

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

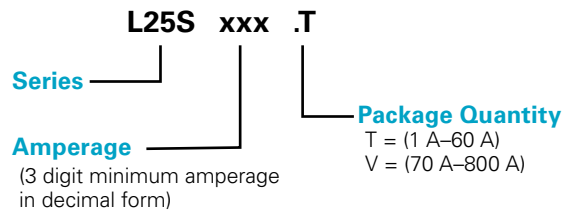
Applications

- 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 1/32 (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) |

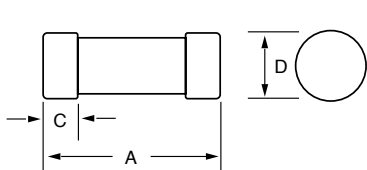


Figure 1

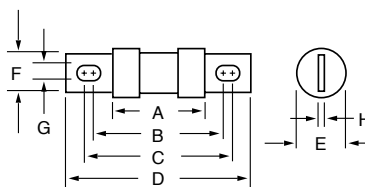


Figure 2

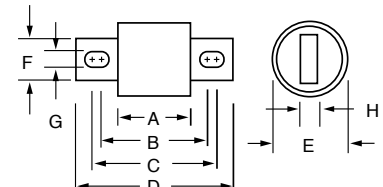
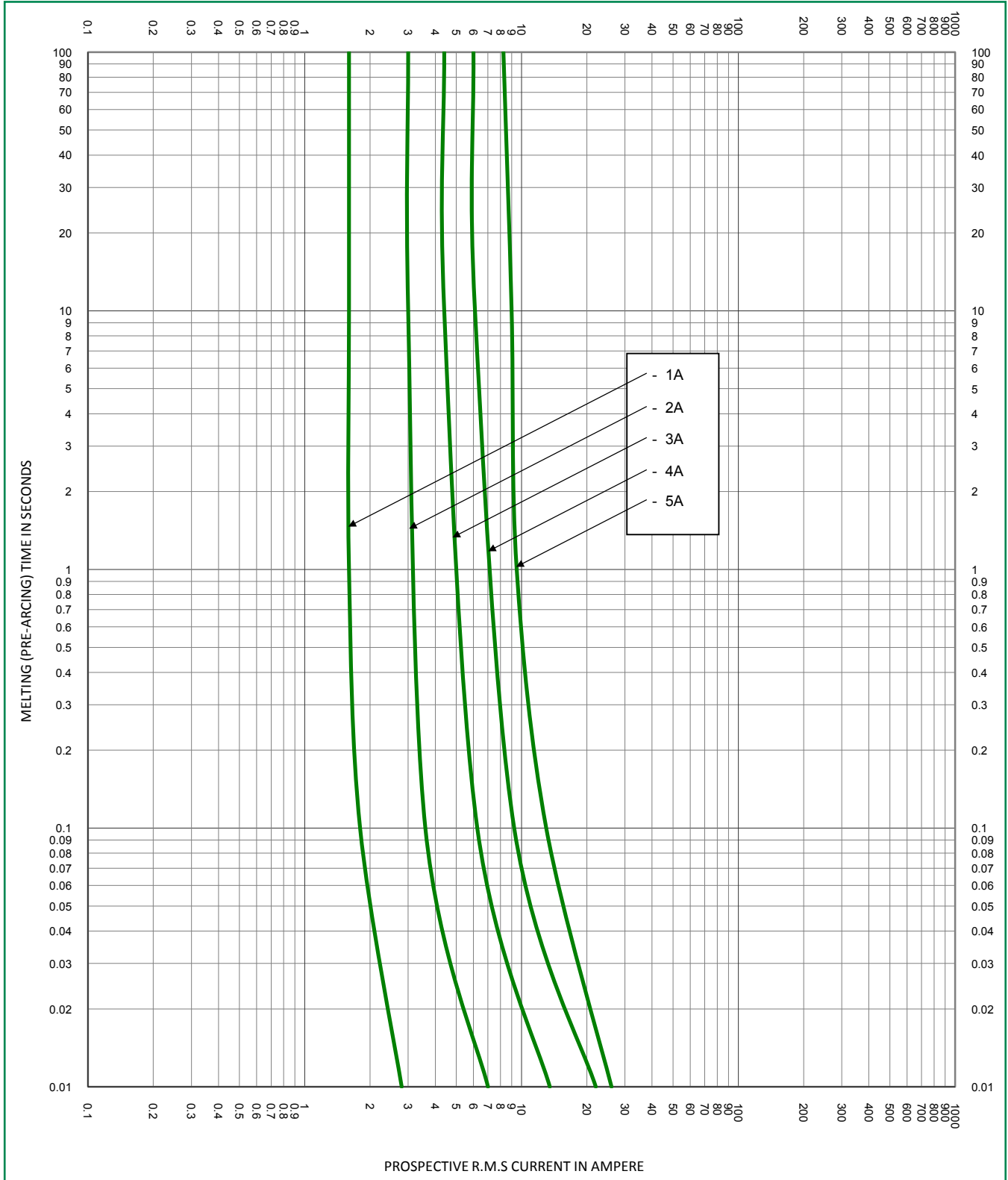
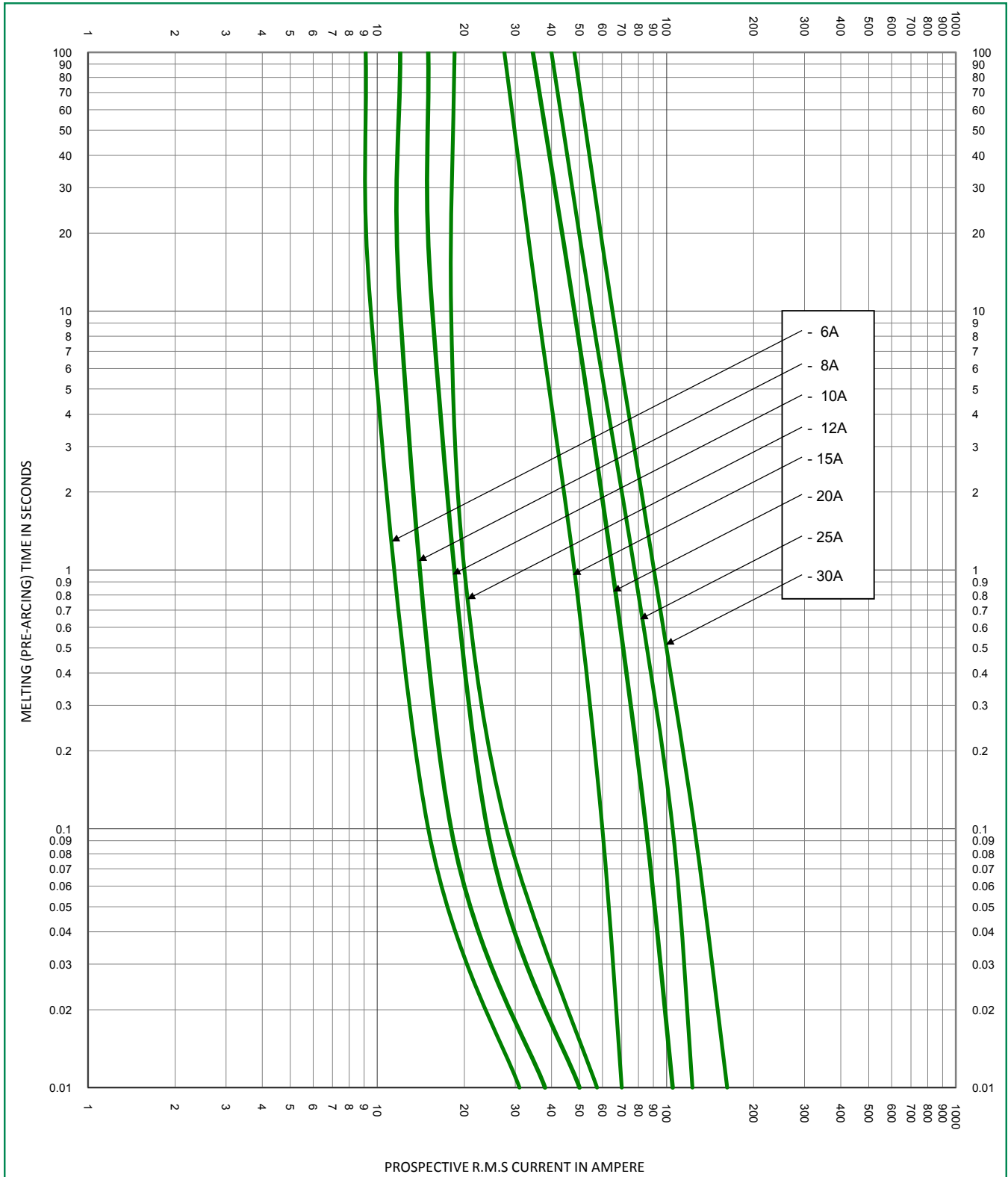


