

# Fusetron™ FRN-R Class RK5 250Vac, 125/250Vdc 70-600A, dual element, time-delay fuses



### Catalog symbols:

- FRN-R-

### Description:

Eaton Bussmann® series advanced protection, energy efficient FRN-R Class RK5 dual element, current-limiting, time-delay fuses. Time-delay – 10 seconds (minimum) at 500% of rated current.

### Specifications:

#### Ratings

- Volts
  - 250Vac
  - 125Vdc (110-200A)
  - 250Vdc (225-600A)
- Amps 70-600A
- Interrupting rating
  - 200kA Vac RMS Sym.
  - 20kA Vdc

#### Agency information

- cULus Listed file No. JDDZ.E4273
  - UL 248-12 – Class RK5 Fuses
  - CSA C22.2 No. 248.12 – Class RK5 Fuses
- CE

### Catalog numbers (amps)

|           |           |           |
|-----------|-----------|-----------|
| FRN-R-70  | FRN-R-150 | FRN-R-400 |
| FRN-R-75  | FRN-R-175 | FRN-R-450 |
| FRN-R-80  | FRN-R-200 | FRN-R-500 |
| FRN-R-90  | FRN-R-225 | FRN-R-600 |
| FRN-R-100 | FRN-R-250 |           |
| FRN-R-110 | FRN-R-300 |           |
| FRN-R-125 | FRN-R-350 |           |

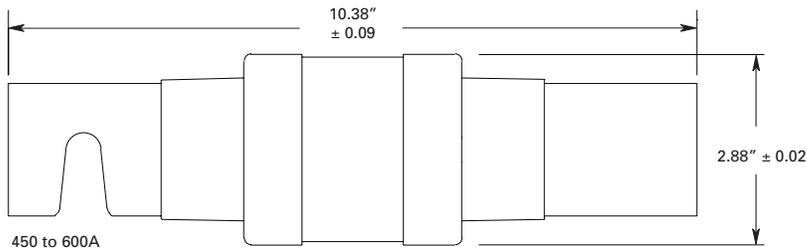
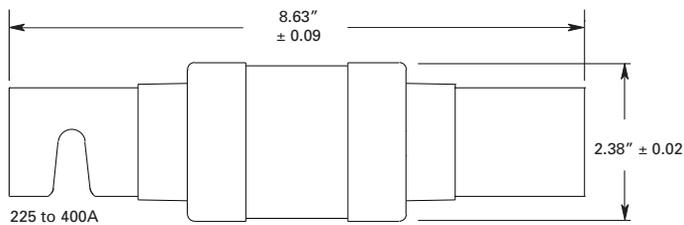
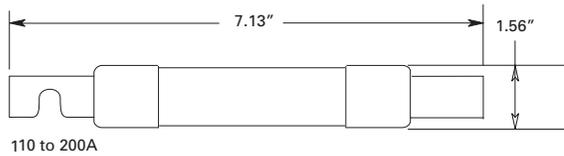
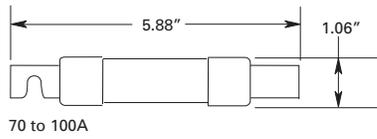
### Carton Quantity:

| Amp rating | Carton qty. |
|------------|-------------|
| 70 – 100   | 5           |
| 110 – 600  | 1           |

### Features:

- Provides motor overload, ground fault and short-circuit protection
- Helps protect motors against burnout from overloads and single-phasing when sized properly
- 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 on inrush current which is five times greater than the amp rating of the fuse for a minimum of ten seconds

**Dimensions - in:**



**Recommended fuse blocks:**

| Fuse amps | 1-pole      | 2-pole      | 3-pole      |
|-----------|-------------|-------------|-------------|
| 70-100    | RM25100-1CR | RM25100-2CR | RM25100-3CR |
| 110-200   | RM25200-1CR | RM25200-2CR | RM25200-3CR |
| 225-400   | RM25400-1CR | RM25400-2CR | RM25400-3CR |
| 450-600   | RM25600-1CR | RM25600-2CR | RM25600-3CR |

For additional information on the RM 250 volt fuse blocks, see product brochure no. 3192.

