

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 value 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’s 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 inrush 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.

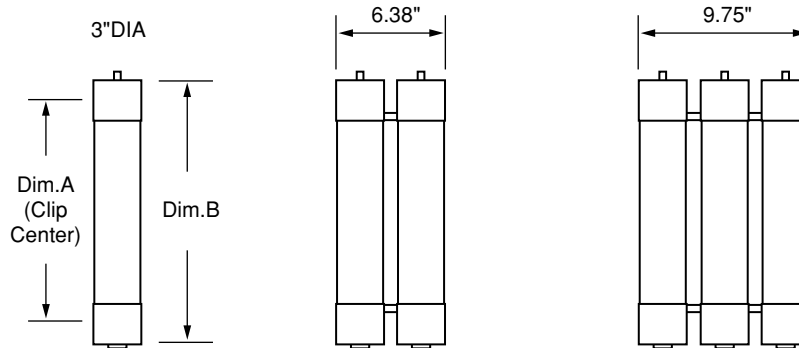
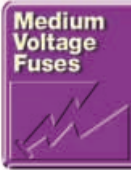


FIGURE 14

FIGURE 15

FIGURE 16



| 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 | | | | 14 |
| | 20E-1C-2.75 | — | 20E | | | | 14 |
| | 25E-1C-2.75 | — | 25E | | | | 14 |
| | 30E-1C-2.75 | LCX 30E | 30E | | | | 14 |
| | 40E-1C-2.75 | LCX 40E | 40E | | | | 14 |
| | 50E-1C-2.75 | LCX 50E | 50E | | | | 14 |
| | 65E-1C-2.75 | LCX 65E | 65E | | | | 14 |
| | 80E-1C-2.75 | LCX 80E | 80E | | | | 14 |
| | 100E-1C-2.75 | LCX 100E | 100E | | | | 14 |
| | 125E-1C-2.75 | — | 125E | | | | 14 |
| | 150E-1C-2.75 | — | 150E | | | | 14 |
| | 200E-1C-2.75 | — | 200E | | | | 14 |
| | 125E-2C-2.75 | LCX 125E | 125E | | | | 7" |
| | 150E-2C-2.75 | LCX 150E | 150E | 15 | | | |
| | 175E-2C-2.75 | LCX 175E | 175E | 15 | | | |
| | 200E-2C-2.75 | LCX 200E | 200E | 15 | | | |
| | 225E-2C-2.75 | — | 225E | 15 | | | |
| | 250E-2C-2.75 | LCX 250E | 250E | 15 | | | |
| | 300E-2C-2.75 | LCX 300E | 300E | 15 | | | |
| | 350E-2C-2.75 | — | 350E | 15 | | | |
| | 400E-2C-2.75 | LCX 400E | 400E | 15 | | | |
| 450E-2C-2.75 | — | 450E | 15 | | | | |

