

# PT Medium voltage fuses for potential and small power transformers



## Description:

- Bussmann® series Indicating and non-indicating E-Rated, current-limiting, medium voltage fuses for potential, small power and control transformers.

## Contents

| Description              | Page  |
|--------------------------|-------|
| Introduction . . . . .   | 2     |
| 2.475kV fuses . . . . .  | 3-6   |
| 3.6kV fuses . . . . .    | 7-9   |
| 5.5kV fuses . . . . .    | 10-26 |
| 7.2kV fuses . . . . .    | 27-29 |
| 8.3kV fuses . . . . .    | 30-39 |
| 12kV fuses . . . . .     | 40-42 |
| 15.5kV fuses . . . . .   | 43-52 |
| 17.5kV fuses . . . . .   | 53-54 |
| 24kV fuses . . . . .     | 55-56 |
| 25.5kV fuses . . . . .   | 57-60 |
| 36kV fuses . . . . .     | 61-62 |
| 38kV fuses . . . . .     | 63-69 |
| Fuse mountings . . . . . | 70-71 |

## Features and benefits

- Low amp, current-limiting E-Rated PT medium voltage fuses are general purpose fuses defined by their melting time-current characteristic that permit their electrical interchangeability with other fuses of the same E Rating.
- E-Rated general purpose fuses must have a current responsive element that will melt in 300 seconds at an RMS current within the range of 200% to 240% of the fuse's nameplate current rating, fuse refill, or link per ANSI C37.46 for fuses rated 100E or less.
- PT fuses are physically dimensioned for easy installation in existing hardware.
- Space saving size eases design considerations for new installations.
- Current-limiting fuses provide positive interruption even on low fault currents. The fuse limits the magnitude of electromechanical stresses in the protected apparatus.
- These fuses are in a self-contained, non-venting package for installation indoors or outdoors in an enclosure.
- Available in indicating and non-indicating versions.
- Open fuse indicator speeds troubleshooting by providing a positive visual indication of fuse operation.

## Typical applications:

- Primary protection of:
  - Medium voltage potential transformers
  - Small medium voltage service transformers
  - Small medium voltage control transformers.

## E-Rated PT medium voltage fuses

### Catalog symbols (by maximum voltage rating):

- 2.475kV
  - 2NCLPT\_
- 3.6kV
  - 3.6ABCNA\_
  - 3.6ABWNA\_
  - 3.6CAV\_
- 5.5kV
  - JCW\_
  - 5CLPT\_E
  - 5NCLPT\_E
  - 5NCLPT\_E-A
  - 5.5ABWNA\_E
  - 5.5AMWNA\_E
  - 5.5CAV\_E
  - 5.5CAVH\_E
- 7.2kV
  - 7.2ABWNA\_
  - 7.2ABCNA\_
  - 7.2AMWNA\_E
  - 7.2CAV\_
- 8.3kV
  - 8CLPT\_E-A
  - 8CLPT\_E-B
  - 8NCLPT\_E
  - 8NCLPT\_E-A
  - 8NCLPT\_E-B
- 12kV
  - 12ABCNA\_
  - 12CAV\_
- 15.5kV
  - 15CLPT\_E
  - 15NCLPT\_E-A
  - 15NCLPT\_E-B
  - 15.5CAV\_E
  - 15.5CAVH\_E
- 17.5kV
  - 17.5ABGNA\_
  - 17.5CAV\_
- 24kV
  - 24ABGNA\_
  - 24CAV\_

- 25.5kV
  - 25CLPT\_E
- 36kV
  - 36ABGNA\_
  - 36CAV\_
- 38kV
  - 38CAV\_E
  - 38CAVH\_E
  - 38CLPT\_E

### Ratings\*:

- Volts
  - 2.4kV to 38kV
- Amps
  - 0.25 to 15A
- Interrupting ratings
  - 25 to 80kA RMS Sym

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

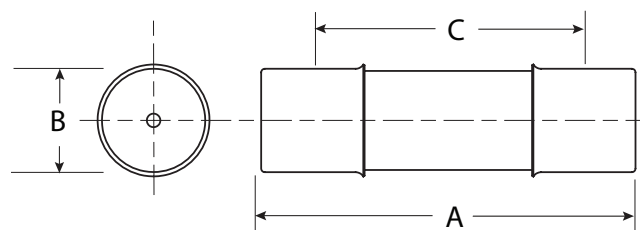
### Agency information:

- Those PT fuses conforming to the requirements for E-Rating meet the performance characteristics of ANSI C37.46

**2.475kV maximum system voltage**

| Amp rating | Dimensions - in (mm) |            |                | Catalog No. (Interrupting rating - kA) |                  | Recommended fuseclip |
|------------|----------------------|------------|----------------|----------------------------------------|------------------|----------------------|
|            | Length A             | Diameter B | Clip centers C | Indicating                             | Non-indicating   |                      |
| 0.25       | 4.5 (114)            | 0.8 (20)   | 3.9 (99)       | —                                      | 2NCLPT-.25E (63) | 1A1837               |
| 0.5        |                      |            |                | —                                      | 2NCLPT-.5E (63)  |                      |
| 1          |                      |            |                | —                                      | 2NCLPT-1E (40)   |                      |
| 2          |                      |            |                | —                                      | 2NCLPT-2E (40)   |                      |
| 5          |                      |            |                | —                                      | 2NCLPT-5E (25)   |                      |

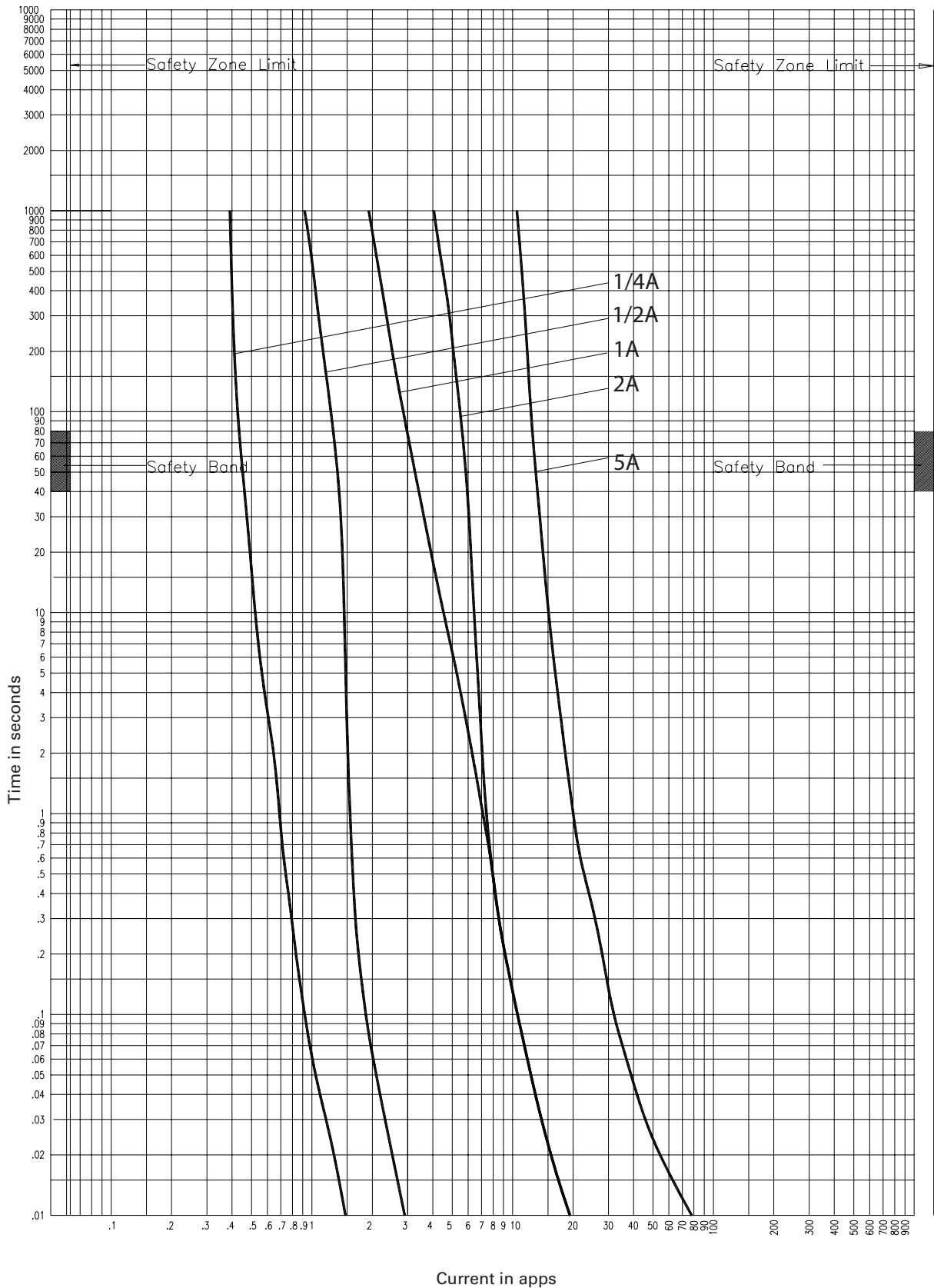
**Dimensions (see catalog number tables for values)**



**Recommended fuseclip and fuse block:**

| Description                                                                                                         | Cat. No.      |
|---------------------------------------------------------------------------------------------------------------------|---------------|
| Open fuseclip for 0.8 (20mm) dia. fuses                                                                             | 1A1837        |
| Single-pole open fuse block with #10-32 phil-slot screw terminals rated 2500V, 5A maximum and 63kA withstand rating | PTFB-2500-JCD |

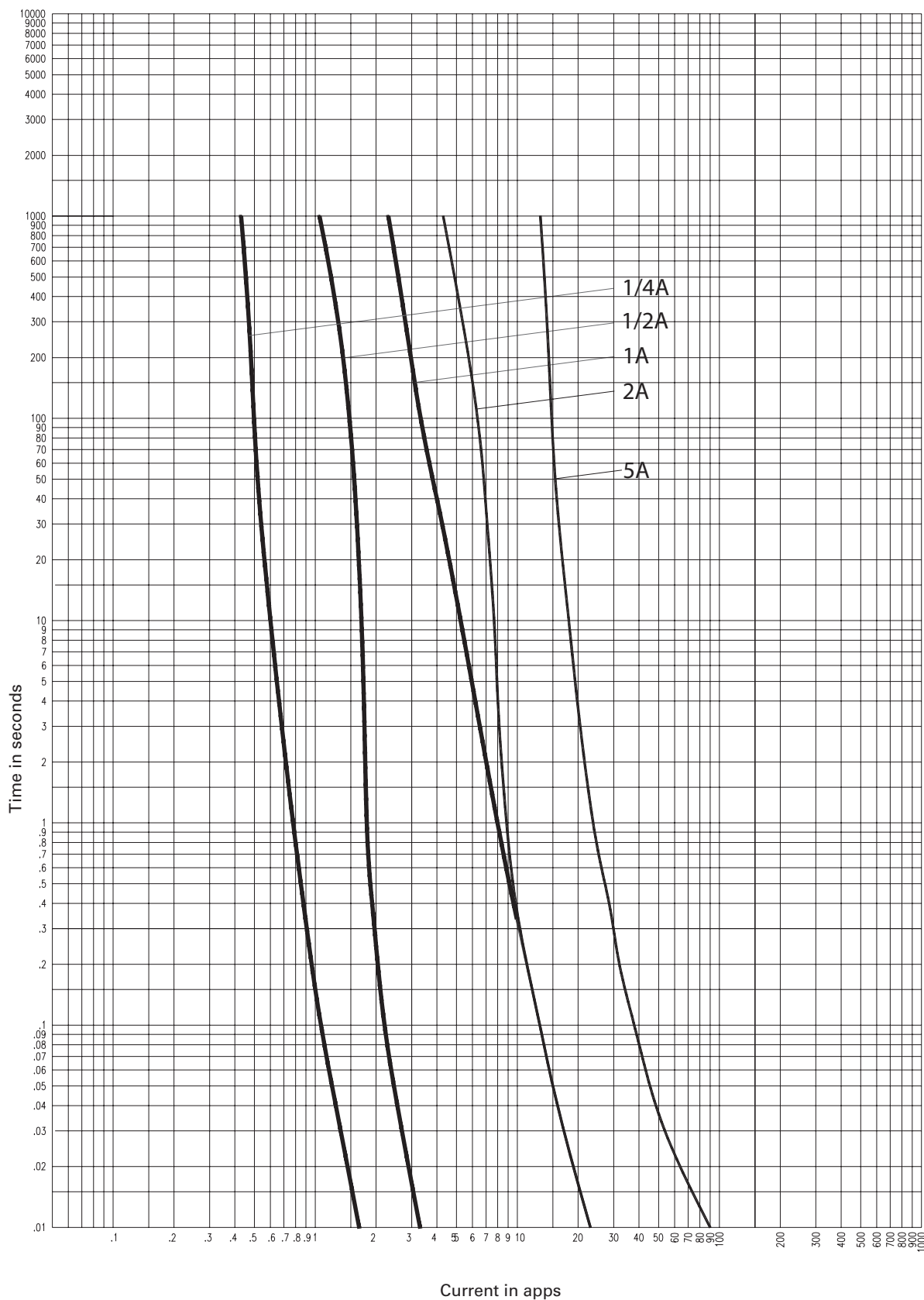
2.47kV time-current curves — minimum melting for 2NCLPT-E



2NCLPT-E

CURVE 56357202  
July 2002  
Reference # 563572

2.47kV time-current curves — total clearing for 2NCLPT-E



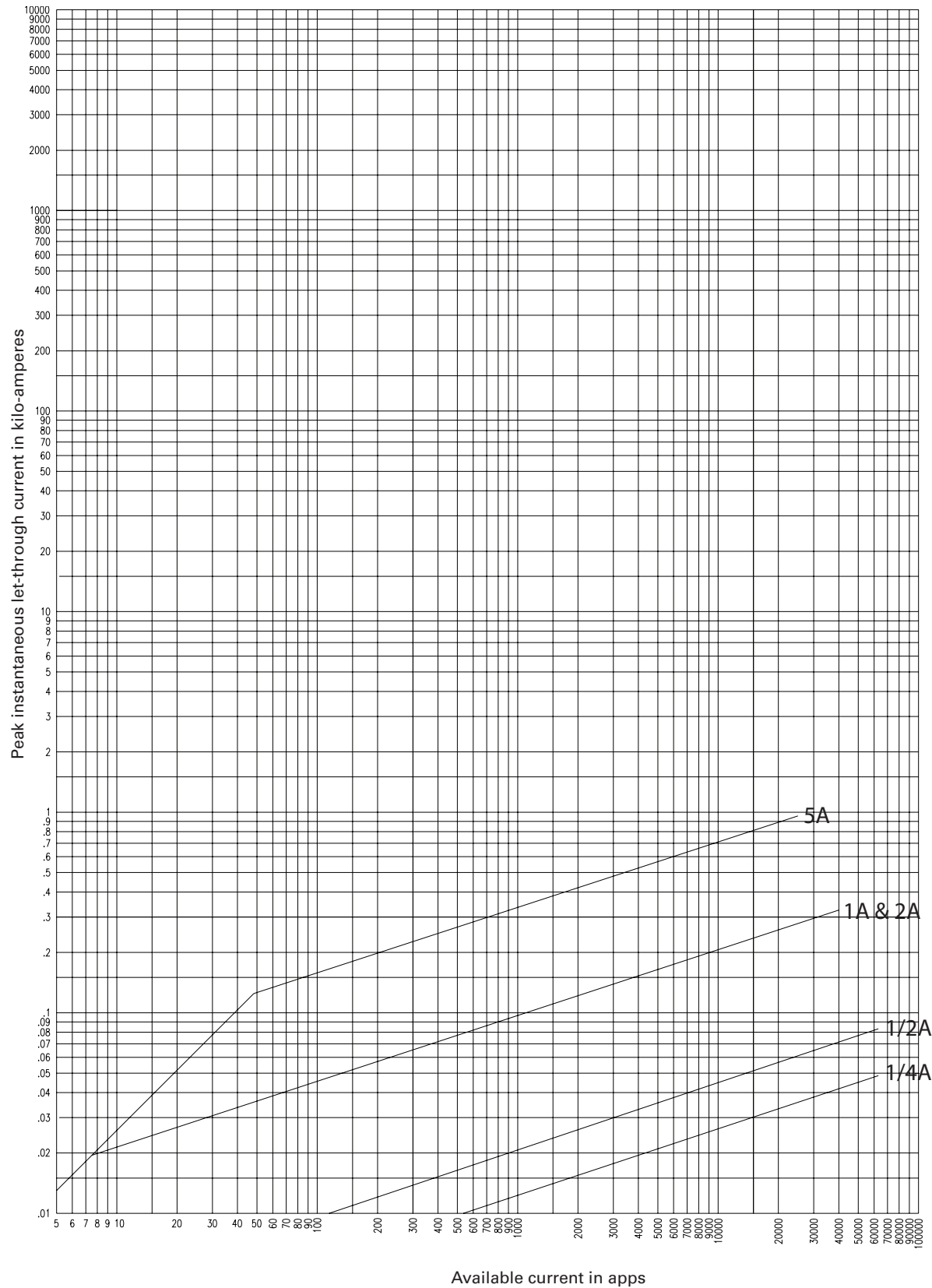
2NCLPT-E

CURVE 59883702

July 2002

Reference # 598837

2.47kV peak let-through curves for 2NCLPT\_E



2NCLPT-E

CURVE 63933702  
April 1999  
Reference # 639337,  
639338

### 3.6kV maximum system voltage

| Amp rating | Dimensions - in (mm) |            |                | Catalog No. (Interrupting rating - kA) |                   |                      |
|------------|----------------------|------------|----------------|----------------------------------------|-------------------|----------------------|
|            | Length A             | Diameter B | Clip centers C | Indicating                             | Non-indicating    | Recommended fuseclip |
| 2          | 8.7 (221)            | 1.6 (41)   | 7.6 (193)      | —                                      | 3.6CAV2 (50)      | 1A1837               |
| 3.15       | 5.6 (142)            | 1 (25)     | 4.4 (112)      | —                                      | 3.6ABWNA3.15 (50) | A3354705             |
| 3.15       | 7.7 (195)            | 1 (25)     | 6.5 (165)      | —                                      | 3.6ABCNA3.15 (50) |                      |
| 6.3        | 5.6 (142)            | 1 (25)     | 4.4 (112)      | —                                      | 3.6ABWNA6.3 (50)  |                      |
| 6.3        | 7.7 (195)            | 1 (25)     | 6.5 (165)      | —                                      | 3.6ABCNA6.3 (50)  |                      |
| 10         | 7.7 (195)            | 1 (25)     | 6.5 (165)      | —                                      | 3.6ABCNA10 (50)   |                      |

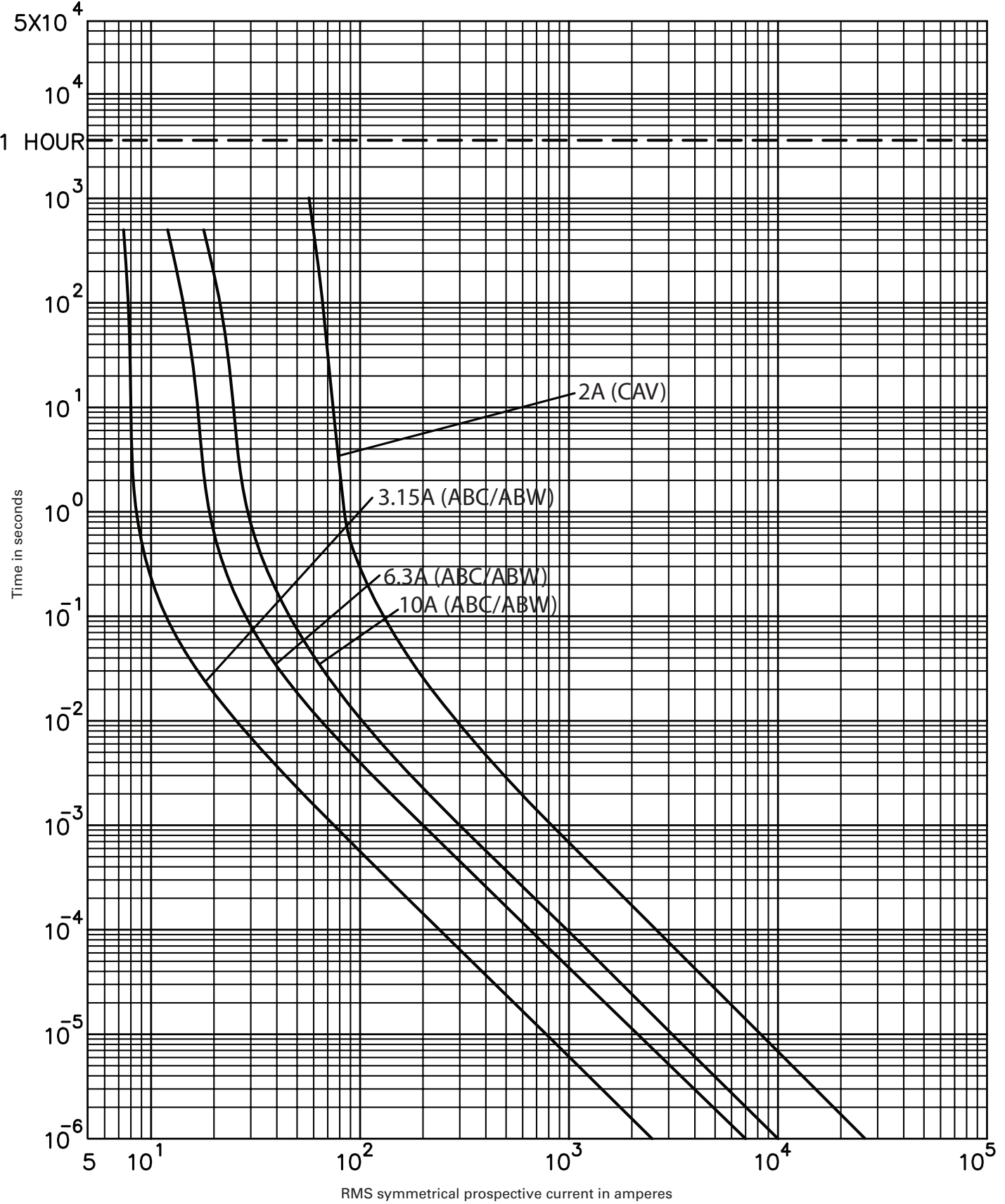
### Dimensions (see catalog number tables for values)



