

Class RK5 Fuses

IDSR Series

600 V ac/dc • Dual Element • Time Delay • $\frac{1}{10}$ –600 A • Indicating



Description

The IDSR series combines a 600 V dc capability with indication to provide an ideal solution for many dc applications.

Features & Benefits

| FEATURES | BENEFITS |
|---|---|
| Excellent short-circuit protection | Improve safety through faster response to fault currents |
| Dual-element design | Provides advanced short circuit and overload protection |
| Current limiting | Restricts fault currents to provide a high degree of circuit protection. |
| Visual Blown Fuse Indication | Indication window turns black allowing fast and easy identification of the fuse that needs replacement. |

Applications

- Dc circuits
- Solar inverters
- Motors
- Transformers
- Solenoids
- Fluorescent lighting

Specifications

| | |
|-----------------------------|---|
| Voltage Rating | Ac: 600 V Dc: 600 V |
| Interrupting Ratings | Ac: 200 kA rms symmetrical; 300 kA rms symmetrical (Littelfuse self-certified) Dc: 20 kA |
| Ampere Range | $\frac{1}{10}$ –600 A |
| Applicable Standards | UL 248-12, Class RK5 |

Certification & Compliance

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

Class RK5 Fuses

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Accessories

LFR60 series fuse holder

Ordering Information

| AMPERE RATING | CATALOG NUMBER | PRODUCT MARKING | PACKING QUANTITY | ORDERING NUMBER | UPC CODE |
|---------------|----------------|-----------------|------------------|-----------------|-------------|
| 1/10 | IDSR.100 | IDSR 1/10 | 10 | IDSR.100T | 07945801523 |
| 15/100 | IDSR.150 | IDSR 15/100 | 10 | IDSR.150T | 07945801524 |
| 3/10 | IDSR.200 | IDSR 3/10 | 10 | IDSR.200T | 07945801525 |
| 1/4 | IDSR.250 | IDSR 1/4 | 10 | IDSR.250T | 07945801526 |
| 3/10 | IDSR.300 | IDSR 3/10 | 10 | IDSR.300T | 07945801527 |
| 4/10 | IDSR.400 | IDSR 4/10 | 10 | IDSR.400T | 07945801528 |
| 1/2 | IDSR.500 | IDSR 1/2 | 10 | IDSR.500T | 07945801529 |
| 6/10 | IDSR.600 | IDSR 6/10 | 10 | IDSR.600T | 07945801530 |
| 8/10 | IDSR.800 | IDSR 8/10 | 10 | IDSR.800T | 07945801531 |
| 1 | IDSR001 | IDSR 1 | 10 | IDSR001.T | 07945801532 |
| 1 1/8 | IDSR1.12 | IDSR 1 1/8 | 10 | IDSR1.12T | 07945801533 |
| 1 1/4 | IDSR1.25 | IDSR 1 1/4 | 10 | IDSR1.25T | 07945801534 |
| 1 1/10 | IDSR01.4 | IDSR 1 1/10 | 10 | IDSR01.4T | 07945801535 |
| 1 1/2 | IDSR01.5 | IDSR 1 1/2 | 10 | IDSR01.5T | 07945801536 |
| 1 1/10 | IDSR01.6 | IDSR 1 1/10 | 10 | IDSR01.6T | 07945801537 |
| 1 1/10 | IDSR01.8 | IDSR 1 1/10 | 10 | IDSR01.8T | 07945801538 |
| 2 | IDSR002 | IDSR 2 | 10 | IDSR002.T | 07945801539 |
| 2 1/4 | IDSR2.25 | IDSR 2 1/4 | 10 | IDSR2.25T | 07945801540 |
| 2 1/2 | IDSR02.5 | IDSR 2 1/2 | 10 | IDSR02.5T | 07945801541 |
| 2 1/10 | IDSR02.8 | IDSR 2 1/10 | 10 | IDSR02.8T | 07945801542 |
| 3 | IDSR003 | IDSR 3 | 10 | IDSR003.T | 07945801543 |
| 3 1/10 | IDSR03.2 | IDSR 3 1/10 | 10 | IDSR03.2T | 07945801544 |
| 3 1/2 | IDSR03.5 | IDSR 3 1/2 | 10 | IDSR03.5T | 07945801545 |
| 4 | IDSR004 | IDSR 4 | 10 | IDSR004.T | 07945801546 |
| 4 1/2 | IDSR04.5 | IDSR 4 1/2 | 10 | IDSR04.5T | 07945801547 |
| 5 | IDSR005 | IDSR 5 | 10 | IDSR005.T | 07945801548 |
| 5 1/10 | IDSR05.6 | IDSR 5 1/10 | 10 | IDSR05.6T | 07945801549 |
| 6 | IDSR006 | IDSR 6 | 10 | IDSR006.T | 07945801550 |
| 6 1/4 | IDSR6.25 | IDSR 6 1/4 | 10 | IDSR6.25T | 07945801551 |
| 7 | IDSR007 | IDSR 7 | 10 | IDSR007.T | 07945801552 |
| 7 1/2 | IDSR07.5 | IDSR 7 1/2 | 10 | IDSR07.5T | 07945801553 |
| 8 | IDSR008 | IDSR 8 | 10 | IDSR008.T | 07945801554 |
| 9 | IDSR009 | IDSR 9 | 10 | IDSR009.T | 07945801555 |
| 10 | IDSR010 | IDSR 10 | 10 | IDSR010.T | 07945801556 |
| 12 | IDSR012 | IDSR 12 | 10 | IDSR012.T | 07945801557 |
| 15 | IDSR015 | IDSR 15 | 10 | IDSR015.T | 07945801558 |
| 17 1/2 | IDSR17.5 | IDSR 17 1/2 | 10 | IDSR17.5T | 07945801559 |

