

Motor Protection

Amp-Trap® and 9F60 Series

MEDIUM VOLTAGE FUSES

2.4kV, 2.54kV, 4.8kV, 5.08kV AND 7.2kV
FERRULE MOUNTED FUSES

M
V



Mersen R-Rated fuses are current-limiting, high interrupting rating fuses intended for the short circuit protection of medium voltage motors and motor controllers. R-Rated fuses are back-up fuses that have a minimum interrupting rating, and must be coordinated with overload relays in combination motor starters. These fuses come with a 3 (size D) or 4 (size E) inch diameter barrels with ferrules and are mounted in spring reinforced clips. Used in and required for replacement in motor controllers by many major manufacturers.

FEATURES/BENEFITS:

- The Amp-Trap and 9F60 R-Rated fuses are UL Recognized.
- Ferrule mounting for standard clips and interchangeability with other brands of fuses.
- 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 2 lb tripped force - 0.50 Inch
 - 9F60: 0.125 lb tripped force - 0.20 Inch
- Many parts offered in non-indicating versions for use in Class 1, Div 2 environments.
- Hook-eye option featured on some models for non-load break isolation by hookstick.
 - A051F part numbers include welded hook-eye feature and are designed for use in Eaton Ampgard MCC, and direct replacement for 5ACLS series Eaton fuses
 - Optional hook-eye is also available on A480 part numbers, factory installed.

Ratings:

Amp-Trap

A240R

- **Volts:** 2.4kVAC
- **Amps:** 1 to 36R
- **IR:** 65kA Sym

A480R

- **Volts:** 4.8kVAC
- **Amps:** 2 to 36R
- **IR:** 64-65kA

A051F

- **Volts:** 5.08kV
- **Amps:** 2 to 24R
- **IR:** 50kA Sym

A072F

- **Volts:** 7.2kVAC
- **Amps:** 2 to 24R
- **IR:** 65kA Sym

9F60 SERIES TYPE EJ-2

9F60

- **Volts:** 2.54kVAC, 5.08kVAC
- **Amps:** 2 to 36R
- **IR:** 50kA Sym

APPLICATIONS:

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

APPROVALS:



- Amp-Trap: UL File E93367
- 9F60: UL File E191980

2.4kV AND 5.08kV FERRULE MOUNTED FUSES:

2.4kV R-Rated 9F60 EJ-2 Series

7" (179 mm) Clip Centers - Barrel diameter size D (3")



Catalog No.	Size	Continuous Amp rating at 40°C	Minimum Interrupting Rating RMS Amp	No of Barrels	Fig.	Indicating	Dimension L Inches (mm)	1 Phase interrupting rating	
								UL Component Recognition Max IR RMS Sym	Max Voltage Tested Max IR RMS Sym
9F60LCB502	2R	70	195	1	D	Yes	10.88 [276]	50kA at 2.54kV	50kA at 2.54kV
9F60LCB503	3R	100	270						
9F60LCB504	4R	130	370						
9F60LCB506	6R	170	580						
9F60LCB509	9R	200	820						
9F60LCB512	12R	230	1150						
9F60MCB518	18R	390	1800	2	E				
9F60MCB524	24R	450	2400						
9F60LCL302	2R	70	195	1	D	No	10.88 [276]	50kA at 2.54kV	50kA at 2.54kV
9F60LCL303	3R	100	270						
9F60LCL304	4R	130	370						
9F60LCL306	6R	170	580						
9F60LCL309	9R	200	820						
9F60LCL312	12R	230	1150						
9F60MCL318	18R	390	1800	2	E				
9F60MCL324	24R	450	2400						

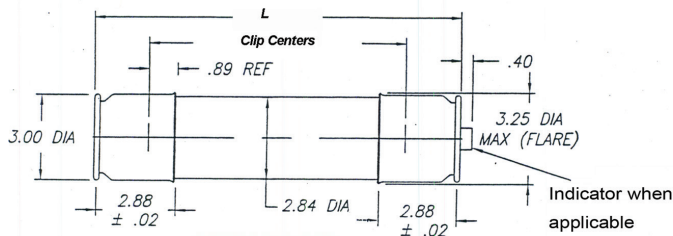


Fig. D

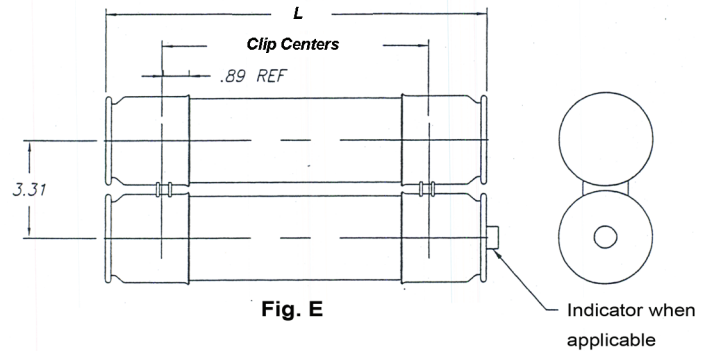


Fig. E

5.08kV R-Rated 9F60 EJ-2 Series

12" (305 mm) Clip Centers - Barrel diameter size D (3")

