

POWR-GARD® Fuse

L15S SERIES TRADITIONAL HIGH-SPEED

150 V ac • Very Fast-Acting • 1–1000 A



Description

The L15S series is a traditional North American bolted style high-speed fuse for protection of power semiconductor devices that are rated up to 150 V ac and up to 150 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 with no time delay are 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

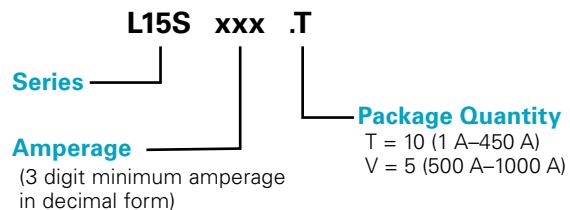
Applications

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

Specifications

Voltage Ratings	Ac: 150 V Dc: 100 V–150 V
Ampere Range	1–1000 A
Interrupting Rating	Ac: 100 kA Dc: 20 kA Self Certified
Approvals	UL Recognized (File: E71611) CSA Recognized (File: LR29862)
Time Constant	10 ms
Material	Body: melamine Cap: copper alloy (silver plated)
Mounting Type	Cylindrical (1–60 A) Bolted Tags (70–1000 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
L15S	005	L15S005	L15S005.T
L15S	500	L15S500	L15S500.V
L15S	1000	L15S1000	L15S1000V

Recommended Fuse Holders

1LFS101/1LFS102
LSCR001/LSCR002
L60030M series (1-30A)
105/125 Series (1-30A)
109/129 Series (35-60A)

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.

Electrical Specifications

CATALOG NUMBER	AMPERAGE RATING	VOLTAGE RATING		INTERRUPT RATING	
		AC	DC	AC	DC
L15S001	1	150	150	100 kA	20 kA
L15S002	2	150	150	100 kA	20 kA
L15S003	3	150	150	100 kA	20 kA
L15S004	4	150	150	100 kA	20 kA
L15S005	5	150	150	100 kA	20 kA
L15S006	6	150	150	100 kA	20 kA
L15S007	7	150	150	100 kA	20 kA
L15S008	8	150	150	100 kA	20 kA
L15S009	9	150	150	100 kA	20 kA
L15S010	10	150	150	100 kA	20 kA
L15S012	12	150	150	100 kA	20 kA
L15S015	15	150	150	100 kA	20 kA
L15S020	20	150	150	100 kA	20 kA
L15S025	25	150	150	100 kA	20 kA
L15S035	35	150	150	100 kA	20 kA
L15S040	40	150	150	100 kA	20 kA
L15S045	45	150	150	100 kA	20 kA
L15S050	50	150	150	100 kA	20 kA
L15S060	60	150	150	100 kA	20 kA
L15S070	70	150	100	100 kA	20 kA
L15S080	80	150	100	100 kA	20 kA
L15S090	90	150	100	100 kA	20 kA
L15S100	100	150	100	100 kA	20 kA
L15S125	125	150	100	100 kA	20 kA
L15S150	150	150	100	100 kA	20 kA
L15S200	200	150	100	100 kA	20 kA
L15S250	250	150	100	100 kA	20 kA
L15S300	300	150	100	100 kA	20 kA
L15S350	350	150	100	100 kA	20 kA
L15S400	400	150	100	100 kA	20 kA
L15S450	450	150	100	100 kA	20 kA
L15S500	500	150	100	100 kA	20 kA
L15S600	600	150	100	100 kA	20 kA
L15S800	800	150	100	100 kA	20 kA
L15S1000	1000	150	100	100 kA	20 kA

