

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 Vac/dc rated
- 200 kA AC Interrupting Rating
- 50 kA DC Interrupting Rating

Specifications

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

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 |

Web Resources

TC Curves, downloadable CAD drawings and other technical information: 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 ³ / ₄ (95.3) | 5 ³ / ₄ (146.1) | 6 ³ / ₄ (171.5) | — | — | 8 ⁵ / ₈ (219.1) | — | — | 2 (50.8) | 2 ¹ / ₂ (63.5) | 3 ⁸ / ₈ (9.5) | 5 ⁸ / ₈ x 1 ¹ / ₈ (15.9) x (28.6) | — |
| 900-1200 | 2 | 3 ³ / ₄ (95.3) | 5 ³ / ₄ (146.1) | 6 ³ / ₄ (171.5) | 9 ¹ / ₄ (235.0) | 9 ¹ / ₂ (241.3) | 10 ³ / ₄ (273.1) | — | — | 2 (50.8) | 2 ¹ / ₂ (63.5) | 3 ⁸ / ₈ (9.5) | 5 ⁸ / ₈ x 3 ¹ / ₄ (15.9) x (19.1) | 5 ⁸ / ₈ x 1 ¹ / ₈ (15.9) x (28.6) |
| 1300-1600 | 2 | 3 ³ / ₄ (95.3) | 5 ³ / ₄ (146.1) | 6 ³ / ₄ (171.5) | 9 ¹ / ₄ (235.0) | 9 ¹ / ₂ (241.3) | 10 ³ / ₄ (273.1) | — | — | 2 ³ / ₈ (60.3) | 3 (76.2) | 7 ¹ / ₁₆ (11.1) | 5 ⁸ / ₈ x 3 ¹ / ₄ (15.9) x (19.1) | 5 ⁸ / ₈ x 1 ¹ / ₈ (15.9) x (28.6) |
| 1800-2000 | 2 | 3 ³ / ₄ (95.3) | 5 ³ / ₄ (146.1) | 6 ³ / ₄ (171.5) | 9 ¹ / ₄ (235.0) | 9 ¹ / ₂ (241.3) | 10 ³ / ₄ (273.1) | — | — | 2 ³ / ₄ (69.9) | 3 ¹ / ₂ (88.9) | 1 ¹ / ₂ (12.7) | 5 ⁸ / ₈ x 3 ¹ / ₄ (15.9) x (19.1) | 5 ⁸ / ₈ x 1 ¹ / ₈ (15.9) x (28.6) |

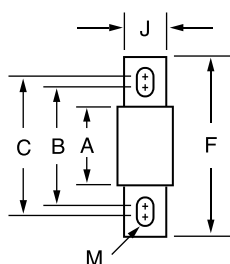


FIG.1

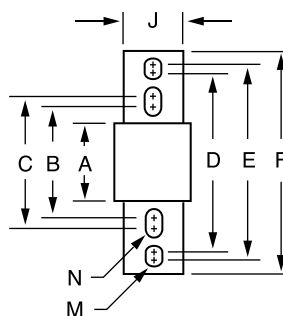
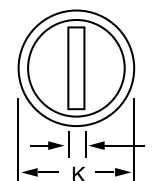


