

# Fusetron® Dual-Element, Time-Delay Fuses Class RK5 – 250 Volt

**FRN-R**  
**1/10-60A**



**Catalog Symbol:** FRN-R

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

**Ampere Rating:** 1/10 to 60 Amperes

**Voltage Rating:** 250 Volts AC (or less)

**Interrupting Rating:** 200,000A RMS Sym.

DC Ratings: 20,000 AIC @ 125 VDC

**Agency Approvals:**

UL Listed, Std. 248-12, Class RK-5, Guide JDDZ, File E4273  
CSA Certified, C22.2 No. 248.12, Class 1422-01, File 53787

**Catalog Numbers**

FRN-R-1/10	FRN-R-19/10	FRN-R-8
FRN-R-1/8	FRN-R-2	FRN-R-9
FRN-R-15/100	FRN-R-2 1/4	FRN-R-10
FRN-R-3/10	FRN-R-2 1/2	FRN-R-12
FRN-R-1/4	FRN-R-2 9/10	FRN-R-15
FRN-R-3/10	FRN-R-3	FRN-R-17 1/2
FRN-R-4/10	FRN-R-3 3/10	FRN-R-20
FRN-R-1/2	FRN-R-3 1/2	FRN-R-25
FRN-R-9/10	FRN-R-4	FRN-R-30
FRN-R-9/10	FRN-R-4 1/2	FRN-R-35
FRN-R-1	FRN-R-5	FRN-R-40
FRN-R-1 1/8	FRN-R-5 9/10	FRN-R-45
FRN-R-1 1/4	FRN-R-6	FRN-R-50
FRN-R-1 1/10	FRN-R-6 3/4	FRN-R-60
FRN-R-1 1/2	FRN-R-7	—
FRN-R-1 9/10	FRN-R-7 1/2	—



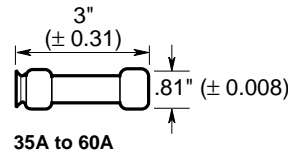
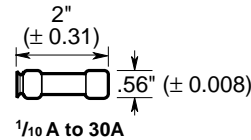
**Carton Quantity and Weight**

Ampere Ratings	Carton Qty.	Weight*	
		Lbs.	Kg.
0-15	10	0.40	0.181
17.5-30	10	0.50	0.227
35-60	10	1.00	0.453

\*Weight per carton.

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.

**Dimensional Data**



**General Information:**

- Provides motor overload, ground fault and short-circuit protection.
- Helps protect motors against burnout from overloads.
- 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) 250V
60A	30A	No. 263-R
100A	30A	No. 213-R
	60A	No. 216-R
200A	60A	No. 226-R

