Class T Fuses
JLLN Series

300 V ac • Fast-Acting • 1–1200 A

Description

The JLLN series fast-acting fuses are the most compact fuses available in ratings above 30 amperes — less than one-third the size of comparable Class R fuses. The JLLN fuses are used for short-circuit protection of drives and surge-sensitive components. When rated in accordance with the NEC, these fuses provide fast-acting overload and short-circuit protection for non-inductive circuits and equipment. Main switches containing JLLN fuses can be used to provide compact protection for meter stacks. It should be noted that molded case circuit breaker load centers and panelboards have increased interrupting ratings when "series rated" with Littelfuse Class T fuses. JLLN fuses are available in non-plated and silver plated terminations.

Features & Benefits

FEATURES	BENEFITS
200,000 AIR	Safety feature providing reliable interruption of all overcurrents up to 200,000 A
Current-limiting	Reduces damage caused by heating and magnetic effects of short-circuit currents; extends the equipment's lifecycle
Fast-acting	Provides fast short-circuit response for equipment requiring fast overload protection
POWR-GARD® technology	Ensures quality overcurrent protection
Compact size	More efficient use of available space – typical three-pole Class T fuse blocks require less than 50% of the panel area required for Class R fuse blocks
Functionality	When used as input or output fuses for surge-sensitive components, they can prevent opening of expensive semiconductor fuses that protect individual components

Applications

- Variable speed drives
- Power conversion devices (inverters, rectifiers, UPS)
- Power supplies and power distribution units
- Compact main switches
- Individual electric services and meters

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Specifications

Voltage Ratings	Ac: 300 V Dc: 160 V (1–60 A) 125 V (70–1200 A)
Ampere Range	1–1200 A
Interrupting Rating	Ac: 200 kA rms symmetrical Dc: 50 kA (1–30 A) 20 kA (35–1200 A)
Material	1–30 A: melamine body, bronze caps 35–1200 A: melamine body, copper caps
Applicable Standards	UL 248-15, Class T
Environmental	RoHS Compliant
Country of Origin	Mexico

Certification & Compliance

UL	UL Listed (File: E81895) and UL Recognized (File: E71611)
CSA	CSA Certified (File: LR29862)
CE	Declaration of Conformity: EU_DOC-JLLN_220711
RoHS	RoHS 2 Directive 2011/65/EU; Directive (EU) 2015/863

Accessories

LFT30 series fuse holder
LSCR series fuse holder for 70–800 amperes

Ordering Information

	UNPLATED					PLATED					AGENCY APPROVALS	
AMPERE	CATALOG NUMBER	PRODUCT MARKING	PACK QUANTITY	ORDERING NUMBER	UPC	CATALOG NUMBER	PRODUCT MARKING	PACK QUANTITY	ORDERING NUMBER	UPC	UL	CSA
1	JLLN001	JLLN 1A	10	JLLN001.T	07945818031	JLLN001P	JLLN 1A-P	10	JLLN001.TXP	07945882120	•	•
2	JLLN002	JLLN 2A	10	JLLN002.T	07945818041	JLLN002P	JLLN 2A-P	10	JLLN002.TXP	07945882121	•	•
3	JLLN003	JLLN 3A	10	JLLN003.T	07945818047	JLLN003P	JLLN 3A-P	10	JLLN003.TXP	07945882122	•	•
6	JLLN006	JLLN 6A	10	JLLN006.T	07945818058	JLLN006P	JLLN 6A-P	10	JLLN006.TXP	07945882123	•	•
10	JLLN010	JLLN 10A	10	JLLN010.T	07945818065	JLLN010P	JLLN 10A-P	10	JLLN010.TXP	07945882124	•	•
15	JLLN015	JLLN 15A	10	JLLN015.T	07945818068	JLLN015P	JLLN 15A-P	10	JLLN015.TXP	07945882125	•	•
20	JLLN020	JLLN 20A	10	JLLN020.T	07945818071	JLLN020P	JLLN 20A-P	10	JLLN020.TXP	07945882126	•	•
25	JLLN025	JLLN 25A	10	JLLN025.T	07945818072	JLLN025P	JLLN 25A-P	10	JLLN025.TXP	07945882127	•	•
30	JLLN030	JLLN 30A	10	JLLN030.T	07945818073	JLLN030P	JLLN 30A-P	10	JLLN030.TXP	07945882128	•	•
35	JLLN035	JLLN 35A	10	JLLN035.T	07945818074	JLLN035P	JLLN 35A-P	10	JLLN035.TXP	07945882129	•	•
40	JLLN040	JLLN 40A	10	JLLN040.T	07945818075	JLLN040P	JLLN 40A-P	10	JLLN040.TXP	07945882130	•	•
45	JLLN045	JLLN 45A	10	JLLN045.T	07945818076	JLLN045P	JLLN 45A-P	10	JLLN045.TXP	07945882131	•	•
50	JLLN050	JLLN 50A	10	JLLN050.T	07945818077	JLLN050P	JLLN 50A-P	10	JLLN050.TXP	07945882132	•	•
60	JLLN060	JLLN 60A	10	JLLN060.T	07945818078	JLLN060P	JLLN 60A-P	10	JLLN060.TXP	07945882133	•	•
70	JLLN070	JLLN 70A	5	JLLN070.V	07945818079	JLLN070P	JLLN 70A-P	5	JLLN070.VXP	07945882134	•	•
80	JLLN080	JLLN 80A	5	JLLN080.V	07945818080	JLLN080P	JLLN 80A-P	5	JLLN080.VXP	07945882135	•	•