FIG.2



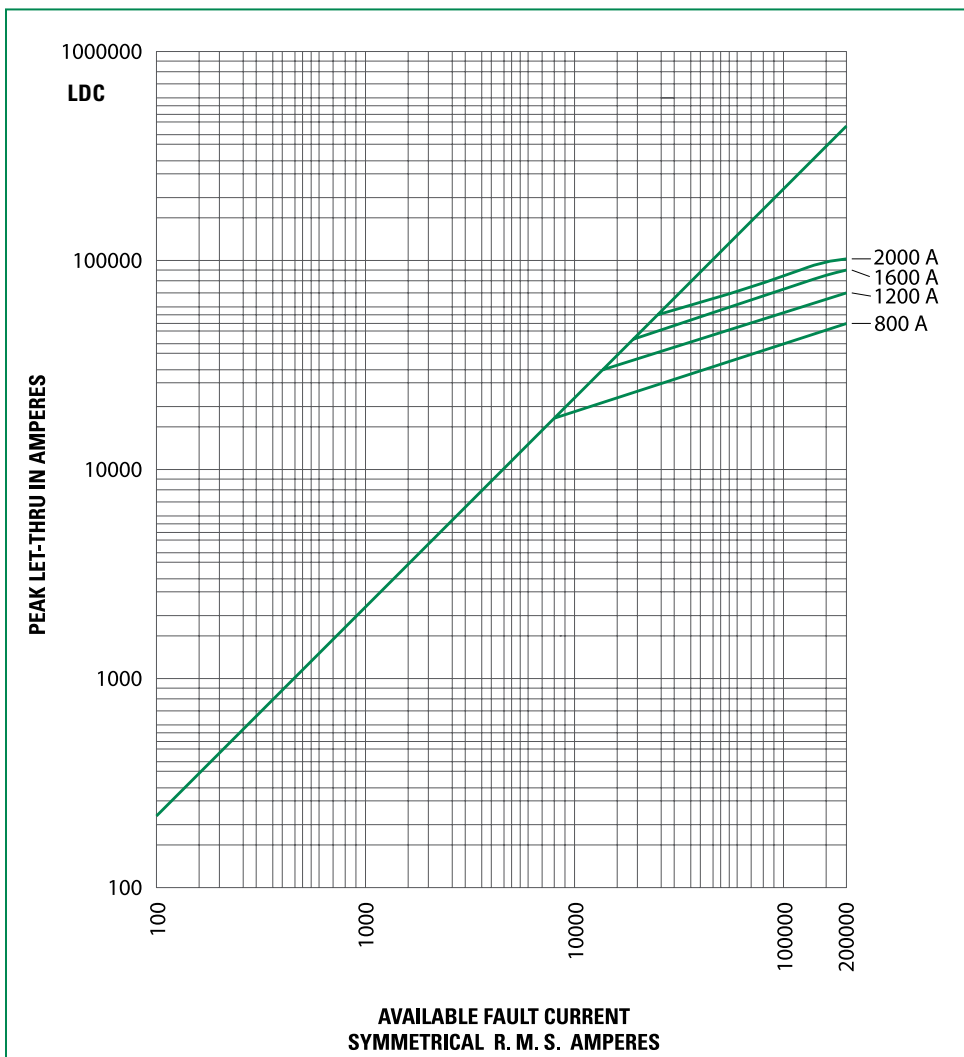
CLASS L – LDC SERIES FUSES

Current-Limiting Effects of LDC (600 V) Fuses

| SHORT CIRCUIT 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 |

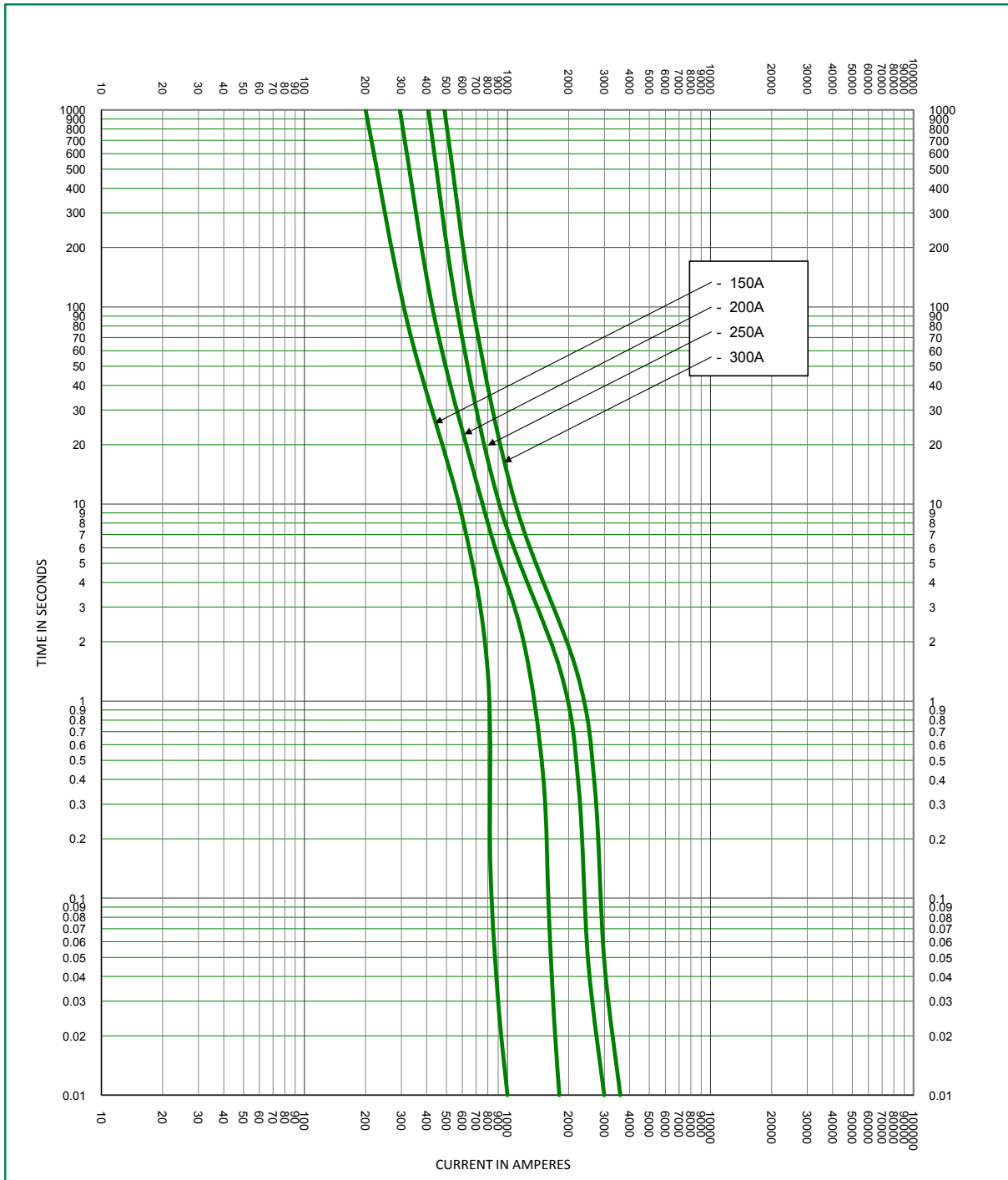
*Prospective RMS Symmetrical Amperes Short-Circuit Current • Note: Data derived from Peak Let-Thru Curves

