



Contents

<i>Description</i>	<i>Page</i>
Introduction	5-2
Current-limiting fuses	
E-Rated – 2.75kV - 15.5kV	5-3
R-Rated – 2.4kV - 7.2kV	5-20
PT E-Rated – 2.475kV - 38kV	5-24
PT fast-acting	5-30
British IEC	5-31
DIN IEC	5-32
Expulsion fuse links	5-33
EEI-NEMA Type K and T – Type H and N	5-35

RED indicates NEW information

Medium voltage fuses

Worldwide circuit protection solutions

Eaton is a world-leading supplier of Bussmann series medium voltage fuses. Each product is backed by an efficient worldwide distribution network with unrivaled service and technical support. Eaton circuit protection solutions comply with major international standards: ANSI, BS, DIN, IEC and UL.

Fuse types

Medium voltage fuses generally fit into two categories – expulsion fuses and current limiting fuses. The definitions per ANSI C37.40 are:

Expulsion fuse: “A vented fuse in which the expulsion effect of the gases produced by internal arcing, either alone or aided by other mechanisms results in current interruption.” Expulsion fuses will limit the duration of an overcurrent event, but they will not limit the magnitude of fault current.

Current-limiting fuse: “A fuse unit that, when in its current-responsive element is melted by a current within the fuse’s specified current-limiting range, abruptly introduces a high resistance to reduce current magnitude and duration, resulting in subsequent current interruption.” A current limiting fuse will reduce the magnitude a fault current as well as limit the duration of the overcurrent event when operating in its current limiting range. Eaton offers a broad range of current limiting fuses for protection of feeders, transformers and motor circuits designed to ANSI, BS, DIN and IEC standards.

Medium voltage current-limiting fuses

Current limiting fuses are classified into three categories:

1. Full range – defined by ANSI C37.40 as “a fuse capable of interrupting all currents from the maximum rated interrupting current down to the minimum continuous current that causes the melting of the fusible element(s), when the fuse is applied at the maximum ambient temperature specified by the manufacturer.” It is able to interrupt any current that will melt its element.

2. General purpose – defined by ANSI C37.40 as “a fuse capable of interrupting all currents from the maximum rated interrupting current down to the current that causes melting of the fusible element(s) in one hour.” Not all currents fall within this range. It is possible for the fuse to be exposed to an overcurrent lower than the value given by the one hour criteria. In that case, a different overcurrent protection device would be required to interrupt the overcurrent.
3. Back-up – defined by ANSI C37.40 as “a fuse capable of interrupting all currents from the maximum interrupting rating current down to the minimum interrupting current.” The minimum interrupting current is the lowest current that the fuse will be able to clear properly. This creates a need to place a low current interrupting device, such as motor overloads, in series with the back-up rated fuse.

E- and R-Rated fuses

In North America, current limiting fuses typically fall into the category of E-Rated fuses and R-Rated fuses. Eaton also offers a wide range of current limiting fuses designed to BS, DIN and IEC standards.

E-Rated fuses are used to protect feeder circuits, power transformers and potential transformers. E-Rated fuses have defined current response times specified by ANSI C37.46. E-Rated fuses 100A and below must melt in 300sec at an rms current within the range of 200% to 240% of the continuous current rating. E-Rated fuses above 100A must melt in 600sec at an rms current within the range of 240% to 264% of the continuous current rating of the fuse. Eaton offers a wide variety of full range and general purpose E-Rated fuses from 2.4kV up to 38kV.

R-Rated fuses are back-up fuses that provide short-circuit protection for motor circuits. They are applied with MV motor starters which provide the overload protection for the circuit. R-Rated fuses also have defined current response times specified by ANSI C37.46. R-Rated fuses will melt in a range of 15 – 35sec at a current equal to 100 times the “R” rating. Eaton offers 2.4kV, 5.08kV, 7.2kV and 8.3kV R-Rated fuses for motor circuit protection.

2.75kV E-Rated fuses



Description:

- E-Rated, current-limiting, medium voltage fuses for feeder circuit, switchgear and transformer protection.

Catalog symbols:

- 2CLE-_E
- JCX-_E

Ratings:

- Volts — 2.75kV
- Amps — 10 to 450A
- Interrupting ratings
 - 50kA RMS Sym (2CLE-_E)
 - 40kA RMS Sym (JCX-_E)

Agency information:

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

Recommended fuse holders:

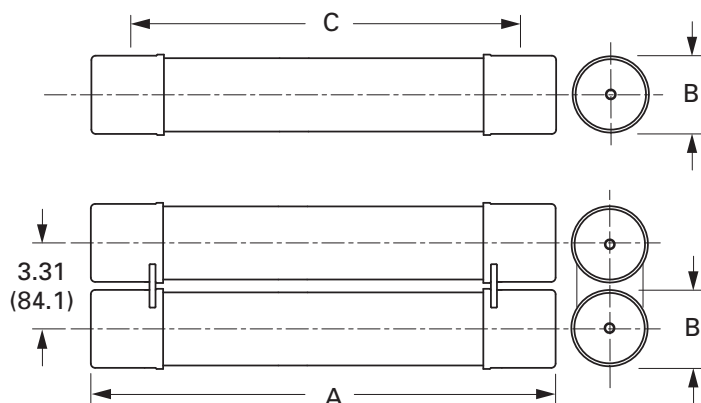
CLE

Amp rating	Fuse mounting type	Voltage BIL (kV)	Approximate dimensions - in (mm)		Catalog number				
			Diameter A	Clip center B	Length C	Mounting (including live parts, end fittings)*		Live parts (including end fittings)	End fittings (disconnect only)
						Porcelain insulator	Glass-polyester insulator		
CLE									
15E–25E	Non-disconnect	60	2 (51)	8.1 (206)	9.5 (241)	2CLE-PNM-C	2CLE-GNM-C	CLE-NL-C	—
Single barrel	Disconnect**	60				2CLE-PDM-C	2CLE-GDM-C	CLE-DL-C	CLE-DF-C
10E–225E	Non-disconnect	60	3 (76)	7 (178)	10.9 (277)	2CLE-PNM-D	2CLE-GNM-D	CLE-NL-D	—
Single barrel	Disconnect**	60				2CLE-PDM-D	2CLE-GDM-D	CLE-DL-D	CLE-DF-D
250E–300E	Non-disconnect	60	3 (76)	7 (178)	10.9 (277)	2CLE-PNM-E	2CLE-GNM-E	CLE-NL-E	—
350X-450X	Disconnect**	60				2CLE-PDM-E	5CLE-GDM-E	CLE-DL-E	CLE-DF-E

* 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.