### Recommended fuseclips:

| Description                                               | Cat. No. |
|-----------------------------------------------------------|----------|
| Open fuseclip for 1.0 (25.4mm) dia. fuses                 | A3354705 |
| Open fuseclip for 1.56 (39.7mm) / 1.6 (40.6mm) dia. fuses | 1A0835   |

3.6kV Time-current curves — minimum melting for 3.6CAV\_, 3.6ABC\_ and 3.6ABW\_



3.6ABC\_, 3.6ABW\_, 3.6CAV\_

3.6kV Peak let-through curves for 3.6ABC\_ and 3.6ABW\_



5.5kV maximum system voltage

| Amp rating | Dimensions - in (mm) |            |                | Catalog No. (Interrupting rating - kA) |                   | Recommended fuseclip |
|------------|----------------------|------------|----------------|----------------------------------------|-------------------|----------------------|
|            | Length A             | Diameter B | Clip centers C | Indicating                             | Non-indicating    |                      |
| 0.5        | 5.6 (142)            | 0.8 (20)   | 4.8 (122)      | —                                      | 5.5AMWNA0.5E (50) | 1A1837               |
| 0.5        | 5.6 (142)            | 1 (25)     | 4.4 (112)      | —                                      | 5.5ABWNA0.5E (50) | A3354705             |
| 0.5        | 7.4 (188)            | 1.6 (41)   | 6.2 (157)      | 5.5CAVH0.5E (63)                       | JCW-1/2E (40)     | 1A0835               |
| 0.5        | 9.5 (241)            | 1.6 (41)   | 8.1 (206)      | 5CLPT-.5E (80)†                        | 5NCLPT-.5E-A (63) | 1A0835               |
| 1          | 5.6 (142)            | 1 (25)     | 4.4 (112)      | —                                      | 5.5ABWNA1E (50)   | A3354705             |
| 1          | 5.6 (142)            | 0.8 (20)   | 4.8 (122)      | —                                      | 5.5AMWNA1.0E (50) | 1A1837               |
| 1          | 7.4 (188)            | 1.6 (41)   | 6.2 (157)      | 5.5CAVH1E (63)                         | JCW-1E (40)       | 1A0835               |
| 1          | 9.5 (241)            | 1.6 (41)   | 8.1 (206)      | 5CLPT-1E (80)†                         | 5NCLPT-1E-A (63)  | 1A0835               |
| 1.5        | 9.5 (241)            | 1.6 (41)   | 8.1 (206)      | 5CLPT-1.5E (80)†                       | —                 | 1A0835               |
| 2          | 5.6 (142)            | 1 (25)     | 4.4 (112)      | —                                      | 5.5ABWNA2E (50)   | A3354705             |
| 2          | 5.6 (142)            | 0.8 (20)   | 4.8 (122)      | —                                      | 5.5AMWNA2.0E (50) | 1A1837               |
| 2          | 7.4 (188)            | 1.6 (41)   | 6.2 (157)      | 5.5CAVH2E (63)                         | JCW-2E (40)       | 1A0835               |
| 3          | 5.6 (142)            | 1 (25)     | 4.4 (112)      | —                                      | 5.5ABWNA3E (50)   | A3354705             |
| 3          | 5.6 (142)            | 0.8 (20)   | 4.8 (122)      | —                                      | 5.5AMWNA3.0E (50) | 1A1837               |
| 3          | 9.5 (241)            | 1.6 (41)   | 8.1 (206)      | 5CLPT-3E (80)                          | —                 | 1A0835               |
| 3          | 7.4 (188)            | 1.6 (41)   | 6.2 (157)      | —                                      | JCW-3E (40)       | 1A0835               |
| 4          | 5.6 (142)            | 0.8 (20)   | 4.8 (122)      | —                                      | 5.5AMWNA4.0E (50) | 1A1837               |
| 4          | 7.3 (185)            | 1.6 (41)   | 5.9 (150)      | —                                      | JCW-4E (40)       | 1A0835               |
| 5          | 9.5 (241)            | 1.6 (41)   | 8.1 (206)      | 5CLPT-5E (80)                          | —                 | 1A0835               |
| 5          | 5.6 (142)            | 1 (25)     | 4.4 (112)      | —                                      | 5.5ABWNA5E (50)   | A3354705             |
| 5          | 5.6 (142)            | 0.8 (20)   | 4.8 (122)      | —                                      | 5.5AMWNA5.0E (50) | 1A1837               |
| 5          | 7.3 (185)            | 1.6 (41)   | 5.9 (150)      | —                                      | JCW-5E (40)       | 1A0835               |
| 10         | 9.5 (241)            | 1.6 (41)   | 8.1 (206)      | 5CLPT-10E (80)                         | —                 | 1A0835               |
| 15         | 7.4 (188)            | 1.6 (41)   | 6.2 (157)      | —                                      | 5.5CAV15E (63)    | 1A0835               |

† Does not comply with ANSI C37.46 for “E” rating.

CLPT Type mountings and hardware 5.5kV maximum (4.8kV nominal)\*

| Amp rating                       | Fuse mounting type** | BIL (kV) | Catalog number                                   |                           |                                        |                                |
|----------------------------------|----------------------|----------|--------------------------------------------------|---------------------------|----------------------------------------|--------------------------------|
|                                  |                      |          | Mounting (including live parts, end fittings)*** |                           | Live parts (including end fittings)*** | End fittings (disconnect only) |
|                                  |                      |          | Porcelain insulator                              | Glass-polyester insulator |                                        |                                |
| <b>CLPT and NCLPT-A Mounting</b> |                      |          |                                                  |                           |                                        |                                |
| 0.5–10                           | Non-disconnect       | 60       | 5CLPT-PNM-A                                      | 5CLPT-GNM-A               | CLPT-NL                                | —                              |
|                                  | Disconnect†          | 60       | 5CLPT-PDM-A                                      | 5CLPT-GDM-A               | CLPT-DL                                | CLPT-DF                        |

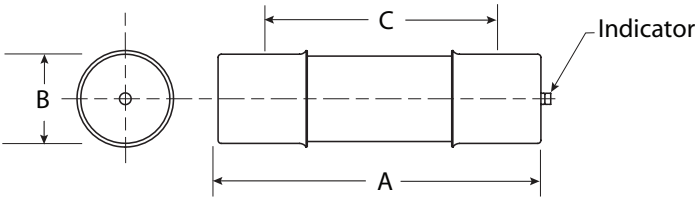
\* Refers to 5CLPT and 5NCLPT-A fuses only.

\*\* See page 70 for dimensions and diagrams of typical mounting.

\*\*\* 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.

Dimensions (see catalog number tables for values)



Recommended fuseclips:

| Description                                               | Cat. No. |
|-----------------------------------------------------------|----------|
| Open fuseclip for 0.8 (20mm) dia. fuses                   | 1A1837   |
| Open fuseclip for 1.0 (25.4mm) dia. fuses                 | A3354705 |
| Open fuseclip for 1.56 (39.7mm) / 1.6 (40.6mm) dia. fuses | 1A0835   |

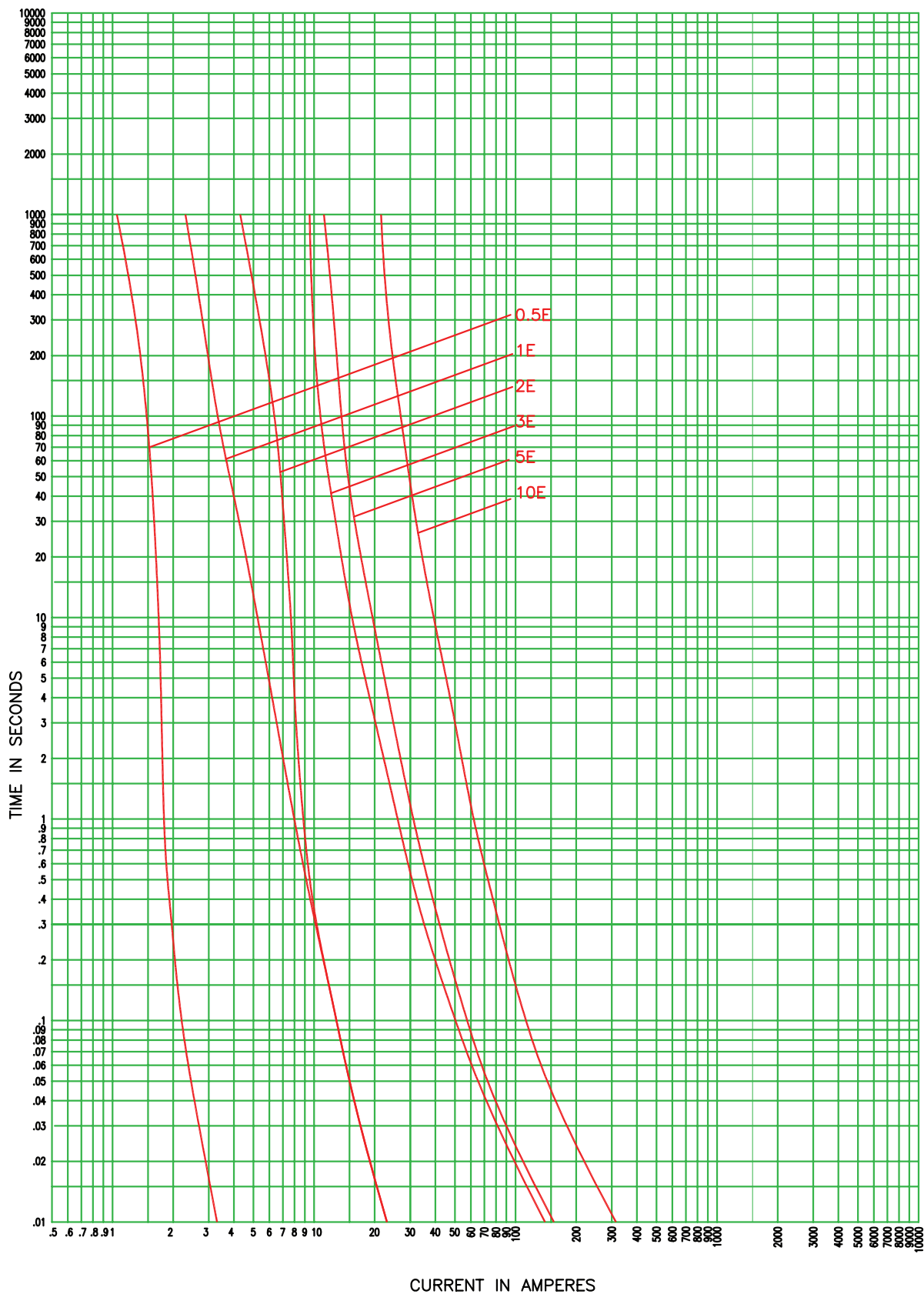
5.5kV time-current curves — minimum melting for 5NCLPT\_-A



5NCLPT\_-E-A

CURVE TC70548302  
December 2008

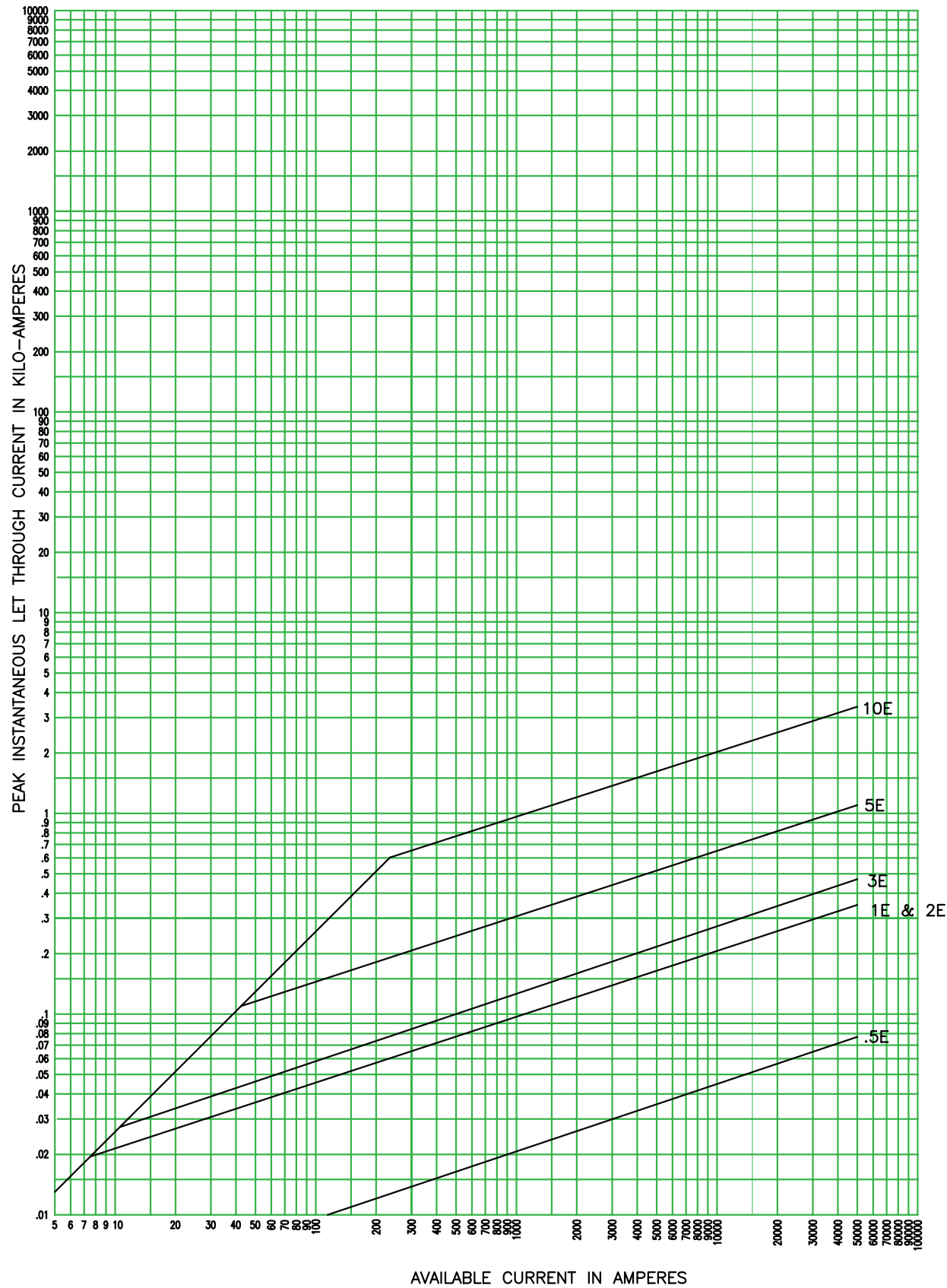
5.5kV time-current curves — total clearing for 5NCLPT\_-A



5NCLPT\_-E-A

CURVE TC70548402  
December 2008

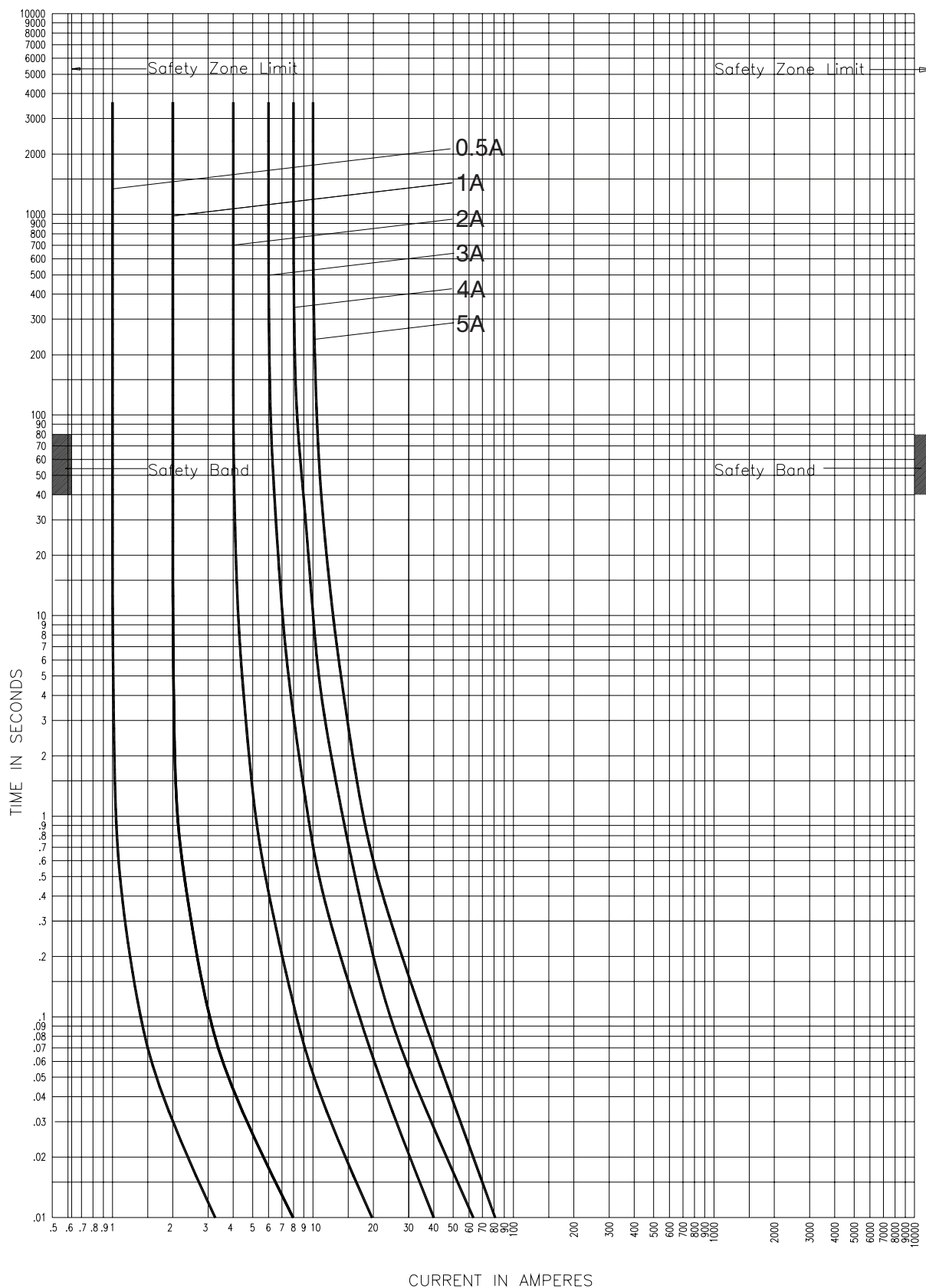
5.5kV peak let-through curves for 5NCLPT\_-A



5NCLPT- F-A

CURVE TC63934002  
December 2008

5.5kV time-current curves — minimum melting for 5NCLPT\_



5NCLPT-E

CURVE 66702402  
July 2002  
Reference # 667024

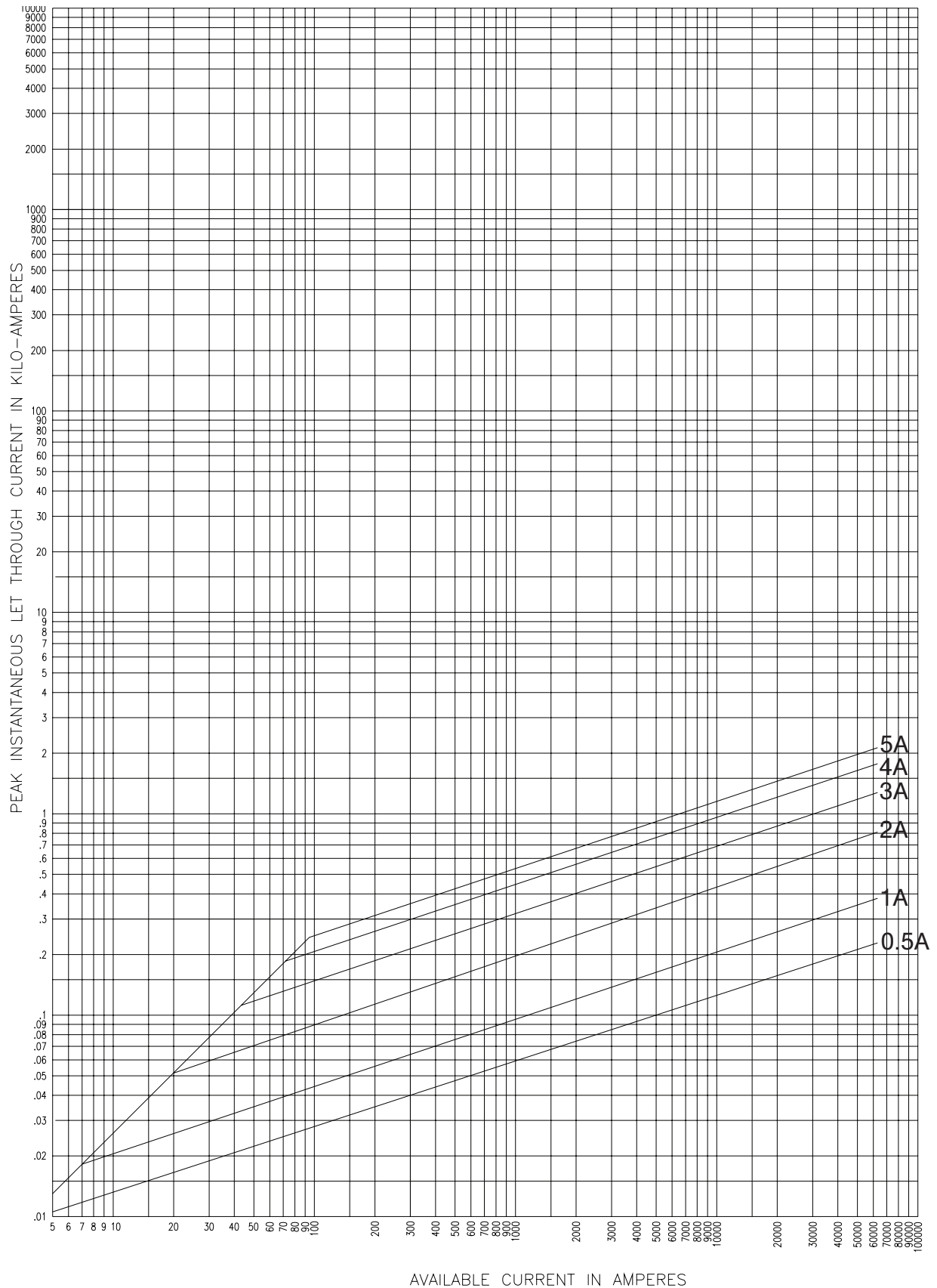
5.5kV time-current curves — total clearing for 5NCLPT\_