E Rated Medium Voltage Fuses



Current Limiting

POWR-GARD™ Products

| 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 | 14 | | | | |
| | 15E-1C-5.5 | — | 15E | | | | 14 | | | | |
| | 20E-1C-5.5 | — | 20E | | | | 14 | | | | |
| | 25E-1C-5.5 | — | 25E | | | | 14 | | | | |
| | 30E-1C-5.5 | LCY 30E | 30E | | | | 14 | | | | |
| | 40E-1C-5.5 | LCY 40E | 40E | | | | 14 | | | | |
| | 50E-1C-5.5 | LCY 50E | 50E | | | | 14 | | | | |
| | 65E-1C-5.5 | LCY 60E | 65E | | | | 14 | | | | |
| | 80E-1C-5.5 | LCY 80E | 80E | | | | 14 | | | | |
| | 100E-1C-5.5 | LCY 100E | 100E | | | | 14 | | | | |
| | 125E-1C-5.5 | LCY 125E | 125E | | | | 14 | | | | |
| | 150E-1C-5.5 | LCY 150E | 150E | | | | 14 | | | | |
| | 175E-1C-5.5 | LCY 175E | 175E | | | | 14 | | | | |
| | 200E-1C-5.5 | LCY 200E | 200E | | | | 14 | | | | |
| | 125E-2C-5.5 | — | 125E | | | | 12" | 15.875" | 80,000 | 15 | |
| | 150E-2C-5.5 | — | 150E | | | | | | | 15 | |
| | 175E-2C-5.5 | — | 175E | 15 | | | | | | | |
| | 200E-2C-5.5 | — | 200E | 15 | | | | | | | |
| | 250E-2C-5.5 | LCY 250E | 250E | 15 | | | | | | | |
| | 300E-2C-5.5 | LCY 300E | 300E | 15 | | | | | | | |
| | 350E-2C-5.5 | LCY 350E | 350E | 15 | | | | | | | |
| | 400E-2C-5.5 | LCY 400E | 400E | 15 | | | | | | | |
| | 450E-2C-5.5 | LCY 450E | 450E | 15 | | | | | | | |
| | 500E-3C-5.5 | — | 500E | 12" | 15.875" | 80,000 | 16 | | | | |
| 550E-3C-5.5 | — | 550E | 16 | | | | | | | | |
| 600E-3C-5.5 | — | 660E | 16 | | | | | | | | |
| 5.5 Max. KV | 5NLE-10E | LCU 30E | 10E | 14 | 17-7/8" | 80,000 | 14 | | | | |
| | 5NLE-15E | | 15E | | | | 14 | | | | |
| | 5NLE-20E | | 20E | | | | 14 | | | | |
| | 5NLE-25E | | 25E | | | | 14 | | | | |
| | 5NLE-30E | | 30E | | | | 14 | | | | |
| | 5NLE-40E | | LCU 40E | | | | 40E | 14 | | | |
| | 5NLE-50E | | LCU 50E | | | | 50E | 14 | | | |
| | 5NLE-65E | | LCU 65E | | | | 65E | 14 | | | |
| | 5NLE-80E | | LCU 80E | | | | 80E | 14 | | | |
| | 5NLE-100E | | LCU 100E | | | | 100E | 14 | | | |
| | 5NLE-125E | | LCU 125E | | | | 125E | 14 | | | |
| | 5NLE-150E | | LCU 150E | | | | 150E | 14 | | | |
| | 5NLE-175E | | LCU 175E | | | | 175E | 14 | | | |
| | 5NLE-200E | | LCU 200E | | | | 200E | 14 | | | |
| | 5NLE2-225E | | LCU 250E | | | | 225E | 14" | 17-7/8" | 80,000 | 15 |
| | 5NLE2-250E | | | | | | 250E | | | | 15 |
| | 5NLE2-300E | LCU 300E | | 300E | 15 | | | | | | |
| | 5NLE2-350E | LCU 350E | | 350E | 15 | | | | | | |
| 5NLE2-400E | LCU 400E | 400E | | 15 | | | | | | | |
| 5NLE2-450E | LCU 450E | 450E | | 15 | | | | | | | |



