

# POWR-GARD® Fuse

## CLASS L – LDC SERIES FUSES

**POWR-PRO®** 600 V ac/dc • Fast Acting • 150–2000 A



### Description

High dc voltage and interrupting ratings make the POWR-PRO® LDC ideal for dc applications. The dc interrupting performance exceeds UL listing requirements.

### Applications

- Solar inverter and array protection
- UPS protection especially for large battery circuits
- Dc distribution and variable speed drives
- Mass transit systems

### Features/Benefits

- POWR-PRO performance
- Extremely current-limiting
- 600 V ac/dc rated
- 200 kA ac interrupting rating
- 50 kA dc interrupting rating

### Web Resources

TC Curves, downloadable CAD drawings and other technical information: [Littelfuse.com/ldc](http://Littelfuse.com/ldc)

### Dimensions

| AMPERES   | FIG. NO. | DIMENSIONS INCHES (mm)                  |                                          |                                          |                                          |                                          |                                           |   |   |                                         |                                         |                                          |                                                                                  |                                                                                  |
|-----------|----------|-----------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|-------------------------------------------|---|---|-----------------------------------------|-----------------------------------------|------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|           |          | A                                       | B                                        | C                                        | D                                        | E                                        | F                                         | G | H | J                                       | K                                       | L                                        | M                                                                                | N                                                                                |
| 150–800   | 1        | 3 <sup>3</sup> / <sub>4</sub><br>(95.3) | 5 <sup>3</sup> / <sub>4</sub><br>(146.1) | 6 <sup>3</sup> / <sub>4</sub><br>(171.5) | —                                        | —                                        | 8 <sup>5</sup> / <sub>8</sub><br>(219.1)  | — | — | 2<br>(50.8)                             | 2 <sup>1</sup> / <sub>2</sub><br>(63.5) | 3 <sup>3</sup> / <sub>8</sub><br>(9.5)   | 5 <sup>5</sup> / <sub>8</sub> x 1 <sup>1</sup> / <sub>8</sub><br>(15.9) x (28.6) | —                                                                                |
| 900–1200  | 2        | 3 <sup>3</sup> / <sub>4</sub><br>(95.3) | 5 <sup>3</sup> / <sub>4</sub><br>(146.1) | 6 <sup>3</sup> / <sub>4</sub><br>(171.5) | 9 <sup>1</sup> / <sub>4</sub><br>(235.0) | 9 <sup>1</sup> / <sub>2</sub><br>(241.3) | 10 <sup>3</sup> / <sub>4</sub><br>(273.1) | — | — | 2<br>(50.8)                             | 2 <sup>1</sup> / <sub>2</sub><br>(63.5) | 3 <sup>3</sup> / <sub>8</sub><br>(9.5)   | 5 <sup>5</sup> / <sub>8</sub> x 3 <sup>3</sup> / <sub>4</sub><br>(15.9) x (19.1) | 5 <sup>5</sup> / <sub>8</sub> x 1 <sup>1</sup> / <sub>8</sub><br>(15.9) x (28.6) |
| 1300–1600 | 2        | 3 <sup>3</sup> / <sub>4</sub><br>(95.3) | 5 <sup>3</sup> / <sub>4</sub><br>(146.1) | 6 <sup>3</sup> / <sub>4</sub><br>(171.5) | 9 <sup>1</sup> / <sub>4</sub><br>(235.0) | 9 <sup>1</sup> / <sub>2</sub><br>(241.3) | 10 <sup>3</sup> / <sub>4</sub><br>(273.1) | — | — | 2 <sup>3</sup> / <sub>8</sub><br>(60.3) | 3<br>(76.2)                             | 7 <sup>7</sup> / <sub>16</sub><br>(11.1) | 5 <sup>5</sup> / <sub>8</sub> x 3 <sup>3</sup> / <sub>4</sub><br>(15.9) x (19.1) | 5 <sup>5</sup> / <sub>8</sub> x 1 <sup>1</sup> / <sub>8</sub><br>(15.9) x (28.6) |
| 1800–2000 | 2        | 3 <sup>3</sup> / <sub>4</sub><br>(95.3) | 5 <sup>3</sup> / <sub>4</sub><br>(146.1) | 6 <sup>3</sup> / <sub>4</sub><br>(171.5) | 9 <sup>1</sup> / <sub>4</sub><br>(235.0) | 9 <sup>1</sup> / <sub>2</sub><br>(241.3) | 10 <sup>3</sup> / <sub>4</sub><br>(273.1) | — | — | 2 <sup>3</sup> / <sub>4</sub><br>(69.9) | 3 <sup>1</sup> / <sub>2</sub><br>(88.9) | 1 <sup>1</sup> / <sub>2</sub><br>(12.7)  | 5 <sup>5</sup> / <sub>8</sub> x 3 <sup>3</sup> / <sub>4</sub><br>(15.9) x (19.1) | 5 <sup>5</sup> / <sub>8</sub> x 1 <sup>1</sup> / <sub>8</sub><br>(15.9) x (28.6) |

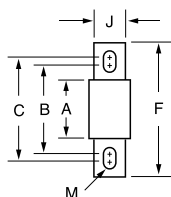


FIG. 1

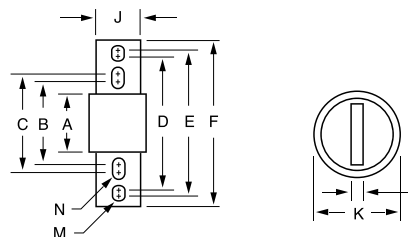
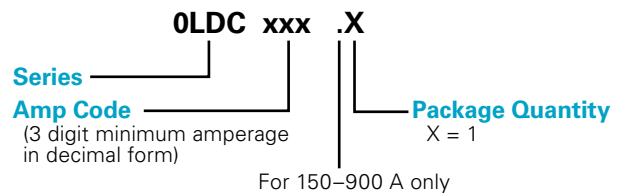


FIG. 2

### Specifications

|                             |                                                                                                                                                          |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Voltage Ratings</b>      | 600 V ac/dc or less                                                                                                                                      |
| <b>Ampere Range</b>         | 150–2000 A                                                                                                                                               |
| <b>Interrupting Ratings</b> | Ac: 200 kA rms symmetrical<br>Dc: 50 kA                                                                                                                  |
| <b>Time Constant</b>        | 16 ms                                                                                                                                                    |
| <b>Approvals</b>            | UL Standard 248-10, Class L<br>UL Listed 601–2000 A (File: E81895)<br>UL Recognized 150–600 A (File: E71611)<br>CSA Certified 800–2000 A (File: LR29862) |
| <b>Material</b>             | Melamine body, copper caps (silver plated)                                                                                                               |
| <b>Country of Origin</b>    | Mexico                                                                                                                                                   |