**use reducers for Class R fuses**

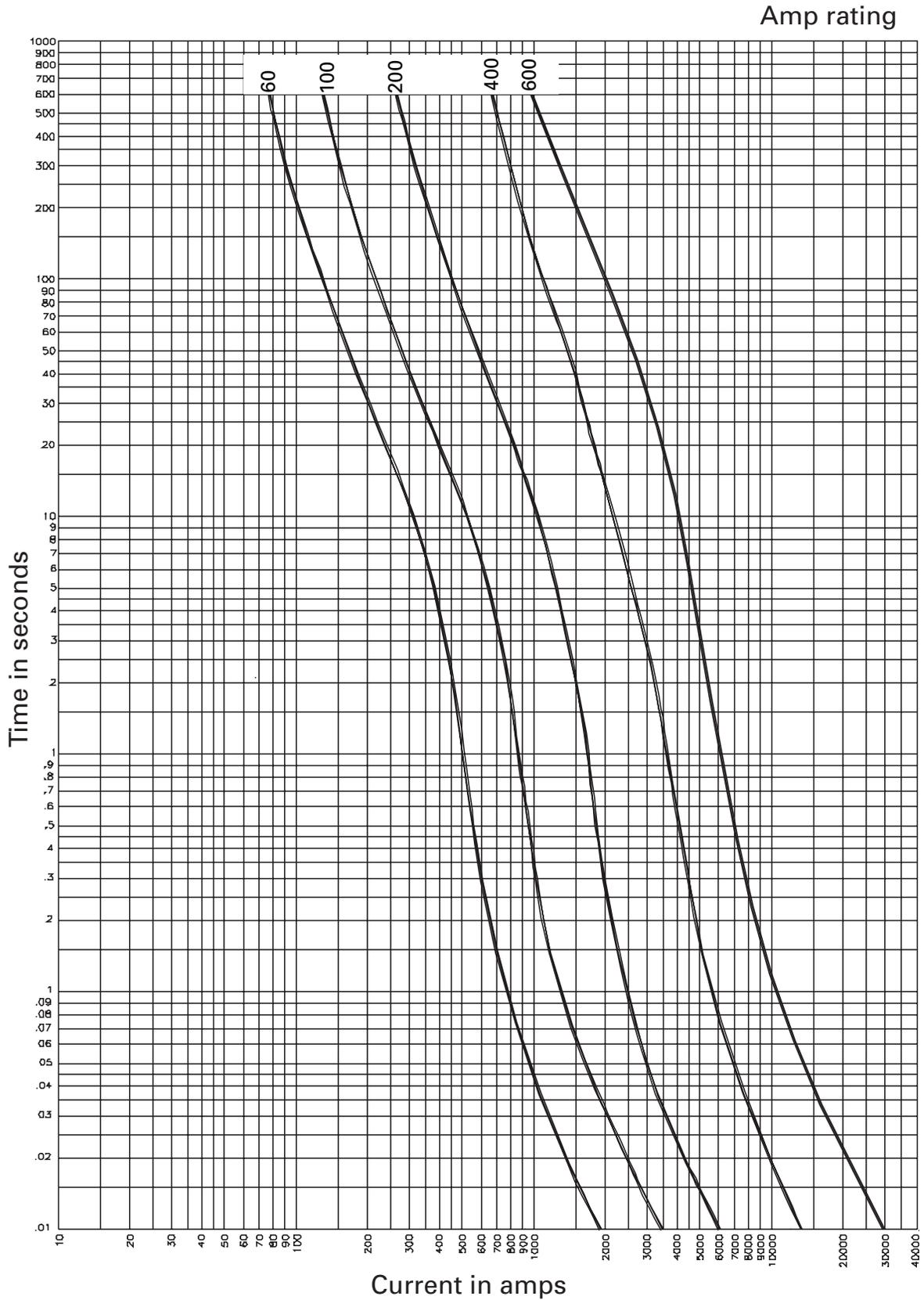
| Fuse size   | Amp size of fuse block or disconnect switch | Catalog no. (pairs) |
|-------------|---|---------------------|
| 65 to 100A  | 400A  | No.2641-R*          |
| 110 to 200A |   | No.242-R*           |
| 65 to 100A  | 600A  | No.2661-R*          |
| 110 to 200A |   | No.2662-R*          |
| 225 to 400A |   | No.2664-R*†         |

\* These reducers are not CSA Certified.

