

POWR-SPEED® Fuse

L75QS SERIES HIGH-SPEED ROUND BODY

750 V dc • Very Fast Acting • 35–800 A



Description

The L75QS series is a next generation high-speed fuse for the protection of power semiconductor devices and is designed in the traditional round body bolted style package.

L75QS series high-speed fuses rated at 750 V dc are extremely current limiting and are used to protect power converters, drives and control circuit applications. Designed with lower I^2t performance characteristics, these fuses provide balanced performance to extend longevity while lowering potentially damaging heat energy to the devices being protected.

In addition L75QS series fuses have been designed with a universal mounting option to meet customer requirements for installation into a variety of application configurations.

Littelfuse POWR-SPEED products offer optimized circuit protection at the extremely fast speed required to protect modern day, sensitive, high-power semiconductor devices.

Features

- Compliance with US and Canadian requirements
- Traditional North American bolted style dimensions
- 750 V dc performance
- Direct bus-bar mount or stud mount design
- Halogen free, RoHS and REACH compliant

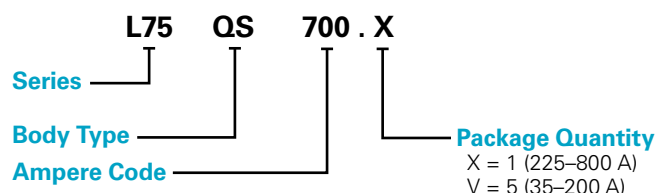
Applications

- Power converters (inverters, rectifiers)
- Power supplies, UPS
- EV charging stations
- Variable speed drives
- Dc common bus

Specifications

Voltage Rating	Dc: 750 V
Amperage Rating	35–800 A
Interrupting Rating	Dc: 50 kA
Time Constant	10 ms
Material	Body: Melamine Caps: Copper Alloy
Approvals	UL Recognized (E71611) cURus (E71611)
Environmental	RoHS compliant, REACH
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	BODY TYPE	AMPERE CODE	PACKAGE QUANTITY	CATALOG NUMBER	ORDERING NUMBER
L75	QS	700	1	L75QS700	L75QS700.X

Recommended Fuse Blocks

LSCR101 (35–100 A)
LSCR102 (125–800 A)
LSCR103 (450–800 A)



Web Resources

Download technical documents: [Littelfuse.com/L75QS](https://www.littelfuse.com/L75QS)

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

POWR-SPEED® Fuse

L75QS SERIES HIGH-SPEED ROUND BODY

Electrical Specifications

CATALOG NUMBER	AMPERAGE RATING	VOLTAGE RATING	INTERRUPT RATING	MELTING (PRE-ARC) I ² T (A ² s)	TOTAL CLEARING I ² T (A ² s)	WATTS LOSS AT 80 % RATED CURRENT	WATTS LOSS AT 100 % RATED CURRENT
		DC	DC		50 KA @ 750 V DC	(W)	(W)
L75QS035	35	750	50 kA	129	406	5	8
L75QS040	40	750	50 kA	153	549	6	9
L75QS050	50	750	50 kA	196	776	6	12
L75QS060	60	750	50 kA	269	895	9	15
L75QS070	70	750	50 kA	359	1,399	10	20
L75QS080	80	750	50 kA	452	1,841	12	22
L75QS090	90	750	50 kA	625	2,498	13	25
L75QS100	100	750	50 kA	966	3,053	15	30
L75QS125	125	750	50 kA	2,208	7,069	13	24
L75QS150	150	750	50 kA	3,026	10,401	17	32
L75QS175	175	750	50 kA	4,216	14,786	20	38
L75QS200	200	750	50 kA	5,529	20,433	22	42
L75QS225	225	750	50 kA	9,226	27,520	22	40
L75QS250	250	750	50 kA	10,999	34,291	27	46
L75QS300	300	750	50 kA	16,296	49,297	31	57
L75QS350	350	750	50 kA	24,778	70,696	35	67
L75QS400	400	750	50 kA	34,225	102,567	41	79
L75QS450	450	750	50 kA	38,946	119,606	45	81
L75QS500	500	750	50 kA	42,747	132,252	56	112
L75QS600	600	750	50 kA	67,363	189,333	67	138
L75QS700	700	750	50 kA	99,387	302,425	72	138
L75QS800	800	750	50 kA	156,137	421,500	76	142

Ordering Information

SERIES	AMPERAGE RATING	AMPERE CODE	CATALOG NUMBER	ORDERING NUMBER	PACK QUANTITY	UPC
L75QS	35	035	L75QS035	L75QS035.V	5 Pcs/ Box	07945823571
L75QS	40	040	L75QS040	L75QS040.V	5 Pcs/ Box	07945823572
L75QS	50	050	L75QS050	L75QS050.V	5 Pcs/ Box	07945823573
L75QS	60	060	L75QS060	L75QS060.V	5 Pcs/ Box	07945823574
L75QS	70	070	L75QS070	L75QS070.V	5 Pcs/ Box	07945823575
L75QS	80	080	L75QS080	L75QS080.V	5 Pcs/ Box	07945823576
L75QS	90	090	L75QS090	L75QS090.V	5 Pcs/ Box	07945823577
L75QS	100	100	L75QS100	L75QS100.V	5 Pcs/ Box	07945823578
L75QS	125	125	L75QS125	L75QS125.V	5 Pcs/ Box	07945823579
L75QS	150	150	L75QS150	L75QS150.V	5 Pcs/ Box	07945823580
L75QS	175	175	L75QS175	L75QS175.V	5 Pcs/ Box	07945823581
L75QS	200	200	L75QS200	L75QS200.V	5 Pcs/ Box	07945823582
L75QS	225	225	L75QS225	L75QS225.X	1 Pc/ Box	07945823583
L75QS	250	250	L75QS250	L75QS250.X	1 Pc/ Box	07945823584
L75QS	300	300	L75QS300	L75QS300.X	1 Pc/ Box	07945823585
L75QS	350	350	L75QS350	L75QS350.X	1 Pc/ Box	07945823586
L75QS	400	400	L75QS400	L75QS400.X	1 Pc/ Box	07945823587
L75QS	450	450	L75QS450	L75QS450.X	1 Pc/ Box	07945823588
L75QS	500	500	L75QS500	L75QS500.X	1 Pc/ Box	07945823589
L75QS	600	600	L75QS600	L75QS600.X	1 Pc/ Box	07945823590
L75QS	700	700	L75QS700	L75QS700.X	1 Pc/ Box	07945823591
L75QS	800	800	L75QS800	L75QS800.X	1 Pc/ Box	07945823592