### Part Numbering System



### Ordering Information

| AMPERE RATINGS |     |      |      |      |
|----------------|-----|------|------|------|
| 150            | 450 | 750  | 1201 | 1601 |
| 200            | 500 | 800  | 1300 | 1800 |
| 250            | 600 | 900  | 1350 | 1900 |
| 300            | 601 | 1000 | 1400 | 2000 |
| 350            | 650 | 1100 | 1500 |      |
| 400            | 700 | 1200 | 1600 |      |

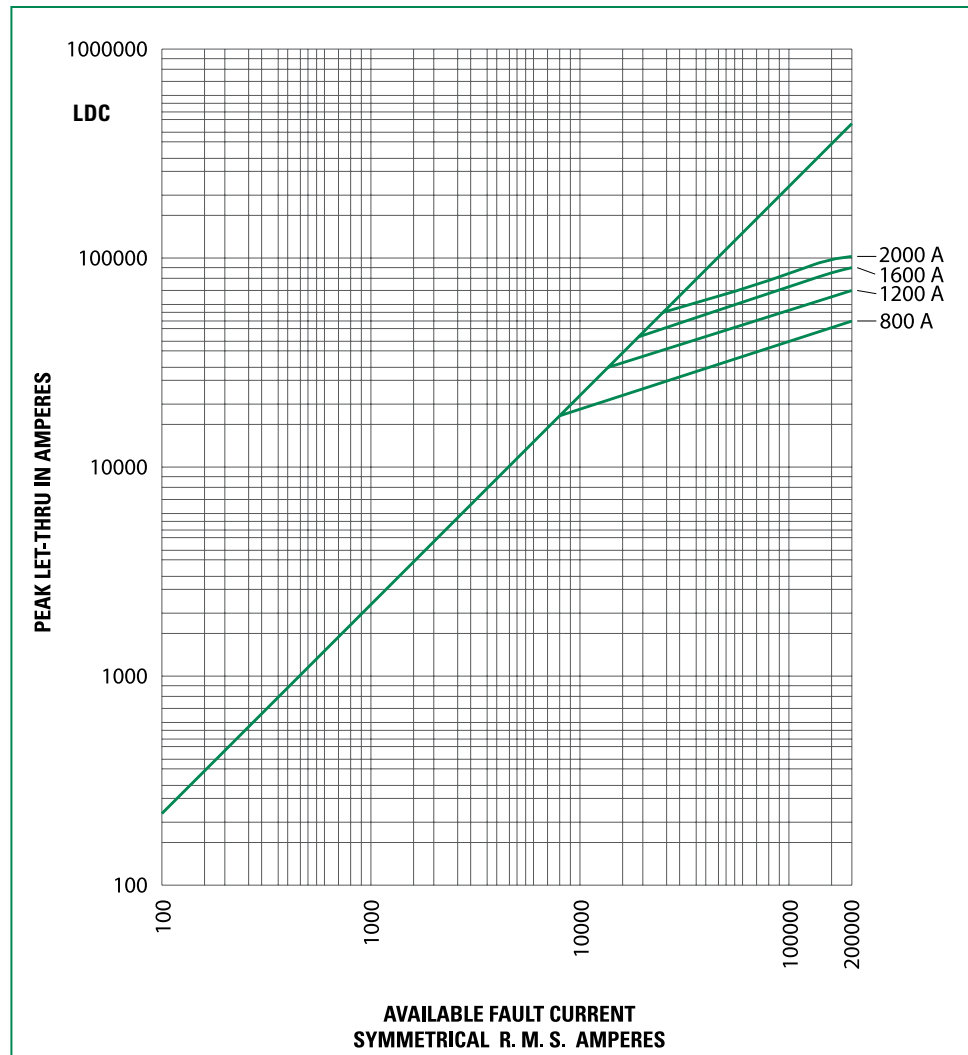
| SERIES | AMPERAGE | CATALOG NUMBER | ORDERING NUMBER |
|--------|----------|----------------|-----------------|
| LDC    | 700      | LDC700         | 0LDC700.X       |

## Current-Limiting Effects of LDC (600 V) Fuses

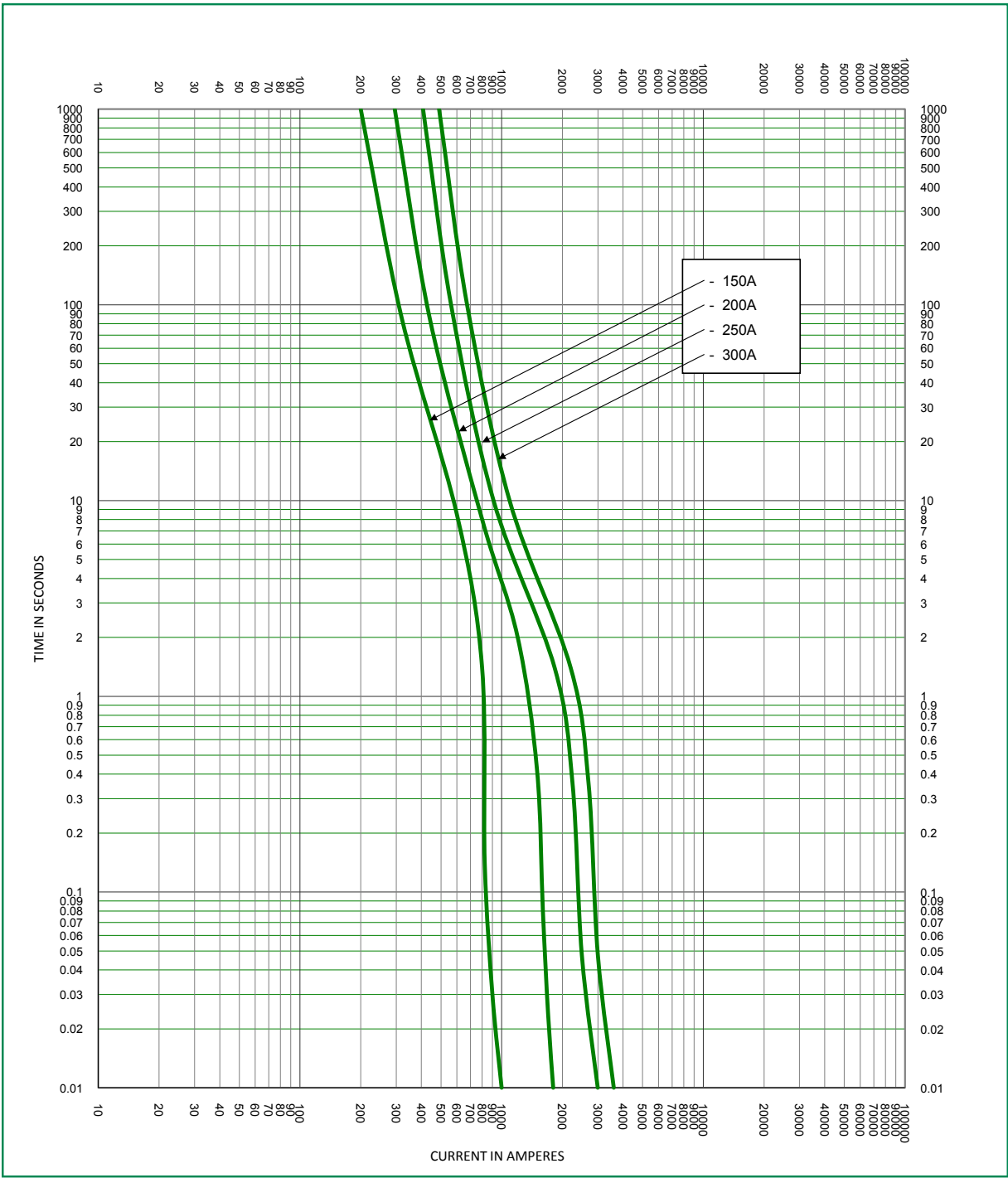
| SHORT CIRCUIT<br>CURRENT* | APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS |        |        |        |
|---------------------------|-----------------------------------------------------------|--------|--------|--------|
|                           | 800 A                                                     | 1200 A | 1600 A | 2000 A |
| 5,000                     | 5,000                                                     | 5,000  | 5,000  | 5,000  |
| 10,000                    | 8,500                                                     | 10,000 | 10,000 | 10,000 |
| 15,000                    | 9,750                                                     | 14,000 | 15,000 | 15,000 |
| 20,000                    | 10,500                                                    | 15,000 | 19,000 | 20,000 |
| 25,000                    | 11,500                                                    | 16,000 | 21,000 | 25,000 |
| 30,000                    | 12,000                                                    | 17,000 | 22,000 | 26,000 |
| 35,000                    | 12,500                                                    | 18,000 | 23,000 | 28,000 |
| 40,000                    | 13,500                                                    | 19,000 | 24,000 | 30,000 |
| 50,000                    | 14,000                                                    | 21,000 | 26,000 | 32,000 |
| 60,000                    | 15,000                                                    | 22,000 | 28,000 | 34,000 |
| 80,000                    | 16,000                                                    | 24,000 | 30,000 | 36,000 |
| 100,000                   | 18,000                                                    | 25,000 | 33,000 | 40,000 |
| 150,000                   | 20,000                                                    | 30,000 | 38,000 | 44,000 |
| 200,000                   | 23,000                                                    | 32,000 | 41,000 | 46,000 |