Dimensions (see catalog number tables for values)



Recommended fuseclips:

Description	Fuse diameter - in (mm)	Catalog number
Enclosed fuseclip	2 (51)	A3354710*
Enclosed fuseclip	3 (76)	A3354730*
Open fuseclip	3 (76)	1A0065
Spring loaded open fuseclip	3 (76)	9078A67G04

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

5

Medium voltage fuses

Current-limiting

CLE and JCX

Amp rating	Dimensions - in (mm)			Interrupting rating kA (RMS Sym.)	Number of barrels	Installation location	Catalog number
	Length A	Diameter B	Clip centers C				
1	9.2 (234)	2 (51)	7 (178)	40	1	Indoor/outdoor	JCX-1E
2	9.2 (234)	2 (51)	7 (178)	40	1	Indoor/outdoor	JCX-2E
3	9.2 (234)	2 (51)	7 (178)	40	1	Indoor/outdoor	JCX-3E
5	9.2 (234)	2 (51)	7 (178)	40	1	Indoor/outdoor	JCX-5E
7	9.2 (234)	2 (51)	7 (178)	40	1	Indoor/outdoor	JCX-7E
10	9.2 (234)	2 (51)	7 (178)	40	1	Indoor/outdoor	JCX-10E
10	10.9 (277)	3 (76)	7 (178)	50	1	Indoor	2CLE-10E
15	9.5 (241)	2 (51)	8.1 (206)	50	1	Indoor	2CLE-15E
20	9.5 (241)	2 (51)	8.1 (206)	50	1	Indoor	2CLE-20E
25	9.5 (241)	2 (51)	8.1 (206)	50	1	Indoor	2CLE-25E
30	10.9 (277)	3 (76)	7 (178)	50	1	Indoor	2CLE-30E
40	10.9 (277)	3 (76)	7 (178)	50	1	Indoor	2CLE-40E
50	10.9 (277)	3 (76)	7 (178)	50	1	Indoor	2CLE-50E
65	10.9 (277)	3 (76)	7 (178)	50	1	Indoor	2CLE-65E
80	10.9 (277)	3 (76)	7 (178)	50	1	Indoor	2CLE-80E
100	10.9 (277)	3 (76)	7 (178)	50	1	Indoor	2CLE-100E
125	10.9 (277)	3 (76)	7 (178)	50	1	Indoor	2CLE-125E
150	10.9 (277)	3 (76)	7 (178)	50	1	Indoor	2CLE-150E
200	10.9 (277)	3 (76)	7 (178)	50	1	Indoor	2CLE-200E
225	10.9 (277)	3 (76)	7 (178)	50	1	Indoor	2CLE-225E
250*	10.9 (277)	3 (76)	7 (178)	50	2	Indoor	2CLE-250E
300*	10.9 (277)	3 (76)	7 (178)	50	2	Indoor	2CLE-300E
350**	10.9 (277)	3 (76)	7 (178)	50	2	Indoor	2CLE-350X
400**	10.9 (277)	3 (76)	7 (178)	50	2	Indoor	2CLE-400X
450**	10.9 (277)	3 (76)	7 (178)	50	2	Indoor	2CLE-450X

* 250A and 300A ratings may also be applied at 280 and 325 amps respectively, but fuses will no longer be compliant with ANSI E Rating criteria.

** Does not comply with ANSI C37.46 for "E" rating.

5.5kV E-Rated fuses



Description:

- E-Rated, current-limiting, medium voltage fuses for feeder circuit, switchgear and transformer protection.

Catalog symbols:

- General purpose:
 - 5CLE_E-D (10-25A)
 - 5CLE_E (10-1350A)
 - 5HLE_E (10-450A)
 - JCY_E (1-25A)
- Full range (per ANSI C37.40)
 - MV055F_ (10-450A)

Ratings*:

- Volts — 5.5kV
- Amps — 1 to 1350A
- Interrupting ratings — 40 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.

Recommended fuseclips and holders:

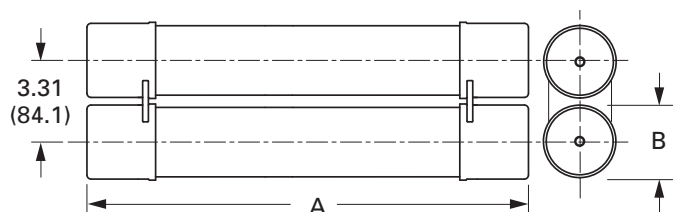
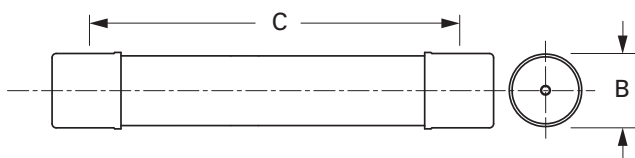
CLE and HLE

Amp rating	Fuse mounting type	Voltage BIL (kV)	Approximate dimensions - in (mm)		Length C	Catalog number			
						Mounting (including live parts, end fittings)*		Live parts (including end fittings)	End fittings (disconnect only)
						Porcelain insulator	Glass-polyester insulator		
CLE									
10E-D-25E-D	Non-disconnect	60	3.0 (76.2)	14.0 (355.6)	17.9 (454.7)	5CLE-PNM-D	5CLE-GNM-D	CLE-NL-D	—
30E-250E	Disconnect**	60				5CLE-PDM-D	5CLE-GDM-D	CLE-DL-D	CLE-DF-D
15E-25E	Non-disconnect	60	2.0 (50.8)	11.5 (292.1)	12.9 (327.7)	5CLE-PNM-C	5CLE-GNM-C	CLE-NL-C	—
	Disconnect**	60				5CLE-PDM-C	5CLE-GDM-C	CLE-DL-C	CLE-DF-C
300E-450E	Non-disconnect	60	3.0 (76.2)	14.0 (355.6)	17.9 (454.7)	5CLE-PNM-E	5CLE-GNM-E	CLE-NL-E	—
	Disconnect**	60				5CLE-PDM-E	5CLE-GDM-E	CLE-DL-E	CLE-DF-E
600E and 750E	Consult factory	60	4.0 (101.6)	N/A	N/A	—	—	—	—
1100E and 1350E	Consult factory	—	4.0 (101.6)	N/A	N/A	—	—	—	—
HLE									
10E-D-250E	Non-disconnect	60	3.0 (76.2)	12.0 (304.8)	15.9 (403.9)	5HLE-PNM-D	5HLE-GNM-D	CLE-NL-D	—
	Disconnect	60				5HLE-PDM-D	5HLE-GDM-D	CLE-DL-D	CLE-DF-D
300E-450E	Non-disconnect	60	3.0 (76.2)	12.0 (304.8)	15.9 (403.9)	5HLE-PNM-E	5HLE-GNM-E	CLE-NL-E	—
	Disconnect	60				5HLE-PDM-E	5HLE-GDM-E	CLE-DL-E	CLE-DF-E

