

## 5.5kV E-Rated

Medium voltage fuses for feeder circuit, switchgear and transformer protection



### Description:

- E-Rated, current-limiting, medium voltage fuses for feeder circuit, switchgear and transformer protection.

### Features and benefits

- Current-limiting E-Rated medium voltage fuses are defined by their melting time-current characteristic that permit their electrical interchangeability with other fuses of the same E Rating.
- E-Rated fuses must have a defined current response time specified by ANSI C37.46. E-Rated fuse of 100 amps and below must melt in 300 seconds at an RMS current within the range of 200% to 240% of the fuse's nameplate current rating. E-Rated fuses greater than 100 amps must melt in 600 seconds at an RMS current within the range of 220% to 264% of the fuse's nameplate current rating.
- E-Rated fuses are physically dimensioned for easy installation in existing hardware.
- Current-limiting fuses provide positive interruption even on low fault currents. The fuse limits the magnitude of electromechanical stresses in the protected apparatus.
- Constructions available in ferrule, bolt-on and clip-lock, and specialty mount fuses for AMPGARD™ motor starters.
- Outdoor rating available on select catalog numbers (requires installation in a suitable enclosure).
- Open fuse indicator easily integrates into automation schemes and speeds troubleshooting by providing a positive visual indication of fuse operation.
- 50/60Hz operating frequency for worldwide application.
- Mountings are available in disconnect and non-disconnect versions with porcelain or glass polyester insulators.
- Live parts and end fittings available.

### Typical applications:

- Medium voltage transformer primary protection
- Medium voltage feeder circuit protection
- Medium voltage switches
- Medium voltage metal-enclosed switchgear



Powering Business Worldwide

## E-Rated medium voltage ferrule fuses

### Catalog symbols:

- General purpose:
  - 5CLE-\_E-D (10-25A)
  - 5CLE-\_E (10-1350A)
  - 5HLE-\_E (10-450A)
  - JCY-\_E (1-25A)
- Full range (per ANSI C37.40)
  - MV055F\_ (10-450A)

### Ratings\*:

- Volts
  - 5.5kV
- Amps
  - 1 to 1350A
- Interrupting ratings
  - 40 to 63kA RMS Sym

\* See catalog number tables for voltages, ampacities and interrupting ratings by catalog number.

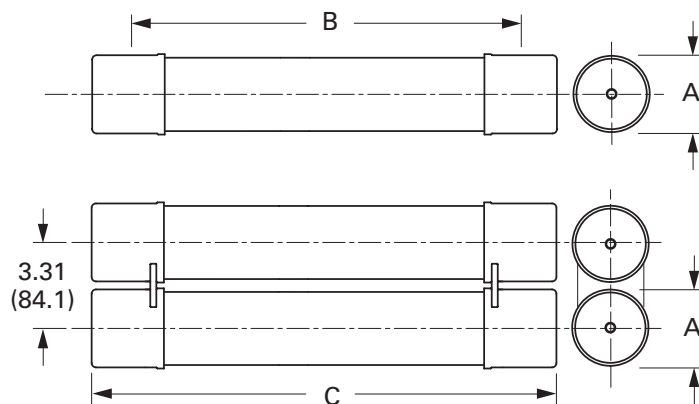
### Agency information:

- E-Rated fuses meet the performance characteristics of ANSI C37.46
- UL® Listed, Guide JEEG, File E240398. See catalog numbers.

### Recommended fuseclips and holders:

CLE and HLE

### Dimensions (see catalog number tables for values)



|                                          |                           |                     |                                  |                  |              | Catalog number                                     |                              |                                           |                                      |
|------------------------------------------|---------------------------|---------------------|----------------------------------|------------------|--------------|----------------------------------------------------|------------------------------|-------------------------------------------|--------------------------------------|
|                                          |                           |                     |                                  |                  |              | Mounting<br>(including live parts, end fittings)** |                              | Live parts<br>(including<br>end fittings) | End fittings<br>(disconnect<br>only) |
| Amp rating                               | Fuse<br>mounting<br>type* | Voltage<br>BIL (kV) | Approximate dimensions - in (mm) |                  |              | Porcelain insulator                                | Glass-polyester<br>insulator |                                           |                                      |
|                                          |                           |                     | Diameter<br>A                    | Clip center<br>B | Length<br>C  |                                                    |                              |                                           |                                      |
| CLE                                      |                           |                     |                                  |                  |              |                                                    |                              |                                           |                                      |
| 10E-D-25E-D<br>30E-250E<br>Single barrel | Non-disconnect            | 60                  | 3.0 (76.2)                       | 14.0 (355.6)     | 17.9 (454.7) | 5CLE-PNM-D                                         | 5CLE-GNM-D                   | CLE-NL-D                                  | —                                    |
|                                          | Disconnect†               | 60                  |                                  |                  |              | 5CLE-PDM-D                                         | 5CLE-GDM-D                   | CLE-DL-D                                  | CLE-DF-D                             |
| 15E-25E<br>Single barrel                 | Non-disconnect            | 60                  | 2.0 (50.8)                       | 11.5 (292.1)     | 12.9 (327.7) | 5CLE-PNM-C                                         | 5CLE-GNM-C                   | CLE-NL-C                                  | —                                    |
|                                          | Disconnect†               | 60                  |                                  |                  |              | 5CLE-PDM-C                                         | 5CLE-GDM-C                   | CLE-DL-C                                  | CLE-DF-C                             |
| 300E-450E<br>Double barrel               | Non-disconnect            | 60                  | 3.0 (76.2)                       | 14.0 (355.6)     | 17.9 (454.7) | 5CLE-PNM-E                                         | 5CLE-GNM-E                   | CLE-NL-E                                  | —                                    |
|                                          | Disconnect†               | 60                  |                                  |                  |              | 5CLE-PDM-E                                         | 5CLE-GDM-E                   | CLE-DL-E                                  | CLE-DF-E                             |
| 600E and 750E<br>Double barrel           | Consult factory           | 60                  | 4.0 (101.6)                      | N/A              | N/A          | —                                                  | —                            | —                                         | —                                    |
| 1100E and 1350E<br>Four barrel           | Consult factory           | —                   | 4.0 (101.6)                      | N/A              | N/A          | —                                                  | —                            | —                                         | —                                    |
| HLE                                      |                           |                     |                                  |                  |              |                                                    |                              |                                           |                                      |
| 10E-D-250E<br>Single barrel              | Non-disconnect            | 60                  | 3.0 (76.2)                       | 12.0 (304.8)     | 15.9 (403.9) | 5HLE-PNM-D                                         | 5HLE-GNM-D                   | CLE-NL-D                                  | —                                    |
|                                          | Disconnect                | 60                  |                                  |                  |              | 5HLE-PDM-D                                         | 5HLE-GDM-D                   | CLE-DL-D                                  | CLE-DF-D                             |
| 300E-450E<br>Double barrel               | Non-disconnect            | 60                  | 3.0 (76.2)                       | 12.0 (304.8)     | 15.9 (403.9) | 5HLE-PNM-E                                         | 5HLE-GNM-E                   | CLE-NL-E                                  | —                                    |
|                                          | Disconnect                | 60                  |                                  |                  |              | 5HLE-PDM-E                                         | 5HLE-GDM-E                   | CLE-DL-E                                  | CLE-DF-E                             |

\* See page 12 for illustrations and dimensions

\*\* End fittings supplied only when required.

† Disconnect mountings provide a means for fuse extraction only. Do not use a disconnect mounting for load switching or fuse removal while energized.

