

# 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)

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#### 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.)
<b>2400V; R-Rated; Indoor/Enclosure (See Figure 1)</b>									
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
<b>2400V; R-Rated; Indoor/Enclosure; With Cutler-Hammer Ampgard Hookeye (See Figure 1)</b>									
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
<b>2400V; R-Rated; Indoor/Enclosure; Bolt-On (See Figure 2)</b>									
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
<b>2400V; R-Rated; Indoor; Hermetically Sealed, Class 1, Group D, Div. 2, Hazardous Locations; For Use with Ampgard Motor Starters (See Figure 1)</b>									
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
<b>4800V; R-Rated; Indoor/Enclosure (See Figure 1)</b>									
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

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#### 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.)
<b>4800V; R-Rated; Indoor/Enclosure; With Cutler-Hammer Ampgard Hookeye (See Figure 1)</b>									
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
<b>4800V; R-Rated; Indoor/Enclosure; Bolt-On (See Figure 2)</b>									
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
<b>4800V; R-Rated; Indoor; Hermetically Sealed, Class 1, Group D, Div. 2, Hazardous Locations; For Use with Ampgard Motor Starters (See Figure 1)</b>									
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
<b>7200V; R-Rated; Indoor/Enclosure; With Ampgard Hookeye (See Figure 1)</b>									
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
<b>7200V; R-Rated; Indoor/Enclosure; Bolt-On (See Figure 2)</b>									
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