Peak Let-Thru Curve



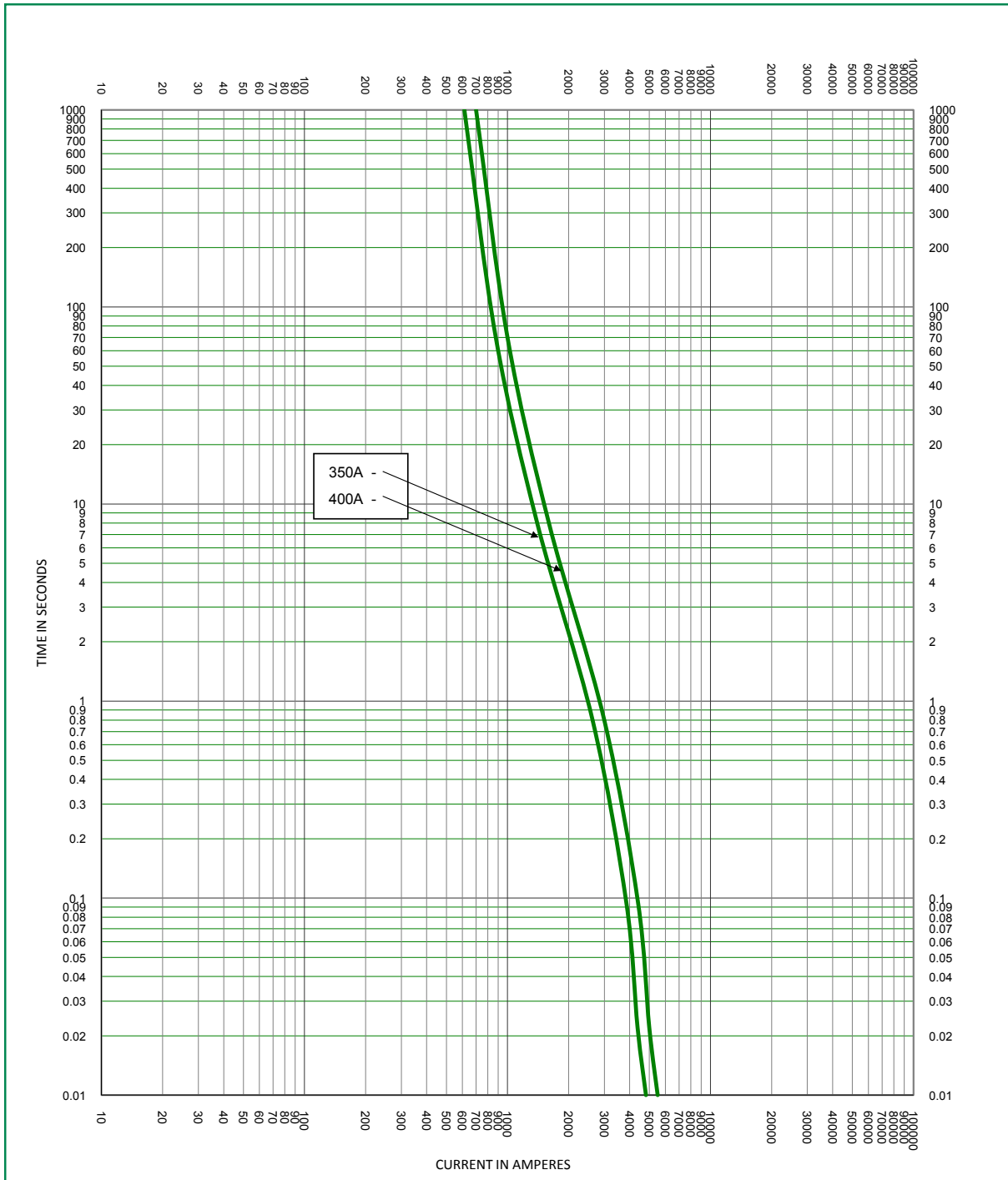
CLASS L – LDC SERIES FUSES

Time Current Curve



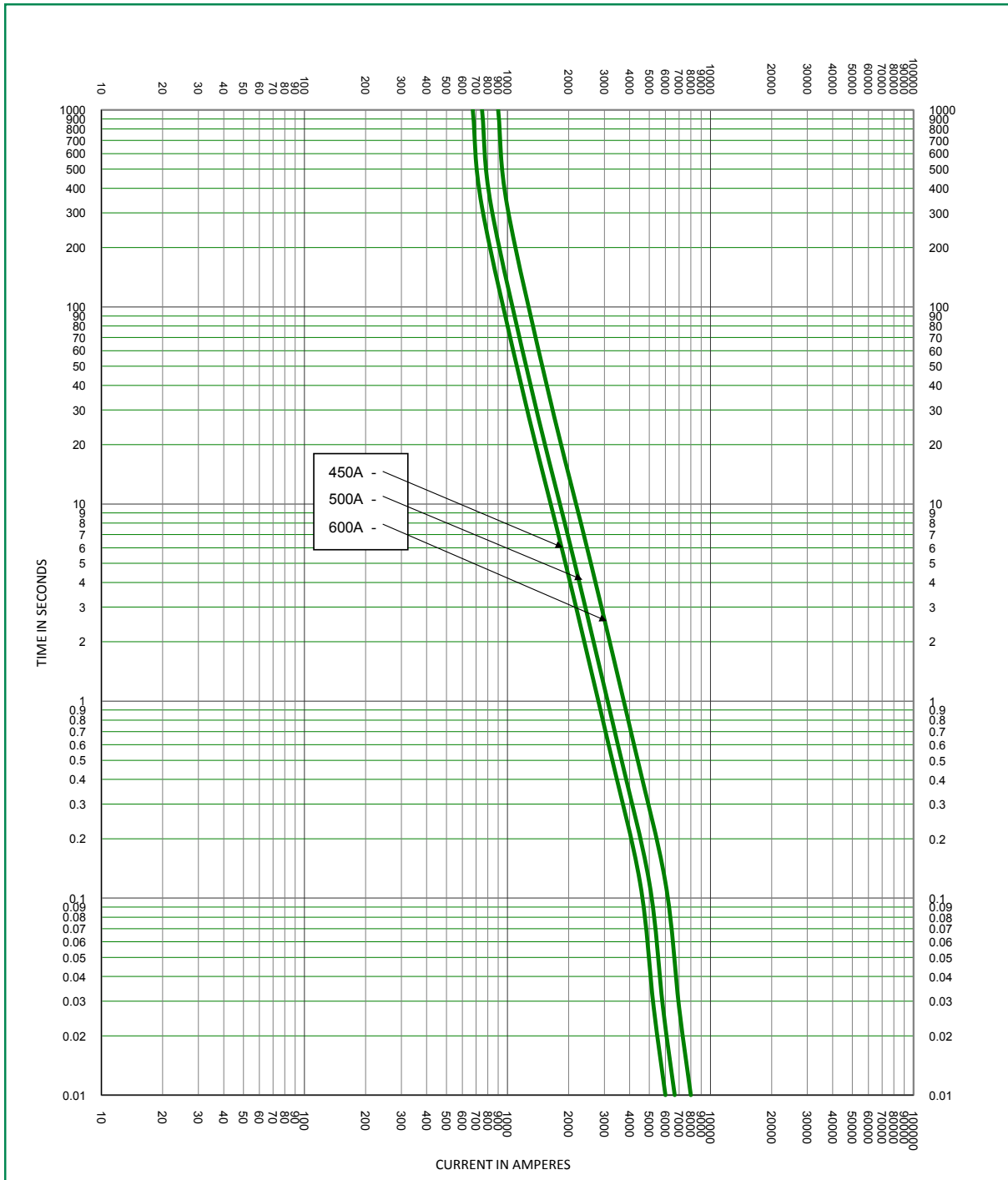
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Time Current Curve



