

15.5kV E-Rated

Medium voltage fuses for feeder circuit, switchgear and transformer protection



Description:

- The Bussmann® series of E-Rated, current-limiting, medium voltage fuses are for feeder circuit, switchgear and transformer protection.

Features and benefits:

- Current-limiting E-Rated medium voltage fuses are defined by their melting time-current characteristic that permit their electrical interchangeability with other fuses of the same E Rating.
- E-Rated fuses must have a defined current response time specified by ANSI C37.46. E-Rated fuse of 100 amps and below must melt in 300 seconds at an RMS current within the range of 200% to 240% of the fuse's nameplate current rating. E-Rated fuses greater than 100 amps must melt in 600 seconds at an RMS current within the range of 220% to 264% of the fuse's nameplate current rating.
- E-Rated fuses are physically dimensioned for easy installation in existing hardware.
- Current-limiting fuses provide positive interruption even on low fault currents. The fuse limits the magnitude of electromechanical stresses in the protected apparatus.
- Constructions available in ferrule, bolt-on and clip-lock, and specialty mount fuses for AMPGARD™ motor starters
- Outdoor rating available on select catalog numbers (requires installation in a suitable enclosure).
- Open fuse indicator easily integrates into automation schemes and speeds troubleshooting by providing a positive visual indication of fuse operation.
- 50/60Hz operating frequency for worldwide application.
- Mountings are available in disconnect and non-disconnect versions with porcelain or glass polyester insulators.
- Live parts and end fittings available.

Typical applications:

- Medium voltage transformer primary protection
- Medium voltage feeder circuit protection
- Medium voltage switches
- Medium voltage metal-enclosed switchgear

E-Rated medium voltage ferrule fuses

Catalog symbols:

- General purpose
 - 15CLE-_E-D (long construction, 10-25A)
 - 15CLE-_E (long construction, 15-300A)
 - 15HLE-_E (short construction, 10-250A)
 - 15LHLE-_E (intermediate construction, 65-300A)
- Full range (per ANSI C37.40)
 - MV155F_

Ratings*:

- Volts — 15.5kV
 - Amps — 10 to 300A
 - Interrupting ratings — 31.5 to 63kA RMS Sym.
- * See catalog number tables for voltages, ampacities and interrupting ratings by catalog number.

Agency information:

- E-Rated fuses meet the performance characteristics of ANSI C37.46
- UL® Listed, Guide JEEG, File E240398. See catalog numbers.

Dimensions (see catalog number tables for values)



Recommended fuseclips and holders:

| Amp rating | Fuse mounting type* | Voltage BIL (kV) | Approximate dimensions - in (mm) | | | Catalog number | | Live parts (including end fittings) | End fittings (disconnect only) |
|--|---------------------|------------------|----------------------------------|-------------|-------------|---|---------------------------|-------------------------------------|--------------------------------|
| | | | Diameter | Clip center | Length | Mounting (including live parts, end fittings)** | Glass-polyester insulator | | |
| CLE | | | A | B | C | Porcelain insulator | | | |
| 15E-25E Single barrel | Non-disconnect | 95 | 2 (51) | 20 (508) | 21.5 (546) | 15CLE-PNM-C | 15CLE-GNM-C | CLE-NL-C | — |
| | | 110 | | | | 15CLE-HPNM-C | — | CLE-NL-C | — |
| | Disconnect† | 95 | | | | 15CLE-PDM-C | 15CLE-GDM-C | CLE-DL-C | CLE-DF-C |
| | | 110 | | | | 15CLE-HPDM-C | — | CLE-DL-C | CLE-DF-C |
| 10E-D-25E-D 30E-150E Single barrel | Non-disconnect | 95 | 3 (76) | 20 (508) | 23.9 (607) | 15CLE-PNM-D | 15CLE-GNM-D | CLE-NL-D | — |
| | | 110 | | | | 15CLE-HPM-D | — | CLE-NL-D | — |
| | Disconnect† | 95 | | | | 15CLE-PDM-D | 15CLE-GNM-D | CLE-DL-D | CLE-DF-D |
| | | 110 | | | | 15CLE-HPDM-D | — | CLE-DL-D | CLE-DF-D |
| 175E-300E Double barrel | Non-disconnect | 110 | 3 (76) | 20 (508) | 23.9 (607) | 15CLE-PNM-E | — | CLE-NL-E | — |
| | Disconnect† | 110 | | | | 15CLE-PDM-E | — | CLE-DL-E | CLE-DF-E |
| HLE | | | | | | | | | |
| 10E-125E Single barrel | Non-disconnect | 95 | 3 (76) | 15 (381) | 18.9 (480) | 15HLE-PNM-D | 15HLE-GNM-D | CLE-NL-D | — |
| | Disconnect† | 95 | | | | 15HLE-PDM-D | 15HLE-GDM-D | CLE-DL-D | CLE-DF-D |
| 150E-250E Double barrel | Non-disconnect | 95 | 3 (76) | 15 (381) | 18.9 (480) | 15HLE-PNM-E | — | CLE-NL-E | — |
| | Disconnect† | 95 | | | | 15HLE-PDM-E | — | CLE-DL-E | CLE-DF-E |
| LHLE | | | | | | | | | |
| 65E-150E Single barrel | Non-disconnect | — | 3 (76) | 18 (457) | 20.53 (521) | Not available | Not available | CLE-NL-D | — |
| | Disconnect† | — | | | | Not available | Not available | CLE-DL-D | CLE-DF-D |
| 175E-300E Double barrel | Non-disconnect | — | 3 (76) | 18 (457) | 20.53 (521) | Not available | Not available | CLE-NL-E | — |
| | Disconnect† | — | | | | Not available | Not available | CLE-DL-E | CLE-DF-E |

