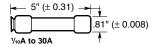
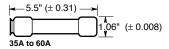
# Fusetron® Dual-Element, Time-Delay Fuses Class RK5 – 600 Volt

FRS-R 1/10-60A



#### **Dimensional Data**





Catalog Symbol: FRS-R

Dual-Element, Time-Delay - 10 second (minimum) at 500%

rated current Current-Limiting

Ampere Rating: 1/10 to 60A Voltage Rating: 600Vac (or less)

Interrupting Rating: 200,000A RMS Sym.

dc Ratings (20,000AIC @ 250Vdc)

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

#### Catalog Numbers

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FRS-R-1/10	FRS-R-1% <sub>10</sub>	FRS-R-8
FRS-R-1/8	FRS-R-2	FRS-R-9
FRS-R-15/100	FRS-R-21/4	FRS-R-10
FRS-R- <sup>2</sup> / <sub>10</sub>	FRS-R-21/2	FRS-R-12
FRS-R-1/4	FRS-R-2% <sub>10</sub>	FRS-R-15
FRS-R-3/10	FRS-R-3	FRS-R-17½
FRS-R-1/10	FRS-R-31/10	FRS-R-20
FRS-R-1/2	FRS-R-31/2	FRS-R-25
FRS-R-% <sub>10</sub>	FRS-R-4	FRS-R-30
FRS-R-% <sub>10</sub>	FRS-R-41/ <sub>2</sub>	FRS-R-35
FRS-R-1	FRS-R-5	FRS-R-40
FRS-R-11/8	FRS-R-5% <sub>10</sub>	FRS-R-45
FRS-R-11/4	FRS-R-6	FRS-R-50
FRS-R-11/10	FRS-R-61/4	FRS-R-60
FRS-R-11/2	FRS-R-7	_
FRS-R-1% <sub>10</sub>	FRS-R-71/2	_

### **Carton Quantity and Weight**

Ampere	Carton	Wei	Weight*	
Ratings	Qty.	Lbs.	Kg.	
<u>1/10</u> -15	10	0.40	0.181	
17.5–30	10	0.50	0.277	
35-60	10	3.10	1.406	

<sup>\*</sup>Weight per carton.

#### **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.
- Permits the use of smaller and less costly switches. The timedelay 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 higher degree of short-circuit protection (greater current-limitation) in circuits in which surge currents or temporary overloads occur.
- · Helps protect motors against burnout from overloads.
- Gives motor running back-up protection to motors without extra costs.
- Helps protect motors against burnout from single phasing on three phase systems.
- 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 an overload which is five times greater than the ampere rating of the fuse for a minimum of ten seconds.

#### **Fuse Reducers For Class R Fuses**

Equipment Fuse Clips	Desired Fuse (Case) Size	Catalog Number (Pairs) 600V
60A	30A	No. 663-R
100A —	30A	No. 216-R
	60A	No. 616-R
200A	60A	No. 626-R



Recommended fuseblocks for Class R 600V fuses See Data Sheet: 1111

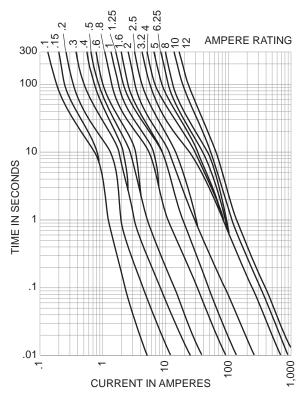
C€ CE logo denotes compliance with European Union Low Voltage Directive (50-1000Vac, 75-1500Vdc). Refer to Data Sheet: 8002 or contact Bussmann Application Engineering at 314-527-1270 for more information.

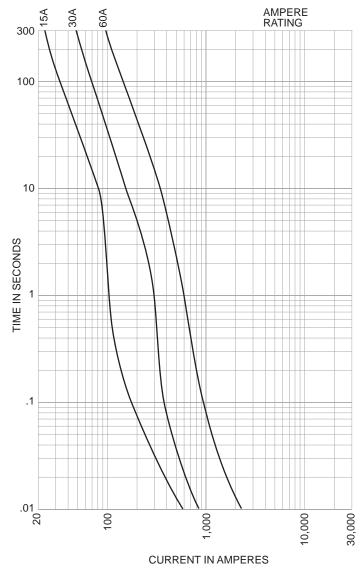


# Fusetron® Dual-Element, Time-Delay Fuses Class RK5 – 600 Volt

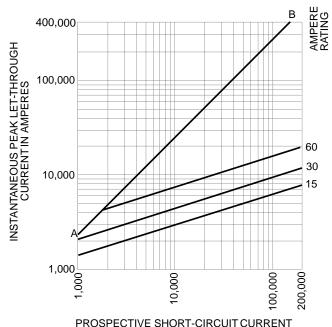
FRS-R 1/10-60A

## **Time-Current Characteristic Curves-Average Melt**





### **Current-Limitation Curves**



in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

SYMMETRICAL RMS AMPERES

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