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|---------------|----------------|-----------------|------------------|-----------------|-------------|
| 20 | IDSR020 | IDSR 20 | 10 | IDSR020.T | 07945801560 |
| 25 | IDSR025 | IDSR 25 | 10 | IDSR025.T | 07945801561 |
| 30 | IDSR030 | IDSR 30 | 10 | IDSR030.T | 07945801562 |
| 35 | IDSR035 | IDSR 35 | 10 | IDSR035.T | 07945801563 |
| 40 | IDSR040 | IDSR 40 | 10 | IDSR040.T | 07945801564 |
| 45 | IDSR045 | IDSR 45 | 10 | IDSR045.T | 07945801565 |
| 50 | IDSR050 | IDSR 50 | 10 | IDSR050.T | 07945801566 |
| 60 | IDSR060 | IDSR 60 | 10 | IDSR060.T | 07945801567 |
| 70 | IDSR070 | IDSR 70 | 5 | IDSR070.V | 07945801568 |
| 75 | IDSR075 | IDSR 75 | 5 | IDSR075.V | 07945801569 |
| 80 | IDSR080 | IDSR 80 | 5 | IDSR080.V | 07945801570 |
| 90 | IDSR090 | IDSR 90 | 5 | IDSR090.V | 07945801571 |
| 100 | IDSR100 | IDSR 100 | 5 | IDSR100.V | 07945801572 |
| 110 | IDSR110 | IDSR 110 | 1 | IDSR110.X | 07945801573 |
| 125 | IDSR125 | IDSR 125 | 1 | IDSR125.X | 07945801574 |
| 150 | IDSR150 | IDSR 150 | 1 | IDSR150.X | 07945801575 |
| 175 | IDSR175 | IDSR 175 | 1 | IDSR175.X | 07945801576 |
| 200 | IDSR200 | IDSR 200 | 1 | IDSR200.X | 07945801577 |
| 225 | IDSR225 | IDSR 225 | 1 | IDSR225.X | 07945801578 |
| 250 | IDSR250 | IDSR 250 | 1 | IDSR250.X | 07945801579 |
| 300 | IDSR300 | IDSR 300 | 1 | IDSR300.X | 07945801580 |
| 350 | IDSR350 | IDSR 350 | 1 | IDSR350.X | 07945801581 |
| 400 | IDSR400 | IDSR 400 | 1 | IDSR400.X | 07945801582 |
| 450 | IDSR450 | IDSR 450 | 1 | IDSR450.X | 07945801583 |
| 500 | IDSR500 | IDSR 500 | 1 | IDSR500.X | 07945801584 |
| 600 | IDSR600 | IDSR 600 | 1 | IDSR600.X | 07945801585 |

