

# Fusetron®

## Dual-Element, Time-Delay Fuses

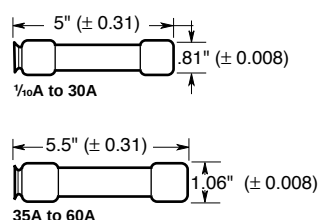
### Class RK5 – 600 Volt

# FRS-R

## 1/10-60A



#### Dimensional Data



Catalog Symbol: FRS-R

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

Current-Limiting

Ampere Rating: 1/10 to 60A

Voltage Rating: 600Vac (or less)

Interrupting Rating: 200,000A RMS Sym.

dc Ratings (20,000AIC @ 250Vdc)

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

#### Catalog Numbers

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

#### Carton Quantity and Weight

| Ampere Ratings | Carton Qty. | Weight* |       |
|----------------|-------------|---------|-------|
|                |             | Lbs.    | Kg.   |
| 1/10-15        | 10          | 0.40    | 0.181 |
| 17.5-30        | 10          | 0.50    | 0.277 |
| 35-60          | 10          | 3.10    | 1.406 |

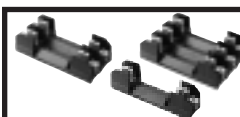
\*Weight per carton.

#### General Information:

- Provides motor overload, ground fault and short-circuit protection. When used in circuits subject to surge currents such as those caused by motors, transformers and other inductive components, these fuses can be sized close to full-load amperes to give maximum overcurrent protection.
- Permits the use of smaller and less costly switches. The time-delay feature makes it possible to use fuse ampere ratings which are much smaller than those of non-time-delay fuses. Considerable cost saving occurs by permitting the use of smaller size switches, panels and fuses themselves.
- Provides a higher degree of short-circuit protection (greater current-limitation) in circuits in which surge currents or temporary overloads occur.
- Helps protect motors against burnout from overloads.
- Gives motor running back-up protection to motors without extra costs.
- 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) 600V |
|----------------------|--------------------------|-----------------------------|
| 60A                  | 30A                      | No. 663-R                   |
| 100A                 | 30A                      | No. 216-R                   |
|                      | 60A                      | No. 616-R                   |
| 200A                 | 60A                      | No. 626-R                   |



Recommended fuseblocks for Class R 600V fuses  
See Data Sheet: 1111

CE CE logo denotes compliance with European Union Low Voltage Directive (50-1000Vac, 75-1500Vdc). Refer to Data Sheet: 8002 or contact Bussmann Application Engineering at 314-527-1270 for more information.

