

R-Rated Fuses For Motor Circuit Protection Medium Voltage

JCK, JCK-A, JCK-B, JCH, JCL, JCL-A, JCL-B, JCG, JCR-A, & JCR-B



- R-Rated medium voltage fuses are back-up current limiting fuses used in conjunction with medium voltage motors and motor controllers.
- The JCK-A, JCL-A, & JCR-A are supplied with Cutler-Hammer Ampgard Hookeye.
- This single hookeye is on one end of the fuse and aids in the insertion and removal of the fuse.
- Current limiting fuses may be designated as R-Rated if they meet the following requirements:
 1. The fuse will safely interrupt all currents between its minimum and maximum interrupting ratings.
 2. The fuse will melt in a range of 15 to 35 seconds at a value of 100 times the "R" number (ANSI C37.46).
- Bussmann R-Rated current limiting fuses are designed for use with medium voltage starters to provide short-circuit protection for the motor and motor controller.
- These fuses offer a high level of fault current interruption in a self-contained, non-venting package which can be mounted indoors or in an enclosure.
- Open fuse indication on all fuses.

Catalog Symbol: JCK, JCK-A, JCK-B, JCH, JCL, JCL-A, JCL-B, JCG, JCR-A, & JCR-B

**R-Rated
Medium Voltage
Current Limiting**

2400V AC — JCK, JCK-A, JCK-B, JCH

4800V AC — JCL, JCL-A, JCL-B, JCG

7200V AC — JCR-A, JCR-B

Max. Design Voltage 2540V AC — JCK, JCK-A, JCK-B, JCH
5080V AC — JCL, JCL-A, JCL-B, JCG
8300V AC — JCR-A, JCR-B

UL Recognized: 2540V AC — JCK, JCK-A
5080V AC — JCL, JCL-A
(2R-24R)

UL Recognized (GUIDE #MSSS2, FILE # E96676)

R-Rated Fuses

For Motor Circuit Protection

Medium Voltage

JCK, JCK-A, JCK-B, JCH, JCL, JCL-A, JCL-B, JCG, JCR-A, & JCR-B

Specifications

| Buss Catalog No. | Amperage | Maximum Design Voltage | Dimensions (Inches) | | | Construction | Max. Int. Cap. | | Min. Int. Cap. |
|---|----------|---------------------------|---------------------|-------|------|--------------|----------------|-------------|----------------|
| | | | A | B | C | | Amps (Asym.) | Amps (Sym.) | Amps (Sym.) |
| 2400V; R-Rated; Indoor/Enclosure (See Figure 1) | | | | | | | | | |
| JCK-2R | 70 2R | 2540V | 11.24 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 165 |
| JCK-3R | 100 3R | 2540V | 11.24 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 220 |
| JCK-4R | 130 4R | 2540V | 11.24 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 320 |
| JCK-5R | 150 5R | 2540V | 11.24 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 410 |
| JCK-6R | 170 6R | 2540V | 11.24 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 480 |
| JCK-9R | 200 9R | 2540V | 11.24 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 720 |
| JCK-12R | 230 12R | 2540V | 11.24 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 970 |
| JCK-18R | 390 18R | 2540V | 11.24 | 3.0 | 3.0 | Double | 80,000 | 50,000 | 1,430 |
| JCK-24R | 450 24R | 2540V | 11.24 | 3.0 | 3.0 | Double | 80,000 | 50,000 | 1,880 |
| 2400V; R-Rated; Indoor/Enclosure; With Cutler-Hammer Ampgard Hookeye (See Figure 1) | | | | | | | | | |
| JCK-A-2R | 70 2R | 2540V | 11.24 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 165 |
| JCK-A-3R | 100 3R | 2540V | 11.24 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 220 |
| JCK-A-4R | 130 4R | 2540V | 11.24 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 320 |
| JCK-A-5R | 150 5R | 27540V | 11.24 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 410 |
