

## 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)



| Amp rating                               | Fuse mounting type* | Voltage BIL (kV) | Catalog number                   |               |              |                                                 |                           |                                     |                                |
|------------------------------------------|---------------------|------------------|----------------------------------|---------------|--------------|-------------------------------------------------|---------------------------|-------------------------------------|--------------------------------|
|                                          |                     |                  | Approximate dimensions - in (mm) |               |              | Mounting (including live parts, end fittings)** |                           | Live parts (including end fittings) | End fittings (disconnect only) |
|                                          |                     |                  | Diameter A                       | Clip center B | Length C     | Porcelain insulator                             | Glass-polyester insulator |                                     |                                |
| <b>CLE</b>                               |                     |                  |                                  |               |              |                                                 |                           |                                     |                                |
| 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          | —                                               | —                         | —                                   | —                              |
| <b>HLE</b>                               |                     |                  |                                  |               |              |                                                 |                           |                                     |                                |
| 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 rating kA (RMS Sym.) | Number of barrels | Installation 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 rating kA (RMS Sym.) | Number of barrels | Installation location | Catalog number |
|------------|----------------------|------------|----------------|-----------------------------------|-------------------|-----------------------|----------------|
|            | Length A             | Diameter B | Clip centers 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 diameter - in (mm) | Figure | Clip dimensions - in (mm) |           |           |           |            |           |          | Catalog 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 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<br>C | Hole Inset<br>D | Hole centers<br>E | Contact height<br>F | Overall height<br>G | BIL<br>kV |
|-------------------------------------|---------------|-----------|---------------------|-----------------|-------------------|---------------------|---------------------|-----------|
|                                     | A             | B         |                     |                 |                   |                     |                     |           |
| <b>Disconnect single barrel†</b>    |               |           |                     |                 |                   |                     |                     |           |
| 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        |
| <b>Disconnect double barrel†</b>    |               |           |                     |                 |                   |                     |                     |           |
| 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        |
| <b>Non-disconnect single barrel</b> |               |           |                     |                 |                   |                     |                     |           |
| 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        |
| <b>Non-disconnect double barrel</b> |               |           |                     |                 |                   |                     |                     |           |
| 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 rating kA (RMS Sym.) | Number of barrels | Installation location | Catalog 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.