Figure 3

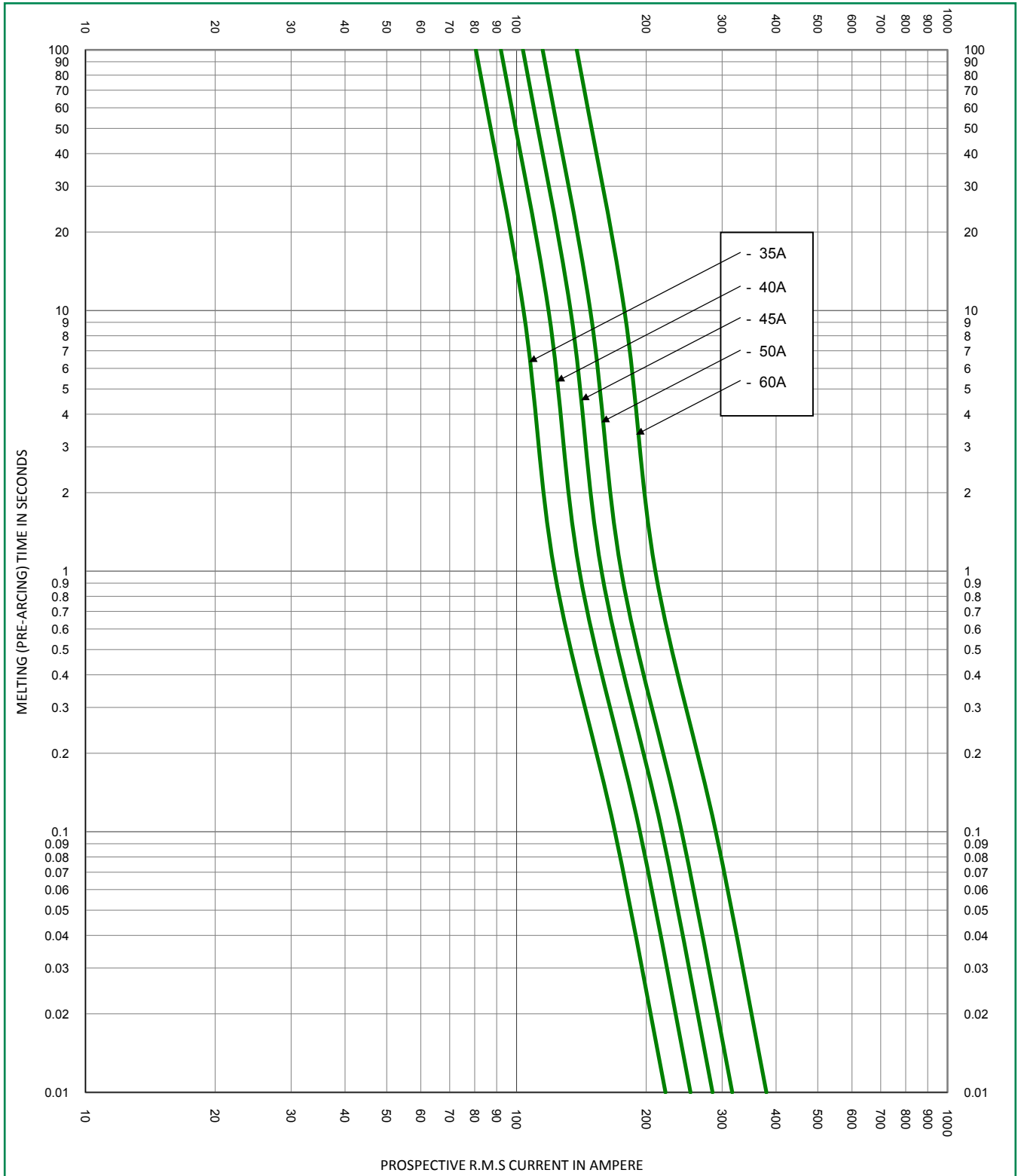
Time Current Curve



