Leadership in fusible circuit protection







At Eaton, we believe that power is a fundamental part of just about everything people do. That's why we're dedicated to helping our customers find new ways to manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. To improve people's lives, the communities where we live and work, and the planet our future generations depend upon. Because this is what really matters. And we're here to make sure it works.

To learn more go to: Eaton.com/whatmatters

We make what matters work.



Eaton is the leading source of fusible circuit protection solutions in the global market-place. Eaton's Bussmann series products are approved for use around the world and meet agency requirements and international standards: IEC, VDE, DIN,UL, CSA, BS and others.

The headquarters for Eaton's Bussmann series product line is located in Burton-on-the-Wolds, Leicestershire (UK) and is part of Eaton's Industrial Control and Protection EMEA division.

Eaton manufactures over 50,000 Bussmann series part numbers, covering extensive fusible circuit protection solutions for a wide range of applications: residential, industrial, motor protection, power conversion and distribution.

Eaton has been a leading exponent in the design, development and manufacture of fuse links and their associated accessories for more than 100 years and has supplied fuse links to more than 90 countries worldwide.

Eaton's team of specialist Engineers and Field Applications Engineers plays a leading role in international standardisation of fuse links offering comprehensive advice on selection and applications.

With a continual commitment to meet our customers' needs with innovative high quality ~products with ISO 9001 'approval systems', Eaton is the supplier of choice for circuit protection solutions.

Table of contents

| North American fuse links | | | | 6 |
|---|---|---|--|---|
| | 130 V a.c. / V d.c. | 1000 A to 4000 A | FWA | 6 |
| | 150 V a.c / V d.c | 70 A to 1000 A | FWA | 9 |
| | 250 V a.c. / V d.c. | 35 A to 2500 A | FWX | 13 |
| | 500 V a.c. / V d.c. (UL) | 50 A to 400 A | CHSF | 16 |
| | 500 V a.c. / V d.c. | 35 A to 1600 A | FWH | 20 |
| | 600 V a.c. | 1 A to 1000 A | KAC | 23 |
| | 600 V a.c. | 35 A to 800 A | KBC | 24 |
| | 700 V a.c. / V d.c. | 5 A to 1200 A | FWP | 25 |
| | 1000 V a.c. / 800 V d.c. | 35 A to 2000 A | FWJ | 31 |
| | 1000 V d.c. | 70 A to 600 A | FWE | 34 |
| British Standard BS88 fuse links | | | | 40 |
| | 240-250-280 V a.c. / 150 V d.c. | 6 A to 180 A | LCT, LET | 40 |
| | 240-250 V a.c. / 150 V d.c. | 160 to 900 A | LMT, LMMT | 44 |
| | 690-700 V a.c / 500 V d.c. | 6 A to 200 A | CT, ET, FE, EET and FEE | 47 |
| | 690-700 V a.c. / 350-450-500 V d.c. | 160 A to 710 A | FM, FMM, MT and MMT | 52 |
| errule fuse links | 300 700 1 0.0.7 000 100 000 1 0.0. | | ,, a.a | 58 |
| | 150 V a.c. / V d.c. | 5 A to 60 A | FWA | 58 |
| | 250 V a.c. / V d.c. | 1 to 50 A | FWX | 61 |
| | 500 V a.c. | 0.25 to 30 A | FWH-A6F | 64 |
| | 500 V a.c. / V d.c. | | FWH-14F | |
| | | 1 to 30 A | | 66 |
| | 600-700 V a.c. / 700 V d.c. | 1 to 32 A | FWC | 68 |
| | 690 V a.c. | 4 to 32 A | FWP-G10F | 70 |
| | 690 V a.c. | 4 to 50 A | FWP-G14F | 73 |
| | 690 V a.c. | 20 to 100 A | FWP-G22F | 76 |
| | 690-700 V a.c. / 600-700 V d.c. | 1 to 50 A | FWP-A14F | 79 |
| | 700 V a.c. / V d.c. | 20 to 100 A | FWP-A22F | 82 |
| | 750 V d.c. | 5 to 60 A | FWK-A20F and FWK-A25F | 84 |
| | 1000 V a.c. / 800 V d.c. | 20 to 30 A | FWJ | 86 |
| | 1200 V a.c. / 1000 V d.c. | 20 to 30 A | FWL | 88 |
| | 1400-2000 V a.c. / 1000 V d.c. | 2 to 15 A | FWS | 90 |
| Square body fuse links | | | | 92 |
| DIN 43653 | 690-700 V a.c. / V d.c. | 10 to 400 A | 170M - size 000 and 00 | 92 |
| | 690-700 V a.c. | 40 to 2000 A | 170M - size 1* to 3 | 98 |
| | 1000 V a.c. | 20 to 315 A | 170M - size 00 | 108 |
| | 1000 V a.c. | 50 to 1400 A | 170M - size 1* to 3 | 111 |
| | 1250-1300 V a.c. | 50 to 1400 A | 170M - size 1* to 3 | 121 |
| DIN 43620 | 690 V a.c. | 10 to 800 A | 170M - size 00 to 3 | 131 |
| | 690-700 V a.c. | 10 to 1600 A | 170M - dual indicator | 141 |
| | 1000 V a.c. | 20 to 225A | 170M - size 00 | 151 |
| | | | | |
| | | | 47014 | |
| | 690-700 V a.c. | 40 to 1600 A | 170M - size 1* to 3 | 154 |
| | 690-700 V a.c. | 40 to 2000 A | 170M - size 1* to 3 | 164 |
| | 690-700 V a.c. 1000 V a.c. | 40 to 2000 A 50 to 1400 A | 170M - size 1* to 3 170M - size 1* to 3 | 164 174 |
| JS style | 690-700 V a.c. 1000 V a.c. 1250-1300 V a.c. | 40 to 2000 A 50 to 1400 A 50 to 1400 A | 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 | 164 174 184 |
| JS style | 690-700 V a.c. 1000 V a.c. | 40 to 2000 A 50 to 1400 A | 170M - size 1* to 3 170M - size 1* to 3 | 164 174 184 194 |
| JS style | 690-700 V a.c. 1000 V a.c. 1250-1300 V a.c. | 40 to 2000 A 50 to 1400 A 50 to 1400 A | 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 | 164 174 184 |
| JS style | 690-700 V a.c. 1000 V a.c. 1250-1300 V a.c. 690 V a.c. | 40 to 2000 A 50 to 1400 A 50 to 1400 A 25 to 400 A | 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 170M - size 00 | 164 174 184 194 |
| JS style | 690-700 V a.c. 1000 V a.c. 1250-1300 V a.c. 690 V a.c. 690-700 V a.c. | 40 to 2000 A 50 to 1400 A 50 to 1400 A 25 to 400 A 40 to 2000 A | 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 170M - size 00 170M - size 1* to 3 | 164 174 184 194 197 |
| JS style | 690-700 V a.c. 1000 V a.c. 1250-1300 V a.c. 690 V a.c. 690-700 V a.c. 1000 V a.c. | 40 to 2000 A 50 to 1400 A 50 to 1400 A 25 to 400 A 40 to 2000 A 50 to 1400 A | 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 170M - size 00 170M - size 1* to 3 170M - size 1* to 3 | 164 174 184 194 197 207 |
| JS style | 690-700 V a.c. 1000 V a.c. 1250-1300 V a.c. 690 V a.c. 690-700 V a.c. 1000 V a.c. 1250-1300 V a.c. | 40 to 2000 A 50 to 1400 A 50 to 1400 A 25 to 400 A 40 to 2000 A 50 to 1400 A 50 to 1400 A | 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 170M - size 00 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 | 164 174 184 194 197 207 217 |
| JS style | 690-700 V a.c. 1000 V a.c. 1250-1300 V a.c. 690 V a.c. 690-700 V a.c. 1250-1300 V a.c. 690-700 V a.c. | 40 to 2000 A 50 to 1400 A 50 to 1400 A 25 to 400 A 40 to 2000 A 50 to 1400 A 50 to 1400 A 1000 to 4000 A | 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 170M - size 00 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 | 164 174 184 194 197 207 217 227 |
| JS style | 690-700 V a.c. 1000 V a.c. 1250-1300 V a.c. 690 V a.c. 690-700 V a.c. 1250-1300 V a.c. 1250-1300 V a.c. 1000 V a.c. | 40 to 2000 A 50 to 1400 A 50 to 1400 A 25 to 400 A 40 to 2000 A 50 to 1400 A 50 to 1400 A 1000 to 4000 A 1000 to 3000 A | 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 170M - size 00 170M - size 1* to 3 170M - size 4 | 164 174 184 194 197 207 217 227 230 |
| JS style | 690-700 V a.c. 1000 V a.c. 1250-1300 V a.c. 690 V a.c. 690-700 V a.c. 1250-1300 V a.c. 1250-1300 V a.c. 690-700 V a.c. 1000 V a.c. 1250 V a.c. | 40 to 2000 A 50 to 1400 A 50 to 1400 A 25 to 400 A 40 to 2000 A 50 to 1400 A 50 to 1400 A 1000 to 4000 A 1000 to 3000 A 800 to 2500 A | 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 170M - size 00 170M - size 1* to 3 170M - size 4 170M - size 4 | 164 174 184 194 197 207 217 227 230 236 |
| JS style | 690-700 V a.c. 1000 V a.c. 1250-1300 V a.c. 690 V a.c. 690-700 V a.c. 1250-1300 V a.c. 1250-1300 V a.c. 1250-1300 V a.c. 1000 V a.c. 1250 V a.c. 1250 V a.c. 1250 V a.c. | 40 to 2000 A 50 to 1400 A 50 to 1400 A 25 to 400 A 40 to 2000 A 50 to 1400 A 50 to 1400 A 1000 to 4000 A | 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 170M - size 00 170M - size 1* to 3 170M - size 4 170M - size 4 170M - size 4 170M - size 23 170M - size 23 | 164 174 184 194 197 207 217 227 230 236 242 |
| JS style | 690-700 V a.c. 1000 V a.c. 1250-1300 V a.c. 690 V a.c. 690-700 V a.c. 1250-1300 V a.c. 1250-1300 V a.c. 1250-1300 V a.c. 1250-700 V a.c. 1250 V a.c. 1250 V a.c. 690 V a.c. 690 V a.c. | 40 to 2000 A 50 to 1400 A 50 to 1400 A 25 to 400 A 40 to 2000 A 50 to 1400 A 50 to 1400 A 1000 to 4000 A 1000 to 3000 A 800 to 2500 A 1000 to 4000 A 630 to 2800 A 2000 to 6500 A | 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 170M - size 00 170M - size 1* to 3 170M - size 4 170M - size 4 170M - size 4 170M - size 23 170M - size 23 170M - size 24 | 164 174 184 194 197 207 217 227 230 236 242 246 249 |
| French style US style Flush end contact | 690-700 V a.c. 1000 V a.c. 1250-1300 V a.c. 690 V a.c. 1000 V a.c. 1250-1300 V a.c. 1250-1300 V a.c. 1250-1300 V a.c. 1250-700 V a.c. 1000 V a.c. 1250 V a.c. 1250 V a.c. 690 V a.c. 1250 V a.c. 1000 V a.c. 1000 V a.c. | 40 to 2000 A 50 to 1400 A 50 to 1400 A 25 to 400 A 40 to 2000 A 50 to 1400 A 50 to 1400 A 1000 to 4000 A 1000 to 4000 A 1000 to 4000 A 1000 to 4000 A 2000 to 6500 A 2000 to 5000 A | 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 170M - size 00 170M - size 1* to 3 170M - size 4 170M - size 4 170M - size 4 170M - size 23 170M - size 23 170M - size 24 170M - size 24 | 164 174 184 194 197 207 217 227 230 236 242 246 249 252 |
| US style | 690-700 V a.c. 1000 V a.c. 1250-1300 V a.c. 690 V a.c. 690-700 V a.c. 1250-1300 V a.c. 1250-1300 V a.c. 1250-1300 V a.c. 690-700 V a.c. 1000 V a.c. 1250 V a.c. 1250 V a.c. 690 V a.c. 1000 V a.c. 11000 V a.c. 11000 V a.c. 11000 V a.c. | 40 to 2000 A 50 to 1400 A 50 to 1400 A 25 to 400 A 40 to 2000 A 50 to 1400 A 50 to 1400 A 1000 to 4000 A 1000 to 3000 A 800 to 2500 A 1000 to 4000 A 2000 to 6500 A 2000 to 5000 A | 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 170M - size 00 170M - size 1* to 3 170M - size 4 170M - size 4 170M - size 4 170M - size 23 170M - size 23 170M - size 24 170M - size 24 170M - size 24 | 164 174 184 194 197 207 217 227 230 236 242 246 249 252 255 |
| US style | 690-700 V a.c. 1000 V a.c. 1250-1300 V a.c. 690 V a.c. 1000 V a.c. 1250-1300 V a.c. 1250-1300 V a.c. 1250-1300 V a.c. 1250-700 V a.c. 1000 V a.c. 1250 V a.c. 1250 V a.c. 690 V a.c. 1250 V a.c. 1000 V a.c. 1000 V a.c. | 40 to 2000 A 50 to 1400 A 50 to 1400 A 25 to 400 A 40 to 2000 A 50 to 1400 A 50 to 1400 A 1000 to 4000 A 1000 to 4000 A 1000 to 4000 A 1000 to 4000 A 2000 to 6500 A 2000 to 5000 A | 170M - size 1* to 3 170M - size 1* to 3 170M - size 1* to 3 170M - size 00 170M - size 1* to 3 170M - size 4 170M - size 4 170M - size 4 170M - size 23 170M - size 23 170M - size 24 170M - size 24 | 164 174 184 194 197 207 217 227 230 236 242 246 249 252 |

| Traction fuse links | | | | 271 |
|-------------------------------------|-------------------------------------|----------------|-----------------------------------|-----|
| Square body | 750 V d.c. | 50 to 1600 A | 170M - size 1*, 3 and 23 | 271 |
| | 750 V d.c. | 63 to 500 A | 170E - size 1*, 1, 2 and 3 | 275 |
| | 850 V d.c. / 1250 V a.c. | 1400 A | 170M7217 - size 4 | 285 |
| | 1200 V d.c. | 20 to 215 A | 170M - size 1* | 288 |
| | 1200 V d.c. | 160 to 420 A | 170F - size 2 | 290 |
| | 2000 V d.c. | 10 to 80 A | 170E - size 1* | 292 |
| | 2000 V d.c. | 10 to 125 A | 170E - size 1* | 295 |
| | 2000 V d.c. | 20 to 600 A | 170M | 300 |
| | 2400 V d.c. | 100 to 400 A | 170M - size 3 | 304 |
| | 4000 V d.c. | 20 to 125 A | 170E - size 1* | 306 |
| | 4000 V d.c. | 20 to 450 A | 170E - size 1*, 2 and 2//2 | 309 |
| Ferrule | 750 V d.c. | 5 to 60 A | FWK | 315 |
| | 750 V d.c. | 30 to 50 A | LRC750 | 316 |
| | 1000 V d.c. / 1200-1400-2000 V a.c. | 2 to 30 A | FWS and FWL | 317 |
| nd body | 750 V d.c. | 5 to 60 A | KC36 | 318 |
| | 750 V d.c. | 200 to 400 A | RC | 319 |
| | 1500 V d.c. | 25 to 200 A | NBC | 320 |
| Photovoltaic fuse links, fuse bases | and holders | | | 321 |
| | 600 V d.c. | 4 to 30 A | PVM 10 x 38 mm fuse links | 321 |
| | 1000 V d.c. | 1 to 20 A | PV-A10F 10 x 38 mm fuse links | 323 |
| | | CHPV | 10 x 38 mm Modular fuse holder | 326 |
| | 1500 V d.c. | 2.25 A to 30 A | PV-A10F85L 10 x 85 mm fuse links | 327 |
| | | CHPV15H85 | 10 x 85 mm fuse holder | 329 |
| | 1000-1100 V d.c. | 15 to 32 A | PV-14F 14 x 51 mm PV fuse links | 330 |
| | | CHPV14 | 14 x 51 mm Modular fuse holder | 332 |
| | 1300-1500 V d.c. | 15 to 32 A | PV-14L 14 x 65 mm fuse links | 333 |
| | 800 V a.c. | 32 A to 400 A | NH 170M PV fuse links | 336 |
| | 1000 V d.c. | 32 to 400 A | PV-ANH fuse links | 343 |
| | | SD-D-PV | NH Bases | 352 |
| | 1000 V d.c. | 160 to 400 A | PV-AF Flush end PV fuse links | 354 |
| | 1000-1500 V d.c. | 50 to 600 A | PV XL fuse links | 357 |
| | | SD-S-PV | XL PV Bases | 367 |
| Battery storage fuse links | | | | 369 |
| | 1000 V d.c. | 63 A to 400 A | BSF-NH fuse links | 369 |
| | 1500 V d.c. | 250 A to 500 A | BSF-XL fuse links | 374 |
| Accessories | | | | 377 |
| Fuse bases | | Modular style | C5268, 1BS and BH | 377 |
| | | Fixed center | 170H | 378 |
| | | Ferrule | BMM and CVRI | 381 |
| | | Ferrule | JM70100 | 383 |
| Modular knifeblade fuse blocks | | | JM60 | 384 |
| Modular fuse holders | | 10 x 38 mm | CHM, CHPV, CHCC | 387 |
| | | 14 x 51 mm | CH14 | 389 |
| | | 22 x 58 mm | CH22 | 391 |
| Microswitches | | Square body | 170H0235 to 170H0237 and 170H0069 | 393 |
| | | BS88-4 | EC, MC and TI | 395 |
| Mountable fuse clips | | FW14-PCB | Lo, Ivio ana 11 | 396 |
| Index | | עט ו דו ייי | | 398 |

FWA - 130 V a.c. / V d.c.(UL), 1000 A 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 A to 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 A to 2000 A fuse links

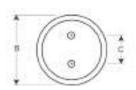
Catalogue numbers

I2t (A2 Sec)

| Rated voltage | Rated current (Amps) | Pre-arcing | 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 |
| 130 V a.c. / V d.c. (UL) | 1200 | 270,000 | 730,000 | 70 | FWA-1200AH |
| 130 V a.c. / V d.c. (UL) | 1500 | 520,000 | 1,400,000 | 78 | FWA-1500AH |
| 130 V a.c. / V d.c. (UL) | 2000 | 860,000 | 2,400,000 | 108 | FWA-2000AH |
| 130 V a.c. / V d.c. (UL) | 2500 | 1,500,000 | 4,100,000 | 130 | FWA-2500AH |
| 130 V a.c. / V d.c. (UL) | 3000 | 2,100,000 | 5,700,000 | 150 | FWA-3000AH |
| 130 V a.c. / V d.c. (UL) | 4000 | 3,400,000 | 9,200,000 | 257 | FWA-4000AH |

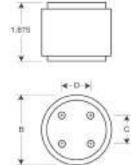
Dimensions (in) - 1000 A to 3000 A

1



Dimensions (in) - 4000 A

FWA-2000AH



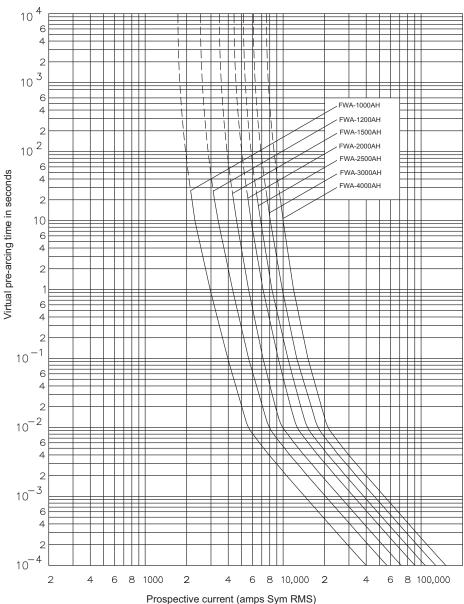
| Rated current (Amps) | В | C | D | Thread depth |
|----------------------|-----|-----|-----|---------------------------|
| 1000 to 2000 | 2 | 1 | - | Tapped 3/8"-24 x 1/2" UNF |
| 2500 to 3000 | 3 | 1.5 | - | Tapped 1/2"-20 x 1/2" UNF |
| 4000 | 3.5 | 1.5 | 1.5 | Tapped 1/2"-20 x 1/2" UNF |

^{1&}quot; = 25.4mm



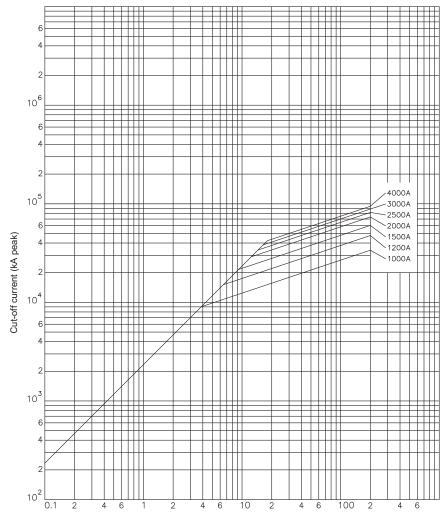
FWA - 130 V a.c. / V d.c.(UL), 1000 A to 4000 A





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

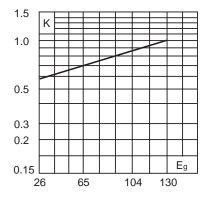
Cut-off curve - 1000 A to 4000 A



Prospective current (Sym RMS kA)

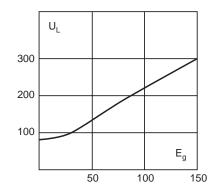
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\alpha'}$ (RMS).



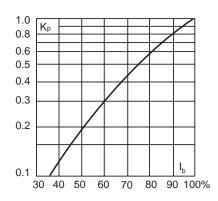
Arc voltage

This curve gives the peak arc voltage, $\rm U_L$, which may appear across the fuse during its operation as a function of the applied working voltage, $\rm E_g$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



FWA - 150 V a.c. / V d.c. (UL), 70 A 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.
- Rated current: 70 A to 1000 A
- Breaking capacity:
 - 100 kA RMS Sym. (70 A to 400 A) at 150 V a.c.
 - 200 kA RMS Sym. (500 A to 1000 A) at 150 V a.c.
 - 20 kA at 150 V a.c. / V d.c. (70 A to 800 A)
 - 100 kA at 80 V d.c. (70 A to 1000 A)

Standards / Agency information

CE, UL Recognised JFHR2.E91958

Catalogue numbers

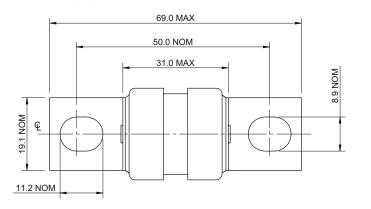


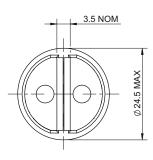
| | | I t (A OCC) | | | |
|--------------------------------------|----------------------|-------------|---------------------------|-------------------|----------------------|
| Rated voltage / Breaking capacity | Rated current (Amps) | Pre-arcing | Clearing at 150 V a.c. | Watts loss (W) | Catalogue numbers |
| | 70 | 470 | 4000 | 6.9 | FWA-70B |
| | 80 | 670 | 6000 | 7.7 | FWA-80B |
| | 100 | 1200 | 12,000 | 9 | FWA-100B |
| 150 V a.c./ 100 kA | 125 | 1870 | 18,000 | 11.2 | FWA-125B |
| 00 \/ d a / 100 k/\ | 150 | 2700 | 26,000 | 13.5 | FWA-150B |
| 80 V d.c. / 100 kA | 200 | 4780 | 45,000 | 17.6 | FWA-200B |
| 150 V d.c./ 20 kA | 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 |
| 150 V a.c. / 200 kA | 500 | 39,000 | 120,000 | 35 | FWA-500A |
| 90 \/ d a / 100 k/\ | 600 | 46,000 | 140,000 | 47 | FWA-600A |
| 80 V d.c. / 100 kA | 700 | 75,000 | 220,000 | 49 | FWA-700A |
| 150 V d.c. / 20 kA | 800 | 92,000 | 280,000 | 58 | FWA-800A |
| 150 V a.c. / 200 kA | 1000 | 170,000 | 510,000 | 60 | FWA-1000A |
| 80 V d.c. / 100 kA | | | | | |



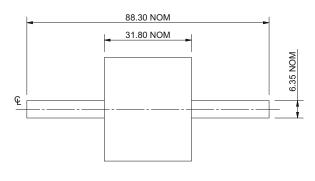
FWA - 150 V a.c. / V d.c. (UL), 70 A to 1000 A

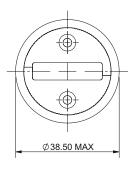
Dimensions (mm) - 70 A to 400 A

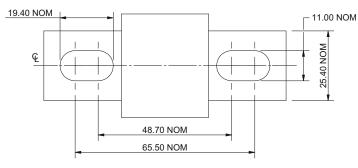




Dimensions (mm) - 500 A to 1000 A

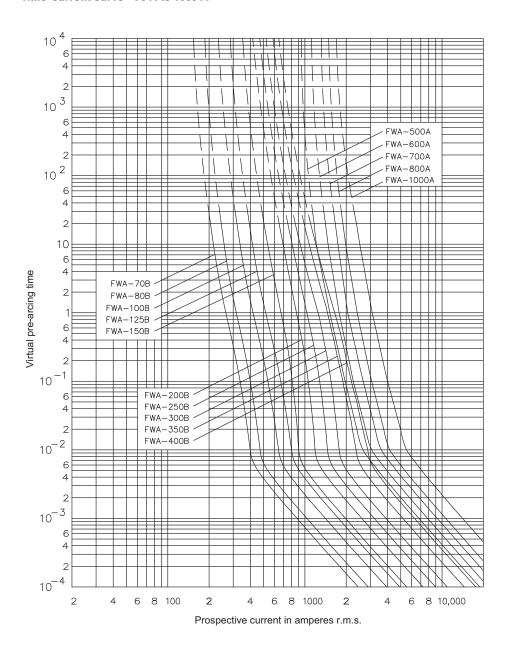






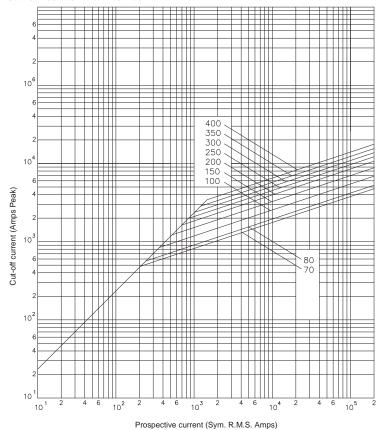
FWA - 150 V a.c. / V d.c. (UL), 70 A to 1000 A

Time-current curve - 70 A to 1000 A

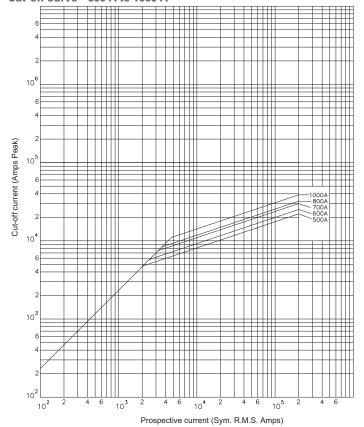


FWA - 150 V a.c. / V d.c. (UL), 70 A to 1000 A

Cut-off curve - 70 A to 400 A

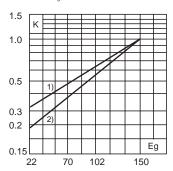


Cut-off curve - 500 A to 1000 A



Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm gr}$ (RMS).

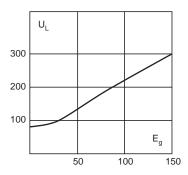


1) 500 - 1000 A

2) 70 - 400 A

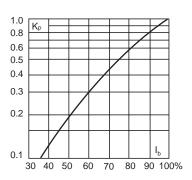
Arc voltage

This curve gives the peak arc voltage, $\rm U_L$, which may appear across the fuse during its operation as a function of the applied working voltage, $\rm E_g$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm h}$, in percent of the rated current.



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

Breaking capacity:

- 200 kA RMS Sym.at 250 V a.c.

- 50 kA at 250 V d.c. (35 A to 800 A)

Standards / Agency information

CE, UL Recognised file JFHR2.E56412 and CSA component acceptance on 35 A to $\,$ 800 A fuse links (50 kA IR at 250 V d.c.)

Catalogue numbers

| | Rated | I ² t (A ² Sec) | | _ | |
|------------------------|-------------------|---------------------------------------|---------------------------|-------------------|----------------------|
| Rated voltage | current (Amps) | Pre-arcing | 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 |
| 250 V a.c./ V d.c.(UL) | 40 | 60 | 310 | 5.2 | FWX-40A |
| 250 V a.c./ V d.c.(UL) | 45 | 80 | 390 | 5.7 | FWX-45A |
| 250 V a.c./ V d.c.(UL) | 50 | 100 | 520 | 6 | FWX-50A |
| 250 V a.c./ V d.c.(UL) | 60 | 140 | 740 | 8.1 | FWX-60A |
| 250 V a.c./ V d.c.(UL) | 70 | 330 | 1400 | 7.2 | FWX-70A |
| 250 V a.c./ V d.c.(UL) | 80 | 430 | 1850 | 8.1 | FWX-80A |
| 250 V a.c./ V d.c.(UL) | 90 | 570 | 2450 | 9 | FWX-90A |
| 250 V a.c./ V d.c.(UL) | 100 | 740 | 3150 | 10 | FWX-100A |
| 250 V a.c./ V d.c.(UL) | 125 | 1130 | 4850 | 12.5 | FWX-125A |
| 250 V a.c./ V d.c.(UL) | 150 | 1620 | 6950 | 15.7 | FWX-150A |
| 250 V a.c./ V d.c.(UL) | 175 | 2170 | 9300 | 18.5 | FWX-175A |
| 250 V a.c./ V d.c.(UL) | 200 | 2790 | 12,000 | 22 | FWX-200A |
| 250 V a.c./ V d.c.(UL) | 225 | 3210 | 14,700 | 24 | FWX-225A |
| 250 V a.c./ V d.c.(UL) | 250 | 3960 | 18,100 | 27 | FWX-250A |
| 250 V a.c./ V d.c.(UL) | 275 | 4720 | 21,600 | 31 | FWX-275A |
| 250 V a.c./ V d.c.(UL) | 300 | 6000 | 27,300 | 32 | FWX-300A |
| 250 V a.c./ V d.c.(UL) | 350 | 10,600 | 48,600 | 39 | FWX-350A |
| 250 V a.c./ V d.c.(UL) | 400 | 14,500 | 66,100 | 44 | FWX-400A |
| 250 V a.c./ V d.c.(UL) | 450 | 22,100 | 101,000 | 49 | FWX-450A |
| 250 V a.c./ V d.c.(UL) | 500 | 28,000 | 128,000 | 54 | FWX-500A |
| 250 V a.c./ V d.c.(UL) | 600 | 41,100 | 188,000 | 62 | FWX-600A |
| 250 V a.c./ V d.c.(UL) | 700 | 48,800 | 190,000 | 72 | FWX-700A |
| 250 V a.c./ V d.c.(UL) | 800 | 59,000 | 230,000 | 84 | FWX-800A |
| 250 V a.c./ V d.c.(UL) | 1000 | 44,000 | 360,000 | 100 | FWX-1000AH |
| 250 V a.c./ V d.c.(UL) | 1200 | 92,000 | 750,000 | 103 | FWX-1200AH |
| 250 V a.c./ V d.c.(UL) | 1500 | 120,000 | 880,000 | 140 | FWX-1500AH |
| 250 V a.c./ V d.c.(UL) | 1600 | 160,000 | 1,200,000 | 140 | FWX-1600AH |
| 250 V a.c./ V d.c.(UL) | 2000 | 320,000 | 2,300,000 | 151 | FWX-2000AH |
| 250 V a.c./ V d.c.(UL) | 2500 | 670,000 | 4,700,000 | 163 | FWX-2500AH |

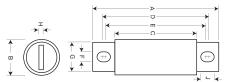


Data sheets: 720005, 359 (35-800 A), 5785299 (100-2500 A)

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

Dimensions (in)

35 A to 800 A

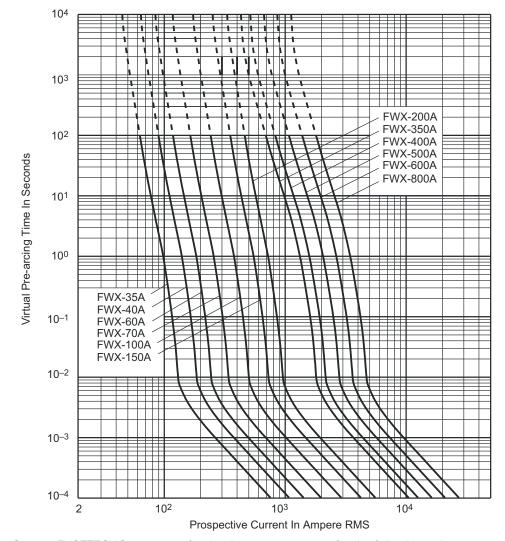


| 1000 A to 1200 A | 1500 A to 2500 A |
|------------------|------------------|
| Î | A |
| | |

| Amp range | Α | В | С | D | E | F | G | н | 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 |
| 1500-2500 | 2.59 | 3.5 | 1.5 | 1.5 | - | - | - | - | - | 1/2" UNF |
| 1" 25 1mm | | | | | | | | | | |

^{1&#}x27;' = 25.4mm

Time-current curve - 35 A to 800 A

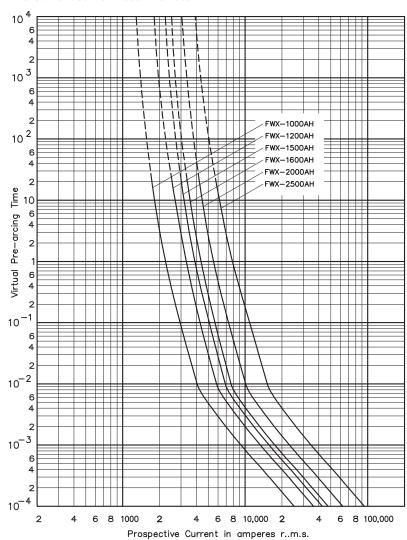


Contact FUSETECH@eaton.com for the time current curves for the following ratings: 45, 50, 80, 90, 125, 175, 225, 250, 275, 300, 450 and 700 A

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

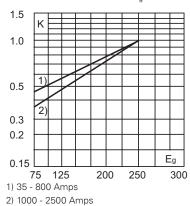
FWX - 250 V a.c. / V d.c. (UL), 35 A to 2500 A

Time-current curve - 1000 A to 2500 A



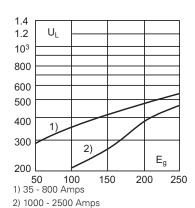
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\alpha'}$ (RMS).



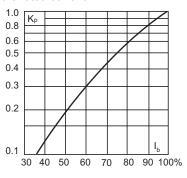
Arc voltage

This curve gives the peak arc voltage, $\rm U_L$, which may appear across the fuse during its operation as a function of the applied working voltage, E $_{\rm g}$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm P}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



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

CHSF - 500 V a.c. / V d.c. (UL), 50 A to 400 A

Specifications

Description

Eaton's Bussmann series compact high speed fuses feature space-saving case sizes for protecting semiconductor devices up to $500\,\mathrm{V}$ a.c./V d.c. in ratings from 50 to 400 Amps

Technical Data

Rated voltage: 500 V a.c. / V d.c. (UL)

Rated current: 50 A to 400 A

· Breaking capacity:

Maximum AC: 200 kA / Minimum AC 400%Maximum DC: 50 kA / Minimum DC 800%

· Conforms to IEC aR specifications for short-circuit protection

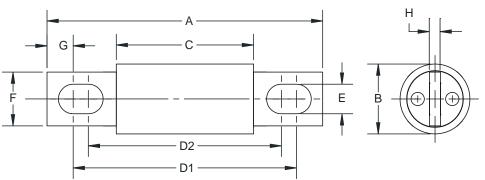
Standards / Agency information

UL Recognised, File E56412, guide JFHR2, CSA Component Acceptance, Class 1422-30, File 53787, IEC aR (self-certified), CE, RoHS compliant, REACH declaration available upon request

Catalogue numbers

| | Rated | I²t (A² Sec) | | | | |
|------------------------|-------------------|---------------------|----------------------------------|------------------------------------|--------------------------|----------------------|
| Rated voltage | current (Amps) | AC/DC Pre-arcing | AC clearing at 200 kA/500 V a.c. | DC clearing at 50 kA/500 V d.c. | Watts loss (W) at 80% | Catalogue numbers |
| 500 V a.c./ V d.c.(UL) | 50 | 304 | 1875 | 935 | 3.8 | CHSF-50 |
| 500 V a.c./ V d.c.(UL) | 60 | 438 | 2700 | 1346 | 4.5 | CHSF-60 |
| 500 V a.c./ V d.c.(UL) | 70 | 596 | 3675 | 1833 | 5.3 | CHSF-70 |
| 500 V a.c./ V d.c.(UL) | 80 | 778 | 4800 | 2394 | 6.1 | CHSF-80 |
| 500 V a.c./ V d.c.(UL) | 100 | 1216 | 7500 | 3740 | 7.6 | CHSF-100 |
| 500 V a.c./ V d.c.(UL) | 125 | 2042 | 12721 | 6465 | 12 | CHSF-125 |
| 500 V a.c./ V d.c.(UL) | 150 | 2941 | 18318 | 9309 | 14.3 | CHSF-150 |
| 500 V a.c./ V d.c.(UL) | 175 | 4003 | 24933 | 12671 | 16.7 | CHSF-175 |
| 500 V a.c./ V d.c.(UL) | 200 | 5228 | 32566 | 16550 | 19.1 | CHSF-200 |
| 500 V a.c./ V d.c.(UL) | 225 | 6835 | 48028 | 21278 | 26.1 | CHSF-225 |
| 500 V a.c./ V d.c.(UL) | 250 | 8438 | 59293 | 26270 | 29 | CHSF-250 |
| 500 V a.c./ V d.c.(UL) | 300 | 12151 | 85382 | 37828 | 34.8 | CHSF-300 |
| 500 V a.c./ V d.c.(UL) | 350 | 16539 | 116215 | 51488 | 40.6 | CHSF-350 |
| 500 V a.c./ V d.c.(UL) | 400 | 21603 | 151791 | 67250 | 46.4 | CHSF-400 |

Dimensions (mm) - 50 A to 400 A

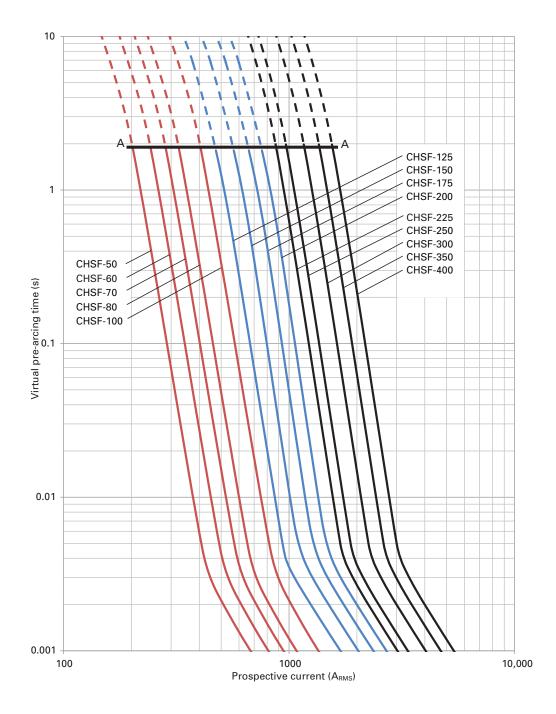


| Amps | Α | В | C | D1 | D2 | Ε | F | G | Н |
|---------|----|----|----|----|----|-----|----|-----|-----|
| 50-100 | 81 | 20 | 40 | 61 | 58 | 8.7 | 16 | 7.7 | 3.2 |
| 125-200 | 92 | 25 | 53 | 77 | 68 | 8.7 | 19 | 7.8 | 3.2 |
| 225-400 | 92 | 30 | 53 | 74 | 68 | 8.7 | 25 | 9 | 4.8 |



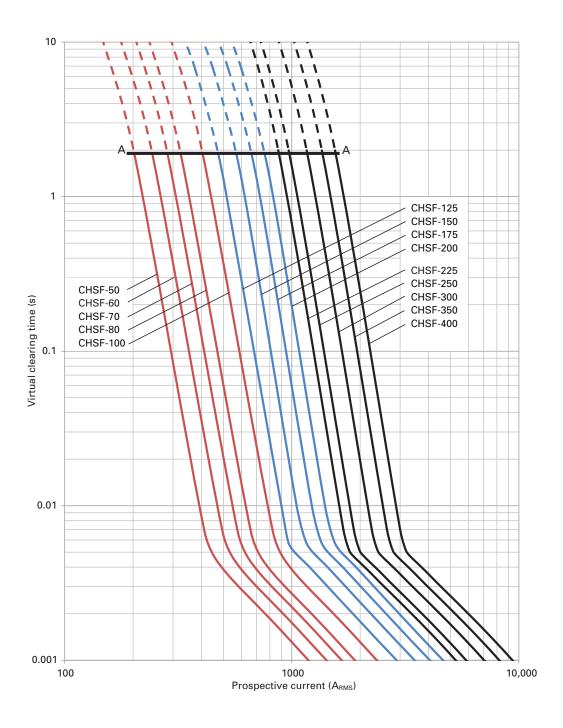
CHSF - 500 V a.c. / V d.c. (UL), 50 A to 400 A

AC Minimum melt curve - 50 A to 400 A



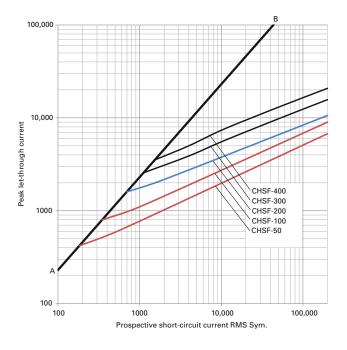
CHSF - 500 V a.c. / V d.c. (UL), 50 A to 400 A

AC Time-current curve- 50 A to 400 A

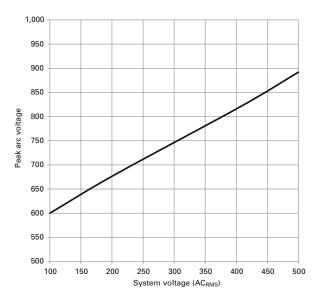


CHSF - 500 V a.c. / V d.c. (UL), 50 A to 400 A

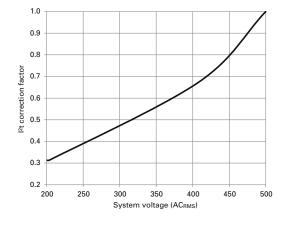
AC Cut-off curve - 50 A to 400 A



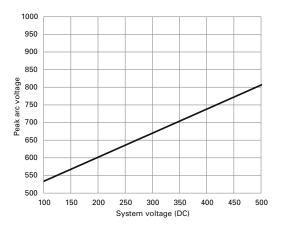
AC Arc Voltage



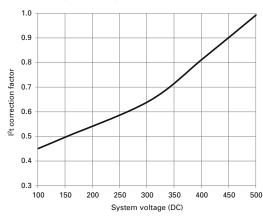
AC clearing I²t voltage correction factor



DC Arc voltage

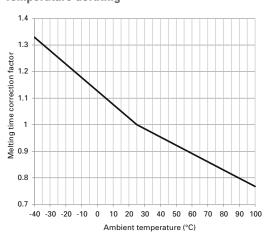


DC clearing I2t voltage correction factor



Data sheet: 10414

Temperature derating



FWH - 500 V a.c. / V d.c. (UL), 35 A 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 A to 800 A only)
- Rated current: 35 A to 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 A to 200 A), JFHR2.E56412 FWH-_A (225 A to 800 A), CSA Component Acceptance Class 1422-30, File 53787 (35 A to 1600 A)

Catalogue numbers

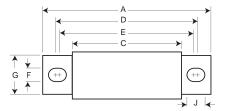
| | D . I | I²t (A² Sec) | | | |
|------------------------|----------------------------|--------------|---------------------------|-------------------|----------------------|
| Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 500 V a.c. | Watts loss (W) | Catalogue numbers |
| 500 V a.c./V d.c. (UL) | 35 | 34 | 150 | 8 | FWH-35B |
| 500 V a.c./V d.c. (UL) | 40 | 76 | 320 | 7.5 | FWH-40B |
| 500 V a.c./V d.c. (UL) | 45 | 105 | 450 | 7.5 | FWH-45B |
| 500 V a.c./V d.c. (UL) | 50 | 135 | 670 | 7.5 | FWH-50B |
| 500 V a.c./V d.c. (UL) | 60 | 210 | 900 | 9.9 | FWH-60B |
| 500 V a.c./V d.c. (UL) | 70 | 210 | 900 | 10.6 | FWH-70B |
| 500 V a.c./V d.c. (UL) | 80 | 305 | 1400 | 12.7 | FWH-80B |
| 500 V a.c./V d.c. (UL) | 90 | 360 | 1600 | 15 | FWH-90B |
| 500 V a.c./V d.c. (UL) | 100 | 475 | 2000 | 17 | FWH-100B |
| 500 V a.c./V d.c. (UL) | 125 | 800 | 3500 | 25 | FWH-125B |
| 500 V a.c./V d.c. (UL) | 150 | 1100 | 4600 | 30 | FWH-150B |
| 500 V a.c./V d.c. (UL) | 175 | 1450 | 6200 | 35 | FWH-175B |
| 500 V a.c./V d.c. (UL) | 200 | 1900 | 8500 | 40 | FWH-200B |
| 500 V a.c./V d.c. (UL) | 225 | 4600 | 23,300 | 39 | FWH-225A |
| 500 V a.c./V d.c. (UL) | 250 | 6300 | 32,200 | 41 | FWH-250A |
| 500 V a.c./V d.c. (UL) | 275 | 7900 | 40,300 | 46 | FWH-275A |
| 500 V a.c./V d.c. (UL) | 300 | 9800 | 49,800 | 51 | FWH-300A |
| 500 V a.c./V d.c. (UL) | 325 | 13,700 | 63,800 | 53 | FWH-325A |
| 500 V a.c./V d.c. (UL) | 350 | 14,500 | 72,900 | 58 | FWH-350A |
| 500 V a.c./V d.c. (UL) | 400 | 19,200 | 96,700 | 65 | FWH-400A |
| 500 V a.c./V d.c. (UL) | 450 | 24,700 | 127,000 | 74 | FWH-450A |
| 500 V a.c./V d.c. (UL) | 500 | 29,200 | 149,000 | 84 | FWH-500A |
| 500 V a.c./V d.c. (UL) | 600 | 41,300 | 206,000 | 108 | FWH-600A |
| 500 V a.c./V d.c. (UL) | 700 | 55,000 | 298,000 | 120 | FWH-700A |
| 500 V a.c./V d.c. (UL) | 800 | 76,200 | 409,000 | 129 | FWH-800A |
| 500 V a.c./V d.c. (UL) | 900 | 74,000 | 363,000 | 132 | FWH-900A |
| 500 V a.c. (UL) | 1000 | 92,000 | 450,000 | 145 | FWH-1000B |
| 500 V a.c. (UL) | 1200 | 122,000 | 600,000 | 180 | FWH-1200B |
| 500 V a.c. (UL) | 1400 | 200,000 | 1,000,000 | 210 | FWH-1400A |
| 500 V a.c. (UL) | 1600 | 290,000 | 1,400,000 | 230 | FWH-1600A |





FWH - 500 V a.c. / V d.c. (UL), 35 A to 1600 A

Dimensions (in) - 35 A to 1200 A

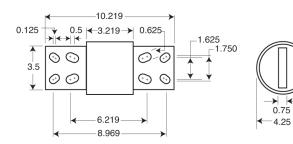




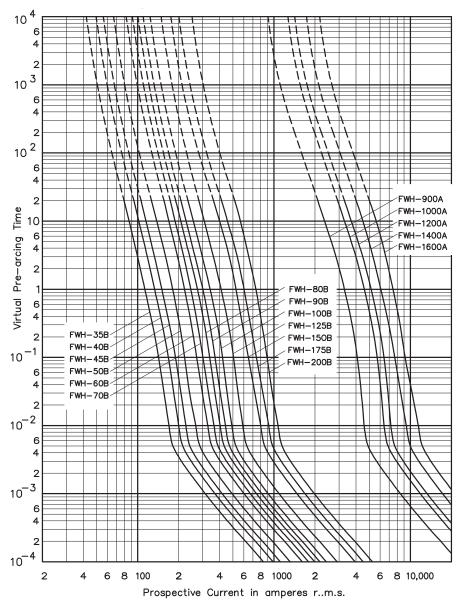
| Amp range | Α | В | C | D | E | F | G | Н | J |
|-----------|------|------|------|------|------|------|------|------|------|
| 35-60 | 3.19 | 0.81 | 1.59 | 2.54 | 2.19 | 0.34 | 0.72 | 0.13 | 0.52 |
| 70-100 | 3.62 | 0.95 | 1.74 | 2.85 | 2.81 | 0.35 | 0.75 | 0.13 | 0.38 |
| 125-200 | 3.62 | 1.16 | 1.84 | 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 | 4.34 | 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 |
| 1" 25 4 | | | | | | | | | |

^{1&#}x27;' = 25.4mm

Dimensions (in) - 1400 A and 1600 A



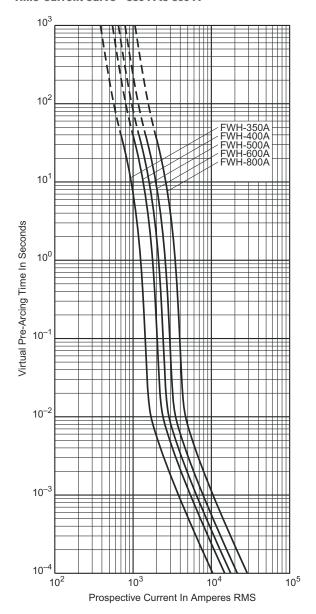
Time-current curve - 35 A to 200 A and 900 A to 1600 A



Data sheets: 720007, 360 (350-800 A), 5785304 (35-200 A, 1000-1600 A)

FWH - 500 V a.c. / V d.c. (UL), 35 A to 1600 A

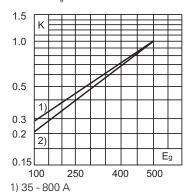
Time-current curve - 350 A to 800 A



Contact FUSETECH@eaton.com for the time current curves for the following ratings: 225 to 325 A, 450 A and 700 A

Total clearing I2t

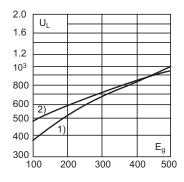
The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} (RMS).



2) 1000 - 1600 A

Arc voltage

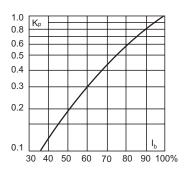
This curve gives the peak arc voltage, $\rm U_L$, which may appear across the fuse during its operation as a function of the applied working voltage, $\rm E_g$, (RMS) at a power factor of 15 percent.



1) 35 - 200 A and 1000 - 1600 A 2) 225 - 800 A

Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, ${\rm K_p}$, is given as a function of the RMS load current, ${\rm I_b}$, in percent of the rated current.



Data sheets: 720007, 360 (350-800 A), 5785304 (35-200 A, 1000-1600 A)

KAC - 600 V a.c. (UL), 1 A 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, Eaton recommends the 700 V FWP fuse links.

Technical Data

Rated voltage: 600 V a.c. (UL)Rated curent: 1 A to 1000 A

• Breaking capacity: 200 kA RMS Sym.

Standards / Agency information

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

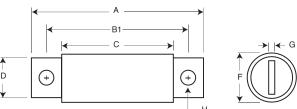
Catalogue numbers

| Rated voltage | Rated current (Amps) | Catalogue numbers |
|-----------------|----------------------|----------------------|
| 600 V a.c. (UL) | 1 | KAC-1 |
| 600 V a.c. (UL) | 2 | KAC-2 |
| 600 V a.c. (UL) | 3 | KAC-3 |
| 600 V a.c. (UL) | 4 | KAC-4 |
| 600 V a.c. (UL) | 5 | KAC-5 |
| 600 V a.c. (UL) | 6 | KAC-6 |
| 600 V a.c. (UL) | 7 | KAC-7 |
| 600 V a.c. (UL) | 8 | KAC-8 |
| 600 V a.c. (UL) | 9 | KAC-9 |
| 600 V a.c. (UL) | 10 | KAC-10 |
| 600 V a.c. (UL) | 12 | KAC-12 |
| 600 V a.c. (UL) | 15 | KAC-15 |
| 600 V a.c. (UL) | 17.5 | KAC-17.5 |
| 600 V a.c. (UL) | 20 | KAC-20 |
| 600 V a.c. (UL) | 25 | KAC-25 |
| 600 V a.c. (UL) | 30 | KAC-30 |
| 600 V a.c. (UL) | 35 | KAC-35 |
| 600 V a.c. (UL) | 40 | KAC-40 |
| 600 V a.c. (UL) | 45 | KAC-45 |
| 600 V a.c. (UL) | 50 | KAC-50 |
| 600 V a.c. (UL) | 60 | KAC-60 |
| 600 V a.c. (UL) | 70 | KAC-70 |
| 600 V a.c. (UL) | 80 | KAC-80 |
| 600 V a.c. (UL) | 90 | KAC-90 |
| 600 V a.c. (UL) | 100 | KAC-100 |
| 600 V a.c. (UL) | 110 | KAC-110 |
| 600 V a.c. (UL) | 125 | KAC-125 |
| 600 V a.c. (UL) | 150 | KAC-150 |
| 600 V a.c. (UL) | 175 | KAC-175 |
| 600 V a.c. (UL) | 200 | KAC-200 |
| 600 V a.c. (UL) | 225 | KAC-225 |
| 600 V a.c. (UL) | 250 | KAC-250 |
| 600 V a.c. (UL) | 300 | KAC-300 |
| 600 V a.c. (UL) | 350 | KAC-350 |
| 600 V a.c. (UL) | 400 | KAC-400 |
| 600 V a.c. (UL) | 450 | KAC-450 |
| 600 V a.c. (UL) | 500 | KAC-500 |
| 600 V a.c. (UL) | 600 | KAC-600 |
| 600 V a.c. (UL) | 700 | KAC-700 |
| 600 V a.c. (UL) | 800 | KAC-800 |
| 600 V a.c. (UL) | 1000 | KAC-1000 |

Data sheet: 720009



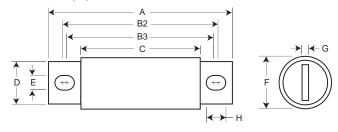
Dimensions (in) - 1 A to 30 A and 450 A to 1000 A



| Rated current (Amps) | Α | B1 | B2 | В3 | С | D | E | F | G | н |
|----------------------|------|------|----|----|------|------|---|------|------|------|
| 1-30 | 2.88 | 2.5 | - | - | 1.88 | 0.41 | - | 0.56 | 0.06 | 0.26 |
| 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&}quot; = 25.4mm

Dimensions (in) - 35 A to 400 A



| Rated current (Amps) | Α | B1 | B2 | В3 | С | D | E | F | G | Н |
|----------------------|------|----|------|------|------|------|------|------|------|------|
| 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 |

^{1&}quot; = 25.4mm

KBC - 600 V a.c. (UL), 35 A 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 recommends the 700 V FWP fuse links.

Technical data

Rated voltage: 600 V a.c. (UL)Rated current: 35 A to 800 A

· Breaking capacity: 100 kA RMS Sym.

Standards / Agency information

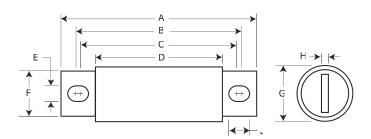
CE, UL file JFHR2.E56412 (35 A to 600 A only)

Catalogue numbers

| Rated voltage | Rated current (Amps) | Catalogue numbers |
|-----------------|----------------------|----------------------|
| 600 V a.c. (UL) | 35 | KBC-35 |
| 600 V a.c. (UL) | 40 | KBC-40 |
| 600 V a.c. (UL) | 45 | KBC-45 |
| 600 V a.c. (UL) | 50 | KBC-50 |
| 600 V a.c. (UL) | 60 | KBC-60 |
| 600 V a.c. (UL) | 70 | KBC-70 |
| 600 V a.c. (UL) | 80 | KBC-80 |
| 600 V a.c. (UL) | 90 | KBC-90 |
| 600 V a.c. (UL) | 100 | KBC-100 |
| 600 V a.c. (UL) | 110 | KBC-110 |
| 600 V a.c. (UL) | 125 | KBC-125 |
| 600 V a.c. (UL) | 150 | KBC-150 |
| 600 V a.c. (UL) | 175 | KBC-175 |
| 600 V a.c. (UL) | 200 | KBC-200 |
| 600 V a.c. (UL) | 225 | KBC-225 |
| 600 V a.c. (UL) | 250 | KBC-250 |
| 600 V a.c. (UL) | 300 | KBC-300 |
| 600 V a.c. (UL) | 350 | KBC-350 |
| 600 V a.c. (UL) | 400 | KBC-400 |
| 600 V a.c. (UL) | 450 | KBC-450 |
| 600 V a.c. (UL) | 500 | KBC-500 |
| 600 V a.c. (UL) | 600 | KBC-600 |
| 600 V a.c. (UL) | 800 | KBC-800 |

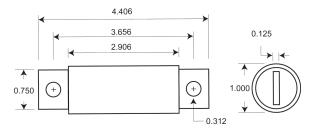


Dimensions (in) - 35 A to 60 A and 110 A to 600 A

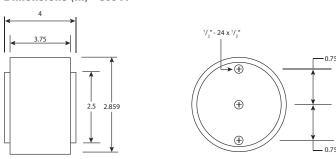


| Rated current (Amps) | Α | В | С | D | E | F | G | н | J |
|----------------------|------|------|------|------|------|------|------|------|------|
| 35-60 | 4.38 | 3.75 | 3.50 | 2.75 | 0.34 | 0.63 | 0.81 | 0.09 | 0.47 |
| 110-200 | 4.41 | 3.72 | 3.59 | 2.91 | 0.31 | 0.88 | 1.22 | 0.19 | 0.38 |
| 225-400 | 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 |
| 1" = 25.4mm | | | | | | | | | - |

Dimensions (in) - 70 A to 100 A



Dimensions (in) - 800 A



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

· Breaking capacity: see details in table below

Standards / Agency information

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

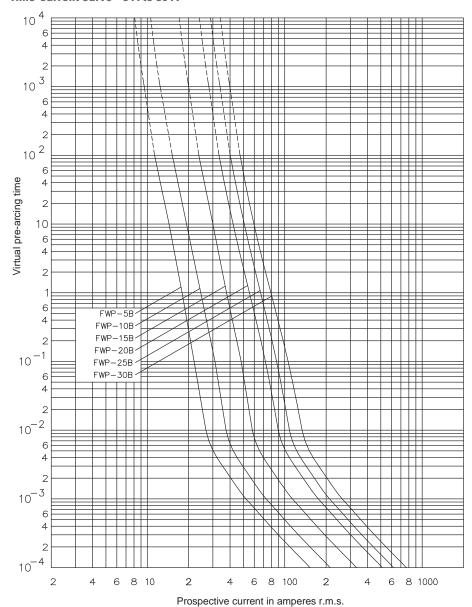


Catalogue numbers

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

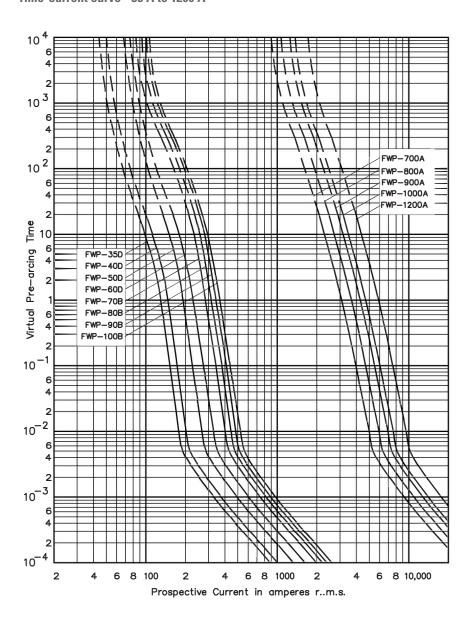
FWP - 700 V a.c. / V d.c.(UL), 5 A to 1200 A

Time-current curve - 5 A to 30 A



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

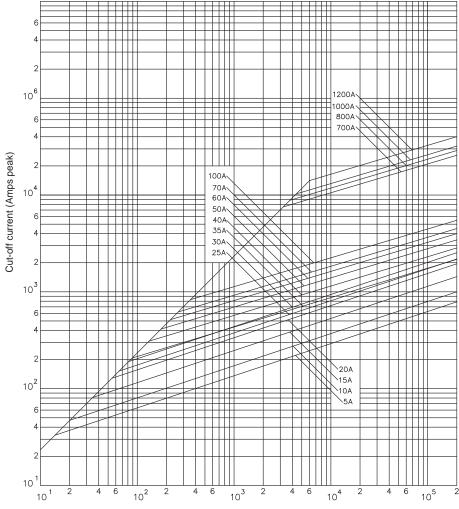
Time-current curve - 35 A to 1200 A



Contact FUSETECH@eaton.com for the time current curves for the following ratings: 125 A to 600 A

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

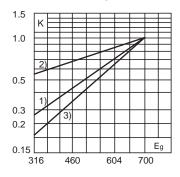
Cut-off curve - 5 A to 1200 A



Prospective current (SYM. R.M.S. Amps)

Total clearing I²t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{σ} , (RMS).



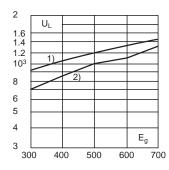
1) 35 - 100 A

2) 125 - 600 A

3) 700 to 1200 A

Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.

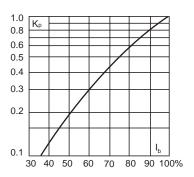


1) 125 - 600 A

2) 35 - 100 and 700 - 1200 A

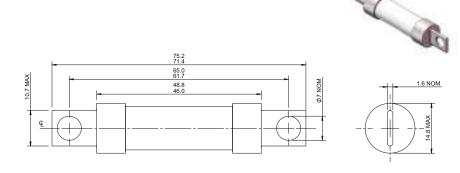
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.

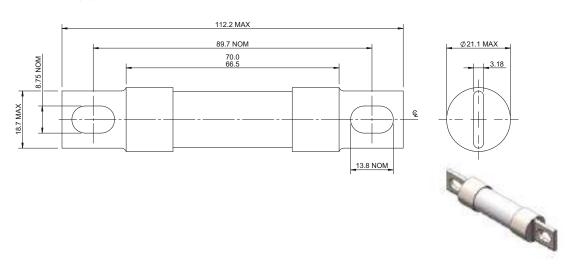


FWP - 700 V a.c. / V d.c.(UL), 5 A to 1200 A

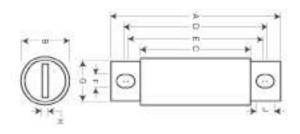
Dimensions (in) - 5 A to 30 A



Dimensions (in) - 35 A to 60 A



Dimensions (in) - 70 A to 600 A

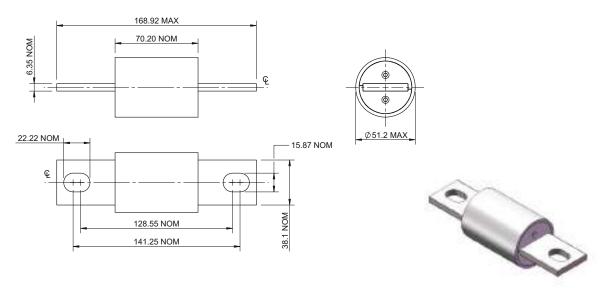


| Amp range | Α | В | C | D | E | F | G | Н | J |
|-----------|------|------|------|------|------|------|------|------|------|
| 70-100 | 4.41 | 0.95 | 2.59 | 3.63 | 3.56 | 0.34 | 0.75 | 0.13 | 0.38 |
| 125-200 | 5.09 | 1.5 | 2.84 | 4.19 | 3.5 | 0.41 | 1 | 0.25 | 0.75 |
| 225-400 | 5.09 | 2 | 2.84 | 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 |

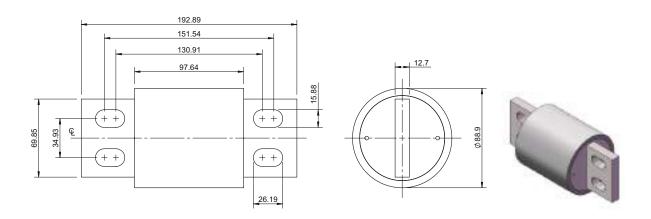
^{1&}quot; = 25.4mm

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

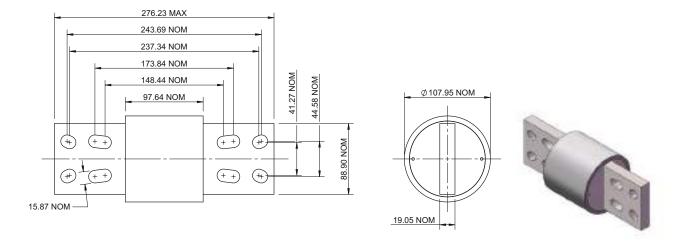
Dimensions (in) - 700 A and 800 A



Dimensions (in) - 900 A and 1000 A



Dimensions (mm) - 1200 A



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

Breaking capacity:

- 25kA RMS Sym. (35 A to 200 A)

- 100 kA RMS Sym. (250 A to 2000 A)

- 50 kA at 800 V d.c. (35 A to 200 A and 450 A to 600 A)

Standards / Agency information

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

Catalogue numbers

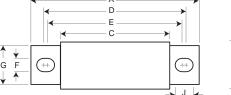
| AC | | DC | | _ Rated | I ² t (A ² Sec) | | | |
|------------------|-------------------|------------------|-------------------|-------------------|---------------------------------------|----------------------------|-------------------|----------------------|
| Rated voltage | Breaking capacity | Rated voltage | Breaking capacity | current (Amps) | Pre-arcing | Clearing at 1000 V a.c. | Watts loss (W) | Catalogue numbers |
| | | | | 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 |
| 1000 \/ | OE 1.A | 000 \/ - - | Ε0.1.Λ | 80 | 1550 | 9700 | 13 | FWJ-80A |
| 1000 V a.c. | 25 KA | 800 V d.c. | 50 kA | 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 |
| 1000 V a.c. | 100 1.4 | N/A | N/A | 300 | 23,500 | 164,000 | 56 | FWJ-300A |
| 1000 v a.c. | TUU KA | IN/A | N/A | 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 |
| 1000 V a.c. | 100 kA | 800 V d.c. | 50 kA | 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 |



Data sheets: 720027, 5785303 (35-600 A), 5785309 (800-2000 A), E5785173

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

Dimensions (in) - 35 A to 2000 A

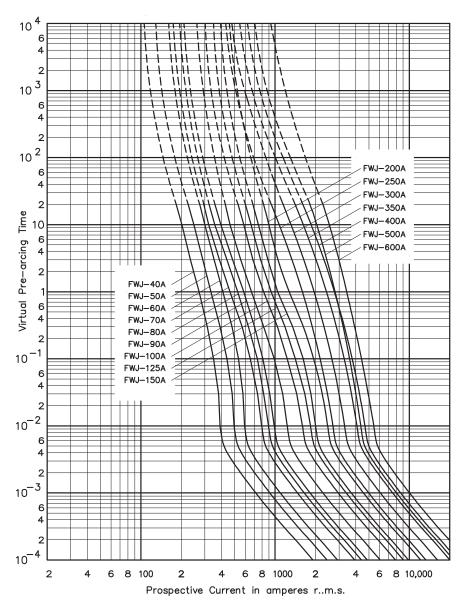




| Amp range | Α | В | C | D | E | F | G | Н | J |
|-----------|------|------|------|------|------|------|------|------|------|
| 35-60 | 5 | 0.94 | 3.11 | 4.24 | 4.18 | 0.35 | 0.75 | 0.13 | 0.38 |
| 70-100 | 4.93 | 1.13 | 3.09 | 4.27 | 4.16 | 0.35 | 1 | 0.19 | 0.41 |
| 125-200 | 5.69 | 1.53 | 3.26 | 4.80 | 4.06 | 0.45 | 1 | 0.25 | 0.82 |
| 250-400 | 5.77 | 2 | 3.5 | 4.81 | 4.15 | 0.43 | 1.5 | 0.25 | 0.76 |
| 500-600 | 7.20 | 2.5 | 3.47 | 5.98 | 4.71 | 0.56 | 2 | 0.38 | 1.2 |
| 800-2000 | 6.81 | 3.5 | 3.31 | 5.47 | 4.96 | 0.63 | 2.75 | 0.5 | 0.88 |
| | | | | | | | | | |

^{1&#}x27;' = 25.4mm

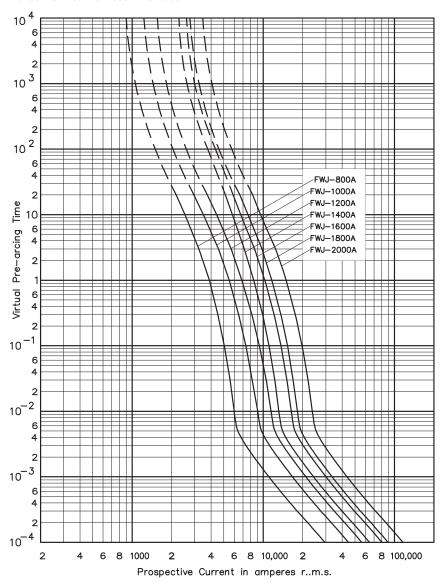
Time-current curve - 35 A to 600 A



Data sheets: 720027, 5785303 (35-600 A), 5785309 (800-2000 A), E5785173

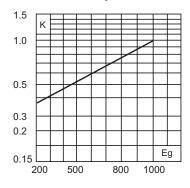
FWJ - 1000 V a.c. / 800 V d.c. (UL), 35 A to 2000 A

Time-current curve - 800 A to 2000 A



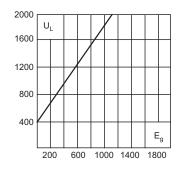
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



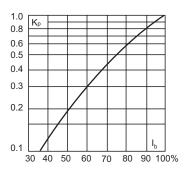
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



Data sheets: 720027, 5785303 (35-600 A), 5785309 (800-2000 A), E5785173

FWE - 1000 V d.c. (IEC/UL), 70 A to 600 A

Specifications

Description

North American style bolted tags high speed fuse links designed for the protection of DC charging stations, specialist vehicle onboard applications and general DC power conversion equipment and battery systems voltage starters.

Technical data

Rated voltage: 1000 V d.c. (IEC/UL)
Rated current: 70 A to 600 A
Breaking capacity: 100 kA

Operating class: aR

Standards / Agency information

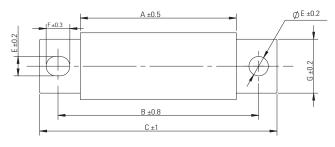
CE, IEC 60269-4 and UL 248-13 Recognised

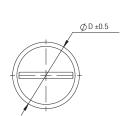
Catalogue numbers

| Rated voltage | Rated current | Watts loss (50% rated current) | Watts loss (100% rated current) | Pre-arcing I ² t (A ² Sec) | Clearing I²t | Breaking capacity | Operating class | Catalogue number |
|------------------|---------------|--------------------------------------|---------------------------------------|---|--------------|-------------------|-----------------|---------------------|
| | 70 | 3.8 | 21 | 680 | 3500 | 100 kA | aR | FWE-70A |
| | 80 | 4.2 | 24 | 1020 | 5000 | 100 kA | aR | FWE-80A |
| | 90 | 4.6 | 27 | 1400 | 6500 | 100 kA | aR | FWE-90A |
| | 100 | 5 | 30 | 1820 | 8500 | 100 kA | aR | FWE-100A |
| | 125 | 6 | 43 | 1830 | 7800 | 100 kA | aR | FWE-125A |
| | 150 | 7 | 49 | 2670 | 12000 | 100 kA | aR | FWE-150A |
| | 175 | 8 | 52 | 4670 | 20700 | 100 kA | aR | FWE-175A |
| | 200 | 9 | 56 | 6900 | 29300 | 100 kA | aR | FWE-200A |
| 1000 V d.c. | 225 | 10 | 69 | 7880 | 31600 | 100 kA | aR | FWE-225A |
| (IEC/UL) | 250 | 11 | 79 | 9940 | 39900 | 100 kA | aR | FWE-250A |
| | 275 | 12 | 83 | 13000 | 52100 | 100 kA | aR | FWE-275A |
| | 300 | 13 | 87 | 16800 | 67500 | 100 kA | aR | FWE-300A |
| | 350 | 15 | 100 | 21100 | 89300 | 100 kA | aR | FWE-350A |
| | 400 | 16 | 110 | 31500 | 125500 | 100 kA | aR | FWE-400A |
| | 450 | 19 | 139 | 35300 | 166200 | 100 kA | aR | FWE-450A |
| | 500 | 21 | 155 | 49300 | 203900 | 100 kA | aR | FWE-500A |
| | 550 | 23 | 167 | 58600 | 322600 | 100 kA | aR | FWE-550A |
| | 600 | 25 | 180 | 74700 | 346500 | 100 kA | aR | FWE-600A |

Dimensions (cm)





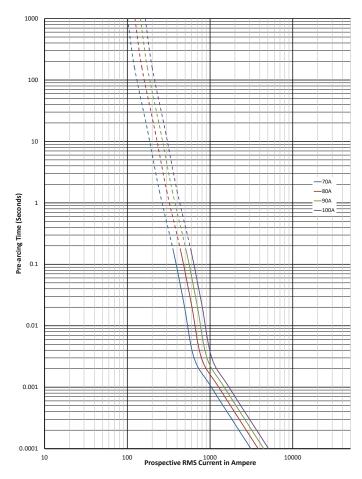


| Catalogue number | Α | В | C | D | E | F | G | Н |
|------------------|------|-----|-----|------|----|----|----|-----|
| 70A to 100A | 72.2 | 93 | 110 | 25.4 | 9 | 11 | 19 | 2.2 |
| 125A to 200A | 72.2 | 93 | 110 | 31 | 9 | 11 | 25 | 3 |
| 225A to 300A | 72.2 | 100 | 122 | 38.1 | 11 | 13 | 28 | 3.5 |
| 350A to 400A | 72.2 | 100 | 122 | 50.8 | 11 | 13 | 28 | 5 |
| 450A to 600A | 72.2 | 100 | 122 | 63.5 | 11 | 13 | 40 | 6 |



FWE - 1000 V V d.c. (IEC/UL), 70 A to 600 A

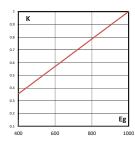
Time-current curve - 70 A to 100 A



K_b = 1 N = 1.7

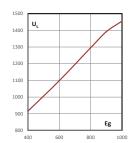
Total clearing I²t

The total clearing I^2t at rated voltage and tested DC time constant are given in electrical characteristics. For other voltages the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltages, E_a .



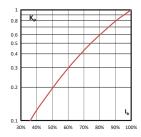
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, $E_{g'}$ at a time constant of 10ms.



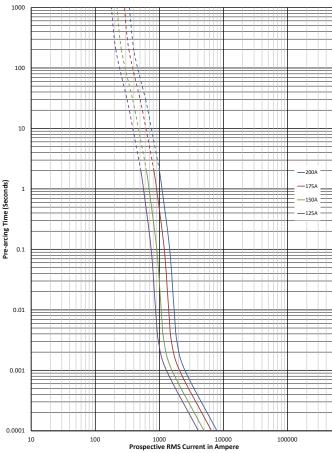
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



FWE - 1000 V V d.c. (IEC/UL), 70 A to 600 A

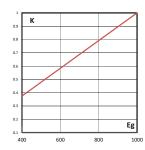
Time-current curve - 125 A to 200 A



K_b = 1 N = 1.7

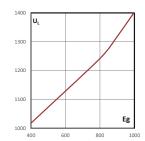
Total clearing I2t

The total clearing I^2t at rated voltage and tested DC time constant are given in electrical characteristics. For other voltages the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltages, E_a .



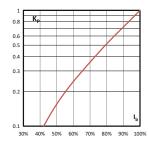
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , at a time constant of 10ms.



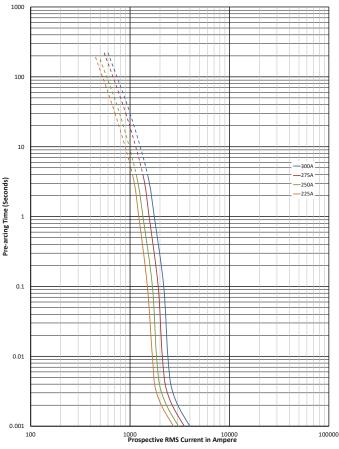
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



FWE - 1000 V V d.c. (IEC/UL), 70 A to 600 A

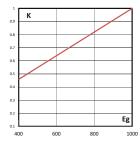
Time-current curve - 225 A to 300 A



K_b = 1 N = 1.7

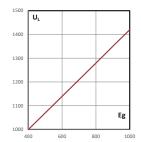
Total clearing I2t

The total clearing I^2t at rated voltage and tested DC time constant are given in electrical characteristics. For other voltages the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltages, E_a .



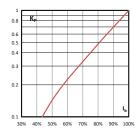
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, at a time constant of 10ms.



Watts losses

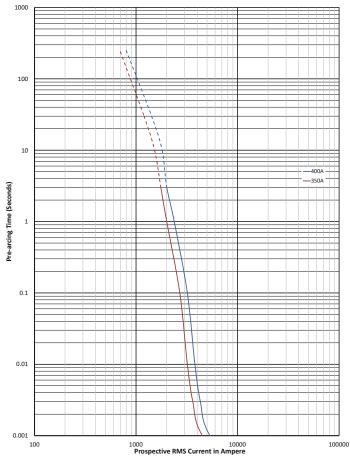
Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



North American fuse links

FWE - 1000 V V d.c. (IEC/UL), 70 A to 600 A

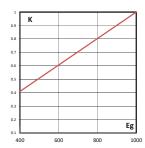
Time-current curve - 350 A and 400 A



K_b = 1 N = 1.7

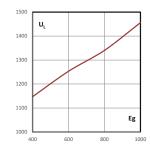
Total clearing I²t

The total clearing I^2t at rated voltage and tested DC time constant are given in electrical characteristics. For other voltages the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltages, E_{α} .



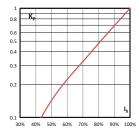
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, at a time constant of 10ms.



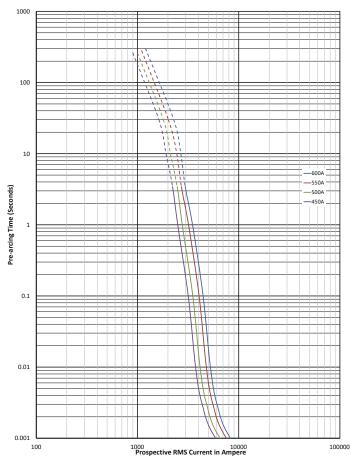
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



FWE - 1000 V V d.c. (IEC/UL), 70 A to 600 A

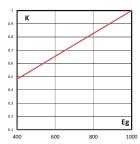
Time-current curve - 450 A to 600 A



K_b = 1 N = 1.7

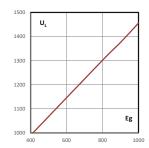
Total clearing I2t

The total clearing I^2t at rated voltage and tested DC time constant are given in electrical characteristics. For other voltages the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltages, E_a .



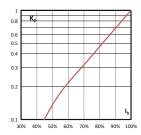
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, at a time constant of 10ms.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



LCT, LET - 240 V a.c. / 150 V d.c. (IEC), 250-280 V a.c. / 150 V d.c. (UL), 6 A 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 A to 160 A)

250 V a.c. / 150 V d.c. (UL 180 A)

- Rated current: 6 A to 180 A
- · Breaking capacity:
 - 200 kA RMS Sym.
 - 50 kA DC at 150 V d.c.
- · Operating Class: aR

Compatible trip indicator and microswitch for LET fuse links

• See details page 395

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 for specific UL recognition status.



I²t (A² Sec)

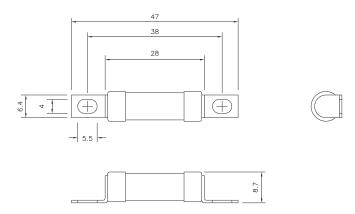
| | | | II (A Sec) | | | |
|-------------------|-------------------------------|----------------------|------------|---------------------------|-------------------|----------------------|
| Fuse link type | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 240 V a.c. | Watts loss (W) | Catalogue numbers |
| | | 6 | 2 | 9 | 1 | 6LCT |
| | 240 V a.c. / 150 V d.c. (IEC) | 10 | 3.8 | 22 | 2.5 | 10LCT |
| LCT | , , , | 12 | 7 | 32 | 2.5 | 12LCT |
| | 250 V a.c. / 150 V d.c. (UL) | 16 | 20 | 100 | 2.5 | 16LCT |
| | | 20 | 25 | 160 | 4 | 20LCT |
| | | 25 | 18 | 250 | 4 | 25LET |
| | | 32 | 32 | 450 | 5 | 32LET |
| | | 35 | 50 | 600 | 5 | 35LET |
| | | 50 | 100 | 1400 | 7 | 50LET |
| LET | 280 V a.c. / 150 V d.c. (UL) | 63 | 180 | 2200 | 9 | 63LET |
| LET | | 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.

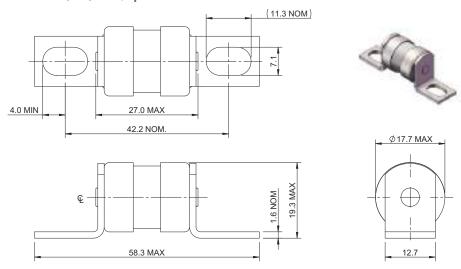


LCT, LET - 240 V a.c. / 150 V d.c. (IEC), 250-280 V a.c. / 150 V d.c. (UL), 6 A to 180 A

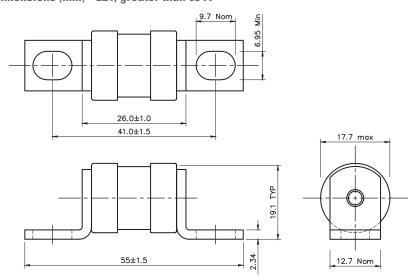
Dimensions (mm) - LCT



Dimensions (mm) - LET, up to 63 A



Dimensions (mm) - LET, greater than 63 A

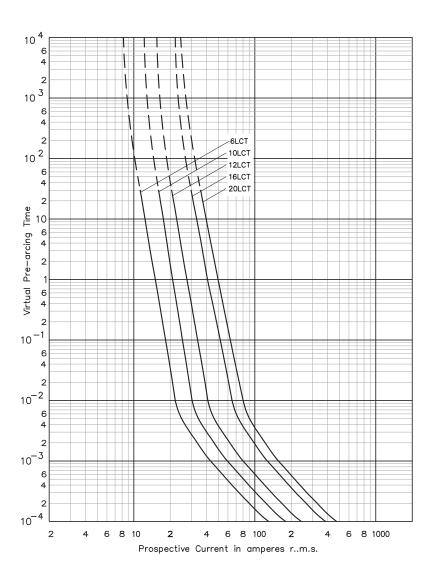


Indicator (optional).

