

## Medium Voltage Fuses



<i>Medium Voltage Fuses</i>	<b>64</b>
<i>R Rated Medium Voltage Fuses</i>	<b>65-68</b>
<i>E Rated Medium Voltage Fuses</i>	<b>69-73</b>
<i>E Rated Potential Transformer Fuses</i>	<b>74</b>
<i>Live Parts</i>	<b>75</b>

## Medium Voltage Fuses

2,400 - 38,000 VAC • Current-Limiting



Current-limiting “E” and “R” rated fuses are equipped with a mechanical indicator or striker pin that protrudes through the fuse cap upon operation of the fuse. This provides visual identification of a blown fuse and can be used as a trigger for external devices.

*Note: Extension distance 1/2" min; extension force 2lb. min*

### General Information

The terms “Medium Voltage” and “High Voltage” have been used interchangeably by many people to describe fuses operating above 600 volts. Technically speaking, “medium voltage” fuses are those intended for the voltage range from 2,400 to 38,000 VAC. “High voltage” fuses are for circuits carrying voltages greater than 38,000 VAC.

“E” rated fuses are considered to be general purpose fuses and can be used to protect against low and high values of fault current. “R” rated fuses are designed for back-up protection. They must be used in series with other devices such as motor overload relays in order to achieve both overload and short-circuit protection.

Medium voltage fuses are not intended to provide overload protection in the same sense as fuses rated 600 volts or less. Medium voltage fuse current ratings do not have the same meanings as the ampere ratings of low voltage fuses.

All medium voltage fuses are limited in their ability to interrupt low value overcurrents, especially those between 100% and 200% of the fuse’s continuous current rating. They are designed to carry their rated current without exceeding the temperature rise permitted by NEMA and ANSI standards.

Additional application data can be found in the Fuse Application section of this catalog.

Littelfuse now offers a complete selection of “E” and “R” rated medium voltage fuses for the protection of transformers, potential transformers, feeders, and motor circuits. Single, double, and triple barrel designs are available to cover a wide range of current, voltage, and interrupting ratings. Conventional ferrule type, clip lock, and bolt-in mounting configurations are now available for virtually any application. Hermetically sealed fuses for use in hazardous environments are also offered.

Contact the factory or your local Littelfuse representative for additional fuse ratings or custom mounting configurations.

24 Hour Emergency Service is available. Call 847 824 1188.

### Applications

- Power Transformer Protection
- Potential Transformer Protection
- Motor Controller Back-up Protection
- Fused Switches
- Feeder Circuits



**Bolt-in Mount Fuses**

## R Rated Medium Voltage Fuses

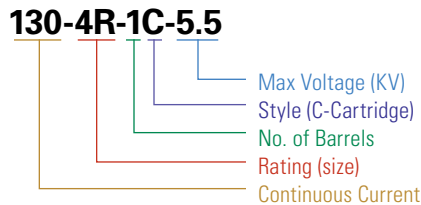
### Current-Limiting

#### Features

“R” rated fuses provide required short-circuit protection for medium voltage motors, motor controllers and associated circuitry. These components have limited ability to absorb the energy of large short-circuit currents. Medium voltage motor controllers contain overload relays which provide both overload protection and locked rotor protection to the motor. The controllers are also intended to interrupt low value short-circuits within the capability of the motor controller. This protects the medium voltage fuse from sustained overcurrents which are less than their minimum interrupting rating.

NEMA Standards for “R” rated medium voltage power fuses require they operate within 15-35 seconds when subjected to an rms current 100 times the “R” rating. For example, a fuse with a 2R rating will open within 15 to 35 seconds on an applied current of  $2 \times 100 = 200$  amperes.

#### Part Number System



#### Characteristics

**Voltage Rating:** 2,400 volts – 8,250 volts  
**Current Range:** 2R – 36R

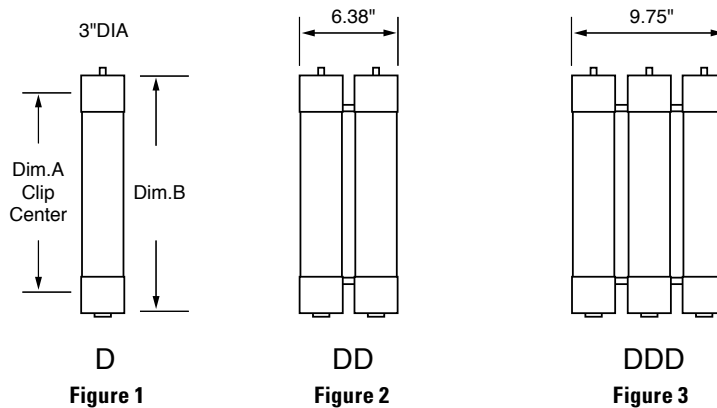
#### Options

- Hermetically sealed for use in hazardous locations (add “S” suffix to part number)
- Bolt-in mounting configurations



#### Hookey Feature\*

\*For hookey attachment; add “W” suffix to part number



<b>R</b> Rated  2.75 KV	Catalog Number	Old Catalog Number	Size	Maximum Continuous Current @ 40 deg C.	Dim. A (inches)	Dim. B (inches)	Min. Interrupting Rating RMS Amps	Max Interrupting Rating RMS Asym	Figure Number
	70-2R-1C-2.75	LCK 2R	2R	70	7"	10.875"	170	80,000	1
	100-3R-1C-2.75	LCK 3R	3R	100	7"	10.875"	250	80,000	1
	130-4R-1C-2.75	LCK 4R	4R	130	7"	10.875"	340	80,000	1
	150-5R-1C-2.75	LCK 5R	5R	150	7"	10.875"	390	80,000	1
	170-6R-1C-2.75	LCK 6R	6R	170	7"	10.875"	500	80,000	1
	200-9R-1C-2.75	LCK 9R	9R	200	7"	10.875"	760	80,000	1
	230-12R-1C-2.75	LCK 12R	12R	230	7"	10.875"	1000	80,000	1
	390-18R-2C-2.75	LCK 18R	18R	390	7"	10.875"	1500	80,000	2
	450-24R-2C-2.75	LCK 24R	24R	450	7"	10.875"	1950	80,000	2

Add “w” suffix to part number for hookey attachment.