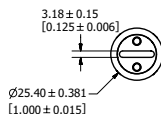
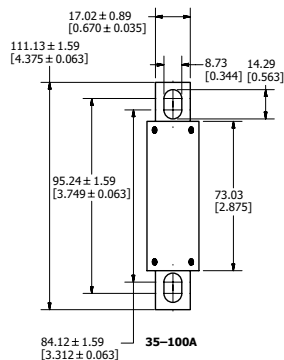
POWR-SPEED® Fuse

L75QS SERIES HIGH-SPEED ROUND BODY

Dimensions

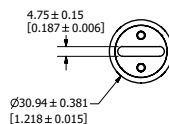
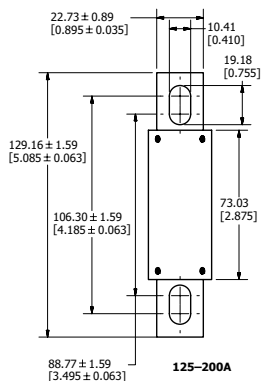
Millimeters [inches]

Document Number: OL-L75QS000



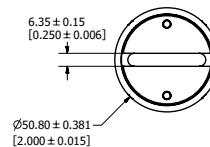
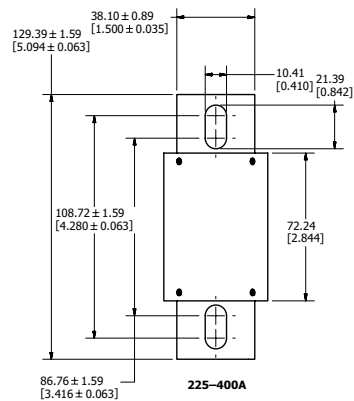
Stud Size: M8 (5/16")

Recommended Torque: 15 Nm (132.76 in-lb)



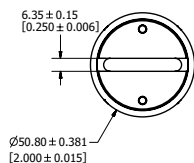
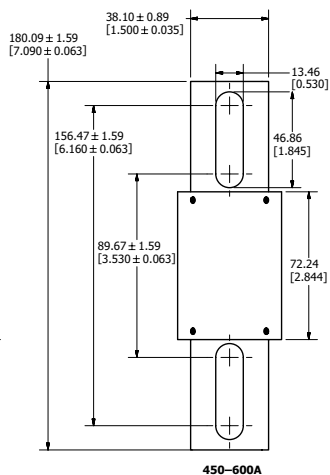
Stud Size: M8 (5/16")

Recommended Torque: 15 Nm (132.76 in-lb)



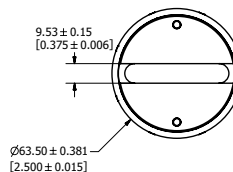
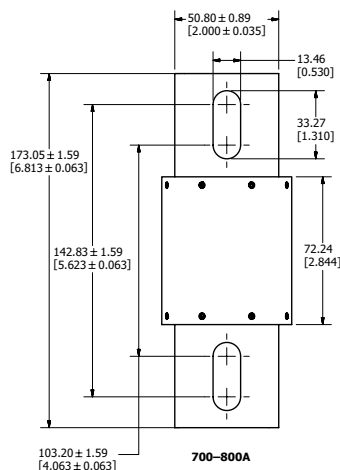
Stud Size: M8 (5/16")

Recommended Torque: 15 Nm (132.76 in-lb)



Stud Size: M12 (1/2")

Recommended Torque: 54 Nm (477.94 in-lb)



Stud Size: M12 (1/2")

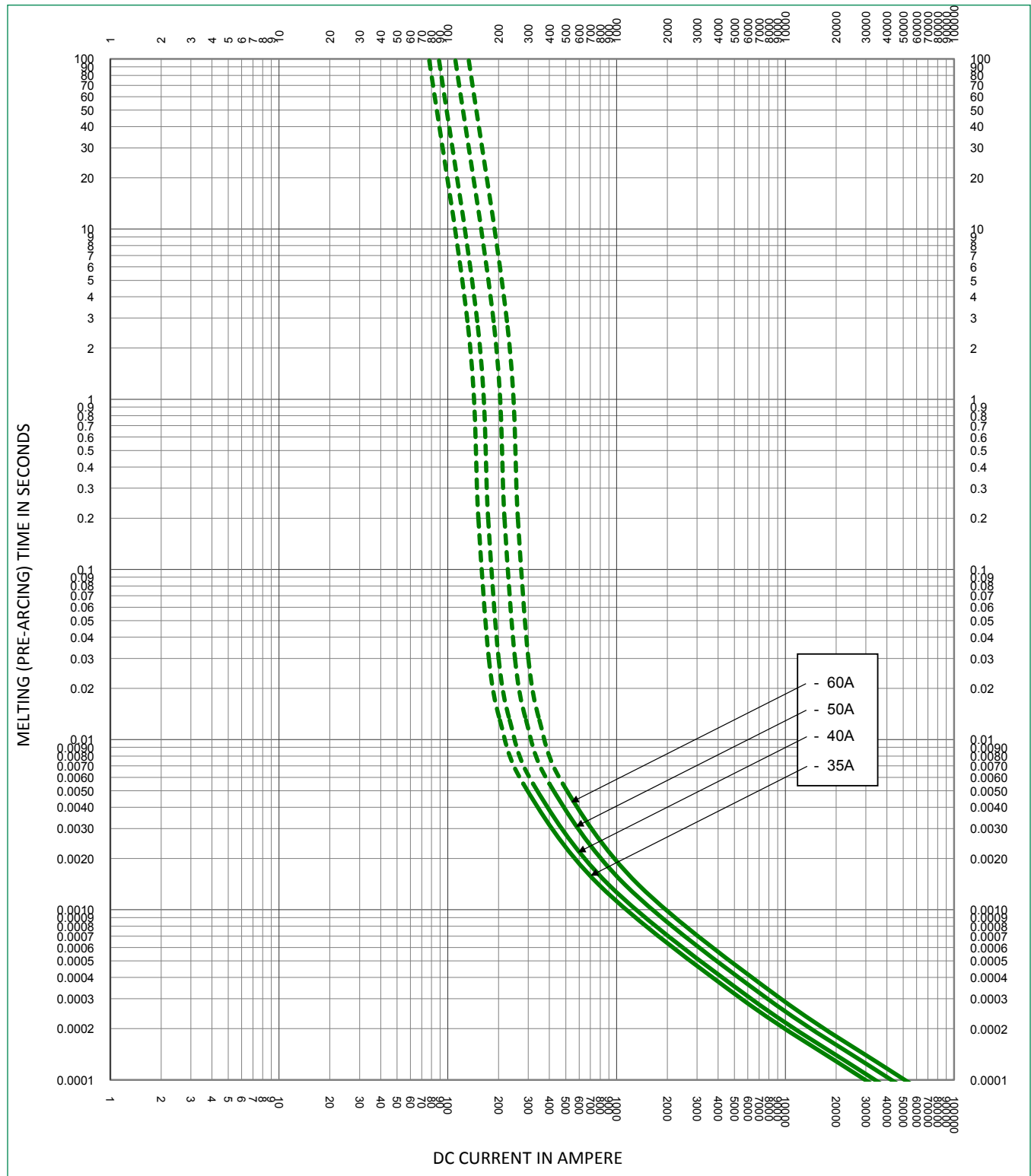
Recommended Torque: 54 Nm (477.94 in-lb)