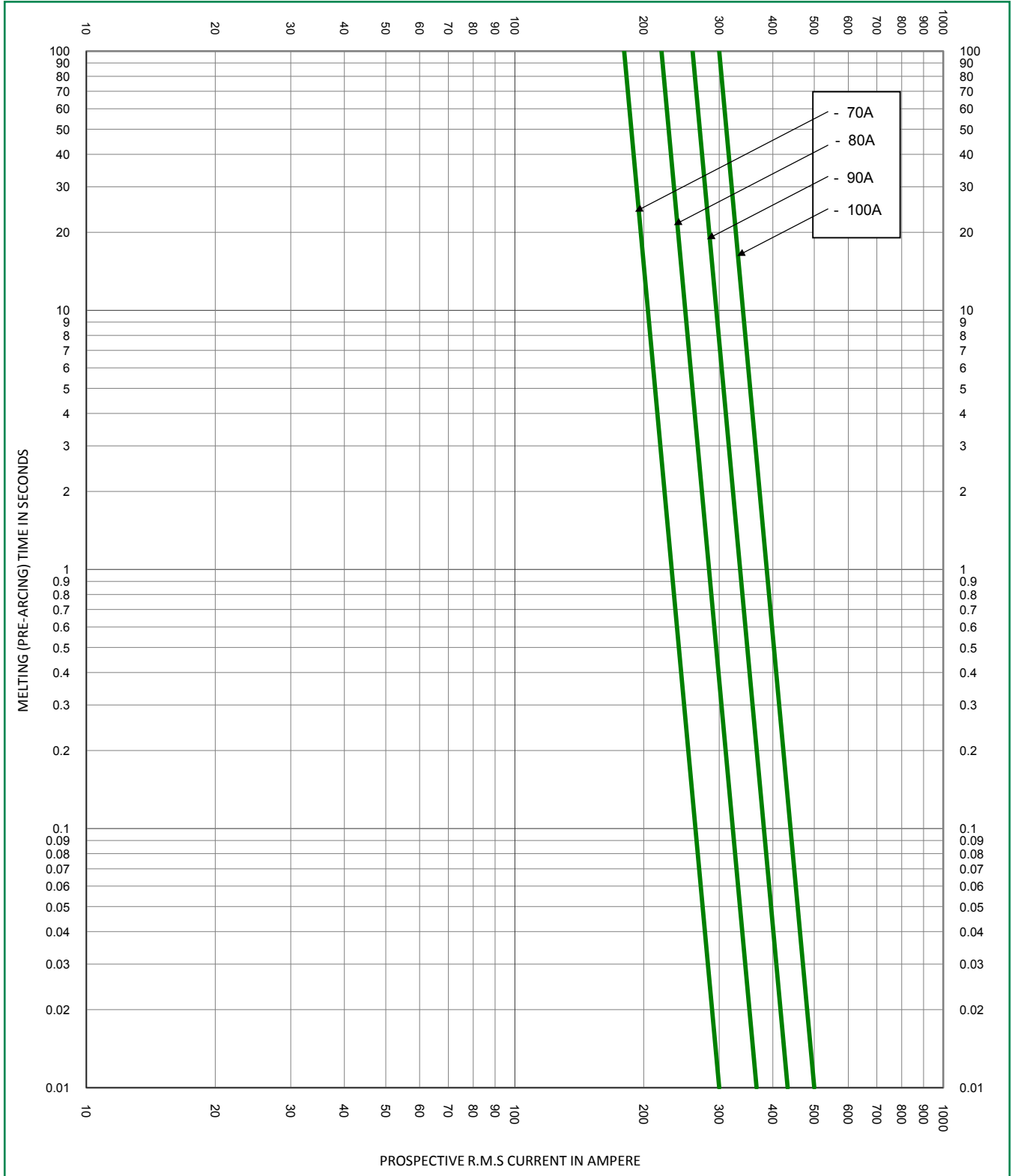
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