## R Rated Medium Voltage Fuses

### Current-Limiting

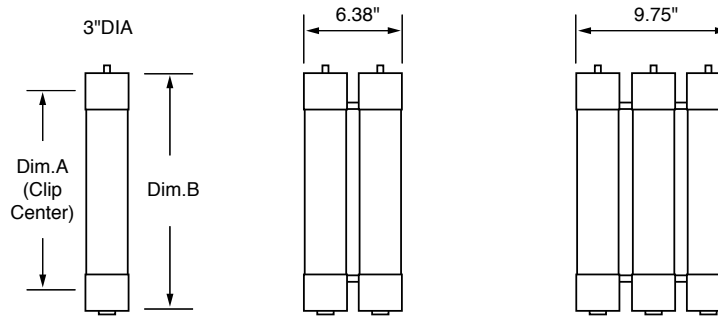


Figure 4

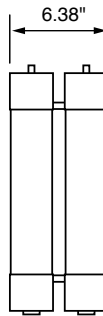


Figure 5

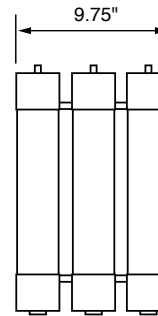


Figure 6

<b>R</b> Rated  5.5 KV	Catalog Number	Old Catalog Number	Size	Maximum Continuous Current @ 40 Degrees C°	Dim. A (inches)	Dim. B (inches)	Min. Interrupting Rating RMS Amps	Max Interrupting Rating RMS (Asym)	Figure Number
	70-2R-1C-5.5	LCL 2R	2R	70	12"	15.875"	170	80,000	4
	100-3R-1C-5.5	LCL 3R	3R	100	12"	15.875"	250	80,000	4
	130-4R-1C-5.5	LCL 4R	4R	130	12"	15.875"	340	80,000	4
	150-5R-1C-5.5	LCL 5R	5R	150	12"	15.875"	390	80,000	4
	170-6R-1C-5.5	LCL 6R	6R	170	12"	15.875"	500	80,000	4
	200-9R-1C-5.5	LCL 9R	9R	200	12"	15.875"	760	80,000	4
	230-12R-1C-5.5	LCL 12R	12R	230	12"	15.875"	1000	80,000	4
	390-18R-2C-5.5	LCL 18R	18R	390	12"	15.875"	1500	80,000	5
	450-24R-2C-5.5	LCL 24R	24R	450	12"	15.875"	1950	80,000	5
	480-26R-2C-5.5	—	26R	480	12"	15.875"	2100	80,000	5
	550-30R-2C-5.5	—	30R	550	12"	15.875"	2400	80,000	5
	600-32R-2C-5.5	—	32R	600	12"	15.875"	2600	80,000	5
	650-36R-2C-5.5	—	36R	650	12"	15.875"	2900	80,000	5
	550-30R-3C-5.5	—	30R	550	12"	15.875"	2400	80,000	6
600-32R-3C-5.5	—	32R	600	12"	15.875"	2600	80,000	6	
650-36R-3C-5.5	LCL 36R	36R	650	12"	15.875"	2900	80,000	6	

5.5 KV 14" Clip Centers	Catalog Number	Old Catalog Number	Size	Maximum Continuous Current @ 40 Degrees C°	Dim. A (inches)	Dim. B (inches)	Min. Interrupting Rating RMS Amps	Max Interrupting Rating RMS (Asym)	Figure Number
	70-2R-1C-5.5X	—	2R	70	14"	17.875"	170	80,000	4
	100-3R-1C-5.5X	—	3R	100	14"	17.875"	250	80,000	4
	130-4R-1C-5.5X	—	4R	130	14"	17.875"	340	80,000	4
	150-5R-1C-5.5X	—	5R	150	14"	17.875"	390	80,000	4
	170-6R-1C-5.5X	—	6R	170	14"	17.875"	500	80,000	4
	200-9R-1C-5.5X	—	9R	200	14"	17.875"	760	80,000	4
	230-12R-1C-5.5X	—	12R	230	14"	17.875"	1000	80,000	4
	390-18R-2C-5.5X	—	18R	390	14"	17.875"	1500	80,000	5
	450-24R-2C-5.5X	—	24R	450	14"	17.875"	1950	80,000	5
550-30R-2C-5.5X	—	30R	550	14"	17.875"	2400	80,000	5	

<b>R</b> Rated  8.25 KV	Catalog Number	Old Catalog Number	Size	Maximum Continuous Current @ 40 Degrees C°	Dim. A (inches)	Dim. B (inches)	Min. Interrupting Rating RMS Amps	Max Interrupting Rating RMS (Asym)	Figure Number
	70-2R-1C-8.25	—	2R	70	12"	15.875"	190	80,000	4
	100-3R-1C-8.25	—	3R	100	12"	15.875"	225	80,000	4
	130-4R-1C-8.25	—	4R	130	12"	15.875"	330	80,000	4
	150-5R-1C-8.25	—	5R	150	12"	15.875"	440	80,000	4
	170-6R-1C-8.25	—	6R	170	12"	15.875"	500	80,000	4
	200-9R-1C-8.25	—	9R	200	12"	15.875"	740	80,000	4
	230-12R-1C-8.25	—	12R	230	12"	15.875"	955	80,000	4
	390-18R-2C-8.25	—	18R	390	12"	15.875"	1440	80,000	5
450-24R-2C-8.25	—	24R	450	12"	15.875"	1910	80,000	5	

Add "w" suffix to part number for hookeye attachment.

## R Rated Medium Voltage Fuses

### Current-Limiting



Littelfuse POWR-GARD™ medium voltage fuses are available in several bolt-in mounting configurations. Contact factory for custom configurations.

- “B” Bolt mount
- “BI” Bolt-In mount
- “IB” Inverted-Bolt mount

Refer to illustrations for mounting dimensions.

