

**FRN-R (250 V) and FRS-R (600 V) Class RK5
Fusetron™ energy efficient, dual-element, time-
delay fuses**

Dual-element, time-delay Class RK5 fuses. FRN-R — 10 seconds (minimum) at 500% rated amps (8 seconds for 0-30 A sizes). FRS-R — 10 seconds (minimum) at 500% rated amps. FRN-R and FRS-R available with optional indication on select ratings (see catalog numbers table). For superior electrical protection, Eaton recommends upgrading to Bussmann series Low-Peak LPN-RK (250 V) or LPS-RK (600 V) fuses, see page 1-18. For dimensions, see page 1-3.

Ratings

- Volts
 - FRN-R
 - 250 Vac (or less)
 - 125 Vdc (1/10-60 A, 110-200 A)
 - 250 Vdc (225-600 A)
 - FRS-R
 - 600 Vac (or less)
 - 300 Vdc 1/10-30 A, 65-600 A
 - 250 Vdc 35-60 A
- Amps 1/10-600 A
- IR
 - 200 kA RMS Sym.
 - 20 kA DC



Agency information

- FRN-R
 - UL Listed, Std 248-12, Class RK5, Guide JDDZ, File E4273
 - CSA Certified, Class 1422-01, File 53787
- FRS-R
 - UL Listed, Std 248-12, Class RK5, Guide JDDZ, File E4273
 - CSA Certified, Class 1422-02, File 53787
- CE

Features

- Separate overload and short-circuit elements provide time-delay for sizing as close as 125% of motor FLA (FRN-R)
- 2:1 selective coordination amp ratio (within the Fusetron RK5 fuse family) helps prevent overcurrent events from opening upstream Fusetron fuses
- Insulated end caps for 225-600 A (FRN-R) and 65-600 A (FRS-R) fuses reduces exposure to live parts and extends air gap to distance between blades of adjacent mounted fuses or to housing

Typical applications

- Power panelboards
- Motor control centers
- Combination starters
- Machinery disconnects

Catalog no. (amps)

| 250 V FRN-R | | | |
|--------------|--------------|---------------|-----------|
| FRN-R-1/10 | FRN-R-2 | FRN-R-10* | FRN-R-100 |
| FRN-R-1/8 | FRN-R-2-1/4 | FRN-R-12* | FRN-R-110 |
| FRN-R-15/100 | FRN-R-2-1/2 | FRN-R-15* | FRN-R-125 |
| FRN-R-2/10 | FRN-R-2-8/10 | FRN-R-17-1/2* | FRN-R-150 |
| FRN-R-1/4 | FRN-R-3 | FRN-R-20* | FRN-R-175 |
| FRN-R-3/10 | FRN-R-3-2/10 | FRN-R-25* | FRN-R-200 |
| FRN-R-4/10 | FRN-R-3-1/2 | FRN-R-30* | FRN-R-225 |
| FRN-R-1/2 | FRN-R-4 | FRN-R-35* | FRN-R-250 |
| FRN-R-6/10 | FRN-R-4-1/2 | FRN-R-40* | FRN-R-300 |
| FRN-R-8/10 | FRN-R-5 | FRN-R-45* | FRN-R-350 |
| FRN-R-1 | FRN-R-5-6/10 | FRN-R-50* | FRN-R-400 |
| FRN-R-1-1/8 | FRN-R-6 | FRN-R-60* | FRN-R-450 |
| FRN-R-1-1/4 | FRN-R-6-1/4 | FRN-R-70 | FRN-R-500 |
| FRN-R-1-4/10 | FRN-R-7 | FRN-R-75 | FRN-R-600 |
| FRN-R-1-1/2 | FRN-R-7-1/2 | FRN-R-80 | |
| FRN-R-1-6/10 | FRN-R-8* | FRN-R-85 | |
| FRN-R-1-8/10 | FRN-R-9* | FRN-R-90 | |
| 600 V FRS-R | | | |
| FRS-R-1/10 | FRS-R-2 | FRS-R-10* | FRS-R-100 |
| FRS-R-1/8 | FRS-R-2-1/4 | FRS-R-12* | FRS-R-110 |
| FRS-R-15/100 | FRS-R-2-1/2 | FRS-R-15* | FRS-R-125 |
| FRS-R-2/10 | FRS-R-2-8/10 | FRS-R-17-1/2* | FRS-R-150 |
| FRS-R-1/4 | FRS-R-3 | FRS-R-20* | FRS-R-175 |
| FRS-R-3/10 | FRS-R-3-2/10 | FRS-R-25* | FRS-R-200 |
| FRS-R-4/10 | FRS-R-3-1/2 | FRS-R-30* | FRS-R-225 |
| FRS-R-1/2 | FRS-R-4 | FRS-R-35* | FRS-R-250 |
| FRS-R-6/10 | FRS-R-4-1/2 | FRS-R-40* | FRS-R-300 |
| FRS-R-8/10 | FRS-R-5 | FRS-R-45* | FRS-R-350 |
| FRS-R-1 | FRS-R-5-6/10 | FRS-R-50* | FRS-R-400 |
| FRS-R-1-1/8 | FRS-R-6* | FRS-R-60* | FRS-R-450 |
| FRS-R-1-1/4 | FRS-R-6-1/4* | FRS-R-65 | FRS-R-500 |
| FRS-R-1-4/10 | FRS-R-7* | FRS-R-70 | FRS-R-600 |
| FRS-R-1-1/2 | FRS-R-7-1/2* | FRS-R-75 | |
| FRS-R-1-6/10 | FRS-R-8* | FRS-R-80 | |
| FRS-R-1-8/10 | FRS-R-9* | FRS-R-90 | |