* See page 10 for illustrations and dimensions

** End fittings supplied only when required.

† Disconnect mountings provide a means for fuse extraction only. Do not use a disconnect mounting for load switching or fuse removal while energized.

CLE, HLE and LHLE type general purpose fuses

| Amp rating | Dimensions - in (mm) | | | Interrupting rating kA (RMS Sym.) | Number of barrels | Installation location | Catalog number |
|-------------------------------|----------------------|------------|----------------|-----------------------------------|-------------------|-----------------------|----------------|
| | Length A | Diameter B | Clip centers C | | | | |
| CLE Long construction | | | | | | | |
| 10 | 23.9 (607) | 3 (76) | 20 (508) | 63 | 1 | Indoor/outdoor | 15CLE-10E-D |
| 15 | 21.5 (546) | 2 (51) | 20 (508) | 31.5 | 1 | Indoor | 15CLE-15E* |
| 15 | 23.9 (607) | 3 (76) | 20 (508) | 63 | 1 | Indoor/outdoor | 15CLE-15E-D |
| 20 | 21.5 (546) | 2 (51) | 20 (508) | 31.5 | 1 | Indoor | 15CLE-20E* |
| 20 | 23.9 (607) | 3 (76) | 20 (508) | 63 | 1 | Indoor/outdoor | 15CLE-20E-D |
| 25 | 21.5 (546) | 2 (51) | 20 (508) | 31.5 | 1 | Indoor | 15CLE-25E* |
| 25 | 23.9 (607) | 3 (76) | 20 (508) | 63 | 1 | Indoor/outdoor | 15CLE-25E-D |
| 30 | 23.9 (607) | 3 (76) | 20 (508) | 63 | 1 | Indoor/outdoor | 15CLE-30E |
| 40 | 23.9 (607) | 3 (76) | 20 (508) | 63 | 1 | Indoor/outdoor | 15CLE-40E† |
| 50 | 23.9 (607) | 3 (76) | 20 (508) | 63 | 1 | Indoor/outdoor | 15CLE-50E† |
| 65 | 23.9 (607) | 3 (76) | 20 (508) | 63 | 1 | Indoor/outdoor | 15CLE-65E† |
| 80 | 23.9 (607) | 3 (76) | 20 (508) | 63 | 1 | Indoor/outdoor | 15CLE-80E† |
| 100 | 23.9 (607) | 3 (76) | 20 (508) | 63 | 1 | Indoor/outdoor | 15CLE-100E† |
| 125 | 23.9 (607) | 3 (76) | 20 (508) | 63 | 1 | Indoor/outdoor | 15CLE-125E† |
| 150 | 23.9 (607) | 3 (76) | 20 (508) | 63 | 1 | Indoor/outdoor | 15CLE-150E† |
| 175 | 23.9 (607) | 3 (76) | 20 (508) | 63 | 2 | Indoor/outdoor | 15CLE-175E† |
| 200 | 23.9 (607) | 3 (76) | 20 (508) | 63 | 2 | Indoor/outdoor | 15CLE-200E† |
| 250 | 23.9 (607) | 3 (76) | 20 (508) | 63 | 2 | Indoor/outdoor | 15CLE-250E† |