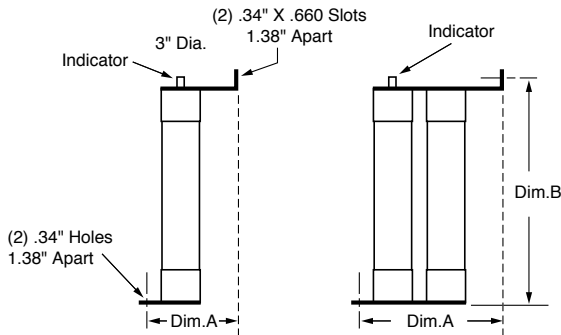


Figure 7

Figure 8

**Bolt Mount “B”**

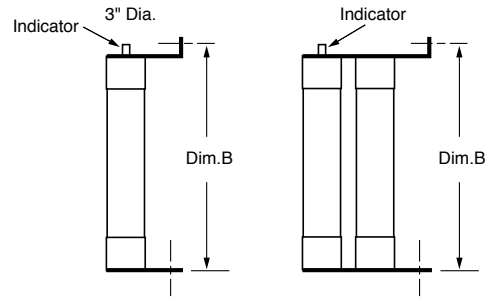


Figure 9

Figure 10

**Inverted-Bolt “IB”**

<b>R Rated</b>	<b>Catalog Number</b>	<b>Old Catalog Number</b>	<b>Size</b>	<b>Maximum Continuous Current @ Degrees C°</b>	<b>Dim. A (inches)</b>	<b>Dim. B (inches)</b>	<b>Min. Interrupting Rating RMS Amps</b>	<b>Max Interrupting Rating RMS (Asym)</b>	<b>Figure Number</b>
<b>2.75 KV Bolt Mount “B”</b>	70-2R-1B-2.75	—	2R	70	4.6"	13"	170	80,000	7
	00-3R-1B-2.75	—	3R	100	4.6"	13"	250	80,000	7
	30-4R-1B-2.75	—	4R	130	4.6"	13"	240	80,000	7
	150-5R-1B-2.75	—	5R	150	4.6"	13"	390	80,000	7
	170-6R-1B-2.75	—	6R	170	4.6"	13"	500	80,000	7
	200-9R-1B-2.75	—	9R	200	4.6"	13"	760	80,000	7
	230-12R-1B-2.75	—	12R	230	4.6"	13"	1000	80,000	7
	390-18R-2B-2.75	—	18R	390	7.4"	13"	1500	80,000	8
	450-24R-2B-2.75	—	24R	450	7.4"	13"	1950	80,000	8
<b>2.75 KV Inverted Bolt “IB”</b>	70-2R-1IB-2.75	—	2R	70	—	13"	170	80,000	9
	100-3R-1IB-2.75	—	3R	100	—	13"	250	80,000	9
	130-4R-1IB-2.75	—	4R	130	—	13"	340	80,000	9
	150-5R-1IB-2.75	—	5R	150	—	13"	390	80,000	9
	170-6R-1IB-2.75	—	6R	170	—	13"	500	80,000	9
	200-9R-1IB-2.75	—	9R	200	—	13"	760	80,000	9
	230-12R-1IB-2.75	—	12R	230	—	13"	1000	80,000	9
	390-18R-2IB-2.75	—	18R	390	—	13"	1500	80,000	10
	450-24R-2IB-2.75	—	24R	450	—	13"	1950	80,000	10

## R Rated Medium Voltage Fuses

### Current-Limiting

#### Bolt-In Mount "BI"

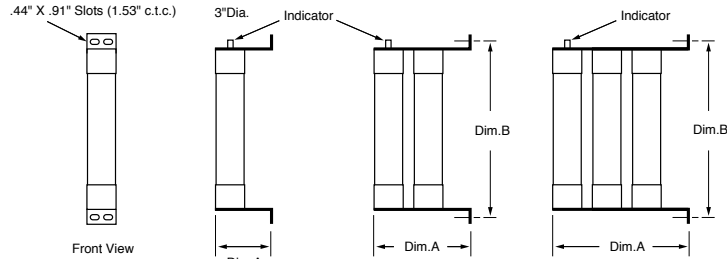


Figure 11

Figure 12

Figure 13

<b>R</b> Rated	Catalog Number	Old Catalog Number	Size	Maximum Continuous Current @ 40° C.	Dim. A (inches)	Dim. B (inches)	Min. Interrupting Rating RMS Amps	Max Interrupting Rating RMS (Asym)	Figure Number
5.5 KV Bolt In Mount "BI"	70-2R-1BI-5.5	—	2R	70	3.6"	18"	170	80,000	11
	100-3R-1BI-5.5	—	3R	100	3.6"	18"	250	80,000	11
	130-4R-1BI-5.5	—	4R	130	3.6"	18"	340	80,000	11
	150-5R-1BI-5.5	—	5R	150	3.6"	18"	390	80,000	11
	170-6R-1BI-5.5	—	6R	170	3.6"	18"	500	80,000	11
	200-9R-1BI-5.5	—	9R	200	3.6"	18"	760	80,000	11
	230-12R-1BI-5.5	—	12R	230	3.6"	18"	1000	80,000	11
	390-18R-2BI-5.5	—	18R	390	7.6"	18"	1500	80,000	12
	450-24R-2BI-5.5	—	24R	450	7.6"	18"	1950	80,000	12
	480-26R-2BI-5.5	—	26R	480	7.6"	18"	2200	80,000	12
	550-30R-2BI-5.5	—	30R	550	7.6"	18"	2400	80,000	12
	600-32R-2BI-5.5	—	32R	600	7.6"	18"	2650	80,000	12
	650-36R-2BI-5.5	—	36R	650	7.6"	18"	2900	80,000	12
	550-30R-3BI-5.5	—	30R	550	—	18"	—	80,000	13
	600-32R-3BI-5.5	—	32R	600	—	18"	—	80,000	13
650-36R-3BI-5.5	—	36R	650	—	18"	—	80,000	13	
700-38R-3BI-5.5	—	38R	700	—	18"	—	80,000	13	
5.5 KV Bolt Mount "B"	70-2R-1B-5.5	—	2R	70	4.6"	18"	170	80,000	7
	100-3R-1B-5.5	—	3R	100	4.6"	18"	250	80,000	7
	130-4R-1B-5.5	—	4R	130	4.6"	18"	340	80,000	7
	150-5R-1B-5.5	—	5R	150	4.6"	18"	390	80,000	7
	170-6R-1B-5.5	—	6R	170	4.6"	18"	500	80,000	7
	200-9R-1B-5.5	—	9R	200	4.6"	18"	760	80,000	7
	230-12R-1B-5.5	—	12R	230	4.6"	18"	1000	80,000	7
	390-18R-2B-5.5	—	18R	390	7.4"	18"	1500	80,000	8
	450-24R-2B-5.5	—	24R	450	7.4"	18"	1950	80,000	8
	550-30R-2B-5.5	—	30R	550	8.4"	18"	2400	80,000	8
600-32R-2B-5.5	—	32R	600	8.4"	18"	2650	80,000	8	
650-36R-2B-5.5	—	36R	650	8.4"	18"	2900	80,000	8	
5.5 KV Inverted Bolt "IB"	70-2R-1IB-5.5	—	2R	70	—	18"	170	80,000	9
	100-3R-1IB-5.5	—	3R	100	—	18"	250	80,000	9
	130-4R-1IB-5.5	—	4R	130	—	18"	340	80,000	9
	150-5R-1IB-5.5	—	5R	150	—	18"	390	80,000	9
	170-6R-1IB-5.5	—	6R	170	—	18"	500	80,000	9
	200-9R-1IB-5.5	—	9R	200	—	18"	760	80,000	9
	230-12R-1IB-5.5	—	12R	230	—	18"	1000	80,000	9
	390-18R-2IB-5.5	—	18R	390	—	18"	1500	80,000	10
	450-24R-2IB-5.5	—	24R	450	—	18"	1950	80,000	10
	550-30R-2IB-5.5	—	30R	550	—	18"	2400	80,000	10
600-32R-2IB-5.5	—	32R	600	—	18"	2650	80,000	10	
650-36R-2IB-5.5	—	36R	650	—	18"	2900	80,000	10	
8.25 KV Bolt-In Mount "BI"	70-2R-1BI-8.25	—	2R	70	3.6"	18"	190	80,000	11
	100-3R-1BI-8.25	—	3R	100	3.6"	18"	225	80,000	11
	130-4R-1BI-8.25	—	4R	130	3.6"	18"	330	80,000	11
	150-5R-1BI-8.25	—	5R	150	3.6"	18"	400	80,000	11
	170-6R-1BI-8.25	—	6R	170	3.6"	18"	500	80,000	11
	200-9R-1BI-8.25	—	9R	200	3.6"	18"	740	80,000	11
	230-12R-1BI-8.25	—	12R	230	3.6"	18"	955	80,000	11
	390-18R-2BI-8.25	—	18R	390	7.6"	18"	1440	80,000	12
450-24R-2BI-8.25	—	24R	450	7.6"	18"	1910	80,000	12	