\*Prospective RMS Symmetrical Amperes Short-Circuit Current • Note: Data derived from Peak Let-Thru Curves

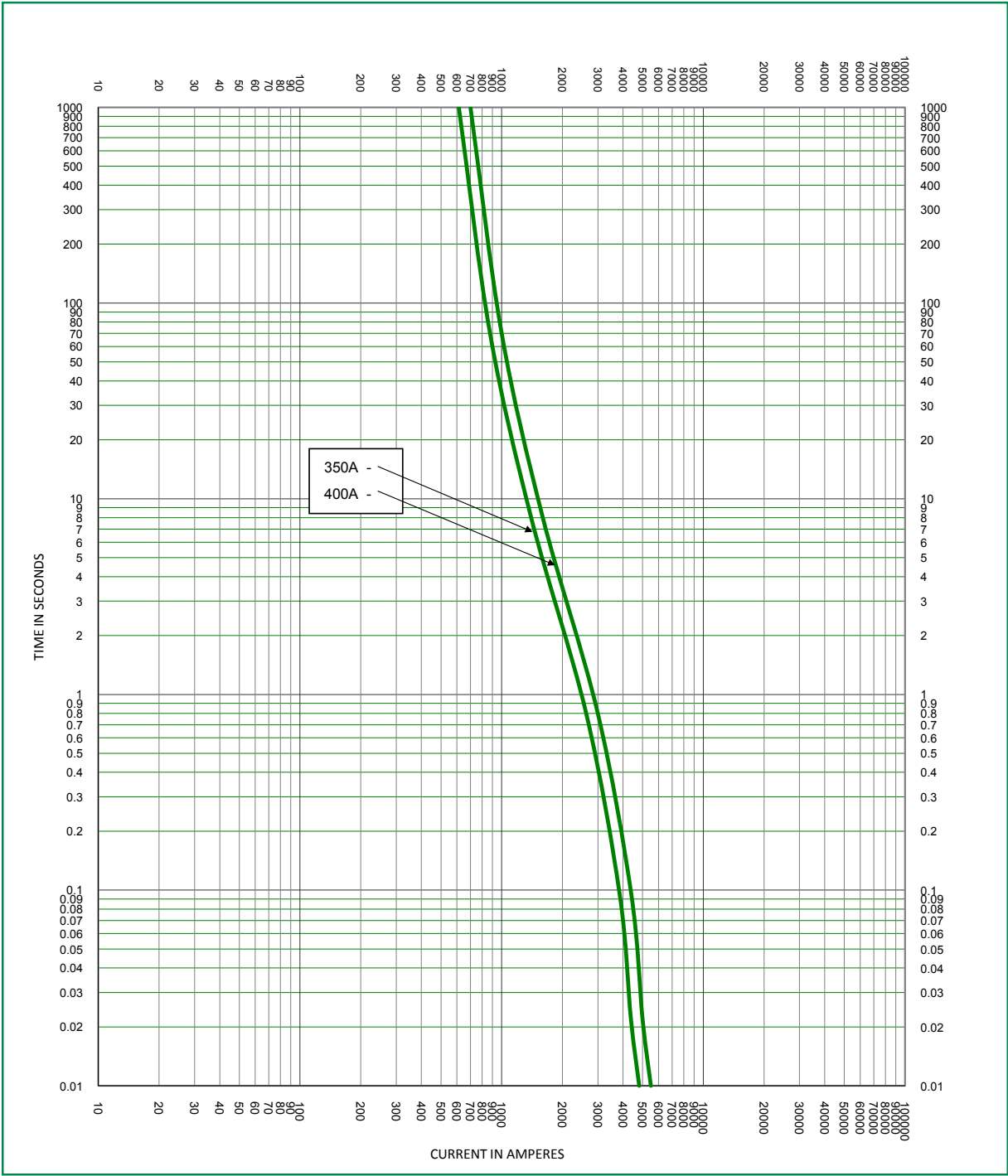