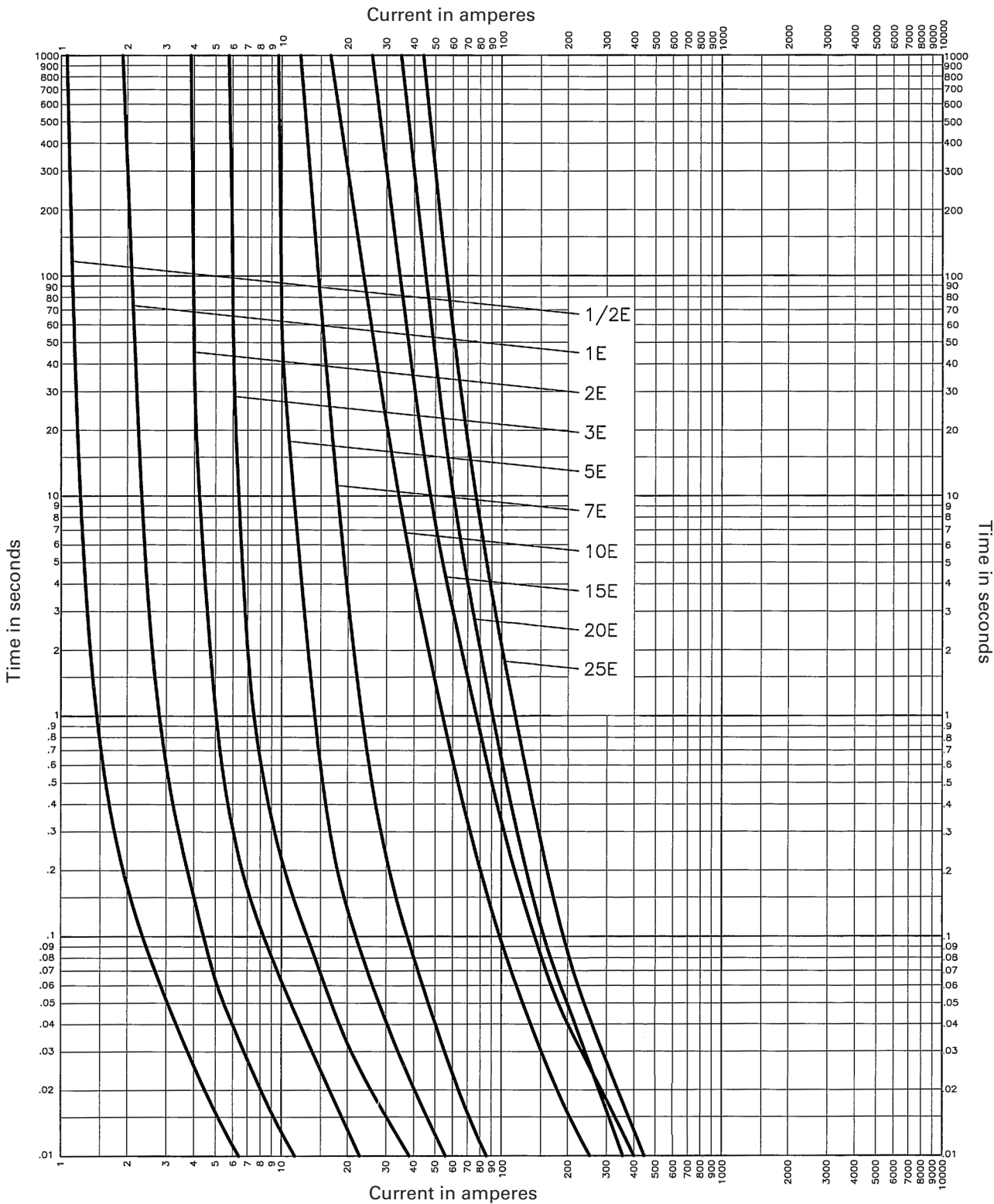
CLE, HLE and JCY general purpose

| Amp rating | Dimensions - in (mm) |            |                | Interrupting<br>rating kA<br>(RMS Sym.) | Number of<br>barrels | Installation<br>location | Catalog number |
|------------|----------------------|------------|----------------|-----------------------------------------|----------------------|--------------------------|----------------|
|            | Length A             | Diameter B | Clip centers C |                                         |                      |                          |                |
| 1          | 11.2 (284)           | 2 (51)     | 9 (229)        | 40                                      | 1                    | Indoor/outdoor           | JCY-1E         |
| 2          | 11.2 (284)           | 2 (51)     | 9 (229)        | 40                                      | 1                    | Indoor/outdoor           | JCY-2E         |
| 3          | 11.2 (284)           | 2 (51)     | 9 (229)        | 40                                      | 1                    | Indoor/outdoor           | JCY-3E         |
| 5          | 11.2 (284)           | 2 (51)     | 9 (229)        | 40                                      | 1                    | Indoor/outdoor           | JCY-5E         |
| 7          | 11.2 (284)           | 2 (51)     | 9 (229)        | 40                                      | 1                    | Indoor/outdoor           | JCY-7E         |
| 10         | 11.2 (284)           | 2 (51)     | 9 (229)        | 40                                      | 1                    | Indoor/outdoor           | JCY-10E        |
| 10         | 17.9 (455)           | 3 (76)     | 14 (356)       | 63                                      | 1                    | Indoor/outdoor           | 5CLE-10E-D     |
| 10         | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 1                    | Indoor/outdoor           | 5HLE-10E       |
| 15         | 11.2 (284)           | 2 (51)     | 9 (229)        | 40                                      | 1                    | Indoor/outdoor           | JCY-15E        |
| 15         | 12.9 (328)           | 2 (51)     | 11.5 (292)     | 50                                      | 1                    | Indoor                   | 5CLE-15E*      |
| 15         | 17.9 (455)           | 3 (76)     | 14 (356)       | 63                                      | 1                    | Indoor/outdoor           | 5CLE-15E-D     |
| 15         | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 1                    | Indoor/outdoor           | 5HLE-15E       |
| 20         | 11.2 (284)           | 2 (51)     | 9 (229)        | 40                                      | 1                    | Indoor/outdoor           | JCY-20E        |
| 20         | 12.9 (328)           | 2 (51)     | 11.5 (292)     | 50                                      | 1                    | Indoor                   | 5CLE-20E*      |
| 20         | 17.9 (455)           | 3 (76)     | 14 (356)       | 63                                      | 1                    | Indoor/outdoor           | 5CLE-20E-D     |
| 20         | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 1                    | Indoor/outdoor           | 5HLE-20E       |
| 25         | 11.2 (284)           | 2 (51)     | 9 (229)        | 40                                      | 1                    | Indoor/outdoor           | JCY-25E        |
| 25         | 12.9 (328)           | 2 (51)     | 11.5 (292)     | 50                                      | 1                    | Indoor                   | 5CLE-25E*      |
| 25         | 17.9 (455)           | 3 (76)     | 14 (356)       | 63                                      | 1                    | Indoor/outdoor           | 5CLE-25E-D     |
| 25         | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 1                    | Indoor/outdoor           | 5HLE-25E       |
| 30         | 17.9 (455)           | 3 (76)     | 14 (356)       | 63                                      | 1                    | Indoor/outdoor           | 5CLE-30E       |
| 30         | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 1                    | Indoor/outdoor           | 5HLE-30E       |
| 40         | 17.9 (455)           | 3 (76)     | 14 (356)       | 50                                      | 1                    | Indoor/outdoor           | 5CLE-40E†      |
| 40         | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 1                    | Indoor/outdoor           | 5HLE-40E†      |
| 50         | 17.9 (455)           | 3 (76)     | 14 (356)       | 50                                      | 1                    | Indoor/outdoor           | 5CLE-50E†      |
| 50         | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 1                    | Indoor/outdoor           | 5HLE-50E†      |
| 65         | 17.9 (455)           | 3 (76)     | 14 (356)       | 50                                      | 1                    | Indoor/outdoor           | 5CLE-65E†      |
| 65         | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 1                    | Indoor/outdoor           | 5HLE-65E†      |
| 80         | 17.9 (455)           | 3 (76)     | 14 (356)       | 50                                      | 1                    | Indoor/outdoor           | 5CLE-80E†      |
| 80         | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 1                    | Indoor/outdoor           | 5HLE-80E†      |
| 100        | 17.9 (455)           | 3 (76)     | 14 (356)       | 50                                      | 1                    | Indoor/outdoor           | 5CLE-100E†     |
| 100        | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 1                    | Indoor/outdoor           | 5HLE-100E†     |
| 125        | 17.9 (455)           | 3 (76)     | 14 (356)       | 50                                      | 1                    | Indoor/outdoor           | 5CLE-125E†     |
| 125        | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 1                    | Indoor/outdoor           | 5HLE-125E†     |
| 150        | 17.9 (455)           | 3 (76)     | 14 (356)       | 63                                      | 1                    | Indoor/outdoor           | 5CLE-150E†     |
| 150        | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 1                    | Indoor/outdoor           | 5HLE-150E†     |
| 175        | 17.9 (455)           | 3 (76)     | 14 (356)       | 63                                      | 1                    | Indoor/outdoor           | 5CLE-175E†     |
| 175        | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 1                    | Indoor/outdoor           | 5HLE-175E†     |
| 200        | 17.9 (455)           | 3 (76)     | 14 (356)       | 63                                      | 1                    | Indoor/outdoor           | 5CLE-200E†     |
| 200        | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 1                    | Indoor/outdoor           | 5HLE-200E†     |
| 250        | 17.9 (455)           | 3 (76)     | 14 (356)       | 63                                      | 1                    | Indoor/outdoor           | 5CLE-250E†     |
| 250        | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 1                    | Indoor/outdoor           | 5HLE-250E†     |
| 300        | 17.9 (455)           | 3 (76)     | 14 (356)       | 63                                      | 2                    | Indoor/outdoor           | 5CLE-300E†     |
| 300        | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 2                    | Indoor/outdoor           | 5HLE-300E†     |
| 350        | 17.9 (455)           | 3 (76)     | 14 (356)       | 63                                      | 2                    | Indoor/outdoor           | 5CLE-350E†     |
| 350        | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 2                    | Indoor/outdoor           | 5HLE-350E†     |
| 400        | 17.9 (455)           | 3 (76)     | 14 (356)       | 63                                      | 2                    | Indoor/outdoor           | 5CLE-400E†     |
| 400        | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 2                    | Indoor/outdoor           | 5HLE-400E†     |
| 450        | 17.9 (455)           | 3 (76)     | 14 (356)       | 63                                      | 2                    | Indoor/outdoor           | 5CLE-450E†     |
| 450        | 15.9 (404)           | 3 (76)     | 12 (305)       | 63                                      | 2                    | Indoor/outdoor           | 5HLE-450E†     |

\* Fuses conform to dimensional standards established by Westinghouse.

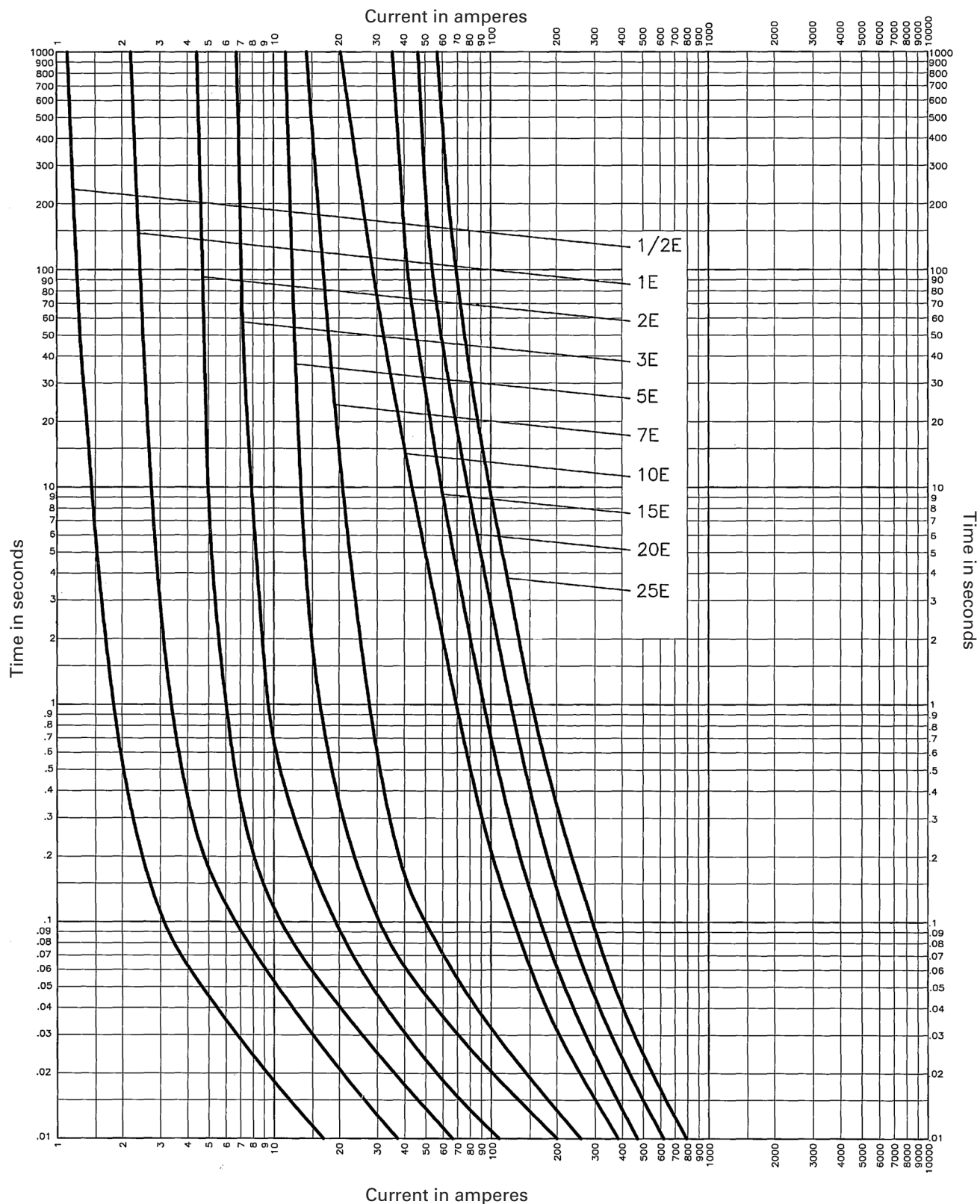
† UL Listed, Guide JEEG, File E240398.

5.5kV time-current curves — minimum melt for JCY\_E fuses



JCY-

5.5kV time-current curves — total clear for JCY-E fuses



JCY-

MV055 full range

| Amp rating | Dimensions - in (mm) |               |                   | Interrupting<br>rating kA<br>(RMS Sym.) | Number of<br>barrels | Installation<br>location | Catalog number |
|------------|----------------------|---------------|-------------------|-----------------------------------------|----------------------|--------------------------|----------------|
|            | Length<br>A          | Diameter<br>B | Clip centers<br>C |                                         |                      |                          |                |
| 5          | 15.7 (399)           | 2 (51)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1CAX5E   |
| 7          | 15.7 (399)           | 2 (51)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1CAX7E   |
| 10         | 15.7 (399)           | 2 (51)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1CAX10E  |
| 10         | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1DAX10E  |
| 15         | 15.7 (399)           | 2 (51)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1CAX15E  |
| 15         | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1DAX15E  |
| 20         | 15.7 (399)           | 2 (51)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1CAX20E  |
| 20         | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1DAX20E  |
| 25         | 15.7 (399)           | 2 (51)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1CAX25E  |
| 25         | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1DAX25E  |
| 30         | 15.7 (399)           | 2 (51)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1CAX30E  |
| 30         | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1DAX30E  |
| 40         | 15.7 (399)           | 2 (51)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1CAX40E  |
| 40         | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1DAX40E  |
| 50         | 15.7 (399)           | 2 (51)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1CAX50E  |
| 50         | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1DAX50E  |
| 65         | 15.7 (399)           | 2 (51)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1CAX65E  |
| 65         | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1DAX65E  |
| 80         | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1DAX80E  |
| 100        | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1DAX100E |
| 125        | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1DAX125E |
| 150        | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1DAX150E |
| 175        | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1DAX175E |
| 200        | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 1                    | Indoor                   | MV055F1DAX200E |
| 250        | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 2                    | Indoor                   | MV055F2DAX250E |
| 300        | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 2                    | Indoor                   | MV055F2DAX300E |
| 350        | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 2                    | Indoor                   | MV055F2DAX350E |
| 400        | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 2                    | Indoor                   | MV055F2DAX400E |
| 450        | 15.7 (399)           | 3 (76)        | 12 (305)          | 50                                      | 2                    | Indoor                   | MV055F2DAX450E |

Recommended MV055 fuseclips:

| Description                    | Fuse<br>diameter -<br>in (mm) | Figure | Clip dimensions - in (mm) |           |           |           |            |           |          | Catalog<br>number |
|--------------------------------|-------------------------------|--------|---------------------------|-----------|-----------|-----------|------------|-----------|----------|-------------------|
|                                |                               |        | A                         | B         | C         | D         | E          | F         | G        |                   |
| Enclosed fuseclip              | 2 (51)                        | 1      | 3.75 (95)                 | 1.98 (50) | 2.01 (51) | 1.19 (30) | 4.54 (115) | 1.51 (38) | 0.4 (10) | A3354710*         |
| Enclosed fuseclip              | 3 (76)                        | 1      | 4.14 (105)                | 2.45 (62) | 3.01 (76) | 1.19 (30) | 5.64 (143) | 1.51 (38) | 0.4 (10) | A3354730*         |
| Open fuseclip                  | 3 (76)                        | 2      | See dimensions drawing    |           |           |           |            |           |          | 1A0065            |
| Spring loaded open<br>fuseclip | 3 (76)                        | 3      | See dimensions drawing    |           |           |           |            |           |          | 9078A67G04        |

\*For single barrel applications only. Not sold in pairs.