| 300 | 23.9 (607) | 3 (76) | 20 (508) | 63 | 2 | Indoor/outdoor | 15CLE-300E† |
| HLE Short construction | | | | | | | |
| 10 | 18.9 (480) | 3 (76) | 15 (381) | 63 | 1 | Indoor/outdoor | 15HLE-10E |
| 15 | 18.9 (480) | 3 (76) | 15 (381) | 63 | 1 | Indoor/outdoor | 15HLE-15E |
| 20 | 18.9 (480) | 3 (76) | 15 (381) | 63 | 1 | Indoor/outdoor | 15HLE-20E |
| 25 | 18.9 (480) | 3 (76) | 15 (381) | 63 | 1 | Indoor/outdoor | 15HLE-25E |
| 30 | 18.9 (480) | 3 (76) | 15 (381) | 63 | 1 | Indoor/outdoor | 15HLE-30E |
| 40 | 18.9 (480) | 3 (76) | 15 (381) | 63 | 1 | Indoor/outdoor | 15HLE-40E† |
| 50 | 18.9 (480) | 3 (76) | 15 (381) | 63 | 1 | Indoor/outdoor | 15HLE-50E† |
| 65 | 18.9 (480) | 3 (76) | 15 (381) | 63 | 1 | Indoor/outdoor | 15HLE-65E† |
| 80 | 18.9 (480) | 3 (76) | 15 (381) | 63 | 1 | Indoor/outdoor | 15HLE-80E† |
| 100 | 18.9 (480) | 3 (76) | 15 (381) | 63 | 1 | Indoor/outdoor | 15HLE-100E† |
| 125 | 18.9 (480) | 3 (76) | 15 (381) | 63 | 1 | Indoor/outdoor | 15HLE-125E† |
| 150 | 18.9 (480) | 3 (76) | 15 (381) | 63 | 2 | Indoor/outdoor | 15HLE-150E† |
| 175 | 18.9 (480) | 3 (76) | 15 (381) | 63 | 2 | Indoor/outdoor | 15HLE-175E† |
| 200 | 18.9 (480) | 3 (76) | 15 (381) | 63 | 2 | Indoor/outdoor | 15HLE-200E† |
| 250 | 18.9 (480) | 3 (76) | 15 (381) | 63 | 2 | Indoor/outdoor | 15HLE-250E† |
| LHLE | | | | | | | |
| 65 | 20.5 (521) | 3 (76) | 18 (457) | 50 | 1 | Indoor/outdoor | 15LHLE-65E |
| 80 | 20.5 (521) | 3 (76) | 18 (457) | 50 | 1 | Indoor/outdoor | 15LHLE-80E |
| 100 | 20.5 (521) | 3 (76) | 18 (457) | 50 | 1 | Indoor/outdoor | 15LHLE-100E |
| 125 | 20.5 (521) | 3 (76) | 18 (457) | 50 | 1 | Indoor/outdoor | 15LHLE-125E |
| 150 | 20.5 (521) | 3 (76) | 18 (457) | 50 | 1 | Indoor/outdoor | 15LHLE-150E |
| 175 | 20.5 (521) | 3 (76) | 18 (457) | 50 | 2 | Indoor/outdoor | 15LHLE-175E |
| 200 | 20.5 (521) | 3 (76) | 18 (457) | 50 | 2 | Indoor/outdoor | 15LHLE-200E |
| 250 | 20.5 (521) | 3 (76) | 18 (457) | 50 | 2 | Indoor/outdoor | 15LHLE-250E |
| 300 | 20.5 (521) | 3 (76) | 18 (457) | 50 | 2 | Indoor/outdoor | 15LHLE-300E |

* Fuses conform to dimensional standards established by Westinghouse.

† UL Listed, Guide JEEG, File E240398.