POWR-SPEED® Fuse

L75QS SERIES HIGH-SPEED ROUND BODY

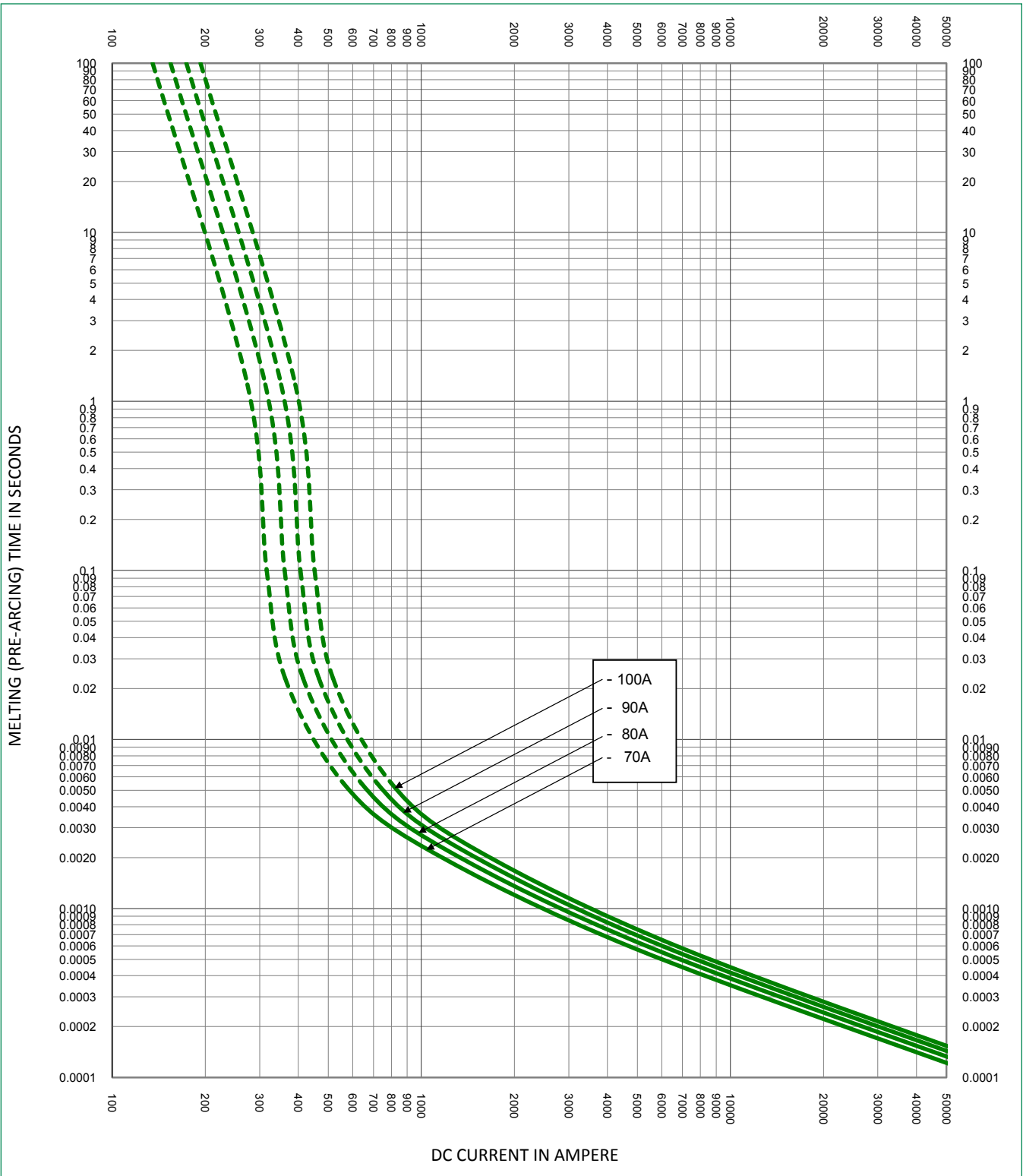
Time Current Curve

L75QS Series



POWR-SPEED® Fuse
L75QS SERIES HIGH-SPEED ROUND BODY

Time Current Curve
