

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 (8/10-100 A) 500 V (110-600 A) |
| Amperage Range | 8/10-600 A |
| Interrupting Rating | AC: 200 kA rms symmetrical 300kA rms symmetrical (Littelfuse self-certified) |
| Material | DC: 20 kA Body: Melamine Caps: Nickel-plated Bronze (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) DC: Littelfuse self-certified |
| Country of Origin | Mexico |

Ordering Information

| AMPERAGE RATINGS | | | | | | | |
|------------------|----|----|-----|----|-----|-----|-----|
| 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 | — |
| 1⅝ | 3⅒ | 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 (8/10-60 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 | 2¼ (57.2) | — | ½ (12.7) | 13/16 (20.6) | — | — | — | — |
| 35 – 60 | 1 | 2¾ (60.3) | — | 5/8 (15.9) | 11/16 (27.0) | — | — | — | — |
| 70 – 100 | 2 | 2½ (66.7) | 317/32 (89.7) | 323/32 (94.5) | 45/8 (117.5) | 1/8 (28.6) | 3/4 (19.1) | 9/32 (7.1) | 1/8 (3.2) |
| 110 – 200 | 2 | 3 (76.2) | 49/32 (108.7) | 415/32 (113.5) | 53/4 (146.1) | 1½ (38.1) | 1/8 (28.6) | 9/32 (7.1) | 3/16 (4.8) |
| 225 – 400 | 2 | 3¾ (85.7) | 5/8 (130.2) | 5¾ (136.5) | 7/8 (181.0) | 2 (50.8) | 15/8 (41.3) | 13/32 (10.3) | ¼ (6.4) |
| 450 – 600 | 2 | 3¾ (95.3) | 527/32 (148.4) | 65/32 (156.4) | 8 (203.2) | 2½ (63.5) | 2 (50.8) | 17/32 (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 I²T (A² SEC) 200 kA | AGENCY APPROVALS | |
|-----------------|-----------------|----------------|-----|---------------------|-------|--------------------------------------|-------------------------------------|------------------------------------|------------------|-----|
| | | AC | DC | AC | DC | | | | UL | CSA |
| 0JTD003.T | 3 | 600 | 300 | 200 kA | 20 kA | 4.537 | 2.801 | 820 | • | • |
| 0JTD010.T | 10 | 600 | 300 | 200 kA | 20 kA | 4.087 | 2.418 | 1690 | • | • |
| 0JTD030.T | 30 | 600 | 300 | 200 kA | 20 kA | 4.247 | 2.92 | 4754 | • | • |
| 0JTD060.T | 60 | 600 | 300 | 200 kA | 20 kA | 6.447 | 3.83 | 10450 | • | • |
| 0JTD100.V | 100 | 600 | 300 | 200 kA | 20 kA | 7.463 | 4.447 | 68150 | • | • |
| 0JTD200.X | 200 | 600 | 500 | 200 kA | 20 kA | 18.39 | 10.187 | 159000 | • | • |
| 0JTD400.X | 400 | 600 | 500 | 200 kA | 20 kA | 40.037 | 23.463 | 1055000 | • | • |
| 0JTD600.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 |

JTD SERIES CLASS J FUSE

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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