



Medium Voltage R-Rated Fuses for 2.4 and 4.8kV Motors

List of Ratings

2.4kV System Voltage		
Catalog Symbol	Current Rating Amps at 40°C	Figure Number
2.75 VFRHA 2R	70	1
2.75 VFRHA 3R	100	
2.75 VFRHA 4R	130	
2.75 VFRHA 6R	170	
2.75 VKRHA 9R	200	
2.75 VKRHA 12R	230	
2.75 VKRHK 18R	390	2
2.75 VKRHK 24R	450	
4.8kV System Voltage		
5.5 VFNHA 2R	70	3
5.5 VFNHA 3R	100	
5.5 VFNHA 4R	130	
5.5 VFNHA 6R	170	
5.5 VKNHA 9R	200	
5.5 VKNHA 12R	230	4
5.5 VKNHK 18R	390	
5.5 VKNHK 24R	450	
5.5 VKNHK 30R	450	
5.5 VKNHK 36R	500	
5.5 VKNHK 40R	600	
5.5 VKNHK 48R	650	

Dimensions - in (mm)

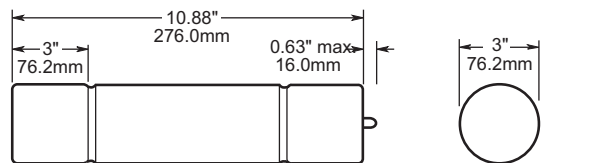


Figure 1

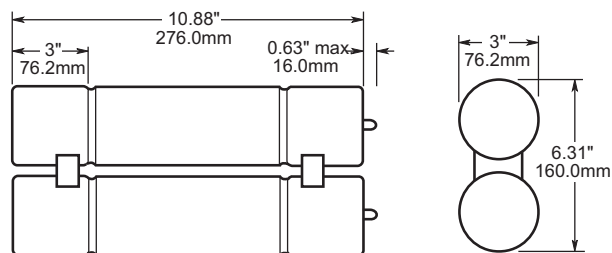


Figure 2

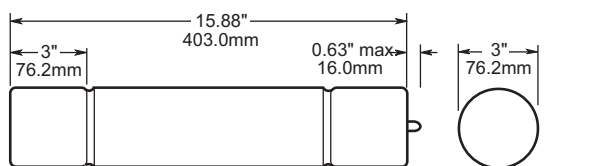


Figure 3

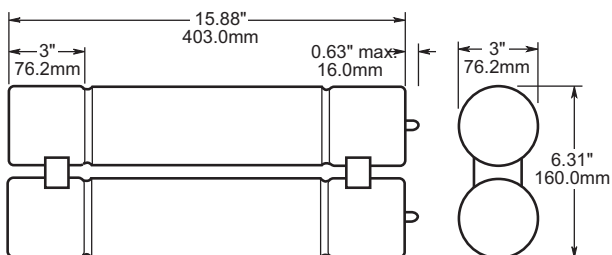


Figure 4

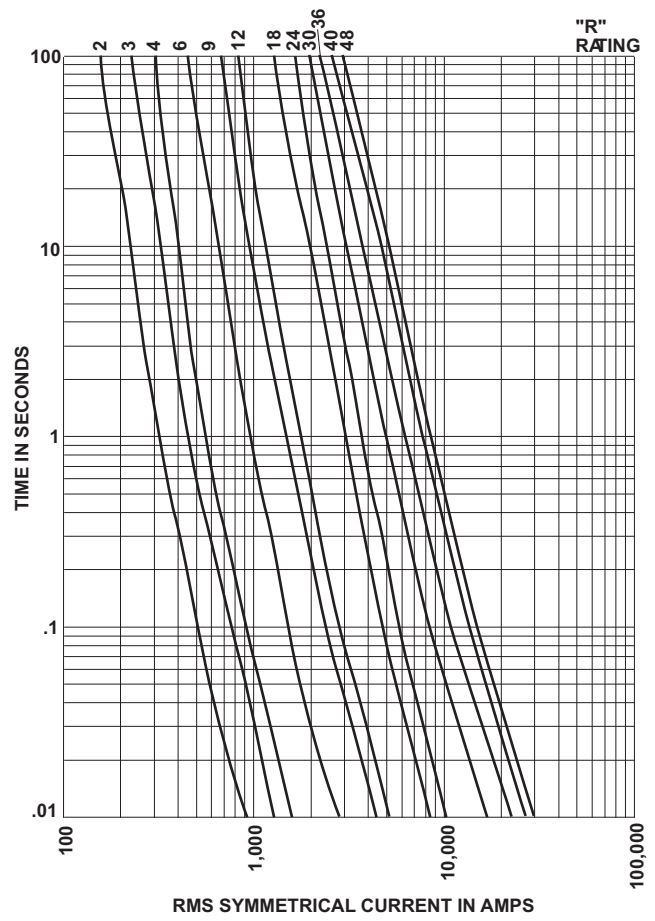
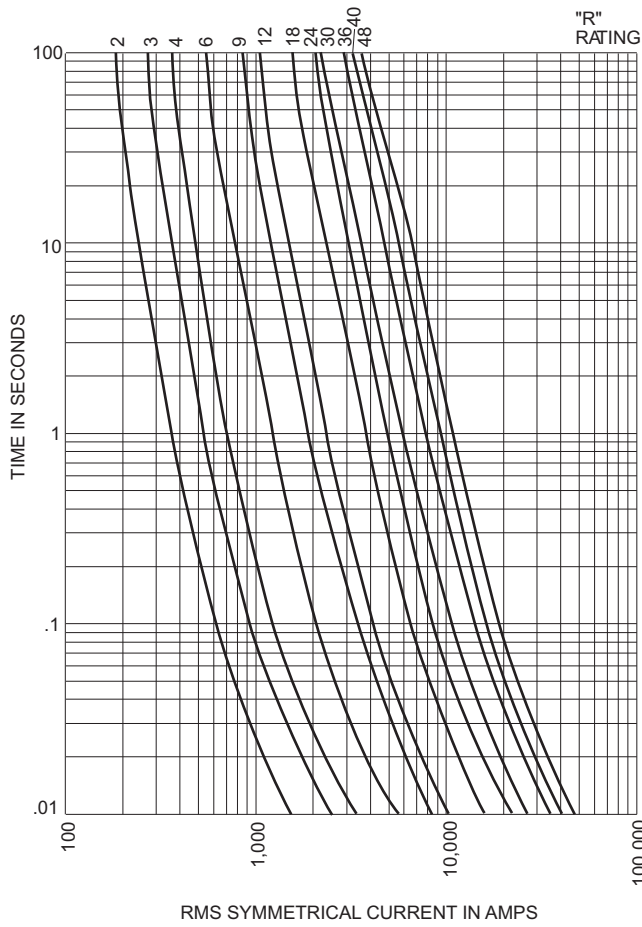
Notes:

1. Interrupting rating - 80,000 amps asymmetrical 60Hz.
2. These fuses are dimensionally interchangeable with corresponding R-Rated fuses produced by other leading North American manufacturers.

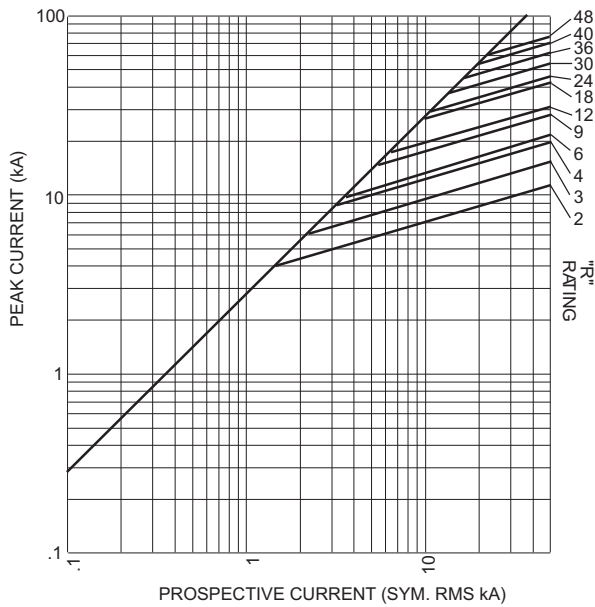
Time-Current Characteristics for 5.5kV and 2.75kV Fuses

Total Clear

Minimum Melt



Peak Let-Through Current Curve (5.5kV and 2.75kV Fuses)



Application for HV Motor Circuit Fuses

The following table is a general guide only based on a number of assumptions regarding the motor duty application which are listed below. Contact Edison Customer Satisfaction for specific application information. The application tables are based on the following assumptions:

Motor Efficiency ----- 90% Run Up Time ----- 10 Secs.
 Motor Power Factor ----- 0.9 Starting Method -- Full Voltage
 Starting Current ----- 6 x FLA Min. Fuse Size ---- 1.3 x FLA
 Starts/Hour ----- Max of 2/Hour

Hp	2.4kV			4.16kV			4.8kV		
	FLA Amps	“R” FUSE	Amps	FLA Amps	“R” FUSE	Amps	FLA Amps	“R” FUSE	Amps
75	17	2R	70	-	-	-	-	-	-
100	22	2R	70	-	-	-	-	-	-
125	28	3R	70	16	2R	70	-	-	-
150	33	3R	100	19	2R	70	17	2R	70
200	44	4R	130	26	3R	100	22	2R	70
250	55	6R	170	32	3R	100	28	3R	100
300	67	6R	170	38	4R	130	33	3R	100
350	78	9R	170	45	4R	130	39	4R	130
400	89	9R	200	45	4R	130	44	4R	130
500	111	12R	230	64	6R	170	55	6R	170
600	133	18R	390	77	9R	200	67	6R	170
700	155	18R	390	90	9R	200	78	9R	200
800	177	18R	390	102	9R	230	89	9R	200
900	200	18R	390	115	12R	230	100	9R	200
1000	222	24	450	128	18R	390	111	12R	230
1100	244	24R	450	141	18R	390	122	12R	230
1200	266	24R	450	154	18R	390	133	18R	390
1400	311	30R	450	179	18R	390	155	18R	390
1600	355	36R	500	205	18R	390	177	18R	390
1800	399	40R	600	230	24R	450	200	18R	390
1900	422	40R	600	243	24R	450	211	18R	390
2000	444	40R	600	256	24R	450	222	24R	450
2200	488	48R	650	282	30R	450	244	24R	450
2400	-	-	-	307	30R	450	266	24R	450
2600	-	-	-	333	36R	500	288	30R	450
2800	-	-	-	358	36R	500	311	30R	450
3000	-	-	-	384	36R	500	333	36R	500
3500	-	-	-	448	40R	600	388	36R	500
4000	-	-	-	-	-	-	444	40R	600
4500	-	-	-	-	-	-	500	48R	650

Contact Edison Customer Satisfaction for applications regarding other operating conditions.