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Ordering Information

SERIES	AMPERAGE	AMPERE CODE	CATALOG NUMBER	ORDERING NUMBER	PACK QUANTITY	UPC
L15S	1	001.	L15S001	L15S001.T	10 Pcs/Box	07945800218
L15S	2	002.	L15S002	L15S002.T	10 Pcs/Box	07945800219
L15S	3	003.	L15S003	L15S003.T	10 Pcs/Box	07945800220
L15S	4	004.	L15S004	L15S004.T	10 Pcs/Box	07945800221
L15S	5	005.	L15S005	L15S005.T	10 Pcs/Box	07945800222
L15S	6	006.	L15S006	L15S006.T	10 Pcs/Box	07945800223
L15S	7	007.	L15S007	L15S007.T	10 Pcs/Box	07945800224
L15S	8	008.	L15S008	L15S008.T	10 Pcs/Box	07945800225
L15S	9	009.	L15S009	L15S009.T	10 Pcs/Box	07945800226
L15S	10	010.	L15S010	L15S010.T	10 Pcs/Box	07945800227
L15S	12	012.	L15S012	L15S012.T	10 Pcs/Box	07945800228
L15S	15	015.	L15S015	L15S015.T	10 Pcs/Box	07945800229
L15S	20	020.	L15S020	L15S020.T	10 Pcs/Box	07945800230
L15S	25	025.	L15S025	L15S025.T	10 Pcs/Box	07945800231
L15S	30	030.	L15S030	L15S030.T	10 Pcs/Box	07945800232
L15S	35	035.	L15S035	L15S035.T	10 Pcs/Box	07945800233
L15S	40	040.	L15S040	L15S040.T	10 Pcs/Box	07945800234
L15S	45	045.	L15S045	L15S045.T	10 Pcs/Box	07945800235
L15S	50	050.	L15S050	L15S050.T	10 Pcs/Box	07945800236
L15S	60	060.	L15S060	L15S060.T	10 Pcs/Box	07945800237
L15S	70	070.	L15S070	L15S070.T	10 Pcs/Box	07945800238
L15S	80	080.	L15S080	L15S080.T	10 Pcs/Box	07945800239
L15S	90	090.	L15S090	L15S090.T	10 Pcs/Box	07945800240
L15S	100	100.	L15S100	L15S100.T	10 Pcs/Box	07945800241
L15S	125	125.	L15S125	L15S125.T	10 Pcs/Box	07945800242
L15S	150	150.	L15S150	L15S150.T	10 Pcs/Box	07945800243
L15S	200	200.	L15S200	L15S200.T	10 Pcs/Box	07945800244
L15S	250	250.	L15S250	L15S250.T	10 Pcs/Box	07945800245
L15S	300	300.	L15S300	L15S300.T	10 Pcs/Box	07945800246
L15S	350	350.	L15S350	L15S350.T	10 Pcs/Box	07945800247
L15S	400	400.	L15S400	L15S400.T	10 Pcs/Box	07945800248
L15S	450	450.	L15S450	L15S450.T	10 Pcs/Box	07945800249
L15S	500	500.	L15S500	L15S500.V	5 Pcs/Box	07945800250
L15S	600	600.	L15S600	L15S600.V	5 Pcs/Box	07945800251
L15S	800	800.	L15S800	L15S800.V	5 Pcs/Box	07945800252
L15S	1000	1000	L15S1000	L15S1000V	5 Pcs/Box	07945800253

Dimensions

AMPERE RATING	FIG. NO.	DIMENSIONS INCHES (MM)							
		A	B	C	D	E	F	G	H
1 – 30	1	1½ (38.1)	—	¾ (9.5)	1¾ ₃₂ (10.3)	—	—	—	—
31 – 60	1	2 (50.8)	—	⅝ (15.9)	1¾ ₁₆ (20.6)	—	—	—	—
61 – 450	2	1½ ₃₂ (29.4)	1⅞ (47.6)	2¾ ₁₆ (55.6)	2² ₃₂ (67.5)	1 (25.4)	⅔ ₆₄ (17.1)	⅝ (7.9)	¾ ₁₆ (4.8)
451 – 1000	2	1¼ (31.8)	1¹⁹ ₁₆ (49.2)	2⁹ ₁₆ (65.1)	3½ (88.9)	1½ (38.1)	1 (25.4)	1¾ ₃₂ (10.3)	¼ (6.4)