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 A to 180 A

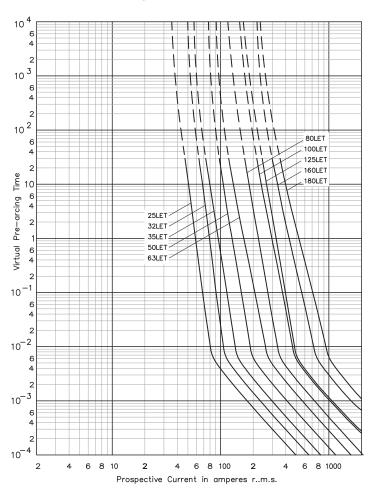
Time-current curve - LCT, 6 A to 20 A



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 A to 180 A

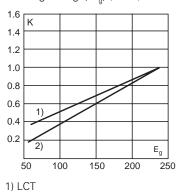
Time-current curve - LET, 25 A to 180 A



Total clearing I2t

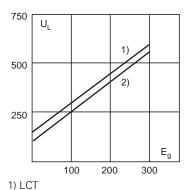
2) LET

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm q}$, (RMS).



Arc voltage

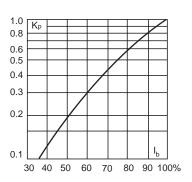
This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



2) LET

Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



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 A 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 A to 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

Compatible trip indicator and microswitch

• See details page 395

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 for specific UL recognition status.

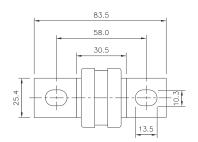


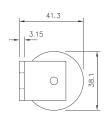
Catalogue numbers

I2t (A2 Sec)

| Fuse link type | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 120 V a.c. | Clearing at 240 V a.c. | Watts loss (W) | Catalogue numbers |
|-------------------|---|----------------------|------------|---------------------------|---------------------------|-------------------|----------------------|
| | | 160 | 1100 | 7000 | 16,000 | 17 | 160LMT |
| | | 200 | 1500 | 10,000 | 20,000 | 28 | 200LMT |
| LMT | 240 V a.c. / 150 V d.c. (IEC) | 250 | 3200 | 20,000 | 40,000 | 28 | 250LMT |
| | , | 315 | 6000 | 35,000 | 75,000 | 35 | 315LMT |
| Single barrel | 250 V a.c. / 150 V d.c. (UL) | 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 |
| | | 400 | 6000 | 35,000 | 80,000 | 60 | 400LMMT |
| | | 500 | 14,000 | 80,000 | 170,000 | 64 | 500LMMT |
| LMMT | 240 V a.c. / 150 V d.c. (IEC) | 630 | 24,000 | 150,000 | 300,000 | 75 | 630LMMT |
| Double barrel | 250 V a.c. / 150 V d.c. (UL) | 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)

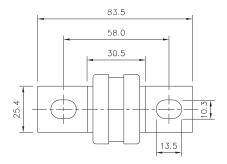


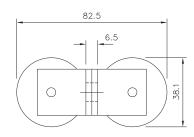


Data sheets: 720004, 5785294 (LMT), 5785295 (LMMT)

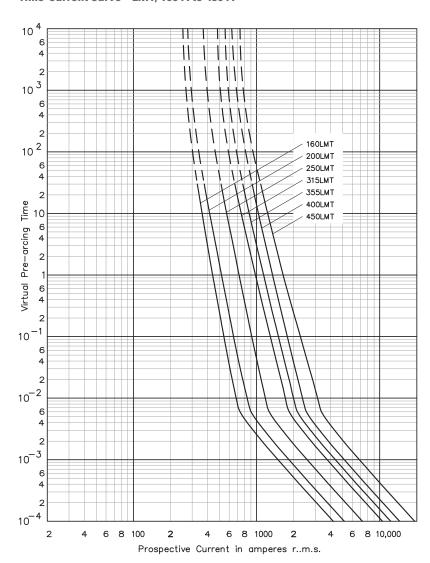
LMT, LMMT - 240 V a.c. / 150 V d.c. (IEC), 250 V a.c. / 150 V d.c. (UL), 160 A to 900 A

Dimensions (mm) - LMMT (indicator optional)





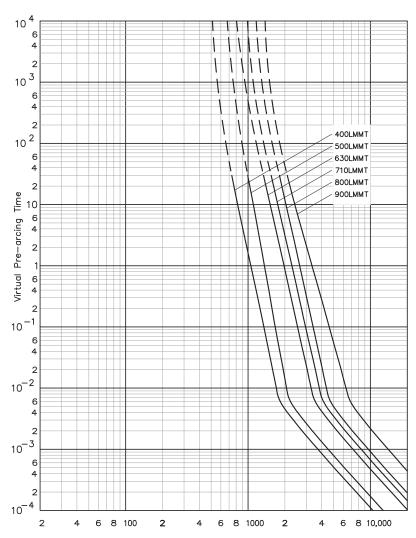
Time-current curve - LMT, 160 A to 450 A



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

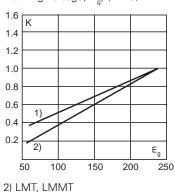
LMT, LMMT - 240 V a.c. / 150 V d.c. (IEC), 250 V a.c. / 150 V d.c. (UL), 160 A to 900 A

Time-current curve - LMMT, 400 A to 900 A



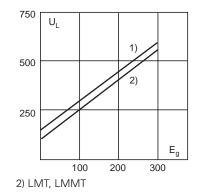
Total clearing I2t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_n, (RMS).



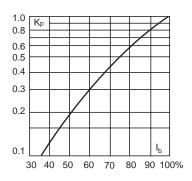
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



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 A 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 A to 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.

Compatible trip indicator and microswitch

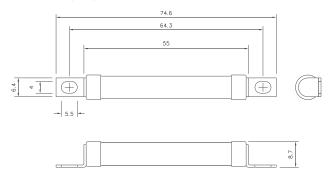
• See details page 395

Standards / Agency information

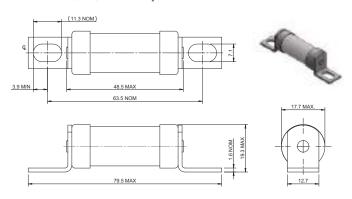
CE, designed and tested to BS88 part 4, IEC 60269 Part 4, Consult Eaton for specific UL Recognition status. CCC for ET, FE, EET, FEE.



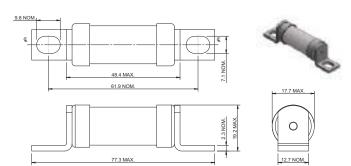
Dimensions (mm) - CT



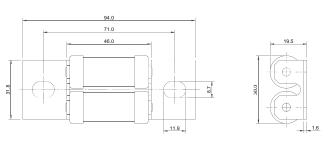
Dimensions (mm) - ET, FE up to 63 A



Dimensions (mm) - ET, FE greater than 63 A



Dimensions (mm) - EET and 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 A to 200 A

Catalogue numbers

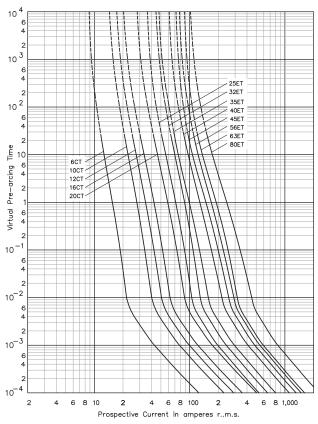
| l²t | (A² | Sec) |
|-----|-----|------|
|-----|-----|------|

| | | | I-I (A- Sec) | | | | |
|----------------|-------------------------------|----------------------|--------------|--------------------------|---------------------------|-------------------|----------------------|
| Fuse link type | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 415V a.c. | Clearing at 660 V a.c. | Watts loss (W) | Catalogue numbers |
| | | 6 | 1.8 | 8.5 | 12 | 2 | 6CT |
| | 690 V a.c. / 500 V d.c. (IEC) | 10 | 7 | 30 | 48 | 3 | 10CT |
| CT | | 12 | 10 | 40 | 65 | 3 | 12CT |
| | 700 V a.c. / 500 V d.c. (UL) | 16 | 16 | 66 | 110 | 7 | 16CT |
| | | 20 | 32 | 150 | 220 | 7 | 20CT |
| | | 25 | 25 | 150 | 250 | 7 | 25ET |
| | | 32 | 32 | 190 | 350 | 11 | 32ET |
| | | 35 | 52 | 310 | 500 | 11 | 35ET |
| ET | 690 V a.c. / 500 V d.c. (IEC) | 40 | 103 | 600 | 900 | 9 | 40ET |
| LI | 700 V a.c. / 500 V d.c. (UL) | 45 | 103 | 680 | 1100 | 11 | 45ET |
| | | 56 | 135 | 950 | 1500 | 14 | 56ET |
| | | 63 | 171 | 1200 | 2000 | 16 | 63ET |
| | | 80 | 360 | 2500 | 4000 | 18 | 80ET |
| | | 35 | 33 | 130 | 200 | 9 | 35FE |
| | | 40 | 52 | 180 | 300 | 9 | 40FE |
| | | 45 | 76 | 270 | 450 | 11 | 45FE |
| | 690 V a.c. / 500 V d.c. (IEC) | 50 | 103 | 380 | 600 | 11 | 50FE |
| FE | | 63 | 135 | 480 | 750 | 12 | 63FE |
| | 700 V a.c. / 500 V d.c. (UL) | 71 | 210 | 600 | 950 | 17 | 71FE |
| | | 80 | 250 | 900 | 1500 | 20 | 80FE |
| | | 90 | 360 | 1300 | 2100 | 20 | 90FE |
| | | 100 | 470 | 1800 | 2800 | 23 | 100FE |
| | | 90 | 490 | 3000 | 4500 | 19 | 90EET |
| EET | 690 V a.c. / 500 V d.c. (IEC) | 110 | 600 | 4000 | 6500 | 27 | 110EET |
| LLI | 700 V a.c. / 700 V d.c. (UL) | 140 | 1050 | 7000 | 12,000 | 35 | 140EET |
| | | 160 | 1500 | 10,000 | 17,000 | 39 | 160EET |
| | | 100 | 400 | 1600 | 2400 | 24 | 100FEE |
| | | 120 | 540 | 1900 | 3100 | 32 | 120FEE |
| FEE | 690 V a.c. / 500 V d.c. (IEC) | 140 | 850 | 2500 | 3800 | 36 | 140FEE |
| ILL | 700 V a.c. / 500 V d.c. (UL) | 160 | 1000 | 3700 | 5700 | 46 | 160FEE |
| | | 180 | 1400 | 5300 | 8400 | 46 | 180FEE |
| | | 200 | 1900 | 7100 | 11,400 | 52 | 200FEE |
| | | | | | | | |

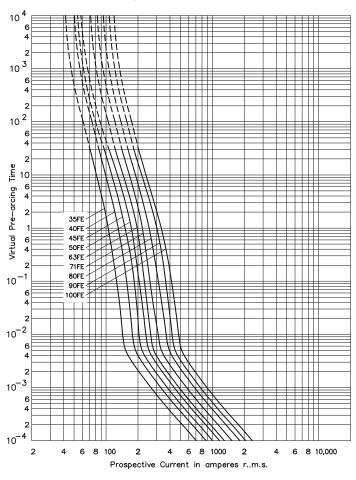
Note: FC, 8ET, 12ET, 15ET, 20ET, 65EET and 75EET are available for replacement purposes on existings equipment.

CT, ET, FE, EET, FEE -690 V a.c. / 500 V d.c. (IEC), 700 V a.c. / 500 V d.c. (UL), 6 A to 200 A

Time-current curve - CT, 6 A to 20 A and ET 25 A to 80 A

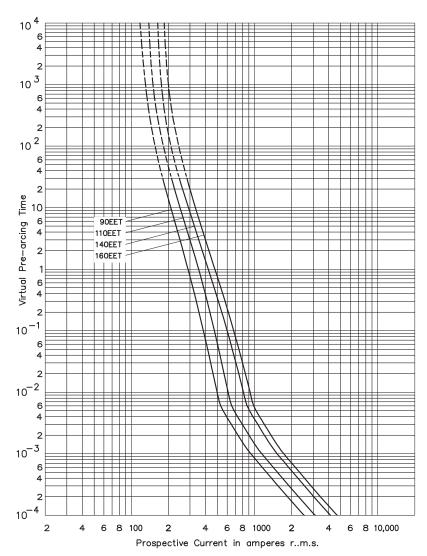


Time-current curve - FE, 35 A to 100 A



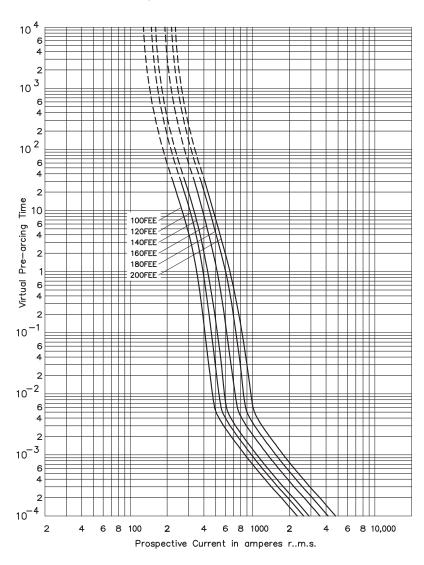
CT, ET, FE, EET, FEE - 690 V a.c. / 500 V d.c. (IEC), 700 V a.c. / 500 V d.c. (UL), 6 A to 200 A

Time-current curve - EET, 90 A to 160 A



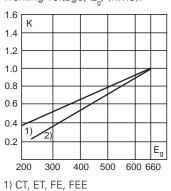
CT, ET, FE, EET, FEE - 690 V a.c./500 V d.c. (IEC), 700 V a.c./500 V d.c. (UL), 6 A to 200 A

Time-current curve - FEE, 100 A to 200 A



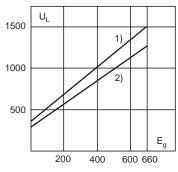
Total clearing I²t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{σ} , (RMS).



Arc voltage

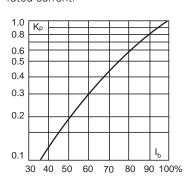
This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



1) CT, ET, FE, FEE

Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



FM, FMM, MT, MMT - 690 V a.c. / 350-450 V d.c. (IEC), 700 V a.c. / 500 V d.c. (UL), 160 A 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)
 - MT and MMT: 690 V a.c. / 350 V d.c. (IEC); 700 V a.c. (UL)
- Rated current: 160 A to 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

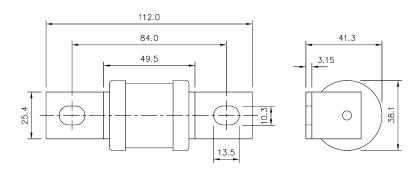
Compatible trip indicator and microswitch

• See details page 395

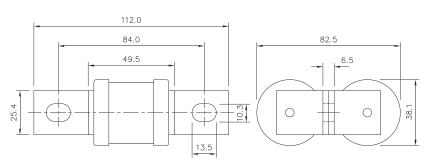
Standards / Agency information

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 for specific UL Recognition status. CCC for FM and FMM.

Dimensions (mm) - FM and MT (indicator optional)



Dimensions (mm) - FMM and MMT (indicator optional)



Data sheets: 720024, 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 A to 710 A

Catalogue numbers

| | | | I ² t (A ² Sec) | | | | |
|----------------|-------------------------------|----------------------|---------------------------------------|--------------------------|---------------------------|-------------------|----------------------|
| Fuse link type | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 415V a.c. | Clearing at 660 V a.c. | Watts loss (W) | Catalogue numbers |
| | | 180 | 1400 | 7500 | 13,500 | 40 | 180FM |
| | | 200 | 2600 | 10,500 | 18,500 | 40 | 200FM |
| | 690 V a.c. / 450 V d.c. (IEC) | 225 | 3700 | 14,500 | 26,500 | 44 | 225FM |
| FM | | 250 | 5200 | 20,500 | 37,500 | 48 | 250FM |
| | 700 V a.c. / 500 V d.c. (UL) | 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 |
| | | 400 | 10,000 | 40,000 | 72,500 | 85 | 400FMM |
| | | 450 | 15,000 | 60,000 | 105,000 | 90 | 450FMM |
| 5.4.4 | 690 V a.c. / 450 V d.c. (IEC) | 500 | 20,000 | 82,000 | 150,000 | 100 | 500FMM |
| FMM | | 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 |
| | | 160 | 2400 | 15,000 | 25,000 | 26 | 160MT |
| | | 180 | 3800 | 25,000 | 38,000 | 26 | 180MT |
| | 690 V a.c. / 350 V d.c. (IEC) | 200 | 6000 | 40,000 | 58,000 | 27 | 200MT |
| MT | , , , | 250 | 11,500 | 80,000 | 110,000 | 32 | 250MT |
| | 700 V a.c. (UL) | 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 |
| | | 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 |
| | | | | | | | |

Data sheets: 720024, 5785314 (FM), 5785313 (MT), 5785292 (FMM), 5785311 (MMT)

690 V a.c. / 350 V d.c. (IEC)

700 V a.c. (UL)

MMT

355

400

450

500

560

630

710

13,500

21,000

30,000

42,000

60,000

68,500

78,000

97,000

150,000

220,000

300,000

430,000

500,000

600,000

54

60

57

64

64

86

105

140,000

220,000

320,000

450,000

640,000

720,000

850,000

355MMT

400MMT

450MMT

500MMT

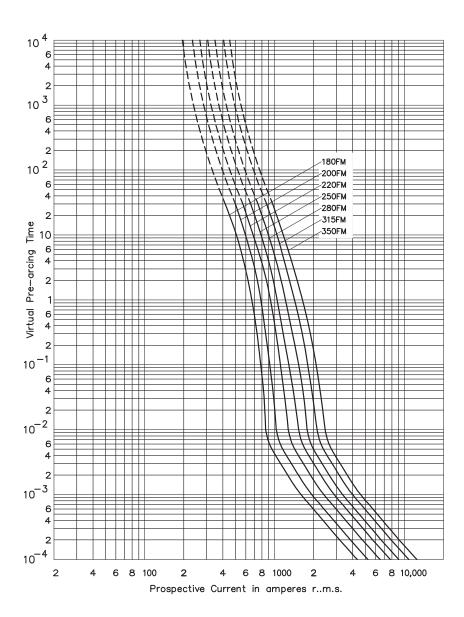
560MMT

630MMT

710MMT

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

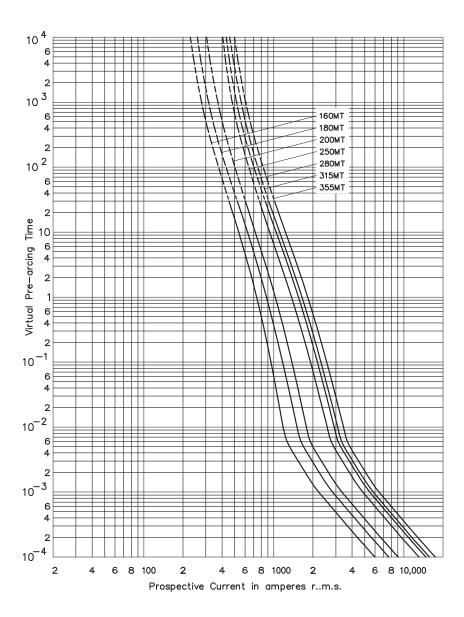
Time-current curve - FM, 180 A to 350 A



Data sheets: 720024, 5785314 (FM), 5785313 (MT), 5785292 (FMM), 5785311 (MMT)

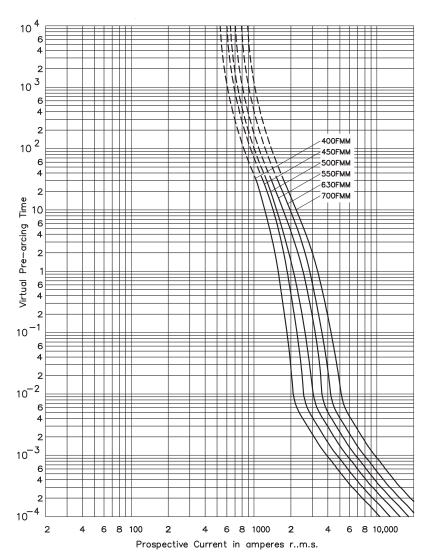
FM, FMM, MT, MMT - 690 V a.c. / 350-450 V d.c. (IEC), 700 V a.c. / 500 V d.c. (UL), 160 A to 710 A

Time-current curve - MT, 160 A to 355 A



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

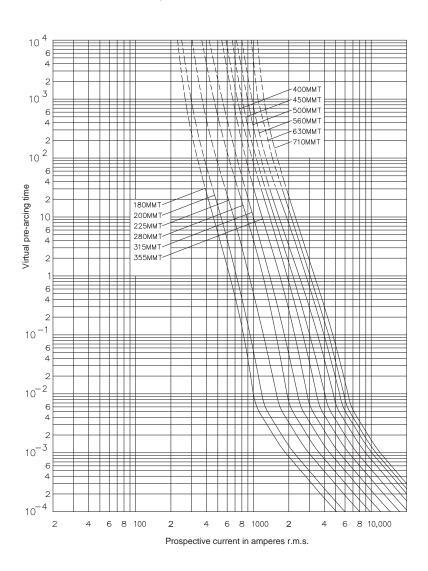
Time-current curve - FMM, 400 A to 700 A



Data sheets: 720024, 5785314 (FM), 5785313 (MT), 5785292 (FMM), 5785311 (MMT)

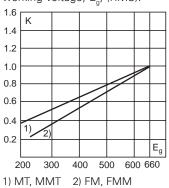
FM, FMM, MT, MMT - 690 V a.c. / 350-450 V d.c. (IEC), 700 V a.c. / 500 V d.c. (UL), 160 A to 710 A

Time-current curve - MMT, 180 A to 710 A



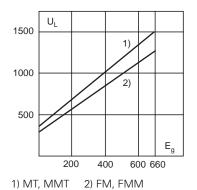
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



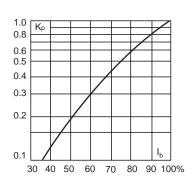
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



Data sheets: 720024, 5785314 (FM), 5785313 (MT), 5785292 (FMM), 5785311 (MMT)

FWA - 10 x 38 mm and 21 x 51 mm, 150 V a.c. / V d.c. (UL), 5 A 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. / V d.c. (UL)

• Rated current: 5 A to 60 A

Breaking capacity:

- 200 kA RMS Sym.

- 50 kA DC at 150 V d.c.

· Operating class: aR

Standards / Agency information

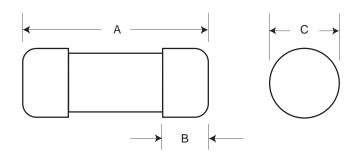
CE, UL recognised

Catalogue numbers



| | | | I ² t (A ² Sec) | | | |
|---|-----------------------------|----------------------|---------------------------------------|---------------------------|-------------------|----------------------|
| Fuse link size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 150 V a.c. | Watts loss (W) | Catalogue numbers |
| | | 5 | 1.6 | 8 | 2 | FWA-5A10F |
| | | 10 | 3.6 | 16 | 2.7 | FWA-10A10F |
| 10 x 38 mm | 150 V a.c. / V d.c. (UL) | 15 | 14 | 50 | 3.3 | FWA-15A10F |
| (13/ ₃₂ " x 11/2") | | 20 | 33 | 130 | 3.8 | FWA-20A10F |
| | | 25 | 58 | 220 | 4.9 | FWA-25A10F |
| | | 30 | 100 | 400 | 4.9 | FWA-30A10F |
| | | 35 | 75 | 800 | 4.5 | FWA-35A21F |
| | | 40 | 100 | 1000 | 5.1 | FWA-40A21F |
| 21 x 51 mm (¹³ / ₁₆ " x 2") | 150 V a.c. / V d.c. (UL) | 45 | 130 | 1300 | 6 | FWA-45A21F |
| 1716 72 / | (OL) | 50 | 170 | 1600 | 7.3 | FWA-50A21F |
| | | 60 | 250 | 2400 | 8 | FWA-60A21F |

Dimensions - in (mm)

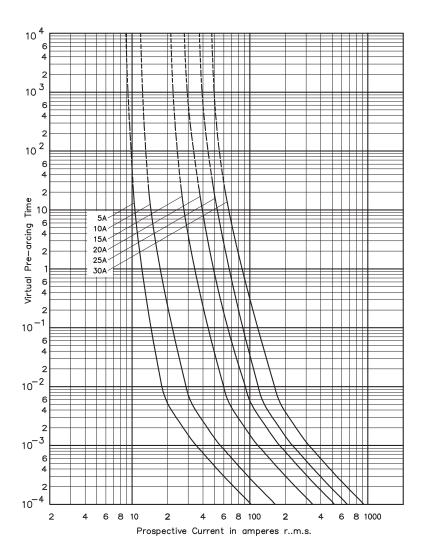


| Α | mp range | Α | В | С |
|---|----------|------------|-------------|-------------|
| 5 | -30 | 1.5 (38.1) | 0.38 (9.5) | 0.41 (10.3) |
| 3 | 5-60 | 2 (50.8) | 0.63 (15.9) | 0.81 (20.6) |
| | | | | |

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

FWA - 10 x 38 mm and 21 x 51 mm, 150 V a.c. / V d.c. (UL), 5 A to 60 A

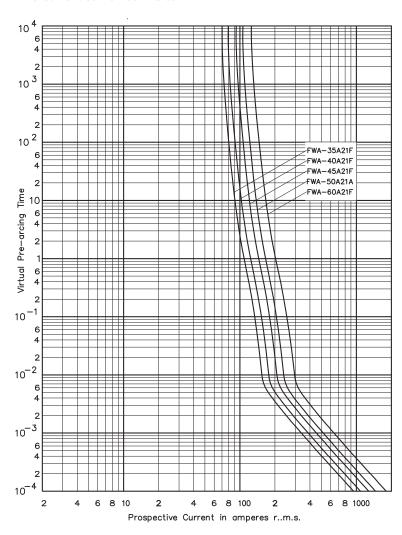
Time-current curve - 5 A to 30 A



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

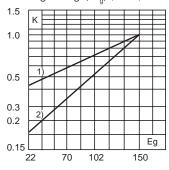
FWA - 10 x 38 mm and 21 x 51 mm, 150 V a.c. / V d.c. (UL), 5 A to 60 A

Time-current curve - 35 A to 60 A



Total clearing I²t

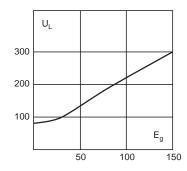
The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm g}$, (RMS).



1) 5 - 30 A 2) 35 - 60 A

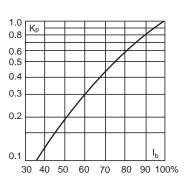
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



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

FWX - 14 x 51 mm, 250 V a.c. / V d.c. (UL), 1 A 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: see details in table below

• Rated current: 1 A to 50 A

· Breaking capacity:

- 200 kA RMS Sym. (UL, all ratings)

50 kA at 250 V d.c. (UL, 5 A to 30 A only)

• Operating class: aR

Compatible modular fuse holder

• CH14

Standards / Agency information

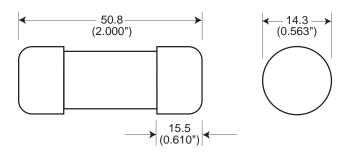
CE, UL recognised 1-50 A & CSA component acceptance: 5 A to 30 A



Catalogue numbers

| | | | I ² t (A ² Sec) | | | |
|--------------------------|-----------------|----------------------|---------------------------------------|---------------------------|-------------------|----------------------|
| Fuse link size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 250 V a.c. | Watts loss (W) | Catalogue numbers |
| | | 1 | 0.04 | 0.12 | 5.7 | FWX-1A14F |
| | 250 // // !! / | 2 | 0.08 | 0.28 | 8.7 | FWX-2A14F |
| | 250 V a.c. (UL) | 3 | 0.11 | 0.39 | 2.8 | FWX-3A14F |
| | | 4 | 0.1 | 0.35 | 3 | FWX-4A14F |
| | | 5 | 1.6 | 13 | 1.3 | FWX-5A14F |
| 14 x 51mm (%16" x 2") | | 10 | 3.6 | 24 | 3.4 | FWX-10A14F |
| (710 X Z) | 250 V a.c. / | 15 | 14 | 83 | 3.8 | FWX-15A14F |
| | 250 V d.c. (UL) | 20 | 33 | 200 | 4.6 | FWX-20A14F |
| | | 25 | 58 | 300 | 5.3 | FWX-25A14F |
| | | 30 | 100 | 500 | 5.9 | FWX-30A14F |
| | 250 V a.c. (UL) | 50 | 200 | 1800 | 5.7 | FWX-50A14F |

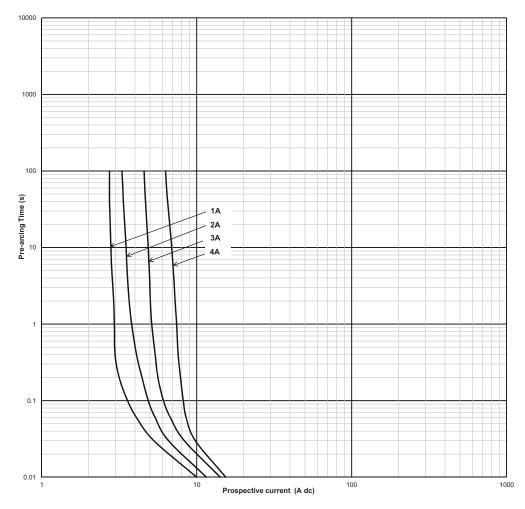
Dimensions - mm (in)



Data sheets: 720006, 5785580, 5785302

FWX - 14 x 51 mm, 250 V a.c. / V d.c. (UL), 1 A to 50 A

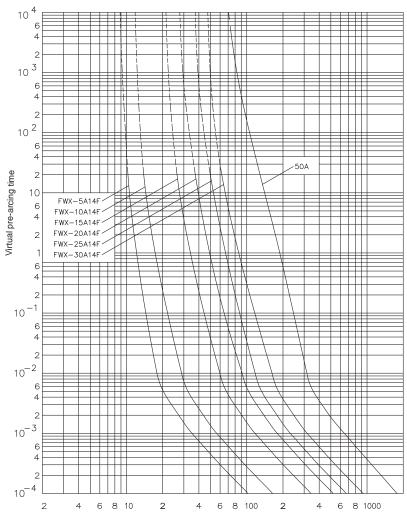
Time-current curve - 1 A to 4 A



Data sheets: 720006, 5785580, 5785302

FWX - 14 x 51 mm, 250 V a.c. / V d.c. (UL), 1 A to 50 A

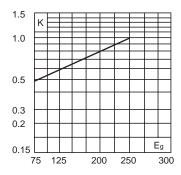
Time-current curve - 5 A to 50 A



Prospective current in amperes r.m.s.

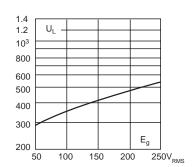
Total clearing I2t

The total clearing l²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



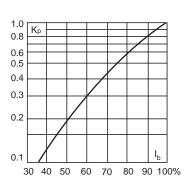
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



Data sheets: 720006, 5785580, 5785302

FWH - 6 x 32 mm, 500 V a.c. (UL), 0.25 A 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)
 - 1000 V a.c. (UL, 2 A only)
 - 600 V d.c. (UL, 4 A and 5 A only)
- Rated current: 0.25 A to 30 A
- Breaking capacity:
 - 50 kA (0.25 A to 20 A)
 - 20 kA (25 A to 30 A, tested at PF = 76%)
 - 50 kA at 600 V d.c. (UL 2 A and 5 A only)
- · Operating class: aR

Standards / Agency information

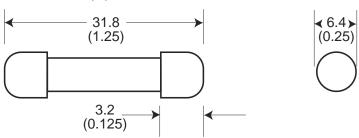
CE, UL recognised 0.25 A to 30 A including 2 A at 1000 V a.c., CSA component Acceptance: 0.25 A to 7 A

Catalogue numbers

| 124 | (Δ2 | Sec) | |
|-----|-----|------|--|

| | | | II (A SEC) | | | |
|----------------|------------------------------|----------------------|------------|---------------------------|-------------------|----------------------|
| Fuse link size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 500 V a.c. | Watts loss (W) | Catalogue numbers |
| | | 0.25 | 0.01 | 0.05 | 2.7 | FWH250A6F |
| | 500 V a.c. (UL) | 0.5 | 0.05 | 0.25 | 1.2 | FWH500A6F |
| | | 1 | 0.4 | 2 | 1.7 | FWH-001A6F |
| | 1000 V a.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) | 4 | 8.4 | 22 | 2.4 | FWH-004A6F |
| | | 5 | 15 | 40 | 2.1 | FWH-005A6F |
| 3 x 32 mm | | 6.3 | 36 | 90 | 2.3 | FWH-6-30A6F |
| ¼" x 1¼") | | 7 | 50 | 125 | 2.5 | FWH-007A6F |
| | | 10 | 9.9 | 139 | 2.86 | FWH5-010A6F |
| | | 12.5 | 20 | 60 | 3.53 | FWH5-12-5A6F |
| | 500 V a.c. (UL) | 15 | 44 | 146 | 3.08 | FWH5-015A6F |
| | | 16 | 48 | 177 | 4.48 | FWH5-016A6F |
| | | 20 | 75 | 259 | 4.26 | FWH5-020A6F |
| | | 25 | 126 | 345 | - | FWH-025A6F |
| | | 30 | 145 | 430 | - | FWH-030A6F |

Dimensions mm (in)

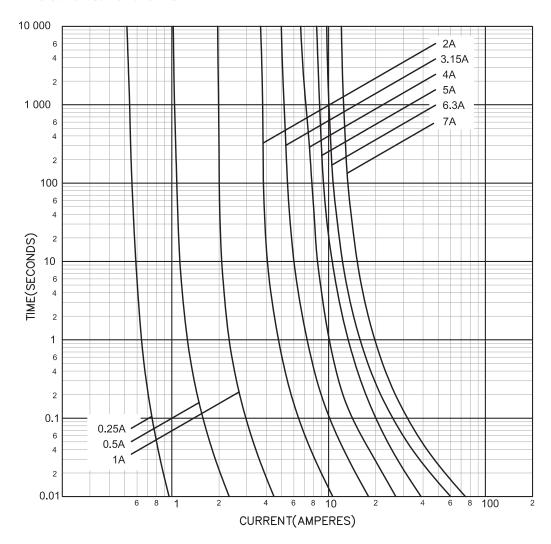


Data sheets: 720038, 5785256 (0.25-7A), 50955 (10-30 A)



FWH - 6 x 32 mm, 500 V a.c. (UL), 0.25 A to 30 A

Time-current curve - 0.25 A to 7 A



Data sheets: 720038, 5785256 (0.25-7A

FWH - 14 x 51 mm, 500 V a.c. / V d.c. (UL), 1 A 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 A to 30 A only)
- Rated current: 1 A to 30 A
- Breaking capacity:
 - 200 kA RMS Sym. all ratings
 - 50 kA at 500 V d.c. (5 A to 30 A only)
- Operating class: aR

Compatible modular fuse holder

• CH14

Standards / Agency information

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

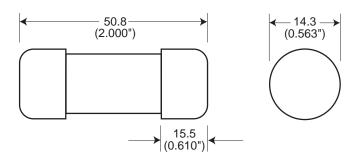


Catalogue numbers

I2t (A2 Sec)

| Fuse link size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 500 V a.c. | Watts loss (W) | Catalogue numbers |
|-------------------------|---------------------------|----------------------|------------|---------------------------|-------------------|----------------------|
| | | 1 | 0.04 | 0.41 | 5.7 | FWH-1A14F |
| | E00 \/ a a / \ | 2 | 0.08 | 0.11 | 8.7 | FWH-2A14F |
| | 500 V a.c.(UL) | 3 | 0.11 | 0.26 | 2.8 | FWH-3A14F |
| | | 4 | 0.1 | 0.23 | 3 | FWH-4A14F |
| | | 5 | 2 | 7 | 1.5 | FWH-5A14F |
| 4 x 51 mm | | 6 | 2 | 7 | 1.5 | FWH-6A14F |
| / ₁₆ " x 2") | | 10 | 4 | 15 | 4 | FWH-10A14F |
| | E00 \/ a a / \/ d a /\ \ | 12 | 7 | 25 | 4.3 | FWH-12A14F |
| | 500 V a.c. / V d.c. (UL) | 15 | 10 | 40 | 5.5 | FWH-15A14F |
| | | | 20 | 26 | 100 | 6.5 |
| | | 25 | 49 | 200 | 7 | FWH-25A14F |
| | | 30 | 58 | 240 | 9 | FWH-30A14F |

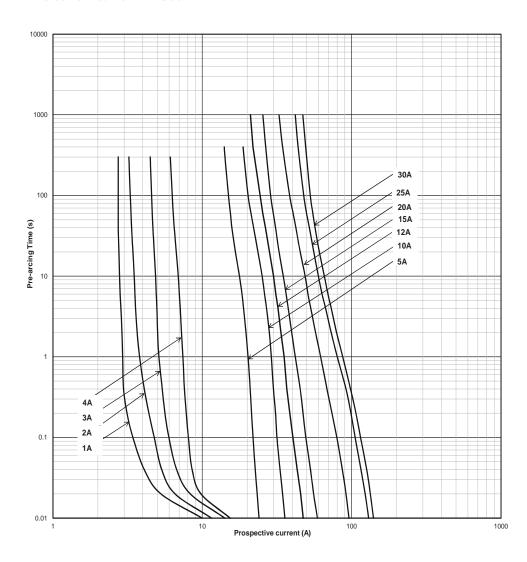
Dimensions mm (in)



Data sheets: 720008, 5785298, 5785578

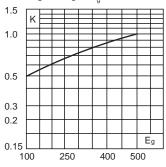
FWH - 14 x 51 mm, 500 V a.c. / V d.c. (UL), 1 A to 30 A

Time-current curve - 1 A to 30 A



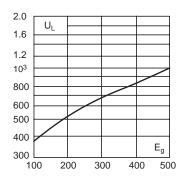
Total clearing I2t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



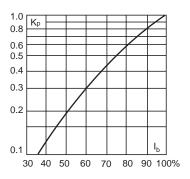
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



Data sheets: 720008, 5785298, 5785578

FWC - 10 x 38 mm, 600-700 V a.c. / 700 V d.c. (UL), 1 A 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. / V d.c. (UL, 1 A to 4 A)
 - 600 V a.c. (UL, 6 A to 32 A), 700 V d.c. (UL, 6 A to 25 A)
- Rated current: 1 A to 32 A
- · Breaking capacity:
 - 200 kA RMS Sym. at 600 V a.c. (6 A to 32 A)
 - 200 kA RMS Sym. at 700 V a.c. (1 A to 4 A)
 - 10 kA DC at 700 V d.c. (1 A to 25 A)
- · Operating class: aR

Standards / Agency information

CE, UL Recognised: 6 A to 32 A

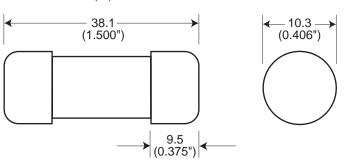


Catalogue numbers

| l²t | (A² | Sec) |
|-----|-----|------|
| IT | (M- | 3661 |

| | Rated voltage | Rated current (Amps) | (/ | | | Catalogue numbers |
|--|-----------------------------|----------------------|------------|---------------------------|-------------------|----------------------|
| Fuse link size | | | Pre-arcing | Clearing at 600 V a.c. | Watts loss (W) | |
| 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) | 30 | 95 | 600 | 7.5 | FWC-30A10F |
| | | 32 | 95 | 600 | 7.5 | FWC-32A10F |

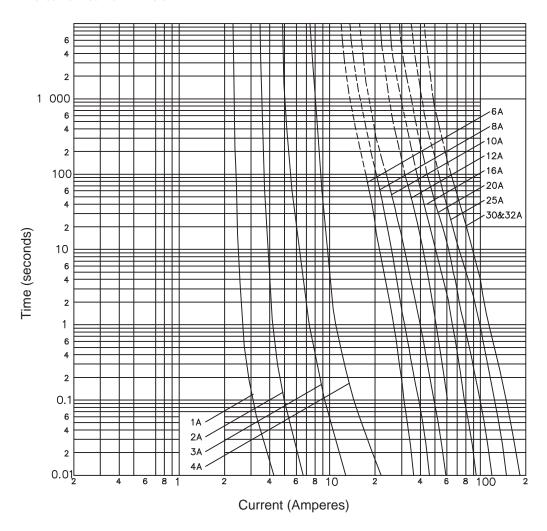
Dimensions - mm (in)



Data sheets: 720011, 5785306

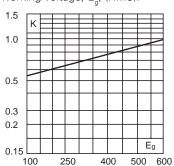
FWC - 10 x 38 mm, 600-700 V a.c. / 700 V d.c. (UL), 1 A to 32A

Time-current curve - 1 A to 32 A



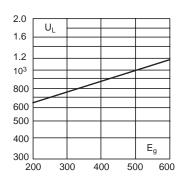
Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm g}$, (RMS).



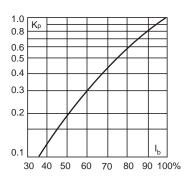
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



Data sheets: 720011, 5785306

FWP - 10 x 38 mm, gR, 690 V a.c. (IEC), 4 A to 32 A

Specifications

Description

The 10 x 38 mm cylindrical, class gR fuse links are used to protect AC/DC Drives and semi-conductors.

Technical data

• Rated voltage: see details in table below

Rated current: 4 A to 32 ABreaking capacity: 200 kA a.c.

Operating class: gR

Compatible fuse holder

CHM

Standards / Agency information

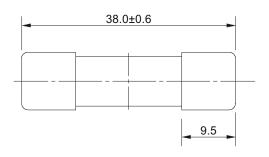
IEC 60269-4, UL 248-13

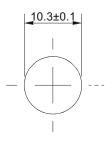
Catalogue numbers



| Fuse link size | Туре | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 690 V a.c. | Watts loss (W) | Catalogue numbers |
|----------------|-------------------|-------------------------------------|----------------------|------------|---------------------------|-------------------|----------------------|
| 10 x 38 mm | Without indicator | 690 V a.c. (IEC) | 4 | 5.6 | 17 | 2.05 | FWP-4G10F |
| | | 500 V d.c (UL) | 6 | 16 | 48 | 3 | FWP-6G10F |
| | | 690 V a.c. (IEC) 700 V a.c. (UL) | 8 | 4.3 | 38 | 1.68 | FWP-8G10F |
| | | | 10 | 6.6 | 59 | 2.09 | FWP-10G10F |
| | | | 12 | 9.6 | 84 | 2.99 | FWP-12G10F |
| | | | 16 | 17 | 150 | 4.27 | FWP-16G10F |
| | | | 20 | 23.5 | 200 | 5.35 | FWP-20G10F |
| | | | 25 | 60.2 | 512 | 5.52 | FWP-25G10F |
| | | | 32 | 94 | 800 | 7.43 | FWP-32G10F |

Dimensions (mm)



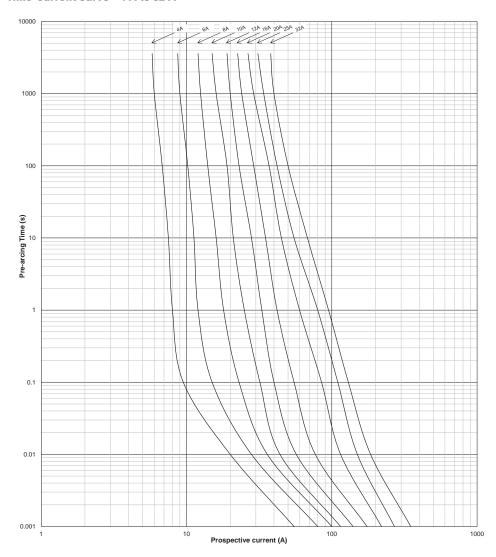




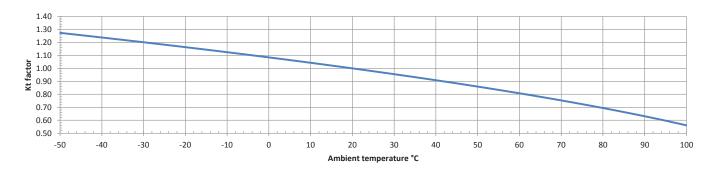
Data sheet: 10467

FWP - 10 x 38 mm, gR, 690 V a.c., 4 A to 32 A

Time-current curve - 4 A to 32 A



Ambient temperature

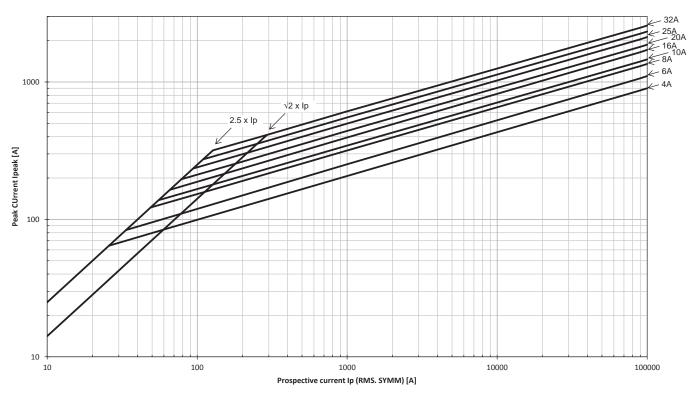


Data sheet: 10467

FWP - 10 x 38 mm, gR, 690 V a.c., 4 A to 32 A

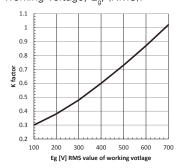
Cut-off curve- 2 A to 32 A

Peak let through current (Ipeak) vs. Prospective Short Circuit Current in SYMM. RMS value, 50 Hz / p.f. > 0.15



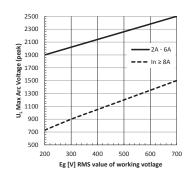
Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



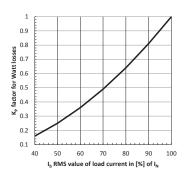
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



Data sheet: 10467

FWP - 14 x 51 mm, gR, 690 V a.c. (IEC), 4 A to 50 A

Specifications

Description

The 14 \times 51 mm cylindrical, class gR fuse links are used to protect AC/DC Drives and semi-conductors.

Technical data

Rated voltage: 690 V a.c. (IEC)
Rated current: 4 A to 50 A
Breaking capacity: 200 kA a.c.

· Operating class: gR

Compatible modular fuse holder

• CH14

Standards / Agency information

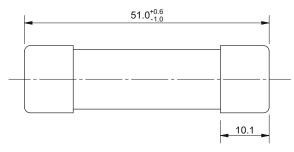
IEC 60269-4, UL 248-13

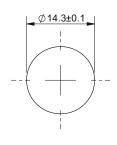
Catalogue numbers



| | | | | I²t (A² Sec) | | | |
|----------------|-------------------|------------------|----------------------|--------------|---------------------------|-------------------|----------------------|
| Fuse link size | Туре | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 690 V a.c. | Watts loss (W) | Catalogue numbers |
| | | | 4 | 5.6 | 17 | 2.94 | FWP-4G14F |
| | | | 6 | 16 | 48 | 4.2 | FWP-6G14F |
| | | | 8 | 3.8 | 30 | 2 | FWP-8G14F |
| | | | 10 | 5.9 | 47 | 2.52 | FWP-10G14F |
| | | | 12 | 8.4 | 68 | 3.54 | FWP-12G14F |
| | Without indicator | 690 V a.c. (IEC) | 16 | 15 | 120 | 4.83 | FWP-16G14F |
| | | | 20 | 27 | 170 | 5.4 6 6.93 | FWP-20G14F |
| | | | 25 | 53 | 333 | | FWP-25G14F |
| | | | 32 | 108 | 679 | | FWP-32G14F |
| 4 54 | | | 40 | 211 | 1331 | 7.52 | FWP-40G14F |
| 4 x 51 mm | | | 50 | 350 | 2200 | 9.8 | FWP-50G14F |
| | | | 8 | 3.8 | 30 | 2 | FWP-8G14FI |
| | | | 10 | 5.9 | 47 | 2.52 | FWP-10G14FI |
| | | | 12 | 8.4 | 68 | 3.54 | FWP-12G14FI |
| | | | 16 | 15 | 120 | 4.83 | FWP-16G14FI |
| | With indicator | 690 V a.c. (IEC) | 20 | 27 | 170 | 5.4 | FWP-20G14FI |
| | | | 25 | 53 | 333 | 6 | FWP-25G14FI |
| | | | 32 | 108 | 679 | 6.93 | FWP-32G14FI |
| | | | 40 | 211 | 1331 | 7.52 | FWP-40G14FI |
| | | | 50 | 350 | 2200 | 9.8 | FWP-50G14FI |

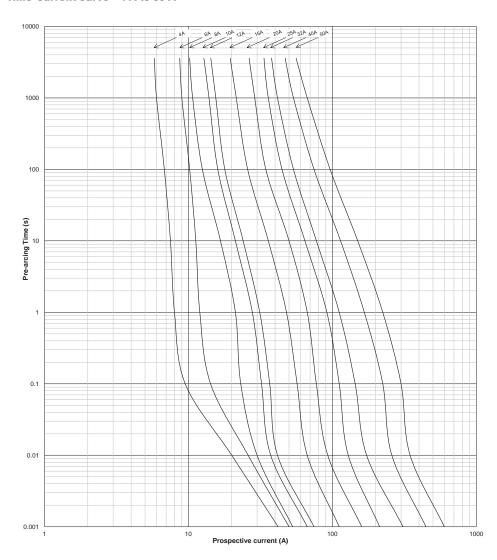
Dimensions (mm)



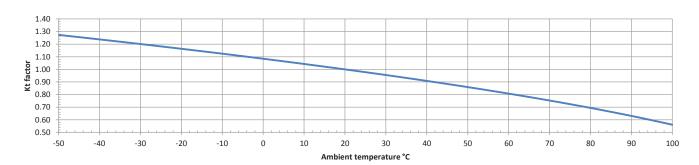


FWP - 14 x 51 mm, gR, 690 V a.c., 4 A to 50 A

Time-current curve - 4 A to 50 A

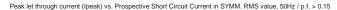


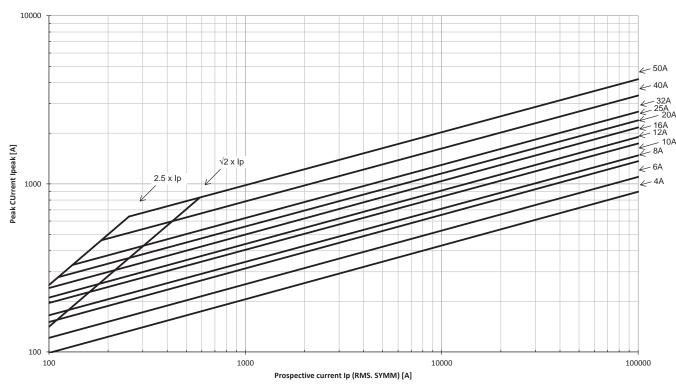
Ambient temperature



FWP - 14 x 51 mm, gR, 690 V a.c., 4 A to 50 A

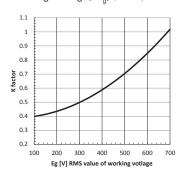
Cut-off curve - 4 A to 50 A





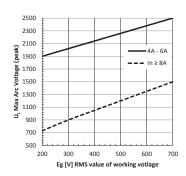
Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



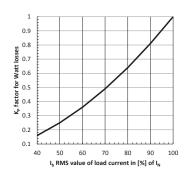
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



FWP - 22 x 58 mm, gR, 690 V a.c. (IEC), 20 A to 100 A

Specifications

Description

The 22 \times 58 mm cylindrical, class gR fuse links are used to protect AC/DC Drives and semi-conductors.

Technical data

Rated voltage: 690 V a.c. (IEC)
Rated current: 20 A to 100 A
Breaking capacity: 200 kA a.c.

• Operating class: gR

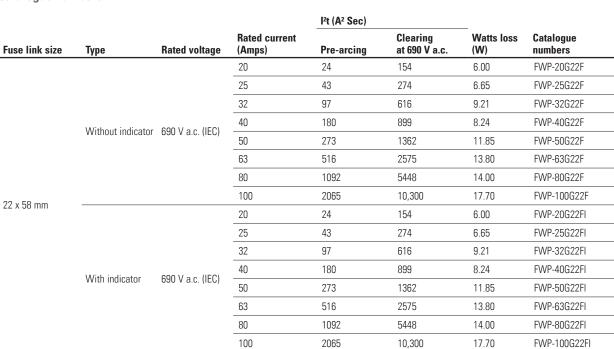
Compatible fuse holder

CH22

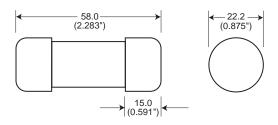
Standards / Agency information

IEC 60269-4, UL 248-13

Catalogue numbers



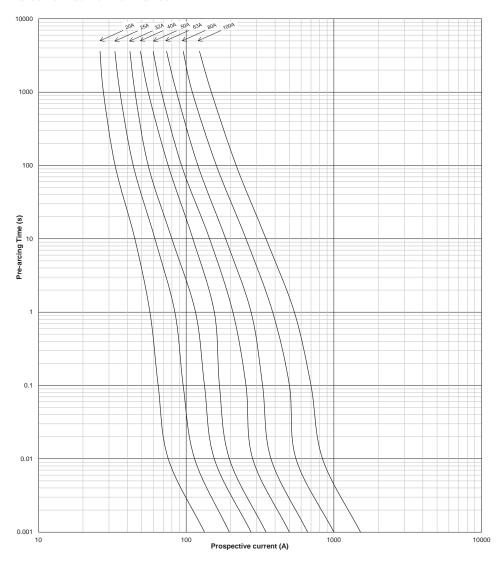
Dimensions - mm (in)



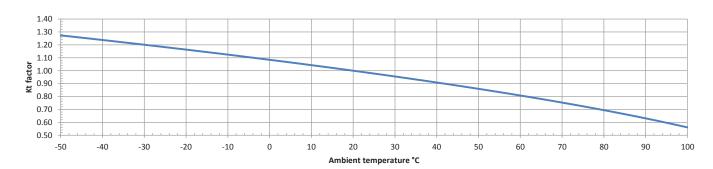


FWP - 22 x 58 mm, gR, 690 V a.c., 20 A to 100 A

Time-current curve - 20 A to 100 A



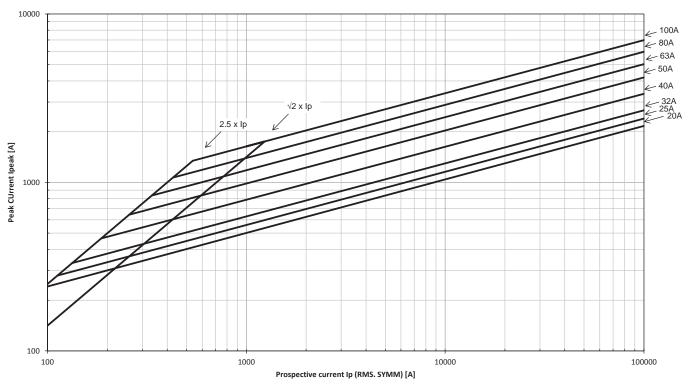
Ambient temperature



FWP - 22 x 58 mm, gR, 690 V a.c., 20 A to 100 A

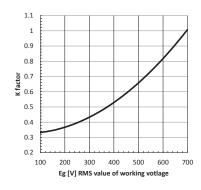
Cut-off curve - 20 A to 100 A

Peak let through current (Ipeak) vs. Prospective Short Circuit Current in SYMM. RMS value, 50Hz / p.f. > 0.15



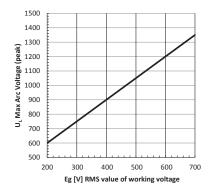
Total clearing I2t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



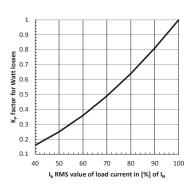
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



FWP - 14 x 51 mm, 690 V a.c. (IEC), 700 V a.c. / V d.c. (UL), 1 A to 63 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:

Without striker: 1 A to 63 AWith striker: 1 A to 50 A

Breaking capacity:

- 200 kA RMS Sym.

50 kA at 700 V d.c. (5 A to 50 A non striker version)

600 V d.c. for striker version

· Operating class: aR

Compatible modular fuse holder

• CH14

Standards / Agency information

CE, UL recognised & CSA component acceptance for versions without striker only, CCC certified 5 A to 50 A $\,$

Catalogue numbers

I2t (A2 Sec)

| Fuse link type | Fuse link size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 700 V a.c. | Watts loss (W) | Catalogue numbers |
|-----------------|----------------------------|------------------------------|-------------------------|------------|---------------------------|-------------------|----------------------|
| | | | 1 | 0.04 | 0.41 | 5.7 | FWP-1A14F |
| | | 700 \/ a a / \ | 2 | 0.08 | 0.11 | 8.7 | FWP-2A14F |
| | | 700 V a.c. (UL) | 3 | 0.11 | 0.26 | 2.8 | FWP-3A14F |
| | | | 4 | 0.1 | 0.23 | 3 | FWP-4A14F |
| | | | 5 | 2 | 11 | 1.5 | FWP-5A14F |
| | | | 6 | 2 | 11 | 1.5 | FWP-6A14F |
| | | | 10 | 4 | 22 | 4 | FWP-10A14F |
| Without striker | 14 x 51 mm (9/16" x 2") | | 15 | 10 | 70 | 5.5 | FWP-15A14F |
| | (0) 10 X 2 / | 700 V a.c. / 700 V d.c. (UL) | 20 | 26 | 180 | 6.5 | FWP-20A14F |
| | | 690 V a.c. (IEC) | 25 | 49 | 320 | 7 | FWP-25A14F |
| | | 000 V a.c. (ILO) | 30 | 58 | 400 | 9 | FWP-30A14F |
| | | | 32 | 68 | 600 | 8 | FWP-32A14F |
| | | | 40 | 84 | 750 | 8 | FWP-40A14F |
| | | | 50 | 200 | 1800 | 9 | FWP-50A14F |
| | | | 63 | 390 | 2516 | 10 | FWP-63A14F |
| | | | 10 | 4 | 32 | 2 | FWP-10A14FI |
| | | | 15 | 7 | 63 | 4 | FWP-15A14FI |
| | | | 20 | 26 | 234 | 4 | FWP-20A14FI |
| With striker | 14 x 51 mm | 700 V a.c. / 600 V d.c. (UL) | 25 | 42 | 378 | 4 | FWP-25A14FI |
| vviui suikei | (9/16" x 2") | 700 V a.C. / 600 V u.C. (OL) | 30 | 52 | 468 | 6 | FWP-30A14FI |
| | | | 32 | 68 | 600 | 8 | FWP-32A14FI |
| | | | 40 | 84 | 750 | 8 | FWP-40A14FI |
| | | | 50 | 200 | 1800 | 9 | FWP-50A14FI |

Data sheets: 720025, 5781724 fuses without striker; 5785566 fuses with striker, 5785626 (63 A)

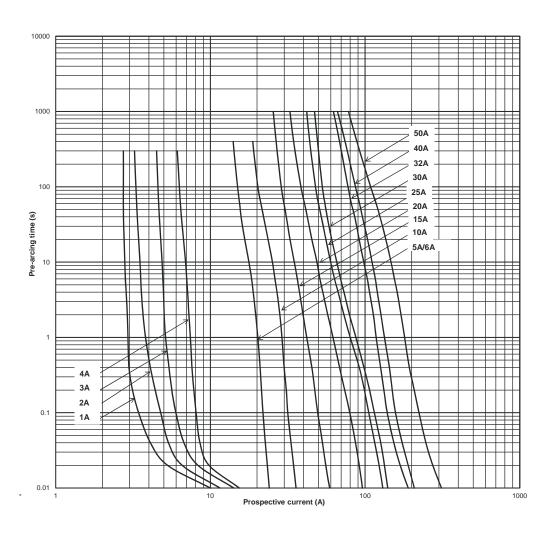


FWP - 14 x 51 mm, 690 V a.c. (IEC), 700 V a.c. / V d.c. (UL), 1 A to 50 A

Dimensions - mm (in)



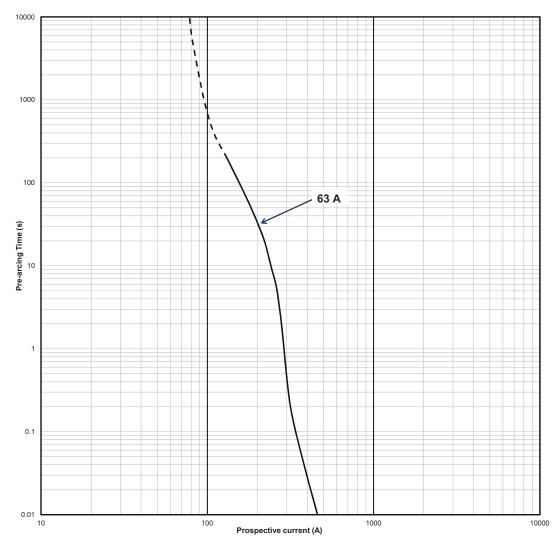
Time-current curve - 1 A to 50 A



Data sheets: 720025, 5781724 fuses without striker; 5785566 fuses with striker, 5785626 (63 A)

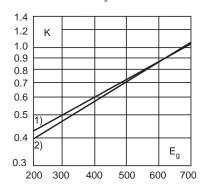
FWP - 14 x 51 mm, 690 V a.c. (IEC), 700 V a.c. / V d.c. (UL), 1 A to 50 A

Time-current curve - 63 A



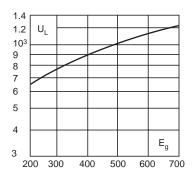
Total clearing I²t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



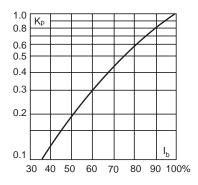
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $\rm K_p$, is given as a function of the RMS load current, $\rm I_b$, in percent of the rated current.



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

FWP - 22 x 58 mm, 700 V a.c. / V d.c. (UL), 20 A 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 A to 100 A

· Breaking capacity:

- 200 kA RMS Sym.

• 50 kA at 700 V d.c., t/c 5 ms

· Operating Class: aR

Compatible modular fuse holder

• CH22

Standards / Agency information

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

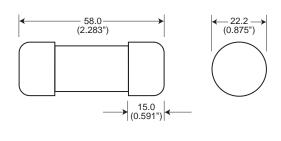


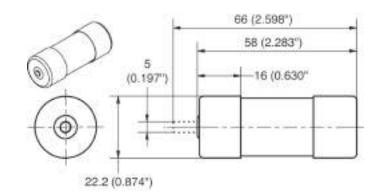
I2t (A2 Sec)

| Fuse link type | Fuse link size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 700 V a.c. | Watts loss (W) | Catalogue numbers |
|-----------------|--|-------------------------------|----------------------|------------|---------------------------|-------------------|----------------------|
| | | | 20 | 23 | 330 | 5 | FWP-20A22F |
| | | | 25 | 37 | 530 | 6 | FWP-25A22F |
| | | | 32 | 55 | 780 | 8 | FWP-32A22F |
| Without atribor | 22 x 58 mm | 700 \/ a a / 700 \/ d a / \ | 40 | 68 | 960 | 12 | FWP-40A22F |
| Without striker | (⁷ /8" x 2 ⁹ / ₃₂ ") | 700 V a.c./ 700 V d.c. (UL) | 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 |
| | | | 20 | 19 | 260 | 5 | FWP-20A22FI |
| | | | 25 | 34 | 410 | 6 | FWP-25A22FI |
| | | | 32 | 53.5 | 605 | 8 | FWP-32A22FI |
| M/idla aduition | 22 x 58 mm | 700 \/ / 700 \/ -! - / 111 \ | 40 | 68 | 750 | 9 | FWP-40A22FI |
| With striker | (⁷ /8" x 2 ⁹ / ₃₂ ") | 700 V a.c./ 700 V d.c. (UL) | 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

Dimensions - mm (in), with striker



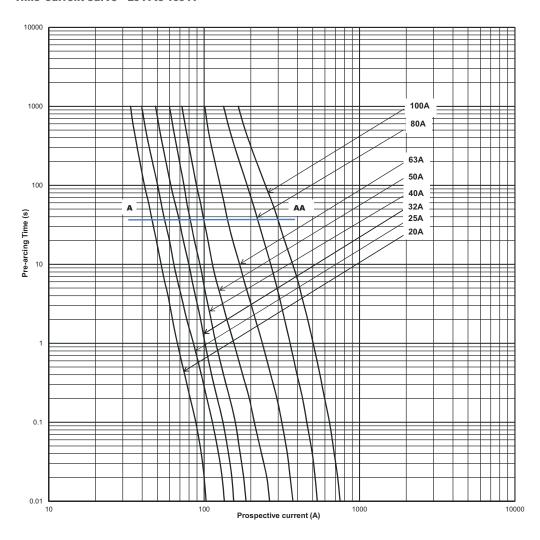


Data sheets: 720026, 5781723



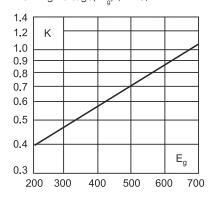
FWP - 22 x 58 mm, 700 V a.c. / V d.c. (UL), 20 A to 100 A

Time-current curve - 20 A to 100 A



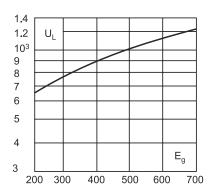
Total clearing I²t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{σ} , (RMS).



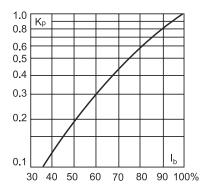
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



Data sheets: 720026, 5781723

FWK - 20 x 127 mm and 25 x 146 mm, 750 V d.c. (IEC), 5 A 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 A to 30 A (20 x 127 mm)
- 35 A to 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

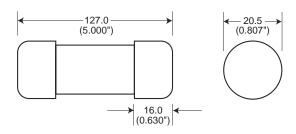


Catalogue numbers

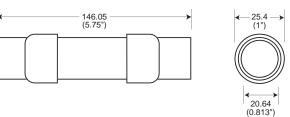
I2t (A2 Sec)

| Fuse link size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 750 V d.c. | Watts loss (W) | Catalogue numbers |
|---------------------------|------------------|----------------------|------------|---------------------------|-------------------|----------------------|
| | | 5 | 8.5 | 16 | 6.7 | FWK-5A20F |
| | | 8 | 50 | 100 | 8.8 | FWK-8A20F |
| 20 x 127 mm | | 10 | 95 | 200 | 8.5 | FWK-10A20F |
| 20 x 127 mm (13/16" x 5") | 750 V d.c. (IEC) | 15 | 100 | 240 | 5 | FWK-15A20F |
| (13/16" X 5") | | 20 | 125 | 315 | 7.8 | FWK-20A20F |
| | | 25 | 400 | 1100 | 6.5 | FWK-25A20F |
| | | 30 | 800 | 2600 | 6.5 | FWK-30A20F |
| | | 35 | 1300 | 4600 | 6 | FWK-35A25F |
| 25 x 146 mm | 7E0 \/ d a /IFC\ | 40 | 1600 | 5300 | 6.8 | FWK-40A25F |
| (1" x 5 ¾") | 750 V d.c. (IEC) | 50 | 3100 | 12,000 | 7.3 | FWK-50A25F |
| | | 60 | 5900 | 24,000 | 7.7 | FWK-60A25F |
| | | | | | | |

Dimensions - mm (in), 20 x 127 mm, 5 A to 30 A



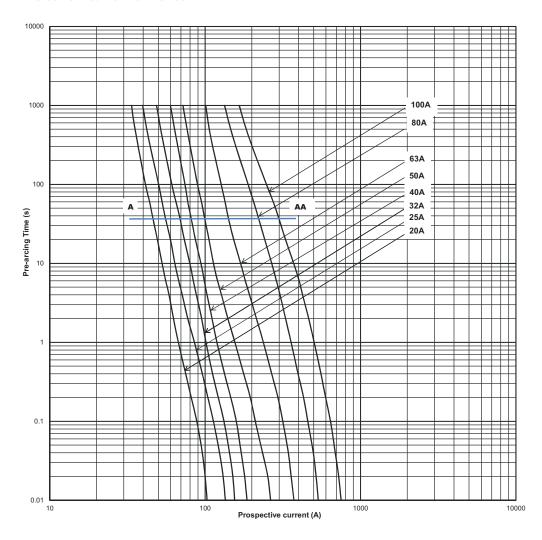
Dimensions - mm (in), 25 x 146 mm, 35 A to 60 A



Data sheets: 720039, 5785454

FWK - 20 x 127 mm and 25 x 146 mm, 750 V d.c. (IEC), 5 A to 60 A

Time-current curve - 20 A to 100 A



FWJ - 14 x 67 mm, 1000 V a.c. / 800 V d.c. (UL), 20 A 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: 1000 V a.c. / 800 V d.c.

• Rated current: 20 A to 30 A

Breaking capacity:

- 25kA RMS Sym

- 50 kA at 800 V d.c.

Operating class: aR

Standards / Agency information

CE, UL Recognised

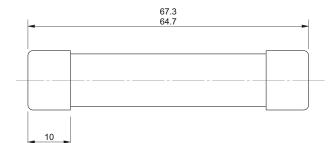


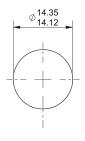
Catalogue numbers

I2t (A2 Sec)

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

Dimensions (mm)

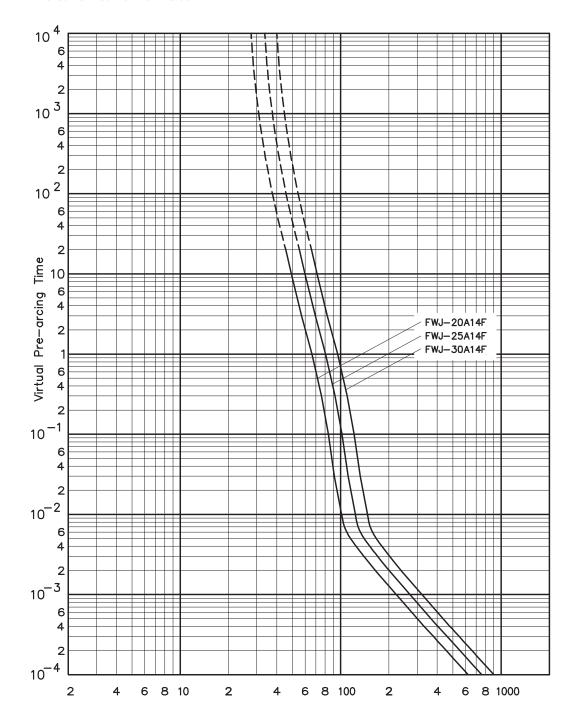




Data sheets: 720028, 5785173, 5785315

FWJ - 14 x 67 mm, 1000 V a.c. / 800 V d.c. (UL), 20 A to 30 A

Time-current curve - 20 A to 30 A



Data sheets: 720028, 5785173, 5785315

FWL - 20 x 127 mm, 1200 V a.c. / 1000 V d.c. (IEC), 20 A 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 A, 25 A and 30 A
- · Breaking capacity:
 - 50 kA RMS Sym
- 50 kA at 1000 V d.c.
- · Operating Class: gR

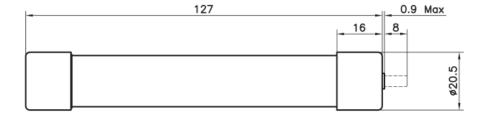
Standards / Agency information

CE

Catalogue numbers

| | | | I ² t (A ² Sec) | | | Catalogue numbers | | |
|--|-----------------------------------|----------------------|---------------------------------------|----------------------------|-------------------|-------------------|----------------|--|
| Fuse link size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 1000 V a.c. | Watts loss (W) | Without indicator | With indicator | |
| | | 20 | 675 | 1550 | 5.9 | FWL-20A20F | FWL-20A20FI | |
| 20 x 127 mm (¹³ / ₁₆ " x 5") | 1200 V a.c./ 1000 V d.c. (IEC) | 25 | 1200 | 2760 | 6.5 | FWL-25A20F | FWL-25A20FI | |
| () 10 | (ILO) | 30 | 1850 | 4300 | 7.5 | FWL-30A20F | FWL-30A20FI | |

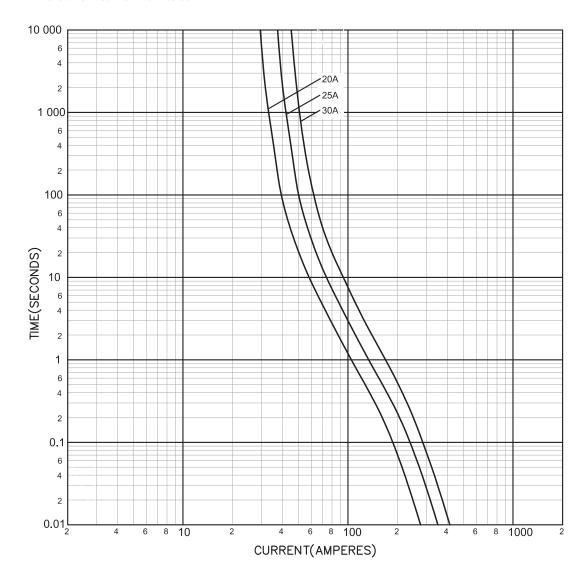
Dimensions (mm)





FWL - 20 x 127 mm, 1200 V a.c. / 1000 V d.c. (IEC), 20 A to 30 A

Time-current curve - 20 A to 30 A



FWS - 20 x 127 mm, 1400 - 2000 V a.c. / 1000 V d.c. (IEC), 2 A 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 A to 8 A)
 - 1400 V a.c. / 1000 V d.c. (IEC, 10 A to 15 A)
- Rated current: 2 A to 15 A
- · Breaking capacity:
 - 50 kA RMS Sym.
 - 50 kA at 1000 V d.c. (2 A to 10 A only)
- Operating class: gR

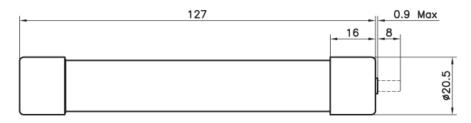
Standards/Agency Information

CE

Catalogue numbers

| | | I²t (A² Sec) | | | | Catalogue numbers | | |
|----------------|-------------------------------|----------------------|------------|----------------------------|-------------------|-------------------|----------------|--|
| Fuse link size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 1000 V a.c. | Watts loss (W) | Without indicator | With indicator | |
| | 2000 V a.c./2000 V d.c.(IEC) | 2 | 0.8 | 2.4 | 4.4 | FWS-2A20F | FWS-2A20FI | |
| | 0000 \ | 6 | 27 | 81 | 6.7 | FWS-6A20F | FWS-6A20FI | |
| 20 x 127 mm | 2000 V a.c./1000 V d.c.(IEC) | 8 | 64 | 192 | 7.6 | FWS-8A20F | FWS-8A20FI | |
| (13/16" x 5") | | 10 | 118 | 277 | 3 | FWS-10A20F | FWS-10A20FI | |
| | 1400 V a.c./ 1000 V d.c.(IEC) | 12 | 170 | 380 | 3.4 | FWS-12A20F | FWS-12A20FI | |
| | | 15 | 209 | 500 | 5 | FWS-15A20F | FWS-15A20FI | |

Dimensions (mm)

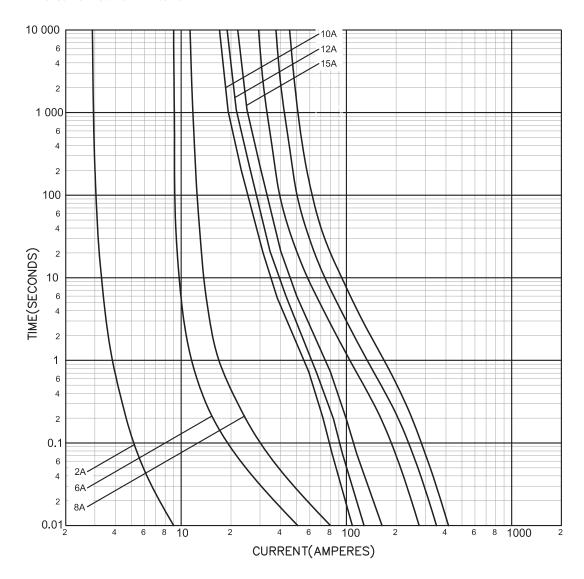




Data sheets: 720040, 5785455

FWS - 20 x 127 mm, 1400 - 2000 V a.c. / 1000 V d.c. (IEC), 2 A to 15 A

Time-current curve - 2 A to 15 A



Data sheets: 720040, 5785455

170M - Sizes 000 and 00, DIN 43653, 690 V a.c. (IEC), 700 V a.c. / V d.c. (UL), 10 A 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

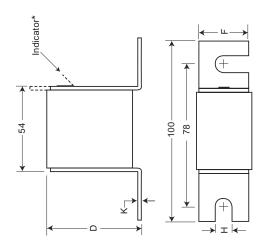
- · Rated voltage:
 - 690 V a.c. (IEC)
 - 700 V a.c. (UL, size 000; size 00 100 A to 400 A)
 - 700 V d.c. (UL, size 000)
- Rated current: 10 A to 400 A
- · Breaking capacity:
 - 200 kA RMS Sym
 - . 50 kA at 700 V d.c. (size 000 only)
- · Operating class
 - gR size 000 (10 A to 63 A), size 00 (25 A to 80 A)
 - aR size 000 (>63 A), size 00 (>80 A)

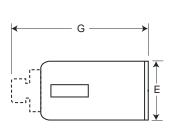
Standards/Agency Information

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

170W1412 F.T.W annex 32A 680Y-180 700Y-W FR 30A (B, w + 170 or BCOTN / 80

Dimensions (mm)





The dotted line illustrates the Type T indicator fuse link.

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

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

^{*} Indication for Size 00 fuses is a red pin.

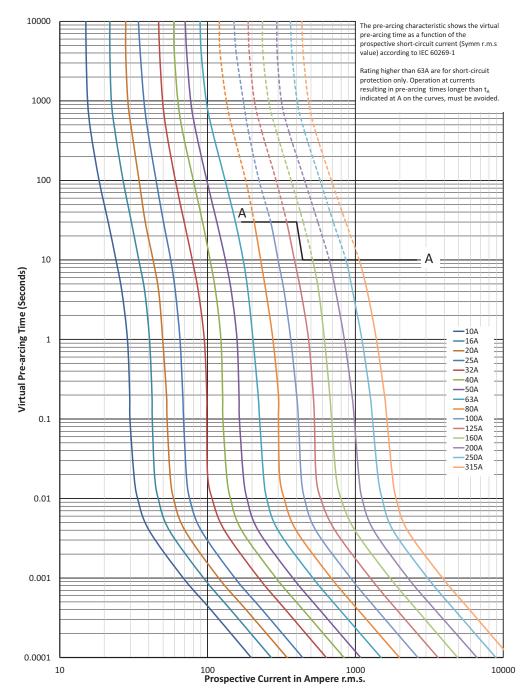
170M - Sizes 000 and 00, DIN 43653, 690 V a.c. (IEC), 700 V a.c. / V d.c. (UL), 10 A to 400 A

Catalogue numbers

| | | | I ² t (A ² Sec) | | | | Catalogue number | s | |
|-----------|------------------|----------------------|---------------------------------------|---------------------------|-------------------|-----------------|----------------------------|--------------------------|--------------------------------------|
| body size | Rated voltage | Rated current (Amps) | Pre-Arcing | Clearing at 660 V a.c. | Watts loss (W) | Operating class | -U/80 Without indicator | -/80 Visual indicator | -TN/80 Type T indicator for micro |
| | | 10 | 3.8 | 25.5 | 3 | gR | 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 |
| | 690 V a.c. | 40 | 69 | 460 | 12 | _ | 170M1313 | 170M1363 | 170M1413 |
| | (IEC) | 50 | 115 | 770 | 15 | _ | 170M1314 | 170M1364 | 170M1414 |
| 000 | 700 V a.c. / | 63 | 215 | 1450 | 16 | _ | 170M1315 | 170M1365 | 170M1415 |
| | V d.c. | 80 | 380 | 2550 | 19 | aR | 170M1316 | 170M1366 | 170M1416 |
| | (UL) | 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 |
| | | 25 | 19 | 130 | 6 | gR | | 170M2608 | 170M2658 |
| | | 32 | 28.5 | 195 | 7 | _ | | 170M2609 | 170M2659 |
| 00 | 690 V a.c. | 40 | 50 | 360 | 9 | _ | | 170M2610 | 170M2660 |
| 00 | (IEC) | 50 | 95 | 640 | 10 | _ | | 170M2611 | 170M2661 |
| | | 63 | 170 | 1200 | 12 | _ | | 170M2612 | 170M2662 |
| | | 80 | 310 | 2100 | 15 | _ | | 170M2613 | 170M2663 |
| | | 100 | 620 | 4150 | 20 | aR | _ | 170M2614 | 170M2664 |
| | | 125 | 1000 | 6950 | 25 | _ | | 170M2615 | 170M2665 |
| | 690 V a.c. | 160 | 1900 | 13,000 | 30 | _ | | 170M2616 | 170M2666 |
| 00 | (IEC) | 200 | 3400 | 23,000 | 35 | _ | | 170M2617 | 170M2667 |
| UU | 700 V a.c. | 250 | 6250 | 42,000 | 45 | = | | 170M2618 | 170M2668 |
| | (UL) | 315 | 10,000 | 68,500 | 55 | = | | 170M2619 | 170M2669 |
| | | 350 | 13,500 | 91,500 | 60 | = | | 170M2620 | 170M2670 |
| | | 400 | 18,000 | 125,000 | 70 | _ | | 170M2621 | 170M2671 |

170M - Sizes 000 and 00, DIN 43653, 690 V a.c. (IEC), 700 V a.c. / V d.c. (UL), 10 A to 400 A

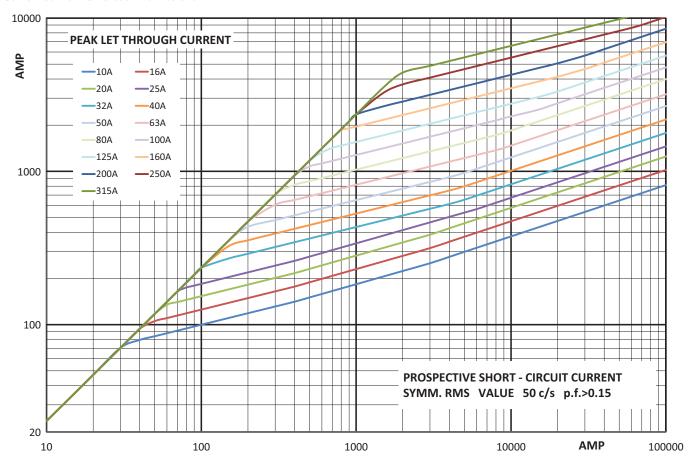
Time-current curve - Size 000 - 10 A to 315 A



 $K_b = 1 N = 1.6$

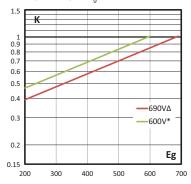
170M - Sizes 000 and 00, DIN 43653, 690 V a.c. (IEC), 700 V a.c. / V d.c. (UL), 10 A to 400 A

Cut-off curve - Size 000 - 10 A to 315 A



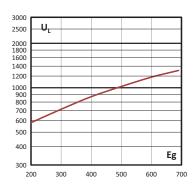
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



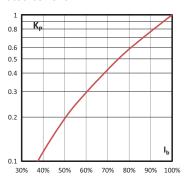
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



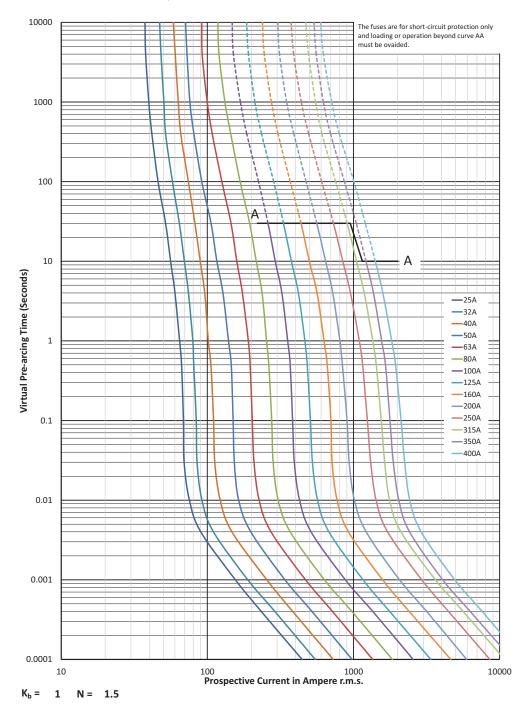
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



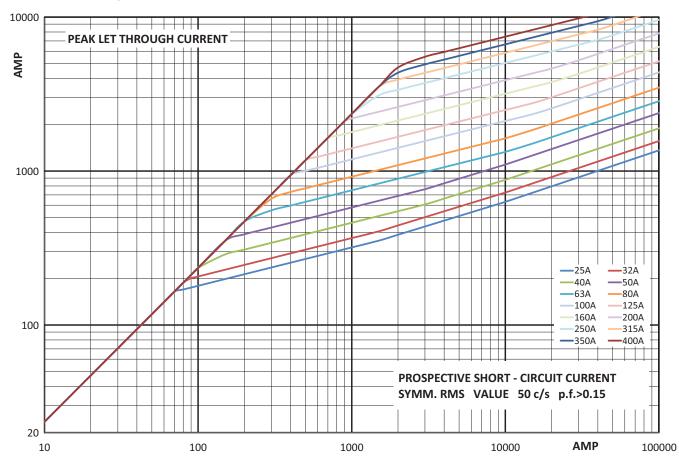
170M - Sizes 000 and 00, DIN 43653, 690 V a.c. (IEC), 700 V a.c. / V d.c. (UL), 10 A to 400 A

Time-current curve - Size 00, 25 A to 400 A



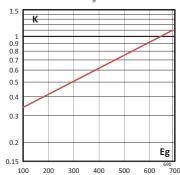
170M - Sizes 000 and 00, DIN 43653, 690 V a.c. (IEC), 700 V a.c. / V d.c. (UL), 10 A to 400 A

Cut-off curve- Size 00, 25 A to 400 A



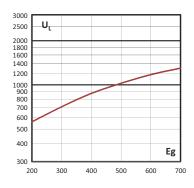
Total clearing I²t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



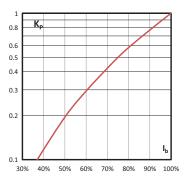
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170M - Sizes 1* to 3, DIN 43653, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A 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 A to 2000 A

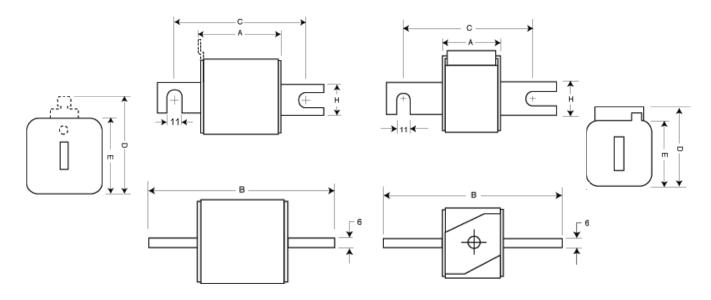
• Breaking capacity: 200 kA RMS Sym

Operating class: aR

Standards / Agency information

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

Dimensions (mm)



| Type - | Type -/80, -TN/80, -/110, -TN/110 | | | | | | | | | | | |
|--------|-----------------------------------|-----|----------------|----|----------------|-------|----|----|--|--|--|--|
| Size | Α | В | B ¹ | С | C ¹ | D^2 | Е | Н | | | | |
| 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.