| JCK-A-6R | 170 6R | 2540V | 11.24 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 480 |
| JCK-A-9R | 200 9R | 2540V | 11.24 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 720 |
| JCK-A-12R | 230 12R | 2540V | 11.24 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 970 |
| JCK-A-18R | 390 18R | 2540V | 11.24 | 3.0 | 3.0 | Double | 80,000 | 50,000 | 1,430 |
| JCK-A-24R | 450 24R | 2540V | 11.24 | 3.0 | 3.0 | Double | 80,000 | 50,000 | 1,880 |
| 2400V; R-Rated; Indoor/Enclosure; Bolt-On (See Figure 2) | | | | | | | | | |
| JCK-B-30 | 25 | 2540V | 14.18 | 12.81 | - | Single | 80,000 | 50,000 | 100 |
| JCK-B-2R | 70 2R | 2540V | 14.18 | 12.81 | - | Single | 80,000 | 50,000 | 180 |
| JCK-B-3R | 100 3R | 2540V | 14.18 | 12.81 | - | Single | 80,000 | 50,000 | 270 |
| JCK-B-4R | 130 4R | 2540V | 14.18 | 12.81 | - | Single | 80,000 | 50,000 | 360 |
| JCK-B-5R | 150 5R | 2540V | 14.18 | 12.81 | - | Single | 80,000 | 50,000 | 450 |
| JCK-B-6R | 170 6R | 2540V | 14.18 | 12.81 | - | Single | 80,000 | 50,000 | 540 |
| JCK-B-9R | 200 9R | 2540V | 14.18 | 12.81 | - | Single | 80,000 | 50,000 | 740 |
| JCK-B-12R | 230 12R | 2540V | 14.18 | 12.81 | - | Single | 80,000 | 50,000 | 1,080 |
| JCK-B-18R | 390 18R | 2540V | 14.18 | 12.81 | 3.56 | Double | 80,000 | 50,000 | 1,500 |
| JCK-B-24R | 450 24R | 2540V | 14.18 | 12.81 | 3.56 | Double | 80,000 | 50,000 | 2,200 |
| 2400V; R-Rated; Indoor; Hermetically Sealed, Class 1, Group D, Div. 2, Hazardous Locations; For Use with Ampgard Motor Starters (See Figure 1) | | | | | | | | | |
| JCH-30 | 25 | 2540V | 11.56 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 100 |
| JCH-2R | 70 2R | 2540V | 11.56 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 180 |
| JCH-3R | 100 3R | 2540V | 11.56 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 270 |
| JCH-4R | 130 4R | 2540V | 11.56 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 360 |
| JCH-5R | 150 5R | 2540V | 11.56 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 450 |
| JCH-6R | 170 6R | 2540V | 11.56 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 540 |
| JCH-9R | 200 9R | 2540V | 11.56 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 740 |
| JCH-12R | 230 12R | 2540V | 11.56 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 1,080 |
| JCH-18R | 390 18R | 2540V | 11.56 | 3.0 | 7.68 | Double | 80,000 | 50,000 | 1,500 |
| JCH-24R | 450 24R | 2540V | 11.56 | 3.0 | 7.68 | Double | 80,000 | 50,000 | 2,200 |
| 4800V; R-Rated; Indoor/Enclosure (See Figure 1) | | | | | | | | | |
| JCL-2R | 70 2R | 5080V | 15.76 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 165 |
| JCL-3R | 100 3R | 5080V | 15.76 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 220 |
| JCL-4R | 130 4R | 5080V | 15.76 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 320 |
| JCL-5R | 150 5R | 5080V | 15.76 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 410 |
| JCL-6R | 170 6R | 5080V | 15.76 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 480 |
| JCL-9R | 200 9R | 5080V | 15.76 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 720 |
| JCL-12R | 230 12R | 5080V | 15.76 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 970 |
| JCL-18R | 390 18R | 5080V | 15.76 | 3.0 | 3.0 | Double | 80,000 | 50,000 | 1,430 |
| JCL-24R | 450 24R | 5080V | 15.76 | 3.0 | 3.0 | Double | 80,000 | 50,000 | 1,880 |