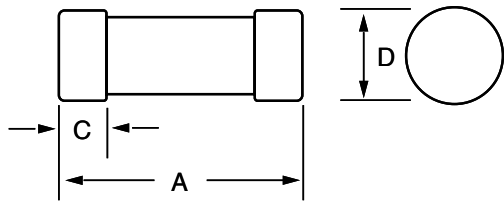


Figure 1

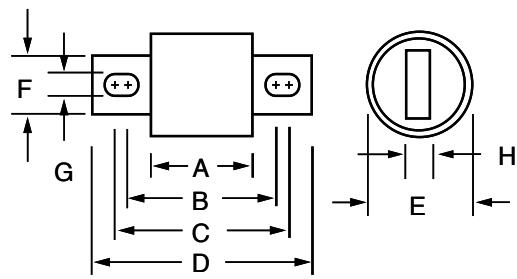
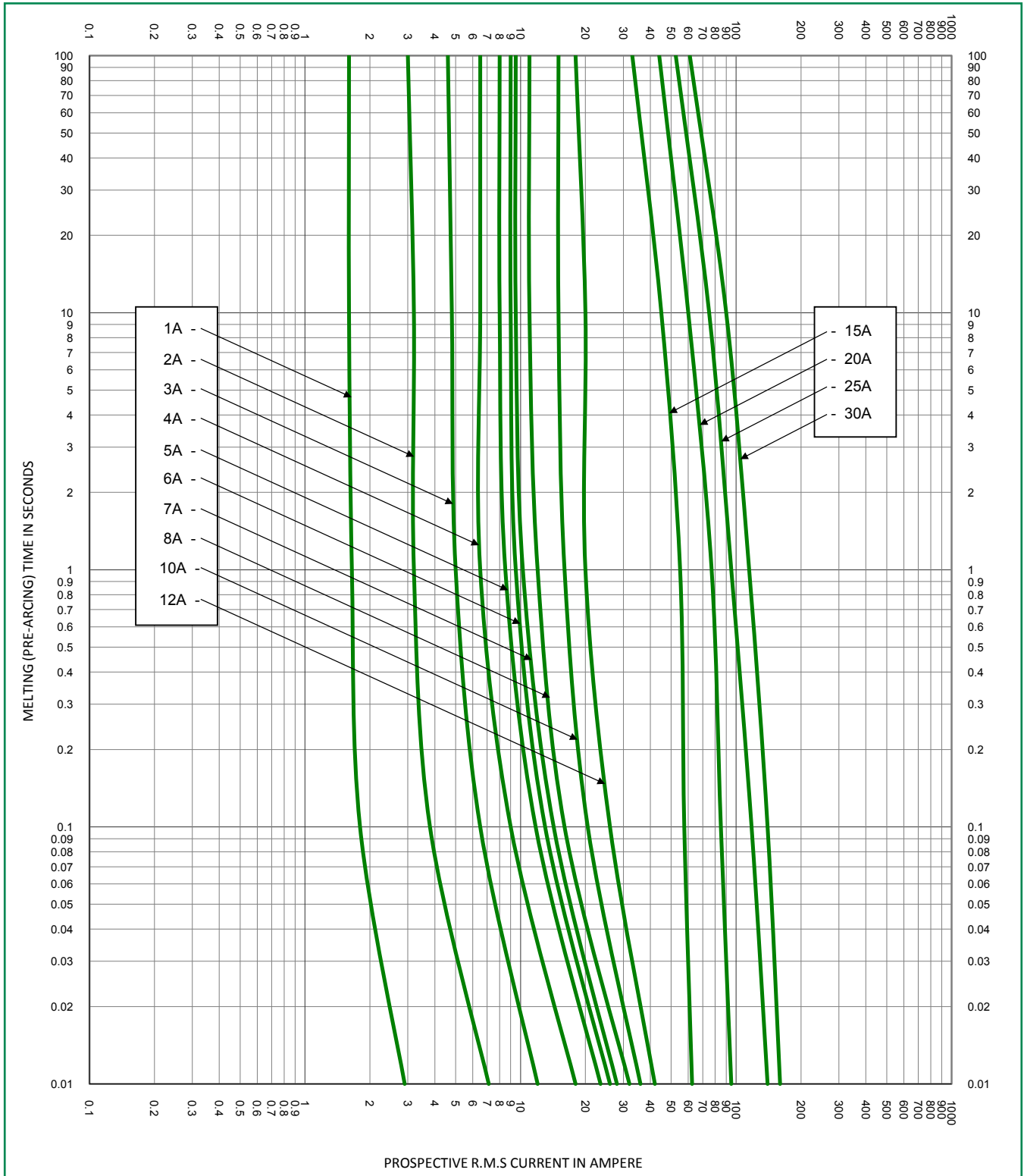
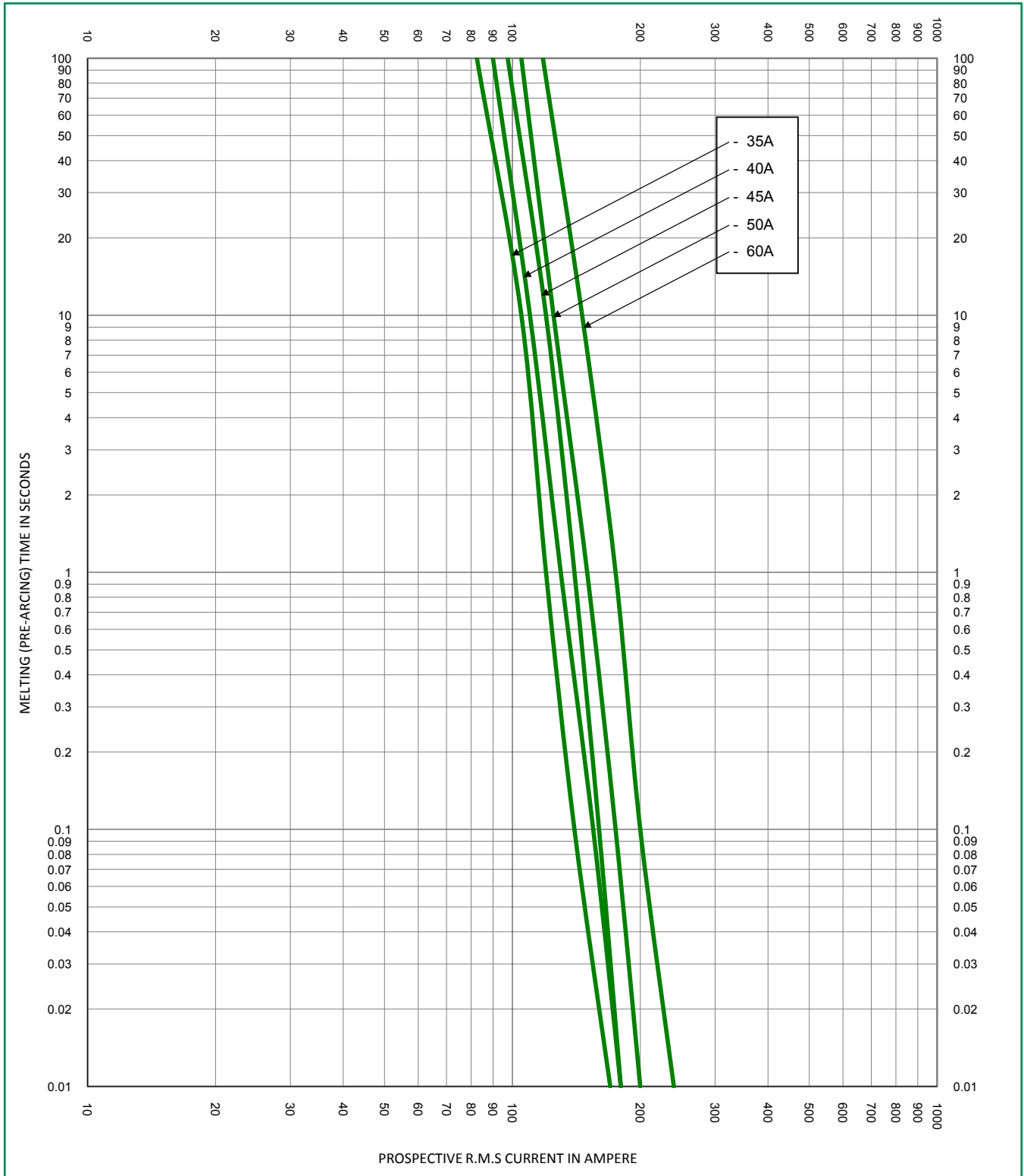


