

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

- UL Listed, Std. 248-12, Class RK5, Guide JDDZ, File E4273
- CSA Certified, C22.2 No. 248.12, Class 1422-02, File 53787
- CE

Catalog numbers (amps)

| | | |
|-----------|-----------|-----------|
| FRN-R-70 | FRN-R-125 | FRN-R-350 |
| FRN-R-75 | FRN-R-150 | FRN-R-400 |
| FRN-R-80 | FRN-R-175 | FRN-R-450 |
| FRN-R-85 | 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 | |

Carton Quantity:

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

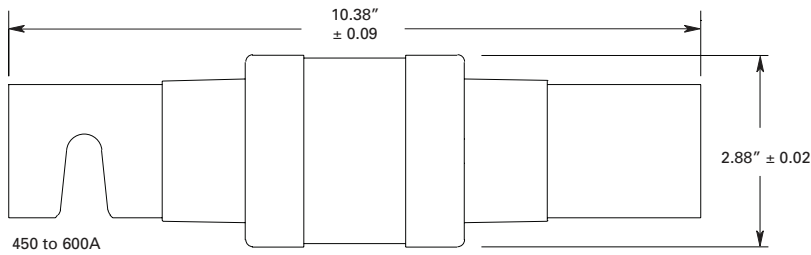
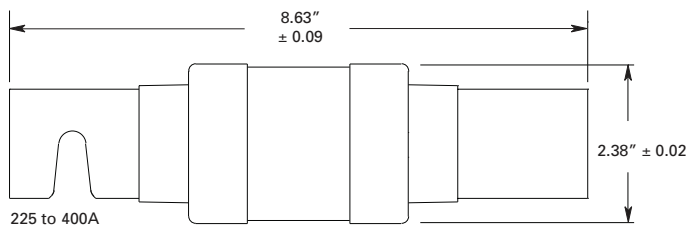
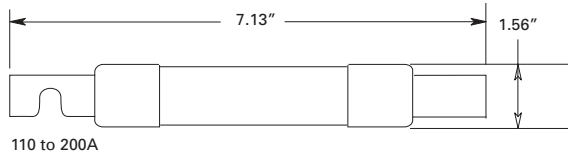
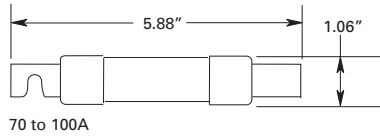
Features:

- 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



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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