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### Medium Voltage

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

#### Dimensional Data

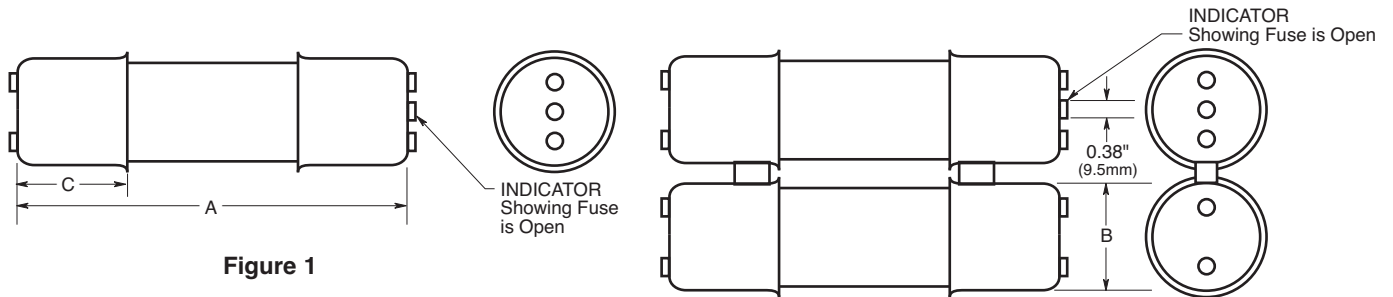