Figure 1

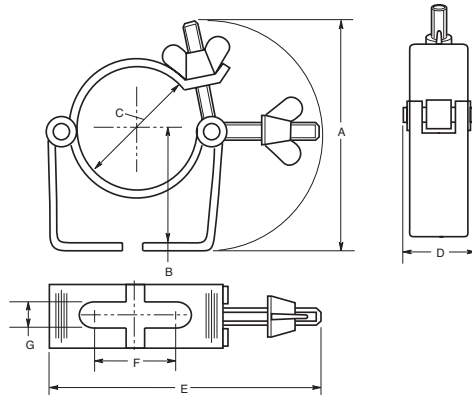


Figure 2

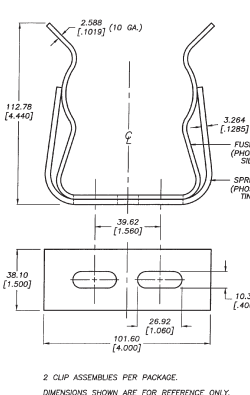
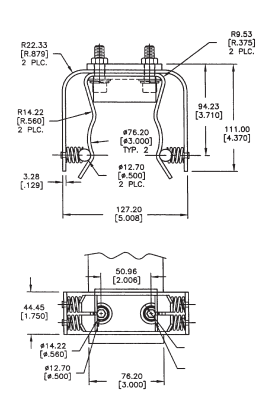
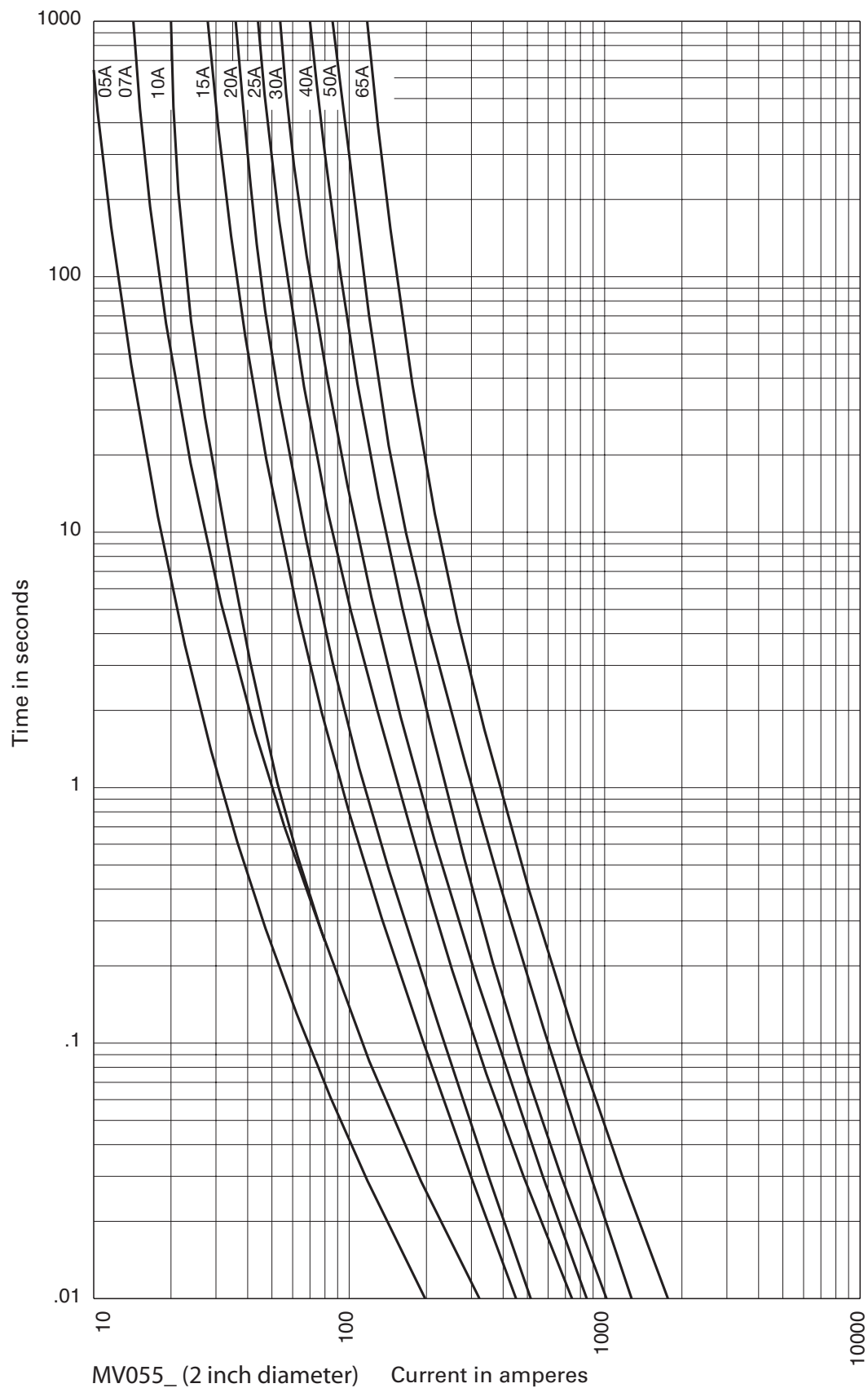


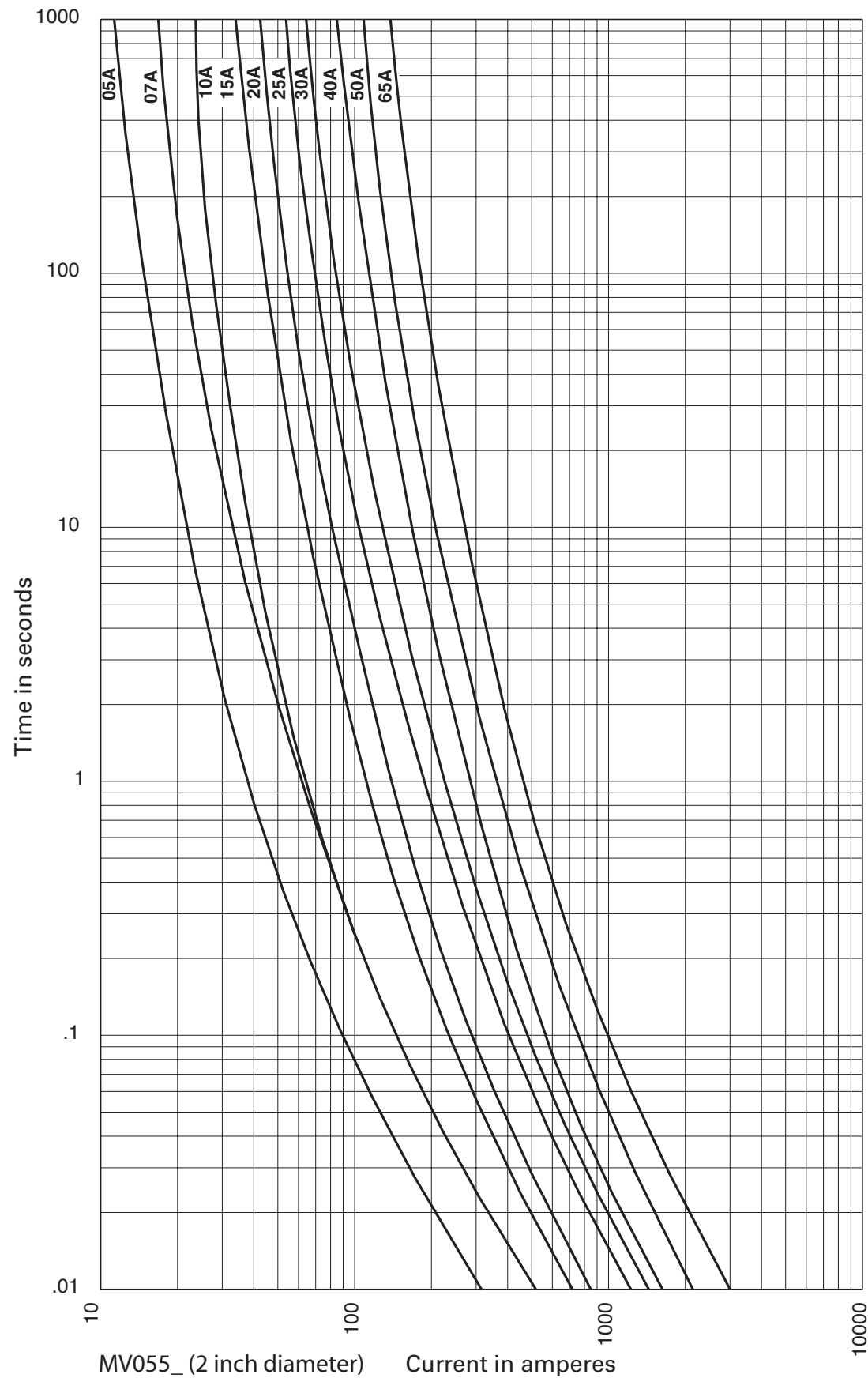
Figure 3



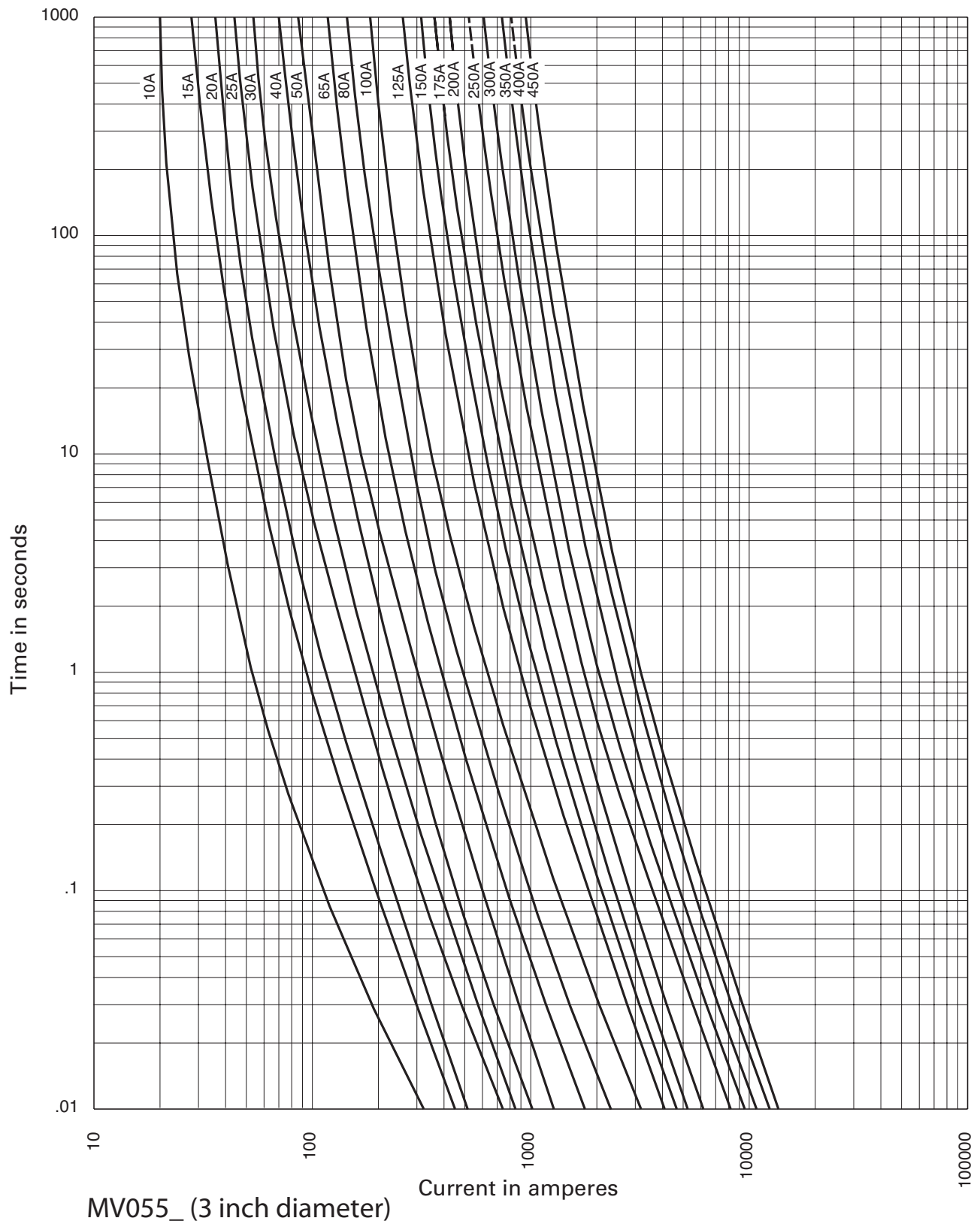
**5.5kV time-current curves — minimum melt for MV055\_ 2 inch diameter fuses**