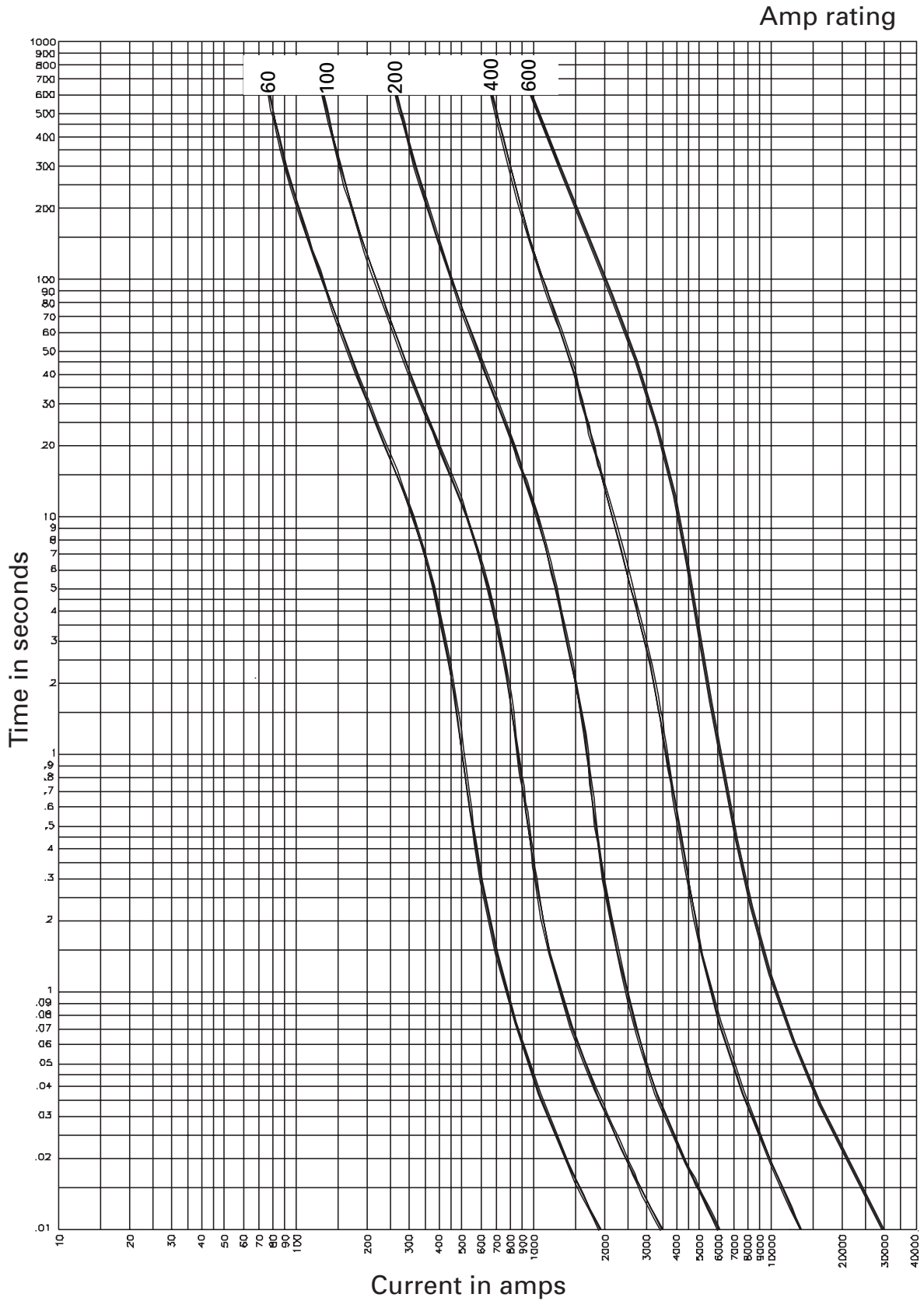
| Fuse size | Amp size of fuse block or disconnect switch | Catalog no. (pairs) |
|-------------|---|---------------------|
| 65 to 100A | 400A | No.2641-R* |
| 110 to 200A | | No.242-R* |
| 65 to 100A | 600A | No.2661-R* |
| 110 to 200A | | No.2662-R* |
| 225 to 400A | | No.2664-R*† |

* These reducers are not CSA Certified.

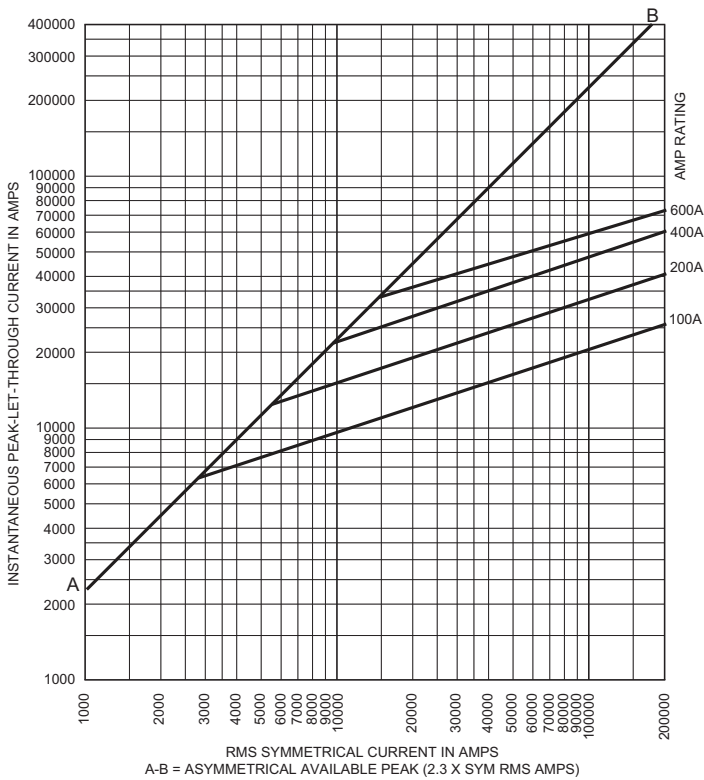
† Single reducer only (pair not required)