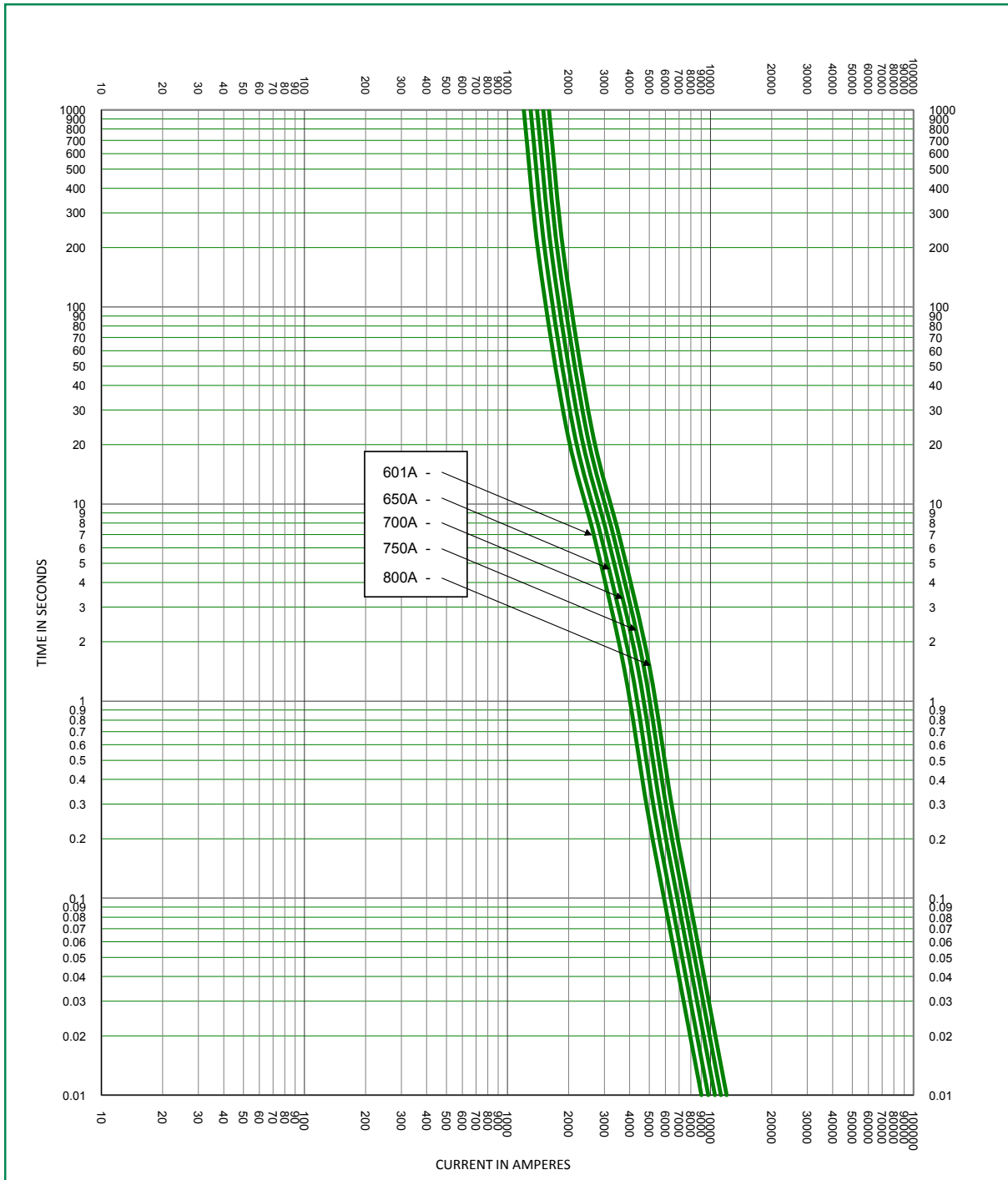
CLASS L – LDC SERIES FUSES

Time Current Curve



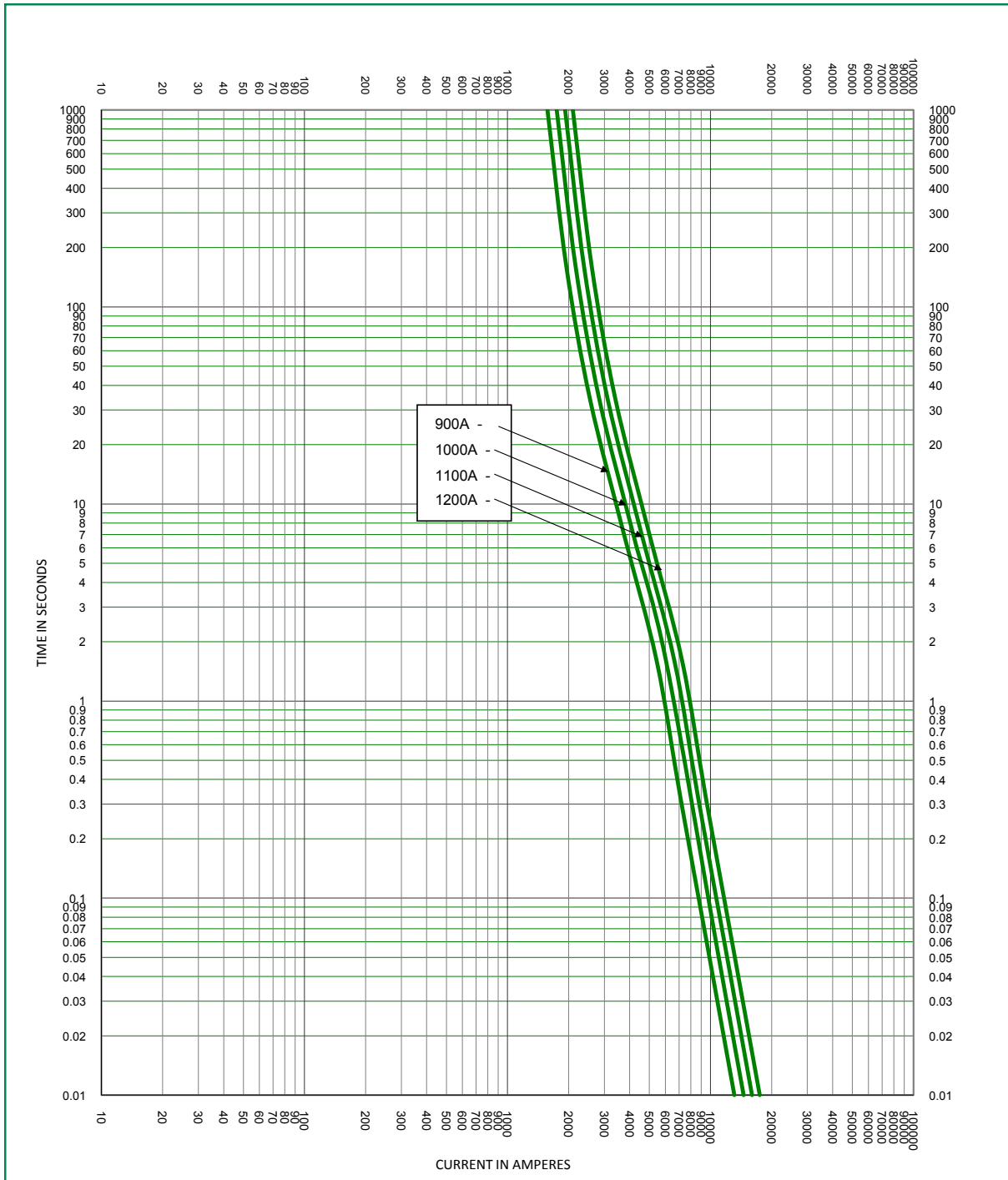
CLASS L – LDC SERIES FUSES