Medium Voltage Fuses

## E Rated Medium Voltage Fuses

### Current-Limiting

“E” Rated fuses have time current characteristics designed to provide current-limiting protection for power transformers, potential transformers, power centers, feeder centers, and unit sub stations. When properly applied, they can protect against high and low fault currents.

NEMA Standards for “E” rated medium voltage fuses require that fuses rated 100E or less open within 300 seconds (5 minutes) when subjected to an RMS value of 200-240% of the fuse continuous current rating; and fuses with an “E” rating larger than 100E must open within 600 seconds (10 minutes) when subjected to an RMS current of 220-240% of the fuse’s continuous current rating. These values establish one point on the time-current curve.

#### Application Note:

Since these fuses are used for the protection of general purpose circuits which may contain transformers, motors, and other equipment producing in-rush and/or overload currents, fuses should generally be rated at 140% of the normal full load current, and circuits should be analyzed to ensure that system load currents will not exceed the current rating of the fuse.

### Characteristics

Voltage Rating: 2,400 volts – 38,000 volts  
Current Range: 10E – 600E

### Options

- Hermetically sealed for use in hazardous locations (add “S” suffix to part number)
- Clip-lock (CL) and bolt-in styles available.

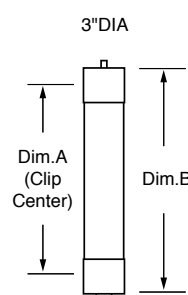


Figure 14

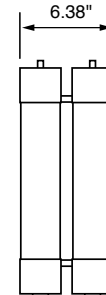


Figure 15

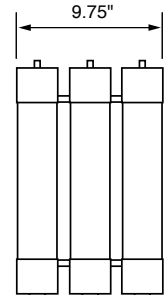


Figure 16

E Rated	Catalog Number	Old Catalog Number	Size	Dim. A (inches)	Dim. B (inches)	Max Interrupting Rating RMS (Asym)	Figure Number
2.75 Max. KV	10E-1C-2.75	LCX 10E	10E	7"	10.875"	80,000	14
	15E-1C-2.75	—	15E	7"	10.875"	80,000	14
	20E-1C-2.75	—	20E	7"	10.875"	80,000	14
	25E-1C-2.75	—	25E	7"	10.875"	80,000	14
	30E-1C-2.75	LCX 30E	30E	7"	10.875"	80,000	14
	40E-1C-2.75	LCX 40E	40E	7"	10.875"	80,000	14
	50E-1C-2.75	LCX 50E	50E	7"	10.875"	80,000	14
	65E-1C-2.75	LCX 65E	65E	7"	10.875"	80,000	14
	80E-1C-2.75	LCX 80E	80E	7"	10.875"	80,000	14
	100E-1C-2.75	LCX 100E	100E	7"	10.875"	80,000	14
	125E-1C-2.75	—	125E	7"	10.875"	80,000	14
	150E-1C-2.75	—	150E	7"	10.875"	80,000	14
	200E-1C-2.75	—	200E	7"	10.875"	80,000	14
	125E-2C-2.75	LCX 125E	125E	7"	10.875"	80,000	15
	150E-2C-2.75	LCX 150E	150E	7"	10.875"	80,000	15
	175E-2C-2.75	LCX 175E	175E	7"	10.875"	80,000	15
	200E-2C-2.75	LCX 200E	200E	7"	10.875"	80,000	15
	225E-2C-2.75	—	225E	7"	10.875"	80,000	15
	250E-2C-2.75	LCX 250E	250E	7"	10.875"	80,000	15
	300E-2C-2.75	LCX 300E	300E	7"	10.875"	80,000	15
	350E-2C-2.75	—	350E	7"	10.875"	80,000	15
400E-2C-2.75	LCX 400E	400E	7"	10.875"	80,000	15	
450E-2C-2.75	—	450E	7"	10.875"	80,000	15	

## E Rated Medium Voltage Fuses

### Current-Limiting

E Rated	Catalog Number	Old Catalog Number	Size	Dim. A (inches)	Dim. B (inches)	Max Interrupting Rating RMS (Asym)	Diagram
	5.5 Max. KV	10E-1C-5.5	—	10E	12"	15.875"	80,000
15E-1C-5.5		—	15E	12"	15.875"	80,000	14
20E-1C-5.5		—	20E	12"	15.875"	80,000	14
25E-1C-5.5		—	25E	12"	15.875"	80,000	14
30E-1C-5.5		LCY 30E	30E	12"	15.875"	80,000	14
40E-1C-5.5		LCY 40E	40E	12"	15.875"	80,000	14
50E-1C-5.5		LCY 50E	50E	12"	15.875"	80,000	14
65E-1C-5.5		LCY 60E	65E	12"	15.875"	80,000	14
80E-1C-5.5		LCY 80E	80E	12"	15.875"	80,000	14
100E-1C-5.5		LCY 100E	100E	12"	15.875"	80,000	14
125E-1C-5.5		LCY 125E	125E	12"	15.875"	80,000	14
150E-1C-5.5		LCY 150E	150E	12"	15.875"	80,000	14
175E-1C-5.5		LCY 175E	175E	12"	15.875"	80,000	14
200E-1C-5.5		LCY 200E	200E	12"	15.875"	80,000	14
125E-2C-5.5		—	125E	12"	15.875"	80,000	15
150E-2C-5.5		—	150E	12"	15.875"	80,000	15
175E-2C-5.5		—	175E	12"	15.875"	80,000	15
200E-2C-5.5		—	200E	12"	15.875"	80,000	15
250E-2C-5.5		LCY 250E	250E	12"	15.875"	80,000	15
300E-2C-5.5		LCY 300E	300E	12"	15.875"	80,000	15
350E-2C-5.5		LCY 350E	350E	12"	15.875"	80,000	15
400E-2C-5.5		LCY 400E	400E	12"	15.875"	80,000	15
450E-2C-5.5		LCY 450E	450E	12"	15.875"	80,000	15
500E-3C-5.5		—	500E	12"	15.875"	80,000	16
550E-3C-5.5		—	550E	12"	15.875"	80,000	16
600E-3C-5.5		—	600E	12"	15.875"	80,000	16