**Fuseblocks for Class R Fuses**

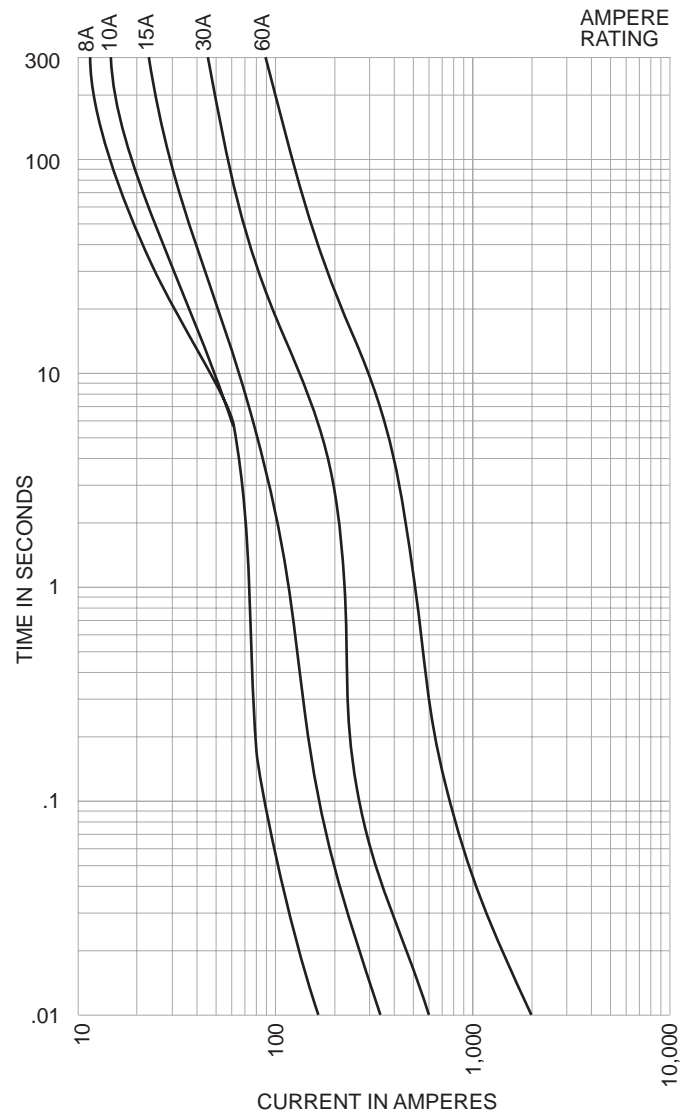
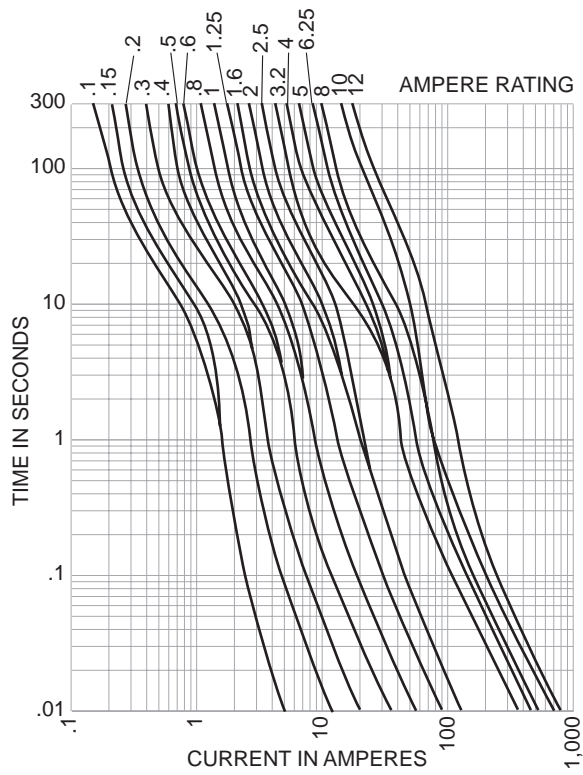
(Clip Retaining Spring Standard, Suffix "R")

Amps	Poles	Basic Catalog Number	Terminal Type (Suffix No.)				
			Screw w/	Box Lug w/		1/4" Quick-Connect	
				Pres. Plate	Clip CU only		
1/10	1	R25030-1	SR	PR	CR	COR	QR
	2	R25030-2	SR	PR	CR	COR	QR
30	3	R25030-3	SR	PR	CR	COR	QR
	1	R25060-1	SR	—	CR	COR	—
31	2	R25060-2	SR	—	CR	COR	—
	3	R25060-3	SR	—	CR	COR	—