MV155F_ full range

| Amp rating | Dimensions - in (mm) | | | Interrupting rating kA (RMS Sym.) | Number of barrels | Installation location | Catalog number |
|------------|----------------------|------------|----------------|-----------------------------------|-------------------|-----------------------|----------------|
| | Length A | Diameter B | Clip centers C | | | | |
| 5 | 18.7 (475) | 2 (51) | 15 (381) | 50 | 1 | Indoor | MV155F1CBX5E |
| 7 | 18.7 (475) | 2 (51) | 15 (381) | 50 | 1 | Indoor | MV155F1CBX7E |
| 10 | 18.7 (475) | 2 (51) | 15 (381) | 50 | 1 | Indoor | MV155F1CBX10E |
| 10 | 18.7 (475) | 3 (76) | 15 (381) | 50 | 1 | Indoor | MV155F1DBX10E |
| 15 | 18.7 (475) | 2 (51) | 15 (381) | 50 | 1 | Indoor | MV155F1CBX15E |
| 15 | 18.7 (475) | 3 (76) | 15 (381) | 50 | 1 | Indoor | MV155F1DBX15E |
| 20 | 18.7 (475) | 2 (51) | 15 (381) | 50 | 1 | Indoor | MV155F1CBX20E |
| 20 | 18.7 (475) | 3 (76) | 15 (381) | 50 | 1 | Indoor | MV155F1DBX20E |
| 25 | 18.7 (475) | 2 (51) | 15 (381) | 50 | 1 | Indoor | MV155F1CBX25E |
| 25 | 18.7 (475) | 3 (76) | 15 (381) | 50 | 1 | Indoor | MV155F1DBX25E |
| 30 | 18.7 (475) | 2 (51) | 15 (381) | 50 | 1 | Indoor | MV155F1CBX30E |
| 30 | 18.7 (475) | 3 (76) | 15 (381) | 50 | 1 | Indoor | MV155F1DBX30E |
| 40 | 18.7 (475) | 3 (76) | 15 (381) | 50 | 1 | Indoor | MV155F1DBX40E |
| 50 | 18.7 (475) | 3 (76) | 15 (381) | 50 | 1 | Indoor | MV155F1DBX50E |
| 65 | 18.7 (475) | 3 (76) | 15 (381) | 50 | 1 | Indoor | MV155F1DBX65E |
| 65 | 21.7 (551) | 3 (76) | 18 (457) | 50 | 1 | Indoor | MV155F1DCX65E |
| 80 | 18.7 (475) | 3 (76) | 15 (381) | 50 | 1 | Indoor | MV155F1DBX80E |
| 80 | 21.7 (551) | 3 (76) | 18 (457) | 50 | 1 | Indoor | MV155F1DCX80E |
| 100 | 18.7 (475) | 3 (76) | 15 (381) | 50 | 1 | Indoor | MV155F1DBX100E |
| 100 | 21.7 (551) | 3 (76) | 18 (457) | 50 | 1 | Indoor | MV155F1DCX100E |
| 125 | 18.7 (475) | 3 (76) | 15 (381) | 50 | 2 | Indoor | MV155F2DBX125E |
| 125 | 21.7 (551) | 3 (76) | 18 (457) | 50 | 2 | Indoor | MV155F2DCX125E |
| 150 | 18.7 (475) | 3 (76) | 15 (381) | 50 | 2 | Indoor | MV155F2DBX150E |
| 150 | 21.7 (551) | 3 (76) | 18 (457) | 50 | 2 | Indoor | MV155F2DCX150E |
| 175 | 18.7 (475) | 3 (76) | 15 (381) | 50 | 2 | Indoor | MV155F2DBX175E |
| 175 | 21.7 (551) | 3 (76) | 18 (457) | 50 | 2 | Indoor | MV155F2DCX175E |
| 200 | 18.7 (475) | 3 (76) | 15 (381) | 50 | 2 | Indoor | MV155F2DBX200E |
| 200 | 21.7 (551) | 3 (76) | 18 (457) | 50 | 2 | Indoor | MV155F2DCX200E |

Recommended MV155 fuseclips:

| Description | Fuse diameter - in (mm) | Figure | Clip dimensions - in (mm) | | | | | | | Catalog number |
|------------------------------|-------------------------|--------|---------------------------|-----------|-----------|-----------|------------|-----------|----------|----------------|
| | | | A | B | C | D | E | F | G | |
| Enclosed fuseclip | 2 (51) | 1 | 3.75 (95) | 1.98 (50) | 2.01 (51) | 1.19 (30) | 4.54 (115) | 1.51 (38) | 0.4 (10) | A3354710* |
| Enclosed fuseclip | 3 (76) | 1 | 4.14 (105) | 2.45 (62) | 3.01 (76) | 1.19 (30) | 5.64 (143) | 1.51 (38) | 0.4 (10) | A3354730* |
| Open fuseclip | 3 (76) | 2 | See dimensions drawing | | | | | | | 1A0065 |
| Spring loaded open fuse-clip | 3 (76) | 3 | See dimensions drawing | | | | | | | 9078A67G04 |

*For single barrel applications only. Not sold in pairs.