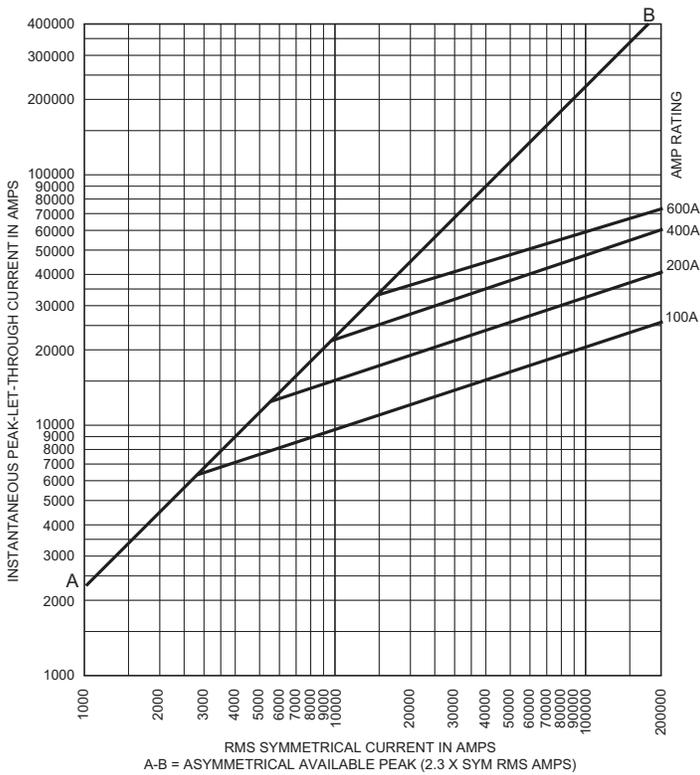
† Single reducer only (pair not required)

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

**Time-current curves — average melt:**



**Current-limitation curves:**



**Current-limiting effects:**

| Prospective S.C.C. | Let-through current (apparent RMS Sym. vs. fuse rating) |        |        |        |
|--------------------|---|--------|--------|--------|
|                    | 100A  | 200A   | 400A   | 600A   |
| —                  | 100A  | 200A   | 400A   | 600A   |
| 5000               | 3000  | 5000   | 5000   | 5000   |
| 10,000             | 4000  | 7000   | 10,000 | 10,000 |
| 15,000             | 5000  | 8000   | 11,000 | 15,000 |
| 20,000             | 5000  | 8000   | 12,000 | 16,000 |
| 25,000             | 6000  | 9000   | 13,000 | 17,000 |
| 30,000             | 6000  | 10,000 | 14,000 | 18,000 |
| 35,000             | 6000  | 10,000 | 15,000 | 19,000 |
| 40,000             | 7000  | 11,000 | 15,000 | 20,000 |
| 50,000             | 7000  | 11,000 | 17,000 | 21,000 |
| 60,000             | 8000  | 12,000 | 18,000 | 22,000 |
| 70,000             | 8000  | 13,000 | 19,000 | 23,000 |
| 80,000             | 8000  | 13,000 | 19,000 | 24,000 |
| 90,000             | 9000  | 14,000 | 20,000 | 25,000 |
| 100,000            | 9000  | 14,000 | 21,000 | 26,000 |
| 150,000            | 10,000  | 16,000 | 24,000 | 29,000 |
| 200,000            | 11,000  | 18,000 | 26,000 | 32,000 |

The only controlled copy of this data sheet is the electronic read-only version located on the Eaton 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. Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton 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.

**Eaton**  
1000 Eaton Boulevard  
Cleveland, OH 44122  
Eaton.com

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

© 2025 Eaton  
All Rights Reserved  
Printed in USA  
Publication No. 1020  
July 2025

For Eaton's Bussmann series product information, call 1-855-287-7626 or visit: [Eaton.com/bussmannseries](http://Eaton.com/bussmannseries)



Eaton, Bussmann and Fusetron are valuable trademarks of Eaton in the U.S. and other countries. You are not permitted to use the Eaton trademarks without prior written consent of Eaton.

Follow us on social media to get the latest product and support information.