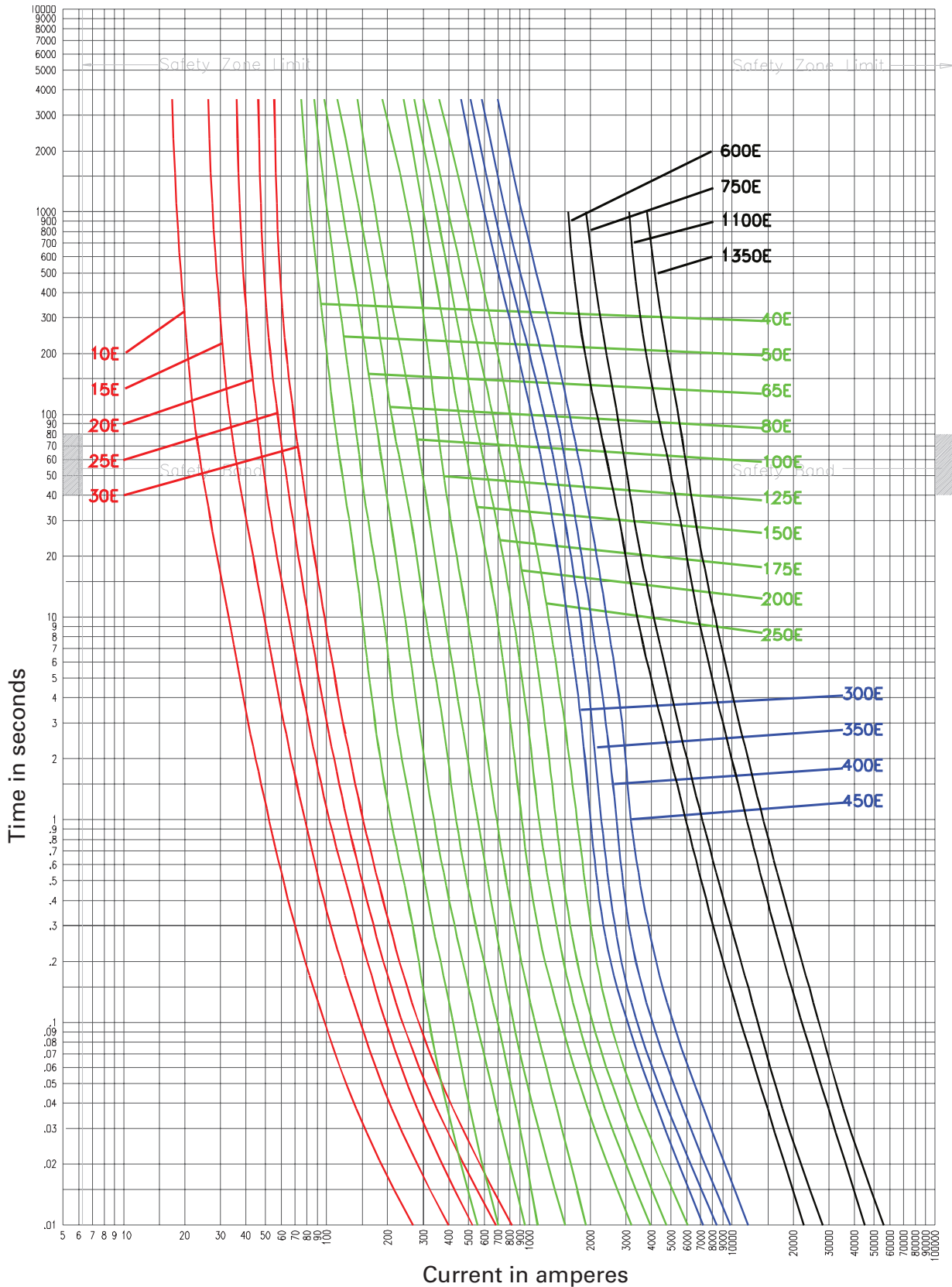
**CLE, BHLE and BHCL bolt-on versions**

| Amp rating | Dimensions - in (mm) |            |                | Interrupting rating kA (RMS Sym.) | Number of barrels | Installation location | Catalog number |
|------------|----------------------|------------|----------------|-----------------------------------|-------------------|-----------------------|----------------|
|            | Overall length A     | Diameter B | Hole centers 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.