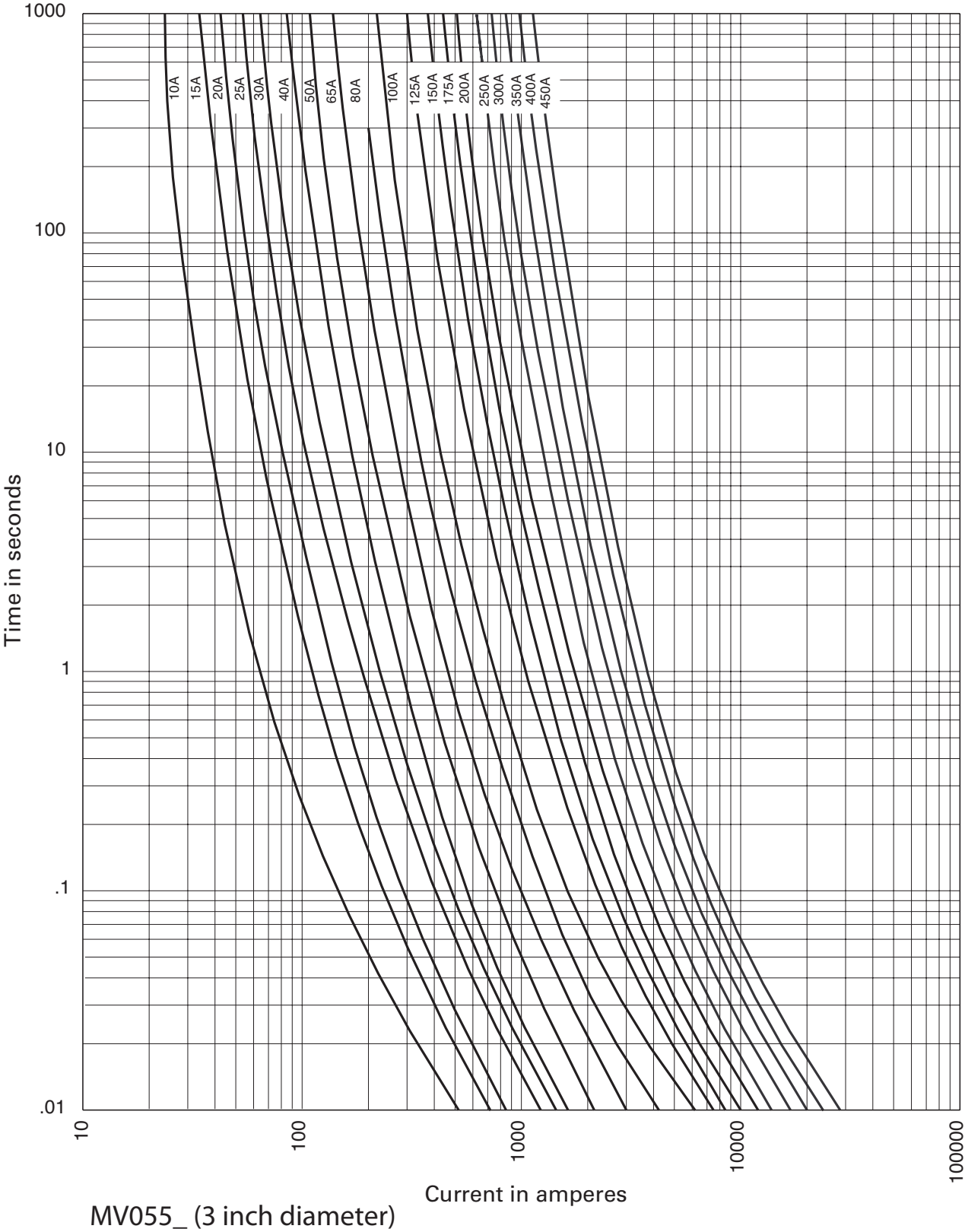
5.5kV time-current curves — total clear for MV055\_ 2 inch diameter fuses



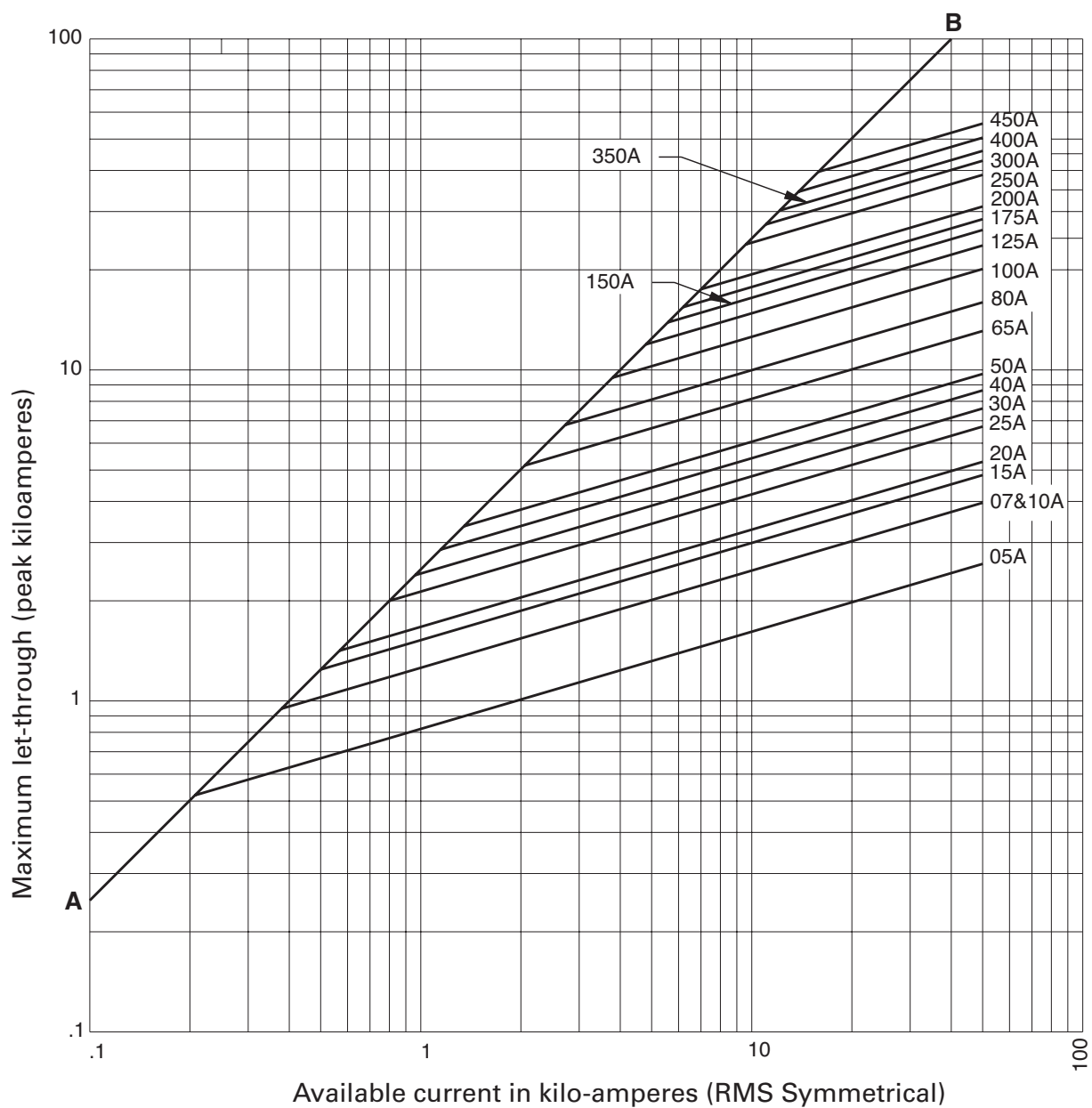
**5.5kV time-current curves — minimum melt for MV055\_ 3 inch diameter fuses**



5.5kV time-current curves — total clear for MV055\_ 3 inch diameter fuses



5.5kV peak let-through for MV055\_ 2 and 3 inch diameter fuses

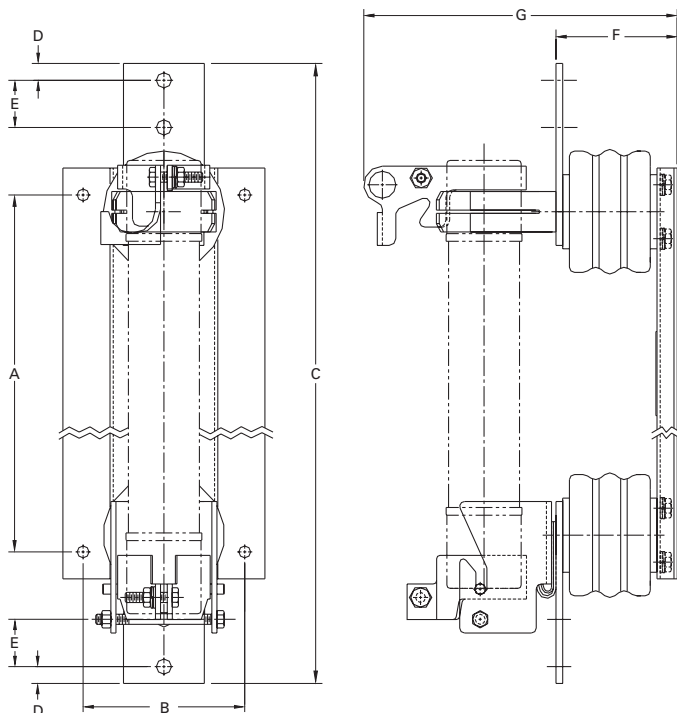


MV055\_ (2 and 3 inch diameter)

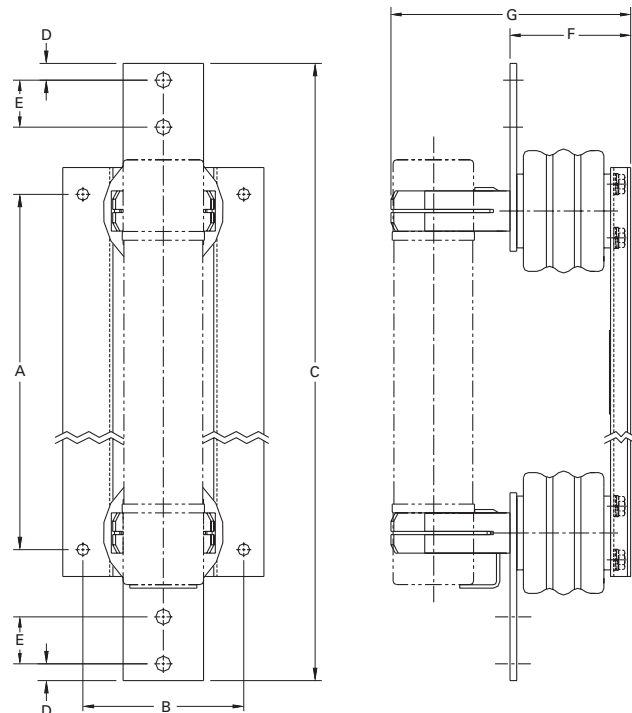
**CLE and HLE type mountings - in (mm)**

