



### THE INDUSTRY'S MOST POPULAR FUSE FOR MOTOR CIRCUIT PROTECTION.

Tri-onic® SmartSpot® fuses now provide a visual open fuse indicator. With advanced material technology added to the existing product the TR and TRS current limiting time delay fuses are engineered for overcurrent protection of motors and transformers, service entrance equipment, feeder and branch circuits. Tri-onic proven time delay characteristic safely handles harmless starting currents and inrush currents associated with today's motors and transformers.

#### Features/Benefits

- **Solid State SmartSpot Indicator**
- **Time delay** for motor start-ups and transformer inrush currents *without* nuisance opening
- **Current limiting** for low peak let-thru current
- **Rejection-style design** prevents replacement errors (when used with recommended fuse blocks)
- **Easy-to-read label** for quick recognition and replacement
- **Metal-embossed date and catalog number** for traceability and lasting identification
- **Fiberglass body** provides dimensional stability in harsh industrial settings
- **Brass end-caps** (blade-style) for cooler operation and superior performance
- **High-grade silica filler** ensures fast arc quenching and high current limitation

#### HIGHLIGHTS:

- Time Delay
- Current Limiting
- AC & DC Rated

#### APPLICATIONS:

- Motor Circuits
- Mains
- Feeders
- Branch Circuits
- Transformers
- Service Entrance Equipment
- General-purpose Protection



#### Ratings

- **TR**  
**AC:** 1/10 to 600A  
250VAC, 200kA I.R.  
**DC:** 1/10 to 2 8/10A  
& 35 to 400A,  
250VDC, 20kA I.R.;  
3 to 30A & 450 to 600A,  
160VDC, 20kA I.R.
- **TRS**  
**AC:** 1/10 to 600A  
600VAC, 200kA I.R.  
**DC:** 1/10 to 12A,  
600VDC, 20kA I.R.;  
70 to 600A,  
600VDC, 100kA I.R.;  
15 to 60A,  
300VDC, 20kA I.R.

#### Approvals

- UL Listed to Standard 248-12
- CSA Certified to Standard C22.2 No. 248.12
- DC Listed to UL Standard 198L

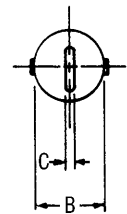
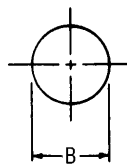