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Ordering Information

	UNPLATED					PLATED					AGENCY APPROVALS	
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90	JLLN090	JLLN 90A	5	JLLN090.V	07945818081	JLLN090P	JLLN 90A-P	5	JLLN090.VXP	07945882136	•	•
100	JLLN100	JLLN 100A	5	JLLN100.V	07945818082	JLLN100P	JLLN 100A-P	5	JLLN100.VXP	07945882137	•	•
110	JLLN110	JLLN 110A	1	JLLN110.X	07945818083	JLLN110P	JLLN 110A-P	1	JLLN110.XXP	07945882139	•	•
125	JLLN125	JLLN 125A	1	JLLN125.X	07945818084	JLLN125P	JLLN 125A-P	1	JLLN125.XXP	07945882142	•	•
150	JLLN150	JLLN 150A	1	JLLN150.X	07945818086	JLLN150P	JLLN 150A-P	1	JLLN150.XXP	07945882143	•	•
175	JLLN175	JLLN 175A	1	JLLN175.X	07945818087	JLLN175P	JLLN 175A-P	1	JLLN175.XXP	07945882144	•	•
200	JLLN200	JLLN 200A	1	JLLN200.X	07945818088	JLLN200P	JLLN 200A-P	1	JLLN200.XXP	07945882145	•	•
225	JLLN225	JLLN 225A	1	JLLN225.X	07945818089	JLLN225P	JLLN 225A-P	1	JLLN225.XXP	07945882146	•	•
250	JLLN250	JLLN 250A	1	JLLN250.X	07945818090	JLLN250P	JLLN 250A-P	1	JLLN250.XXP	07945882147	•	•
300	JLLN300	JLLN 300A	1	JLLN300.X	07945818091	JLLN300P	JLLN 300A-P	1	JLLN300.XXP	07945882148	•	•
350	JLLN350	JLLN 350A	1	JLLN350.X	07945818092	JLLN350P	JLLN 350A-P	1	JLLN350.XXP	07945882149	•	•
400	JLLN400	JLLN 400A	1	JLLN400.X	07945818093	JLLN400P	JLLN 400A-P	1	JLLN400.XXP	07945882150	•	•
450	JLLN450	JLLN 450A	1	JLLN450.X	07945818095	JLLN450P	JLLN 450A-P	1	JLLN450.XXP	07945882151	•	•
500	JLLN500	JLLN 500A	1	JLLN500.X	07945818096	JLLN500P	JLLN 500A-P	1	JLLN500.XXP	07945882152	•	•
600	JLLN600	JLLN 600A	1	JLLN600.X	07945818098	JLLN600P	JLLN 600A-P	1	JLLN600.XXP	07945882153	•	•
700	JLLN700	JLLN 700A	1	JLLN700.X	07945803070	JLLN700P	JLLN 700A-P	1	JLLN700.XXP	07945882154	•	
800	JLLN800	JLLN 800A	1	JLLN800.X	07945818103	JLLN800P	JLLN 800A-P	1	JLLN800.XXP	07945882155	•	
1000	JLLN1000	JLLN 1000A	1	JLLN1000X	07945818105	JLLN1000P	JLLN 1000A-P	1	JLLN1000.XXP	07945882138	•	
1100	JLLN1100	JLLN 1100A	1	JLLN1100X	07945805588	JLLN1100P	JLLN 1100A-P	1	JLLN1100.XXP	07945882140	•	
1200	JLLN1200	JLLN 1200A	1	JLLN1200X	07945818106	JLLN1200P	JLLN 1200A-P	1	JLLN1200.XXP	07945882141	•	