R-Rated Fuses

For Motor Circuit Protection

Medium Voltage

JCK, JCK-A, JCK-B, JCH, JCL, JCL-A, JCL-B, JCG, JCR-A, & JCR-B

Specifications

| Buss Catalog No. | Amperage | Maximum Design Voltage | Dimensions (Inches) | | | Construction | Max. Int. Cap. | | Min. Int. Cap. |
|---|----------|---------------------------|---------------------|-------|------|--------------|----------------|-------------|----------------|
| | | | A | B | C | | Amps (Asym.) | Amps (Sym.) | Amps (Sym.) |
| 4800V; R-Rated; Indoor/Enclosure; With Cutler-Hammer Ampgard Hookeye (See Figure 1) | | | | | | | | | |
| JCL-A-2R | 70 2R | 5080V | 15.76 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 165 |
| JCL-A-3R | 100 3R | 5080V | 15.76 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 220 |
| JCL-A-4R | 130 4R | 5080V | 15.76 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 320 |
| JCL-A-5R | 150 5R | 5080V | 15.76 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 410 |
| JCL-A-6R | 170 6R | 5080V | 15.76 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 480 |
| JCL-A-9R | 200 9R | 5080V | 15.76 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 720 |
| JCL-A-12R | 230 12R | 5080V | 15.76 | 3.0 | 3.0 | Single | 80,000 | 50,000 | 970 |
| JCL-A-18R | 390 18R | 5080V | 15.76 | 3.0 | 3.0 | Double | 80,000 | 50,000 | 1,430 |
| JCL-A-24R | 450 24R | 5080V | 15.76 | 3.0 | 3.0 | Double | 80,000 | 50,000 | 1,880 |
| JCL-A-36R | 650 36R | 5080V | 16.0 | 4.0 | - | Double | 100,000 | 63,000 | 3,200 |
| 4800V; R-Rated; Indoor/Enclosure; Bolt-On (See Figure 2) | | | | | | | | | |
| JCL-B-30 | 30 | 5080V | 19.25 | 17.88 | - | Single | 80,000 | 50,000 | 100 |
| JCL-B-2R | 70 2R | 5080V | 19.25 | 17.88 | - | Single | 80,000 | 50,000 | 180 |
| JCL-B-3R | 100 3R | 5080V | 19.25 | 17.88 | - | Single | 80,000 | 50,000 | 270 |
| JCL-B-4R | 130 4R | 5080V | 19.25 | 17.88 | - | Single | 80,000 | 50,000 | 360 |
| JCL-B-5R | 150 5R | 5080V | 19.25 | 17.88 | - | Single | 80,000 | 50,000 | 450 |
| JCL-B-6R | 170 6R | 5080V | 19.25 | 17.88 | - | Single | 80,000 | 50,000 | 540 |
| JCL-B-9R | 200 9R | 5080V | 19.25 | 17.88 | - | Single | 80,000 | 50,000 | 740 |
| JCL-B-12R | 230 12R | 5080V | 19.25 | 17.88 | - | Single | 80,000 | 50,000 | 1,080 |
| JCL-B-18R | 390 18R | 5080V | 19.25 | 17.88 | 3.31 | Double | 80,000 | 50,000 | 1,500 |
| JCL-B-24R | 450 24R | 5080V | 19.25 | 17.88 | 3.31 | Double | 80,000 | 50,000 | 2,200 |
| 4800V; R-Rated; Indoor; Hermetically Sealed, Class 1, Group D, Div. 2, Hazardous Locations; For Use with Ampgard Motor Starters (See Figure 1) | | | | | | | | | |
| JCG-30 | 30 | 5080V | 16.6 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 95 |
| JCG-2R | 70 2R | 5080V | 16.6 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 180 |
| JCG-3R | 100 3R | 5080V | 16.6 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 270 |
| JCG-4R | 130 4R | 5080V | 16.6 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 350 |
| JCG-5R | 150 5R | 5080V | 16.6 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 450 |
| JCG-6R | 170 6R | 5080V | 16.6 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 540 |
| JCG-9R | 200 9R | 5080V | 16.6 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 700 |
| JCG-12R | 230 12R | 5080V | 16.6 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 1,000 |
| JCG-18R | 390 18R | 5080V | 15.85 | 3.0 | 6.31 | Double | 80,000 | 50,000 | 1,450 |
| JCG-24R | 450 24R | 5080V | 15.85 | 3.0 | 6.31 | Double | 80,000 | 50,000 | 2,000 |
| 7200V; R-Rated; Indoor/Enclosure; With Ampgard Hookeye (See Figure 1) | | | | | | | | | |
| JCR-A-2R | 70 2R | 8300V | 15.85 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 200 |
| JCR-A-3R | 100 3R | 8300V | 15.85 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 320 |
| JCR-A-4R | 130 4R | 8300V | 15.85 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 405 |
| JCR-A-5R | 150 5R | 8300V | 15.85 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 550 |
| JCR-A-6R | 170 6R | 8300V | 15.85 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 670 |
| JCR-A-9R | 200 9R | 7200V | 15.85 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 1,300 |
| JCR-A-12R | 230 12R | 7200V | 15.85 | 3.0 | 4.12 | Single | 80,000 | 50,000 | 1,500 |
| JCR-A-18R | 390 18R | 7200V | 15.85 | 3.0 | 7.43 | Double | 80,000 | 50,000 | 2,000 |
| JCR-A-24R | 450 24R | 7200V | 15.85 | 3.0 | 7.43 | Double | 80,000 | 50,000 | 2,600 |
| 7200V; R-Rated; Indoor/Enclosure; Bolt-On (See Figure 2) | | | | | | | | | |
| JCR-B-2R | 70 2R | 8300V | 19.25 | 17.88 | - | Single | 80,000 | 50,000 | 200 |
| JCR-B-3R | 100 3R | 8300V | 19.25 | 17.88 | - | Single | 80,000 | 50,000 | 320 |
| JCR-B-4R | 130 4R | 8300V | 19.25 | 17.88 | - | Single | 80,000 | 50,000 | 405 |
| JCR-B-5R | 150 5R | 8300V | 19.25 | 17.88 | - | Single | 80,000 | 50,000 | 550 |
| JCR-B-6R | 170 6R | 8300V | 19.25 | 17.88 | - | Single | 80,000 | 50,000 | 670 |
| JCR-B-9R | 200 9R | 7200V | 19.25 | 17.88 | - | Single | 80,000 | 50,000 | 1,300 |
| JCR-B-12R | 230 12R | 7200V | 19.25 | 17.88 | - | Single | 80,000 | 50,000 | 1,500 |
| JCR-B-18R | 390 18R | 7200V | 19.25 | 17.88 | 3.31 | Double | 80,000 | 50,000 | 2,000 |
| JCR-B-24R | 450 24R | 7200V | 19.25 | 17.88 | 3.31 | Double | 80,000 | 50,000 | 2,600 |