| Catalog number               | Hole centers  |           | Overall length | Hole Inset  | Hole centers | Contact height | Overall height | BIL kV |
|------------------------------|---------------|-----------|----------------|-------------|--------------|----------------|----------------|--------|
|                              | A             | B         |                |             |              |                |                |        |
| Disconnect single barrel†    |               |           |                |             |              |                |                |        |
| 5CLE-GDM-C                   | 12.74 (323.6) | 6 (152.4) | 25.5 (647.7)   | 0.75 (19)   | 1.75 (44.4)  | 4.5 (114.3)    | 9.75 (247.6)   | 60     |
| 5CLE-PDM-C                   | 12.74 (323.6) | 6 (152.4) | 25.5 (647.7)   | 0.75 (19)   | 1.75 (44.4)  | 4.5 (114.3)    | 9.75 (247.6)   | 60     |
| 5CLE-GDM-D                   | 15.24 (387.1) | 6 (152.4) | 25 (635)       | 0.62 (15.7) | 1.75 (44.4)  | 4.5 (114.3)    | 11.72 (297.7)  | 60     |
| 5CLE-PDM-D                   | 15.24 (387.1) | 6 (152.4) | 25 (635)       | 0.62 (15.7) | 1.75 (44.4)  | 4.5 (114.3)    | 11.72 (297.7)  | 60     |
| 5HLE-GDM-D                   | 16.25 (412.8) | 6 (152.4) | 23 (584.2)     | 0.62 (15.7) | 1.75 (44.4)  | 4.5 (114.3)    | 11.72 (297.7)  | 60     |
| 5HLE-PDM-D                   | 16.25 (412.8) | 6 (152.4) | 23 (584.2)     | 0.62 (15.7) | 1.75 (44.4)  | 4.5 (114.3)    | 11.72 (297.7)  | 60     |
| Disconnect double barrel†    |               |           |                |             |              |                |                |        |
| 5CLE-GDM-E                   | 15.24 (387.1) | 6 (152.4) | 25 (635)       | 0.62 (15.7) | 1.75 (44.4)  | 4.5 (114.3)    | 15.28 (388.1)  | 60     |
| 5CLE-PDM-E                   | 15.24 (387.1) | 6 (152.4) | 25 (635)       | 0.62 (15.7) | 1.75 (44.4)  | 4.5 (114.3)    | 15.28 (388.1)  | 60     |
| 5HLE-GDM-E                   | 16.25 (412.8) | 6 (152.4) | 23 (584.2)     | 0.62 (15.7) | 1.75 (44.4)  | 4.5 (114.3)    | 15.28 (388.1)  | 60     |
| 5HLE-PDM-E                   | 16.25 (412.8) | 6 (152.4) | 23 (584.2)     | 0.62 (15.7) | 1.75 (44.4)  | 4.5 (114.3)    | 15.28 (388.1)  | 60     |
| Non-disconnect single barrel |               |           |                |             |              |                |                |        |
| 5CLE-GNM-C                   | 12.75 (323.8) | 6 (152.4) | 22 (558.8)     | 0.75 (19)   | 1.75 (44.4)  | 4.5 (114.3)    | 7.25 (184.1)   | 60     |
| 5CLE-PNM-C                   | 12.75 (323.8) | 6 (152.4) | 22 (558.8)     | 0.75 (19)   | 1.75 (44.4)  | 4.5 (114.3)    | 7.25 (184.1)   | 60     |
| 5CLE-GNM-D                   | 15.24 (387.1) | 6 (152.4) | 25 (635)       | 0.62 (15.7) | 1.75 (44.4)  | 4.5 (114.3)    | 8.79 (223.3)   | 60     |
| 5CLE-PNM-D                   | 15.24 (387.1) | 6 (152.4) | 25 (635)       | 0.62 (15.7) | 1.75 (44.4)  | 4.5 (114.3)    | 8.79 (223.3)   | 60     |
| 5HLE-GNM-D                   | 16.25 (412.7) | 6 (152.4) | 23 (584.2)     | 0.62 (15.7) | 1.75 (44.4)  | 4.5 (114.3)    | 8.79 (223.3)   | 60     |
| 5HLE-PNM-D                   | 16.25 (412.7) | 6 (152.4) | 23 (584.2)     | 0.62 (15.7) | 1.75 (44.4)  | 4.5 (114.3)    | 8.79 (223.3)   | 60     |
| Non-disconnect double barrel |               |           |                |             |              |                |                |        |
| 5CLE-GNM-E                   | 15.24 (387.1) | 6 (152.4) | 25 (635)       | 0.62 (15.7) | 1.42 (36.1)  | 4.5 (114.3)    | 12.48 (317)    | 60     |
| 5CLE-PNM-E                   | 15.24 (387.1) | 6 (152.4) | 25 (635)       | 0.62 (15.7) | 1.42 (36.1)  | 4.5 (114.3)    | 12.48 (317)    | 60     |
| 5HLE-GNM-E                   | 16.25 (412.7) | 6 (152.4) | 23 (584.2)     | 0.62 (15.7) | 1.75 (44.4)  | 4.5 (114.3)    | 12.48 (317)    | 60     |
| 5HLE-PNM-E                   | 16.25 (412.7) | 6 (152.4) | 23 (584.2)     | 0.62 (15.7) | 1.75 (44.4)  | 4.5 (114.3)    | 12.48 (317)    | 60     |

**CLE and HLE type disconnect mounting†**



**CLE and HLE type non-disconnect mounting**



† Disconnect mountings provide a means for fuse extraction only. Do not use a disconnect mounting for load switching or fuse removal while energized.

## E-Rated medium voltage specialty mount fuses

### Catalog symbols:

- \_AHLE-\_E (for Eaton AMPGARD motor starting assemblies)
- \_BHLE-\_E/\_BHCL-\_E (bolt-on version)
- \_HCL-\_E (clip-lock version)

### Ratings\*:

- Volts
  - 5.5kV
- Amps
  - 10 to 900A
- Interrupting ratings
  - 31 to 63kA RMS Sym

\* See catalog number tables for voltages, ampacities and interrupting ratings by catalog number.

### Agency information:

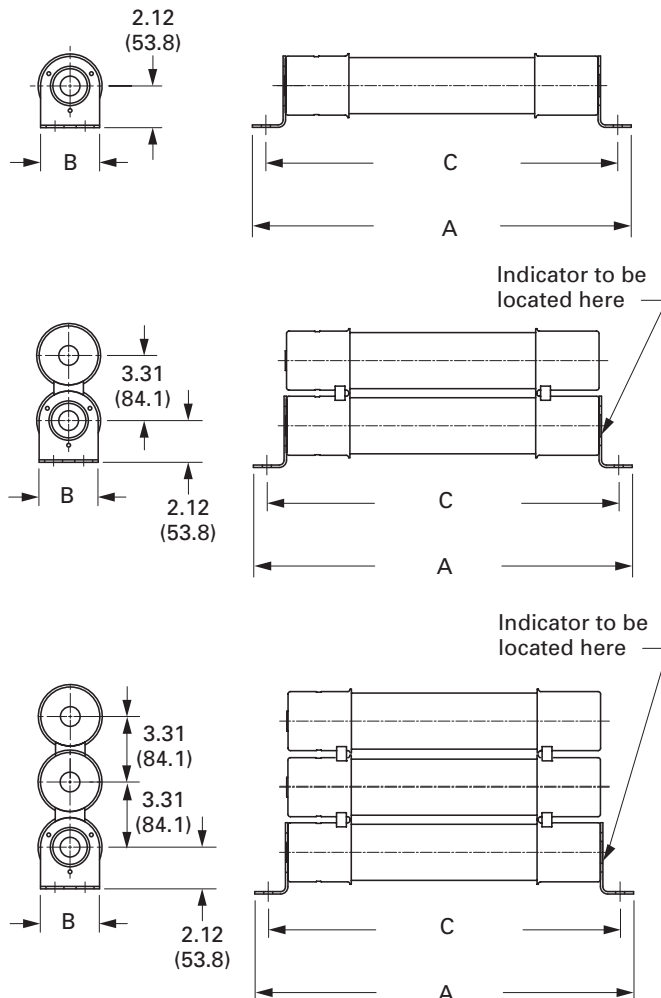
- E-Rated fuses meet the performance characteristics of ANSI C37.46

### Recommended live parts for clip-lock fuses

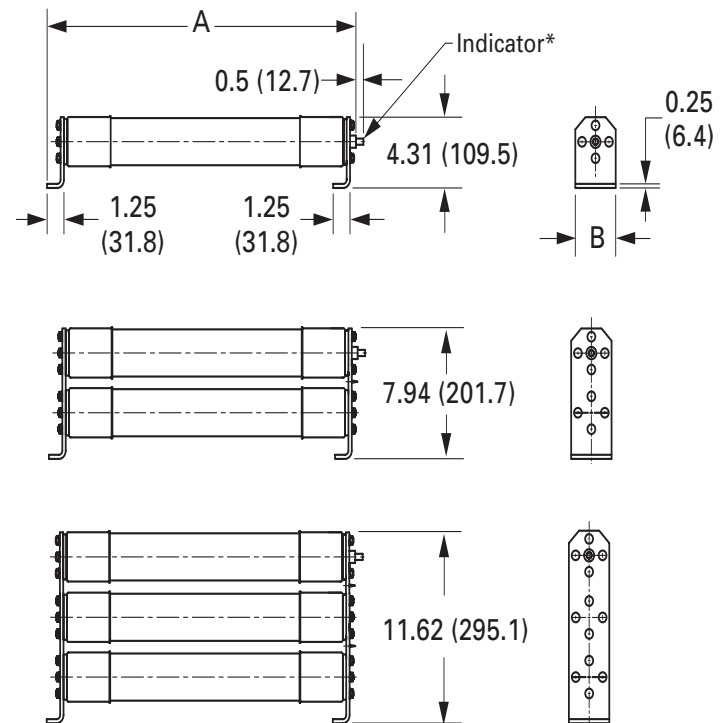
- Catalog number HCL-NL-1

### Dimensions - in (mm)

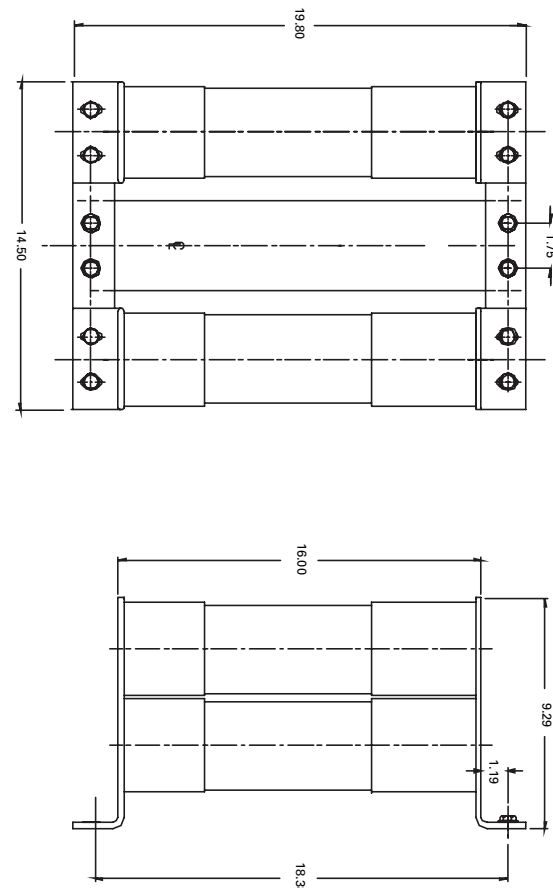
#### BHLE bolt-on



#### HCL clip-lock



#### CLE four barrel bolt-on



### AHLE for Eaton AMPGARD motor starting assemblies

| Amp rating | Interrupting rating kA (RMS Sym.) | Number of barrels | Catalog number |
|------------|-----------------------------------|-------------------|----------------|
| 10         | 63                                | 1                 | 5AHLE-10E      |
| 15         | 63                                | 1                 | 5AHLE-15E      |
| 20         | 63                                | 1                 | 5AHLE-20E      |
| 25         | 63                                | 1                 | 5AHLE-25E      |
| 30         | 63                                | 1                 | 5AHLE-30E      |
| 40         | 63                                | 1                 | 5AHLE-40E†     |
| 50         | 63                                | 1                 | 5AHLE-50E†     |
| 65         | 63                                | 1                 | 5AHLE-65E†     |
| 80         | 63                                | 1                 | 5AHLE-80E†     |
| 100        | 63                                | 1                 | 5AHLE-100E†    |
| 125        | 63                                | 1                 | 5AHLE-125E†    |
| 150        | 63                                | 1                 | 5AHLE-150E†    |
| 175        | 63                                | 1                 | 5AHLE-175E†    |
| 200        | 63                                | 1                 | 5AHLE-200E†    |
| 250        | 63                                | 1                 | 5AHLE-250E†    |
| 300        | 63                                | 2                 | 5AHLE-300E†    |
| 350        | 63                                | 2                 | 5AHLE-350E†    |
| 400        | 63                                | 2                 | 5AHLE-400E†    |
| 450        | 63                                | 2                 | 5AHLE-450E†    |

† UL Listed, Guide JEEG, File E240398.

### HCL clip-lock versions

| Amp rating | Dimensions - in (mm) |            |                | Interrupting<br>rating kA<br>(RMS Sym.) | Number of<br>barrels | Installation<br>location | Catalog<br>number |
|------------|----------------------|------------|----------------|-----------------------------------------|----------------------|--------------------------|-------------------|
|            | Overall length A     | Diameter B | Hole centers C |                                         |                      |                          |                   |
| 10         | 16.8 (427)           | 3 (76)     | N/A            | 63                                      | 1                    | Indoor                   | 5HCL-10E          |
| 15         | 16.8 (427)           | 3 (76)     | N/A            | 63                                      | 1                    | Indoor                   | 5HCL-15E          |
| 20         | 16.8 (427)           | 3 (76)     | N/A            | 63                                      | 1                    | Indoor                   | 5HCL-20E          |
| 25         | 16.8 (427)           | 3 (76)     | N/A            | 63                                      | 1                    | Indoor                   | 5HCL-25E          |
| 30         | 16.8 (427)           | 3 (76)     | N/A            | 63                                      | 1                    | Indoor                   | 5HCL-30E          |
| 40         | 16.8 (427)           | 3 (76)     | N/A            | 63                                      | 1                    | Indoor                   | 5HCL-40E†         |
| 50         | 16.8 (427)           | 3 (76)     | N/A            | 63                                      | 1                    | Indoor                   | 5HCL-50E†         |
| 65         | 16.8 (427)           | 3 (76)     | N/A            | 63                                      | 1                    | Indoor                   | 5HCL-65E†         |
| 80         | 16.8 (427)           | 3 (76)     | N/A            | 63                                      | 1                    | Indoor                   | 5HCL-80E†         |
| 100        | 16.8 (427)           | 3 (76)     | N/A            | 63                                      | 1                    | Indoor                   | 5HCL-100E†        |
| 125        | 16.8 (427)           | 3 (76)     | N/A            | 63                                      | 1                    | Indoor                   | 5HCL-125E†        |
| 150        | 16.8 (427)           | 3 (76)     | N/A            | 63                                      | 1                    | Indoor                   | 5HCL-150E†        |
| 200        | 22.8 (579)           | 3 (76)     | N/A            | 63                                      | 1                    | Indoor                   | 5HCL-200E†        |
| 250        | 22.8 (579)           | 3 (76)     | N/A            | 63                                      | 1                    | Indoor                   | 5HCL-250E†        |
| 300        | 22.8 (579)           | 3 (76)     | N/A            | 63                                      | 2                    | Indoor                   | 5HCL-300E†        |
| 400        | 22.8 (579)           | 3 (76)     | N/A            | 63                                      | 2                    | Indoor                   | 5HCL-400E†        |
| 450        | 22.8 (579)           | 3 (76)     | N/A            | 63                                      | 2                    | Indoor                   | 5HCL-450E†        |
| 500        | 22.8 (579)           | 3 (76)     | N/A            | 63                                      | 2                    | Indoor                   | 5HCL-500E         |
| 600        | 22.8 (579)           | 3 (76)     | N/A            | 63                                      | 2                    | Indoor                   | 5HCL-600E         |
| 750        | 22.8 (579)           | 3 (76)     | N/A            | 63                                      | 3                    | Indoor                   | 5HCL-750E         |
| 900        | 22.8 (579)           | 3 (76)     | N/A            | 63                                      | 3                    | Indoor                   | 5HCL-900E         |