Time Current Curve



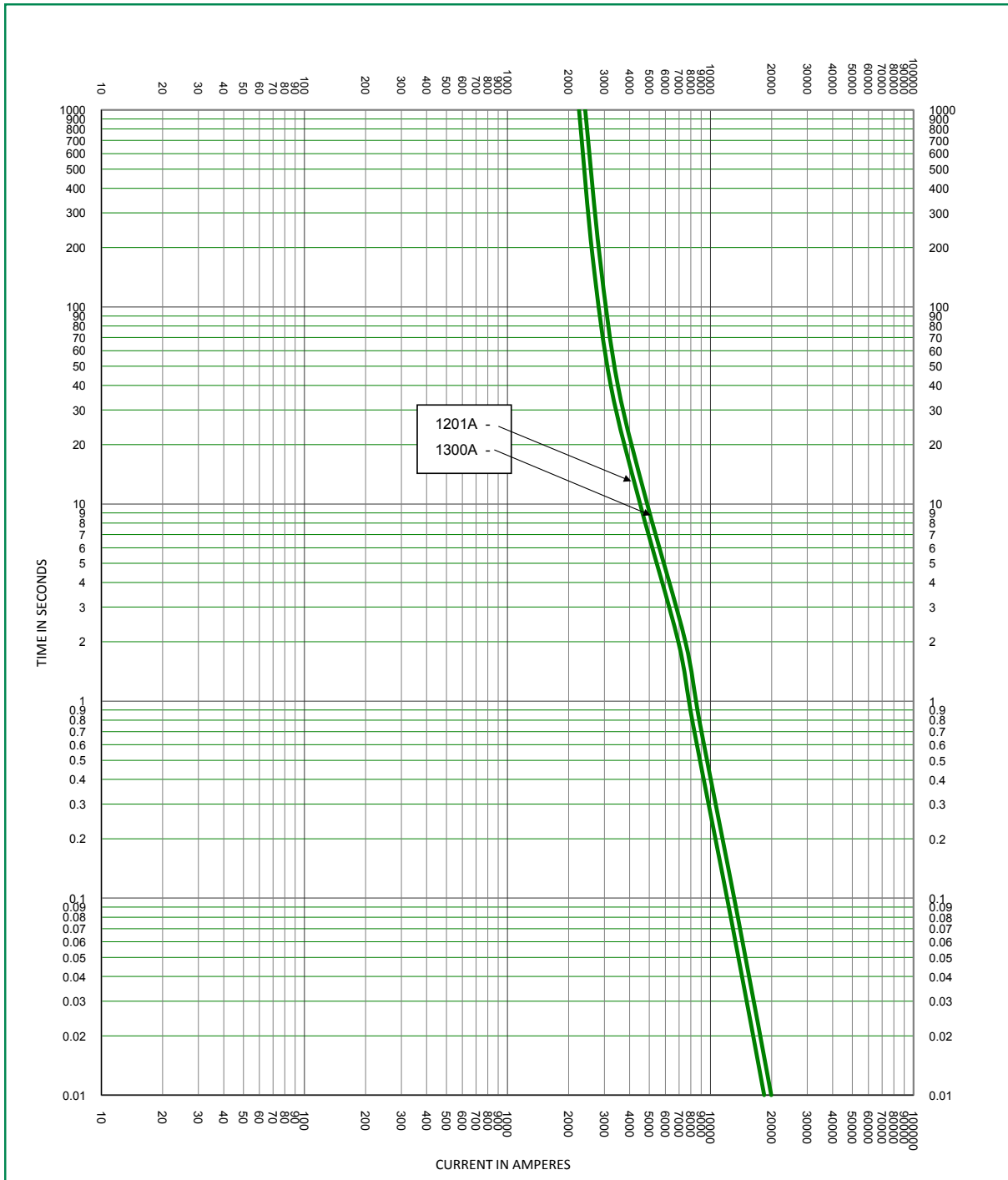
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Time Current Curve