R-Rated Fuses

For Motor Circuit Protection

Medium Voltage

JCK, JCK-A, JCK-B, JCH, JCL, JCL-A, JCL-B, JCG, JCR-A, & JCR-B

Dimensional Data

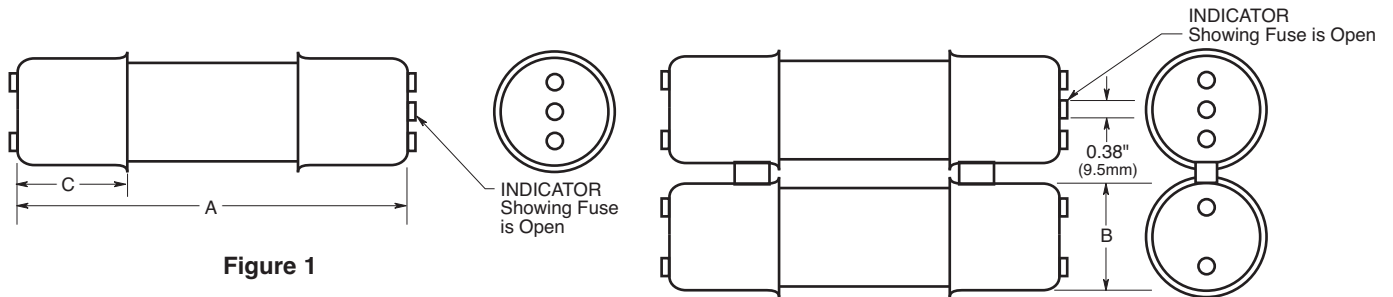
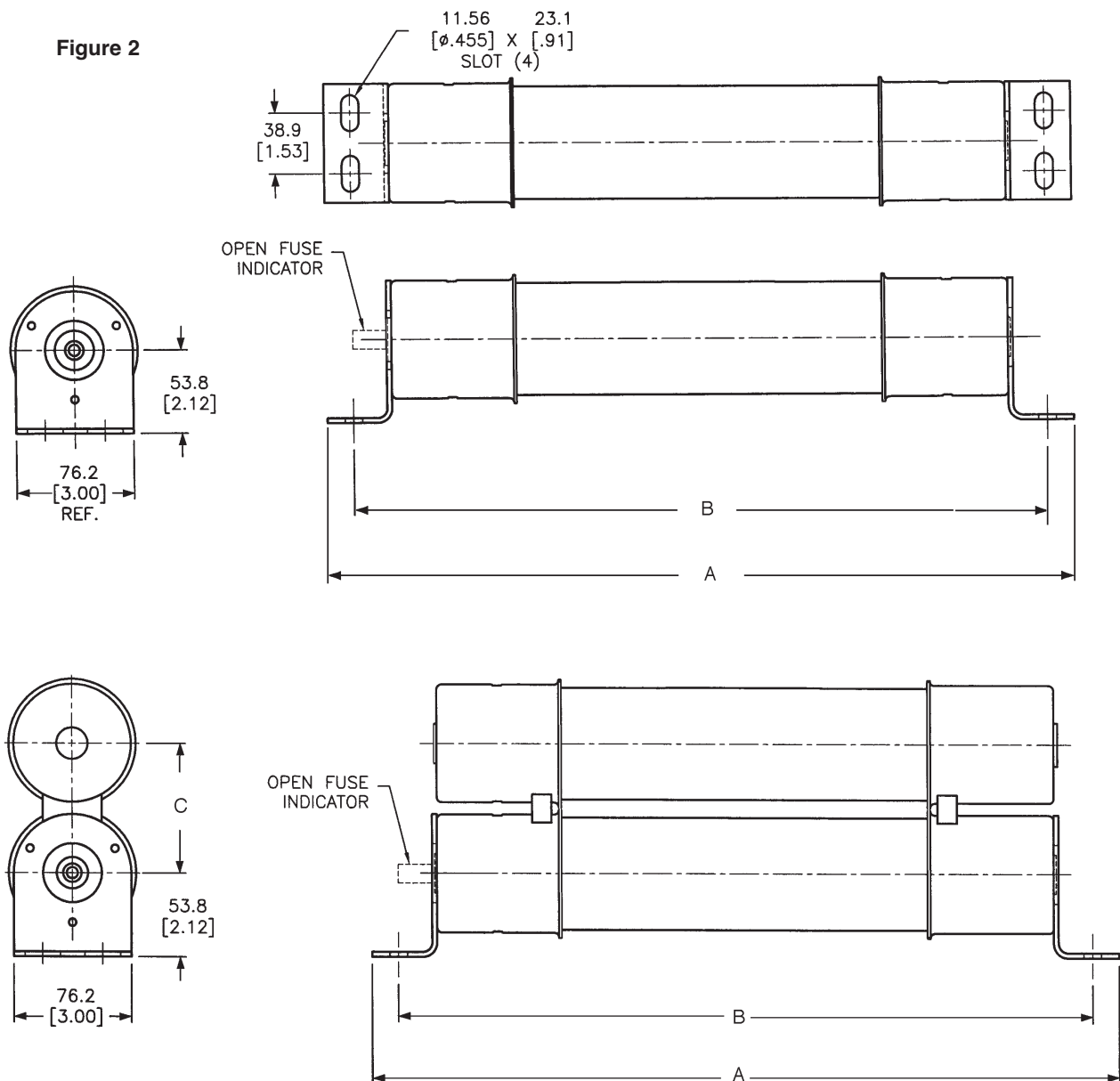