* 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.

Dimensions (see catalog number tables for values)



Data Sheet: 10351

5

Medium voltage fuses

Current-limiting

CLE, HLE and JCY General purpose

Amp rating	Dimensions - in (mm)			Interrupting rating kA (RMS Sym.)	Number of barrels	Installation location	Catalog number
	Length A	Diameter B	Clip centers C				
1	11.2 (284)	2 (51)	9 (229)	40	1	Indoor/outdoor	JCY-1E
2	11.2 (284)	2 (51)	9 (229)	40	1	Indoor/outdoor	JCY-2E
3	11.2 (284)	2 (51)	9 (229)	40	1	Indoor/outdoor	JCY-3E
5	11.2 (284)	2 (51)	9 (229)	40	1	Indoor/outdoor	JCY-5E
7	11.2 (284)	2 (51)	9 (229)	40	1	Indoor/outdoor	JCY-7E
10	11.2 (284)	2 (51)	9 (229)	40	1	Indoor/outdoor	JCY-10E
10	17.9 (455)	3 (76)	14 (356)	63	1	Indoor/outdoor	5CLE-10E-D
10	15.9 (404)	3 (76)	12 (305)	63	1	Indoor/outdoor	5HLE-10E
15	11.2 (284)	2 (51)	9 (229)	40	1	Indoor/outdoor	JCY-15E
15	12.9 (328)	2 (51)	11.5 (292)	50	1	Indoor	5CLE-15E*
15	17.9 (455)	3 (76)	14 (356)	63	1	Indoor/outdoor	5CLE-15E-D
15	15.9 (404)	3 (76)	12 (305)	63	1	Indoor/outdoor	5HLE-15E
20	11.2 (284)	2 (51)	9 (229)	40	1	Indoor/outdoor	JCY-20E
20	12.9 (328)	2 (51)	11.5 (292)	50	1	Indoor	5CLE-20E*
20	17.9 (455)	3 (76)	14 (356)	63	1	Indoor/outdoor	5CLE-20E-D
20	15.9 (404)	3 (76)	12 (305)	63	1	Indoor/outdoor	5HLE-20E
25	11.2 (284)	2 (51)	9 (229)	40	1	Indoor/outdoor	JCY-25E
25	12.9 (328)	2 (51)	11.5 (292)	50	1	Indoor	5CLE-25E*
25	17.9 (455)	3 (76)	14 (356)	63	1	Indoor/outdoor	5CLE-25E-D
25	15.9 (404)	3 (76)	12 (305)	63	1	Indoor/outdoor	5HLE-25E
30	17.9 (455)	3 (76)	14 (356)	63	1	Indoor/outdoor	5CLE-30E
30	15.9 (404)	3 (76)	12 (305)	63	1	Indoor/outdoor	5HLE-30E
40	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	5CLE-40E†
40	15.9 (404)	3 (76)	12 (305)	63	1	Indoor/outdoor	5HLE-40E†
50	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	5CLE-50E†
50	15.9 (404)	3 (76)	12 (305)	63	1	Indoor/outdoor	5HLE-50E†
65	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	5CLE-65E†
65	15.9 (404)	3 (76)	12 (305)	63	1	Indoor/outdoor	5HLE-65E†
80	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	5CLE-80E†
80	15.9 (404)	3 (76)	12 (305)	63	1	Indoor/outdoor	5HLE-80E†
100	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	5CLE-100E†
100	15.9 (404)	3 (76)	12 (305)	63	1	Indoor/outdoor	5HLE-100E†
125	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	5CLE-125E†
125	15.9 (404)	3 (76)	12 (305)	63	1	Indoor/outdoor	5HLE-125E†
150	17.9 (455)	3 (76)	14 (356)	63	1	Indoor/outdoor	5CLE-150E†
150	15.9 (404)	3 (76)	12 (305)	63	1	Indoor/outdoor	5HLE-150E†
175	17.9 (455)	3 (76)	14 (356)	63	1	Indoor/outdoor	5CLE-175E†
175	15.9 (404)	3 (76)	12 (305)	63	1	Indoor/outdoor	5HLE-175E†
200	17.9 (455)	3 (76)	14 (356)	63	1	Indoor/outdoor	5CLE-200E†
200	15.9 (404)	3 (76)	12 (305)	63	1	Indoor/outdoor	5HLE-200E†
250	17.9 (455)	3 (76)	14 (356)	63	1	Indoor/outdoor	5CLE-250E†
250	15.9 (404)	3 (76)	12 (305)	63	1	Indoor/outdoor	5HLE-250E†
300	17.9 (455)	3 (76)	14 (356)	63	2	Indoor/outdoor	5CLE-300E†
300	15.9 (404)	3 (76)	12 (305)	63	2	Indoor/outdoor	5HLE-300E†
350	17.9 (455)	3 (76)	14 (356)	63	2	Indoor/outdoor	5CLE-350E†
350	15.9 (404)	3 (76)	12 (305)	63	2	Indoor/outdoor	5HLE-350E†
400	17.9 (455)	3 (76)	14 (356)	63	2	Indoor/outdoor	5CLE-400E†
400	15.9 (404)	3 (76)	12 (305)	63	2	Indoor/outdoor	5HLE-400E†
450	17.9 (455)	3 (76)	14 (356)	63	2	Indoor/outdoor	5CLE-450E†
450	15.9 (404)	3 (76)	12 (305)	63	2	Indoor/outdoor	5HLE-450E†

* Fuses conform to dimensional standards established by Westinghouse.

