

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)
 - 9F60: 0.125 lb tripped force - 0.2 inch

Ratings:

Amp-Trap

A051B

- **Volts:** 5.08kV AC
- **Amps:** 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 AC
- **Amps:** 9 to 38X
- **IR:** 50kA Sym

9F60 Series Type EJ-2

- **Volts:** 5.08kV
- **Amps:** 2 to 24R
- **IR:** 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 non-indicating 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	Figure	Indicating	1 Phase interrupting rating	
							UL Component Recognition Max IR RMS Sym	Max Voltage Tested Max IR RMS Sym
A051B1DAR0-2R	2R	70	190	1	A	Yes	65kA at 5.08kV	65kA at 5.5kV
A051B1DAR0-3R	3R	100	225					
A051B1DAR0-4R	4R	130	330					
A051B1DAR0-6R	6R	170	500					
A051B1DAR0-9R	9R	200	740					
A051B1DAR0-12R	12R	230	955					
A051B2DAR0-18R	18R	390	1440	2	B	Yes	65kA at 5.08kV	65kA at 5.5kV
A051B2DAR0-24R	24R	450	1910					
A051B2DAR0-32R	32R	600	2500					
A051B2DAR0-38R	38R	700	3100					
A051B3DAR0-48X	48X	750	3600	3	C	Yes	50kA at 5.08kV	50kA at 5.2kV
A051B3DAR0-57X	57X	900	4500					

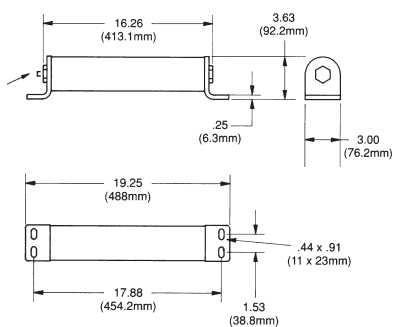


Figure A

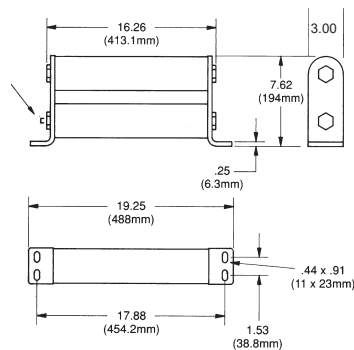


Figure B

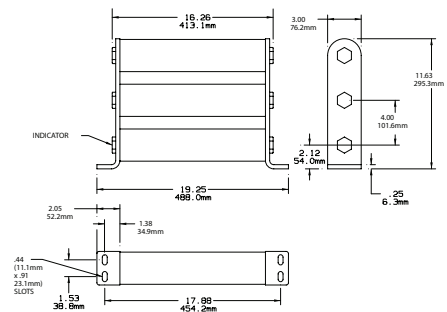


Figure C

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5.08kV BOLT-IN FUSES:

5.08kV R-Rated 9F60, EJ-2 Bolt-In Series, for use in Mebane Style Switchgear



Catalog No.	Size	Continuous Amp rating at 40°C	Rated Minimum Interrupting Current	No. of Barrels	Figure	Indicating	Dimension L Inches/ (mm)	UL Component Recognition Max IR RMS Sym	Max Voltage Tested Max IR RMS Sym
9F60LXD702	2R	70	195	1	D	Yes		50kA at 5.08kV	50kA at 5.08kV
9F60LXD703	3R	100	270						
9F60LXD704	4R	130	370						
9F60LXD706	6R	170	580						
9F60LXD709	9R	200	820						
9F60LXD712	12X	230	1150	2	E				
9F60MXD718	18R	390	1800						
9F60MXD724	24R	450	2400						

5.08kV R-Rated 9F60, EJ-2 Bolt-In Series, for use in Mebane Style Switchgear - Alternate Bolt Configuration



Catalog No.	Size	Continuous Amp rating at 40°C	Rated Minimum Interrupting Current	No. of Barrels	Figure	Indicating	Dimension L Inches/ (mm)	UL Component Recognition Max IR RMS Sym	Max Voltage Tested Max IR RMS Sym
9F60LXD402	2R	70	195	1	F	Yes		50kA at 5.08kV	50kA at 5.08kV
9F60LXD403	3R	100	270						
9F60LXD404	4R	130	370						
9F60LXD406	6R	170	580						
9F60LXD409	9R	200	820						
9F60LXD412	12X	230	1150	2	G				
9F60MXD418	18R	390	1800						
9F60MXD424	24R	450	2400						