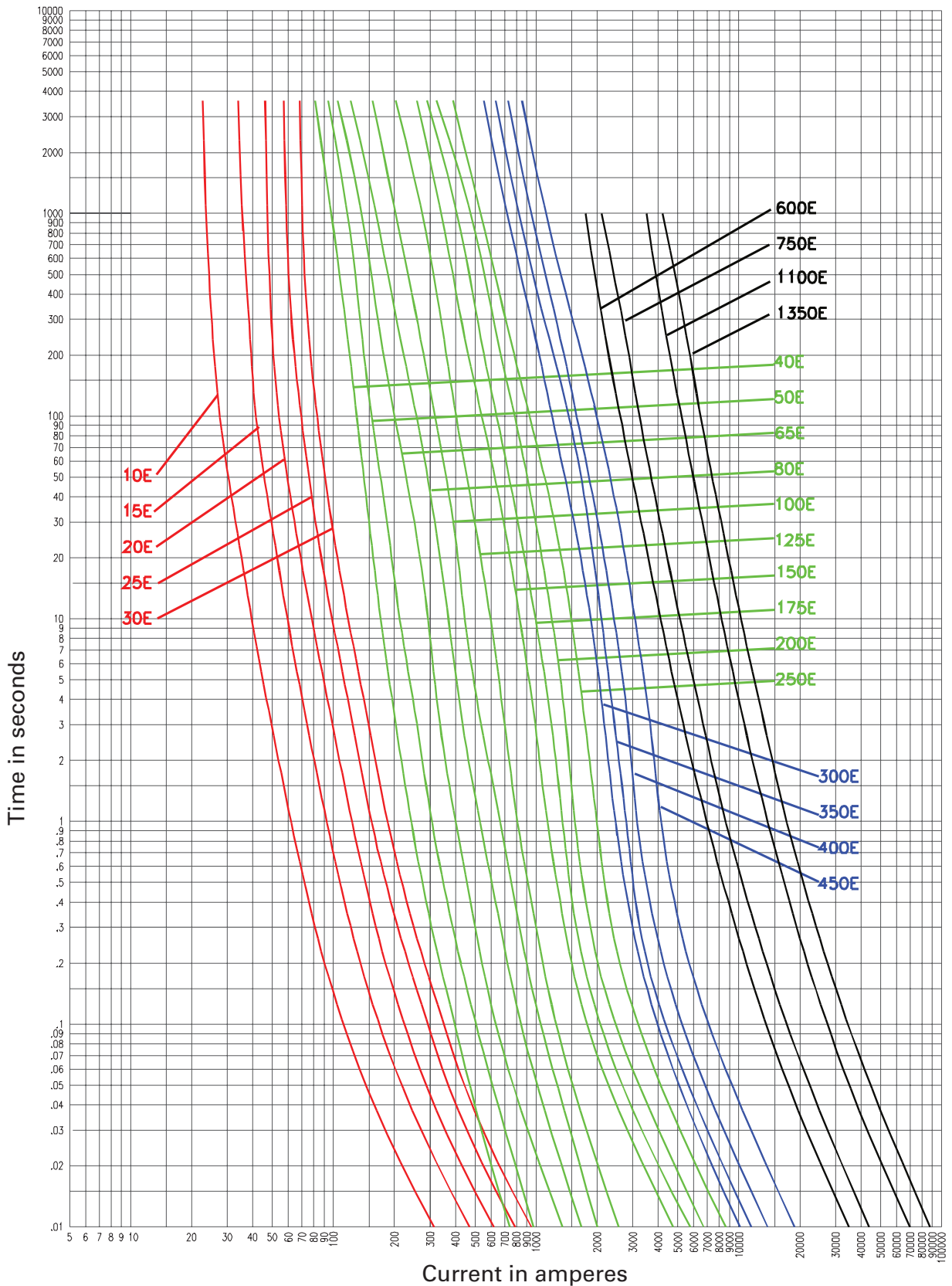
5.5kV time-current curves – minimum melt for 5CLE-\_E and 5CLE-\_-D



|                    |                    |                    |                    |
|--------------------|--------------------|--------------------|--------------------|
| 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 |