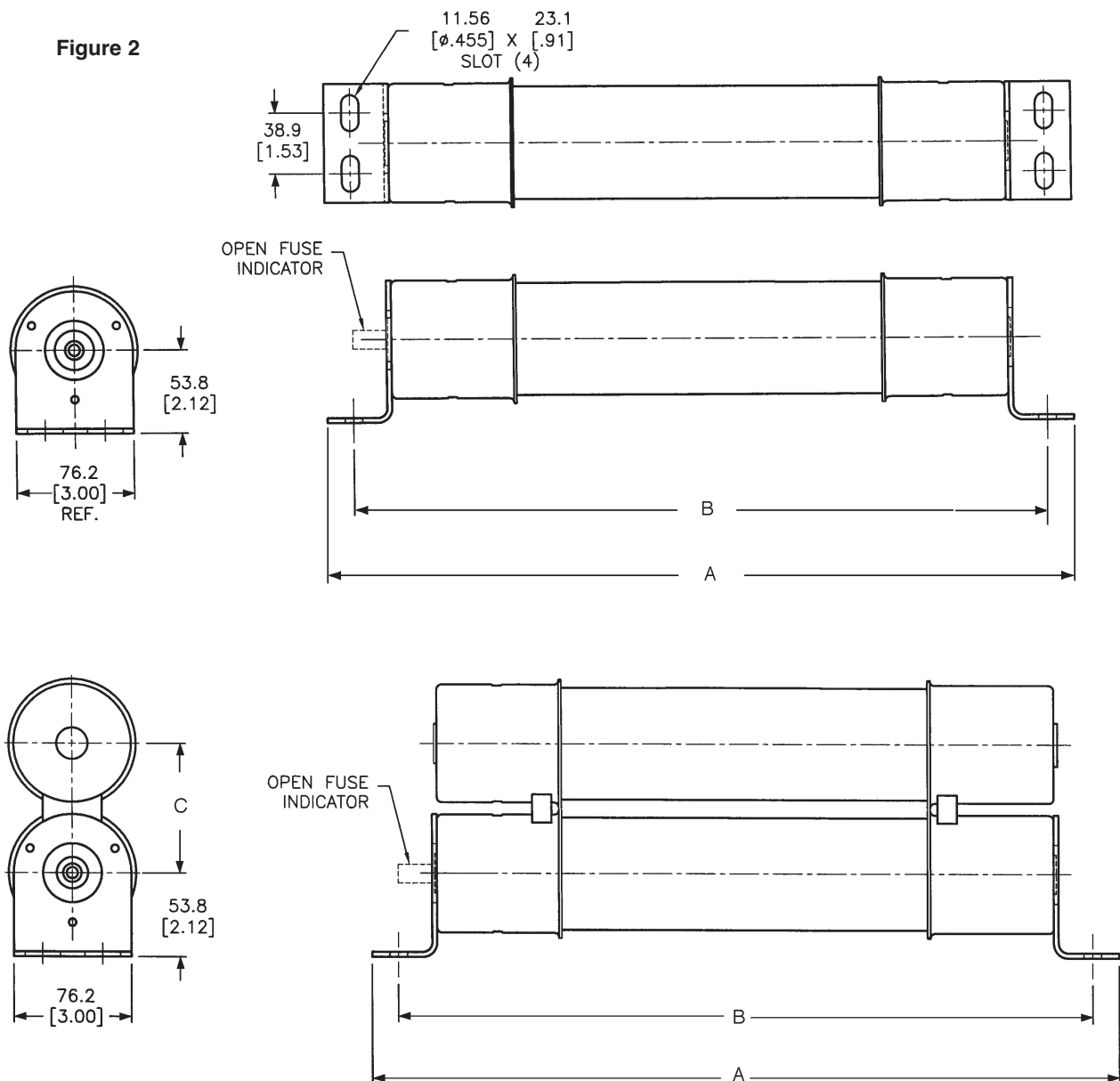


Figure 1

Figure 2



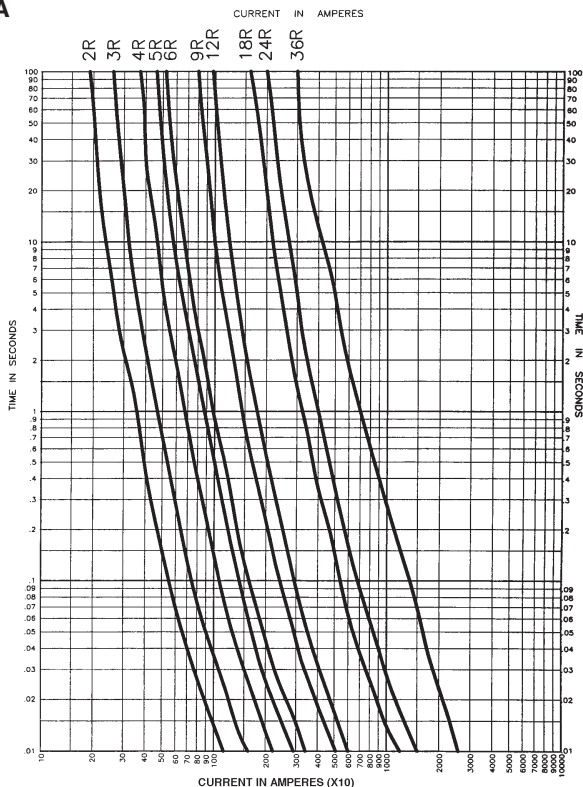
# R-Rated Fuses For Motor Circuit Protection Medium Voltage