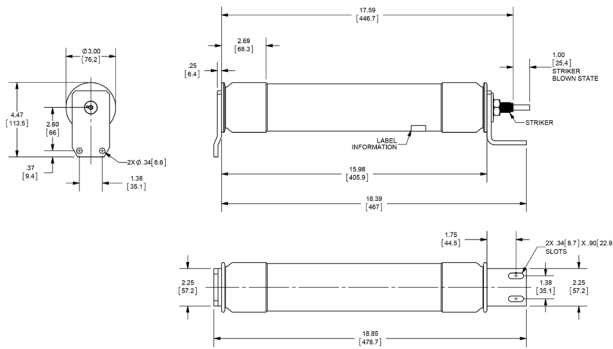


Figure D

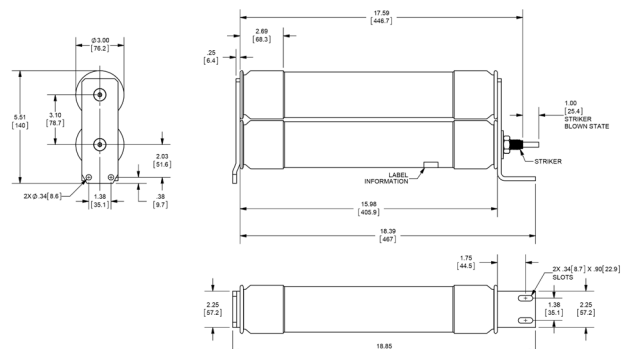


Figure E

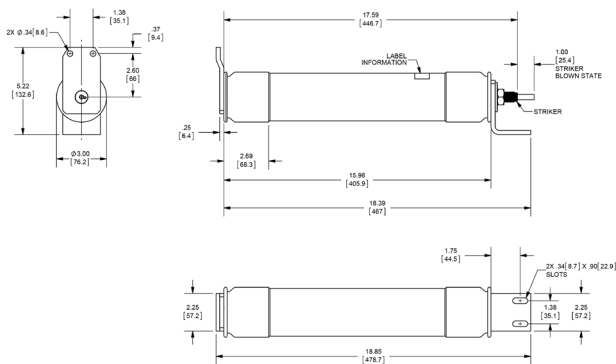


Figure F

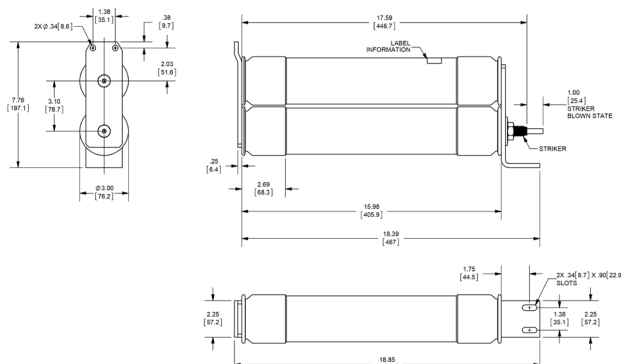


Figure G

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5.08kV BOLT-IN FUSES:

5.08kV R-Rated Amp-Trap Bolt-In Series, for use in Ampgard Switchgear



Catalog No.	Size	Continuous Amp rating at 40°C	Rated Minimum Interrupting Current	No. of Barrels	Figure	Indicating	Dimension L Inches/ [mm]	UL Component Recognition Max IR RMS Sym	Max Voltage Tested Max IR RMS Sym
A051B1DHR0-2R	2R	70	220	1	H	Yes**	15.88 [403.2]	50kA @ 5.08kV	50kA @ 5.08kV
A051B1DHR0-3R	3R	100	270						
A051B1DHR0-4R	4R	130	360						
A051B1DHR0-5R	5R	150	450						
A051B1DHR0-6R	6R	170	600						
A051B1DHR0-9R	9R	200	900						
A051B2DHR0-12R	12R	230	1200	2	I				
A051B2DHR0-18R	18R	390	1500						
A051B2DHR0-24R	24R	450	2200						

** All part numbers available without indication by substituting "DHR0" w/ "DHRN". Example: A051B1DHRN-24R

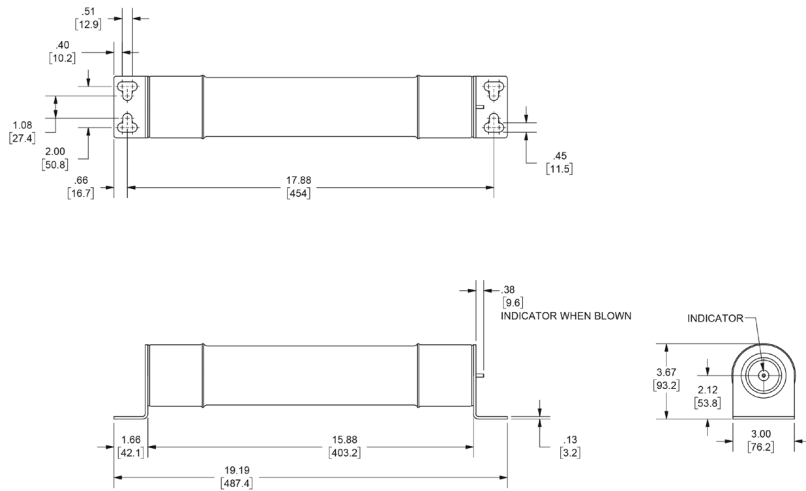


Figure H

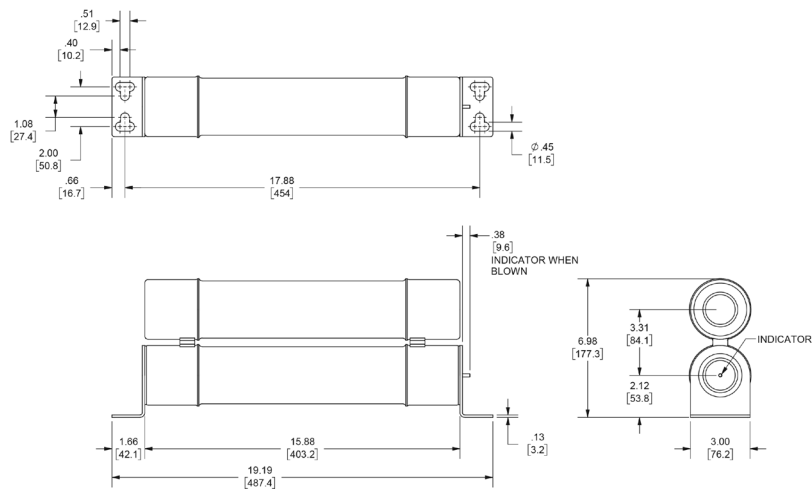


Figure I

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