## Peak Let-Thru Curve



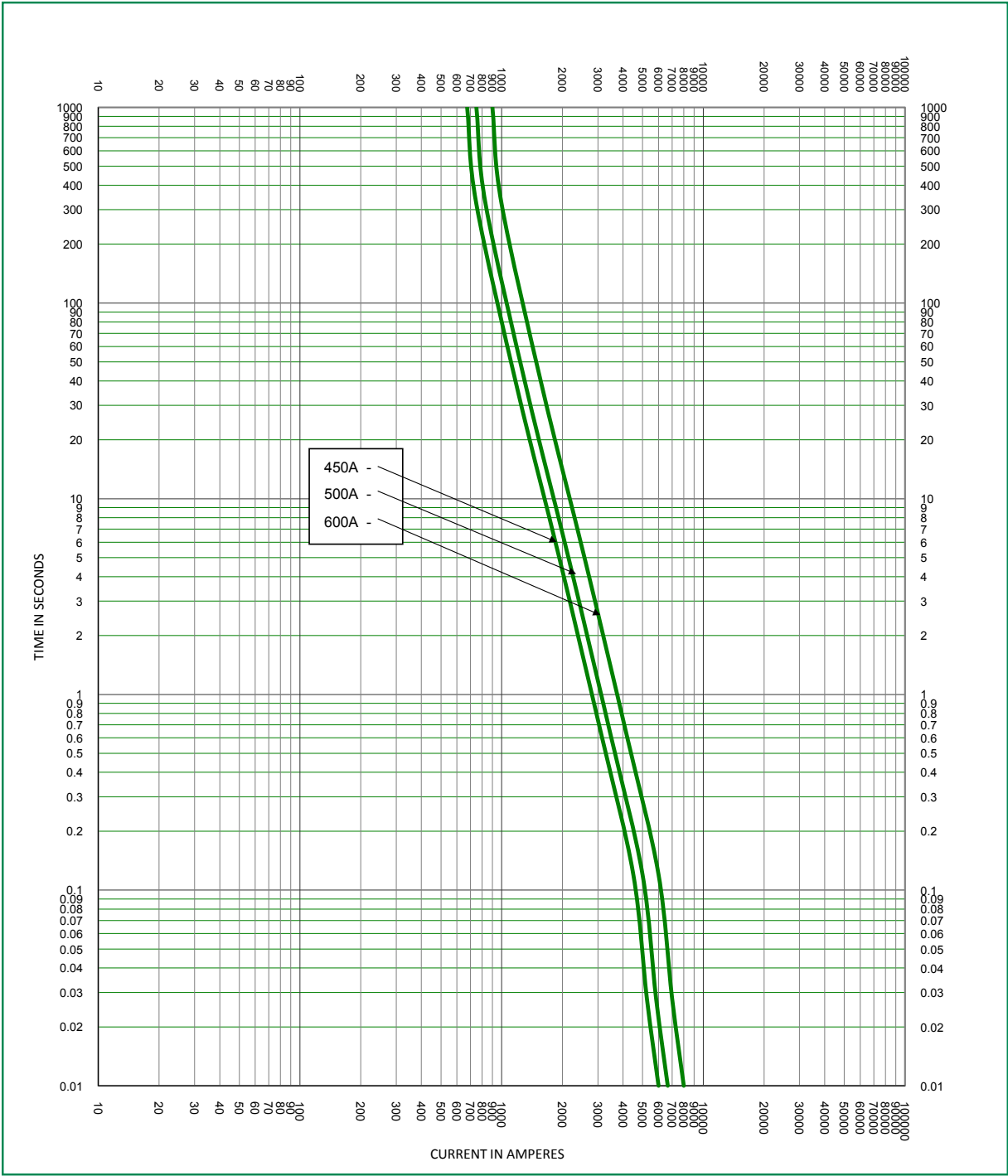
Time Current Curve



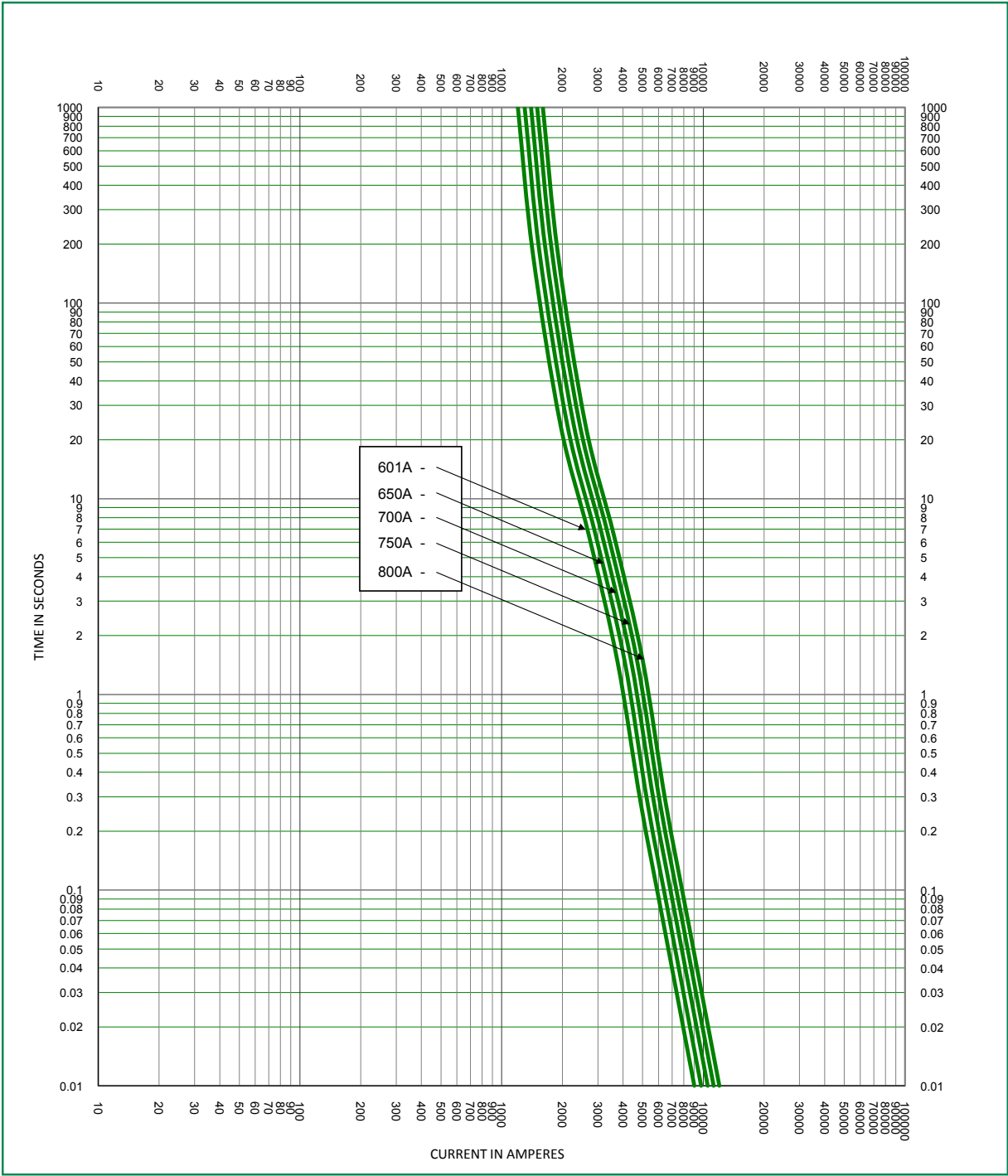
Time Current Curve