Figure 2

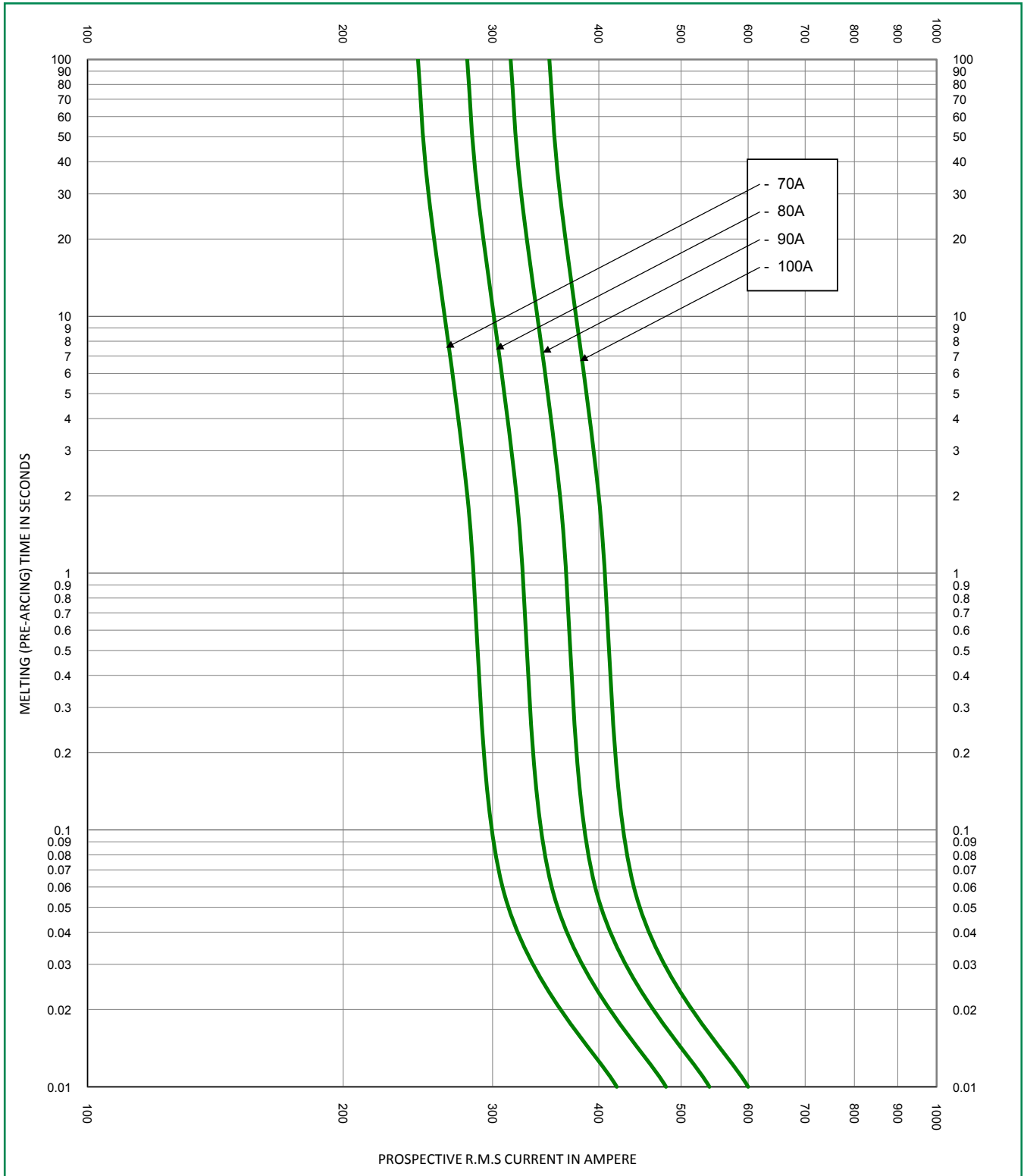
Time Current Curve



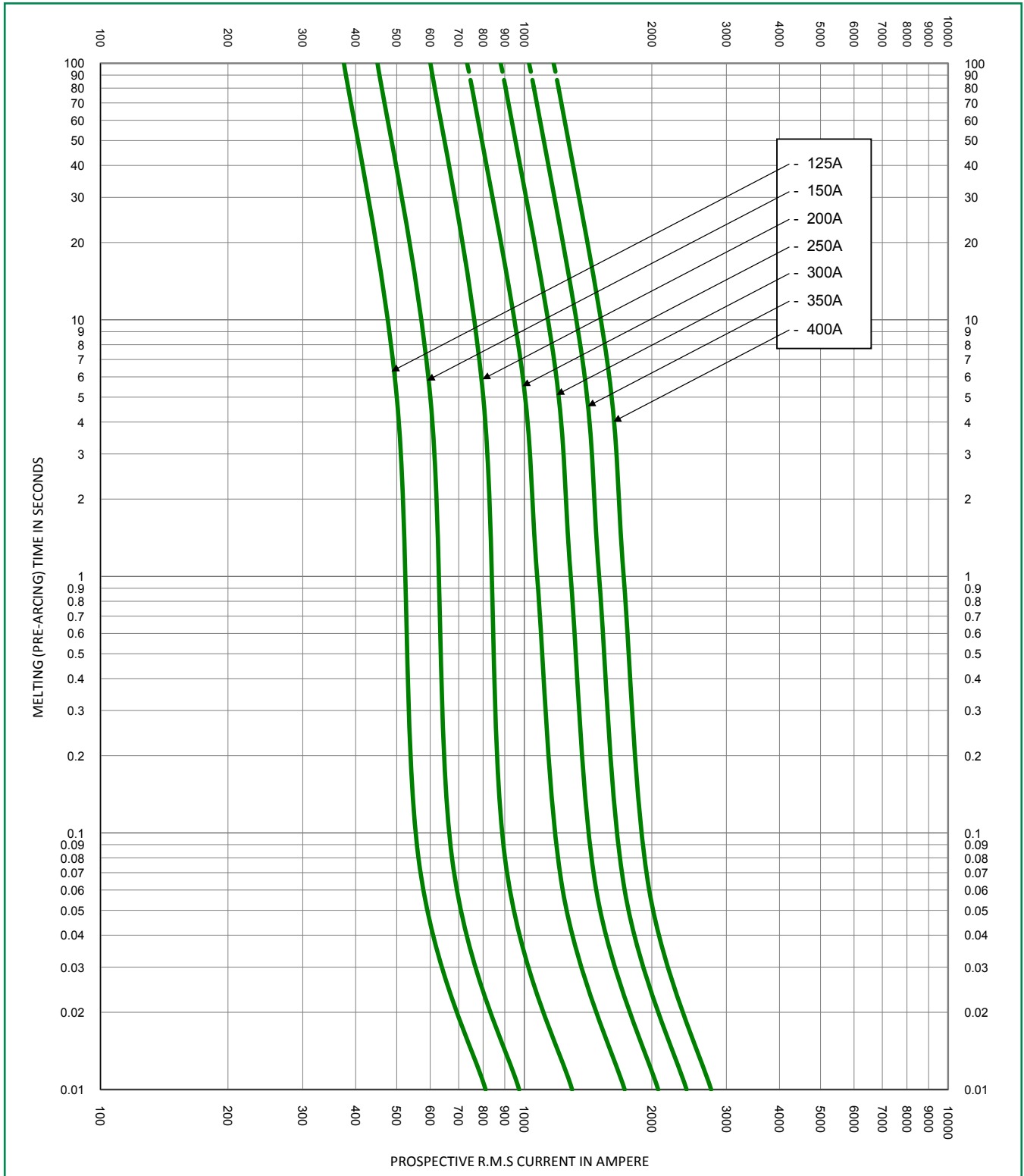
