

# Motor Protection

## Amp-Trap® DIN-Style Fuses

### R-Rated IEC DIN style MV fuses

Amp-Trap® R-Rated DIN style fuses are current-limiting, high interrupting rating fuses, intended for the short circuit protection of medium voltage motors and motor controllers. This product range offers North American R-Rated performance in the IEC 282-1 DIN mounting configuration of 442mm. R-Rated fuses are applied as back up fuses that have a minimum interrupting rating, and must be coordinated with overload relays in combination motor starters. Amp-Trap R-Rated, DIN type fuses are offered in voltage ratings of 3.3kV, 5.3kV and 7.2kV in ratings from 2R to 19R. All fuses within this product group are UL component recognized.

### Features/Benefits:

- Clip mount DIN 45: R-Rated fuses with North American ANSI characteristics in a standard DIN 442mm size.
- Current-limiting for superior equipment protection
- Blown fuse indicator provides positive identification of open fuse.
- 4.5lb tripping force - 1.0" inch.

### Highlights:

- R-Rated
- UL recognized

### Applications:

- Short circuit protection of medium voltage motors and motor controllers.

### Definitions:

**R-Rating:** R-Rated fuses are back-up fuses that operate as follows (Per ANSI C37.46-2000): An R-Rated fuse will melt in the range of 15 to 35 seconds at a value of current equal to 100 times the "R" rating.

**Back-up Current-Limiting Fuses:** A back-up current-limiting fuse is a fuse that can interrupt any current between its rated minimum interrupting current and its maximum interrupting current. Back-up fuses are not designed or intended to open under overload conditions.

**Continuous Ampere Rating at 40°C:** The continuous amp rating defines the thermal capability of the fuse per ANSI C37.46 and should not be the sole factor in fuse selection.

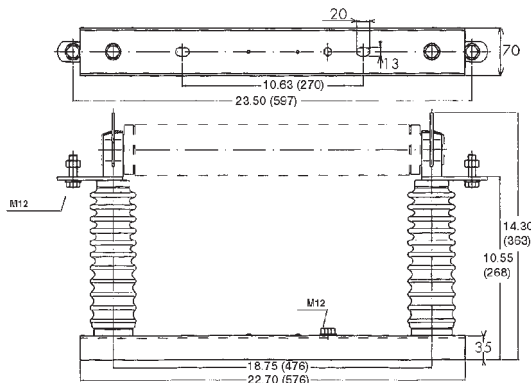
### Spring-Reinforced Clip

MR45 & Spring Ref.# L096472

**Fuse-Holder:** SI 24/442 Ref # K209424

In compliance with IEC 282-1, DIN standard 43625.

\* Note: Ratings above 19R may be achieved by paralleling fuses. Please consult factory for details.



### Ratings:

#### A033D1

**Volts** : 3300V AC  
**Amps** : 2 to 19R\*  
**IR** : 65kA Sym

#### A055D1

**Volts** : 5300V AC  
**Amps** : 2 to 19R\*  
**IR** : 65kA Sym

#### A072D1

**Volts** : 7200V AC  
**Amps** : 2 to 19R\*  
**IR** : 65kA Sym

### Approvals:

- UL recognized component File E93367



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## Amp-Trap<sup>®</sup> DIN-Style Fuses



