Class T Fuses
JLLS Series

600 V ac • Fast-Acting • 1–1200 A

Description

The JLLS 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 JLLS 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 JLLS 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. JLLS 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
Functional protection	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: 600 V Dc: 300 V
Ampere Range	1–1200 A
Interrupting Rating	Ac: 200 kA rms symmetrical Dc: 20 kA Littelfuse self-certified
Material	1–30 A: melamine body, copper caps 35–60 A: melamine body, bronze caps 70–1200 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)
CSA	CSA Certified (File: LR29862)
CE	Declaration of Conformity: EU_DOC-JLLS_210701
RoHS	RoHS 2 Directive 2011/65/EU; Directive (EU) 2015/863

Accessories

LFT60 series fuse holder
LSCR series fuse holder for 70–800 amperes

Ordering Information

	UNPLATED					PLATED				
AMPERE	CATALOG NUMBER	PRODUCT MARKING	PACK QUANTITY	ORDERING NUMBER	UPC	CATALOG NUMBER	PRODUCT MARKING	PACK QUANTITY	ORDERING NUMBER	UPC
1	JLLS001	JLLS 1A	10	JLLS001.T	07945819031	JLLS001P	JLLS 1A-P	10	JLLS001.TXP	07945882156
2	JLLS002	JLLS 2A	10	JLLS002.T	07945819041	JLLS002P	JLLS 2A-P	10	JLLS002.TXP	07945882157
3	JLLS003	JLLS 3A	10	JLLS003.T	07945819047	JLLS003P	JLLS 3A-P	10	JLLS003.TXP	07945882158
6	JLLS006	JLLS 6A	10	JLLS006.T	07945819058	JLLS006P	JLLS 6A-P	10	JLLS006.TXP	07945882159
10	JLLS010	JLLS 10A	10	JLLS010.T	07945819065	JLLS010P	JLLS 10A-P	10	JLLS010.TXP	07945882160
15	JLLS015	JLLS 15A	10	JLLS015.T	07945819068	JLLS015P	JLLS 15A-P	10	JLLS015.TXP	07945882161
20	JLLS020	JLLS 20A	10	JLLS020.T	07945819071	JLLS020P	JLLS 20A-P	10	JLLS020.TXP	07945882162
25	JLLS025	JLLS 25A	10	JLLS025.T	07945819072	JLLS025P	JLLS 25A-P	10	JLLS025.TXP	07945882163
30	JLLS030	JLLS 30A	10	JLLS030.T	07945819073	JLLS030P	JLLS 30A-P	10	JLLS030.TXP	07945882164
35	JLLS035	JLLS 35A	10	JLLS035.T	07945819074	JLLS035P	JLLS 35A-P	10	JLLS035.TXP	07945882165
40	JLLS040	JLLS 40A	10	JLLS040.T	07945819075	JLLS040P	JLLS 40A-P	10	JLLS040.TXP	07945882166
45	JLLS045	JLLS 45A	10	JLLS045.T	07945819076	JLLS045P	JLLS 45A-P	10	JLLS045.TXP	07945882167
50	JLLS050	JLLS 50A	10	JLLS050.T	07945819077	JLLS050P	JLLS 50A-P	10	JLLS050.TXP	07945882168
60	JLLS060	JLLS 60A	10	JLLS060.T	07945819078	JLLS060P	JLLS 60A-P	10	JLLS060.TXP	07945882169
70	JLLS070	JLLS 70A	5	JLLS070.V	07945819079	JLLS070P	JLLS 70A-P	5	JLLS070.VXP	07945882170
80	JLLS080	JLLS 80A	5	JLLS080.V	07945819080	JLLS080P	JLLS 80A-P	5	JLLS080.VXP	07945882171
90	JLLS090	JLLS 90A	5	JLLS090.V	07945819081	JLLS090P	JLLS 90A-P	5	JLLS090.VXP	07945882172
100	JLLS100	JLLS 100A	5	JLLS100.V	07945819082	JLLS100P	JLLS 100A-P	5	JLLS100.VXP	07945882173

