Effective February 2016 Supersedes July 2013

BUSSMANN SERIES

Fusetron[™] FRN-R Class RK5 250Vac, 125/250Vdc 70-600A, dual element, time-delay fuses



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:

Amp rating	Carton qty.
70 – 100	5
110 - 600	1

Catalog symbols:

· FRN-R-_

Description:

Eaton Bussmann[®] series advanced protection, energy efficient FRN-R Class RK5 dual element, current-limiting, time-delay fuses. Time-delay – 10 seconds (minimum) at 500% of rated current.

Specifications:

Ratings

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

Agency information

- UL Listed, Std. 248-12, Class RK5, Guide JDDZ, File E4273
- CSA Certified, C22.2 No. 248.12, Class 1422-02, File 53787

• CE



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

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Dimensions - in:



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 250 volt fuse blocks, see product brochure no. 3192.

use reducers for Class R fuses

Fuse size	Amp size of fuse block or disconnect switch	Catalog no. (pairs)	
65 to 100A	- 4004	No.2641-R*	
110 to 200A	- 400A	No.242-R*	
65 to 100A		No.2661-R*	
110 to 200A	600A	No.2662-R*	
225 to 400A	_	No.2664-R*†	

* These reducers are not CSA Certified.

† Single reducer only (pair not required)

For additional information on Class R fuse reducers, see data sheet no 1118.

Time-current curves — average melt:



Current-limitation curves:



Current-limiting effects:

Let-through current Prosp. S.C.C. (apparent RMS Sym. 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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