

POWR-GARD® Fuse Datasheet



JTD SERIES INDICATOR® POWR-PRO® FUSES

POWR-PRO® 600 Vac • Time Delay • $\frac{1}{4}$ to 600 A



Description

The Littelfuse POWR-PRO® JTD/JD Indicator Class J fuse provides visual blown fuse indication and maximum protection in a compact package. The current-limiting time delay JTD/JD 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

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 ($\frac{1}{4}$ to 100 A) 500 V (110–600 A)
Amperage Range	$\frac{1}{4}$ to 600 A
Interrupting Rating	AC: 200 kA rms symmetrical 300 kA rms asymmetrical DC: 20 kA
Material	Body: Melamine Cap: Nickel-plated Bronze ($\frac{1}{4}$ to 60 A) Brass (70–200 A) Brass Cap with Copper Blade (225–600 A)
Approvals	AC: Standard 249-9, Class J UL Listed (File: E81895) CSA Certified (File: LR29862) DC: Littelfuse self-certified
Country of Origin	Mexico

Ordering Information

AMPERAGE RATINGS							
$\frac{1}{4}$ A	$\frac{1}{2}$ A	1 A	10	35	90	225	600
1	2 $\frac{1}{2}$	5	12	40	100	250	–
1 $\frac{1}{2}$	2 $\frac{1}{2}$	5 $\frac{1}{2}$	15	45	110	300	–
1 $\frac{1}{2}$	3	6	17 $\frac{1}{2}$	50	125	350	–
1 $\frac{1}{2}$	3 $\frac{1}{2}$	7	20	60	150	400	–
1 $\frac{1}{2}$	3 $\frac{1}{2}$	8	25	70	175	450	–
2	4	9	30	80	200	500	–

TYPE	SERIES	AMPERAGE	CATALOG NUMBER	ORDERING NUMBER
INDICATING	JTD/JD	60	JTD60JD	0JTD60JD
NON-INDICATING	JTD	60	JTD60	0JTD60T

Web Resources

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

Recommended Fuse Holders

LF60 Series
 LFPSJ Series ($\frac{1}{4}$ to 60 A)

JTD DIMENSIONS AND CURRENT-LIMITING EFFECTS

Dimensions Inches (mm)

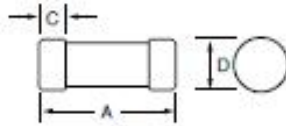


Fig. 1

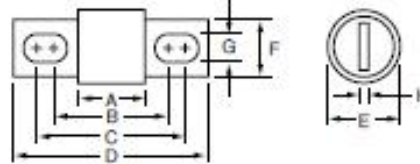


Fig. 2

Dimensions of JTD_ID & JTD

AMPERAGE	FIG. NO.	DIMENSIONS INCHES (mm)							
		A	B	C	D	E	F	G	H
1-30	1	2 1/4 (57.2)	—	3/8 (12.7)	5/16 (20.6)	—	—	—	—
35-60	1	2 1/4 (58.3)	—	1/2 (15.9)	1/4 (27.0)	—	—	—	—
75-100	2	2 1/4 (58.7)	3 1/4 (82.7)	3 3/4 (94.5)	4 1/4 (117.5)	1 1/4 (28.5)*	1/2 (13.1)	1/2 (7.1)	1/2 (13.2)
110-200	2	3 (76.2)	4 1/4 (108.7)	4 1/4 (113.5)	5 1/4 (146.1)	1 1/4 (38.1)	1 1/4 (28.6)	1/2 (7.1)	1/2 (14.9)
225-400	2	3 1/4 (86.7)	5 1/4 (130.2)	5 1/4 (136.5)	7 1/4 (181.0)	2 (50.8)	1 1/4 (41.3)	1 1/4 (10.3)	1/4 (6.4)
450-600	2	3 1/4 (86.3)	5 7/8 (148.4)	6 1/4 (158.4)	8 (203.2)	2 1/4 (53.5)	2 (50.8)	1 1/4 (13.5)	1/4 (6.5)

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				
0JTD003.T	3	600	300	200 kA	20 kA	4.537	2.801	820	UL • CSA •
0JTD010.T	10	600	300	200 kA	20 kA	4.987	2.419	1600	UL • CSA •
0JTD030.T	30	600	300	200 kA	20 kA	4.247	2.32	4754	UL • CSA •
0JTD060.T	60	600	300	200 kA	20 kA	6.447	3.83	10450	UL • CSA •
0JTD100.V	100	600	300	200 kA	20 kA	7.463	4.447	68150	UL • CSA •
0JTD200.X	200	600	500	200 kA	20 kA	18.39	10.187	159000	UL • CSA •
0JTD400.X	400	600	500	200 kA	20 kA	48.037	23.463	1055000	UL • CSA •
0JTD600.X	600	600	500	200 kA	20 kA	61.187	34.983	1970000	UL • CSA •

Fuse Weight

AMPERAGE	JTD-ID (POUNDS)	JTD-ID (GRAMS)	JTD (POUNDS)	JTD (GRAMS)
3/10-3 K	0.008	20.92	0.004	36.10
4-10	0.090	40.82	0.086	39.01
15-30	0.090	40.82	0.086	39.01
35-60	0.180	81.65	0.116	79.40
70-100	0.242	109.77	0.230	103.95
110-200	0.774	351.38	0.770	349.27
225-400	1.704	772.92	1.700	771.11
450-600	3.124	1411.02	3.120	1410.21

JTD SERIES CLASS J FUSE

Current-Limiting Effects of JTD_ID (600 V) Fuses

SHORT CIRCUIT CURRENT ¹	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS						
	15 A	30 A	60 A	100 A	200 A	400 A	600 A
5,000	595	750	1,500	1,600	2,600	4,800	5,300
10,000	675	925	1,800	2,450	3,600	5,700	7,750
15,000	775	1,050	2,100	2,800	4,100	6,500	9,000
20,000	875	1,175	2,300	3,000	4,400	7,250	9,700
25,000	900	1,200	2,500	3,300	5,000	8,000	10,500
30,000	950	1,300	2,600	3,500	5,100	8,400	11,000
35,000	1,000	1,350	2,700	3,700	5,400	9,000	12,000
40,000	1,050	1,400	2,800	3,900	5,600	9,200	12,500
50,000	1,100	1,500	3,000	4,200	6,000	10,000	13,000
60,000	1,200	1,600	3,200	4,500	6,400	10,500	14,000
80,000	1,300	1,700	3,400	4,900	7,200	11,200	15,500
100,000	1,375	1,800	3,600	5,200	7,800	12,200	16,500
150,000	1,500	2,000	3,950	6,000	9,000	14,500	19,000
200,000	1,600	2,175	4,000	6,500	10,000	16,000	20,500

¹ Prospective RMS Symmetrical Average Short-Circuit Current
 Note: Data derived from Peak Let-Thru Curves

Peak Let-Thru Curve (JTD_ID)