E Rated Medium Voltage Fuses

Current Limiting



POWR-GARD™ Products

| 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" | 15-7/8" | 80,000 | 14 | | | |
| | 15E-1C-8.25 | | 15E | | | | 14 | | | |
| | 20E-1C-8.25 | | 20E | | | | 14 | | | |
| | 25E-1C-8.25 | | 25E | | | | 14 | | | |
| | 30E-1C-8.25 | LDZ 30E | 30E | | | | 14 | | | |
| | 40E-1C-8.25 | LDZ 40E | 40E | | | | 14 | | | |
| | 50E-1C-8.25 | LDZ 50E | 50E | | | | 14 | | | |
| | 65E-1C-8.25 | LDZ 65E | 65E | | | | 14 | | | |
| | 80E-1C-8.25 | LDZ 80E | 80E | | | | 14 | | | |
| | 100E-1C-8.25 | LDZ 100E | 100E | | | | 14 | | | |
| | 125E-1C-8.25 | LDZ 125E | 125E | | | | 14 | | | |
| | 150E-1C-8.25 | LDZ 150E | 150E | | | | 14 | | | |
| | 125E-2C-8.25 | LDZ 125E | 125E | | | | 12" | 15-7/8" | 80,000 | 15 |
| | 150E-2C-8.25 | LDZ 150E | 150E | | | | | | | 15 |
| | 200E-2C-8.25 | LDZ 200E | 200E | | | | | | | 15 |
| | 250E-2C-8.25 | LDZ 250E | 250E | 15 | | | | | | |
| | 300E-2C-8.25 | LDZ 300E | 300E | 15 | | | | | | |
| | 350E-3C-8.25 | LDZ 350Z | 350E | 12" | 15-7/8" | 80,000 | 16 | | | |
| 400E-3C-8.25 | | 400E | 16 | | | | | | | |
| 8.25 Max. KV | 8NLE-10E | | 10E | 14" | 17-7/8" | 80,000 | 14 | | | |
| | 8NLE-15E | | 15E | | | | 14 | | | |
| | 8NLE-20E | | 20E | | | | 14 | | | |
| | 8NLE-25E | | 25E | | | | 14 | | | |
| | 8NLE-30E | LCZ 30E | 30E | | | | 14 | | | |
| | 8NLE-40E | LCZ 40E | 40E | | | | 14 | | | |
| | 8NLE-50E | LCZ 50E | 50E | | | | 14 | | | |
| | 8NLE-65E | LCZ 65E | 65E | | | | 14 | | | |
| | 8NLE-80E | LCZ 80E | 80E | | | | 14 | | | |
| | 8NLE-100E | LCZ 100E | 100E | | | | 14 | | | |
| | 8NLE2-100E | LCZ 100E | 100E | 14" | 17-7/8" | 80,000 | 15 | | | |
| | 8NLE2-125E | LCZ 125E | 125E | | | | 15 | | | |
| | 8NLE2-150E | LCZ 150E | 150E | | | | 15 | | | |
| | 8NLE2-200E | LCZ 200E | 200E | | | | 15 | | | |
| | 8NLE2-250E | | 250E | | | | 15 | | | |



| 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" | 60,000 | 14 |
| | 15E-1C-15.5 | LDN 15E | 15E | | | | 14 |
| | 20E-1C-15.5 | LDN 20E | 20E | | | | 14 |
| | 25E-1C-15.5 | LDN 25E | 25E | | | | 14 |
| | 30E-1C-15.5 | LDN 30E | 30E | | | | 14 |
| | 40E-1C-15.5 | LDN 40E | 40E | | | | 14 |
| | 50E-1C-15.5 | LDN 50E | 50E | | | | 14 |
| | 65E-1C-15.5 | LDN 65E | 65E | | | | 14 |
| | 80E-1C-15.5 | LDN 80E | 80E | | | | 14 |
| | 100E-1C-15.5 | LDN 100E | 100E | | | | 14 |
| | 65E-2C-15.5 | | 65E | 15" | 18.875" | 60,000 | 15 |
| | 80E-2C-15.5 | | 80E | | | | 15 |
| | 100E-2C-15.5 | | 100E | | | | 15 |
| | 125E-2C-15.5 | | 125E | | | | 15 |
| | 150E-2C-15.5 | LDN 150E | 150E | | | | 15 |
| | 175E-2C-15.5 | LDN 175E | 175E | | | | 15 |
| | 200E-2C-15.5 | | 200E | 15 | | | |
| | 200E-3C-15.5 | | 200E | 15" | 18.875" | 60,000 | 16 |
| | 250E-3C-15.5 | | 250E | | | | 16 |
| | 300E-3C-15.5 | | 300E | | | | 16 |