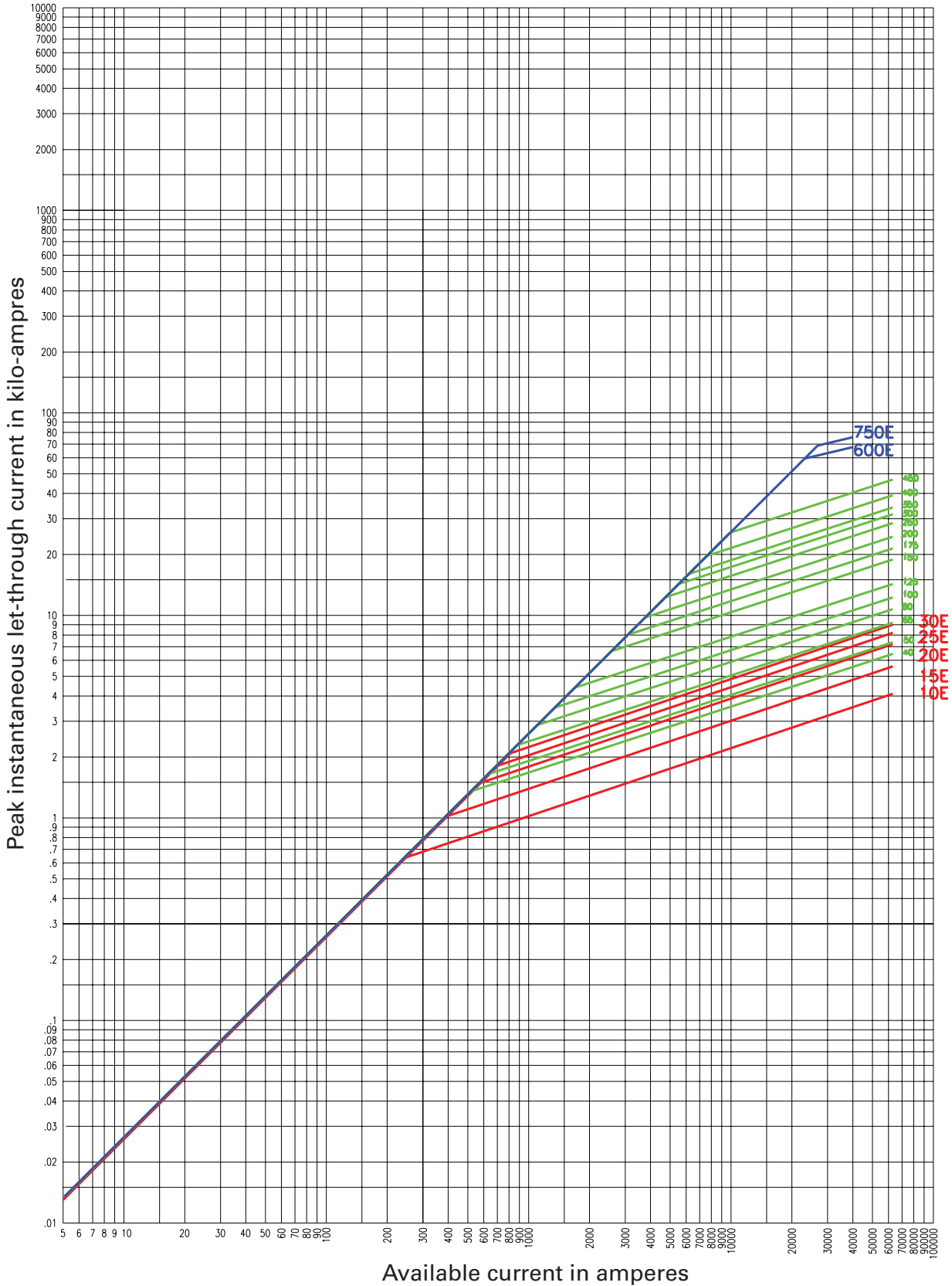
5CLE-\_\_

5.5kV time-current curves — total clear for 5CLE-E and 5CLE-D



|                       |                                                                 |                                                                 |                                                                 |                                                             |
|-----------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|
| <p>5CLE-<u>  </u></p> | <p>Curve 70548702<br/>April 16, 1999<br/>Reference # 563533</p> | <p>Curve 70545901<br/>April 20, 1999<br/>Reference # 705459</p> | <p>Curve 70546101<br/>April 20, 1999<br/>Reference # 705461</p> | <p>Curve 62908903<br/>April 1999<br/>Reference # 629089</p> |
|-----------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|