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

Time-current curves — average melt:



Current-limitation curves:



Current-limiting effects:

| Prospect. 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 |

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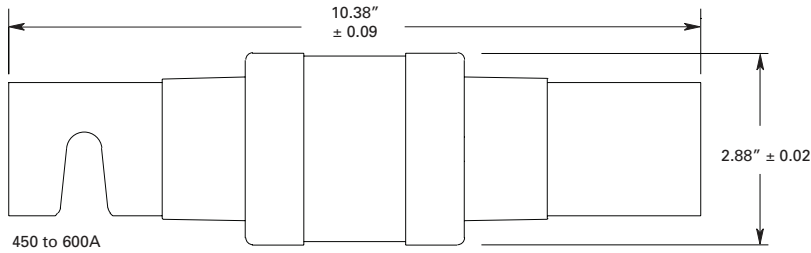
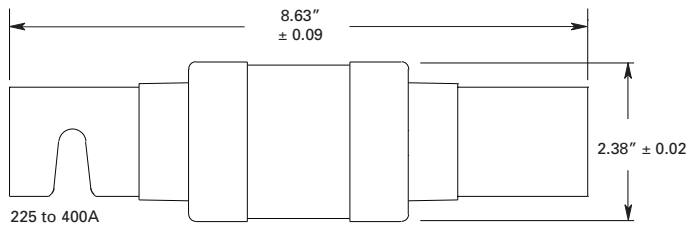
