

POWR-GARD® Fuse

L25S SERIES TRADITIONAL HIGH-SPEED

250 V ac • Very Fast-Acting • 1–800 A



Description

The L25S Series is a traditional North American bolted style high-speed fuse for protection of power semiconductor devices that are rated up to 250 V ac and 200 V dc.

Littelfuse POWR-SPEED® products offer optimized circuit protection at the extremely fast speed required to protect power semiconductor devices such as silicon controlled rectifiers (SCR's), diodes, thyristors, triacs, transistors, and similar solid-state devices. These devices are used in power equipment including variable speed drives, power rectifiers, UPS systems, dc power supplies, and in a wide range of electronic equipment. May be used wherever extremely fast-acting, current-limiting fuses are used with no time delay required.

Features/Benefits

- Compliance with US and Canadian requirements
- Traditional North American bolted style dimensions
- Class aR performance
- Direct bus-bar mount or stud mount design
- RoHS Compliant applications

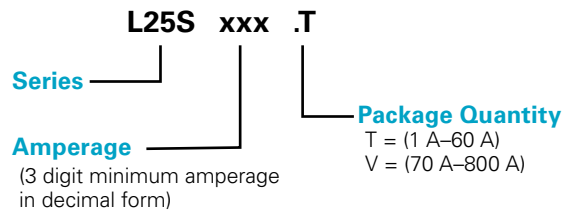
Applications

- Power converters (inverters, rectifiers, UPS)
- Power supplies
- Industrial heaters
- Variable speed drives
- Battery chargers
- Soft starters

Specifications

| | |
|------------------------------|--|
| Voltage Ratings | Ac: 250 V Dc: 200 V–250 V |
| Ampere Range | 1–800 A |
| Interrupting Rating | Ac: 200 kA Dc: 20 kA Self Certified |
| Approvals | UL Recognized (File: E71611) CSA Recognized (File: LR29862) |
| Time Constant | 10 ms |
| Material | Body: melamine Caps: copper alloy (silver plated) |
| Mounting Type | Cylindrical (10–30 A) Bolted Tags (35–800 A) |
| Environmental | RoHS |
| Country of Origin | Mexico |
| Operating Temperature | -55 °C to +125 °C |
| Storage Temperature | Up to 35 °C with Relative Humidity <65 % |

Part Numbering System



| SERIES | AMPERAGE | CATALOG NUMBER | ORDERING NUMBER |
|--------|----------|----------------|-----------------|
| L25S | 1 | L25S001 | L25S001.T |
| L25S | 100 | L25S100 | L25S100.V |

Recommended Fuse Holders

1LFS101/1LFS102
LSCR001/LSCR002
107/127 Series (1-30A)
LFH25030 (1-30A)

Web Resources

For additional information, visit: Littelfuse.com/high-speed

Note: high-speed fuses are designed for fixed installations. They are not intended for use in moving vehicle applications.

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Electrical Specifications

| CATALOG NUMBER | AMPERAGE RATING | VOLTAGE RATING | | INTERRUPT RATING | |
|----------------|-----------------|----------------|-----|------------------|-------|
| | | AC | DC | AC | DC |
| L25S001 | 1 | 250 | 250 | 200 kA | 20 kA |
| L25S002 | 2 | 250 | 250 | 200 kA | 20 kA |
| L25S003 | 3 | 250 | 250 | 200 kA | 20 kA |
| L25S004 | 4 | 250 | 250 | 200 kA | 20 kA |
| L25S005 | 5 | 250 | 250 | 200 kA | 20 kA |
| L25S006 | 6 | 250 | 250 | 200 kA | 20 kA |
| L25S008 | 8 | 250 | 250 | 200 kA | 20 kA |
| L25S010 | 10 | 250 | 250 | 200 kA | 20 kA |
| L25S012 | 12 | 250 | 250 | 200 kA | 20 kA |
| L25S015 | 15 | 250 | 250 | 200 kA | 20 kA |
| L25S020 | 20 | 250 | 250 | 200 kA | 20 kA |
| L25S025 | 25 | 250 | 250 | 200 kA | 20 kA |
| L25S030 | 30 | 250 | 250 | 200 kA | 20 kA |
| L25S035 | 35 | 250 | 250 | 200 kA | 20 kA |
| L25S040 | 40 | 250 | 250 | 200 kA | 20 kA |
| L25S045 | 45 | 250 | 250 | 200 kA | 20 kA |
| L25S050 | 50 | 250 | 250 | 200 kA | 20 kA |
| L25S060 | 60 | 250 | 250 | 200 kA | 20 kA |
| L25S070 | 70 | 250 | 250 | 200 kA | 20 kA |
| L25S080 | 80 | 250 | 250 | 200 kA | 20 kA |
| L25S090 | 90 | 250 | 250 | 200 kA | 20 kA |
| L25S100 | 100 | 250 | 250 | 200 kA | 20 kA |
| L25S125 | 125 | 250 | 250 | 200 kA | 20 kA |
| L25S150 | 150 | 250 | 250 | 200 kA | 20 kA |
| L25S175 | 175 | 250 | 250 | 200 kA | 20 kA |
| L25S200 | 200 | 250 | 250 | 200 kA | 20 kA |
| L25S225 | 225 | 250 | 200 | 200 kA | 20 kA |
| L25S250 | 250 | 250 | 200 | 200 kA | 20 kA |
| L25S275 | 275 | 250 | 200 | 200 kA | 20 kA |
| L25S300 | 300 | 250 | 200 | 200 kA | 20 kA |
| L25S350 | 350 | 250 | 200 | 200 kA | 20 kA |
| L25S400 | 400 | 250 | 200 | 200 kA | 20 kA |
| L25S450 | 450 | 250 | 200 | 200 kA | 20 kA |
| L25S500 | 500 | 250 | 200 | 200 kA | 20 kA |
| L25S600 | 600 | 250 | 200 | 200 kA | 20 kA |
| L25S700 | 700 | 250 | 200 | 200 kA | 20 kA |
| L25S800 | 800 | 250 | 200 | 200 kA | 20 kA |