Fig.	Catalog Number	Size	Continuous Amp Rating 55°C**	Continuous Amp Rating 40°C**	Minimum Interrupting Rating RMS Rating	1 Phase Interrupting Rating Maximum Tested	
						RMS Asym	RMS Sym
<b>3.3kV Max. DIN IEC Style 442 mm</b>							
A	A033D1DSRO-2R	2R	63	70	190	100kA @ 3300V	65kA @ 3300V
A	A033D1DSRO-3R	3R	90	100	225		
A	A033D1DSRO-4R	4R	115	130	225		
A	A033D1DSRO-5R	5R	135	150	400		
A	A033D1DSRO-6R	6R	150	170	540		
A	A033D1DSRO-9R	9R	180	200	780		
A	A033D1DSRO-12R	12R	210	230	955		
A	A033D1DSRO-13R	13R*	230	260	1050		
A	A033D1DSRO-16R	16R*	270	300	1200		
A	A033D1DSRO-19R	19R*	280	310	1280		
<b>5.5kV Max. DIN IEC Style 442 mm</b>							
A	A055D1DSRO-2R	2R	63	70	190	100kA @ 5500V	65kA @ 5500V
A	A055D1DSRO-3R	3R	90	100	225		
A	A055D1DSRO-4R	4R	115	130	225		
A	A055D1DSRO-5R	5R	135	150	400		
A	A055D1DSRO-6R	6R	150	170	540		
A	A055D1DSRO-9R	9R	180	200	780		
A	A055D1DSRO-12R	12R	210	230	955		
A	A055D1DSRO-13R	13R*	230	260	1050		
A	A055D1DSRO-16R	16R*	270	300	1200		
A	A055D1DSRO-19R	19R*	280	310	1280		
<b>7.2kV Max. DIN IEC Style 442 mm</b>							
A	A072D1DSRO-2R	2R	63	70	190	100kA @ 7200V	65kA @ 7200V
A	A072D1DSRO-3R	3R	90	100	225		
A	A072D1DSRO-4R	4R	115	130	400		
A	A072D1DSRO-5R	5R	135	150	540		
A	A072D1DSRO-6R	6R	150	170	550		
A	A072D1DSRO-9R	9R	180	200	780		
A	A072D1DSRO-12R	12R	210	230	955		
A	A072D1DSRO-13R	13R*	230	260	1050		
A	A072D1DSRO-16R	16R*	270	300	1200		
A	A072D1DSRO-19R	19R*	280	310	1280		

\* 13R, 16R and 19R are not standard ratings defined in ANSI C37.46.

\*\* This rating defines the thermal capability of the fuse per ANSI 37.46 and should not be the sole factor in fuse selection.

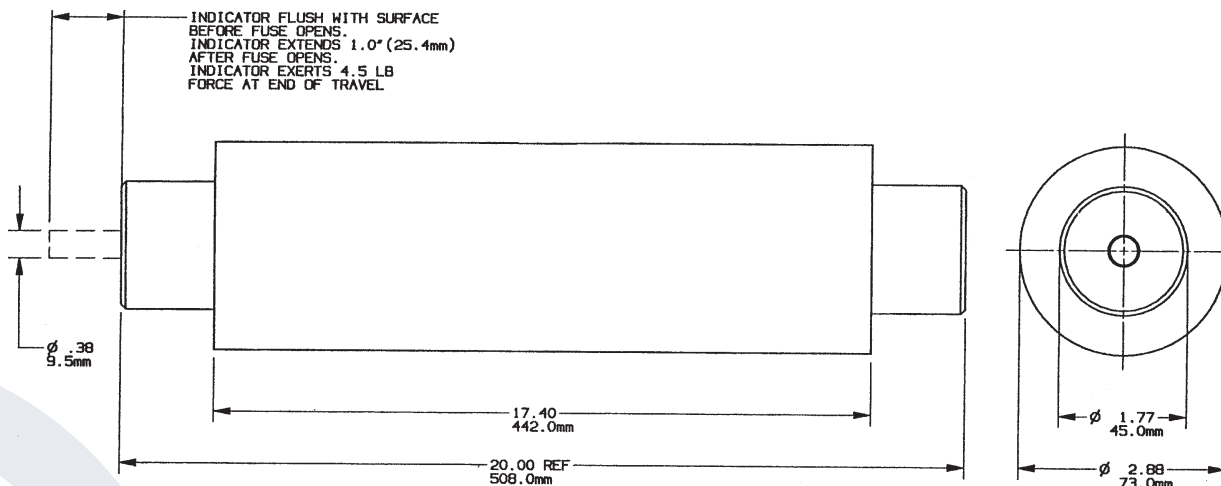


Figure A