5NCLPT-E

CURVE 66702502  
July 2002  
Reference # 667025

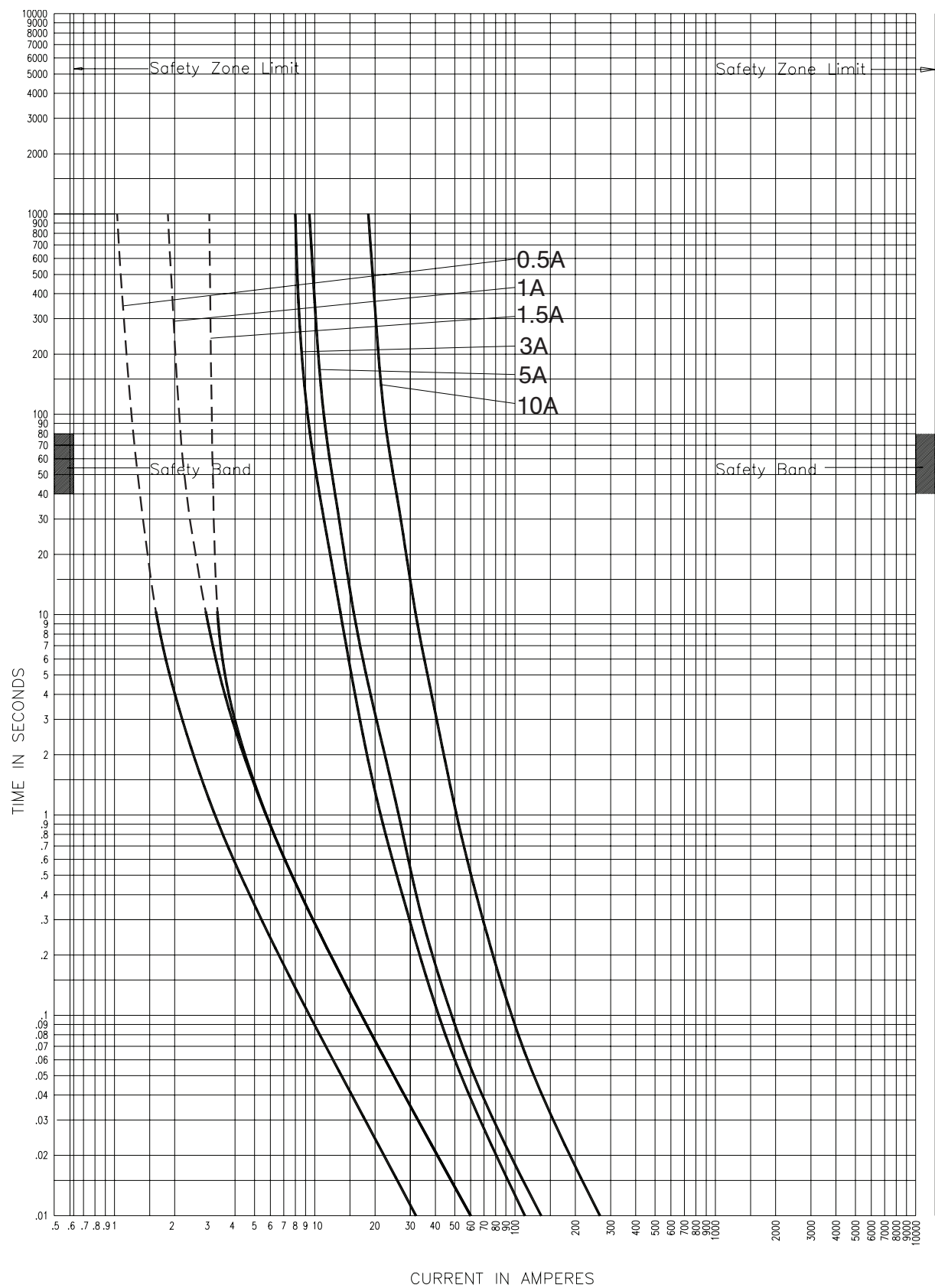
5.5kV peak let-through curves for 5NCLPT\_



5NCLPT\_E

CURVE 66704101  
July 2001

5.5kV time-current curves — minimum melting for 5CLPT\_

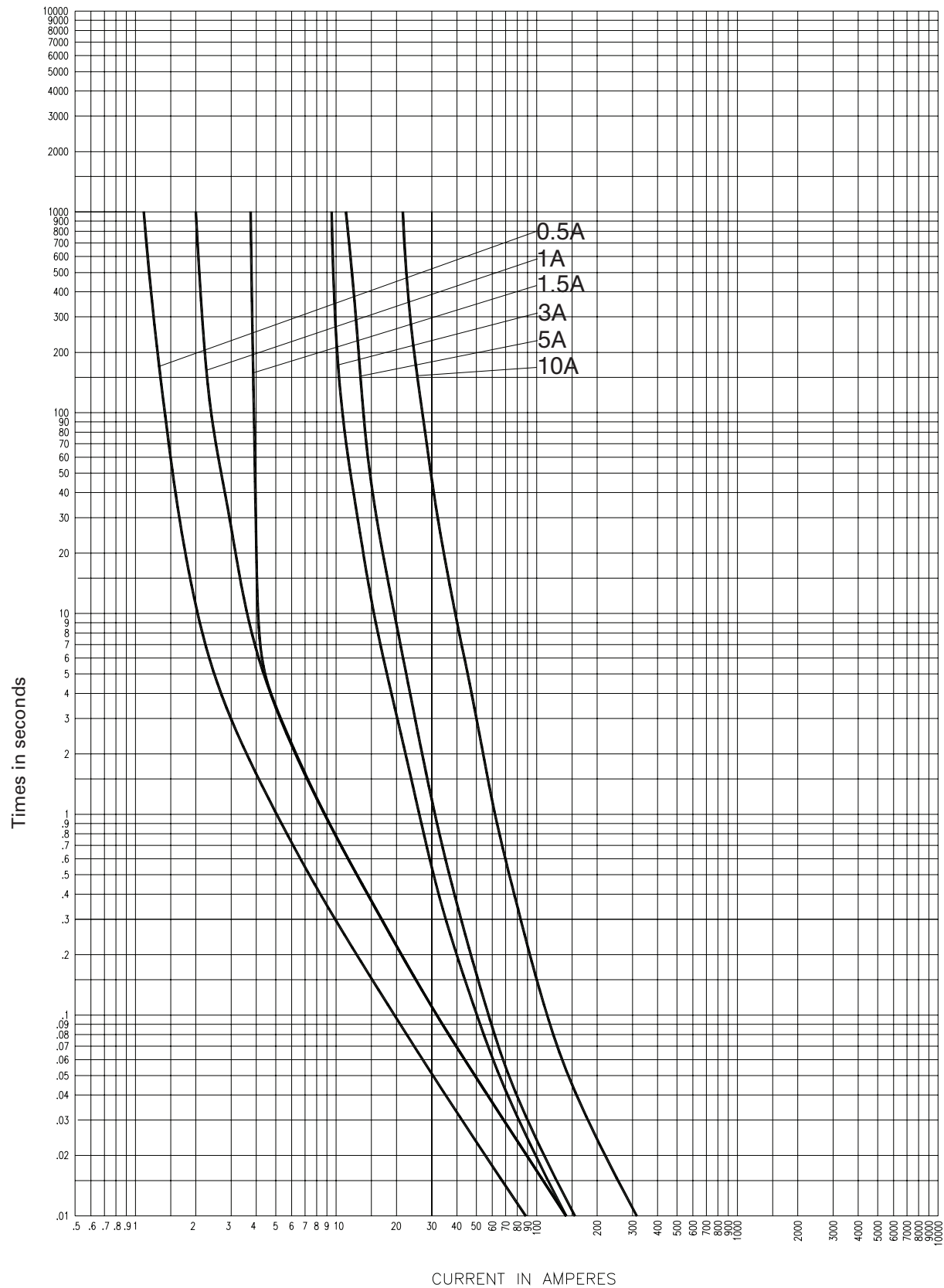


5CLPT-\_E

0.5, 1 and 1.5 A fuse melt times in the dotted line region may not be assured due to manufacturing variations. The dotted lines show nominal operation. Some individual fuses may not open until current at 10-second mark is applied.

CURVE 56353206  
July 2002  
Reference # 563532

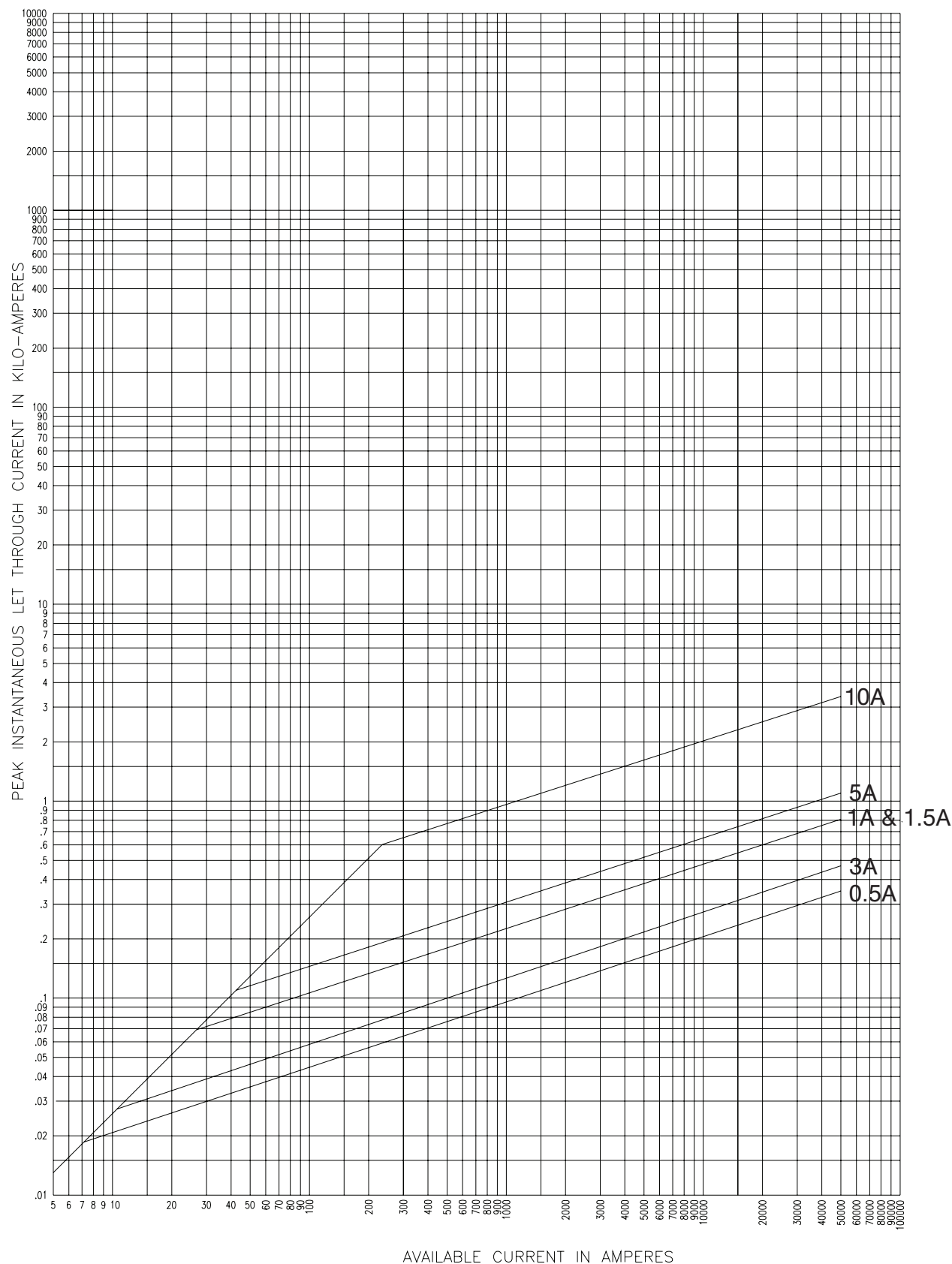
5.5kV Time-current curves — total clearing for 5CLPT\_



5CLPT-E

CURVE 56353306  
July 2002  
Reference # 563533

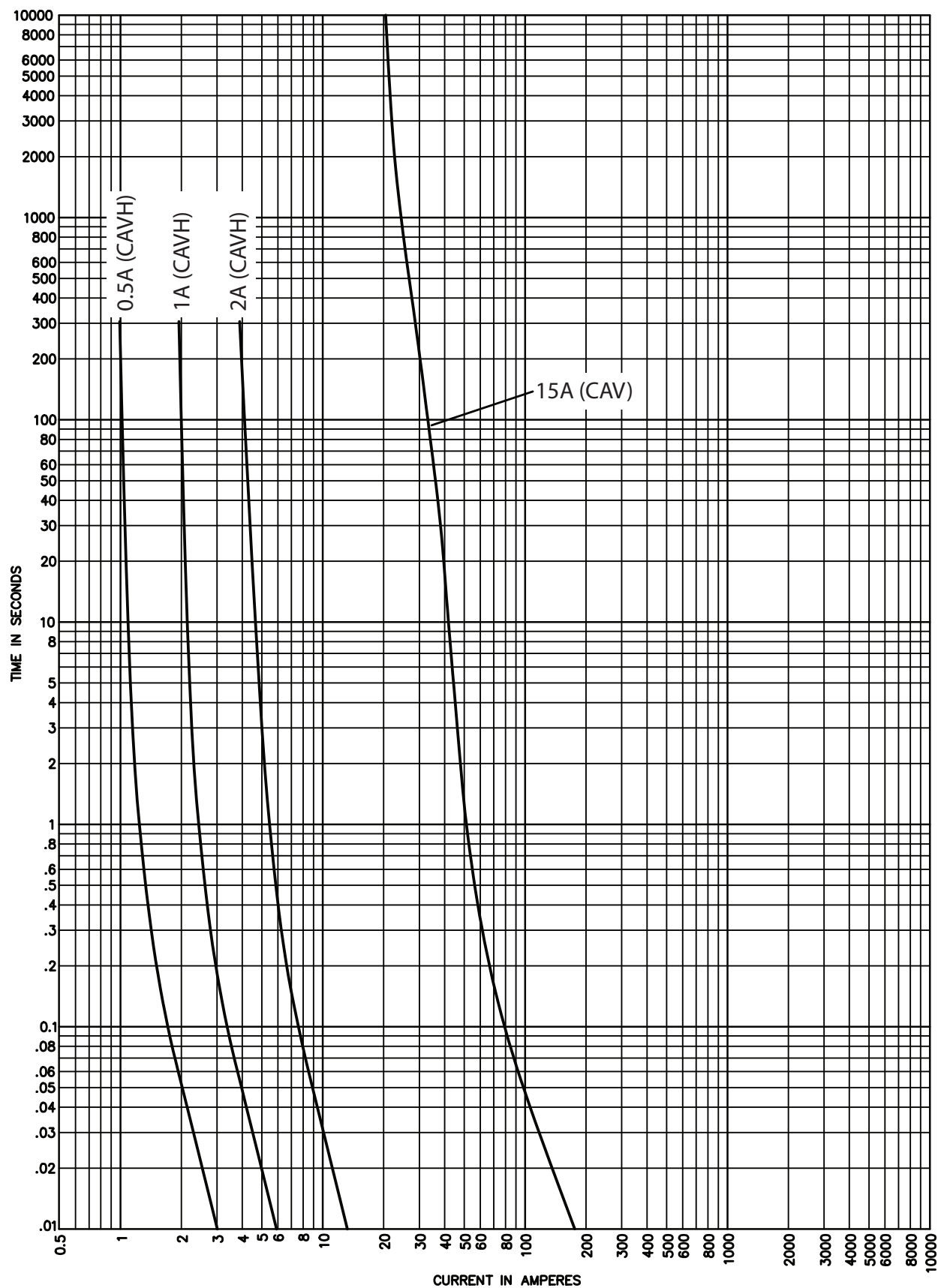
5.5kV peak let-through curves for 5CLPT\_



5CLPT\_E

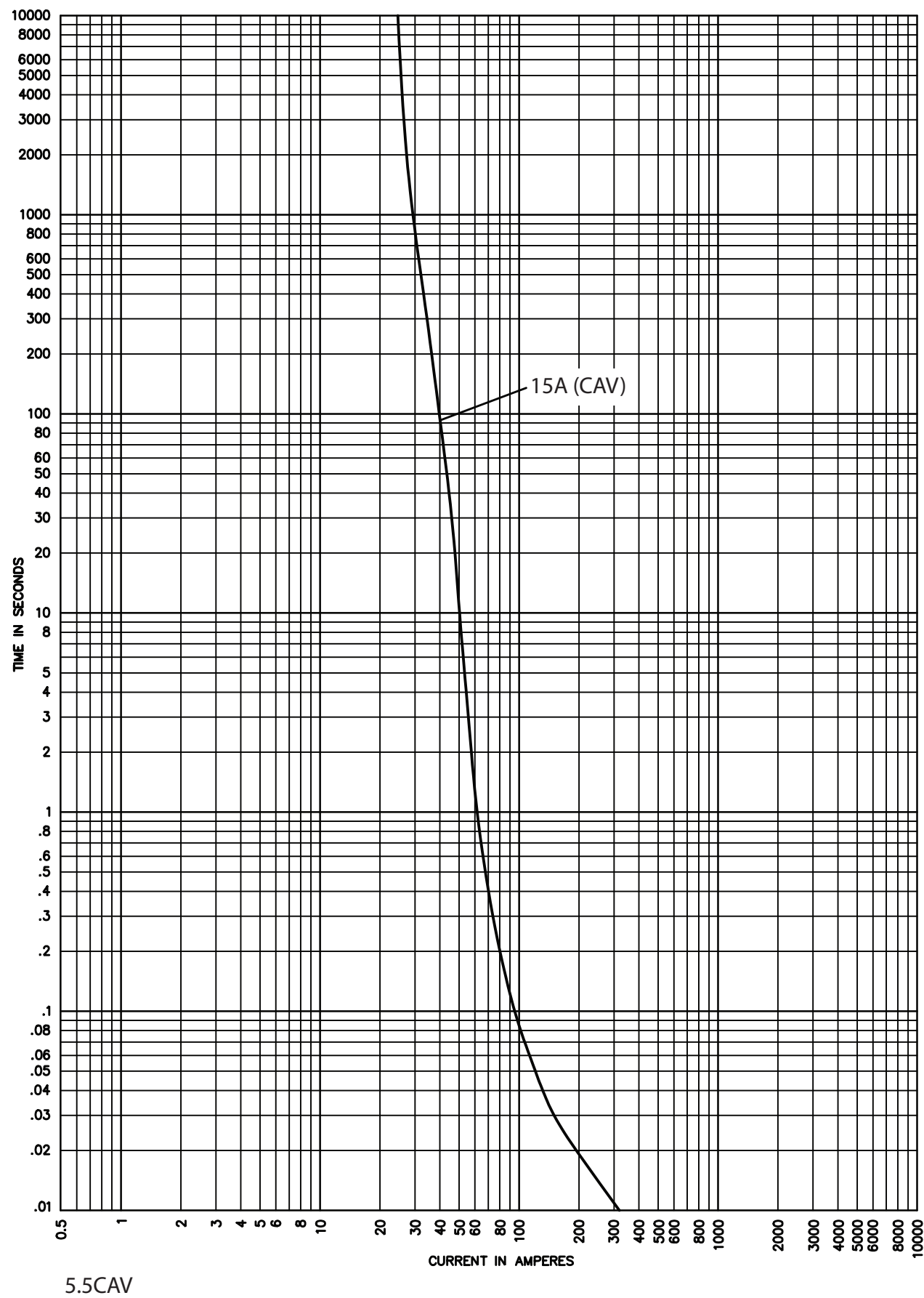
63934001  
July 2001  
Reference # 639340