Dimensions

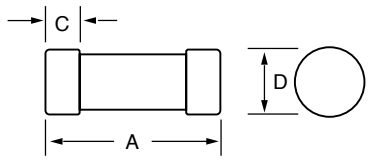

Fig. 1

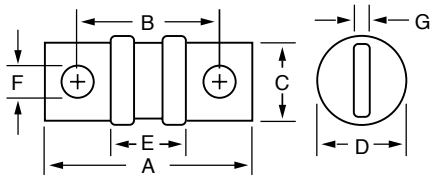

Fig. 2

AMPERAGE	REFER TO FIG. NO.	DIMENSIONS INCHES (MM)						
		A	B	C	D	E	F	G
1–30	1	.875 (22.2)	—	.281 (7.1)	.406 (10.3)	—	—	—
35–60	1	.875 (22.2)	—	.281 (7.1)	.562 (14.3)	—	—	—
70–100	2	2.156 (54.8)	1.562 (39.7)	.750 (19.1)	.812 (20.6)	.830 (21.1)	.281 (7.1)	.125 (3.2)
110–200	2	2.437 (61.9)	1.687 (42.9)	.875 (22.2)	1.062 (27.0)	.830 (21.1)	.343 (8.7)	.187 (4.8)
225–400	2	2.750 (69.9)	1.843 (46.8)	1.000 (25.4)	1.312 (33.3)	.828 (21.0)	.406 (10.3)	.250 (6.4)
450–600	2	3.062 (77.8)	2.031 (51.6)	1.250 (31.8)	1.593 (40.5)	.875 (22.2)	.484 (12.3)	.312 (7.9)
700–800	2	3.375 (85.7)	2.218 (56.4)	1.750 (44.5)	2.062 (52.4)	.875 (22.2)	.546 (13.9)	.375 (9.5)
900–1200	2	4.000 (101.6)	2.531 (64.3)	2.000 (50.8)	2.500 (63.5)	1.033 (26.2)	.609 (15.5)	.437 (11.1)

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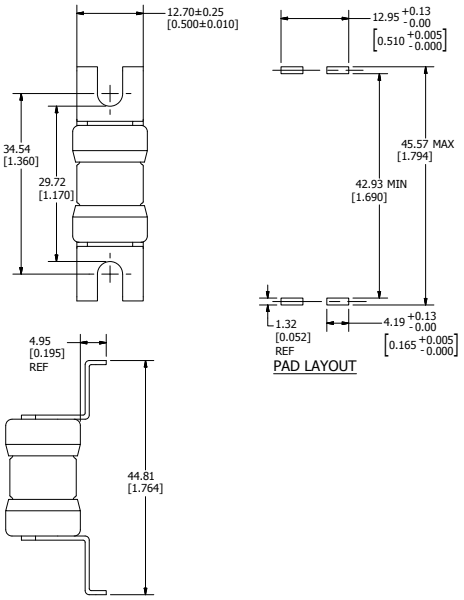
Ordering Information
(Solder Mount - L Version)