Figure 1

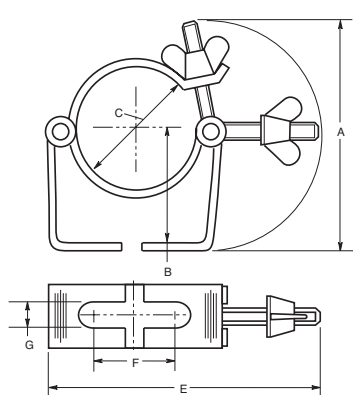
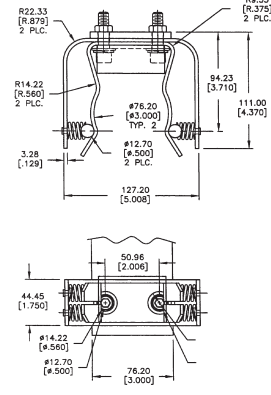


Figure 2



Figure 3



15.5kV Time-current curves – minimum melt for MV155 2 inch diameter fuses



MV155_ (2 inch diameter)

15.5kV time-current curves — total clear for MV155_ 2 inch diameter fuses



MV155_ (2 inch diameter)

15.5kV time-current curves – minimum melt for MV155_ 3 inch diameter fuses



15.5kV time-current curves — total clear for MV155_ 3 inch diameter fuses



MV155_ (3 inch diameter)

15.5kV peak let-through for MV155_ 2 and 3 inch diameter fuses



MV155_ (2 and 3 inch diameter)

15.5kV time-current curves — minimum melt for 15LHLE_ 3 inch diameter fuses



15LHLE_ (3 inch diameter)

Curve TC66703203
April 2011

15.5kV time-current curves – total clear for 15LHLE_ 3 inch diameter fuses



15LHLE_ (3 inch diameter)

Curve TC66703303
April 2011

15.5kV peak let-through for 15LHLE_ 3 inch diameter fuses



15LHLE_ (3 inch diameter)

Curve TC70547404
April 2011

CLE and HLE type mountings - in (mm)

| Catalog number | Hole centers | | Overall length C | Hole Inset D | Hole centers E | Contact height F | Overall height G | BIL kV |
|-------------------------------------|---------------|-----------|---------------------|-----------------|-------------------|---------------------|---------------------|-----------|
| | A | B | | | | | | |
| Disconnect single barrel† | | | | | | | | |
| 15CLE-GDM-C | 21.24 (539.5) | 6 (152.4) | 34 (863.6) | 0.75 (19.0) | 1.75 (44.4) | 7 (177.8) | 12.25 (311.1) | 95 |
| 15CLE-GDM-D | 21.15 (537.2) | 6 (152.4) | 31 (787.4) | 0.62 (15.7) | 1.75 (44.4) | 7 (177.8) | 14.22 (361.2) | 95 |
| 15CLE-PDM-C | 21.24 (539.5) | 6 (152.4) | 34 (863.6) | 0.75 (19.0) | 1.75 (44.4) | 7 (177.8) | 12.25 (311.1) | 95 |
| 15CLE-PDM-D | 21.15 (537.2) | 6 (152.4) | 31 (787.4) | 0.62 (15.7) | 1.75 (44.4) | 7 (177.8) | 14.22 (361.2) | 95 |
| 15CLE-HPDM-C | 21.24 (539.5) | 6 (152.4) | 34 (863.6) | 0.75 (19.0) | 1.75 (44.4) | 8.5 (215.9) | 13.75 (349.2) | 110 |
| 15CLE-HPDM-D | 21.15 (537.2) | 6 (152.4) | 31 (787.4) | 0.62 (15.7) | 1.75 (44.4) | 8.5 (215.9) | 15.72 (399.3) | 110 |