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Ordering Information

| SERIES | AMPERAGE | AMPERE CODE | CATALOG NUMBER | ORDERING NUMBER | PACK QUANTITY | UPC |
|--------|----------|-------------|----------------|-----------------|---------------|-------------|
| L25S | 1 | 001. | L25S001 | L25S001.T | 10 Pcs/Box | 07945884001 |
| L25S | 2 | 002. | L25S002 | L25S002.T | 10 Pcs/Box | 07945884002 |
| L25S | 3 | 003. | L25S003 | L25S003.T | 10 Pcs/Box | 07945884003 |
| L25S | 4 | 004. | L25S004 | L25S004.T | 10 Pcs/Box | 07945884004 |
| L25S | 5 | 005. | L25S005 | L25S005.T | 10 Pcs/Box | 07945884005 |
| L25S | 6 | 006. | L25S006 | L25S006.T | 10 Pcs/Box | 07945884006 |
| L25S | 8 | 008. | L25S008 | L25S008.T | 10 Pcs/Box | 07945884008 |
| L25S | 10 | 010. | L25S010 | L25S010.T | 10 Pcs/Box | 07945884010 |
| L25S | 12 | 012. | L25S012 | L25S012.T | 10 Pcs/Box | 07945884012 |
| L25S | 15 | 015. | L25S015 | L25S015.T | 10 Pcs/Box | 07945884015 |
| L25S | 20 | 020. | L25S020 | L25S020.T | 10 Pcs/Box | 07945884020 |
| L25S | 25 | 025. | L25S025 | L25S025.T | 10 Pcs/Box | 07945884025 |
| L25S | 30 | 030. | L25S030 | L25S030.T | 10 Pcs/Box | 07945884030 |
| L25S | 35 | 035. | L25S035 | L25S035.T | 10 Pcs/Box | 07945884035 |
| L25S | 40 | 040. | L25S040 | L25S040.T | 10 Pcs/Box | 07945884040 |
| L25S | 45 | 045. | L25S045 | L25S045.T | 10 Pcs/Box | 07945884045 |
| L25S | 50 | 050. | L25S050 | L25S050.T | 10 Pcs/Box | 07945884050 |
| L25S | 60 | 060. | L25S060 | L25S060.T | 10 Pcs/Box | 07945884060 |
| L25S | 70 | 070. | L25S070 | L25S070.V | 5 Pcs/Box | 07945884070 |
| L25S | 80 | 080. | L25S080 | L25S080.V | 5 Pcs/Box | 07945884080 |
| L25S | 90 | 090. | L25S090 | L25S090.V | 5 Pcs/Box | 07945884090 |
| L25S | 100 | 100. | L25S100 | L25S100.V | 5 Pcs/Box | 07945884100 |
| L25S | 125 | 125. | L25S125 | L25S125.V | 5 Pcs/Box | 07945884125 |
| L25S | 150 | 150. | L25S150 | L25S150.V | 5 Pcs/Box | 07945884150 |
| L25S | 175 | 175. | L25S175 | L25S175.V | 5 Pcs/Box | 07945884175 |
| L25S | 200 | 200. | L25S200 | L25S200.V | 5 Pcs/Box | 07945884200 |
| L25S | 225 | 225. | L25S225 | L25S225.V | 5 Pcs/Box | 07945884225 |
| L25S | 250 | 250. | L25S250 | L25S250.V | 5 Pcs/Box | 07945884250 |
| L25S | 275 | 275. | L25S275 | L25S275.V | 5 Pcs/Box | 07945884275 |
| L25S | 300 | 300. | L25S300 | L25S300.V | 5 Pcs/Box | 07945884300 |
| L25S | 350 | 350. | L25S350 | L25S350.V | 5 Pcs/Box | 07945884350 |
| L25S | 400 | 400. | L25S400 | L25S400.V | 5 Pcs/Box | 07945884400 |
| L25S | 450 | 450. | L25S450 | L25S450.V | 5 Pcs/Box | 07945884450 |
| L25S | 500 | 500. | L25S500 | L25S500.V | 5 Pcs/Box | 07945884500 |
| L25S | 600 | 600. | L25S600 | L25S600.V | 5 Pcs/Box | 07945884600 |
| L25S | 700 | 700. | L25S700 | L25S700.V | 5 Pcs/Box | 07945884700 |
| L25S | 800 | 800. | L25S800 | L25S800.V | 5 Pcs/Box | 07945884800 |

