# **Motor Protection**

**Amp-Trap® Bolt-In Series** 

### MEDIUM VOLTAGE FUSES

5.08kV, 7.2kV AND 15.5kV BOLT-IN FUSES



Mersen R-Rated fuses are current-limiting, high interrupting rating fuses intended for the short circuit protection of medium voltage motors and motor control centers (MCC). R-Rated fuses are back-up fuses that have a minimum interrupting rating, and must be coordinated with overload relays in MCCs. These fuses are single, double, triple or quadruple barrels 3 inches diameter with end mounts designed for bolting directly to equipment bus or terminal pads. Used in and requested for replacement in MCCs from many manufacturers.

## FEATURES/BENEFITS:

- UL Recognized.
- Bolt-in mounting for direct connection to bus or terminals.
- Current-limiting for superior equipment protection.
- Metal embossed catalog number and manufacturing date for lasting identification.
- Blown-fuse indicator to give positive identification of open fuse:
  - Amp-Trap, 3" Barrel: 1 lb tripped force 0.44 inch (0.38 inch for -DHR0 part numbers)
  - Mebane Fuses (9F60LXD/MXD parts): 1.8 lbs tripped force -1 inch

# **Ratings:**

## **Amp-Trap**

### A051B

Volts: 5.08kV ACAmps: 2 to 38R

• IR: 50kA Sym, 65kA Sym

#### A072B

• Volts: 7.2kV AC

Amps: 2 to 24R, 19R to 57X
IR: 50kA Sym, 65kA Sym

#### A155B

Volts: 15.5kV ACAmps: 9 to 38XIR: 50kA Sym

## 9F60 Series Type EJ-2

Volts: 5.08kVAmps: 2 to 24RIR: 50kA Sym

## **APPLICATIONS:**

- Short circuit protection of medium voltage motors and motor controllers.
- Bolt-in equipment for secure mechanical connection in blast-proof equipment
- Many parts offered in nonindicating versions for use in Class 1, Div 2 locations

# APPROVALS:

• UL Recognized File E93367 and File E191980



## **DEFINITIONS:**

**R-Rating:** R-Rated fuses are back-up fuses that operate as follows (Per IEEE C37.42-2016): 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 IEEE C37.42-2016 and should not be the sole factor in fuse selection.

## 5.08kV BOLT-IN FUSES:

## 5.08kV R-Rated Amp-Trap Bolt-In Series



Catalog No.	Size	Continuous Amp rating at 40°C	Minimum Interrupting Rating RMS Amp	No. of Barrels		Indicating	1 Phase interrupting rating		
					Figure		UL Component Recognition	Max Voltage Tested	
							Max IR RMS Sym	Max IR RMS Sym	
AO51B1DARO-2R	2R	70	190		A	Yes			
AO51B1DARO-3R	3R	100	225	- - 1 -				65kA at 5.5kV	
A051B1DAR0-4R	4R	130	330						
A051B1DAR0-6R	6R	170	500						
\051B1DAR0-9R	9R	200	740				65kA at 5.08kV		
A051B1DAR0-12R	12R	230	955				OSKA dl S.UOKV		
A051B2DAR0-18R	18R	390	1440		В	Yes			
A051B2DAR0-24R	24R	450	1910	2					
A051B2DAR0-32R	32R	600	2500						
A051B2DAR0-38R	38R	700	3100						
A051B3DAR0-48X	48X	750	3600	3	С	Yes	50kA at 5.08kV	50kA at 5.2kV	
A051B3DAR0-57X	57X	900	4500	3					
16.26 - (413.1mm)		3.63 .2mm) 3.00 (76.2mm)		16.26 (413.1mm)	7.62 (194m	3.00 O	19.28—413.1 mm	11.63 70.2mm 11.63 205.3mm 2 12.63 101.6mm 101.6mm 101.6mm	
17.88	0 0	.44 x .91 (11 x 23mm)	0 0	— 17.88 ——— (454.2mm)	0 0	44 x .91 (11 x 23mm)	225/mm 138 345mm 100 (111mm 00 231mm) 1,53 3,6mm 454.2mm	0 0	
(454.2mm)	(38.8mm	)		(101.2.1.11)	(38.8mm)				

# 15.5kV BOLT-IN FUSES:

## 15.5kV R-Rated Amp-Trap Bolt-In Series



			Minimum				1 Phase interrupting rating	
Catalog No.	Size	Continuous Amp rating at 40°C	Interrupting Rating RMS Amp	No. of Barrels	Figure	Indicating	UL Component Recognition	Max Voltage Tested
			KM3 Allip				Max IR RMS Sym	Max IR RMS Sym
A155B2D0R0-9R	9R	200	888	- 2	0	Yes	50 kA at 15.5kV	50 kA at 15.5kV
A155B2D0R0-12R	12R	230	1200					
A155B3D0R0-18X	18X	390	1900	3	Р			
A155B3D0R0-24X	24X	450	2633					
A155B4D0R0-32X	32X	600	3510	4	Q			
A155B4D0R0-38X	38X	700	4000					





