JTD_ID Series Indicator® POWR-PRO® Class J Fuses

600 VAC • Time Delay • 8/10 – 600 Amperes

The Littelfuse POWR-PRO JTD_ID Indicator Class J fuse provides visual blown fuse indication and maximum protection in a compact package. The compact Class J package was designed specifically for circuits where space is at a premium. The current-limiting time delay JTD_ID offers a patented, true dual-element design that is ideal for use in circuits with high, in-rush currents. The Superior performance characteristics of JTD_ID Indicator fuses reduce nuisance fuse opening, and the blown fuse indication reduces downtime while increasing safety.

Applications

Fused combination motor controllers to provide IEC Type 2 ("No Damage") motor branch circuit short-circuit and ground fault protection
Motor control centers
Transformer protection
Protection for UL Listed series rated molded case circuit breaker panels
General purpose circuits — mains, feeders and branch circuits — especially when space is limited.

Features/Benefits

- Reduce downtime — A glance at the indicating window of a JTD_ID Indicator fuse pinpoints open fuses immediately. If the indicating window is dark, the fuse has opened. It's that simple.
- Reduce nuisance opening — Indicator fuses have superior time-delay and cycling characteristics which can lengthen fuse life and decrease needless opening.
- Reduce fuse inventory — JTD_ID Indicator fuses have superior performance characteristics, which means they can be used on a variety of applications; therefore, decreasing fuse inventory.
- Reduce equipment damage — Indicator fuses provide superior overload and short-circuit protection that can reduce equipment damage. Indicator fuses also provide IEC Type 2 "No Damage" protection to IEC and NEMA type motor starters.
- Reduce accidents — The JTD_ID Indicator fuse improves safety by minimizing exposure to live circuits. Unlike other forms of blown fuse indication, once the indicating window darkens, it stays dark. It does not matter if the power is on or off or if the fuse is in a tool box. Other forms of indication require the power to remain on, which is a safety hazard for personnel.

Specifications

Voltage Ratings:	AC:	600 Volts
	DC:	300 Volts (8/10 – 100A)
		500 Volts (110 – 600A)
Interrupting Ratings:	AC:	200,000 amperes rms symmetrical
		300,000 amperes rms symmetrical (Littelfuse self-certified)
Ampere Range:		8/10 – 600 amperes
Approvals:	AC:	Standard 248-8, Class J
		ULListed (File No: E81895)
		CSA Certified (File No: LR29862)
	DC:	Littelfuse self-certified
		8/10 - 100A: 300VDC self certified
		110 – 600A: 500VDC self certified

Ampere Ratings

8/10	2 8/10	7	30	100	350
1	3	8	35	110	400
1 1/4	3 2/10	9	40	125	450
1 1/2	3 1/2	10	45	150	500
1 6/10	4	12	50	175	600
1 8/10	4 1/2	15	60	200	
2	5	17 1/2	70	225	
2 1/4	5 6/10	20	80	250	
2 1/2	6	25	90	300	

Example part number (series & amperage): JTD 60 ID

Recommended Fuse Blocks

LJ600 series, LPSJ series
Refer to Blocks & Holders section of this catalog for additional information.

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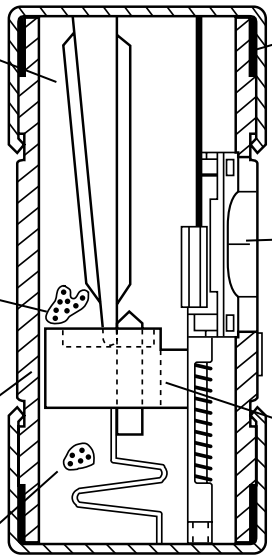
An Inside Look . . .

Superior Short-Circuit Elements
Reduce damage to equipment and enables the Littelfuse JTD_ID to provide IEC Type 2 "No Damage" protection to IEC and NEMA motor starters.

Stone-Sand Filler
Helps provide I^2t and I_{peak} values well below UL maximum limits and improves heat dissipation and reliability.

Elastomeric Silicone EPR Plug
A space-age material used in the patented overload section of the Littelfuse JTD_ID.



Granular Quartz Filler
Assists in quenching the arc that occurs during overload conditions.

Plated End Caps
Help reduce corrosion and provide superior contact for lower heat generation.

Blown Fuse Indicator
Incorporates precision wound elements to provide consistent and reliable blown fuse indication.

Solid State Overload Section
Patented thermally reversible design utilizes high-tech aircraft grade polymers to ensure reliable operation every time.

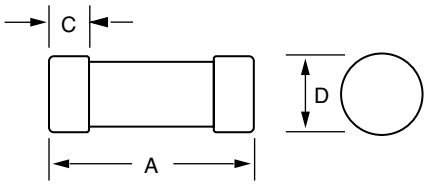


FIG. 1

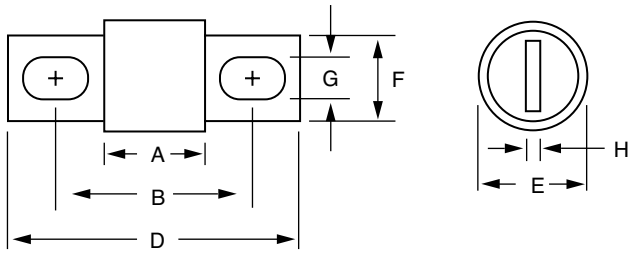


FIG.2

Amperes	Refer to Fig. No.	Dimensions in Inches (mm in parentheses)							
		A	B	C	D	E	F	G	H
8/10– 30	1	2¼ (57.2)	—	½ (12.7)	13/16 (20.6)	—	—	—	—
35 – 60	1	2⅜ (60.3)	—	⅝ (15.9)	1 1/16 (27.0)	—	—	—	—
70 – 100	2	2⅝ (66.7)	3⅝ (92.1)	—	4⅝ (117.5)	1⅛ (28.6)	¾ (19.1)	9/32 (7.1)	⅛ (3.2)
110 – 200	2	3 (76.2)	4⅜ (111.1)	—	5¾ (146.1)	1⅝ (41.3)	1⅛ (28.6)	9/32 (7.1)	3/16 (4.8)
225 – 400	2	3⅜ (85.7)	5¼ (133.4)	—	7⅛ (181.0)	2⅛ (54.0)	1⅝ (41.3)	13/32 (10.3)	¼ (6.4)
450 – 600	2	3¾ (95.3)	6 (152.4)	—	8 (203.2)	2⅝ (66.7)	2 (50.8)	17/32 (13.5)	⅜ (9.5)

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Current-Limiting Effects of JTD_ID (600V) fuses

Short Circuit Current*	Apparent RMS Symmetrical for Various Fuse Ratings						
	15A	30A	60A	100A	200A	400A	600A
5,000	565	750	1,500	1,800	2,800	4,800	5,000
10,000	675	925	1,900	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	825	1,125	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

* Prospective RMS Symmetrical Amperes Short-Circuit Current

Note: Data derived from Peak Let-Thru Curves