Dimensions

| AMPERE RATING | FIG. NO. | DIMENSIONS INCHES (MM) | | | | | | | |
|---------------|----------|------------------------|---------------|----------------|----------------|---------------|---------------|---------------|------------|
| | | A | B | C | D | E | F | G | H |
| 1 – 30 | 1 | 2 (50.8) | — | ½ (12.7) | 9/16 (14.3) | — | — | — | — |
| 31 – 60 | 2 | 1 5/8 (41.3) | 2 ¼ (57.2) | 2 ½ (63.5) | 3 3/16 (81.0) | 1 3/16 (20.6) | 2 9/32 (18.3) | 1 ½ (8.7) | 1/8 (3.2) |
| 61 – 200 | 3 | 1 5/8 (41.3) | 2 5/16 (58.7) | 2 7/16 (61.9) | 3 1/8 (79.4) | 1 7/32 (31.0) | 1 (25.4) | 5/16 (7.9) | 3/16 (4.8) |
| 201 – 700 | 3 | 1 11/32 (40.5) | 2 9/32 (57.9) | 2 29/32 (73.8) | 3 27/32 (97.6) | 1 ½ (38.1) | 1 (25.4) | 1 3/32 (10.3) | ¼ (6.4) |
| 701 – 800 | 3 | 1 11/32 (40.5) | 2 9/32 (57.9) | 2 29/32 (73.8) | 3 27/32 (97.6) | 2 (50.8) | 1 ½ (38.1) | 1 3/32 (10.3) | ¼ (6.4) |

