

# 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 2/10 | 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 1/4  | FRN-R-60     |
| FRN-R-1 1/2  | FRN-R-7      | —            |
| FRN-R-1 9/10 | FRN-R-7 1/2  | —            |

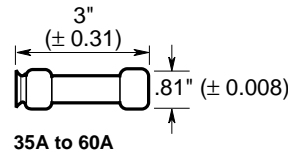
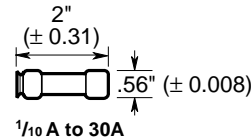
**Carton Quantity and Weight**

| 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**

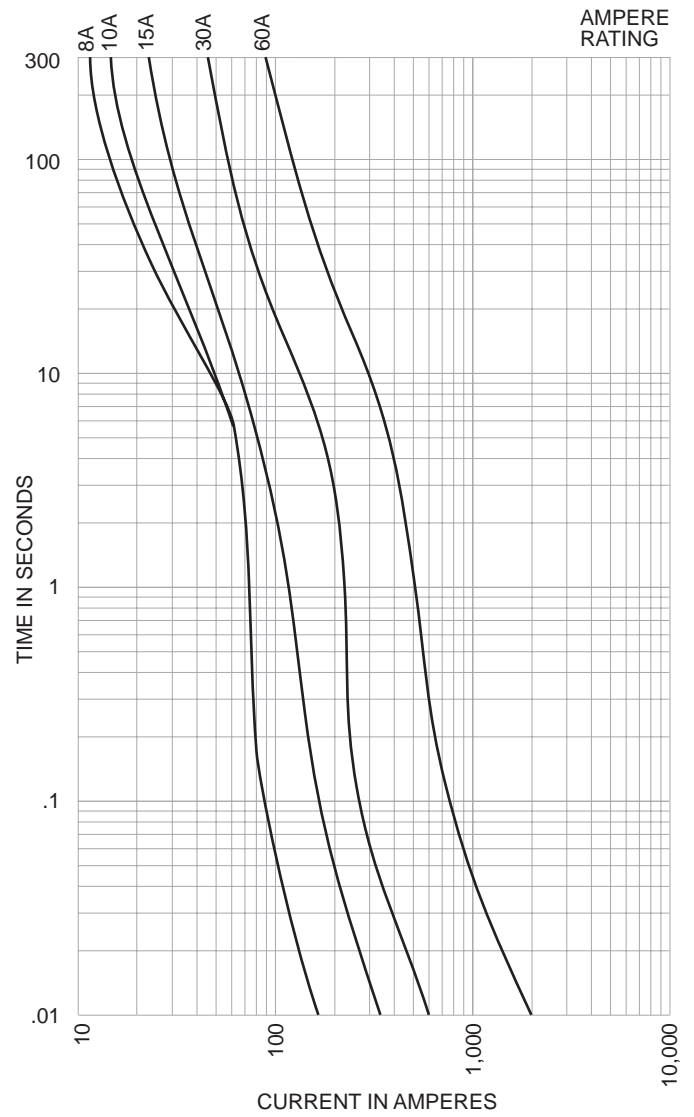
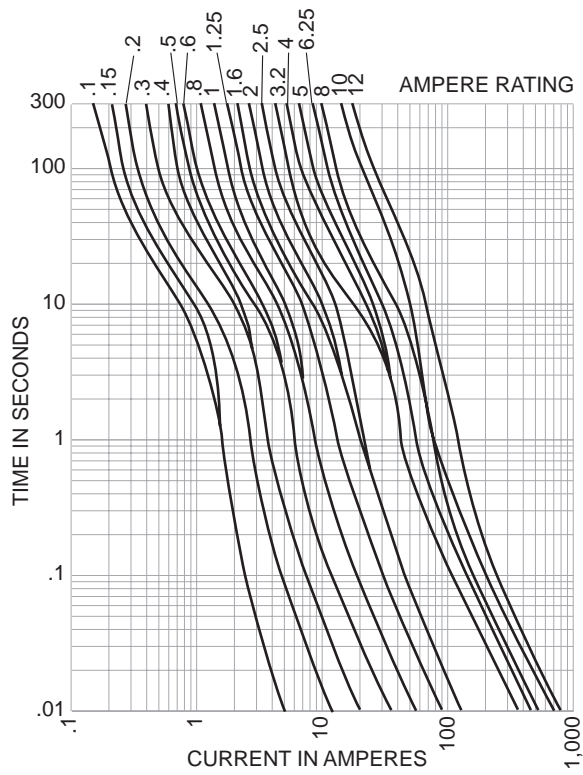
(Clip Retaining Spring Standard, Suffix "R")