Figure 1

Figure 2



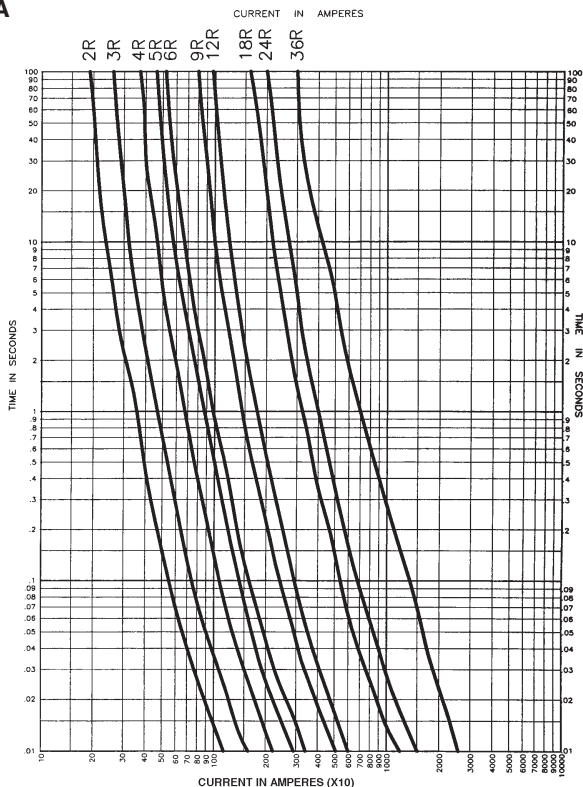
R-Rated Fuses For Motor Circuit Protection Medium Voltage

JCK, JCK-A, JCK-B, JCH, JCL, JCL-A, JCL-B, JCG, JCR-A, & JCR-B

JCK, JCK-A, JCL, JCL-A

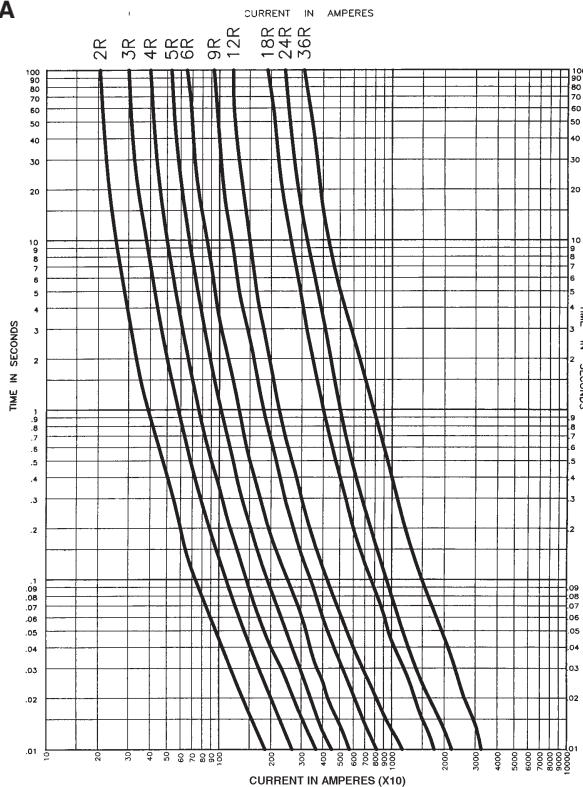
Time-Current Characteristic Curves—Minimum Melt