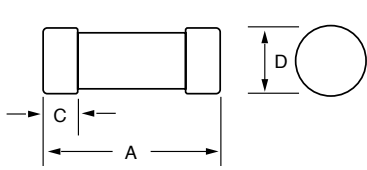


Figure 1

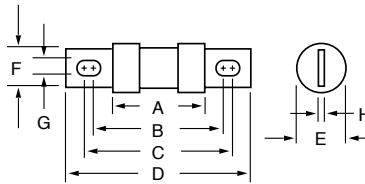


Figure 2

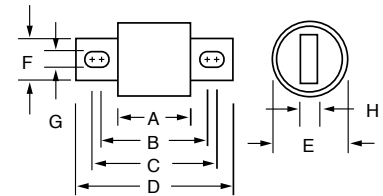
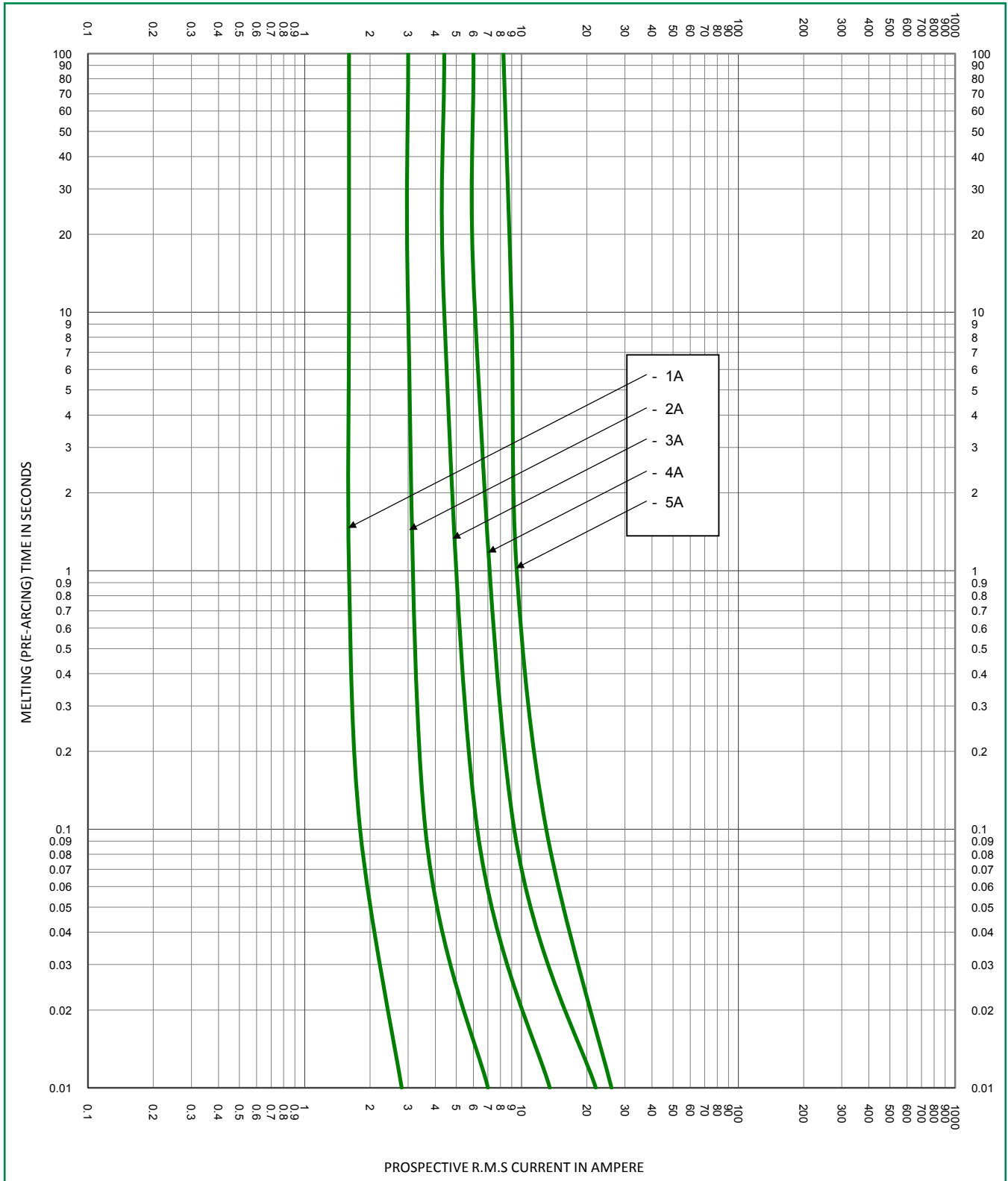
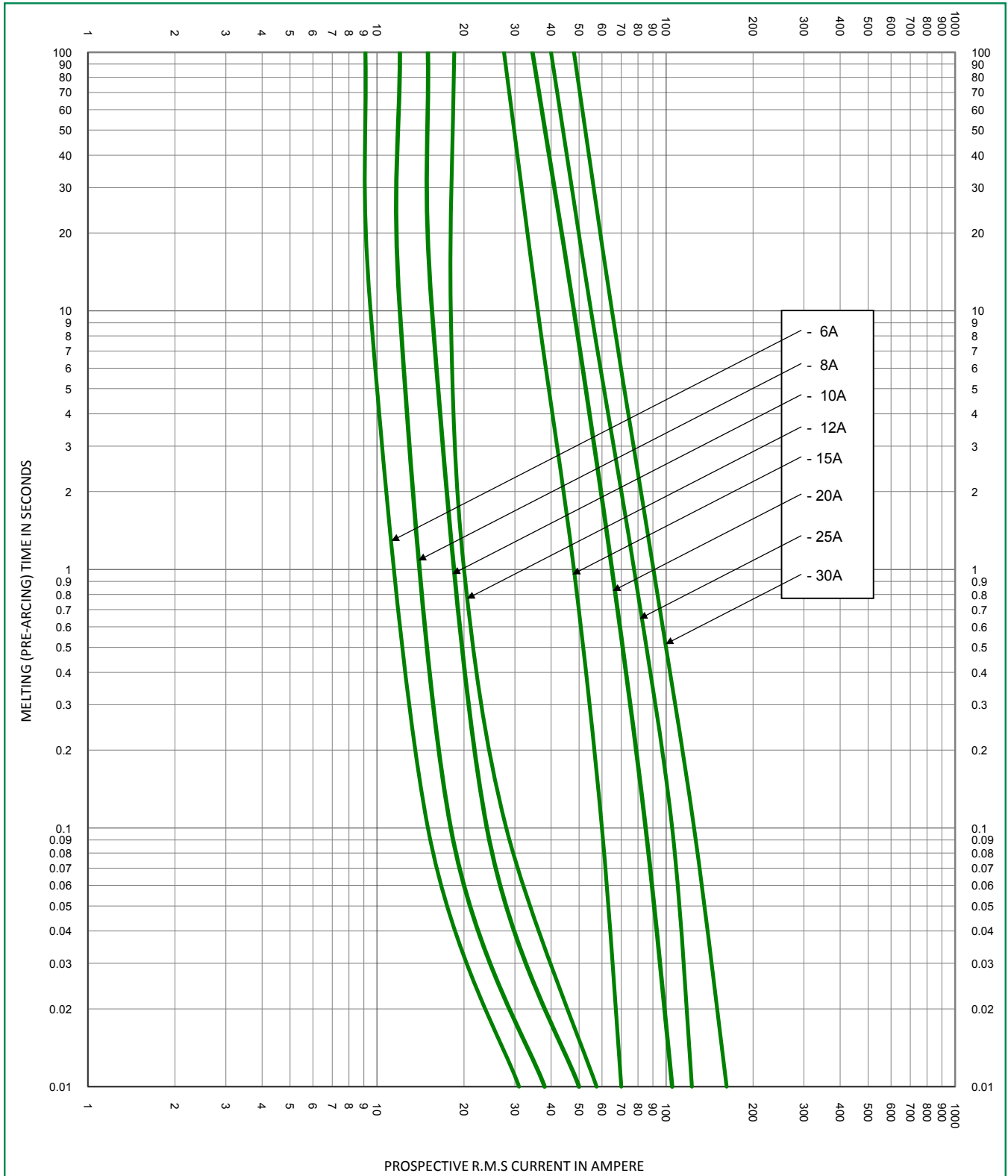


