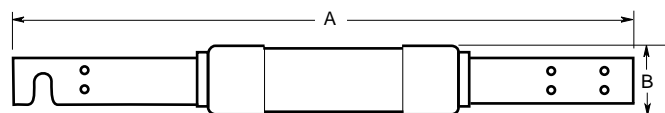


Fusetron® Dual-Element, Time-Delay Fuses Class RK5 -- 600 Volt

FRS-R
65-600A



Dimensional Data



Dimensions (inches)

Ampere Ratings	A	B
65-100	7.88 (± 0.062)	1.11 (± 0.020)
110-200	9.63 (± 0.062)	1.61 (± 0.020)
225-400	11.63 (± 0.094)	2.34 (± 0.020)
450-600	13.38 (± 0.094)	2.88 (± 0.020)

Catalog Symbol: FRS-R

Dual-Element, Time-Delay – 10 seconds (minimum) at 500% rated current

Current-Limiting

Ampere Rating: 65 to 600 Amperes †

Voltage Rating: 600 Volts AC (or less)

Interrupting Rating: 200,000A RMS Sym.

DC Ratings (20,000AIC @ 300 Vdc)

Agency Approvals:

U.L. Listed, Std. 248-12, Class RK5, Guide JDDZ, File E4273

CSA Certified, C22.2 No. 248.12, Class 1422-01, File 53787

Catalog Numbers

FRS-R-65	FRS-R-125	FRS-R-300
FRS-R-70	FRS-R-135	FRS-R-325
FRS-R-75	FRS-R-150	FRS-R-350
FRS-R-80	FRS-R-175	FRS-R-400
FRS-R-85	FRS-R-200	FRS-R-450
FRS-R-90	FRS-R-225	FRS-R-500
FRS-R-100	FRS-R-250	FRS-R-600
FRS-R-110	FRS-R-275	—

Carton Quantity and Weight

Ampere Ratings	Carton Qty.	Weight*	
		Lbs.	Kg.
65-100	1	0.54	0.245
101-200	1	1.22	0.544
201-400	1	3.00	1.359
401-600	1	5.00	2.268

*Weight per carton.

Fuseblocks – Class R Catalog Numbers

(Clip Retaining Spring Standard, Suffix "R")

Amps	Poles	Basic Catalog Number	Terminal Type (Suffix No.)	
			Box Lug w/	
			—	Reinforced Clip CU only
65 to 100	1	R60100-1	CR	COR
	2	R60100-2	CR	COR
100 to 200	3	R60100-3	CR	COR
to 600	1	R60200-1	CR	—
	1	R60400-1	CR	—
	1	R60600-1	CR	—

For additional information on the R600 Series fuseblocks, refer to BIF Document 1111.

† To obtain information for 0-60 Amps, access BIF # 1017

General Information:

- 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 amperes to give maximum overcurrent protection.
- The time-delay feature makes it possible to use fuse ampere 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 costs.
- 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.

Fuse Reducers For Class R Fuses

Equipment Fuse Clips	Desired Fuse (Case) Size	Catalog Number (Pairs) 600V
200A	100A	No. 2621-R
	100A	No. 2641-R
400A	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, see BIF Document 1118.

CE CE logo denotes compliance with European Union Low Voltage Directive (50-1000 Vac, 75-1500 Vdc). Refer to BIF document #8002 or contact Bussmann Application Engineering at 636-527-1270 for more information.