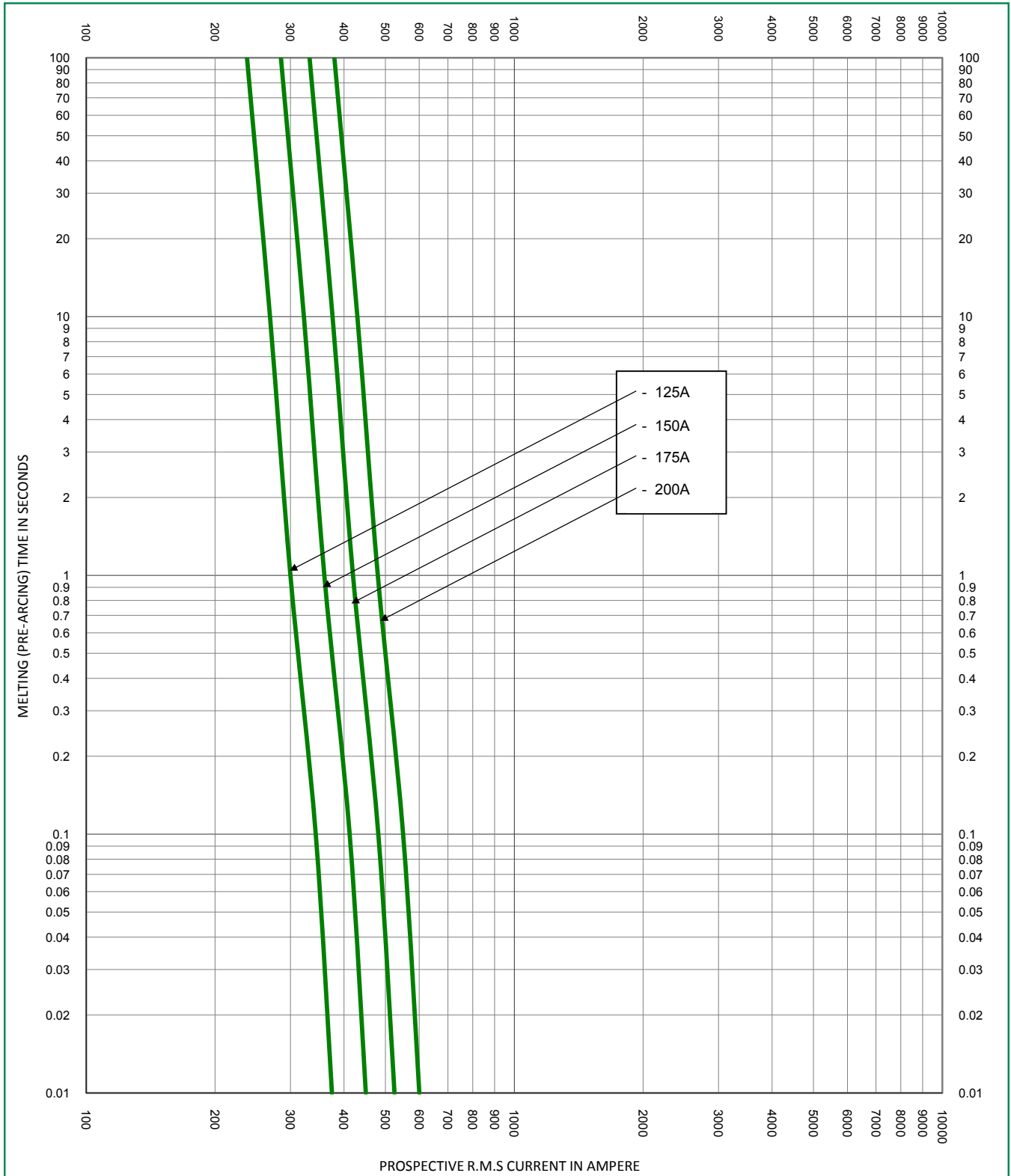
Time Current Curve