† UL Listed, Guide JEEG, File E240398.

MV055 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	15.7 (399)	2 (51)	12 (305)	50	1	Indoor	MV055F1CAX5E
7	15.7 (399)	2 (51)	12 (305)	50	1	Indoor	MV055F1CAX7E
10	15.7 (399)	2 (51)	12 (305)	50	1	Indoor	MV055F1CAX10E
10	15.7 (399)	3 (76)	12 (305)	50	1	Indoor	MV055F1DAX10E
15	15.7 (399)	2 (51)	12 (305)	50	1	Indoor	MV055F1CAX15E
15	15.7 (399)	3 (76)	12 (305)	50	1	Indoor	MV055F1DAX15E
20	15.7 (399)	2 (51)	12 (305)	50	1	Indoor	MV055F1CAX20E
20	15.7 (399)	3 (76)	12 (305)	50	1	Indoor	MV055F1DAX20E
25	15.7 (399)	2 (51)	12 (305)	50	1	Indoor	MV055F1CAX25E
25	15.7 (399)	3 (76)	12 (305)	50	1	Indoor	MV055F1DAX25E
30	15.7 (399)	2 (51)	12 (305)	50	1	Indoor	MV055F1CAX30E
30	15.7 (399)	3 (76)	12 (305)	50	1	Indoor	MV055F1DAX30E
40	15.7 (399)	2 (51)	12 (305)	50	1	Indoor	MV055F1CAX40E
40	15.7 (399)	3 (76)	12 (305)	50	1	Indoor	MV055F1DAX40E
50	15.7 (399)	2 (51)	12 (305)	50	1	Indoor	MV055F1CAX50E
50	15.7 (399)	3 (76)	12 (305)	50	1	Indoor	MV055F1DAX50E
65	15.7 (399)	2 (51)	12 (305)	50	1	Indoor	MV055F1CAX65E
65	15.7 (399)	3 (76)	12 (305)	50	1	Indoor	MV055F1DAX65E
80	15.7 (399)	3 (76)	12 (305)	50	1	Indoor	MV055F1DAX80E
100	15.7 (399)	3 (76)	12 (305)	50	1	Indoor	MV055F1DAX100E
125	15.7 (399)	3 (76)	12 (305)	50	1	Indoor	MV055F1DAX125E
150	15.7 (399)	3 (76)	12 (305)	50	1	Indoor	MV055F1DAX150E
175	15.7 (399)	3 (76)	12 (305)	50	1	Indoor	MV055F1DAX175E
200	15.7 (399)	3 (76)	12 (305)	50	1	Indoor	MV055F1DAX200E
250	15.7 (399)	3 (76)	12 (305)	50	2	Indoor	MV055F2DAX250E
300	15.7 (399)	3 (76)	12 (305)	50	2	Indoor	MV055F2DAX300E
350	15.7 (399)	3 (76)	12 (305)	50	2	Indoor	MV055F2DAX350E
400	15.7 (399)	3 (76)	12 (305)	50	2	Indoor	MV055F2DAX400E
450	15.7 (399)	3 (76)	12 (305)	50	2	Indoor	MV055F2DAX450E

Recommended MV055 fuseclips:

Description	Fuse diameter - in (mm)	Catalog number
Enclosed fuseclip	2 (51)	A3354710*
Enclosed fuseclip	3 (76)	A3354730*
Open fuseclip	3 (76)	1A0065
Spring loaded open fuseclip	3 (76)	9078A67G04

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

5

Medium voltage fuses

Current-limiting

E-Rated medium voltage specialty mount fuses

Catalog symbols:

- _AHLE-_E (for Eaton AMPGARD motor starting assemblies)
- _BHLE-_E/_BHCL-_E (bolt-on version)
- _HCL-_E (clip-lock version)
- _CLE-_E (four barrel bolt-on version)

Ratings*:

- Volts — 5.5kV
- Amps — 10 to 900A
- Interrupting ratings — 31 to 63kA RMS Sym

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

Agency information:

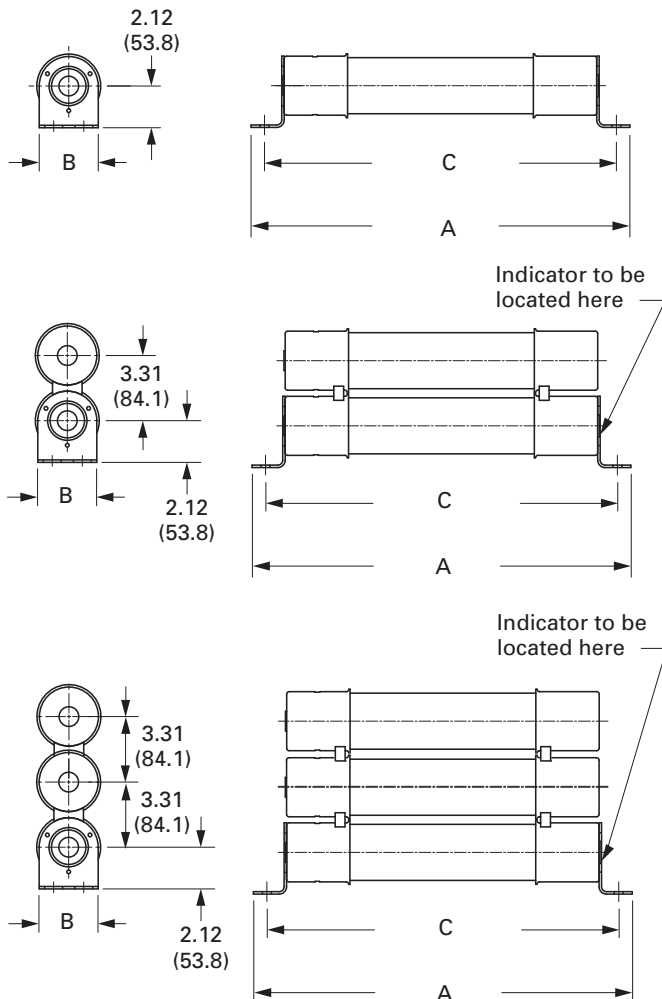
- E-Rated fuses meet the performance characteristics of ANSI C37.46

