

## FRN-R — 250Vac/125Vdc, 70-600A, Dual Element, Time-Delay Fuses



**Description:** Advanced protection, energy efficient Class RK5 dual element, current-limiting, time-delay fuses. Time-delay – 10 seconds (minimum) at 500% of rated current.

**Catalog Symbol:** FRS-R-(amp)

### Ratings:

- Volts — 250Vac
- 125Vdc (110-200A)
- 250Vdc (225-600A)
- Amps — 70-600A
- IR — 200kA Vac RMS Sym.
- 20kA Vdc

### Agency Information:

CE, UL Listed, Std. 248-12, Class RK5, Guide JDDZ, File E4273

CSA Certified, C22.2 No. 248.12, Class 1422-02, File 53787

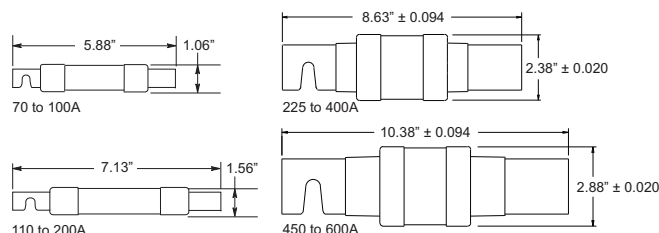
### Catalog Numbers (amps)

FRN-R-70	FRN-R-125	FRN-R-350
FRN-R-75	FRN-R-150	FRN-R-400
FRN-R-80	FRN-R-175	FRN-R-450
FRN-R-85	FRN-R-200	FRN-R-500
FRN-R-90	FRN-R-225	FRN-R-600
FRN-R-100	FRN-R-250	
FRN-R-110	FRN-R-300	

### Carton Quantity and Weight

Amp Rating	Carton Qty.
70-100	5
101-200	1
201-400	1
401-600	1

### Dimensions - in



### Features:

- Provides motor overload, ground fault and short-circuit protection
- Helps protect motors against burnout from overloads and single-phasing when sized properly
- Simplifies and improves blackout prevention (selective coordination)
- Dual-element fuses can be applied in circuits subject to temporary motor overloads and surge currents to provide both high performance short-circuit and overload protection
- The overload element provides protection against low level overcurrent of overloads and will hold on inrush current which is five times greater than the amp rating of the fuse for a minimum of ten seconds

### Recommended Fuse Blocks

Fuse Amps	1-Pole	2-Pole	3-Pole
70-100	RM25100-1CR	RM25100-2CR	RM25100-3CR
110-200	RM25200-1CR	RM25200-2CR	RM25200-3CR
225-400	RM25400-1CR	RM25400-2CR	RM25400-3CR
450-600	RM25600-1CR	RM25600-2CR	RM25600-3CR

For additional information on the RM Series of 250 volt fuse blocks, see product brochure # 3192.

