

POWR-GARD® Fuse Datasheet

JTD SERIES INDICATOR® POWR-PRO® FUSES

POWR-PRO® 600 V ac • Time Delay • 8/10-600 A



Description

The Littelfuse POWR-PRO® JTD_ID Indicator Class J fuse provides visual blown fuse indication and maximum protection in a compact package. The current-limiting time delay JTD_ID offers a patented design which reduces nuisance fuse openings.

Features/Benefits

- POWR-PRO® Performance
- Current-Limiting
- IEC Type 2 Protection
- Indication and non-indication version available
- Indicating and din mount holders available
- Dual-element design

Applications

- Fused combination motor controllers and motor control centers
- Transformer protection
- Protection for series rated molded case circuit-breaker panels
- General purpose circuits

Specifications

Voltage Ratings

Ac: 600 V
Dc: 300 V ($\frac{8}{10}$ –100 A)
500 V (110–600 A)

Amperage Range Interrupting Rating

$\frac{8}{10}$ –600 A
Ac: 200 kA rms symmetrical
300kA rms symmetrical
(Littelfuse self-certified)

Material

Dc: 20 kA
Body: Melamine
Caps: Nickel-plated Bronze ($\frac{8}{10}$ –60 A)
Brass (70–200 A)

Approvals

Brass Cap with Copper Blade (225–600 A)
Ac: Standard 248-8, Class J
UL Listed (File: E81895)
CSA Certified (File: LR29862)

Country of Origin

Dc: Littelfuse self-certified
Mexico

Ordering Information

AMPERAGE RATINGS							
$\frac{8}{10}$	2¼	4½	10	35	90	225	600
1	2½	5	12	40	100	250	–
1¼	2¾	5¾	15	45	110	300	–
1½	3	6	17½	50	125	350	–
1¾	3¾	7	20	60	150	400	–
1⅞	3½	8	25	70	175	450	–
2	4	9	30	80	200	500	–

TYPE	SERIES	AMPERAGE	CATALOG NUMBER	ORDERING NUMBER
INDICATING	JTD_ID	60	JTD60ID	0JTD060.TXID
NON-INDICATING	JTD	60	JTD60	0JTD060.T

Web Resources

Time-current curves, data sheets and additional technical information: Littelfuse.com/jtd

Recommended Fuse Holders

LFJ60 Series
LFPSJ Series ($\frac{8}{10}$ –60 A)

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Dimensions Inches (mm)

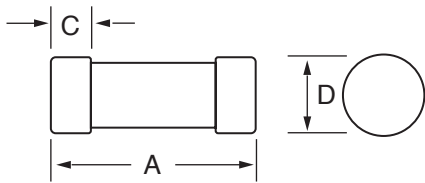


Fig. 1

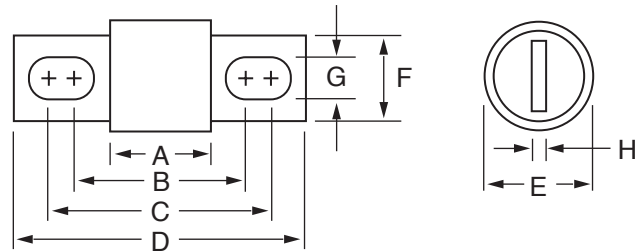


Fig. 2

Dimensions of JTD_ID & JTD

AMPERAGE	FIG. NO.	DIMENSIONS INCHES (mm)							
		A	B	C	D	E	F	G	H
1 – 30	1	2¼ (57.2)	—	½ (12.7)	13/16 (20.6)	—	—	—	—
35 – 60	1	2¾ (60.3)	—	5/8 (15.9)	1¼ (27.0)	—	—	—	—
70 – 100	2	2½ (66.7)	3¼ (89.7)	3 ²³ / ₃₂ (94.5)	4 ⁵ / ₈ (117.5)	1/8 (28.6)	¾ (19.1)	9/32 (7.1)	1/8 (3.2)
110 – 200	2	3 (76.2)	4 ⁹ / ₃₂ (108.7)	4 ¹⁵ / ₃₂ (113.5)	5 ³ / ₄ (146.1)	1½ (38.1)	1/8 (28.6)	9/32 (7.1)	3/16 (4.8)
225 – 400	2	3 ³ / ₈ (85.7)	5/8 (130.2)	5 ³ / ₈ (136.5)	7 ¹ / ₈ (181.0)	2 (50.8)	1 ⁵ / ₈ (41.3)	1 ³ / ₃₂ (10.3)	¼ (6.4)
450 – 600	2	3 ³ / ₄ (95.3)	5 ²⁷ / ₃₂ (148.4)	6 ⁵ / ₃₂ (156.4)	8 (203.2)	2½ (63.5)	2 (50.8)	1 ⁷ / ₃₂ (13.5)	3/8 (9.5)

Electrical Specifications

ORDERING NUMBER	AMPERAGE RATING	VOLTAGE RATING		INTERRUPTING RATING		WATTS LOSS AT 100% RATED CURRENT (W)	WATTS LOSS AT 80% RATED CURRENT (W)	TOTAL CLEARING I ² T (A ² SEC) 200 kA	AGENCY APPROVALS	
		AC	DC	AC	DC				UL	CSA
OJTD003.T	3	600	300	200 kA	20 kA	4.537	2.801	820	•	•
OJTD010.T	10	600	300	200 kA	20 kA	4.087	2.418	1690	•	•
OJTD030.T	30	600	300	200 kA	20 kA	4.247	2.92	4754	•	•
OJTD060.T	60	600	300	200 kA	20 kA	6.447	3.83	10450	•	•
OJTD100.V	100	600	300	200 kA	20 kA	7.463	4.447	68150	•	•
OJTD200.X	200	600	500	200 kA	20 kA	18.39	10.187	159000	•	•
OJTD400.X	400	600	500	200 kA	20 kA	40.037	23.463	1055000	•	•
OJTD600.X	600	600	500	200 kA	20 kA	61.187	34.983	1970000	•	•