Recommended live parts for clip-lock fuses

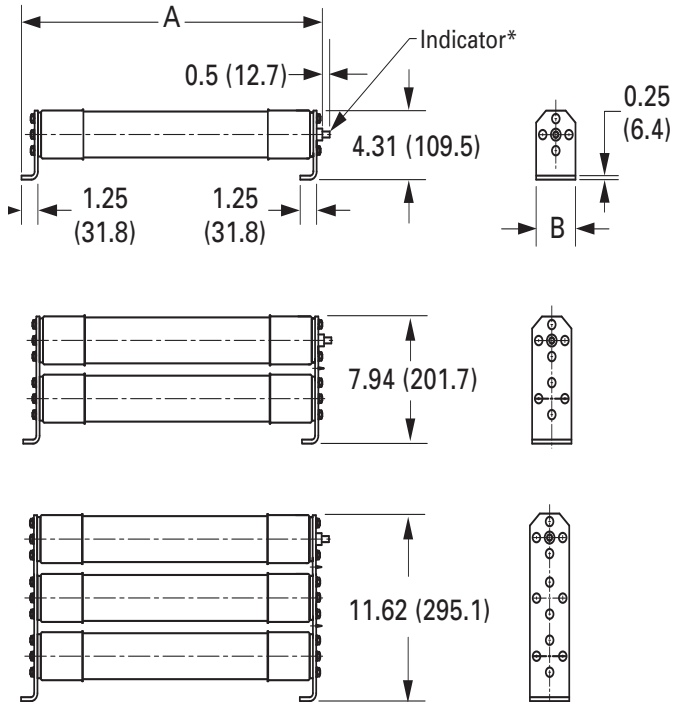
- Catalog number HCL-NL-1

Dimensions - in (mm)

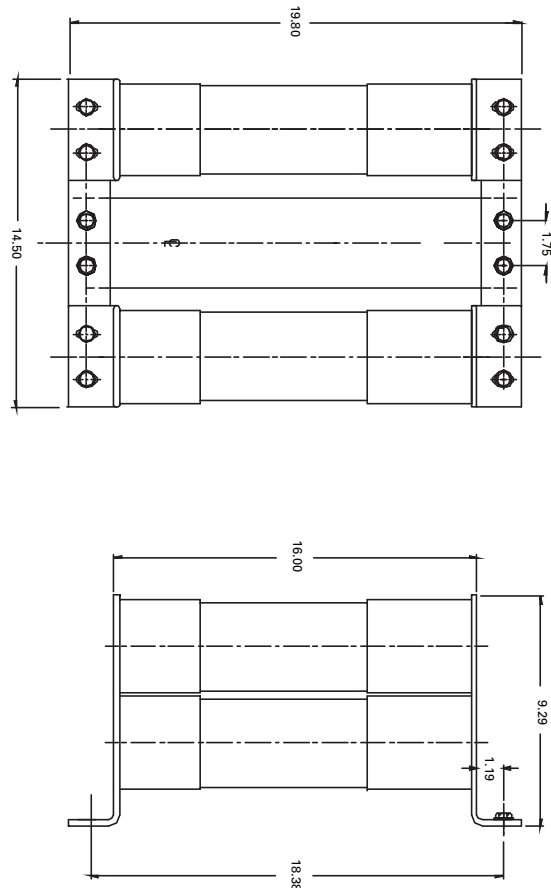
BHLE/CLE bolt-on



HCL clip-lock



CLE four barrel bolt-on



AHLE for Eaton AMPGARD motor starting assemblies

Amp rating	Interrupting rating kA (RMS Sym.)	Number of barrels	Catalog number
10	63	1	5AHLE-10E
15	63	1	5AHLE-15E
20	63	1	5AHLE-20E
25	63	1	5AHLE-25E
30	63	1	5AHLE-30E
40	63	1	5AHLE-40E†
50	63	1	5AHLE-50E†
65	63	1	5AHLE-65E†
80	63	1	5AHLE-80E†
100	63	1	5AHLE-100E†
125	63	1	5AHLE-125E†
150	63	1	5AHLE-150E†
175	63	1	5AHLE-175E†
200	63	1	5AHLE-200E†
250	63	1	5AHLE-250E†
300	63	2	5AHLE-300E†
350	63	2	5AHLE-350E†
400	63	2	5AHLE-400E†
450	63	2	5AHLE-450E†

† UL Listed, Guide JEEG, File E240398.

HCL clip-lock versions

Amp Rating	Dimensions - in (mm)			Interrupting rating kA (RMS Sym.)	Number of barrels	Installation location	Catalog number
	Overall length A	Diameter B	Hole centers C				
10	16.8 (427)	3 (76)	N/A	63	1	Indoor	5HCL-10E
15	16.8 (427)	3 (76)	N/A	63	1	Indoor	5HCL-15E
20	16.8 (427)	3 (76)	N/A	63	1	Indoor	5HCL-20E
25	16.8 (427)	3 (76)	N/A	63	1	Indoor	5HCL-25E
30	16.8 (427)	3 (76)	N/A	63	1	Indoor	5HCL-30E
40	16.8 (427)	3 (76)	N/A	63	1	Indoor	5HCL-40E†
50	16.8 (427)	3 (76)	N/A	63	1	Indoor	5HCL-50E†
65	16.8 (427)	3 (76)	N/A	63	1	Indoor	5HCL-65E†
80	16.8 (427)	3 (76)	N/A	63	1	Indoor	5HCL-80E†
100	16.8 (427)	3 (76)	N/A	63	1	Indoor	5HCL-100E†
125	16.8 (427)	3 (76)	N/A	63	1	Indoor	5HCL-125E†
150	16.8 (427)	3 (76)	N/A	63	1	Indoor	5HCL-150E†
175	16.8 (427)	3 (76)	N/A	63	1	Indoor	5HCL-175E
200	22.8 (579)	3 (76)	N/A	63	1	Indoor	5HCL-200E†
250	22.8 (579)	3 (76)	N/A	63	1	Indoor	5HCL-250E†
300	22.8 (579)	3 (76)	N/A	63	2	Indoor	5HCL-300E†
400	22.8 (579)	3 (76)	N/A	63	2	Indoor	5HCL-400E†
450	22.8 (579)	3 (76)	N/A	63	2	Indoor	5HCL-450E†
500	22.8 (579)	3 (76)	N/A	63	2	Indoor	5HCL-500E
600	22.8 (579)	3 (76)	N/A	63	2	Indoor	5HCL-600E
750	22.8 (579)	3 (76)	N/A	63	3	Indoor	5HCL-750E
900	22.8 (579)	3 (76)	N/A	63	3	Indoor	5HCL-900E

† UL Listed, Guide JEEG, File E240398.

