

# JLLN/JLLS CLASS T FUSES

300/600 VAC • Fast-Acting • 1-600 Amperes



## Specifications

|                         |                              |  |  |
|-------------------------|------------------------------|--|--|
| <b>Voltage Ratings:</b> | AC:                          | 300 V (JLLN); 600 V (JLLS)   |  |
|                         | DC:                          | 125 V (JLLN 1 – 30 A)<br>160 V (JLLN 35 – 60 A)<br>125 V (JLLN 70 – 100 A)<br>125 V (JLLN 110 – 1200 A)<br>300 V (JLLS)  |  |
|                         | <b>Interrupting Ratings:</b> | AC:  | 200 kA rms symmetrical   |
|                         |                              | DC:  | 20 kA<br>(JLLN 70 – 100 A)<br>(JLLN 110 – 1200 A)<br>(JLLS 1 – 1200 A) |
| <b>Ampere Range:</b>    | 1 – 1200 A                   |  |  |
| <b>Approvals:</b>       | AC:                          | Standard 248-15, Class T<br>UL Listed (File No. E81895):<br>JLLN (1-1200 A)<br>JLLS (1-800 A)<br>UL Recognized (File No. E71611)<br>JLLS (900 – 1200 A)<br>CSA Certified (File No. LR29862)<br>JLLN/JLLS (1 – 600 A) |  |
|                         | DC:                          | UL Listed (File No. E81895):<br>JLLN (35 – 1200 A)<br>Littelfuse self-certified:<br>JLLN (1-30 A)<br>JLLS (1 – 1200 A)   |  |

## Description

JLLN/JLLS fuses are less than 1/3 the size of comparable Class R fuses and are typically used for short circuit protection of drives and surge sensitive components. When rated in accordance with the NEC®, JLLN/JLLS fuses provide fast-acting overload and short circuit protection for non-inductive circuits and equipment.

## Applications

- Variable speed drive protection
- Compact mains switches

## Features/Benefits

- Extremely current-limiting
- Compact design
- 200 kA Interrupting Rating
- JLLN Series is RoHS Compliant

## Ordering Information

| AMPERE RATINGS |    |     |     |      |
|----------------|----|-----|-----|------|
| 1              | 30 | 90  | 250 | 800  |
| 2              | 35 | 100 | 300 | 900* |
| 3              | 40 | 110 | 350 | 1000 |
| 6              | 45 | 125 | 400 | 1100 |
| 10             | 50 | 150 | 450 | 1200 |
| 15             | 60 | 175 | 500 |      |
| 20             | 70 | 200 | 600 |      |
| 25             | 80 | 225 | 700 |      |

\*JLLS only

Note: Contact the factory for RoHS compliant Class T fuses.

| SERIES | VOLTAGE | AMPERAGE | CATALOG NUMBER | SYSTEM NUMBER |
|--------|---------|----------|----------------|---------------|
| JLLS   | 600 V   | 6        | JLLS006        | JLLS006.T     |
| JLLN   | 300 V   | 10       | JLLN010        | JLLN010.T     |

## Web Resources

TC Curves, downloadable CAD drawings and other technical information: [www.littelfuse.com/jlln](http://www.littelfuse.com/jlln)  
[www.littelfuse.com/jlls](http://www.littelfuse.com/jlls)