1mm = 0.0394"

| 71. | | | | | | | | | |
|------|----|-----|----------------|----|----------------|----|----|----|--|
| Size | А | В | B ³ | С | C ₃ | D | Е | Н | |
| 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 | |

108

92

76

30

78

109

139

1mm = 0.0394'

3

Type -KN/80, -KN/110

51

² Valid for Fuse type -TN/80 and -TN/110.

³ Valid for fuse links type -KN/110.

170M - Sizes 1* to 3, DIN 43653, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Catalogue numbers

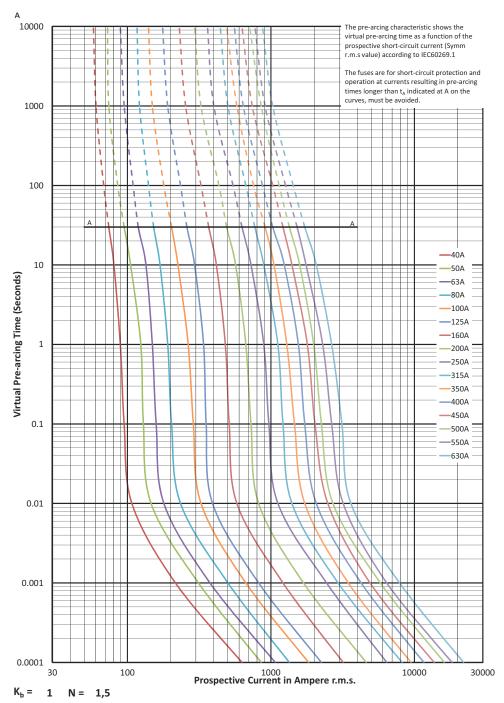
| | | | I²t (A² Sec) | | | Catalogue r | numbers | | | | |
|------------------------------|------------------------------------|-------------------------|--------------|---------------------------|-------------------|-----------------------|--|--|------------------------------|---|---|
| Fuse link body size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 660 V a.c. | Watts loss (W) | -/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 |
| | | 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 |
| | 690 V a.c. (IEC) | 160 | 1100 | 7500 | 30 | 170M3014 | 170M3064 | 170M3114 | 170M3164 | 170M3214 | 170M3264 |
| 1* | , , | 200 | 2200 | 15,000 | 35 | 170M3015 | 170M3065 | 170M3115 | 170M3165 | 170M3215 | 170M3265 |
| ' | 700 V a.c. (UL) | 250 | 4200 | 28,500 | 40 | 170M3016 | 170M3066 | 170M3116 | 170M3166 | 170M3216 | 170M3266 |
| | (OL) | 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 |
| | | 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 |
| | 690 V a.c. (IEC) | 400 | 13,500 | 91,500 | 65 | 170M4012 | 170M4062 | 170M4112 | 170M4162 | 170M4212 | 170M4262 |
| 1 | 700 V a.c. | 450 | 17,000 | 120,000 | 70 | 170M4013 | 170M4063 | 170M4113 | 170M4163 | 170M4213 | 170M4263 |
| ı | (UL) | 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 |
| | 550 V a.c. IEC | 900 | 155,000 | 850,000 | 100 | 170M4019 ¹ | 170M4069 ¹ | 170M4119 ¹ | 170M4169 ¹ | 170M4219 ¹ | 170M4269 ¹ |
| | | 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 |
| | 690 V a.c. (IEC) | 550 | 28,000 | 190,000 | 80 | 170M5011 | 170M5061 | 170M5111 | 170M5161 | 170M5211 | 170M5261 |
| | 700 V a.c. | 630 | 41,000 | 275,000 | 90 | 170M5012 | 170M5062 | 170M5112 | 170M5162 | 170M5212 | 170M5262 |
| 2 | (UL) | 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 |
| | 600 V a.c. (IEC) / | 1100 | 245,000 | 1,600,000 | 120 | 170M5017 | 170M5067 | 170M5117 | 170M5167 | 170M5217 | 170M5267 |
| | 700 V a.c. UL | 1250 | 365,000 | 2,400,000 | 130 | 170M5018 | 170M5068 | 170M5118 | 170M5168 | 170M5218 | 170M5268 |
| | | 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 |
| | 690 V a.c. (IEC) | 900 | 100,000 | 670,000 | 120 | 170M6013 | 170M6063 | 170M6113 | 170M6163 | 170M6213 | 170M6263 |
| | 700 V a.c. | 1000 | 140,000 | 945,000 | 125 | 170M6014 | 170M6064 | 170M6114 | 170M6164 | 170M6214 | 170M6264 |
| 3 | (UL) | 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 | 170M6217 | 170M6268 |
| | | 1600 | 580,000 | 3,900,000 | 160 | 170M6019 | 170M6069 | 170M6119 | 170M6169 | 170M6219 | 170M6269 |
| | 600 V a.c. IEC / | 1800 | 880,000 | 5,250,000 | 165 | 170M6020 ² | 170M6070 ² | 170M6120 | 170M6170 ² | 170M6220 ² | 170M6270 |
| | 550 V a.c. UL 550 V a.c. IEC/UL | 2000 | | | 175 | 170M6020 | 170M6071 | 170M6121 | 170M6171 | 170M6220 | |
| | JOU V d.C. IEU/UL | ZUUU | 1,150,000 | 6,350,000 | 1/0 | I / UIVIDUZ I | 1 / UIVIDU / I | 1/01/101/1 | 1 / 1 01/10 1 / 1 | 1/01010221 | 170M6271 |

¹ Not UL Approved IEC ² Rated

 $^{^{\}rm 2}$ Rated at 750 V d.c. 12XIn 130 kA when two fuses connected in series

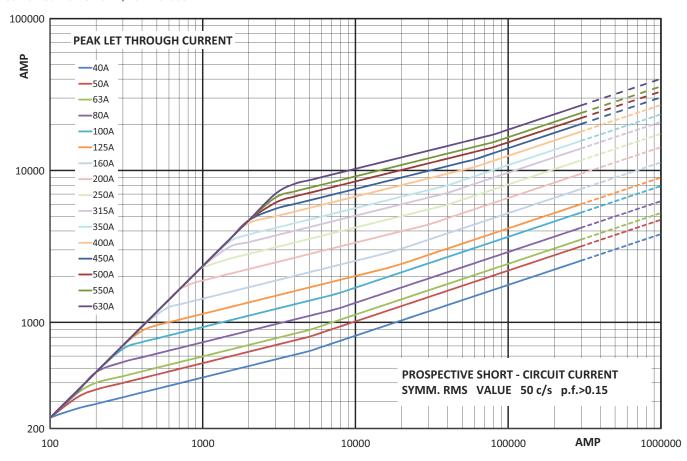
170M - Sizes 1* to 3, DIN 43653, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Time-current curve - Size 1*, 40 A to 630 A



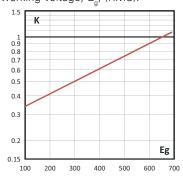
170M - Sizes 1* to 3, DIN 43653, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Cut-off curve - Size 1*, 40 A to 630 A



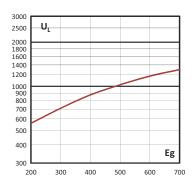
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{σ} , (RMS).



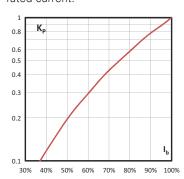
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



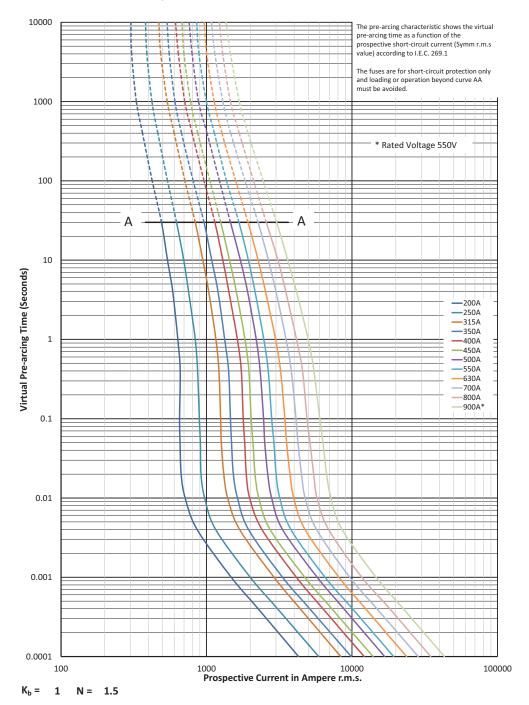
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



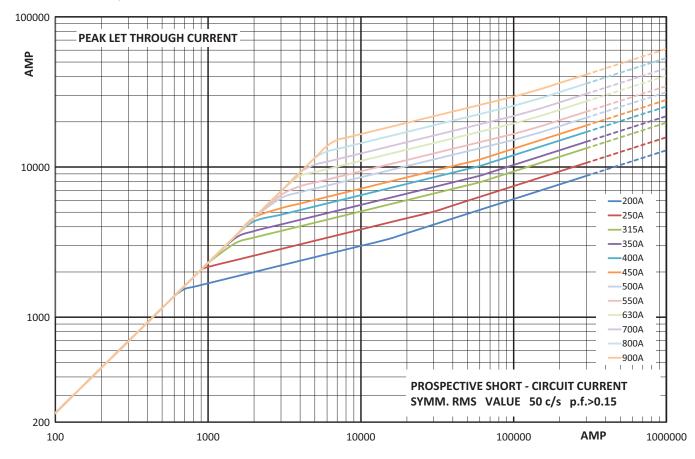
170M - Sizes 1* to 3, DIN 43653, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Time-current curve - Size 1, 200 A to 900 A



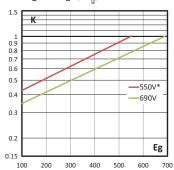
170M - Sizes 1* to 3, DIN 43653, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Cut-off curve - Size 1, 200 A to 900 A



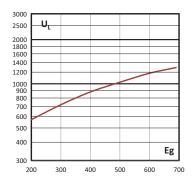
Total clearing I2t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



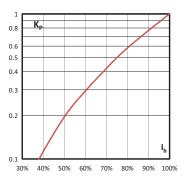
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



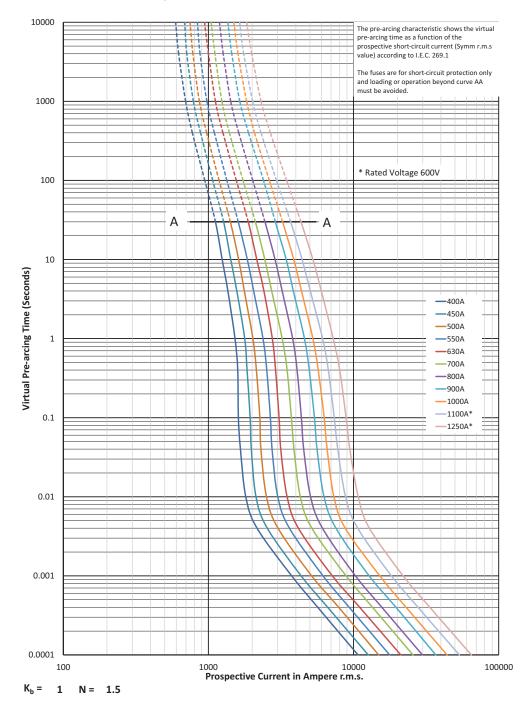
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



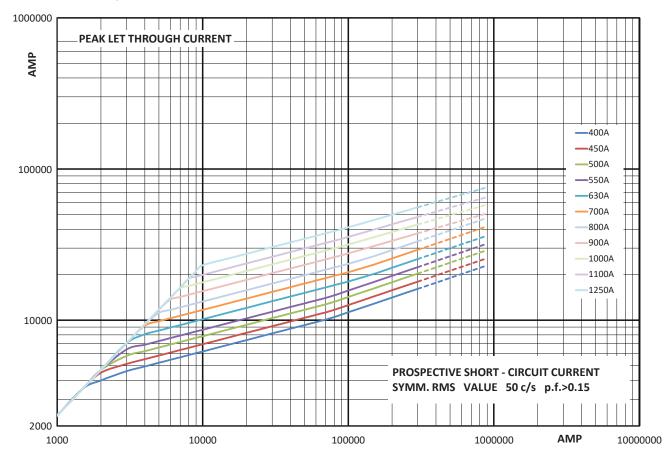
170M - Sizes 1* to 3, DIN 43653, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Time-current curve - Size 2, 400 A to 1250 A



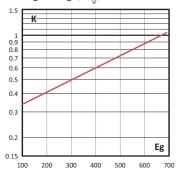
170M - Sizes 1* to 3, DIN 43653, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Cut-off curve - Size 2, 400 A to 1250 A



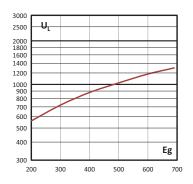
Total clearing I2t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



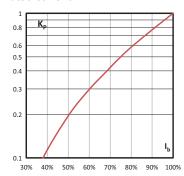
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



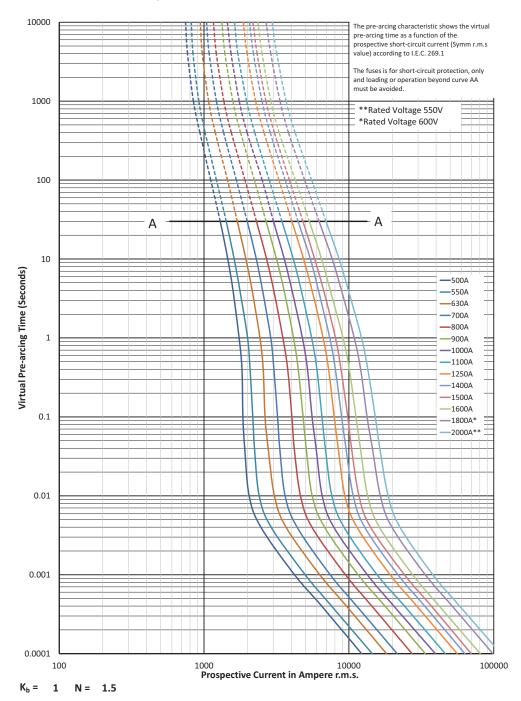
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



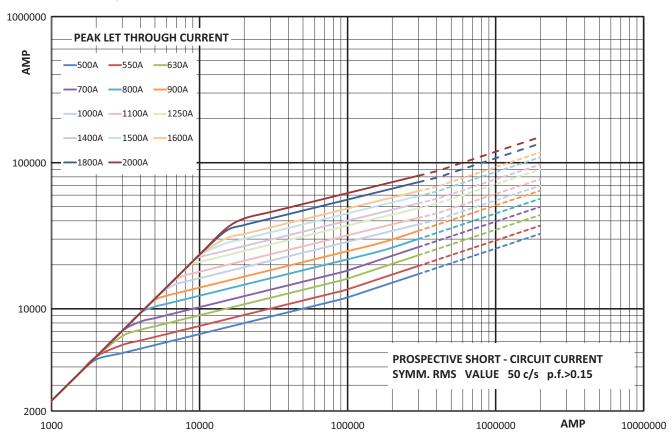
170M - Sizes 1* to 3, DIN 43653, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Time-current curve -Size 3, 500 A to 2000 A



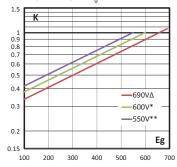
170M - Sizes 1* to 3, DIN 43653, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Cut-off curve - Size 3, 500 A to 2000 A



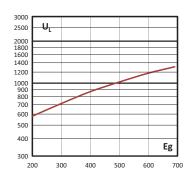
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



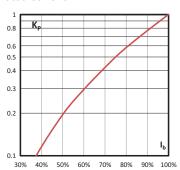
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm P}}$, is given as a function of the RMS load current, $I_{_{\rm B}}$, in percent of the rated current.



170M - Size 00, DIN 43653, 1000 V a.c. (IEC and UL), 20 A 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 A to 250 A)

900 V a.c. (IEC, 315 A)

• Rated current: 20 A to 315 A

Breaking capacity: 125 kA RMS Sym

Operating class: aR

Standards / Agency information

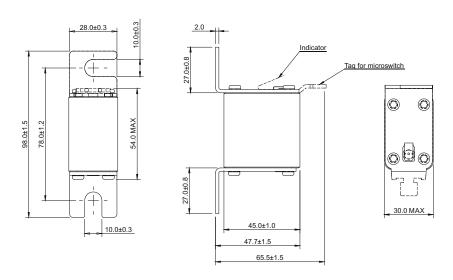
CE, Designed and tested to IEC60269 Part 4, UL Recognised/CSA component acceptance status (20-250 A)





| Fuse link body size | Rated voltage | Rated current (Amps) | I ² t (A ² Sec) | | | Catalogue numbers | |
|------------------------|-------------------------|-------------------------|---------------------------------------|------------------------------|------------|------------------------|--|
| | | | Pre-arcing | Clearing at rated voltage | Watts loss | 00/80 Visual indicator | 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 |

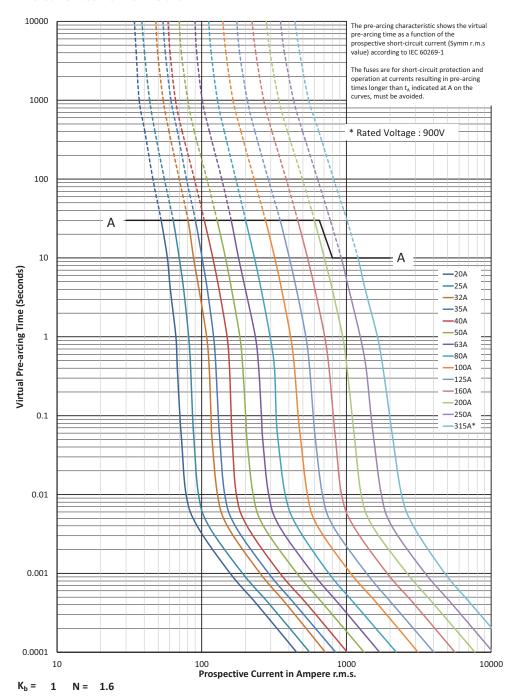
Dimensions (mm)



Data sheet: 170K8504

170M - Size 00, DIN 43653, 1000 V a.c. (IEC and UL), 20 A to 315A

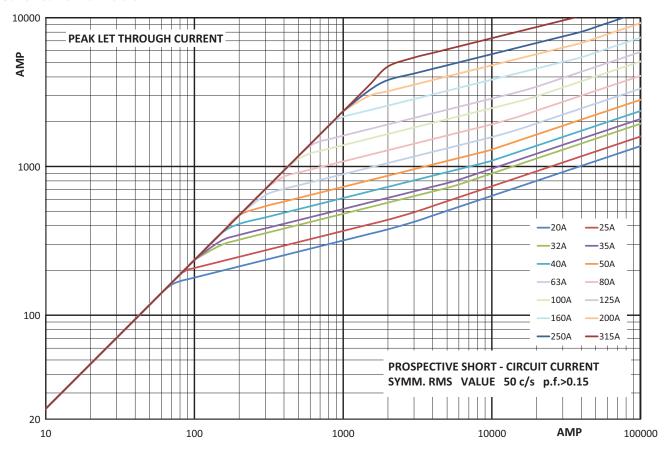
Time-current curve - 20 A to 315 A



Data sheet: 170K8504

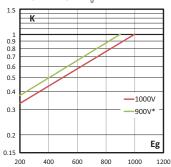
170M - Size 00, DIN 43653, 1000 V a.c. (IEC and UL), 20 A to 315A

Cut-off curve - 20 A to 315 A



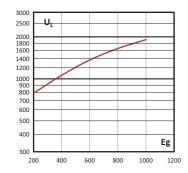
Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm a}$, (RMS).



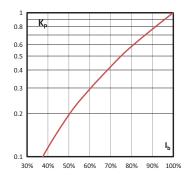
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



Data sheet: 170K8504

170M - Sizes 1* to 3, DIN 43653, 1000 V a.c. (IEC and UL), 50 A 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

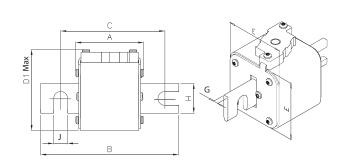
- · Rated voltage:
 - 1000 V a.c. (IEC, 50 A to 1250 A), 900 V a.c. (IEC, 1400 A)
 - 1000 V a.c. (UL size 2, size 3, 315 A to 1100 A only)
- Rated current: 50 A to 1400 A
- Breaking Capacity:
 - · 125kA RMS Sym. AC
 - Size 1: 50 kA for 750 V d.c.
- · Operating Class: aR

Standards/Agency Information

CE, Designed and tested to IEC60269 Part 4, UL Recognised (only sizes 2 and 3), CCC only size 3 (315 A to 1100 A) $\,$

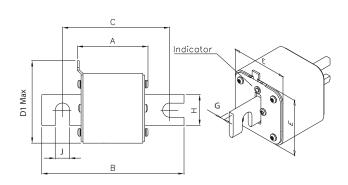


Dimensions (mm) -KN/110



| Size | Α | В | C | D1 (max) | E | G | Н | 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 | |

Dimensions (mm) -TN/110



| Size | Α | В | C | D1 (max) | E | G | Н | 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 |

170M - Sizes 1* to 3, DIN 43653, 1000 V a.c. (IEC and UL), 50 A to 1400 A

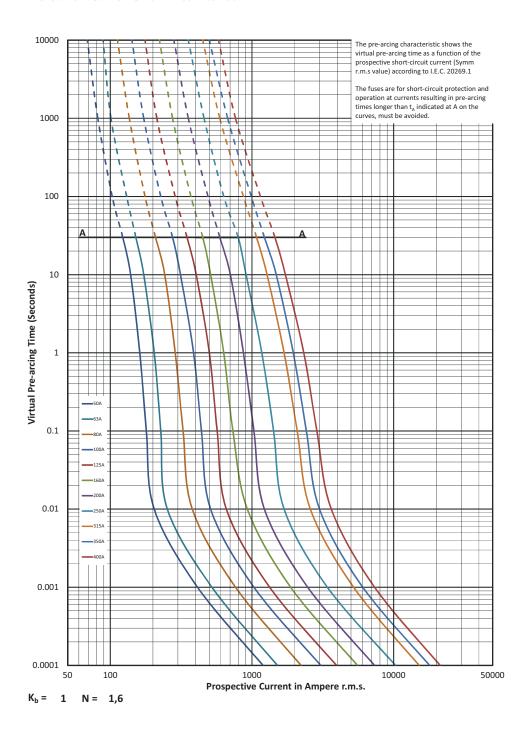
Catalogue numbers

| Fibre Inke | | | | I²t (A² Sec) | | | Catalogue numb | ers |
|--|----|-------------------------------|------|--------------|-----------|-----|----------------|-----------------------|
| 1000 V a.c. (IEC) 1000 | | Rated voltage | | Pre-arcing | | | indicator for | indicator for |
| 1000 V a.c. IEC 1000 | | | 50 | 135 | 815 | 20 | 170M3965 | 170M3981 |
| 100 | | | 63 | 215 | 1300 | 25 | 170M3966 | 170M3982 |
| 1° 1000 V a.c. (IEC) 125 1450 8600 48 170M3985 1 | | | 80 | 460 | 2750 | 30 | 170M3967 | 170M3983 |
| 1* | | | 100 | 860 | 5100 | 35 | 170M3968 | 170M3984 |
| 1000 V a.c. (IEC and UL) 1000 V a.c. (IEC and UL) 1000 V a.c. (IEC and UL) 1000 | | | 125 | 1450 | 8600 | 40 | 170M3969 | 170M3985 |
| 1000 V a.c. (IEC and UL) 1000 V a.c. (IEC an | 1* | 1000 V a.c. (IEC) | 160 | 2850 | 17,500 | 45 | 170M3970 | 170M3986 |
| 1000 V a.c. (IEC and UL) 1000 V a.c. (IEC an | | | 200 | 4950 | 29,500 | 50 | 170M3971 | 170M3987 |
| 1700 | | | 250 | 9550 | 57,000 | | 170M3972 | 170M3988 |
| 1000 V a.c. (IEC and UL) 400 | | | 315 | 21,500 | 130,000 | 65 | 170M3973 | 170M3989 |
| 160 2200 13,500 40 170M4965 170M4980 170M4980 170M4980 170M4980 170M4981 170M4981 170M4981 170M4982 170M4982 170M4982 170M4982 170M4983 170M4983 170M4983 170M4983 170M4983 170M4983 170M4983 170M4983 170M4984 170M4985 170M | | | 350 | 29,000 | 175,000 | 70 | 170M3974 | 170M3990 |
| 1000 V a.c. (IEC) | | | 400 | 42,000 | 250,000 | 75 | 170M3975 | 170M3991 |
| 1000 V a.c. (IEC) 1700 | | | 160 | 2200 | 13,500 | | 170M4965 | 170M4980 |
| 1000 V a.c. (IEC) | | | 200 | 4150 | 24,500 | 45 | 170M4966 | 170M4981 |
| 1 1000 V a.c. (IEC) | | | 250 | 7750 | 46,000 | 52 | 170M4967 | 170M4982 |
| 1 000 V a.c. / 750 V d.c. (LU) 400 31,000 185,000 70 170M4970 170M4986 500 63,000 375,000 85 170M4971 170M4987 550 84,500 500,000 90 170M4973 170M4988 630 125,000 755,000 98 170M4974 170M4988 170M4988 550 6750 40,000 65 170M5966 170M5981 350 16,500 99,000 80 170M5967 170M5981 400 26,000 155,000 85 170M5968 170M5983 600 49,500 295,000 80 170M5970 170M5983 170M5987 170M5988 170M5988 170M5988 1 170M5988 170M5988 170M5988 1 170M5988 170M5988 1 170M5988 170M5988 1 170M5988 170M5988 1 170M5988 170M5988 1 170M5988 170M5988 1 170M5988 170M5988 1 170M5988 170M5988 1 170M5988 170M5988 1 170M5988 170M5988 1 170M5988 170M5988 1 170M5990 170M5988 1 170M5988 170M5988 1 170M5990 170M5988 1 170M5990 170M5988 1 170M5988 170M5988 1 170M5990 170M5988 1 170M5990 170M5988 1 170M5990 170M5988 1 170M5990 170M5988 1 170M6990 170M69 | | | 315 | 16,500 | 98,500 | 60 | 170M4968 | 170M4983 |
| 1000 V a.c. (/750 V d.c. (UL) 400 31,000 185,000 70 170M4970 170M4986 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 250 6750 40,000 65 170M5966 170M5981 315 13,500 81,500 75 170M5966 170M5982 350 16,500 99,000 80 170M5968 170M5982 400 26,000 155,000 85 170M5969 170M5984 400 26,000 155,000 85 170M5969 170M5986 550 66,000 390,000 90 170M5970 170M5986 550 66,000 390,000 90 170M5970 170M5986 550 66,000 390,000 100 170M5971 170M5986 550 66,000 390,000 100 170M5972 170M5986 550 66,000 390,000 110 170M5972 170M5989 600 195,000 1200,000 125 170M5971 170M5989 800 195,000 1,200,000 125 170M5973 170M5989 800 195,000 17,200,000 125 170M5975 170M5989 400 19,000 115,000 105 170M6614 170M6639¹ 400 19,000 115,000 105 170M6616 170M6631¹ 450 27,000 160,000 107 170M6616 170M6631¹ 450 27,000 160,000 105 170M6616 170M6631¹ 450 27,000 160,000 107 170M6616 170M6631¹ 450 27,000 160,000 107 170M6610 170M6631¹ 450 27,000 160,000 115 170M6621 170M6631¹ 450 27,000 160,000 120 170M6622 170M6631¹ 450 27,000 160,000 120 170M6623 170M6631¹ 450 27,000 160,000 135 170M6623 170M6631¹ 450 27,500 27,500 155 170M6625 170M6631¹ 450 27,500 27,500 155 170M6626 170M6641 170M6631¹ 450 27,500 27,500 155 170M6625 170M6641 170M6641 | 1 | 1000 V a.c. (IEC) | 350 | 21,500 | 130,000 | 65 | 170M4969 | 170M4984 |
| | 1 | 1000 V a.c. / 750 V d.c. (UL) | 400 | 31,000 | 185,000 | 70 | 170M4970 | 170M4985 |
| 1000 V a.c. (IEC and UL) 1000 V a.c. (IEC) 10000 V a.c. | | | 450 | 44,500 | 265,000 | 80 | 170M4971 | 170M4986 |
| 1000 V a.c. (IEC and UL) 1000 V a.c. (IEC an | | | 500 | 63,000 | 375,000 | 85 | 170M4972 | 170M4987 |
| Part | | | 550 | 84,500 | 500,000 | 90 | 170M4973 | 170M4988 |
| 2 135 13,500 81,500 75 170M5967 170M5982 2 350 16,500 99,000 80 170M5968 170M5983 400 26,000 155,000 85 170M5969 170M5984 450 35,500 210,000 90 170M5970 170M5986 500 49,500 295,000 95 170M5971 170M5986 550 66,000 390,000 100 170M5972 170M5987 630 93,500 555,000 110 170M5972 170M5987 630 93,500 555,000 110 170M5973 170M5988 700 130,000 770,000 125 170M5974 170M5988 1000 195,000 1,200,000 125 170M8614 170M86291 350 13,000 77,500 95 170M8615 170M86301 400 19,000 115,000 105 170M8615 170M86311 450 27,000 < | | | 630 | 125,000 | 755,000 | 98 | 170M4974 | 170M4989 |
| 2 1000 V a.c. (IEC and UL) 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 170M5972 170M5988 700 130,000 770,000 115 170M5974 170M5989 800 195,000 1,200,000 115 170M5974 170M5989 315 9200 54,500 90 170M8615 170M8629 350 13,000 77,500 95 170M8616 170M8631 450 27,000 160,000 107 170M8616 170M8631 450 27,000 160,000 107 170M8617 170M8633 550 52,0 | | | 250 | 6750 | 40,000 | 65 | 170M5966 | 170M5981 |
| 2 400 26,000 155,000 85 170M5969 170M5984 450 35,500 210,000 90 170M5970 170M5985 500 49,500 295,000 95 170M5971 170M5986 650 66,000 390,000 100 170M5972 170M5987 700 130,000 770,000 115 170M5973 170M5989 800 195,000 1,200,000 125 170M5975 170M5989 315 9200 54,500 90 170M8614 170M86291 400 19,000 115,000 105 170M8615 170M86301 400 19,000 115,000 105 170M8616 170M86311 400 19,000 115,000 105 170M8616 170M86311 400 19,000 115,000 107 170M8617 170M86321 550 52,000 310,000 115 170M8619 170M86341 630 82,500 490,000 | | | 315 | 13,500 | 81,500 | 75 | 170M5967 | 170M5982 |
| 1000 V a.c. (IEC and UL) 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 800 195,000 54,500 90 170M8614 170M8629 350 13,000 77,500 95 170M8615 170M8630 400 19,000 115,000 105 170M8616 170M8631 400 19,000 115,000 105 170M8616 170M8631 450 27,000 160,000 107 170M8618 170M8632 500 37,500 225,000 110 170M8618 170M8633 550 52,000 310,000 115 170M8618 170M8634 550 52,000 310,000 125 170M8620 170M8636 630 82,500 490,000 120 170M8620 170M8636 630 82,500 490,000 125 170M8620 170M8636 630 82,500 490,000 125 170M8620 170M8636 630 82,500 490,000 125 170M8620 170M8636 630 340,000 2,050,000 135 170M8621 170M8638 630 340,000 2,050,000 150 170M8624 170M8639 630 340,000 2,050,000 150 170M8625 170M8639 630 340,000 2,750,000 155 170M8626 170M8639 630 340,000 2,750,000 155 170M8626 170M8639 630 340,000 2,750,000 155 170M8626 170M8640 630 340,000 | | | 350 | 16,500 | 99,000 | 80 | 170M5968 | 170M5983 |
| 2 1000 V a.c. (IEC and UL) 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 800 195,000 54,500 90 170M8614 170M86291 400 19,000 115,000 95 170M8615 170M86301 4400 19,000 115,000 105 170M8616 170M86311 450 27,000 160,000 107 170M8616 170M86321 550 52,000 310,000 115 170M8618 170M86331 1000 V a.c. (IEC and UL) 550 52,000 310,000 115 170M8620 170M86341 1000 V a.c. (IEC) 115,000 700,000 125 170M8621 <t< td=""><td></td><td></td><td>400</td><td>26,000</td><td>155,000</td><td>85</td><td>170M5969</td><td>170M5984</td></t<> | | | 400 | 26,000 | 155,000 | 85 | 170M5969 | 170M5984 |
| 1000 V a.c. (IEC and UL) 500 | 2 | 1000 V a.c. (IEC and III.) | 450 | 35,500 | 210,000 | 90 | 170M5970 | 170M5985 |
| 1000 V a.c. (IEC) 1250 1 | ۷ | 1000 V a.c. (ILO alla OL) | 500 | 49,500 | 295,000 | 95 | 170M5971 | 170M5986 |
| 1000 V a.c. (IEC) 1250 1250 175,0000 1151 170M8629 170M8629 170M8639 1 | | | 550 | 66,000 | 390,000 | 100 | 170M5972 | 170M5987 |
| Second Parison | | | 630 | 93,500 | 555,000 | 110 | 170M5973 | 170M5988 |
| None Section | | | 700 | 130,000 | 770,000 | 115 | 170M5974 | 170M5989 |
| Second Parison | | | 800 | 195,000 | 1,200,000 | 125 | 170M5975 | 170M5990 |
| A00 | | | 315 | 9200 | 54,500 | 90 | 170M8614 | 170M8629 ¹ |
| A50 27,000 160,000 107 170M8617 170M8632 170M8632 170M8633 170M8633 170M8633 170M8633 170M8634 170M8634 170M8634 170M8634 170M8635 170M8635 170M8635 170M8636 170M8640 170M8636 170M8640 | | | | | | | | |
| 1000 V a.c. (IEC and UL) 500 37,500 225,000 110 170 M8618 170 M8633 | | | 400 | 19,000 | 115,000 | 105 | 170M8616 | 170M8631 ¹ |
| 1000 V a.c. (IEC and UL) 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 800 250,000 1,500,000 145 170M8623 170M8638 170M8638 170M8638 170M8639 1100 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 | | | 450 | 27,000 | 160,000 | 107 | 170M8617 | 170M8632 ¹ |
| 3 1000 V a.c. (IEC and UL) 630 82,500 490,000 120 170M8620 170M8635¹ 700 115,000 700,000 125 170M8621 170M8636¹ 800 170,000 1,050,000 135 170M8622 170M8637¹ 900 250,000 1,500,000 145 170M8623 170M8638¹ 1000 340,000 2,050,000 150 170M8624 170M8639¹ 1100 460,000 2,750,000 155 170M8625 170M8640¹ 1000 V a.c. (IEC) 1250 575,000 3,400,000 175 170M8626 170M8641 | | | 500 | 37,500 | 225,000 | 110 | 170M8618 | 170M8633 ¹ |
| 3 | | 1000 V a.c. (IEC and III.) | 550 | 52,000 | 310,000 | 115 | 170M8619 | 170M8634 ¹ |
| 1000 V a.c. (IEC) 115,000 700,000 125 170M8621 170M8636 170M8636 170M8637 170M8637 170M8637 170M8638 170M8638 170M8638 170M8638 170M8638 170M8638 170M8638 170M8638 170M8639 170M8638 170M8639 170M8638 170M8639 170M8638 170M8638 170M8638 170M8638 170M8638 170M8640 170M8638 170M8640 170M8638 170M8640 170M8638 170M8640 170M8638 170M8641 170M8638 170M8638 170M8641 170M8638 170M863 | 3 | 1000 V a.c. (ILO alla OL) | 630 | 82,500 | 490,000 | 120 | 170M8620 | 170M8635 ¹ |
| 900 250,000 1,500,000 145 170M8623 170M8638¹ 1000 340,000 2,050,000 150 170M8624 170M8639¹ 1100 460,000 2,750,000 155 170M8625 170M8640¹ 1000 V a.c. (IEC) 1250 575,000 3,400,000 175 170M8626 170M8641 | J | | 700 | 115,000 | 700,000 | 125 | 170M8621 | 170M8636 ¹ |
| 1000 340,000 2,050,000 150 170M8624 170M8639¹ 1100 460,000 2,750,000 155 170M8625 170M8640¹ 1000 V a.c. (IEC) 1250 575,000 3,400,000 175 170M8626 170M8641 | | | 800 | 170,000 | 1,050,000 | 135 | 170M8622 | 170M8637 ¹ |
| 1100 460,000 2,750,000 155 170M8625 170M8640¹ 1000 V a.c. (IEC) 1250 575,000 3,400,000 175 170M8626 170M8641 | | | 900 | 250,000 | 1,500,000 | 145 | 170M8623 | 170M8638 ¹ |
| 1000 V a.c. (IEC) 1250 575,000 3,400,000 175 170M8626 170M8641 | | | 1000 | 340,000 | 2,050,000 | 150 | 170M8624 | 170M8639 ¹ |
| | | | 1100 | 460,000 | 2,750,000 | 155 | 170M8625 | 170M8640 ¹ |
| 900 V a.c. (IEC) 1400 795,000 4,200,000 185 170M8627 170M8642 | | 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 |

¹ Rated at 900 V d.c. 8XIn 90 kA

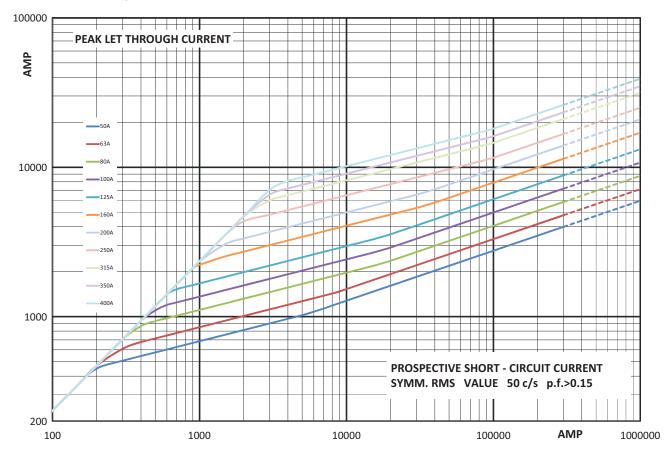
170M - Sizes 1* to 3, DIN 43653, 1000 V a.c. (IEC and UL), 50 A to 1400 A

Time-current curve - Size 1* - 50 A to 400 A



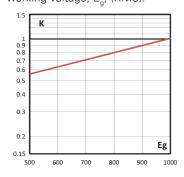
170M - Sizes 1* to 3, DIN 43653, 1000 V a.c. (IEC and UL), 50 A to 1400 A

Cut-off curve - Size 1*, 50 A to 400 A



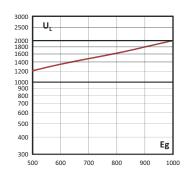
Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



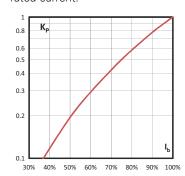
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



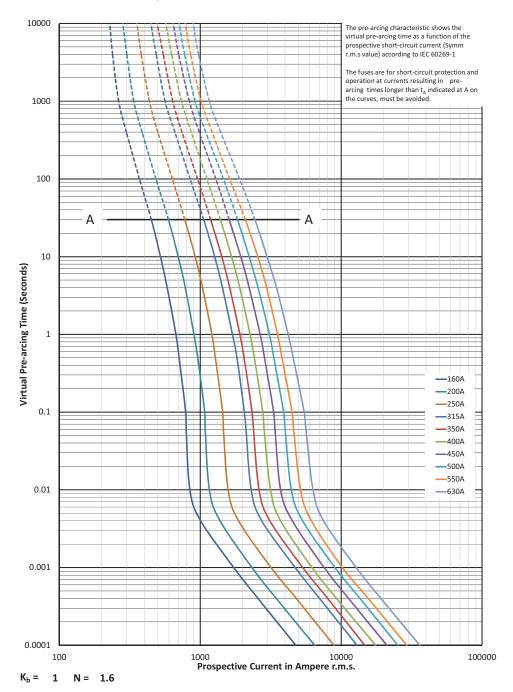
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



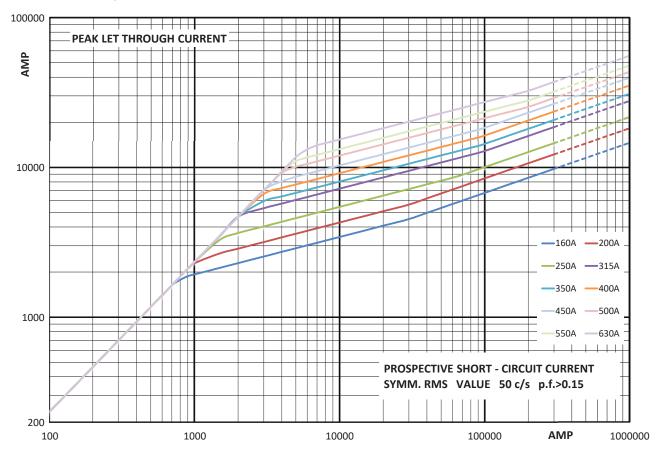
170M - Sizes 1* to 3, DIN 43653, 1000 V a.c. (IEC and UL), 50 A to 1400 A

Time-current curve - Size 1, 160 A to 630 A



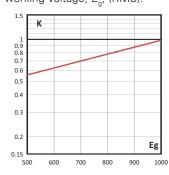
170M - Sizes 1* to 3, DIN 43653, 1000 V a.c. (IEC and UL), 50 A to 1400 A

Cut-off curve - Size 1, 160 A to 630 A



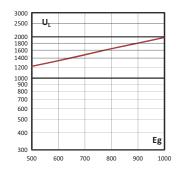
Total clearing I²t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



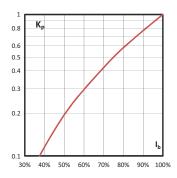
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



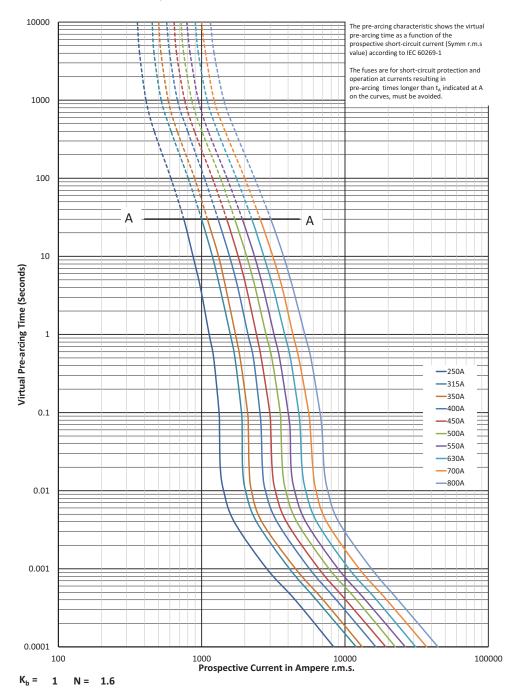
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



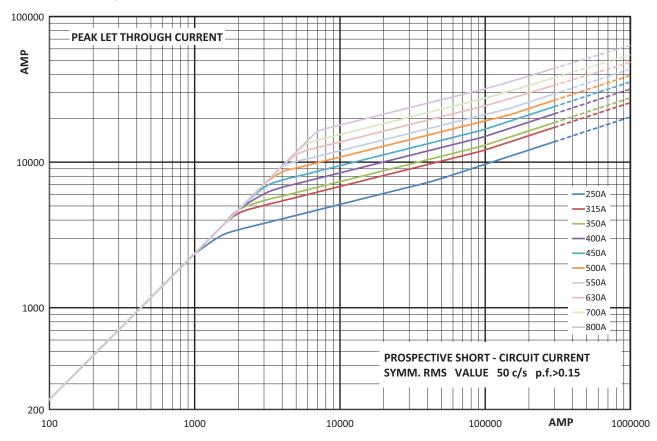
170M - Sizes 1* to 3, DIN 43653, 1000 V a.c. (IEC and UL), 50 A to 1400 A

Time-current curve - Size 2, 250 A to 800 A



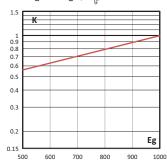
170M - Sizes 1* to 3, DIN 43653, 1000 V a.c. (IEC and UL), 50 A to 1400 A

Cut-off curve - Size 2, 250 A to 800 A



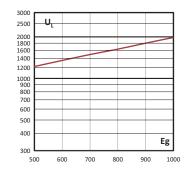
Total clearing I2t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



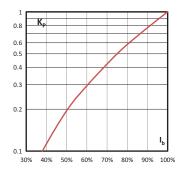
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



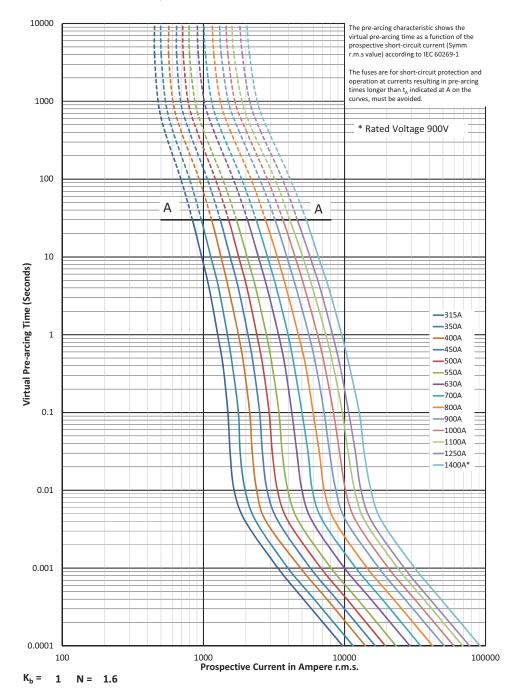
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



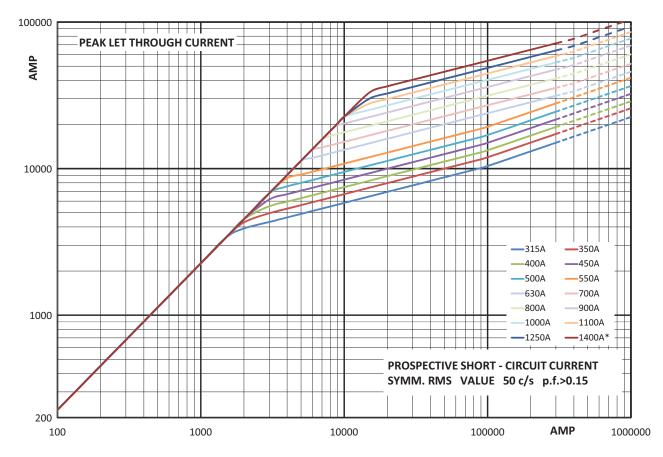
170M - Sizes 1* to 3, DIN 43653, 1000 V a.c. (IEC and UL), 50 A to 1400 A

Time-current curve - Size 3, 315 A to 1400 A



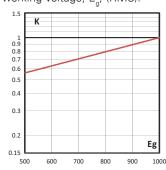
170M - Sizes 1* to 3, DIN 43653, 1000 V a.c. (IEC and UL), 50 A to 1400 A

Cut-off curve - Size 3, 315 A to 1400 A



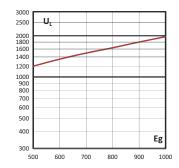
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{σ} , (RMS).



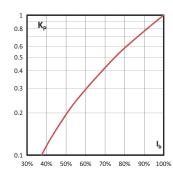
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170M - Sizes 1* to 3, DIN 43653, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A 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 opposite page

• Rated current: 50 A to 1400 A

· Breaking capacity: 100 kA RMS Sym.

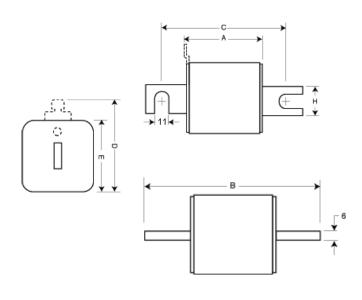
· Operating class: aR

Standards / Agency information

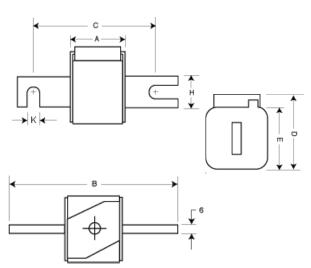
CE, Designed and tested to IEC60269 Part 4. Consult Eaton for UL Recognition/CSA Component Acceptance status.



Dimensions (mm) -110 and TN/110



Dimensions (mm) - KN/110



| Size | Α | В | C | \mathbf{D}^{1} | E | Н | 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"

| Size | Α | В | C | D | E | Н | 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"

170M - Sizes 1* to 3, DIN 43653, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Catalogue numbers

| | | | I²t (A² Sec) | | | | Catalogue numbers | | | |
|------------------------|-------------------|----------------------|--------------|----------------------------|----------------------------|-------------------|------------------------------|---|---|--|
| Fuse link body size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 1000 V a.c. | Clearing at 1250 V a.c. | Watts loss (W) | -/110 Visual indicator | -TN/110 Type T indicator for micro | -KN/110 Type K indicator for micro | |
| | | 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 | |
| | 1250 V a.c. (IEC) | 125 | 1450 | 9000 | 11,500 | 35 | 170M3142 | 170M3192 | 170M3242 | |
| 1* | | 160 | 2600 | 16,000 | 21,000 | 40 | 170M3143 | 170M3193 | 170M3243 | |
| | 1300 V a.c. (UL) | 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 | |
| | | 160 | 1900 | 11,500 | 15,500 | 45 | 170M4138 ² | 170M4188 ² | 170M4238 ² | |
| | | 200 | 3800 | 22,500 | 30,000 | 50 | 170M4139 ² | 170M4189 ² | 170M4239 ² | |
| | 1250 \/ //50\ | 250 | 7750 | 46,000 | 61,500 | 60 | 170M4140 ² | 170M4190 ² | 170M4240 ² | |
| | 1250 V a.c. (IEC) | 315 | 15,000 | 90,000 | 120,000 | 65 | 170M4141 ² | 170M4191 ² | 170M4241 ² | |
| | 1300 V a.c. (UL) | 350 | 20,000 | 125,000 | 165,000 | 70 | 170M4142 ² | 170M4192 ² | 170M4242 ² | |
| 1 | | 400 | 29,500 | 175,000 | 235,000 | 75 | 170M4143 ² | 170M4193 ² | 170M4243 ² | |
| | | 450 | 42,000 | 250,000 | 335,000 | 80 | 170M4144 ² | 170M4194 ² | 170M4244 ² | |
| | 800 V d.c. (UL) | 500 | 69,500 | 340,000 | 435,000 | 85 | 170M4145 | 170M4195 | 170M4245 | |
| | 85 kA IR | 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 | |
| | | 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 | |
| | 4050.1/ (150) | 400 | 23,000 | 140,000 | 180,000 | 85 | 170M5142 | 170M5192 | 170M5242 | |
| | 1250 V a.c. (IEC) | 450 | 34,000 | 205,000 | 270,000 | 90 | 170M5143 | 170M5193 | 170M5243 | |
| 2 | 1300 V a.c. (UL) | 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 ² | 170M5196 ² | 170M5246 | |
| | | 700 | 160,000 | 795,000 | 1,050,000 | 125 | 170M5147 ² | 170M5197 ² | 170M5247 | |
| | | 800 | 245,000 | 1,200,000 | 1,550,000 | 130 | 170M5148 ² | 170M5198 ² | 170M5248 | |
| | 1100 V a.c. | 900 | 360,000 | 1,750,000 | N/A | 135 | 170M5149 ⁴ | 170M5199 ⁴ | 170M5249 ⁴ | |
| | (IEC & UL) | 1000 | 480,000 | 2,350,000 | N/A | 145 | 170M5150 ⁴ | 170M5200 ⁴ | 170M5250 ⁴ | |
| | | 315 | 9500 | 58,000 | 77,500 | 85 | 170M6138 ² | 170M6188 ² | 170M6238 ² | |
| | | 350 | 13,500 | 81,500 | 110,000 | 90 | 170M6139 ² | 170M6189 ² | 170M6239 ² | |
| | | 400 | 19,500 | 120,000 | 160,000 | 95 | 170M6140 ² | 170M6190 ² | 170M6240 ² | |
| | | 450 | 31,000 | 185,000 | 245,000 | 100 | 170M6141 ² | 170M6191 ² | 170M6241 ² | |
| | | 500 | 39,000 | 235,000 | 310,000 | 105 | 170M6142 ² | 170M6192 ² | 170M6242 ² | |
| | | 550 | 55,000 | 325,000 | 435,000 | 110 | 170M6143 ² | 170M6193 ² | 170M6242 | |
| | 1300 V a.c. (UL) | 630 | 83,500 | 495,000 | 665,000 | 115 | 170M6144 ² | 170M6194 ² | 170M6244 ² | |
| 3 | | 700 | 115,000 | 705,000 | 940,000 | 120 | 170M6145 ² | 170M6195 ² | 170M6244 | |
| | | 800 | 205,000 | 995,000 | 1,300,000 | 125 | 170M6146 ³ | 170M6196 ³ | 170M6246 ¹ | |
| | | 900 | 305,000 | 1,500,000 | 1,900,000 | 130 | 170M6147 ³ | 170M6197 ³ | 170M6247 ¹ | |
| | | 1000 | 450,000 | 2,150,000 | 2,750,000 | 135 | 170M6148 ³ | 170M6198 ³ | 170M6248 ¹ | |
| | | 1100 | 575,000 | 2,800,000 | 3,600,000 | 160 | 170M6149 ³ | 170M6199 ³ | 1701V16246* | |
| | 1100 V a.c. (IEC) | 1250 | 810,000 | 3,950,000 | N/A | 170 | 170M6150 ⁵ | 170M6200 ¹ | 1701V162491 170M62501 | |
| | 1100 V a.C. (IEC) | 1400 | | | N/A N/A | 175 | 170M6151 ⁵ | 170M62001 | 170lVl6250 ⁻ | |
| | | 1400 | 1,250,000 | 6,000,000 | IN/A | 1/0 | 170101017 | 17UIVIOZUT | 1701010231 | |

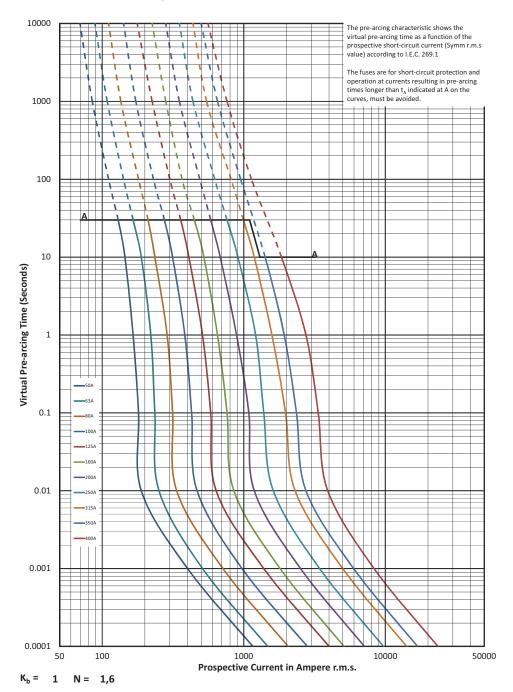
¹ These fuse links are not UL recognised ² 900 V d.c. 8XIn 90 kA ⁵ 900 V d.c. 12XIn 90 kA

³ Rated at 1000 V d.c. 10XIn 91 kA

⁴ 900 V d.c. 9.5XIn 80 kA

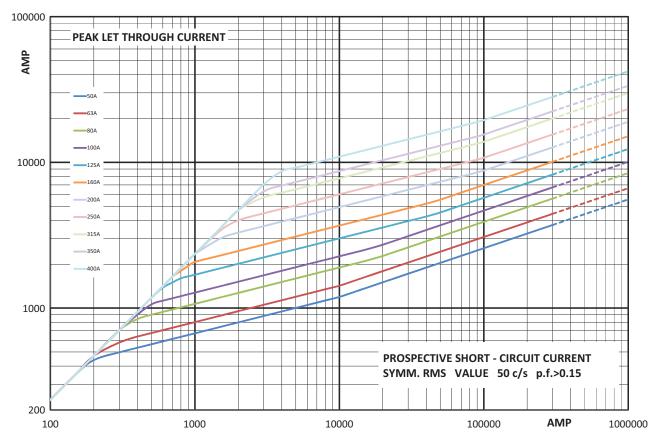
170M - Sizes 1* to 3, DIN 43653, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Time-current curve - Size 1*, 50 A to 400 A



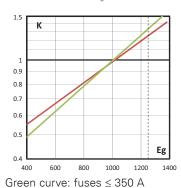
170M - Sizes 1* to 3, DIN 43653, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Cut-off curve - Size 1*, 50 A to 400 A



Total clearing I²t

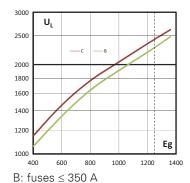
The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{σ} , (RMS).



Red curve: fuses ≥ 400 A

Arc voltage

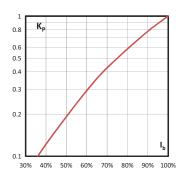
This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



C: fuses ≥ 400 A

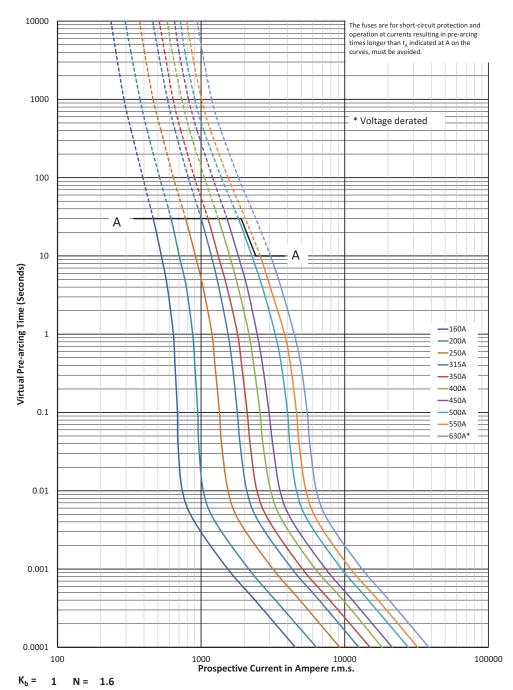
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



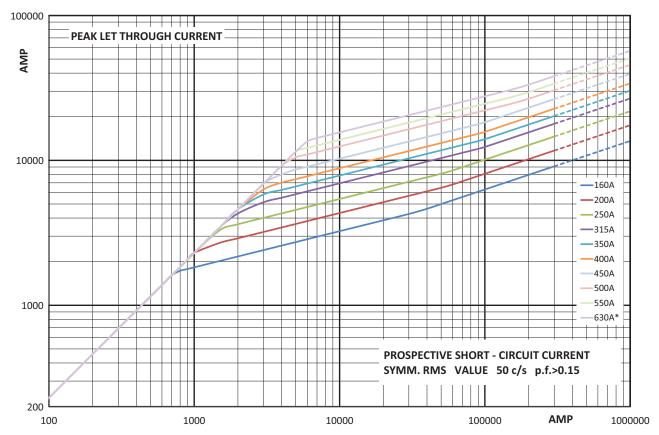
170M - Sizes 1* to 3, DIN 43653, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Time-current curve - Size 1, 160 A to 630 A



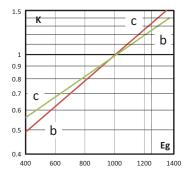
170M - Sizes 1* to 3, DIN 43653, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Cut-off curve - Size 1, 160 A to 630 A



Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\alpha'}$ (RMS).

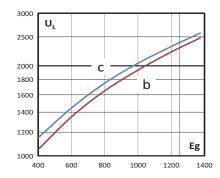


B: fuses ≤ 450 A

C: fuses ≥ 500 A

Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.

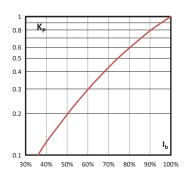


B: fuses ≤ 450 A

C: fuses ≥ 500 A

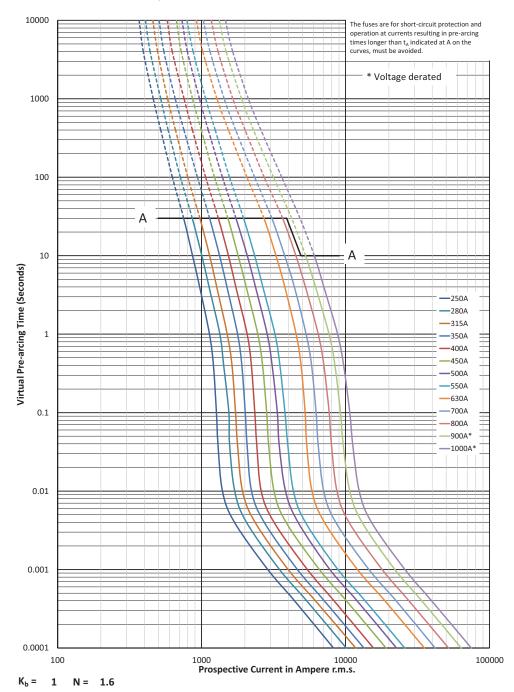
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



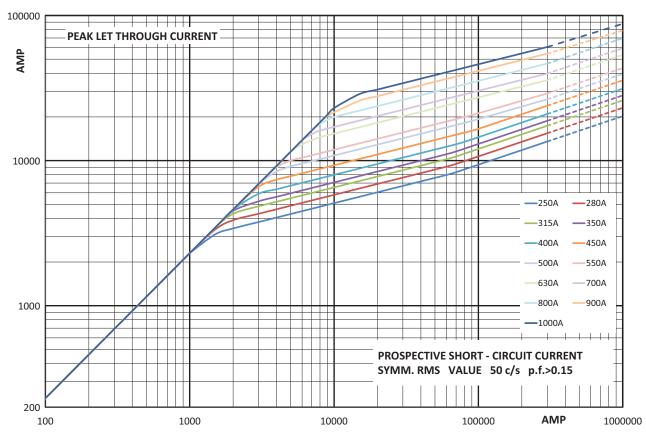
170M - Sizes 1* to 3, DIN 43653, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Time-current curve - Size 2, 250 A to 1000 A



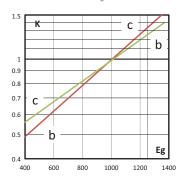
170M - Sizes 1* to 3, DIN 43653, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Cut-off curve - Size 2, 250 A to 1000 A



Total clearing I2t

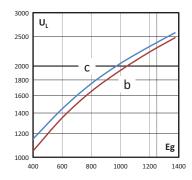
The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



B: fuses ≤ 550 A C: fuses ≥ 630 A

Arc voltage

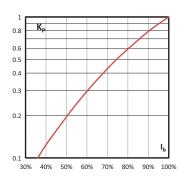
This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



B: fuses \leq 550 A C: fuses \geq 630 A

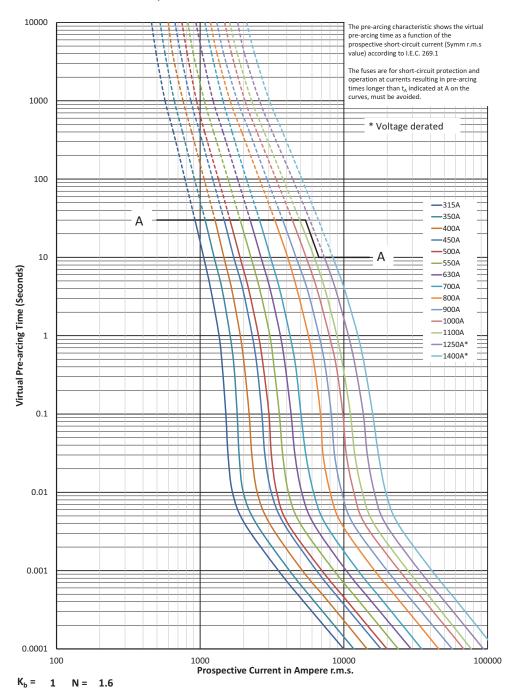
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



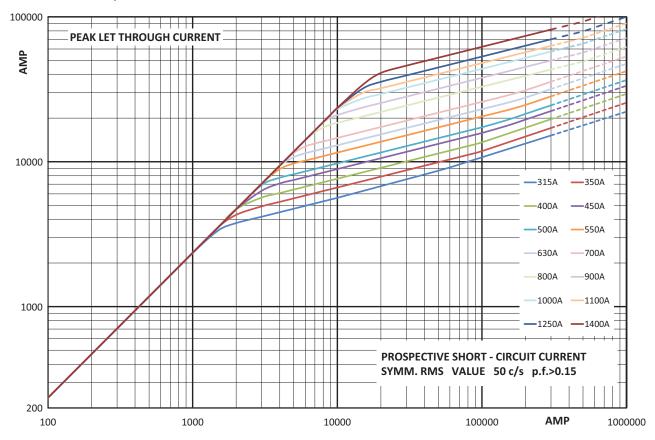
170M - Sizes 1* to 3, DIN 43653, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A





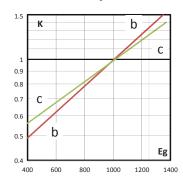
170M - Sizes 1* to 3, DIN 43653, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Cut-off curve - Size 3, 315 A to 1400 A



Total clearing I²t

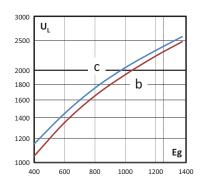
The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



B: fuses ≤ 550 A C: fuses ≥ 630 A

Arc voltage

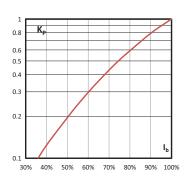
This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



B: fuses ≤ 700 A C: fuses ≥ 800 A

Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170M - Sizes 00 to 3, DIN 43620, Full range (gR), 690 V a.c. (IEC), 10 A to 800 A

Specifications

Description

Square body DIN 43620 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 A to 800 A

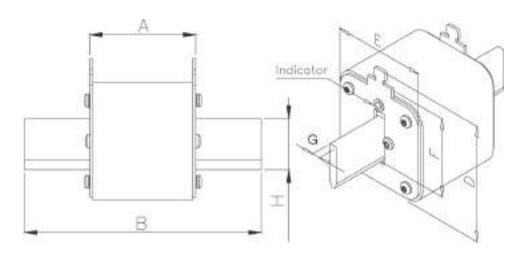
· Breaking capacity: 200 kA RMS Sym

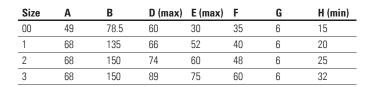
· Operating class: gR

Standards / Agency information

CE, Designed and tested to IEC 60269 Part 4

Dimensions (mm)







170M - Sizes 00 to 3, DIN 43620, Full range (gR), 690 V a.c. (IEC), 10 A to 800 A

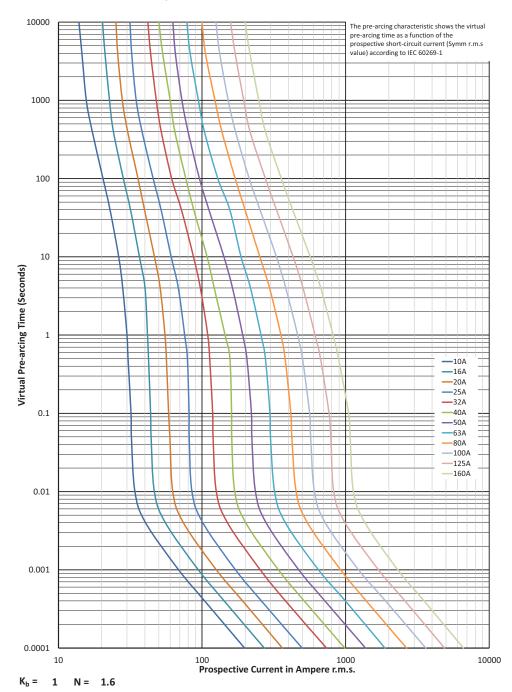
Catalogue numbers

| | | | I ² t (A ² Sec) | | | Catalogue numbers | |
|------------------------|------------------|--------------------------------------|---------------------------------------|---------------------------------------|-------------------|----------------------------|--|
| Fuse link body size | Rated voltage | Rated current (Amps) ¹ | Pre-arcing | Clearing at 690 V a.c. | Watts loss (W) | Type T indicator for micro | |
| | | 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 | |
| 00 | 000 1/ (150) | 40 | 95 | 490 | 10 | 170M2696 | |
| 00 | 690 V a.c. (IEC) | 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 | |
| | | 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 | |
| 1 | 690 V a.c. (IEC) | 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 | |
| | | 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 | |
| 2 | 690 V a.c. (IEC) | 400 | 39,500 | 205,000 | 53 | 170M5885 | |
| _ | 000 7 0.0. (120) | 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 | |
| | | 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 | |
| 3 | 690 V a.c. (IEC) | 550 | 84,500 | 435,000 | 70 | 170M6084 | |
| | | 630 | 125,000 | 645,000 | 85 | 170M6085 | |
| | | 700 | 160,000 | 840,000 | 93 | 170M6086 | |
| | | | 245,000 | · · · · · · · · · · · · · · · · · · · | | | |
| | | 800 | ∠45,UUU | 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 60269-1, table 17. When used in enclosed fuse bases/disconnects, derating factors have to be observed. Please contact Eaton for application assistance bulehighspeedtechnical@eaton.com.

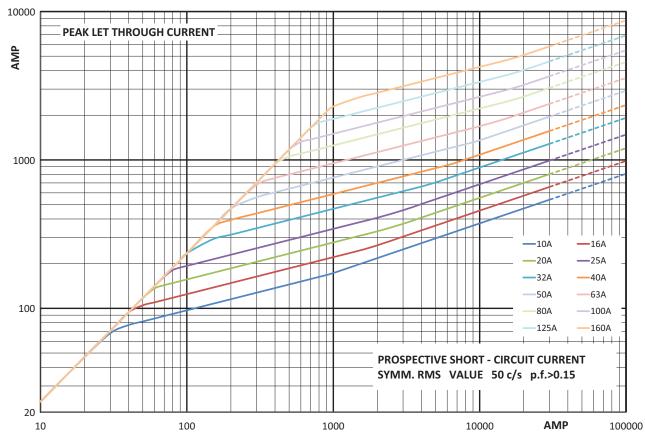
170M - Sizes 00 to 3, DIN 43620, Full range (gR), 690 V a.c. (IEC), 10 A to 800 A

Time-current curve - Size 00, 10 A to 160 A



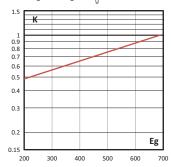
170M - Sizes 00 to 3, DIN 43620, Full range (gR), 690 V a.c. (IEC), 10 A to 800 A

Cut-off curve - Size 00, 10 A to 160 A



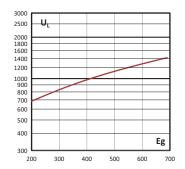
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm g}$, (RMS).



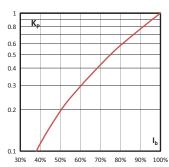
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



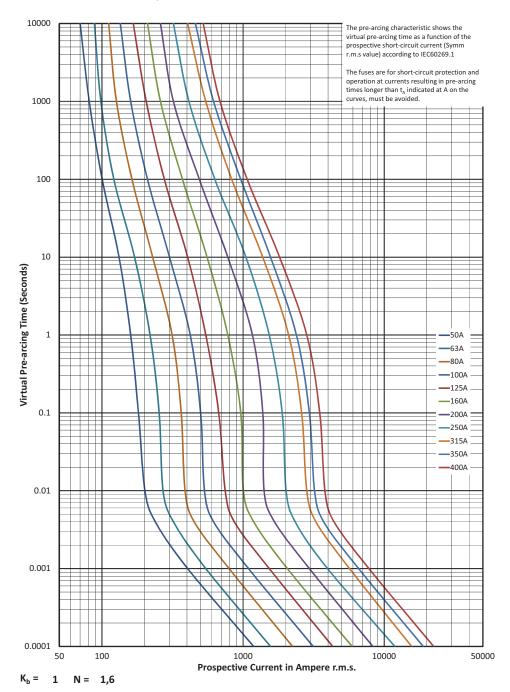
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



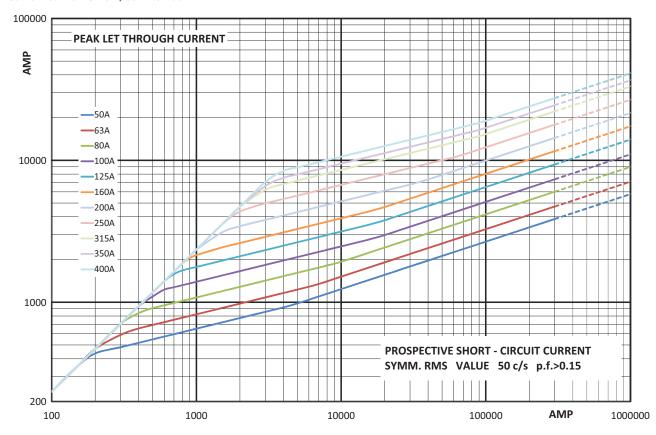
170M - Sizes 00 to 3, DIN 43620, Full range (gR), 690 V a.c. (IEC), 10 A to 800 A

Time-current curve - Size 1, 50 A to 400 A



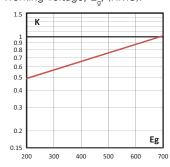
170M - Sizes 00 to 3, DIN 43620, Full range (gR), 690 V a.c. (IEC), 10 A to 800 A

Cut-off curve - Size 1, 50 A to 400 A



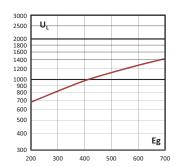
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm g}$, (RMS).



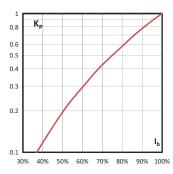
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm q}$, (RMS) at a power factor of 15 percent.



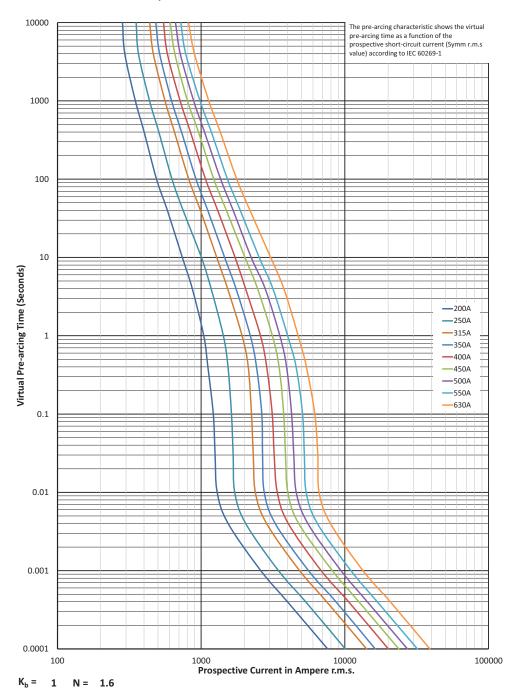
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



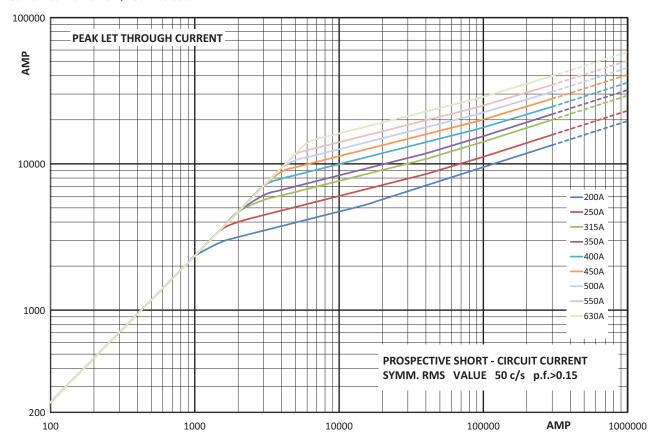
170M - Sizes 00 to 3, DIN 43620, Full range (gR), 690 V a.c. (IEC), 10 A to 800 A

Time-current curve - Size 2, 200 A to 630 A



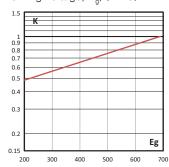
170M - Sizes 00 to 3, DIN 43620, Full range (gR), 690 V a.c. (IEC), 10 A to 800 A

Cut-off curve - Size 2, 200 A to 630 A



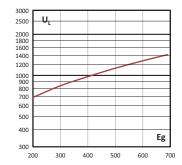
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm g}$, (RMS).



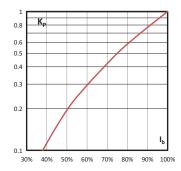
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



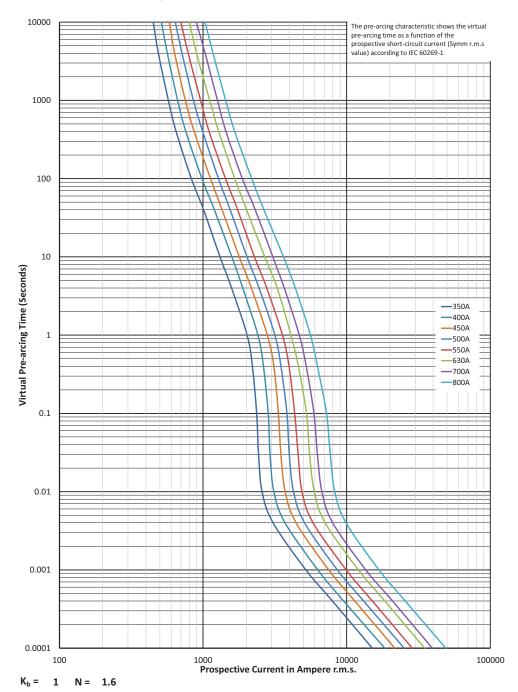
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



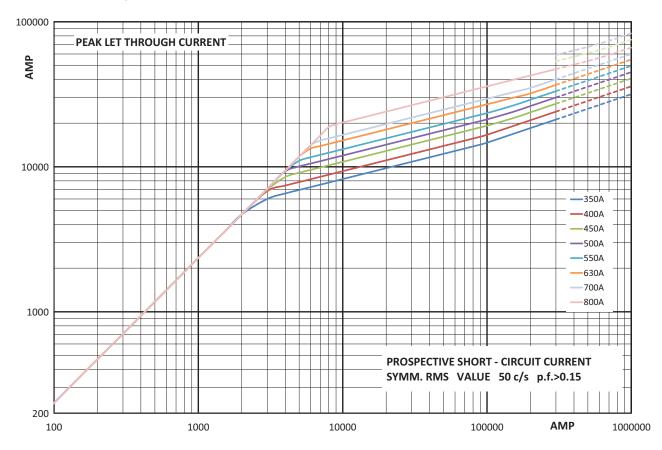
170M - Sizes 00 to 3, DIN 43620, Full range (gR), 690 V a.c. (IEC), 10 A to 800 A

Time-current curve - Size 3, 350 A to 800 A



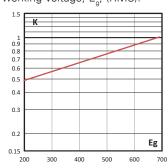
170M - Sizes 00 to 3, DIN 43620, Full range (gR), 690 V a.c. (IEC), 10 A to 800 A

Cut-off curve - Size 3, 350 A to 1000 A



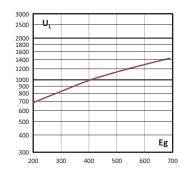
Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm g}$, (RMS).