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

## JCK, JCK-A, JCL, JCL-A

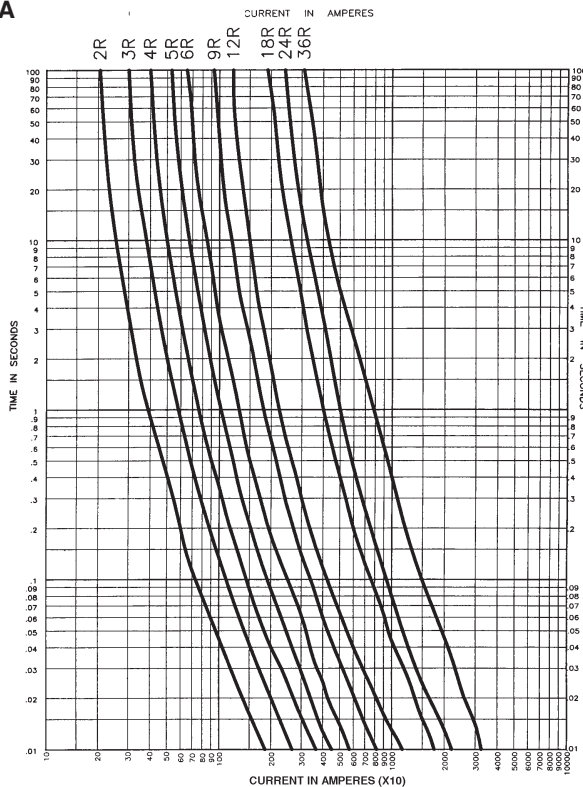
Time-Current Characteristic Curves—Minimum Melt