167-A



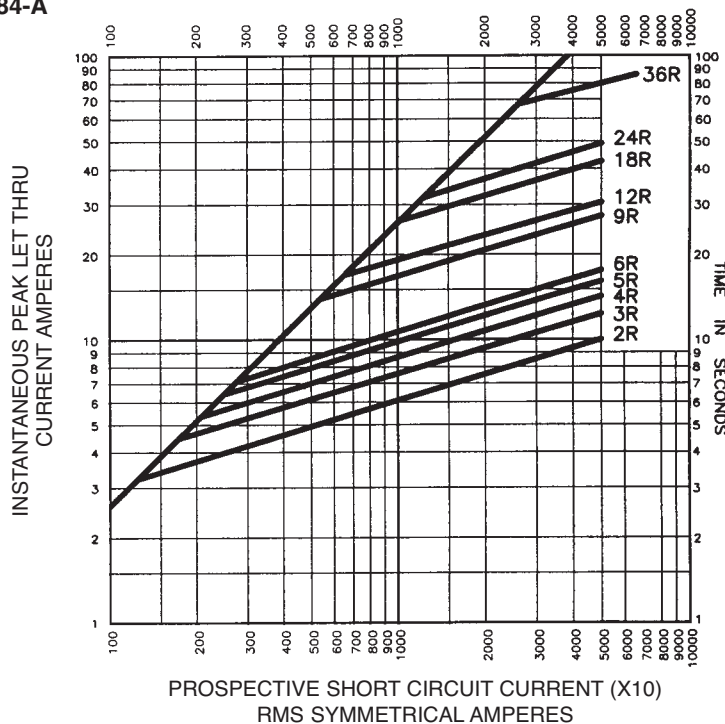
Total Clearing Curves

168-A



Current Limitation Curves

184-A



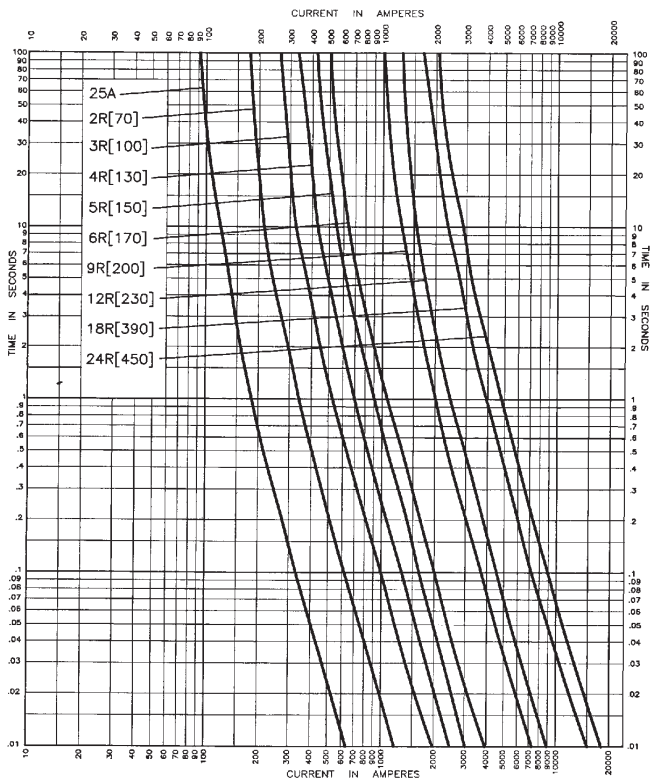
R-Rated Fuses For Motor Circuit Protection Medium Voltage