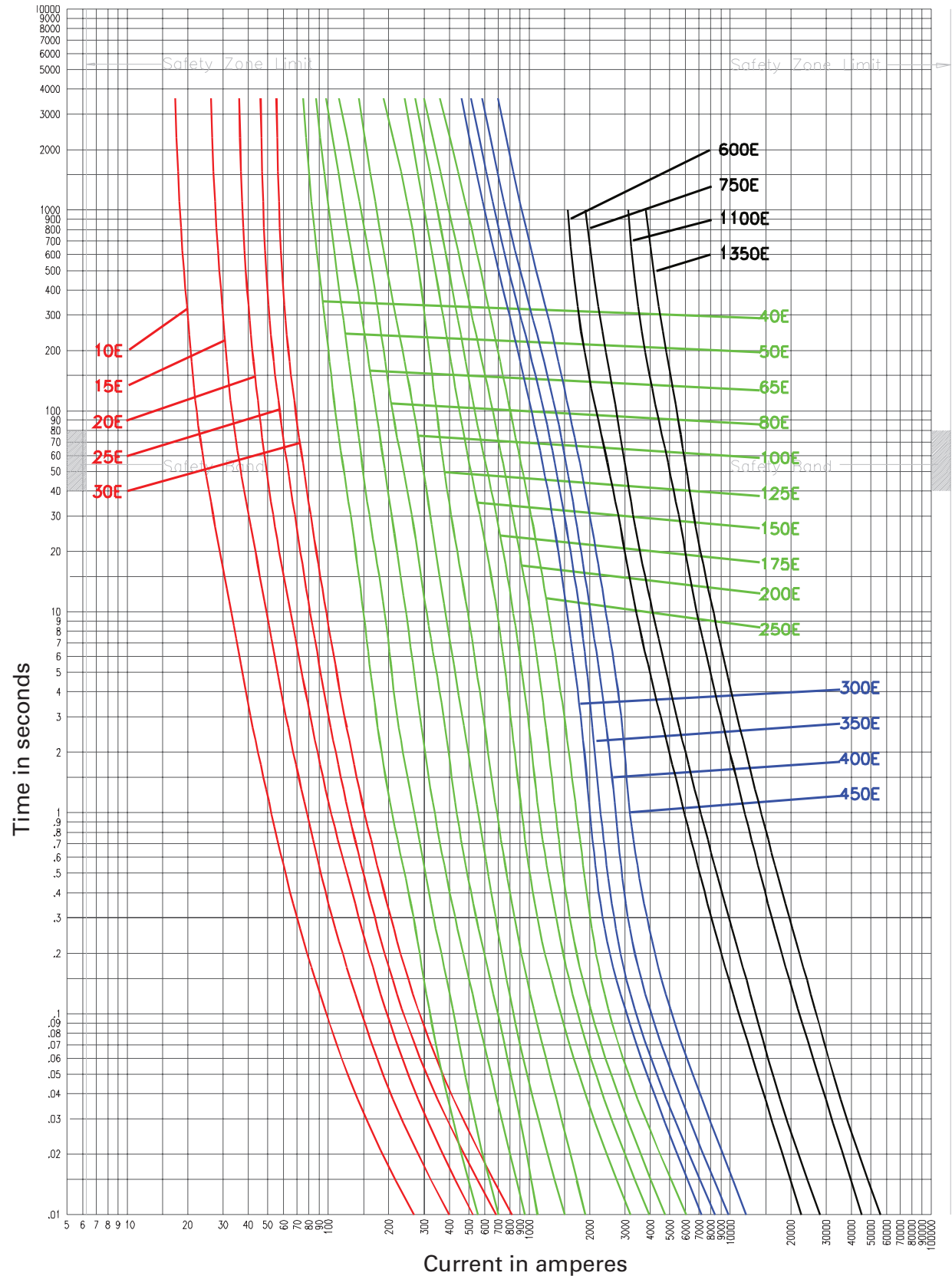
† UL Listed, Guide JEEG, File E240398.

CLE, BHLE and BHCL bolt-on versions

| Amp rating | Dimensions - in (mm) |               |                   | Interrupting<br>rating kA<br>(RMS Sym.) | Number of<br>barrels | Installation<br>location | Catalog<br>number |
|------------|----------------------|---------------|-------------------|-----------------------------------------|----------------------|--------------------------|-------------------|
|            | Overall length<br>A  | Diameter<br>B | Hole centers<br>C |                                         |                      |                          |                   |
| 10         | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 1                    | Indoor                   | 5BHLE-10E         |
| 15         | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 1                    | Indoor                   | 5BHLE-15E         |
| 20         | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 1                    | Indoor                   | 5BHLE-20E         |
| 25         | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 1                    | Indoor                   | 5BHLE-25E         |
| 30         | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 1                    | Indoor                   | 5BHLE-30E         |
| 40         | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 1                    | Indoor                   | 5BHLE-40E†        |
| 50         | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 1                    | Indoor                   | 5BHLE-50E†        |
| 65         | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 1                    | Indoor                   | 5BHLE-65E†        |
| 80         | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 1                    | Indoor                   | 5BHLE-80E†        |
| 100        | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 1                    | Indoor                   | 5BHLE-100E†       |
| 125        | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 1                    | Indoor                   | 5BHLE-125E†       |
| 150        | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 1                    | Indoor                   | 5BHLE-150E†       |
| 175        | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 1                    | Indoor                   | 5BHLE-175E†       |
| 200        | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 1                    | Indoor                   | 5BHLE-200E†       |
| 200        | 25.1 (637)           | 3 (76)        | 23.7 (602)        | 63                                      | 1                    | Indoor                   | 5BHCL-200E        |
| 250        | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 1                    | Indoor                   | 5BHLE-250E†       |
| 250        | 25.1 (637)           | 3 (76)        | 23.7 (602)        | 63                                      | 1                    | Indoor                   | 5BHCL-250E        |
| 300        | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 2                    | Indoor                   | 5BHLE-300E†       |
| 300        | 25.1 (637)           | 3 (76)        | 23.7 (602)        | 63                                      | 2                    | Indoor                   | 5BHCL-300E        |
| 350        | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 2                    | Indoor                   | 5BHLE-350E†       |
| 400        | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 2                    | Indoor                   | 5BHLE-400E†       |
| 400        | 25.1 (637)           | 3 (76)        | 23.7 (602)        | 63                                      | 2                    | Indoor                   | 5BHCL-400E        |
| 450        | 19.2 (488)           | 3 (76)        | 17.9 (455)        | 63                                      | 2                    | Indoor                   | 5BHLE-450E†       |
| 450        | 25.1 (637)           | 3 (76)        | 23.7 (602)        | 63                                      | 2                    | Indoor                   | 5BHCL-450E        |
| 500        | 25.1 (637)           | 3 (76)        | 23.7 (602)        | 63                                      | 2                    | Indoor                   | 5BHCL-500E        |
| 600        | 25.1 (637)           | 3 (76)        | 23.7 (602)        | 63                                      | 2                    | Indoor                   | 5BHCL-600E        |
| 600        | 28.9 (734)           | 4 (102)       | 18.4 (467)        | 40                                      | 2                    | Indoor                   | 5CLE-600E         |
| 750        | 25.1 (637)           | 3 (76)        | 23.7 (602)        | 63                                      | 3                    | Indoor                   | 5BHCL-750E        |
| 750        | 28.9 (734)           | 4 (102)       | 18.4 (467)        | 40                                      | 2                    | Indoor                   | 5CLE-750E         |
| 900        | 25.1 (637)           | 3 (76)        | 23.7 (602)        | 63                                      | 3                    | Indoor                   | 5BHCL-900E        |
| 1100       | 19.8 (503)           | 4 (102)       | 18.4 (467)        | 31                                      | 4                    | Indoor                   | 5CLE-1100E        |
| 1350       | 19.8 (503)           | 4 (102)       | 18.4 (467)        | 31                                      | 4                    | Indoor                   | 5CLE-1350E        |

† UL Listed, Guide JEEG, File E240398.

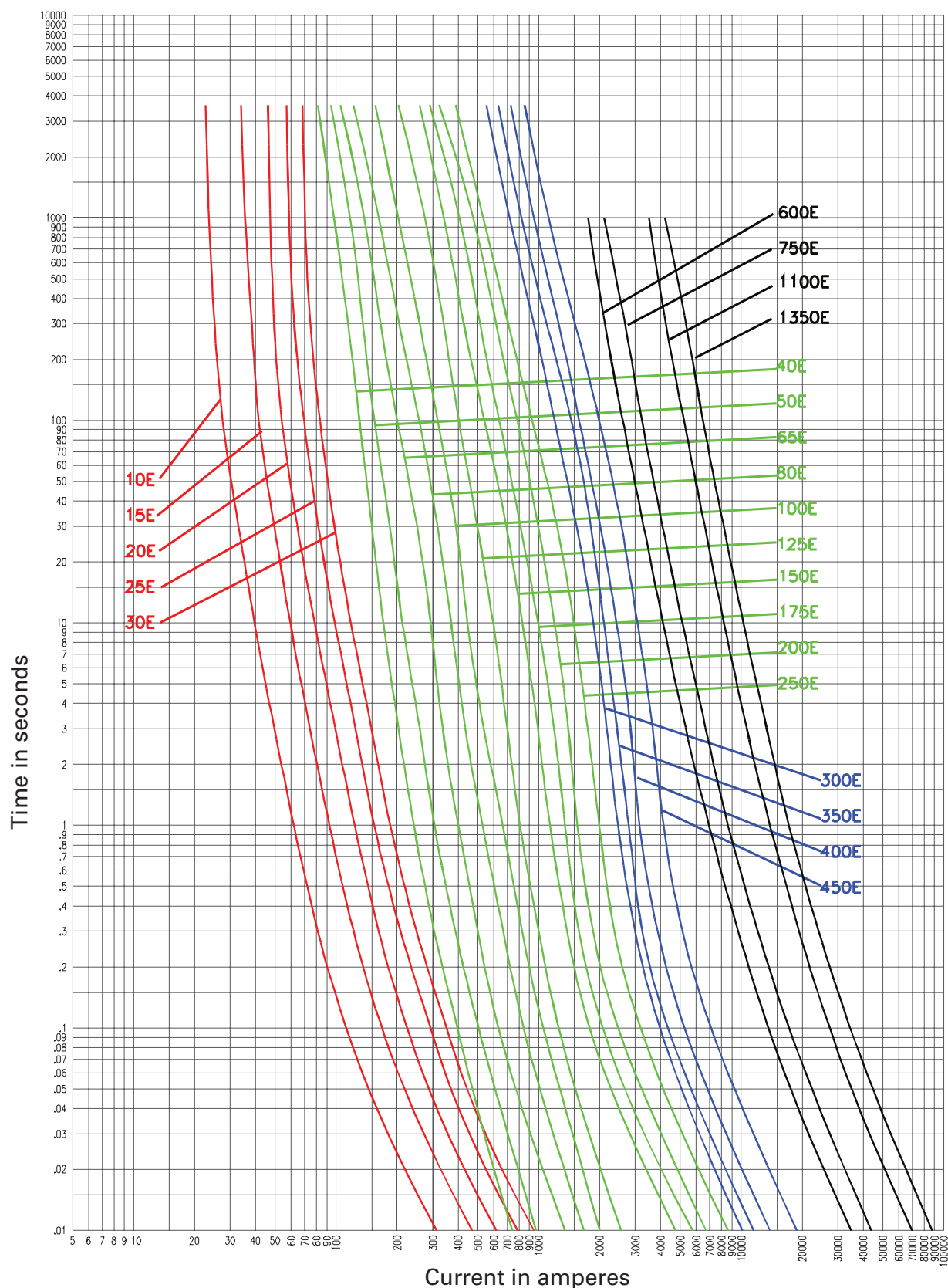
5.5kV time-current curves — minimum melt for 5CLE- \_E and 5CLE- \_D