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	CATALOG NUMBER	PRODUCT MARKING	PACK QUANTITY	ORDERING NUMBER	UPC	CATALOG NUMBER	PRODUCT MARKING	PACK QUANTITY	ORDERING NUMBER	UPC
110	JLLS110	JLLS 110A	1	JLLS110.X	07945819083	JLLS110P	JLLS 110A-P	1	JLLS110.XXP	07945882175
125	JLLS125	JLLS 125A	1	JLLS125.X	07945819084	JLLS125P	JLLS 125A-P	1	JLLS125.XXP	07945882178
150	JLLS150	JLLS 150A	1	JLLS150.X	07945819086	JLLS150P	JLLS 150A-P	1	JLLS150.XXP	07945882179
175	JLLS175	JLLS 175A	1	JLLS175.X	07945819087	JLLS175P	JLLS 175A-P	1	JLLS175.XXP	07945882180
200	JLLS200	JLLS 200A	1	JLLS200.X	07945819088	JLLS200P	JLLS 200A-P	1	JLLS200.XXP	07945882182
225	JLLS225	JLLS 225A	1	JLLS225.X	07945819089	JLLS225P	JLLS 225A-P	1	JLLS225.XXP	07945882183
250	JLLS250	JLLS 250A	1	JLLS250.X	07945819090	JLLS250P	JLLS 250A-P	1	JLLS250.XXP	07945882184
300	JLLS300	JLLS 300A	1	JLLS300.X	07945819091	JLLS300P	JLLS 300A-P	1	JLLS300.XXP	07945882185
350	JLLS350	JLLS 350A	1	JLLS350.X	07945819092	JLLS350P	JLLS 350A-P	1	JLLS350.XXP	07945882186
400	JLLS400	JLLS 400A	1	JLLS400.X	07945819093	JLLS400P	JLLS 400A-P	1	JLLS400.XXP	07945882187
450	JLLS450	JLLS 450A	1	JLLS450.X	07945819095	JLLS450P	JLLS 450A-P	1	JLLS450.XXP	07945882188
500	JLLS500	JLLS 500A	1	JLLS500.X	07945819096	JLLS500P	JLLS 500A-P	1	JLLS500.XXP	07945882189
600	JLLS600	JLLS 600A	1	JLLS600.X	07945819098	JLLS600P	JLLS 600A-P	1	JLLS600.XXP	07945882190
700	JLLS700	JLLS 700A	1	JLLS700.X	07945805363	JLLS700P	JLLS 700A-P	1	JLLS700.XXP	07945882191
800	JLLS800	JLLS 800A	1	JLLS800.X	07945819103	JLLS800P	JLLS 800A-P	1	JLLS800.XXP	07945882192
900	JLLS900	JLLS 900A	1	JLLS900.X	07945801059	JLLS900P	JLLS 900A-P	1	JLLS900.XXP	07945882193
1000	JLLS1000	JLLS 1000A	1	JLLS1000X	07945801060	JLLS1000XP	JLLS 1000A-P	1	JLLS1000XXP	07945882174
1100	JLLS1100	JLLS 1100A	1	JLLS1100X	07945801061	JLLS1100XP	JLLS 1100A-P	1	JLLS1100XXP	07945882176
1200	JLLS1200	JLLS 1200A	1	JLLS1200X	07945801062	JLLS1200XP	JLLS 1200A-P	1	JLLS1200XXP	07945882177

