

# JTD\_ID Series Indicator POWR-PRO® Class J Fuses

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

 **Littelfuse®**  
POWR-GARD™ Products

**POWR-  
PRO  
Fuses**



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 inrush currents. Superior performance characteristics of JTD\_ID Indicator fuses reduce nuisance fuse opening and the blown fuse indication reduces down-time and increases safety.

## APPLICATIONS

Fused combination motor controllers to provide IEC Type II (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 at a premium

## FEATURES/BENEFITS

- **Reduce down-time** — A glance at the indicating window of a JTD\_ID Indicator fuse pinpoints open fuses immediately. If the window is dark, the fuse has opened. It's that simple.

## SPECIFICATIONS

**Voltage Ratings:** AC: 600 Volts

DC: Contact Factory

### 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  
UL Listed (File No: E81895)  
CSA Certified (File No: LR29862)  
DC: Littelfuse self-certified

## AMPERE RATINGS

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

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

## RECOMMENDED FUSE BLOCKS

LJ600 series

Refer to Fuse Block section of this catalog for additional information.

No fuse testing required. Machine operators can immediately determine that there is an open fuse and request maintenance personnel to bring the proper replacement.

- **Reduce nuisance opening** — Indicator fuses have superior time-delay and cycling characteristics which can lengthen fuse life and decrease needless opening.
- **Reduce fuse inventory** — Because JTD\_ID Indicator fuses have superior performance characteristics they can be used on a variety of applications, thus 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 II "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 indicator 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 causes a safety hazard for personnel.

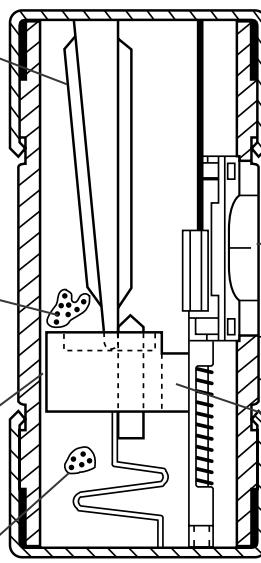


## An Inside Look . . .

**Superior Short-Circuit Elements** – reduce damage to equipment and enables the Littelfuse JTD\_ID to provide IEC Type II "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.



**Plated End Caps** – help reduce corrosion and provide superior contact that aids in 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.

**Granular Quartz Filler** – assists in quenching the arc that occurs during overload conditions.

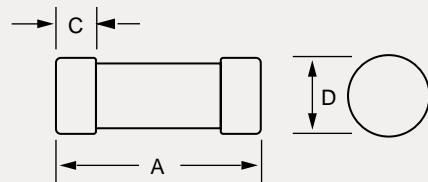


FIG. 1

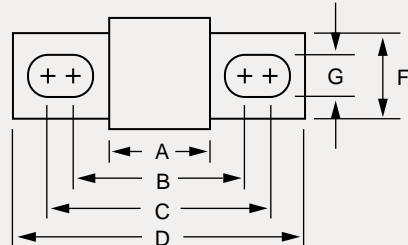


FIG. 2

AMPERES	REFER TO FIG. NO.	DIMENSIONS IN INCHES (mm in parentheses)							
		A	B	C	D	E	F	G	H
8/10–30	1	2-1/4 (57.2)	—	1/2 (12.7)	13/16 (20.6)	—	—	—	—
35 – 60	1	2-3/8 (60.3)	—	5/8 (15.9)	1-1/16 (27.0)	—	—	—	—
70 – 100	2	2-5/8 (66.7)	3-17/32 (89.7)	3-23/32 (94.5)	4-5/8 (117.5)	1 (25.4)	3/4 (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)	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)	1-5/8 (41.3)	13/32 (10.3)	1/4 (6.4)
450 – 600	2	3-3/4 (95.3)	5-27/32 (148.4)	6-5/32 (156.4)	8 (203.2)	2-1/2 (63.5)	2 (50.8)	17/32 (13.5)	3/8 (9.5)



## Current-Limiting Effects of JTD\_ID (600V) fuses

\* Prospective RMS Symmetrical Amperes

Short-Circuit Current

\*\* Apparent RMS Symmetrical

Note: Data derived from Peak Let-Thru Curves

Short Circuit Current*	Let-Thru Current** 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

