Fusetron™ 600V Class RK5

FRS-R — 600 Vac/300 Vdc, 65-600 A, dual element, time-delay fuses



Catalog symbol:

- FRS-R-(amp)

Description:

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

Specifications:

Ratings

- Volts — 600Vac, 300Vdc
- Amps — 65-600A
- Interrupting rating
  - 200 kA Vac RMS Sym
  - 20 kA 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

Catalog numbers (amps)		
FRS-R-65	FRS-R-125	FRS-R-350
FRS-R-70	FRS-R-150	FRS-R-400
FRS-R-75	FRS-R-175	FRS-R-450
FRS-R-80	FRS-R-200	FRS-R-500
FRS-R-90	FRS-R-225	FRS-R-600
FRS-R-100	FRS-R-250	
FRS-R-110	FRS-R-300	

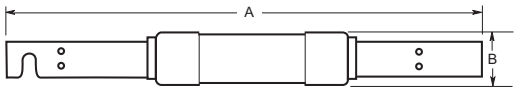
Carton quantity

Amp ratings	Carton Qty.
65–100	1
101–200	1
201–400	1
401–600	1

Features:

- Provides motor overload, ground fault and short-circuit protection. When used in circuits subject to surge currents such as those caused by motors, transformers and other inductive components, these fuses can be sized close to full-load amps to give maximum overcurrent protection
- The time-delay feature makes it possible to use fuse amp ratings which are much smaller than those of non-time delay fuses. Considerable cost saving occurs by permitting the use of smaller size switches, panels and fuses themselves
- Provides a good degree of short-circuit protection (greater current-limitation) to help protect downstream components from high fault currents
- Gives motor running back-up protection to motors without extra cost
- Helps protect motors against burnout from overloads and single-phasing when sized properly
- Simplifies and improves blackout prevention (selective coordination ratios)
- 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

Dimensions - in:



Amp ratings	A	B
65-100	7.88	1.11
110-200	9.63	1.61
225-400	11.63	2.34
450-600	13.38	2.88

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Recommended fuse blocks

Fuse amps	1-Pole	2-Pole	3-Pole
70-100	RM60100-1CR	RM60100-2CR	RM60100-3CR
110-200	RM60200-1CR	RM60200-2CR	RM60200-3CR
225-400	RM60400-1CR	RM60400-2CR	RM60400-3CR
450-600	RM60600-1CR	RM60600-2CR	RM60100-3CR

For additional information on the RM600 volt fuse blocks, see data sheet No. 10489.