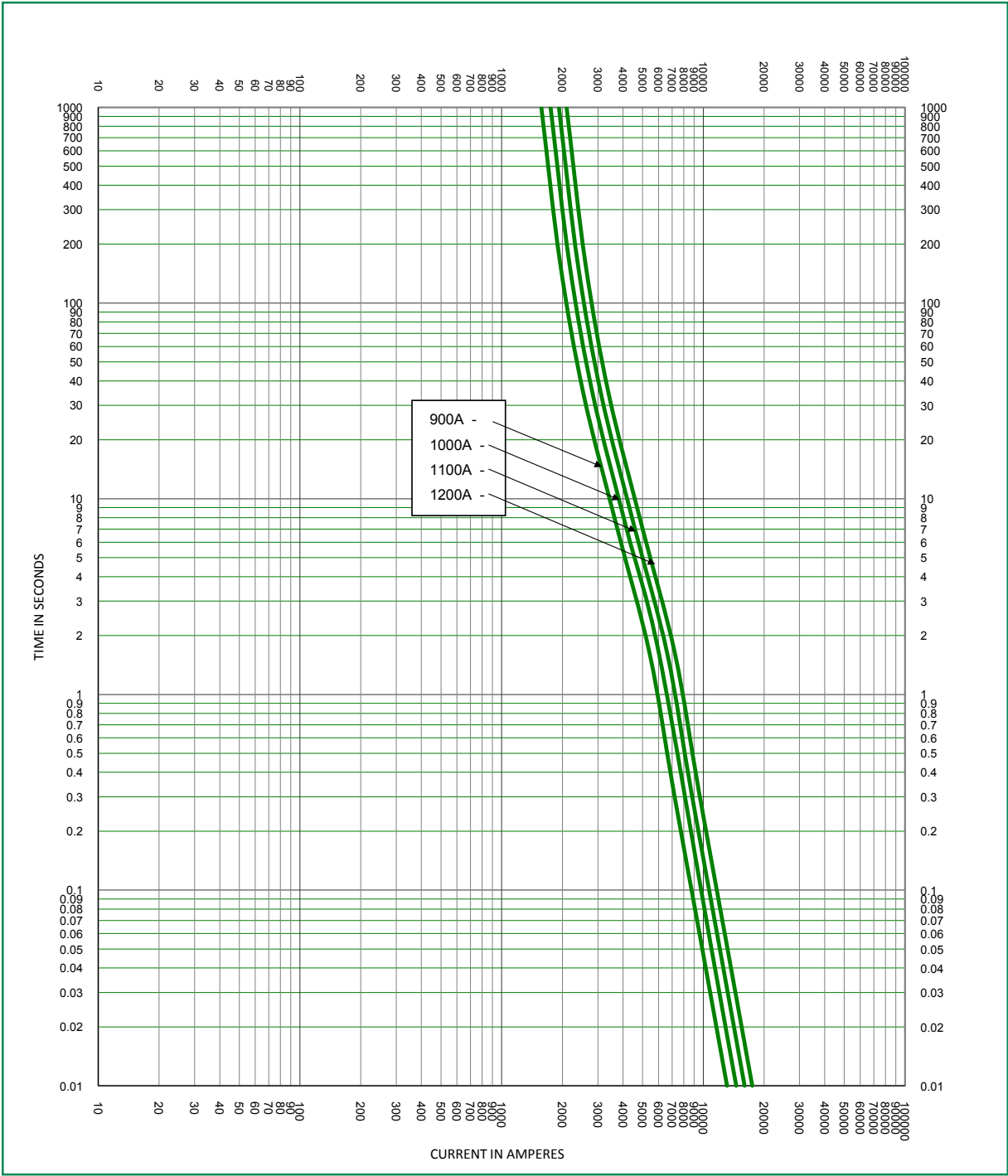
Time Current Curve



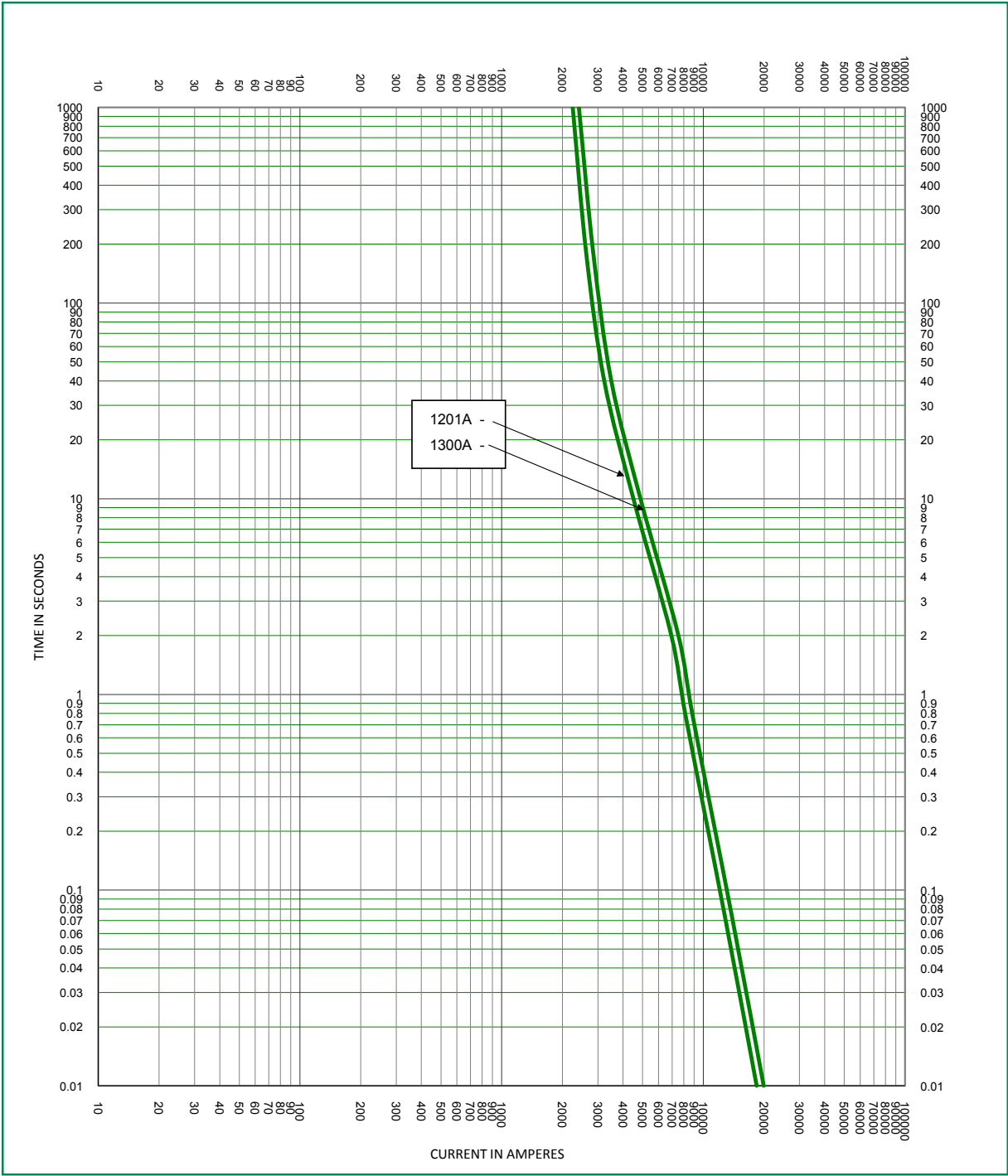
Time Current Curve



Time Current Curve