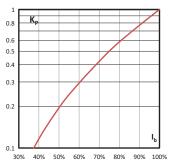
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170M - Sizes 000 to 3, DIN 43620, Dual indicator fuse links, 690 V a.c. (IEC), 700 V a.c. (UL), 10 A 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 A to 1600 A

· Breaking capacity: 200 kA RMS Sym

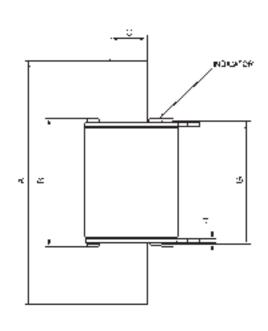
• Operating class: gR (size 000, 10 A to 63A), aR (others)

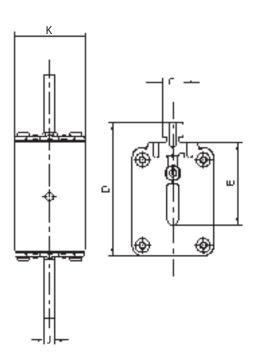
Standards / Agency information

CE, IEC60269 Part 4, UL and CSA Recognised



Dimensions (mm)





| Size | Α | В | C | D | E | F | G | Н | 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)

170M - Sizes 000 to 3, DIN 43620, Dual indicator fuse links, 690 V a.c. (IEC), 700 V a.c. (UL), 10 A to 1600 A Catalogue numbers

| oataiogue numbers | | | | I²t (A² Sec) | | | Catalogue numbers | |
|------------------------|------------------------------------|----------------------|---------------------------------|--------------|---------------------------|--------------------------------|-------------------|--|
| Fuse link body size | Rated voltage | Rated current (Amps) | Max permissible load current | Pre-arcing | Clearing at 690 V a.c. | Watts loss (W) ² | Dual indicator | |
| | | 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 | |
| 000 | 690 V a.c. (IEC) | 50 | 50 | 115 | 815 | 9.5 | 170M1564D | |
| JUU | 700 V a.c. (UL) | 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 | |
| | | 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 | |
| 1 | 690 V a.c. (IEC) | 250 | 150 | 4350 | 31,000 | 16 | 170M3816D | |
| | 700 V a.c. (UL) | 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 | | 155,000 | 26.5 | 170M4863D | |
| | | | | 21,500 | | 28.5 | 170M4864D | |
| | | 500 EEO | 300 | 27,000 | 190,000 | | | |
| | | 550 | 330 | 33,500 | 240,000 | 33 | 170M4865D | |
| | | 630 | 380 | 48,500 | 345,000 | 37.5 | 170M4866D | |
| | | 700 | 420 | 69,500 | 495,000 | 39 | 170M4867D1 | |
| | | 400 | 240 | 11,000 | 79,000 | 29 | 170M5808D | |
| | | 450 | 270 | 16,000 | 115,000 | 32 | 170M5809D | |
| | | 500 | 300 | 21,500 | 155,000 | 34 | 170M5810D | |
| | COO \/ a a /IFC\ | 550 | 330 | 29,000 | 215,000 | 36 | 170M5811D | |
|) | 690 V a.c. (IEC) | 630 | 380 | 41,000 | 295,000 | 42 | 170M5812D | |
| | 700 V a.c. (UL) | 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 | |
| | | 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 | |
| } | 690 V a.c. (IEC) | 900 | 540 | 100,000 | 720,000 | 50 | 170M6813D | |
| 1 | 700 V a.c. (UL) | 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 | |
| | | | | * | | | | |

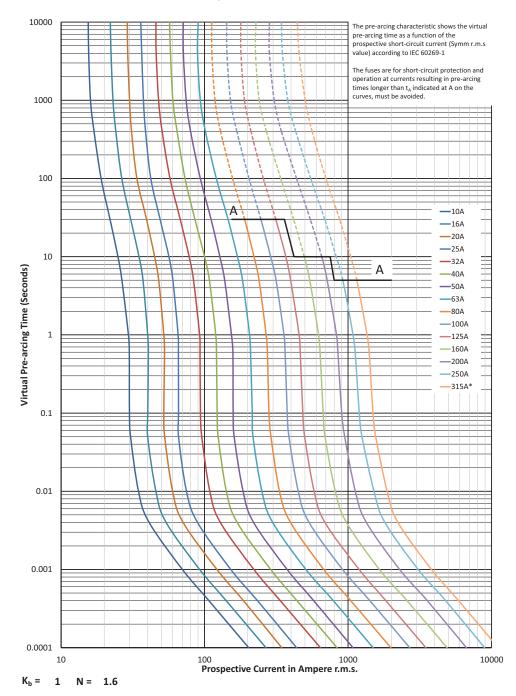
¹ 170M4867D is not UL recognised.

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

² Given at maximum load Rated current, please refer to data sheets for further details.

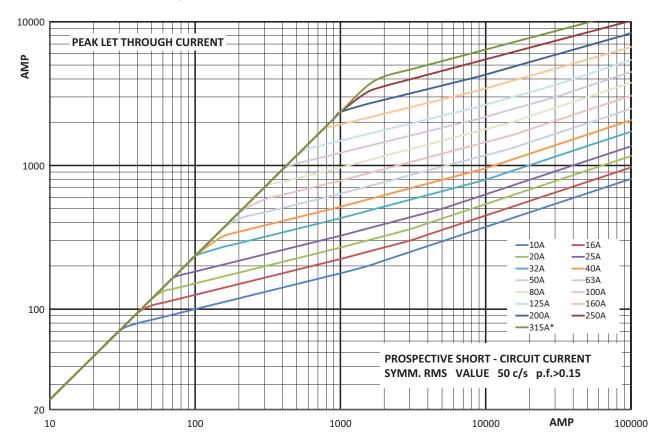
170M - Sizes 000 to 3, DIN 43620, Dual indicator fuse links, 690 V a.c. (IEC), 700 V a.c. (UL), 10 A to 1600 A

Time-current curve - Sizes 000 and 00, 10 A to 315 A



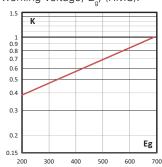
170M - Sizes 000 to 3, DIN 43620, Dual indicator fuse links, 690 V a.c. (IEC), 700 V a.c. (UL), 10 A to 1600 A

Cut-off curve - Sizes 000 amd 00, 10 A to 315 A



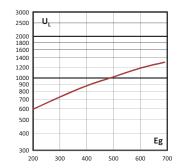
Total clearing I2t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_n, (RMS).



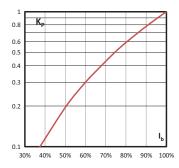
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

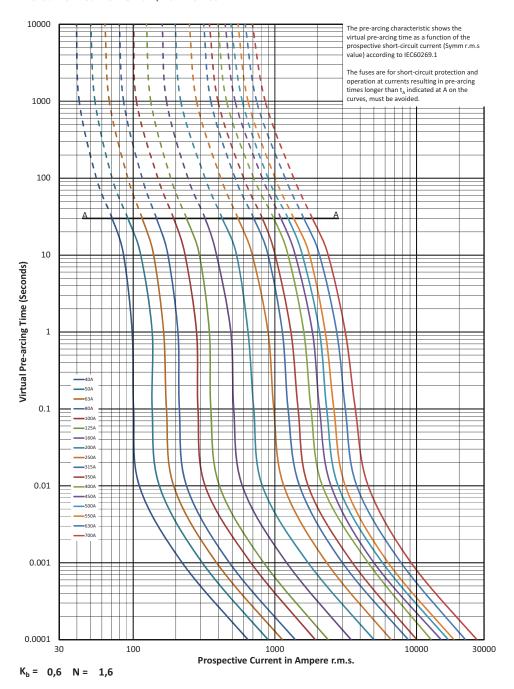
Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, ${\rm K_p}$, is given as a function of the RMS load current, ${\rm I_b}$, in percent of the rated current.



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

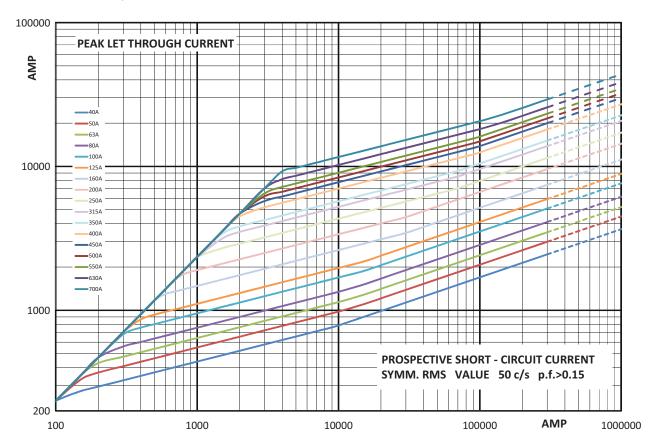
170M - Sizes 000 to 3, DIN 43620, Dual indicator fuse links, 690 V a.c. (IEC), 700 V a.c. (UL), 10 A to 1600 A

Time-current curve - Size 1, 40 A to 700 A



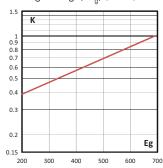
170M - Sizes 000 to 3, DIN 43620, Dual indicator fuse links, 690 V a.c. (IEC), 700 V a.c. (UL), 10 A to 1600 A

Cut-off curve - Size 1, 40 A to 700 A



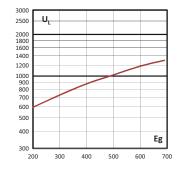
Total clearing I²t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



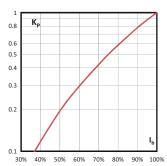
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



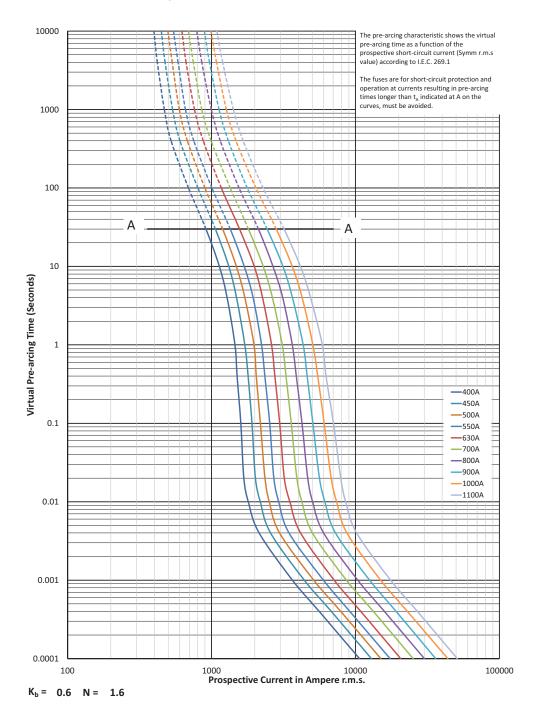
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



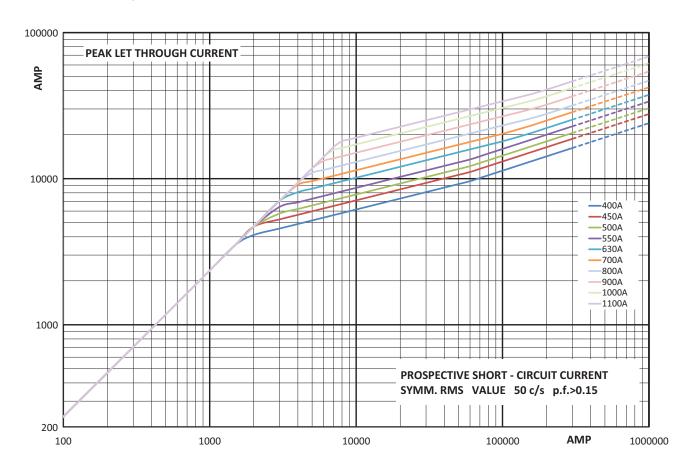
170M - Sizes 000 to 3, DIN 43620, Dual indicator fuse links, 690 V a.c. (IEC), 700 V a.c. (UL), 10 A to 1600 A

Time-current curve - Size 2, 400 A to 1100 A



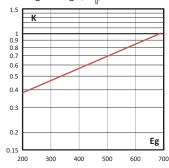
170M - Sizes 000 to 3, DIN 43620, Dual indicator fuse links, 690 V a.c. (IEC), 700 V a.c. (UL), 10 A to 1600 A

Cut-off curve - Size 2, 400 A to 1100 A



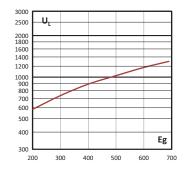
Total clearing I²t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{σ} , (RMS).



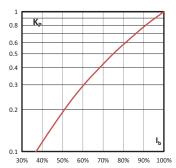
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



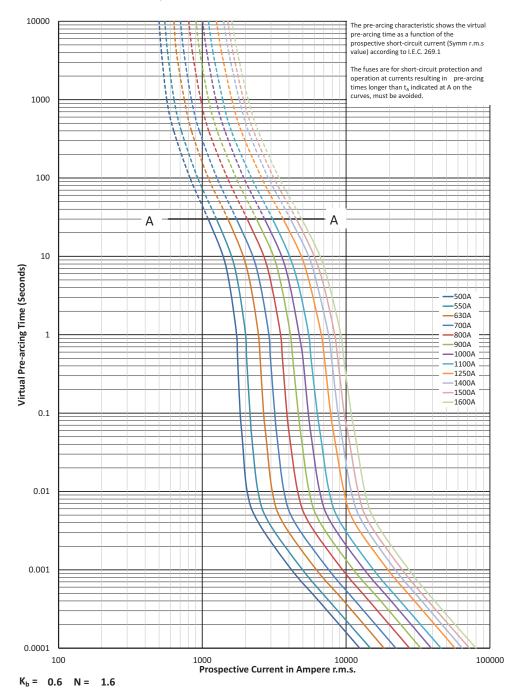
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



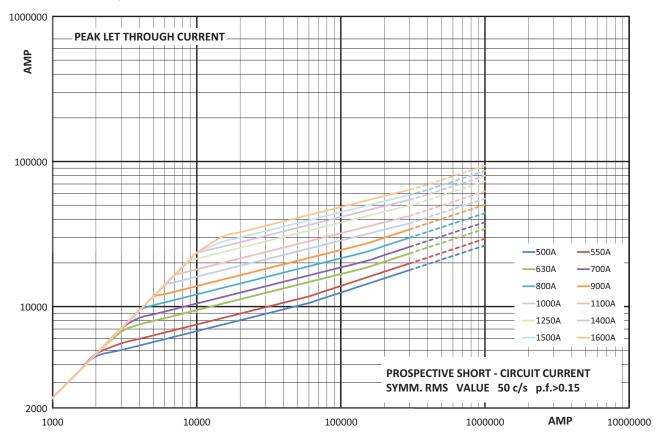
170M - Sizes 000 to 3, DIN 43620, Dual indicator fuse links, 690 V a.c. (IEC), 700 V a.c. (UL), 10 A to 1600 A

Time-current curve - Size 3, 500 A to 1600 A



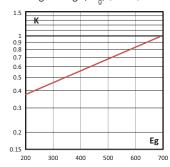
170M - Sizes 000 to 3, DIN 43620, Dual indicator fuse links, 690 V a.c. (IEC), 700 V a.c. (UL), 10 A to 1600 A

Cut-off curve - Size 3, 500 A to 1600 A



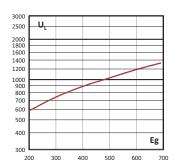
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



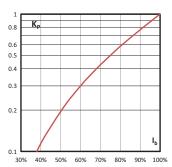
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



170M - Size 00, DIN 43620, 1000 V a.c. (IEC and UL), 20 A 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 A and 225A)

• Rated current: 20 A to 225 A

Breaking capacity: 125kA RMS Sym

Operating class: aR

Standards / Agency information

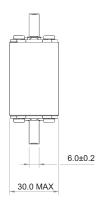
CE, Designed and tested to IEC60269 Part 4, UL Recognised/CSA Component Acceptance status (20 A to 160 A)

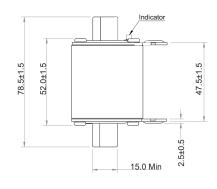


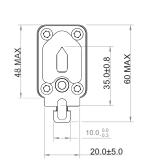
Catalogue numbers

| | | | I ² t (A ² Sec) | | | Catalogue numbers |
|------------------------|-------------------------|------------------------|---------------------------------------|----------------------------|-------------------|----------------------------|
| Fuse link body size | Rated voltage | Rated current Amps) | Pre-arcing | Clearing at 1000 V a.c. | Watts loss (W) | Type T indicator for micro |
| | | 20 | 15 | 110 | 8.5 | 170M2673 |
| | | 25 | 28.5 | 210 | 9.5 | 170M2674 |
| | | 32 | 53 | 390 | 11 | 170M2675 |
| | 1000 V a.c. (IEC/UL) | 35 | 69 | 500 | 12 | 170M2676 |
| | | 40 | 105 | 760 | 13 | 170M2677 |
| 00 | | 50 | 215 | 1550 | 14 | 170M2678 |
| | (120/02) | 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 | 000 \/ 0 0 //FC\ | 200 | 12,000 | 86,500 | 31 | 170M2684 |
| 00 | 900 V a.c. (IEC) | 225 | 18,000 | 115,000 | 33 | 170M2685 |

Dimensions (mm)



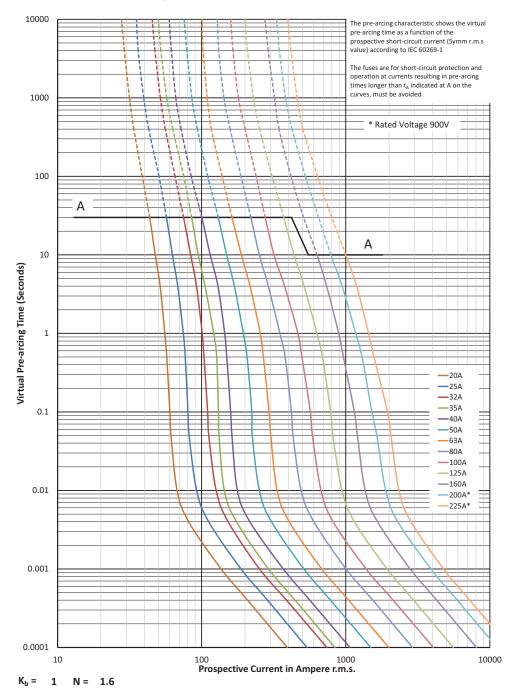




Data sheet: 170K8506

170M - Size 00, DIN 43620, 1000 V a.c. (IEC and UL), 20 A to 225 A

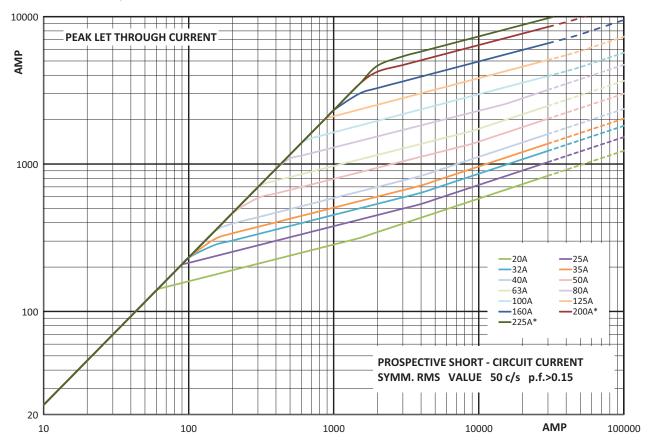
Time-current curve - Size 00, 20 A to 225 A



Data sheet: 170K8506

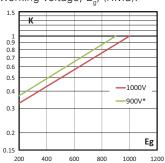
170M - Size 00, DIN 43620, 1000 V a.c. (IEC and UL), 20 A to 225 A

Cut-off curve - Size 00, 20 A to 225 A



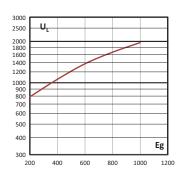
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm q}$, (RMS).



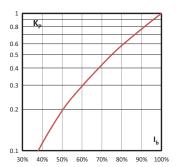
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



Data sheet: 170K8506

170M - Sizes 1* to 3, French style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A 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 A to 1600 A

· Breaking capacity: 200 kA RMS Sym

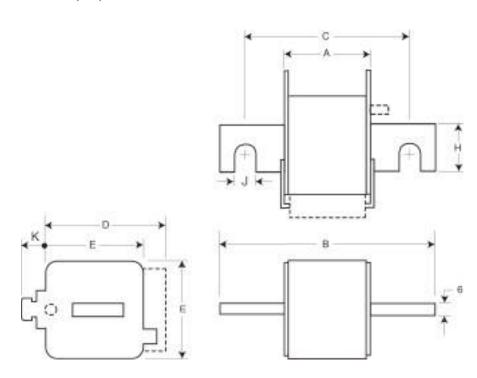
· Operating class: aR

Standards / Agency information

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



Dimensions (mm)



| Size | Α | В | C | D | E | Н | 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 | |

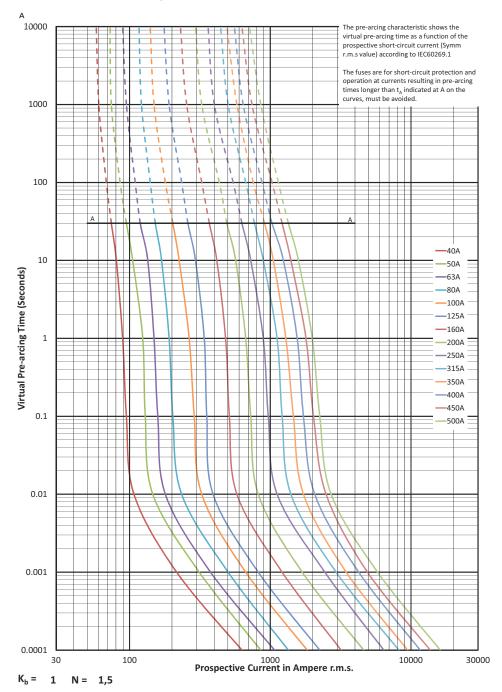
170M - Sizes 1* to 3, French style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 1600 A

Catalogue numbers

| | | | I ² t (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) | -E/- Type T indicator for micro | -EKN/- Type K indicator for micro |
| | | 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 |
| 1* | 690 V a.c. (IEC) | 160 | 1100 | 7500 | 30 | 170M3314 | 170M3364 |
| ı | 700 V a.c.(UL) | 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 |
| | | 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 |
| | 690 V a.c. (IEC) | 400 | 13,500 | 91,500 | 65 | 170M4312 | 170M4362 |
| 1 | , , | 450 | 17,000 | 120,000 | 70 | 170M4313 | 170M4363 |
| | 700 V a.c.(UL) | 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 |
| | | 400 | 11,000 | 74,000 | 65 | 170M5308 | 170M5358 |
| | | 450 | 15,500 | 105,000 | 70 | 170M5309 | 170M5359 |
| | | 500 | 21,500 | 145,000 | 75 | 170M5310 | 170M5360 |
| | 690 V a.c. (IEC) | 550 | 28,000 | 190,000 | 80 | 170M5311 | 170M5361 |
| 2 | , , | 630 | 41,000 | 275,000 | 90 | 170M5312 | 170M5362 |
| | 700 V a.c.(UL) | 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 |
| | | 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 |
| | 000) / /// /// // | 800 | 69,500 | 465,000 | 115 | 170M6312 | 170M6362 |
| 3 | 690 V a.c. (IEC) | 900 | 100,000 | 670,000 | 120 | 170M6313 | 170M6363 |
| - | 700 V a.c.(UL) | 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 |

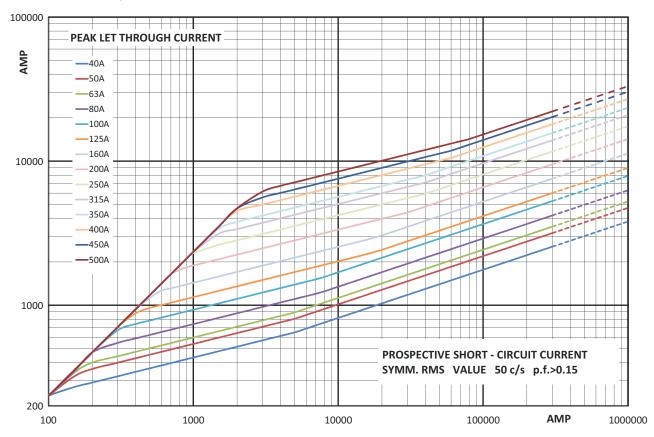
170M - Sizes 1* to 3, French style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 1600 A

Time-current curve - Size 1*, 40 A to 500 A



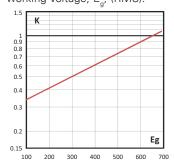
170M - Sizes 1* to 3, French style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 1600 A

Cut-off curve - Size 1*, 40 A to 500 A



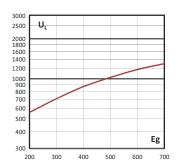
Total clearing I2t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



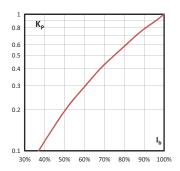
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



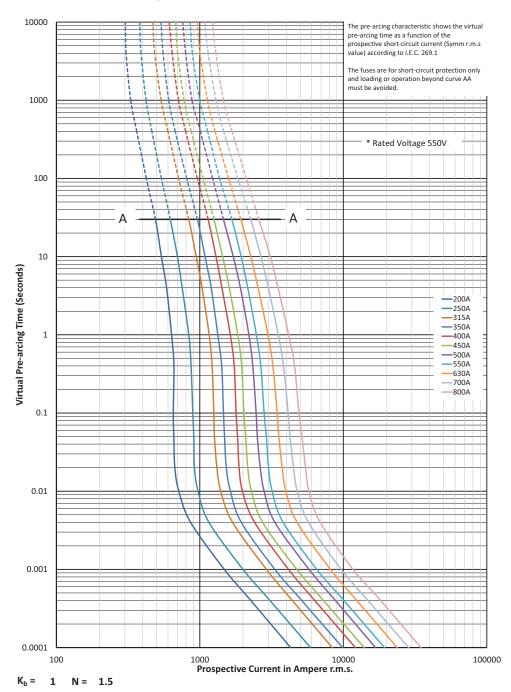
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



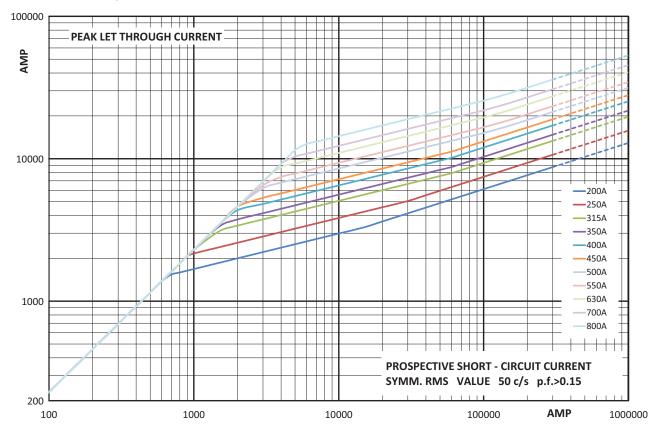
170M - Sizes 1* to 3, French style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 1600 A

Time-current curve - Size 1, 200 A to 800 A



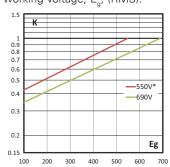
170M - Sizes 1* to 3, French style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 1600 A

Cut-off curve - Size 1, 200 A to 800 A



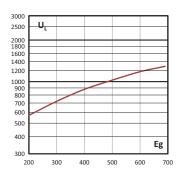
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



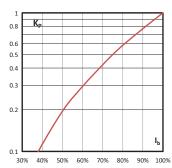
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



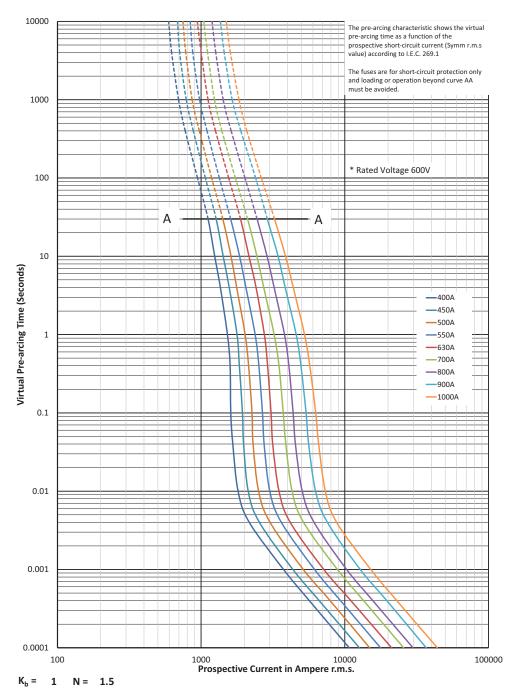
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



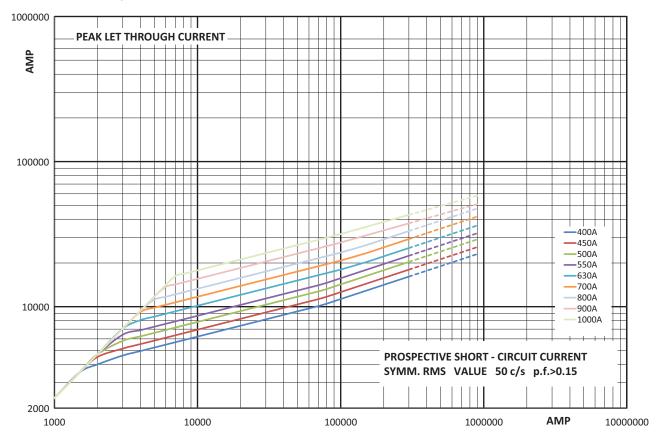
170M - Sizes 1* to 3, French style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 1600 A

Time-current curve - Size 2, 400 A to 1000 A



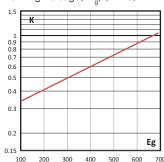
170M - Sizes 1* to 3, French style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 1600 A

Cut-off curve - Size 2, 400 A to 1000 A



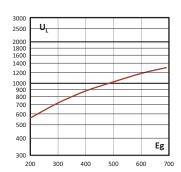
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{σ} , (RMS).



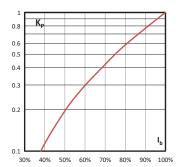
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



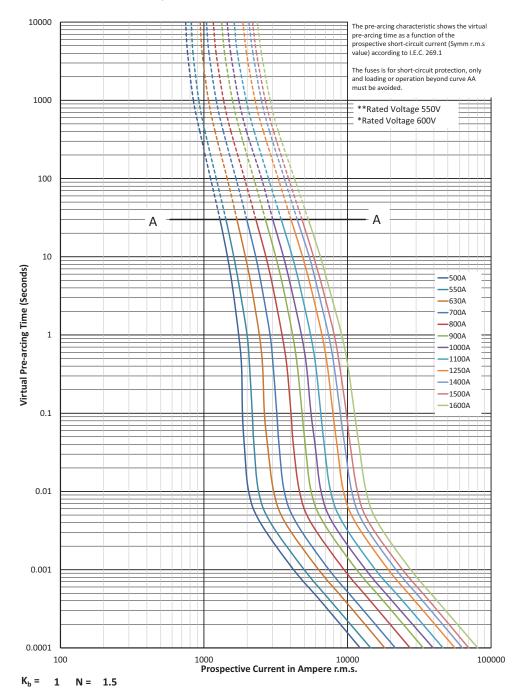
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



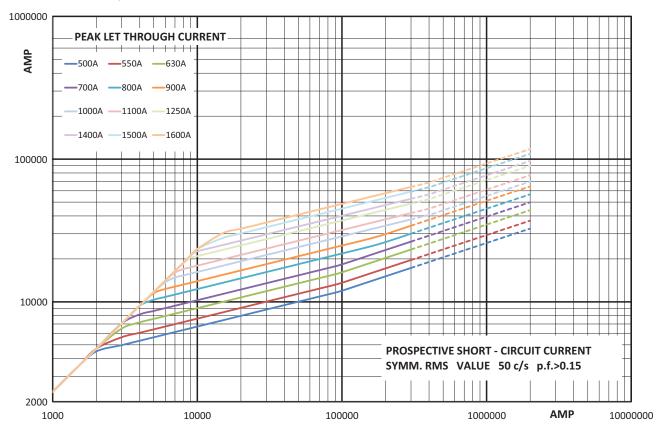
170M - Sizes 1* to 3, French style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 1600 A

Time-current curve - Size 3, 500 A to 1600 A



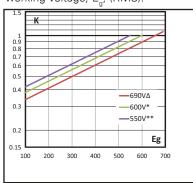
170M - Sizes 1* to 3, French style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 1600 A

Cut-off curve - Size 3, 500 A to 1600 A



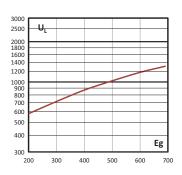
Total clearing I²t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



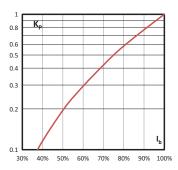
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $\rm K_p$, is given as a function of the RMS load current, $\rm I_b$, in percent of the rated current.



170M - Sizes 1* to 3, US style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A 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 159

· Rated current: 40 A to 2000 A

· Breaking capacity: 200 kA RMS Sym

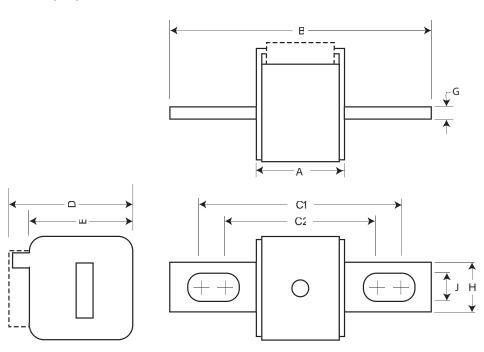
· Operating class: aR

Standards / Agency information

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



Dimensions (mm)



| Size | Α | В | B1 | C1 | C1 ¹ | C2 | C2 ¹ | D | E | G | Н | 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"

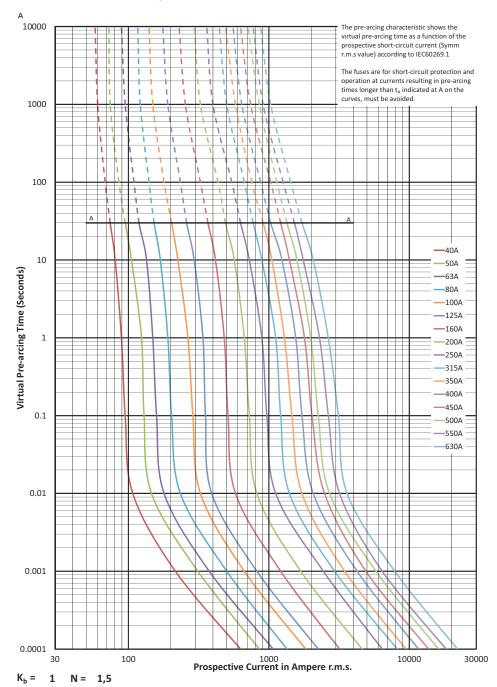
170M - Sizes 1* to 3, US style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

| | | | I²t (A² Sec) | | | Catalogue numbers | | | | |
|------------------------|------------------------------------|----------------------------|--------------|---------------------------------------|-------------------|-------------------------|---|---------------------------|---|--|
| Fuse link body size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 660 V a.c. | Watts loss (W) | -FU/- without indicator | -FKE/- Type K indicator for micro | -FU/115 without indicator | -FKE/115 Type K indicator for micro | |
| | | 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 | |
| * | 690 V a.c. (IEC) | 200 | 2200 | 15,000 | 35 | 170M3615 | 170M3665 | 170M3715 | 170M3765 | |
| * | 700 V a.c. (UL) | 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 | |
| | | 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 | |
| | 690 V a.c. (IEC) | 400 | 13,500 | 91,500 | 65 | 170M4612 | 170M4662 | 170M4712 | 170M4762 | |
| | 700 V a.c. (UL) | 450 | 17,000 | 120,000 | 70 | 170M4613 | 170M4663 | 170M4713 | 170M4763 | |
| | 700 V d.c. (OL) | 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 | |
| | | 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 | |
| | 690 V a.c. (IEC) | 550 | 28,000 | 190,000 | 80 | 170M5611 | 170M5661 | 170M5711 | 170M5761 | |
| | , , | 630 | 41,000 | 275,000 | 90 | 170M5612 | 170M5662 | 170M5712 | 170M5762 | |
| | 700 V a.c. (UL) | 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) | 1100 | 245,000 | 1,600,000 | 120 | 170M5617 | 170M5667 | 170M5717 | 170M5767 | |
| | 700 V a.c. (ILC) | 1250 | 365,000 | 2,400,000 | 130 | 170M5618 | 170M5668 | 170M5718 | 170M5768 | |
| | <u></u> | 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 | - | | | 170M6661 | | | |
| | | | | 300,000 | 110 | 170M6611 | | 170M6711 | 170M6761 | |
| | 690 V a.c. (IEC) | 800 | 69,500 | 465,000 | 115 | 170M6612 | 170M6662 | 170M6712 | 170M6762 | |
| | 030 V a.c. (ILO) | 900 | 100,000 | 670,000 | 120 | 170M6613 | 170M6663 | 170M6713 | 170M6763 | |
| | 700 V a.c. (UL) | 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) | 1800 | 880,000 | 5,250,000 | 165 | 170M6620 ³ | 170M6670 ¹ | 170M6720 ³ | 170M6770 | |
| | 550 V a.c. (UL) 550 V a.c.(IEC) | 2000 | 1,150,000 | 6,350,000 | 175 | 170M6621 | 170M6671 ² | 170M6721 | 170M6771 | |

¹ 170M6670 600 V a.c. (UL)/550 V a.c. (IEC) ² 170M6671 550 V a.c. (IEC and UL) ³ Rated at 750 V d.c.12XIn 130 kA when two fuses are connected in series

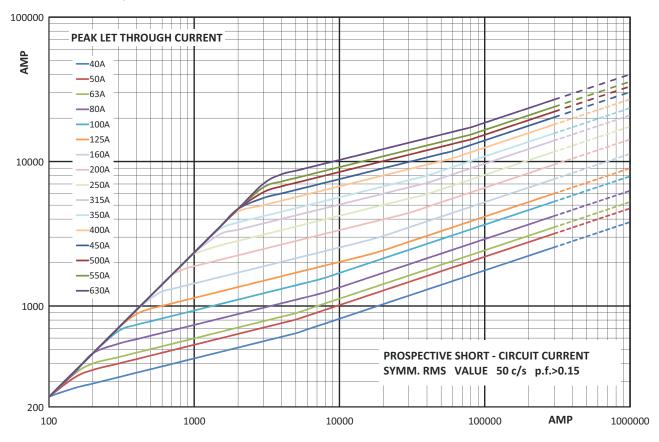
170M - Sizes 1* to 3, US style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Time-current curve - Size 1*, 40 A to 630 A



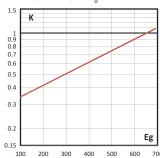
170M - Sizes 1* to 3, US style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Cut-off curve - Size 1*, 40 A to 630 A



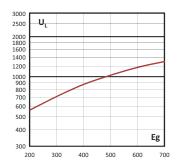
Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm q}$, (RMS).



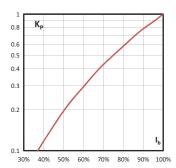
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



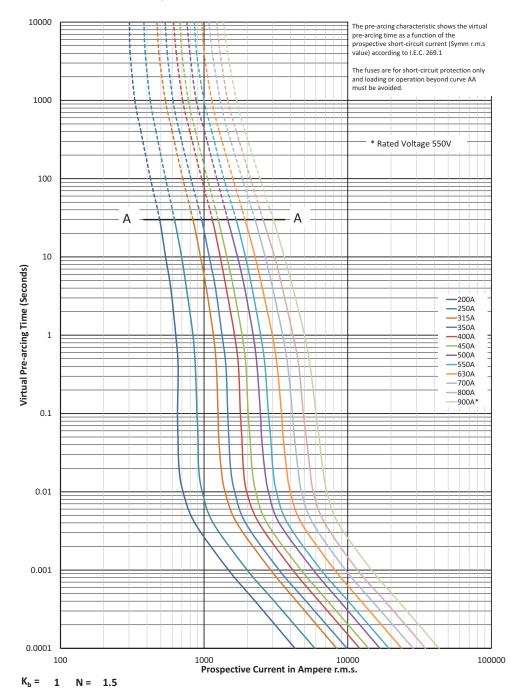
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



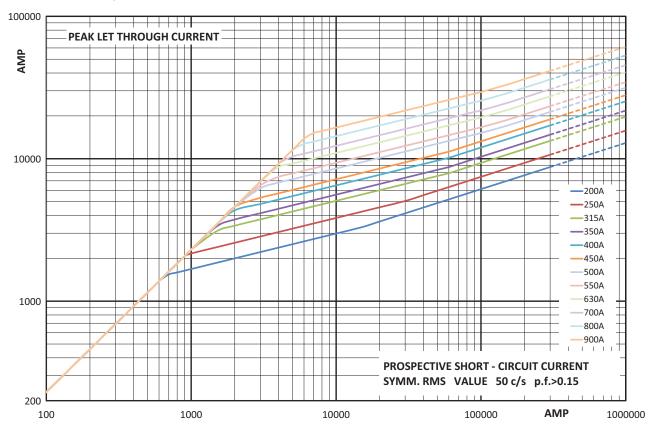
170M - Sizes 1* to 3, US style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Time-current curve - Size 1, 200 A to 900 A



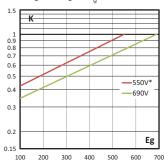
170M - Sizes 1* to 3, US style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Cut-off curve - Size 1, 200 A to 900 A



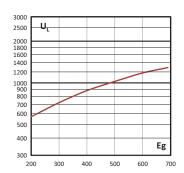
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_g , (RMS).



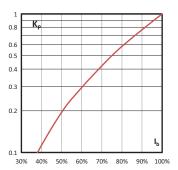
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



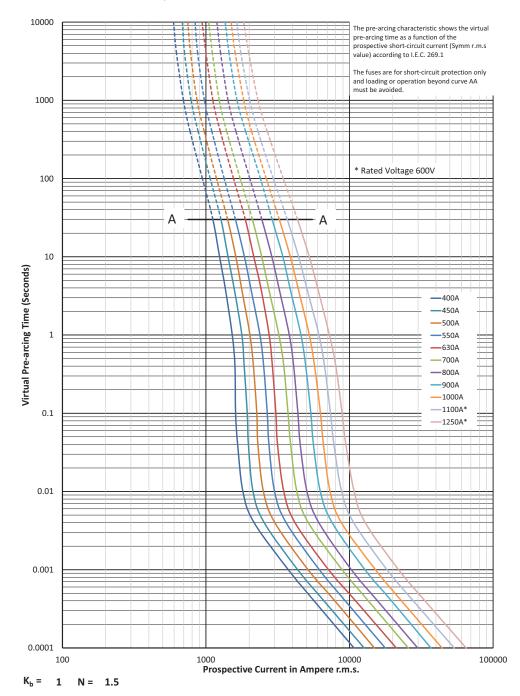
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



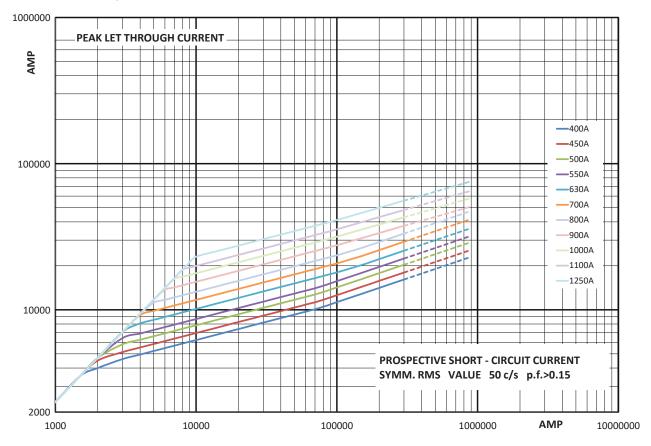
170M - Sizes 1* to 3, US style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Time-current curve - Size 2, 400 A to 1250 A



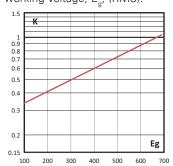
170M - Sizes 1* to 3, US style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Cut-off curve - Size 2, 400 A to 1250 A



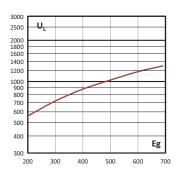
Total clearing I2t

The total clearing l²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



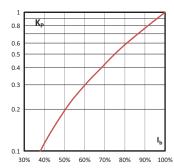
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



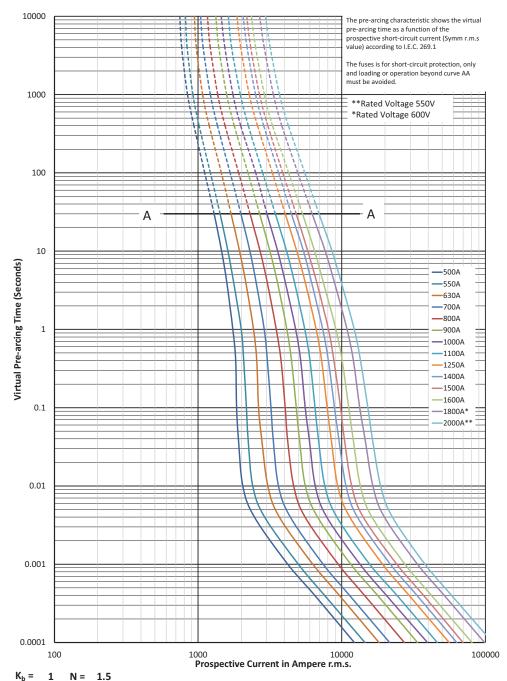
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



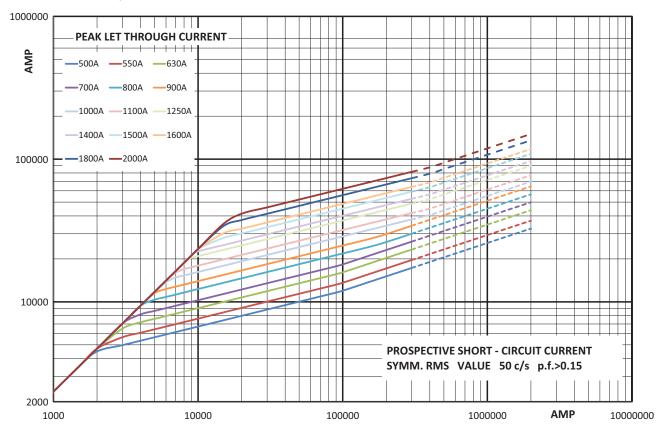
170M - Sizes 1* to 3, US style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Time-current curve - Size 3, 500 A to 2000 A



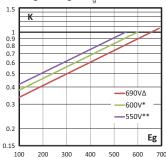
170M - Sizes 1* to 3, US style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Cut-off curve - Size 3, 500 A to 2000 A



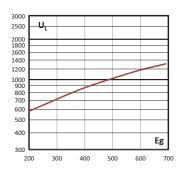
Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



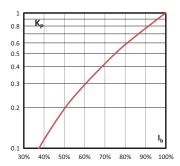
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



170M - Sizes 1* to 3, US style, 1000 V a.c. (IEC), 50 A 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)Rated current: 50 A to 1400 A

Breaking capacity:

125kA RMS Sym. A.C.

- Size 1 750 V d.c. 50 kA IR

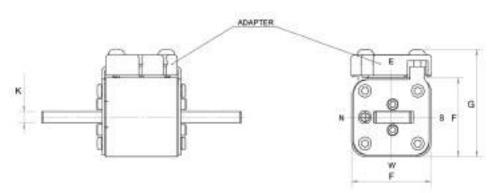
• Operating class: aR

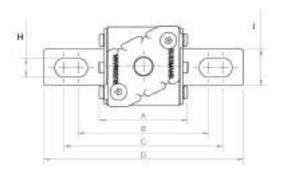
Standards / Agency information

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



Dimensions (mm)





| Size | Α | В | C | D | F | G | Н | 1 | 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"

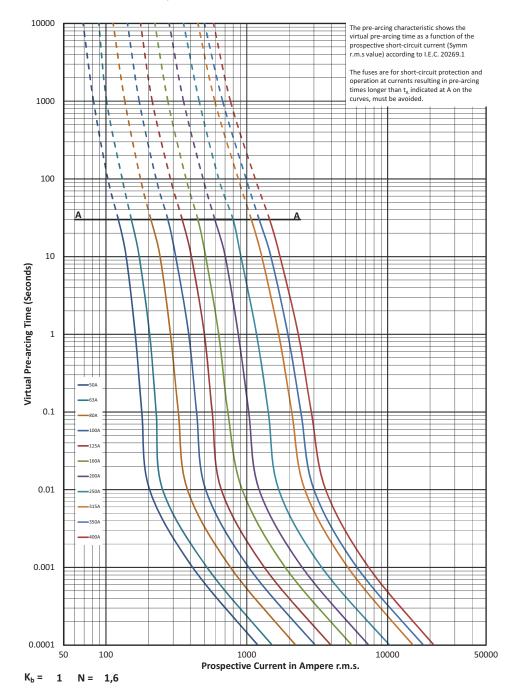
170M - Sizes 1* to 3, US style, 1000 V a.c. (IEC), 50 A to 1400 A

Catalogue numbers

| | | | I²t (A² Sec) | | | Catalogue numbers | |
|------------------------|-------------------------------|----------------------|--------------|----------------------------|-------------------|-------------------------------------|--|
| Fuse link body size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 1000 V a.c. | Watts loss (W) | -FKE/115 Type K indicator for micro | |
| | | 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 | |
| 1* | 1000 V a.c. (IEC) | 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 | |
| | | 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 | |
| | 1000 V a.c. (IEC) | 350 | 21,500 | 130,000 | 70 | 170M4535 | |
| | 1000 V a.c. / 750 V d.c. (UL) | 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 | |
| | | 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 | |
| | 1000 V a.c. | 450 | 35,500 | 210,000 | 90 | 170M5535 | |
| 2 | (IEC/UL) | 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 | |
| | | 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 | |
| | 1000 V a.c. | 550 | 52,000 | 310,000 | 115 | 170M8536 | |
| | (IEC/UL) | 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 | |

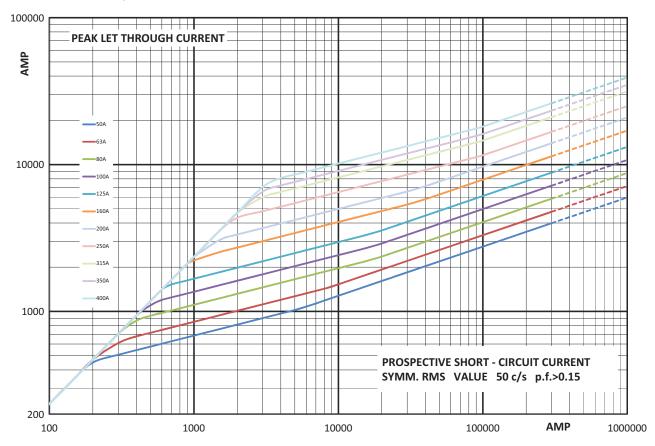
170M - Sizes 1* to 3, US style, 1000 V a.c. (IEC), 50 A to 1400 A

Time-current curve - Size 1*, 50 A to 400 A



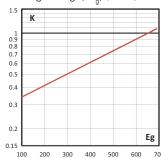
170M - Sizes 1* to 3, US style, 1000 V a.c. (IEC), 50 A to 1400 A

Cut-off curve - Size 1*, 50 A to 400 A



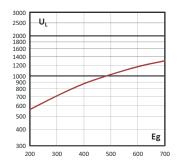
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



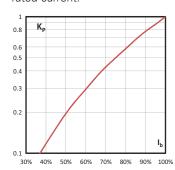
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



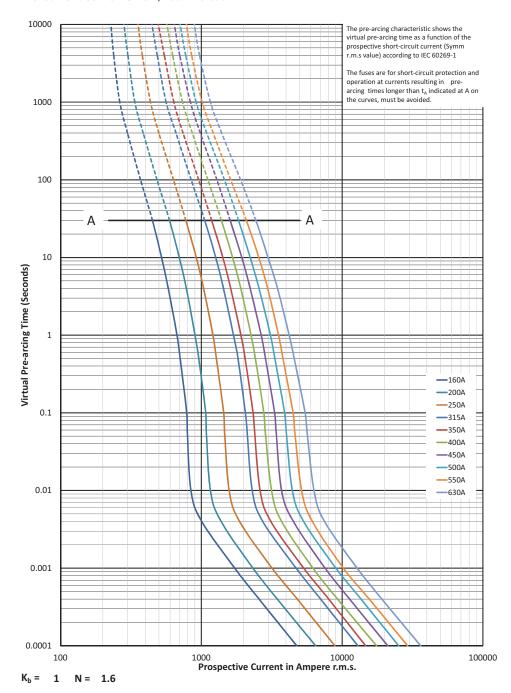
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



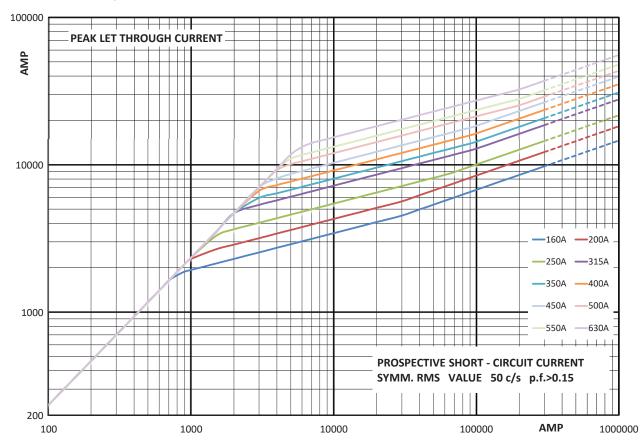
170M - Sizes 1* to 3, US style, 1000 V a.c. (IEC), 50 A to 1400 A

Time-current curve - Size 1, 160 A to 630 A



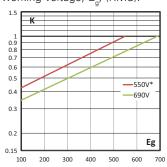
170M - Sizes 1* to 3, US style, 1000 V a.c. (IEC), 50 A to 1400 A

Cut-off curve - Size 1, 160 A to 630 A



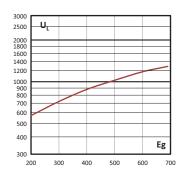
Total clearing I2t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



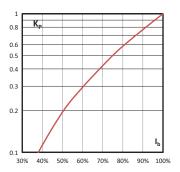
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



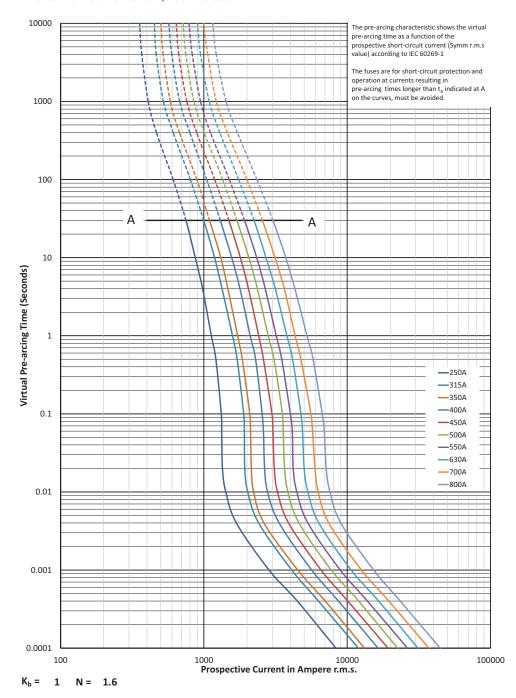
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



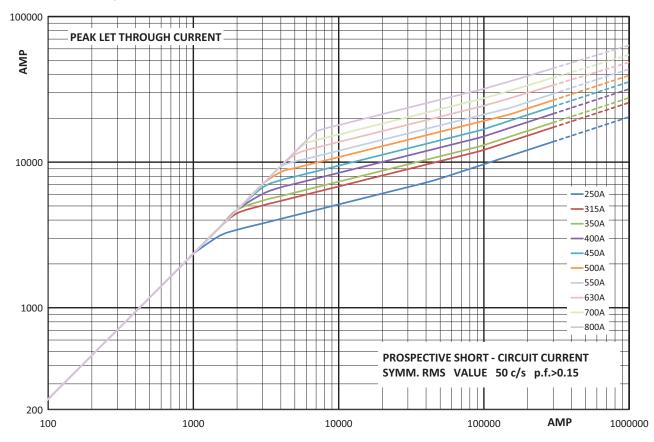
170M - Sizes 1* to 3, US style, 1000 V a.c. (IEC), 50 A to 1400 A

Time-current curve - Size 2, 250 A to 800 A



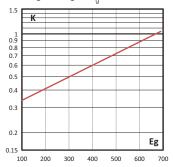
170M - Sizes 1* to 3, US style, 1000 V a.c. (IEC), 50 A to 1400 A

Cut-off curve - Size 2, 250 A to 800 A



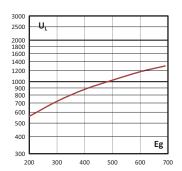
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{a^\prime} (RMS).



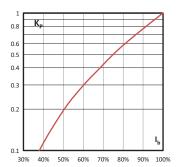
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm q}$, (RMS) at a power factor of 15 percent.



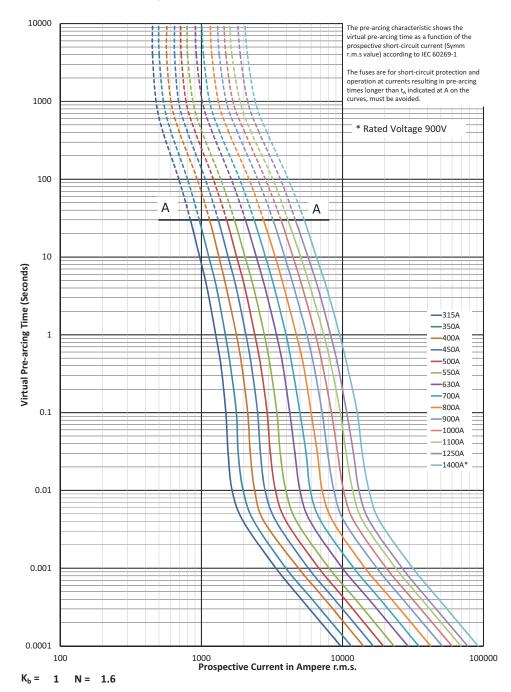
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



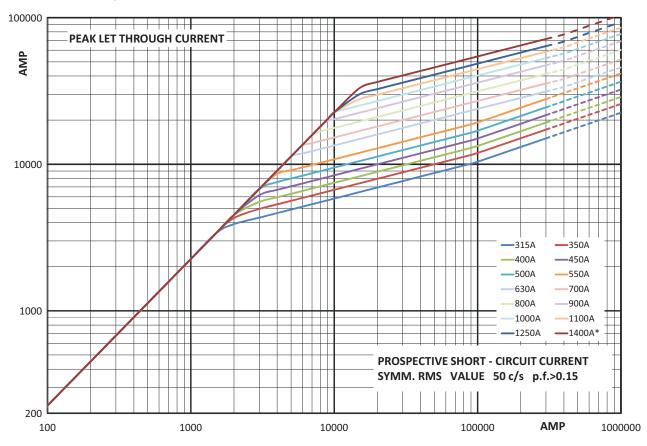
170M - Sizes 1* to 3, US style, 1000 V a.c. (IEC), 50 A to 1400 A

Time-current curve - Size 3, 315 A to 1400 A



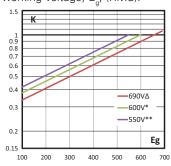
170M - Sizes 1* to 3, US style, 1000 V a.c. (IEC), 50 A to 1400 A

Cut-off curve - Size 3, 315 A to 1400 A



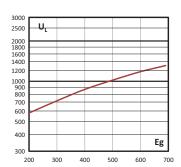
Total clearing I2t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



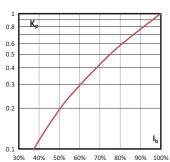
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170M - Sizes 1* to 3, US style, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A 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

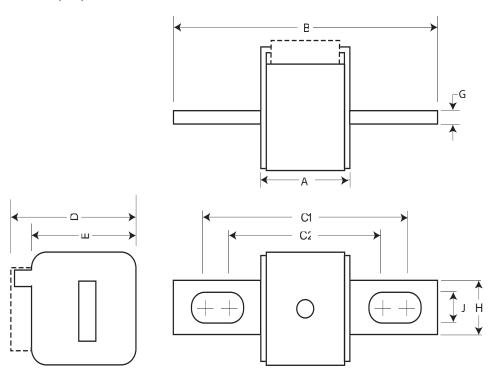
- Rated voltage: 1250 V a.c. (IEC), 1300 V a.c. (UL)
- Rated current: 50 A to 1400 A
- · Breaking capacity:
 - 100 kA RMS Sym.A.C.
- Size 1* 90 kA D.C.
- · -Operating class: aR

Standards / Agency information

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



Dimensions (mm)



| Size | Α | В | C1 | C2 | D | E | G | Н | 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 |

170M - Sizes 1* to 3, US style, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

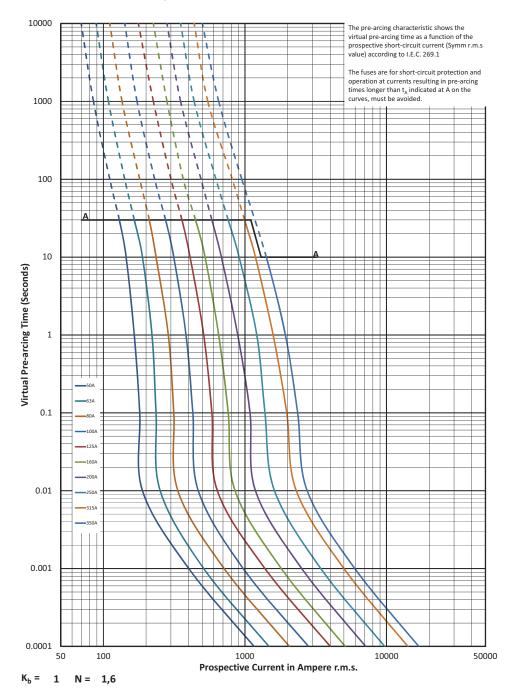
Catalogue numbers

| | | | I²t (A² Sec) | | | | Catalogue number | S |
|------------------------|-------------------|----------------------|--------------|----------------------------|----------------------------|-------------------|---------------------------|--|
| Fuse link body size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 1000 V a.c. | Clearing at 1250 V a.c. | Watts loss (W) | -FU/115 without indicator | -FKE/115 Type K indicator for micro |
| | | 50 | 135 | 815 | 1100 | 15 | 170M3688 ¹ | 170M3738 ¹ |
| | | 63 | 215 | 1300 | 1750 | 20 | 170M3689 ¹ | 170M3739 ¹ |
| | | 80 | 420 | 2500 | 3350 | 25 | 170M3690 ¹ | 170M3740 ¹ |
| | | 100 | 750 | 4450 | 5950 | 30 | 170M3691 ¹ | 170M3741 ¹ |
| 1* | 1250 V a.c. (IEC) | 125 | 1450 | 9000 | 11,500 | 35 | 170M3692 ¹ | 170M3742 ¹ |
| 1 | 1300 V a.c. (UL) | 160 | 2600 | 16,000 | 21,000 | 40 | 170M3693 ¹ | 170M3743 ¹ |
| | | 200 | 5150 | 31,000 | 41,000 | 45 | 170M3694 ¹ | 170M3744 ¹ |
| | | 250 | 9200 | 54,500 | 73,000 | 55 | 170M3695 ¹ | 170M3745 ¹ |
| | | 315 | 18,500 | 115,000 | 150,000 | 60 | 170M3696 ¹ | 170M3746 ¹ |
| | | 350 | 27,000 | 165,000 | 220,000 | 65 | 170M3697 ¹ | 170M3747 ¹ |
| | | 160 | 1900 | 11,500 | 15,500 | 45 | 170M4688 | 170M4738 |
| | | 200 | 3800 | 22,500 | 30,000 | 50 | 170M4689 | 170M4739 |
| | 1250 V a.c. (IEC) | 250 | 7750 | 46,000 | 61,500 | 60 | 170M4690 | 170M4740 |
| | | 315 | 15,000 | 90,000 | 120,000 | 65 | 170M4691 | 170M4741 |
| 4 | 1300 V a.c. (UL) | 350 | 20,000 | 125,000 | 165,000 | 70 | 170M4692 | 170M4742 |
| 1 | | 400 | 29,500 | 175,000 | 235,000 | 75 | 170M4693 | 170M4743 |
| | | 450 | 42,000 | 250,000 | 335,000 | 80 | 170M4694 | 170M4744 |
| | 11001/ 150 | 500 | 69,500 | 340,000 | N/A | 85 | 170M4695 | 170M4745 |
| | 1100 V a.c. IEC | 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 |
| | | 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 |
| | 1250 V a.c. (IEC) | 350 | 16,500 | 97,500 | 135,000 | 80 | 170M5691 | 170M5741 |
| | | 400 | 23,000 | 140,000 | 180,000 | 85 | 170M5692 | 170M5742 |
| | 1300 V a.c. (UL) | 450 | 34,000 | 205,000 | 270,000 | 90 | 170M5693 | 170M5743 |
| 2 | | 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 |
| | 11001/ 150 | 700 | 160,000 | 795,000 | N/A | 125 | 170M5697 | 170M5747 |
| | 1100 V a.c. IEC | 800 | 245,000 | 1,200,000 | N/A | 130 | 170M5698 | 170M5748 |
| | 4000 1/ 150 | 900 | 360,000 | 1,750,000 | N/A | 135 | 170M5699 | 170M5749 |
| | 1000 V a.c. IEC | 1000 | 480,000 | 2,350,000 | N/A | 145 | 170M5700 | 170M5750 |
| | | 315 | 9500 | 58,000 | 77,500 | 85 | 170M6688 | 170M6738 |
| | | 350 | 13,500 | 81,500 | 110,000 | 90 | 170M6689 | 170M6739 |
| | | 400 | 19,500 | 120,000 | 160,000 | 95 | 170M6690 | 170M6740 |
| | 1250 V a.c.(IEC) | 450 | 31,000 | 185,000 | 245,000 | 100 | 170M6691 | 170M6741 |
| | 1300 V a.c. (UL) | 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 |
| 3 | | 700 | 115,000 | 705,000 | 940,000 | 120 | 170M6695 | 170M6745 |
| | | 800 | 205,000 | 995,000 | 1,300,000 | 125 | 170M6696 | 170M6746 |
| | 1250 V a.c. (IEC) | 900 | 305,000 | 1,500,000 | 1,900,000 | 130 | 170M6697 | 170M6747 |
| | 1100 V a.c. (IEC) | 1000 | 450,000 | 2,150,000 | N/A | 135 | 170M6698 | 170M6748 |
| | 1000 V a.c. (ILC) | 1100 | 575,000 | 2,800,000 | N/A | 160 | 170M6699 | 170M6749 |
| | 1000 V a.c. | 1250 | 810,000 | 3,950,000 | N/A | 170 | 170M6700 | 170M6750 |
| | IEC & UL | 1400 | 1,250,000 | 6,000,000 | N/A | 175 | 170M6701 | 170M6751 |
| | | . 100 | .,200,000 | 3,000,000 | 14//1 | 170 | | 1701110701 |

¹ Rated at 900 V d.c. 8XIn 90 kA

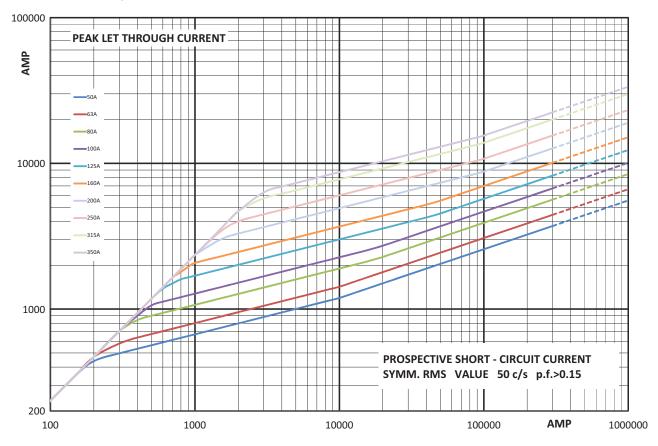
170M - Sizes 1* to 3, US style, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Time-current curve - Size 1*, 50 A to 350 A



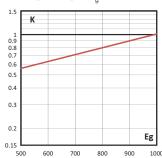
170M - Sizes 1* to 3, US style, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Cut-off curve - Size 1*, 50 A to 350 A



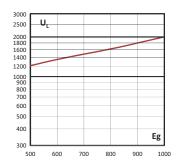
Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



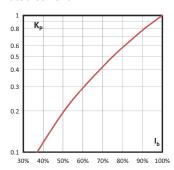
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm q}$, (RMS) at a power factor of 15 percent.



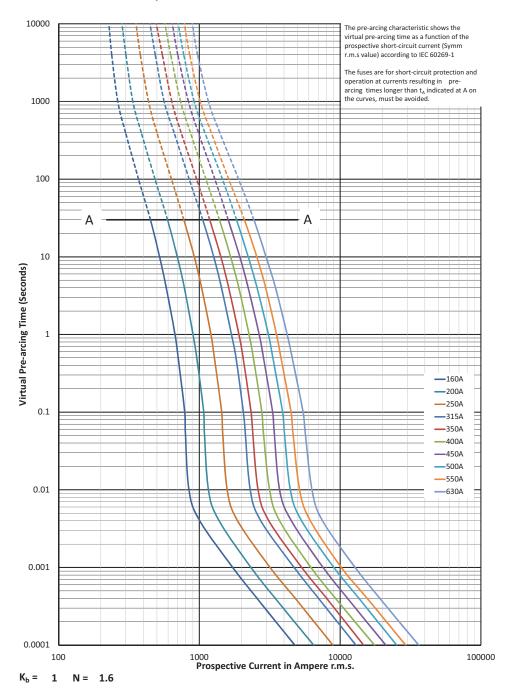
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



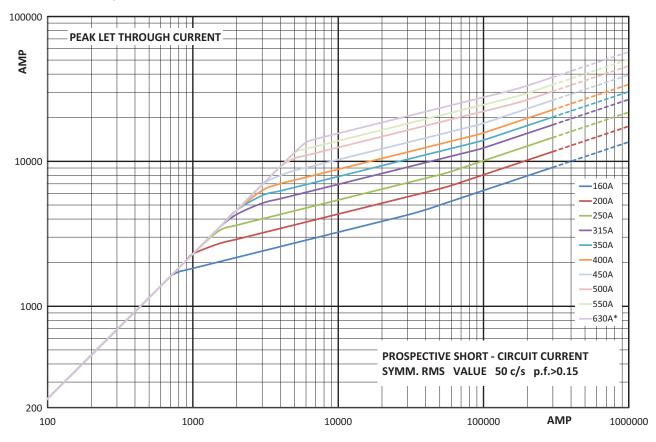
170M - Sizes 1* to 3, US style, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Time-current curve - Size 1, 160 A to 630 A



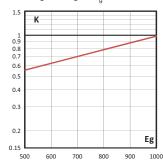
170M - Sizes 1* to 3, US style, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Cut-off curve - Size 1, 160 A to 630 A



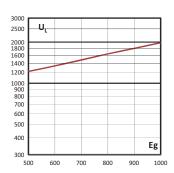
Total clearing I²t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\alpha'}$ (RMS).



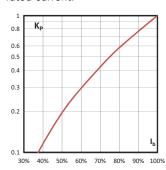
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



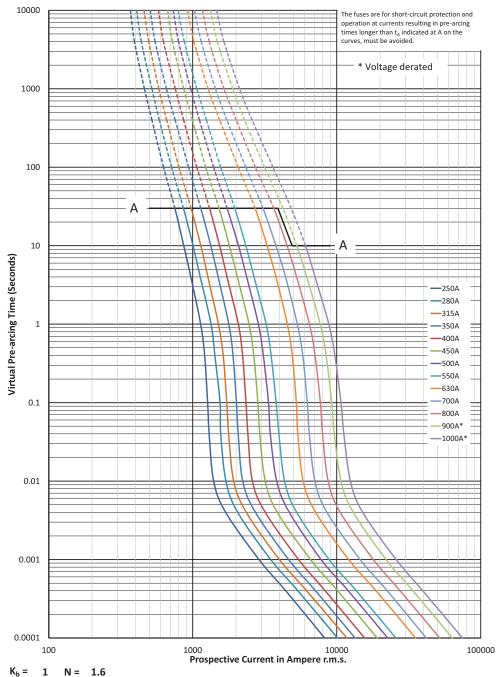
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170M - Sizes 1* to 3, US style, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

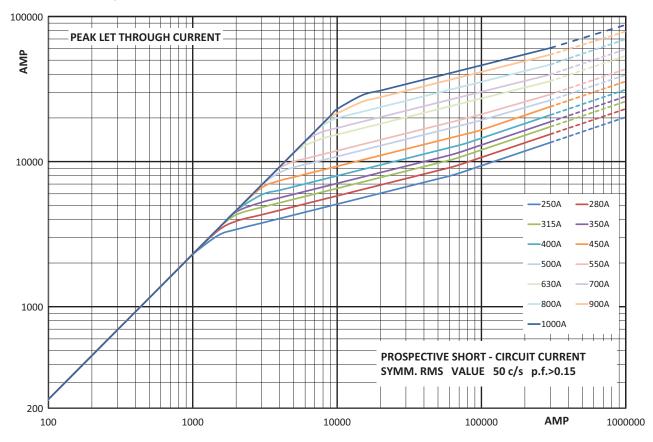
Time-current curve - Size 2, 250 A to 1000 A



N_b - 1 N = 1.0

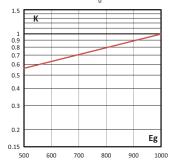
170M - Sizes 1* to 3, US style, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Cut-off curve - Size 2, 250 A to 1000 A



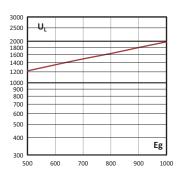
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\alpha'}$ (RMS).



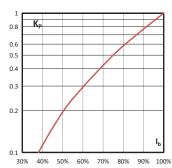
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm p}$, (RMS) at a power factor of 15 percent.



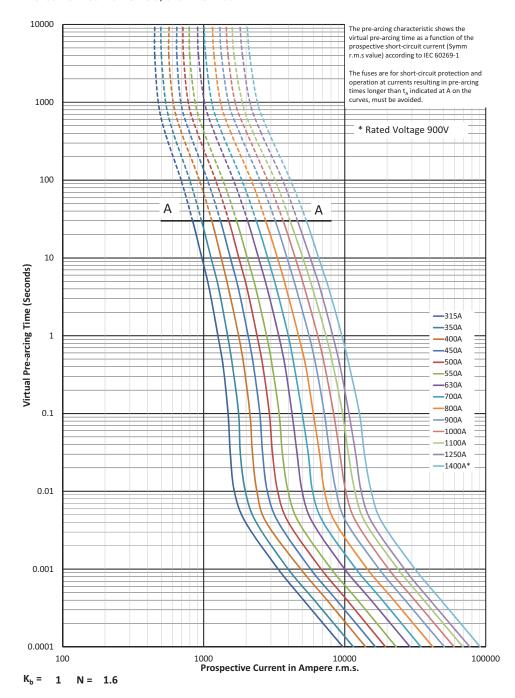
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



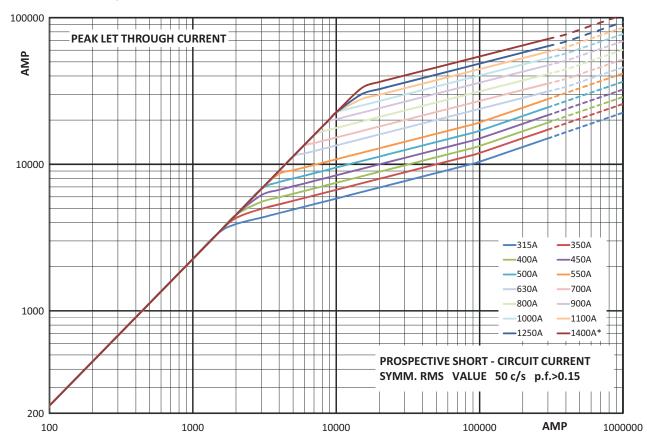
170M - Sizes 1* to 3, US style, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Time-current curve - Size 3, 315 A to 1400 A



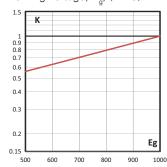
170M - Sizes 1* to 3, US style, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Cut-off curve - Size 3, 315 A to 1400 A



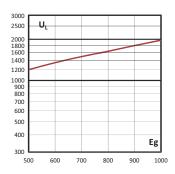
Total clearing I²t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



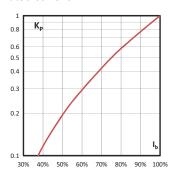
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170M - Size 00, Flush end contact, 690 V a.c., 25 A 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 A to 400 A

Breaking capacity: 200 kA RMS Sym

· Operating class:

- gR (25 A to 80 A)

- aR (100 A to 400 A)

Standards / Agency information

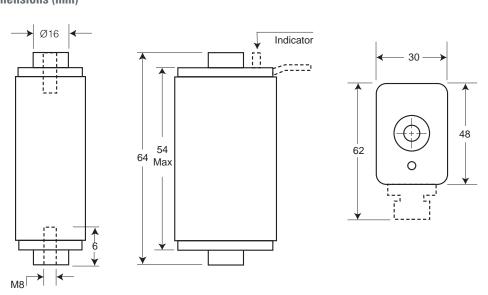
CE, Designed and tested to IEC 60269 Part 4



Catalogue numbers

| | | | I ² t (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) | 00B/60 visual indicator | 00BTN/60 Type T indicator for micro |
| | | 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 |
| 00 | 690 V a.c. (IEC) | 100 | 620 | 4150 | 20 | 170M2714 | 170M2764 |
| 00 | 090 V a.C. (IEC) | 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 |

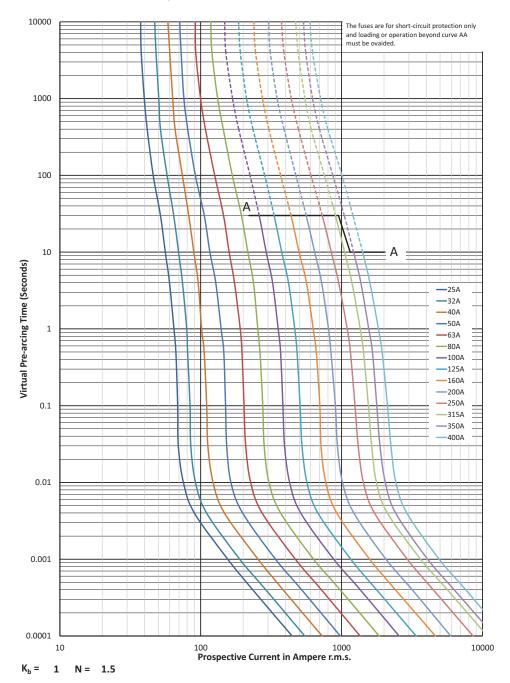
Dimensions (mm)



Data sheet: 170K6312

170M - Size 00, Flush end contact, 690 V a.c., 25 A to 400 A

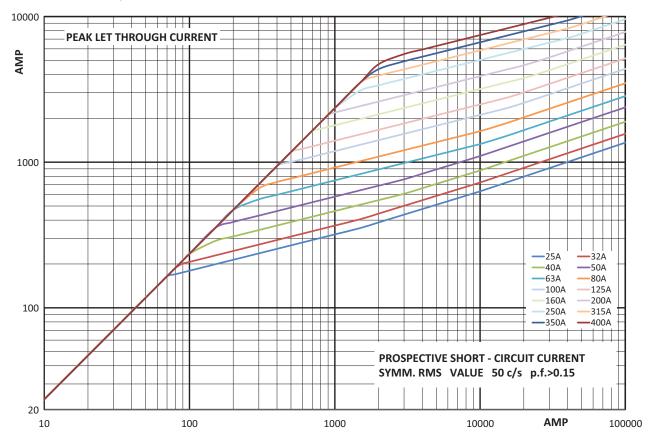
Time-current curve - Size 00, 25 A to 400 A



Data sheet: 170K6312

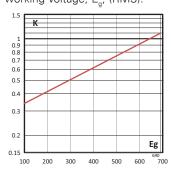
170M - Size 00, Flush end contact, 690 V a.c., 25 A to 400 A

Cut-off curve - Size 00, 25 A to 400 A



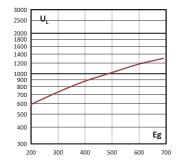
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



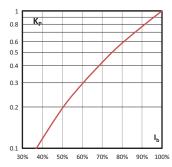
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



Data sheet: 170K6312

170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A 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 192

· Rated current: 40 A to 2000 A

· Breaking capacity: 200 kA RMS Sym

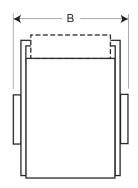
· Operating class: aR

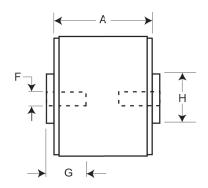
Standards / Agency information

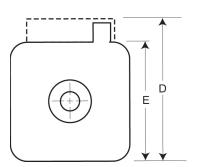
CE, Designed and tested to IEC 60269 Part 4. Consult Eaton for UL Recognition, CSA Component Acceptance Status and CCC approvals

E:T-N BUSSMANN 170M3459 50A 590V-18C Strike 700V-18C Strike 70

Dimensions (mm)







| | | | | | | | G | |
|------|----|--|----------------|----|-----|---|-----|-----|
| Size | Α | В | \mathbf{D}^3 | E | F | F¹ (in) | min | Н |
| 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) 65 (1100 and 1250 (A) | 77 | 61 | M10 | ³ /8" -16 UNC-2B | 10 | N24 |
| 3 | 51 | 53 (500 - 1500 A) 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/.