Medium voltage fuses

5

Medium voltage fuses

Current-limiting

CLE, BHLE and BHCL bolt-on versions

Amp rating	Dimensions - in (mm)			Interrupting rating kA (RMS Sym.)	Number of barrels	Installation location	Catalog number
	Overall length A	Diameter B	Hole centers C				
10	19.2 (488)	3 (76)	17.9 (455)	63	1	Indoor	5BHLE-10E
15	19.2 (488)	3 (76)	17.9 (455)	63	1	Indoor	5BHLE-15E
20	19.2 (488)	3 (76)	17.9 (455)	63	1	Indoor	5BHLE-20E
25	19.2 (488)	3 (76)	17.9 (455)	63	1	Indoor	5BHLE-25E
30	19.2 (488)	3 (76)	17.9 (455)	63	1	Indoor	5BHLE-30E
40	19.2 (488)	3 (76)	17.9 (455)	63	1	Indoor	5BHLE-40E†
50	19.2 (488)	3 (76)	17.9 (455)	63	1	Indoor	5BHLE-50E†
65	19.2 (488)	3 (76)	17.9 (455)	63	1	Indoor	5BHLE-65E†
80	19.2 (488)	3 (76)	17.9 (455)	63	1	Indoor	5BHLE-80E†
100	19.2 (488)	3 (76)	17.9 (455)	63	1	Indoor	5BHLE-100E†
125	19.2 (488)	3 (76)	17.9 (455)	63	1	Indoor	5BHLE-125E†
150	19.2 (488)	3 (76)	17.9 (455)	63	1	Indoor	5BHLE-150E†
175	19.2 (488)	3 (76)	17.9 (455)	63	1	Indoor	5BHLE-175E†
200	19.2 (488)	3 (76)	17.9 (455)	63	1	Indoor	5BHLE-200E†
200	25.1 (637)	3 (76)	23.7 (602)	63	1	Indoor	5BHCL-200E
250	19.2 (488)	3 (76)	17.9 (455)	63	1	Indoor	5BHLE-250E†
250	25.1 (637)	3 (76)	23.7 (602)	63	1	Indoor	5BHCL-250E
300	19.2 (488)	3 (76)	17.9 (455)	63	2	Indoor	5BHLE-300E†
300	25.1 (637)	3 (76)	23.7 (602)	63	2	Indoor	5BHCL-300E
350	19.2 (488)	3 (76)	17.9 (455)	63	2	Indoor	5BHLE-350E†
400	19.2 (488)	3 (76)	17.9 (455)	63	2	Indoor	5BHLE-400E†
400	25.1 (637)	3 (76)	23.7 (602)	63	2	Indoor	5BHCL-400E
450	19.2 (488)	3 (76)	17.9 (455)	63	2	Indoor	5BHLE-450E†
450	25.1 (637)	3 (76)	23.7 (602)	63	2	Indoor	5BHCL-450E
500	25.1 (637)	3 (76)	23.7 (602)	63	2	Indoor	5BHCL-500E
600	25.1 (637)	3 (76)	23.7 (602)	63	2	Indoor	5BHCL-600E
600	28.9 (734)	4 (102)	18.4 (467)	40	2	Indoor	5CLE-600E
750	25.1 (637)	3 (76)	23.7 (602)	63	3	Indoor	5BHCL-750E
750	28.9 (734)	4 (102)	18.4 (467)	40	2	Indoor	5CLE-750E
900	25.1 (637)	3 (76)	23.7 (602)	63	3	Indoor	5BHCL-900E
1100	19.8 (503)	4 (102)	18.4 (467)	31	4	Indoor	5CLE-1100E
1350	19.8 (503)	4 (102)	18.4 (467)	31	4	Indoor	5CLE-1350E

† UL Listed, Guide JEEG, File E240398.

8.3kV E-Rated fuses



Description:

- E-Rated, current-limiting, medium voltage fuses for feeder circuit, switchgear and transformer protection.

Catalog symbols:

- 8CLE_E-D (10-25A)
- 8CLE_E (10-350A)
- 8HLE_E (10-350A)

Ratings*:

- Volts — 8.3kV
- Amps — 10 to 350A
- Interrupting ratings — 50kA 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 fuse holders:

Amp rating	Fuse mounting type	Voltage BIL (kV)	Approximate dimensions - in (mm)			Catalog number				
			Diameter A	Clip center B	Length C	Mounting (including live parts, end fittings)*		Live parts (including end fittings)	End fittings (disconnect only)	
CLE										
10E-D-25E-D 30E-175E Single barrel	Non-disconnect	75	3.0 (76)	14 (356)	17.9 (455)	8CLE-PNM-D	8CLE-GNM-D	CLE-NL-D	—	
	Disconnect**	75				8CLE-PDM-D	8CLE-GDM-D	CLE-DL-D	CLE-DF-D	
15E-25E Single Barrel	Non-disconnect	75	2.0 (51)	14 (356)	15.5 (394)	8CLE-PNM-C	8CLE-GNM-C	CLE-NL-C	—	
	Disconnect**	75				8CLE-PDM-C	8CLE-GDM-C	CLE-DL-C	CLE-DF-C	
200E-350E Double barrel	Non-disconnect	75	3.0 (76)	14 (356)	17.9 (455)	8CLE-PNM-E	8CLE-GNM-E	CLE-NL-E	—	
	Disconnect	75				8CLE-PDM-E	8CLE-GDM-E	CLE-DL-E	CLE-DF-E	
HLE										
10E-175E Single barrel	Non-disconnect	75	3.0 (76)	12 (305)	15.9 (404)	8HLE-PNM-D	8HLE-GNM-D	CLE-NL-D	—	
	Disconnect**	75				8HLE-PDM-D	8HLE-GDM-D	CLE-DL-D	CLE-DF-D	
200E-350E Double barrel	Non-disconnect	75	3.0 (76)	12 (305)	15.9 (404)	8HLE-PNM-E	8HLE-GNM-E	CLE-NL-E	—	
	Disconnect**	75				8HLE-PDM-E	8HLE-GDM-E	CLE-DL-E	CLE-DF-E	