AMPERE	CATALOG NUMBER	PRODUCT MARKING	PACK QUANTITY	ORDERING NUMBER	UPC	AGENCY APPROVALS
						UL CSA
35	JLLN035L	JLLN 35A-L	10	JLLN035.TXL	07945810542	•
40	JLLN040L	JLLN 40A-L	10	JLLN040.TXL	07945810543	•
45	JLLN045L	JLLN 45A-L	10	JLLN045.TXL	07945810544	•
50	JLLN050L	JLLN 50A-L	10	JLLN050.TXL	07945810545	•
60	JLLN060L	JLLN 60A-L	10	JLLN060.TXL	07945810546	•

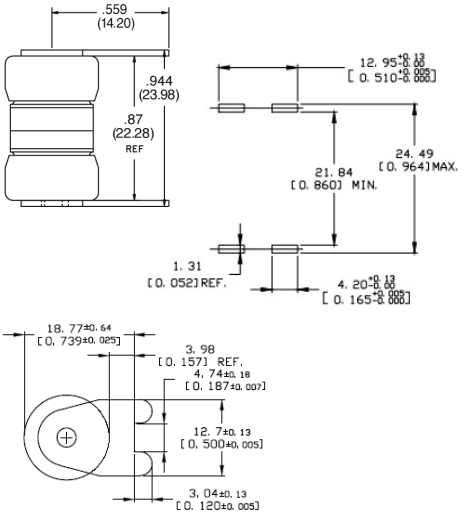
Dimensions
Millimeters [inches]



Ordering Information
(Solder Mount - LS Version)

AMPERE	CATALOG NUMBER	PRODUCT MARKING	PACK QUANTITY	ORDERING NUMBER	UPC	AGENCY APPROVALS
						UL CSA
35	JLLN035LS	JLLN 35A-LS	10	JLLN035.TXLS	07945810087	•
40	JLLN040LS	JLLN 40A-LS	10	JLLN040.TXLS	07945810088	•
45	JLLN045LS	JLLN 45A-LS	10	JLLN045.TXLS	07945810089	•
50	JLLN050LS	JLLN 50A-LS	10	JLLN050.TXLS	07945810090	•
60	JLLN060LS	JLLN 60A-LS	10	JLLN060.TXLS	07945810091	•

Dimensions
Millimeters [inches]



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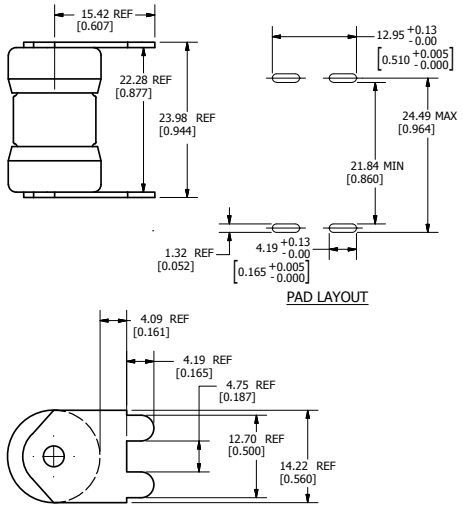
Ordering Information
(Solder Mount - LSE Version)

AMPERE	CATALOG NUMBER	PRODUCT MARKING	PACK QUANTITY	ORDERING NUMBER	UPC	AGENCY APPROVALS	
						UL	CSA
35	JLLN035LSE	JLLN 35A-LSE	10	JLLN035.TXLSE	07945882075	•	•
40	JLLN040LSE	JLLN 40A-LSE	10	JLLN040.TXLSE	07945894507	•	•
45	JLLN045LSE	JLLN 45A-LSE	10	JLLN045.TXLSE	07945894508	•	•
50	JLLN050LSE	JLLN 50A-LSE	10	JLLN050.TXLSE	07945894509	•	•
60	JLLN060LSE	JLLN 60A-LSE	10	JLLN060.TXLSE	07945894510	•	•