L75QS Series

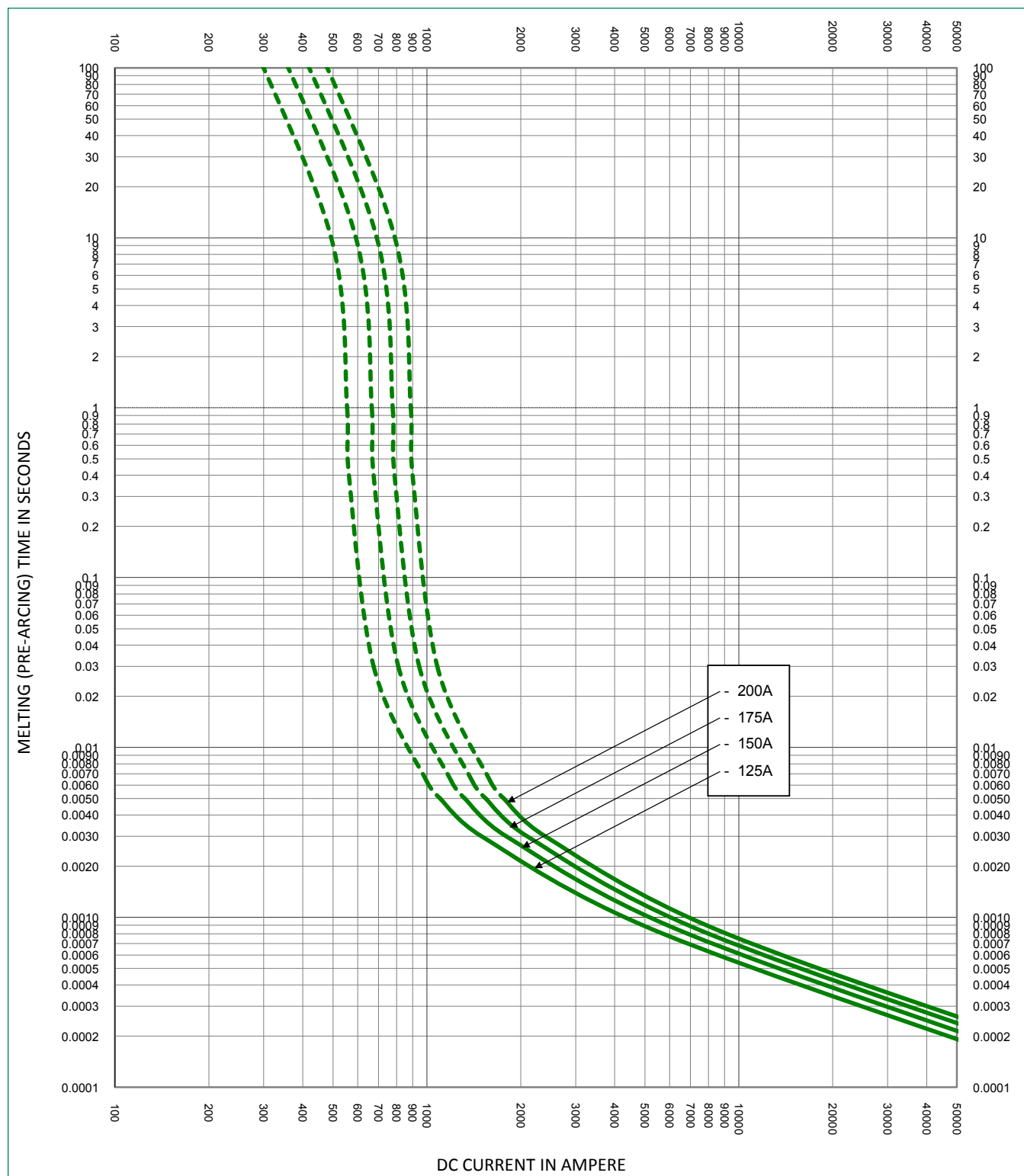


POWR-SPEED® Fuse

L75QS SERIES HIGH-SPEED ROUND BODY

Time Current Curve

L75QS Series

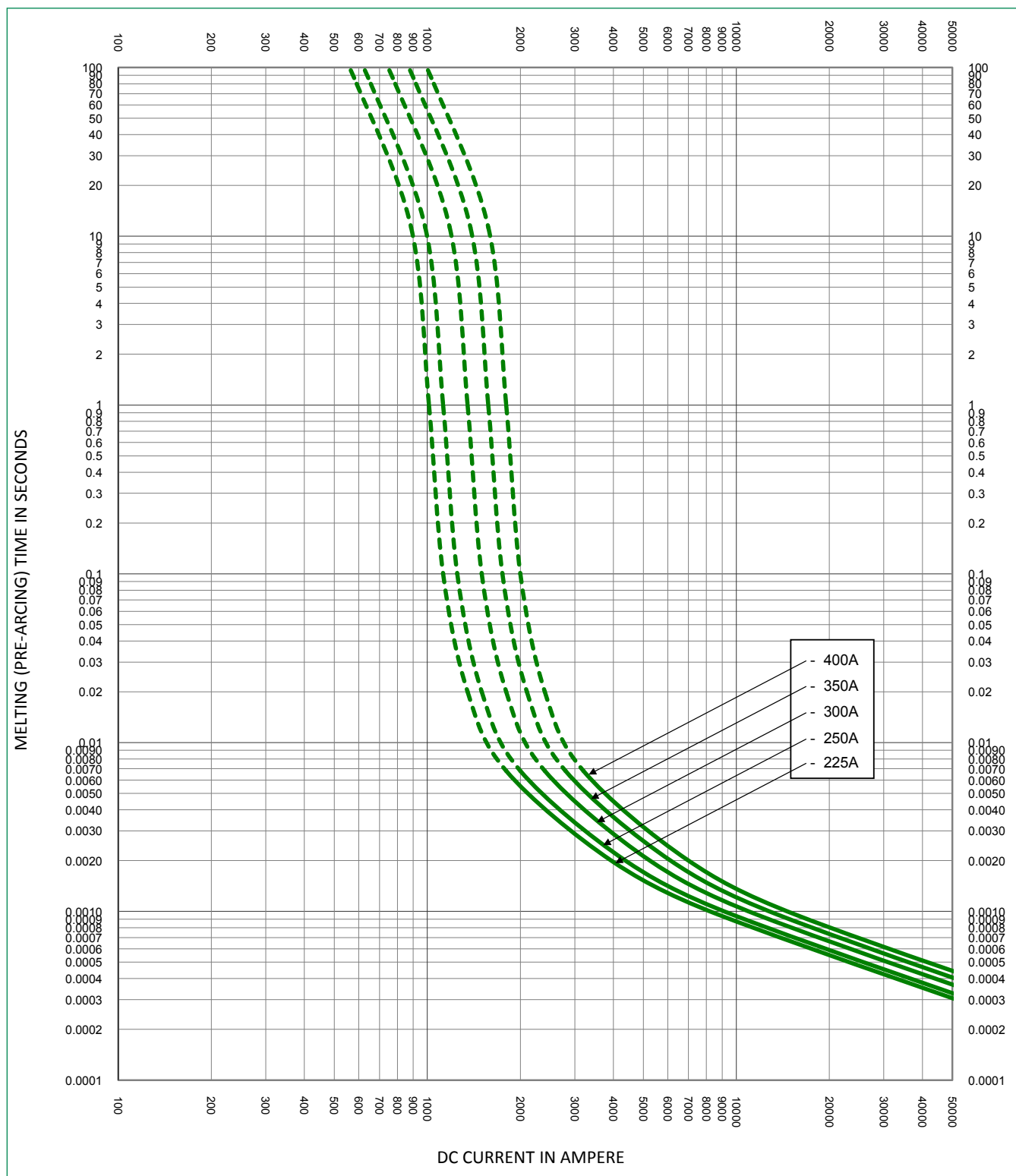


POWR-SPEED® Fuse