170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

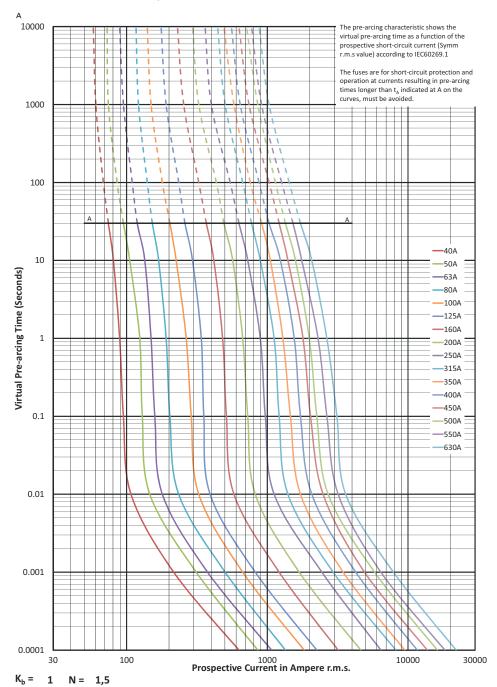
| | | | I ² t (A ² Sec) | | _ | Catalogue nu | ımbers | | |
|------------------------|---------------------------------------|----------------------|---------------------------------------|---------------------------|-------------------|-----------------------------------|---|-----------------------------------|---|
| Fuse link body size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 660 V a.c. | Watts loss (W) | -B/- visual indicator | -BKN/- Type K indicator for micro | -G/- visual indicator | -GKN/- Type K indicator for micro |
| | | 40 | 40 | 270 | 11 | 170M3408 | 170M3458 | 170M3508 | 170M3558 |
| | | 50 | 77 | 515 | 13 | 170M3409 | 170M3459 | 170M3509 | 170M3559 |
| | | 63 | 115 | 770 | 17 | 170M3410 | 170M3460 | 170M3510 | 170M3560 |
| | | 80 | 185 | 1250 | 21 | 170M3411 | 170M3461 | 170M3511 | 170M3561 |
| | | 100 | 360 | 2450 | 24 | 170M3412 | 170M3462 | 170M3512 | 170M3562 |
| | | 125 | 550 | 3700 | 30 | 170M3413 | 170M3463 | 170M3513 | 170M3563 |
| | | 160 | 1100 | 7500 | 34 | 170M3414 | 170M3464 | 170M3514 | 170M3564 |
| | 690 V a.c. (IEC) | 200 | 2200 | 15,000 | 41 | 170M3415 | 170M3465 | 170M3515 | 170M3565 |
| * | 700 V a.c. (UL) | 250 | 4200 | 28,500 | 47 | 170M3416 | 170M3466 | 170M3516 | 170M3566 |
| | 700 V a.c. (OL) | 315 | 7000 | 46,500 | 60 | 170M3417 | 170M3467 | 170M3517 | 170M3567 |
| | | 350 | 10,000 | 68,500 | 64 | 170M3418 | 170M3468 | 170M3518 | 170M3568 |
| | | 400 | 15,000 | 105,000 | 69 | 170M3419 | 170M3469 | 170M3519 | 170M3569 |
| | | 450 | 21,000 | 140,000 | 75 | 170M3410 | 170M3470 | 170M3513 | 170M3570 |
| | | 500 | 27,000 | 180,000 | 83 | 170M3421 | 170M3470 | 170M3520 | 170M3571 |
| | | 550 | 34,000 | 230,000 | 89 | 170M3421 | 170M3471 170M3472 | 170M3521 | 170M3571 |
| | | 630 | | 325,000 | 100 | | 170M3472 170M3473 | 170M3522 170M3523 | |
| | | | 48,500 | • | | 170M3423 | | | 170M3573 |
| | | 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 |
| | 690 V a.c. (IEC) | 400 | 13,500 | 91,500 | 65 | 170M4412 | 170M4462 | 170M4512 | 170M4562 |
| | 700 \/ a a / \ | 450 | 17,000 | 120,000 | 70 | 170M4413 | 170M4463 | 170M4513 | 170M4563 |
| | 700 V a.c. (UL) | 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 |
| | | 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 |
| | 690 V a.c. (IEC) | 630 | 41,000 | 275,000 | 90 | 170M5412 | 170M5462 | 170M5511 | 170M5562 |
| | 700 V a.c. (UL) | 700 | | | 95 | | | | |
| | | | 60,500 | 405,000 | | 170M5413 | 170M5463 170M5464 | 170M5513 | 170M5563 |
| | | 800 | 86,000 | 575,000 | 105 | 170M5414 | | 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) | 1100 | 245,000 | 1,600,000 | 120 | 170M5417 | 170M5467 | 170M5517 | 170M5567 |
| | 700 V a.c. (UL) | 1250 | 365,000 | 2,400,000 | 130 | 170M5418 | 170M5468 | 170M5518 | 170M5568 |
| | | 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 |
| | 690 V a.c. (IEC) | 900 | 100,000 | 670,000 | 120 | 170M6413 | 170M6463 | 170M6513 | 170M6563 |
| | 700 V a.c. (UL) | 1000 | 140,000 | 945,000 | 125 | 170M6414 | 170M6464 | 170M6514 | 170M6564 |
| | . 55 . 4.5. (01) | 1100 | 190,000 | 1,300,000 | 130 | 170M6415 | 170M6465 ¹ | 170M6515 | 170M6565 |
| | | 1250 | 290,000 | 1,950,000 | 140 | 170M6416 | 170M6466 | 170M6516 | 170M6566 |
| | | 1400 | 370,000 | 2,450,000 | 155 | 170M6417 | 170M6467 ¹ | 170M6517 | 170M6567 |
| | | 1500 | 460,000 | 3,100,000 | 160 | 170M6417 | 170M6468 | 170M6518 | 170M6568 |
| | | | | | | | | | |
| | 600 V a.c. (IEC) / 500 V a.c. (UL) | 1800 | 580,000 880,000 | 3,900,000 5,250,000 | 165 | 170M6419 170M6420 ² | 170M6469 170M6470 | 170M6519 170M6520 ² | 170M6569 170M6570 |
| | 550 V a.c. (6L) / | 2000 | 1,150,000 | 6,350,000 | 175 | 170M6421 | 170M6471 | 170M6521 | 170M6571 |

 $[\]overline{\ }^1$ 170M6465 and 170M6467 rated at 800 V d.c. UL 85kA 3ms TC when two fuses are connected in series

 $^{^{\}rm 2}$ 170M6420 and 170M6520 rated at 750 V d.c. 12XIn 130 kA when two fuses are connected in series

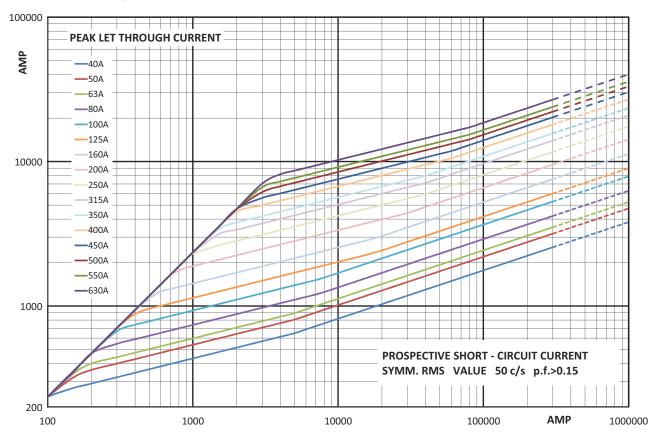
170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Time-current curve - Size 1*, 40 A to 630 A



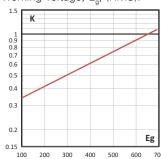
170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Cut-off curve - Size 1*, 40 A to 630 A



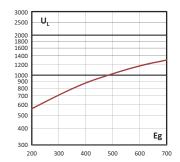
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_g , (RMS).



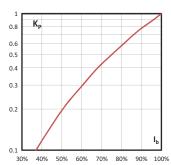
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



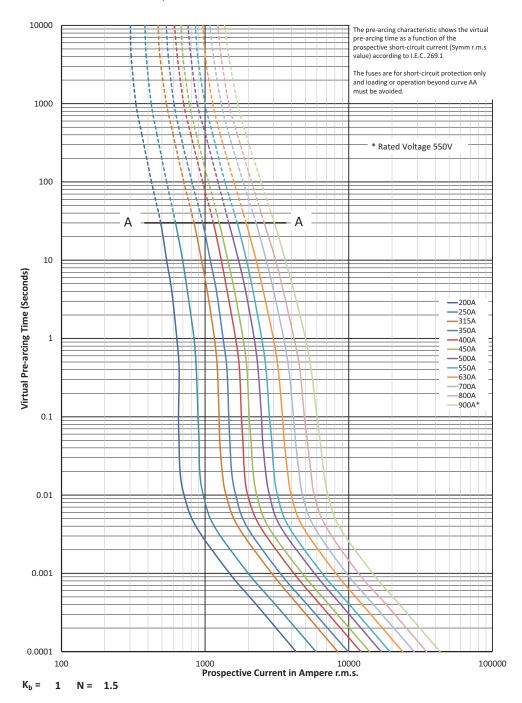
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



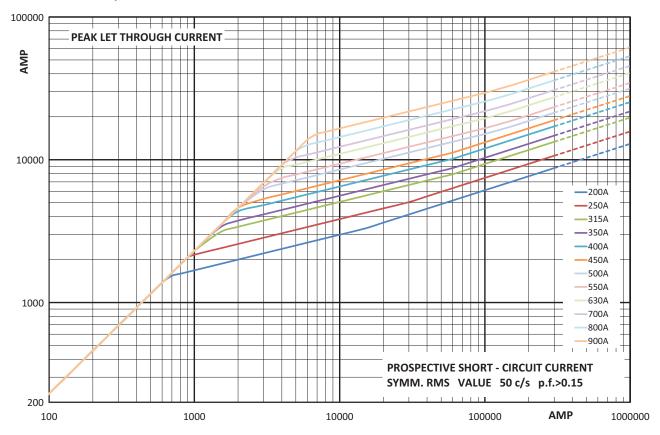
170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Time-current curve - Size 1, 200 A to 900 A



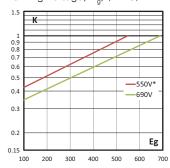
170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Cut-off curve - Size 1, 200 A to 900 A



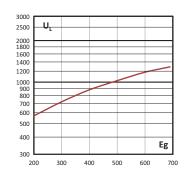
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm g}$, (RMS).



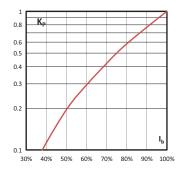
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



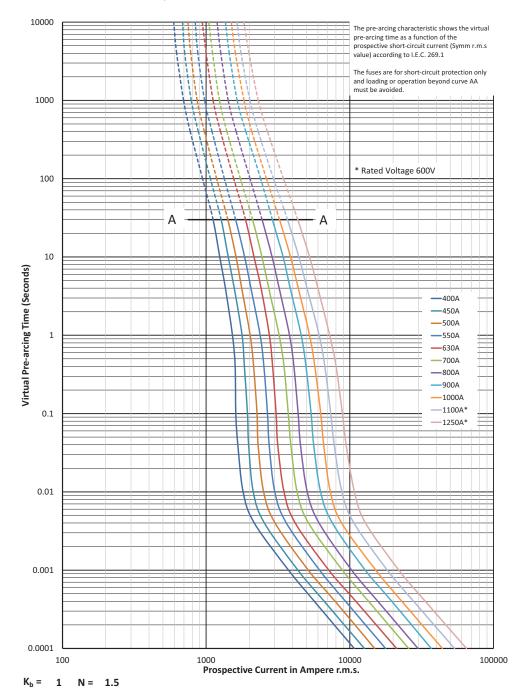
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



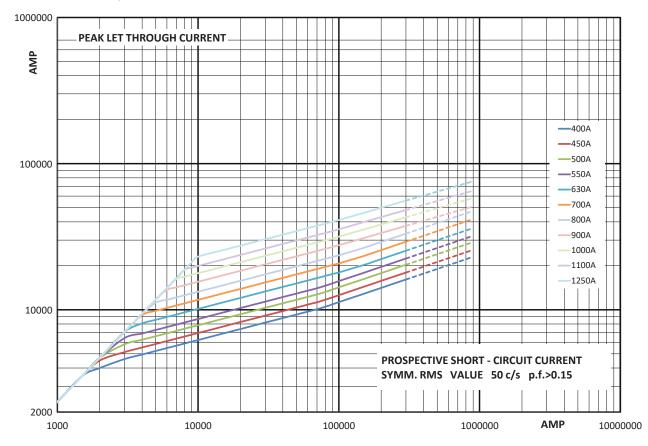
170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Time-current curve - Size 2, 400 A to 1250 A



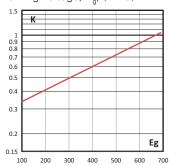
170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Cut-off curve - Size 2, 400 A to 1250 A



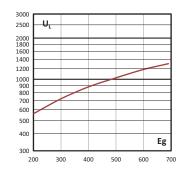
Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm q}$, (RMS).



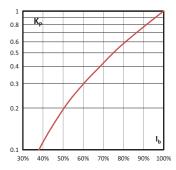
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



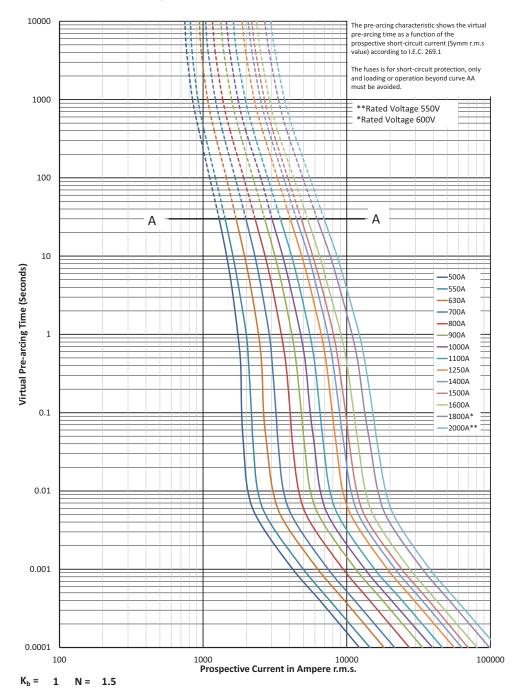
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



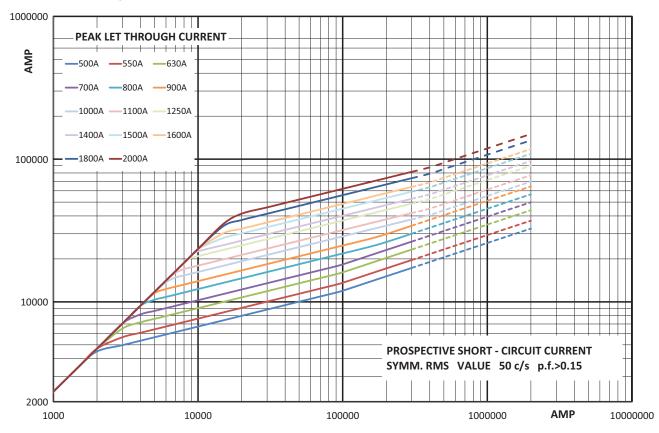
170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Time-current curve - Size 3, 500 A to 2000 A



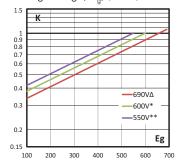
170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Cut-off curve - Size 3, 500 A to 2000 A



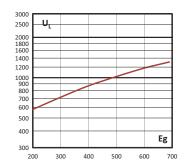
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



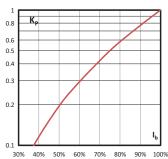
Arc voltage

This curve gives the peak arc voltage, $\rm U_L$, which may appear across the fuse during its operation as a function of the applied working voltage, $\rm E_g$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



170M - sizes 1* to 3, Flush end contact, 1000 V a.c. (IEC and UL), 50 A 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

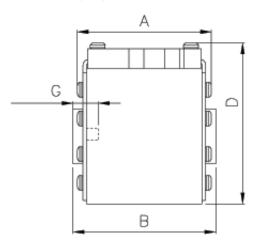
- · Rated voltage:
 - 1000 V a.c. (IEC, 50 A to 1250 A)
 - 1000 V a.c. (UL, 250 A to 1100 A)
 - 900 V a.c. (IEC, 1400 A)
- Rated current: 50 A to 1400 A
- Breaking capacity:
 - 125kA RMS Sym. AC
- Size 1 DC 750 V d.c. 50 kA IR
- · Operating class: aR

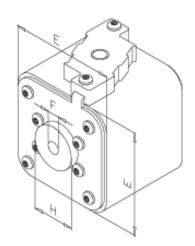
Standards / Agency information

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



Dimensions (mm)





| Size | Туре | Α | В | D (max) | E | F | F¹ (in) | G (min) | Н |
|------|-----------------|------|------|---------|----|-----|-----------------|---------|------|
| 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/-.

170M - sizes 1* to 3, Flush end contact, 1000 V a.c. (IEC and UL), 50 A to 1400 A

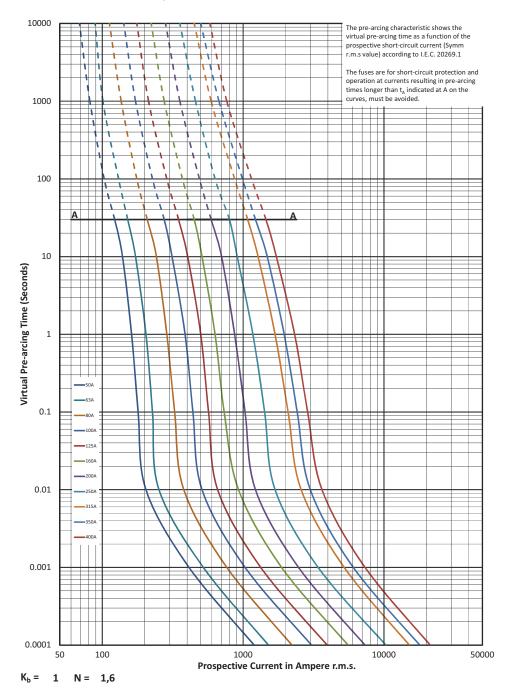
Catalogue numbers

| | | | I ² t (A ² Sec) | | | Catalogue num | bers |
|------------------------|-------------------------------|-------------------------|---------------------------------------|---------------------------------|-------------------|--|---|
| Fuse link body size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at rated voltage | Watts loss (W) | -BKN/- Type K indicator for micro | -GKN/- Type K indicator for micro |
| | | 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 |
| 1* | 1000 V a.c. (IEC) | 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 |
| | | 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 |
| | 1000 V a.c. (IEC) | 350 | 21,500 | 130,000 | 65 | 170M4955 | 170M4925 |
| 1 | 1000 V a.c. / 750 V d.c. (UL) | 400 | 31.000 | 185,000 | 70 | 170M4956 | 170M4926 |
| | 1000 V a.c. / 750 V u.c. (OL) | 450 | 44,500 | 265,000 | 80 | 170M4957 | 170M4927 |
| | | 500 | 63,000 | 375,000 | 85 | | 170M4928 |
| | | 550 | 84,500 | 500.000 | 90 | | 170M4929 |
| | | 630 | 125,000 | 755,000 | 98 | 170M4958 170M4959 170M4960 170M5952 | 170M4930 |
| | | 250 | 6750 | 40,000 | 65 | | 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 |
| 2 | 1000 V a.c. (IEC/UL) | 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 |
| | | 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 |
| | 1000 V a.c. (IEC/UL) | 630 | 82,500 | 490,000 | 120 | 170M8606 | 170M8506 |
| 3 | | 700 | 115,000 | 700,000 | 125 | 170M8607 | 170M8507 |
| | | 800 | | 1,050,000 | | 170M8608 | 170M8508 |
| | | | 170,000 | | 135 | | |
| | | 900 | 250,000 | 1,500,000 | 145 | 170M8609 | 170M8509 |
| | | 1000 | 340,000 | 2,050,000 | 150 | 170M8610 | 170M8510 |
| | 1000 \/ //F0\ | 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.

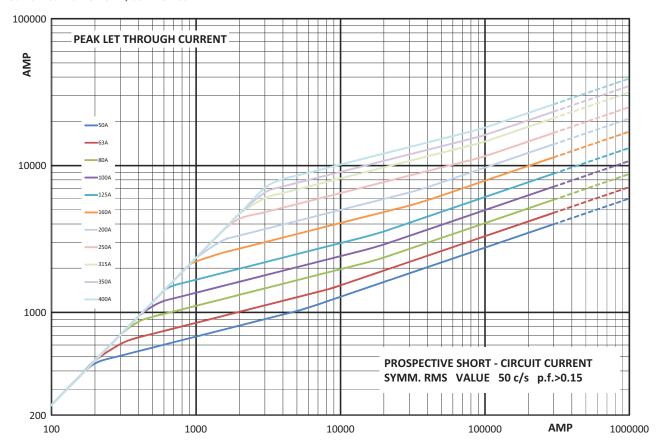
170M - sizes 1* to 3, Flush end contact, 1000 V a.c. (IEC and UL), 50 A to 1400 A

Time-current curve - Size 1*, 50 A to 400 A



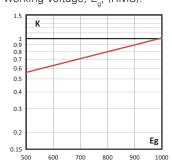
170M - sizes 1* to 3, Flush end contact, 1000 V a.c. (IEC and UL), 50 A to 1400 A

Cut-off curve - Size 1*, 50 A to 400 A



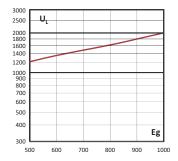
Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



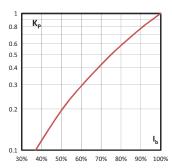
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



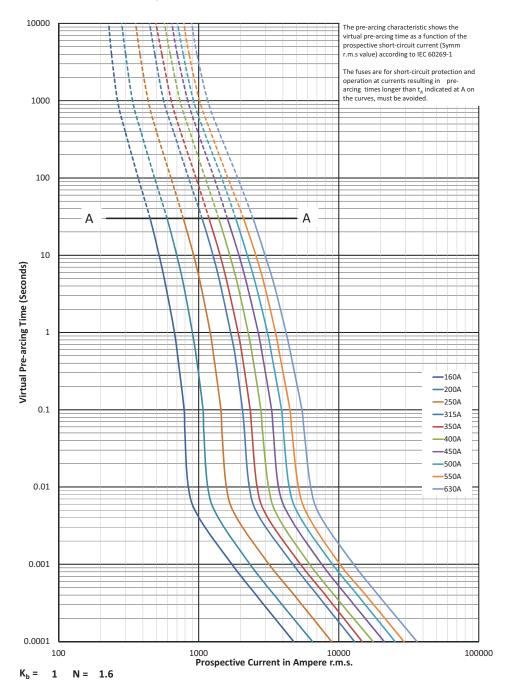
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



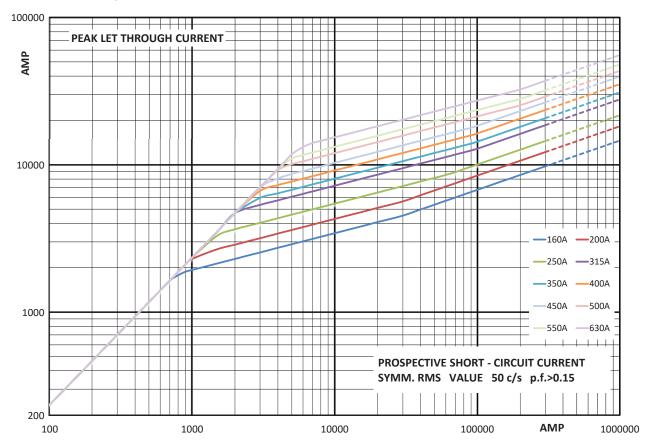
170M - Sizes 1* to 3, Flush end contact, 1000 V a.c. (IEC and UL), 50 A to 1400 A

Time-current curve - Size 1, 160 A to 630 A



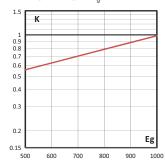
170M - Sizes 1* to 3, Flush end contact, 1000 V a.c. (IEC and UL), 50 A to 1400 A

Cut-off curve - Size 1, 160 A to 630 A



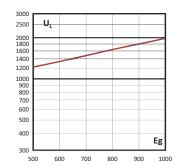
Total clearing I²t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm g}$, (RMS).



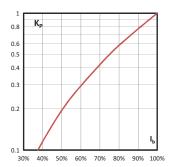
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



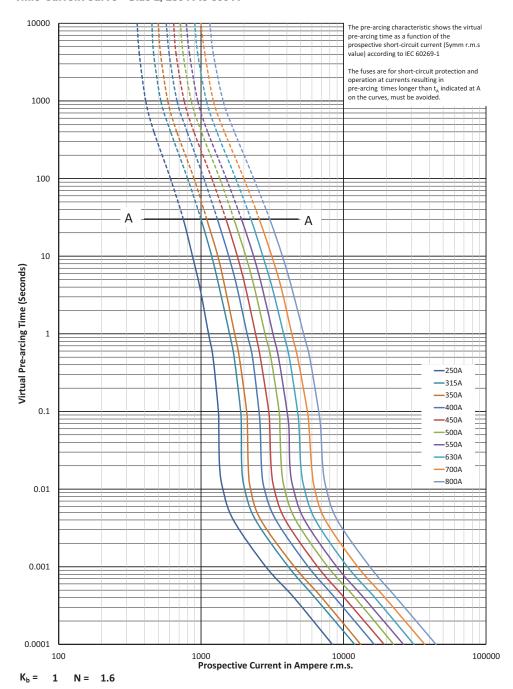
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



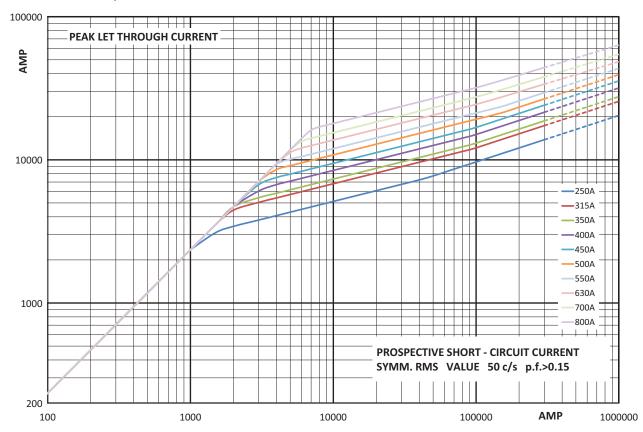
170M - Sizes 1* to 3, Flush end contact, 1000 V a.c. (IEC and UL), 50 A to 1400 A

Time-current curve - Size 2, 250 A to 800 A



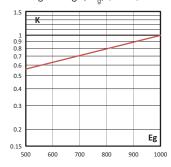
170M - Sizes 1* to 3, Flush end contact, 1000 V a.c. (IEC and UL), 50 A to 1400 A

Cut-off curve - Size 2, 250 A to 800 A



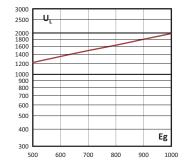
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



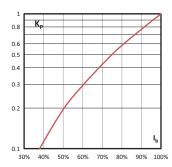
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



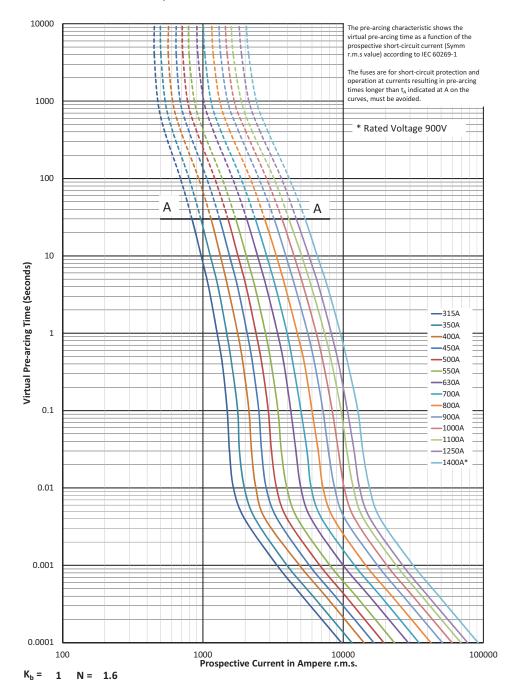
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



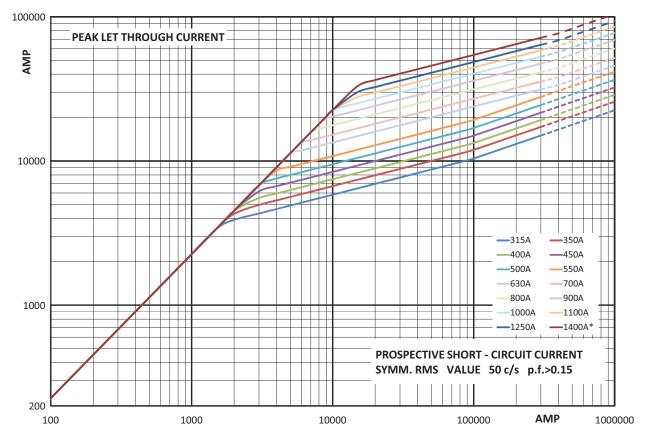
170M - Sizes 1* to 3, Flush end contact, 1000 V a.c. (IEC and UL), 50 A to 1400 A

Time-current curve - Size 3, 315 A to 1400 A



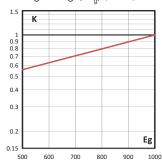
170M - Sizes 1* to 3, Flush end contact, 1000 V a.c. (IEC and UL), 50 A to 1400 A

Cut-off curve - Size 3, 315 A to 1400 A



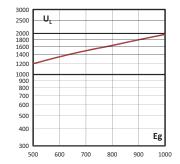
Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm g'}$ (RMS).



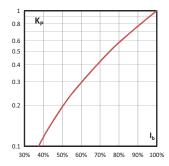
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170M - Sizes 1* to 3, Flush end contact, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A 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 A to 1400 A

Breaking capacity: 100 kA RMS Sym

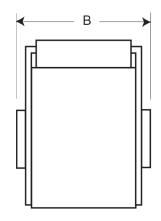
Operating class: aR

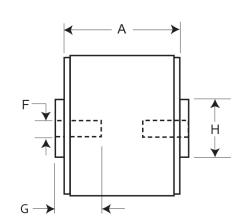
Standards / Agency information

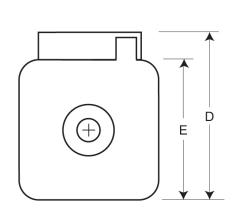
CE, Designed and tested to IEC 60269 Part 4. Consult Eaton for UL Recognition/CSA Component Acceptance Status



Dimensions (mm)







| Size | Туре | Α | В | D | E | F | F¹ (in) | Min G | Н |
|------|--------------|----|----|----|----|-----|------------------|-------|-----|
| 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/-.

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170M - Sizes 1* to 3, Flush end contact, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

| | | | I ² t (A ² Sec | :) | | _ | Catalogue numbers | | | | |
|------------------------------|----------------------|----------------------------|--------------------------------------|----------------------------|----------------------------|----------------------|---|--|--|--|--|
| Fuse link body size | Rated voltage | Rated current (Amps) | Pre- arcing | Clearing at 1000 V a.c. | Clearing at 1250 V a.c. | Watts loss (W) | -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 |
| | | 50 | 135 | 815 | 1100 | 15 | 170M3388 ⁶ | 170M3438 | _ | 170M3488 ⁶ | _ |
| | | 63 | 215 | 1300 | 1750 | 20 | 170M3389 ⁶ | 170M3439 | _ | 170M3489 ⁶ | _ |
| | | 80 | 420 | 2500 | 3350 | 25 | 170M3390 ⁶ | 170M3440 | _ | 170M3490 ⁶ | _ |
| | | 100 | 750 | 4450 | 5950 | 30 | 170M3391 ⁶ | 170M3441 | _ | 170M3491 ⁶ | _ |
| | 1250 V a.c. | 125 | 1450 | 9000 | 11,500 | 35 | 170M3392 ⁶ | 170M3442 | _ | 170M3492 ⁶ | _ |
| 1* | (IEC) 1300 V a.c. | 160 | 2600 | 16,000 | 21,000 | 40 | 170M3393 ⁶ | 170M3443 | _ | 170M3493 ⁶ | _ |
| | (UL) | 200 | 5150 | 31,000 | 41,000 | 45 | 170M3394 ⁶ | 170M3444 | _ | 170M3494 ⁶ | _ |
| | | 250 | 9200 | 54,500 | 73,000 | 55 | 170M3395 ⁶ | 170M3445 | _ | 170M3495 ⁶ | _ |
| | | 315 | 18,500 | 115,000 | 150,000 | 60 | 170M3396 ⁶ | 170M3446 | _ | 170M3496 ⁶ | _ |
| | | 350 | 27,000 | 165,000 | 220,000 | 65 | 170M3397 ⁶ | 170M3447 | _ | 170M3497 ⁶ | _ |
| | | 400 | 53,000 | 265,000 | 335,000 | 70 | | 170M3448 | _ | | _ |
| | | 160 | 1900 | 11,500 | 15,500 | 45 | 170M4388 ⁶ | 170M4438 ⁶ | _ | 170M4488 ⁶ | _ |
| | | 200 | 3800 | 22,500 | 30,000 | 50 | 170M4389 ⁶ | 170M4439 ⁶ | _ | 170M4489 ⁶ | |
| | | 250 | 7750 | 46,000 | 61,500 | 60 | 170M4390 ⁶ | 170M4440 ⁶ | | 170M4490 ⁶ | _ |
| | 1250 V a.c. | 315 | 15,000 | 90,000 | 120,000 | 65 | 170M4391 ⁶ | 170M4441 ⁶ | _ | 170M4491 ⁶ | |
| 1 | (IEC) | 350 | 20,000 | 125,000 | 165,000 | 70 | 170M4392 ⁶ | 170M4442 ⁶ | _ | 170M4492 ⁶ | _ |
| | 1300 V a.c. | 400 | 29,500 | 175,000 | 235,000 | 75 | 170M4393 ⁶ | 170M4443 ⁶ | _ | 170M4493 ⁶ | _ |
| | (UL) | 450 | 42,000 | 250,000 | 335,000 | 80 | 170M4394 ⁶ | 170M4444 ⁶ | _ | 170M4494 ⁶ | - |
| | | 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 | - |
| | | 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 | - |
| | 1250 V a.c. | 450 | 34,000 | 205,000 | 270,000 | 90 | 170M5393 | 170M5443 | _ | 170M5593 | - |
| 2 | (IEC) | 500 | 48,000 | 285,000 | 380,000 | 95 | 170M5394 | 170M5444 | 170M5494 | 170M5594 | 170M5644 |
| | 1300 V a.c. (UL) | 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 ⁷ | 170M5497 | 170M5597 ⁵ | 170M5647 |
| | | 800 | 245,000 | 1,200,000 | 1,550,000 | 130 | 170M5398 ⁵ | 170M5448 ⁸ | 170M5498 | 170M5598 ⁵ | 170M5648 |
| | | 900 | 360,000 | 1,750,000 | N/A | 135 | | | 170M5499 ⁹ | | 170M5649 ⁹ |
| | | 1000 | 480,000 | 2,350,000 | N/A | 145 | _ | | 170M5500 ⁹ | - | 170M5650 ⁹ |
| | | 315 | 9500 | 58,000 | 77,500 | 85 | 170M6338 ⁶ | 170M6538 ⁶ | | 170M6588 | |
| | | 350 | 13,500 | 81,500 | 110,000 | 90 | 170M6339 ⁶ | 170M6539 ⁶ | - | 170M6589 | - |
| | | 400 | 19,500 | 120,000 | 160,000 | 95 | 170M6340 ⁶ | 170M6540 ⁶ | - | 170M6590 | - |
| | | 450 | 31,000 | 185,000 | 245,000 | 100 | 170M6341 ⁶ | 170M6541 ⁶ | - | 170M6591 | - |
| | | 500 | 39,000 | 235,000 | 310,000 | 105 | 170M6342 ⁶ | 170M6542 ⁶ | - | 170M6592 | - |
| | | 550 | 55,000 | 325,000 | 435,000 | 110 | 170M6343 ⁶ | 170M6543 ⁶ | - | 170M6593 | - |
| | 1250 V a.c. | 630 | 83,500 | 495,000 | 665,000 | 115 | 170M6344 ⁶ | 170M6544 ⁶ | 170M6494 ⁶ | 170M6594 | 170M6644 |
| | (IEC) 1300 V a.c. | 700 | 115,000 | 705,000 | 940,000 | 120 | 170M6345 | 170M6545 ⁶ | 170M6495 ⁶ | 170M6595 | 170M6645 ⁶ |
| | (UL) | 800 | 205,000 | 995,000 | 1,300,000 | 125 | 170M6346 ⁴ | 170M6546 ⁶ | 170M6496 ¹² | 170M6596 ⁴ | 170M6646 ¹² |
| | | 900 | 305,000 | 1,500,000 | 1,900,000 | 130 | 170M6347 ⁵ | 170M6547 ¹⁰ | 170M6497 ¹² | 170M6597 ⁵ | 170M6647 ¹² |
| | | 1000 | 450,000 | 2,150,000 | 2,750,000 | 135 | 170M6348 ⁵ | 170M6548 ¹⁰ | 170M6498 ¹² | 170M6598 ⁵ | 170M6648 ¹² |
| | | 1100 | 575,000 | 2,800,000 | 3,600,000 | 160 | 170M6349 ⁵ | 170M6549 ¹¹ | 170M6499 ¹² | 170M6599 ⁵ | 170M6649 ¹² |
| | | 1250 | 810,000 | 3,950,000 | N/A | 170 | 170100043 | 17 UIVIUU43 | 170M6500 ¹³ | I / UIVIUJJJ | 170M6650 ⁴ |
| | | 1 と い し | | | IN/ M | | | | 1701010000 | | 1701010000 |

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.

 $^{^{\}rm 6}$ Rated voltage 900 V d.c. 8XIn 90 kA

⁷ Rated voltage 1100 V a.c. (IEC), 1000 V a.c. (UL). and 1000 V d.c. 8XIn 70 kA

⁸ Rated voltage 1000 V a.c. (IEC and UL). and 1000 V d.c. 8XIn 70 kA

 $^{^{\}rm 9}$ Rated voltage 1100 V a.c. (IEC and UL). and 900 V d.c. 9.5XIn 80 kA

 $^{^{10}}$ Rated voltage 1100 V a.c. (IEC), 1000 V a.c. (UL). and 900 V d.c. 8XIn 90 kA

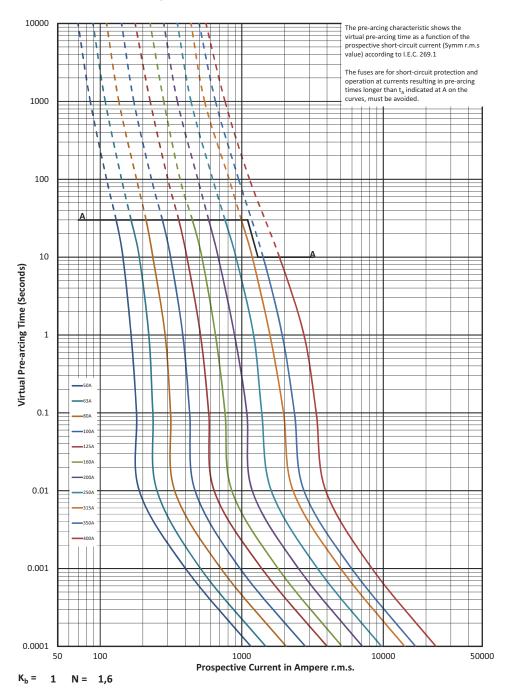
¹¹ Rated voltage 1000 V a.c. (IEC and UL). and 900 V d.c. 8XIn 90 kA

¹² Rated voltage 1000 V d.c. 10XIn 91 kA

 $^{^{\}rm 13}$ Rated voltage 1100 V a.c. (IEC and UL), and 900 V d.c. 12XIn 90 kA

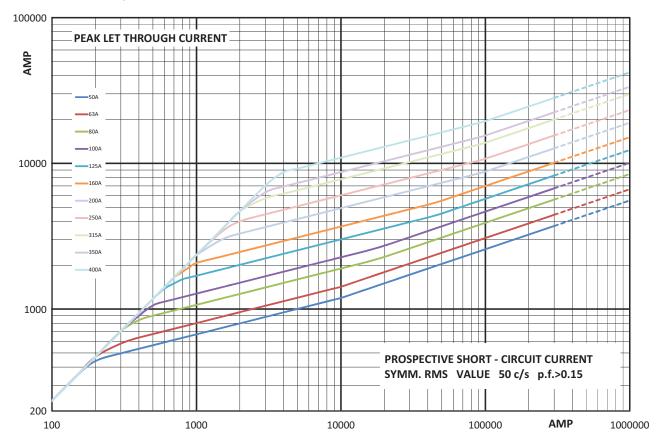
170M - Sizes 1* to 3, Flush end contact, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Time-current curve - Size 1*, 50 A to 400 A



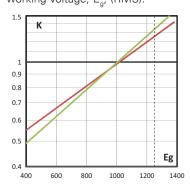
170M - Sizes 1* to 3, Flush end contact, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Cut-off curve - Size 1*, 50 A to 400 A



Total clearing l²t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{σ} , (RMS).

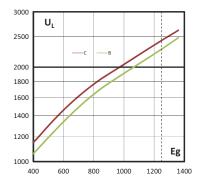


B: fuses ≤ 350 A

C: fuses ≥ 400 A

Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.

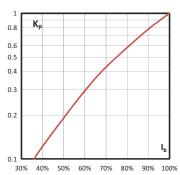


B: fuses ≤ 350 A

C: fuses \geq 400 A

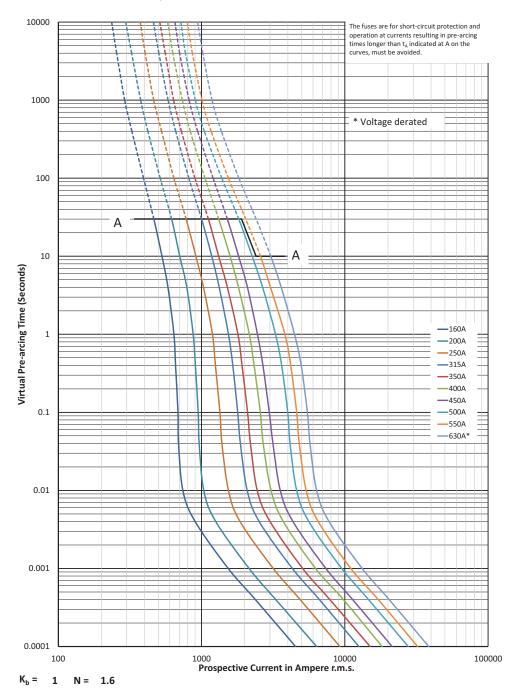
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



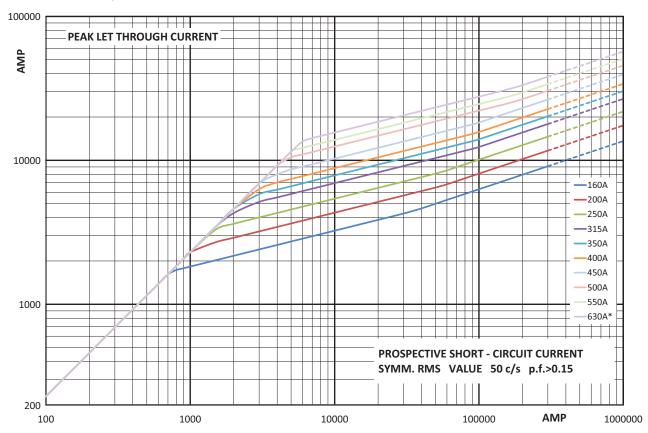
170M - Sizes 1* to 3, Flush end contact, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Time-current curve - Size 1, 160 A to 630 A



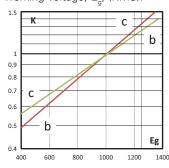
170M - Sizes 1* to 3, Flush end contact, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Cut-off curve - Size 1, 160 A to 630 A



Total clearing I2t

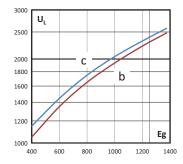
The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



B: fuses \leq 450 A C: fuses \geq 500 A

Arc voltage

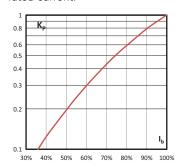
This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



B: fuses ≤ 450 A C: fuses ≥ 500 A

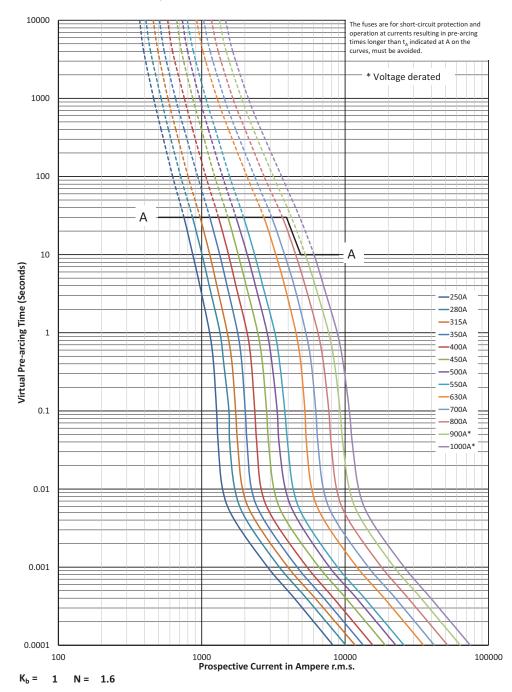
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



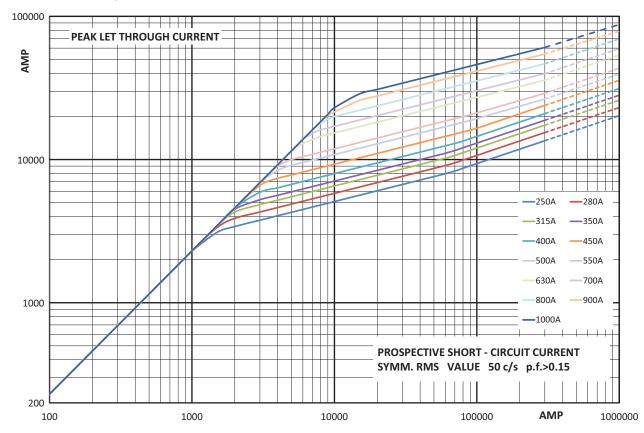
170M - Sizes 1* to 3, Flush end contact, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Time-current curve - Size 2, 250 A to 1000 A



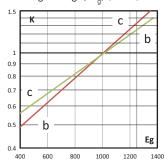
170M - Sizes 1* to 3, Flush end contact, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Cut-off curve - Size 2, 250 A to 1000 A



Total clearing I2t

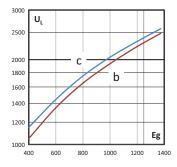
The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



B: fuses \leq 550 A C: fuses \geq 630 A

Arc voltage

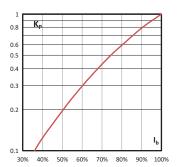
This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



B: fuses \leq 550 A C: fuses \geq 630 A

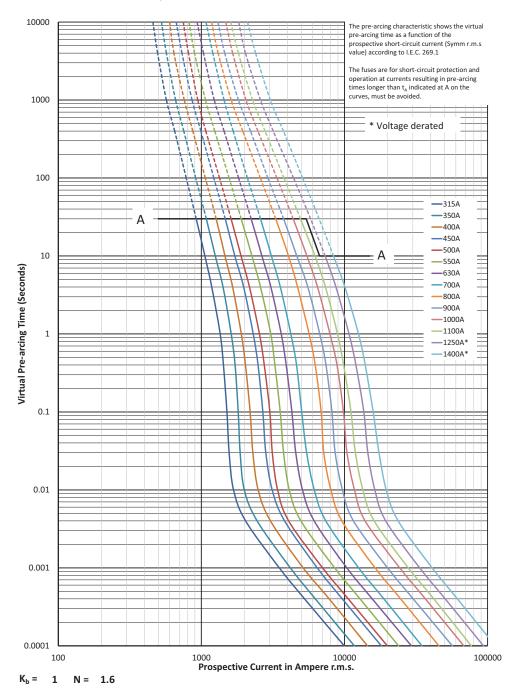
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



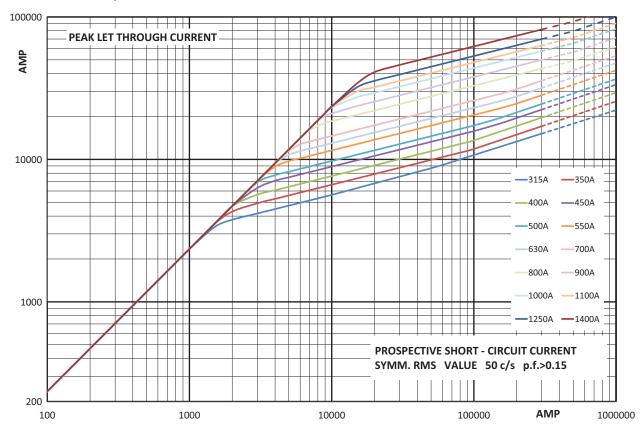
170M - Sizes 1* to 3, Flush end contact, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Time-current curve - Size 3, 315 A to 1400 A



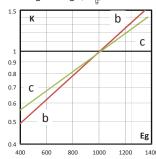
170M - Sizes 1* to 3, Flush end contact, 1250 V a.c. (IEC), 1300 V a.c. (UL), 50 A to 1400 A

Cut-off curve - Size 3, 315 A to 1400 A



Total clearing I²t

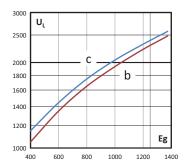
The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



B: fuses ≤ 700 A C: fuses ≥ 800 A

Arc voltage

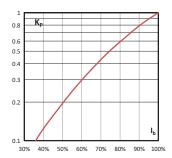
This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm q}$, (RMS) at a power factor of 15 percent.



B: fuses ≤ 700 A C: fuses ≥ 800 A

Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170M - Size 4, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 1000 A 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 A to 3500 A

600 V a.c. (IEC and UL, 4000 A)
Rated current: 1000 A to 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

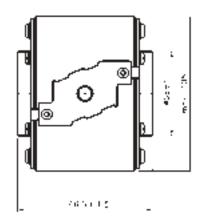


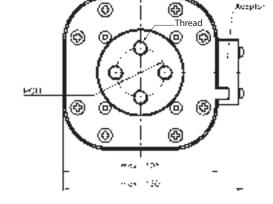
Catalogue numbers

| | | | I²t (A² Sec) | | | Catalogue numbers | | | | |
|------------------------|--------------------------|----------------------|--------------|---------------------------|-------------------|------------------------|-----------------------------|---------------------------|-----------------------------|--|
| Fuse link body size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 660 V a.c. | Watts loss (W) | -B/65 visual indicator | -BKN/65 Type K indicator | -G/65 visual indicator | -GKN/65 Type K indicator | |
| | | 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 | |
| | 690 V a.c. (IEC) | 1600 | 305,000 | 2,050,000 | 220 | 170M7061 | 170M7081 | 170M7101 | 170M7121 | |
| | | 1800 | 436,600 | 3,067,000 | 260 | 170M7340 | - | - | - | |
| 4 | 700 V a.c. (UL) | 2000 | 600,000 | 3,950,000 | 245 | 170M7062 | 170M7082 | 170M7102 | 170M7122 | |
| • | | 2200 | 805,000 | 5,350,000 | 255 | 170M7116 | 170M7114 | 170M7171 | 170M7173 | |
| | | 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 | 28,000,000¹ | 355 | 170M7066 | 170M7086 | 170M7106 | 170M7126 | |

¹ Clearing at 600 V a.c.

Dimensions (mm) -BKN/65 and -GKN/65

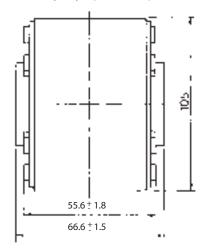


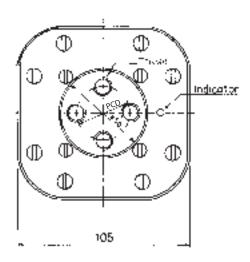


| Туре | PCD | Thread |
|---------|--------|-------------|
| -GKN/65 | Ø 38.1 | UNC ½" - 13 |
| -BKN/65 | Ø 33 | M-10 |
| | | |

170M - Size 4, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 1000 A to 4000 A

Dimensions (mm) -B/65 and -G/65

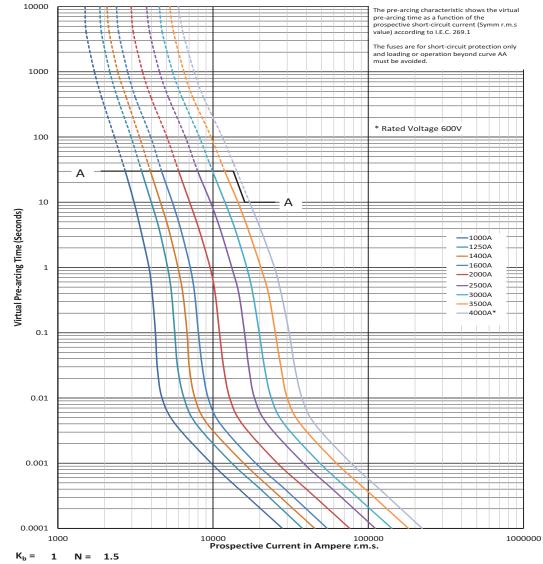




Type -B/65, -G/65

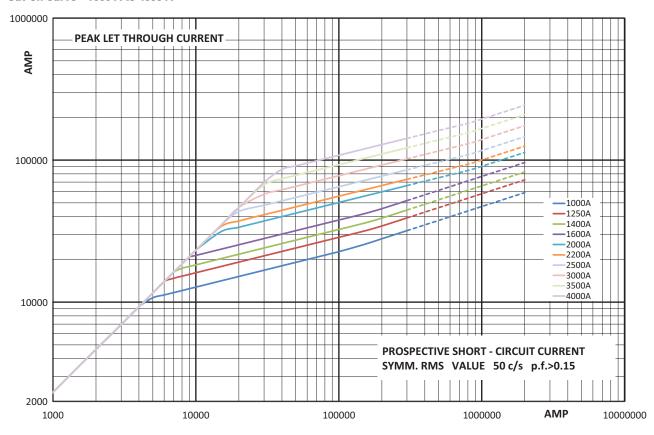
| | PCD | Thread |
|-------|--------|-------------|
| -G/65 | Ø 38.1 | UNC ½" - 13 |
| -B/65 | Ø 33 | M-10 |

Time-current curve - 1000 A to 4000 A



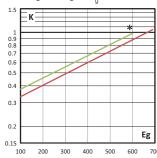
170M - Size 4, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 1000 A to 4000 A

Cut-off curve - 1000 A to 4000 A



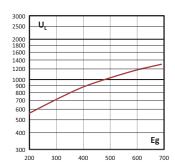
Total clearing l²t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\alpha'}$ (RMS).



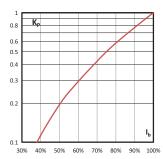
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170M - Size 4, Flush end contact, 1000 V a.c. (IEC), 1000 A 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 A to 3000 A
Breaking capacity: 200 kA RMS Sym

• Operating class: aR

Standards / Agency information

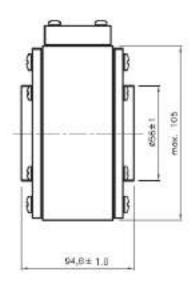
CE, Designed and tested to IEC 60269 Part 4

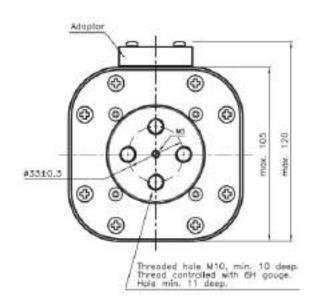


Catalogue numbers

| | | | I ² t (A ² Sec) | | | Catalogue numbers | | |
|------------------------|---------------|----------------------|---------------------------------------|----------------------------|-------------------|-----------------------------|------------------------------|--|
| Fuse link body size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 1000 V a.c. | Watts loss (W) | -BKN/95 Type K indicator | -SBKN/90 Type K indicator | |
| | | 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 | |
| 4 | 1000 V a.c. | 1800 | 1,000,000 | 5,950,000 | 265 | 170M7661 | 170M7053 | |
| 4 | 1000 V a.c. | 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 | |

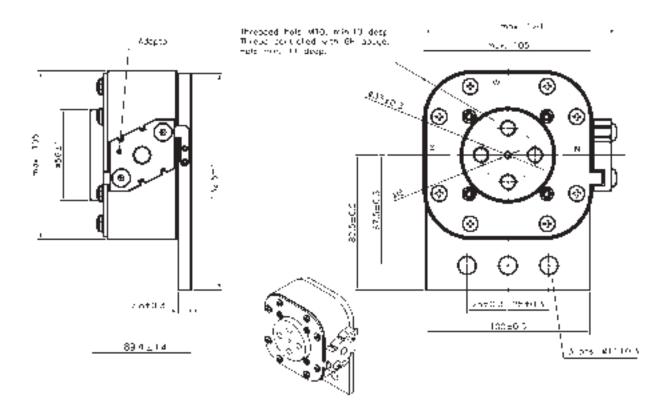
Dimensions (mm) - 4BKN/95





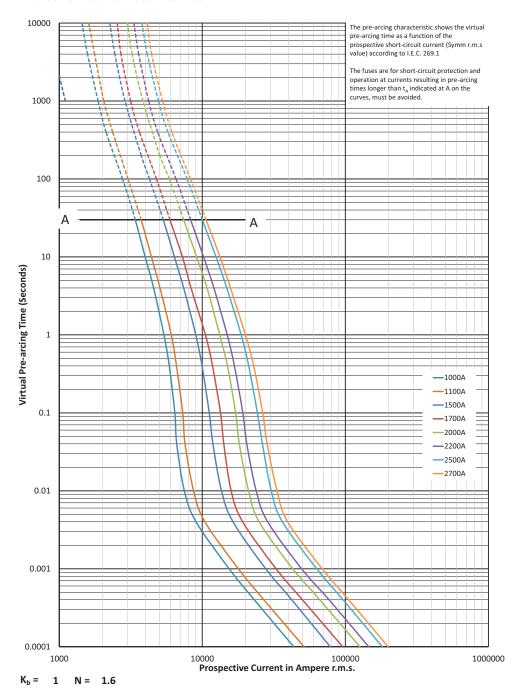
170M - Size 4, Flush end contact, 1000 V a.c. (IEC), 1000 A to 3000 A

Dimensions (mm) - 4SBKN/90



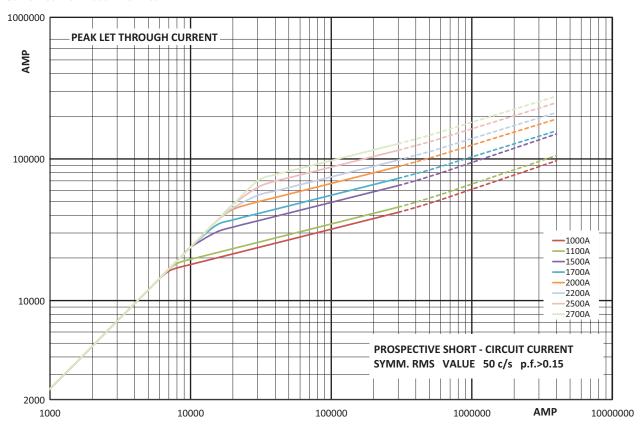
170M - Size 4, Flush end contact, 1000 V a.c. (IEC), 1000 A to 3000 A

Time-current curve - 1000 A to 2700 A



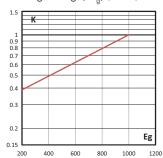
170M - Size 4, Flush end contact, 1000 V a.c. (IEC), 1000 A to 3000 A

Cut-off curve - 1000 A to 2700 A



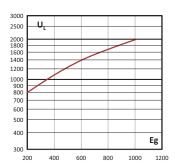
Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



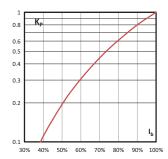
Arc voltage

This curve gives the peak arc voltage, $\rm U_L$, which may appear across the fuse during its operation as a function of the applied working voltage, $\rm E_q$, (RMS) at a power factor of 15 percent.



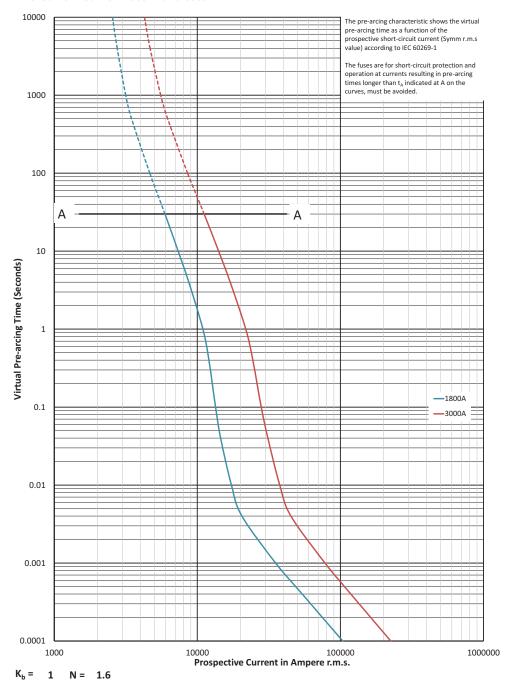
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



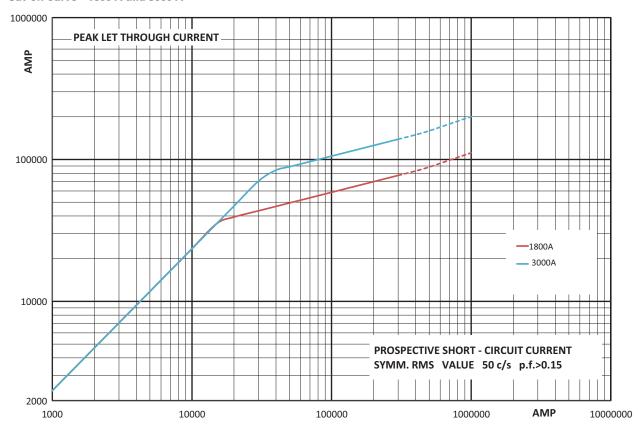
170M - Size 4, Flush end contact, 1000 V a.c. (IEC), 1000 A to 3000 A

Time-current curve - 1800 A and 3000 A



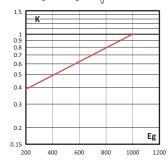
170M - Size 4, Flush end contact, 1000 V a.c. (IEC), 1000 A to 3000 A

Cut-off curve - 1800 A and 3000 A



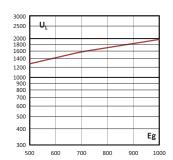
Total clearing I²t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm a}$, (RMS).



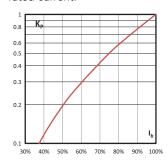
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170M - Size 4, Flush end contact, 1250 V a.c. (IEC), 800 A 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 A to 2500 A

· Operating class: aR

Standards / Agency information

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



Catalogue numbers

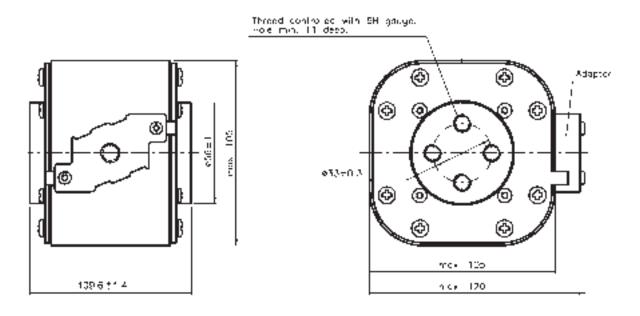
| Fuse link | AC Rated Breaking capacity | | | | Rated I²t (A | I²t (A² Sec) | I²t (A² Sec) | | Catalogue numbers | | |
|--------------|-----------------------------|--------|-------------|--------------|-------------------|--------------|----------------------------|--|------------------------------|-------------------------------|--|
| body size | | | | | current (Amps) | Pre-arcing | Clearing at 1250 V a.c. | Wattsloss(W) | -BKN/110 Type K indicator | -SBKN/105 Type K indicator | |
| | | | | | 800 | 145,000 | 905,000 | 195 | 170M7802 | - | |
| | | | | | 1000 | 275,000 | 1,750,000 | 220 | 170M7803 | - | |
| | | 100 kA | | | 1200 | 495,000 | 3,100,000 | 240 | 170M7804 | - | |
| | | | | | 1400 | 800,000 | 5,000,000 | 250 | 170M7217 ¹ | 170M7512 | |
| | | | 1000 V d.c. | 180 kA IR UL | 1500 | 1,000,000 | 6,200,000 | 260 | 170M7597 | 170M7510 | |
| 4 | 1250 V a.c. | | | 85 kA IR UL | 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 ² | 170M7978 | |

 $^{^{1}}$ 170M7217 rated 850 V d.c./1250 V a.c. (IEC), 1000 V d.c. 180 kA IR (UL), 1200 V d.c. 85 kA IR (UL)

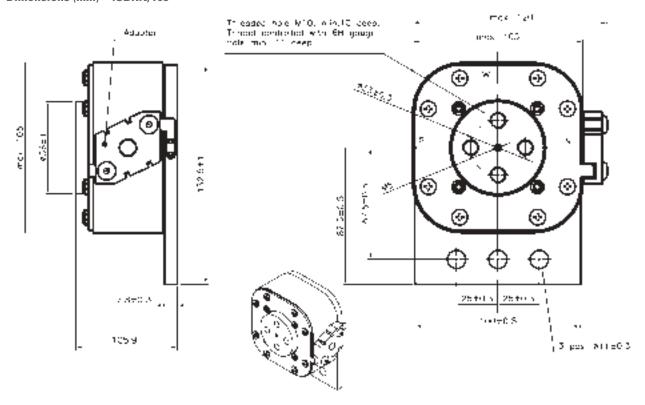
² 170M7595 rated at 1200V d.c. 85kA only at 2ms time constant

170M - Size 4, Flush end contact, 1250 V a.c. (IEC), 800 A to 2500 A

Dimensions (mm) - 4BKN/110

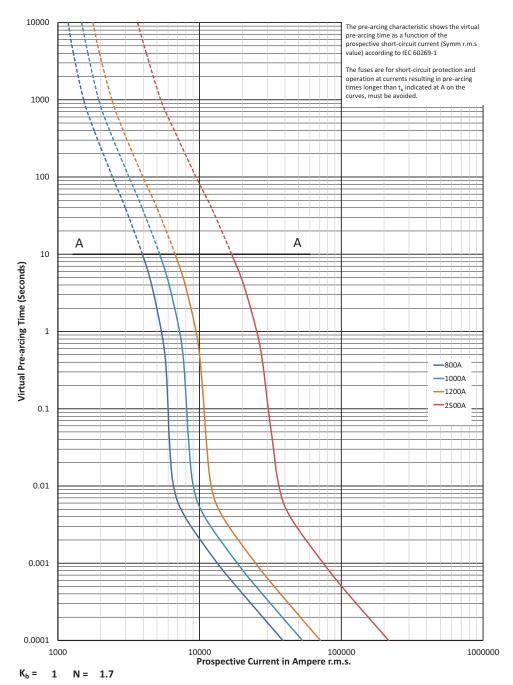


Dimensions (mm) - 4SBKN/105



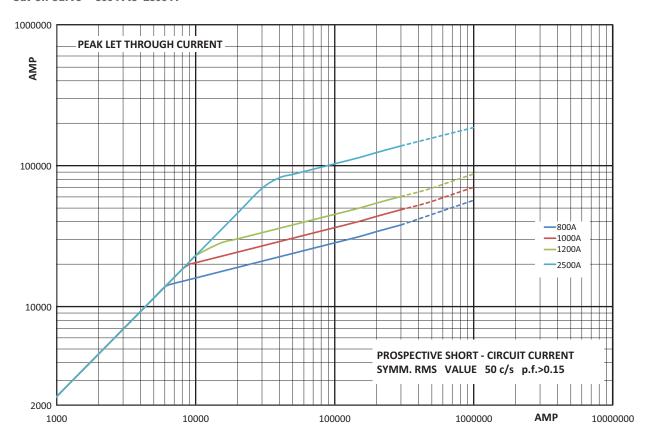
170M - Size 4, Flush end contact, 1250 V a.c. (IEC), 800 A to 2500 A

Time-current curve - 800 A to 2500 A



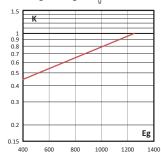
170M - Size 4, Flush end contact, 1250 V a.c. (IEC), 800 A to 2500 A

Cut-off curve - 800 A to 2500 A



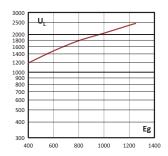
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



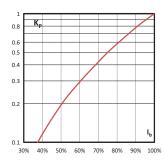
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



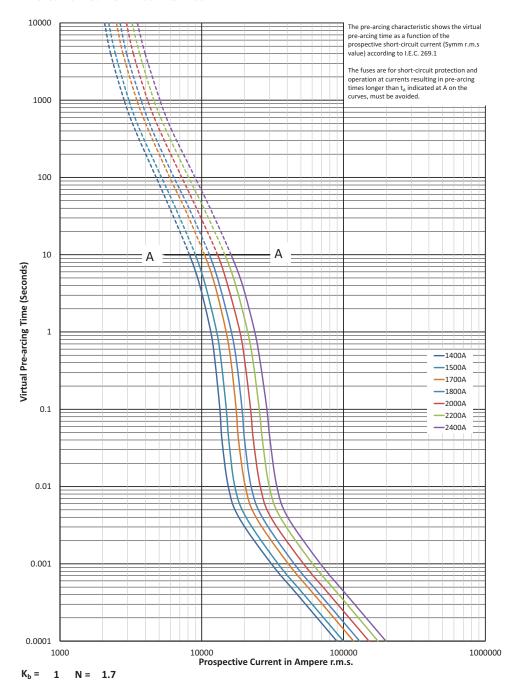
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



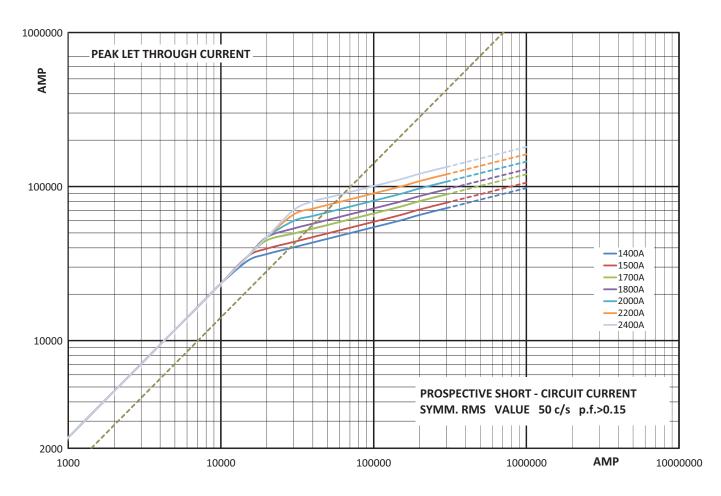
170M - Size 4, Flush end contact, 1250 V a.c. (IEC), 800 A to 2500 A

Time-current curve - 1400 A to 2400 A



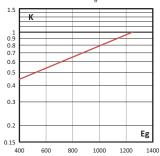
170M - Size 4, Flush end contact, 1250 V a.c. (IEC), 800 A to 2500 A

Cut-off curve - 1400 A to 2400 A



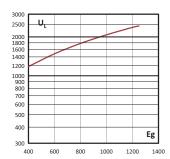
Total clearing I2t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



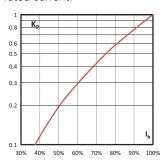
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



170M - Size 23, Flush end contact, 660 V a.c. (IEC), 1000 A 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 A to 3000 A)

600 V a.c. (IEC, 3500 A)550 V a.c. (IEC, 4000 A)

Rated current: 1000 A to 4000 A
Breaking capacity: 100 kA RMS Sym

Operating class: aR

Standards / Agency information

CE, Designed and tested to IEC 60269 Part 4



Catalogue numbers

| | | | I²t (A² Sec) | | | Catalogue ni | umbers | | | | |
|------------------------|---------------------|----------------------------|--------------|---------------------------|----------------------|--------------|--------------------------------|--------------------------------|----------|--------------------------------|--------------------------------|
| 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 |
| | | 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 |
| | 660 V a.c. (IEC) | 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 |
| 23 | | 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 | 21,000,0001 | 315 | 170M6869 | 170M6909 | 170M6889 | 170M6929 | 170M6969 | 170M6949 |
| | 550 V a.c. (IEC) | 4000 | 5,000,000 | 27,500,000² | 340 | 170M6870 | 170M6910 | 170M6890 | 170M6930 | 170M6970 | 170M6950 |

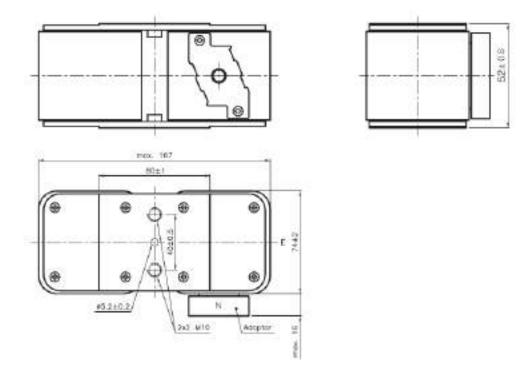
¹ Clearing at 600 V a.c.

When using these fuse links, please consult Eaton for application assistance at bulehigh speed technical @eaton.com.

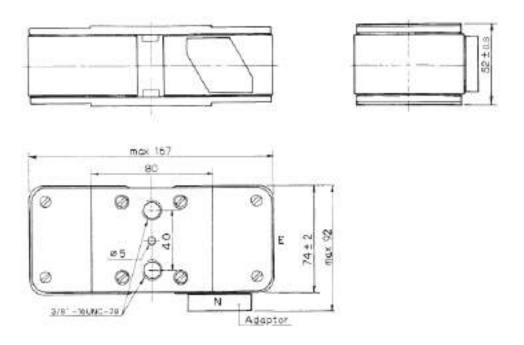
² Clearing at 550 V a.c.

170M - Size 23, Flush end contact, 660 V a.c. (IEC), 1000 A to 4000 A

Dimensions (mm) -BU/55, -BKE/55 and -BKN/55



Dimensions (mm) -GU/55, -GKE/55 and -GKN/55

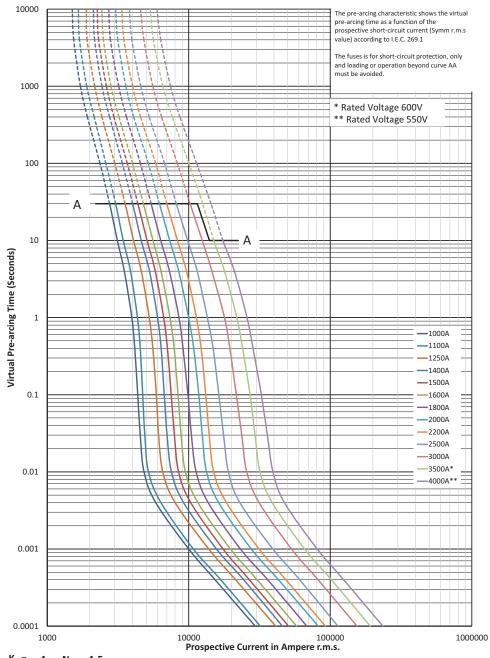


Type -GU/55, -GKE/55, -GKN/55

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

170M - Size 23, Flush end contact, 660 V a.c. (IEC), 1000 A to 4000 A

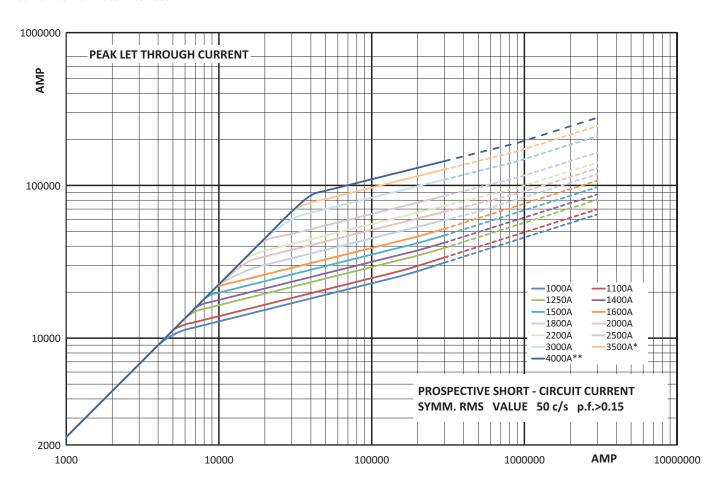
Time-current curve - 1000 A to 4000 A



 $K_b = 1 N = 1.5$

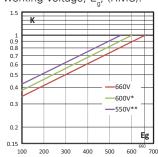
170M - Size 23, Flush end contact, 660 V a.c. (IEC), 1000 A to 4000 A

Cut-off curve - 1000 A to 4000 A



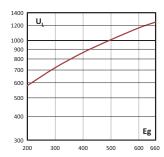
Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm g}$, (RMS).



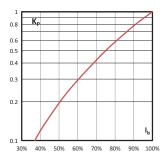
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170M - Size 23, Flush end contact, 1250 V a.c. (IEC), 630 A 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 A to 2200 A)

- 1100 V a.c. (IEC 2500 A and 2800 A)

Rated current: 630 A to 2800 A

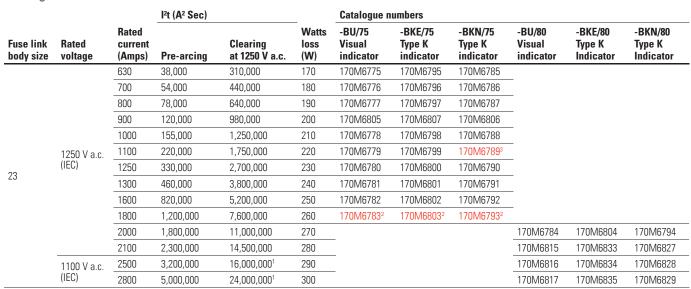
· Breaking capacity: 125kA RMS Sym

· Operating class: aR

Standards / Agency information

CE, Designed and tested to IEC 60269 Part 4

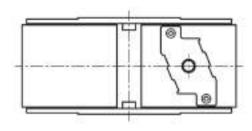
Catalogue numbers

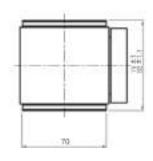


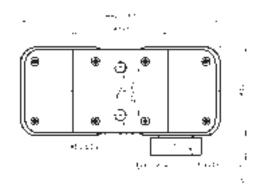
¹ Clearing at 1000 V

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

Dimensions (mm)







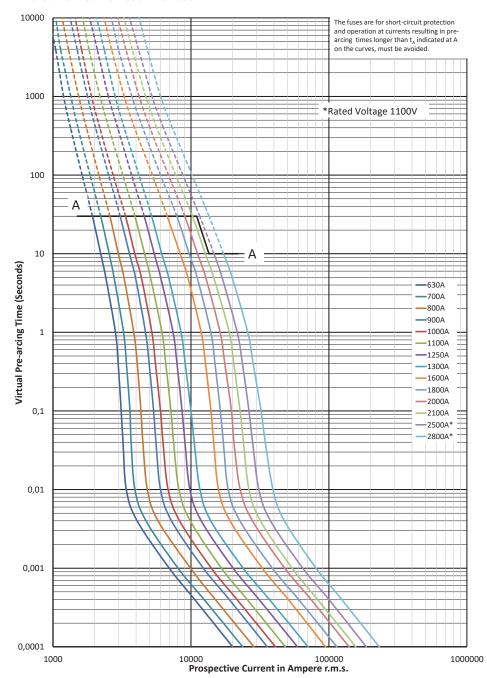


² Rated voltage 900 V d.c. 10XIn 90 kA

³1000 V d.c. UL 50 kA IR

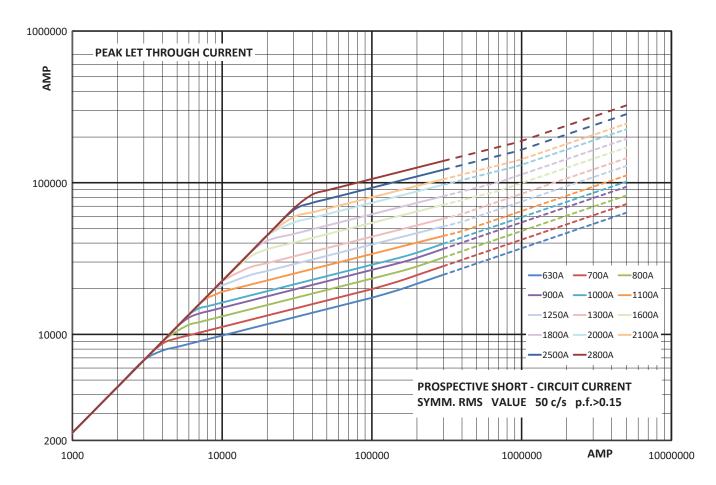
170M - Size 23, Flush end contact, 1250 V a.c. (IEC), 630 A to 2800 A

Time-current curve - 630 A to 2800 A



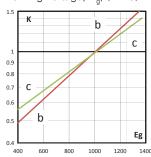
170M - Size 23, Flush end contact, 1250 V a.c. (IEC), 630 A to 2800 A

Cut-off curve - 630 A to 2800 A



Total clearing I2t

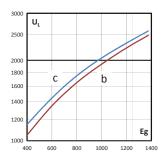
The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm q}$, (RMS).