5.5 Max. KV	5NLE-10E	—	10E	14"	17 $\frac{1}{8}$ "	80,000	14
	5NLE-15E	—	15E	14"	17 $\frac{1}{8}$ "	80,000	14
	5NLE-20E	—	20E	14"	17 $\frac{1}{8}$ "	80,000	14
	5NLE-25E	—	25E	14"	17 $\frac{1}{8}$ "	80,000	14
	5NLE-30E	LCU 30E	30E	14"	17 $\frac{1}{8}$ "	80,000	14
	5NLE-40E	LCU 40E	40E	14"	17 $\frac{1}{8}$ "	80,000	14
	5NLE-50E	LCU 50E	50E	14"	17 $\frac{1}{8}$ "	80,000	14
	5NLE-65E	LCU 65E	65E	14"	17 $\frac{1}{8}$ "	80,000	14
	5NLE-80E	LCU 80E	80E	14"	17 $\frac{1}{8}$ "	80,000	14
	5NLE-100E	LCU 100E	100E	14"	17 $\frac{1}{8}$ "	80,000	14
	5NLE-125E	LCU 125E	125E	14"	17 $\frac{1}{8}$ "	80,000	14
	5NLE-150E	LCU 150E	150E	14"	17 $\frac{1}{8}$ "	80,000	14
	5NLE-175E	LCU 175E	175E	14"	17 $\frac{1}{8}$ "	80,000	14
	5NLE-200E	LCU 200E	200E	14"	17 $\frac{1}{8}$ "	80,000	14
	5NLE2-225E	—	225E	14"	17 $\frac{1}{8}$ "	80,000	15
	5NLE2-250E	LCU 250E	250E	14"	17 $\frac{1}{8}$ "	80,000	15
	5NLE2-300E	LCU 300E	300E	14"	17 $\frac{1}{8}$ "	80,000	15
	5NLE2-350E	LCU 350E	350E	14"	17 $\frac{1}{8}$ "	80,000	15
	5NLE2-400E	LCU 400E	400E	14"	17 $\frac{1}{8}$ "	80,000	15
	5NLE2-450E	LCU 450E	450E	14"	17 $\frac{1}{8}$ "	80,000	15

## E Rated Medium Voltage Fuses

### Current-Limiting

E Rated	Catalog Number	Old Catalog Number	Size	Dim. A (inches)	Dim. B (inches)	Max Interrupting Rating RMS (Asym)	Diagram
8.25 Max. KV	10E-1C-8.25	—	10E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	14
	15E-1C-8.25	—	15E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	14
	20E-1C-8.25	—	20E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	14
	25E-1C-8.25	—	25E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	14
	30E-1C-8.25	LDZ 30E	30E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	14
	40E-1C-8.25	LDZ 40E	40E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	14
	50E-1C-8.25	LDZ 50E	50E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	14
	65E-1C-8.25	LDZ 65E	65E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	14
	80E-1C-8.25	LDZ 80E	80E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	14
	100E-1C-8.25	LDZ 100E	100E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	14
	125E-1C-8.25	LDZ 125E	125E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	14
	150E-1C-8.25	LDZ 150E	150E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	14
	125E-2C-8.25	LDZ 125E	125E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	15
	150E-2C-8.25	LDZ 150E	150E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	15
	200E-2C-8.25	LDZ 200E	200E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	15
	250E-2C-8.25	LDZ 250E	250E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	15
	300E-2C-8.25	LDZ 300E	300E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	15
	350E-3C-8.25	LDZ 350Z	350E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	16
	400E-3C-8.25	—	400E	12"	15 <sup>7</sup> / <sub>8</sub> "	80,000	16

8.25 Max. KV	8NLE-10E	—	10E	14"	17 <sup>7</sup> / <sub>8</sub> "	80,000	14
	8NLE-15E	—	15E	14"	17 <sup>7</sup> / <sub>8</sub> "	80,000	14
	8NLE-20E	—	20E	14"	17 <sup>7</sup> / <sub>8</sub> "	80,000	14
	8NLE-25E	—	25E	14"	17 <sup>7</sup> / <sub>8</sub> "	80,000	14
	8NLE-30E	LCZ 30E	30E	14"	17 <sup>7</sup> / <sub>8</sub> "	80,000	14
	8NLE-40E	LCZ 40E	40E	14"	17 <sup>7</sup> / <sub>8</sub> "	80,000	14
	8NLE-50E	LCZ 50E	50E	14"	17 <sup>7</sup> / <sub>8</sub> "	80,000	14
	8NLE-65E	LCZ 65E	65E	14"	17 <sup>7</sup> / <sub>8</sub> "	80,000	14
	8NLE-80E	LCZ 80E	80E	14"	17 <sup>7</sup> / <sub>8</sub> "	80,000	14
	8NLE-100E	LCZ 100E	100E	14"	17 <sup>7</sup> / <sub>8</sub> "	80,000	14
	8NLE2-100E	LCZ 100E	100E	14"	17 <sup>7</sup> / <sub>8</sub> "	80,000	14
	8NLE2-125E	LCZ 125E	125E	14"	17 <sup>7</sup> / <sub>8</sub> "	80,000	15
	8NLE2-150E	LCZ 150E	150E	14"	17 <sup>7</sup> / <sub>8</sub> "	80,000	15
	8NLE2-200E	LCZ 200E	200E	14"	17 <sup>7</sup> / <sub>8</sub> "	80,000	15
	8NLE2-250E	—	250E	14"	17 <sup>7</sup> / <sub>8</sub> "	80,000	15