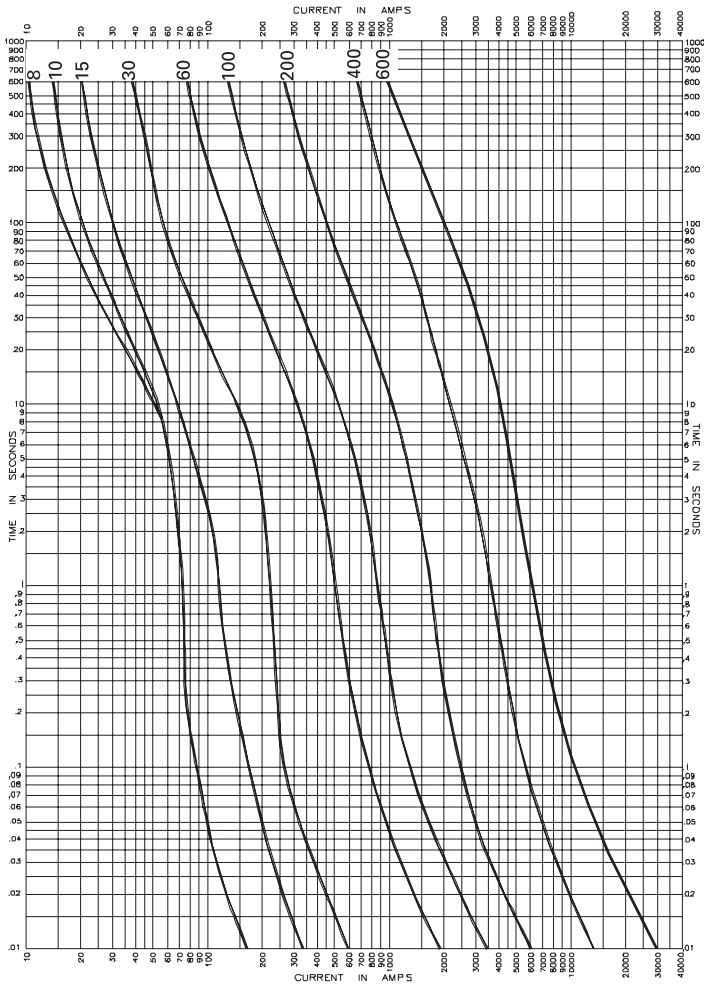
* Available with indication To order, place 'ID' at the end of the catalog number. Example: FRN-R-30**ID** or FRS-R-7**ID**.

Recommended blocks for Class RK5 fuses, see page 1-2.

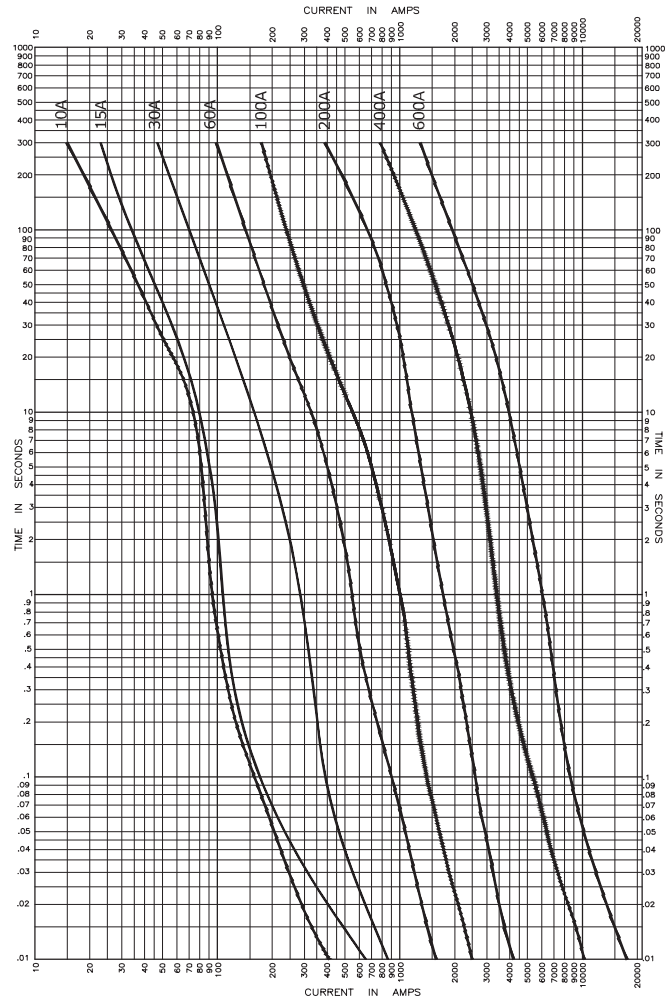
Recommended fuse reducers for Class R fuses, see page 1-2.