Dimensions

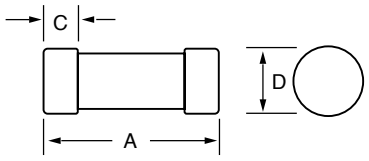

Fig. 1

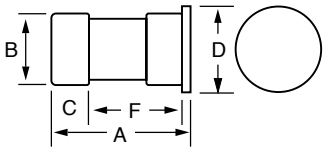

Fig. 2

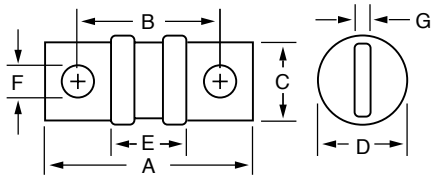

Fig. 3

AMPERAGE	REFER TO FIG. NO.	DIMENSIONS INCHES (MM)						
		A	B	C	D	E	F	G
1–30	1	1.500 (38.1)	—	.281 (7.1)	.562 (14.3)	—	—	—
35–60	2	1.562 (39.7)	.812 (20.6)	.406 (10.3)	.994 (25.2)	.062 (1.6)	1.094 (27.8)	—
70–100	3	2.953 (75.0)	2.352 (59.7)	.750 (19.1)	.828 (21.0)	1.625 (41.3)	.281 (7.1)	.125 (3.2)
110–200	3	3.250 (82.6)	2.507 (63.7)	.875 (22.2)	1.078 (27.4)	1.656 (42.1)	.343 (8.7)	.187 (4.8)
225–400	3	3.625 (92.1)	2.718 (69.1)	1.000 (25.4)	1.593 (40.5)	1.712 (43.5)	.406 (10.3)	.250 (6.4)
450–600	3	3.984 (101.2)	2.953 (75.0)	1.250 (31.8)	2.062 (52.4)	1.765 (44.8)	.484 (12.3)	.312 (7.9)
700–800	3	4.328 (109.9)	3.171 (80.6)	1.750 (44.5)	2.500 (63.5)	1.860 (47.2)	.546 (13.9)	.375 (9.5)
900–1200	3	5.271 (133.9)	3.801 (96.5)	2.000 (50.8)	2.625 (66.7)	2.303 (58.5)	.609 (15.5)	.437 (11.1)

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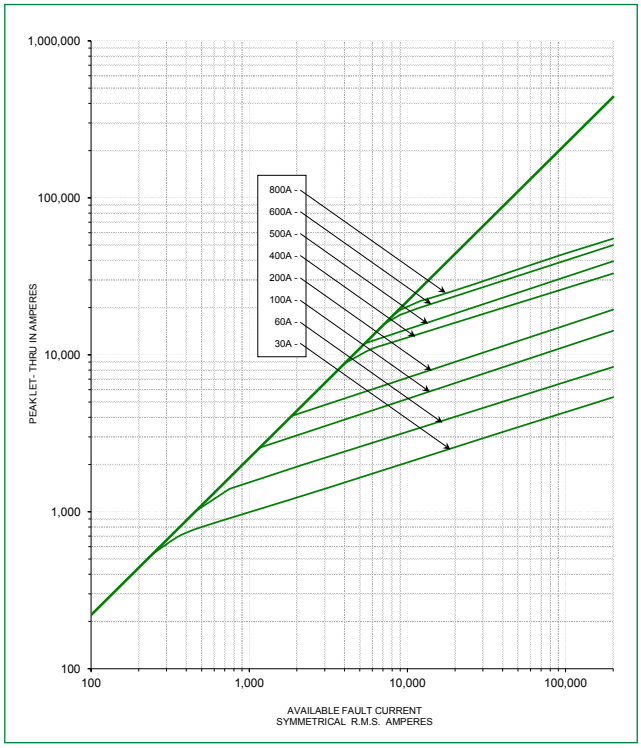
