

Class J Fuses

JTD_ID Series Indicator®

POWR-PRO® 600 V ac • Time Delay • $\frac{1}{10}$ –600 A



Description

The JTD_ID Indicating* Series fuses provide visual blown indication and maximum protection in a compact size. These time-delay, dual-element fuses carry the Littelfuse POWR-PRO® advanced technology designation and are specifically designed for circuits where space is at a premium. They are ideal for use in systems with high in-rush currents. The JTD_ID fuses offer a patented design that reduces nuisance fuse openings. In addition, they provide Type 2 “No Damage” protection for both NEMA- and IEC-type motor circuit components. These fuses help lower the costs associated with downtime, provide longer fuse life by minimizing nuisance openings, increase system performance by minimizing equipment damage, and improve safety by minimizing accidents.

The POWR-PRO performance brand offers advanced technology protection features, such as self-certification to 300,000 A rms symmetrical and superior current-limiting capability. The self-certification at 300,000 A meets the current trend toward higher short-circuit current ratings (SCCR). Self-certification testing was conducted at a nationally recognized testing laboratory, and the tests were UL witnessed. The POWR-PRO design also includes blown fuse indication for maximum security and protection.

*Also available in non-indicating version

Features & Benefits

FEATURES	BENEFITS
POWR-PRO® technology	Superior protection against electrical system damage
Dual-element	Provides extra time-delay protection with dual-element construction
Blown fuse indicator	Built-in, blown-fuse indication for quick identification of blown fuses, which reduces downtime and increases safety
Current-limiting	POWR-PRO current limitation is $\frac{1}{10}$ –600 A. Reduces damage caused by heating and magnetic effects of short-circuit currents
Mounting options	Indicating and DIN mount holders available

Applications

- Motor control centers
- Fused combination motor controllers
- Transformers
- UL listed series-rated molded case circuit breaker panels
- General purpose circuits

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Specifications

Voltage Ratings	Ac: 600 V Dc: 300 V ($\frac{1}{10}$ –100 A) 500 V (110–600 A)
Ampere Range	$\frac{1}{10}$ –600 A
Interrupting Rating	Ac: 200 kA rms symmetrical 300 kA rms symmetrical (Littelfuse self-certified) Dc: 20 kA Littelfuse self-certified
Material	Body: Melamine Caps: Nickel-plated Bronze ($\frac{1}{10}$ –60 A) Brass (70–200 A) Brass Cap with Copper Blade (225–600 A)
Applicable Standards	UL 248-8, Class J
Country of Origin	Mexico

Certification & Compliance

UL	UL Listed (File: E81895)
CSA	CSA Certified (File: LR29862)

Accessories

LFJ60 series fuse holder
LFPSJ series ($\frac{1}{10}$ – 60 A) fuse holder

Ordering Information

AMPERE	CATALOG NUMBER	PRODUCT MARKING	PACK QUANTITY	ORDERING NUMBER	UPC	AGENCY APPROVALS	
						UL	CSA
0.8	JTD.800ID	JTD $\frac{1}{10}$ ID	10	OJTD.800TXID	07945802564	•	•
1	JTD001ID	JTD 1ID	10	OJTD001.TXID	07945802565	•	•
1.25	JTD1.25ID	JTD 1- $\frac{1}{4}$ ID	10	OJTD1.25TXID	07945802566	•	•
1.5	JTD01.5ID	JTD 1- $\frac{1}{2}$ ID	10	OJTD01.5TXID	07945802567	•	•
1.6	JTD01.6ID	JTD 1- $\frac{6}{10}$ ID	10	OJTD01.6TXID	07945802568	•	•
1.8	JTD01.8ID	JTD 1- $\frac{9}{10}$ ID	10	OJTD01.8TXID	07945802569	•	•
2	JTD002ID	JTD 2ID	10	OJTD002.TXID	07945802570	•	•
2.25	JTD2.25ID	JTD 2- $\frac{1}{4}$ ID	10	OJTD2.25TXID	07945802571	•	•
2.5	JTD02.5ID	JTD 2- $\frac{1}{2}$ ID	10	OJTD02.5TXID	07945802572	•	•
2.8	JTD02.8ID	JTD 2- $\frac{8}{10}$ ID	10	OJTD02.8TXID	07945802573	•	•
3	JTD003ID	JTD 3ID	10	OJTD003.TXID	07945802574	•	•
3.2	JTD03.2ID	JTD 3- $\frac{2}{10}$ ID	10	OJTD03.2TXID	07945802575	•	•
3.5	JTD03.5ID	JTD 3- $\frac{1}{2}$ ID	10	OJTD03.5TXID	07945802576	•	•
4	JTD004ID	JTD 4ID	10	OJTD004.TXID	07945802577	•	•
4.5	JTD04.5ID	JTD 4- $\frac{1}{2}$ ID	10	OJTD04.5TXID	07945802578	•	•
5	JTD005ID	JTD 5ID	10	OJTD005.TXID	07945802579	•	•