| 15HLE-GDM-D | 16.25 (412.8) | 6 (152.4) | 25 (647.7) | 0.62 (15.7) | 1.75 (44.4) | 7 (177.8) | 14.22 (361.2) | 95 |
| 15HLE-PDM-D | 16.25 (412.8) | 6 (152.4) | 25 (647.7) | 0.62 (15.7) | 1.75 (44.4) | 7 (177.8) | 14.22 (361.2) | 95 |
| Disconnect double barrel† | | | | | | | | |
| 15CLE-PDM-E | 21.15 (537.2) | 6 (152.4) | 31 (787.4) | 0.62 (15.7) | 1.75 (44.4) | 8.5 (215.9) | 19.28 (489.7) | 95 |
| 15HLE-GDM-E | 16.25 (412.8) | 6 (152.4) | 25 (635) | 0.62 (15.7) | 1.75 (44.4) | 7 (177.8) | 17.78 (451.6) | 95 |
| 15HLE-PDM-E | 16.25 (412.8) | 6 (152.4) | 25 (635) | 0.62 (15.7) | 1.75 (44.4) | 7 (177.8) | 17.78 (451.6) | 95 |
| Non-disconnect single barrel | | | | | | | | |
| 15CLE-GNM-C | 21.25 (539.7) | 6 (152.4) | 30.5 (774.7) | 0.75 (19.0) | 1.75 (44.4) | 7 (177.8) | 9.75 (247.6) | 95 |
| 15CLE-PNM-C | 21.25 (539.7) | 6 (152.4) | 30.5 (774.7) | 0.75 (19.0) | 1.75 (44.4) | 7 (177.8) | 9.75 (247.6) | 95 |
| 15CLE-HPNM-C | 21.25 (539.7) | 6 (152.4) | 30.5 (774.7) | 0.75 (19.0) | 1.75 (44.4) | 8.5 (215.9) | 11.25 (285.7) | 110 |
| 15CLE-GNM-D | 21.15 (539.7) | 6 (152.4) | 31 (787.4) | 0.62 (15.7) | 1.75 (44.4) | 7 (177.8) | 11.29 (286.7) | 95 |
| 15CLE-PNM-D | 21.15 (539.7) | 6 (152.4) | 31 (787.4) | 0.62 (15.7) | 1.75 (44.4) | 7 (177.8) | 11.29 (286.7) | 95 |
| 15CLE-HPNM-D | 21.15 (539.7) | 6 (152.4) | 31 (787.4) | 0.62 (15.7) | 1.75 (44.4) | 8.5 (215.9) | 12.79 (286.7) | 110 |
| 15HLE-GNM-D | 16.25 (412.7) | 6 (152.4) | 25 (635) | 0.62 (15.7) | 1.75 (44.4) | 7 (177.8) | 11.29 (286.7) | 95 |
| 15HLE-PNM-D | 16.25 (412.7) | 6 (152.4) | 25 (635) | 0.62 (15.7) | 1.75 (44.4) | 7 (177.8) | 11.29 (286.7) | 95 |
| Non-disconnect double barrel | | | | | | | | |
| 15CLE-PNM-E | 21.15 (539.7) | 6 (152.4) | 31 (787.4) | 0.62 (15.7) | 1.75 (44.4) | 8.5 (215.9) | 14.98 (380.5) | 95 |
| 15HLE-GNM-E | 16.25 (412.7) | 6 (152.4) | 25 (635) | 0.62 (15.7) | 1.75 (44.4) | 7 (177.8) | 14.98 (380.5) | 95 |
| 15HLE-PNM-E | 16.25 (412.7) | 6 (152.4) | 25 (635) | 0.62 (15.7) | 1.75 (44.4) | 7 (177.8) | 14.98 (380.5) | 95 |