B: fuses ≤ 1400 A C: fuses ≥ 1600 A

Arc voltage

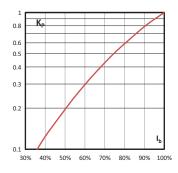
This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



B: fuses \leq 1400 A C: fuses \geq 1600 A

Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170M - Size 24, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 2000 A to 6500 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)

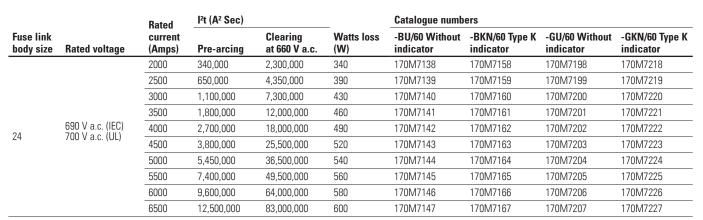
Rated current: 2000 A to 6500 A
Breaking capacity: 200 kA RMS Sym

· Operating class: aR

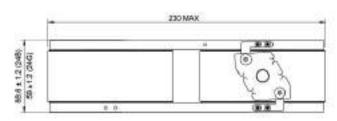
Standards / Agency information

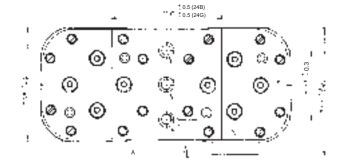
CE, Designed and tested to IEC 60269 Part 4, UL Recognised





Dimensions (mm)





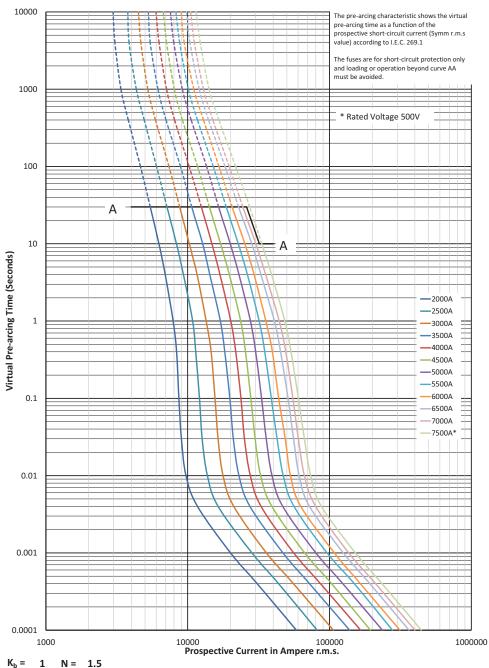
| Size | Туре | Α |
|------|------|-------------------|
| 24 | BKN | 2x3 M12 |
| 24 | GKN | 2x3 ½" -13 UNC-2B |

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



170M - Size 24, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 2000 A to 6500 A

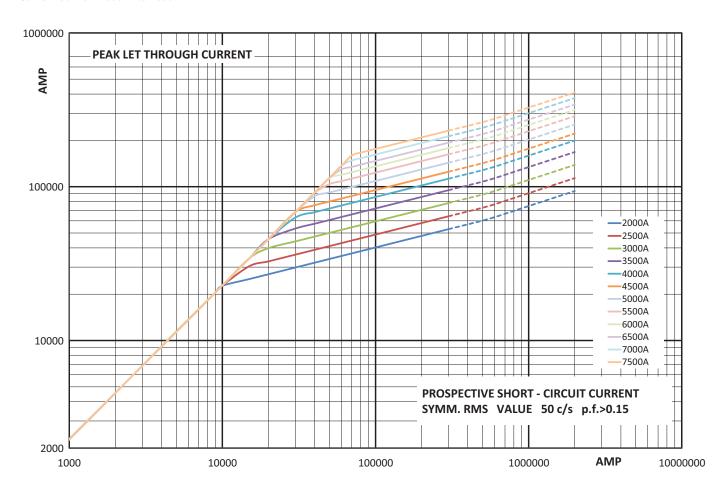
Time-current curve - 2000 A to 7500 A



 $N_b - 1 N = 1.5$

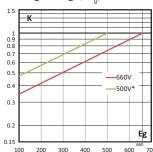
170M - Size 24, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 2000 A to 6500 A

Cut-off curve - 2000 A to 7500 A



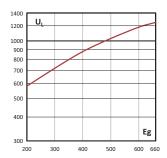
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



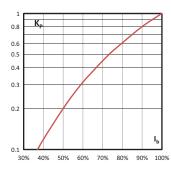
Arc voltage

This curve gives the peak arc voltage, $\rm U_L$, which may appear across the fuse during its operation as a function of the applied working voltage, $\rm E_q$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170M - Size 24, Flush end contact, 1000 V a.c. (IEC and UL), 2000 A 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 and UL)

• Rated current: 2000 A to 5000 A

Breaking capacity: 166 kA RMS Sym / 100 kA RMS (UL)

· Operating class: aR

Standards / Agency information

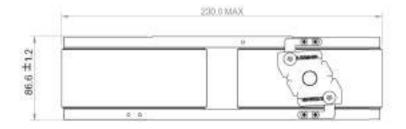
CE, Designed and tested to IEC 60269 Part 4, UL Recognised

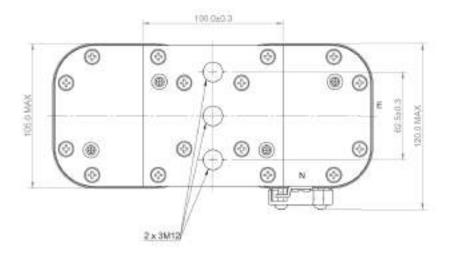


Catalogue numbers

| | | | I²t (A² Sec) | | | Catalogue numbers | |
|------------------------|---------------|----------------------|--------------|----------------------------|-------------------|--------------------------|--|
| Fuse link body size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 1000 V a.c. | Watts loss (W) | -BKN/85 Type K indicator | |
| | | 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 | |
| 24 | 1000 V a.c. | 3500 | 4,500,000 | 27,000,000 | 450 | 170M7568 | |
| 24 | (IEC & UL) | 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)



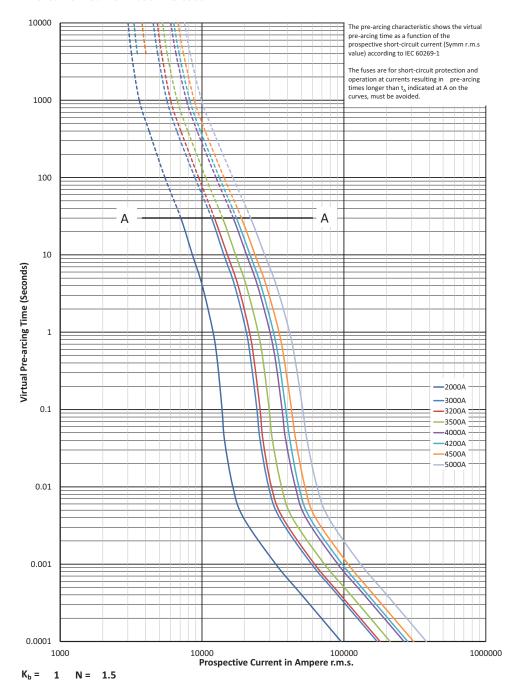


The normal position of the indicator is as shown position N, position E on request only

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

170M - Size 24, Flush end contact, 1000 V a.c. (IEC and UL), 2000 A to 5000 A

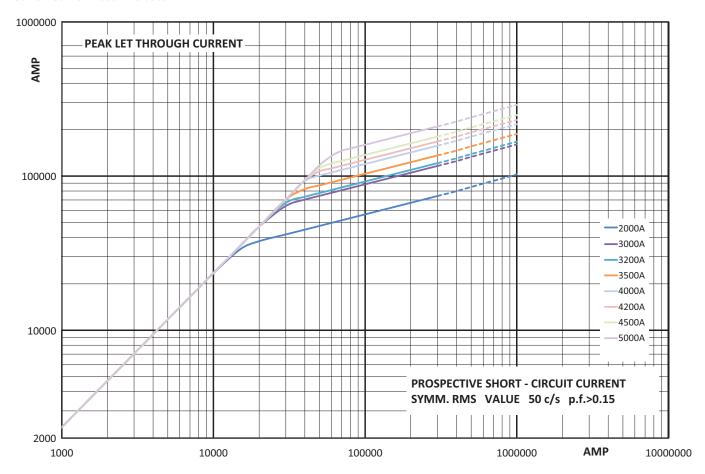
Time-current curve - 2000 A to 5000 A



Data sheets: 170K8514

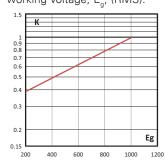
170M - Size 24, Flush end contact, 1000 V a.c. (IEC and UL), 2000 A to 5000 A

Cut-off curve - 2000 A to 5000 A



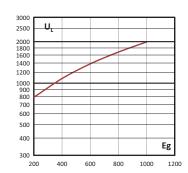
Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm q}$, (RMS).



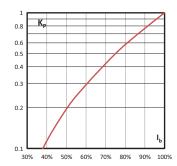
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



Data sheets: 170K8514

170M - Size 5, Flush end contact, 1100-2000 V a.c. (IEC), 1800 A 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 A to 5500 A

• Breaking capacity: 300 kA RMS Sym. estimated: 197 kA tested

• Operating class: aR

Standards / Agency information

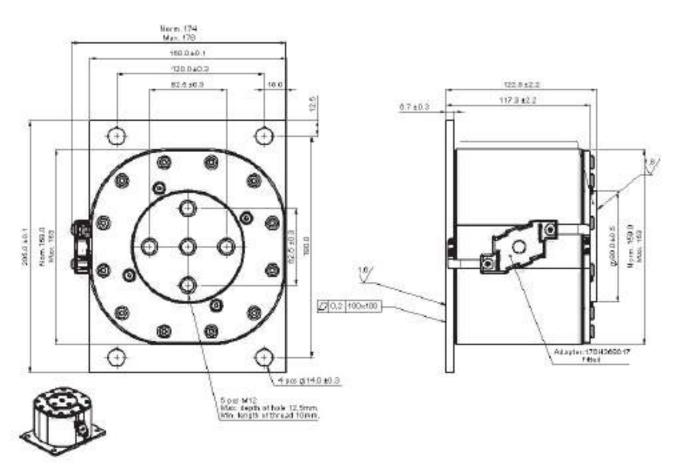
Consult Eaton bulehighspeedtechnical@eaton.com

Catalogue Numbers

Consult Eaton bulehighspeedtechnical@eaton.com



Dimensions (mm)



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

DFJ - Drive fuse links, 600 V a.c. / 450 V d.c. (UL), 1 A 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 A to 600 A

Breaking capacity: 200 kA RMS Sym., 100 kA DC

· Operating class: aR

•

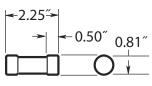
Standards / Agency information

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.

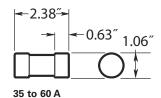
Catalogue numbers

| Rated voltage | Rated current (Amps) | Catalogue numbers |
|--------------------|----------------------|----------------------|
| | 1 | DFJ-1 |
| | 2 | DFJ-2 |
| | 3 | DFJ-3 |
| | 4 | DFJ-4 |
| | 5 | DFJ-5 |
| | 6 | DFJ-6 |
| | 8 | DFJ-8 |
| 600 V a.c./ | 10 | DFJ-10 |
| 450 V d.c. | 12 | DFJ-12 |
| (UL) | 15 | DFJ-15 |
| | 20 | DFJ-20 |
| | 25 | DFJ-25 |
| | 30 | DFJ-30 |
| | 40 | DFJ-40 |
| | 45 | DFJ-45 |
| | 50 | DFJ-50 |
| | 60 | DFJ-60 |
| 600 -700 | 70 | DFJ-70 |
| V a.c./ | 80 | DFJ-80 |
| 450 V d.c. (UL) | 90 | DFJ-90 |
| (UL) | 100 | DFJ-100 |
| | 110 | DFJ-110 |
| | 125 | DFJ-125 |
| | 150 | DFJ-150 |
| | 175 | DFJ-175 |
| | 100 | DFJ-100 |
| 600 V a.c./ | 225 | DFJ-225 |
| 450 V d.c. | 250 | DFJ-250 |
| (UL) | 300 | DFJ-300 |
| | 350 | DFJ-350 |
| | 400 | DFJ-400 |
| | 450 | DFJ-450 |
| | 500 | DFJ-500 |
| | 600 | DFJ-600 |

Dimensions (in)

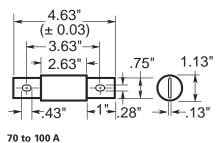


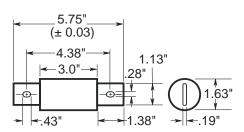




BUSSMANN

DFJ-100 I

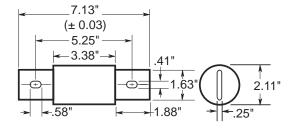


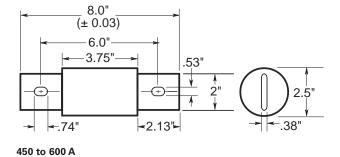


110 to 200 A

DFJ - Drive fuse links, 600 V a.c. / 450 V d.c. (UL), 1 A to 600 A

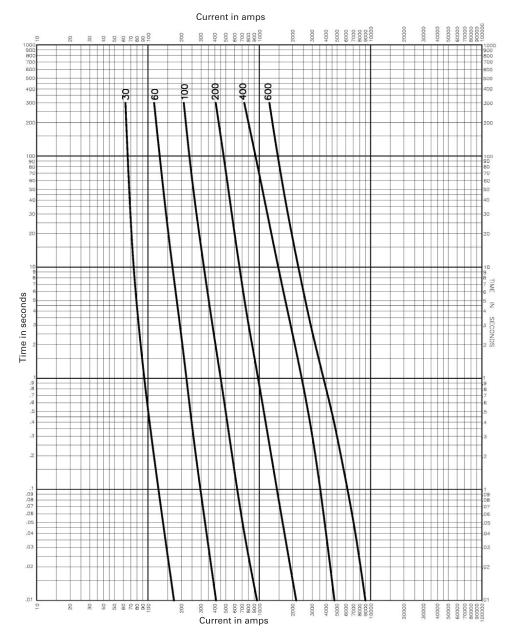
Dimensions (in)





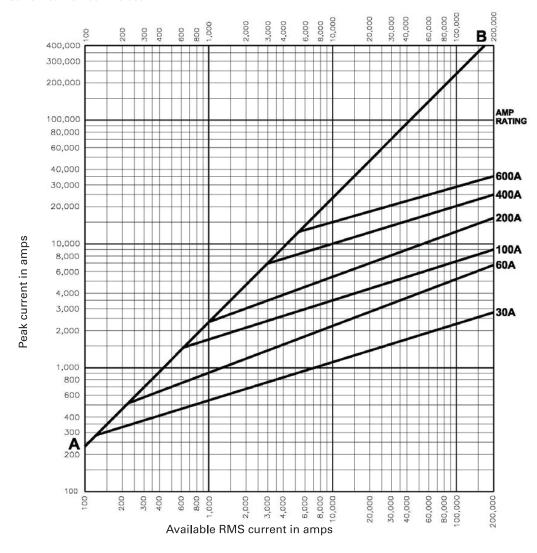
225 to 400 A

Time-current curve - 30 A to 600 A



DFJ - Drive fuse links, 600 V a.c. / 450 V d.c. (UL), 1 A to 600 A

Cut-off curve - 30 A to 600 A



170M - Sizes 000 and 230, IGBT fuse links, 750 V d.c. (IEC), 800 V d.c. (UL), 25 A 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 \leq 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 A to 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

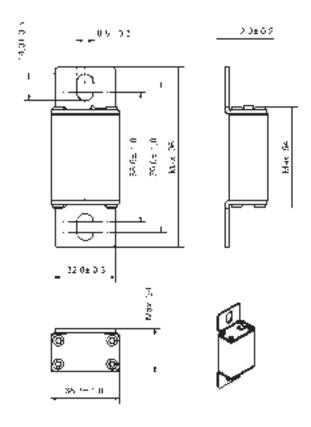


Catalogue numbers

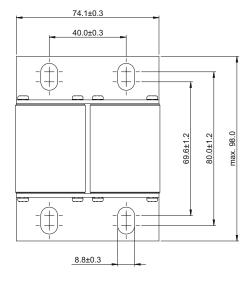
| Fuse link | | Rated current | I ² t (A ² Sec) | Watts loss | Catalogue numbers | | |
|-----------|-------------------------------------|---------------|---------------------------------------|------------|-------------------|----------|--|
| body size | Rated voltage | (Amps) | Pre-arcing | (W) | -FU/70 | -FN/70 | |
| | | 25 | 25 | 12 | 170M1750 | 170M1730 | |
| | | 32 | 45 | 13 | 170M1751 | 170M1731 | |
| | | 40 | 75 | 14 | 170M1752 | 170M1732 | |
| | | 50 | 135 | 16 | 170M1753 | 170M1733 | |
| | | 63 | 260 | 17 | 170M1754 | 170M1734 | |
| | 750 V d.c. (IEC) | 80 | 460 | 20 | 170M1755 | 170M1735 | |
| 000 | , , | 100 | 795 | 25 | 170M1756 | 170M1736 | |
| | 800 V d.c. (UL) | 125 | 1300 | 29 | 170M1757 | 170M1737 | |
| | | 160 | 2550 | 34 | 170M1758 | 170M1738 | |
| | | 200 | 4350 | 40 | 170M1759 | 170M1739 | |
| | | 250 | 7400 | 48 | 170M1760 | 170M1740 | |
| | | 315 | 12,500 | 60 | 170M1761 | 170M1741 | |
| | | 350 | 17,000 | 65 | 170M1762 | 170M1742 | |
| | | 100 | 380 | 35 | 170M1770 | 170M1785 | |
| | | 125 | 645 | 42 | 170M1771 | 170M1786 | |
| | 750 V d.c. (IEC) 800 V d.c. (UL) | 160 | 1350 | 47 | 170M1772 | 170M1787 | |
| | | 200 | 2550 | 54 | 170M1773 | 170M1788 | |
| | | 250 | 4950 | 62 | 170M1774 | 170M1789 | |
| 220 | | 315 | 9350 | 72 | 170M1775 | 170M1790 | |
| 230 | | 350 | 12,000 | 78 | 170M1776 | 170M1791 | |
| | | 400 | 18,500 | 80 | 170M1777 | 170M1792 | |
| | | 450 | 27,000 | 85 | 170M1778 | 170M1793 | |
| | | 500 | 37,500 | 90 | 170M1779 | 170M1794 | |
| | | 550 | 48,500 | 95 | 170M1780 | 170M1795 | |
| | | 630 | 69,500 | 105 | 170M1781 | 170M1796 | |

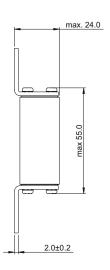
170M - Sizes 000 and 230, IGBT fuse links, 750 V d.c. (IEC), 800 V d.c. (UL), 25 A to 630 A

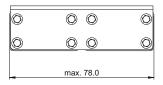
Dimensions (mm) - Size 000



Dimensions (mm) - Size 230

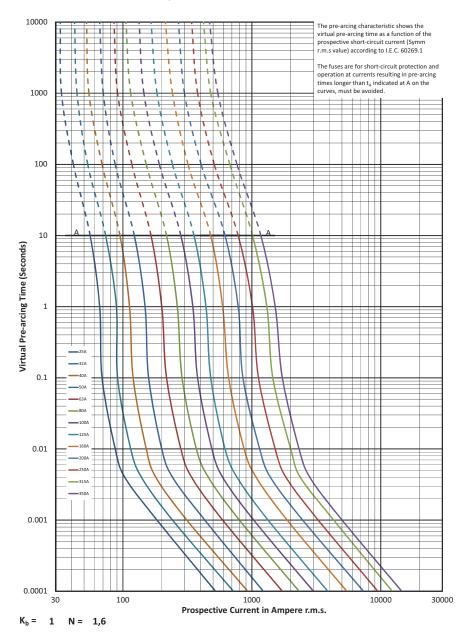






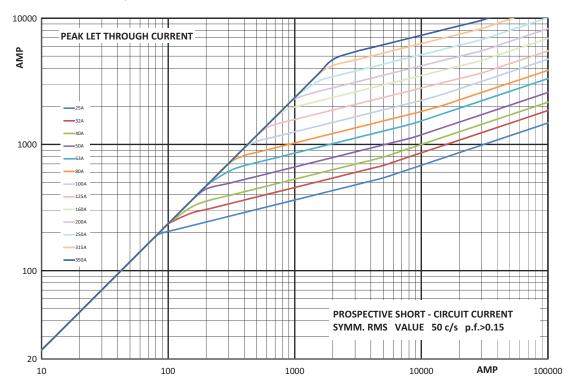
170M - Sizes 000 and 230, IGBT fuse links, 750 V d.c. (IEC), 800 V d.c. (UL), 25 A to 630 A

Time-current curve - Size 000, 25 A to 350 A



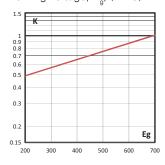
170M - Sizes 000 and 230, IGBT fuse links, 750 V d.c. (IEC), 800 V d.c. (UL), 25 A to 630 A

Cut-off curve - Size 000, 25 A to 350 A



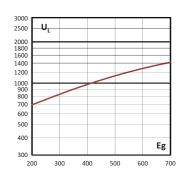
Total clearing l²t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_g , (RMS).



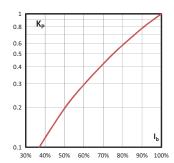
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



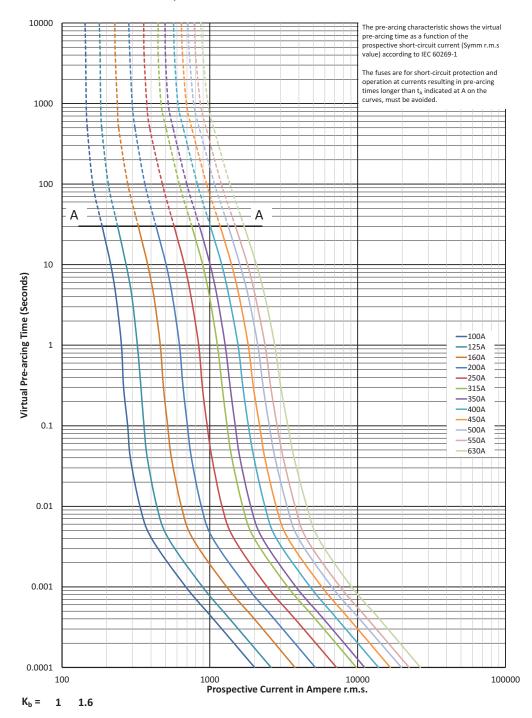
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



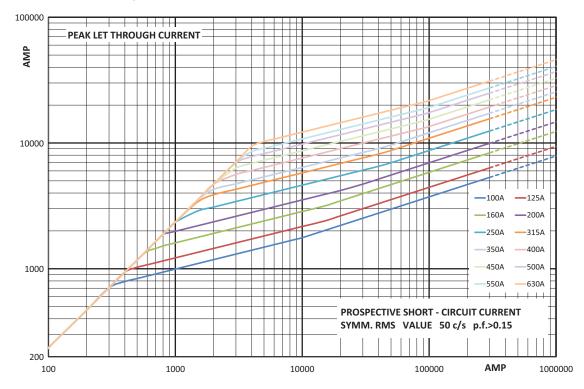
170M - Sizes 000 and 230, IGBT fuse links, 750 V d.c. (IEC), 800 V d.c. (UL), 25 A to 630 A

Time-current curve - Size 230, 100 A to 630 A



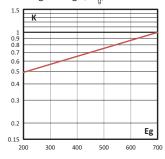
170M - Sizes 000 and 230, IGBT fuse links, 750 V d.c. (IEC), 800 V d.c. (UL), 25 A to 630 A

Cut-off curve - Size 230, 100 A to 630 A



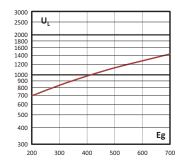
Total clearing I²t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{g'}$ (RMS).



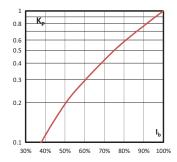
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170M - Sizes 000 and 230, IGBT fuse links, 1000 V d.c. (IEC and UL), 25 A 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 \leq 20nH.

Technical data

• Rated voltage: 1000 V d.c. tested at 1000 V d.c. according to UL 248-1

• Rated current: 25 A to 500 A

• Breaking capacity: 50 kA DC (1ms tc UL)

Operating class: aR

Standards / Agency information

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

CE

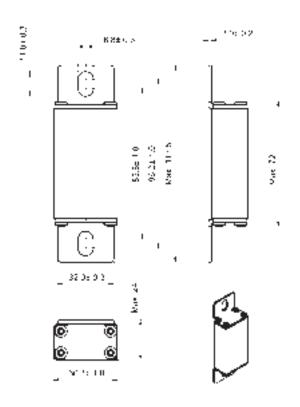


Catalogue numbers

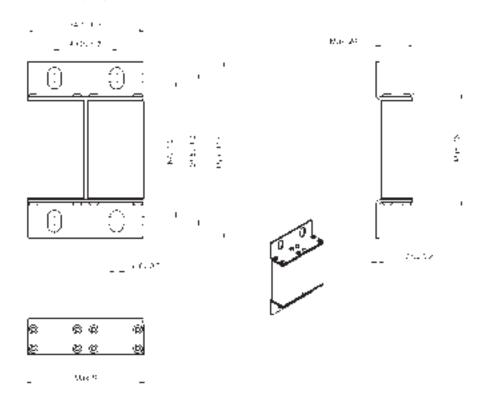
| Fuse link | | Rated current | | _ Watts loss | Catalogue numbe | rs |
|-----------|---------------------|---------------|------------|--|-----------------|----------|
| body size | Rated voltage | (Amps) | Pre-arcing | (W) | -FU/90 | -FN/90 |
| | | 25 | 19 | 14 | 170M1802 | 170M1842 |
| | | 32 | 34 | 17 | 170M1803 | 170M1843 |
| | | 40 | 61 | 20 | 170M1804 | 170M1844 |
| | | 50 | 135 | 21 | 170M1805 | 170M1845 |
| | | 63 | 245 | 22 | 170M1806 | 170M1846 |
| 000 | 1000 \/ d a / \ | 80 | 505 | 27 | 170M1807 | 170M1847 |
| 000 | 1000 V d.c. (UL) | 100 | 1050 | 32 | 170M1808 | 170M1848 |
| | | 125 | 1900 | g (W) -FU/90 14 170M1802 17 170M1803 20 170M1804 21 170M1805 22 170M1806 27 170M1807 | 170M1849 | |
| | | 160 | 4050 | 37 | 170M1810 | 170M1850 |
| | | 200 | 8500 | 43 | 170M1811 | 170M1851 |
| | | 225 | 12,000 | 45 | 170M1812 | 170M1852 |
| | | 250 | 16,000 | 48 | 170M1813 | 170M1853 |
| | | 100 | 600 | 38 | 170M1824 | 170M1860 |
| | | 125 | 1200 | 42 | 170M1825 | 170M1861 |
| | | 160 | 2550 | 48 | 170M1826 | 170M1862 |
| | | 200 | 4650 | 55 | 170M1827 | 170M1863 |
| 220 | 1000 \/ d a // \ | 250 | 9300 | 62 | 170M1828 | 170M1864 |
| 230 | 1000 V d.c. (UL) | 315 | 18,500 | 68 | 170M1829 | 170M1865 |
| | | 350 | 24,500 | 75 | 170M1830 | 170M1866 |
| | | 400 | 37,500 | 80 | 170M1831 | 170M1867 |
| | | 450 | 52,000 | 85 | 170M1832 | 170M1868 |
| | | 500 | 69,500 | 90 | 170M1833 | 170M1869 |

170M - Sizes 000 and 230, IGBT fuse links, 1000 V d.c. (IEC and UL), 25 A to 500 A

Dimensions (mm) - Size 000

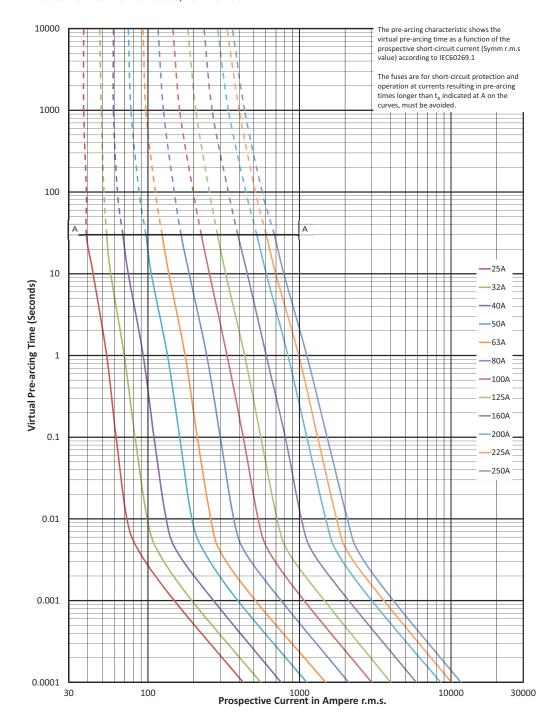


Dimensions (mm) - Size 230



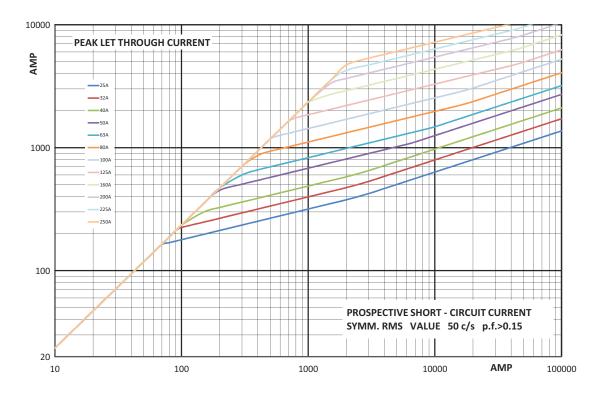
170M - Sizes 000 and 230, IGBT fuse links, 1000 V d.c. (IEC and UL), 25 A to 500 A

Time-current curve - Size 000, 25 A to 250 A



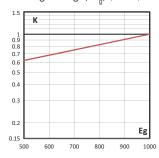
170M - Sizes 000 and 230, IGBT fuse links, 1000 V d.c. (IEC and UL), 25 A to 500 A

Cut-off curve - Size 000, 25 A to 250 A



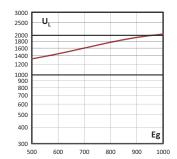
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



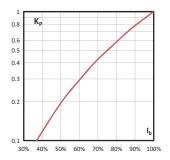
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm p}$, (RMS) at a power factor of 15 percent.



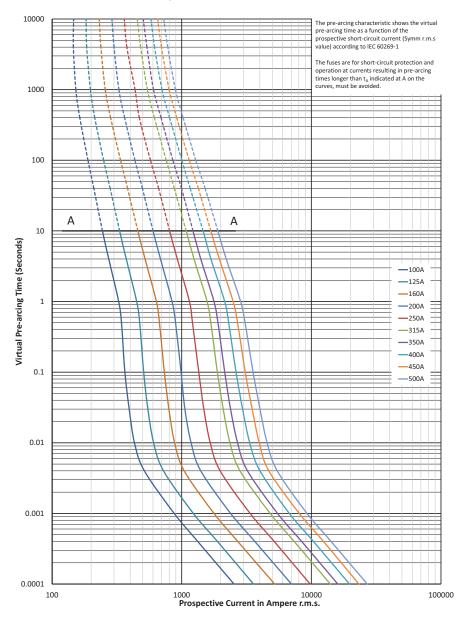
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



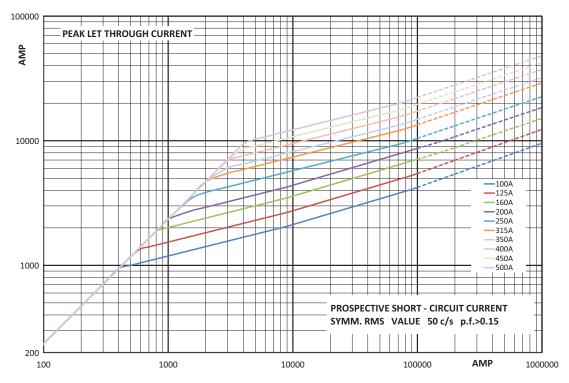
170M - Sizes 000 and 230, IGBT fuse links, 1000 V d.c. (IEC and UL), 25 A to 500 A

Time-current curve - Size 230, 100 A to 500 A



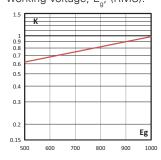
170M - Sizes 000 and 230, IGBT fuse links, 1000 V d.c. (IEC and UL), 25 A to 500 A

Cut-off curve - Size 230, 100 A to 500 A



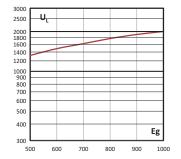
Total clearing I2t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm g}$, (RMS).



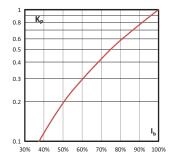
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm q}$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170M - Sizes 1*, 3 and 23, Square body fuse links, 750 V d.c. (IEC), 50 A 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 A to 1600 A

· Breaking capacity: see details in table below

Operating class:

- aR size 1*

• gR: size 1* (at 900 V d.c.), 3 and 23

Standards / Agency information

IEC 60269



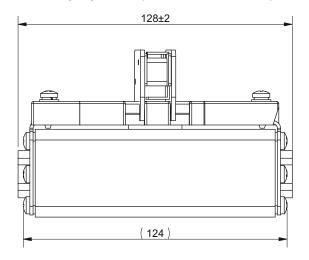
Catalogue numbers

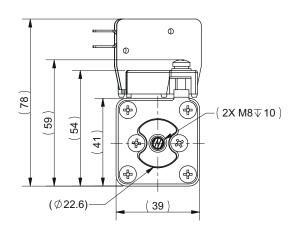
| | | | | | I²t (A² Sec) | | Watts lo | Watts loss (W) | |
|-------------------|------------------------|----------------------|----------------------|---|--------------|---------------------------|--------------------|----------------|----------------------|
| Fuse link type | Fuse link body size | Rated voltage | Rated current (Amps) | Breaking capacity | Pre-arcing | Clearing at 750 V d.c. | 0.8 I _n | I _n | Catalogue numbers |
| | | | 50 | 80 kA at 750 V d.c. | 390 | 1300 | 15 | 27 | 170M2000 |
| | | | 63 | | 610 | 2050 | 18 | 35 | 170M2001 |
| Florida and | 1* | 750 V d.c. / | 80 | - L/R 65 ms | 670 | 2250 | 19 | 37 | 170M2002 |
| Flush end | Ι" | 900 V d.c. (IEC) | 100 | 80 kA at 900 V d.c. | 2450 | 8150 | 21 | 40 | 170M2003 |
| | | | 125 | L/R 45ms | 2950 | 9800 | 24 | 47 | 170M2004 |
| | | | 160 | • | 5500 | 18,250 | 29 | 56 | 170M2005 |
| | 3 | 750 V d.c. (IEC) | 450 | - - 100 kA at 700 V d.c. - L/R 100 ms - | 65,700 | 272,300 | 46 | 87 | 170M2010 |
| | | | 500 | | 83,200 | 344,800 | 52 | 98 | 170M2011 |
| | | | 550 | | 136,700 | 566,500 | 67 | 126 | 170M2012 |
| Flush end | | | 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 |
| | | | 1000 | - - 100 kA at 800 V d.c., _ L/R 40 ms | 476,300 | 1,973,700 | 112 | 187 | 170M2017 |
| | | 800 V d.c. (IEC/ UL) | 1250 | | 694,000 | 2,875,800 | 134 | 224 | 170M2018 |
| Parallel | 23 | | 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 sheets: 720140, size 1* 5785524, 3 5785521, 23 5785525

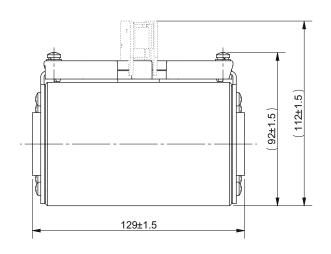
170M - Sizes 1*, 3 and 23, Square body fuse links, 750 V d.c. (IEC), 50 A to 1600 A

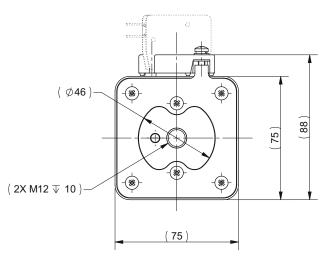
Dimensions (mm) - Size 1*, 170M2000 to 170M2005, Flush end

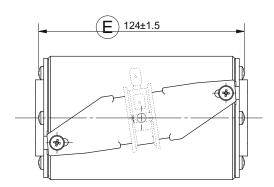




Dimensions (mm) - Size 3, 170M2010 to 170M2016, Flush end



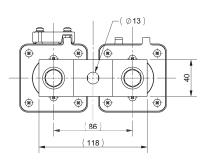


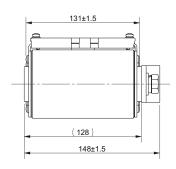


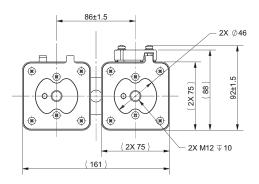
Data sheets: 720140, size 1* 5785524, 3 5785521, 23 5785525

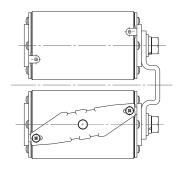
170M - Sizes 1*, 3 and 23, Square body fuse links, 750 V d.c. (IEC), 50 A to 1600 A

Dimensions (mm) - Size 23, 170M2017 to 170M2021, Parallel

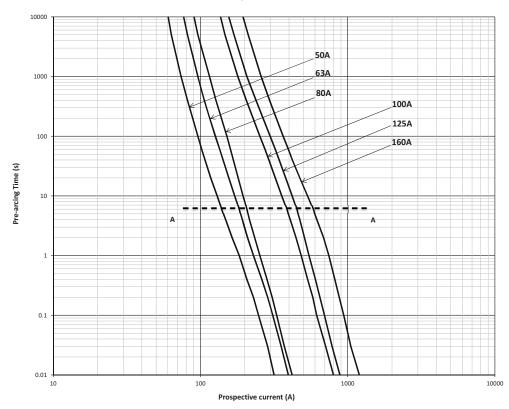








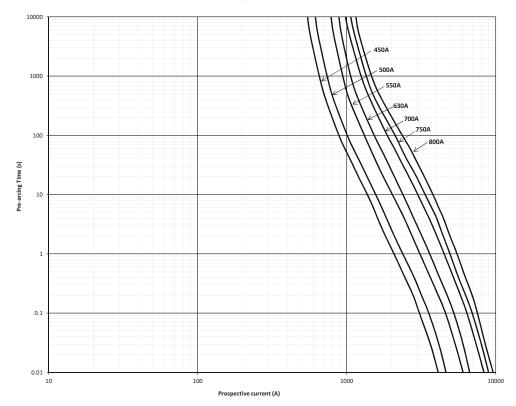
Time-current curve - 170M2000 to 170M2005, 50 A to 160 A



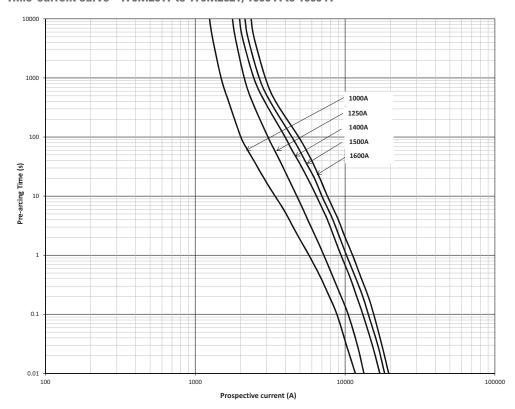
Data sheets: 720140, size 1* 5785524, 3 5785521, 23 5785525

170M - Sizes 1*, 3 and 23, Square body fuse links, 750 V d.c. (IEC), 50 A to 1600 A

Time-current curve - 170M2010 to 170M2016, 450 A to 800 A



Time-current curve - 170M2017 to 170M2021, 1000 A to 1600 A



170E - Sizes 1*, 1, 2 and 3, Square body fuse links, 750 V d.c. (IEC), 63 A to 500 A

Specifications

Description

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

Technical data

Rated voltage: 750 V d.c. (IEC)Rated current: 63 A to 500 A

· Breaking capacity: see details below

· Operating class: gR

Standards / Agency information

Consult Eaton bulehighspeedtechnical@eaton.com

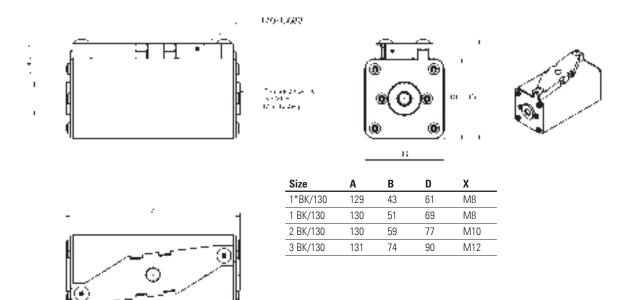


Catalogue numbers

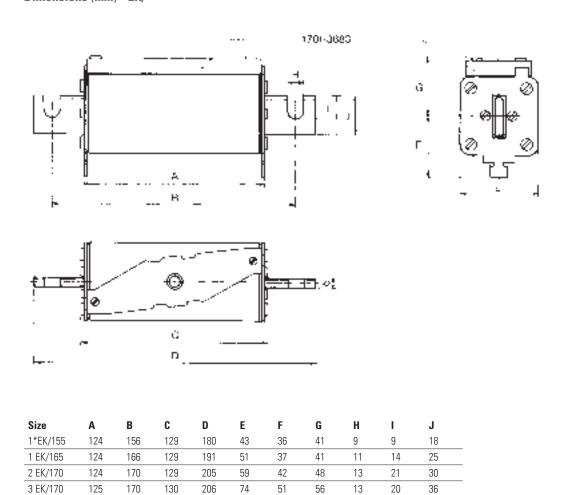
| Fuse link | | Breaking | Rated current | I²t (A²s) | Watts loss | Catalogue numbers | _ | Catalogue numbers | Fuse link |
|-----------|------------------|-----------------|---------------|----------------|------------|----------------------|----------------|----------------------|-----------|
| | Rated voltage | capacity | (Amps) | Pre-arcing (W) | | -BK flush end | Fuse link type | -EK knife blade | type |
| | | | 63 | 1100 | 10 | 170E3577 | | 170E3583 | |
| | | | 80 | 1750 | 13 | 170E3578 | _ | 170E3584 | |
| 1* | 750 V d.c. (IEC) | 80 kA at 43ms | 100 | 3000 | 16 | 170E3579 | _ | 170E3585 | EK/155 |
| | | | 125 | 4500 | 21 | 170E3580 | _ | 170E3586 | |
| | | | 160 | 7700 | 26 | 170E3581 | _ | 170E3587 | |
| 1 | 750 V d.c. (IEC) | 50 kA at 15ms | 200 | 11,000 | 37 | 170E5417 | BK/130 | 170E5420 | EK/165 |
| 1 | 750 V a.c. (IEC) | 50 KA at 15IIIS | 250 | 18,000 | 46 | 170E5418 | _ | 170E5421 | EN/100 |
| | | | 250 | 17,000 | 47 | 170E8335 | _ | 170E8345 | |
| 2 | 750 V d.c. (IEC) | 100 kA at 15ms | 315 | 28,000 | 57 | 170E8336 | _ | 170E8346 | EK/170 |
| | | | 400 | 55,000 | 73 | 170E8337 | | 170E8347 | |
| 3 | 750 V d.c. (IEC) | 50 kA at 15 ms | 500 | 75,500 | 93 | 170E9681 | | 170E9685 | EK/170 |

170E - Sizes 1*, 1, 2 and 3, Square body fuse links, 750 V d.c. (IEC), 63 A to 500 A

Dimensions (mm) - BK/130

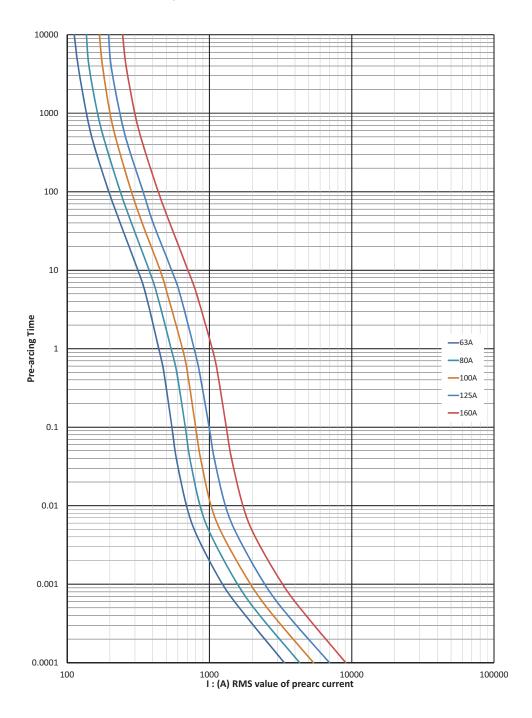


Dimensions (mm) - EK/



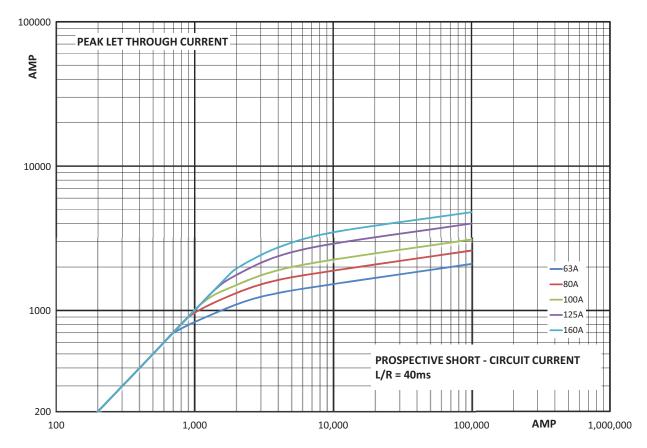
170E - Sizes 1*, 1, 2 and 3, Square body fuse links, 750 V d.c. (IEC), 63 A to 500 A

Time-current curve - Size 1*, 63 A to 160 A



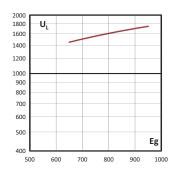
170E - Sizes 1*, 1, 2 and 3, Square body fuse links, 750 V d.c. (IEC), 63 A to 500 A

Cut-off curve - Size 1*, 63 A to 160 A



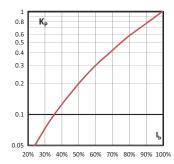
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



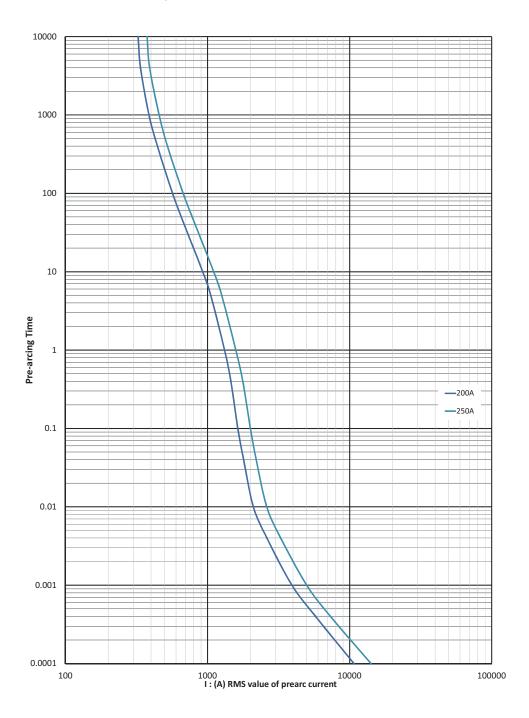
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



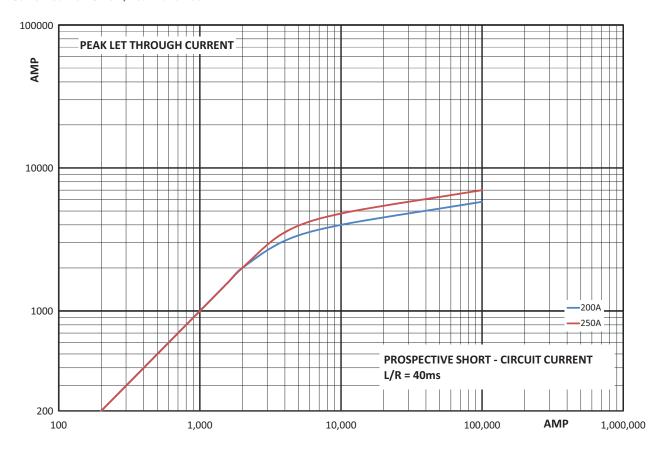
170E - Sizes 1*, 1, 2 and 3, Square body fuse links, 750 V d.c. (IEC), 63 A to 500 A

Time-current curve - Size 1, 200 A and 250 A



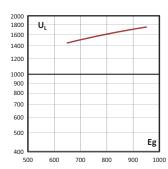
170E - Sizes 1*, 1, 2 and 3, Square body fuse links, 750 V d.c. (IEC), 63 A to 500 A

Cut-off curve - Size 1, 200 A and 250 A



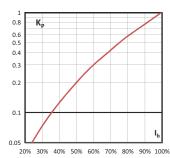
Arc voltage

This curve gives the peak arc voltage, $\rm U_L$, which may appear across the fuse during its operation as a function of the applied working voltage, $\rm E_q$, (RMS) at a power factor of 15 percent.



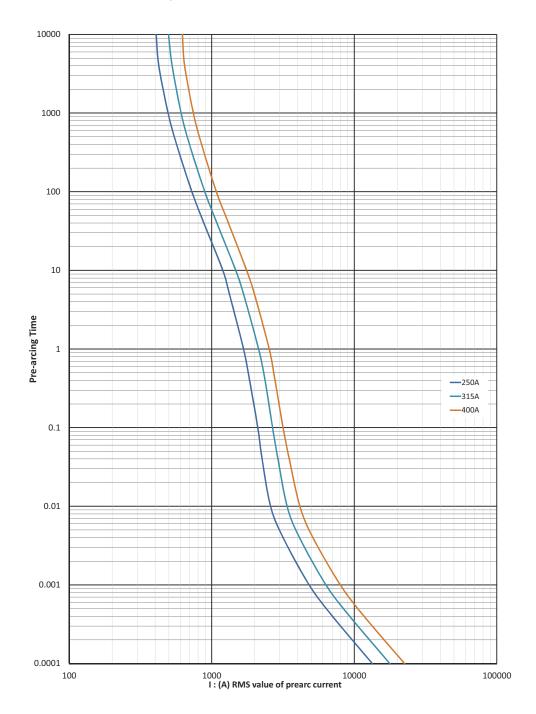
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



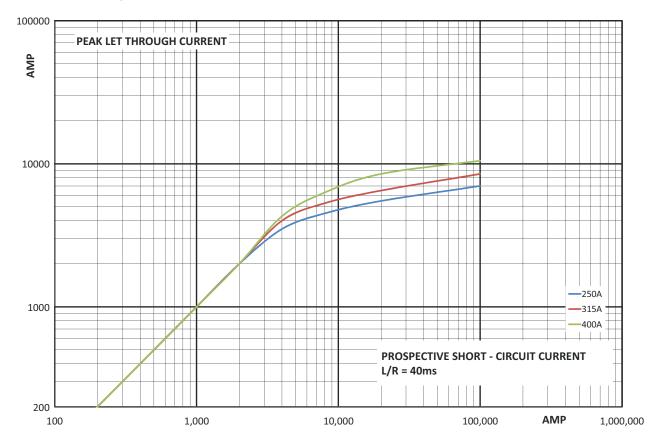
170E - Sizes 1*, 1, 2 and 3, Square body fuse links, 750 V d.c. (IEC), 63 A to 500 A

Time-current curve - Size 2, 250 A to 400 A



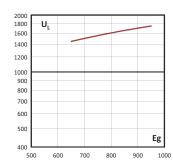
170E - Sizes 1*, 1, 2 and 3, Square body fuse links, 750 V d.c. (IEC), 63 A to 500 A

Cut-off curve - Size 2, 250 A to 400 A



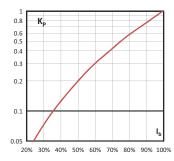
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



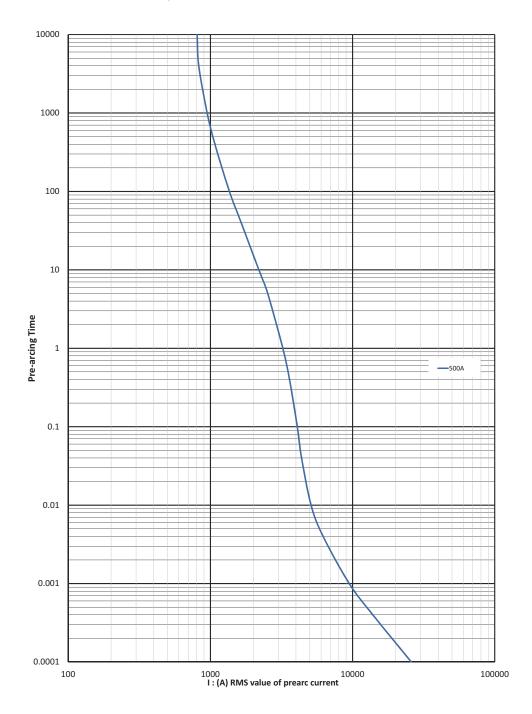
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



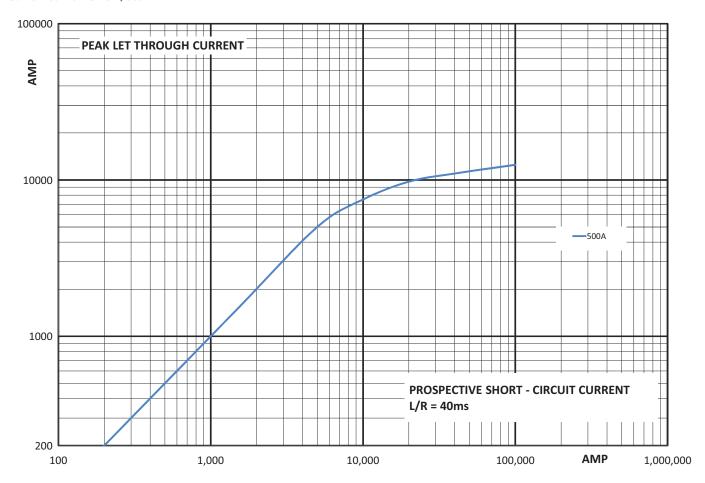
170E - Sizes 1*, 1, 2 and 3, Square body fuse links, 750 V d.c. (IEC), 63 A to 500 A

Time-current curve - Size 3, 500 A



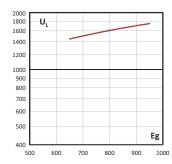
170E - Sizes 1*, 1, 2 and 3, Square body fuse links, 750 V d.c. (IEC), 63 A to 500 A

Cut-off curve - Size 2, 500 A



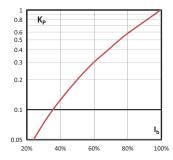
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



170M7217 - Size 4, Square body fuse links, 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.

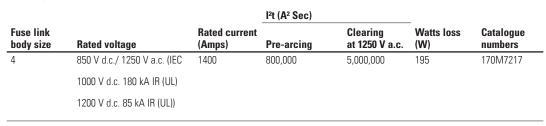
80 kA at 850 V d.c., L/R 8ms

· Operating class: aR

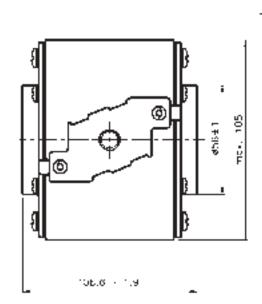
Standards / Agency information

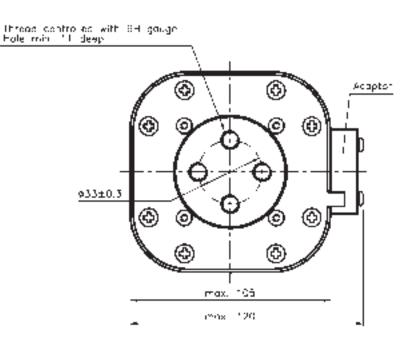
Consult Eaton bulehighspeedtechnical@eaton.com

Catalogue numbers



Dimensions (mm)

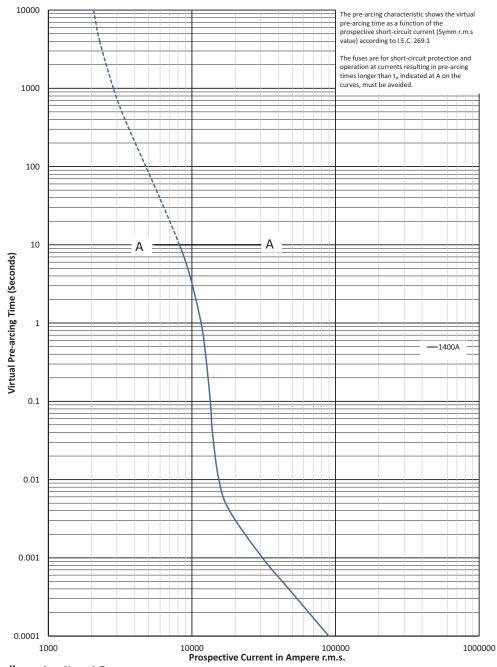




Data sheet: 170K6640

170M7217 - Size 4, Square body fuse links, 1250 V a.c. / 850 V d.c. (IEC), 1400 A

Time-current curve - 1400 A

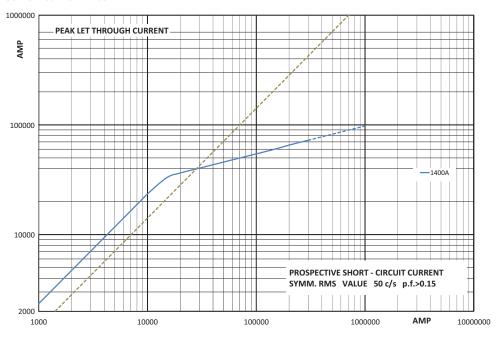


 $K_b = 1 N = 1.7$

Data sheet: 170K6640

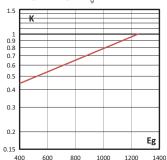
170M7217 - Size 4, Square body fuse links, 1250 V a.c. / 850 V d.c. (IEC), 1400 A

Cut-off curve - 1400 A



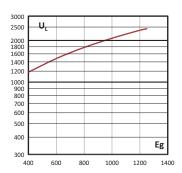
Total clearing I2t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



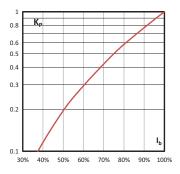
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



Data sheet: 170K6640

170M - Size 1*, Square body fuse links, 1200 V d.c. (IEC), 20 A 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 A to 215 A

• Tested breaking capacity: 100 kA at 1200 V d.c., L/R 15ms

• Operating class: aR

Standards / Agency information

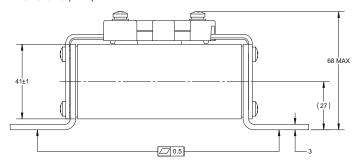
IEC 60269

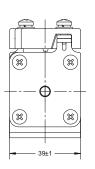
Catalogue numbers

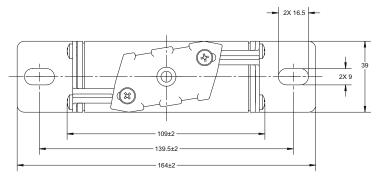


| | | | Rated current (Amps) | I²t (A² Sec) | | Watts loss (W) | | |
|-----------------|------------------------|----------------------|-------------------------|--------------|----------------------------|--------------------|----|----------------------|
| | Fuse link body size | | | Pre-arcing | Clearing at 1200 V d.c. | 0.8 I _n | In | Catalogue numbers |
| | | | 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 |
| 0:!!-++ | 1* | 1200 \ / //FC\ | 63 | 1310 | 3990 | 5 | 9 | 170M2105 |
| Single slot tag | Ι" | 1* 1200 V d.c. (IEC) | 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)



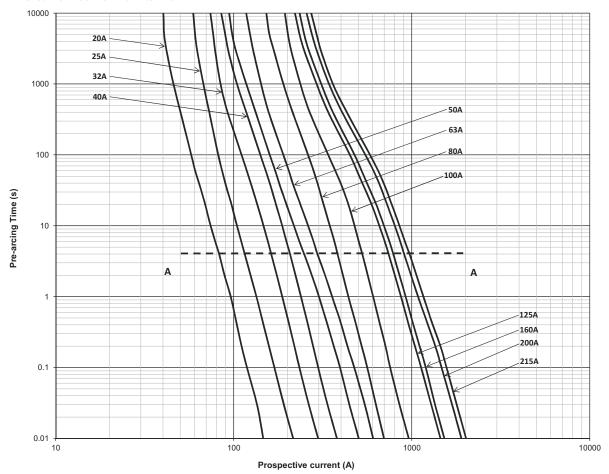






170M - Size 1*, Square body fuse links, 1200 V d.c. (IEC), 20 A to 215A

Time-current curve - 20 A to 215 A



170F - Size 2, Square body fuse links, 1200 V d.c. (IEC), 160 A to 420 A

Specifications

Description

Traction bolted tags square body high speed fuse link for superior protection in DC traction applications up to $1200\,\mathrm{V}$ d.c.

Technical data

- · Rated voltage:
 - 1200 V d.c. (IEC)
 - 1050 V d.c. (UL)
- Rated current: 160 A to 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

Contact Eaton bulehighspeedtechnical@eaton.com

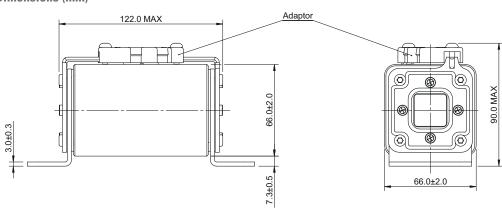


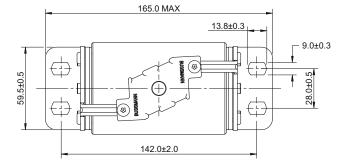
Catalogue numbers

| 24 | / A 2 | Se | ۱ما |
|-----|--------------|------|-----|
| 141 | IA | • DE | :C1 |

| | | | | () | | | | |
|----------------|------------------------|-------------------|----------------------|-------------------------|-------------------------|-------------------|----------------------|--|
| Fuse link type | Fuse link body size | Rated voltage | Rated current (Amps) | 1000 V d.c. L/R 15ms | 1000 V d.c. L/R 45ms | Watts loss (W) | Catalogue numbers | |
| | | | 160 | 12,000 | 20,000 | 75 | 170F8230 | |
| | | | 200 | 20,000 | 35,000 | 85 | 170F8231 | |
| Double | 2 | 1200 V d.c. (IEC) | 250 | 43,000 | 75,000 | 94 | 170F8232 | |
| slotted tag | Z | 1050 V d.c. (UL) | 315 | 87,000 | 150,000 | 104 | 170F8233 | |
| | | | 400 | 180,000 | 310,000 | 120 | 170F8234 | |
| | | | 420 | 215,000 | 375,000 | 122 | 170F8235 | |

Dimensions (mm)

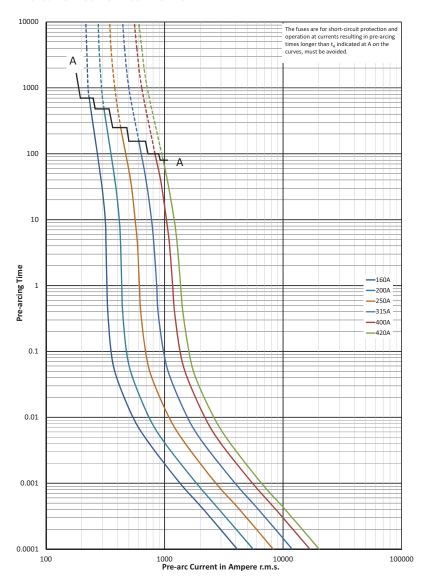






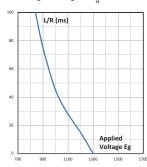
170F - Size 2, Square body fuse links, 1200 V d.c. (IEC), 160 A to 420 A

Time-current curve - 160 A to 420 A



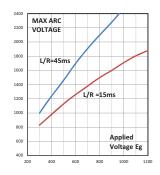
Total clearing I²t

The total clearing l^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing l^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{α} , (RMS).



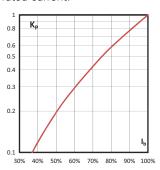
Arc voltage

This curve gives the peak arc voltage, $\rm U_L$, which may appear across the fuse during its operation as a function of the applied working voltage, $\rm E_g$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



170E - Size 1*, Square body fuse links, 2000 V d.c. (IEC), 10 A to 80 A

Specifications

Description

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

Technical data

• Rated voltage: 2000 V d.c. (IEC)

• Rated current: 10 A to 80 A

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

Operating class: gR

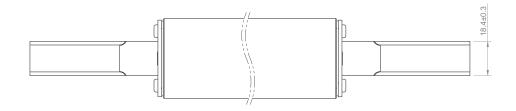
Standards / Agency information

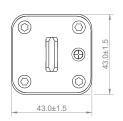
Contact Eaton bulehighspeedtechnical@eaton.com

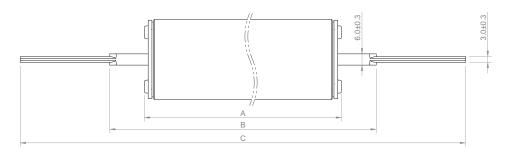
Catalogue numbers

| Fuse link type | Fuse link body size | Rated voltage | Rated current (Amps) | Watts loss (W) | Catalogue numbers |
|-------------------|------------------------|------------------|----------------------|-------------------|----------------------|
| | | | 10 | 7 | 170E3977 |
| | | | 12 | 8 | 170E3982 |
| | | | 16 | 11 | 170E3971 |
| | | | 20 | 13 | 170E3906 |
| V-:4- - +- - | 1* | 2000 V d.c.(IEC) | 25 | 17 | 170E3907 |
| Knife blade style | I" | | 32 | 22 | 170E3908 |
| | | | 40 | 27 | 170E3909 |
| | | | 50 | 34 | 170E3910 |
| | | | 63 | 43 | 170E3911 |
| | | | 80 | 50 | 170E3912 |

Dimensions (mm)



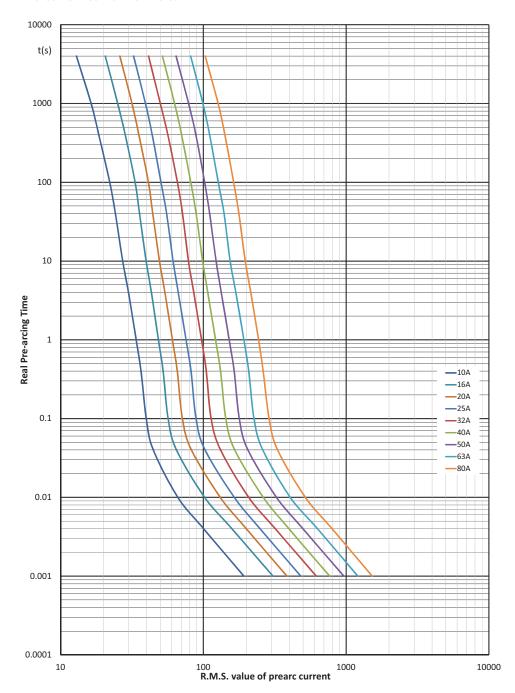




| Α | В | C |
|-----------|-------------|-------------|
| 215 ± 2.5 | 250.5 ± 3.2 | 245.5 ± 3.5 |

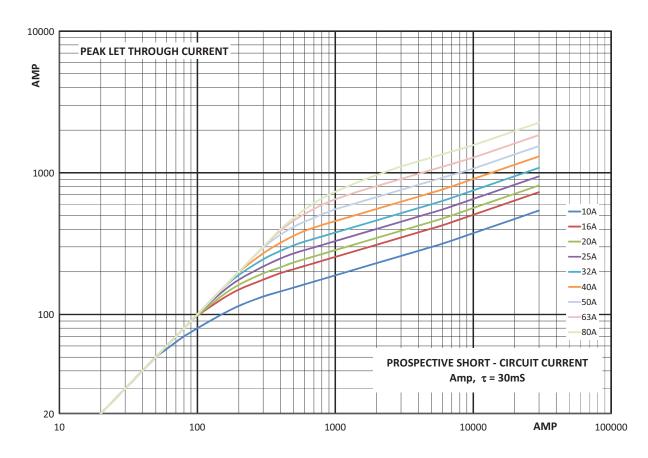
170E - Size 1*, Square body fuse links, 2000 V d.c. (IEC), 10 A to 80 A

Time-current curve - 10 A to 80 A



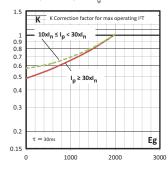
170E - Size 1*, Square body fuse links, 2000 V d.c. (IEC), 10 A to 80 A

Cut-off curve - 10 A to 80 A



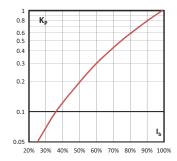
Total clearing I²t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



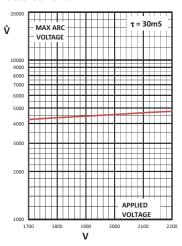
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170E - Size 1*, Square body fuse links, 2000 V d.c. (IEC), 10 A to 125 A

Specifications

Description

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

Technical data

Rated voltage: 2000 V d.c. (IEC)Rated current: 10 A to 125 A

Tested breaking capacity: 40 kA at 2000 V d.c., L/R 20ms

· Operating class: aR

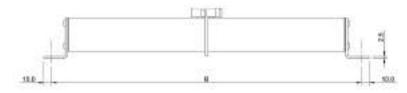
Standards / Agency information

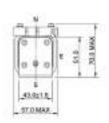
Contact Eaton bulehighspeedtechnical@eaton.com



| Fuse link type | Fuse link body size | Rated voltage | Rated current (Amps) | Watts loss (W) | Catalogue numbers |
|----------------|------------------------|-------------------|----------------------|-------------------|----------------------|
| | | | 20 | 13 | 170E3937 |
| | | | 25 | 16 | 170E3938 |
| | | | 32 | 20 | 170E3939 |
| | | | 40 | 25 | 170E3940 |
| | | | 50 | 32 | 170E3941 |
| | | | 63 | 40 | 170E3942 |
| | | 2000 V d.c. (IEC) | 80 | 51 | 170E3943 |
| | | | 100 | 64 | 170E3944 |
| Bolted | 1* | | 125 | 80 | 170E3945 |
| blade Style | İ., | | 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)





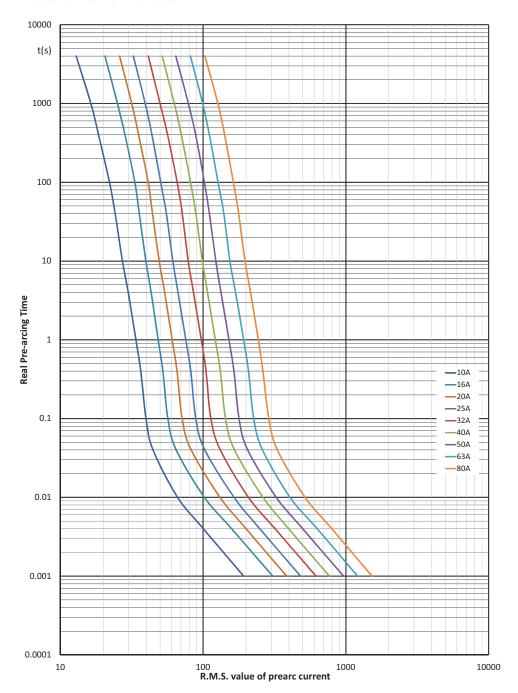


| Α | В | C |
|-----|-----|-----|
| 217 | 246 | 266 |



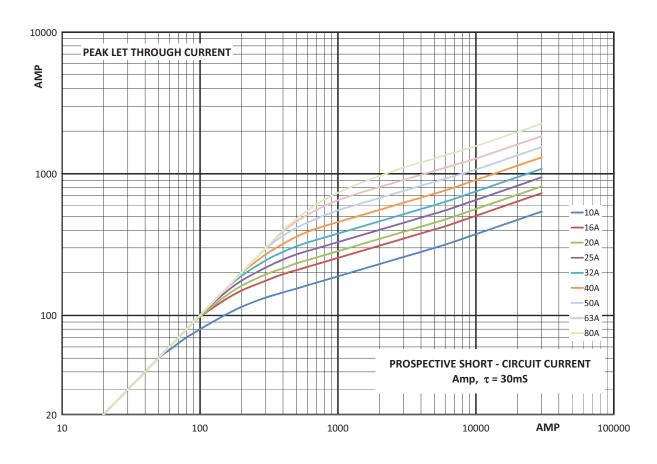
170E - Size 1*, Square body fuse links, 2000 V d.c. (IEC), 10 A to 125 A

Time-current curve - 10 A to 80 A



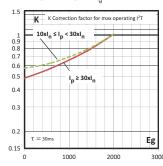
170E - Size 1*, Square body fuse links, 2000 V d.c. (IEC), 10 A to 125 A

Cut-off curve - 10 A to 80 A



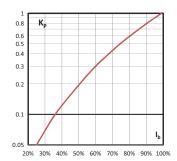
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{σ} , (RMS).



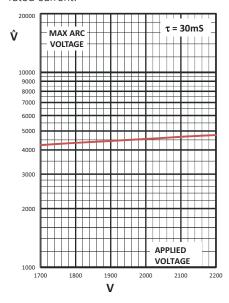
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



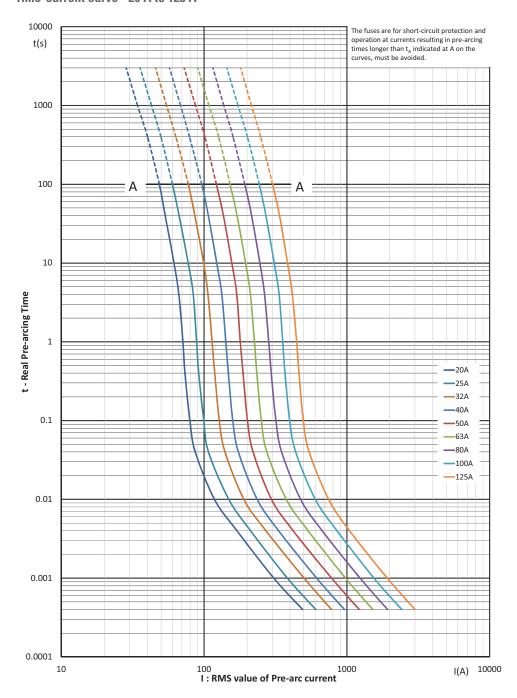
Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



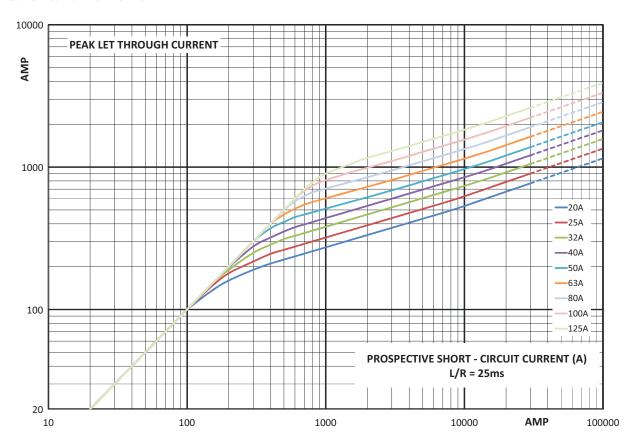
170E - Size 1*, Square body fuse links, 2000 V d.c. (IEC), 10 A to 125 A

Time-current curve - 20 A to 125 A



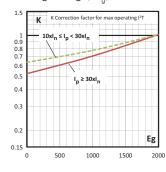
170E - Size 1*, Square body fuse links, 2000 V d.c. (IEC), 10 A to 125 A

Cut-off curve - 20 A to 125 A



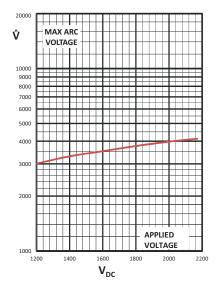
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm g}$, (RMS).



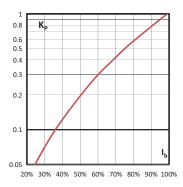
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



170M - Square body fuse links, 2000 V d.c. (IEC), 20 A 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 A to 215 A Single slot tag
 - · 160 A to 400 A Double slot tag
 - 500 A to 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 < 45ms
- · Operating class: aR

Standards / Agency information

Tested in line with IEC 60269

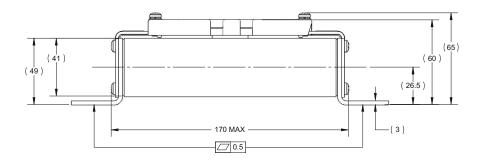


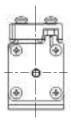
Catalogue numbers

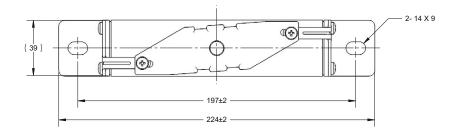
| | | | I ² t (A ² Sec) | | Watts Id | ss (W) | |
|-----------------|-------------------|----------------------------------|---------------------------------------|-------------------------|--------------------|----------------|----------------------|
| Fuse link type | Rated voltage | Rated current ted voltage (Amps) | Pre-arcing | Total at 2000 V d.c. | 0.8 I _n | I _n | Catalogue numbers |
| | | 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 |
| Single slot | 2000 V d.c. (IEC) | 63 | 1030 | 3000 | 20 | 39 | 170M2051 |
| tag | 1500 V d.c. (UL) | 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 |
| | | 160 | 7900 | 42,000 | 68 | 91 | 170M2039 |
| | | 200 | 12,300 | 66,000 | 85 | 113 | 170M2040 |
| Double slot tag | 2000 V d.c. (IEC) | 250 | 21,900 | 120,000 | 100 | 133 | 170M2041 |
| Siot tay | | 315 | 38,900 | 210,000 | 119 | 158 | 170M2042 |
| | | 400 | 65,700 | 350,000 | 148 | 176 | 170M2043 |
| Parallel double | 2000 \/ 4 2 //E0\ | 500 | 105,851 | 163,010 | 109 | 230 | 170M2044 |
| slot tag | 2000 V d.c. (IEC) | 600 | 188,179 | 289,796 | 153 | 305 | 170M2045 |

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

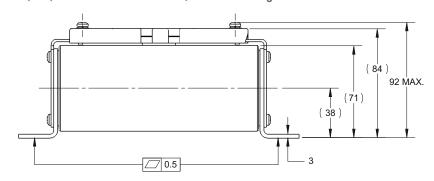
Dimensions (mm) - 170M2046 to 170M2057, Single slot tag

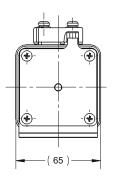


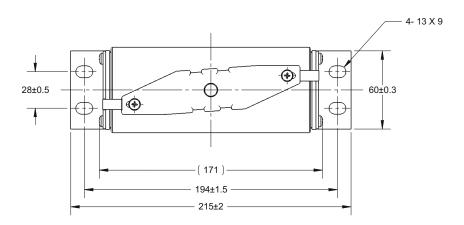




Dimensions (mm) - 170M2039 to 170M2043, Double slot tag

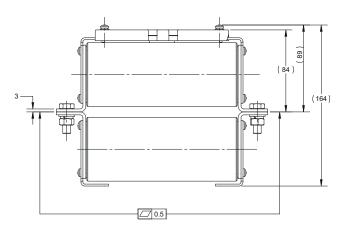


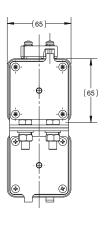


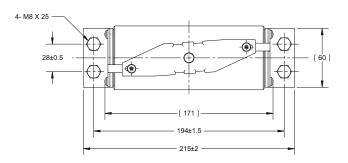


170M - Square body fuse links, 2000 V d.c. (IEC), 20 A to 600 A

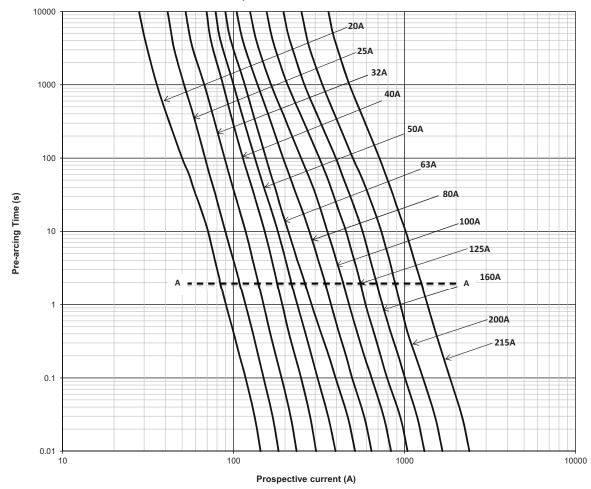
Dimensions (mm) - 170M2044 and 170M2045, Parallel, double slot tag





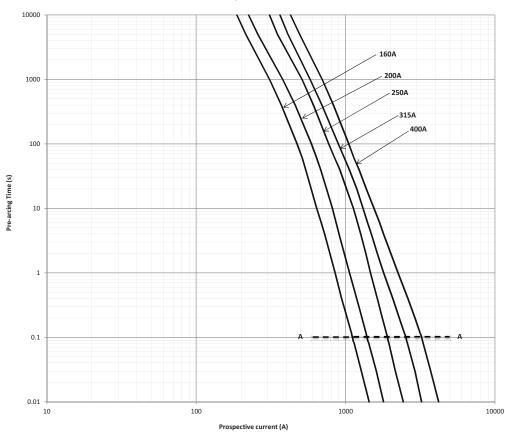


Time-current curve - 170M2046 to 170M2056, 20 A to 215 A

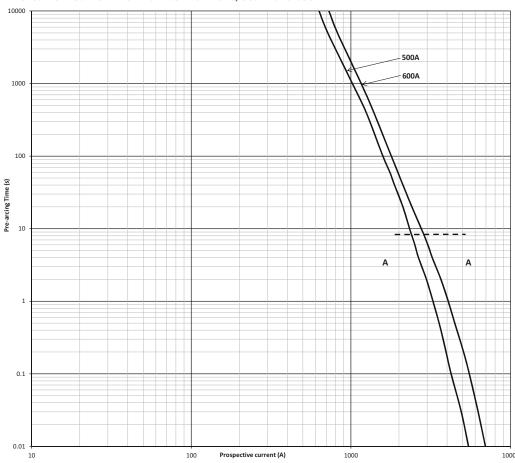


170M - Square body fuse links, 2000 V d.c. (IEC), 20 A to 600 A

Time-current curve - 170M2039 to 170M2043, 160 A to 400 A



Time-current curve - 170M2044 to 170M2045, 500 A and 600 A



170M - Size 3, Square body fuse links, 2400 V d.c. (IEC), 100 A 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 A to 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

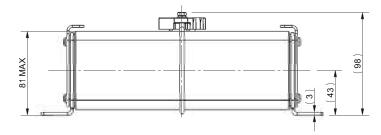
Tested in line with IEC 60269

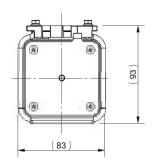


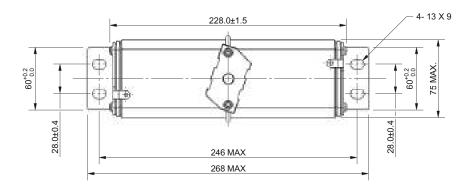
Catalogue numbers

| | | | | I ² t (A ² Sec) | | Watts los | ss (W) | |
|---------------------------------------|---------------|------------------------------------|------------|---------------------------------------|--------------------|----------------|----------------------|----------|
| Fuse link Fuse link type body size | Rated voltage | Rated current Rated voltage (Amps) | Pre-arcing | Total at 2000 V d.c. | 0.8 I _n | I _n | Catalogue numbers | |
| | | | 100 | 5468 | 15,457 | 20 | 39 | 170M2090 |
| | | | 160 | 16,427 | 46,439 | 43 | 84 | 170M2091 |
| | | | 200 | 25,667 | 72,561 | 53 | 97 | 170M2092 |
| Double slot tag | 3 | 2400 V d.c. (IEC) | 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)



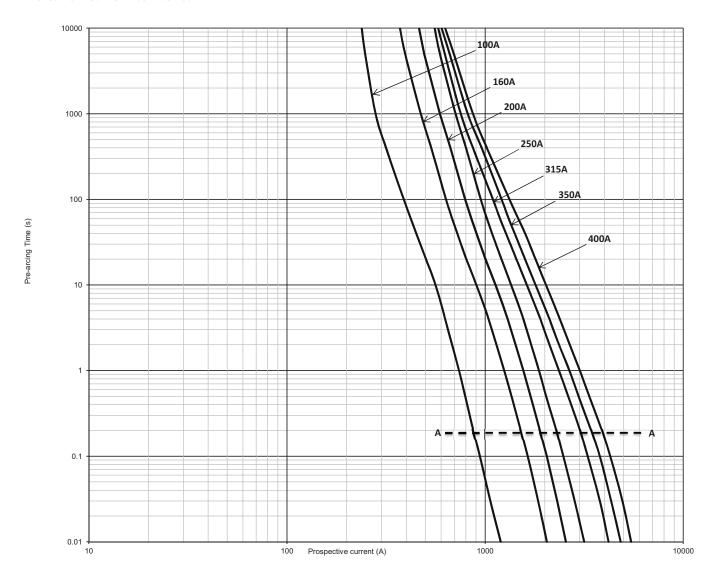




Data sheet: 720143, 5785520

170M - Size 3, Square body fuse links, 2400 V d.c. (IEC), 100 A to 400 A

Time-current curve - 100 A to 400 A



Data sheet: 720143, 5785520

170E - Size 1*, Square body fuse links, 4000 V d.c. (IEC), 20 A to 125 A

Specifications

Description

Traction bolted tags square body high speed fuse link for superior protection in DC traction applications up to $4000\,\mathrm{V}$ d.c.