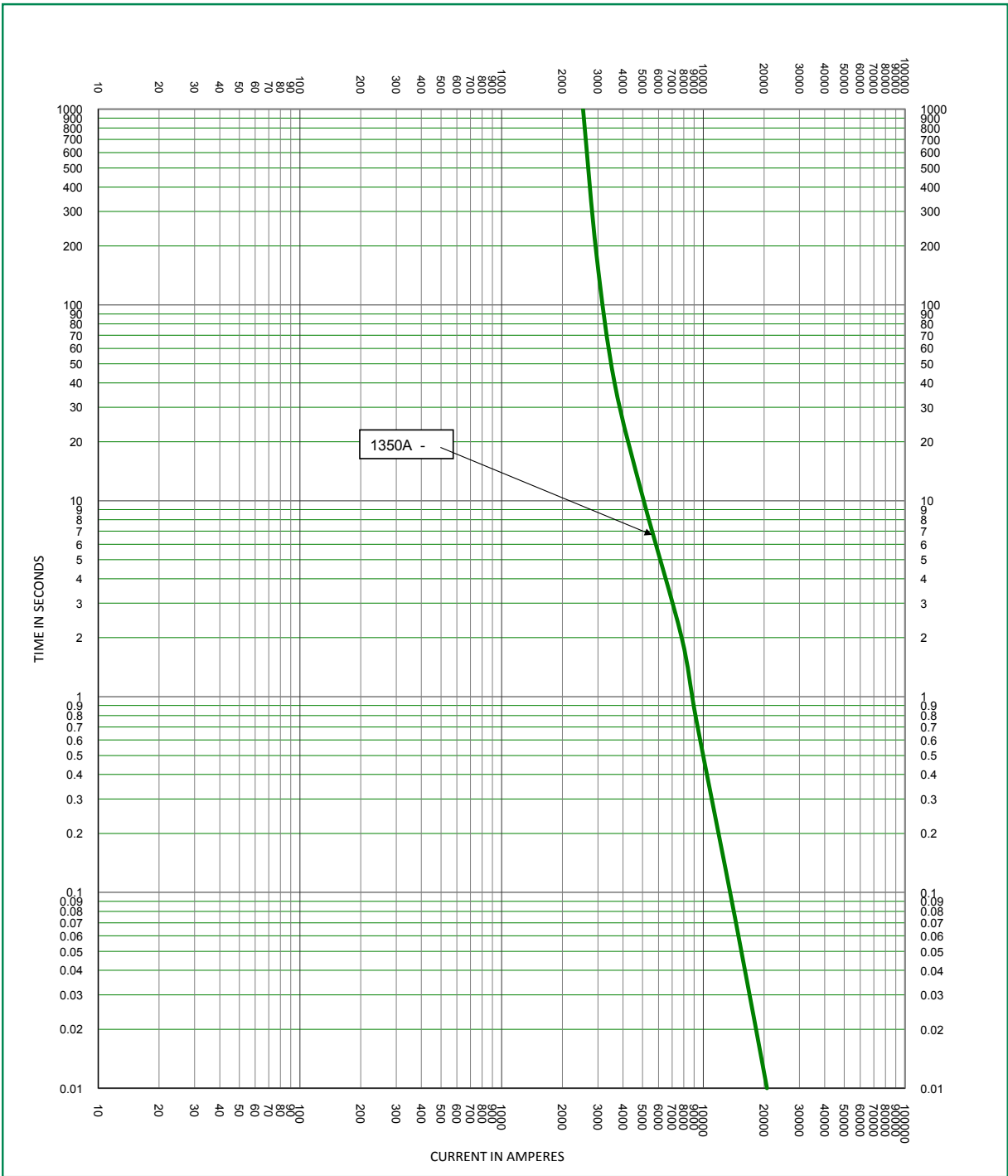


Time Current Curve





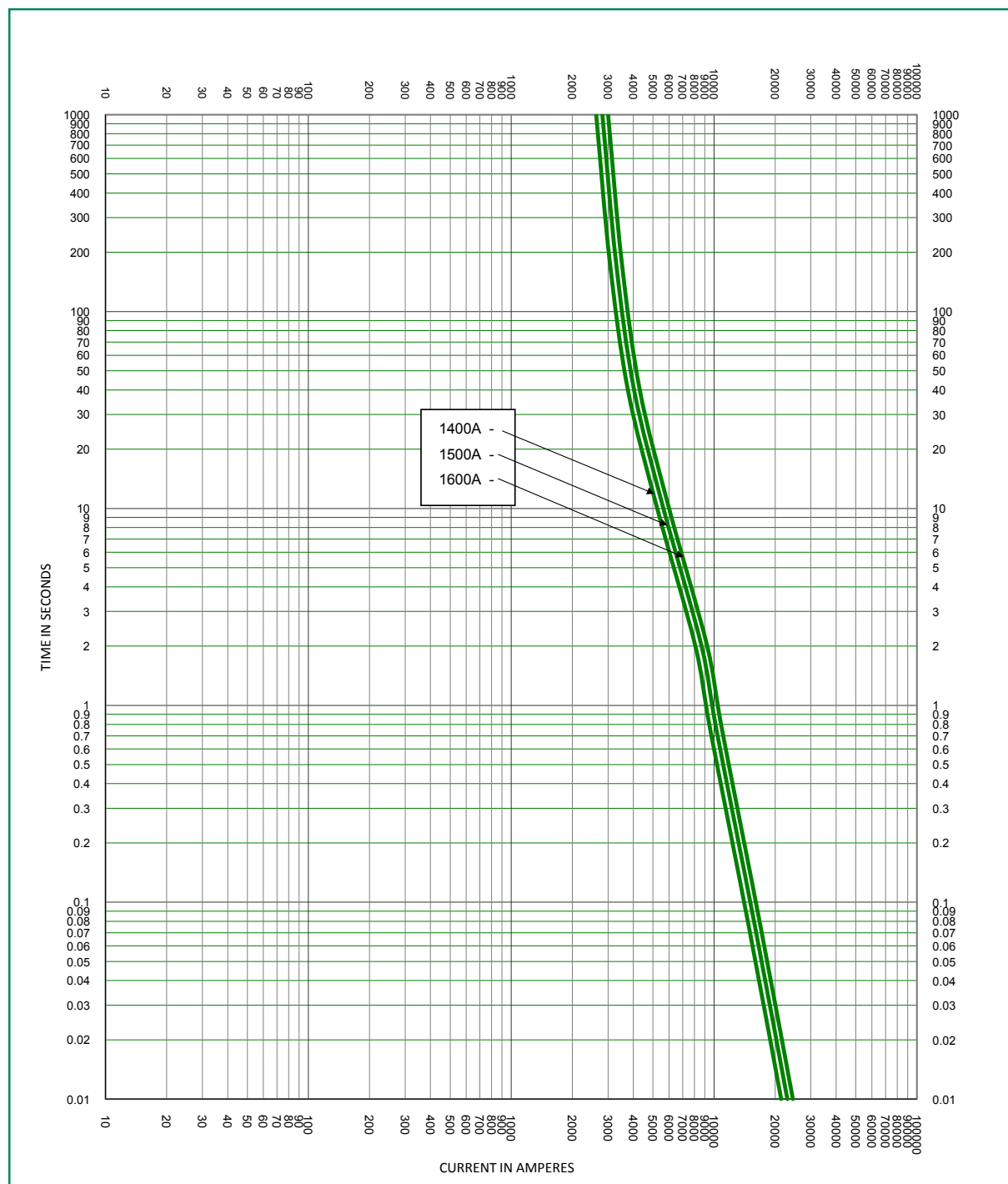
Time Current Curve