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

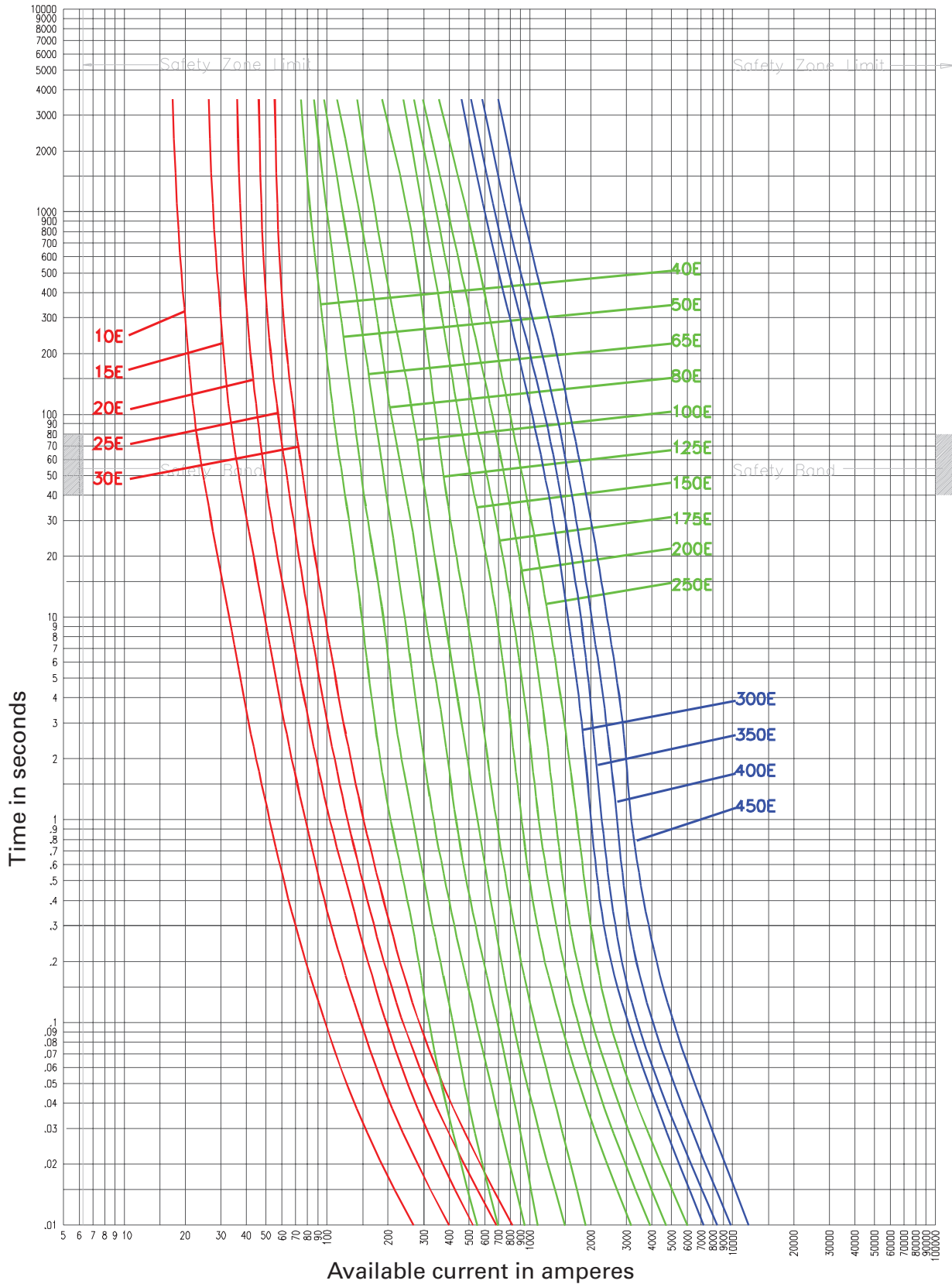


Available current in amperes

|                    |                    |                    |
|--------------------|--------------------|--------------------|
| 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