JCK, JCK-A, JCK-B, JCH, JCL, JCL-A, JCL-B, JCG, JCR-A, & JCR-B

JCK-B, JCH

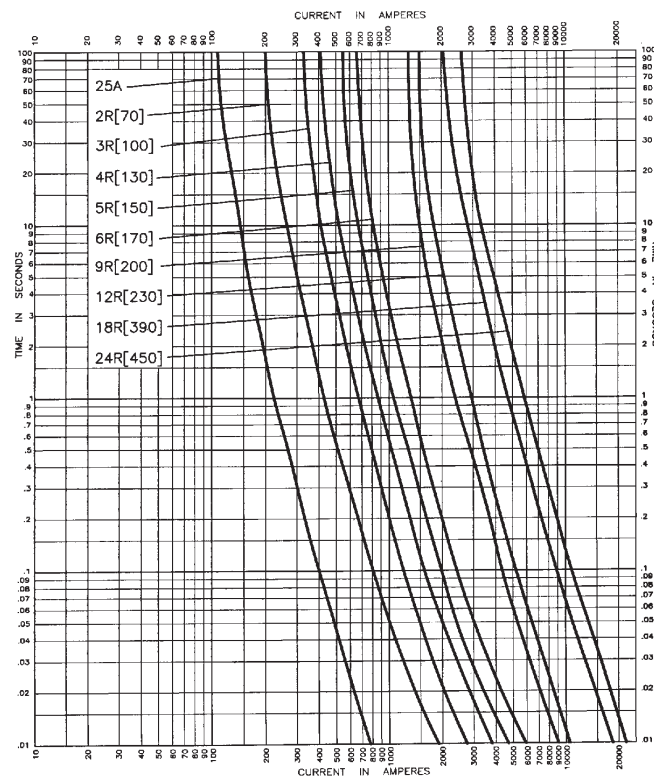
Time-Current Curve: Minimum Melt

50999-1



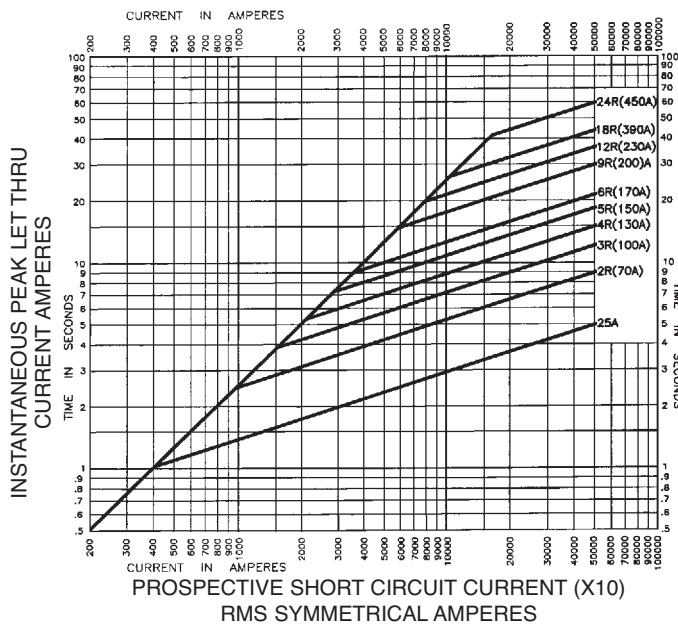
Time-Current Curve: Total Clearing

50999-2



Peak Let-Through Curves

50999-3

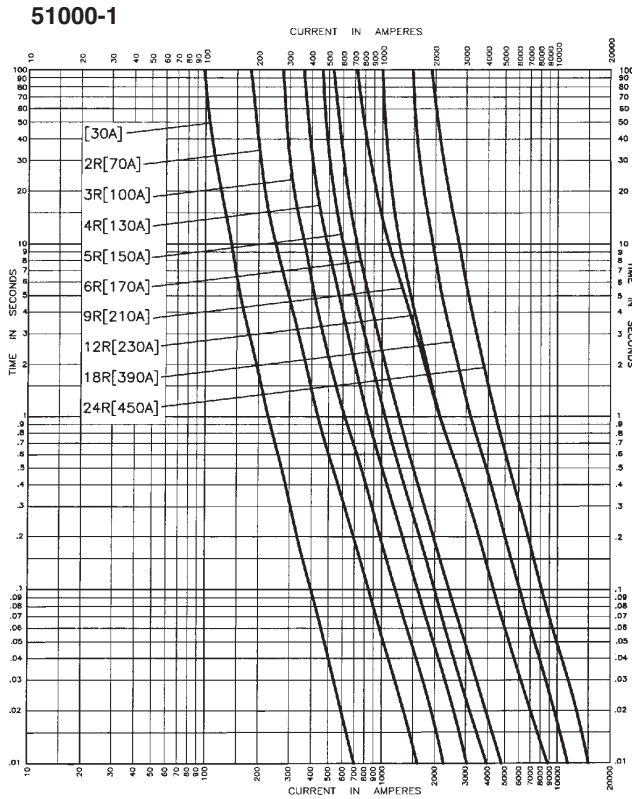


R-Rated Fuses For Motor Circuit Protection Medium Voltage

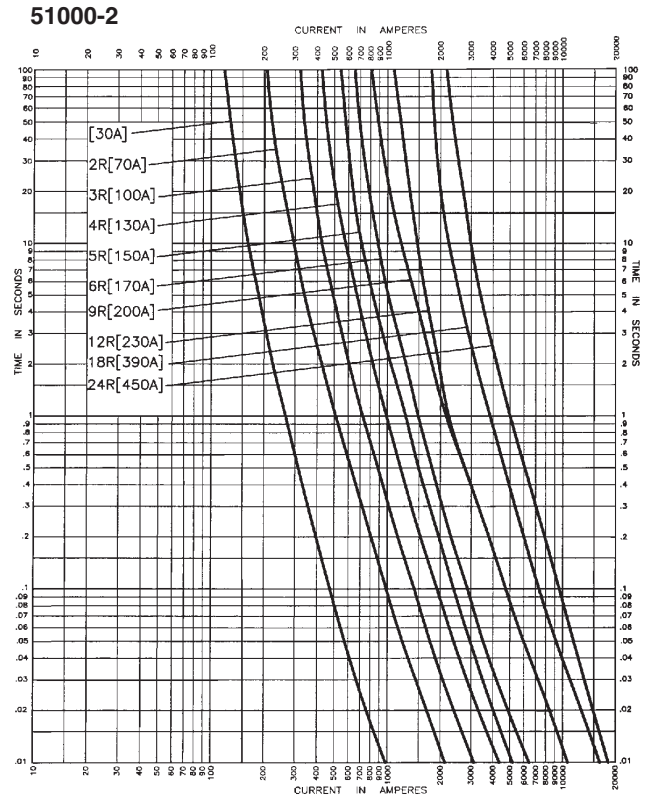
JCK, JCK-A, JCK-B, JCH, JCL, JCL-A, JCL-B, JCG, JCR-A, & JCR-B