Current-Limiting Effects

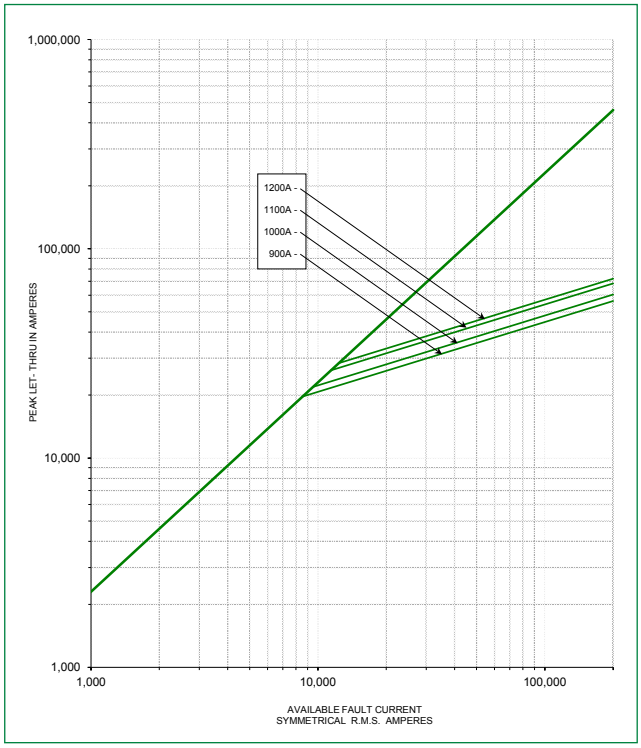
SHORT CIRCUIT CURRENT*	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS							
	30 A	60 A	100 A	200 A	400 A	600 A	800 A	1200 A
5,000	750	1,225	1,810	2,500	4,600	5,000	5,000	5,000
10,000	945	1,525	2,300	3,150	6,000	8,500	9,400	10,000
15,000	1,050	1,700	2,610	3,600	6,600	9,750	10,500	13,000
20,000	1,150	1,900	2,900	3,950	7,250	10,500	11,000	14,750
25,000	1,300	2,050	3,100	4,250	8,000	11,500	12,500	15,500
30,000	1,375	2,150	3,300	4,500	8,250	12,000	13,750	16,500
35,000	1,400	2,250	3,500	4,750	8,500	13,000	14,000	17,000
40,000	1,425	2,400	3,650	4,950	8,700	14,000	14,750	18,000
50,000	1,600	2,450	3,900	5,350	9,500	14,500	16,000	20,000
60,000	1,650	2,625	4,150	5,650	10,000	15,500	17,300	21,000
80,000	1,825	2,800	4,570	6,250	11,000	17,000	18,750	23,000
100,000	2,000	3,100	4,950	6,700	12,000	18,000	20,000	25,000
150,000	2,250	3,400	5,650	7,700	13,000	21,000	23,000	28,500
200,000	2,450	3,800	6,200	8,450	15,000	23,000	25,000	31,000