5CLE- \_

|                    |                    |                    |                    |
|--------------------|--------------------|--------------------|--------------------|
| Curve 70548501     | Curve 70545801     | Curve 70546001     | Curve 62908902     |
| April 16, 1999     | April 16, 1999     | April 20, 1999     | April 1999         |
| Reference # 563532 | Reference # 705458 | Reference # 705460 | Reference # 629089 |

5.5kV time-current curves — total clear for 5CLE-\_E and 5CLE\_-\_D



5CLE-\_

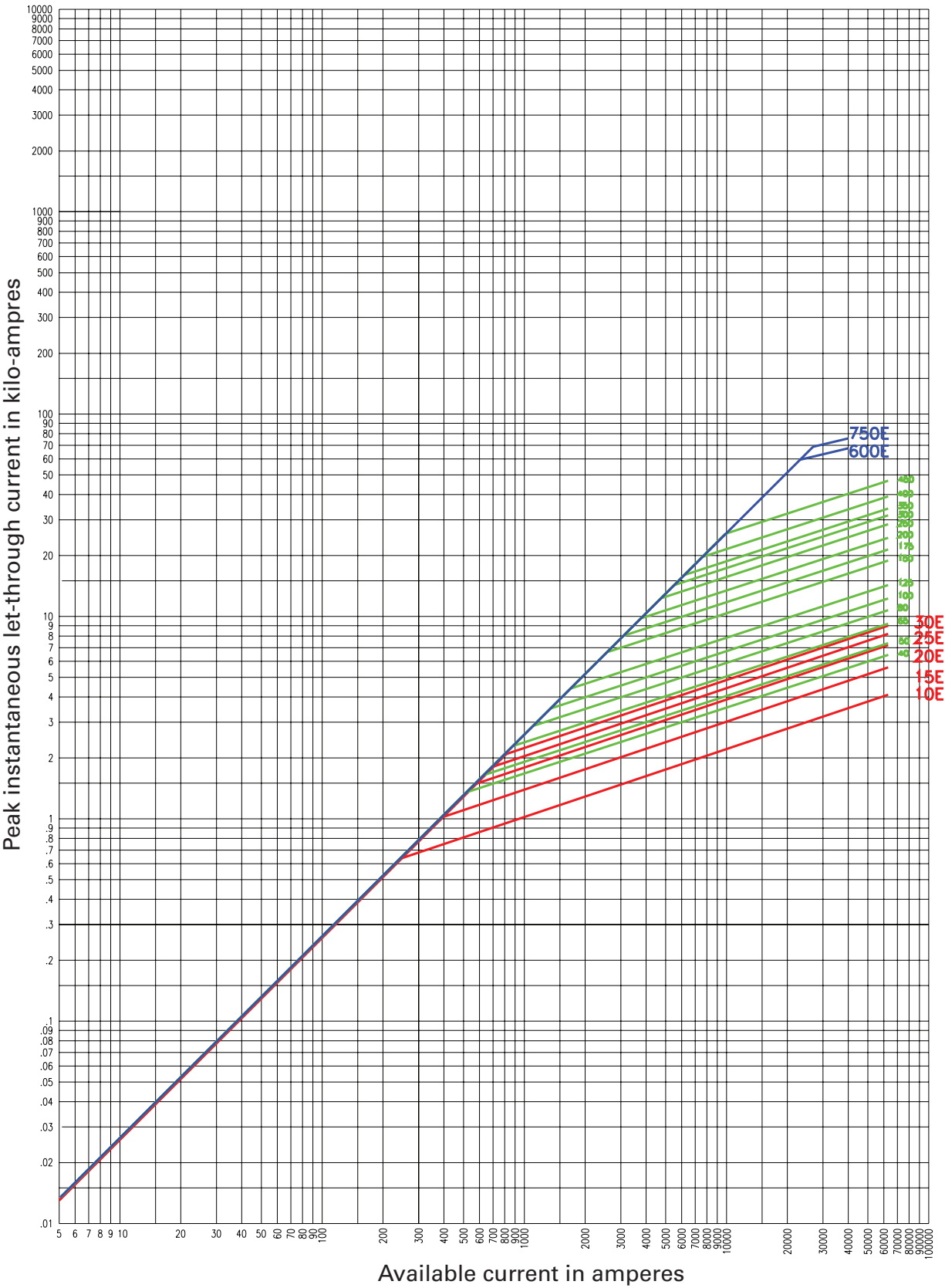
Curve 70548702  
April 16, 1999  
Reference # 563533

Curve 70545901  
April 20, 1999  
Reference # 705459

Curve 70546101  
April 20, 1999  
Reference # 705461

Curve 62908903  
April 1999  
Reference # 629089

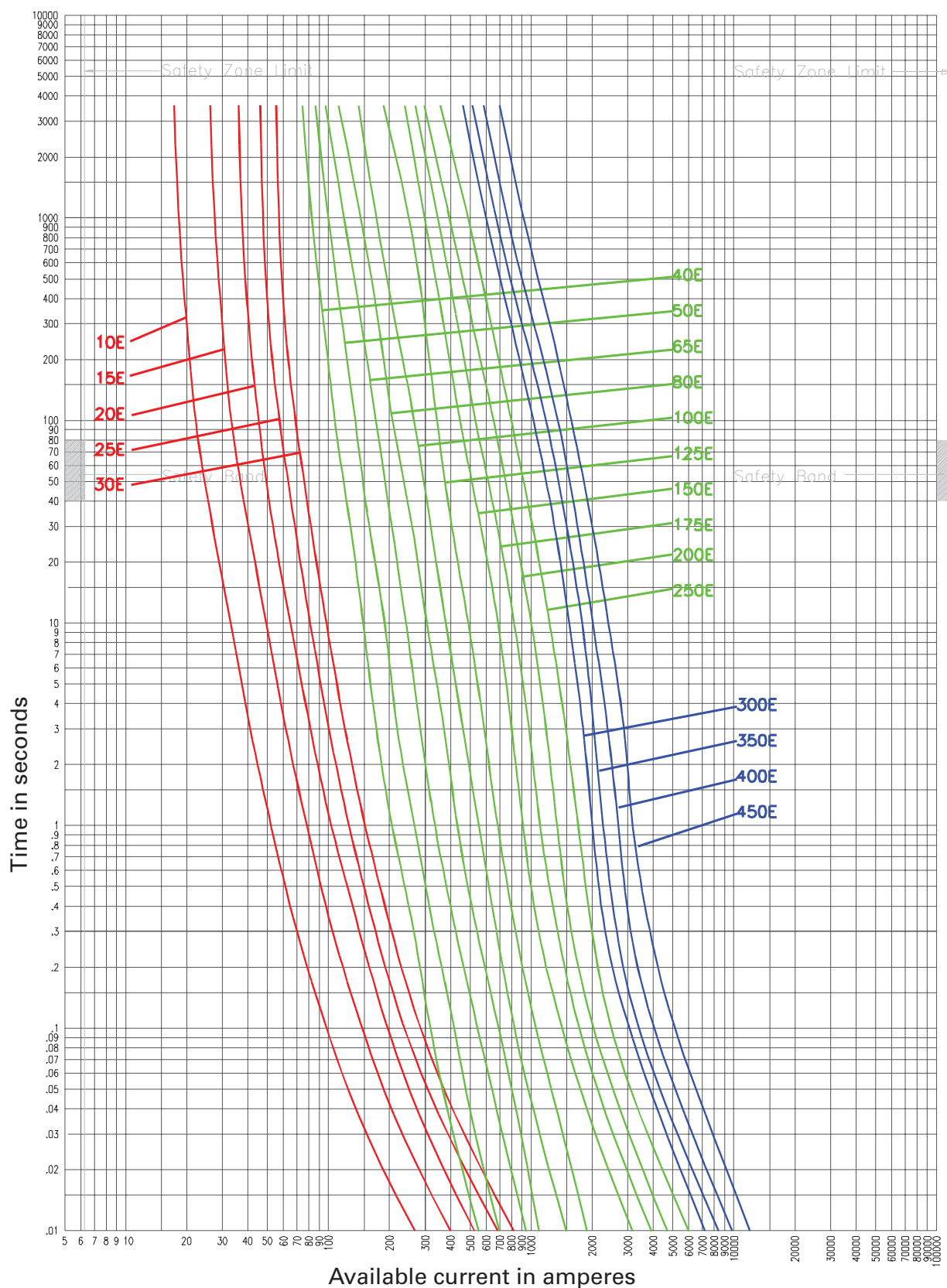
5.5kV peak let-through for 5CLE- \_E and 5CLE- \_D



|                    |                    |                    |
|--------------------|--------------------|--------------------|
| Curve 70548701     | Curve 70547601     | Curve 62908904     |
| April 1999         | April 1999         | April 1999         |
| Reference # 705487 | Reference # 705476 | Reference # 629089 |

