

### R-Rated for motor circuits

- 2.4 kV: 2CLS, 2ACL, JCK, JCK-A, 2HCLS, 2BCLS — 25 to 450 A
- 4.8 kV: 5CLS, JCL, 5LCLS, JCL-A, 5ACLS, 5HCLS, 5BCLS, 5MCLS — 30 to 800 A
- 7.2 kV: 8CLS, 7CLS, 8ACLS, 7ACLS, 7BCLS — 70 to 800 A
- 50 kA IR Sym.
- 80 kA IR Asym.



R-Rated medium voltage fuses are back-up current-limiting fuses used in conjunction with medium voltage motors and motor controllers to provide short-circuit protection.

Current-limiting fuses may be designated as R-Rated if they meet the following requirements:

- The fuse will safely interrupt all currents between its minimum and maximum interrupting ratings.
- The fuse will melt in a range of 15 to 35 seconds at a value of 100 times the “R” number (ANSI C37.46).

Bussmann series R-Rated fuses offer a high level of fault current interruption in a self-contained, non-venting package that can be mounted indoors or in an enclosure.

Available styles include standard, AMPGARD™ Hookeye, hermetically sealed and bolt-on with open fuse indication standard on all fuses (see data sheet no. 6001).

### E-Rated for transformer and feeder protection

- 2.75 kV: 2CLE, JCX — 1 to 450 A (see data sheet no. 10350)
- 5.5 kV: AHLE, BHLE, HCL, 5CLE, 5HLE, JCY, MV055F — 1 to 1350 A (see data sheet no. 10351)
- 8.3 kV: 8CLE, 8HLE, 8AHLE, 8BHLE, 8HCL — 10 to 350 A (see data sheet no. 10352)
- 15.5 kV: 15CLE, 15HLE, 15LHLE, MV155F, 15BHLE, 15HCL — 10 to 300 A (see data sheet no. 10353)
- 5.5 to 38 kV (DIN dimensioned for switchgear): 55GDMSJ, 55GFMSJ, 155GQJSJ, 175GDMSJ, 175GFMSJ, 175GXMSJ, 175GXQJSJ, 258GDMSJ, 258GXQJSJ, 258GXZSJ, 38GFZSJ — 10 to 450 A (see data sheet no. 10638)
- 25 to 65 kA IR catalog number dependent



E-Rated medium voltage fuses are general purpose current-limiting fuses. The E-rating defines the fuse's melting time-current characteristic and the ratings are used to allow electrical interchangeability among different manufacturers. A general purpose E-Rated fuse must meet these requirements:

- The current responsive element shall melt in 300 seconds at an RMS current within the range of 200% to 240% of the fuse's continuous current rating (ANSI C37.46).
- The current responsive element above 100 amps shall melt in 600 seconds at an RMS current within the range of 220% to 264% of the fuse's continuous current rating (ANSI C37.46).

Bussmann series E-Rated fuses provide primary protection for transformers, feeders and branch circuits. They are non-venting fuses which must be mounted indoors or in an enclosure. Their current-limiting ability reduces the fault current ( $I^2t$ ) that the system components must withstand.



**E-Rated for potential and small transformers**

- 2.475 kV: 2NCLPT —  
0.25 to 5 A
- 3.6 kV: 3.6ABCNA,  
3.6ABWNA, 3.6CAV —  
2 to 10 A
- 5.5 kV: JCW, 5CLPT, 5NCLPT,  
5.5ABWNA, 5.5AMWNA,  
5.5CAV, 5.5CAVH —  
0.5 to 15 A
- 7.2 kV: 7.2ABWNA, 7.2ABCNA,  
7.2AMWNA, 7.2CAV —  
0.5 to 10 A
- 8.3 kV: 8CLPT, CLPT, 8NCLPT —  
0.5 to 10 A
- 12 kV: 12ABCNA, 12CAV —  
2 to 3.15 A
- 15.5 kV: 15CLPT, 15NCLPT, 15.5CAV, 15.5CAVH —  
0.5 to 10 A
- 17.5 kV: 17.5ABGNA, 17.5CAV —  
2 to 10 A
- 24 kV: 24ABGNA, 24CAV —  
2 to 4 A
- 25.5 kV: 25CLPT —  
0.5 to 1 A
- 36 kV: 36ABGNA, 36CAV —  
2 to 4 A
- 38 kV: 38CAV, 38CAVH, 38CLPT —  
0.5 to 4 A
- 25 to 80 kA IR Sym., catalog number dependent.