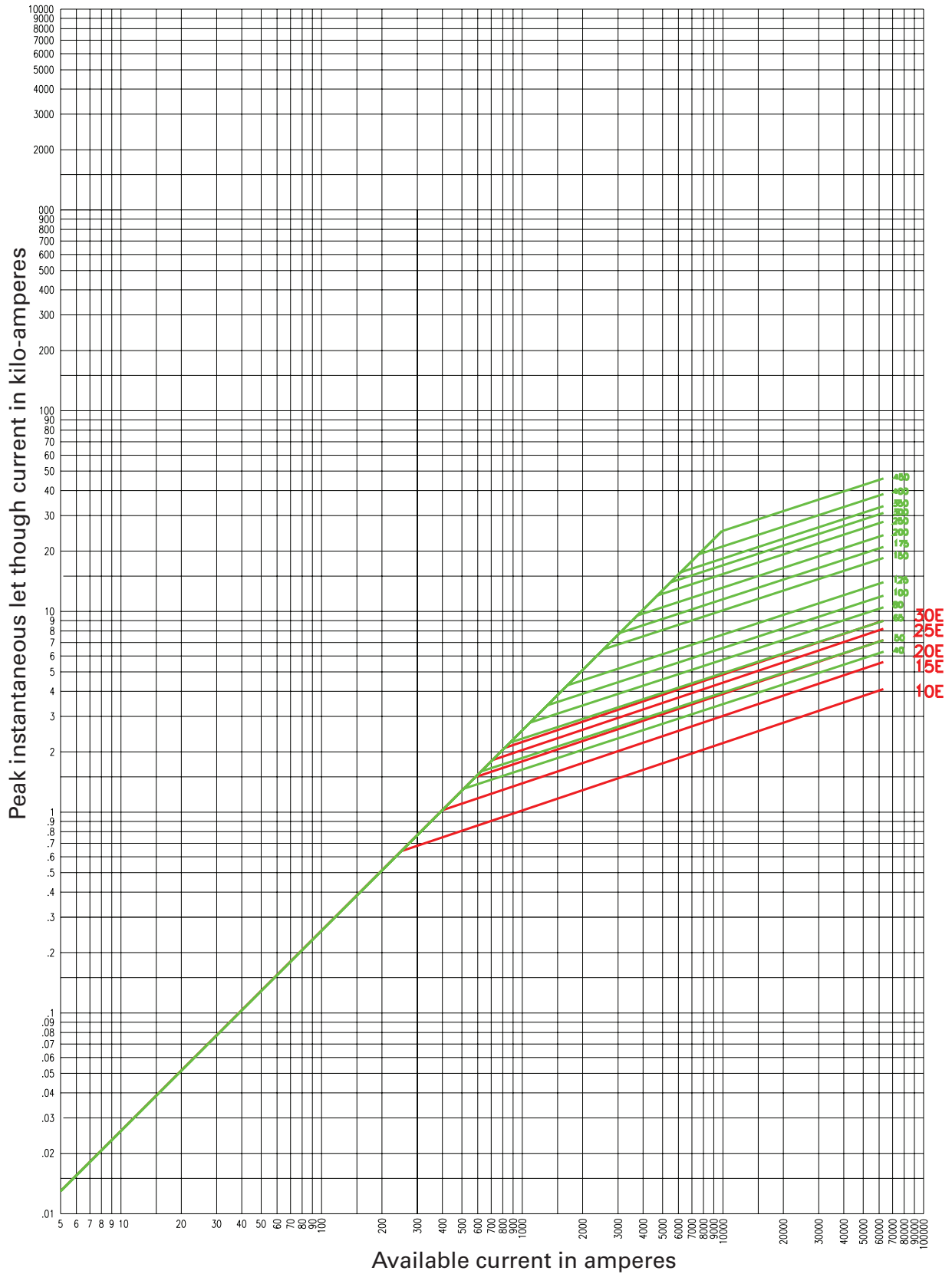
|                                                       |                                                        |                                                        |                                                        |
|-------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|
| 5HLE- <u>  </u> , 5BHLE- <u>  </u> , 5AHLE- <u>  </u> | Curve 70548507<br>April 16, 1999<br>Reference # 563532 | Curve 70545805<br>April 16, 1999<br>Reference # 705458 | Curve 70546005<br>April 20, 1999<br>Reference # 705460 |
|-------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|

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



|                                                       |                                                        |                                                        |                                                        |
|-------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|
| 5HLE- <u>  </u> , 5BHLE- <u>  </u> , 5AHLE- <u>  </u> | 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  
 January 2001