Figure 3

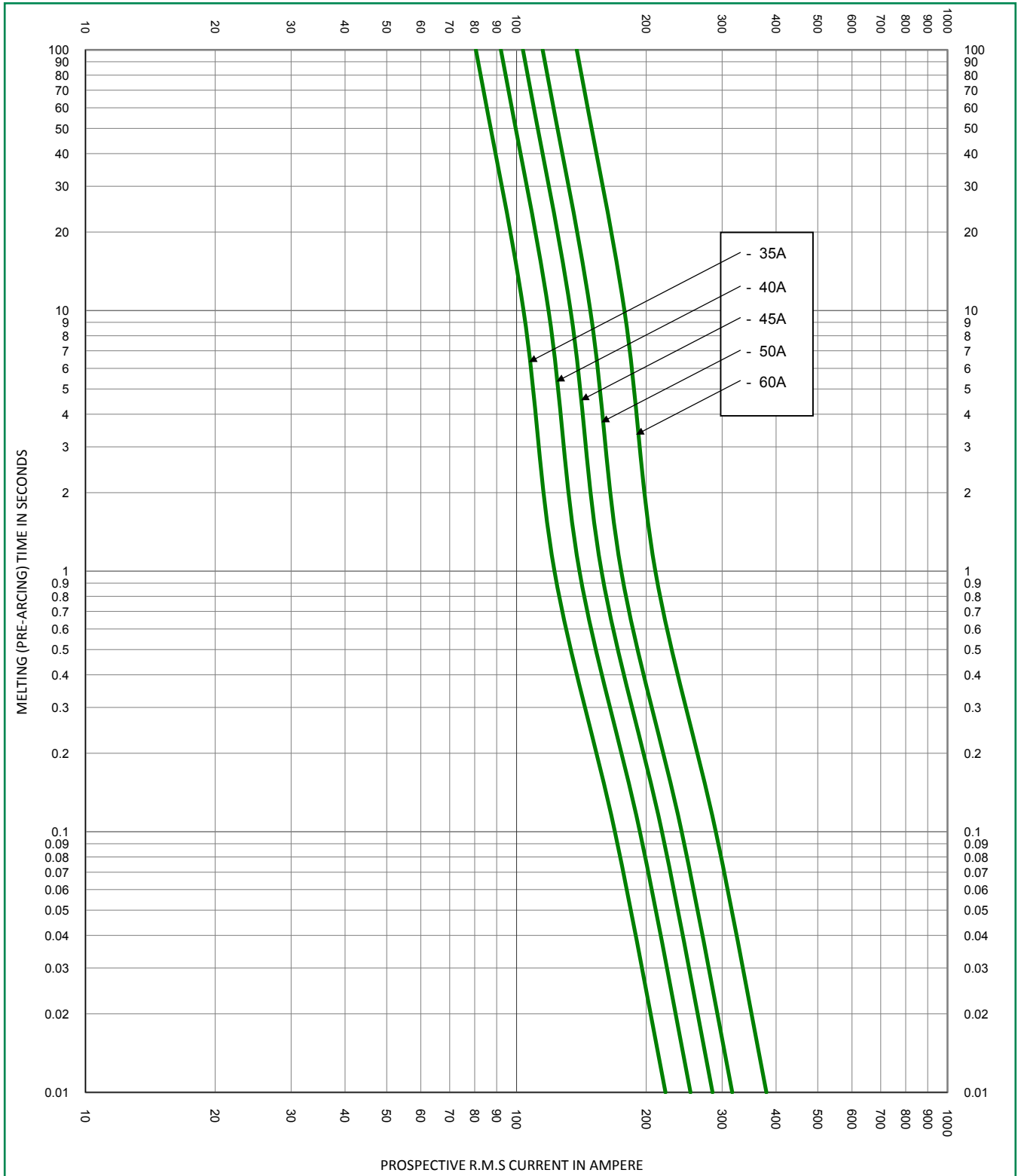
Time Current Curve



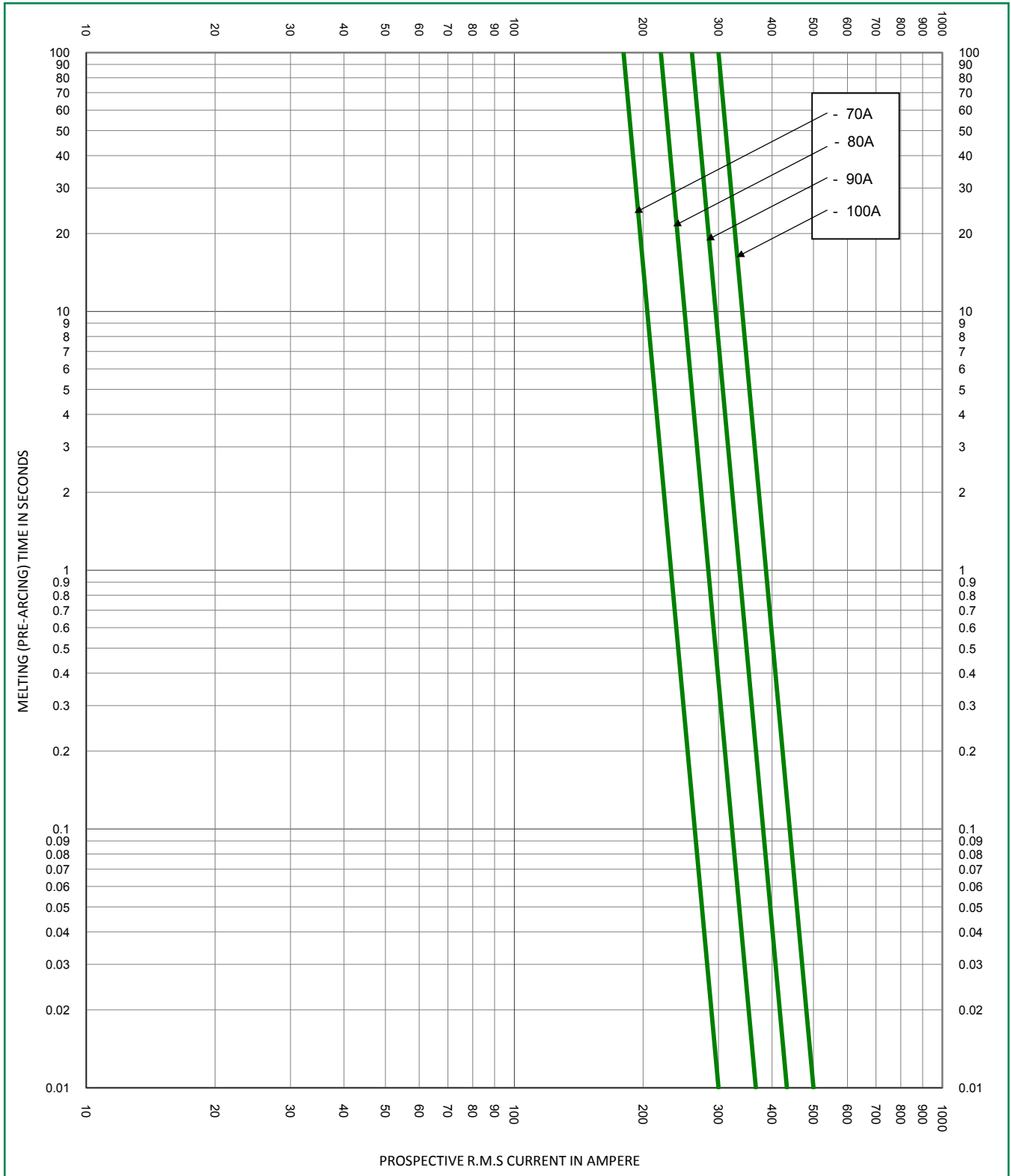