E Rated Medium Voltage Fuses

Current Limiting

| 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" | 21-7/8" | 60,000 | 14 | | | | |
| | 15GSE-80E | | 80E | | | | 14 | | | | |
| | 15GSE-100E | | 100E | | | | 14 | | | | |
| | 15GSE2-125E | — | 125E | 18" | 21-7/8" | 60,000 | 15 | | | | |
| | 15GSE2-150E | | 150E | | | | 15 | | | | |
| | 15GSE2-175E | | 175E | | | | 15 | | | | |
| 15GSE2-200E | 200E | | 15 | | | | | | | | |
| 15.5 Max. KV | 15NLE-10E | LCN 30E LCN 40E LCN 50E LCN 65E LCN 80ES LCN 100ES | 10E | 20" | 23-7/8" | 60,000 | 14 | | | | |
| | 15NLE-15E | | 15E | | | | 14 | | | | |
| | 15NLE-20E | | 20E | | | | 14 | | | | |
| | 15NLE-25E | | 25E | | | | 14 | | | | |
| | 15NLE-30E | | 30E | | | | 14 | | | | |
| | 15NLE-40E | | 40E | | | | 14 | | | | |
| | 15NLE-50E | | 50E | | | | 14 | | | | |
| | 15NLE-65E | | 65E | | | | 14 | | | | |
| | 15NLE-80E | | 80E | | | | 14 | | | | |
| | 15NLE-100E | | 100E | | | | 14 | | | | |
| | 15NLE2-80E | | LCN 80E | | | | 80E | 20" | 23-7/8" | 60,000 | 15 |
| | 15NLE2-100E | | LCN 100E | | | | 100E | | | | 15 |
| | 15NLE2-125E | LCN 125X | 125E | 15 | | | | | | | |
| | 15NLE2-150E | LCN 150E | 150E | 15 | | | | | | | |
| | 15NLE2-175E | 175E | 175E | 15 | | | | | | | |
| | 15NLE2-200E | LCN 200ED | 200E | 15 | | | | | | | |
| | 15NLE3-150E | — | 150E | 20" | 23-7/8" | 60,000 | 16 | | | | |
| | 15NLE3-175E | | 175E | | | | 16 | | | | |
| 15NLE3-250E | 250E | | 16 | | | | | | | | |
| 15NLE3-300E | 300E | | 16 | | | | | | | | |



| 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" | 24-5/8" | 40,000 | 14 |
| | 20E-1C-25.8 | | 20E | | | | 14 |
| | 25E-1C-25.8 | | 25E | | | | 14 |
| | 30E-1C-25.8 | | 30E | | | | 14 |
| | 40E-1C-25.8 | | 40E | | | | 14 |
| | 50E-1C-25.8 | | 50E | | | | 14 |
| | 65E-2C-25.8 | — | 65E | 21" | 24-5/8" | 40,000 | 15 |
| | 80E-2C-25.8 | | 80E | | | | 15 |
| | 100E-2C-25.8 | | 100E | | | | 15 |

| 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" | 30-5/8" | 20,000 | 14 |
| | 7E-1C-38.0 | | 7E | | | | 14 |
| | 10E-1C-38.0 | | 10E | | | | 14 |
| | 15E-1C-38.0 | | 15E | | | | 14 |
| | 20E-1C-38.0 | | 20E | | | | 14 |
| | 25E-1C-38.0 | | 25E | | | | 14 |
| | 30E-1C-38.0 | | 30E | | | | 14 |
| | 40E-1C-38.0 | | 40E | | | | 14 |
| | 50E-2C-38.0 | | — | | | | 50E |
| | 65E-2C-38.0 | 65E | | 15 | | | |
| | 80E-2C-38.0 | 80E | | 15 | | | |

E Rated Medium Voltage Fuses



Current Limiting

POWR-GARD™ Products

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.