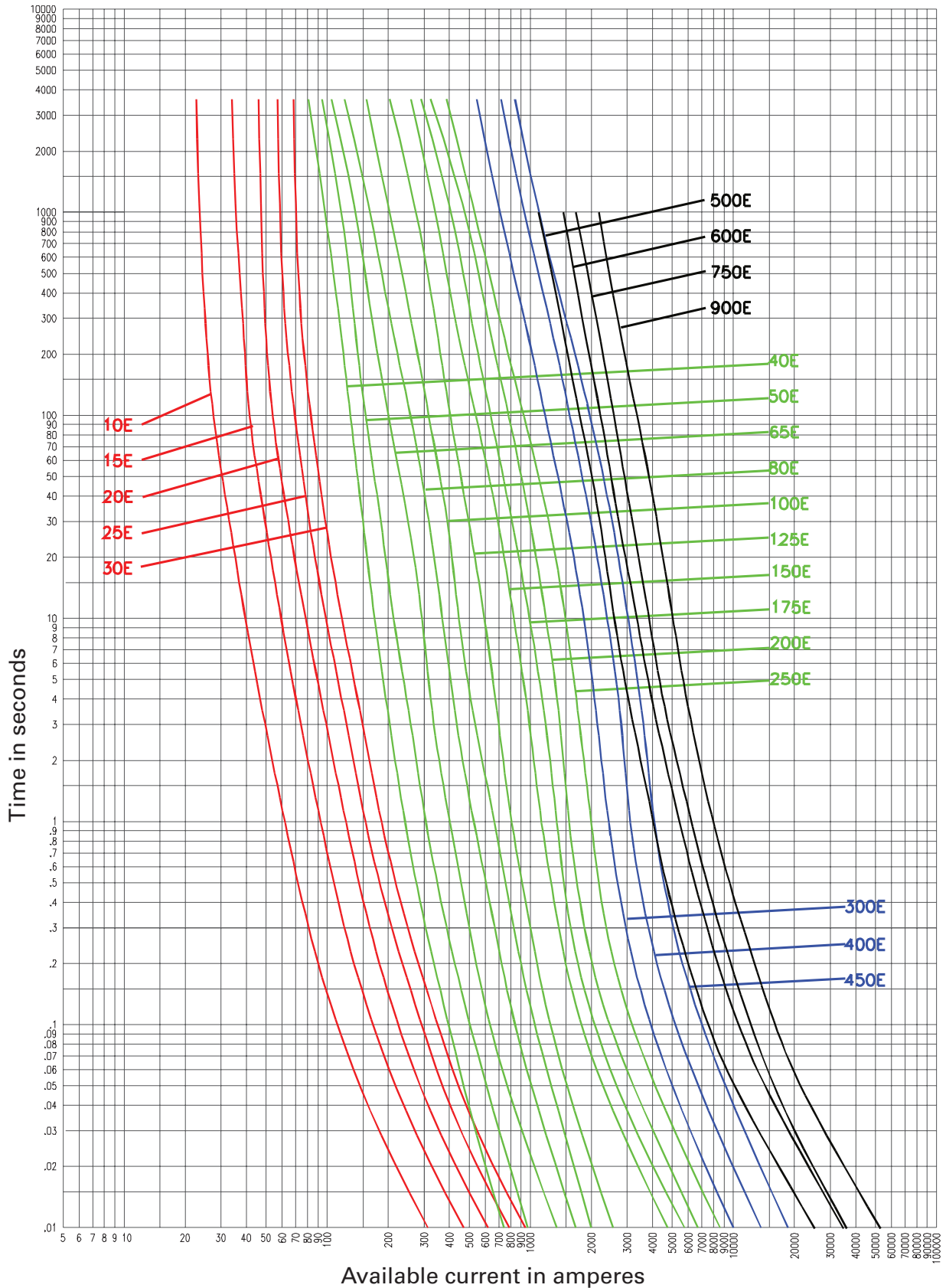
Curve 70545803  
 January 2001

Curve 70546003  
 April 2001

Curve 66703401  
 January 2001



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



5HCL-\_\_

Curve 70548605  
January 2001

Curve 70545903  
January 2001

Curve 70516103  
January 2001

Curve 66703501  
January 2001



5HCL\_

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

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