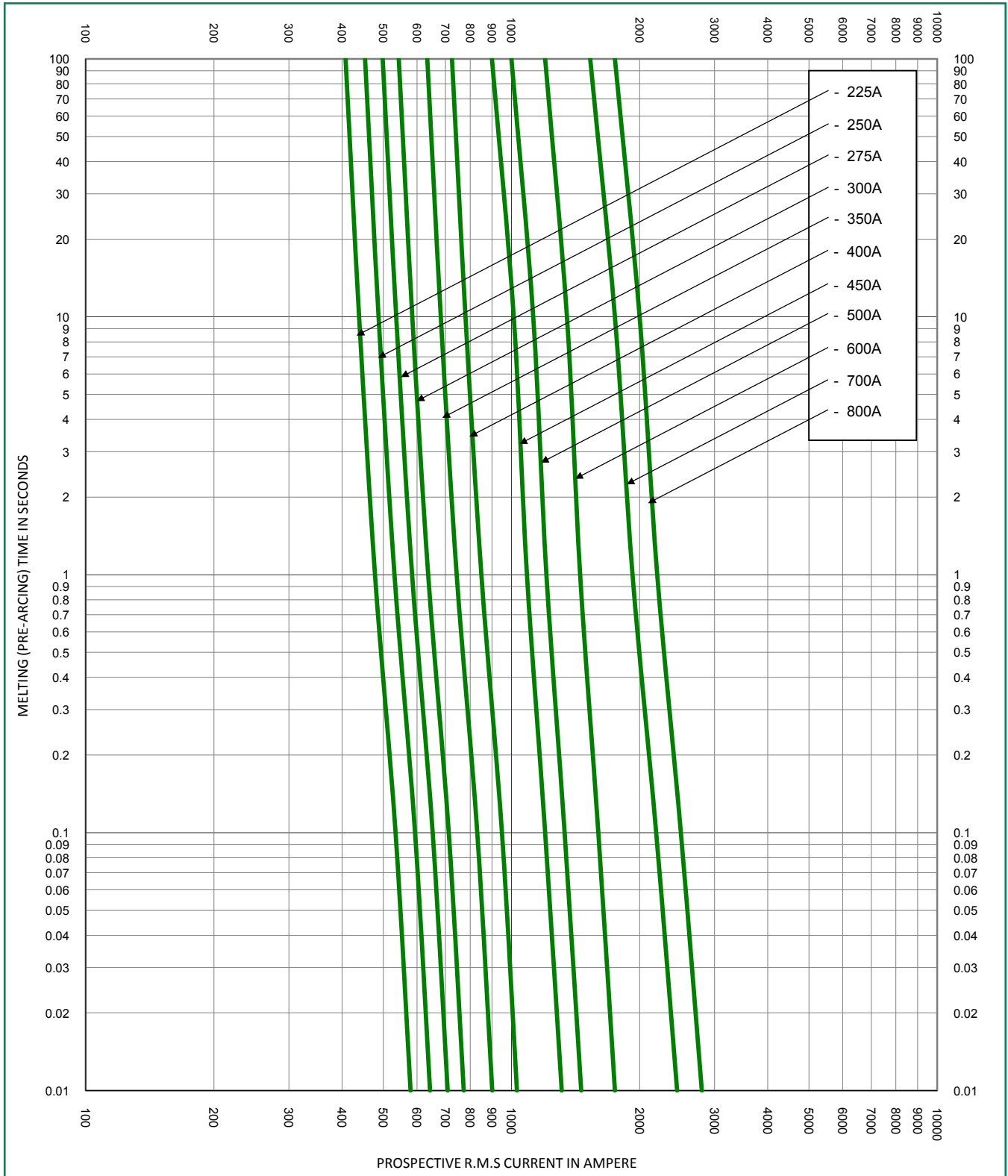
Time Current Curve



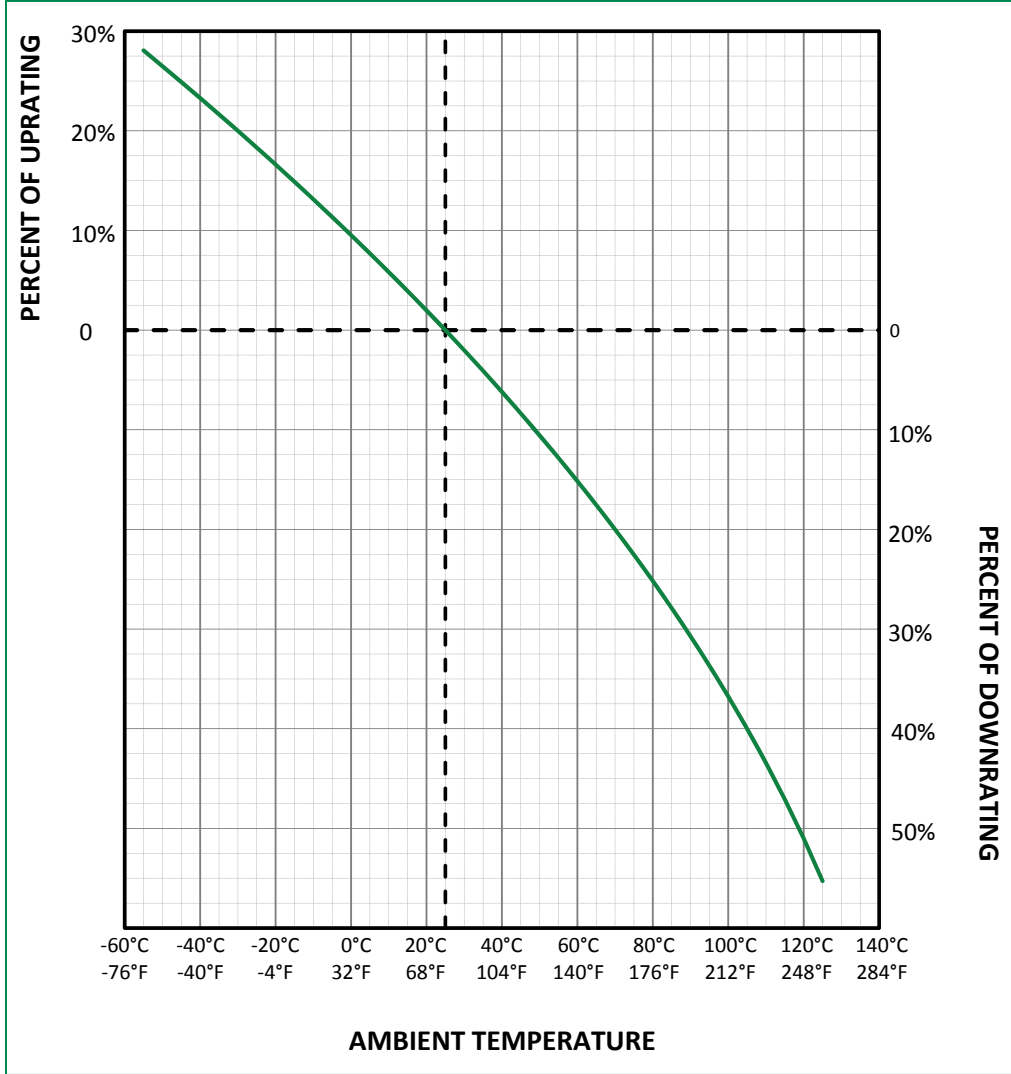
Time Current Curve



Time Current Curve



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



Disclaimer Notice – Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.
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