*Prospective RMS Symmetrical Amperes Short-Circuit Current

Note: Data Derived from Peak Let-Thru Curve

Peak Let-Thru Curves





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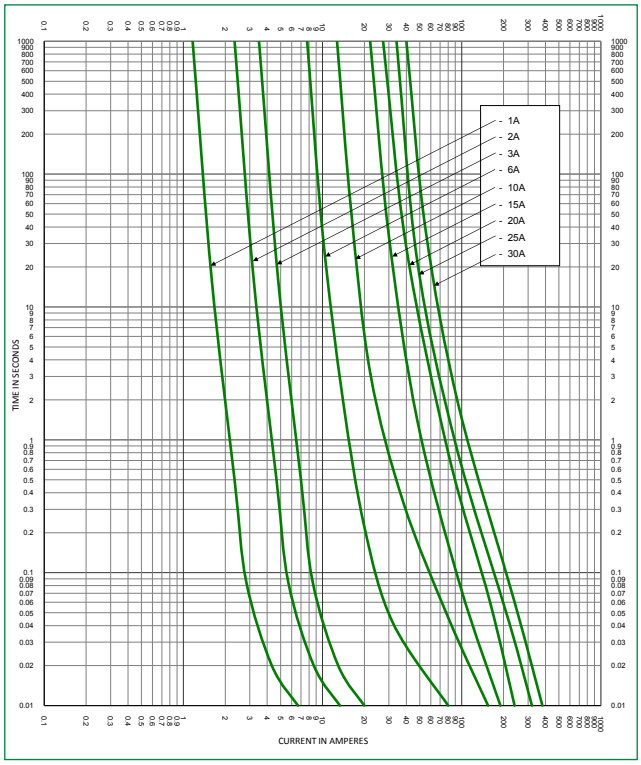
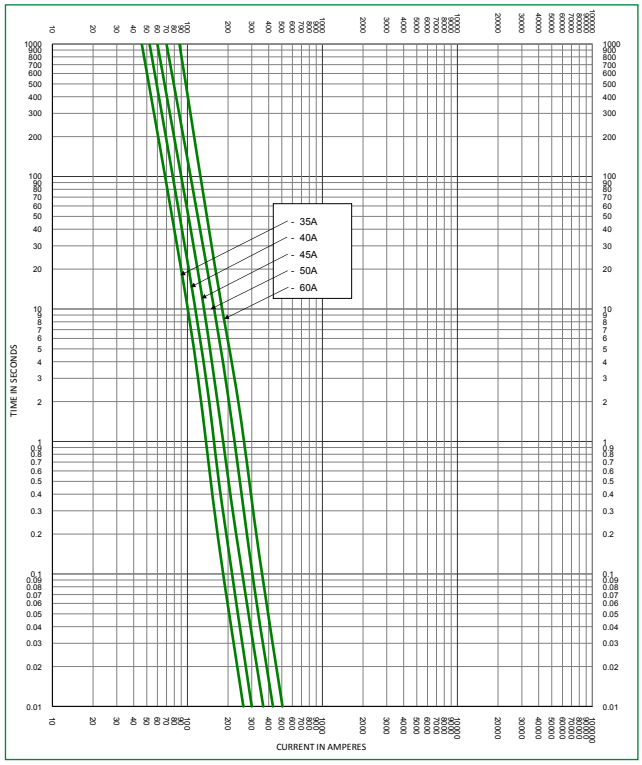
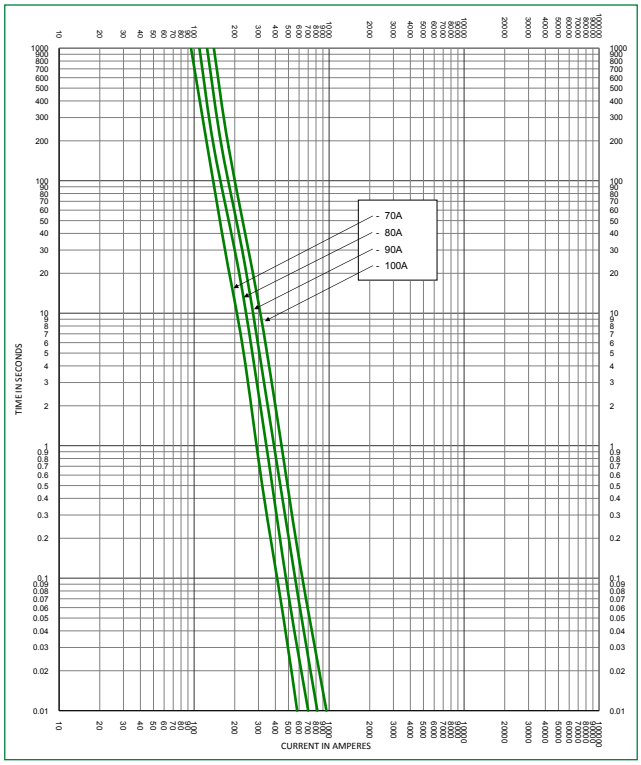
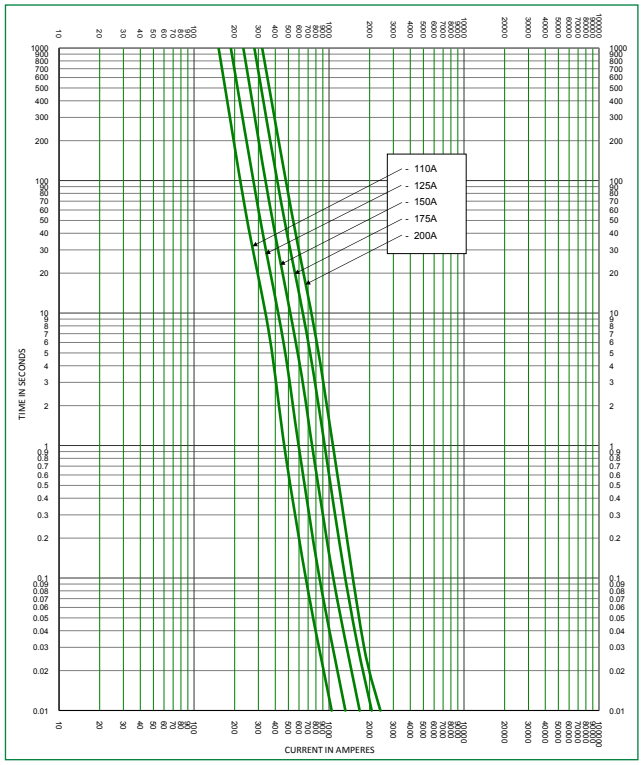
Time Current Curves