Technical data

Rated voltage: 4000 V d.c. (IEC)Rated current: 20 A to 125 A

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

Operating class: aR

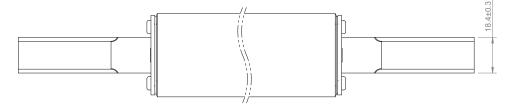
Standards / Agency information

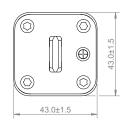
Consult Eaton bulehighspeedtechnical@eaton.com

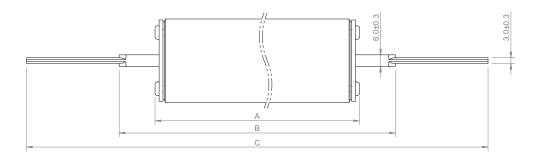


| Fuse link body size | Rated voltage | Rated current (Amps) | Watts loss (W) | Catalogue numbers |
|------------------------|-------------------|----------------------|-------------------|----------------------|
| | | 20 | 23 | 170E3924 |
| | | 25 | 28 | 170E3925 |
| | | 32 | 34 | 170E3926 |
| | | 40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

Dimensions (mm)



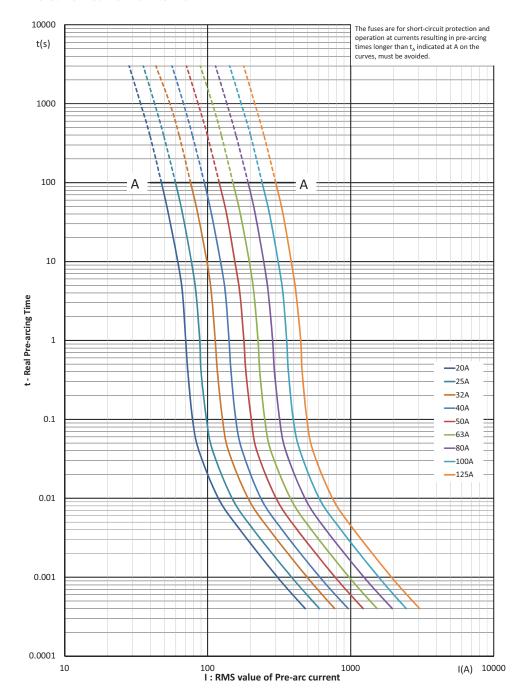






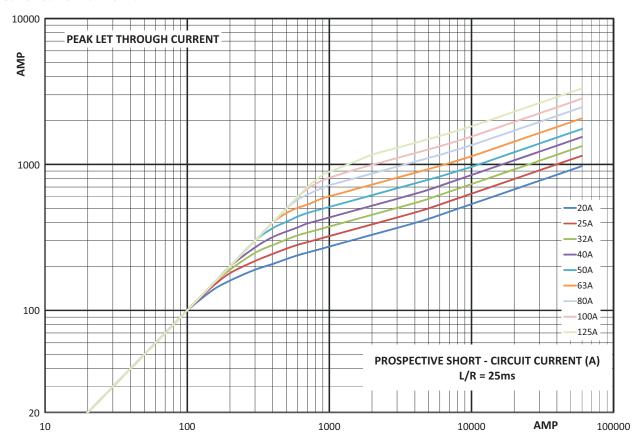
170E - Size 1*, Square body fuse links, 4000 V d.c. (IEC), 20 A to 125 A

Time-current curve - 20 A to 125 A



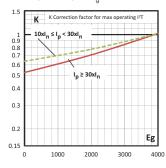
170E - Size 1*, Square body fuse links, 4000 V d.c. (IEC), 20 A to 125 A

Cut-off curve - 20 A to 125 A



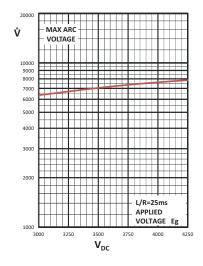
Total clearing I²t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_{σ} , (RMS).



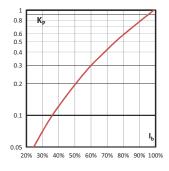
Arc voltage

This curve gives the peak arc voltage, $U_{\rm L}$, which may appear across the fuse during its operation as a function of the applied working voltage, $E_{\rm g}$, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.



170E - Sizes 1*, 2 and 2//2, Square body fuse links, 4000 V d.c. (IEC), 20 A 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 A to 500 A

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

• Operating class: aR

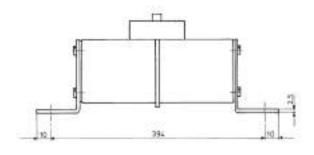
Standards / Agency information

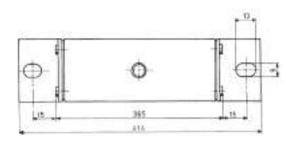
Contact Eaton bulehighspeedtechnical@eaton.com

Catalogue numbers

| Fuse link body size | Rated voltage | Rated current (Amps) | Watts loss (W) | Catalogue numbers |
|------------------------|-------------------|----------------------|-------------------|----------------------|
| | | 20 | 23 | 170E3914 |
| | | 25 | 28 | 170E3915 |
| | | 32 | 34 | 170E3916 |
| | | 40 | 45 | 170E3917 |
| 1* | 4000 V d.c. (IEC) | 50 | 57 | 170E3918 |
| | | 63 | 72 | 170E3919 |
| | | 80 | 91 | 170E3984 |
| | | 100 | 114 | 170E3933 |
| | | 125 | 143 | 170E3922 |
| | | 160 | 182 | 170E8882 |
| 2 | 4000 V d.c. (IEC) | 200 | 228 | 170E8883 |
| | | 250 | 285 | 170E8884 |
| | | 315 | 360 | 170E8885 |
| | | 350 | 400 | 170E8886 |
| 2//2 | 4000 V d.c. (IEC) | 400 | 455 | 170E8887 |
| | | 450 | 515 | 170E8888 |
| | | 500 | 600 | 170E8889 |

Dimensions (mm) - Size 1*



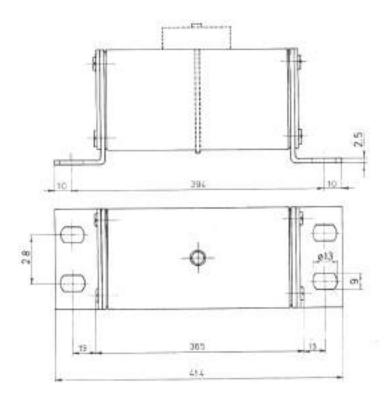


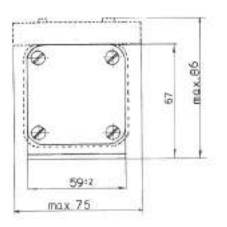
Data sheets: 1* 170K6600, 2 and 2//2 170K6604



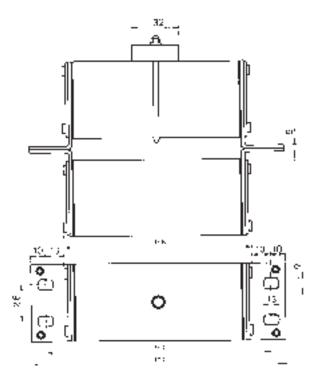
170E - Sizes 1*, 2 and 2//2, Square body fuse links, 4000 V d.c. (IEC), 20 A to 450 A

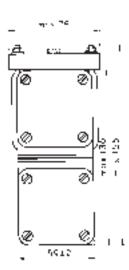
Dimensions (mm) - Size 2





Dimensions (mm) - Size 2/2

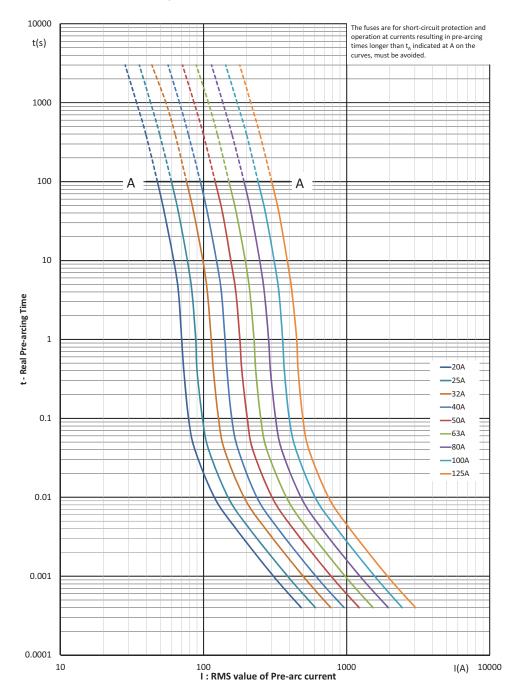




Data sheets: 1* 170K6600, 2 and 2//2 170K6604

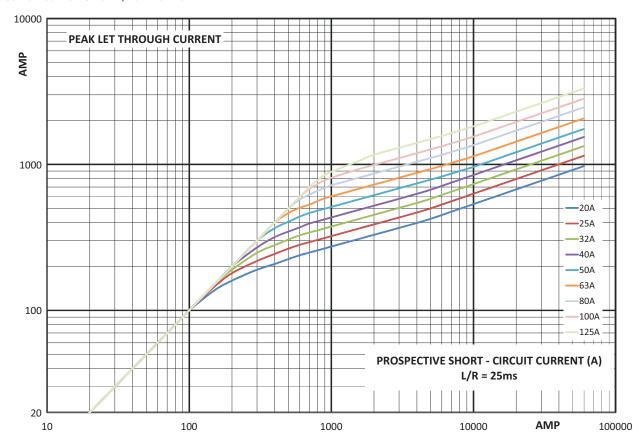
170E - Sizes 1*, 2 and 2//2, Square body fuse links, 4000 V d.c. (IEC), 20 A to 450 A

Time-current curve - Size 1*, 20 A to 125 A



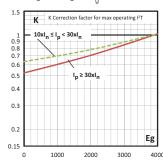
170E - Sizes 1*, 2 and 2//2, Square body fuse links, 4000 V d.c. (IEC), 20 A to 450 A

Cut-off curve - Size 1*, 20 A to 125 A



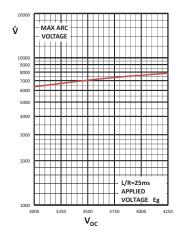
Total clearing I2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm g}$, (RMS).



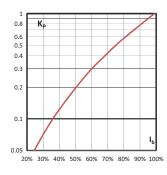
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_q , (RMS) at a power factor of 15 percent.



Watts losses

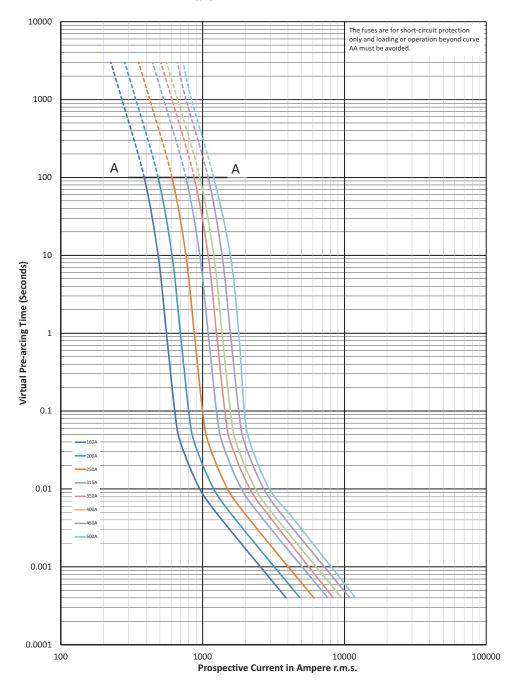
Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



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

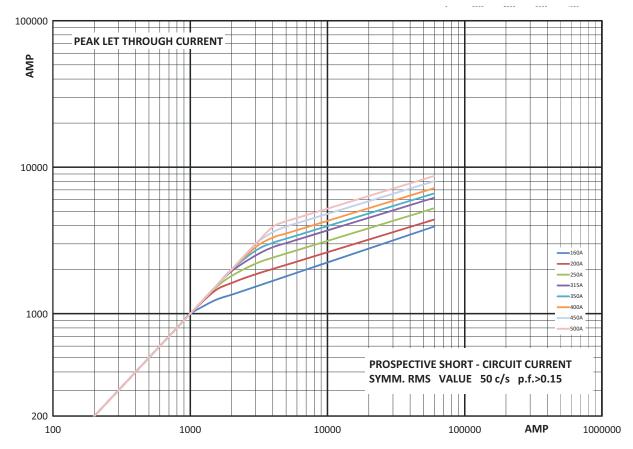
170E - Sizes 1*, 2 and 2//2, Square body fuse links, 4000 V d.c. (IEC), 20 A to 450 A

Time-current curve - Sizes 2 and 2//2, 160 A to 500 A



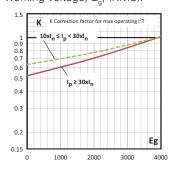
170E - Sizes 1*, 2 and 2//2, Square body fuse links, 4000 V d.c. (IEC), 20 A to 450 A

Cut-off curve - Sizes 2 and 2/2, 160 A to 500 A



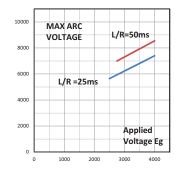
Total clearing I²t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, $E_{\rm g}$, (RMS).



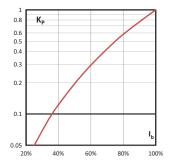
Arc voltage

This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, $K_{_{\rm p}}$, is given as a function of the RMS load current, $I_{_{\rm b}}$, in percent of the rated current.



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

FWK - 20 x 127 and 25 x 146 mm, Ferrule fuse links, 750 V d.c. (IEC), 5 A 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 A to 30 A (20 x 127 mm)

- 35 A to 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

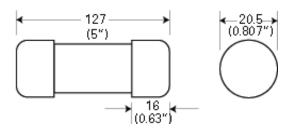
Tested in line with IEC 60269



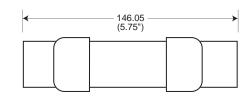


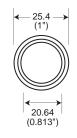
| | | 11(11 000) | | | | |
|--|------------------|-------------------------|------------|---------------------------|-------------------|----------------------|
| Fuse link size | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 750 V d.c. | Watts loss (W) | Catalogue numbers |
| | | 5 | 8.5 | 16 | 6.7 | FWK-5A20F |
| | | 8 | 50 | 100 | 8.8 | FWK-8A20F |
| | | 10 | 95 | 200 | 8.5 | FWK-10A20F |
| 20 x 127 mm (¹³ / ₁₈ " x 5") | 750 V d.c. (IEC) | 15 | 100 | 240 | 5 | FWK-15A20F |
| (/10 X O / | | 20 | 125 | 315 | 7.8 | FWK-20A20F |
| | | 25 | 400 | 1100 | 6.5 | FWK-25A20F |
| | | 30 | 800 | 2600 | 6.5 | FWK-30A20F |
| | | 35 | 1300 | 4300 | 6 | FWK-35A25F |
| 25 x 146 mm (1" x 5¾") | 750 \ / / /50\ | 40 | 1600 | 5300 | 6.8 | FWK-40A25F |
| | 750 V d.c. (IEC) | 50 | 3100 | 12000 | 7.3 | FWK-50A25F |
| | | 60 | 5900 | 24000 | 7.7 | FWK-60A25F |

Dimensions mm (in) - 5 A to 30 A



Dimensions mm (in) - 35 A to 60 A





Data sheets: 720039, 5785454

LRC750 - Ferrule fuse links, 750 V d.c. (IEC), 30 A 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 A to 50 A

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

· Operating class: gR

Standards / Agency information

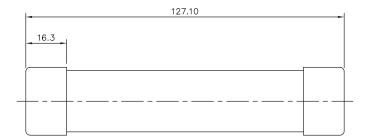
Tested in line with IEC 60269

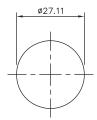


Catalogue numbers

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

Dimensions (mm)





FWL and FWS - 20 x 127 mm, Ferrule fuse links, 1200-1400-2000 V a.c. (IEC), 1000 V d.c. (IEC), 2 A 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 A to 8 A) 1400 V a.c. / 1000 V d.c. (IEC 10 A to 15 A)

• Rated current: 2 A to 30 A

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

· Operating class: gG

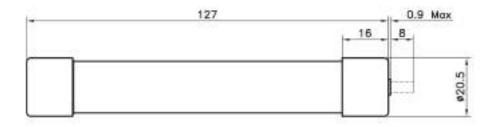
Standards / Agency information

Consult Eaton bulehighspeedtechnical@eaton.com

Catalogue numbers

| | Rated voltage | Rated current (Amps) | I²t (A² Sec) | | | Catalogue numbers | |
|---|--------------------------------------|-------------------------|--------------|----------------------------|-------------------|----------------------|----------------|
| Fuse link size | | | Pre-arcing | Clearing at 1000 V d.c. | Watts loss (W) | Without indicator | With indicator |
| | 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 |
| 20 x 127 mm | | 8 | 64 | 192 | 7.6 | FWS-8A20F | FWS-8A20FI |
| (13/ ₁₆ " x 5) | 1400 V a.c./ | 10 | 118 | 277 | 3.0 | FWS-10A20F | FWS-10A20FI |
| | 1000 V d.c. | 12 | 170 | 380 | 3.4 | FWS-12A20F | FWS-12A20FI |
| | (IEC) | 15 | 209 | 500 | 5.0 | FWS-15A20F | FWS-15A20FI |
| 20 x 127 mm (¹³ / ₁₆ " x 5) | 1200 V a.c./ | 20 | 675 | 1550 | 5.9 | FWL-20A20F | FWL-20A20FI |
| | 1000 V d.c. | 25 | 1200 | 2760 | 6.5 | FWL-25A20F | FWL-25A20FI |
| | (IEC) | 30 | 1850 | 4300 | 7.5 | FWL-30A20F | FWL-30A20FI |

Dimensions (mm)





Data sheets: 720040, 5785455

KC36 - Round body fuse links, 750 V d.c. (IEC), 5 A 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 A to 60 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

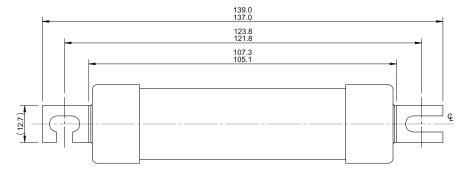


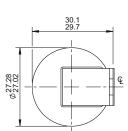
Catalogue numbers

I2t (A2 Sec)

| | | | 1 ² t (A ² 5ec) | | | | |
|-------------------|------------------|----------------------|---------------------------------------|---------------------------|-------------------|----------------------|--|
| Fuse link type | Rated voltage | Rated current (Amps) | Pre-arcing | Clearing at 750 V d.c. | Watts loss (W) | Catalogue numbers | |
| | | 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 | |
| KC36 | 750 V d.c. (IEC) | 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)





RC - Round body fuse links, 750 V d.c. (IEC), 200 A 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 A to 400 A
Breaking capacity: Consult Eaton bulehighspeedtechnical@eaton.com

· Operating class: gG

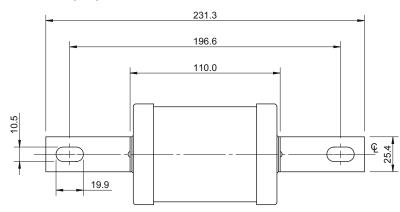
Standards / Agency information

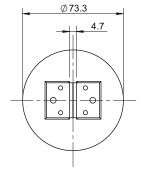
Consult Eaton bulehighspeedtechnical@eaton.com

Catalogue numbers

| Rated voltage | Rated current (Amps) | I²t (A²s) | Watts loss (W) | Catalogue numbers |
|------------------|----------------------|-----------|-------------------|----------------------|
| | 200 | 85,000 | 31 | 200RC |
| | 250 | 225,000 | 33 | 250RC |
| 750 V d.c. (IEC) | 300 | 340,000 | 37 | 300RC |
| | 350 | 530,000 | 41 | 350RC |
| | 400 | 765,000 | 48 | 400RC |

Dimensions (mm)







NBC - Round body fuse links, 1500 V d.c. (IEC), 25 A 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 A to 200 A

Breaking capacity: Consult Eaton for interrupting rating and time

constant capabilities.

Operating class: gR

Standards / Agency information

Consult Eaton bulehighspeedtechnical@eaton.com

Catalogue numbers

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

 $Consult\ Eaton\ bullehigh speed technical @eaton.com. for\ dimensions\ drawings:$

25 and 60 Amps: BU-NBC-25-60 70 and 100 Amps: BU-NBC-70-100

150 and 200 Amps: BU-NBC-150 and 200



PVM - 10 x 38 mm, 600 V d.c. (UL), 4 A 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 A to 30 A

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

Compatible fuse holder

CHPV

Standards / Agency information

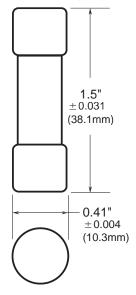
UL Listed 2579, Guide JFGA, File E335324, CSA Component Certified C22.2

Catalogue numbers

| | Rated current | Power Lo | oss (W) | _ Catalogue | |
|-----------------|---------------|----------------------|--|-------------|--|
| Rated voltage | (Amps) | 0.8 x I _n | 1 x I _n numbers PVM-4 PVM-5 PVM-6 PVM-7 PVM-8 PVM-9 1.9 PVM-10 PVM-12 1.7 PVM-15 PVM-20 PVM-25 | • | |
| | 4 | | | PVM-4 | |
| | 5 | | | PVM-5 | |
| | 6 | | | PVM-6 | |
| | 7 | | | PVM-7 | |
| | 8 | | | PVM-8 | |
| 600 V d.c. (UL) | 9 | | | PVM-9 | |
| 000 V u.C. (UL) | 10 | 1 | 1.9 | PVM-10 | |
| | 12 | | | PVM-12 | |
| | 15 | 1 | 1.7 | PVM-15 | |
| | 20 | | | PVM-20 | |
| | 25 | | | PVM-25 | |
| | 30 | 1.6 | 2.9 | PVM-30 | |

Please contact FUSETECH@eaton.com for further information

Dimensions in (mm)

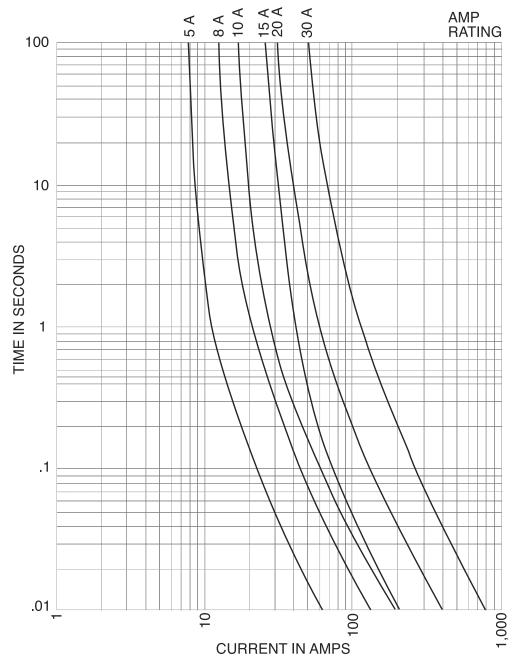




Photovoltaic fuse links, fuse bases and holders

PVM - 10 x 38 mm, 600 V d.c. (UL), 4 A to 30 A





Please contact FUSETECH@eaton.com for further information

PV-A10 - 10 x 38 mm, 1000 V d.c. (IEC/UL), 1 A 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 over rated currents associated with faulted PV (reverse rated current, multi-array fault) string arrays.

Technical data

• Rated voltage: 1000 V d.c. (IEC/UL)

Rated current: 1 A to 20 ABreaking capacity: 50 kA

· Operating class: gPV and UL PV fuse links

Compatible fuse holder

CHPV

Standards / Agency information

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

Catalogue numbers - Cylindrical and bolt fixing fuse links

| | | I ² t (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 | In | Cylindrical | Bolt fixing |
| | 1 | 0.2 | 0.4 | 0.8 | 1.5 | PV-1A10F | PV-1A10-T |
| | 2 | 1.2 | 4 | 0.6 | 1.0 | PV-2A10F | PV-2A10-T |
| | 2.5 | 3 | 9 | 0.6 | 1.0 | PV-2-5A10F | PV-2-5A10-T |
| | 3 | 4 | 11 | 0.8 | 1.3 | PV-3A10F | PV-3A10-T |
| | 3.5 | 6.6 | 18 | 0.9 | 1.4 | PV-3-5A10F | PV-3-5A10-T |
| | 4 | 9.5 | 26 | 1.0 | 1.5 | PV-4A10F | PV-4A10-T |
| 1000 \ / - / - / / / | 5 | 19 | 50 | 1.0 | 1.6 | PV-5A10F | PV-5A10-T |
| 1000 V d.c. (UL/IEC) | 6 | 30 | 90 | 1.1 | 1.8 | PV-6A10F | PV-6A10-T |
| | 8 | 3 | 32 | 1.2 | 2.1 | PV-8A10F | PV-8A10-T |
| | 10 | 7 | 70 | 1.2 | 2.3 | PV-10A10F | PV-10A10-T |
| | 12 | 12 | 120 | 1.5 | 2.7 | PV-12A10F | PV-12A10-T |
| | 15 | 15 | 160 | 1.7 | 2.9 | PV-15A10F | PV-15A10-T |
| | 16 | 19 | 200 | 1.8 | 3 | PV-16A10F | PV-16A10-T |
| | 20 | 34 | 350 | 2.1 | 3.6 | PV-20A10F | PV-20A10-T |

Catalogue numbers - PCB fixing fuse links

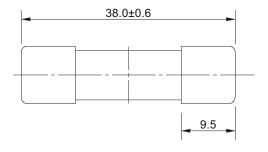
| | | I ² t (A ² Sec) | | Watts loss (W) | | Catalogue nui | Catalogue numbers | | |
|-----------------------|----------------------|---------------------------------------|-------------------------|--------------------|-----|-----------------------|--------------------------|----------------------------------|--|
| Rated voltage | Rated current (Amps) | Pre-arcing | Total at 1000 V d.c. | 0.8 I _n | In | PCB fixing single pin | PCB fixing double pin | PCB fixing double pin silver cap | |
| | 1 | 0.2 | 0.4 | 0.8 | 1.5 | PV-1A10-1P | PV-1A10-2P | PV-1A10-2P-S | |
| | 2 | 1.2 | 4 | 0.6 | 1.0 | PV-2A10-1P | PV-2A10-2P | PV-2A10-2P-S | |
| | 2.5 | 3 | 9 | 0.6 | 1.0 | PV-2-5A10-1P | PV-2-5A10-2P | PV-2-5A10-2P-S | |
| | 3 | 4 | 11 | 0.8 | 1.3 | PV-3A10-1P | PV-3A10-2P | PV-3A10-2P-S | |
| | 3.5 | 6.6 | 18 | 0.9 | 1.4 | PV-3-5A10-1P | PV-3-5A10-2P | PV-3-5A10-2P-S | |
| | 4 | 9.5 | 26 | 1.0 | 1.5 | PV-4A10-1P | PV-4A10-2P | PV-4A10-2P-S | |
| 1000 \/ d a /UI /IFC\ | 5 | 19 | 50 | 1.0 | 1.6 | PV-5A10-1P | PV-5A10-2P | PV-5A10-2P-S | |
| 1000 V d.c. (UL/IEC) | 6 | 30 | 90 | 1.1 | 1.8 | PV-6A10-1P | PV-6A10-2P | PV-6A10-2P-S | |
| | 8 | 3 | 32 | 1.2 | 2.1 | PV-8A10-1P | PV-8A10-2P | PV-8A10-2P-S | |
| | 10 | 7 | 70 | 1.2 | 2.3 | PV-10A10-1P | PV-10A10-2P | PV-10A10-2P-S | |
| | 12 | 12 | 120 | 1.5 | 2.7 | PV-12A10-1P | PV-12A10-2P | PV-12A10-2P-S | |
| | 15 | 15 | 160 | 1.7 | 2.9 | PV-15A10-1P | PV-15A10-2P | PV-15A10-2P-S | |
| | 16 | 19 | 200 | 1.8 | 3 | PV-16A10-1P | PV-16A10-2P | PV-16A10-2P-S | |
| | 20 | 34 | 350 | 2.1 | 3.6 | PV-20A10-1P | PV-20A10-2P | PV-20A10-2P-S | |

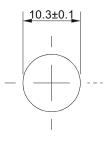


Photovoltaic fuse links, fuse bases and holders

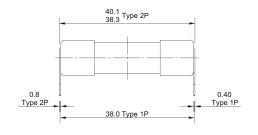
PV-A10 - 10 x 38 mm, 1000 V d.c. (IEC/UL), 1 A to 20 A

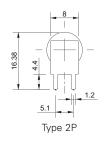
Dimensions (mm) - PV-**A10F, Cylindrical

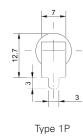




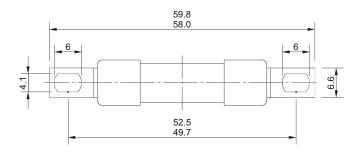
Dimensions (mm) - PV-**A10-xP, PCB fixing







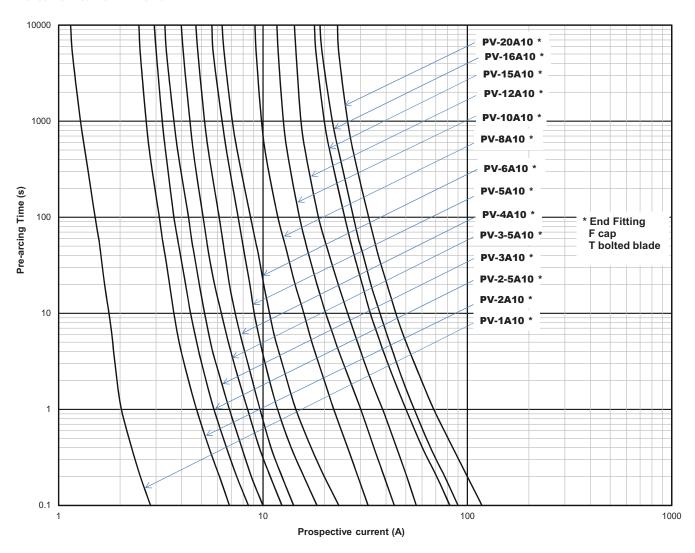
Dimensions (mm) - PV-**A10-T, Bolt fixing



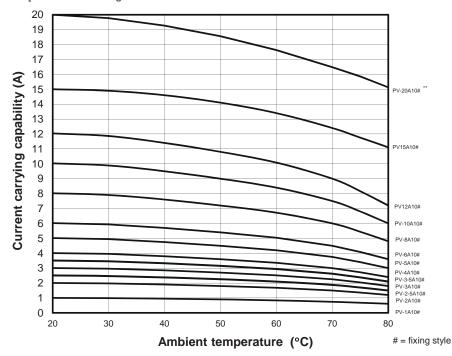


PV-A10 - 10 x 38 mm, 1000 V d.c. (IEC/UL), 1 A to 20 A

Time-current curve - 1 A to 20 A



Temperature deratings



CHPV - Modular fuse holders, 1000 V d.c. (IEC/UL), 32 A (IEC), 30 A (UL

Specifications

Description

Compact DIN-Rail mounting fuse holders specifically designed for 10 \times 38 mm photovoltaic fuse links.

Catalogue numbers

- CHPV1U 1-pole modular fuse holder
- CHPV2U 2-pole modular fuse holder
- CHPV1IU 1-pole modular fuse holder with neon indicator
- CHPV2IU 2-pole modular fuse holder with neon indicator

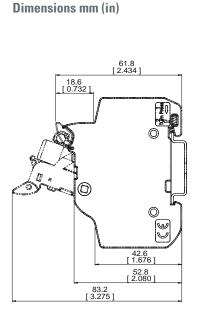


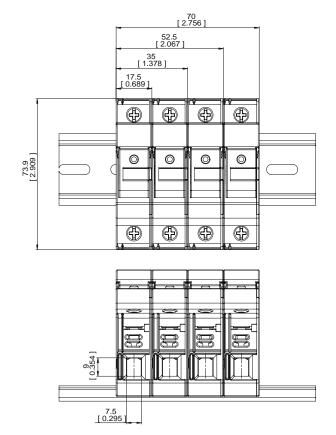
Technical data

| IEC | UL | | | | Rated breaking | | | |
|------------------|---------------|---------------|---------------|--|-----------------------|--|--|--|
| Rated voltage | Rated current | Rated voltage | Rated current | Terminal rating | withstand capactiy | Compatible Bussmann series fuse links | | |
| 1000 V d.c. | 32 A | 1000 V d.c. | 30 A | IEC 1 to 25 mm ² 70°C PVC Copper cable (solid stranded or fine stranded) Spade lug Comb bus bar | 33 kA rms sym | Solar PV range: PVM, PV-A10F | | |

Standards / Agency information

| IEC | UL | CSA | CCC | CE |
|-------------|--|-------------------------------------|------------|---------|
| IEC 60269-1 | UL 4248-1 UL4248-19 UL file E14853 | C22.2 No 4248.1 C22.2 No 4248.19 | GB 13539.1 | DCB 272 |





PV-A10F85L - 10 x 85 mm, 1500 V d.c. (IEC/UL), 2.25 A to 30 A

Specifications

Description

A range of fuse links in a 10 \times 85 mm package specifically designed for the protection and isolation of photovoltaic strings.

Technical data

Rated voltage: 1500 V d.c.
Rated current: 2.25 A to 30 A
Breaking capacity: 30 kA 1 ms

Operating class: gPV

Compatible fuse holder

CHPV15L85

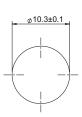
Standards / Agency information

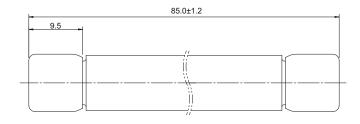
IEC 60269-6, UL 248-19, RoHS compliant



| | | I ² t (A ² Sec) | | Watts los | ss (W) | |
|----------------------|----------------------|---------------------------------------|-------------------------|--------------------|--------|----------------------|
| Rated voltage | Rated current (Amps) | Pre-arcing | Total at 1500 V d.c. | 0.8 I _n | In | Catalogue numbers |
| | 2.25 | 3 | 10 | 1.4 | 2.4 | PV-2-25A10F85L |
| | 2.5 | 4 | 10 | 1.3 | 2.1 | PV-2.5A10F85L |
| | 3 | 7 | 20 | 1.3 | 2.2 | PV-3A10F85L |
| | 3.5 | 10 | 20 | 1.6 | 2.6 | PV-3.5A10F85L |
| | 4 | 15 | 30 | 1.7 | 2.8 | PV-4A10F85L |
| 1500 V d.c. (IEC/UL) | 5 | 33 | 60 | 1.7 | 2.8 | PV-5A10F85L |
| 1500 V U.C. (IEG/OL) | 12 | 19 | 240 | 2.1 | 3.5 | PV-12A10F85L |
| | 15 | 42 | 300 | 2.2 | 3.6 | PV-15A10F85L |
| | 16 | 48 | 350 | 2.1 | 3.5 | PV-16A10F85L |
| | 20 | 108 | 800 | 2.7 | 4.5 | PV-20A10F85L |
| | 25 | 190 | 1400 | 3.4 | 5.6 | PV-25A10F85L |
| | 30 | 485 | 3500 | 4 | 6.6 | PV-30A10F85L |

Dimensions (mm)

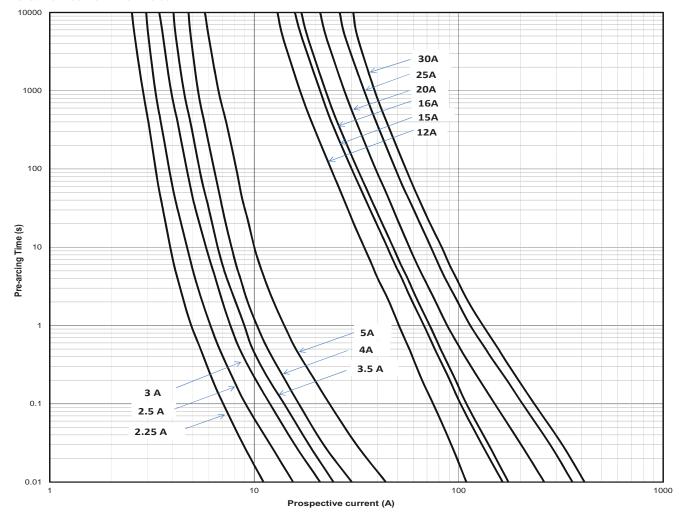






PV-A10F85L - 10 x 85 mm, 1500 V d.c. (IEC/UL), 2.25 A to 30 A

Time-current curve - 2.25 A to 30 A



CHPV15H85 -10 x 85 mm fuse holder, 1500 V d.c.. 32 A (IEC/UL)

Specifications

Description

Eaton's Bussmann series 10 \times 85 mm fuse holders are suitable for use with 10 \times 85 mm and 14 \times 85 mm cylindrical gPV fuse links. The unique design offers high degree of safety. There is no possibility of any accidental contact with live parts during replacement of the fuse links. When the fuse carrier is extracted, a spring loaded cover moves out covering the live parts hence protecting against accidental damage.

Catalogue symbol

CHPV15H85

Compatible fuse links

- 10 x 85 mm fuse links PV-A10F85L
- 14 x 85 mm fuse links PV-A14LF

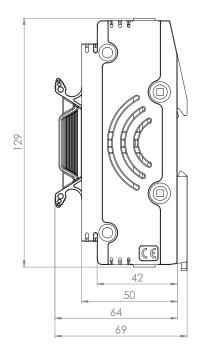
Technical data

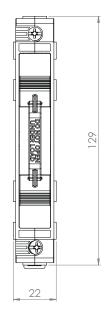
Rated voltage: 1500 V d.c.
Rated current: 32 A (IEC/UL)
Breaking capacity: 50 kA

Standards / Agency information

- IIEC 60269-1
- IEC 60269-6
- UL 4248-1 Edition 1 (File number 348242)
- UL 4248-19 Edition 1

Dimensions (mm)







Data sheet: TD135010

PV-14F - 14 x 51 mm, 1000 and 1100 V d.c. (IEC/UL), 15 A 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 A and 20 A)

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

Rated current: 15 A to 32 ABreaking capacity: 30 kA

• Operating class: gPV and UL PV fuse links

Compatible fuse holder

• CHPV14

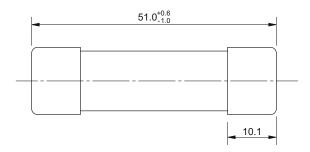
Standards / Agency information

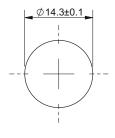
IIEC 60269-6, UL Recognised 2579 (File number E335324), RoHS compliant. Pending: CCC

Catalogue numbers

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

Dimensions (mm)

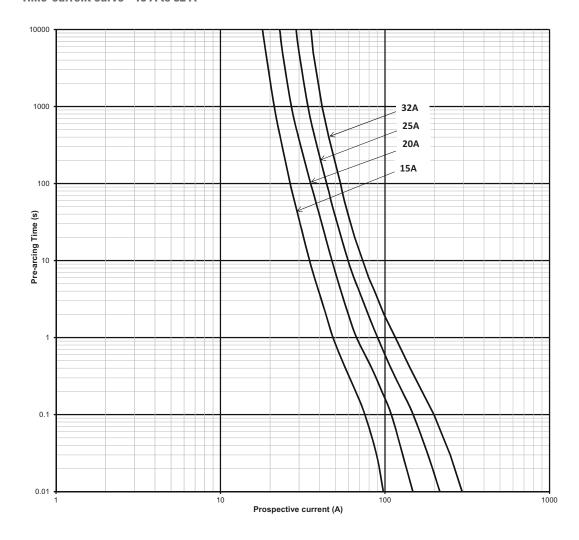






PV-14F - 14 x 51 mm, 1000 and 1100 V d.c. (IEC/UL), 15 A to 32 A

Time-current curve - 15 A to 32 A



CHPV14 - 14 x 51 mm, Modular fuse holders, 1500 V d.c., 50 A

Specifications

Description

Compact DIN-Rail mounting fuse holders specifically designed for 14 x 51 mm photovoltaic fuse links.

Catalogue numbers

- CHPV141U 1-pole without indicator
- CHPV142 2-pole without indicator
- CHPV141IU 1-pole with indicator
- CHPV142IU 2-pole with indicator

Standards / Agency information

IEC 60269-1 and 2, UL Listed file number E348242



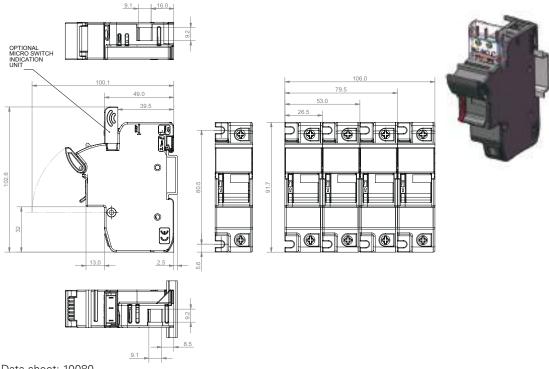
Technical data

| Rated voltage | Rated current | _ | | Rated breaking | Compatible |
|------------------|---------------|---|---|-----------------------|-------------------------------|
| IEC and UL | IEC and UL | Agency markings | Terminal rating | withstand capactiy | Bussmann series fuse links |
| 1500 V d.c. | 32 A | IEC 60269-1 and 2 UL Listed file number E348242 | Cable size: 1.5-50 mm ² Recommended torque setting: 3.5 Nm Maximum torque setting: 3.5Nm Mounting 35 mm DIN-Rail or 2 x M4 panel mounting screws | 10 kA d.c. | PV-A14F |

Accessories

| Catalogue numbers | Description | Unit packing |
|----------------------|---|--------------|
| JV-L | Multi-pole connector kit. One kit will gang up to 4-poles together | 12 |
| CH14-CTP | IP20 Protection accessory, provides IP20 protection to terminals with 10mm ² or less cable | 12 |

Dimensions (mm)



PV-14L - 14 x 65 mm, 1300-1500 V d.c. (IEC and UL), 2.25 A to 32 A

Specifications

Description

A range of fuse links in a 14 \times 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, 2.25 A to 20 A)
 1300 V d.c. (IEC and UL, 25 A and 32 A)

Rated current: 2.25 A to 32 ABreaking capacity: 10 kA

Operating class: gPV and UL PV fuse links

Compatible fuse holder for PV-A14LF10F

CHPV15L85

Standards / Agency information

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



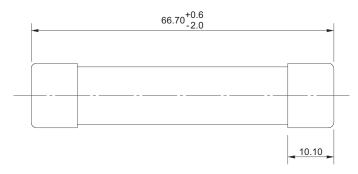
Catalogue numbers

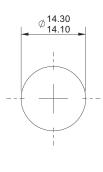
| | | I²t (A² Sec) | | Watts lo | ss (W) | Catalogue numbers | | |
|-------------------------|----------------------|--------------|---------------------------|--------------------|--------|----------------------|-----------------------|----------------------------------|
| Rated voltage | Rated current (Amps) | Pre-arcing | Total at rated voltage | 0.8 I _n | In | Cylindrical | Cylindrical with tags | Cylindrical with 10mm fixings |
| | 2.25 | 4 | 8 | 1.4 | 2.3 | PV-2.25A14LF | N/A | PV-2.25A14LF10F |
| | 2.5 | 5 | 10 | 1.5 | 2.5 | PV-2.5A14LF | PV-2.5A14L-T | PV-2.5A14LF10F |
| | 3 | 8 | 14 | 1.7 | 2.8 | PV-3A14LF | PV-3A14L-T | PV-3A14LF10F |
| 1500 V d.c. (IEC/UL) | 3.5 | 12 | 23 | 1.8 | 3.0 | N/A | N/A | PV-3.5A14LF10F |
| 1120/02/ | 4 | 18 | 34 | 2 | 3.3 | PV-4A14LF | PV-4A14L-T | PV-4A14LF10F |
| | 15 | 16 | 190 | 2.9 | 5.1 | PV-15A14LF | PV-15A14L-T | PV-15A14LF10F |
| | 20 | 34 | 400 | 3.8 | 6.9 | PV-20A14LF | PV-20A14L-T | PV-20A14LF10F |
| 1300 V d.c. | 25 | 65 | 550 | 4.1 | 7.5 | PV-25A14LF | PV-25A14L-T | PV-25A14LF10F |
| (IEC/UL) | 32 | 105 | 900 | 5.7 | 10.4 | PV-32A14LF | PV-32A14L-T | PV-32A14LF10F |

Data sheet: 720139, 5785579

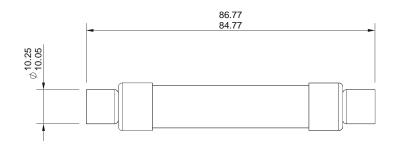
PV-14L - 14 x 65 mm, 1300-1500 V d.c. (IEC and UL), 2.25 A to 32 A

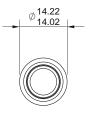
Dimensions (mm) - PV-*A14LF, Cylindrical



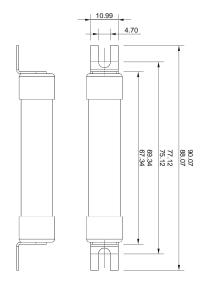


Dimensions (mm) - PV-*A14LF10F, Cylindrical with 10 mm Fixings





Dimensions (mm) - PV-*A14L-T, Cylindrical with tags

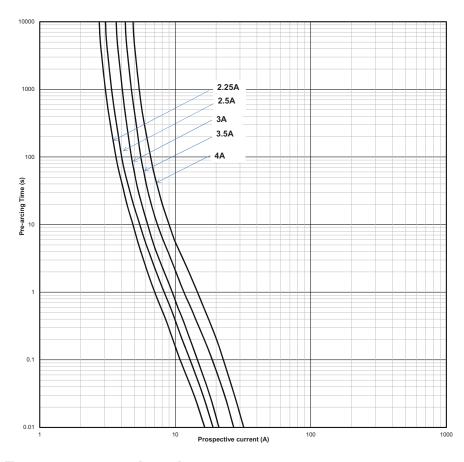




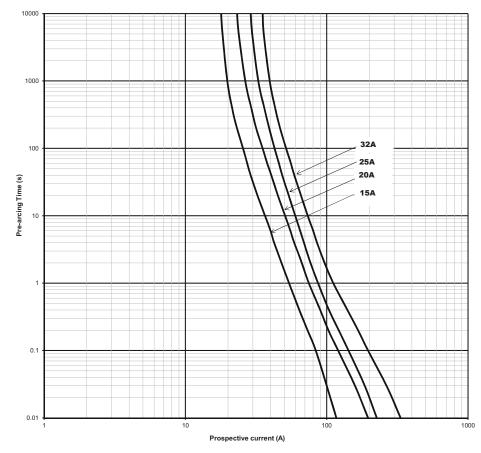
Data sheet: 720139, 5785579

PV-14L - 14 x 65 mm, 1300-1500 V d.c. (IEC and UL), 2.25 A to 32 A

Time-current curve - 2.25 A to 4 A



Time-current curve - 3.5 A to 32 A



Data sheet: 720139, 5785579

NH 170M - 800 V a.c. (IEC/UL), 32 A to 400 A

Specifications

Description

Eaton's Bussmann series NH size 800 V a.c. fuse links are specifically designed to meet the needs of branch circuit and transformer protection in photovoltaic inverter systems. The fuse links are capable of interrupting low overcurrents associated with faulted PV systems (reverse current, multi-array fault).

Technical data

Rated voltage: 800 V a.c.
Rated current: 32 A to 400 A
Breaking capacity: 65 kA
Operating class: gR

Compatible fuse base

SD-D-PV see details page 352

Microswitches, for use with bladed version

• 170H0236

• 170H0238

Standards / Agency information

UL 248-13 (file number E125085), IEC 60269-4 (see details below)

Catalogue numbers

| | | | I²t (A² Sec) | | Watts loss (W) | Catalogue numbers | |
|------------------------|---------------|----------------------|--------------|------------------------|-------------------|----------------------|-------------------------------|
| Fuse link body size | Rated voltage | Rated current (Amps) | Pre-arcing | Total at 800 V a.c. | I _n | Bladed with lugs | Blade with bolt holes no lugs |
| | | 32 | 80 | 2000 | 8 | 170M7350 | |
| | | 40 | 185 | 3000 | 9 | 170M7351 | |
| | | 50 | 400 | 6000 | 11 | 170M7352 | |
| | | 63 | 470 | 7000 | 12 | 170M7353* | 170M7353-B* |
| NH1 | 800 V a.c. | 80 | 640 | 9000 | 15 | 170M7354 | 170M7354-B |
| | | 100 | 1300 | 17000 | 16 | 170M7355 | 170M7355-B |
| | | 125 | 2600 | 34000 | 17 | 170M7356* | 170M7356-B* |
| | | 160 | 5200 | 68000 | 27 | 170M7357* | 170M7357-B* |
| | | 200 | 10200 | 140000 | 25 | 170M7358* | 170M7358-B* |
| | | 160 | 4600 | 36800 | 28 | 170M7397 | 170M7397-B |
| NH2 | 800 V a.c. | 200 | 9500 | 76000 | 32 | 170M7398 | 170M7398-B |
| | | 250 | 17000 | 136000 | 38 | 170M7399 | 170M7399-B |
| | | 315 | 32000 | 230000 | 44 | 170M7400* | 170M7400-B* |
| | | 355 | 44500 | 320000 | 46 | 170M7401* | |
| NH3 | 800 V a.c. | 400 | 67500 | 480000 | 50 | 170M7402* | |
| | | 355 | 38000 | 270000 | 48 | | 170M7401-B* |
| | | 400 | 61000 | 430000 | 50 | | 170M7402-B* |

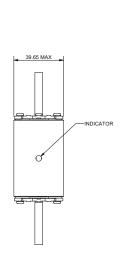
^{*}UL 248-13 and IEC 60269-4



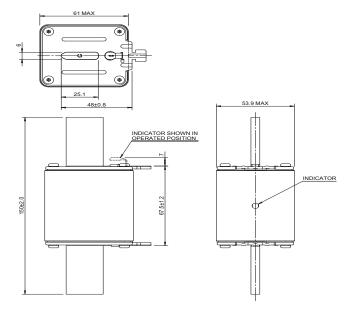


NH 170M - 800 V a.c. (IEC/UL), 32 A to 400 A

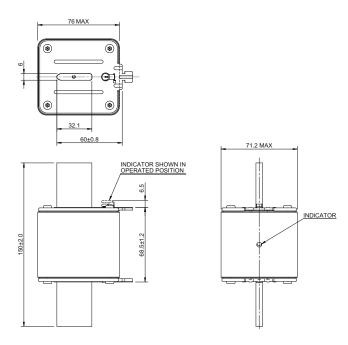
Dimensions (mm) - NH1, bladed with lugs



Dimensions (mm) - NH2, bladed with lugs



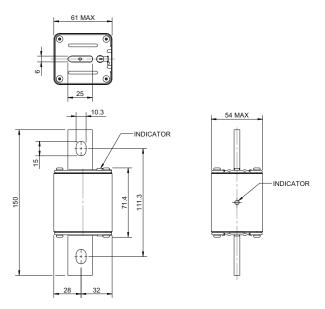
Dimensions (mm) - NH3, bladed with lugs



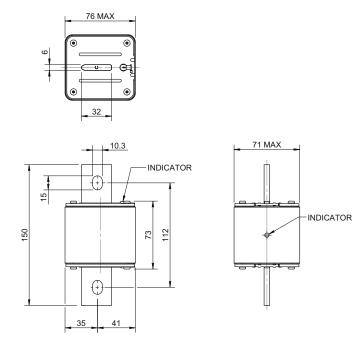
NH 170M - 800 V a.c. (IEC/UL), 32 A to 400 A

Dimensions (mm) - NH1,bolt holes no lugs

Dimensions (mm) - NH2, bolt holes no lugs

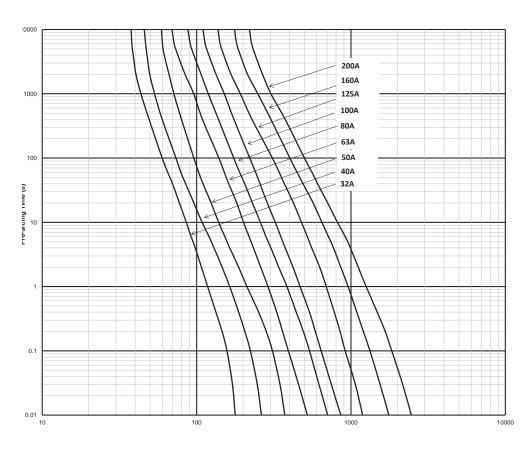


Dimensions (mm) - NH3, bolt holes no lugs

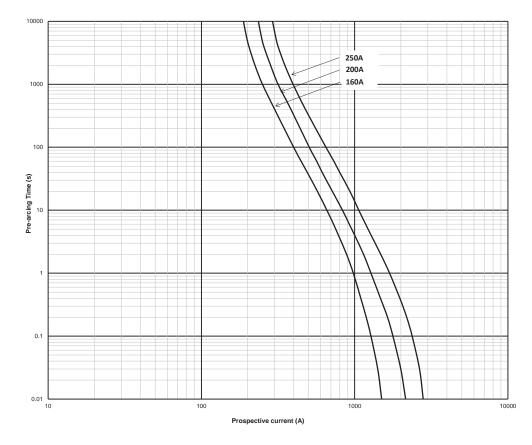


NH 170M - 800 V a.c. (IEC/UL), 32 A to 400 A

Time-current curve - Size 1, 32 A to 200 A

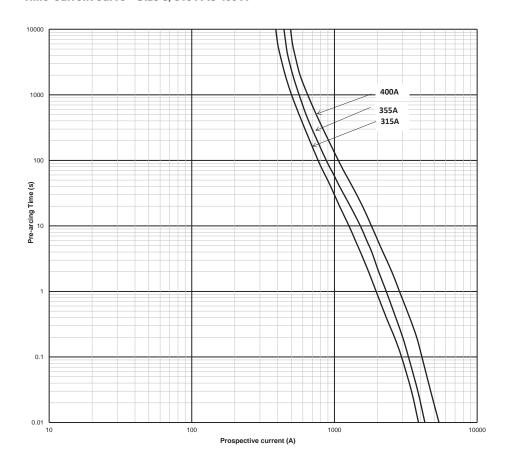


Time-current curve - Size 2, 160 A to 250 A

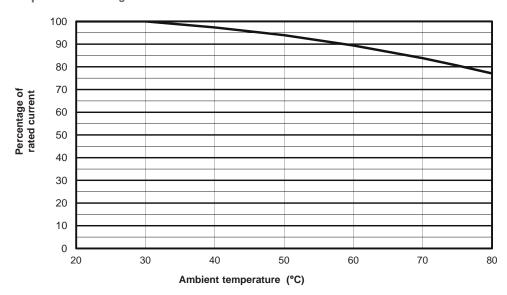


NH 170M - 800 V a.c. (IEC/UL), 32 A to 400 A

Time-current curve - Size 3, 315 A to 400 A

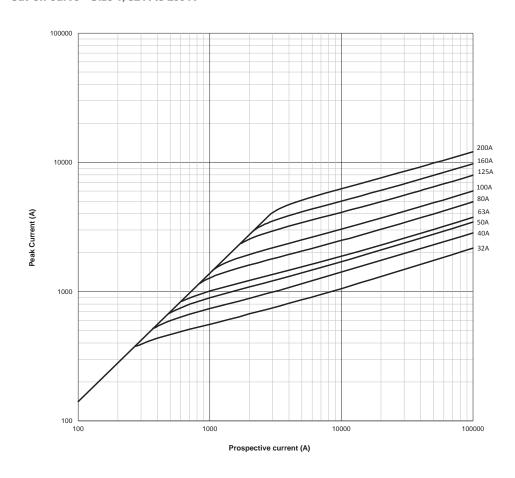


Temperature derating curve

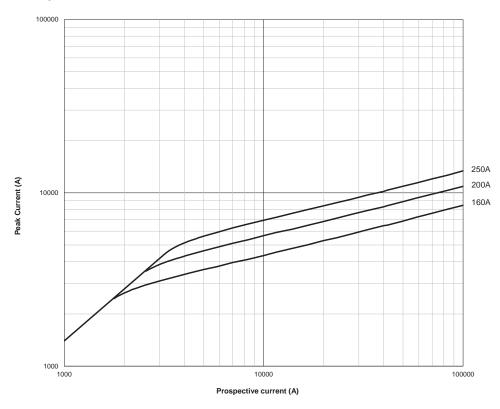


NH 170M - 800 V a.c. (IEC/UL), 32 A to 400 A

Cut-off curve - Size 1, 32 A to 200 A



Cut-off peak current curve - Size 2, 160 A to 250 A

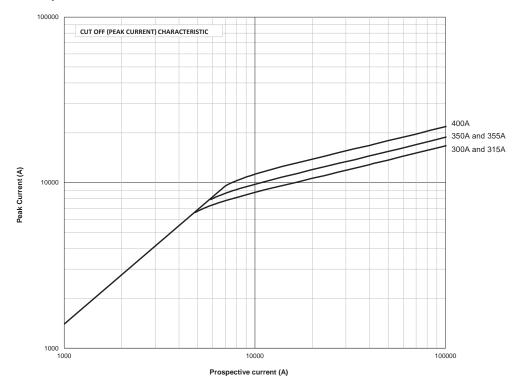


PEAK CURRENT SHOWN FOR SYMMETRICAL FAULTS ONLY

Data sheet: 10/84

NH 170M - 800 V a.c. (IEC/UL), 32 A to 400 A

Cut-off peak current curve - Sze 3, 315 A to 400 A



PEAK CURRENT SHOWN FOR SYMMETRICAL FAULTS ONLY

NH PV-ANH - 1000 V d.c. (IEC/UL), 32 A 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 A to 400 ABreaking capacity: 50 kA

· Operating class: gPV and UL PV fuse links

Compatible fuse base

SD-D-PV see page 352

Standards / Agency information

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

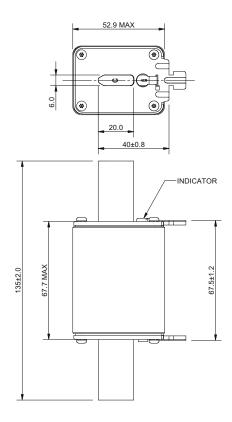


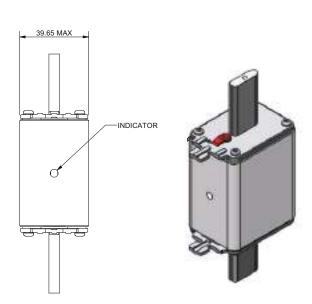
Catalogue numbers

| | | | I²t (A² Sec) | | Watts I | oss (W) | Catalogue numbers | | |
|------------------------|-------------------------|----------------------|--------------|-------------------------|--------------------|---------|--------------------------|-----------------------|--------------------------------|
| Fuse link body size | Rated voltage | Rated current (Amps) | Pre-arcing | Total at 1000 V d.c. | 0.8 I _n | In | Blade without bolt holes | Blade with bolt holes | Blade with bolt holes and lugs |
| | | 32 | 80 | 720 | 4 | 8 | PV-32ANH1 | PV-32ANH1-B | |
| | | 40 | 185 | 1670 | 5 | 9 | PV-40ANH1 | PV-40ANH1-B | _ |
| | | 50 | 400 | 3600 | 6 | 11 | PV-50ANH1 | PV-50ANH1-B | _ |
| | | 63 | 470 | 4300 | 6 | 12 | PV-63ANH1 | | _ |
| | 400014.4 | 80 | 640 | 5760 | 8 | 15 | PV-80ANH1 | - | |
| NH1 | 1000 V d.c. (IEC/UL) | 100 | 1300 | 11700 | 8 | 16 | PV-100ANH1 | - | |
| | (120/02) | 110 | 2100 | 18900 | 9 | 18.5 | PV-110ANH1 | - | |
| | | 125 | 2600 | 23400 | 9 | 17 | PV-125ANH1 | - | |
| | | 160 | 5200 | 46800 | 14 | 27 | PV-160ANH1 | - | |
| | | 175 | 8300 | 74700 | 15 | 29 | PV-175ANH1 | - | |
| | | 200 | 10200 | 82000 | 13 | 25 | PV-200ANH1 | - | |
| | | 160 | 4600 | 37000 | 14 | 28 | PV-160ANH2 | - | |
| NH2 | 1000 V d.c. (IEC/UL) | 200 | 9500 | 76000 | 16 | 32 | PV-200ANH2 | - | |
| | (120/02) | 250 | 17000 | 136000 | 19 | 38 | PV-250ANH2 | - | |
| | | 300 | 32000 | 260000 | 24 | 40 | PV-300ANH3 | - | |
| | | 315 | 32000 | 260000 | 26 | 44 | PV-315ANH3 | - | |
| NH3 | 1000 V d.c. (IEC/UL) | 350 | 44500 | 370000 | 27 | 45 | PV-350ANH3 | - | |
| | (120/02) | 355 | 44500 | 370000 | 28 | 46 | PV-355ANH3 | - | |
| | | 400 | 67500 | 550000 | 30 | 50 | PV-400ANH3 | - | |
| | | 63 | 470 | 4300 | 6 | 12 | | PV-63ANH1-B | PV-63ANH1-BL |
| | | 80 | 640 | 5760 | 8 | 15 | - | PV-80ANH1-B | PV-80ANH1-BL |
| NII I1 | 1000 V d.c. | 100 | 1300 | 11700 | 8 | 16 | - | PV-100ANH1-B | PV-100ANH1-BL |
| NH1 | (IEC/UL) | 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 |
| | | 160 | 4600 | 37000 | 14 | 28 | - | PV-160ANH2-B | PV-160ANH2-BL |
| NH2 | 1000 V d.c. (IEC/UL) | 200 | 9500 | 76000 | 16 | 32 | - | PV-200ANH2-B | PV-200ANH2-BL |
| | (120/02/ | 250 | 17000 | 136000 | 19 | 38 | - | PV-250ANH2-B | PV-250ANH2-BL |
| | | 315 | 32000 | 260000 | 26 | 44 | - | PV-315ANH3-B | PV-315ANH3-BL |
| NH3 | 1000 V d.c. (IEC/UL) | 355 | 38000 | 310000 | 29 | 48 | - | PV-355ANH3-B | PV-355ANH3-BL |
| | (.23/32/ | 400 | 61000 | 490000 | 32 | 50 | | PV-400ANH3-B | PV-400ANH3-BL |

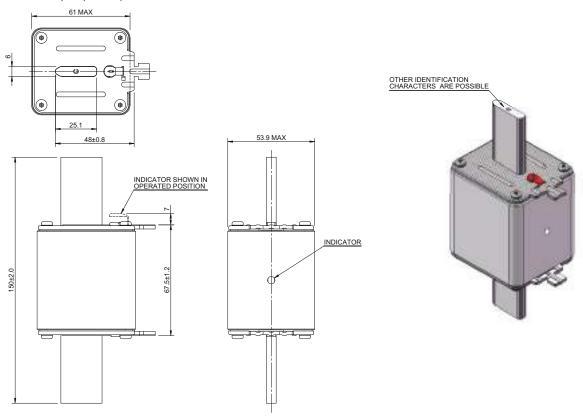
NH PV-ANH - 1000 V d.c. (IEC/UL), 32 A to 400 A

Dimensions (mm) - NH1, blade without bolt holes



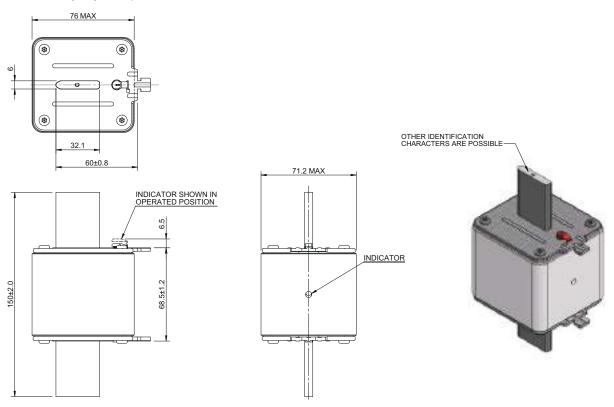


Dimensions (mm) - NH2, blade without bolt holes

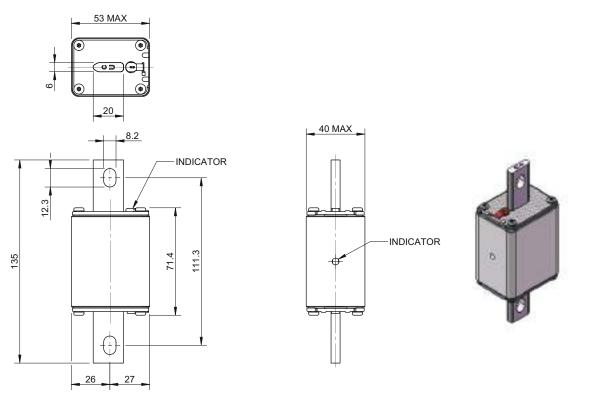


NH PV-ANH - 1000 V d.c. (IEC/UL), 32 A to 400 A

Dimensions (mm) - NH3, blade without bolt holes

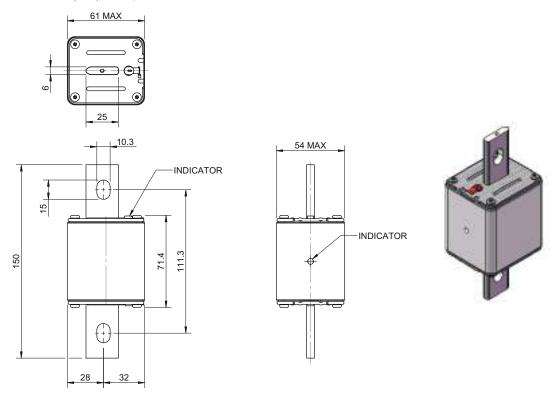


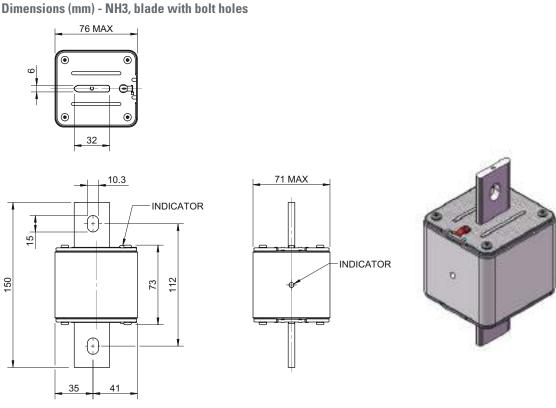
Dimensions (mm) - NH1, blade with bolt holes



NH PV-ANH - 1000 V d.c. (IEC/UL), 32 A to 400 A

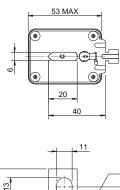
Dimensions (mm) - NH2, blade with bolt holes

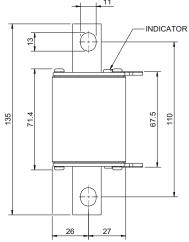


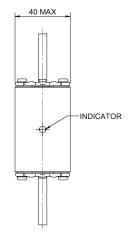


NH PV-ANH - 1000 V d.c. (IEC/UL), 32 A to 400 A

Dimensions (mm) - NH1, blade with bolt holes and lugs

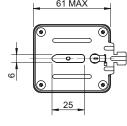


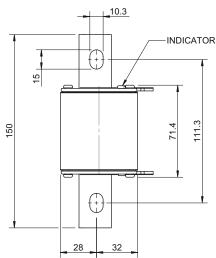


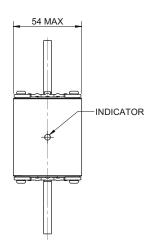




Dimensions (mm) - NH2, blade with bolt holes and lugs



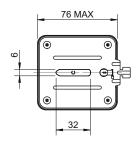


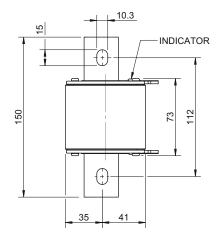


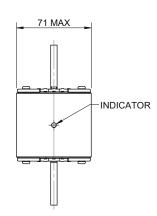


NH PV-ANH - 1000 V d.c. (IEC/UL), 32 A to 400 A

Dimensions (mm) - NH3, blade with bolt holes and lugs

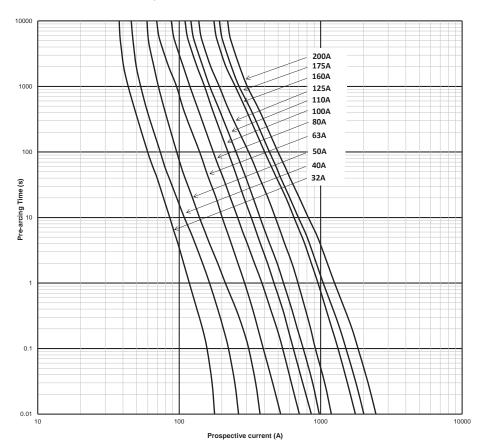






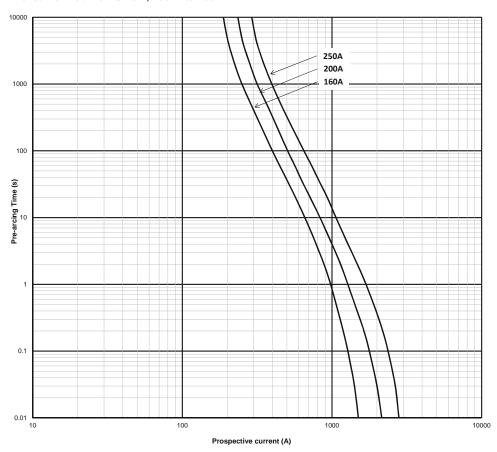


Time-current curve - Size 1, 32 A to 200 A

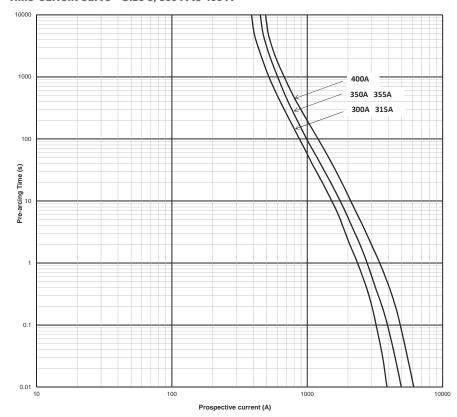


NH PV-ANH - 1000 V d.c. (IEC/UL), 32 A to 400 A

Time-current curve - Size 2, 160 A to 250 A

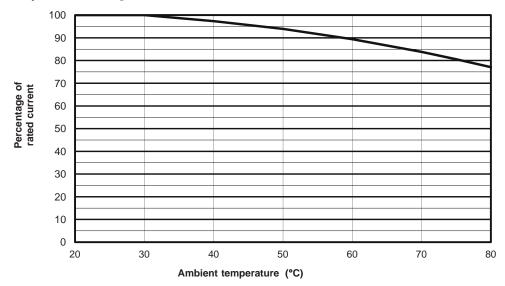


Time-current curve - Size 3, 300 A to 400 A

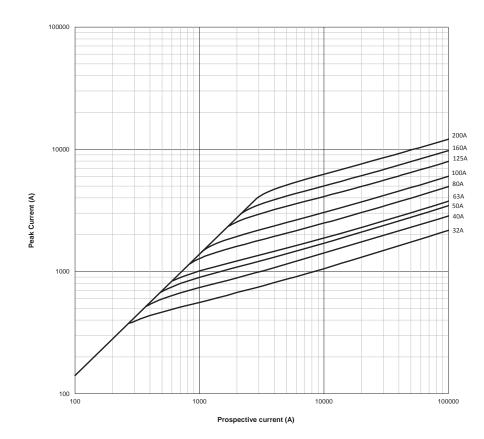


NH PV-ANH - 1000 V d.c. (IEC/UL), 32 A to 400 A

Temperature derating curve - Sizes 1 to 3

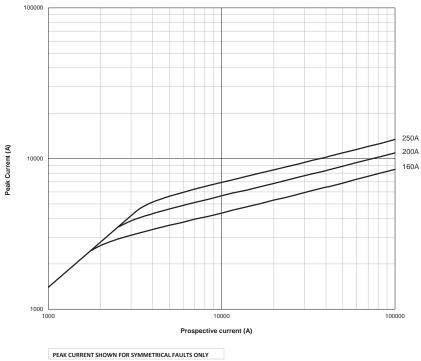


Cut-off curve - Size 1, 32 A to 200 A

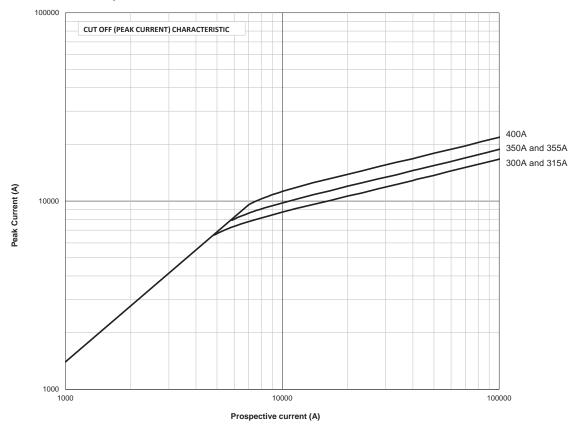


NH PV-ANH - 1000 V d.c. (IEC/UL), 32 A to 400 A

Cut-off curve - Size 2, 160 A to 250 A



Cut-off curve - Size 3, 300 A to 400 A



PEAK CURRENT SHOWN FOR SYMMETRICAL FAULTS ONLY

SD-D-PV - NH fuse bases, 1500 V d.c. (IEC), 1000 V d.c. (UL/CSA) 250 A to 630 A, sizes 1 to 3

Specifications

Description

Sizes 1 to 3 NH Fuse bases specifically designed for use with 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 sizes: 1 to 3
- Withstand: 50 kA
- Power acceptance
 - SD1: 32 W
 - SD2: 45 W
 - SD3: 60 W

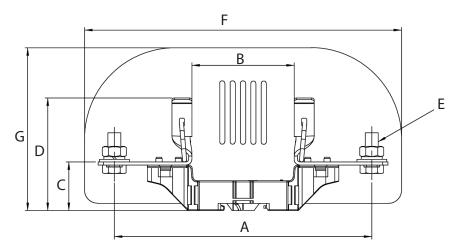
Standards / Agency information

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

Accessories:

- Microswitches 170H0236, 170H0238 and BVL50
- IP20 Finger-Safe Protection Kit TD1-IP20, TD2-IP20, TD3-IP20
- Fuse extraction handle
- Shroud kits

Dimensions (mm) - 1-pole with phase barriers

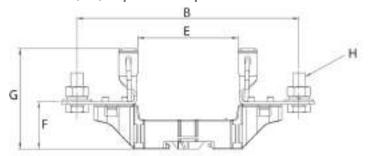


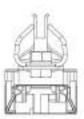
| Catalogue numbers | Poles/Type | Α | В | C | D | E | F | G |
|----------------------|------------|-----|----|------|----|--------|-----|-------|
| SD1-D-PV | 1-pole | 175 | 79 | 37 | 78 | M10x25 | 245 | 125.5 |
| SD2-D-PV | 1 pole | 199 | 79 | 37.5 | 86 | M10x25 | 245 | 125.5 |
| SD3-D-PV | 1-pole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

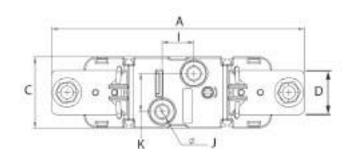


SD-D-PV - NH fuse bases, 1500 V d.c. (IEC), 1000 V d.c. (UL/CSA) 250 A to 630 A, sizes 1 to 3

Dimensions (mm) - 1-pole without phase barriers







| Catalogue numbers | Poles | Α | В | С | D | E | F | G | Н | ı | 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 | |

PV-AF - Flush end, 1000 V d.c. (IEC/UL), 160 A 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 A to 400 A

• Breaking capacity: 50 kA

· Operating class: gPV and UL PV fuse links

Standards / Agency information

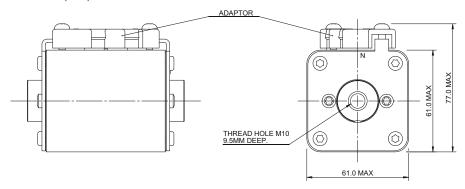
IEC 60269-6, UL 2579 (file number E335324), CSA Listed, RoHS compliant

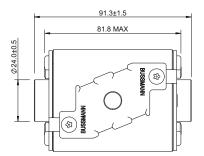


Catalogue numbers

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

Dimensions (mm) - Size 2

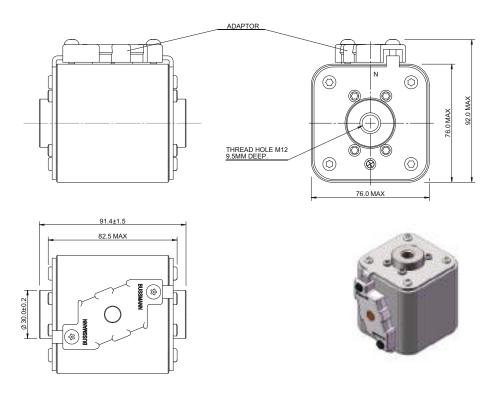




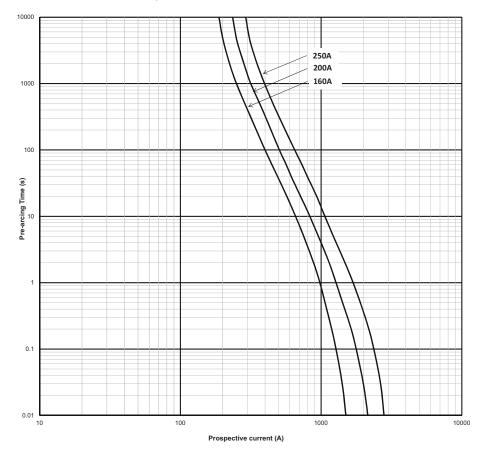


PV-AF - Flush end, 1000 V d.c. (IEC/UL), 160 A to 400 A

Dimensions (mm) - Size 3

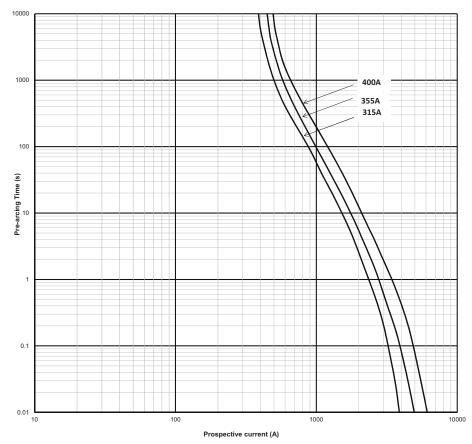


Time-current curve - Size 2, 160 A to 250 A



PV-AF - Flush end, 1000 V d.c. (IEC/UL), 160 A to 400 A

Time-current curve -Size 3, 315 A to 400 A



PV-XL - XL Style, 1000-1500 V d.c. (IEC/UL), 50 A 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)
- 1500 V d.c. (IEC and UL 50 to 400 A)
- Rated current: 50 A to 600 A
- · Breaking capacity: see catalogue numbers tables
- · Operating class: gPV and UL PV fuse links

Compatible fuse base

SD-S-PV

Microswitches

- · For bladed fuse links
- 170H0235 or 170H0237 for 01XL
- 170H0236 or 170H0238 for 1XL, 2XL and 3L
- · For bolted fuse links
 - · 170H0069 for all sizes

Standards / Agency information

IEC 60269-6, UL Recognised file 2579 E335324, RoHS compliant

Catalogue numbers - PV-XL fuse links, 1000 V d.c.

| Fuse link body size | Rated voltage | Rated current (Amps) | Breaking capacity (IEC/UL) (kA) | I²t (A² Sec) | | Watts loss (W) | | Catalogue numbers | |
|------------------------|---------------|----------------------|--|--------------|-------------------------|--------------------|----------------|----------------------|-----------------------------|
| | | | | Pre-arcing | Total at 1000 V d.c. | 0.7 I _n | I _n | Bladed version | Bolted version |
| | | 63 | 50 | 260 | 1900 | 10 | 24 | PV-63A-01XL | PV-63A-01XL-B |
| 01 | 1000 V d.c. | 80 | 50 | 490 | 3600 | 12 | 29 | PV-80A-01XL | PV-80A-01XL-B |
| | | 100 | 50 | 870 | 6300 | 13 | 32 | PV-100A-01XL | PV-100A-01XL-B |
| | | 125 | 50 | 1930 | 13,900 | 16 | 40 | PV-125A-01XL | PV-125A-01XL-B |
| | | 160 | 50 | 3900 | 28,100 | 18 | 44 | PV-160A-01XL | PV-160A-01XL-B |
| | 1000 V d.c. | 160 | 33 | 2780 | 21,000 | 18 | 44 | PV-160A-2XL | PV-160A-2XL-B |
| | | 200 | 33 | 4950 | 37,000 | 20 | 50 | PV-200A-2XL | PV-200A-2XL-B |
| | | 250 | 33 | 9450 | 70,000 | 24 | 60 | PV-250A-2XL | PV-250A-2XL-B |
| | | 315 | 33 | 16,600 | 123,000 | 26 | 66 | PV-315A-2XL | PV-315A-2XL-B |
| 0 | | 355 | 33 | 26,000 | 192,000 | 27 | 68 | PV-355A-2XL | PV-355A-2XL-B |
| 2 | | 160 | 33 | 2780 | 21,000 | 18 | 44 | | PV-160A-2XL-3B ¹ |
| | | 200 | 33 | 4950 | 37,000 | 20 | 50 | | PV-200A-2XL-3B ¹ |
| | | 250 | 33 | 9450 | 70,000 | 24 | 60 | | PV-250A-2XL-3B ¹ |
| | | 315 | 33 | 16,600 | 123,000 | 26 | 66 | | PV-315A-2XL-3B ¹ |
| | | 355 | 33 | 26,000 | 192,000 | 27 | 68 | | PV-355A-2XL-3B ¹ |
| 3 | 1000 V d.c. | 350 | 50 | 31,000 | 161,200 | 26 | 65 | PV-350A-3L | PV-350A-3L-B |
| | | 400 | 50 | 44,500 | 231,400 | 33 | 82 | PV-400A-3L | PV-400A-3L-B |
| | | 500 | 50 | 85,000 | 442,000 | 34 | 85 | PV-500A-3L | PV-500A-3L-B |
| | | 600 | 50 | 137,000 | 712.400 | 43 | 108 | PV-600A-3L | PV-600A-3L-B |

¹ PV-*A-2XL-3B and PV-*A-2XL-3B-15 have revised bolting patterns, which are identical to size 3L bolting pattern. This allows utilisation of both size 2XL and size 3L fuse links without changing the dimensional layout of the inverter, combiners and disconnects.