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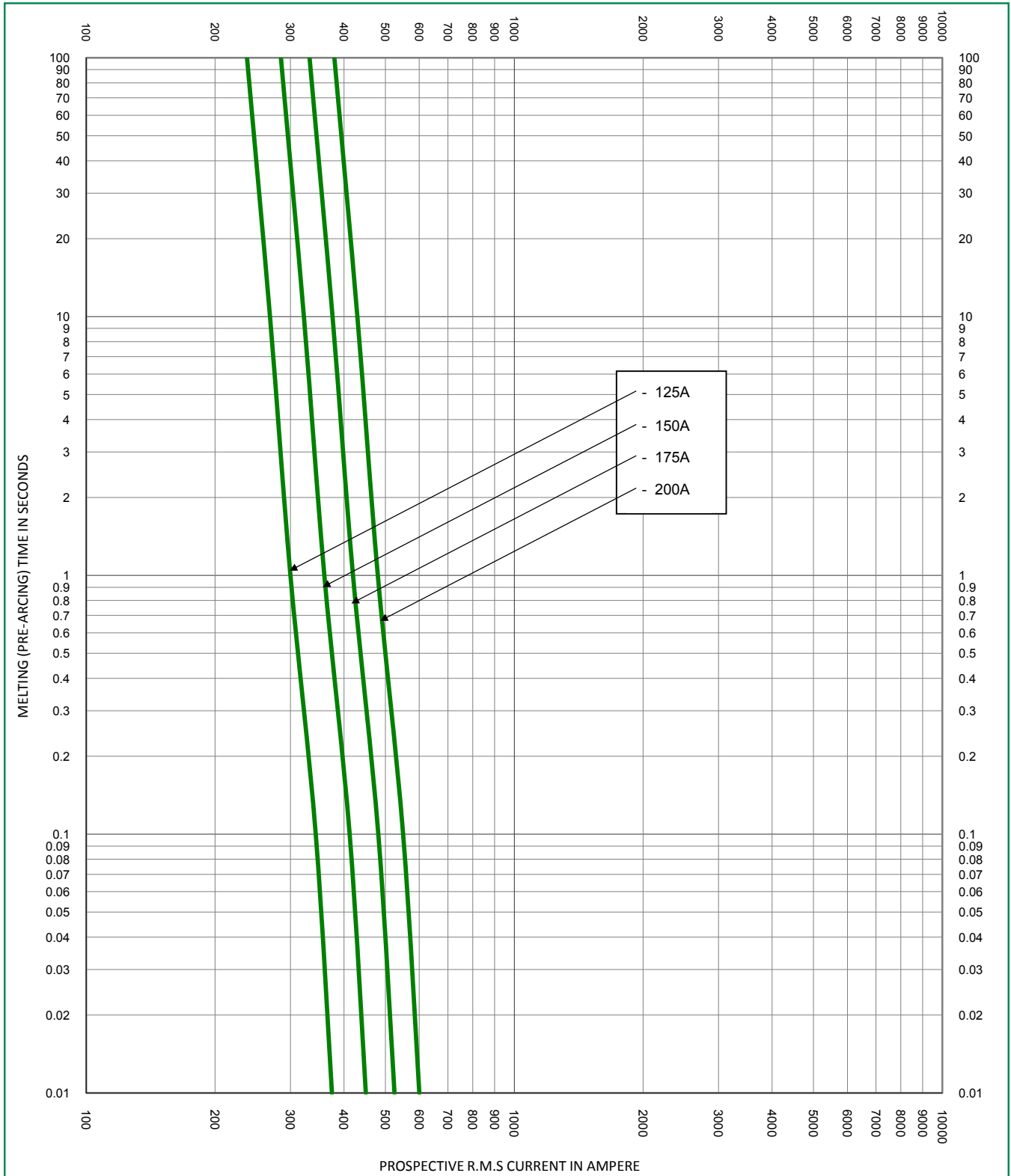
Time Current Curve