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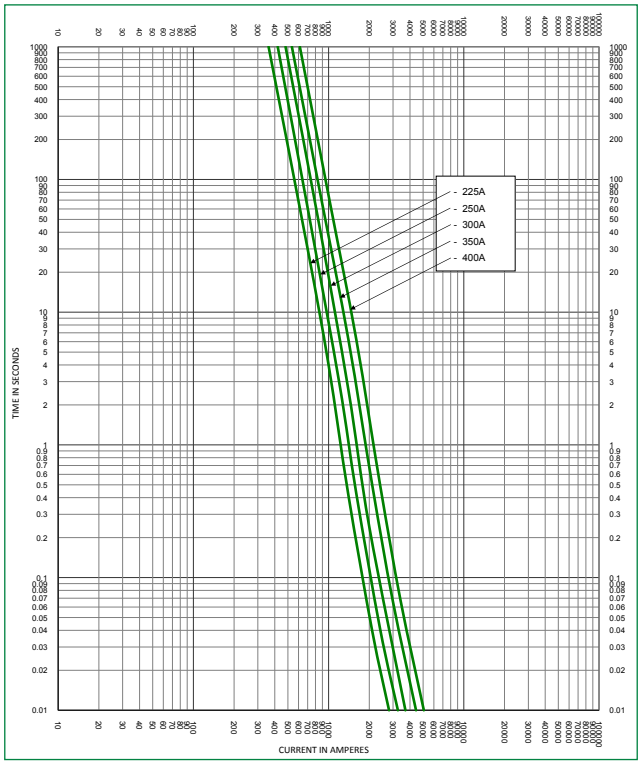

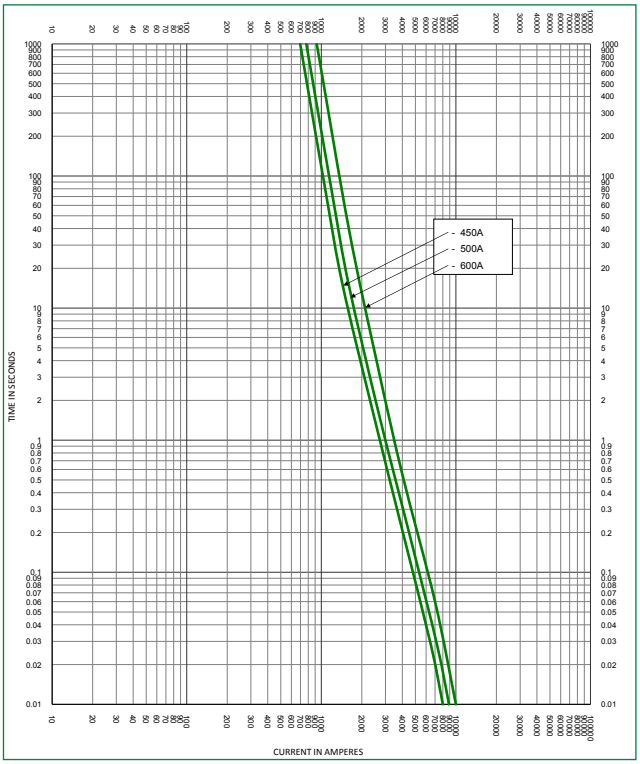

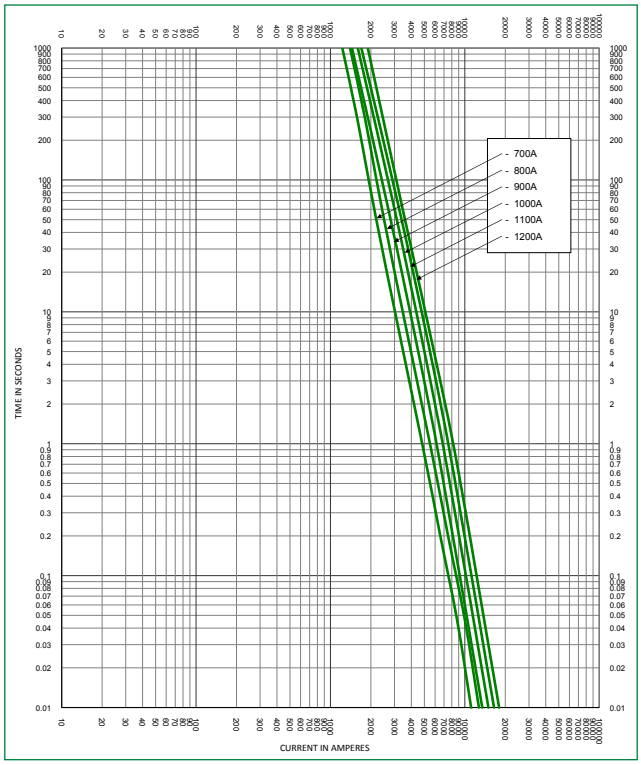

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