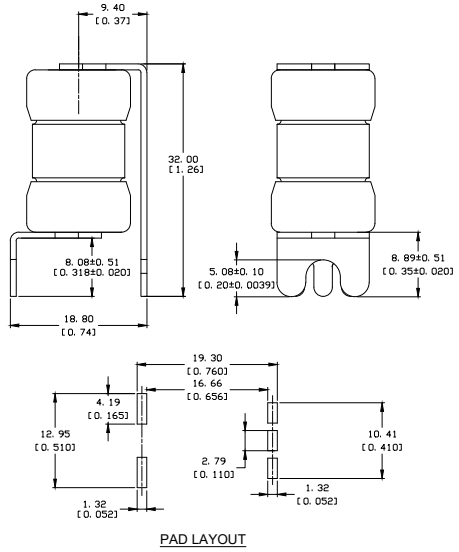
Dimensions
Millimeters [inches]



Ordering Information
(Solder Mount - V Version)

AMPERE	CATALOG NUMBER	PRODUCT MARKING	PACK QUANTITY	ORDERING NUMBER	UPC	AGENCY APPROVALS
						UL CSA
35	JLLN035V	JLLN 35A-V	10	JLLN035.TXV	07945810568	•
40	JLLN040V	JLLN 40A-V	10	JLLN040.TXV	07945810569	•
45	JLLN045V	JLLN 45A-V	10	JLLN045.TXV	07945810570	•
50	JLLN050V	JLLN 50A-V	10	JLLN050.TXV	07945810571	•
60	JLLN060V	JLLN 60A-V	10	JLLN060.TXV	07945810572	•

Dimensions
Millimeters [inches]



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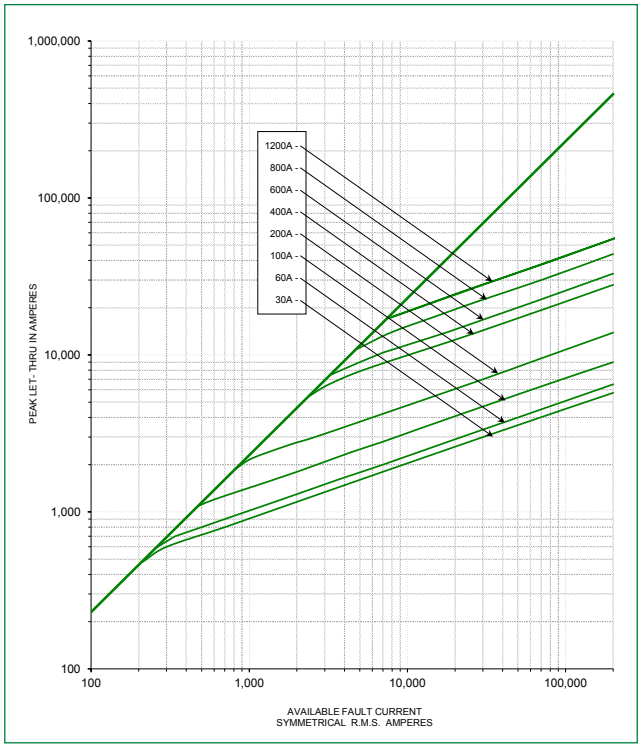
Current-Limiting Effects

SHORT CIRCUIT CURRENT*	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS							
	30 A	60 A	100 A	200 A	400 A	600 A	800 A	1200 A
5,000	700	775	1,100	1,650	3,500	4,000	5,000	5,000
10,000	900	1,000	1,400	2,100	4,400	5,100	6,750	8,250
15,000	1,000	1,100	1,600	2,400	5,000	5,900	7,750	10,000
20,000	1,100	1,250	1,800	2,700	5,500	6,500	8,750	11,000
25,000	1,230	1,300	1,950	2,900	6,000	7,000	9,500	12,000
30,000	1,300	1,475	2,050	3,100	6,400	7,500	10,000	12,500
35,000	1,330	1,575	2,150	3,300	6,750	7,750	10,500	13,500
40,000	1,430	1,600	2,300	3,500	7,000	8,000	11,000	14,000
50,000	1,500	1,750	2,400	3,700	7,500	8,750	12,000	15,000
60,000	1,700	1,900	2,700	4,000	8,000	9,500	12,500	16,000
80,000	1,850	2,100	2,800	4,400	9,000	10,500	14,000	17,500
100,000	2,000	2,250	3,150	4,800	9,750	11,500	15,000	18,500
150,000	2,300	2,600	3,600	5,500	11,000	13,000	17,500	22,000
200,000	2,600	2,800	3,900	6,000	12,000	14,500	19,500	24,000