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						UL	CSA
5.6	JTD05.6ID	JTD 5- $\frac{6}{10}$ ID	10	OJTD05.6TXID	07945802580	•	•
6	JTD006ID	JTD 6ID	10	OJTD006.TXID	07945802581	•	•
7	JTD007ID	JTD 7ID	10	OJTD007.TXID	07945802582	•	•
8	JTD008ID	JTD 8ID	10	OJTD008.TXID	07945802583	•	•
9	JTD009ID	JTD 9ID	10	OJTD009.TXID	07945802584	•	•
10	JTD010ID	JTD 10ID	10	OJTD010.TXID	07945802595	•	•
12	JTD012ID	JTD 12ID	10	OJTD012.TXID	07945802596	•	•
15	JTD015ID	JTD 15ID	10	OJTD015.TXID	07945802585	•	•
17.5	JTD17.5ID	JTD 17 $\frac{1}{2}$ ID	10	OJTD17.5TXID	07945802586	•	•
20	JTD020ID	JTD 20ID	10	OJTD020.TXID	07945802587	•	•
25	JTD025ID	JTD 25ID	10	OJTD025.TXID	07945802588	•	•
30	JTD030ID	JTD 30ID	10	OJTD030.TXID	07945802589	•	•
35	JTD035ID	JTD 35ID	10	OJTD035.TXID	07945802590	•	•
40	JTD040ID	JTD 40ID	10	OJTD040.TXID	07945802591	•	•
45	JTD045ID	JTD 45ID	10	OJTD045.TXID	07945802592	•	•
50	JTD050ID	JTD 50ID	10	OJTD050.TXID	07945802593	•	•
60	JTD060ID	JTD 60ID	10	OJTD060.TXID	07945802594	•	•
70	JTD070ID	JTD70ID	5	OJTD070.VXID	07945803176	•	•
80	JTD080ID	JTD80ID	5	OJTD080.VXID	07945803177	•	•
90	JTD090ID	JTD90ID	5	OJTD090.VXID	07945803178	•	•
100	JTD100ID	JTD100ID	5	OJTD100.VXID	07945803179	•	•
110	JTD110ID	JTD110ID	1	OJTD110.XXID	07945803181	•	•
125	JTD125ID	JTD125ID	1	OJTD125.XXID	07945803182	•	•
150	JTD150ID	JTD150ID	1	OJTD150.XXID	07945803183	•	•
175	JTD170ID	JTD170ID	1	OJTD175.XXID	07945803184	•	•
200	JTD200ID	JTD200ID	1	OJTD200.XXID	07945803185	•	•
225	JTD225ID	JTD225ID	1	OJTD225.XXID	07945803186	•	•
250	JTD250ID	JTD250ID	1	OJTD250.XXID	07945803187	•	•
300	JTD300ID	JTD300ID	1	OJTD300.XXID	07945803188	•	•
350	JTD350ID	JTD350ID	1	OJTD350.XXID	07945803189	•	•
400	JTD400ID	JTD400ID	1	OJTD400.XXID	07945803190	•	•
450	JTD450ID	JTD450ID	1	OJTD450.XXID	07945803191	•	•
500	JTD500ID	JTD500ID	1	OJTD500.XXID	07945803192	•	•
600	JTD600ID	JTD600ID	1	OJTD600.XXID	07945803193	•	•

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Electrical Specifications

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
	AC	DC	AC	DC			
3	600	300	200 kA	20 kA	4.537	2.801	820
10	600	300	200 kA	20 kA	4.087	2.418	1690
30	600	300	200 kA	20 kA	4.247	2.92	4754
60	600	300	200 kA	20 kA	6.447	3.83	10450
100	600	300	200 kA	20 kA	7.463	4.447	68150
200	600	500	200 kA	20 kA	18.39	10.187	159000
400	600	500	200 kA	20 kA	40.037	23.463	1055000
600	600	500	200 kA	20 kA	61.187	34.983	1970000