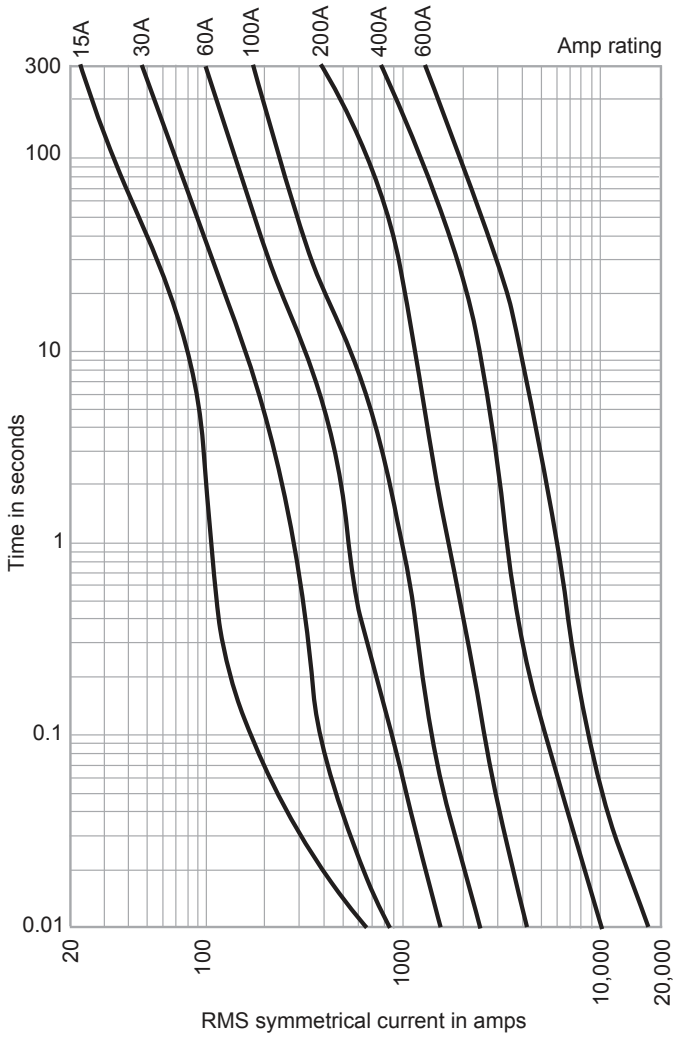
Fuse reducers for class R fuses

Equipment fuse clips	Desired fuse (case) size	Catalog numbers (pairs) 600 V
200 A	100 A	NO.2621-R
400 A	100 A	NO.2641-R
	200 A	NO.642-R
	100 A	NO.2661-R
600 A	200 A	NO.2662-R
	400 A	NO.2664-R†

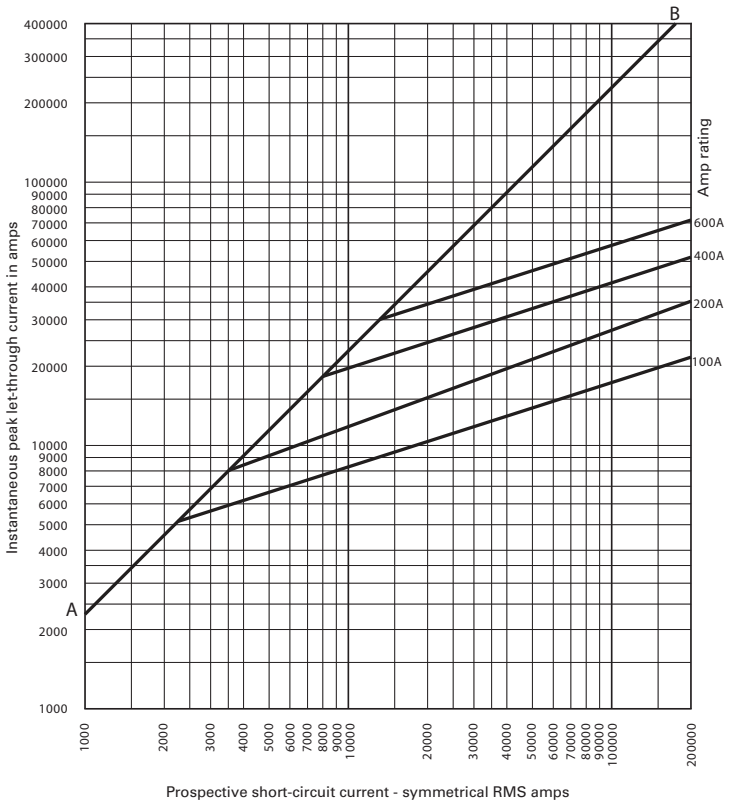
† Single reducer only (pair not required).

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

Time-current curves - average melt



Current-Limitation curves



Current-limiting effects

Prosp. S.C.C.	Let-through current (apparent RMS symmetrical vs. fuse rating)			
	100A	200A	400A	600A
5000	3000	4000	5000	5000
10,000	4000	5000	9000	10,000
15,000	4000	6000	10,000	14,000
20,000	5000	7000	11,000	15,000
25,000	5000	7000	12,000	17,000
30,000	5000	8000	13,000	18,000
35,000	5000	8000	13,000	18,000
40,000	6000	9000	14,000	19,000
50,000	6000	9000	14,000	20,000
60,000	6000	10,000	15,000	22,000
70,000	7000	11,000	17,000	23,000
80,000	7000	12,000	17,000	23,000
90,000	7000	12,000	17,000	24,000
100,000	8000	13,000	18,000	25,000
150,000	9000	14,000	21,000	27,000
200,000	9000	16,000	23,000	32,000

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Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

Bussmann Division
114 Old State Road
Ellisville, MO 63021
United States
Eaton.com/bussmannseries