*Prospective RMS Symmetrical Amperes Short-Circuit Current

Note: Data Derived from Peak Let-Thru Curve

Peak Let-Thru Curves



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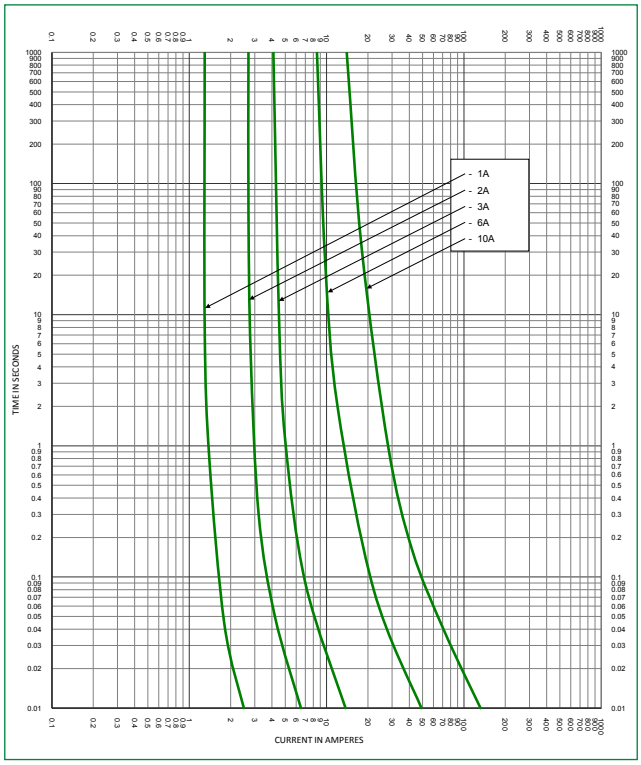
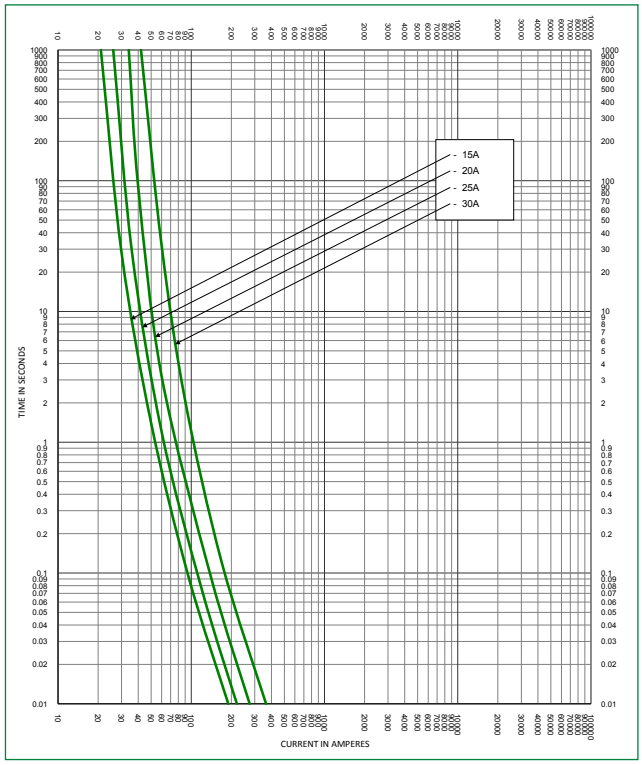
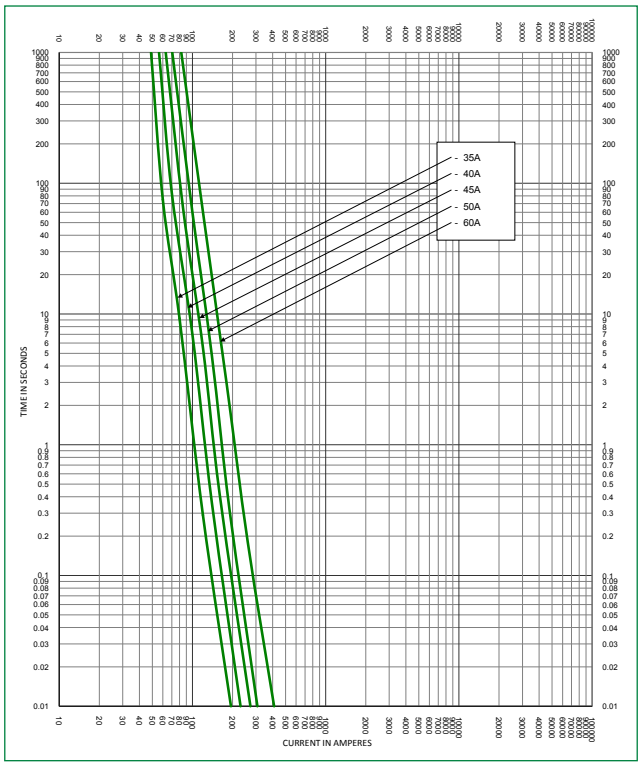
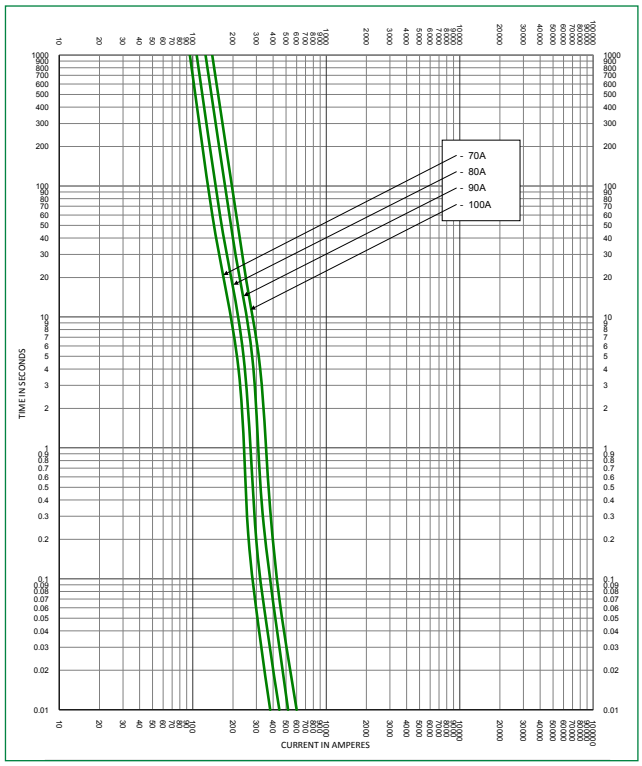
Time Current Curves