Low amp, E-Rated medium voltage fuses are general purpose current-limiting fuses defined by their melting time-current characteristic that permits their electrical interchangeability with fuses having the same E-rating. To be E-Rated, the fuse responsive element shall melt in 300 seconds at a RMS current within the range of 200% to 240% of the fuse's continuous current rating. (For fuses rated 100E or less)(ANSI C37.46).

Bussmann series low amp, E-Rated fuses provide primary protection for potential, small service and control transformers. These fuses offer a high level of fault current interruption in a self-contained, non-venting package that can be mounted indoors or in an enclosure (see data sheet no. 6002).





These are a range of fuses with low current rating, for use with voltage transformers or operating transformers to provide isolation of the associated system in the event of faults in the transformer circuit.

### Advantages of Edison P.T. Fuses

Most fuses have two elements in parallel, ensuring satisfactory operation at much smaller values of overcurrent than is possible with single element fuse.

The elements are wound on a ceramic former, thus ensuring correct spacing of the elements from the body wall and from each other and hence giving assurance of correct operation in service.

Switching (arc) voltages comply with the IEC282-1.

### Application Notes

1. In order to minimize the risk of deterioration of the fine fuse elements caused by corona, it is desirable to mount the fuses so that grounded metal is not in the immediate vicinity of the part of the barrel between the ferrules.
2. It is recommended that all three fuses are replaced when the fuse in one or two phases has operated unless it is definitely known that no overcurrent has passed through the unmelted fuses.

### “AB” & “AM” Series

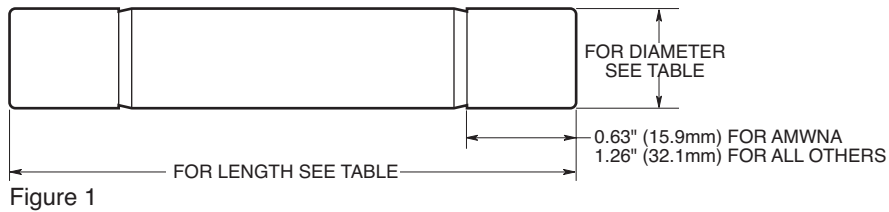
kV	Catalog Number	Ampere Ratings	Type	Dimensions (Figure 1)		IR
				Length	Diameter	
3.6	3.6ABWNA(amp)	3.15, 6.3	AB	5.6"	1"	50KA
3.6	3.6ABCNA(amp)	3.15, 6.3, 10	AB	7.69"	1"	
5.5	5.5ABWNA(amp)	0.5E, 1.0E, 2.0E, 3.0E, 5.0E	AB	5.6"	1"	
5.5	5.5AMWNA(amp)	0.5E, 1.0E, 2.0E, 3.0E, 5.0E	AM	5.6"	.81"	
7.2	7.2ABWNA(amp)	3.15, 6.3	AB	5.6"	1"	
7.2	7.2ABCNA(amp)	3.15, 6.3	AB	7.69"	1"	
12.0	12ABCNA(amp)	3.15	AB	7.69"	1"	
15.5	15.5ABFNA(amp)	3.15	AB	10.00"	1"	
17.5	17.5ABGNA(amp)	3.15	AB	14.13"	1"	
24.0	24ABGNA(amp)	3.15	AB	14.13"	1"	
36.0*	36ABGNA(amp)	3.15	AB	14.13"	1"	

\*For clean indoor applications only.