L75QS SERIES HIGH-SPEED ROUND BODY

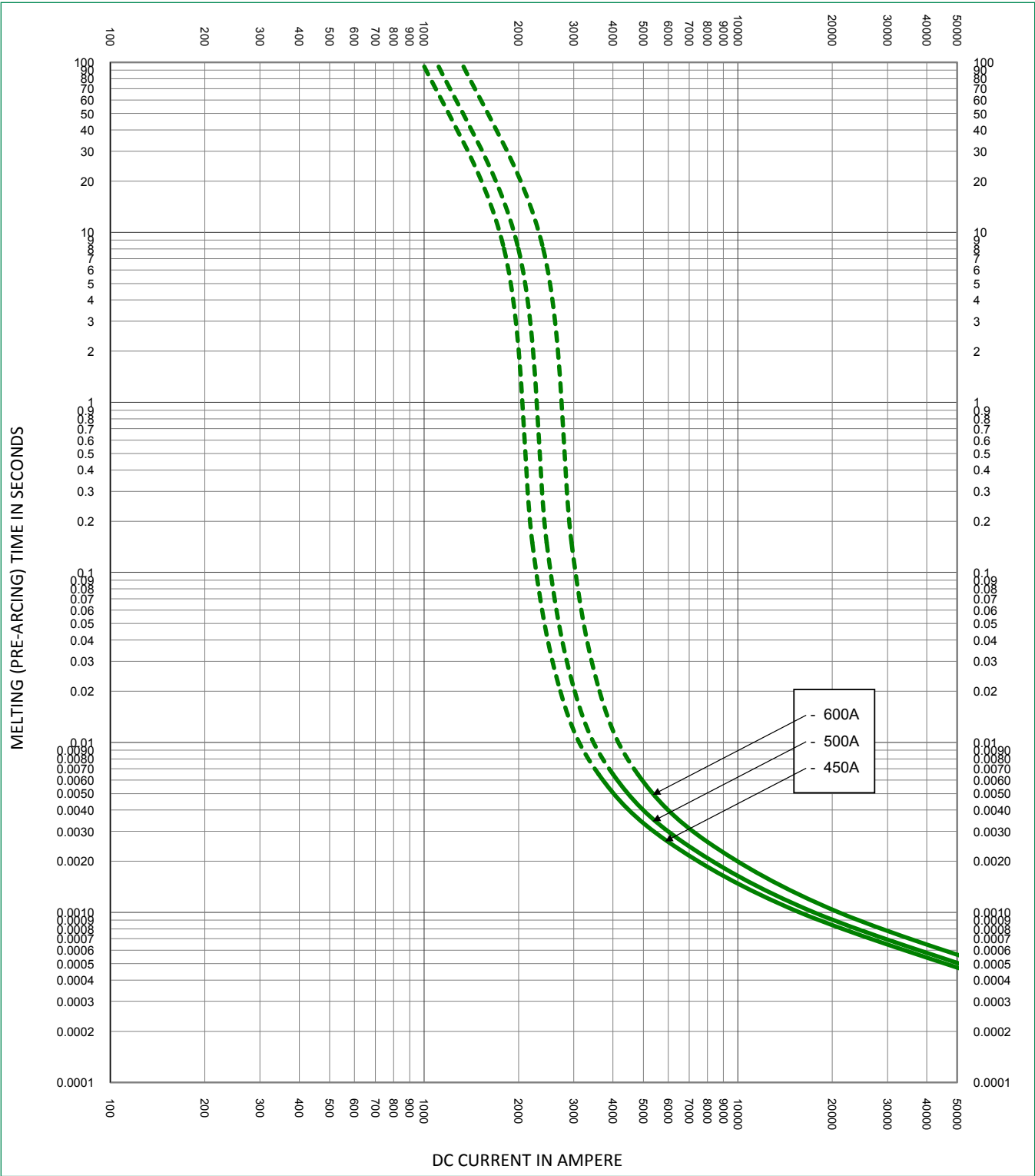
Time Current Curve

L75QS Series



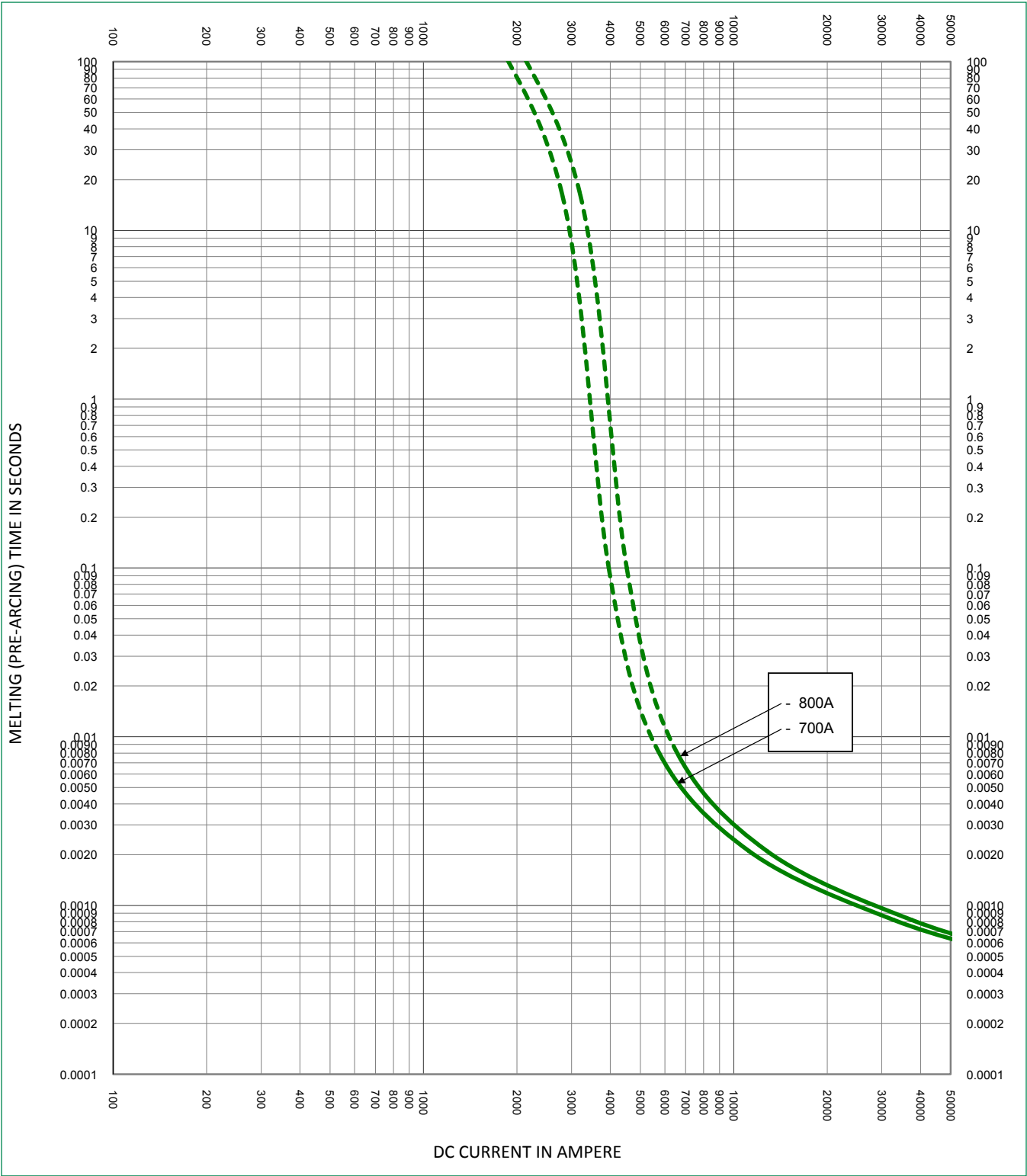
POWR-SPEED® Fuse
L75QS SERIES HIGH-SPEED ROUND BODY