### Fuse Reducers For Class R Fuses

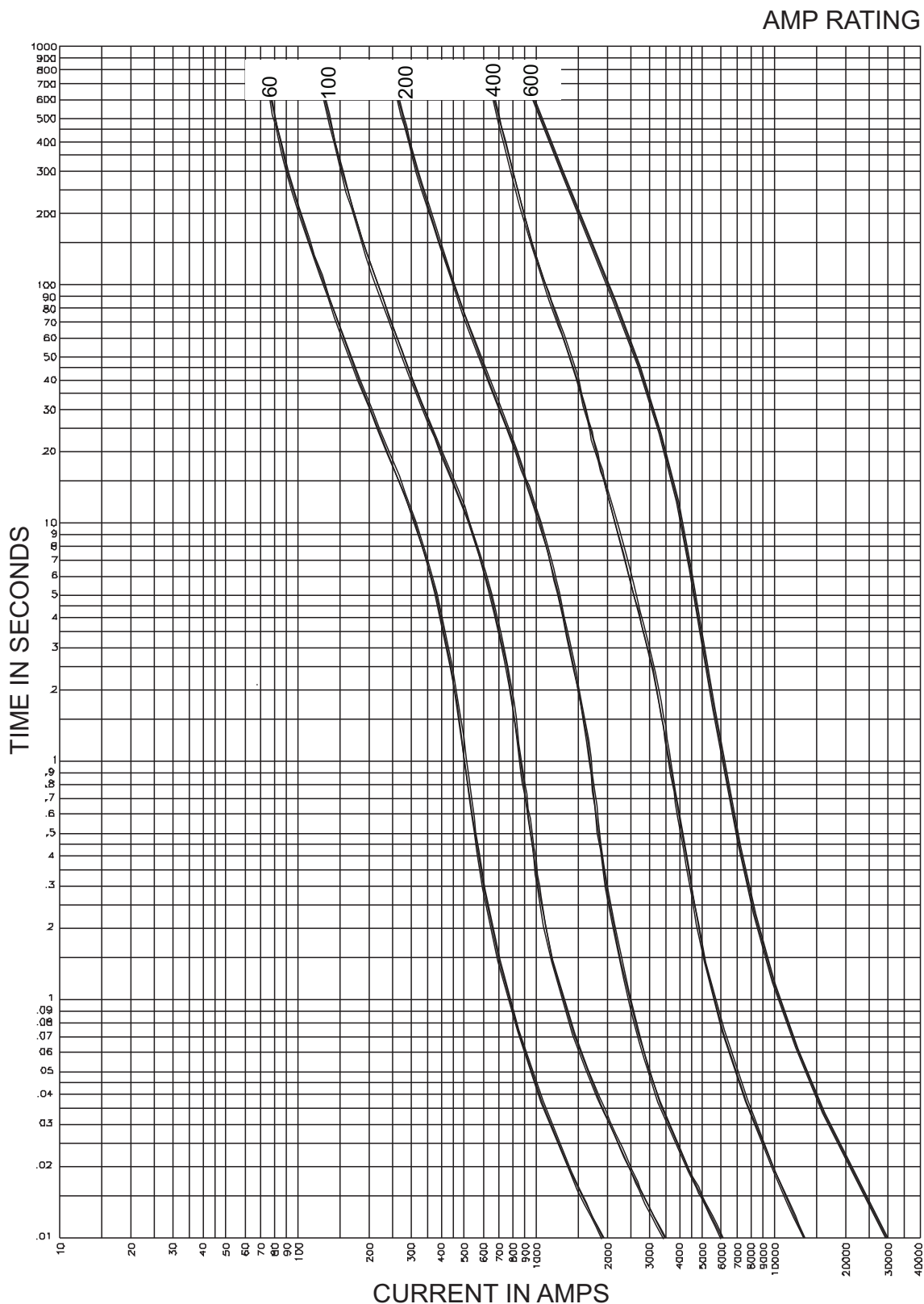
Equipment Fuse Clips	Desired Fuse (Case) Size	Catalog Numbers (Pairs) 250V
200A	100A	NO.2621-R
400A	100A	NO.2641-R
	200A	NO.642-R
	100A	NO.2661-R
600A	200A	NO.2662-R
	400A	NO.2664-R†

† Single reducer only (pair not required).

For additional information on Class R fuse reducers, see Data Sheet # 1118.

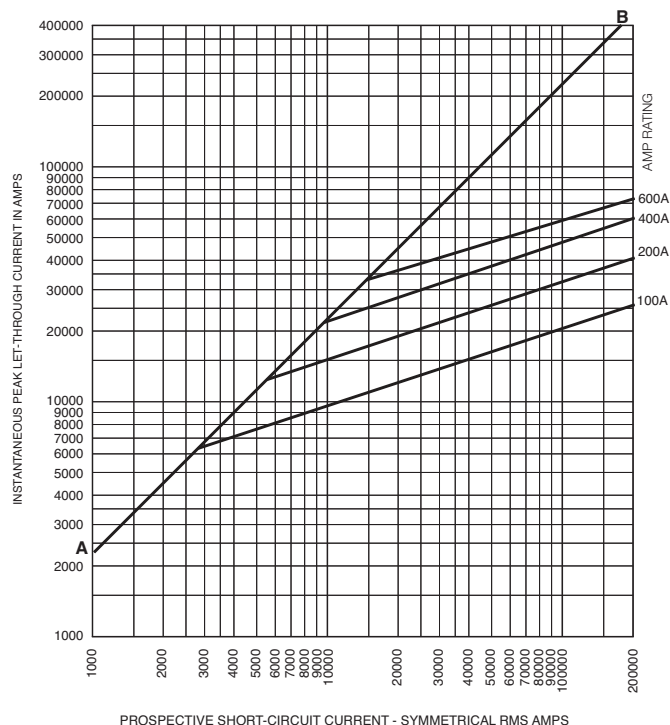
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### Time-Current Curves - Average Melt



## FRN-R — 250Vac/125Vdc, 70-600A, Dual Element, Time-Delay Fuses

### Current-Limitation Curves



### Current-Limiting Effects

Prospect. S.C.C.	Let-Through Current (Apparent RMS Symmetrical Vs. Fuse Rating)			
	100A	200A	400A	600A
5000	3000	5000	5000	5000
10,000	4000	7000	10,000	10,000
15,000	5000	8000	11,000	15,000
20,000	5000	8000	12,000	16,000
25,000	6000	9000	13,000	17,000
30,000	6000	10,000	14,000	18,000
35,000	6000	10,000	15,000	19,000
40,000	7000	11,000	15,000	20,000
50,000	7000	11,000	17,000	21,000
60,000	8000	12,000	18,000	22,000
70,000	8000	13,000	19,000	23,000
80,000	8000	13,000	19,000	24,000
90,000	9000	14,000	20,000	25,000
100,000	9000	14,000	21,000	26,000
150,000	10,000	16,000	24,000	29,000
200,000	11,000	18,000	26,000	32,000

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