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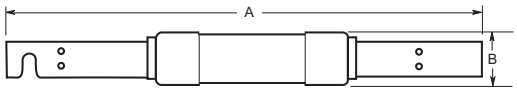
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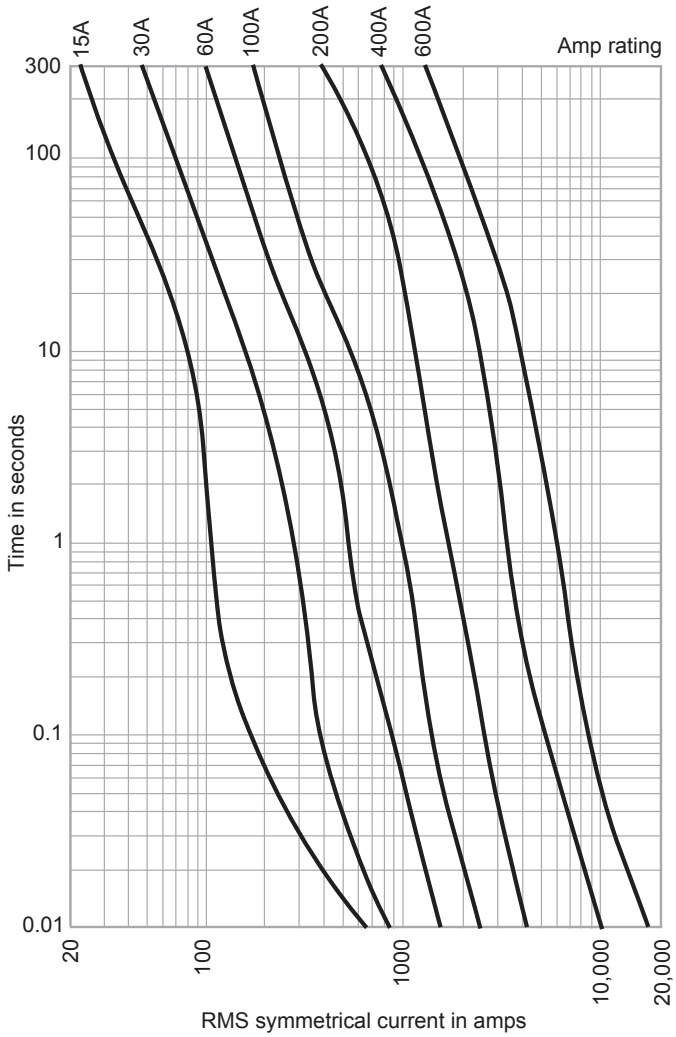
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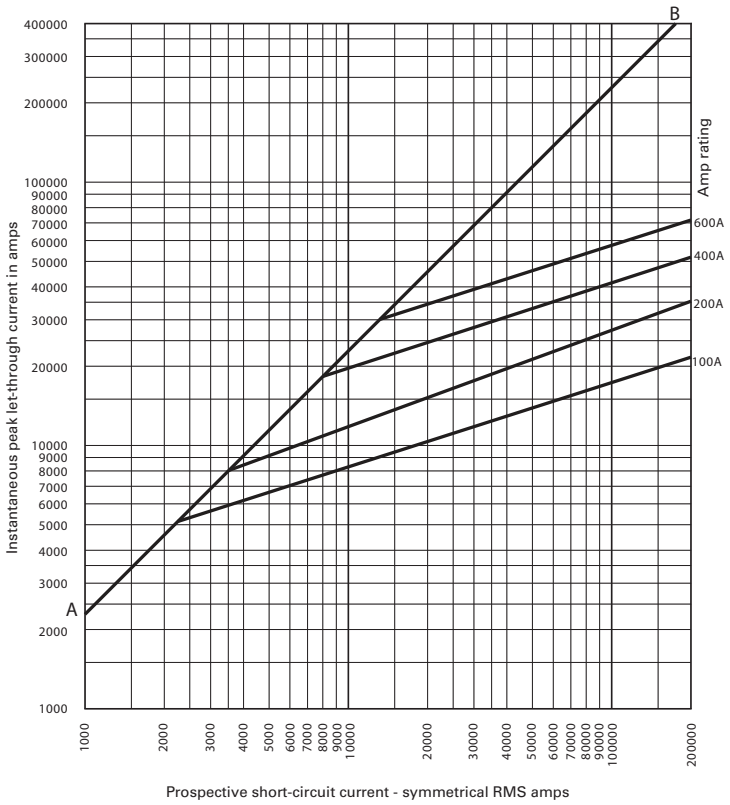
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Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

Bussmann Division
114 Old State Road
Ellisville, MO 63021
United States
Eaton.com/bussmannseries

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