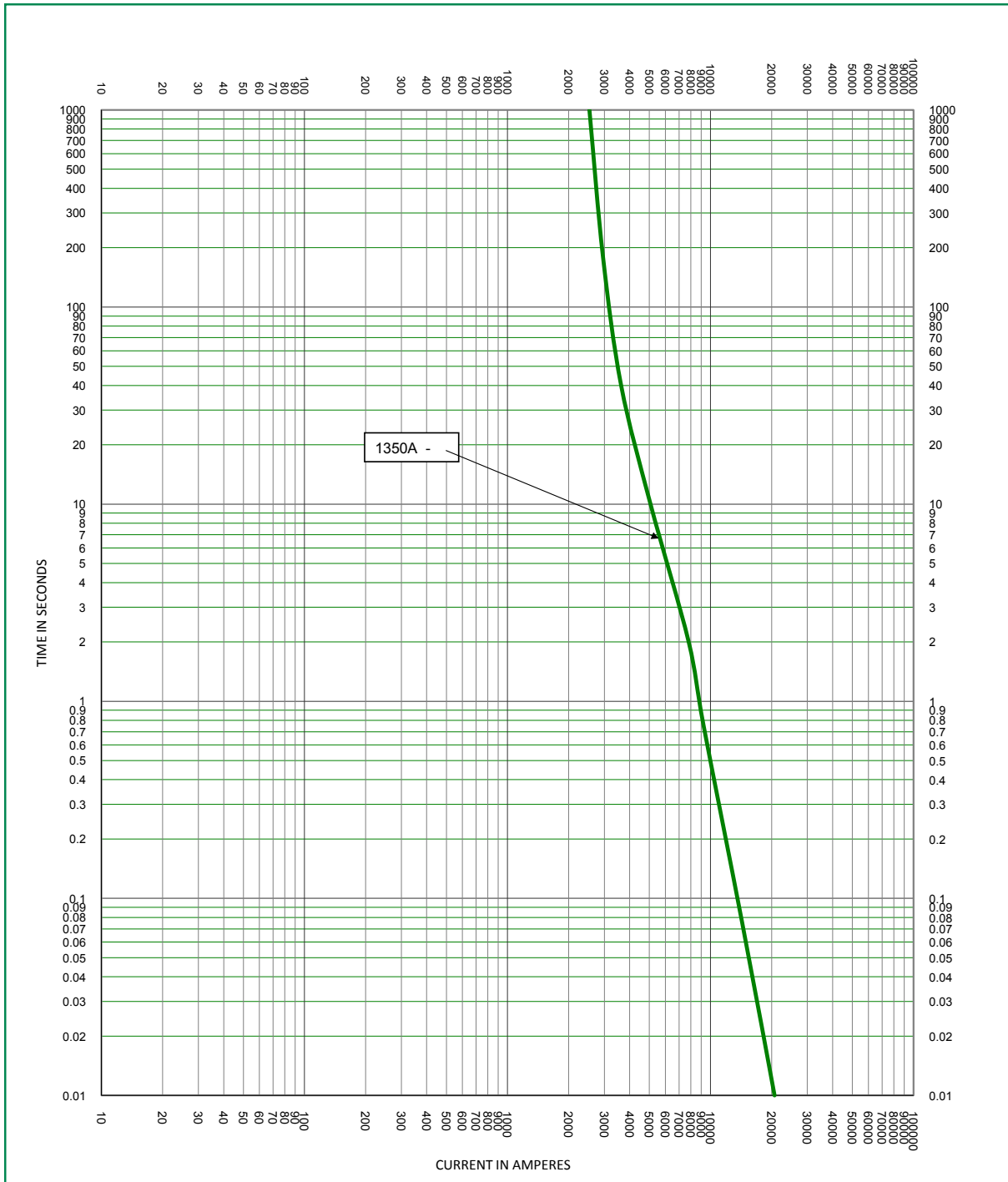
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Time Current Curve