5.5kV time-current curves — minimum melting for 5.5CAV\_ and 5.5CAVH\_

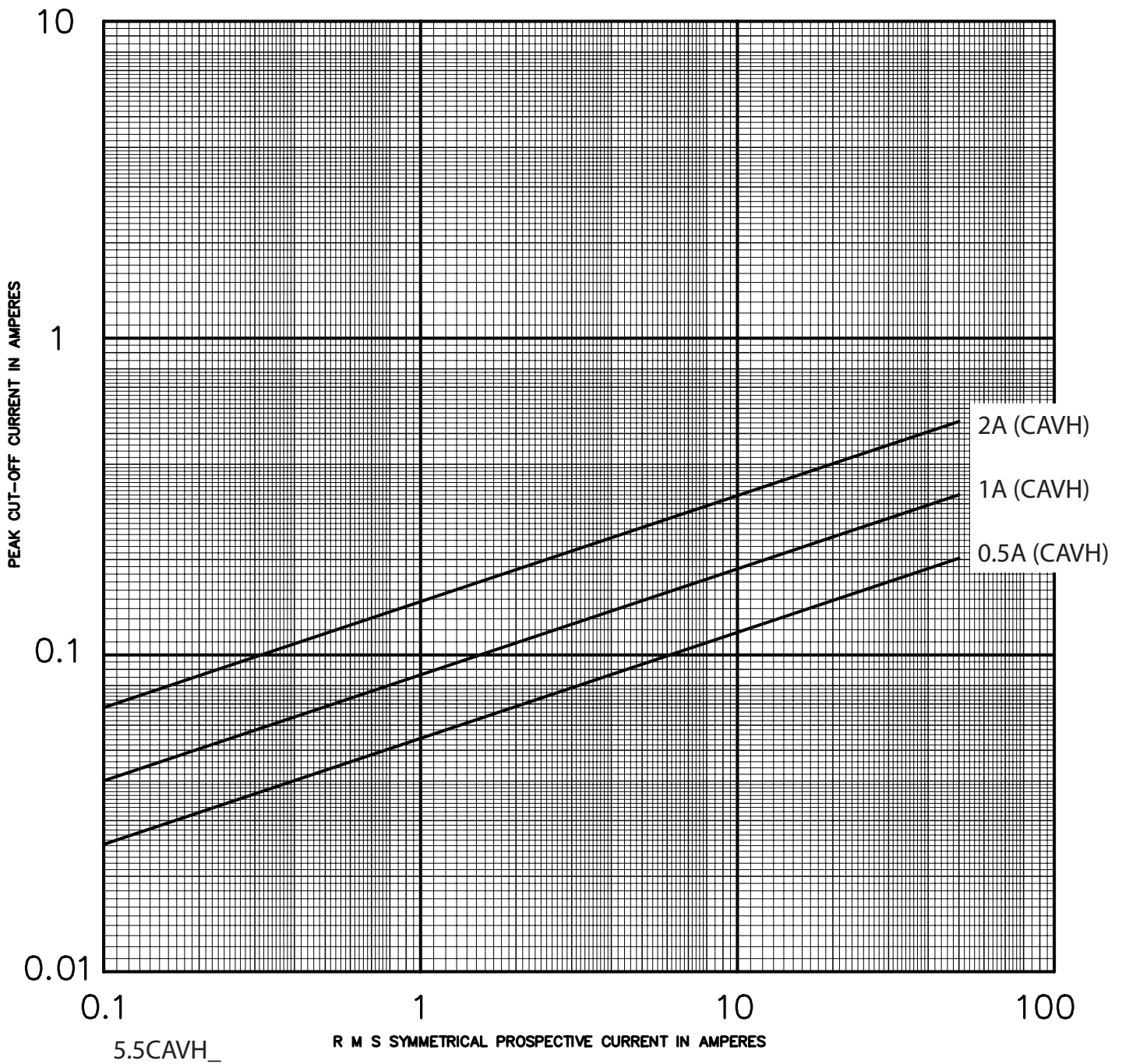


5.5CAV\_, 5.5CAVH\_

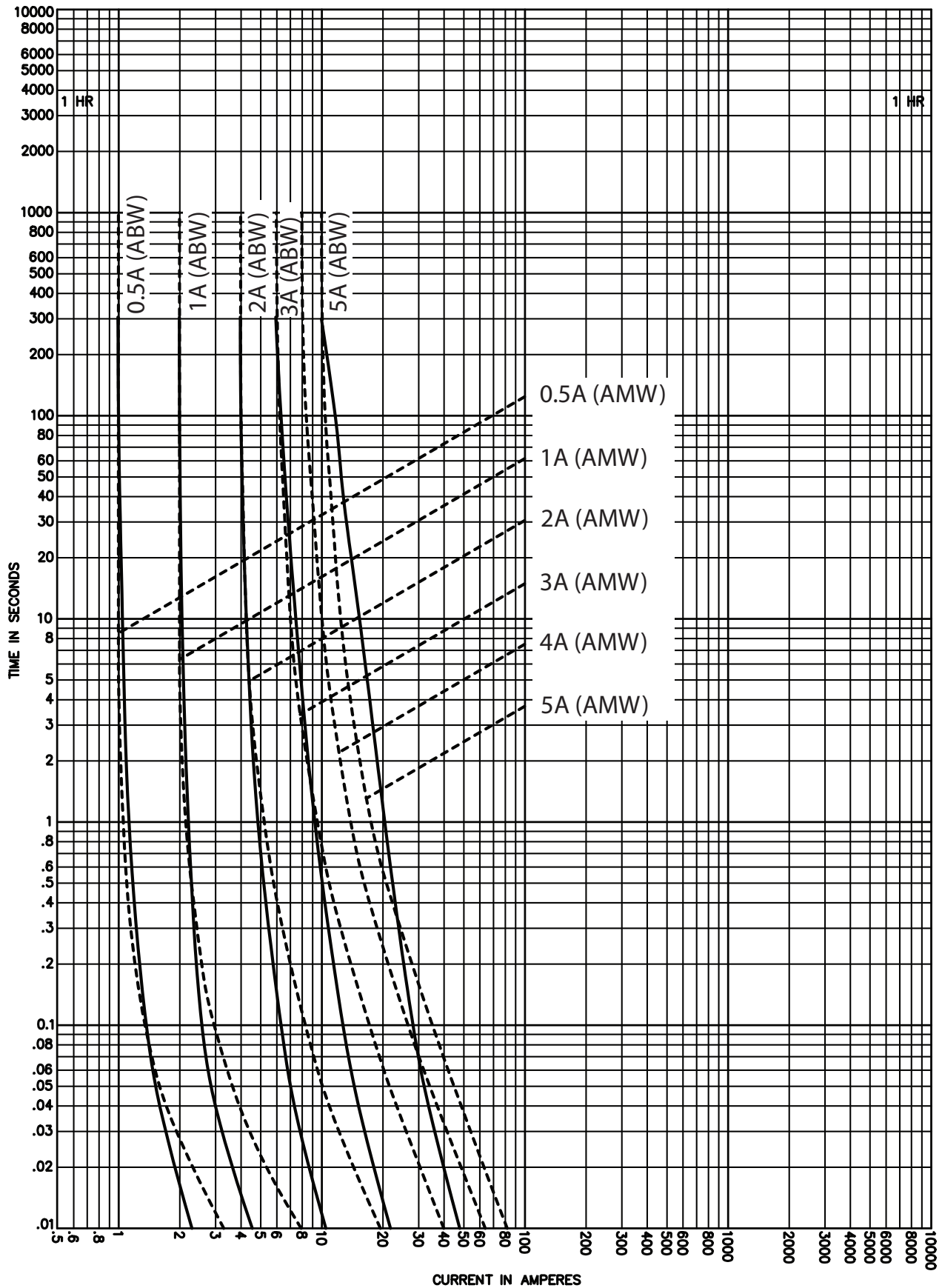
5.5kV time-current curves — total clearing for 5.5CAV<sub>2</sub>



5.5kV peak let-through curves for 5.5CAVH\_

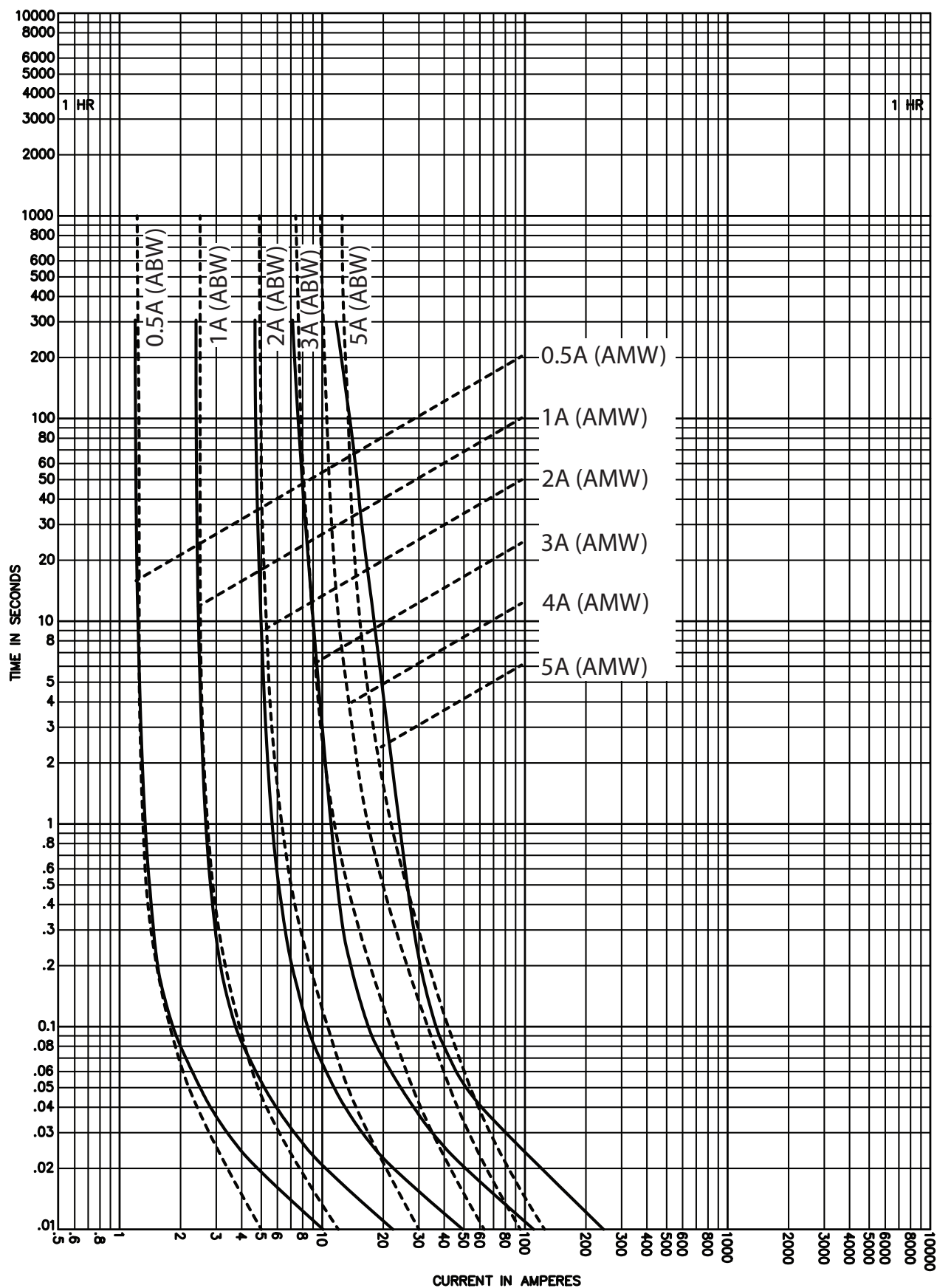


5.5kV time-current curves — minimum melting for 5.5ABW\_ and 5.5AMW\_



5.5ABW\_, 5.5AMW\_

5.5kV time-current curves — total clearing for 5.5ABW\_ and 5.5AMW\_



5.5ABW\_, 5.5AMW\_

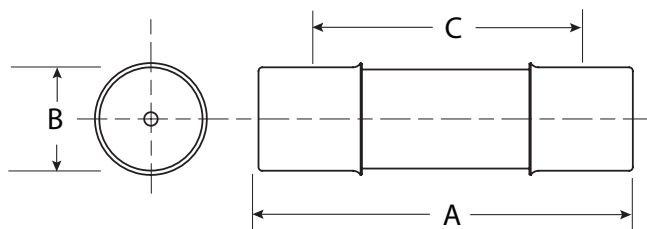
5.5kV peak let-through curves for 5.5ABW\_ and 5.5AMW\_



**7.2kV maximum system voltage**

| Amp rating | Dimensions - in (mm) |            |                | Catalog No. (Interrupting rating - kA) |                   |                      |
|------------|----------------------|------------|----------------|----------------------------------------|-------------------|----------------------|
|            | Length A             | Diameter B | Clip centers C | Indicating                             | Non-indicating    | Recommended fuseclip |
| 0.5        | 5.6 (142)            | 0.8 (20)   | 4.8 (122)      | —                                      | 7.2AMWNA0.5E (50) | 1A1837               |
| 1          | 5.6 (142)            | 0.8 (20)   | 4.8 (122)      | —                                      | 7.2AMWNA1.0E (50) |                      |
| 2          | 5.6 (142)            | 0.8 (20)   | 4.8 (122)      | —                                      | 7.2AMWNA2.0E (50) |                      |
| 2          | 8.7 (221)            | 1.6 (41)   | 7.5 (190)      | —                                      | 7.2CAV2 (63)      | 1A0835               |
| 3          | 5.6 (142)            | 0.8 (20)   | 4.8 (122)      | —                                      | 7.2AMWNA3.0E (50) | 1A1837               |
| 3.15       | 5.6 (142)            | 1 (25.4)   | 4.4 (112)      | —                                      | 7.2ABWNA3.15 (45) | A3354705             |
| 3.15       | 7.7 (195)            | 1 (25.4)   | 6.5 (165)      | —                                      | 7.2ABCNA3.15 (45) |                      |
| 4          | 5.6 (142)            | 0.8 (20)   | 4.8 (122)      | —                                      | 7.2AMWNA4.0E (50) | 1A1837               |
| 4          | 8.7 (221)            | 1.6 (41)   | 7.5 (190)      | —                                      | 7.2CAV4 (63)      | 1A0835               |
| 5          | 5.6 (142)            | 0.8 (20)   | 4.8 (122)      | —                                      | 7.2AMWNA5E (50)   | 1A1837               |
| 6          | 8.7 (221)            | 1.6 (41)   | 7.5 (190)      | —                                      | 7.2CAV6 (63)      | 1A0835               |
| 6.3        | 5.6 (142)            | 1 (25.4)   | 4.4 (112)      | —                                      | 7.2ABWNA6.3 (45)  | A3354705             |
| 6.3        | 7.7 (195)            | 1 (25.4)   | 6.5 (165)      | —                                      | 7.2ABCNA6.3 (45)  |                      |
| 10         | 8.7 (221)            | 1.6 (41)   | 7.5 (190)      | —                                      | 7.2CAV10 (63)     | 1A0835               |

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



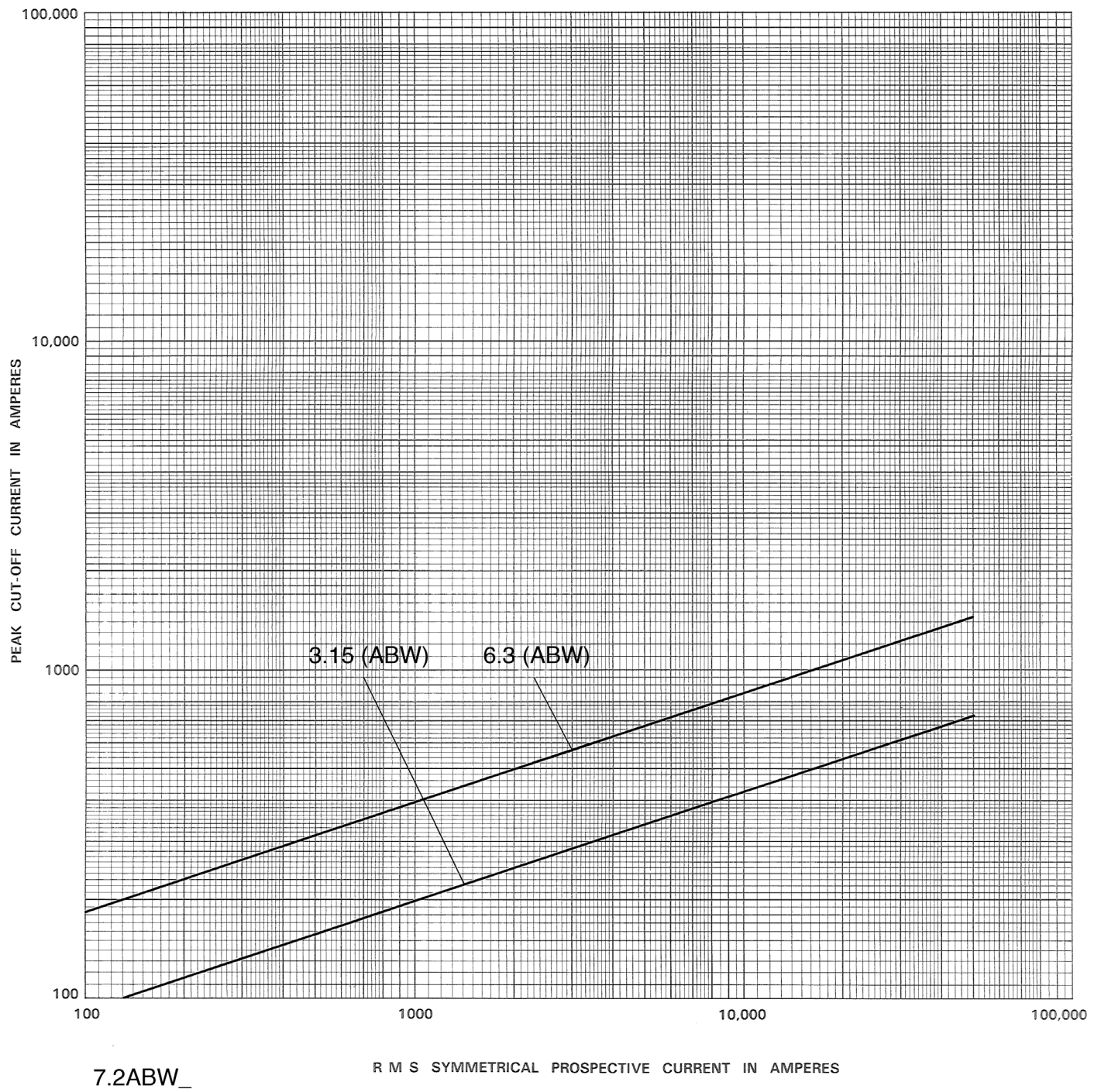
**Recommended fuseclips**

| Description                                               | Cat. No. |
|-----------------------------------------------------------|----------|
| Open fuseclip for 0.8 (20mm) dia. fuses                   | 1A1837   |
| Open fuseclip for 1.0 (25.4mm) dia. fuses                 | A3354705 |
| Open fuseclip for 1.56 (39.7mm) / 1.6 (40.6mm) dia. fuses | 1A0835   |

7.2kV time-current curves — minimum melting for 7.2ABW\_ and 7.2CAV\_



7.2kV peak let-through curves for 7.2ABW\_



### 8.3kV maximum system voltage

| Amp rating | Dimensions - in (mm) |            |                | Catalog No. (interrupting rating - kA) |                   |                      |
|------------|----------------------|------------|----------------|----------------------------------------|-------------------|----------------------|
|            | Length A             | Diameter B | Clip centers C | Indicating                             | Non-indicating    | Recommended fuseclip |
| 0.5        | 9.5 (241)            | 1.6 (41)   | 8.1 (206)      | 8CLPT-5E-A (80) <sup>†</sup>           | 8NCLPT-5E-A (50)  | 1A0835               |
| 1          | 5 (127)              | 1.1 (28)   | 4 (102)        | —                                      | 8NCLPT-1E (50)    | A3354705             |
| 1          | 9.5 (241)            | 1.6 (41)   | 8.1 (206)      | —                                      | 8NCLPT-1E-A (50)  | 1A0835               |
| 2          | 8 (203)              | 0.8 (20)   | 7.2 (183)      | —                                      | 8NCLPT-2E (25)    | 1A1837               |
| 2          | 9.5 (241)            | 1.6 (41)   | 8.1 (206)      | —                                      | 8NCLPT-2E-A (50)  | 1A0835               |
| 3          | 12.9 (328)           | 1.6 (41)   | 11.5 (292)     | 8CLPT-3E-B (80)                        | 8NCLPT-3E-B (50)  | 1A0835               |
| 4          | 8 (203)              | 0.8 (20)   | 7.2 (183)      | —                                      | 8NCLPT-4E (25)    | 1A1837               |
| 5          | 5 (127)              | 1.1 (28)   | 4 (102)        | —                                      | 8NCLPT-5E (50)    | A3354705             |
| 5          | 12.9 (328)           | 1.6 (41)   | 11.5 (292)     | 8CLPT-5E-B (50)                        | 8NCLPT-5E-B (50)  | 1A0835               |
| 10         | 12.9 (328)           | 1.6 (41)   | 11.5 (292)     | 8CLPT-10E-B (50)                       | 8NCLPT-10E-B (50) | 1A0835               |

<sup>†</sup> Does not comply with ANSI C37.46 for “E” rating.

### CLPT type mountings and hardware 8.3kV maximum (7.2kV nominal)\*

| Amp rating | Fuse mounting type**    | BIL (kV) | Catalog number                                   |             |                                        |                                |
|------------|-------------------------|----------|--------------------------------------------------|-------------|----------------------------------------|--------------------------------|
|            |                         |          | Mounting (including live parts, end fittings)*** |             | Live parts (including end fittings)*** | End fittings (disconnect only) |
| 0.5–2      | Non-disconnect          | 75       | 8CLPT-PNM-A                                      | 8CLPT-GNM-A | CLPT-NL                                | —                              |
|            | Disconnect <sup>†</sup> | 75       | 8CLPT-PDM-A                                      | 8CLPT-GDM-A | CLPT-DL                                | CLPT-DF                        |
| 3–10       | Non-disconnect          | 75       | 8CLPT-PNM-B                                      | 8CLPT-GNM-B | CLPT-NL                                | —                              |
|            | Disconnect <sup>†</sup> | 75       | 8CLPT-PDM-B                                      | 8CLPT-GDM-B | CLPT-DL                                | CLPT-DF                        |

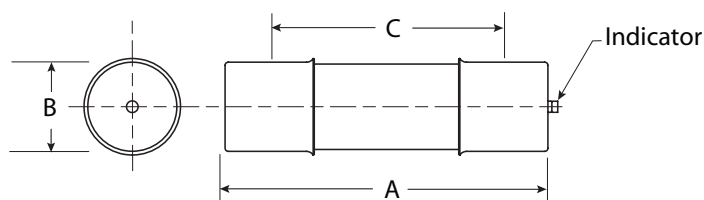
\* Refers to 8CLPT and 8NCLPT-A or -B fuses only.

\*\* See page 70 for dimensions and diagrams of typical mounting.

\*\*\* End fittings supplied only when required.