Class RK5 Fuses IDSR Series

Dimensions

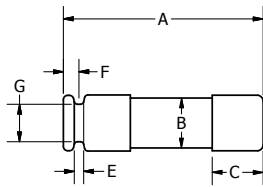


FIG. 1

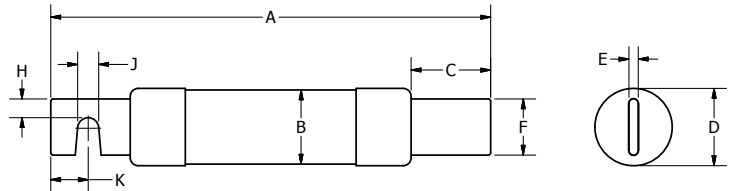


FIG. 2

| AMPS | FIGURE NUMBER | DIMENSIONS INCHES (MM) | | | | | | | | | |
|---------|---------------|------------------------|----------------|----------------|----------------|---------------|----------------|----------------|----------------|----------------|----------------|
| | | A | B | C | D | E | F | G | H | J | K |
| 1/10-30 | 1 | 5 (127.0) | 0.76 (19.2) | 0.63 (15.9) | 0.81 (20.7) | 0.09 (2.4) | 0.19 (4.7) | 0.61 (15.5) | - | - | - |
| 35-60 | 1 | 5.50 (139.7) | 1 (25.1) | 0.63 (15.9) | 1.06 (27.0) | 0.09 (2.4) | 0.25 (6.4) | 0.88 (22.2) | - | - | - |
| 70-100 | 2 | 7.88 (200.0) | 1.24 (31.5) | 1.06 (27.0) | 1.28 (32.6) | 0.13 (3.2) | 0.75 (19.1) | - | 0.25 (6.4) | 0.28 (7.1) | 0.50 (12.7) |
| 110-200 | 2 | 9.63 (244.5) | 1.74 (44.2) | 1.47 (37.3) | 1.79 (45.4) | 0.19 (4.8) | 1.13 (28.6) | - | 0.44 (11.1) | 0.28 (7.1) | 0.69 (17.5) |
| 225-400 | 2 | 11.63 (295.3) | 2.50 (63.1) | 2 (50.8) | 2.54 (64.6) | 0.25 (6.4) | 1.63 (41.3) | - | 0.63 (15.9) | 0.41 (10.3) | 0.95 (24.0) |
| 450-600 | 2 | 13.38 (339.7) | 3 (76.0) | 2.41 (61.1) | 3.04 (77.3) | 0.25 (6.4) | 2 (50.8) | - | 0.75 (19.1) | 0.53 (13.5) | 1.13 (28.6) |

Current-Limiting Effects of IDSR Fuses

| SHORT CIRCUIT CURRENT* | APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS | | | | | | |
|------------------------|---|-------|-------|--------|--------|--------|--------|
| | 15 A | 30 A | 60 A | 100 A | 200 A | 400 A | 600 A |
| 5,000 | 800 | 1,100 | 2,100 | 3,200 | 5,000 | 5,000 | 5,000 |
| 10,000 | 1,100 | 1,600 | 2,900 | 4,300 | 7,300 | 10,000 | 10,000 |
| 15,000 | 1,300 | 1,900 | 3,400 | 5,000 | 8,600 | 13,700 | 15,000 |
| 20,000 | 1,400 | 2,200 | 3,800 | 5,600 | 9,500 | 15,500 | 19,000 |
| 25,000 | 1,500 | 2,500 | 4,100 | 6,100 | 10,300 | 16,700 | 21,500 |
| 30,000 | 1,600 | 2,700 | 4,500 | 6,500 | 11,000 | 17,700 | 23,500 |
| 35,000 | 1,700 | 2,900 | 4,700 | 6,800 | 11,600 | 18,600 | 25,200 |
| 40,000 | 1,800 | 3,100 | 5,000 | 7,200 | 12,100 | 19,400 | 26,600 |
| 50,000 | 1,900 | 3,400 | 5,400 | 7,800 | 13,100 | 20,800 | 29,500 |
| 60,000 | 2,000 | 3,600 | 5,800 | 8,300 | 13,900 | 22,000 | 30,600 |
| 80,000 | 2,200 | 4,000 | 6,300 | 9,100 | 15,400 | 24,000 | 33,200 |
| 100,000 | 2,300 | 4,200 | 6,800 | 9,800 | 16,700 | 25,500 | 35,100 |
| 150,000 | 2,600 | 4,500 | 7,700 | 11,200 | 19,300 | 28,100 | 38,000 |
| 200,000 | 2,800 | 4,600 | 8,400 | 12,400 | 21,400 | 30,000 | 39,600 |

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

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