CLE and HLE type disconnect mounting†



CLE and HLE type non-disconnect mounting



† Disconnect mountings provide a means for fuse extraction only. Do not use a disconnect mounting for load switching or fuse removal while energized.

E-Rated medium voltage specialty mount fuses

Catalog symbols:

- 15BHLE_E (bolt-on version)
- 15HCL_E (clip-lock version)

Ratings*:

- Volts
 - 15.5kV
- Amps
 - 10 to 300A
- Interrupting ratings
 - 50 to 63kA RMS Sym

* See catalog number tables for voltages, ampacities and interrupting ratings by catalog number.

Agency information:

- E-Rated fuses meet the performance characteristics of ANSI C37.46

Recommended live parts for clip-lock fuses

- Catalog number HCL-NL-1

HCL



Dimensions - in (mm)

BHLE



BHCL, BHLE and HCL Type fuses

| Amp rating | Dimensions - in (mm) | | | Interrupting rating kA (RMS Sym.) | Number of barrels | Installation location | Catalog number |
|------------------------------|----------------------|------------|----------------|-----------------------------------|-------------------|-----------------------|----------------|
| | Length A | Diameter B | Hole centers C | | | | |
| BHCL and BHLE bolt-on | | | | | | | |
| 10 | 22.2 (563) | 3 (76) | 20.9 (531) | 63 | 1 | Indoor/outdoor | 15BHLE-10E |
| 15 | 22.2 (563) | 3 (76) | 20.9 (531) | 63 | 1 | Indoor/outdoor | 15BHLE-15E |
| 20 | 22.2 (563) | 3 (76) | 20.9 (531) | 63 | 1 | Indoor/outdoor | 15BHLE-20E |
| 25 | 22.2 (563) | 3 (76) | 20.9 (531) | 63 | 1 | Indoor/outdoor | 15BHLE-25E |
| 30 | 22.2 (563) | 3 (76) | 20.9 (531) | 63 | 1 | Indoor/outdoor | 15BHLE-30E |
| 40 | 22.2 (563) | 3 (76) | 20.9 (531) | 63 | 1 | Indoor/outdoor | 15BHLE-40E† |
| 50 | 22.2 (563) | 3 (76) | 20.9 (531) | 63 | 1 | Indoor/outdoor | 15BHLE-50E† |
| 65 | 22.2 (563) | 3 (76) | 20.9 (531) | 63 | 1 | Indoor/outdoor | 15BHLE-65E† |
| 80 | 22.2 (563) | 3 (76) | 20.9 (531) | 63 | 1 | Indoor/outdoor | 15BHLE-80E† |
| 100 | 22.2 (563) | 3 (76) | 20.9 (531) | 63 | 1 | Indoor/outdoor | 15BHLE-100E† |
| 125 | 22.2 (563) | 3 (76) | 20.9 (531) | 63 | 1 | Indoor/outdoor | 15BHLE-125E† |
| 150 | 22.2 (563) | 3 (76) | 20.9 (531) | 63 | 2 | Indoor/outdoor | 15BHLE-150E† |
| 175 | 22.2 (563) | 3 (76) | 20.9 (531) | 63 | 2 | Indoor/outdoor | 15BHLE-175E† |
| 200 | 22.2 (563) | 3 (76) | 20.9 (531) | 63 | 2 | Indoor/outdoor | 15BHLE-200E† |
| 250 | 22.2 (563) | 3 (76) | 20.9 (531) | 63 | 2 | Indoor/outdoor | 15BHLE-250E† |
| 300 | 25.1 (637) | 3 (76) | 23.7 (602) | 50 | 2 | Indoor | 15BHCL-300E |
| 400 | 25.1 (637) | 3 (76) | 23.7 (602) | 50 | 3 | Indoor | 15BHCL-400E |
| HCL clip-lock | | | | | | | |
| 10 | 22.8 (579) | 3 (76) | N/A | 63 | 1 | Indoor | 15HCL-10E |
| 15 | 22.8 (579) | 3 (76) | N/A | 63 | 1 | Indoor | 15HCL-15E |
| 20 | 22.8 (579) | 3 (76) | N/A | 63 | 1 | Indoor | 15HCL-20E |
| 25 | 22.8 (579) | 3 (76) | N/A | 63 | 1 | Indoor | 15HCL-25E |
| 30 | 22.8 (579) | 3 (76) | N/A | 63 | 1 | Indoor | 15HCL-30E |
| 40 | 22.8 (579) | 3 (76) | N/A | 63 | 1 | Indoor | 15HCL-40E† |
| 50 | 22.8 (579) | 3 (76) | N/A | 63 | 1 | Indoor | 15HCL-50E† |
| 65 | 22.8 (579) | 3 (76) | N/A | 50 | 1 | Indoor | 15HCL-65E† |
| 80 | 22.8 (579) | 3 (76) | N/A | 50 | 1 | Indoor | 15HCL-80E† |
| 100 | 22.8 (579) | 3 (76) | N/A | 50 | 1 | Indoor | 15HCL-100E† |
| 125 | 22.8 (579) | 3 (76) | N/A | 50 | 1 | Indoor | 15HCL-125E† |
| 150 | 22.8 (579) | 3 (76) | N/A | 50 | 2 | Indoor | 15HCL-150E† |
| 200 | 22.8 (579) | 3 (76) | N/A | 50 | 2 | Indoor | 15HCL-200E† |
| 250 | 22.8 (579) | 3 (76) | N/A | 50 | 2 | Indoor | 15HCL-250E† |
| 300 | 22.8 (579) | 3 (76) | N/A | 50 | 2 | Indoor | 15HCL-300E† |

† UL Listed, Guide JEEG, File E240398.

15.5kV time-current curves — minimum melt for 15CLE-_E and 15CLE_-_D



15CLE-_

| | | |
|--------------------|--------------------|--------------------|
| Curve 70548501 | Curve 70546801 | Curve 70547001 |
| April 16, 1999 | April 1999 | April 1999 |
| Reference # 563532 | Reference # 705468 | Reference # 705470 |