E Rated	Catalog Number	Old Catalog Number	Size	Dim. A (inches)	Dim. B (inches)	Max Interrupting Rating RMS (Asym)	Figure Number
15.5 Max. KV	10E-1C-15.5	LDN 10E	10E	15"	18.875"	80,000	14
	15E-1C-15.5	LDN 15E	15E	15"	18.875"	80,000	14
	20E-1C-15.5	LDN 20E	20E	15"	18.875"	80,000	14
	25E-1C-15.5	LDN 25E	25E	15"	18.875"	80,000	14
	30E-1C-15.5	LDN 30E	30E	15"	18.875"	80,000	14
	40E-1C-15.5	LDN 40E	40E	15"	18.875"	80,000	14
	50E-1C-15.5	LDN 50E	50E	15"	18.875"	80,000	14
	65E-1C-15.5	LDN 65E	65E	15"	18.875"	80,000	14
	80E-1C-15.5	LDN 80E	80E	15"	18.875"	80,000	14
	100E-1C-15.5	LDN 100E	100E	15"	18.875"	80,000	14
	65E-2C-15.5	—	65E	15"	18.875"	80,000	15
	80E-2C-15.5	—	80E	15"	18.875"	80,000	15
	100E-2C-15.5	—	100E	15"	18.875"	80,000	15
	125E-2C-15.5	—	125E	15"	18.875"	80,000	15
	150E-2C-15.5	LDN 150E	150E	15"	18.875"	80,000	15
	175E-2C-15.5	LDN 175E	175E	15"	18.875"	80,000	15
	200E-2C-15.5	—	200E	15"	18.875"	80,000	15
	200E-3C-15.5	—	200E	15"	18.875"	80,000	16
	250E-3C-15.5	—	250E	15"	18.875"	80,000	16
	300E-3C-15.5	—	300E	15"	18.875"	80,000	16

## E Rated Medium Voltage Fuses

### Current-Limiting

E Rated	Catalog Number	Old Catalog Number	Size	Dim. A (inches)	Dim. B (inches)	Max Interrupting Rating RMS (Asym)	Figure Number
	15.5 Max. KV	15GSE-65E	—	65E	18"	21 <sup>7</sup> / <sub>8</sub> "	60,000
15GSE-80E		—	80E	18"	21 <sup>7</sup> / <sub>8</sub> "	60,000	14
15GSE-100E		—	100E	18"	21 <sup>7</sup> / <sub>8</sub> "	60,000	14
15GSE2-125E		—	125E	18"	21 <sup>7</sup> / <sub>8</sub> "	60,000	15
15GSE2-150E		—	150E	18"	21 <sup>7</sup> / <sub>8</sub> "	60,000	15
15GSE2-175E		—	175E	18"	21 <sup>7</sup> / <sub>8</sub> "	60,000	15
15GSE2-200E		—	200E	18"	21 <sup>7</sup> / <sub>8</sub> "	60,000	15

15.5 Max. KV	15NLE-10E	—	10E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	14
	15NLE-15E	—	15E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	14
	15NLE-20E	—	20E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	14
	15NLE-25E	—	25E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	14
	15NLE-30E	LCN 30E	30E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	14
	15NLE-40E	LCN 40E	40E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	14
	15NLE-50E	LCN 50E	50E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	14
	15NLE-65E	LCN 65E	65E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	14
	15NLE-80E	LCN 80ES	80E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	14
	15NLE-100E	LCN 100ES	100E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	14
	15NLE2-80E	LCN 80E	80E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	15
	15NLE2-100E	LCN 100E	100E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	15
	15NLE2-125E	LCN 125X	125E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	15
	15NLE2-150E	LCN 150E	150E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	15
	15NLE2-175E	—	175E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	15
	15NLE2-200E	LCN 200ED	200E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	15
	15NLE3-150E	—	150E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	16
	15NLE3-175E	—	175E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	16
15NLE3-250E	—	250E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	16	
15NLE3-300E	—	300E	20"	23 <sup>3</sup> / <sub>8</sub> "	60,000	16	

E Rated	Catalog Number	Old Catalog Number	Size	Dim. A (inches)	Dim. B (inches)	Max Interrupting Rating RMS (Asym)	Figure Number
	25.8 Max. KV	15E-1C-25.8	—	15E	21"	24 <sup>5</sup> / <sub>8</sub> "	40,000
20E-1C-25.8		—	20E	21"	24 <sup>5</sup> / <sub>8</sub> "	40,000	14
25E-1C-25.8		—	25E	21"	24 <sup>5</sup> / <sub>8</sub> "	40,000	14
30E-1C-25.8		—	30E	21"	24 <sup>5</sup> / <sub>8</sub> "	40,000	14
40E-1C-25.8		—	40E	21"	24 <sup>5</sup> / <sub>8</sub> "	40,000	14
50E-1C-25.8		—	50E	21"	24 <sup>5</sup> / <sub>8</sub> "	40,000	14
65E-2C-25.8		—	65E	21"	24 <sup>5</sup> / <sub>8</sub> "	40,000	14
80E-2C-25.8		—	80E	21"	24 <sup>5</sup> / <sub>8</sub> "	40,000	15
100E-2C-25.8		—	100E	21"	24 <sup>5</sup> / <sub>8</sub> "	40,000	15

E Rated	Catalog Number	Old Catalog Number	Size	Dim. A (inches)	Dim. B (inches)	Max Interrupting Rating RMS (Asym)	Figure Number
	38 Max. KV	3E-1C-38.0	—	3E	27"	30 <sup>5</sup> / <sub>8</sub> "	20,000
7E-1C-38.0		—	7E	27"	30 <sup>5</sup> / <sub>8</sub> "	20,000	14
10E-1C-38.0		—	10E	27"	30 <sup>5</sup> / <sub>8</sub> "	20,000	14
15E-1C-38.0		—	15E	27"	30 <sup>5</sup> / <sub>8</sub> "	20,000	14
20E-1C-38.0		—	20E	27"	30 <sup>5</sup> / <sub>8</sub> "	20,000	14
25E-1C-38.0		—	25E	27"	30 <sup>5</sup> / <sub>8</sub> "	20,000	14
30E-1C-38.0		—	30E	27"	30 <sup>5</sup> / <sub>8</sub> "	20,000	14
40E-1C-38.0		—	40E	27"	30 <sup>5</sup> / <sub>8</sub> "	20,000	14
50E-2C-38.0		—	50E	27"	30 <sup>5</sup> / <sub>8</sub> "	20,000	15
65E-2C-38.0		—	65E	27"	30 <sup>5</sup> / <sub>8</sub> "	20,000	15
80E-2C-38.0		—	80E	27"	30 <sup>5</sup> / <sub>8</sub> "	20,000	15

## E Rated Medium Voltage Fuses

### Current-Limiting

#### Clip Lock Design

The clip lock type designs ensures a positive contact between the fuse and the connection cam. The fuse's clip lock tab slides in between the clip casting and the cam to prevent the fuse from slipping or blowing out of the holder. This positive contact improves heat dissipation and allows fuses to run cooler.