**Fusetron®**  
**Dual-Element, Time-Delay Fuses**  
**Class RK5 - 250 Volt**

**FRN-R**  
**1/10-60A**

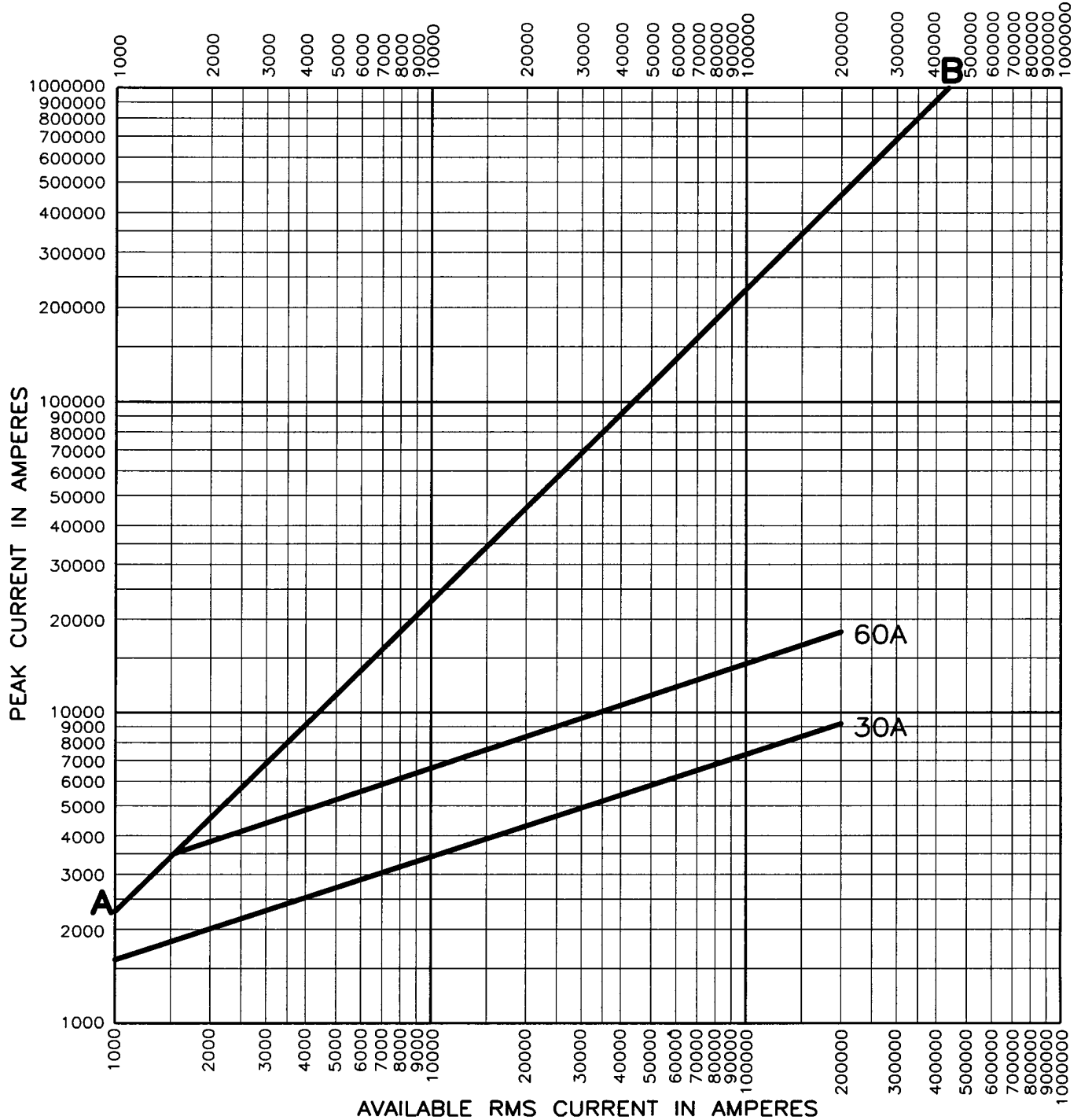
**Time-Current Characteristic Curves-Average Melt**



**Fusetron®**  
**Dual-Element, Time-Delay Fuses**  
**Class RK5 - 250 Volt**

**FRN-R**  
**1/10-60A**

**Current-Limitation Curve**



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.