Catalog No.	Size	Continuous Amp rating at 40°C	Minimum Interrupting Rating RMS Amp	No of Barrels	Fig.	Indicating	Dimension L Inches (mm)	1 Phase interrupting rating	
								UL Component Recognition Max IR RMS Sym	Max Voltage Tested Max IR RMS Sym
9F60LJD502	2R	70	195	1	D*	Yes	15.97 [406]	50kA at 5.08kV	50kA at 5.08kV
9F60LJD503	3R	100	270						
9F60LJD504	4R	130	370						
9F60LJD506	6R	170	580						
9F60LJD509	9R	200	820						
9F60LJD512	12R	230	1150						
9F60MJD518	18R	390	1800	2	E*				
9F60MJD524	24R	450	2400						
9F60LJN302	2R	70	195	1	D*	No	15.97 [406]	50kA at 5.08kV	50kA at 5.08kV
9F60LJN303	3R	100	270						
9F60LJN304	4R	130	370						
9F60LJN306	6R	170	580						
9F60LJN309	9R	200	820						
9F60LJN312	12R	230	1150						
9F60MJN318	18R	390	1800	2	E*				
9F60MJN324	24R	450	2400						

4.8kV / 5.08kV FERRULE MOUNTED FUSES:

4.8kV R-Rated Amp-Trap Series

12.5" (317 mm) Clip Centers - Barrel diameter size D (3")



Catalog No.	Size	Continuous Amp rating at 40°C	Minimum Interrupting Rating RMS Amp	No of Barrels	Fig.	Indicating	Dimension L Inches (mm)	1 Phase interrupting rating	
								UL Component Recognition Max IR RMS Sum	Max Voltage Tested Max IR RMS Sum
A480R2R-1	2R	70	190	1	F	Yes	15.88 (403)	65kA at 5.5kV	65kA at 5.5kV
A480R3R-1	3R	100	225						
A480R4R-1	4R	130	330						
A480R5R-1	5R	150	400						
A480R6R-1	6R	170	500						
A480R9R-1	9R	200	740						
A480R12R-1	12R	230	955	2	G		64kA at 5.5kV	64kA at 5.5kV	
A480R18R-1	18R	390	1440						
A480R24R-1	24R	450	1910						
A480R36R-1	36R**	650	2810	3	H				

** Not recommended for use in fuse clips which grasp only one barrel.

4.8kV R-Rated Amp-Trap Series with Hookeye

12.75" (324 mm) Clip Centers - Barrel diameter size D (3")



Catalog No.	Size	Continuous Amp rating at 40°C	Minimum Interrupting Rating RMS Amp	No of Barrels	Fig.	Indicating	Dimension L Inches (mm)	1 Phase interrupting rating	
								UL Component Recognition Max IR RMS Sum	Max Voltage Tested Max IR RMS Sum
A480R2R-1HE	2R	70	190	1	F	Yes	16.13 (410)	50kA at 5.08kV	63kA at 5.5kV
A480R3R-1HE	3R	100	225						
A480R4R-1HE	4R	130	330						
A480R5R-1HE	5R	150	400						
A480R6R-1HE	6R	170	500						
A480R9R-1HE	9R	200	740						
A480R12R-1HE	12R	230	955	2	G				
A480R18R-1HE	18R	390	1440						
A480R24R-1HE	24R	450	1910						

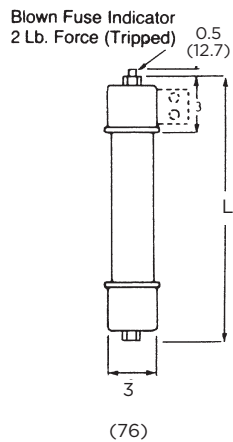


Figure F

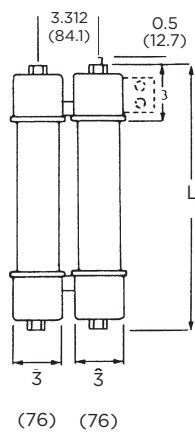


Figure G

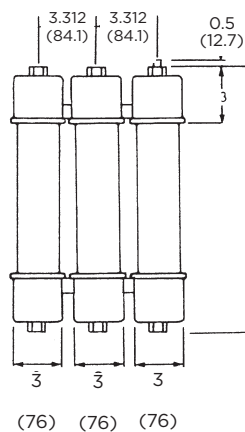
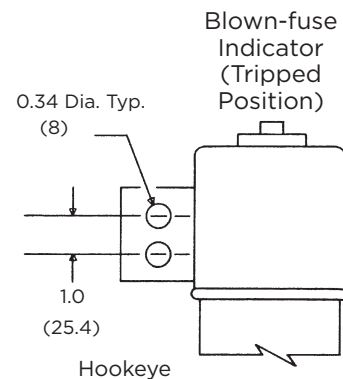