Time Current Curve
L75QS Series

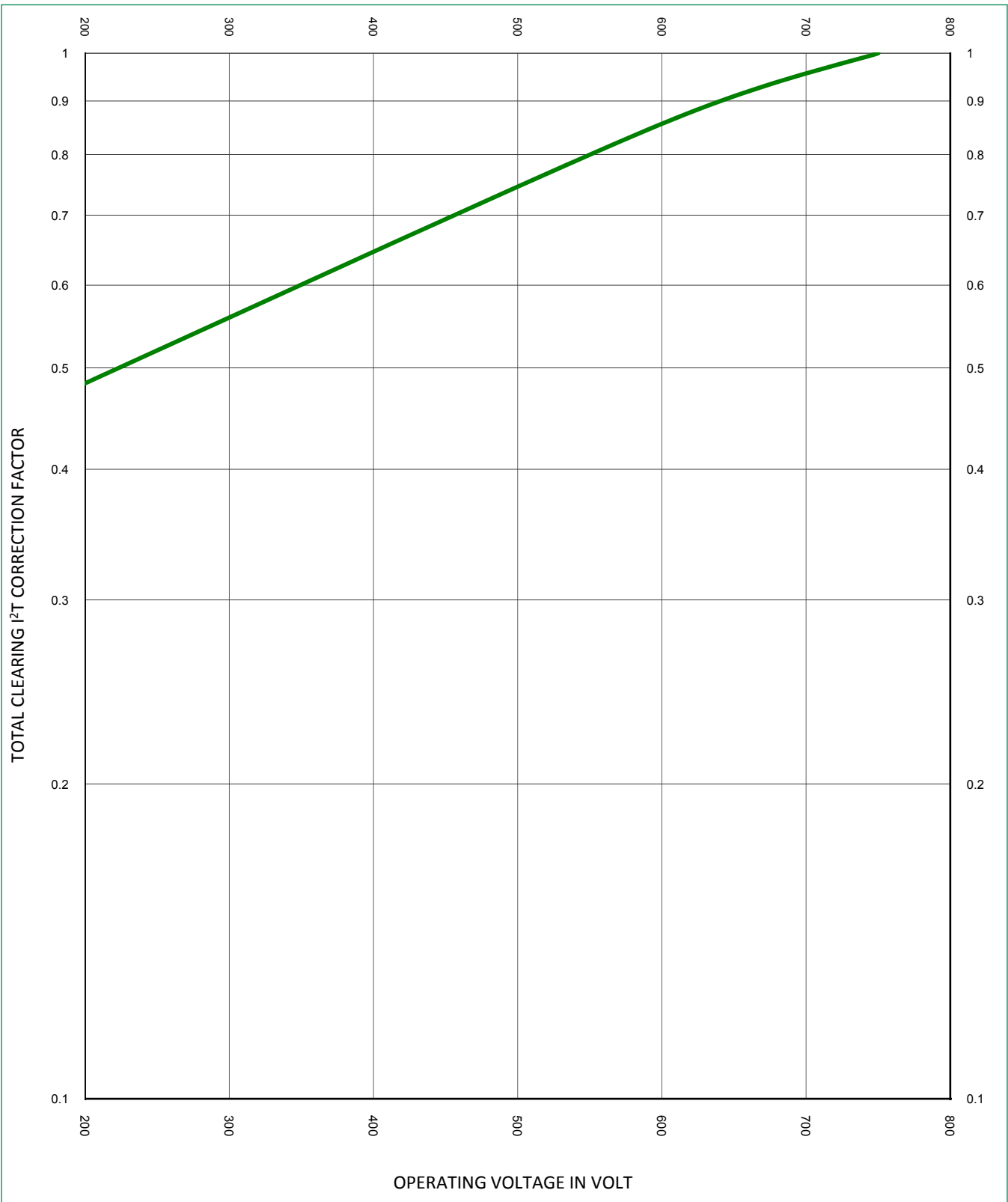


POWR-SPEED® Fuse
L75QS SERIES HIGH-SPEED ROUND BODY

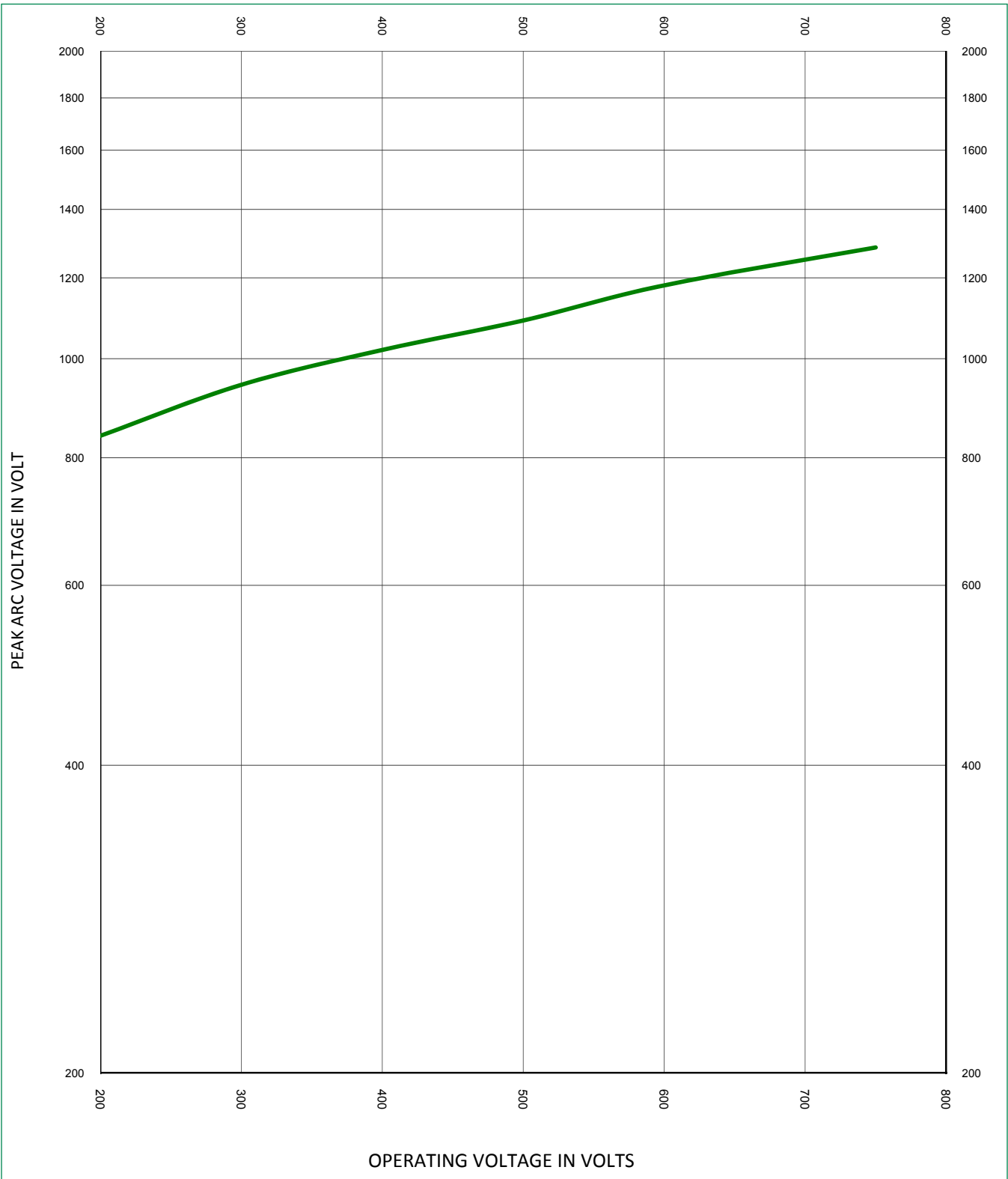
Time Current Curve
L75QS Series