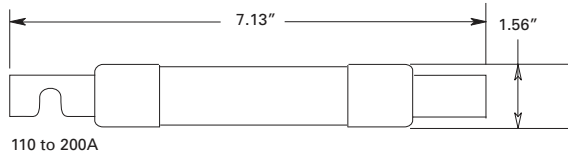
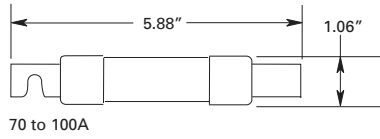
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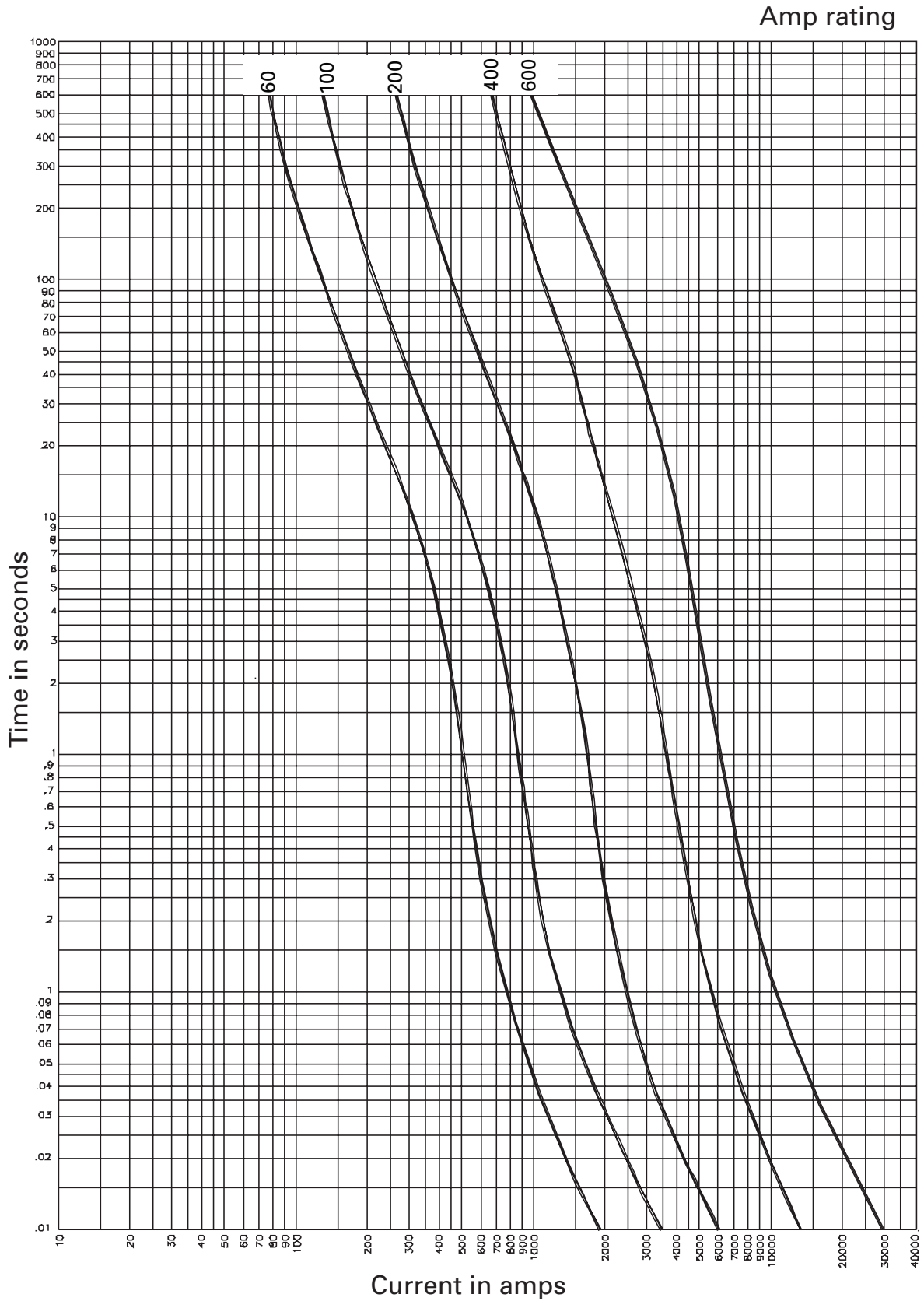
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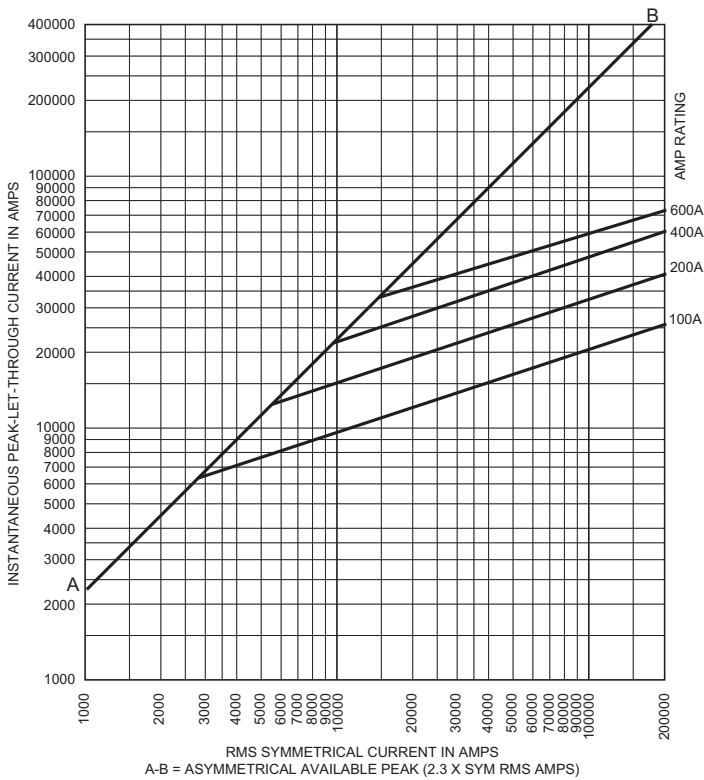
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