5CLE- \_

5.5kV time-current curves — minimum melt for 5HLE-\_E, 5AHLE-\_E and 5BHLE-\_E



5HLE-\_, 5BHLE-\_, 5AHLE-\_

Curve 70548507

April 16, 1999

Reference # 563532

Curve 70545805

April 16, 1999

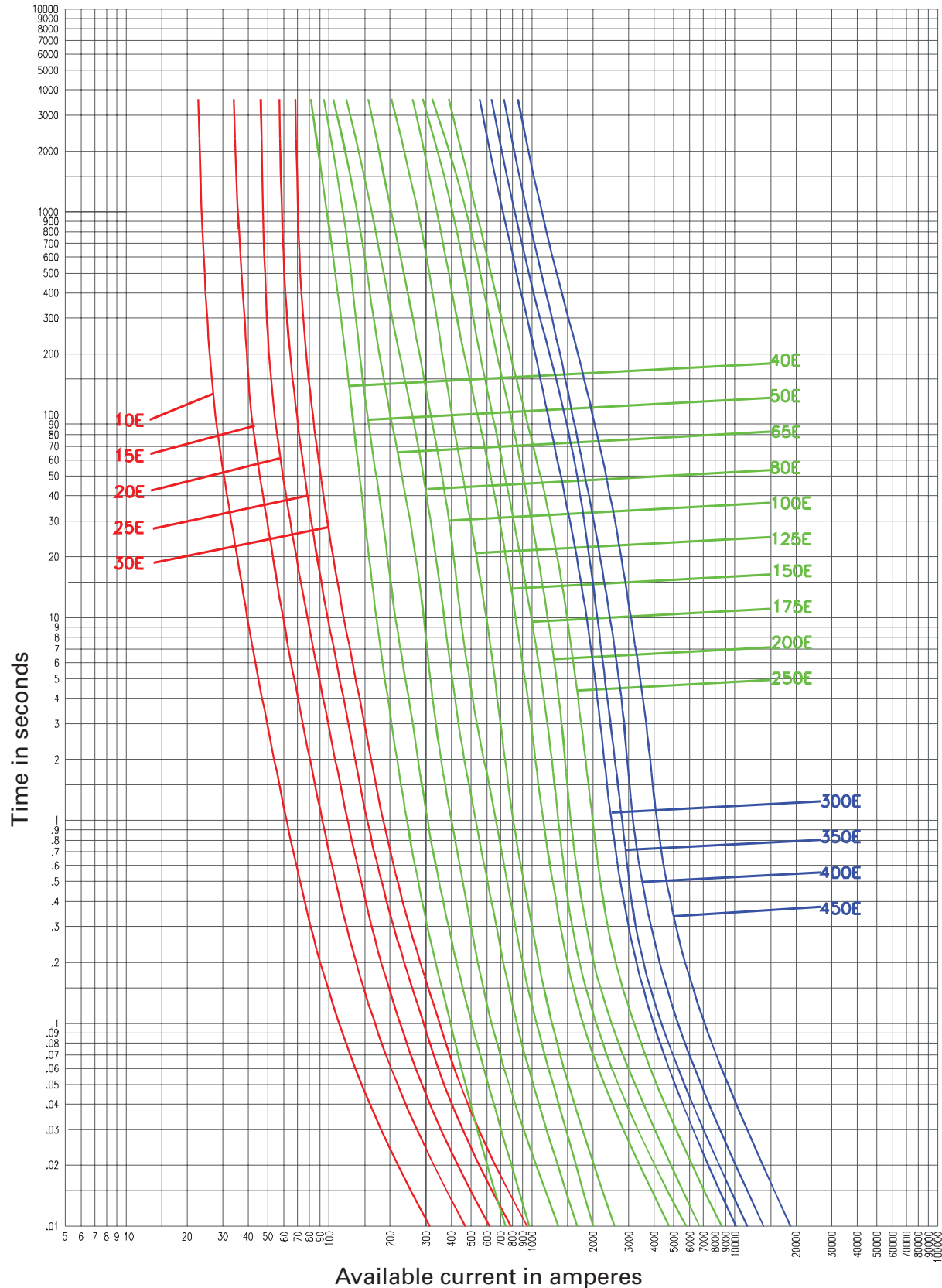
Reference # 705458

Curve 70546005

April 20, 1999

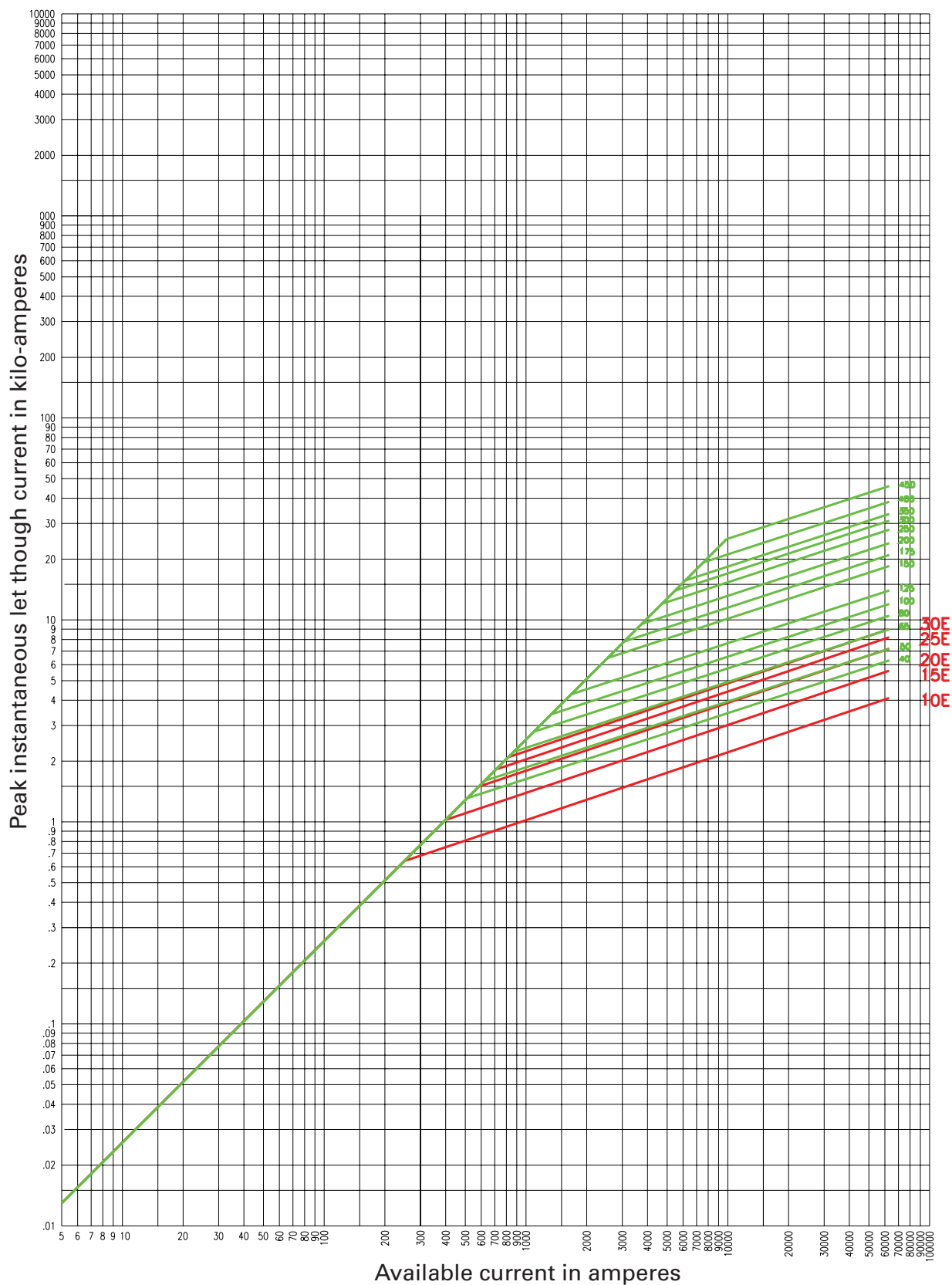
Reference # 705460

5.5kV time-current curves — total clear for 5HLE- \_E, 5AHLE- \_E and 5BHLE- \_E



|                                                                                    |                                                        |                                                        |
|------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|
| 5HLE-_, 5BHLE-_, 5AHLE-_<br>Curve 70548607<br>April 16, 1999<br>Reference # 563533 | Curve 70545905<br>April 20, 1999<br>Reference # 705459 | Curve 70546105<br>April 20, 1999<br>Reference # 705461 |
|------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|

5.5kV peak let-through for 5HLE-\_E, 5AHLE-\_E and 5BHLE-\_E



5HLE-\_, 5BHLE-\_, 5AHLE-\_

Curve 70548703

April 1999

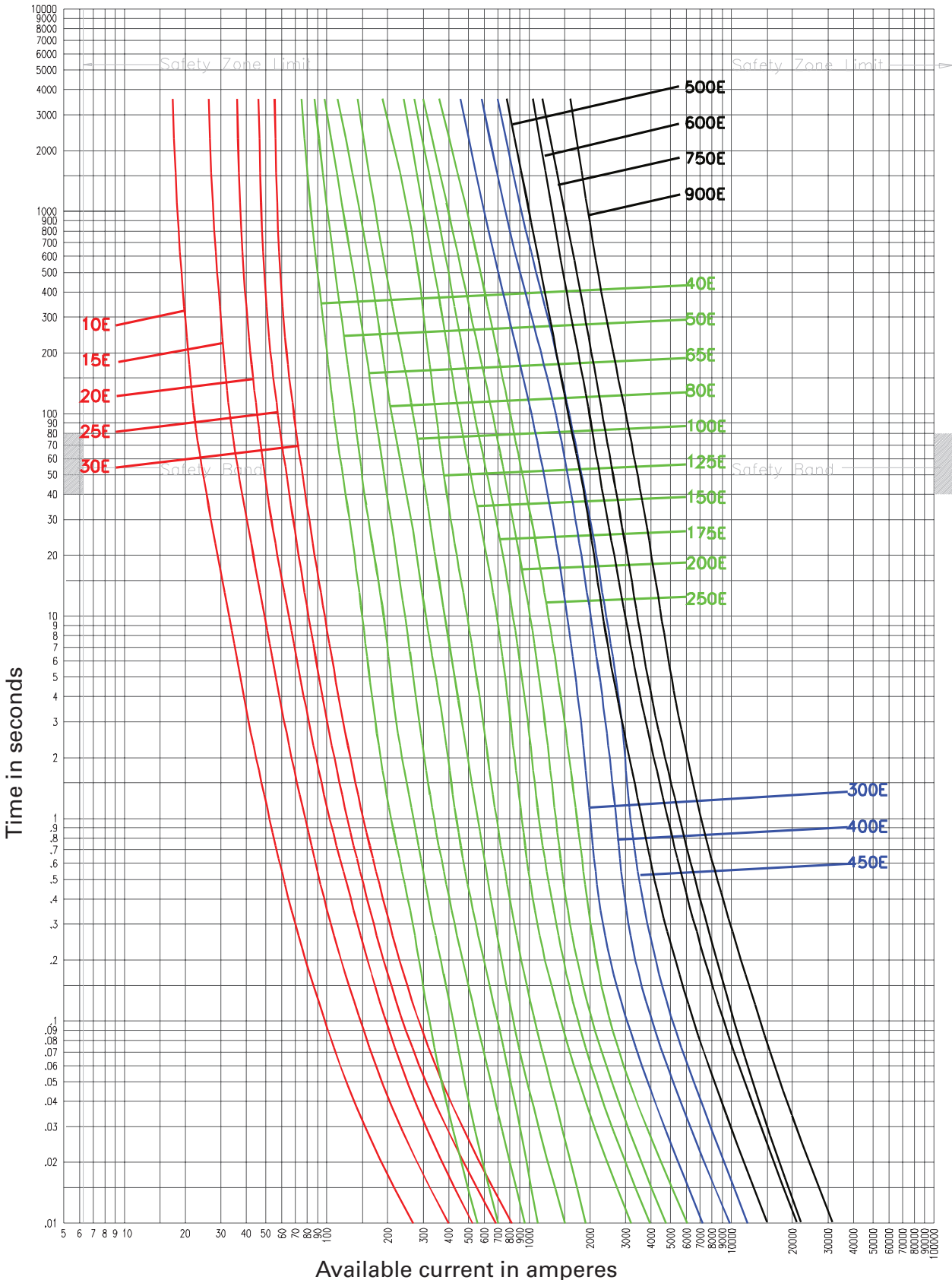
Reference # 705487

Curve 70547603

April 1999

Reference # 705476

5.5kV time-current curves — minimum melt for 5HCL\_E



5HCL\_

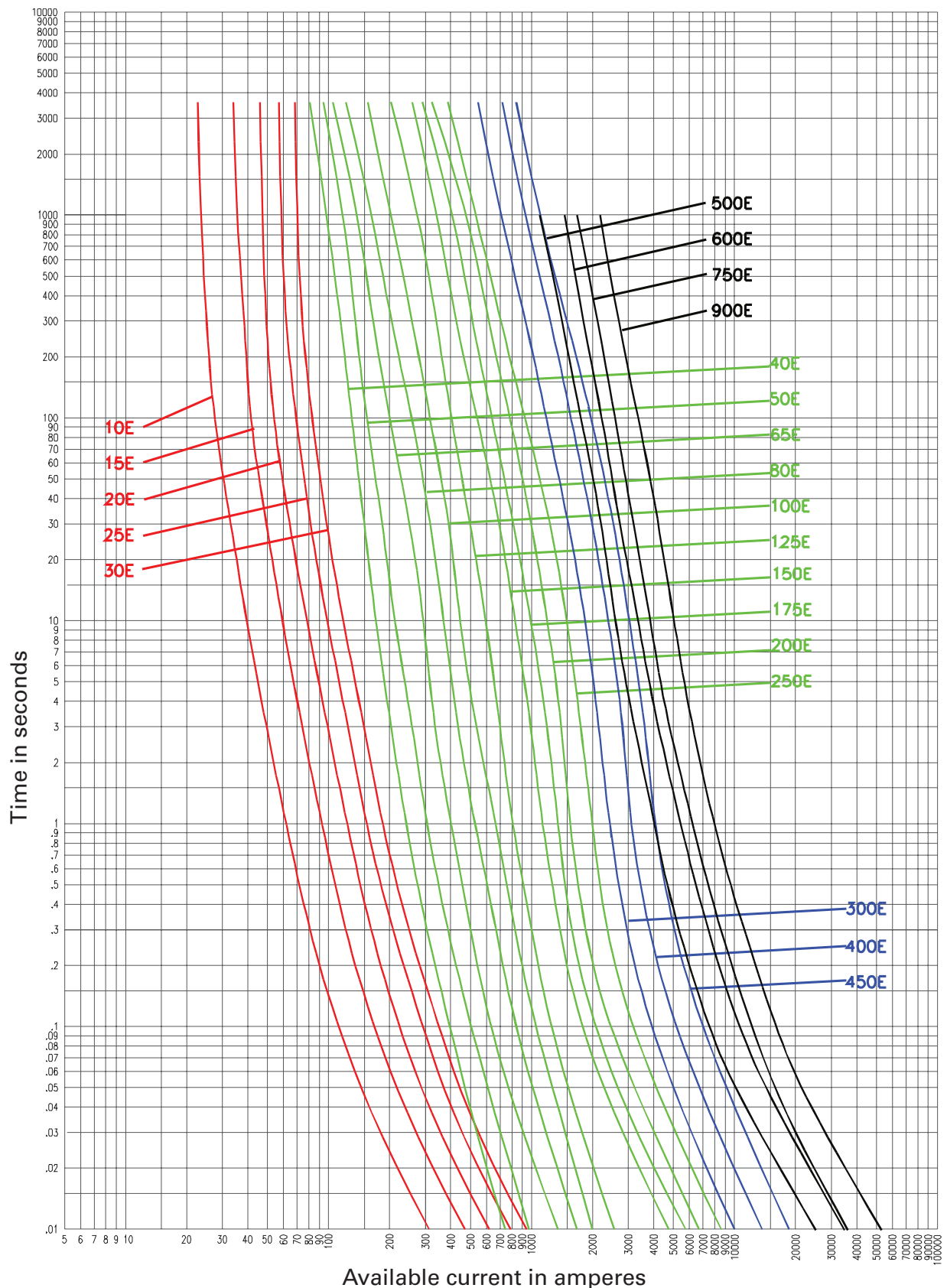
Curve 70548505  
Janaury 2001

Curve 70545803  
January 2001

Curve 70546003  
April 2001

Curve 66703401  
Janaury 2001

5.5kV time-current curves — total clear for 5HCL\_E



5HCL\_

Curve 70548605  
Janaury 2001

Curve 70545903  
Janaury 2001

Curve 70516103  
Janaury 2001

Curve 66703501  
Janaury 2001



Curve 70548702    Curve 70547602    Curve 66703701  
January 2001    January 2001    January 2001

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- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
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- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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