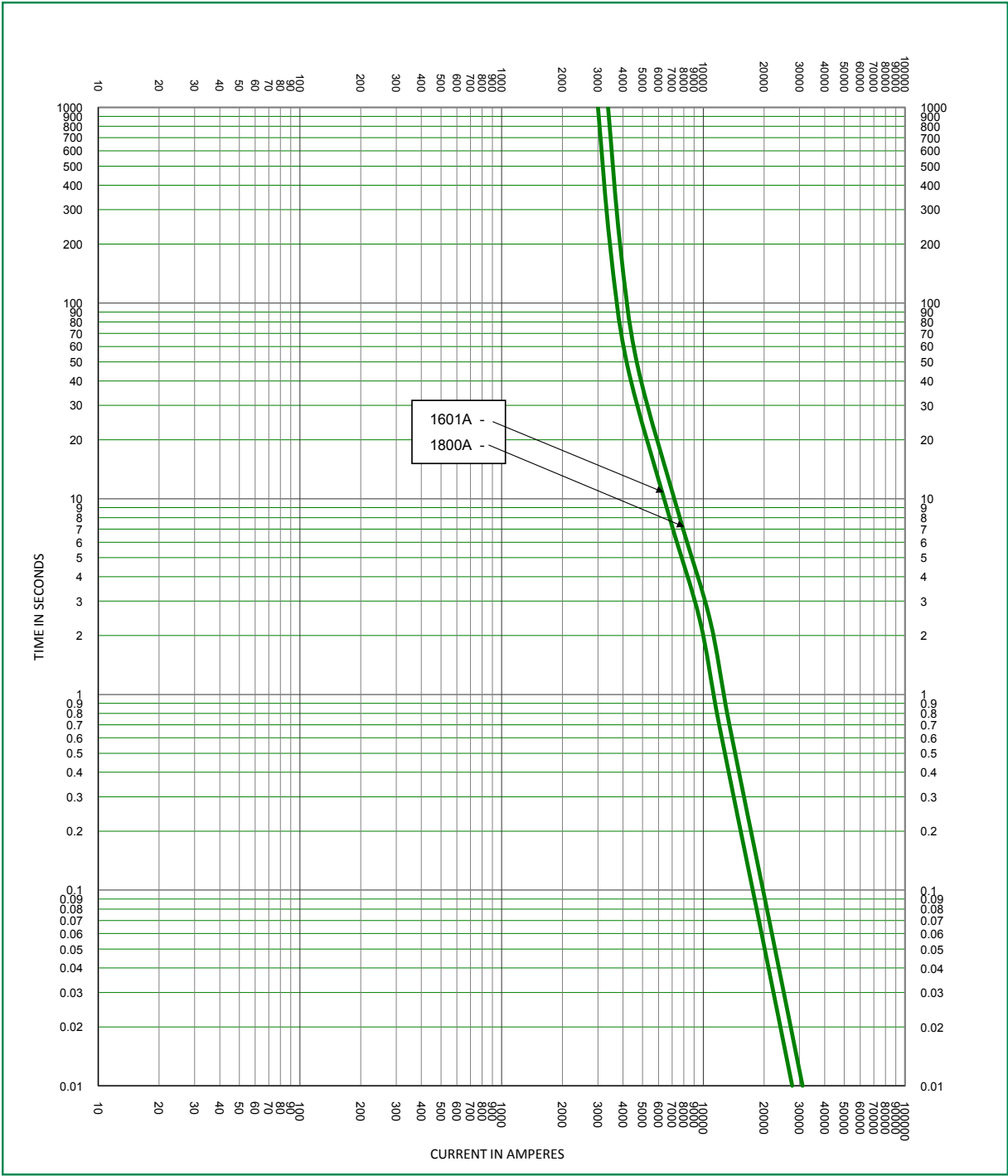
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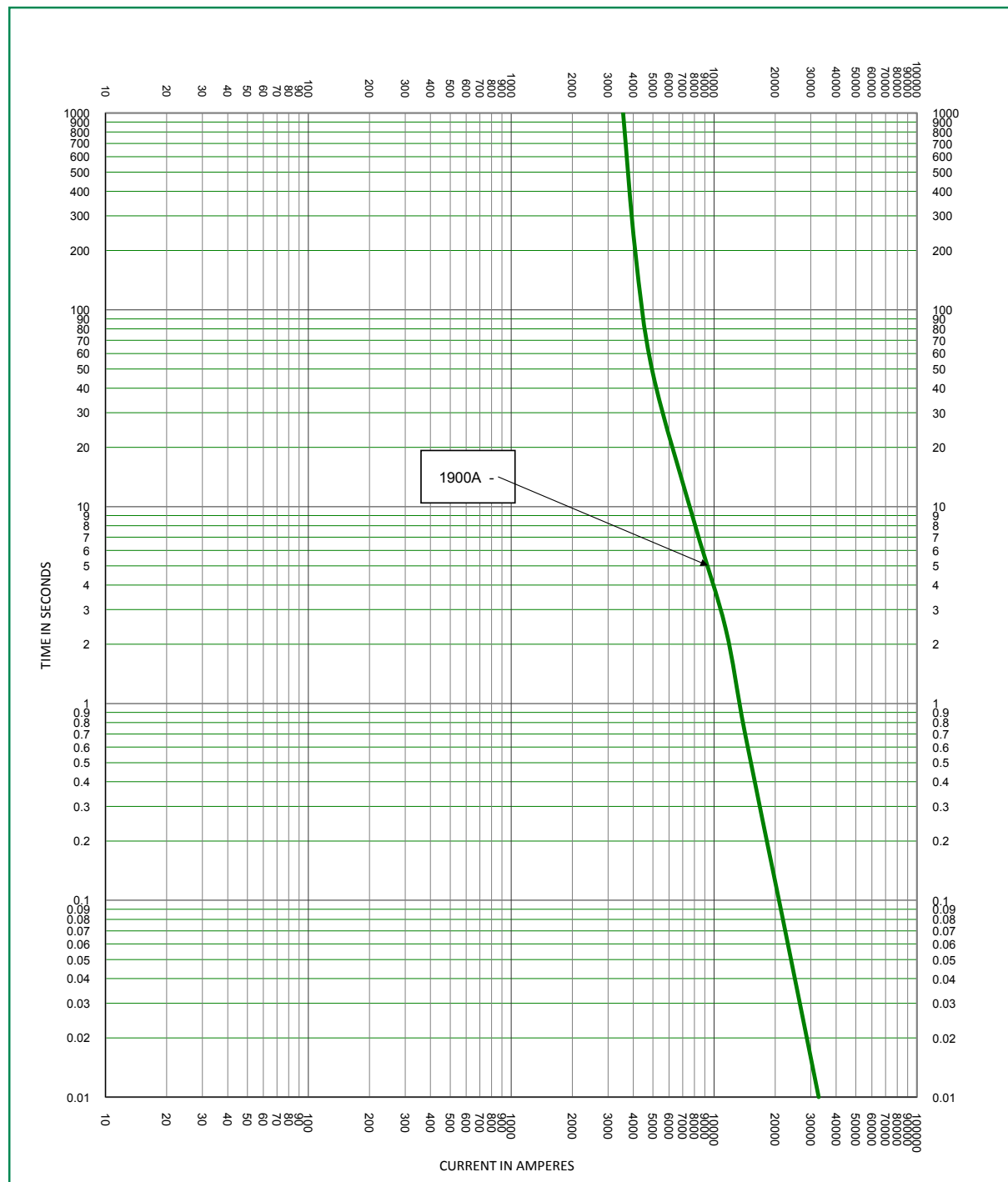
### Time Current Curve