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

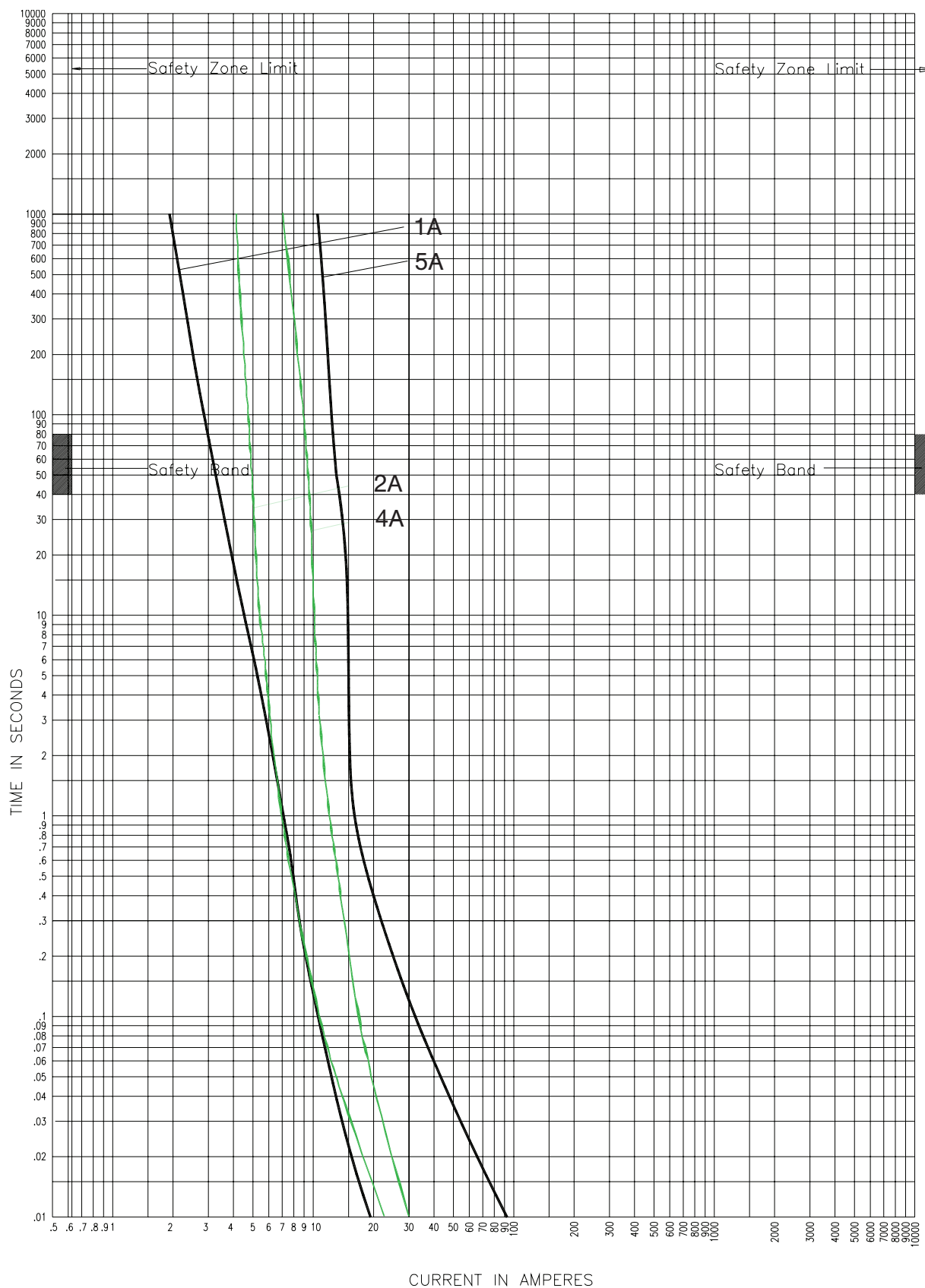
### Dimensions (see catalog number tables for values)



### Recommended fuseclips:

| Description                                               | Cat. No. |
|-----------------------------------------------------------|----------|
| Open fuseclip for 0.8 (20mm) dia. fuses                   | 1A1837   |
| Open fuseclip for 1.0 (25.4mm) dia. fuses                 | A3354705 |
| Open fuseclip for 1.56 (39.7mm) / 1.6 (40.6mm) dia. fuses | 1A0835   |

8.3kV time-current curves — minimum melting for 8NCLPT\_

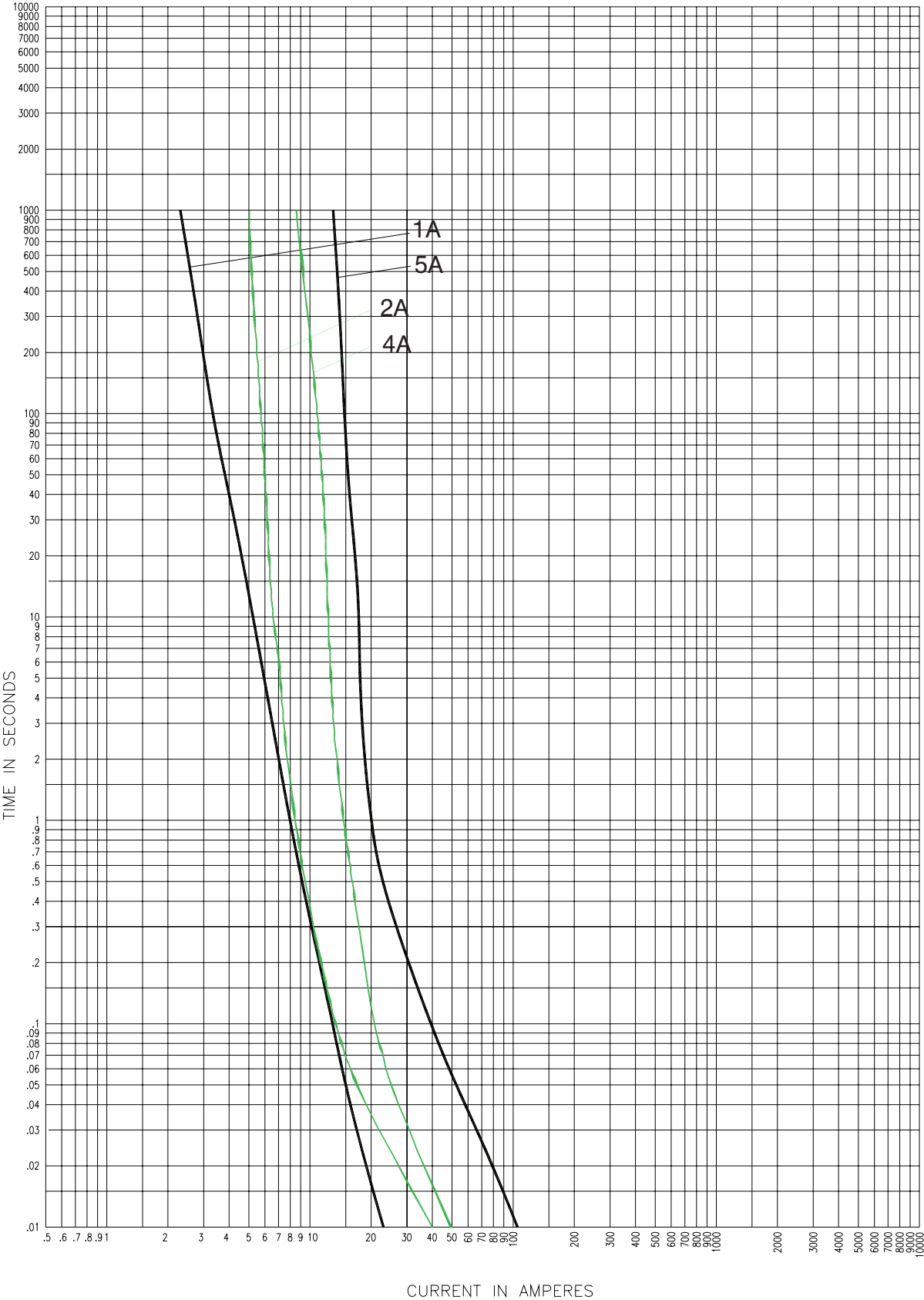


8NCLPT\_E

Curve 59887102  
July 2002  
Reference # 628852, 598871

Curve 56357206  
July 2002

8.3kV time-current curves — total clearing for 8NCLPT\_



8NCLPT-\_E

Curve 59887104  
July 2002  
Reference # 598871

Curve 59883706  
July 2002

8.3kV peak let-through curves for 8NCLPT\_

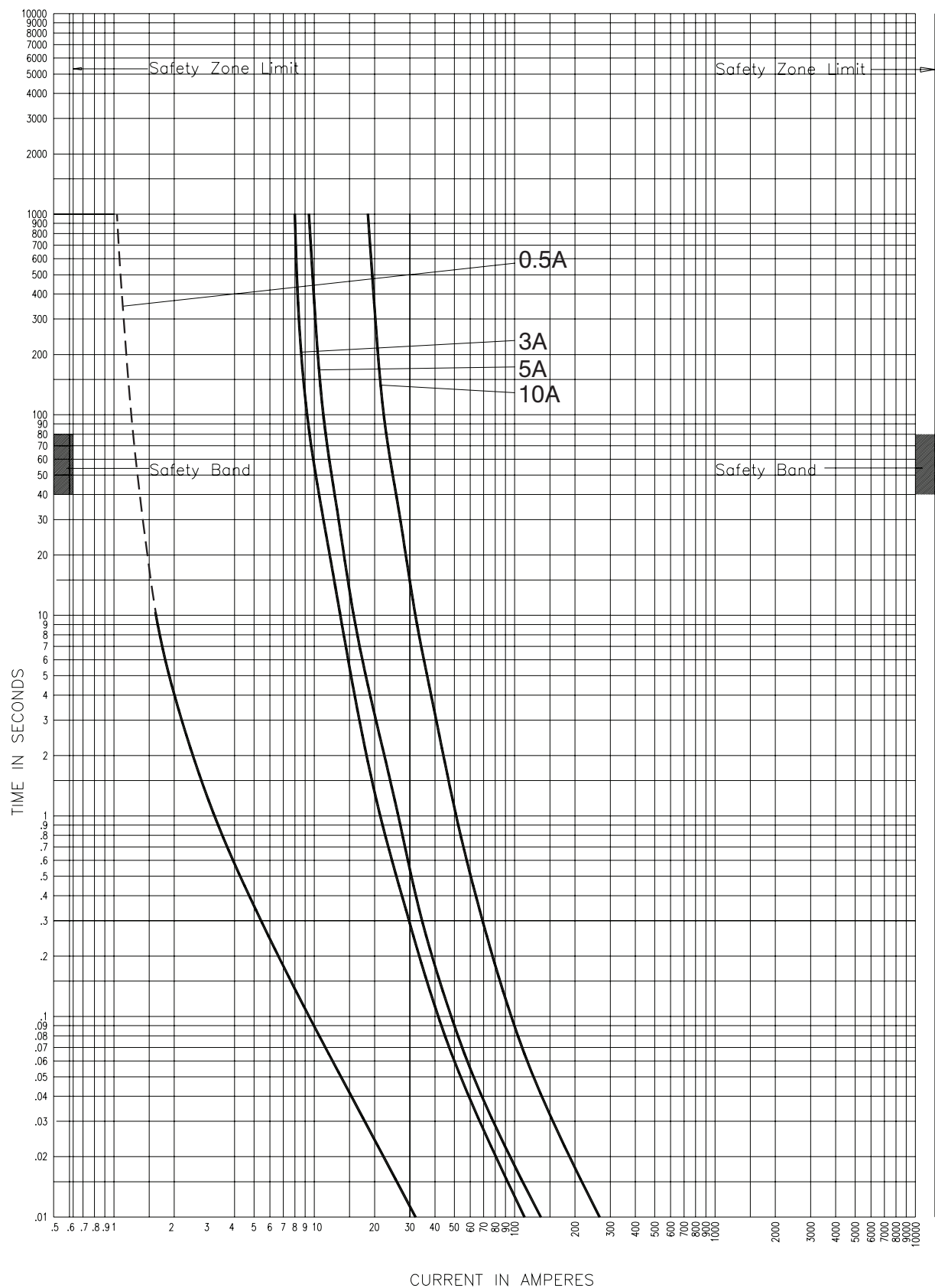


8NCLPT\_E

Curve 63933703  
July 2001  
Reference # 639337

Curve 63933704  
July 2001  
Reference # 639337

8.3kV time-current curves — minimum melting for 8CLPT\_



8CLPT-\_E

0.5 A fuse melt time in the dotted line region may not be assured due to manufacturing variations. The dotted lines show nominal operation. Some individual fuses may not open until current at 10-second mark is applied.

CURVE 56353206  
July 2002  
Reference # 563532

8.3kV time-current curves — total clearing for 8CLPT\_



8CLPT-\_E

CURVE 56353306  
July 2002  
Reference # 563533

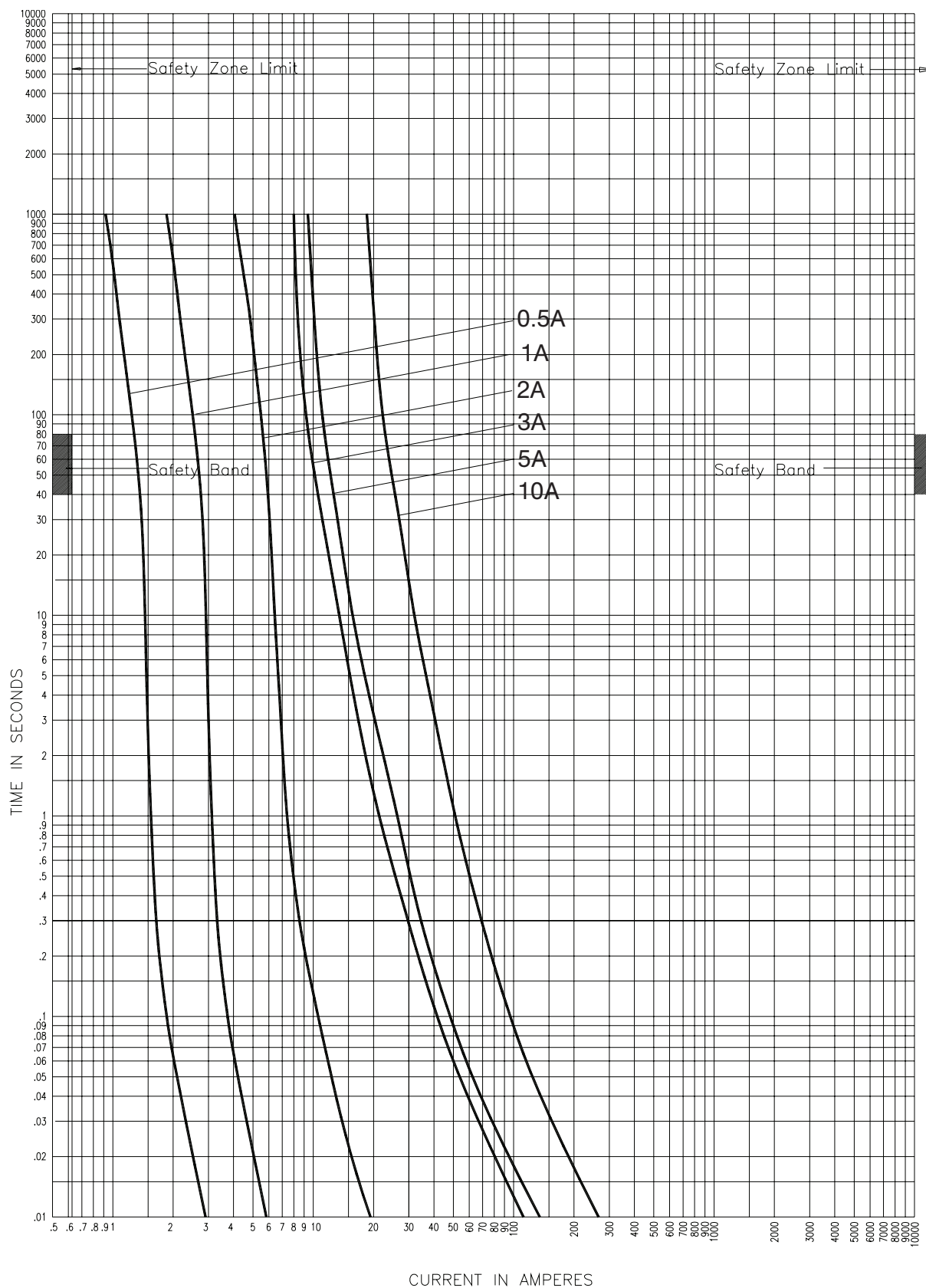
8.3kV peak let-through curves for 8CLPT\_



8CLPT-\_E

63934001  
July 2001  
Reference # 639340

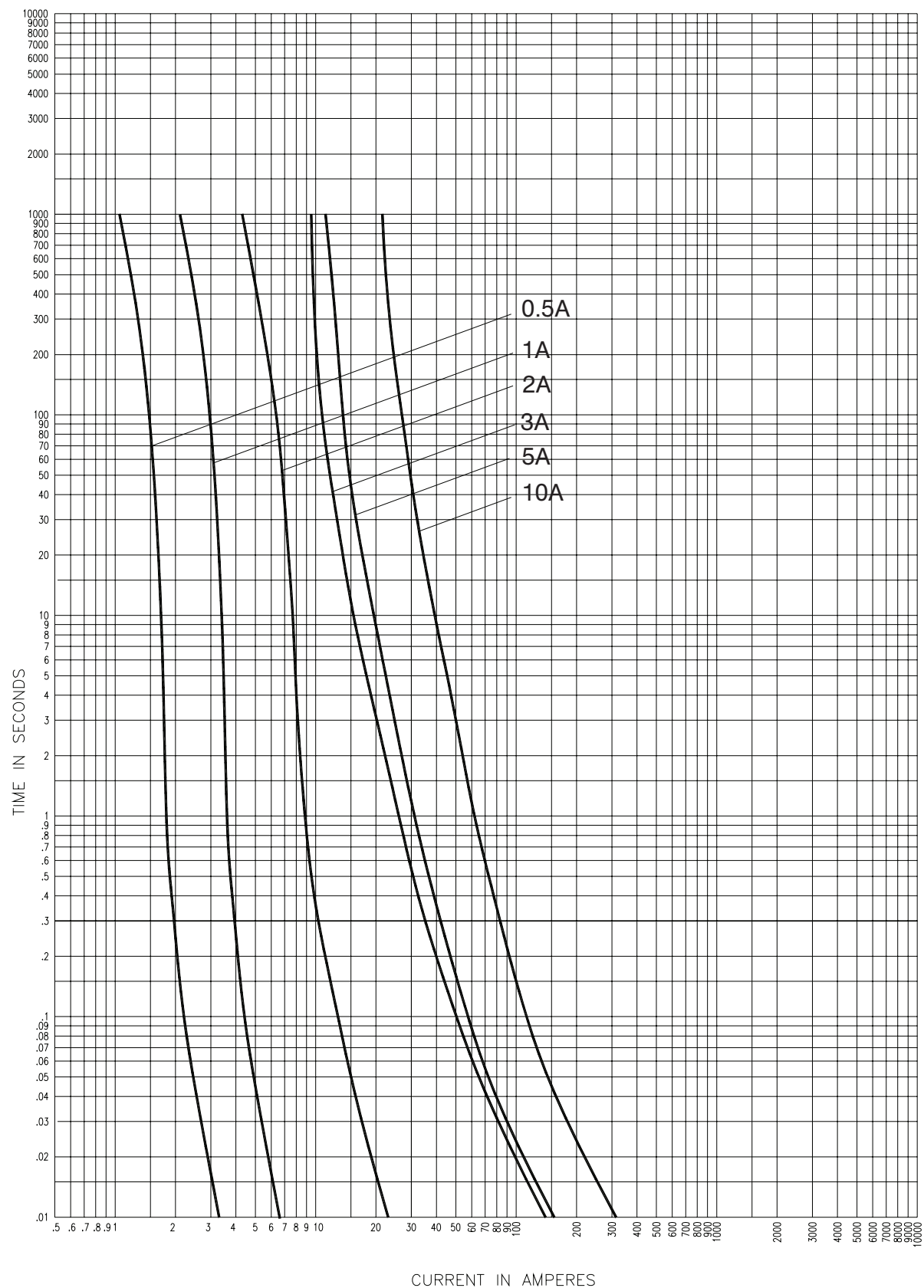
8.3kV time-current curves — minimum melting for 8NCLPT-E-A/B



8NCLPT-E-A/B

CURVE 70548303  
July 2002  
Reference # 705483

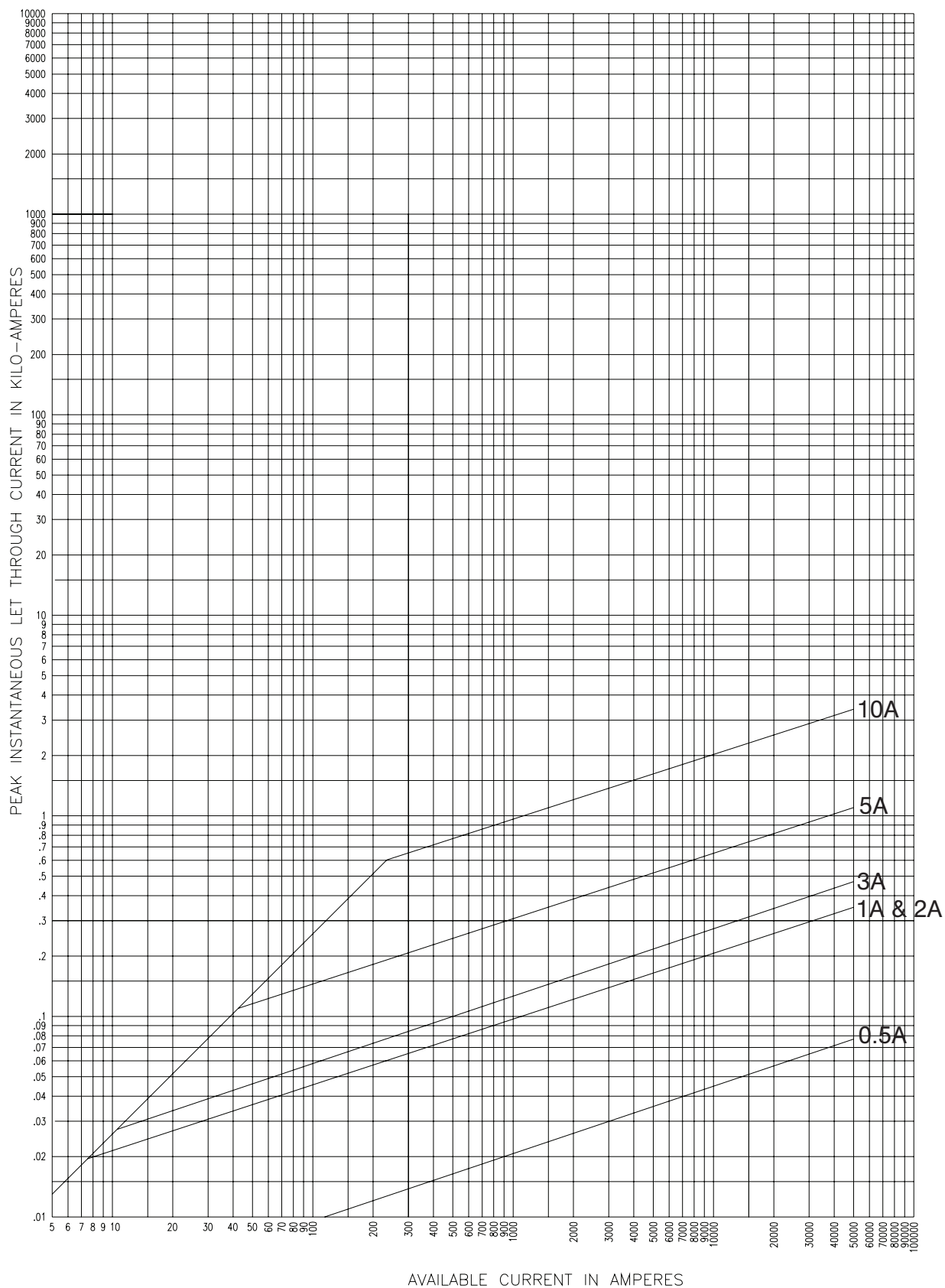
8.3kV time-current curves — total clearing for 8NCLPT\_E--A/B