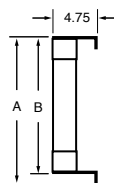


Figure 17

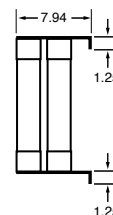


Figure 18

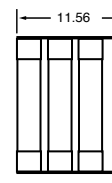


Figure 19



E Rated	Catalog Number	Old Catalog Number	Size	Dim. A (inches)	Dim. B (inches)	Max Interrupting Rating RMS (Asym)	Figure Number
5.5 Max. KV Clip Lock	10E-1CL-5.5	—	10E	16.38"	15.13"	80,000	17
	15E-1CL-5.5	—	15E	16.38"	15.13"	80,000	17
	20E-1C-5.5	—	20E	16.38"	15.13"	80,000	17
	25E-1CL-5.5	—	25E	16.38"	15.13"	80,000	17
	30E-1CL-5.5	—	30E	16.38"	15.13"	80,000	17
	40E-1CL-5.5	—	40E	16.38"	15.13"	80,000	17
	50E-1CL-5.5	—	50E	16.38"	15.13"	80,000	17
	65E-1CL-5.5	—	65E	16.38"	15.13"	80,000	17
	80E-1CL-5.5	—	80E	16.38"	15.13"	80,000	17
	100E-1CL-5.5	—	100E	16.38"	15.13"	80,000	17
	125E-1CL-5.5	—	125E	16.38"	15.13"	80,000	17
	150E-1CL-5.5	—	150E	16.38"	15.13"	80,000	17
	225E-2CL-5.5	—	225E	17.38"	16.13"	80,000	18
	250E-2CL-5.5	—	250E	17.38"	16.13"	80,000	18
	300E-2CL-5.5	—	300E	17.38"	16.13"	80,000	18
	350E-2CL-5.5	—	350E	17.38"	16.13"	80,000	18
	400E-2CL-5.5	—	400E	17.38"	16.13"	80,000	18
	450E-2CL-5.5	—	450E	17.38"	16.13"	80,000	18
	500E-3CL-5.5	—	500E	17.38"	16.13"	80,000	19
	550E-3CL-5.5	—	550E	17.38"	16.13"	80,000	19
600E-3CL-5.5	—	600E	17.38"	16.13"	80,000	19	

E Rated	Catalog Number	Old Catalog Number	Size	Dim. A (inches)	Dim. B (inches)	Max Interrupting Rating RMS (Asym)	Figure Number
8.25 Max. KV Clip Lock	10E-1CL-8.25	—	10E	17.38"	16.13"	80,000	17
	15E-1CL-8.25	—	15E	17.38"	16.13"	80,000	17
	20E-1C-8.25	—	20E	17.38"	16.13"	80,000	17
	25E-1CL-8.25	—	25E	17.38"	16.13"	80,000	17
	30E-1CL-8.25	—	30E	17.38"	16.13"	80,000	17
	40E-1CL-8.25	—	40E	17.38"	16.13"	80,000	17
	50E-1CL-8.25	—	50E	17.38"	16.13"	80,000	17
	65E-1CL-8.25	—	65E	17.38"	16.13"	80,000	17
	80E-1CL-8.25	—	80E	17.38"	16.13"	80,000	17
	100E-1CL-8.25	—	100E	17.38"	16.13"	80,000	17
	125E-2CL-8.25	—	125E	17.38"	16.13"	80,000	18
	150E-2CL-8.25	—	150E	17.38"	16.13"	80,000	18
	175E-2CL-8.25	—	175E	17.38"	16.13"	80,000	18
	200E-2CL-8.25	—	200E	17.38"	16.13"	80,000	18
	225E-2CL-8.25	—	225E	17.38"	16.13"	80,000	18
	250E-2CL-8.25	—	250E	17.38"	16.13"	80,000	18
	300E-2CL-8.25	—	300E	17.38"	16.13"	80,000	18
	350E-3CL-8.25	—	350E	17.38"	16.13"	80,000	19

E Rated	Catalog Number	Old Catalog Number	Size	Dim. A (inches)	Dim. B (inches)	Max Interrupting Rating RMS (Asym)	Figure Number
15.5 Max. KV Clip Lock	10E-1CL-15.5	—	10E	19.8"	18.1"	60,000	17
	15E-1CL-15.5	—	15E	19.8"	18.1"	60,000	17
	20E-1CL-15.5	—	20E	19.8"	18.1"	60,000	17
	25E-1CL-15.5	—	25E	19.8"	18.1"	60,000	17
	30E-1CL-15.5	—	30E	19.8"	18.1"	60,000	17
	40E-1CL-15.5	—	40E	19.8"	18.1"	60,000	17
	50E-1CL-15.5	—	50E	19.8"	18.1"	60,000	17
	65E-1CL-15.5	—	65E	22.81"	21.13"	60,000	17
	80E-1CL-15.5	—	80E	22.81"	21.13"	60,000	17
	100E-1CL-15.5	—	100E	22.81"	21.13"	60,000	17
	125E-2CL-15.5	—	125E	22.81"	19.1"	60,000	18
	150E-3CL-15.5	—	150E	22.81"	19.1"	60,000	19
	175E-3CL-15.5	—	175E	22.81"	19.1"	60,000	19
	200E-3CL-15.5	—	200E	22.81"	19.1"	60,000	19
	225E-3CL-15.5	—	225E	22.81"	19.1"	60,000	19
	250E-3CL-15.5	—	250E	22.81"	19.1"	60,000	19
	300E-3CL-15.5	—	300E	22.81"	19.1"	60,000	19

## E Rated Potential Transformer Fuses

### Current-Limiting

Potential Transformer (PT) fuses are current-limiting fuses with high interrupting ratings designed for the protection of potential transformers.

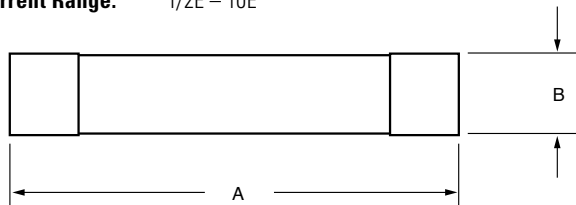
#### Application Note:

When applying fuses for the protection of transformers, the magnetizing current in-rush must be considered. The characteristics of the in-rush, which can be matched with a fuse time-current curve, should be available from the transformer manufacturer.