Time Current Curve



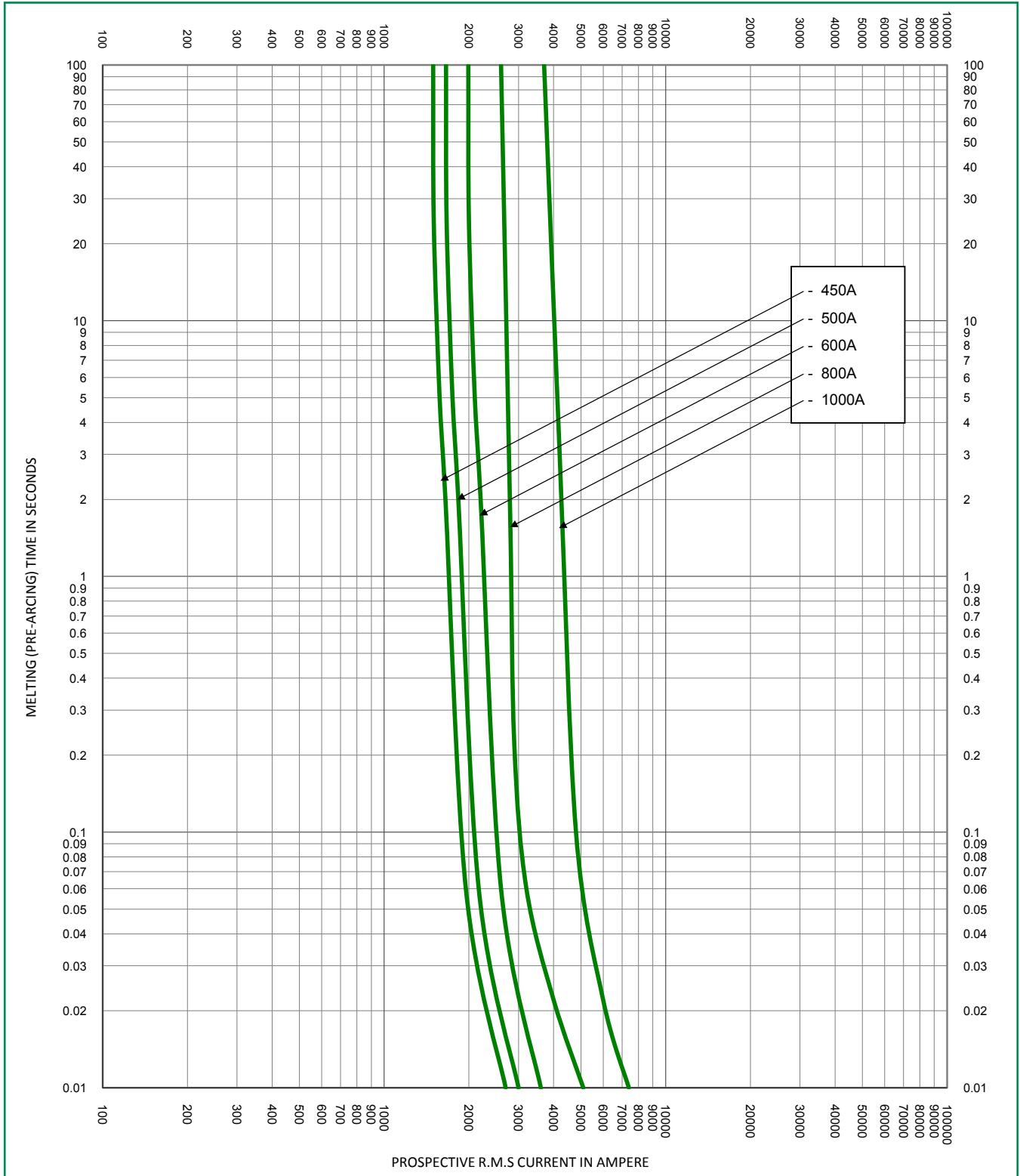
Time Current Curve