Fusetron®

Dual-Element, Time-Delay Fuses

Class RK5 -- 600 Volt

FRS-R
65-600A

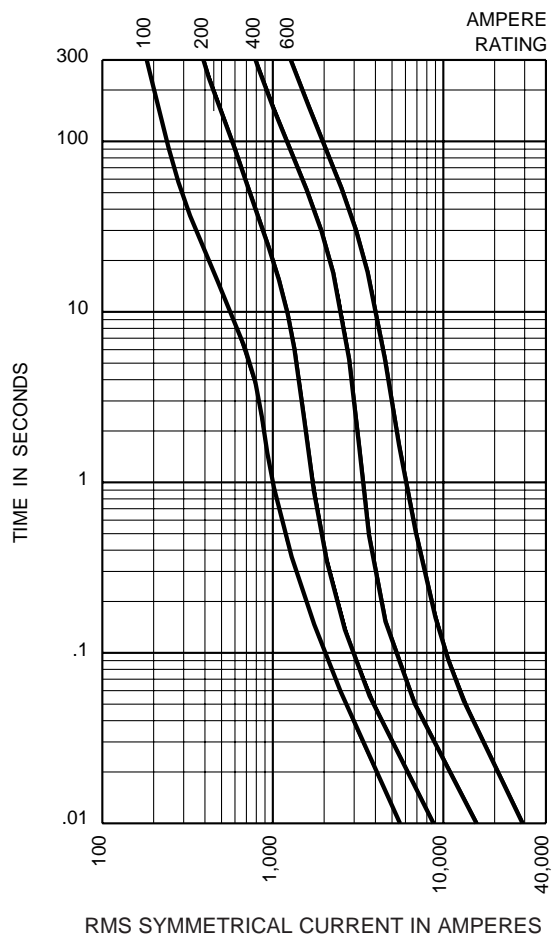
Current-Limiting Effects

FRS-R Apparent RMS Symmetrical Let-Through Current

Prospective SCC	30A	60A	100A	200A	400A	600A
5,000	1,400	2,000	2,900	3,950	5,000	5,000
10,000	1,850	2,650	3,600	5,100	8,550	10,000
15,000	2,200	3,200	4,100	5,950	9,750	13,700
20,000	2,450	3,550	4,500	6,600	10,700	15,000
25,000	2,700	3,900	4,850	7,150	11,500	16,100
30,000	2,900	4,280	5,150	7,650	12,200	17,050
35,000	3,100	4,400	5,400	8,100	12,800	17,900
40,000	3,300	4,760	5,600	8,500	13,400	18,700
50,000	3,550	5,150	6,050	9,250	14,400	20,050
60,000	3,800	5,500	6,400	9,850	15,250	21,250
80,000	4,300	6,100	7,000	10,950	16,750	23,300
100,000	4,500	6,600	7,550	11,900	18,000	25,000
150,000	5,200	8,000	8,600	13,800	20,550	28,450
200,000	5,800	8,500	9,400	15,350	22,550	31,200

For information on previous design FRS-R, 70-600, see BIF Document 1153.

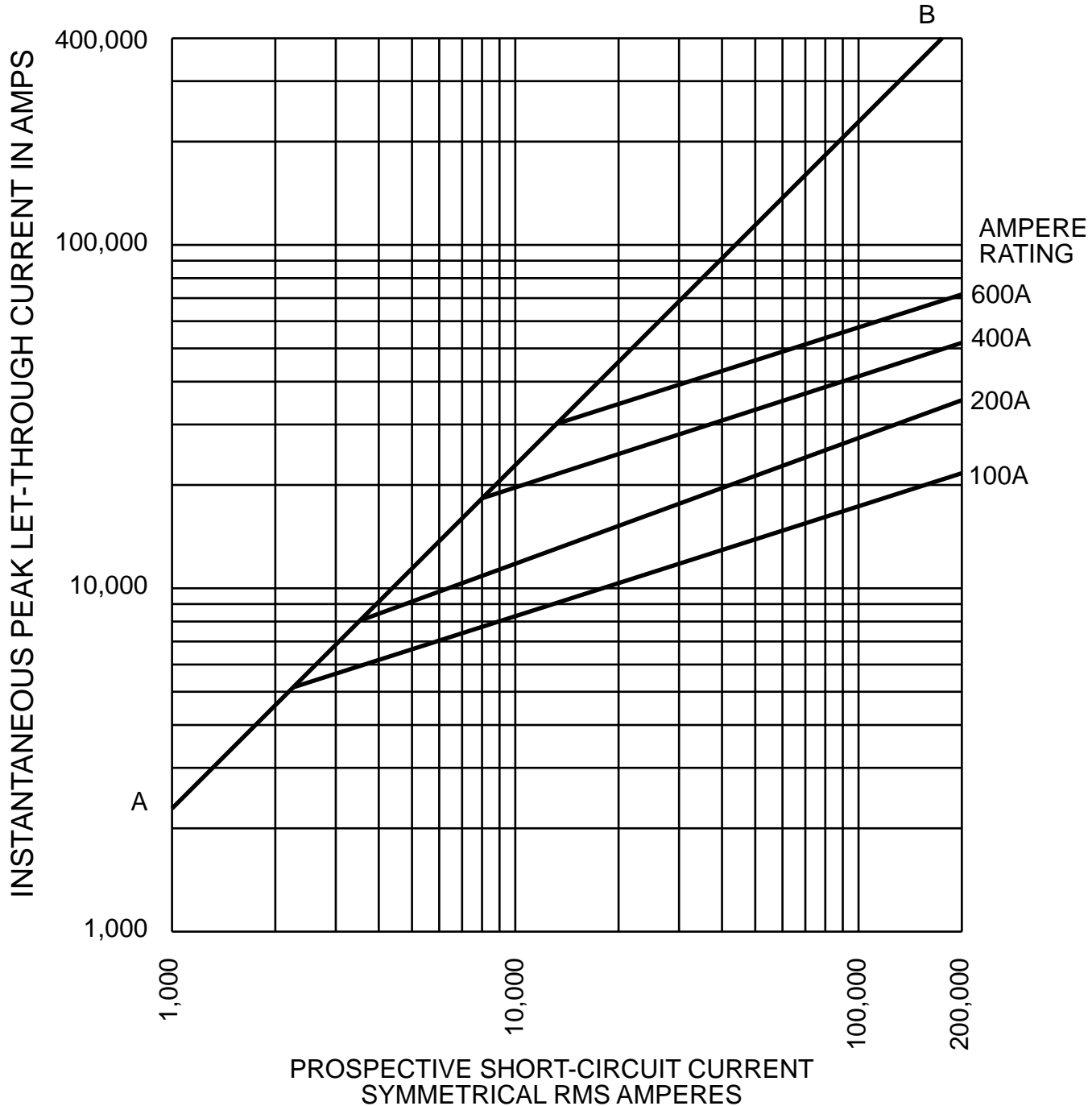
Time-Current Characteristic Curves-Average Melt



Fusetron®
 Dual-Element, Time-Delay Fuses
 Class RK5 -- 600 Volt

FRS-R
 65-600A

Current-Limitation Curves



The only controlled copy of this BIF document is the electronic read-only version located on the Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.