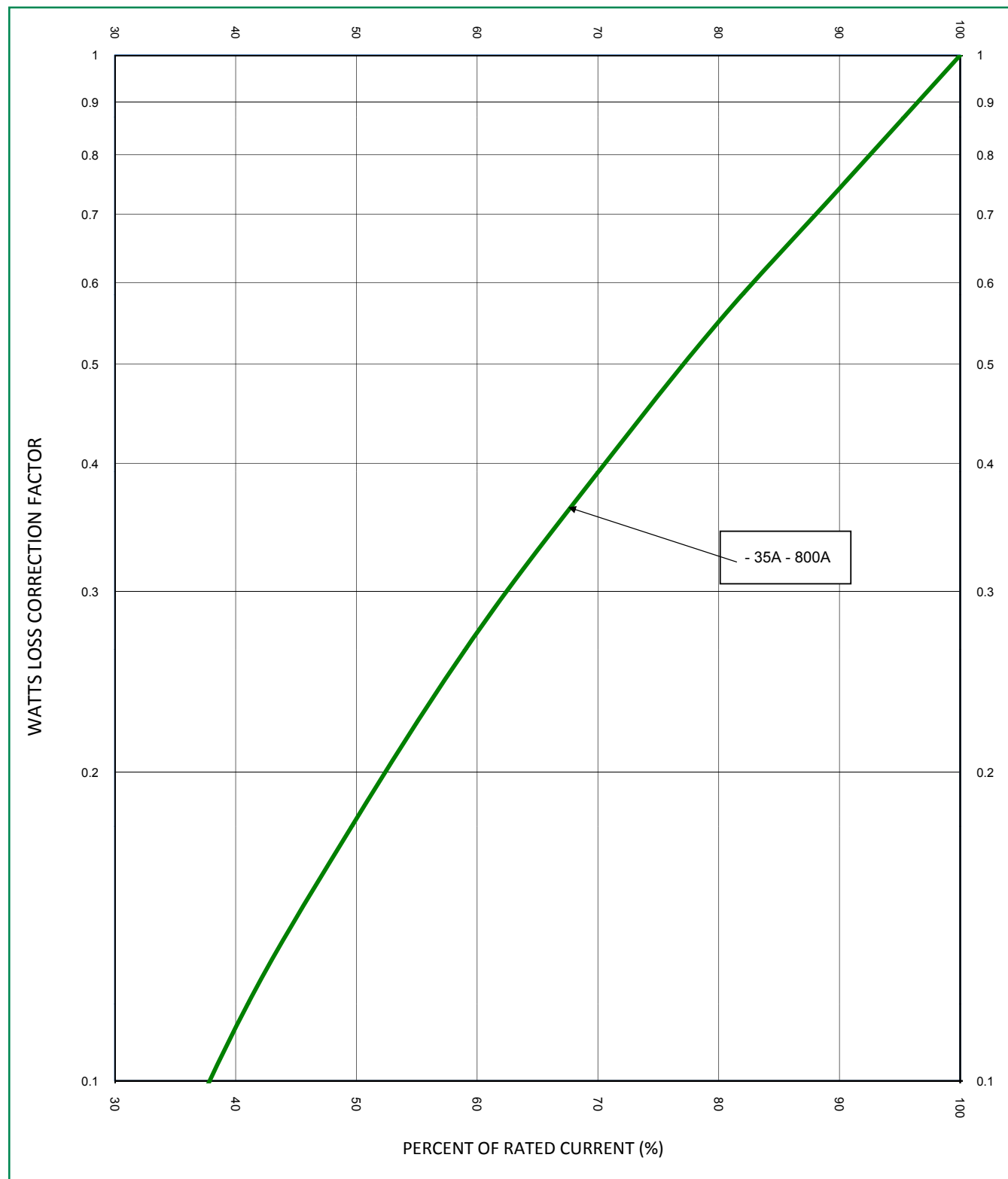
Total Clearing I²T Correction Factor Curve
L75QS Series



Peak Arc Voltage Curve
L75QS Series

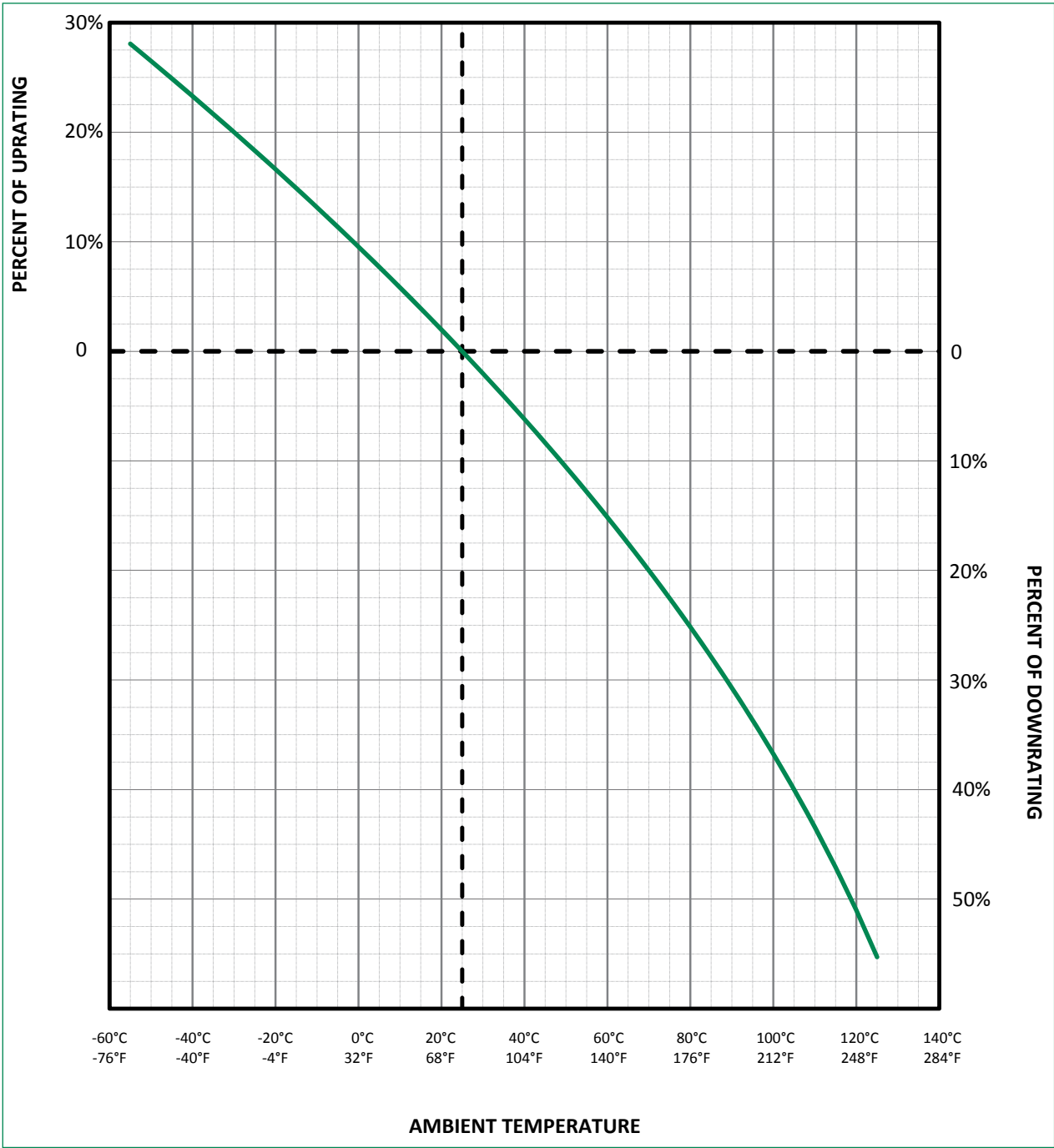


Watts Loss Correction Factor Curve
L75QS Series



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

L75QS Series



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.

Littelfuse.com/Product-Disclaimer