15.5kV time-current curves — total clear for 15CLE-_E and 15CLE_-_D



15CLE-_

Current in amperes

Curve 70548601

April 16, 1999

Reference # 563533

Curve 70546901

April 1999

Reference # 705469

Curve 70547101

April 1999

Reference # 705471

15.5kV peak let-through for 15CLE-_E and 15CLE-_D



15CLE-_

Curve 70548802
 September 1999
 Reference # 705488

Curve 70547501
 September 1999
 Reference # 705475

15.5kV time-current curves – minimum melt for 15HLE-_E and 15BHLE-_E

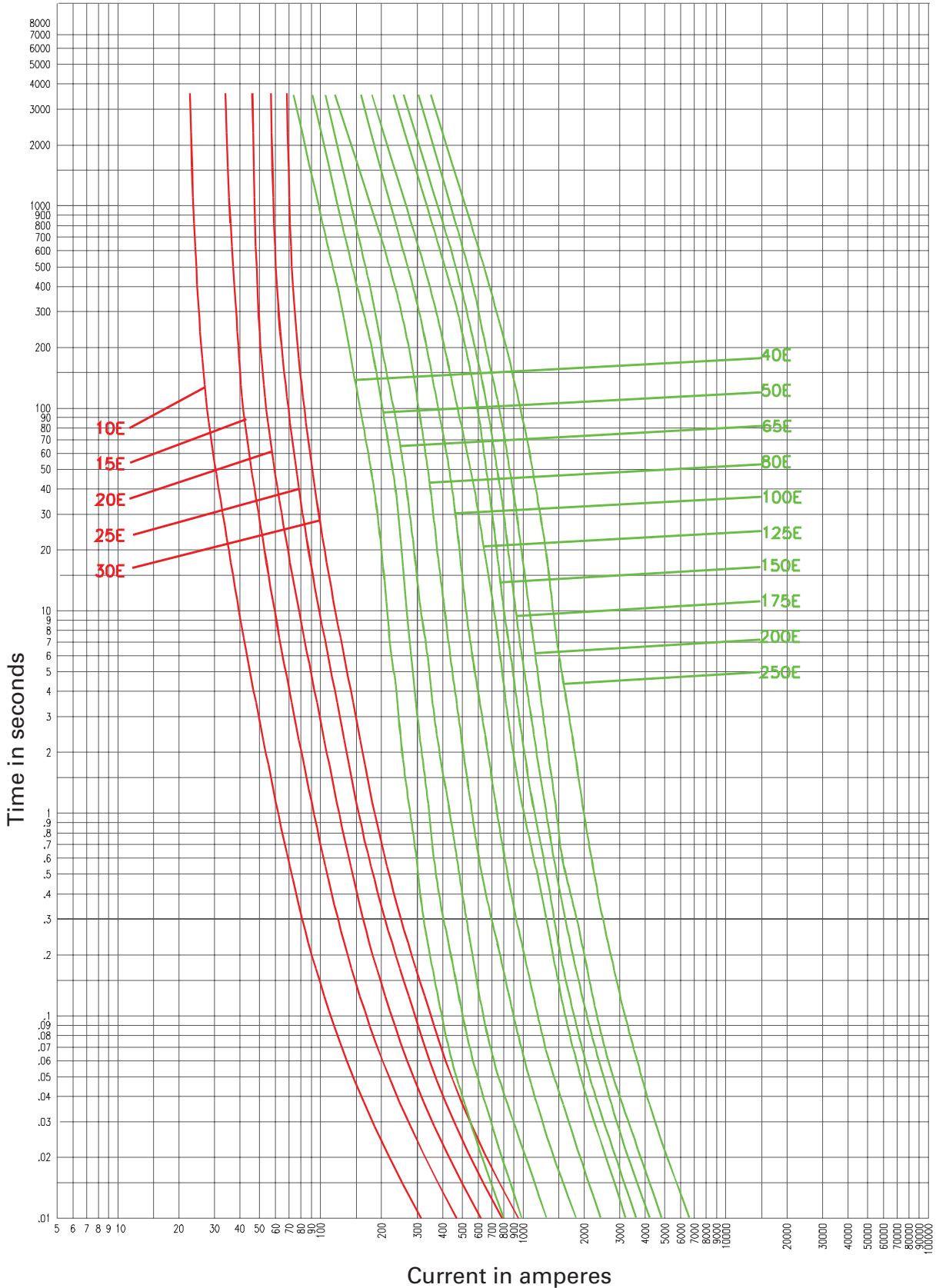


15HLE-_, 15BHLE-_

Curve 70548507
April 16, 1999
Reference # 563532

Curve 70546601
April 1999
Reference # 705466

15.5kV time-current curves — total clear for 15HLE-_E and 15BHLE-_E



15HLE-_, 15BHLE-_

Curve 70548607 Curve 70546701
 April 16, 1999 April 1999
 Reference # 563533 Reference # 705467

15.5kV peak let-through for 15HLE-_E and 15BHLE-_E



15HLE-_, 15BHLE-_

Curve 70548805 Curve 70547401
September 1999 September 1999
Reference # 705488 Reference # 705474

15.5kV time-current curves – minimum melt for 15HCL_E



15HCL_

Curve 70548503 January 2001 Curve 66703201 January 2001

15.5kV time-current curves — total clear for 15HCL-_E



15HCL-_

Curve 70548603 Curve 66703301
January 2001 January 2001

15.5kV peak let-through for 15HCL_E



15HCL_

Curve 70548803 January 2001
 Curve 70547402 January 2001

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