8NCLPT\_E-A/B

CURVE 70548403  
July 2002  
Reference # 563533

8.3kV peak let-through curves for 8NCLPT\_E-A/B



8NCLPT\_E-A/B

63934002

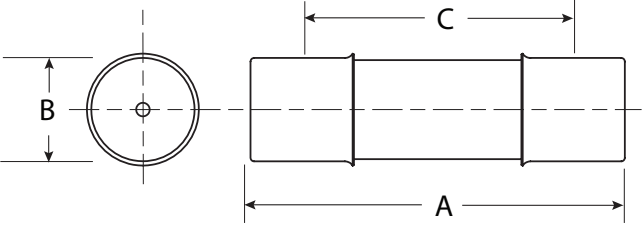
July 2001

Reference # 639340

12kV maximum system voltage

| Dimensions - in (mm) |           |            |                | Catalog No. (Interrupting rating - kA) |                  |                      |
|----------------------|-----------|------------|----------------|----------------------------------------|------------------|----------------------|
| Amp rating           | Length A  | Diameter B | Clip centers C | Indicating                             | Non-indicating   | Recommended fuseclip |
| 2                    | 8.7 (221) | 1.6 (41)   | 7.5 (190) —    |                                        | 12CAV2 (40)      | 1A0835               |
| 3.15                 | 7.7 (195) | 1 (25)     | 6.5 (165) —    |                                        | 12ABCNA3.15 (45) | A3354705             |

Dimensions (see catalog number tables for values)



Recommended fuseclips:

| Description                                               | Cat. No. |
|-----------------------------------------------------------|----------|
| Open fuseclip for 1.0 (25.4mm) dia. fuses                 | A3354705 |
| Open fuseclip for 1.56 (39.7mm) / 1.6 (40.6mm) dia. fuses | 1A0835   |

12kV time-current curves — minimum melting for 12ABC\_ and 12CAV\_



12ABC\_, 12CAV\_

12kV peak let-through curves for 12ABC\_



### 15.5kV maximum system voltage

| Amp rating | Dimensions - in (mm) |            |                | Catalog No. (Interrupting rating - kA) |                    | Recommended fuseclip |
|------------|----------------------|------------|----------------|----------------------------------------|--------------------|----------------------|
|            | Length A             | Diameter B | Clip centers C | Indicating                             | Non-indicating     |                      |
| 0.5        | 12.9 (328)           | 1.6 (41)   | 11.5 (292)     | 15.5CAVH0.5E (80)                      | 15NCLPT-5E-A (63)  | 1A0835               |
| 1          | 12.9 (328)           | 1.6 (41)   | 11.5 (292)     | 15.5CAVH1E (80)                        | 15NCLPT-1E-A (63)  |                      |
| 2          | 12.9 (328)           | 1.6 (41)   | 11.5 (292)     | 15.5CAVH2E (80)                        | 15NCLPT-2E-A (63)  |                      |
| 3          | 12.9 (328)           | 1.6 (41)   | 11.5 (292)     | —                                      | 15.5CAV3E (80)     |                      |
| 3          | 17.6 (447)           | 1.6 (41)   | 16.1 (409)     | —                                      | 15NCLPT-3E-B (63)  |                      |
| 3          | 17.6 (447)           | 1.6 (41)   | 16.1 (409)     | 15CLPT-3E-B (63)                       | —                  |                      |
| 5          | 12.9 (328)           | 1.6 (41)   | 11.5 (292)     | —                                      | 15.5CAV5E (80)     |                      |
| 5          | 17.6 (447)           | 1.6 (41)   | 16.1 (409)     | 15CLPT-5E-B (80)                       | 15NCLPT-5E-B (63)  |                      |
| 7          | 12.9 (328)           | 1.6 (41)   | 11.5 (292)     | —                                      | 15.5CAV7E (80)     |                      |
| 10         | 17.6 (447)           | 1.6 (41)   | 16.1 (409)     | 15CLPT-10E-B (50)                      | 15NCLPT-10E-B (63) |                      |

### CLPT Type mountings and hardware 15.5kV maximum (14.4kV nominal)

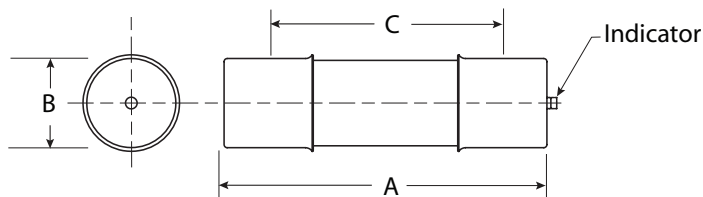
| Amp rating | Fuse mounting type* | BIL (kV) | Catalog number                                  |                           |                                       |                                |
|------------|---------------------|----------|-------------------------------------------------|---------------------------|---------------------------------------|--------------------------------|
|            |                     |          | Mounting (Including live parts, end fittings)** |                           | Live parts (including end fittings)** | End fittings (disconnect only) |
|            |                     |          | Porcelain insulator                             | Glass-polyester insulator |                                       |                                |
| 0.5–2      | Non-disconnect      | 95       | 15CLPT-PNM-A                                    | 15CLPT-GNM-A              | CLPT-NL                               | —                              |
|            | Disconnect†         | 95       | 15CLPT-PDM-A                                    | 15CLPT-GDM-A              | CLPT-DL                               | CLPT-DF                        |
| 3–10       | Non-disconnect      | 95       | 15CLPT-PNM-B                                    | 15CLPT-GNM-B              | CLPT-NL                               | CLPT-DF                        |
|            | Disconnect†         | 95       | 15CLPT-PDM-B                                    | 15CLPT-GDM-B              | CLPT-DL                               | —                              |

\* See page 70 for dimensions and diagrams of typical mounting.

\*\* 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.

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



### Recommended fuseclips:

| Description                                               | Cat. No. |
|-----------------------------------------------------------|----------|
| Open fuseclip for 1.56 (39.7mm) / 1.6 (40.6mm) dia. fuses | 1A0835   |

15.5kV time-current curves — minimum melting for 15CLPT\_



15CLPT\_E

CURVE 56353306  
July 2002  
Reference # 563533

15.5kV time-current curves — total clearing for 15CLPT\_



15CLPT\_E

CURVE 56353306

July 2002

Reference # 563533

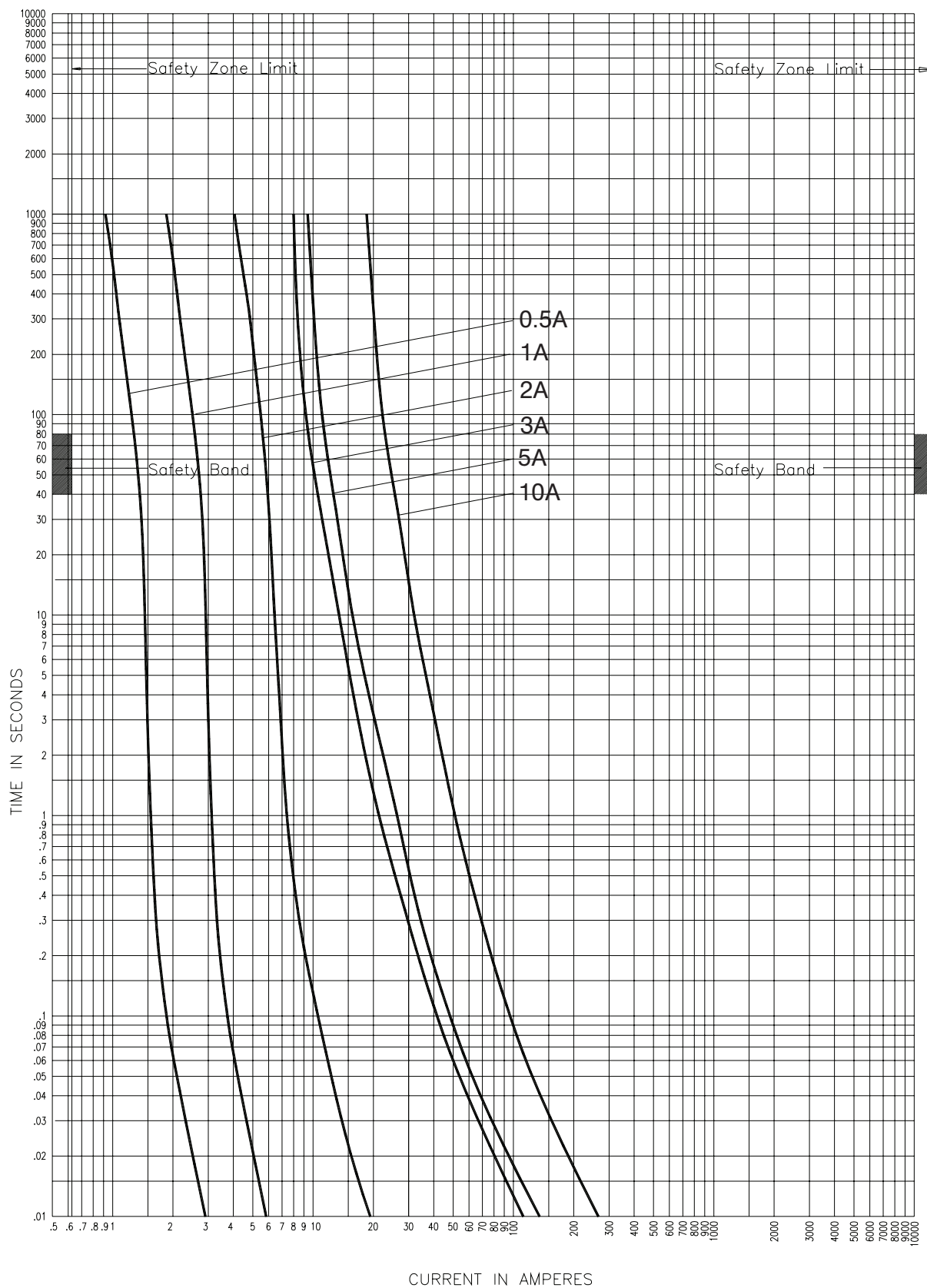
15.5kV peak let-through curves for 15CLPT\_



15CLPT-\_E

63934001  
July 2001  
Reference # 639340

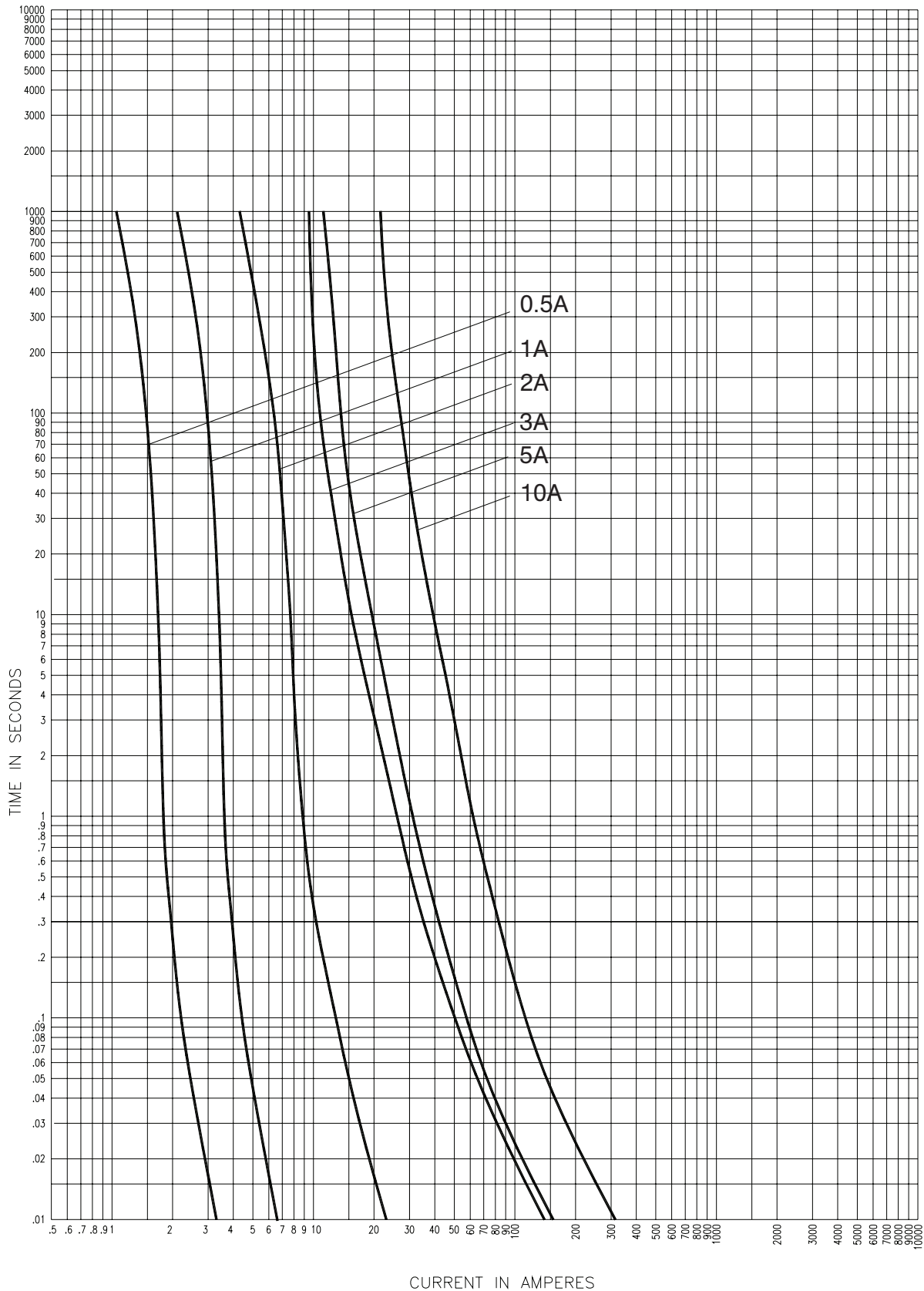
15.5kV time-current curves — minimum melting for 15NCLPT\_



15NCLPT-\_E

CURVE 70548303  
July 2002  
Reference # 705483

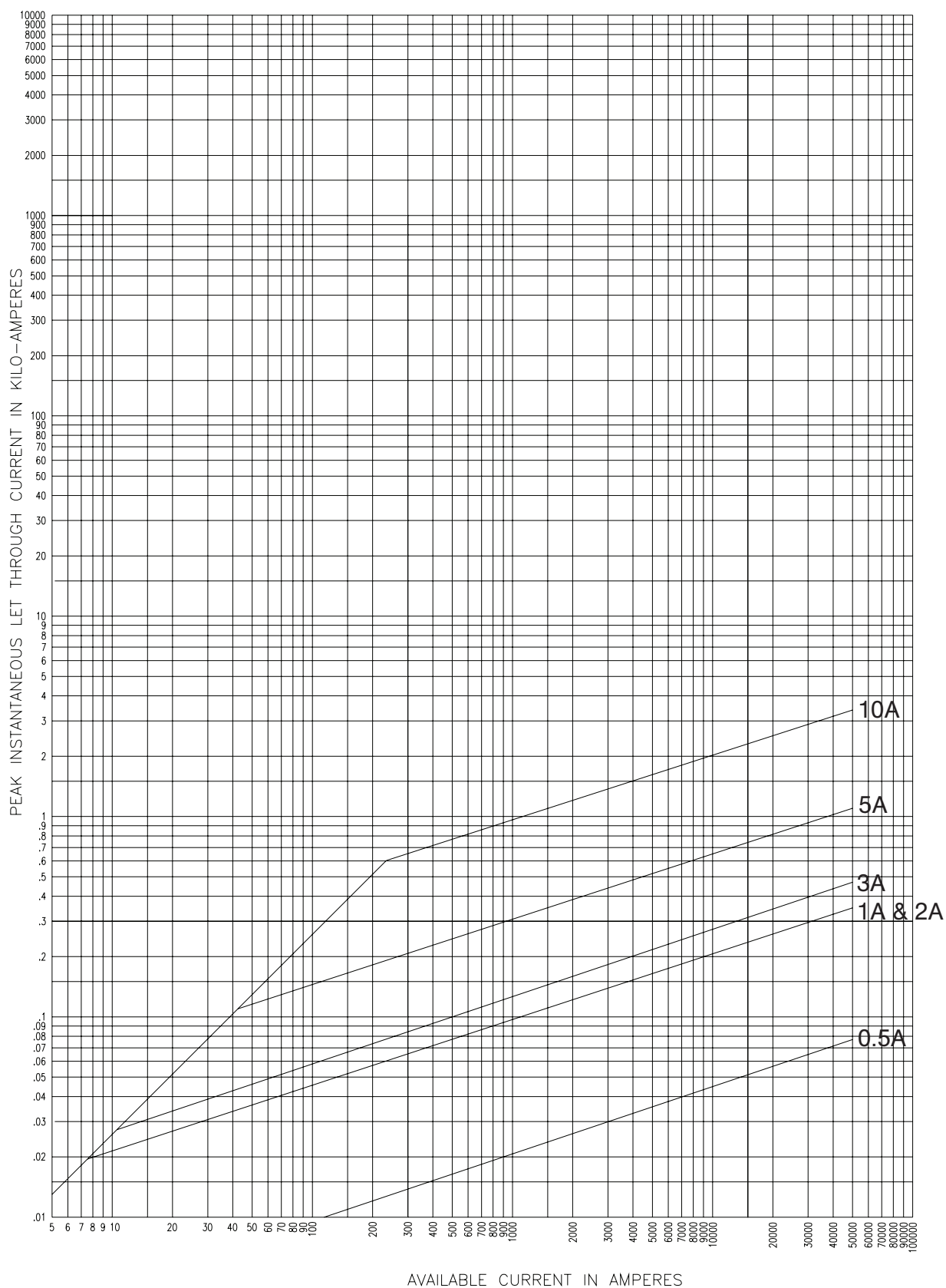
15.5kV Time-current curves — total clearing for 15NCLPT\_



15NCLPT-E

CURVE 70548403  
July 2002  
Reference # 563533

15.5kV Peak let-through curves for 15NCLPT\_



15NCLPT-\_E

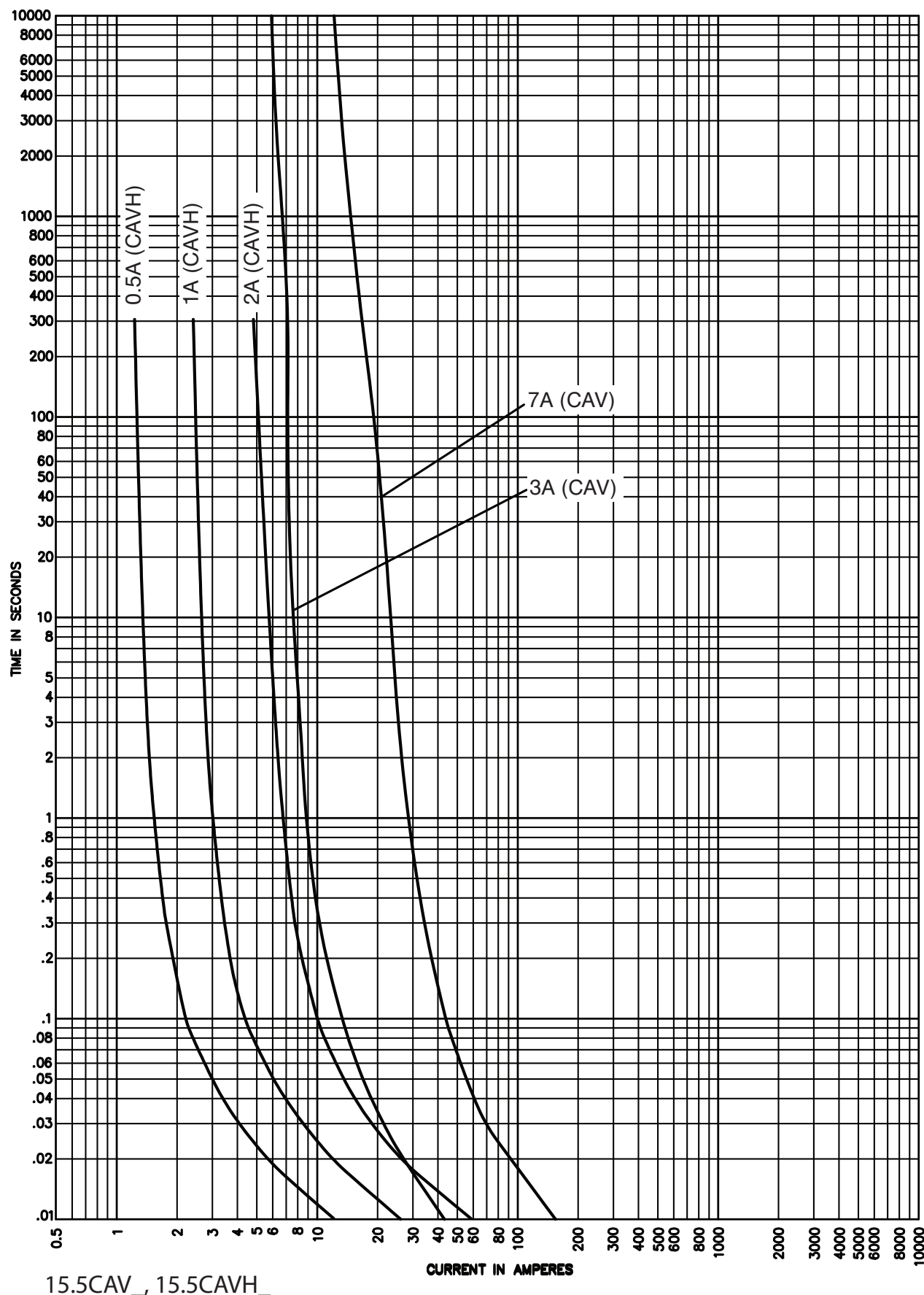
63934002  
July 2001  
Reference # 639340