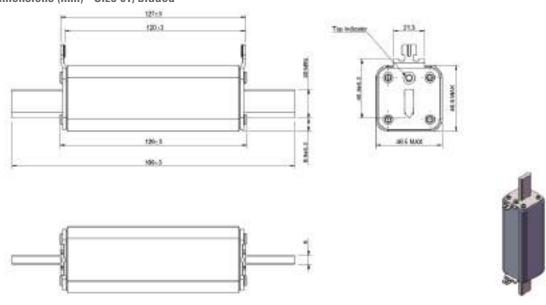
PV-XL - XL Style - 1000-1500 V d.c. (IEC/UL), 50 A to 600 A

Catalogue numbers - PV-XL fuse links, 1500 V d.c.

| | | | Breaking | I²t (A² Sec) | | Watts loss (W) | | Catalogue numbers | | | |
|------------------------|------------------|----------------------------|------------------------------|----------------|---------------------------------|--------------------|----|---------------------------|------------------------------|--|---------------------------------|
| Fuse link body size | Rated voltage | Rated current (Amps) | capacity (IEC/UL) (kA) | Pre- arcing | Total at 1500 V ¹ | 0.7 I _n | In | Bladed with top indicator | Bladed without top indicator | Bolted version with side indicator | Bolted without side indicator |
| 01 | 1500 V d.c. | 50 | 30 | 175 | 1000 | 10 | 25 | PV-50A-01XL-15 | | PV-50A-01XL-B-15 | |
| | | 63 | 30 | 362 | 2250 | 10 | 26 | PV-63A-01XL-15 | | PV-63A-01XL-B-15 | |
| | | 80 | 30 | 565 | 3300 | 14 | 35 | PV-80A-01XL-15 | | PV-80A-01XL-B-15 | |
| | | 100 | 30 | 1100 | 6600 | 16 | 40 | PV-100A-01XL-15 | | PV-100A-01XL-B-15 | |
| | | 125 | 30 | 2200 | 10,500 | 18 | 44 | PV-125A-01XL-15 | | PV-125A-01XL-B-15 | |
| 1 | 1500 V d.c. | 100 | 30 | 1250 | 6000 | 24 | 43 | PV-100A-1XL-15 | | PV-100A-1XL-B-15 | |
| | | 125 | 30 | 1950 | 9360 | 25 | 52 | PV-125A-1XL-15 | | PV-125A-1XL-B-15 | |
| | | 160 | 30 | 4200 | 20,160 | 26 | 54 | PV-160A-1XL-15 | | PV-160A-1XL-B-15 | |
| | | 200 | 30 | 9400 | 45,120 | 31 | 60 | PV-200A-1XL-15 | | PV-200A-1XL-B-15 | |
| | 1500 V d.c. | 125 | 30 | 2200 | 15,000 | 18 | 44 | PV-125A-2XL-15 | PV-125A-2XL-U-15 | PV-125A-2XL-B-15 | PV-125A-2XL-BU-15 |
| 2 | | 160 | 30 | 5000 | 32,000 | 19 | 48 | PV-160A-2XL-15 | PV-160A-2XL-U-15 | PV-160A-2XL-B-15 | PV-160A-2XL-BU-15 |
| | | 200 | 30 | 8800 | 51,000 | 23 | 57 | PV-200A-2XL-15 | PV-200A-2XL-U-15 | PV-200A-2XL-B-15 | PV-200A-2XL-BU-15 |
| | | 250 | 30 | 16,600 | 85,000 | 28 | 70 | PV-250A-2XL-15 | PV-250A-2XL-U-15 | PV-250A-2XL-B-15 | PV-250A-2XL-BU-15 |
| | | 125 | 30 | 2200 | 15,000 | 18 | 44 | | | PV-125A-2XL-3B-15 ¹ | PV-125A-2XL-3BU-15 ¹ |
| | | 160 | 30 | 5000 | 32,000 | 19 | 48 | | | PV-160A-2XL-3B-15 ¹ | PV-160A-2XL-3BU-15 ¹ |
| | | 200 | 30 | 8800 | 51,000 | 23 | 57 | | | PV-200A-2XL-3B-15 ¹ | PV-200A-2XL-3BU-15 ¹ |
| | | 250 | 30 | 16,600 | 85,000 | 28 | 70 | | | PV-250A-2XL-3B-15 ¹ | PV-250A-2XL-3BU-15 ¹ |
| 3 | 1500 V d.c. | 250 | 100 ² | 74,000 | 263,000 | 20 | 49 | PV-250A-3L-15 | PV-250A-3L-U-15 | PV-250A-3L-B-15 | PV-250A-3L-BU-15 |
| | | 315 | 100 ² | 150,000 | 533,000 | 21 | 52 | PV-315A-3L-15 | PV-315A-3L-U-15 | PV-315A-3L-B-15 | PV-315A-3L-BU-15 |
| | | 350 | 100 ² | 195,000 | 693,000 | 24 | 59 | PV-350A-3L-15 | PV-350A-3L-U-15 | PV-350A-3L-B-15 | PV-350A-3L-BU-15 |
| | | 355 | 100 ² | 195,000 | 693,000 | 24 | 59 | PV-355A-3L-15 | PV-355A-3L-U-15 | PV-355A-3L-B-15 | PV-355A-3L-BU-15 |
| | | 400 | 100 ² | 296,000 | 1,060,000 | 24 | 61 | PV-400A-3L-15 | PV-400A-3L-U-15 | PV-400A-3L-B-15 | PV-400A-3L-BU-15 |
| | | 450 | 100 ² | 412,000 | 1,470,000 | 27 | 67 | PV-450A-3L-15 | PV-450A-3L-U-15 | PV-450A-3L-B-15 | PV-450A-3L-BU-15 |
| | | 500 | 100 ² | 532,000 | 1,890,000 | 29 | 73 | PV-500A-3L-15 | PV-500A-3L-U-15 | PV-500A-3L-B-15 | PV-500A-3L-BU-15 |

¹ PV-*A-2XL-3B and PV-*A-2XL-3B-15 have revised bolting patterns, which are identical to size 3L bolting pattern. This allows utilisation of both size 2XL and size 3L fuse links without changing the dimensional layout of the inverter, combiners and disconnects.

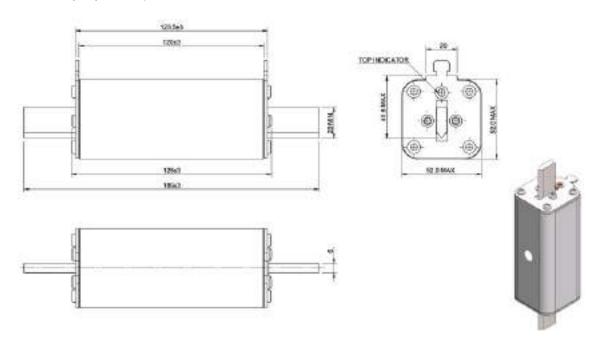
Dimensions (mm) - Size 01, bladed



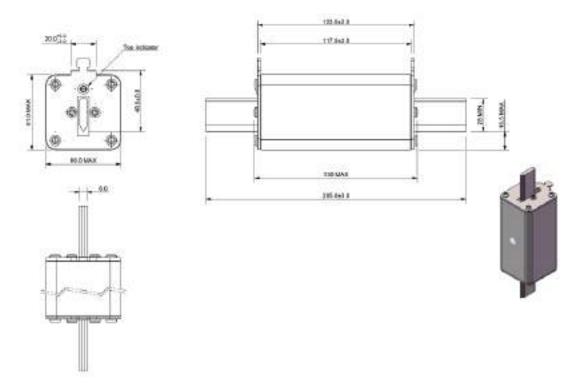
² 100 kA at time constant 6 mS.

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

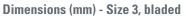
Dimensions (mm) - Size 1, bladed

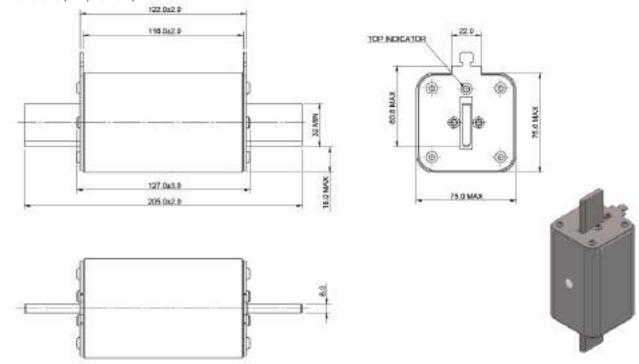


Dimensions (mm) - Size 2, bladed

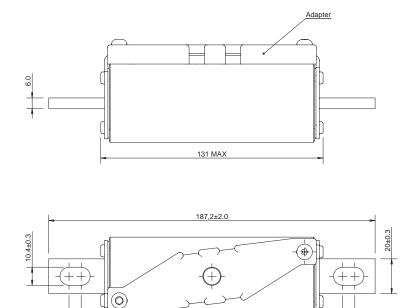


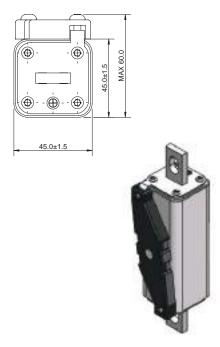
PV-XL - XL Style - 1000-1500 V d.c. (IEC/UL), 50 A to 600 A





Dimensions (mm) - Size 01, bolted



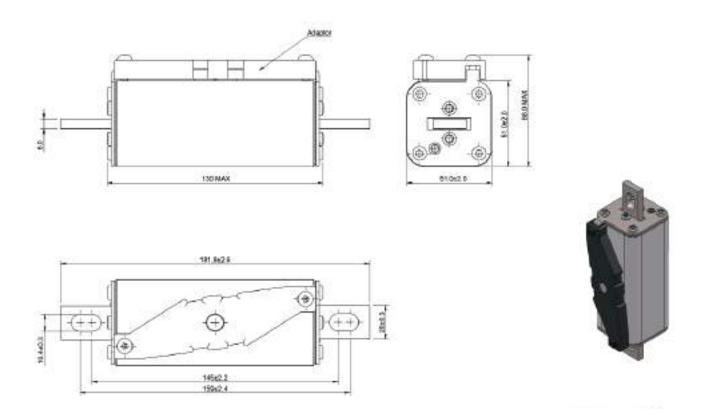


Data sheet: 10201

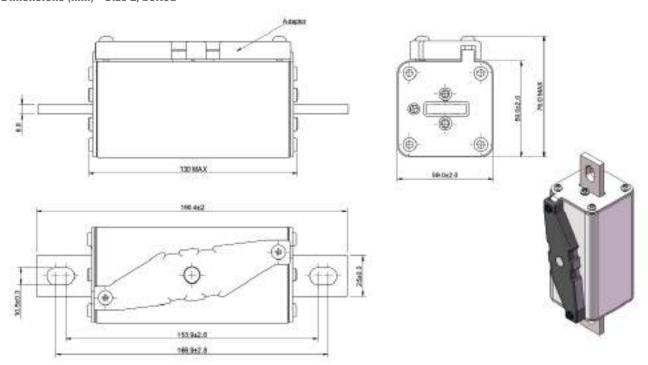
149,8±1.6 163,8±2.0

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

Dimensions (mm) - Size 1, bolted



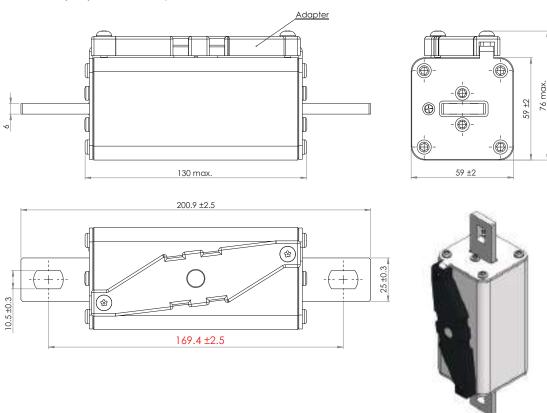
Dimensions (mm) - Size 2, bolted



Photovoltaic fuse links, fuse bases and holders

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

Dimensions (mm) - Size 2XL-3B, bolted

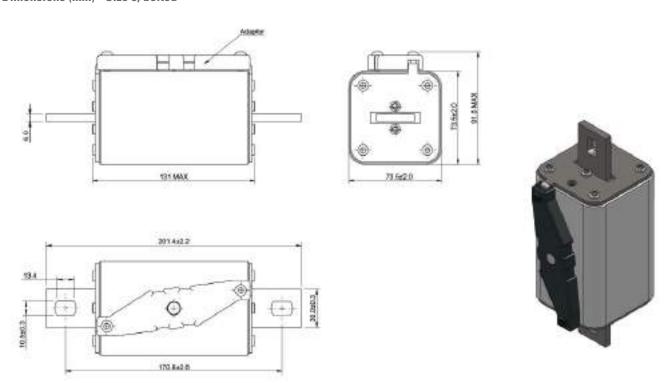


PV-*A-2XL-3B and PV-*A-2XL-3B-15 have revised bolting patterns, which are identical to size 3L bolting pattern. This allows utilisation of both size 2XL and size 3L fuse links without changing the dimensional layout of the inverter, combiners and disconnects.

Mounting dimensions comparison

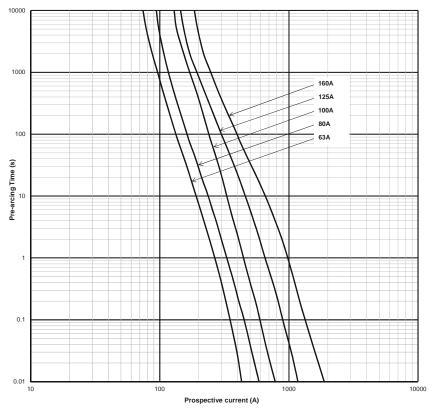
| 2XL-3B | 3L |
|--------|-------|
| 169.4 | 170.8 |

Dimensions (mm) - Size 3, bolted

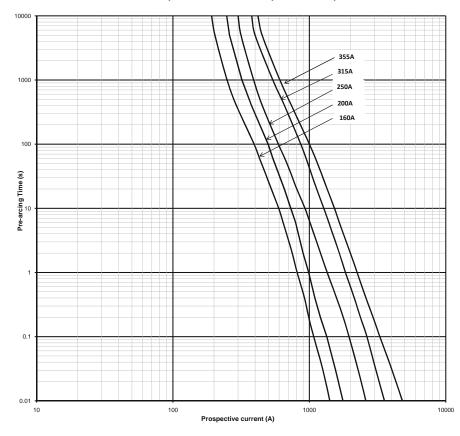


PV-XL - XL Style - 1000-1500 V d.c. (IEC/UL), 50 A to 600 A

Time-current curve - Size 01XL, bladed and bolted, 1000 V d.c., 63 A to 160 A



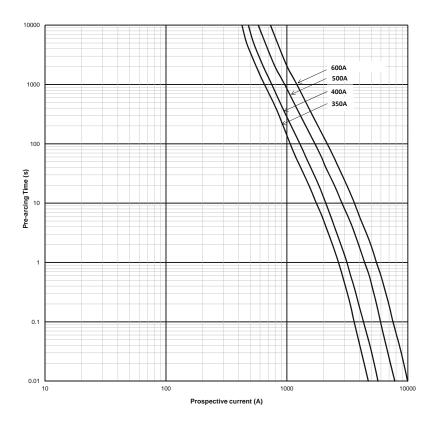
Time-current curve - Size 2XL, bladed and bolted, 1000 V d.c., 160 A to 355 A



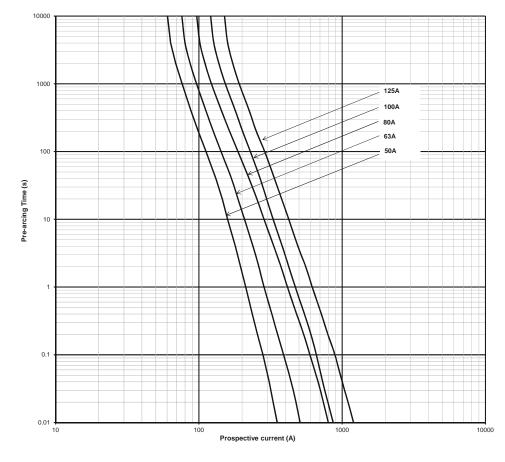
Photovoltaic fuse links, fuse bases and holders

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

Time-current curve - Size 3L, bladed and bolted, 1000 V d.c., 350 A to 600 A

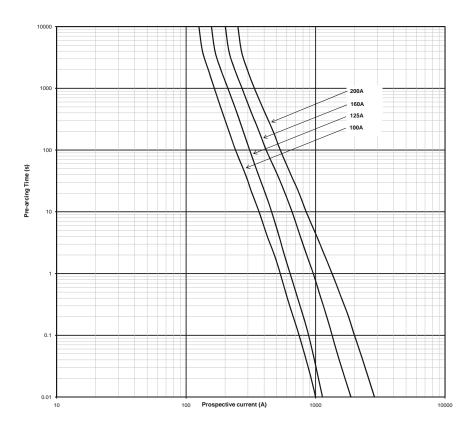


Time-current curve - Size 01XL, bladed and bolted, 1500 V d.c., 50 A to 125 A

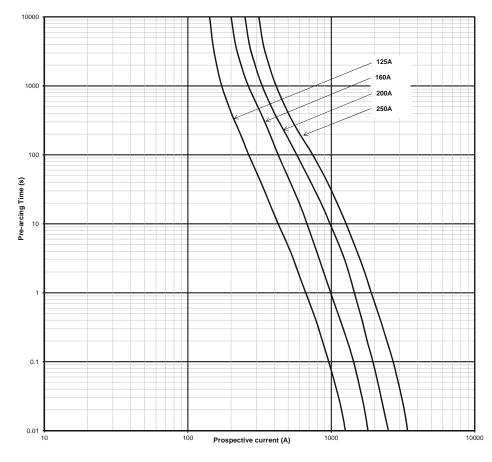


PV-XL - XL Style - 1000-1500 V d.c. (IEC/UL), 50 A to 600 A

Time-current curve - Size 1XL, bladed and bolted, 1500 V d.c., 100 A to 200 A



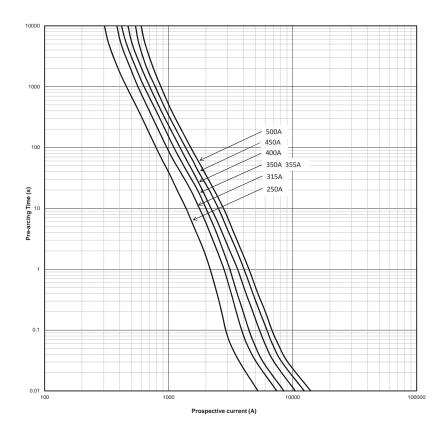
Time-current curve - Size 2XL, bladed and bolted, 1500 V d.c., 125 A to 250 A



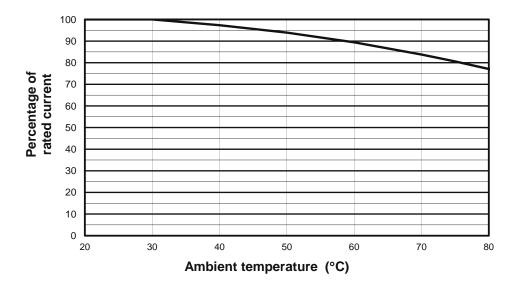
Photovoltaic fuse links, fuse bases and holders

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

Time-current curve - Size 3L, bladed and bolted, 1500 V d.c., 250 A to 500 A



Temperature derating curve



SD-S-PV - XL fuse bases, 1500 V d.c. (IEC), 200 A to 500 A, sizes 1 to 3

Specifications

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: 200 A, 400 A and 630 A

• Fuse base size: 1 to 3

· Compatible fuse links: PV XL

Standards / Agency information

• IEC 60269-1

• UL Listed (file number E348242)

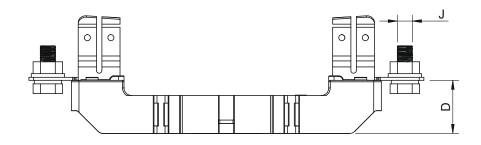
Accessories:

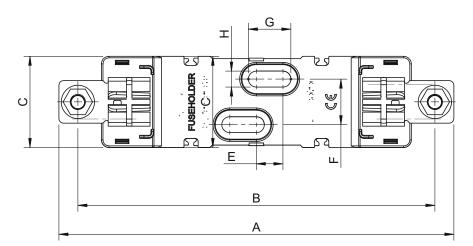
Fuse extraction handle available in sizes 01XL to 3L

Part numbers: FEH1500B

Unit packing: 1

Dimensions (mm)





| Catalogue numbers | XL Style fuse link size | Maximum fuse rated current (Amps) | Power acceptance | A | В | С | D | E | F | G | Н | J |
|----------------------|-------------------------------|---|------------------|-----|-----|----|----|------|----|----|------|-----|
| SD1XL-S-PV | 01XL, 1XL | 200 | 57W | 260 | 235 | 60 | 35 | 17.5 | 30 | 28 | 10.5 | M10 |
| SD2XL-S-PV | 2XL | 400 | 75W | 285 | 260 | 60 | 35 | 17.5 | 30 | 28 | 10.5 | M12 |
| SD3L-S-PV | 3L | 500 | 108W | 300 | 270 | 60 | 35 | 17.5 | 30 | 28 | 10.5 | M12 |



Battery storage fuse links

BSF-NH - NH Style, 1000 V d.c. (IEC/UL), 63 A to 400 A

Specifications

Description

Eaton's Bussmann series NH battery storage fuses are specifically designed to protect and isolate battery array combiners and disconnects. These fuse links are capable of interrupting low overcurrents associated with faulted battery storage systems (reverse current, multi-array fault).

Technical data

Rated voltage: 1000 V d.c.Rated current: 63 A to 400 A

 Operating class: gBat proposed for full range fuse links for protection of battery storage systems

Breaking capacity: 100 kA

• Time constant: 4.5 ms at 100 kA

Microswitches

For bladed fuse links only

170H0236170H0238

Fuse holders

For bladed fuse links only

- SD1-D-PV

- SD2-D-PV

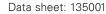
- SD3-D-PV

Standards / Agency information

IEC 60269-7 for battery storage fuse links is under preparation.

Catalogue numbers

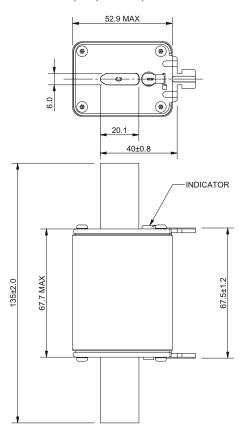
| | | | I²t (A² Sec) | | Watts Id (W) | oss | Catalogue numbers | |
|------------------------|---------------|----------------------|--------------|-------------------------|--------------------|----------------|----------------------|------------------|
| Fuse link body size | Rated voltage | Rated current (Amps) | Pre-arcing | Total at 1000 V d.c. | 0.7 l _n | l _n | Bladed version | Bolted version |
| | | 63 | 470 | 4300 | 5 | 12 | BSF-063G-NH110 | BSF-063G-NH110-B |
| | | 80 | 640 | 5760 | 6 | 15.5 | BSF-080G-NH110 | BSF-080G-NH110-B |
| 1 | 1000 V d.c. | 100 | 1300 | 11,700 | 7 | 16.5 | BSF-100G-NH110 | BSF-100G-NH110-B |
| I | | 125 | 2600 | 23,400 | 7 | 17.5 | BSF-125G-NH110 | BSF-125G-NH110-B |
| | | 160 | 5200 | 46,800 | 11 | 27.5 | BSF-160G-NH110 | BSF-160G-NH110-B |
| | | 200 | 10,200 | 82,000 | 10 | 25 | BSF-200G-NH110 | BSF-200G-NH110-B |
| | | 160 | 4600 | 37,000 | 11 | 28 | BSF-160G-NH210 | BSF-160G-NH210-B |
| 2 | 1000 V d.c. | 200 | 9500 | 76,000 | 13 | 32 | BSF-200G-NH210 | BSF-200G-NH210-B |
| | | 250 | 17,000 | 136,000 | 15 | 38 | BSF-250G-NH210 | BSF-250G-NH210-B |
| | | 315 | 32,000 | 260,000 | 18 | 44 | BSF-315G-NH310 | BSF-315G-NH310-B |
| 3 | 1000 V d.c. | 355 | 44,500 | 370,000 | 18 | 46 | BSF-355G-NH310 | BSF-355G-NH310-B |
| | | 400 | 67,500 | 550,000 | 20 | 50 | BSF-400G-NH310 | BSF-400G-NH310-B |

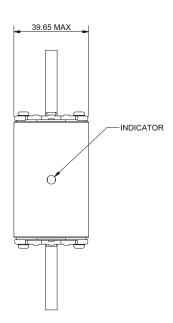




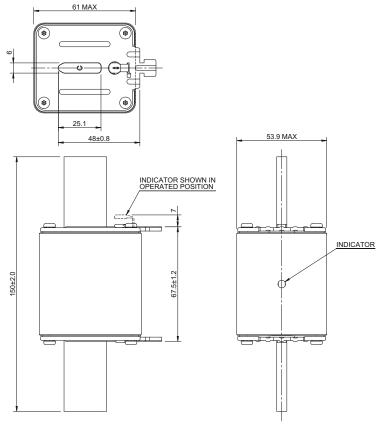
BSF-NH - NH Style, 1000 V d.c. (IEC/UL), 63 A to 400 A

Dimensions (mm) - Size 1, bladed





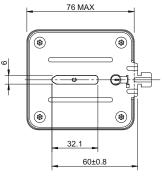
Dimensions (mm) - Size 2, bladed

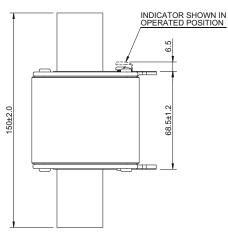


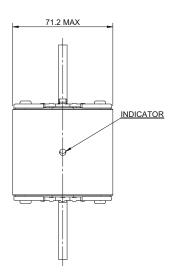
Battery storage fuse links

BSF-NH - NH Style, 1000 V d.c. (IEC/UL), 63 A to 400 A

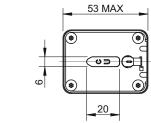
Dimensions (mm) - Size 3, bladed

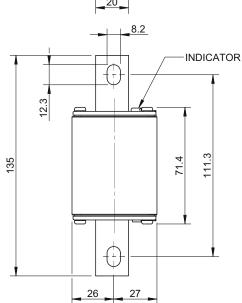


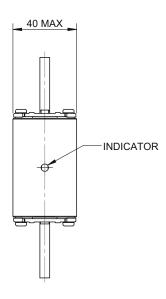




Dimensions (mm) - Size 1, bolted

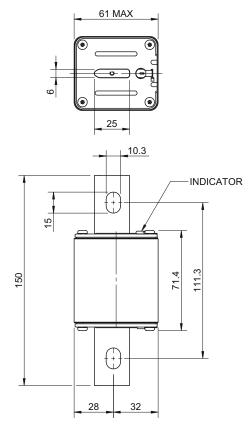


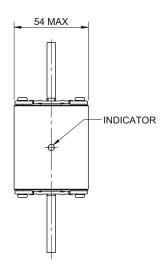




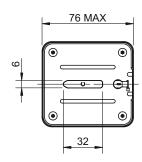
BSF-NH - NH Style, 1000 V d.c. (IEC/UL), 63 A to 400 A

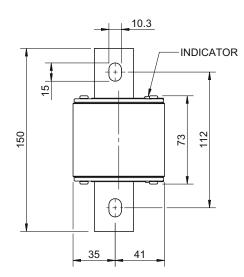
Dimensions (mm)- Size 2, bolted

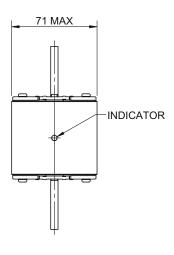




Dimensions (mm) - Size 3, bolted



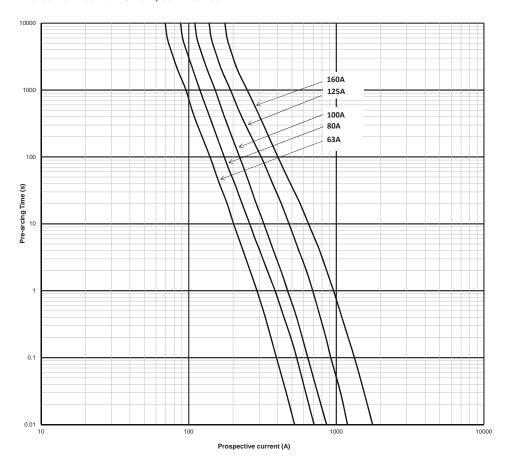




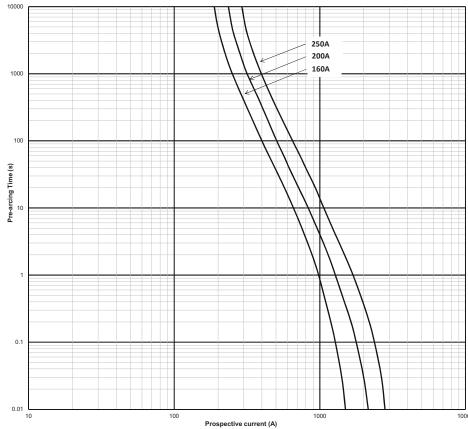
Battery storage fuse links

BSF-NH - NH Style, 1000 V d.c. (IEC/UL), 63 A to 400 A

Time-current curve - Size 1, 63 A to 200 A

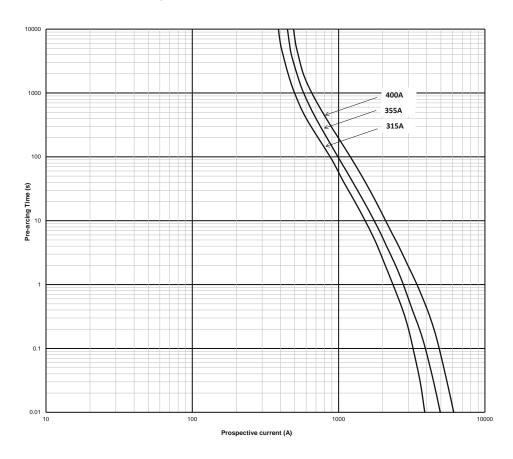


Time-current curve - Size 2, 160 A to 250 A

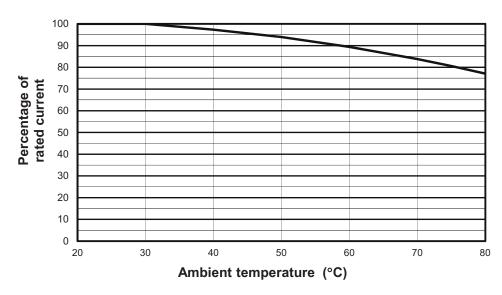


BSF-NH - NH Style, 1000 V d.c. (IEC/UL), 63 A to 400 A

Time-current curve - Size 3, 315 A to 400 A



Temperature derating



(The ambient temperature is that local to the fuse link)

Battery storage fuse links

BSF-3XL - XL Style, 1500 V d.c. (IEC/UL), 250 A to 500 A

Specifications

Description

Eaton's Bussmann series XL battery storage fuses are specifically designed to protect and isolate battery array combiners and disconnects. These fuse links are capable of interrupting low overcurrents associated with faulted battery storage systems (reverse current, multi-array fault).

Technical data

Rated voltage: 1500 V d.c.Rated current: 250 A to 500 A

 Operating class: gBat proposed for full range fuse links for protection of battery storage systems

Breaking capacity: 100 kA

• Time constant: 4.5 ms at 100 kA

Microswitches

· For bladed fuse links

- 170H0236

- 170H0238

· For bolted fuse links

· 170H0069

Compatible fuse bases

SD3L-S-PV

Standards / Agency information

IEC 60269-7 for battery storage fuse links is under preparation.

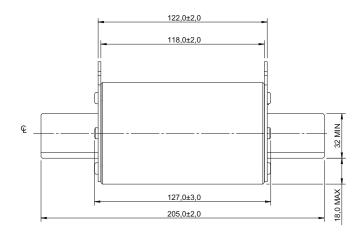
Catalogue numbers

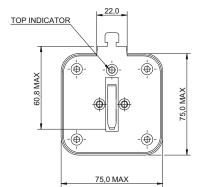
| | | | I²t (A² Sec) | | Watts Id (W) | oss | Catalogue numbers | | |
|------------------------|---------------|----------------------|--------------|-------------------------|--------------------|----------------|----------------------|------------------|--|
| Fuse link body size | Rated voltage | Rated current (Amps) | Pre-arcing | Total at 1500 V d.c. | 0.7 I _n | I _n | Bladed version | Bolted version | |
| | | 250 | 74,000 | 263,000 | 20 | 49 | BSF-250G-3XL15 | BSF-250G-3XL15-B | |
| | | 315 | 150,000 | 533,000 | 21 | 52 | BSF-315G-3XL15 | BSF-315G-3XL15-B | |
| 0 | 1500 V d.c. | 355 | 195,000 | 693,000 | 24 | 59 | BSF-355G-3XL15 | BSF-355G-3XL15-B | |
| 3 | | 400 | 296,000 | 1,060,000 | 24 | 61 | BSF-400G-3XL15 | BSF-400G-3XL15-B | |
| | | 450 | 412,000 | 1,470,000 | 27 | 67 | BSF-450G-3XL15 | BSF-450G-3XL15-B | |
| | | 500 | 532,000 | 1,890,000 | 29 | 73 | BSF-500G-3XL15 | BSF-500G-3XL15-B | |

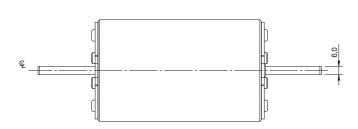


BSF-3XL - XL Style, 1500 V d.c. (IEC/UL), 250 A to 500 A

Dimensions (mm) - Size 3, bladed

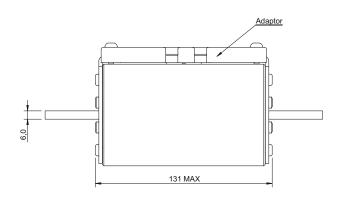


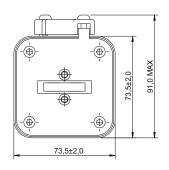


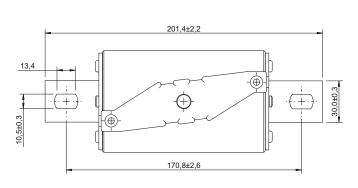




Dimensions (mm) - Size 3, bolted





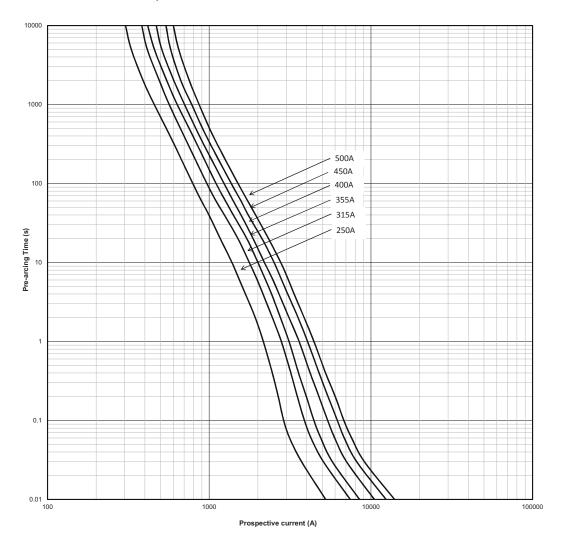




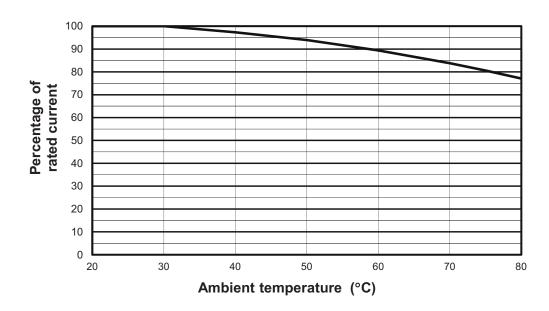
Battery storage fuse links

BSF-3XL - XL Style, 1500 V d.c. (IEC/UL), 250 A to 500 A

Time-current curve - Size 3, 250 A to 500 A



Temperature derating



Modular style fuse bases for North American, British and square body fuse links

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.

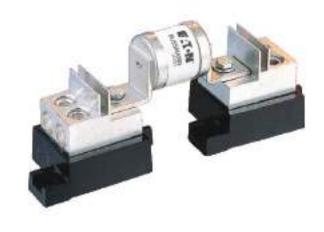
| Catalogue numbers | Max fuse amp rating | Stud height (in) | Stud dia. & threads |
|----------------------|---------------------|------------------|---------------------|
| C5268-1 | 200 | 1 | 5/16"-18 |
| C5268-2 | 200 | 1.75 | 5/16"-18 |
| C5268-3 | 200 | 0.75 | 5/16"-18 |
| C5268-4 | 100 | 1 | 1/4"-20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

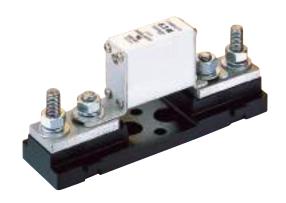
Fixed center fuse bases for DIN 43653 square body fuse links

Description

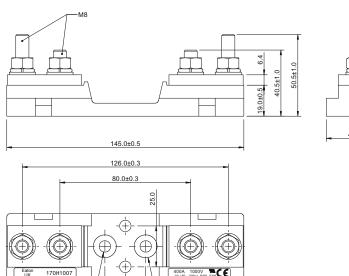
Fuse bases (blocks) to be used with DIN 43653 square body fuse links with centre distances of 80 and 110mm. Available for sizes 000, 00, 1*, 1, 2 and 3.

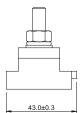
Sizes 000 to 00 Fuse bases

| 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

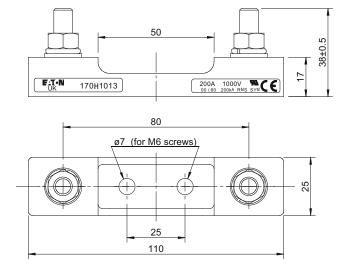






Dimensions (mm) - 170H1013

25.0





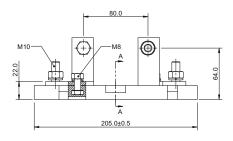
Fixed center fuse bases for DIN 43653 square body fuse links

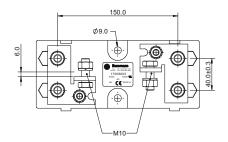
Sizes 1* to 3

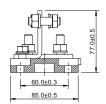
| Catalogue numbers | Max rated voltage (Volts) | Max fuse Amp rating (Amps) | Centre distance (mm) |
|----------------------|---------------------------|----------------------------|-------------------------|
| 170H3003 | 1000 V a.c./V d.c. | 630 | 80 |
| 170H3004 | 1000 V a.c./V d.c. | 1250 | 80 |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



Dimensions (mm) - 170H3003



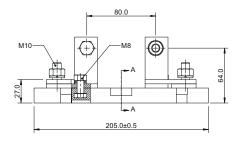


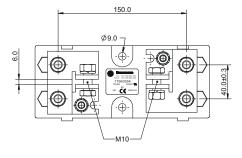


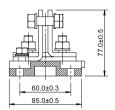
SECTION A-A



Dimensions (mm) - 170H3004





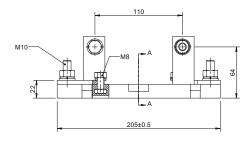


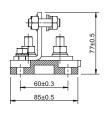
SECTION A-A



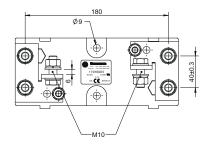
Fixed center fuse bases for DIN 43653 square body fuse links

Dimensions (mm) - 170H3005



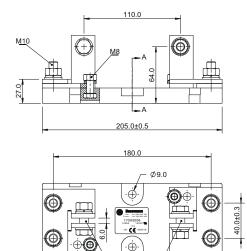


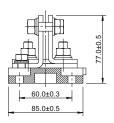
SECTION A-A





Dimensions (mm) - 170H3006





SECTION A-A



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 |

BMM - Fuse bases for ferrule fuse links, 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
 - 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



Catalogue numbers

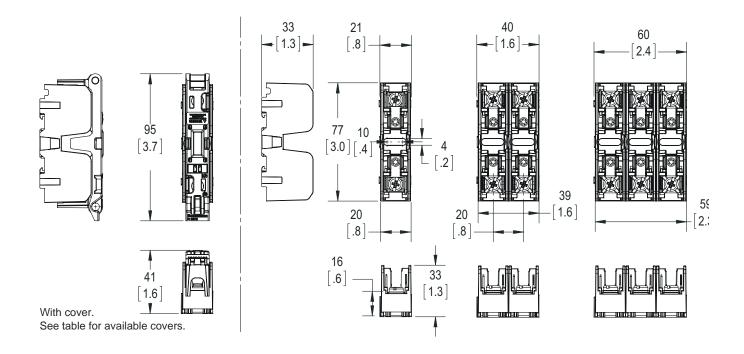
Terminal type

| Screw w/quick connect1 | 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.

BMM - Fuse bases for ferrule fuse links, 600 V a.c. (UL), 30 A

Dimensions mm (in)



Recommended covers

| | Cover part numbers | | | |
|-----------------------------------|--------------------|----------------|--|--|
| Terminal type | 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 | | |



JM70100 - Fuse bases for ferrule fuse links, 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)

Standards / Agency information

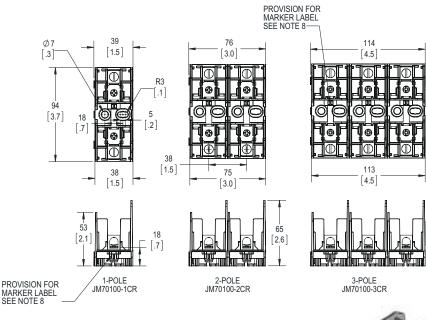
UL Recognised, Guide IZTL2, File 14853.

Catalogue numbers

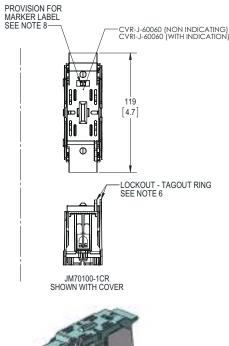
| Tern | ninal | type | • |
|------|-------|------|---|
| Day | lua i | with | |

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

Dimensions mm (in)









3D VIEW FOR JM70100-1CR SCALE NONE

3D VIEW FOR JM70100-1CR WITH COVER SCALE NONE

JM60 - Modular knifeblade fuse blocks, 600 V a.c. (UL), 70 A 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

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

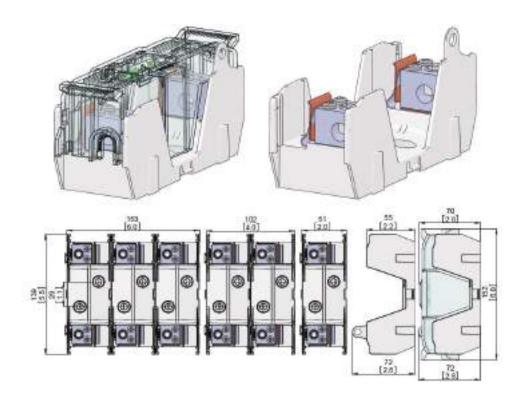
^{*} Covers sold separately. Blown fuse indication requires 90 volts minimum and closed circuit to operate.

Wire range and torque values

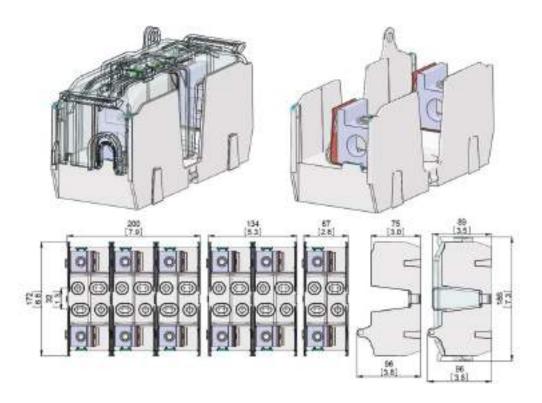
| Catalogue numbers Class J Block | _ Wire range (solid and stranded) | Wire range (fine stranded) | Torque N•m (Lb-in) | |
|---------------------------------------|--|----------------------------------|--------------------------|--|
| JM60100-1CR | 1/0-3 AWG; (2) Cu 4-6 AWG | 1.0.4140 | 6.2 (55) | |
| JM60100-2CR | 4-6 AWG; (2) Cu 8 AWG 8 AWG; (2) Cu 10-14 AWG | 1-3 AWG 4-6 AWG 8 AWG | 5.6 (50) 5.1 (45) | |
| JM60100-3CR | Cu 10-14 AWG; AI 10-12 AWG | 8 AVVu | 4.5 (40) 4.0 (35) | |
| JM60200-1CR | | | | |
| JM60200-2CR | - 250 MCM -1 AWG - 2-6 AWG; (2) Cu 2-6 AWG | 3/0-1 AWG 2-6 AWG | 42 (375) 31 (275) | |
| JM60200-3CR | = 2 0 / 11/10 2 0 / 11/10 | 2 0 7 11 10 | | |
| JM60400-1CR | 600kcmil | | 57 (500) | |
| JM60400-2CR | 500kcmil-4 AWG (2) Cu 3/0 - 4 AWG | N/A | 51 (450) 57 (500) | |
| JM60400-3CR | (2) AI 3/0 - 4 AWG | | 34 (300) | |
| JM60600-1CR | - (2) 500kcmil-4 AWG | NI/A | E1 (4E0) | |
| JM60600-2CR | - (2) SUUKCIIIII-4 AVVG | N/A | 51 (450) | |

$\ensuremath{\textbf{JM60}}$ - Modular knifeblade fuse blocks, 600 V a.c. (UL), 70 A to 600 A

Dimensions mm (in) - 100 A

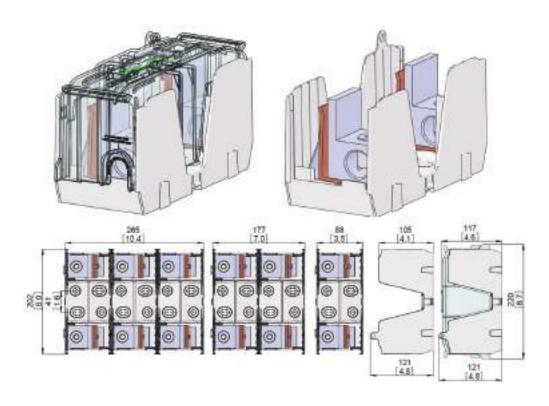


Dimensions mm (in) - 200 A

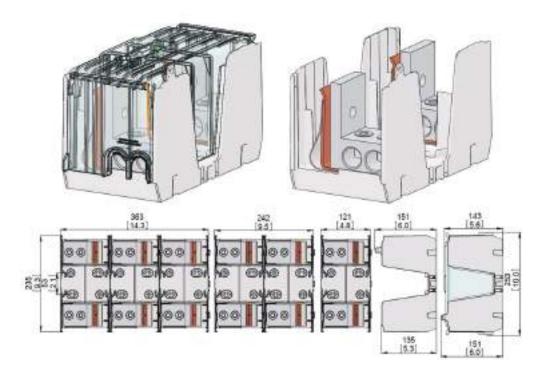


JM60 - Modular knifeblade fuse blocks, 600 V a.c. (UL), 70 A to 600 A

Dimensions mm (in) - 400 A



Dimensions mm (in) - 600 A



CHM - Modular fuse holders for 10 x 38 mm fuse links

Specifications

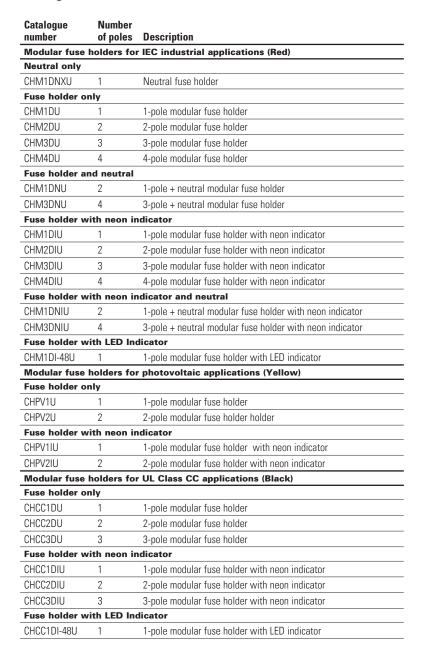
Description

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

Technical data

See table page 384

Catalogue numbers





CHM - Modular fuse holders for 10 x 38 mm fuse links

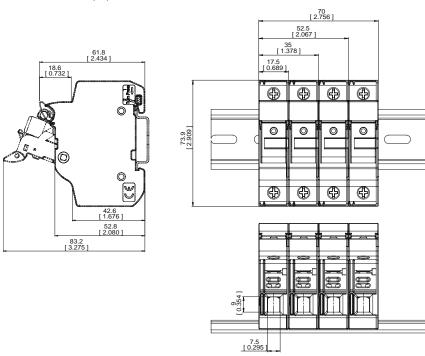
Technical data

| | Rated voltage | | Rated current | | _ | Rated breaking | | |
|--------------|---------------|--------------|---------------|--------------|--|-----------------------|--|--|
| Туре | IEC | UL | IEC | UL | Terminal rating | withstand capactiy | Compatible Bussmann series fuse links | |
| Modular fuse | holders fo | r IEC indust | trial appli | ications (R | led) | | | |
| CHM1 | 690 V a.c. | 600 V a.c. | 32 A | 30 A | IEC 1 to 25 mm ² | IEC 120 kA rms sym | IEC: C10 and FWP-G10F | |
| CHM_DN(X)U | 690 V a.c. | 600 V a.c. | 32 A | 30 A | 70°C PVC Copper cable (solid stranded or | , | | |
| | | | | | fine stranded) | UL 200 kA rms sym | UL: FNQ, KLM, FNM, KTK, BAF, FWA, PVM, AGU, | |
| CHM1DI-48U | 48 V d.c. | 48 V d.c. | 32 A | 30 A | Spade lug Comb bus bar | CCC 100 kA rms sym | BAN, FWC | |
| Modular fuse | holders fo | r Photovolt | aic appli | cations (Y | ellow) | | | |
| CHPV | 1000 V d.c. | 1000 V d.c. | 32 A | 30 A | IEC 1 to 25 mm ² 70°C PVC Copper cable (solid stranded or fine stranded) Spade lug Comb bus bar | 33 kA rms sym | Solar PV range: PVM, PV-A10F | |
| Modular fuse | holders fo | r UL Class (| CC Indus | trial applic | cations (Black) | | | |
| CHCC | N/A | 600 V a.c. | N/A | 30 A | C-bl- 750C 000C C | 200 I.A | LD CC FNO D VTV D | |
| CHCC1DI-48U | N/A | 48 V d.c. | N/A | 30 A | Cable 75°C and 90°C Cu cable | 200 kA rms sym | LP-CC, FNQ-R, KTK-R | |

Standards / Agency information

| | IEC | UL | CSA | CCC | CE |
|-------------------------|----------------------------|--|-------------------------------------|--------------------------|---------------------------------|
| CHMD(I)U | IEC 60269-1 IEC 60269-2 | UL 4248-1 UL file E14853 | C22.2 No 4248.1 | GB 13539.1 GB 13539.2 | DCB 272 |
| CHMDN(I)U | IEC 60269-1 IEC 60269-2 | UL 4248-1 UL file E14853 | C22.2 No 4248.1 | GB 13539.1 GB 13539.2 | DCB 272 |
| CHM1DI-48U | IEC 60269-1 IEC 60269-2 | UL 4248-1 UL file E14853 | C22.2 No 4248.1 | GB 13539.1 GB 13539.2 | DCB 272 |
| CHM1DNXU | IEC 60269-1 IEC 60269-2 | UL 4248-1 UL file E14853 | C22.2 No 4248.1 | GB 13539.1 GB 13539.2 | DCB 272 |
| CHPV | IEC 60269-1 | UL 4248-1 UL4248-19 UL file E14853 | C22.2 No 4248.1 C22.2 No 4248.19 | GB 13539.1 | DCB 272 |
| CHCC1D(I) to CHCC3D(I)U | N/A | UL 4248-1 UL file E14853 | C22.2 No 4248.1 | N/A | Contact: fusetech@ eaton.com |
| CHCC1DI-48U | N/A | UL 4248-1 UL file E14853 | C22.2 No 4248.1 | N/A | Contact: fusetech@ eaton.com |

Dimensions mm (in)



CH14 - Modular fuse holders for 14 x 51 mm fuse links, 690 V a.c. / 750 and 1500V d.c., 50 A

Specifications

Description

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

Technical data

Rated voltage & Rated current: see table page 390

Compatible fuse links

- C14G and C14M14 x 51 mm gG and gM cylindrical fuse links
- FW Ferrule
 - FWH-A14F
 - · FWX-A14F
 - FWP-A14F (please consult Eaton's bulehighspeedtechnical@eaton.com if you wish to use a FWP fuse link with a striker option)
 - · FWP-G14F
- PV-A14F



IEC 60269-1 and 60269-2

Catalogue numbers

| Catalogue number | Number of poles | Description |
|---------------------|-----------------|--|
| Neutral only | | |
| CH141DNXU | 1 | Neutral modular fuse fuse holder |
| Fuse holder on | ly | |
| CH141DU | 1 | 1-pole modular fuse holder |
| CH142DU | 2 | 2-pole modular fuse holder |
| CH143DU | 3 | 3-pole modular fuse holder |
| CH144DU | 4 | 4-pole modular fuse holder |
| Fuse holder an | d neutral | |
| CH141DNU | 2 | 1-pole + neutral modular fuse holder |
| CH143DNU | 4 | 2-pole + neutral modular fuse holder |
| Fuse holder wi | th neon ir | ndicator |
| CH141DIU | 1 | 1-pole modular fuse holder with neon indicator |
| CH142DIU | 2 | 2-pole modular fuse holder with neon indicator |
| CH143DIU | 3 | 3-pole modular fuse holder with neon indicator |
| CH144DIU | 4 | 4-pole modular fuse holder with neon indicator |
| Fuse holder wi | th neon ir | ndicator and neutral |
| CH141DNIU | 2 | 1-pole + neutral modular fuse holder with neon indicator |
| CH143DNIU | 4 | 3-pole + neutral modular fuse holder with neon indicator |
| Fuse holder wi | th micros | witch |
| CH141DMSU-F | 1 | 1-pole modular fuse holder with microswitch for remote fuse indication operation |
| CH143DMSU-F | 3 | 3-pole modular fuse holder with microswitch for remote fuse indication operation |
| Fuse holder wi | th micros | witch and neutral |
| CH143DNMSU-F | 4 | 3-pole + neutral modular fuse holder with microswitch for remote fuse indication operation |
| Fuse holder wi | th LED In | dicator |
| CHPV141DI-48U | 1 | 1-pole modular fuse holder with LED indicator |
| Fuse holder for | r photovo | Itaic applications |
| CHPV141U | 1 | 1-pole modular fuse holder |
| CHPV141IU | 1 | 1-pole modular fuse holder with neon indicator |
| CHPV142U | 2 | 2-pole modular fuse holder holder |
| CHPV142IU | 2 | 2-pole modular fuse holder with neon indicator |





CH14 - Modular fuse holders for 14 x 51 mm fuse links, 690 V a.c. / 750 and 1500V d.c., 50 A $\,$

Technical data

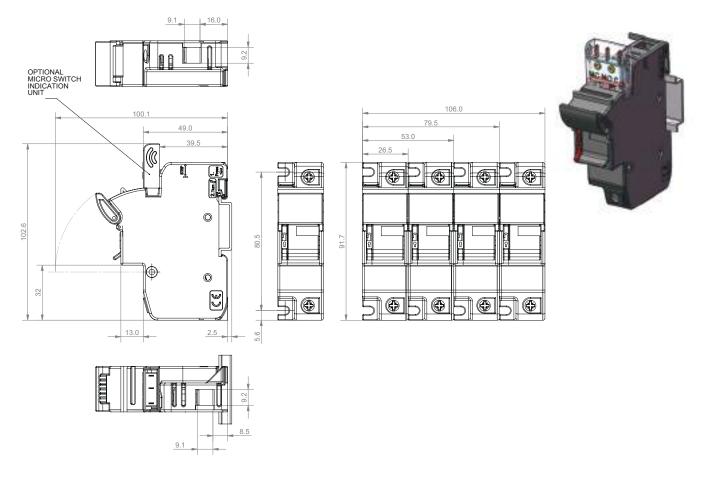
| | Rated current | | Rated voltage | | _ | | Rated breaking | Compatible |
|----------------------|-------------------------|------|----------------------------|-------------|---|--|-----------------------|---|
| Туре | IEC | UL | IEC | UL | Agency markings | Terminal rating | withstand capactiy | Bussmann series fuse links |
| CH14 | 50 A (a.c. and d.c.) | 50 A | 690 V a.c. / 750 V d.c. | 700 V a.c. | IEC 60269-1 and 2 UL Listed file number E14853 | Cable size: 1.5-50 mm² Recommended torque setting: 3.5 N•m Maximum torque setting: 3.5 N•m | 120 kA a.c. | C14G and C14M FWX-A14F ¹ FWH-A14F ¹ FWP-A14F FWP-G14F |
| CHPV Photovoltaic | 50 A (a.c. and d.c.) | 50 A | 1500 V d.c. | 1500 V d.c. | IEC 60269-1 and 2 UL Listed file number E348242 | Mounting 35 mm DIN-Rail or 2 x M4 panel mounting screws | 10 kA d.c. | PV-A14F |

¹ Maximum allowed continuous current applies. Please refer to data sheet for details.

Accessories

| Catalogue numbers | Description | Unit packing |
|----------------------|---|--------------|
| JV-L | Multi-pole connector kit. One kit will gang up to 4-poles together | 12 |
| CH14-SPS | Microswitch to work on CH141D(I)U, 1 n/o + 1 n/c changeover type | 3 |
| CH14-TPS | Microswitch to work on CH143D(I)U, 1 n/o + 1 n/c changeover type | 3 |
| CH14-CTP | IP20 protection accessory, provides IP20 protection to terminals with 10mm ² or less cable | 12 |

Dimensions (mm)



CH22 - Modular fuse holders for 22 x 58 mm fuse links, 690 V a.c./1000 V 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

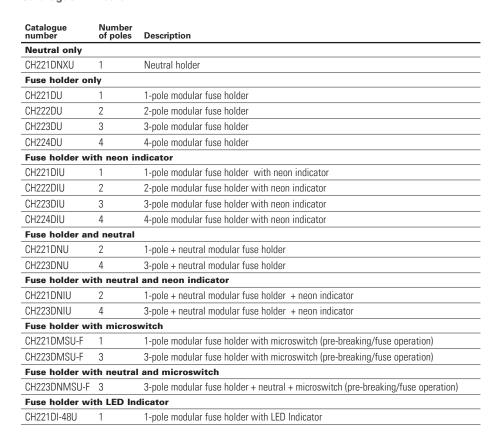
Compatible fuse links

- C22G and C22M 22 x 58 mm gG and gM cylindrical fuse links
- FWP-A22F Ferrule (please consult Eaton for derating information bulehighspeedtechnical@eaton.com
- FWP-G22F

Standards / Agency information

IEC 60269-1 and 60269-2

Catalogue numbers



Technical data

| Rated voltag | ge | Rated curre | nt | | | Rated breaking | Compatible | |
|---------------------------|------------|-----------------------|-----------------|---|--|---------------------------|-------------------------------|--|
| IEC | UL | IEC | UL | Agency markings | Terminal rating | withstand capactiy | Bussmann series fuse links | |
| | | | | | Cable size: 2.5-70 mm ² | | | |
| 690 V a.c. 1000 V d.c. | 700 V a.c. | 125 A (a.c. and d.c.) | C. 100 A (a.c.) | IEC 60269-1 and 2 UL Listed file number | Recommended torque setting: 4 N•m Maximum torque setting: 5 N•m | 120 kA a.c. 50 kA d.c. | FWP Ferrule ¹ | |
| 1000 1 4.0. | | and d.c.) | | E14853 | Mounting 35 mm DIN-Rail or 2 x M4 panel mounting screws | | | |

¹ Maximum allowed continuous current applies. Please refer to data sheet for details.

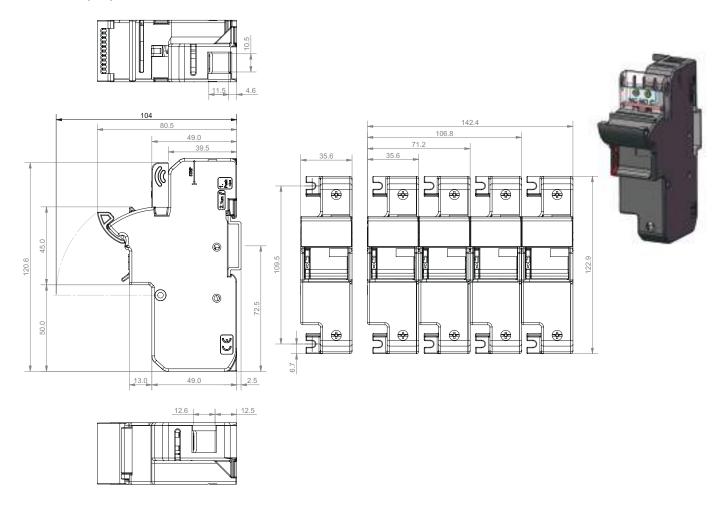


$\pmb{\text{CH22}}$ - Modular fuse holders for 22 x 58 mm fuse links, 690 V a.c./1000 V d.c., 125 A

Accessories

| Description | Unit packing |
|---|---|
| Multi-pole connector kit. One kit will gang up to 4-poles together | 12 |
| IP20 protection accessory, provides IP20 protection to terminals with 10mm ² or less cable | 12 |
| Microswitch to work on CH221D(I)U, 1 $n/o + 1$ n/c changeover type | 3 |
| Microswitch to work on CH223D(I)U, 1 n/o + 1 n/c changeover type | 3 |
| | Multi-pole connector kit. One kit will gang up to 4-poles together IP20 protection accessory, provides IP20 protection to terminals with 10mm² or less cable Microswitch to work on CH221D(I)U, 1 n/o + 1 n/c changeover type |

Dimensions (mm)



170H - 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 accommodate 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



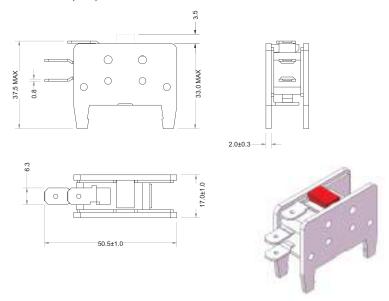
| Fuse | DIN 43653 | | DIN 43620 | | French style Flush end | | US Style | | Terminal size | | |
|----------------------|-----------|----------|-----------------------|------------------------|------------------------|----------|----------|----------|---------------|---------------------|---------------------|
| link body size | Туре Т | Туре К | aR | gR and dual indication | Туре Т | Туре К | Туре Т | Туре К | Туре К | 6.3 x 0.8mm lugs | 2.8 x 0.5mm lugs |
| 000 | 170H0236 | | 170H0236 | 170H0236 | | | | | | Χ | |
| 000 | 170H0238 | | 170H0238 | 170H0238 | | | | | | | Χ |
| 00 | 170H0235 | | 170H0236 | 170H0236 | | | 170H0235 | | | Χ | |
| 00 | 170H0237 | | 170H0238 | 170H0238 | | | 170H0237 | | | | Χ |
| 1* | 170H0235 | 170H0069 | 170H0235 | | 170H0236 | 170H0069 | | 170H0069 | 170H0069 | Χ | |
| 1 | 170H0237 | | 170H0237 | | 170H0238 | | | | | | Χ |
| 1 | 170H0235 | 170H0069 | 170H0235 ¹ | 170H0236 | 170H0236 | 170H0069 | | 170H0069 | 170H0069 | Χ | |
| 1 | 170H0237 | | 170H02371 | 170H0238 | 170H0238 | | | | | | Χ |
| 2 | 170H0235 | 170H0069 | 170H0235 | 170H0236 | 170H0236 | 170H0069 | | 170H0069 | 170H0069 | Χ | |
| ۷ | 170H0237 | | 170H0237 | 170H0238 | 170H0238 | | | | | | Χ |
| 3 | 170H0235 | 170H0069 | 170H0236 | 170H0236 | 170H0236 | 170H0069 | | 170H0069 | 170H0069 | Χ | |
| 3 | 170H0237 | | 170H0238 | 170H0238 | 170H0238 | | | | | | Χ |
| 4 | | | | | | | | 170H0069 | | Χ | |
| 23 | | | | | | | | 170H0069 | | Χ | |
| 24 | | | | | | | | 170H0069 | | Χ | |

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

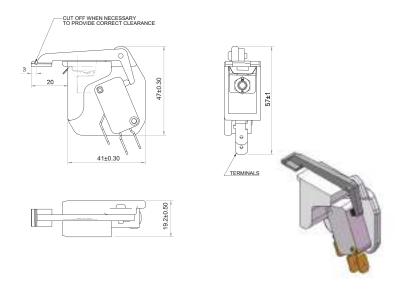
¹ DIN2* (55x55), if DIN2 then use microswitch 170H0236, 170H0238.

170H - Microswitches for square body fuse links - indicator systems

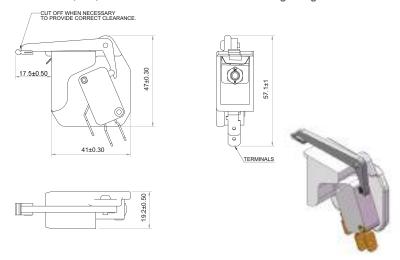
Dimensions (mm) - 170H0069



Dimensions (mm) - 170H0235 and 170H0237 for bent tags



Dimensions (mm) - 170H0236 and 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 |
| MT | MC-700 |
| MMT | MC-700 |

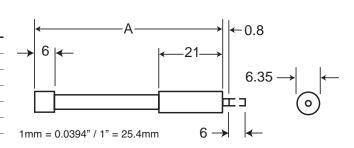




Indicator Only

| Max RMS AC voltage (V a.c. RMS) | Dim 'A' (mm) |
|---------------------------------------|---|
| 250 | 37.6 |
| 500 | 47.5 |
| 600 | 55.7 |
| 700 | 61.8 |
| 1100 | 98.4 |
| 1500 | 120.8 |
| 2000 | 147.5 |
| 2500 | 198.3 |
| | voltage (V a.c. RMS) 250 500 600 700 1100 1500 2000 |

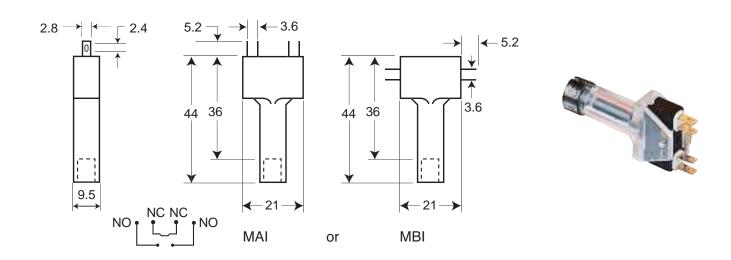
Dimensions (mm)





Microswitch/Adaptor: MAI and MBI

Dimensions (mm)



FW14-PCB Mountable fuse clip

Specifications

Catalogue number

FW14-PCB

Description

Mountable fuse clip compatible with any 14 mm \varnothing fuse links.

Technical data

Max rated power acceptance: 6 Watts

Please note deratings apply to fuse links with watts loss greater than 6 Watts, contact bulehighspeedtechnical@eaton.com for application assistance.

· Material: Copper Alloy CuSn, tin plated

• Weight: 5 grams each

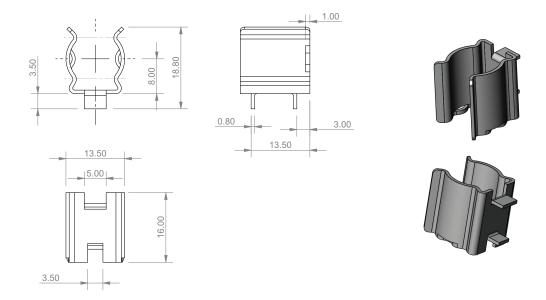
Compatible fuse links

• Any 14 mm Ø fuse links

Standards / Agency information

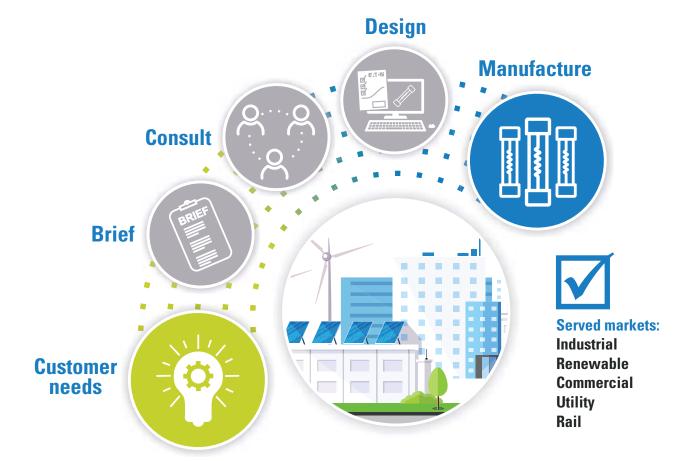
IEC 60269-1

Dimensions (mm)



Appropriate creepage and clearances distances between clips should be maintained when mounting on the PCB.

Customised fuse design service



Eaton's Field Applications
Engineers are able to draw upon more than 100 years of fuse design knowledge to fully meet your application needs and ensure you can rely on the best in class electrical circuit protection solutions.

As the trend towards clean energy continues to drive new technologies in renewable energy generation, energy storage, electrical transportation and the adoption of DC technology throughout wider industries, the demand for customised fusing products has only increased.

Our Application and Design Engineers located at R&D centres in North America, Europe and Asia can leverage over 100 years of fuse design and application experience along with our in-house test labs to meet any customised solution requests for **Eaton's Bussmann series fuses**.

Our services include:

- New current/voltage ratings
- Design to meet I2t requirements
- Customised mounting connection and plating materials
- Modify indicator locations/ add or remove indicators
- Special end connections
- Acquire UL/IEC/CCC/CSA certificates
- Customised testing such as shock vibration
- Higher breaking capacity testing

Contact us today:

For general fuse enquiries: buletechnical@eaton.com
For high speed fuses enquiries : bulehighspeedtechnical@eaton.com



Index

| Catalogue number | Page | Catalogue number | Page | Catalogue number | Page |
|--|------|--|-----------|--------------------------|------------|
| 170E3577 to 170E3581 | 275 | 170M3808D to 170M3819D | 141 | 170M6138 to 170M6151 | 121 |
| 170E3583 to 170E3587 | 275 | 170M3921 to 170M3931 | 207 | 170M6158 to 170M6171 | 98 |
| 170E3906 to 170E3912 | 292 | 170M3951 to 170M3961 | 207 | 170M6188 to 170M6201 | 121 |
| 170E3900 to 170E3912 170E3914 to 170E3919 | 309 | 170M3965 to 170M3975 | 111 | 170M6208 to 170M6221 | 98 |
| | | | | | |
| 170E3922 | 309 | 170M3981 to 170M3991 | 111 | 170M6208 to 170M6221 | 98 |
| 170E3924 to 170E3932 | 306 | 170M4008 to 170M4019 | 98 | 170M6238 to 170M6251 | 121 |
| 170E3933 | 309 | 170M4058 to 170M4069 | 98 | 170M6258 to 170M6271 | 98 |
| 170E3937 to 170E3945 | 295 | 170M4108 to 170M4119 | 98 | 170M6308 to 170M6319 | 164 |
| 170E3950 to 170E3956 | 295 | 170M4138 to 170M4147 | 121 | 170M6338 to 170M6349 | 217 |
| 170E3970 | 295 | 170M4158 to 170M4169 | 98 | 170M6358 to 170M6369 | 164 |
| 170E3971 | 292 | 170M4176 to 170M4186 | 131 | 170M6408 to 170M6421 | 197 |
| 170E3976 | 295 | 170M4188 to 170M4197 | 121 | 170M6458 to 170M6471 | 197 |
| 170E3977 | 292 | 170M4208 to 170M4219 | 98 | 170M6494 to 170M6501 | 217 |
| 170E3982 | 292 | 170M4238 to 170M4247 | 121 | 170M6508 to 170M6521 | 197 |
| 170E3984 | 309 | 170M4258 to 170M4269 | 98 | 170M6538 to 170M6549 | 217 |
| 170E5417 | 275 | 170M4308 to 170M4318 | 154 | 170M6558 to 170M6571 | 197 |
| 170E5418 | 275 | 170M4358 to 170M4368 | 154 | 170M6588 to 170M6599 | 217 |
| 170E5420 | 275 | 170M4388 to 170M4397 | 217 | 170M6608 to 170M6621 | 164 |
| 170E5421 | 275 | 170M4408 to 170M4419 | 197 | 170M6644 to 170M6651 | 217 |
| | | | | | |
| 170E8335 to 170E8337 | 275 | 170M4438 to 170M4447 | 217 | 170M6658 to 170M6671 | 164 |
| 170E8345 to 170E8347 | 275 | 170M4458 to 170M4469 | 197 | 170M6688 to 170M6701 | 184 |
| 170E8882 to 170E8889 | 309 | 170M4458 to 170M4469 | 197 | 170M6708 to 170M6721 | 164 |
| 170E9681 | 275 | 170M4488 to 170M4497 | 217 | 170M6738 to 170M6751 | 184 |
| 170E9685 | 275 | 170M4508 to 170M4519 | 197 | 170M6758 to 170M6771 | 165 |
| 170F8230 to 170F8235 | 290 | 170M4531 to 170M4540 | 174 | 170M6775 to 170M6804 | 246 |
| 170H0069 | 393 | 170M4558 to 170M4569 | 197 | 170M6808D to 170M6814D | 141 |
| 170H023 | 393 | 170M4608 to 170M4619 | 164 | 170M6815 to 170M6817 | 246 |
| 170H1007 | 378 | 170M4658 to 170M4669 | 164 | 170M6827 to 170M6829 | 246 |
| 170H1013 | 378 | 170M4688 to 170M4697 | 184 | 170M6833 to 170M6835 | 246 |
| 170H300 | 379 | 170M4708 to 170M4719 | 164 | 170M6858 to 170M6870 | 242 |
| 170M1308 to 170M1322 | 93 | 170M4738 to 170M4747 | 184 | 170M6878 to 170M6890 | 242 |
| 170M1358 to 170M1372 | 93 | 170M4758 to 170M4769 | 164 | 170M6892D | 141 |
| 170M1408 to 170M1422 | 93 | | 108 | 170M6898 to 170M6910 | 242 |
| | | 170M4802 to 170M4815 | | | |
| 170M1558D to 170M1572D | 141 | 170M4822 to 170M4835 | 108 | 170M6918 to 170M6930 | 242 |
| 170M1730 to 170M1742 | 259 | 170M4863D to 170M4867D | 141 | 170M6938 to 170M6950 | 242 |
| 170M1750 to 170M1762 | 259 | 170M4921 to 170M4930 | 207 | 170M6958 to 170M6970 | 242 |
| 170M1770 to 170M1781 | 259 | 170M4951 to 170M4960 | 207 | 170M7031 | 230 |
| 170M1785 to 170M1796 | 259 | 170M4965 to 170M4974 | 111 | 170M7034 to 170M7037 | 230 |
| 170M1802 to 170M1813 | 265 | 170M4980 to 170M4989 | 111 | 170M7053 | 230 |
| 170M1824 to 170M1833 | 265 | 170M5008 to 170M5018 | 98 | 170M7058 to 170M7066 | 227 |
| 170M1842 to 170M1853 | 265 | 170M5058 to 17M05068 | 98 | 170M7078 to 170M7086 | 227 |
| 170M1860 to 170M1869 | 265 | 170M5108 to 170M5118 | 98 | 170M7090 | 230 |
| 170M2000 to 170M2005 | 271 | 170M5138 to 170M5150 | 121 | 170M7098 to 170M7106 | 227 |
| 170M2010 to 170M2021 | 271 | 170M5158 to 170M5168 | 98 | 170M7107 | 236 |
| 170M2039 to 170M2045 | 300 | 170M5188 to 170M5200 | 121 | 170M7114 | 227 |
| 170M2046 to 170M2057 | 300 | 170M5208 to 170M5218 | 98 | 170M7116 | 227 |
| 170M2090 to 170M2096 | 304 | 170M5238 to 170M5250 | 121 | 170M7118 to 170M7126 | 227 |
| 170M2100 to 170M2111 | 288 | 170M5258 to 170M5268 | 98 | 170M7138 to 170M7147 | 249 |
| | | | | | |
| 170M2608 to 170M2621 | 93 | 170M5308 to 170M5316 | 154 | 170M7156 | 230 |
| 170M2658 to 170M2671 | 93 | 170M5358 to 170M5366 | 154 | 170M7158 to 170M7167 | 249 |
| 170M2673 to 170M2685 | 151 | 170M5388 to 170M5398 | 217 | 170M7171 | 227 |
| 170M2691 to 170M2702 | 131 | 170M5408 to 170M5418 | 197 | 170M7173 | 227 |
| 170M2708 to 170M2721 | 194 | 170M5438 to 170M5448 | 217 | 170M7198 to 170M7207 | 249 |
| 170M2758 to 170M2771 | 194 | 170M5458 to 170M5468 | 197 | 170M7217 | 285 |
| 170M3008 to 170M3023 | 98 | 170M5494 to 170M5500 | 217 | 170M7218 to 170M7227 | 249 |
| 170M3058 to 170M3073 | 98 | 170M5508 to 170M5518 | 197 | 170M7340 | 227 |
| 170M3108 to 170M3123 | 98 | 170M5531 to 170M5540 | 174 | 170M7350 to 170M7358 | 336 |
| 170M3138 to 170M3148 | 121 | 170M5558 to 170M5568 | 197 | 170M7353-B to 170M7402-B | 336 |
| 170M3158 to 170M3173 | 98 | 170M5588 to 170M5598 | 217 | 170M7397 to 170M7402 | 336 |
| 170M3188 to 170M3198 | 121 | 170M5608 to 170M5618 | 164 | 170M7488 | 252 |
| 170M3208 to 170M3223 | 98 | 170M5644 to 170M5650 | 217 | 170M7498 | 252 |
| 170M3238 to 170M3248 | 121 | 170M5658 to 170M5668 | 164 | 170M7510 to 170M7513 | 236 |
| 170M3258 to 170M3273 | 98 | 170M5688 to 170M5700 | 184 | 170M7516 | 236 |
| 170M3308 to 170M3321 | 154 | 170M5708 to 170M5718 | 164 | 170M7532 | 236 |
| 170M3358 to 170M3371 | 154 | 170M5738 to 170M5750 | 184 | 170M7542 | 230 |
| 170M3388 to 170M3397 | 217 | 170M5758 to 170M5750 | 164 | 170M7542 170M7544 | 230 |
| | | | | | 230 |
| 170M3408 to 170M3423 | 197 | 170M5808D to 170M5814D | 141 | 170M7546 | |
| 170M3438 to 170M3448 | 217 | 170M5816D | 141 | 170M7548 | 230 |
| 170M3458 to 170M3473 | 197 | 170M5817D | 141 | 170M7567 to 170M7569 | 252 |
| 170M3488 to 170M3497 | 217 | 170M5820D | 141 | 170M7592 | 236 |
| 170M3508 to 170M3523 | 197 | 170M5881 to 170M5889 | 131 | 170M7595 | 236 |
| 170M3531 to 170M3541 | 174 | 170M5922 to 170M5931 | 207 | 170M7597 | 236 |
| 170M3558 to 170M3573 | 197 | 170M5952 to 170M5961 | 207 | 170M7608 | 252 |
| 170M3608 to 170M3623 | 164 | 170M5966 to 170M5975 | 111 | 170M7622 | 252 |
| 170M3658 to 170M3673 | 164 | 170M5981 to 170M5990 | 111 | 170M7633 | 236 |
| 170M3688 to 170M3697 | 184 | 170M6008 to 170M6021 | 98 | 170M7636 | 230 |
| 170M3708 to 170M3723 | 164 | 170M6058 to 170M6071 | 98 | 170M7639 | 230 |
| | | | | | |
| 170M3738 to 170M3747 | 184 | 170M6080 to 170M6087 | 131 | 170M7640 | 230 |
| 170M3738 to 170M3747 170M3758 to 170M3773 | | 170M6080 to 170M6087 170M6108 to 170M6121 | 131 98 | 170M7640 170M7658 | 230 230 |

Index

| | _ |
|---|--------------------|
| Catalogue number | Page |
| 170M7661 170M7676 | 230 236 |
| 170M7676 | 252 |
| 170M7692 | 230 |
| 170M7693 | 230 |
| 170M7802 to 170M7804 | 236 |
| 170M7976 | 236 236 |
| 170M7978 170M8500 to 170M8513 | 207 |
| 170M8531 to 170M8544 | 174 |
| 170M8554D to 170M8557D | 141 |
| 170M8600 to 170M8613 | 207 |
| 170M8614 to 170M8627 | 111 |
| 170M8629 to 170M8642 17M1408 to 170M1422 | 111 93 |
| 1BS | 377 |
| ВН | 377 |
| BMM | 381 |
| BSF-G-3XL15 BSF-G-NH | 374 368 |
| C5268 | 300 |
| CH14 | 389 |
| CH14-CTP | 390 |
| CH14-SPS | 390 |
| CH14-TPS | 390 |
| CH22 CH22-CTP | 391 392 |
| CH22-SPS | 392 |
| CH22-TPS | 392 |
| CHCC | 387 |
| CHM | 387 |
| CHPV_IU CHPV_U | 326 326 and 387 |
| CHPV14 | 332 |
| CHPV15H85 | 329 |
| CHSF | 16 |
| CT | 47 |
| CVR DFJ | 384 256 |
| EC | 395 |
| EET | 47 |
| ET | 47 |
| FE FEE | 47 47 |
| FM | 52 |
| FMM | 52 |
| FW14-PCB | 396 |
| FWA-A FWA-A10F | 9 58 |
| FWA-A21F | 58 |
| FWA-AH | 6 |
| FWA-B | 9 |
| FWC-A10F | 68 |
| FWE FWH-A | 34 20 |
| FWH-A14F | 66 |
| FWH-A6F | 64 |
| FWH-B | 20 |
| FWJ FWJ-A14F | 31 86 |
| FWK | 84 |
| FWK-A20F | 315 |
| FWK-A25F | 315 |
| FWL-A20F | 88 |
| FWL-A20F FWP-A | 317 25 |
| FWP-A14F | 79 |
| FWP-A22F | 82 |
| FWP-B | 25 |
| FWP-D FWP-G10F | 25 |
| FWP-G10F FWP-G14F | 70 73 |
| FWP-G22F | 76 |
| FWS-A20F | 90 |
| FWS-A20F | 317 |
| FWX-A | 13 |
| FWX-A14F FWX-AH | 61 13 |
| JM60 | 384 |
| | |

| 0.11 | |
|------------------|-------------|
| Catalogue number | Page |
| JM70100 | 383 |
| JV-L | 390 and 392 |
| KAC | 23 |
| KBC | 24 |
| KC36 | 318 |
| LCT | 40 |
| LET | 40 |
| LMMT | 44 |
| LMT | 44 |
| LRC750 | 316 |
| MC | 395 |
| MMT | 52 |
| MT | 52 |
| NBC | 320 |
| PV-3L | 357 |
| PV-3L-15 | 357 |
| PV-A10 | 323 |
| PV-A10F85L | 327 |
| PV-A14F | 330 |
| PV-A14L | 333 |
| PV-A14LF10F | 333 |
| PV-A14L-T | 333 |
| PV-AF | 354 |
| PV-ANH | 343 |
| PVM | 321 |
| PV-XL | 357 |
| PV-XL-15 | 357 |
| RC | 319 |
| SD-D-PV | 352 |
| SD-S-PV | 367 |
| TI | 395 |
| | |



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|--------------------------------|--|
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| Breaking capacity | Up to 150 kA |
| Applications | Batteries, converters, inverters, charging circuits and auxiliary circuits |

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