# TIME DELAY / CLASS RK5 FUSES

# TR & TRS

## Standard Fuse Ampere Ratings, Catalog Numbers

| Ampere Rating | Catalog Number |            | Ampere Rating | Catalog Number |            | Ampere Rating | Catalog Number |         |
|---------------|----------------|------------|---------------|----------------|------------|---------------|----------------|---------|
|               | 250V           | 600V       |               | 250V           | 600V       |               | 250V           | 600V    |
| 1/10          | TR1/10R        | TRS1/10R   | 3-1/2         | TR3-1/2R       | TRS3-1/2R  | 50            | TR50R          | TRS50R  |
| 15/100        | TR15/100R      | TRS15/100R | 4             | TR4R           | TRS4R      | 60            | TR60R          | TRS60R  |
| 2/10          | TR2/10R        | TRS2/10R   | 4-1/2         | TR4-1/2R       | TRS4-1/2R  | 70            | TR70R          | TRS70R  |
| 3/10          | TR3/10R        | TRS3/10R   | 5             | TR5R           | TRS5R      | 75            | TR75R          | TRS75R  |
| 4/10          | TR4/10R        | TRS4/10R   | 5-6/10        | TR5-6/10R      | TRS5-6/10R | 80            | TR80R          | TRS80R  |
| 1/2           | TR1/2R         | TRS1/2R    | 6             | TR6R           | TRS6R      | 90            | TR90R          | TRS90R  |
| 6/10          | TR6/10R        | TRS6/10R   | 6-1/4         | TR6-1/4R       | TRS6-1/4R  | 100           | TR100R         | TRS100R |
| 8/10          | TR8/10R        | TRS8/10R   | 7             | TR7R           | TRS7R      | 110           | TR110R         | TRS110R |
| 1             | TR1R           | TRS1R      | 8             | TR8R           | TRS8R      | 125           | TR125R         | TRS125R |
| 1-1/8         | TR1-1/8R       | TRS1-1/8R  | 9             | TR9R           | TRS9R      | 150           | TR150R         | TRS150R |
| 1-1/4         | TR1-1/4R       | TRS1-1/4R  | 10            | TR10R          | TRS10R     | 175           | TR175R         | TRS175R |
| 1-4/10        | TR1-4/10R      | TRS1-4/10R | 12            | TR12R          | TRS12R     | 200           | TR200R         | TRS200R |
| 1-6/10        | TR1-6/10R      | TRS1-6/10R | 15            | TR15R          | TRS15R     | 225           | TR225R         | TRS225R |
| 1-8/10        | TR1-8/10R      | TRS1-8/10R | 17-1/2        | TR17-1/2R      | TRS17-1/2R | 250           | TR250R         | TRS250R |
| 2             | TR2R           | TRS2R      | 20            | TR20R          | TRS20R     | 300           | TR300R         | TRS300R |
| 2-1/4         | TR2-1/4R       | TRS2-1/4R  | 25            | TR25R          | TRS25R     | 350           | TR350R         | TRS350R |
| 2-1/2         | TR2-1/2R       | TRS2-1/2R  | 30            | TR30R          | TRS30R     | 400           | TR400R         | TRS400R |
| 2-8/10        | TR2-8/10R      | TRS2-8/10R | 35            | TR35R          | TRS35R     | 450           | TR450R         | TRS450R |
| 3             | TR3R           | TRS3R      | 40            | TR40R          | TRS40R     | 500           | TR500R         | TRS500R |
| 3-2/10        | TR3-2/10R      | TRS3-2/10R | 45            | TR45R          | TRS45R     | 600           | TR600R         | TRS600R |



## Dimensions

| AMPERE RATING         | A      |     | B       |    | C    |    | D     |    | E     |    |
|-----------------------|--------|-----|---------|----|------|----|-------|----|-------|----|
|                       | In.    | mm  | In.     | mm | In.  | mm | In.   | mm | In.   | mm |
| <b>250V-TR FUSES</b>  |        |     |         |    |      |    |       |    |       |    |
| 0-30                  | 2      | 51  | 9/16    | 14 | -    | -  | -     | -  | -     | -  |
| 31-60                 | 3      | 76  | 13/16   | 21 | -    | -  | -     | -  | -     | -  |
| 61-100                | 5-7/8  | 149 | 1-1/16  | 27 | 1/8  | 3  | 3/4   | 19 | 1     | 25 |
| 101-200               | 7-1/8  | 181 | 1-9/16  | 40 | 3/16 | 5  | 1-1/8 | 28 | 1-3/8 | 35 |
| 201-400               | 8-5/8  | 219 | 2-1/16  | 53 | 1/4  | 6  | 1-5/8 | 41 | 1-7/8 | 48 |
| 401-600               | 10-3/8 | 264 | 2-9/16  | 66 | 1/4  | 6  | 2     | 51 | 2-1/4 | 57 |
| <b>600V-TRS FUSES</b> |        |     |         |    |      |    |       |    |       |    |
| 0-30                  | 5      | 127 | 13/16   | 21 | -    | -  | -     | -  | -     | -  |
| 31-60                 | 5-1/2  | 139 | 1-1/16  | 27 | -    | -  | -     | -  | -     | -  |
| 61-100                | 7-7/8  | 200 | 1-5/16  | 34 | 1/8  | 3  | 3/4   | 19 | 1     | 25 |
| 101-200               | 9-5/8  | 244 | 1-13/16 | 46 | 3/16 | 5  | 1-1/8 | 28 | 1-3/8 | 35 |
| 201-400               | 11-5/8 | 295 | 2-9/16  | 66 | 1/4  | 6  | 1-5/8 | 41 | 1-7/8 | 48 |
| 401-600               | 13-3/8 | 340 | 3-1/8   | 80 | 1/4  | 6  | 2     | 51 | 2-1/4 | 57 |