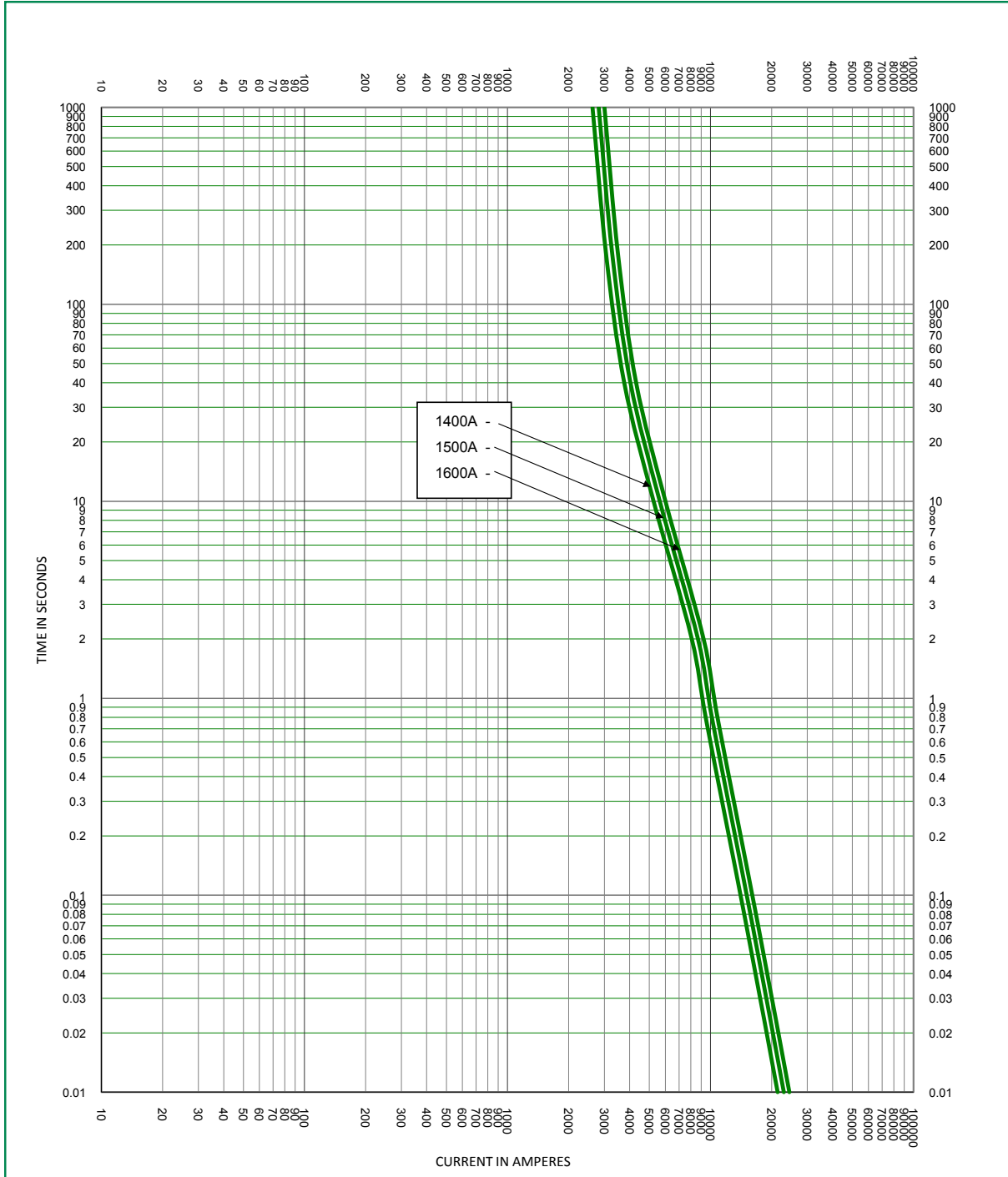
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Time Current Curve



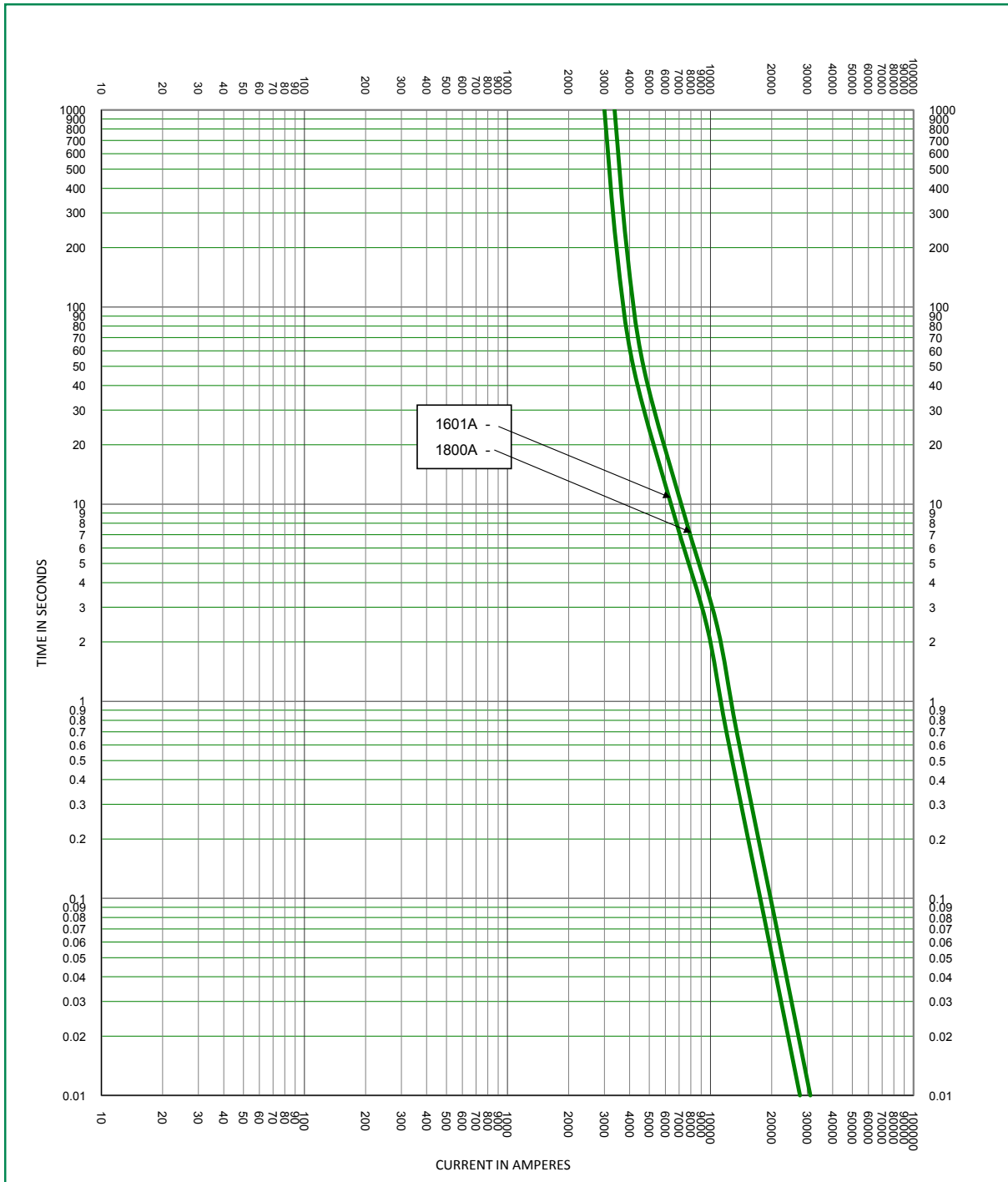
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Time Current Curve