Figure H



4.8KV / 5.08KV FERRULE MOUNTED FUSES:

5.08kV R-Rated Amp-Trap Ferrule Mount w/ Hookeye, for use in Ampgard Switchgear



Catalog No.	Size	Continuous Amp rating at 40°C	Rated Minimum Interrupting Current	No of Barrels	Fig.	Indicating	Dimension L Inches (mm)	UL Component Recognition Max IR RMS Sym	Max Voltage Tested Max IR RMS Sym
A051F1DHRO – 2R	2R	70	200	1	I	Yes**	15.88 [403.2]	50kA @5.08kV	50kA @5.08kV
A051F1DHRO – 3R	3R	100	290						
A051F1DHRO – 4R	4R	130	360						
A051F1DHRO – 5R	5R	150	450						
A051F1DHRO – 6R	6R	170	600						
A051F1DHRO – 9R	9R	200	900						
A051F1DHRO – 12R	12R	230	1200	2	J				
A051F2DHRO – 18R	18R	390	1500						
A051F2DHRO – 24R	24R	450	2200						

** All part numbers available without indication by substituting "DHRO" w/ "DHRN". Example: A051F1DHRN-24R

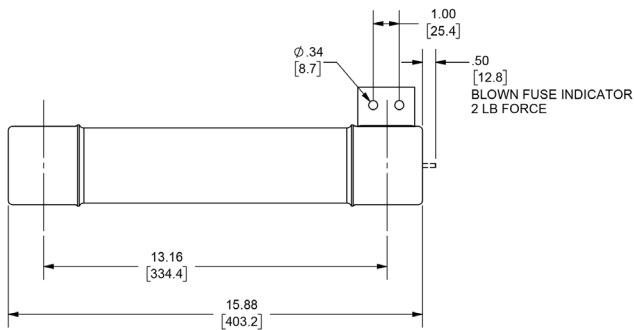


Figure I

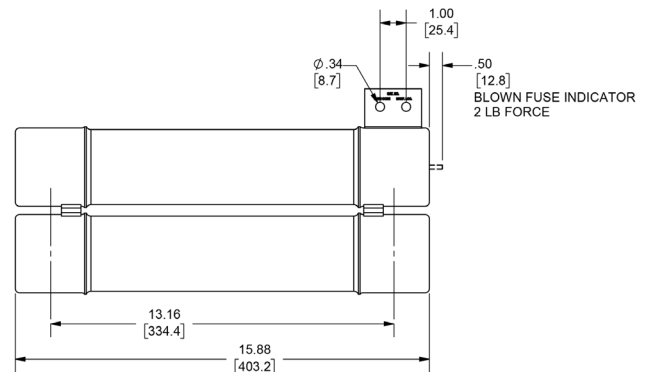


Figure J

5.08kV R-Rated 9F60 EJ-2 Series

14" (356 mm) Clip Centers - Barrel diameter size E (4") - Use clip parts 9F61BNW452

Catalog No.	Size	Continuous Amp rating at 40°C	Minimum Interrupting Rating RMS Amp	Indicating	Dimension L Inches (mm)	1 Phase interrupting rating UL Component Recognition Max IR RMS Sym	Max Voltage Tested Max IR RMS Sym	No of Barrels	Fig.
9F60NLD830	30R	550	3600	Yes	19.12 [486]	50kA at 5.08kV	50kA at 5.08kV	2	K
9F60NLD836	36R	650	4200						

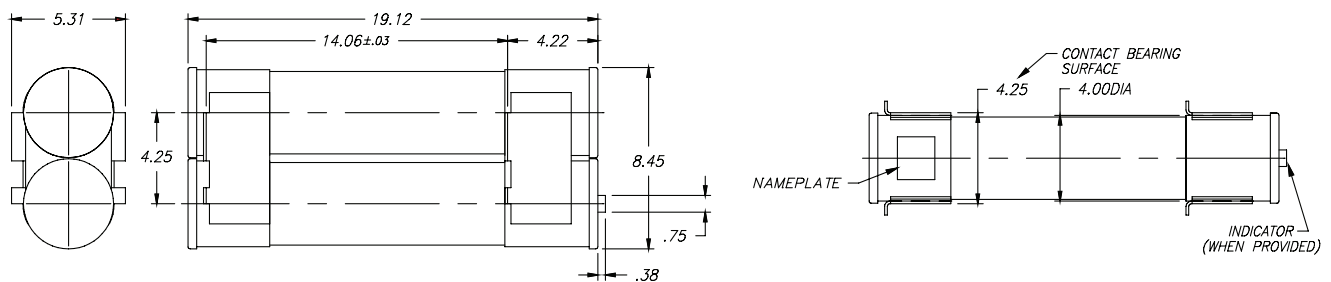


Figure K