

# TR-R & TRS-R Time-delay/Class RK5

## The industry's most popular fuse for motor circuit protection

With advanced material technology added to the existing product, the Tri-Onic® 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 fuse's proven time-delay characteristic safely handles harmless starting currents and inrush currents associated with today's motors and transformers. Now available with optional SmartSpot® blown fuse indication technology.

### Features/Benefits:

- Optional solid state SmartSpot blown fuse 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 brand recognition and replacement
- Metal-embossed date and catalog number for traceability and lasting identification
- Fiberglass body provides dimensional stability in harsh industrial settings
- 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 equipment



### Ratings:

#### TR-R

- Volts** : 250VAC  
: 250VDC (.1-2.8A; 35-400A)  
: 160VDC (3-30A; 450-600A)
- Amps** : 1/10 to 600A
- IR** : 200kA I.R. AC / 20kA I.R. DC

#### TRS-R

- Volts** : 600VAC  
: 600VDC (.1-12A; 70-600A)  
: 300VDC (15-60A)
- Amps** : 1/10 to 600A
- IR** : 200kA I.R. AC  
: 1/10A to 60A -> 20kA I.R. DC  
: 70A to 600A -> 100kA I.R. DC

### Approvals:

- UL listed to standard 248-12 File E2137
- CSA certified to standard C22.2 no. 248.12
- DC listed to UL standard 248 TRS only



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## Catalog Numbers (amps)

| 250V       |            |        | 600V        |             |         |
|------------|------------|--------|-------------|-------------|---------|
| TR1/10R*   | TR3-1/2R*  | TR50R  | TRS1/10R*   | TRS3-1/2R*  | TRS50R  |
| TR15/100R* | TR4R*      | TR60R  | TRS15/100R* | TRS4R*      | TRS60R  |
| TR2/10R*   | TR4-1/2R*  | TR70R  | TRS2/10R*   | TRS4-1/2R*  | TRS70R  |
| TR3/10R*   | TR5R*      | TR75R* | TRS3/10R*   | TRS5R*      | TRS75R* |
| TR4/10R*   | TR5-6/10R* | TR80R  | TRS4/10R*   | TRS5-6/10R* | TRS80R  |
| TR1/2R*    | TR6R*      | TRS90R | TRS1/2R*    | TRS6R*      | TRS90R  |
| TR6/10R*   | TR6-1/4R*  | TR100R | TRS6/10R*   | TRS6-1/4R*  | TRS100R |
| TR8/10R*   | TR7R*      | TR110R | TRS8/10R*   | TRS7R*      | TRS110R |
| TR1R*      | TR8R       | TR125R | TRS1R*      | TRS8R       | TRS125R |
| TR1-1/8R*  | TR9R       | TR150R | TRS1-1/8R*  | TRS9R       | TRS150R |
| TR1-1/4R*  | TR10R      | TR175R | TRS1-1/4R*  | TRS10R      | TRS175R |
| TR1-4/10R* | TR12R      | TR200R | TRS1-4/10R* | TRS12R      | TRS200R |
| TR1-6/10R* | TR15R      | TR225R | TRS1-6/10R* | TRS15R      | TRS225R |
| TR1-8/10R* | TR17-1/2R  | TR250R | TRS1-8/10R* | TRS17-1/2R  | TRS250R |
| TR2R*      | TR20R      | TR300R | TRS2R*      | TRS20R      | TRS300R |
| TR2-1/4R*  | TR25R      | TR350R | TRS2-1/4R*  | TRS25R      | TRS350R |
| TR2-1/2R*  | TR30R      | TR400R | TRS2-1/2R*  | TRS30R      | TRS400R |
| TR2-8/10R* | TR35R      | TR450R | TRS2-8/10R* | TRS35R      | TRS450R |
| TR3R*      | TR40R      | TR500R | TRS3R*      | TRS40R      | TRS500R |
| TR3-2/10R* | TR45R      | TR600R | TRS3-2/10R* | TRS45R      | TRS600R |

## 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  |

A variety of pole configurations and termination provisions are available. Refer to Section H for details.

Note: Optional blown fuse visual indication available. To order, place "ID" at the end of the catalog number. Example: #TRS30RID

\* Not available with optional blow fuse indicator.

Tin plated end caps are available on Non-ID fuses less than 60A. Example Part # TRP30R, TRSP30R

## 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 |