## Recommended Fuseholders

LFT30 Series  
LFT60 Series  
LSCR Series for 700-800 A

# JLLN/JLLS CLASS T FUSES

## Dimensions in inches (mm)



Fig. 1



Fig. 2



Fig. 3

| AMPERES    | REFER TO FIG. NO. | SERIES | DIMENSIONS IN INCHES (mm) |                |              |                |                |               |             |
|------------|-------------------|--------|---------------------------|----------------|--------------|----------------|----------------|---------------|-------------|
|            |                   |        | A                         | B              | C            | D              | E              | F             | G           |
| 1 – 30     | 1                 | JLLN   | 7/8 (22.2)                | —              | 9/32 (7.1)   | 13/32 (10.3)   | —              | —             | —           |
|            |                   | JLLS   | 1 1/2 (38.1)              | —              | 9/32 (7.1)   | 9/16 (14.3)    | —              | —             | —           |
| 35 – 60    | 1                 | JLLN   | 7/8 (22.2)                | —              | 9/32 (7.1)   | 9/16 (14.3)    | —              | —             | —           |
|            |                   | JLLS   | 1 9/16 (39.7)             | 1 3/16 (20.6)  | 13/32 (10.3) | 1 (25.4)       | 1/16 (1.6)     | 1 3/32 (27.8) | —           |
| 70 – 100   | 3                 | JLLN   | 2 5/32 (54.8)             | 1 9/16 (39.7)  | 3/4 (19.1)   | 13/16 (20.6)   | 27/32 (21.4)   | 9/32 (7.1)    | 1/8 (3.2)   |
|            |                   | JLLS   | 2 61/64 (75.0)            | 2 23/64 (59.9) | 3/4 (19.1)   | 13/16 (20.6)   | 1 41/64 (41.7) | 9/32 (7.1)    | 1/8 (3.2)   |
| 110 – 200  | 3                 | JLLN   | 2 7/16 (61.9)             | 1 11/16 (42.9) | 7/8 (22.2)   | 1 1/16 (27.0)  | 27/32 (21.4)   | 11/32 (8.7)   | 3/16 (4.8)  |
|            |                   | JLLS   | 3 1/4 (82.6)              | 2 1/2 (63.5)   | 7/8 (22.2)   | 1 1/16 (27.0)  | 1 21/32 (42.1) | 11/32 (8.7)   | 3/16 (4.8)  |
| 225 – 400  | 3                 | JLLN   | 2 3/4 (69.9)              | 1 27/32 (46.8) | 1 (25.4)     | 1 5/16 (33.3)  | 53/64 (21.0)   | 13/32 (10.3)  | 1/4 (6.4)   |
|            |                   | JLLS   | 3 5/8 (92.1)              | 2 23/32 (69.1) | 1 (25.4)     | 1 19/32 (40.5) | 1 23/32 (43.7) | 13/32 (10.3)  | 1/4 (6.4)   |
| 450 – 600  | 3                 | JLLN   | 3 1/16 (77.8)             | 2 1/32 (51.6)  | 1 1/4 (31.8) | 1 19/32 (40.5) | 7/8 (22.2)     | 31/64 (12.3)  | 5/16 (7.9)  |
|            |                   | JLLS   | 3 63/64 (101.2)           | 2 61/64 (75.0) | 1 1/4 (31.8) | 2 1/16 (52.4)  | 1 49/64 (44.8) | 31/64 (12.3)  | 5/16 (7.9)  |
| 700 – 800  | 3                 | JLLN   | 3 3/8 (85.7)              | 2 7/32 (64.3)  | 1 3/4 (44.5) | 2 1/16 (52.4)  | 7/8 (22.2)     | 35/64 (13.9)  | 3/8 (9.5)   |
|            |                   | JLLS   | 4 21/64 (109.9)           | 3 11/64 (80.6) | 1 3/4 (44.5) | 2 1/2 (63.5)   | 1 55/64 (47.2) | 35/64 (13.9)  | 3/8 (9.5)   |
| 900 – 1200 | 3                 | JLLN   | 4 (101.6)                 | 2 7/32 (64.3)  | 2 (50.8)     | 2 1/2 (63.5)   | 1 1/32 (26.2)  | 39/64 (15.5)  | 7/16 (11.1) |
|            |                   | JLLS   | 5.27 (133.9)              | 3.80 (96.5)    | 2 (50.8)     | 2.63 (66.8)    | 2.30 (58.4)    | 0.67 (15.5)   | 0.44 (11.2) |

