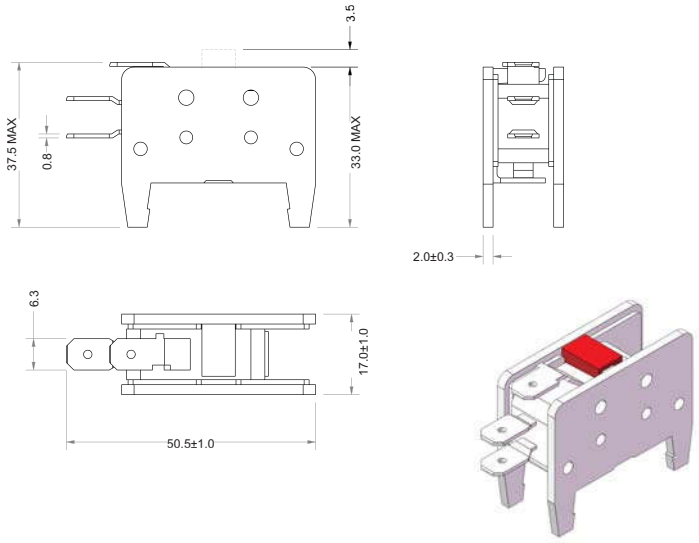
| Fuse link body size | DIN 43653 | | DIN 43620 | | French style | | Flush end | | US Style | Terminal size | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Type T | Type K | aR | gR and dual indication | Type T | Type K | Type T | Type K | Type K | 6.3 x 0.8mm lugs | 2.8 x 0.5mm lugs |
| 000 | 170H0236 | | 170H0236 | 170H0236 | | | | | | X | |
| | 170H0238 | | 170H0238 | 170H0238 | | | | | | | X |
| 00 | 170H0235 | | 170H0236 | 170H0236 | | | 170H0235 | | | X | |
| | 170H0237 | | 170H0238 | 170H0238 | | | 170H0237 | | | | X |
| 1* | 170H0235 | 170H0069 | 170H0235 | | 170H0236 | 170H0069 | | 170H0069 | 170H0069 | X | |
| | 170H0237 | | 170H0237 | | 170H0238 | | | | | | X |
| 1 | 170H0235 | 170H0069 | 170H0235[1] | 170H0236 | 170H0236 | 170H0069 | | 170H0069 | 170H0069 | X | |
| | 170H0237 | | 170H0237[1] | 170H0238 | 170H0238 | | | | | | X |
| 2 | 170H0235 | 170H0069 | 170H0235 | 170H0236 | 170H0236 | 170H0069 | | 170H0069 | 170H0069 | X | |
| | 170H0237 | | 170H0237 | 170H0238 | 170H0238 | | | | | | X |
| 3 | 170H0235 | 170H0069 | 170H0236 | 170H0236 | 170H0236 | 170H0069 | | 170H0069 | 170H0069 | X | |
| | 170H0237 | | 170H0238 | 170H0238 | 170H0238 | | | | | | X |
| 4 | | | | | | | | 170H0069 | | X | |
| 23 | | | | | | | | 170H0069 | | X | |
| 24 | | | | | | | | 170H0069 | | X | |

For special microswitches, double microswitches, DC rating of the microswitches, lower/higher signal levels and for insulation voltages please contact Eaton's Bussmann business: bulehighspeedtechnical@eaton.com.

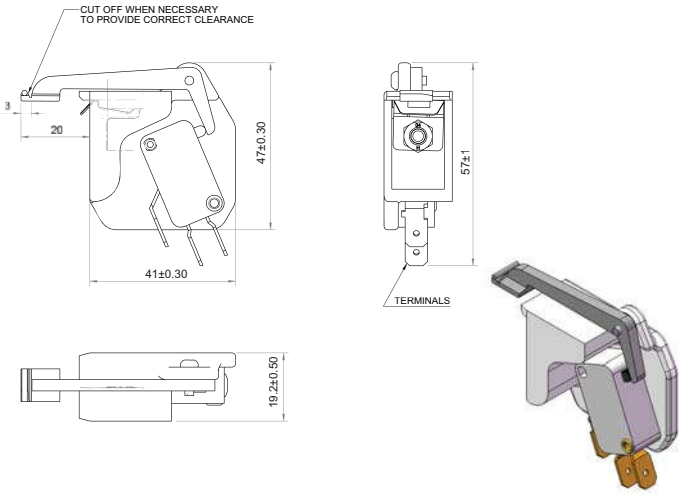
[1] DIN2* (55x55), if DIN2 then use microswitch 170H0236, 170H0238.