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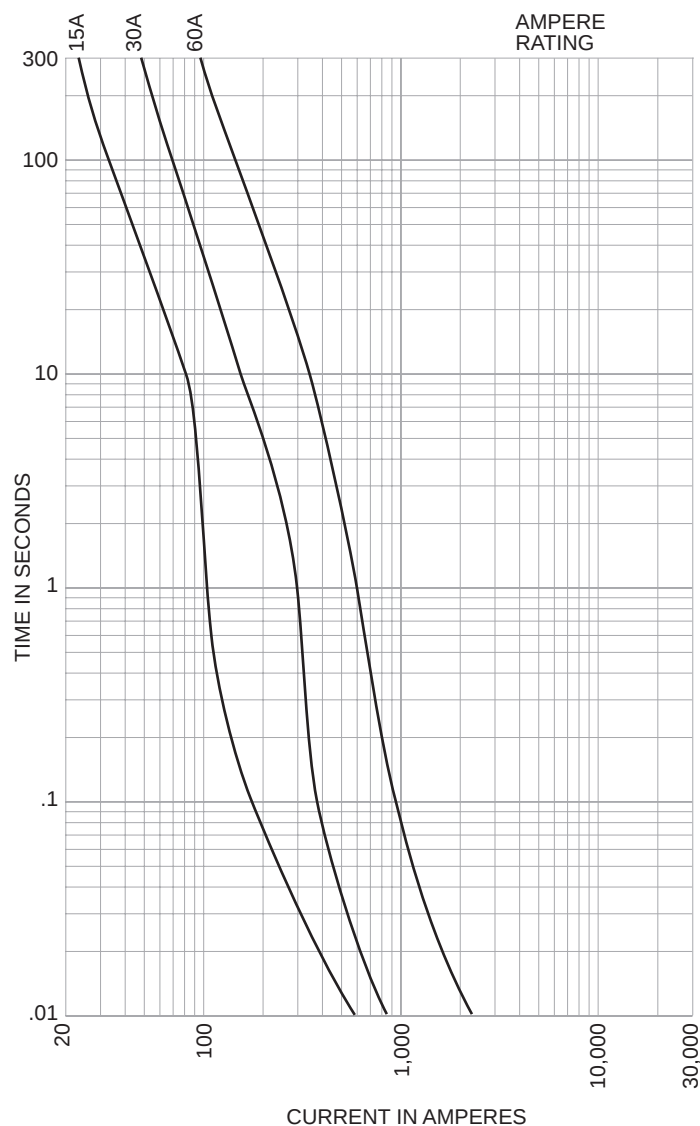
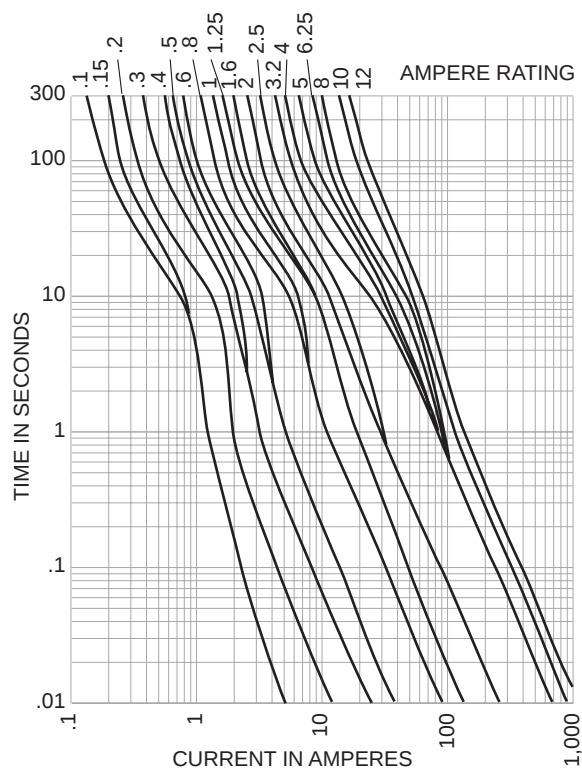
## Dual-Element, Time-Delay Fuses

### Class RK5 – 600 Volt

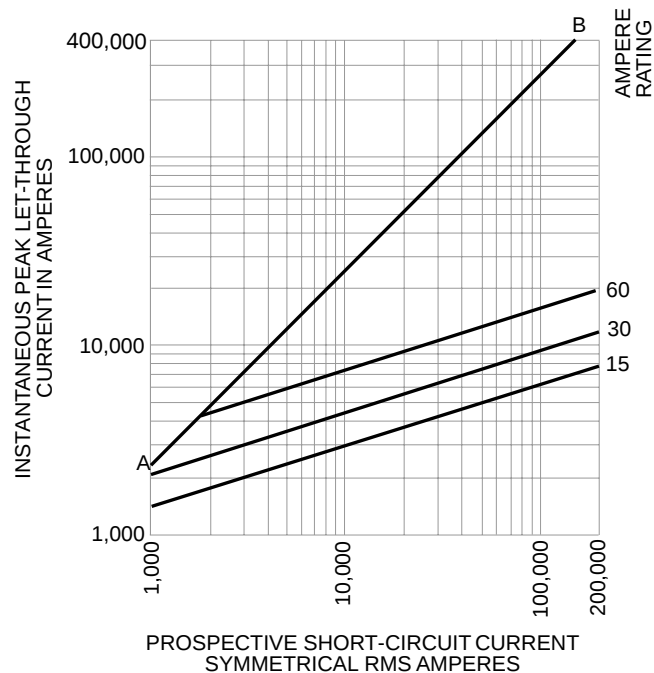
# FRS-R

1/10-60A

Time-Current Characteristic Curves—Average Melt



Current-Limitation Curves



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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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