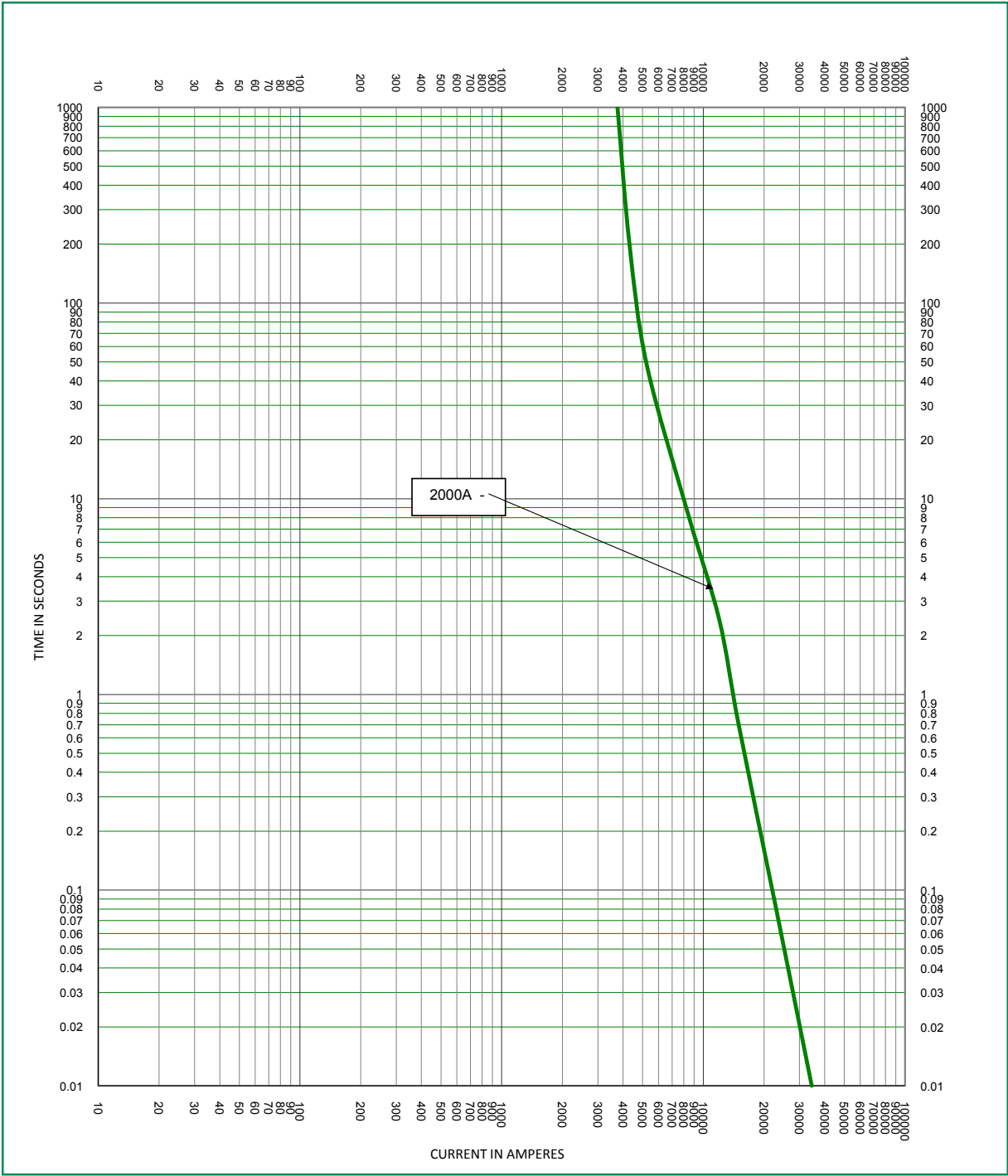
Time Current Curve



## Time Current Curve



Time Current Curve



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