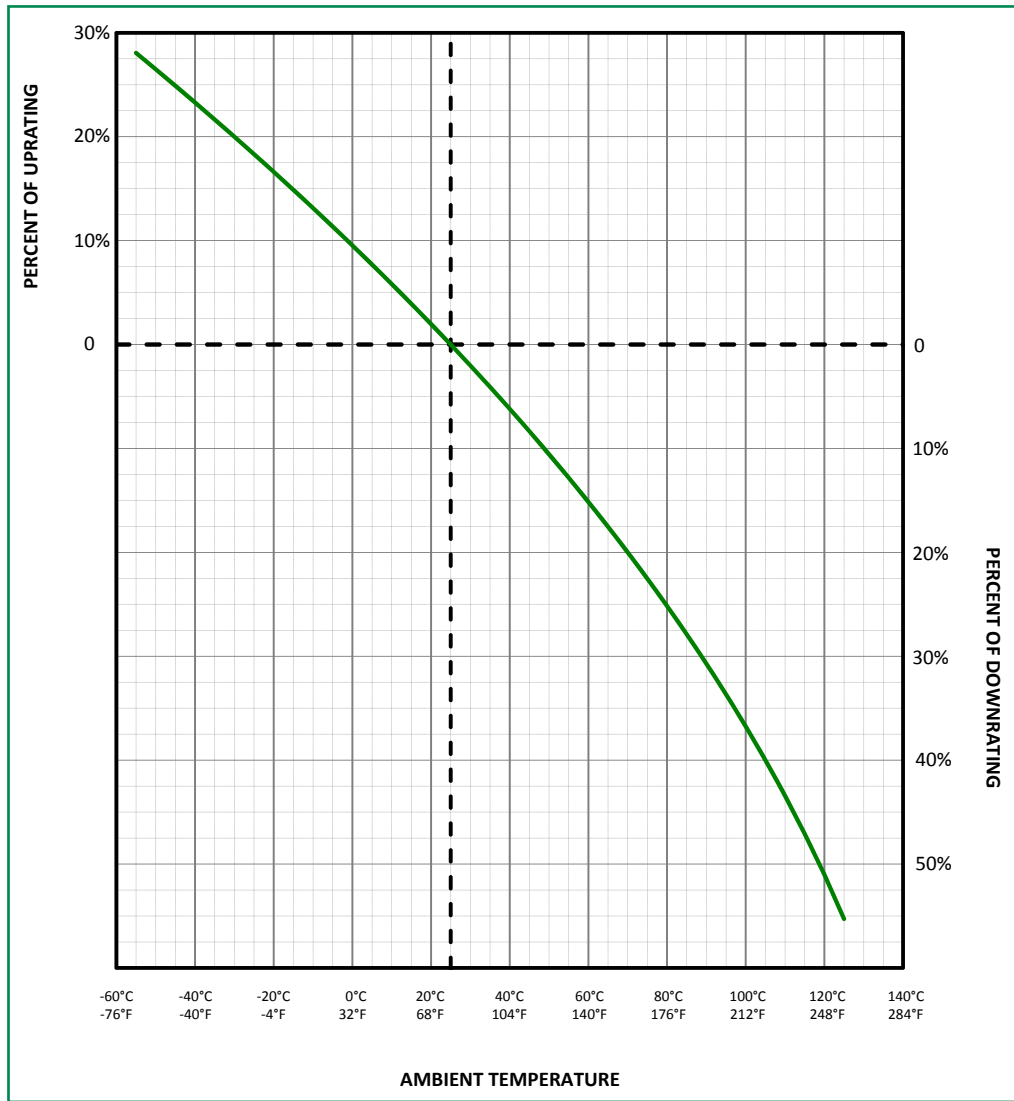
Time Current Curve



Time Current Curve



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



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