15.5kV time-current curves — minimum melting for 15.5CAV\_ and 15.5CAVH\_



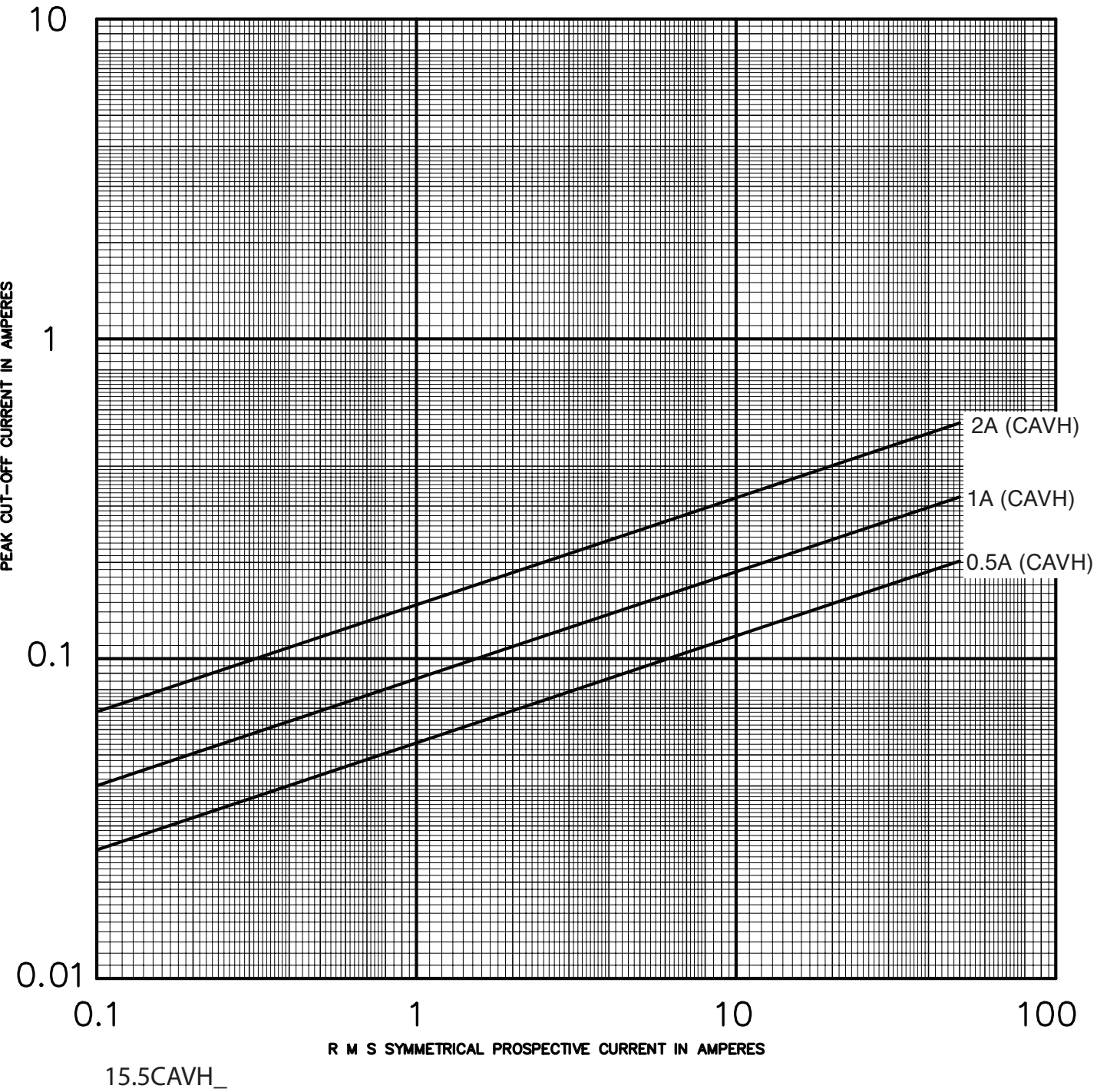
15.5CAV\_, 15.5CAVH\_

15.5kV time-current curves — total clearing for 15.5CAVH\_



15.5CAV\_, 15.5CAVH\_

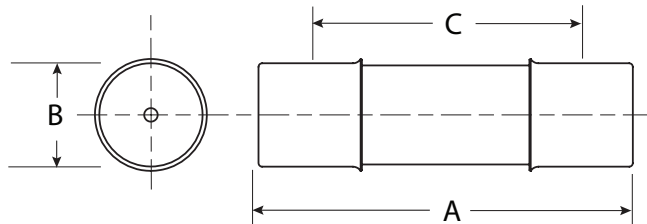
15.5kV peak let-through curves for 15.5CAVH\_



17.5kV maximum system voltage

| Amp rating | Dimensions - in (mm) |            |                | Catalog No. (Interrupting rating - kA) |                |                      |
|------------|----------------------|------------|----------------|----------------------------------------|----------------|----------------------|
|            | Length A             | Diameter B | Clip centers C | Indicating                             | Non-indicating | Recommended fuseclip |
| 2          | 8.7 (221)            | 1.6 (41)   | 7.5 (190)      | —                                      | 17.5CAV2 (40)  | 1A0835               |
| 4          |                      |            |                | —                                      | 17.5CAV4 (40)  |                      |
| 6          |                      |            |                | —                                      | 17.5CAV6 (40)  |                      |
| 10         |                      |            |                | —                                      | 17.5CAV10 (40) |                      |

Dimensions (see catalog number tables for values)



Recommended fuseclips:

| Description                                               | Cat. No. |
|-----------------------------------------------------------|----------|
| Open fuseclip for 1.56 (39.7mm) / 1.6 (40.6mm) dia. fuses | 1A0835   |

17.5kV time-current curves — minimum melting for 17.5CAV\_

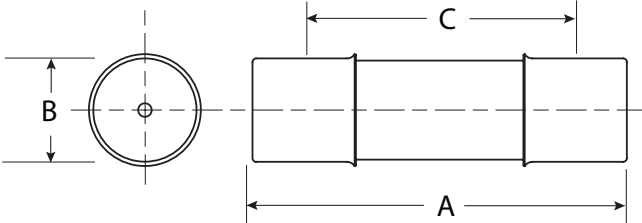


7.5CAV\_

24kV maximum system voltage

| Amp rating | Dimensions - in (mm) |            |                | Catalog No. (Interrupting rating - kA) |                |                      |
|------------|----------------------|------------|----------------|----------------------------------------|----------------|----------------------|
|            | Length A             | Diameter B | Clip centers C | Indicating                             | Non-indicating | Recommended fuseclip |
| 2          |                      |            |                | —                                      | 24CAV2 (40)    | 1A0835               |
| 3          | 13.49 (340)          | 1.6 (41)   | 12.2 (310)     | —                                      | 24CAV3 (40)    |                      |
| 4          |                      |            |                | —                                      | 24CAV4 (40)    |                      |

Dimensions (see catalog number tables for values)



Recommended fuseclips:

| Description                                               | Cat. No. |
|-----------------------------------------------------------|----------|
| Open fuseclip for 1.56 (39.7mm) / 1.6 (40.6mm) dia. fuses | 1A0835   |

24kV time-current curves — minimum melting for 24CAV\_



## 25.5kV maximum system voltage

| Amp rating | Dimensions - in (mm) |            |                | Catalog No. (interrupting rating - kA) |                | Recommended fuseclip |
|------------|----------------------|------------|----------------|----------------------------------------|----------------|----------------------|
|            | Length A             | Diameter B | Clip centers C | Indicating                             | Non-indicating |                      |
| 0.5        | 17.6 (447)           | 1.6 (41)   | 16.1 (410)     | 25CLPT-5E (44) <sup>†</sup>            | —              | 1A0835               |
| 1          | 17.6 (447)           | 1.6 (41)   | 16.1 (410)     | 25CLPT-1E (44) <sup>†</sup>            | —              |                      |

<sup>†</sup> Does not comply with ANSI C37.46 for "E" rating.

## CLPT Type Mountings and Hardware 25.5kV Maximum (23kV Nominal)

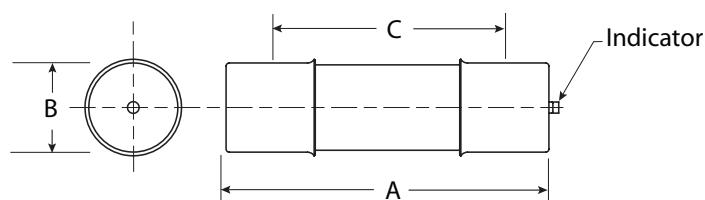
| Amp rating | Fuse mounting type* | BIL (kV) | Catalog number                                  |                           |                                       |                                |
|------------|---------------------|----------|-------------------------------------------------|---------------------------|---------------------------------------|--------------------------------|
|            |                     |          | Mounting (including live parts, end fittings)** |                           | Live parts (including end fittings)** | End fittings (disconnect only) |
|            |                     |          | Porcelain insulator                             | Glass-polyester insulator |                                       |                                |
| 0.5-1      | Non-disconnect      | 150      | 25CLPT-PNM-A                                    | —                         | 25CLPT-NL                             | —                              |
|            | Disconnect          | 150      | 25CLPT-PDM-A                                    | —                         | 25CLPT-DL                             | CLPT-DF                        |

\* See page 70 for dimensions and diagrams of typical mounting.

\*\* End fittings supplied only when required.

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

## Dimensions (see catalog number tables for values)



## Recommended fuseclips:

| Description                                               | Cat. No. |
|-----------------------------------------------------------|----------|
| Open fuseclip for 1.56 (39.7mm) / 1.6 (40.6mm) dia. fuses | 1A0835   |

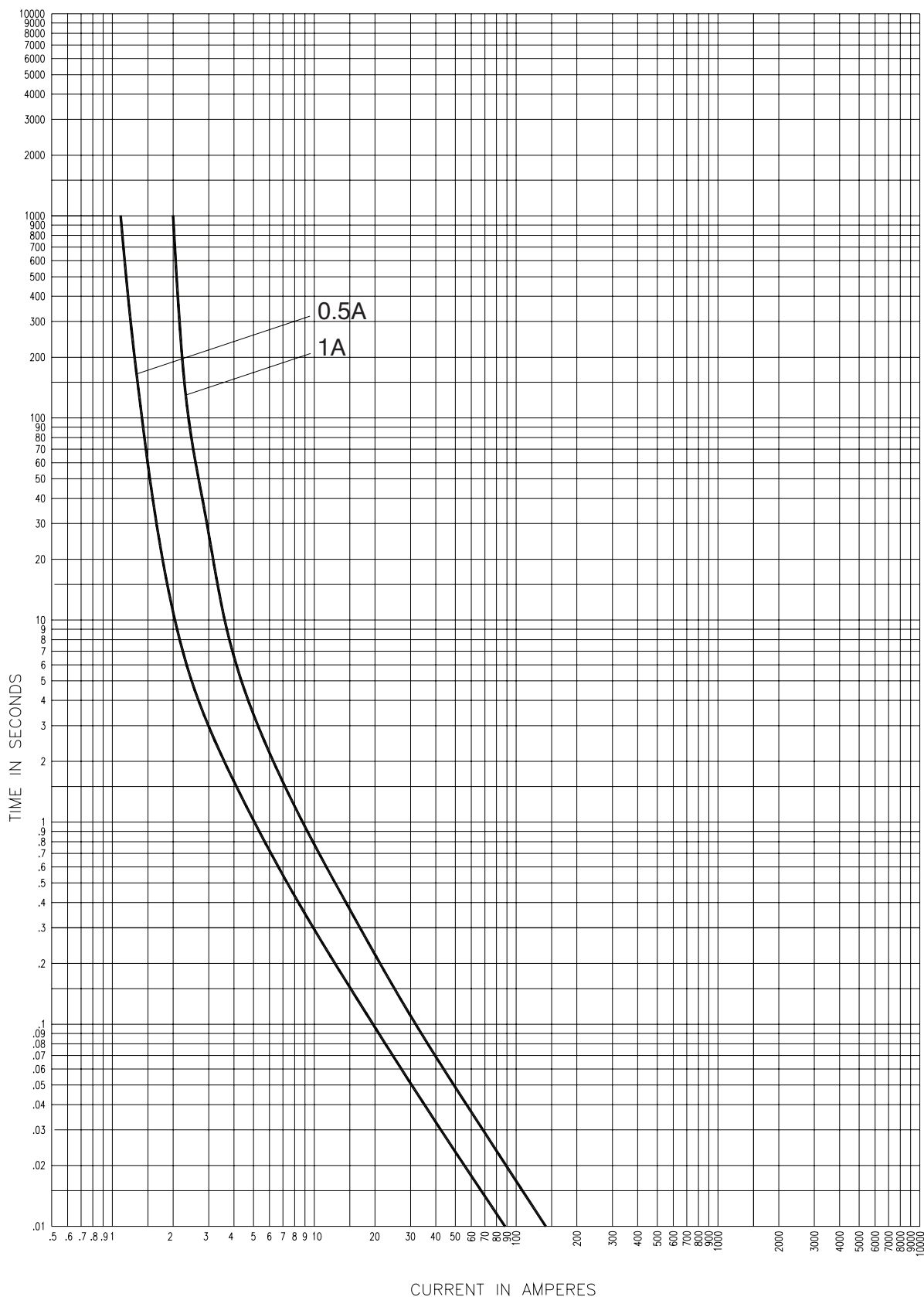
25.5kV time-current curves — minimum melting for 25CLPT\_



25CLPT-\_E

CURVE 56353208  
July 2002  
Reference # 563532

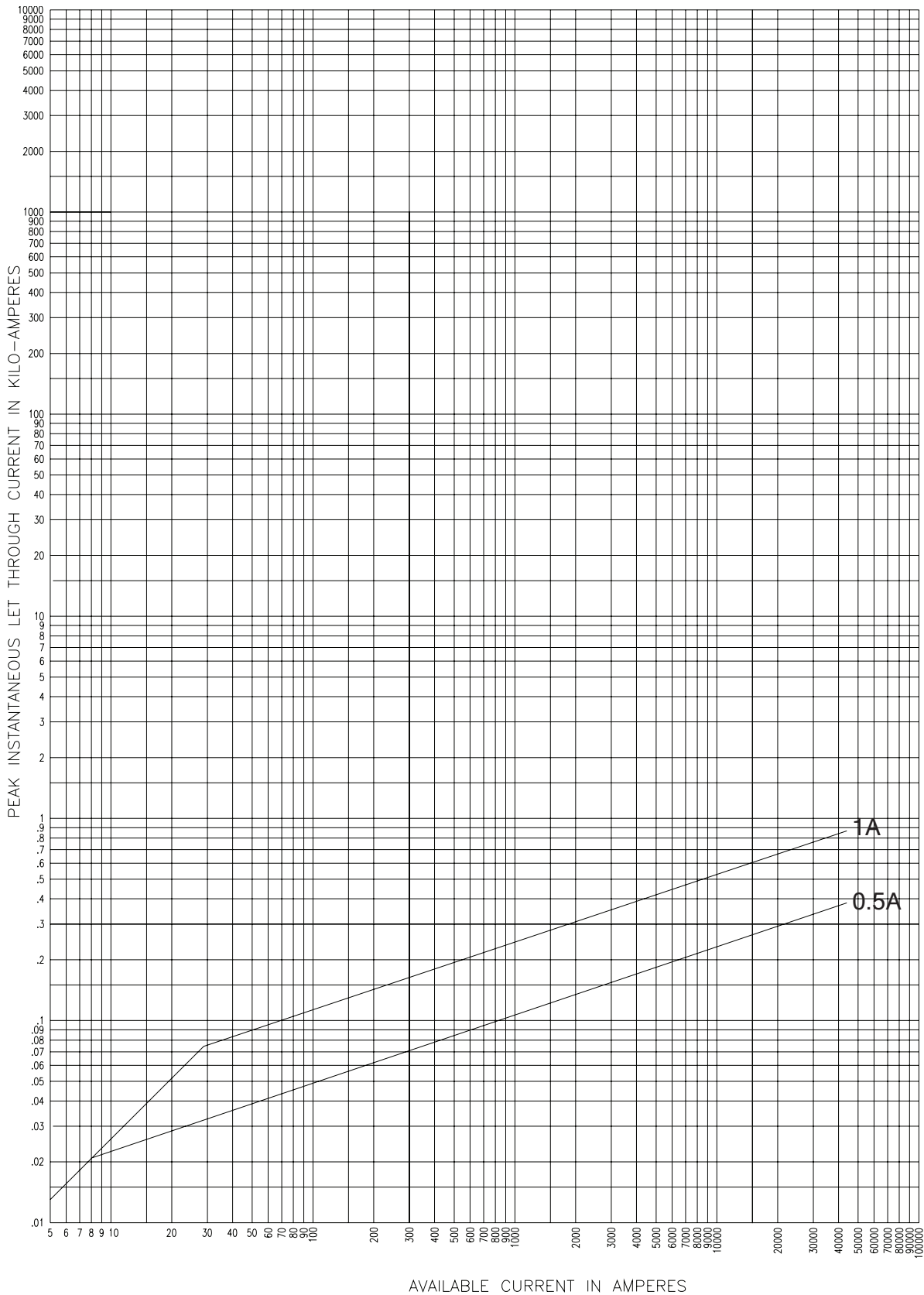
25.5kV time-current curves — total clearing for 25CLPT\_



25CLPT-\_E

CURVE 56353308  
July 2002  
Reference # 563533

25.5kV Peak let-through curves for 25CLPT\_



25CLPT\_E

CURVE 63933901  
July 2001  
Reference # 639339

**36kV maximum system voltage**

| Amp rating | Dimensions - in (mm) |            |                | Catalog No. (Interrupting rating - kA) |                | Recommended fuseclip |
|------------|----------------------|------------|----------------|----------------------------------------|----------------|----------------------|
|            | Length A             | Diameter B | Clip centers C | Indicating                             | Non-indicating |                      |
| 2          | 17.3 (439)           | 1.6 (41)   | 16.1 (410)     | —                                      | 36CAV2 (40)    | 1A0835               |
| 4          |                      |            |                | —                                      | 36CAV4 (40)    |                      |

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



**Recommended fuseclips:**

| Description                                               | Cat. No. |
|-----------------------------------------------------------|----------|
| Open fuseclip for 1.56 (39.7mm) / 1.6 (40.6mm) dia. fuses | 1A0835   |

36kVTime-current curves — minimum melting for 36CAV\_



### 38kV maximum system voltage

| Amp rating | Dimensions - in (mm) |            |                | Catalog No. (interrupting rating - kA) |                |  | Recommended fuseclip |
|------------|----------------------|------------|----------------|----------------------------------------|----------------|--|----------------------|
|            | Length A             | Diameter B | Clip centers C | Indicating                             | Non-indicating |  |                      |
| 0.5        | 17.3 (439)           | 1.6 (41)   | 16.1 (409)     | 38CAVH0.5E (38)                        | —              |  |                      |
| 0.5        | 18.6 (472)           | 1.6 (41)   | 17.1 (434)     | 38CLPT-0.5E (44) <sup>†</sup>          | —              |  |                      |
| 1          | 17.3 (439)           | 1.6 (41)   | 16.1 (409)     | 38CAVH1E (38)                          | —              |  | 1A0835               |
| 2          | 17.3 (439)           | 1.6 (41)   | 16.1 (409)     | 38CAVH2E (38)                          | —              |  |                      |
| 4          | 17.3 (439)           | 1.6 (41)   | 16.1 (409)     | —                                      | 38CAV4E (38)   |  |                      |

<sup>†</sup> Does not comply with ANSI C37.46 for “E” rating.

### CLPT Type Mountings and Hardware 38kV Maximum (34.5kV Nominal)

| Amp rating | Fuse mounting type      | Catalog number                                 |                           |                                      |                                |
|------------|-------------------------|------------------------------------------------|---------------------------|--------------------------------------|--------------------------------|
|            |                         | Mounting (including Live Parts, End Fittings)* |                           | Live Parts (including end fittings)* | End fittings (disconnect only) |
|            |                         | Porcelain insulator                            | Glass-polyester insulator |                                      |                                |
| 0.5        | Disconnect <sup>†</sup> | Not applicable                                 | Not applicable            | 25CLPT-NL                            | CLPT-DF                        |
|            | Non-disconnect          | Not applicable                                 | Not applicable            | 25CLPT-DL                            | —                              |

\* End fittings supplied only when required.

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

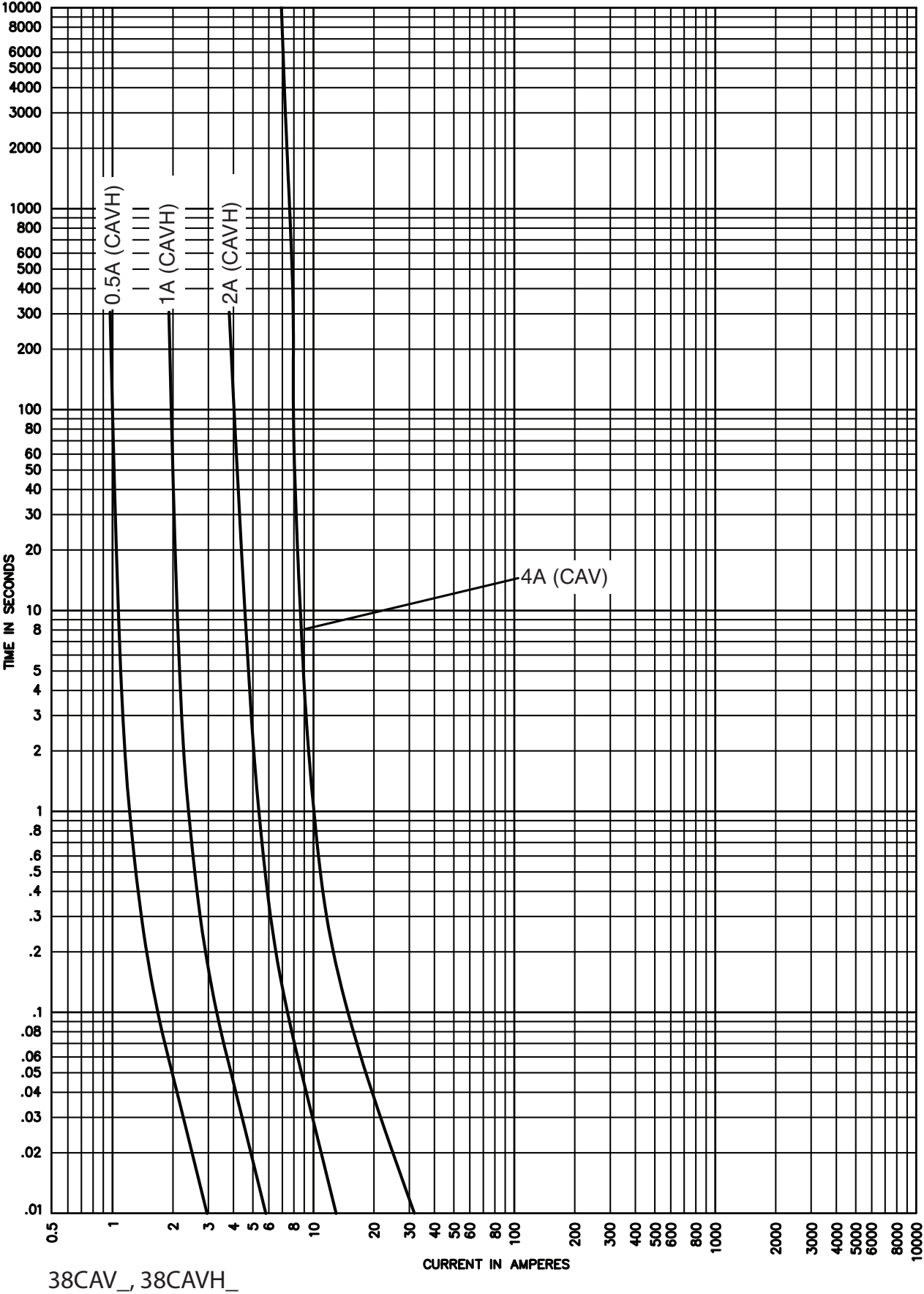
### Dimensions (see catalog number tables for values)