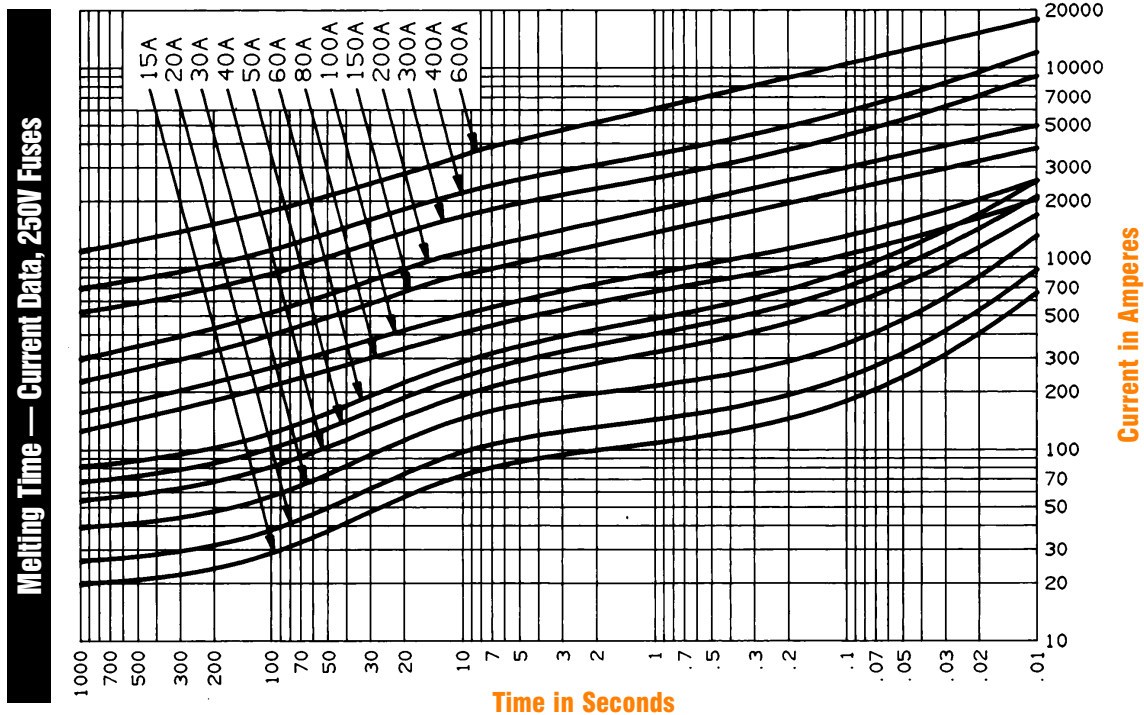
**Recommended Fuse Blocks With Box Connectors For Tri-onic™ Class RK5 Fuses**

| Fuse Ampere Rating | Catalog Number |        |        |        |
|--------------------|----------------|--------|--------|--------|
|                    | 250V           |        | 600V   |        |
|                    | 1 Pole         | 3 pole | 1 pole | 3 pole |
| 0-30               | 20306R         | 20308R | 60306R | 60308R |
| 31-60              | 20606R         | 20608R | 60606R | 60608R |
| 61-100             | 21036R         | 21038R | 61036R | 61038R |
| 101-200            | 22001R         | 22003R | 62001R | 62003R |
| 201-400            | 24001R         | 24003R | 64001R | 64003R |
| 401-600            | 2631R          | 2633R  | 6631R  | 6633R  |