**Data sheet no. FRN-R; 1019 (up to 60 A), 1020 (70-600 A)
FRS-R 1017 (up to 60 A), 1018 (70-600 A)**

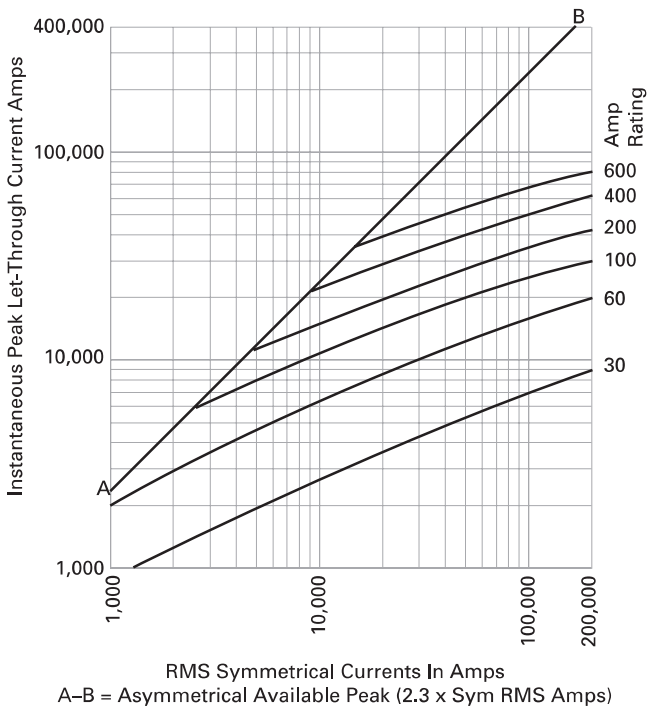
FRN-R Time-current characteristics — average melt



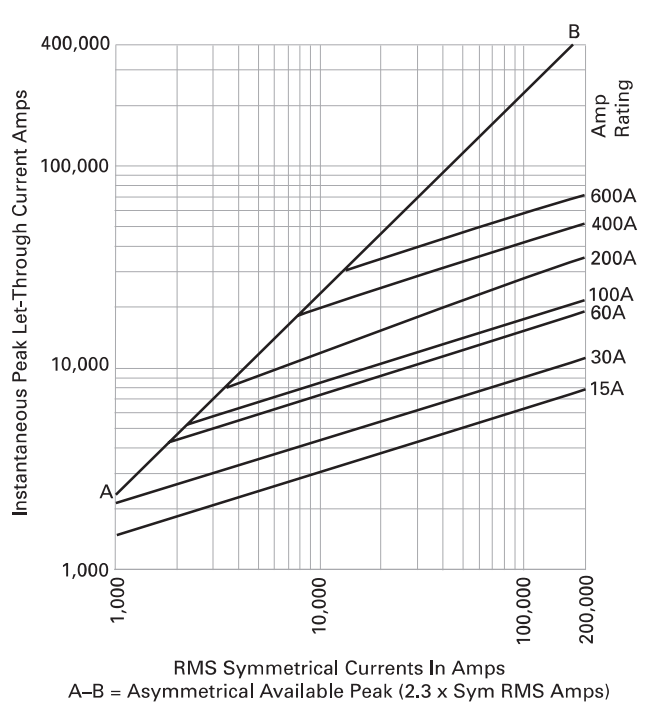
FRS-R Time-current characteristics — average melt



FRN-R Current limitation curves



FRS-R Current limitation curves



Data sheet no. FRN-R; 1019 (up to 60 A), 1020 (70-600 A)
FRS-R 1017 (up to 60 A), 1018 (70-600 A)