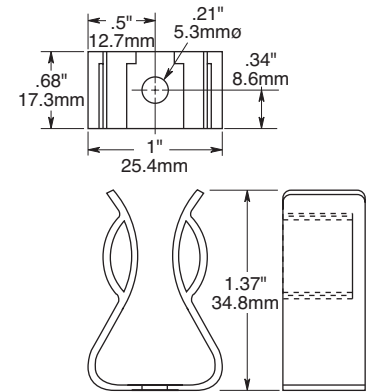
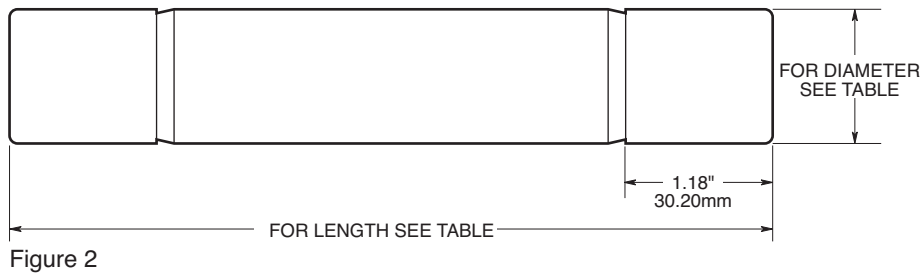
### “CAV” Series

kV	Catalog Number	Ampere Ratings	Type	Dimensions (Figure 2)		IR
				Length	Diameter	
3.6	3.6CAV(amp)	2	8CAV	8.66"	1.63"	40KA
5.5	5.5CAV(amp)	15E	7CAV	7.375"		
5.5	5.5CAVH(amp)	0.5E, 1E, 2E	7CAVH	7.375"		
7.2	7.2CAV(amp)	2, 10	8CAV	8.66"		
12	12CAV(amp)	2	8CAV	8.66"		
15.5	15.5CAV(amp)	0.5E, 1E, 2E, 3E, 7E	12CAV	12.87"		
15.5	15.5CAVH(amp)	0.5E, 1E, 2E	12CAVH	12.87"		
17.5	17.5CAV(amp)	2, 4, 6, 10	8CAV	8.66"		
24	24CAV(amp)	2, 3, 4	13CAV	13.39"		
36	36CAV(amp)	2, 4	17CAV	17.32"		
38	38CAV(amp)	4E	17CAV	17.32"		
38	38CAVH(amp)	0.5E, 1E, 2E	17CAV	17.32"		

### Dimensions (Type AB & AM)



### Dimensions (Type CAV)

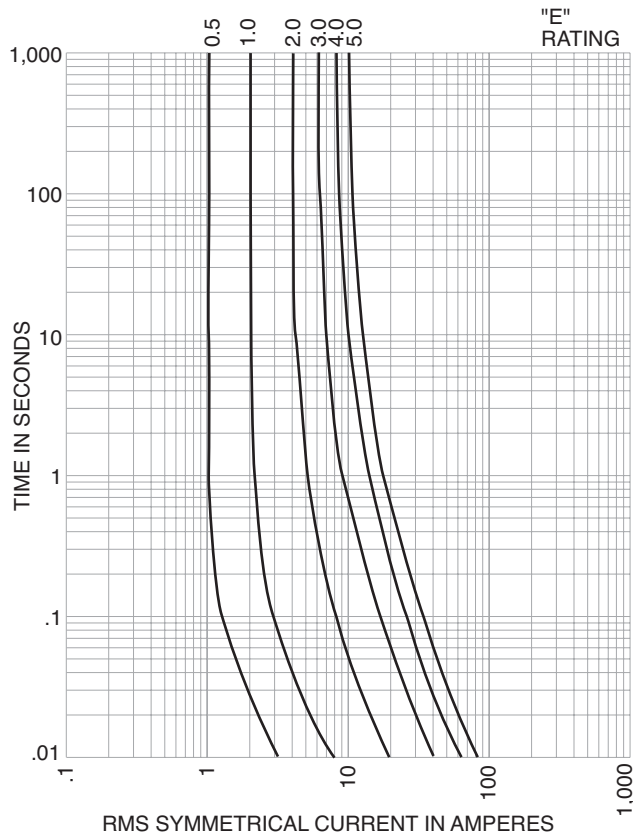


**Ref. No. A3354705**

For 1" diameter potential transformer fuses.

### Time/Current-Curves

#### (5.5kV AMWNA)



#### (5.5kV ABWNA & 15.5kV CAV)