# TIME DELAY / CLASS RK5 FUSES

## TR & TRS

TR15 to 600



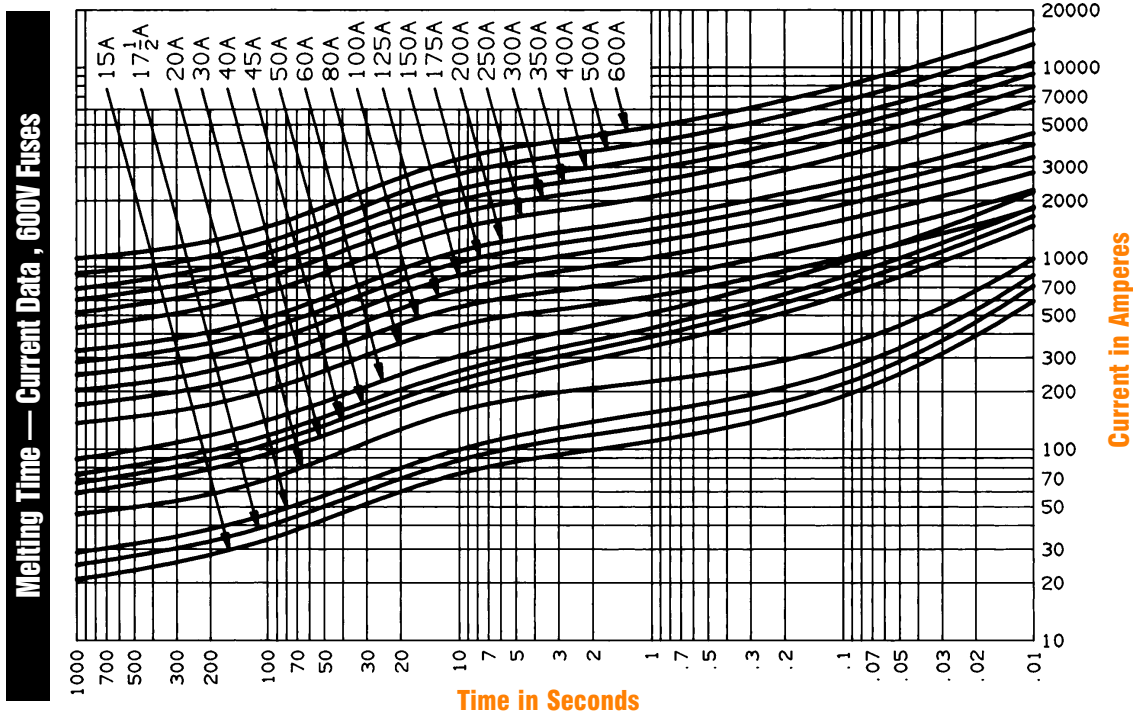
TR1/10 to 12



# TIME DELAY / CLASS RK5 FUSES

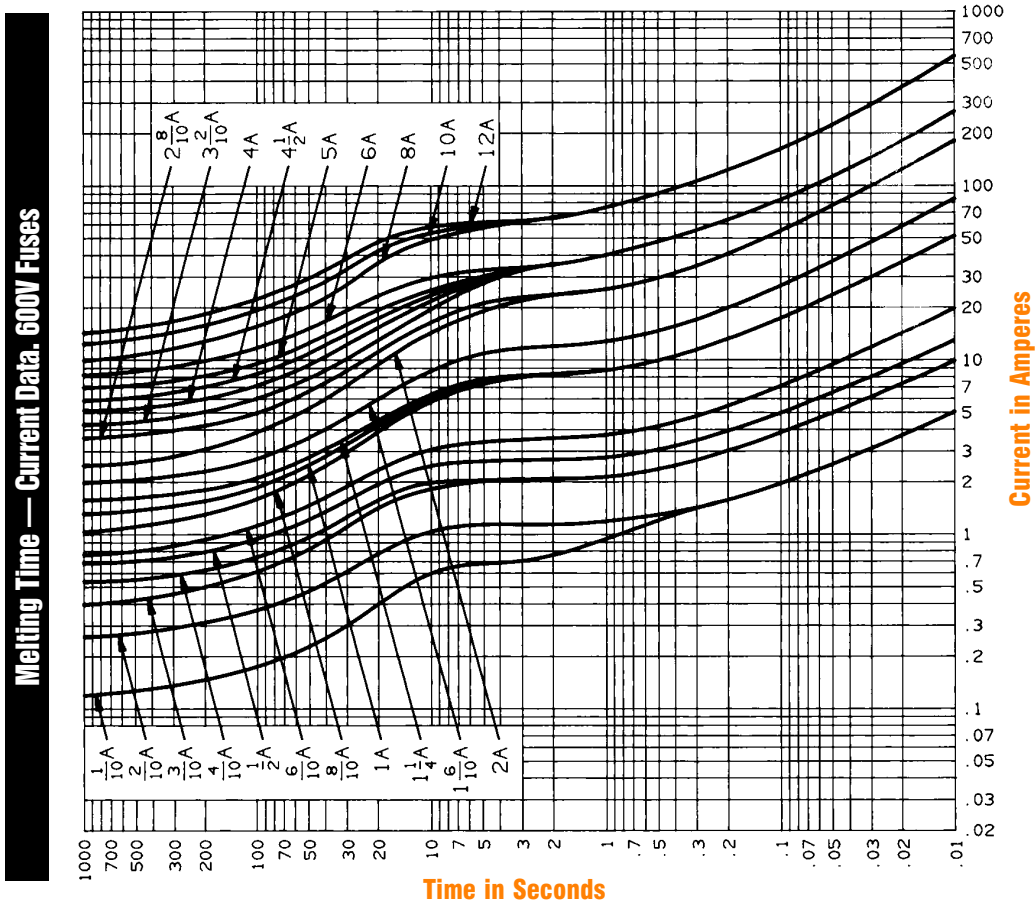
# TR & TRS

TRS15 to 600