JCL-B, JCG

Time-Current Curve: Minimum Melt

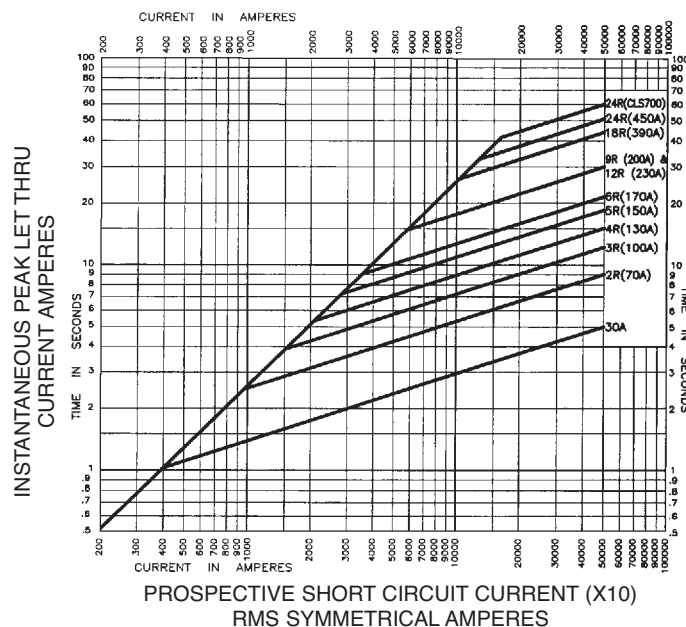


Time-Current Curve: Total Clearing



Peak Let-Through Curves

51000-3

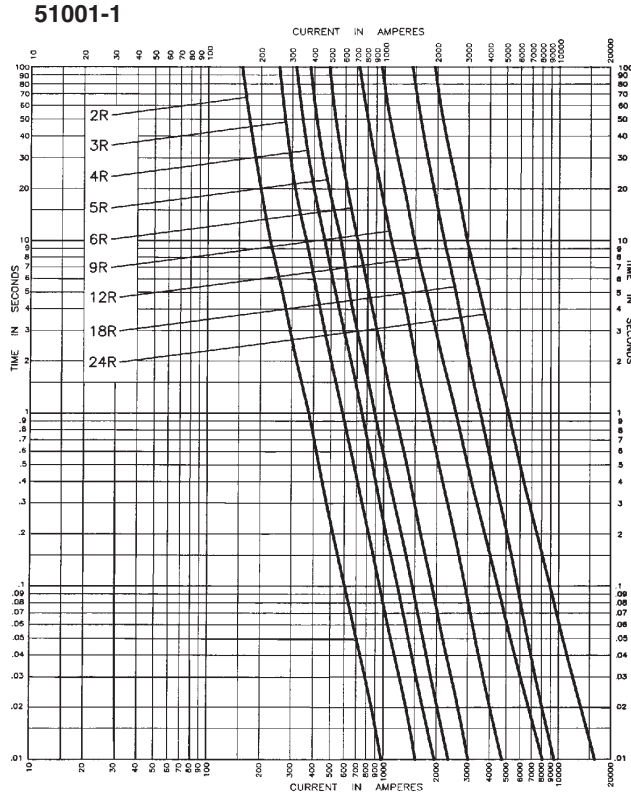


R-Rated Fuses For Motor Circuit Protection Medium Voltage

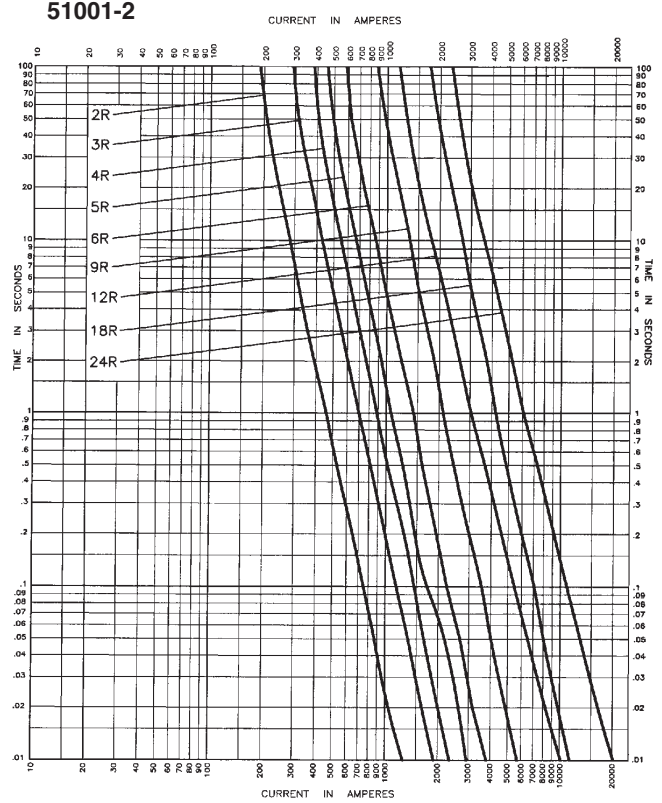
JCK, JCK-A, JCK-B, JCH, JCL, JCL-A, JCL-B, JCG, JCR-A, & JCR-B

JCR, JCR-B

Time-Current Curve: Minimum Melt

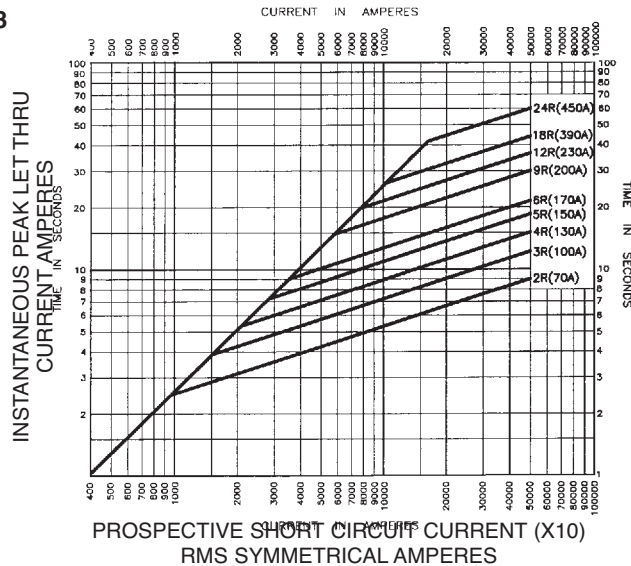


Time-Current Curve: Total Clearing



Peak Let-Through Curves

51001-3



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