### Recommended fuseclip:

| Description                                               | Cat. No. |
|-----------------------------------------------------------|----------|
| Open fuseclip for 1.56 (39.7mm) / 1.6 (40.6mm) dia. fuses | 1A0835   |

38kV time-current curves — minimum melting for 38CAV\_ and 38CAVH

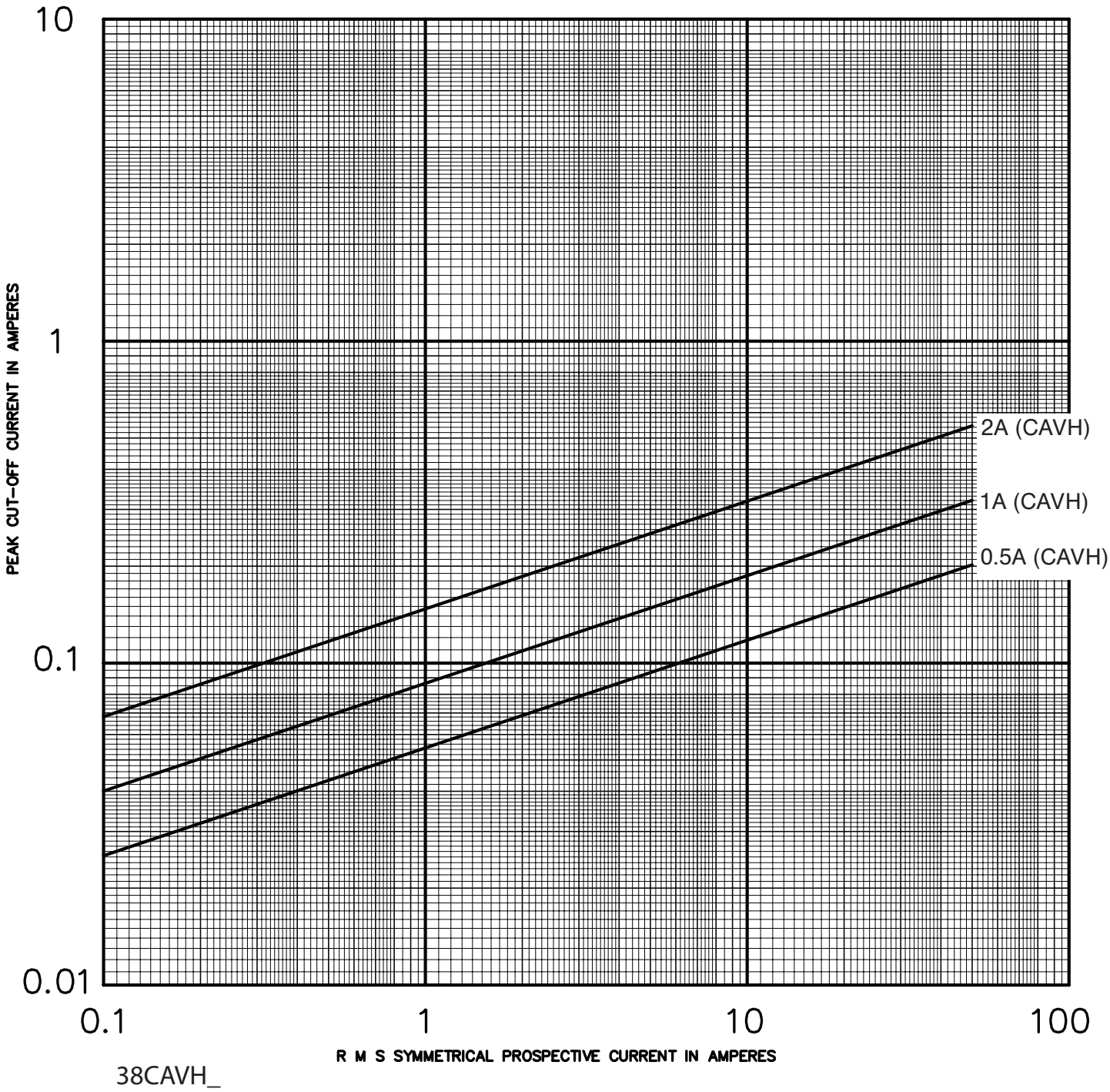


38kV time-current curves — total clearing for 38CAV\_ and 38CAVH

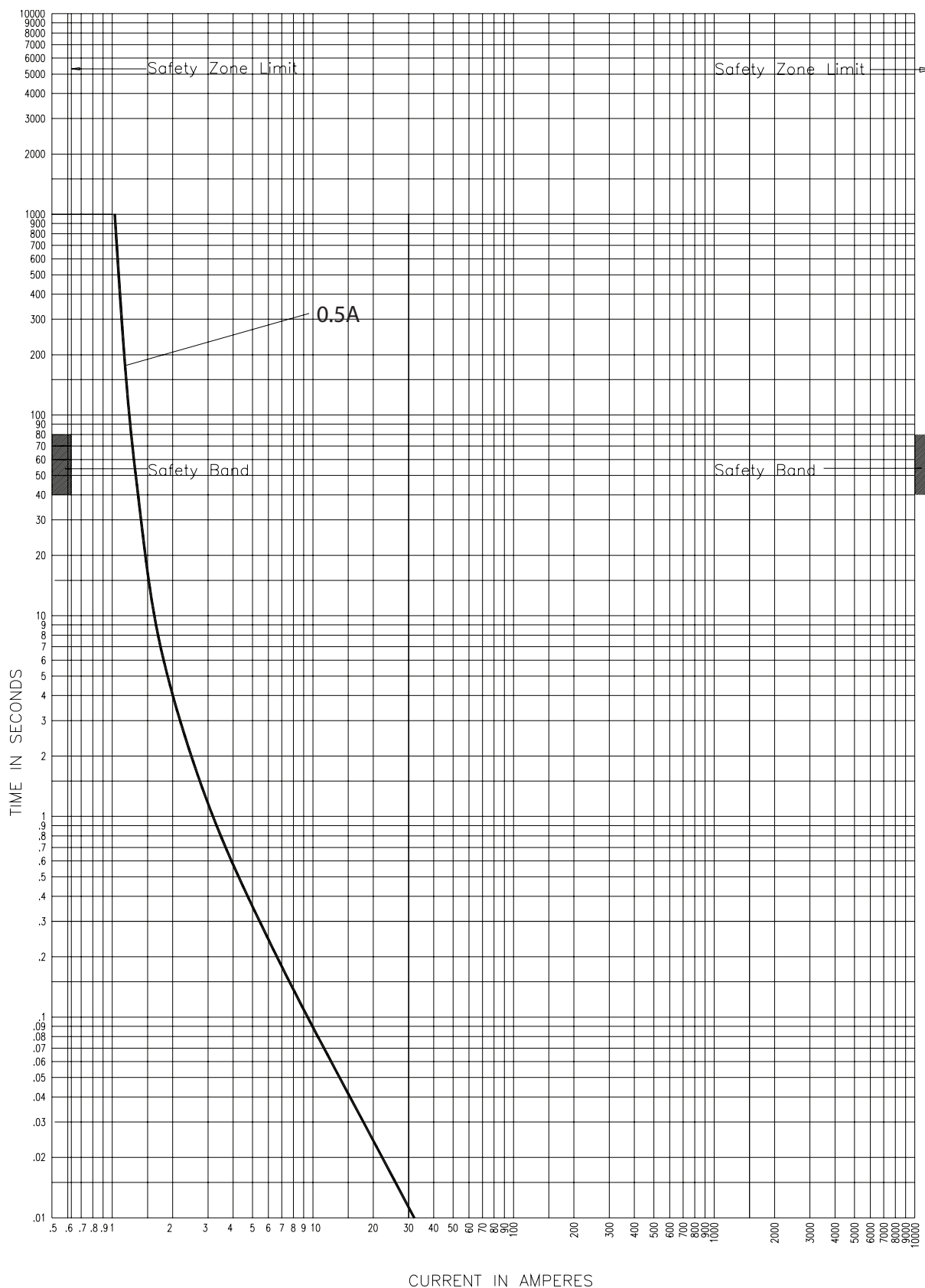


38CAV\_, 38CAVH\_

38kV peak let-through curves for 38CAVH



38kV time-current curves — minimum melting for 38CLPT\_



38CLPT\_

CURVE 56353208  
July 2002  
Reference # 563532

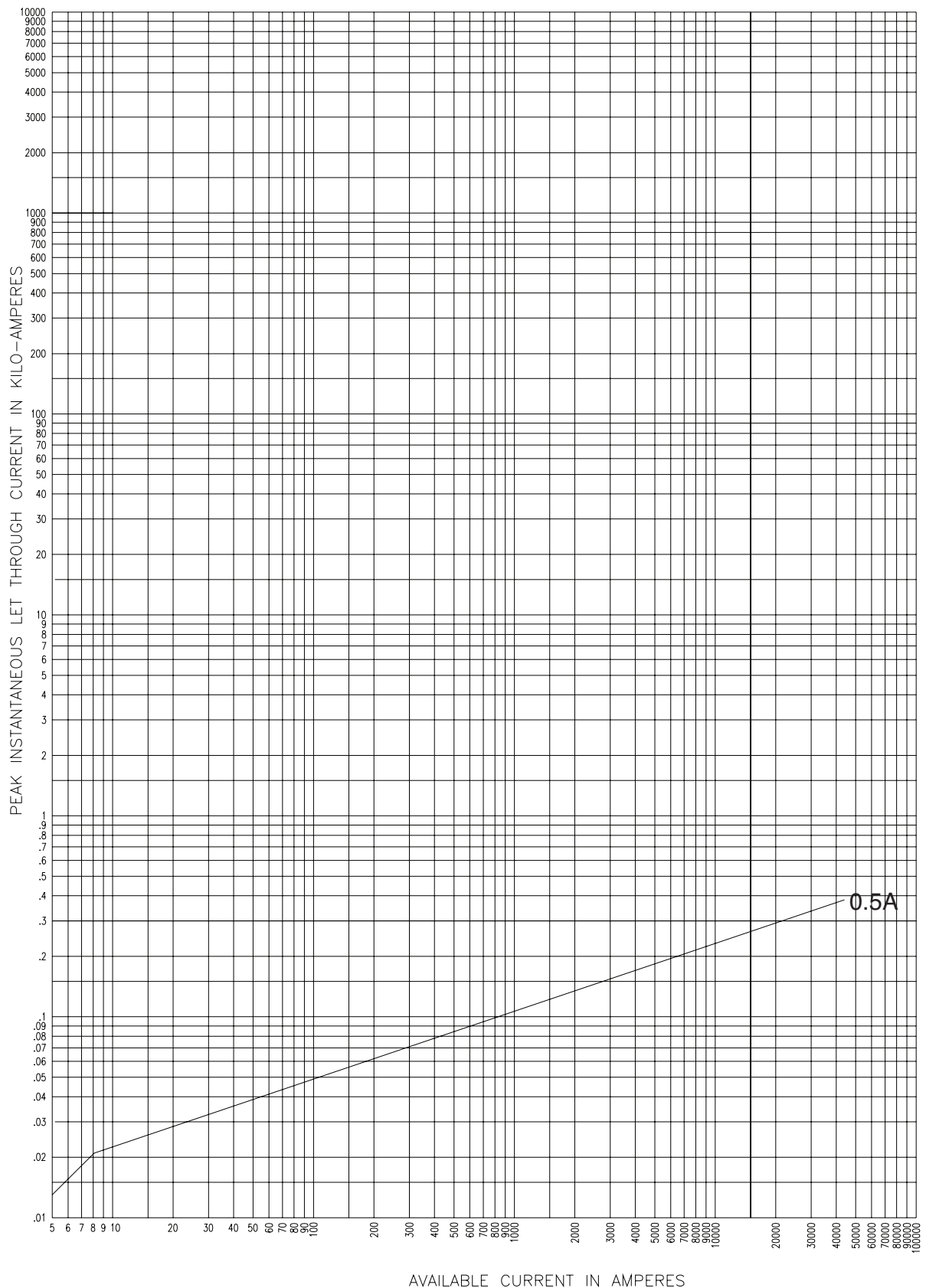
38kV time-current curves — total clearing for 38CLPT\_



38CLPT\_

CURVE 56353308  
July 2002  
Reference # 563533

38kV peak let-through curves for 38CLPT\_



38CLPT\_

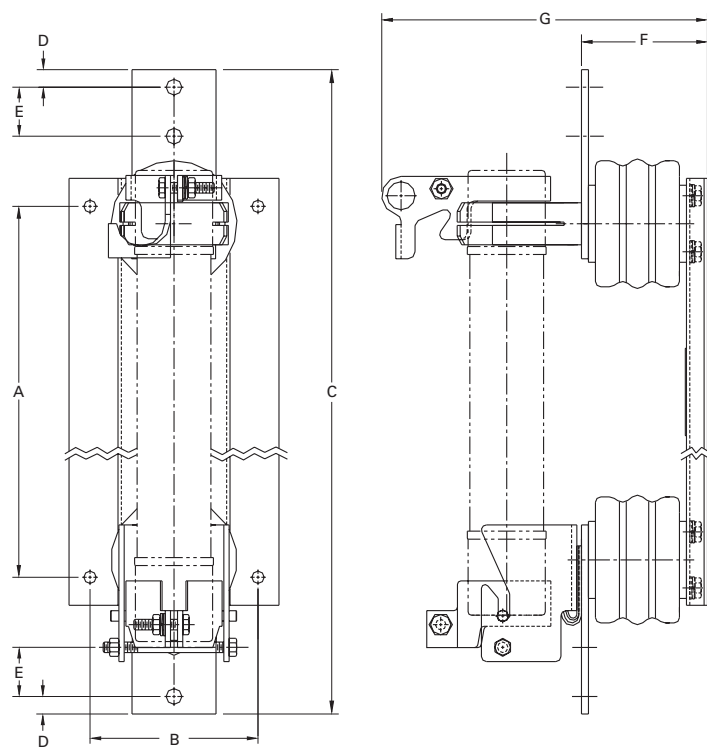
CURVE 63933901  
July 2001  
Reference # 639339

PT fuse mountings - in (mm)

| Catalog number               | Hole centers A | Hole centers B | Overall length C | Hole Inset D | Hole centers E | Contact height F | Overall height G | BIL<br>kV |
|------------------------------|----------------|----------------|------------------|--------------|----------------|------------------|------------------|-----------|
| <b>5.5kV Disconnect†</b>     |                |                |                  |              |                |                  |                  |           |
| 5CLPT-GDM-A                  | 9.37 (238)     | 6 (152.4)      | 18.63 (473.2)    | 0.75 (19)    | 1.75 (44.4)    | 4.5 (114.3)      | 9.56 (242.8)     | 60        |
| 5CLPT-PDM-A                  | 9.37 (238)     | 6 (152.4)      | 18.63 (473.2)    | 0.75 (19)    | 1.75 (44.4)    | 4.5 (114.3)      | 9.56 (242.8)     | 60        |
| <b>5.5kV Non-disconnect</b>  |                |                |                  |              |                |                  |                  |           |
| 5CLPT-GNM-A                  | 9.37 (238)     | 6 (152.4)      | 18.63 (473.2)    | 0.75 (19)    | 1.75 (44.4)    | 4.5 (114.3)      | 6.94 (176.2)     | 60        |
| 5CLPT-PNM-A                  | 9.37 (238)     | 6 (152.4)      | 18.63 (473.2)    | 0.75 (19)    | 1.75 (44.4)    | 4.5 (114.3)      | 6.94 (176.2)     | 60        |
| <b>8.3kV Disconnect†</b>     |                |                |                  |              |                |                  |                  |           |
| 8CLPT-GDM-A                  | 9.37 (238)     | 6 (152.4)      | 18.63 (473.2)    | 0.75 (19)    | 1.75 (44.4)    | 7 (177.8)        | 12.06 (306.3)    | 75        |
| 8CLPT-GDM-B                  | 9.37 (238)     | 6 (152.4)      | 18.63 (473.2)    | 0.75 (19)    | 1.75 (44.4)    | 7 (177.8)        | 12.06 (306.3)    | 75        |
| 8CLPT-PDM-A                  | 9.37 (238)     | 6 (152.4)      | 18.63 (473.2)    | 0.75 (19)    | 1.75 (44.4)    | 7 (177.8)        | 12.06 (306.3)    | 75        |
| 8CLPT-PDM-B                  | 12.74 (323.6)  | 6 (152.4)      | 22 (558.8)       | 0.75 (19)    | 1.75 (44.4)    | 7 (177.8)        | 12.06 (306.3)    | 75        |
| <b>8.3kV Non-disconnect</b>  |                |                |                  |              |                |                  |                  |           |
| 8CLPT-GNM-A                  | 9.37 (238)     | 6 (152.4)      | 18.63 (473.2)    | 0.75 (19)    | 1.75 (44.4)    | 7 (177.8)        | 9.44 (239.8)     | 75        |
| 8CLPT-PNM-A                  | 9.37 (238)     | 6 (152.4)      | 18.63 (473.2)    | 0.75 (19)    | 1.75 (44.4)    | 7 (177.8)        | 9.44 (239.8)     | 75        |
| 8CLPT-GNM-B                  | 12.75 (323.8)  | 6 (152.4)      | 22 (558.8)       | 0.75 (19)    | 1.75 (44.4)    | 7 (177.8)        | 9.44 (239.8)     | 75        |
| 8CLPT-PNM-B                  | 12.75 (323.8)  | 6 (152.4)      | 22 (558.8)       | 0.75 (19)    | 1.75 (44.4)    | 7 (177.8)        | 9.44 (239.8)     | 75        |
| <b>15.5kV Disconnect†</b>    |                |                |                  |              |                |                  |                  |           |
| 15CLPT-GDM-A                 | 12.74 (323.6)  | 6 (152.4)      | 22 (558.8)       | 0.75 (19)    | 1.75 (44.4)    | 7 (177.8)        | 12.06 (306.3)    | 95        |
| 15CLPT-PDM-A                 | 12.74 (323.6)  | 6 (152.4)      | 22 (558.8)       | 0.75 (19)    | 1.75 (44.4)    | 7 (177.8)        | 12.06 (306.3)    | 95        |
| 15CLPT-GDM-B                 | 17.46 (443.5)  | 6 (152.4)      | 26.63 (676.4)    | 0.75 (19)    | 1.75 (44.4)    | 7 (177.8)        | 12.06 (306.3)    | 95        |
| 15CLPT-PDM-B                 | 17.46 (443.5)  | 6 (152.4)      | 26.63 (676.4)    | 0.75 (19)    | 1.75 (44.4)    | 7 (177.8)        | 12.06 (306.3)    | 95        |
| <b>15.5kV Non-disconnect</b> |                |                |                  |              |                |                  |                  |           |
| 15CLPT-GNM-A                 | 12.74 (323.6)  | 6 (152.4)      | 22 (558.8)       | 0.75 (19)    | 1.75 (44.4)    | 7 (177.8)        | 9.44 (239.8)     | 95        |
| 15CLPT-PNM-A                 | 12.74 (323.6)  | 6 (152.4)      | 22 (558.8)       | 0.75 (19)    | 1.75 (44.4)    | 7 (177.8)        | 9.44 (239.8)     | 95        |
| 15CLPT-GNM-B                 | 17.46 (443.5)  | 6 (152.4)      | 26.63 (676.4)    | 0.75 (19)    | 1.75 (44.4)    | 7 (177.8)        | 9.44 (239.8)     | 95        |
| 15CLPT-PNM-B                 | 17.46 (443.5)  | 6 (152.4)      | 26.63 (676.4)    | 0.75 (19)    | 1.75 (44.4)    | 7 (177.8)        | 9.44 (239.8)     | 95        |
| <b>25.5kV Disconnect†</b>    |                |                |                  |              |                |                  |                  |           |
| 25CLPT-PDM-A                 | 19.12 (485.6)  | 7 (177.8)      | 26.63 (676.4)    | 0.75 (19)    | 1.75 (44.4)    | 12 (304.8)       | 17.06 (433.3)    | 150       |
| <b>25.5kV Non-disconnect</b> |                |                |                  |              |                |                  |                  |           |
| 25CLPT-PNM-A                 | 26.63 (676.4)  | 7 (177.8)      | 26.63 (676.4)    | 0.75 (19)    | 1.75 (44.4)    | 12 (304.8)       | 14.75 (374.6)    | 150       |

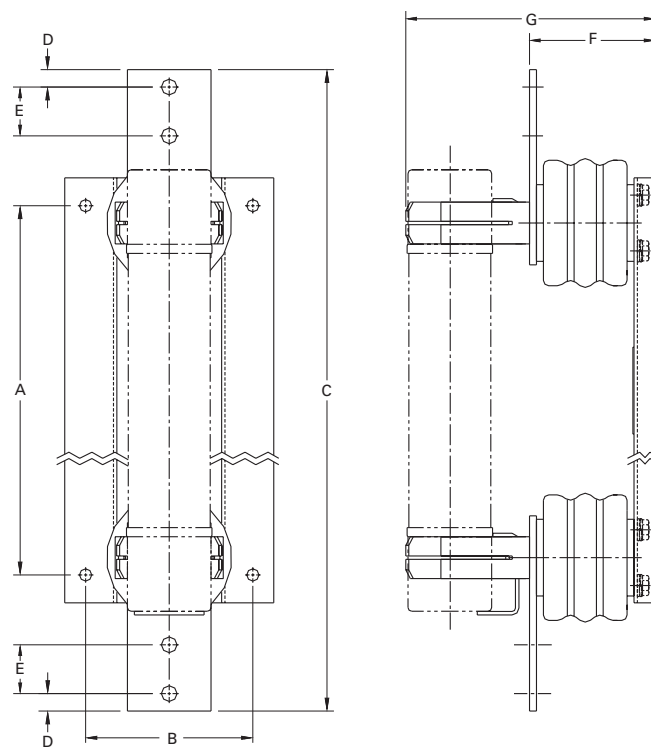
† Disconnect mountings provide a means for fuse extraction only. Do not use a disconnect mounting for load switching or fuse removal while energized.

### Disconnect mountings†



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

### Non-disconnect mountings



The only controlled copy of this data sheet is the electronic read-only version located on the Eaton network drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

**Eaton**  
1000 Eaton Boulevard  
Cleveland, OH 44122  
United States  
Eaton.com

Bussmann Division  
114 Old State Road  
Ellisville, MO 63021  
United States  
Eaton.com/bussmannseries

© 2016 Eaton  
All Rights Reserved  
Printed in USA  
Publication No. 6002 – BU-SB15149  
March 2016

Eaton and Bussmann are valuable trademarks of Eaton in the US and other countries. You are not permitted to use the Eaton trademarks without prior written consent of Eaton.

For Eaton's Bussmann series  
product information,  
call **1-855-287-7626** or visit:  
**Eaton.com/bussmannseries**

## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9