| 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                | —  |

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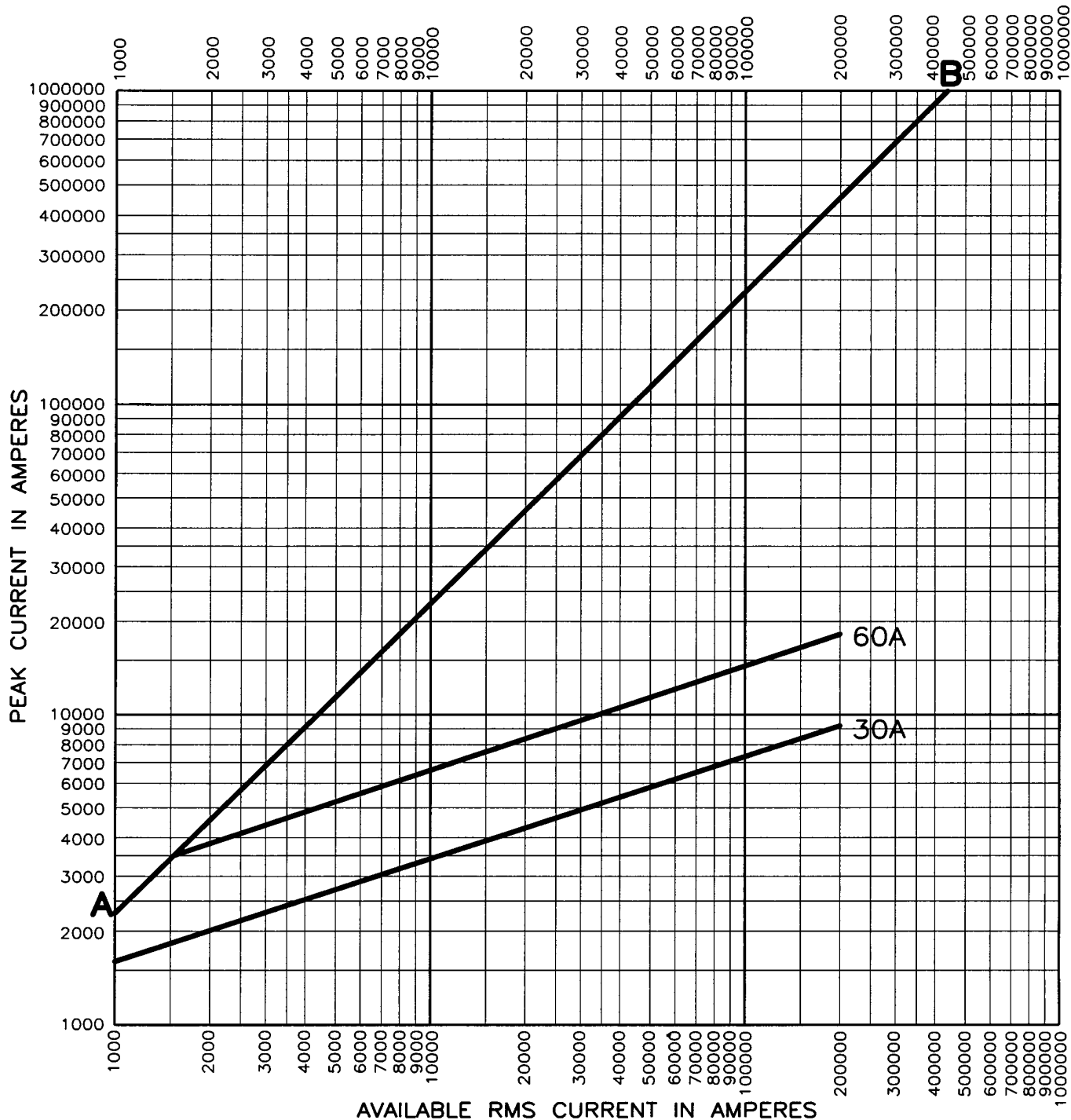
**Time-Current Characteristic Curves-Average Melt**



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**Current-Limitation Curve**



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