167-A



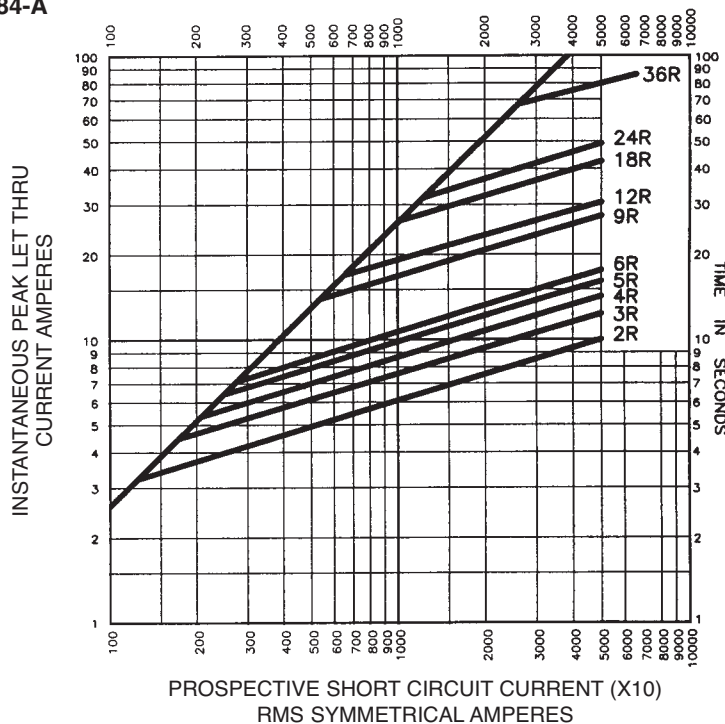
Total Clearing Curves

168-A



Current Limitation Curves

184-A



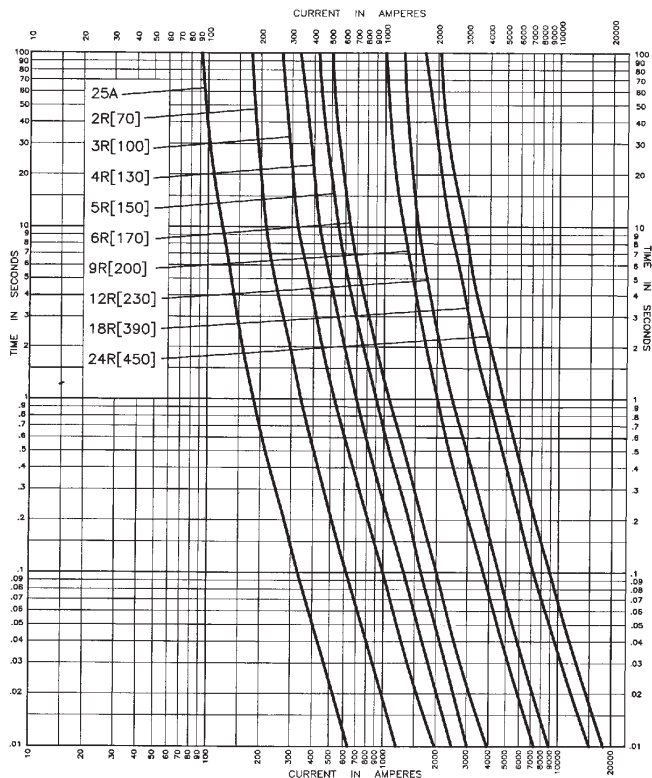
# R-Rated Fuses For Motor Circuit Protection Medium Voltage