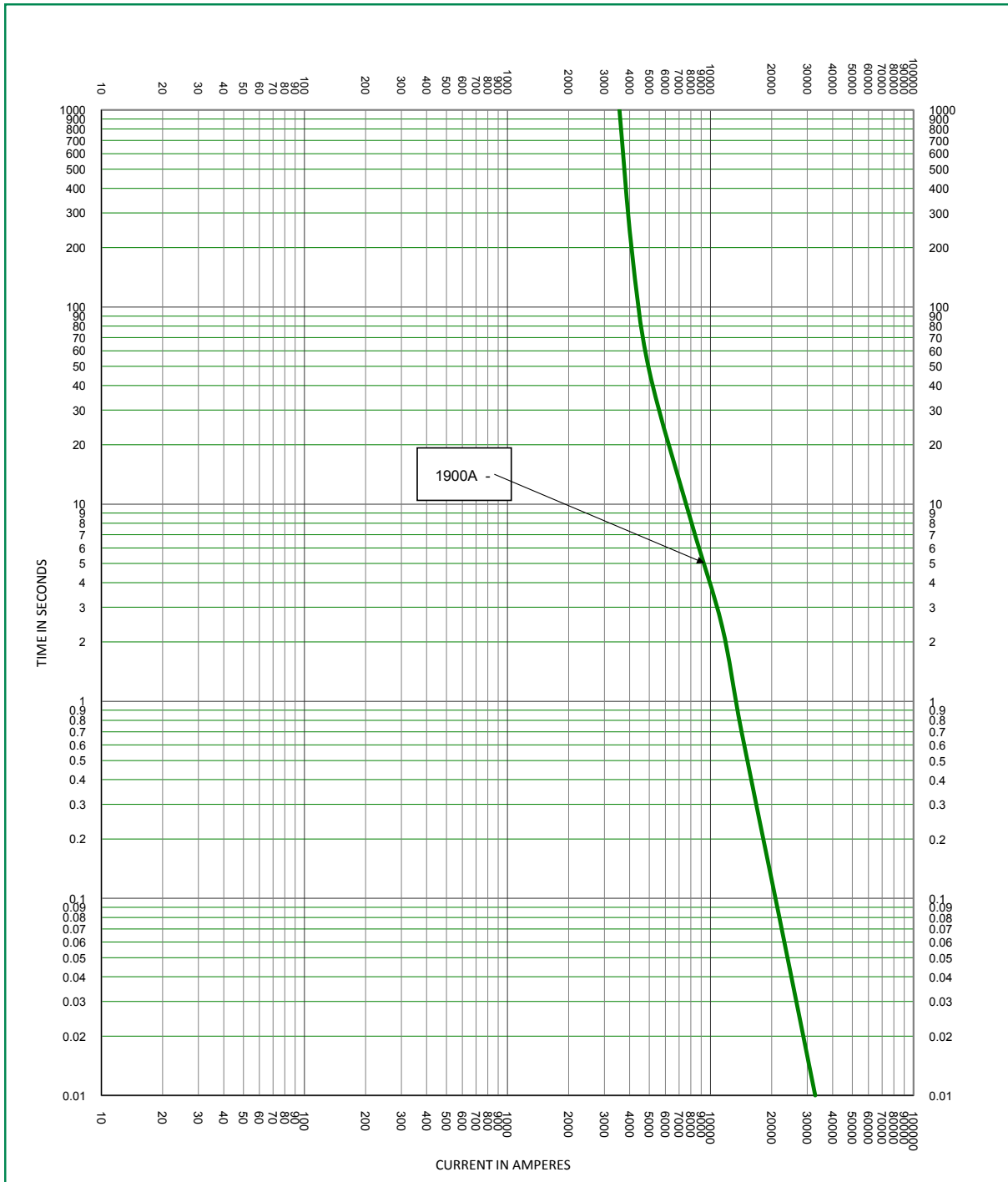
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