## Current-Limiting Effects of JLLN (300 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  | 800 A  | 1200 A |
| 5,000                  | 700   | 775   | 1,100 | 1,650 | 3,500  | 4,000  | 5,000  | 5,000  |
| 10,000                 | 900   | 1,000 | 1,400 | 2,100 | 4,400  | 5,100  | 6,750  | 8,250  |
| 15,000                 | 1,000   | 1,100 | 1,600 | 2,400 | 5,000  | 5,900  | 7,750  | 10,000 |
| 20,000                 | 1,100   | 1,250 | 1,800 | 2,700 | 5,500  | 6,500  | 8,750  | 11,000 |
| 25,000                 | 1,230   | 1,300 | 1,950 | 2,900 | 6,000  | 7,000  | 9,500  | 12,000 |
| 30,000                 | 1,300   | 1,475 | 2,050 | 3,100 | 6,400  | 7,500  | 10,000 | 12,500 |
| 35,000                 | 1,330   | 1,575 | 2,150 | 3,300 | 6,750  | 7,750  | 10,500 | 13,500 |
| 40,000                 | 1,430   | 1,600 | 2,300 | 3,500 | 7,000  | 8,000  | 11,000 | 14,000 |
| 50,000                 | 1,500   | 1,750 | 2,400 | 3,700 | 7,500  | 8,750  | 12,000 | 15,000 |
| 60,000                 | 1,700   | 1,900 | 2,700 | 4,000 | 8,000  | 9,500  | 12,500 | 16,000 |
| 80,000                 | 1,850   | 2,100 | 2,800 | 4,400 | 9,000  | 10,500 | 14,000 | 17,500 |
| 100,000                | 2,000   | 2,250 | 3,150 | 4,800 | 9,750  | 11,500 | 15,000 | 18,500 |
| 150,000                | 2,300   | 2,600 | 3,600 | 5,500 | 11,000 | 13,000 | 17,500 | 22,000 |
| 200,000                | 2,600   | 2,800 | 3,900 | 6,000 | 12,000 | 14,500 | 19,500 | 24,000 |

\*Prospective RMS Symmetrical Amperes Short-Circuit Current  
Note: Data Derived from Peak Let-Thru Curves

## Current-Limiting Effects of JLLS (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  | 800 A  | 1200 A |
| 5,000                  | 750   | 1,225 | 1,400 | 2,850 | 4,600  | 5,000  | 5,000  | 5,000  |
| 10,000                 | 945   | 1,525 | 1,700 | 3,600 | 6,000  | 8,500  | 9,400  | 10,000 |
| 15,000                 | 1,050   | 1,700 | 2,000 | 4,050 | 6,600  | 9,750  | 10,500 | 13,000 |
| 20,000                 | 1,150   | 1,900 | 2,200 | 4,450 | 7,250  | 10,500 | 11,000 | 14,750 |
| 25,000                 | 1,300   | 2,050 | 2,400 | 4,800 | 8,000  | 11,500 | 12,500 | 15,500 |
| 30,000                 | 1,375   | 2,150 | 2,450 | 5,000 | 8,250  | 12,000 | 13,750 | 16,500 |
| 35,000                 | 1,400   | 2,250 | 2,600 | 5,100 | 8,500  | 13,000 | 14,000 | 17,000 |
| 40,000                 | 1,425   | 2,400 | 2,800 | 5,200 | 8,700  | 14,000 | 14,750 | 18,000 |
| 50,000                 | 1,600   | 2,450 | 2,900 | 6,000 | 9,500  | 14,500 | 16,000 | 20,000 |
| 60,000                 | 1,650   | 2,625 | 3,100 | 6,250 | 10,000 | 15,500 | 17,300 | 21,000 |
| 80,000                 | 1,825   | 2,800 | 3,400 | 7,000 | 11,000 | 17,000 | 18,750 | 23,000 |
| 100,000                | 2,000   | 3,100 | 3,700 | 7,250 | 12,000 | 18,000 | 20,000 | 25,000 |
| 150,000                | 2,250   | 3,400 | 4,300 | 8,500 | 13,000 | 21,000 | 23,000 | 28,500 |
| 200,000                | 2,450   | 3,800 | 4,600 | 9,000 | 15,000 | 23,000 | 25,000 | 31,000 |

\*Prospective RMS Symmetrical Amperes Short-Circuit Current  
Note: Data Derived from Peak Let-Thru Curves

### Peak Let-Thru Curve JLLS





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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