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

## JCK-B, JCH

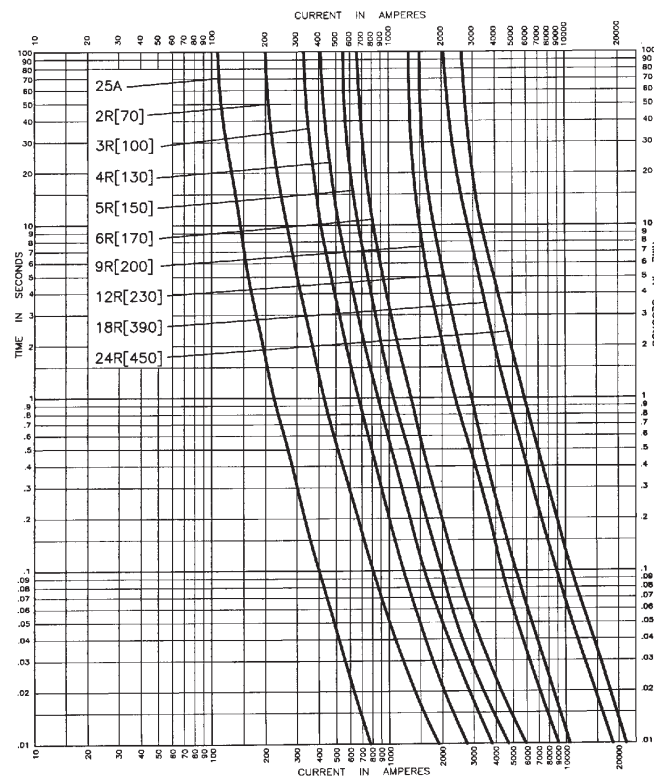
Time-Current Curve: Minimum Melt

50999-1



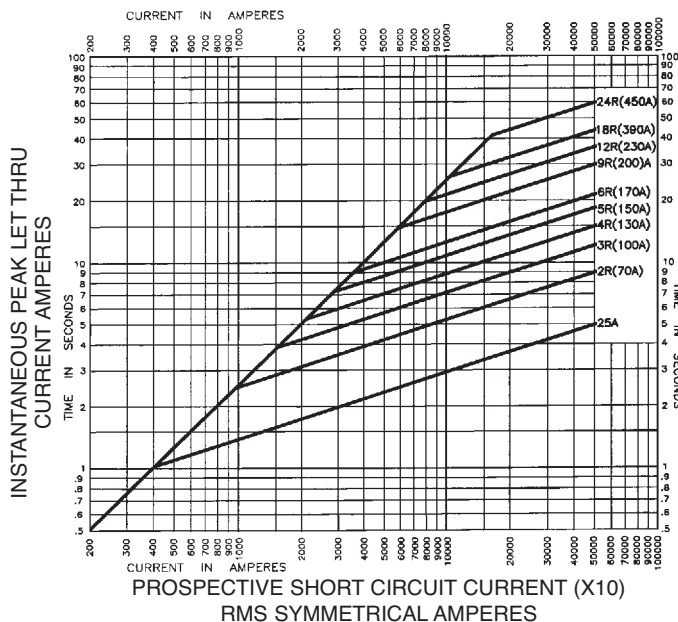
Time-Current Curve: Total Clearing

50999-2



### Peak Let-Through Curves

50999-3

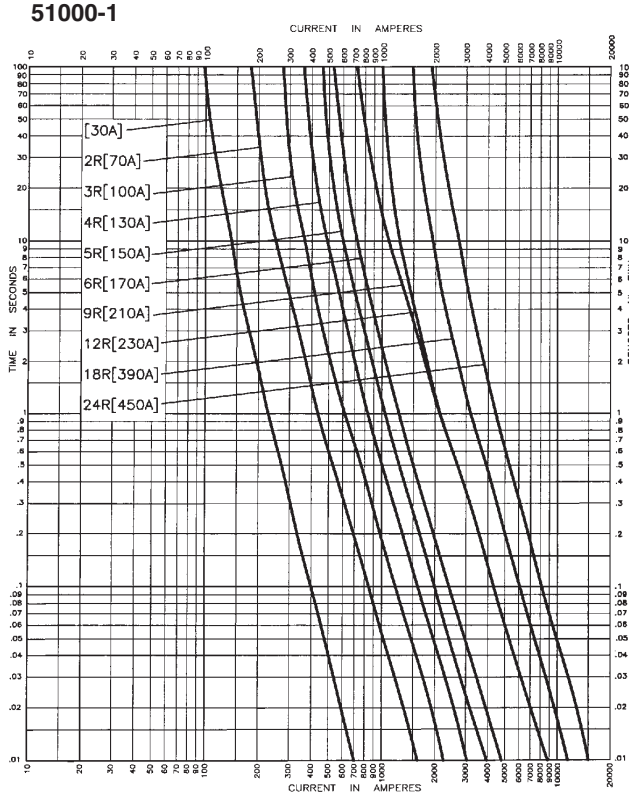


# R-Rated Fuses For Motor Circuit Protection Medium Voltage

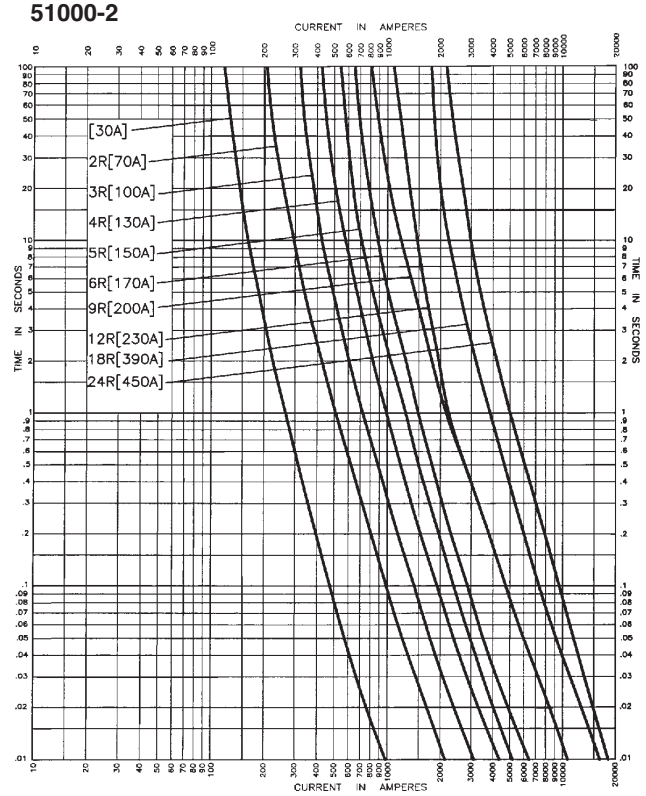
# JCK, JCK-A, JCK-B, JCH, JCL, JCL-A, JCL-B, JCG, JCR-A, & JCR-B