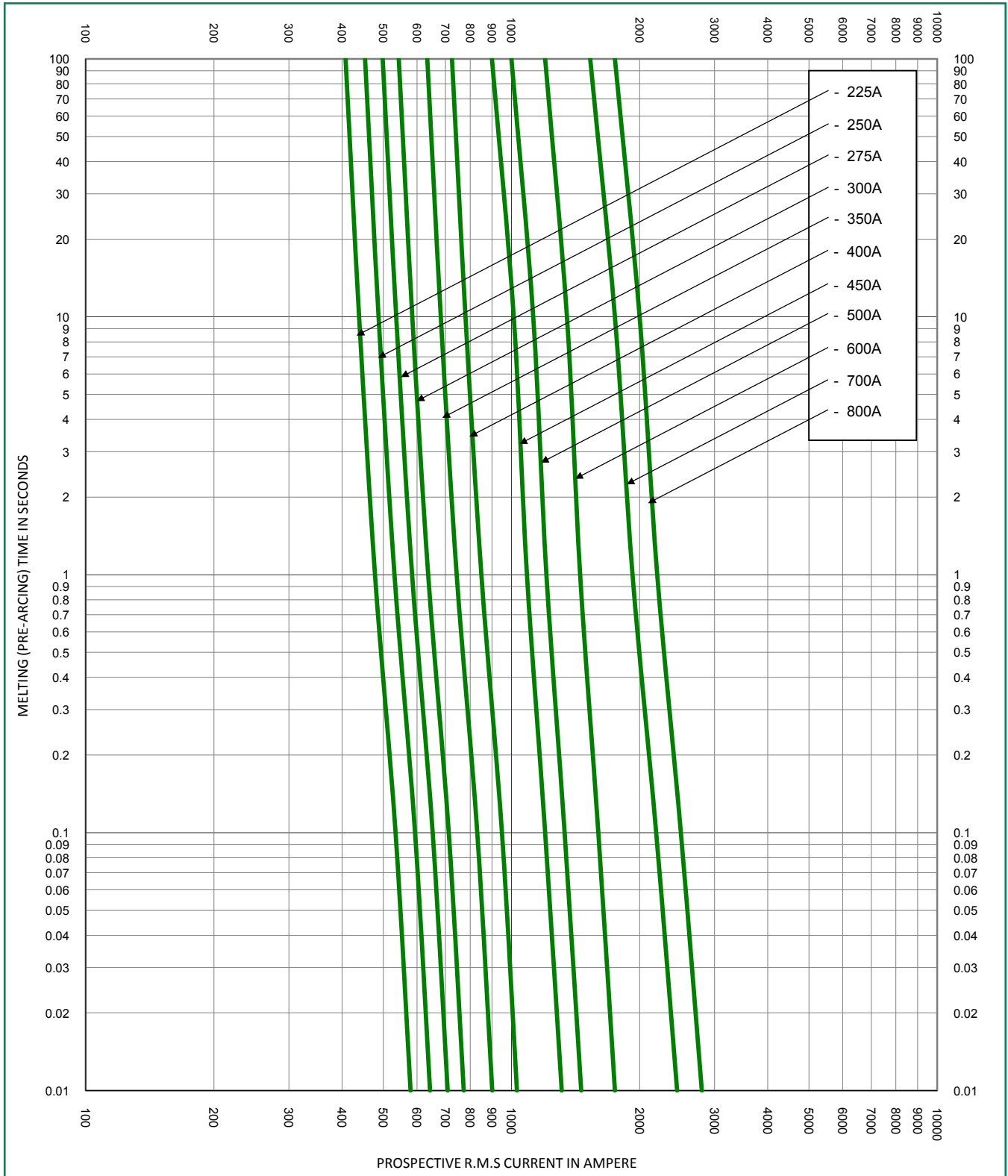
Time Current Curve



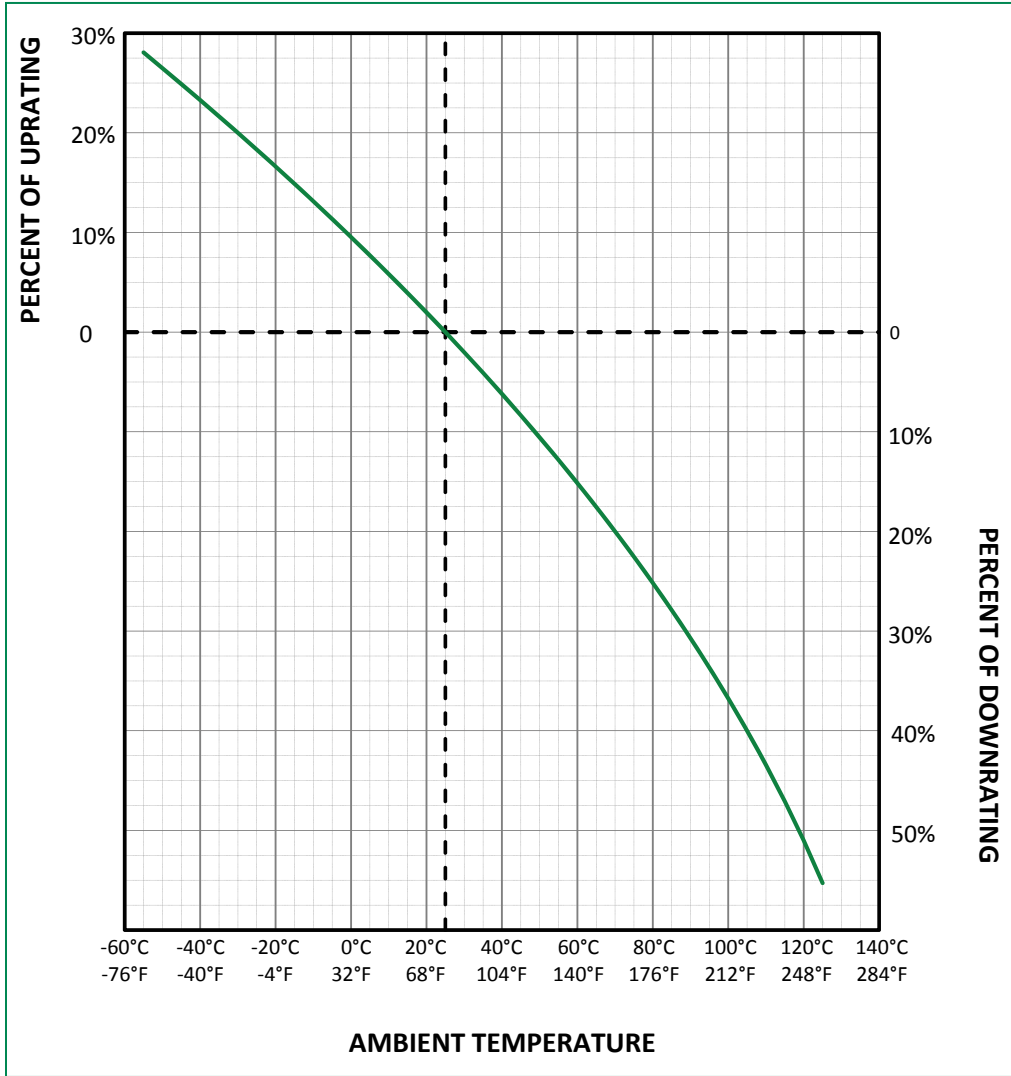
Time Current Curve



Time Current Curve



Temperature De-rating Curve
 (temperature of air immediately surrounding fuse)



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