Fuse Weight

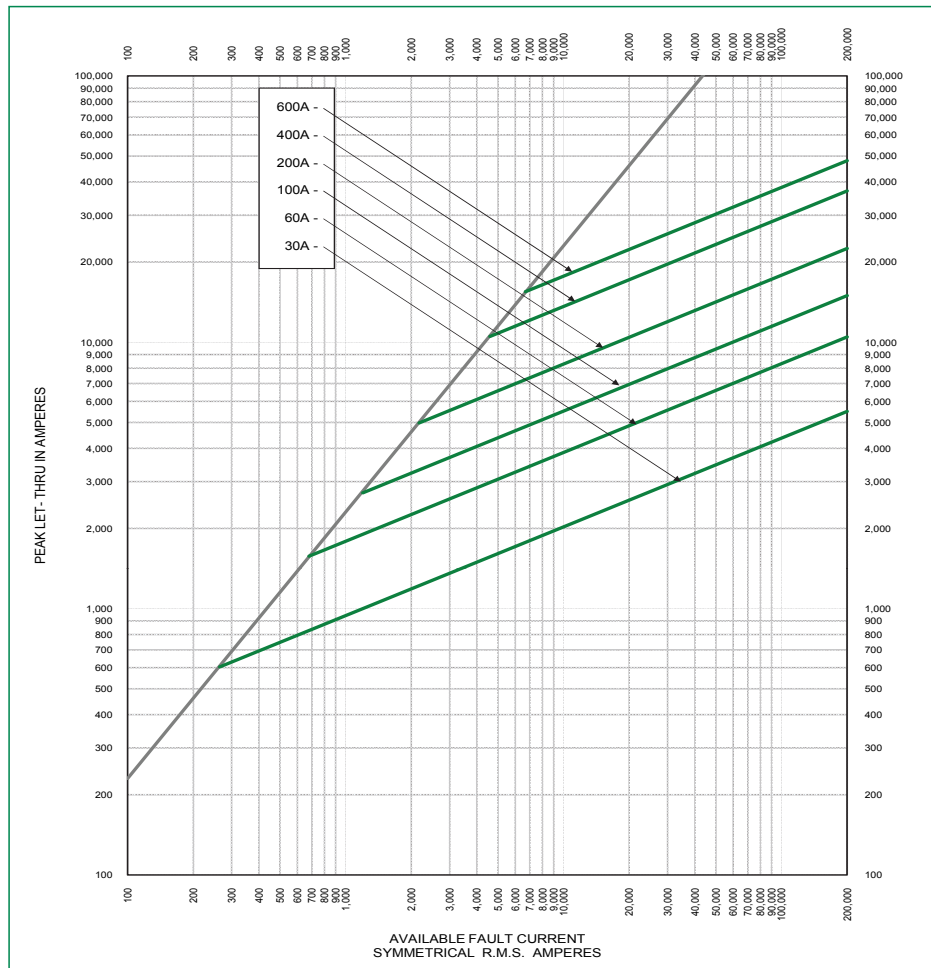
AMPERAGE	JTD-ID (POUNDS)	JTD-ID (GRAMS)	JTD (POUNDS)	JTD (GRAMS)
8/10–3 ½	0.088	39.92	0.084	38.10
4–12	0.090	40.82	0.086	39.01
15–30	0.090	40.82	0.086	39.01
35–60	0.180	81.65	0.176	79.83
70–100	0.242	109.77	0.238	107.95
110–200	0.774	351.08	0.770	349.27
225–400	1.704	772.92	1.700	771.11
450–600	3.124	1417.02	3.120	1415.21

Current-Limiting Effects of JTD & JTDID (600 V) Fuses

SHORT CIRCUIT CURRENT [†]	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS					
	30 A	60 A	100 A	200 A	400 A	600 A
5,000	699	1,331	1,903	2,858	4,702	-
10,000	881	1,676	2,397	3,601	5,925	7,689
15,000	1,008	1,919	2,744	4,123	6,782	8,802
20,000	1,110	2,112	3,020	4,537	7,464	9,687
25,000	1,196	2,275	3,254	4,888	8,041	10,436
30,000	1,271	2,418	3,457	5,194	8,545	11,089
35,000	1,338	2,545	3,640	5,468	8,995	11,674
40,000	1,398	2,661	3,805	5,717	9,405	12,205
50,000	1,506	2,867	4,099	6,158	10,131	13,148
60,000	1,601	3,046	4,356	6,544	10,766	13,972
80,000	1,762	3,353	4,795	7,203	11,849	15,378
100,000	1,898	3,612	5,165	7,759	12,764	16,565
150,000	2,173	4,134	5,912	8,882	14,611	18,963
200,000	2,391	4,551	6,507	9,776	16,082	20,871

[†]Prospective RMS Symmetrical Amperes Short-Circuit Current
 Note: Data derived from Peak Let-Thru Curves

Peak Let-Thru Curve (JTD & JTDID)



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