## JCL-B, JCG

Time-Current Curve: Minimum Melt

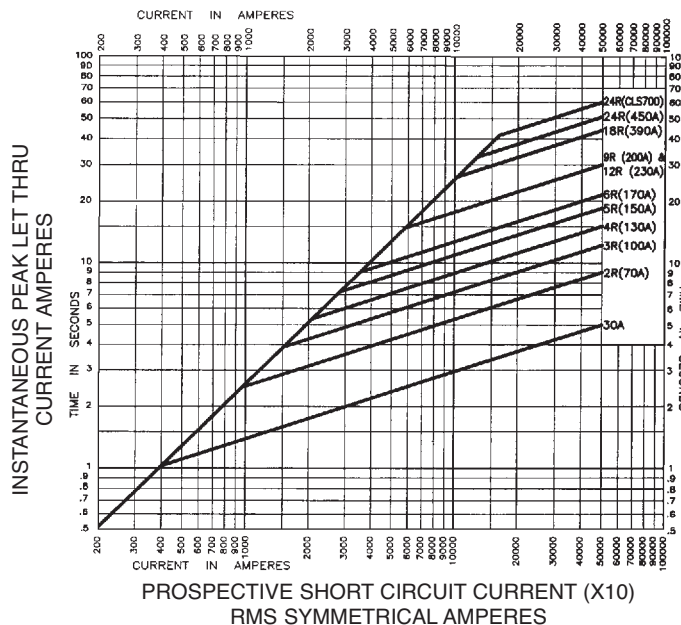


Time-Current Curve: Total Clearing



## Peak Let-Through Curves

51000-3

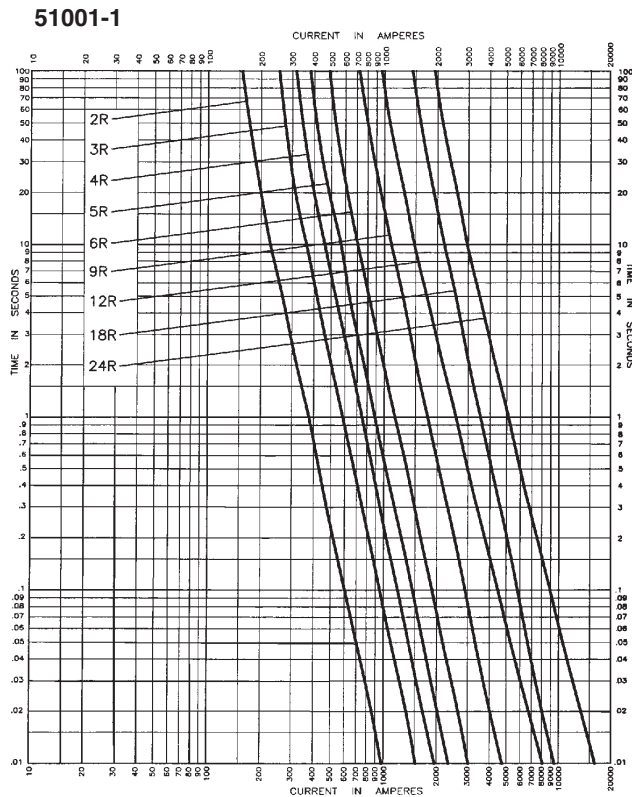


# R-Rated Fuses For Motor Circuit Protection Medium Voltage

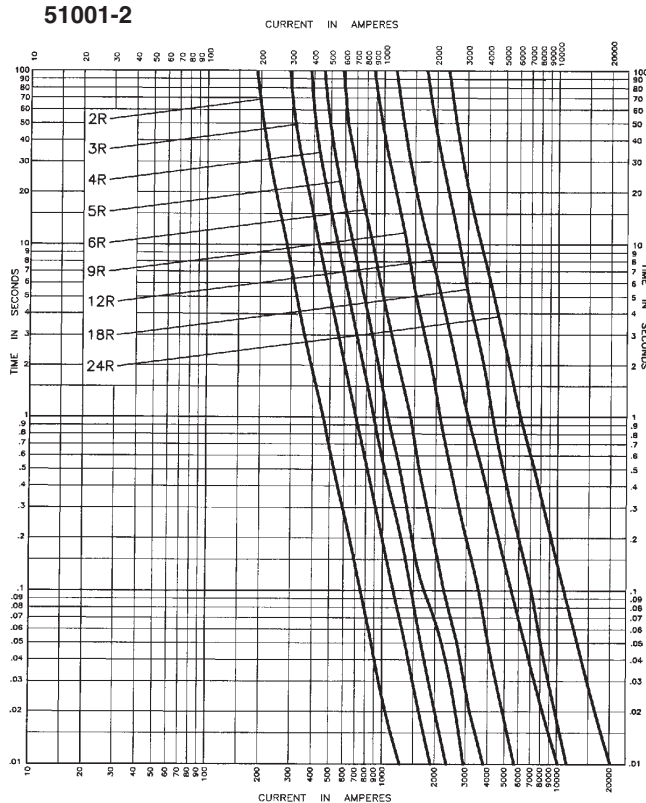
# JCK, JCK-A, JCK-B, JCH, JCL, JCL-A, JCL-B, JCG, JCR-A, & JCR-B

## JCR, JCR-B

Time-Current Curve: Minimum Melt

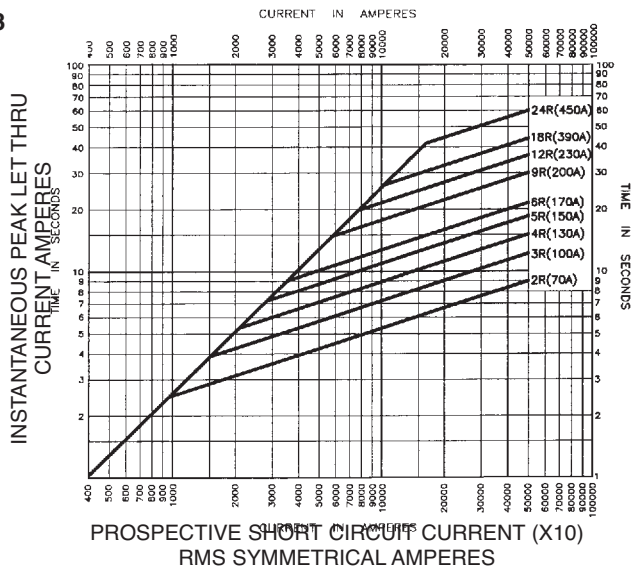


Time-Current Curve: Total Clearing



## Peak Let-Through Curves

51001-3



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