Fuse Weight

AMPERAGE	POUNDS	GRAMS
1/10–3 1/2	0.088	39.92
4–12	0.090	40.82
15–30	0.090	40.82
35–60	0.180	81.65
70–100	0.242	109.77
110–200	0.774	351.08
225–400	1.704	772.92
450–600	3.124	1417.02

Dimensions

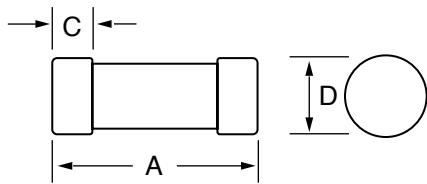


Fig. 1

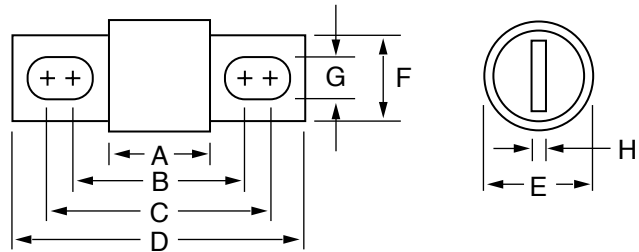


Fig. 2

AMPERAGE	FIG. NO.	VOLTAGE RATING							
		A	B	C	D	E	F	G	H
1–30	1	2 1/4 (57.2)	—	1/2 (12.7)	1 1/16 (20.6)	—	—	—	—
35–60	1	2 3/8 (60.3)	—	5/8 (15.9)	1 1/8 (27.0)	—	—	—	—
70–100	2	2 5/8 (66.7)	3 11/32 (89.7)	3 23/32 (94.5)	4 5/8 (117.5)	1 1/8 (28.6)	3/4 (19.1)	9/32 (7.1)	1/8 (3.2)
110–200	2	3 (76.2)	4 3/32 (108.7)	4 15/32 (113.5)	5 1/4 (146.1)	1 1/2 (38.1)	1 1/8 (28.6)	9/32 (7.1)	3/16 (4.8)
225–400	2	3 3/8 (85.7)	5 1/8 (130.2)	5 3/8 (136.5)	7 1/8 (181.0)	2 (50.8)	1 3/8 (41.3)	13/32 (10.3)	1/4 (6.4)
450–600	2	3 3/4 (95.3)	5 27/32 (148.4)	6 3/32 (156.4)	8 (203.2)	2 1/2 (63.5)	2 (50.8)	17/32 (13.5)	3/8 (9.5)

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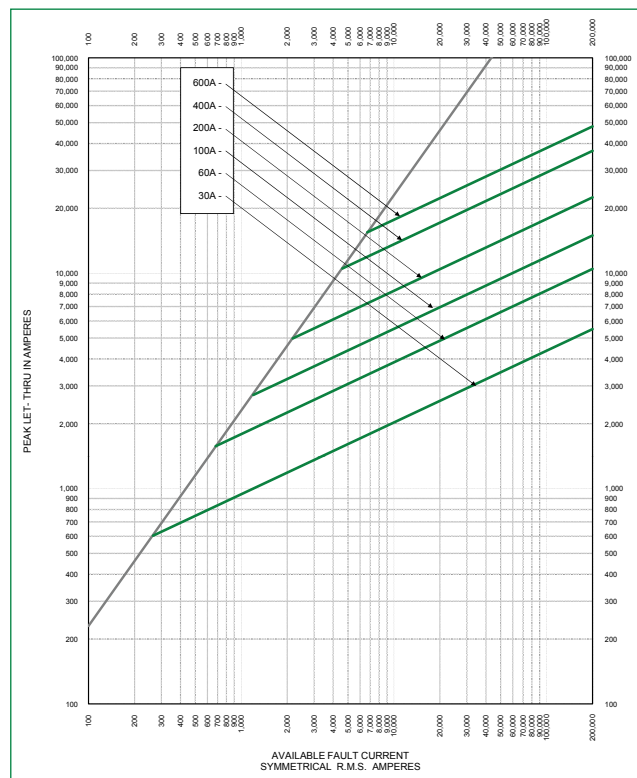
Current-Limiting Effects

SHORT CIRCUIT CURRENT*	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS					
	30 A	60 A	100 A	200 A	400 A	600 A
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 Curve

Peak Let-Thru Curve



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