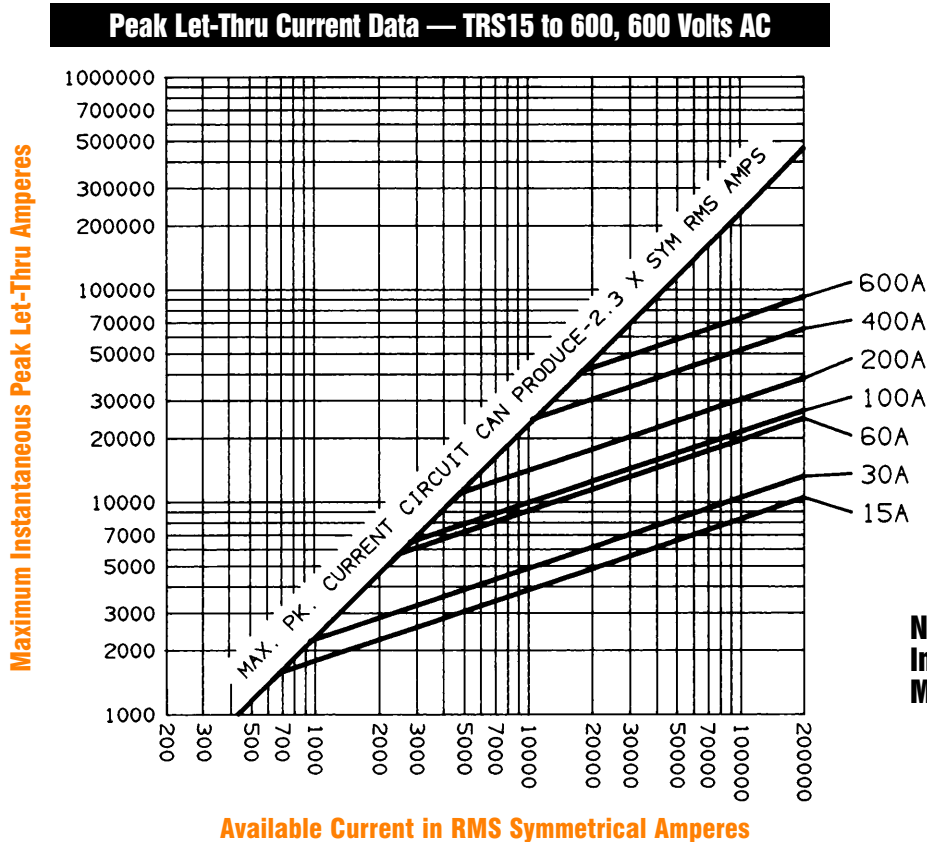
B

TRS1/10 to 12



# TIME DELAY / CLASS RK5 FUSES

## TR & TRS



**Note: See Application Information page L9 for All Motor and Transformer Tables.**