### Characteristics

**Voltage Rating:** 600VAC – 25,500 VAC

**Current Range:** 1/2E – 10E



Rated	Catalog Number	Old Catalog Number	Size	Length Dim. A (inches)	Diameter Dim. B (inches)	Max Interrupting Rating RMS (Sym)
600 Volt	3E-4PT-6	—	3E	4.6"	0.8125"	37,500
	5E-4PT-6	—	5E	4.6"	0.8125"	37,500
	7E-4PT-6	—	7E	4.6"	0.8125"	37,500
	10E-4PT-6	—	10E	4.6"	0.8125"	37,500
2.75 Max. kV	500E-4PT-2.4	—	1/2E	4.6"	0.8125"	37,000
	1E-4PT-2.4	LCD 1E-4	1E	4.6"	0.8125"	37,000
	2E-4PT-2.4	LCD 2E-4	2E	4.6"	0.8125"	37,000
2.75 Max. KV	1E-6PT-2.75	—	1E	7.4"	1.5625"	37,500
	2E-6PT-2.75	—	2E	7.4"	1.5625"	37,500
	3E-6PT-2.75	—	3E	7.4"	1.5625"	37,500
	1E-8PT-2.75	—	1E	9.5"	1.5625"	37,000
	2E-8PT-2.75	—	2E	9.5"	1.5625"	37,000
	3E-8PT-2.75	—	3E	9.5"	1.5625"	37,000
4.8 Max. kV	1E-5PT-4.8	LCE 1E-4	1E	5.6"	0.8125"	50,000
	2E-5PT-4.8	LCE 2E-4	2E	5.6"	0.8125"	50,000
5.5 Max. kV	1/2E-6PT-5.5	—	1/2E	7.4"	1.5625"	50,000
	1E-6PT-5.5	—	1E	7.4"	1.5625"	50,000
	2E-6PT-5.5	—	2E	7.4"	1.5625"	50,000
	3E-6PT-5.5	—	3E	7.4"	1.5625"	50,000
	5E-6PT-5.5	—	5E	7.4"	1.5625"	50,000
	1/2E-8PT-5.5	LCQ .5E	1/2E	9.5"	1.5625"	50,000
	1E-8PT-5.5	LCQ 1E	1E	9.5"	1.5625"	50,000
	2E-8PT-5.5	LCQ 2E	2E	9.5"	1.5625"	50,000
	3E-8PT-5.5	LCQ 3E	3E	9.5"	1.5625"	50,000
	5E-8PT-5.5	LCQ 5E	5E	9.5"	1.5625"	50,000
10E-8PT-5.5	LCQ 10E	10E	9.5"	1.5625"	50,000	
8.25 Max. kV	1/2E-8PT-8.25	—	1/2E	9.5"	1.5625"	50,000
	1E-8PT-8.25	—	1E	9.5"	1.5625"	50,000
	2E-8PT-8.25	—	2E	9.5"	1.5625"	50,000
	3E-8PT-8.25	—	3	9.5"	1.5625"	50,000
15.5 Max. kV	1/2E-11PT-15.5	LCT .5E	1/2E	12.8"	1.5625"	35,000
	1E-11PT-15.5	LCT 1E	1E	12.8"	1.5625"	35,000
	2E-11PT-15.5	LCT 2E	2E	12.8"	1.5625"	35,000
	3E-11PT-15.5	LCT 3E	3E	12.8"	1.5625"	35,000
	3E-16PT-15.5	—	3E	17.5"	1.5625"	35,000
5E-16PT-15.5	—	5E	17.5"	1.5625"	35,000	
25.8 Max. kV	1/2E-16PT-25.5	LCJ 1E-4	1/2E	17.5"	1.5625"	43,500
	1E-16PT-25.5	LCJ 2E-4	1E	17.5"	1.5625"	43,500

## Live Parts

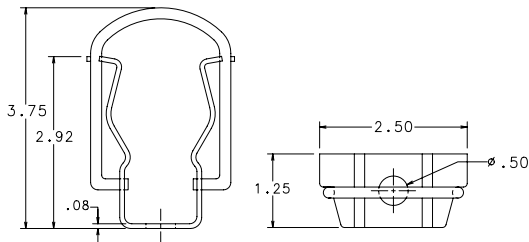


Live parts are available for mounting "E", "R", and "PT" single, double, and triple barrel fuses. Mounting clips are available for ferrule type and clip lock style fuses. All clips are sold in pairs. Contact factory for additional live parts.

### Part Number: 700-156\*

System Number: 0700156.Z

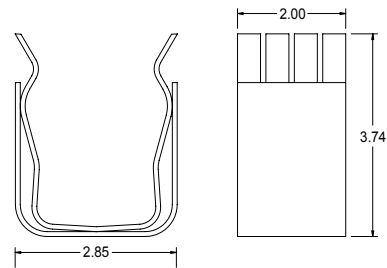
For use with 1-9/16" to 1-5/8" (1.625") diameter PT fuses.



### Part Number: 700-300\*

System Number: 0700300.Z

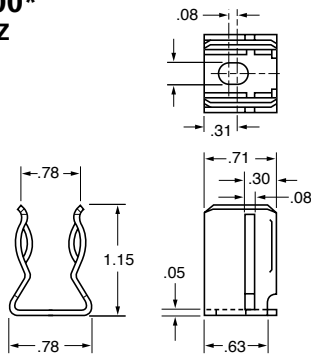
For use with 3" diameter fuses.



### Part Number: 700-500\*

System Number: 0700500.Z

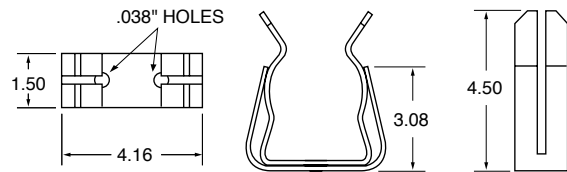
For use with all 13/16" (.8125") diameter PT fuses.



### Part Number: 700-530\*

System Number: 0700530.Z

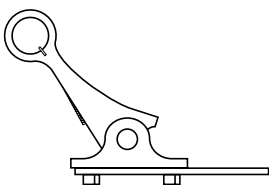
For use with all 3" diameter fuses.



### Part Number: 700-520-CL\*

System Number: 0700520.ZXCL

Clip Lock Design (For CL-14)



\* One Pair. Dimensions for reference only.

### Mounting Details for Clip Lock