# Indicator systems

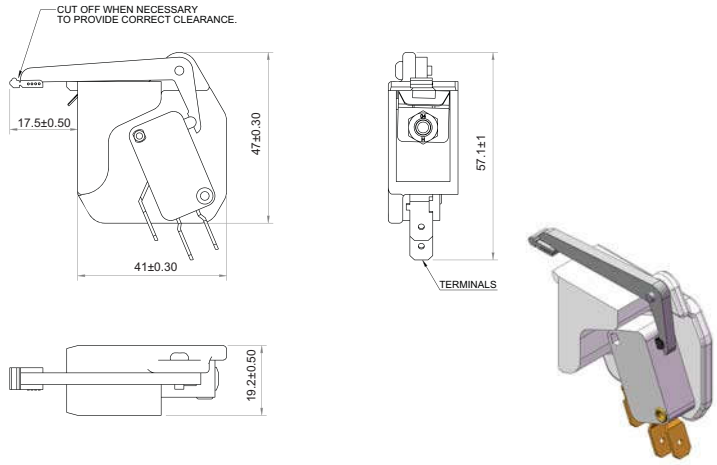
## Dimensions - mm




**170H0069**




**170H0235/170H0237 For bent tags**




**170H0236/170H0238 for straight tags**

# Microswitches for British Standard BS88-4 fuse links

## Trip Indicator / Microswitches

### Specifications

Trip-indicator fuse links are available for use in parallel with the main BS88-4 fuse links. They can either be attached to the associated fuse link or mounted separately in panel mounted fuse clips. A push-on adaptor and microswitch attachment is available for use with the trip indicator to give the facility of remote indication.

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

### Catalogue numbers

Trip indicator kit (indicator + clips)

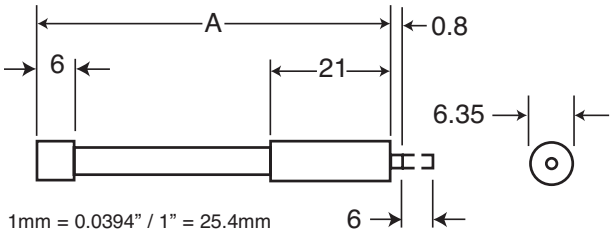
| Fuse type | Catalogue number |
|---|---|
| ET | EC-600 |
| EET | EC-600 |
| FE | EC-600 |
| FEE | EC-600 |
| LET | EC-250 |
| FM | MC-600 |
| FMM | MC-600 |
| LMT | MC-250 |
| LMMT | MC-250 |



Indicator Only

| Fuse type | Rated current (V a.c.) | 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 |

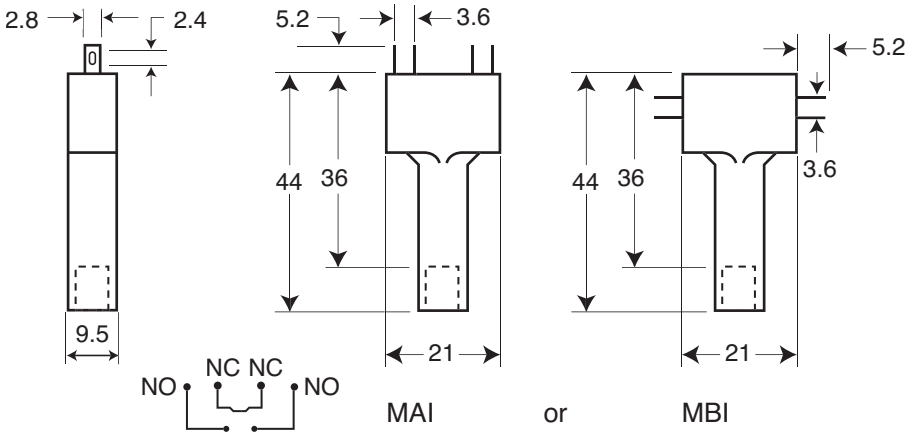
**Dimensions - mm**

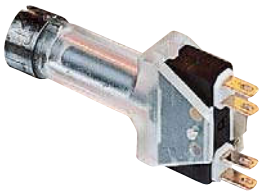





### Microswitch/Adaptor: MAI and MBI

**Dimensions - mm**



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# Notes

# Contact details

## Customer Satisfaction team

Eaton's Bussmann business Customer Satisfaction team is available to answer questions regarding Bussmann series products.

Calls can be made between:

Monday - Thursday 7.30 a.m. - 5.30 p.m. GMT

Friday 7.30 a.m. - 5.00 p.m. GMT

The Customer Satisfaction team can be reached via:

Phone: 00 44 (0) 1509 882 600

Fax: 00 44 (0) 1509 882 786

Email: bulesales@eaton.com

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- Simple to Use
- Real-Time Data.

## Online resources

Visit www.bussmann.com for the following resources:

- Product cross reference
- Product profiles
- Online catalogues for the latest United States and European catalogues.

## Application engineering

Application Engineering assistance is available to all customers. The Application Engineering team is staffed by university-qualified electrical engineers who are available with technical and application support.

Calls can be made between:

Monday - Thursday 8.30 a.m. - 4.30 p.m. GMT

Friday 8.30 a.m. - 4.00 p.m. GMT

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