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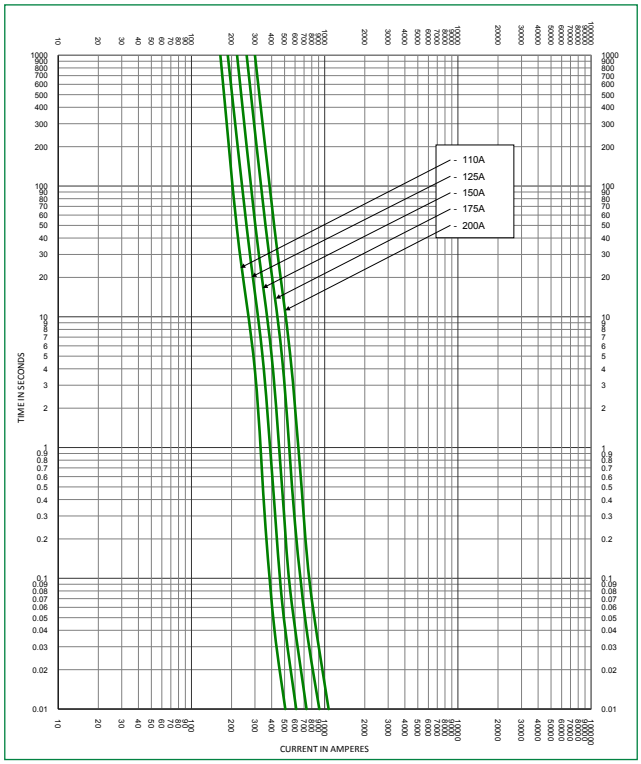
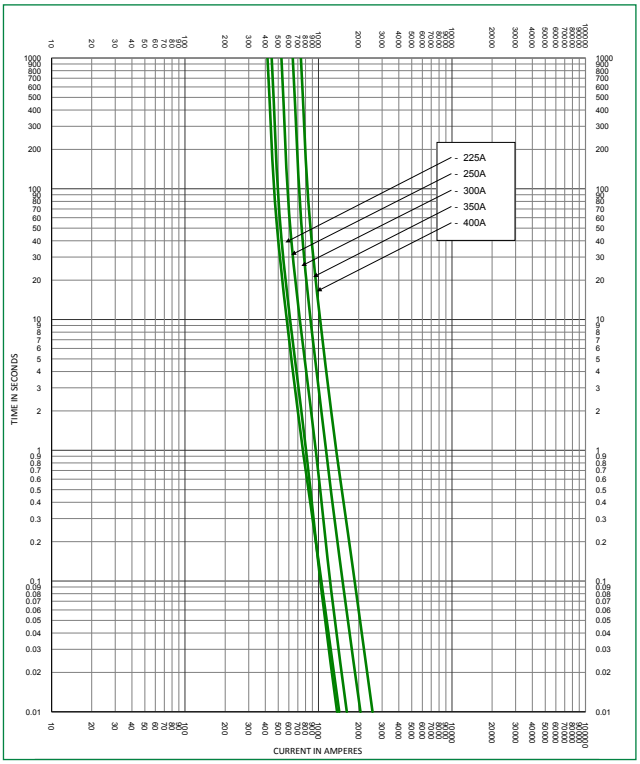
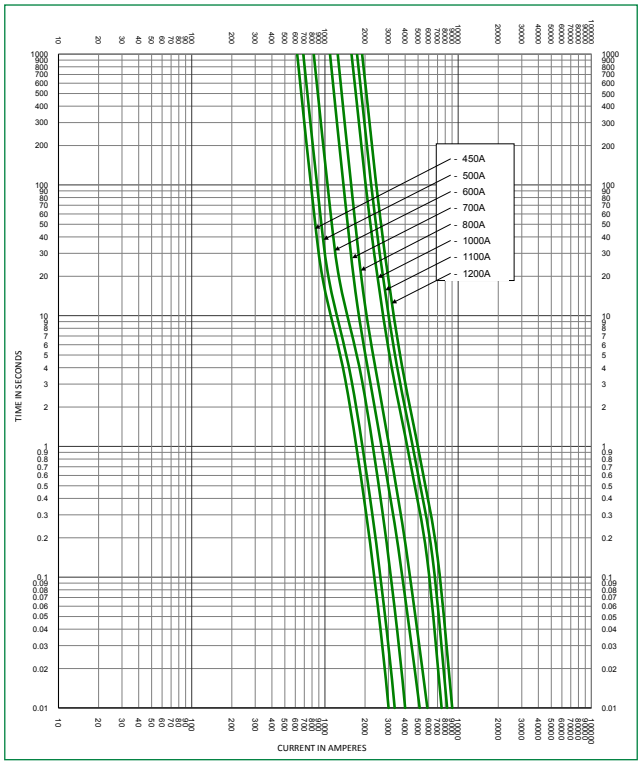
Time Current Curves







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