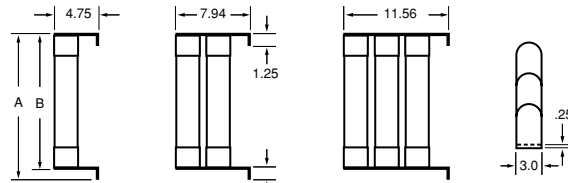


FIGURE 17

FIGURE 18

FIGURE 19

| 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 | | | | 17 | | | | |
| | 20E-1C-5.5 | | 20E | | | | 17 | | | | |
| | 25E-1CL-5.5 | | 25E | | | | 17 | | | | |
| | 30E-1CL-5.5 | | 30E | | | | 17 | | | | |
| | 40E-1CL-5.5 | | 40E | | | | 17 | | | | |
| | 50E-1CL-5.5 | | 50E | | | | 17 | | | | |
| | 65E-1CL-5.5 | | 65E | | | | 17 | | | | |
| | 80E-1CL-5.5 | | 80E | | | | 17 | | | | |
| | 100E-1CL-5.5 | | 100E | | | | 17 | | | | |
| | 125E-1CL-5.5 | | 125E | | | | 17 | | | | |
| | 150E-1CL-5.5 | | 150E | | | | 17 | | | | |
| | 225E-2CL-5.5 | | — | | | | 225E | 17.38" | 16.13" | 80,000 | 18 |
| | 250E-2CL-5.5 | | | | | | 250E | | | | 18 |
| | 300E-2CL-5.5 | | | | | | 300E | | | | 18 |
| | 350E-2CL-5.5 | 350E | | 18 | | | | | | | |
| | 400E-2CL-5.5 | 400E | | 18 | | | | | | | |
| | 450E-2CL-5.5 | 450E | 18 | | | | | | | | |
| 500E-3CL-5.5 | — | 500E | 17.38" | 16.13" | 80,000 | 19 | | | | | |
| 550E-3CL-5.5 | | 550E | | | | 19 | | | | | |
| 600E-3CL-5.5 | | 600E | | | | 19 | | | | | |



| 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 |
| | 20E-1C-8.25 | | 20E | | | | 17 |
| | 25E-1CL-8.25 | | 25E | | | | 17 |
| | 30E-1CL-8.25 | | 30E | | | | 17 |
| | 40E-1CL-8.25 | | 40E | | | | 17 |
| | 50E-1CL-8.25 | | 50E | | | | 17 |
| | 65E-1CL-8.25 | | 65E | | | | 17 |
| | 80E-1CL-8.25 | | 80E | | | | 17 |
| | 100E-1CL-8.25 | | 100E | | | | 17 |
| | 125E-2CL-8.25 | — | 125E | 17.38" | 16.13" | 80,000 | 18 |
| | 150E-2CL-8.25 | | 150E | | | | 18 |
| | 175E-2CL-8.25 | | 175E | | | | 18 |
| | 200E-2CL-8.25 | | 200E | | | | 18 |
| | 225E-2CL-8.25 | | 225E | | | | 18 |
| | 250E-2CL-8.25 | | 250E | | | | 18 |
| | 300E-2CL-8.25 | | 300E | | | | 18 |
| | 350E-3CL-8.25 | | 350E | | | | 19 |

| 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 | | | | 17 |
| | 20E-1CL-15.5 | | 20E | | | | 17 |
| | 25E-1CL-15.5 | | 25E | | | | 17 |
| | 30E-1CL-15.5 | | 30E | | | | 17 |
| | 40E-1CL-15.5 | | 40E | | | | 17 |
| | 50E-1CL-15.5 | | 50E | | | | 17 |
| | 65E-1CL-15.5 | — | 65E | 22.81" | 21.13" | 60,000 | 17 |
| | 80E-1CL-15.5 | | 80E | | | | 17 |
| | 100E-1CL-15.5 | | 100E | | | | 17 |
| | 125E-2CL-15.5 | — | 125 | 22.81" | 19.1" | 60,000 | 18 |
| | 150E-3CL-15.5 | | 150E | | | | 19 |
| | 175E-3CL-15.5 | | 175E | | | | 19 |
| | 200E-3CL-15.5 | | 200E | | | | 19 |
| | 225E-3CL-15.5 | | 225E | | | | 19 |
| 250E-3CL-15.5 | 250E | | 19 | | | | |
| 300E-3CL-15.5 | 300E | | 19 | | | | |