* End fittings supplied only when required

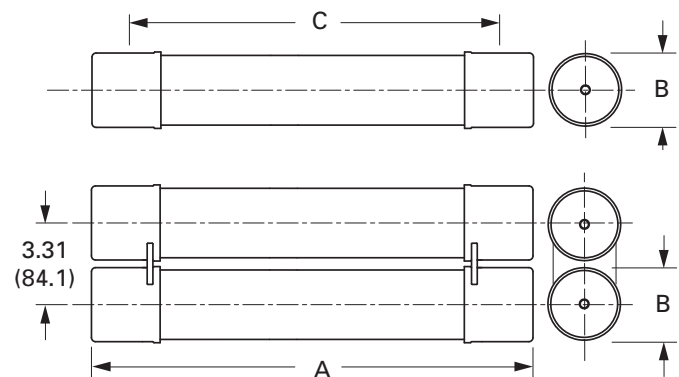
** Disconnect mountings provide a means for fuse extraction only. Do not use a disconnect mounting for load switching or fuse removal while energized.

Recommended fuseclips:

Description	Fuse diameter - in (mm)	Catalog number
Enclosed fuseclip	2 (51)	A3354710*
Enclosed fuseclip	3 (76)	A3354730*
Open fuseclip	3 (76)	1A0065
Spring loaded open fuseclip	3 (76)	9078A67G04

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

Dimensions (see catalog number tables for values)



5

Medium voltage fuses

Current-limiting

CLE and HLE Type 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 (Westinghouse)							
10	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	8CLE-10E-D
15	15.5 (394)	2 (51)	14 (356)	50	1	Indoor	8CLE-15E*
15	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	8CLE-15E-D
20	15.5 (394)	2 (51)	14 (356)	50	1	Indoor	8CLE-20E*
20	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	8CLE-20E-D
25	15.5 (394)	2 (51)	14 (356)	50	1	Indoor	8CLE-25E*
25	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	8CLE-25E-D
30	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	8CLE-30E
40	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	8CLE-40E
50	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	8CLE-50E
65	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	8CLE-65E
80	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	8CLE-80E
100	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	8CLE-100E
125	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	8CLE-125E
150	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	8CLE-150E
175	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	8CLE-175E
200	17.9 (455)	3 (76)	14 (356)	50	2	Indoor/outdoor	8CLE-200E
250	17.9 (455)	3 (76)	14 (356)	50	2	Indoor/outdoor	8CLE-250E
300	17.9 (455)	3 (76)	14 (356)	50	2	Indoor/outdoor	8CLE-300E
350	17.9 (455)	3 (76)	14 (356)	50	2	Indoor/outdoor	8CLE-350E
HLE Short construction							
10	15.9 (404)	3 (76)	12 (305)	50	1	Indoor/outdoor	8HLE-10E
15	15.9 (404)	3 (76)	12 (305)	50	1	Indoor/outdoor	8HLE-15E
20	15.9 (404)	3 (76)	12 (305)	50	1	Indoor/outdoor	8HLE-20E
25	15.9 (404)	3 (76)	12 (305)	50	1	Indoor/outdoor	8HLE-25E
30	15.9 (404)	3 (76)	12 (305)	50	1	Indoor/outdoor	8HLE-30E
40	15.9 (404)	3 (76)	12 (305)	50	1	Indoor/outdoor	8HLE-40E
50	15.9 (404)	3 (76)	12 (305)	50	1	Indoor/outdoor	8HLE-50E
65	15.9 (404)	3 (76)	12 (305)	50	1	Indoor/outdoor	8HLE-65E
80	15.9 (404)	3 (76)	12 (305)	50	1	Indoor/outdoor	8HLE-80E
100	15.9 (404)	3 (76)	12 (305)	50	1	Indoor/outdoor	8HLE-100E
125	15.9 (404)	3 (76)	12 (305)	50	1	Indoor/outdoor	8HLE-125E
150	15.9 (404)	3 (76)	12 (305)	50	1	Indoor/outdoor	8HLE-150E
175	15.9 (404)	3 (76)	12 (305)	50	1	Indoor/outdoor	8HLE-175E
200	15.9 (404)	3 (76)	12 (305)	50	2	Indoor/outdoor	8HLE-200E
250	15.9 (404)	3 (76)	12 (305)	50	2	Indoor/outdoor	8HLE-250E
300	15.9 (404)	3 (76)	12 (305)	50	2	Indoor/outdoor	8HLE-300E
350	15.9 (404)	3 (76)	12 (305)	50	2	Indoor/outdoor	8HLE-350E

* Fuses conform to dimensional standards established by Westinghouse.

E-Rated medium voltage specialty mount fuses

Catalog symbols:

- 8AHLE_E (special dimension fuses for use with 7.2kV rated, 800 amp AMPGARD motor starting assemblies)
- 8BHLE_E (bolt-on version)
- 8HCL_E (clip-lock version)

Ratings*:

- Volts — 8.3kV
- Amps — 10 to 350A
- Interrupting ratings — 50kA RMS Sym

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

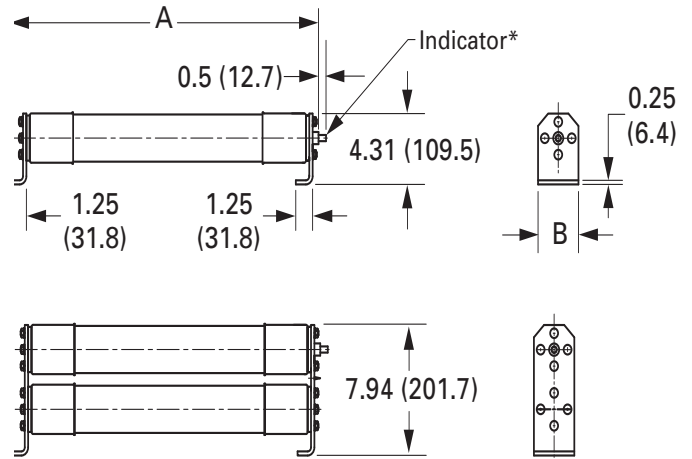
Agency information:

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

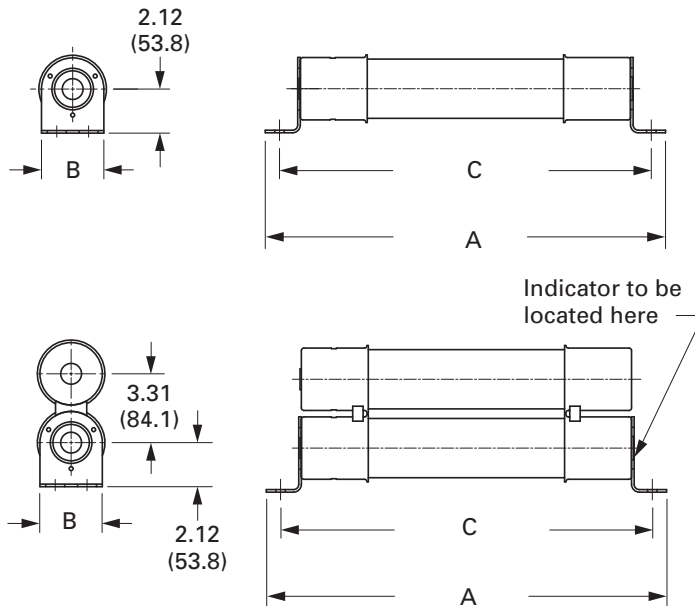
Recommended live parts for clip-lock fuses

- Catalog number HCL-NL-1

Dimensions for HCL - in (mm)



Dimensions for BHLE - in (mm)



Medium voltage fuses

5

Medium voltage fuses

Current-limiting

AHLE Type fuses (special dimension fuses for use with 7.2kV rated, 800 amp AMPGARD motor starting assemblies)

Amp rating	Interrupting rating kA (RMS Sym.)	Number of barrels	Catalog number
10	50	1	8AHLE-10E
15	50	1	8AHLE-15E
20	50	1	8AHLE-20E
25	50	1	8AHLE-25E
30	50	1	8AHLE-30E
40	50	1	8AHLE-40E
50	50	1	8AHLE-50E
65	50	1	8AHLE-65E
80	50	1	8AHLE-80E
100	50	1	8AHLE-100E
125	50	1	8AHLE-125E
150	50	1	8AHLE-150E
175	50	1	8AHLE-175E
200	50	2	8AHLE-200E
250	50	2	8AHLE-250E
300	50	2	8AHLE-300E
350	50	2	8AHLE-350E

BHLE bolt-on versions

Amp rating	Dimensions - in (mm)			Interrupting rating kA (RMS Sym.)	Number of barrels	Installation location	Catalog number
	Overall length	Diameter	Hole centers				
10	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	1	Indoor	8BHLE-10E
15	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	1	Indoor	8BHLE-15E
20	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	1	Indoor	8BHLE-20E
25	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	1	Indoor	8BHLE-25E
30	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	1	Indoor	8BHLE-30E
40	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	1	Indoor	8BHLE-40E
50	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	1	Indoor	8BHLE-50E
65	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	1	Indoor	8BHLE-65E
80	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	1	Indoor	8BHLE-80E
100	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	1	Indoor	8BHLE-100E
125	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	1	Indoor	8BHLE-125E
150	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	1	Indoor	8BHLE-150E
175	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	1	Indoor	8BHLE-175E
200	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	2	Indoor	8BHLE-200E
250	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	2	Indoor	8BHLE-250E
300	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	2	Indoor	8BHLE-300E
350	19.25 (488.9)	3 (76.2)	17.88 (454.2)	50	2	Indoor	8BHLE-350E

HCL Clip lock versions

Amp rating	Dimensions - in (mm)			Interrupting rating kA (RMS Sym.)	Number of barrels	Installation location	Catalog number
	Overall length	Diameter	Hole centers				
65	22.5 (571.5)	3 (76.2)	N/A	50	1	Indoor/outdoor	8HCL-65E
80	22.5 (571.5)	3 (76.2)	N/A	50	1	Indoor/outdoor	8HCL-80E
100	22.5 (571.5)	3 (76.2)	N/A	50	1	Indoor/outdoor	8HCL-100E
125	22.5 (571.5)	3 (76.2)	N/A	50	1	Indoor/outdoor	8HCL-125E
150	22.5 (571.5)	3 (76.2)	N/A	50	1	Indoor/outdoor	8HCL-150E
175	22.5 (571.5)	3 (76.2)	N/A	50	1	Indoor/outdoor	8HCL-175E
200	22.5 (571.5)	3 (76.2)	N/A	50	2	Indoor/outdoor	8HCL-200E
250	22.5 (571.5)	3 (76.2)	N/A	50	2	Indoor/outdoor	8HCL-250E
300	22.5 (571.5)	3 (76.2)	N/A	50	2	Indoor/outdoor	8HCL-300E
350	22.5 (571.5)	3 (76.2)	N/A	50	2	Indoor/outdoor	8HCL-350E

15.5kV E-Rated fuses



Description:

- E-Rated, current-limiting, medium voltage fuses for feeder circuit, switchgear and transformer protection.

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.

Recommended fuseclips:

Description	Fuse diameter - in (mm)	Catalog number
Enclosed fuseclip	2 (51)	A3354710*
Enclosed fuseclip	3 (76)	A3354730*
Open fuseclip	3 (76)	1A0065
Spring loaded open fuseclip	3 (76)	9078A67G04

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

Recommended fuseclips and holders:

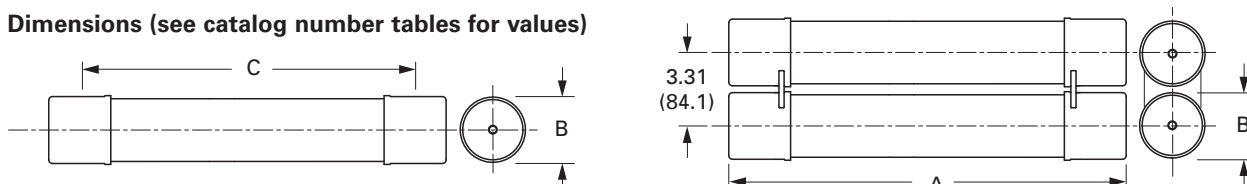
Amp rating	Fuse mounting type	Voltage BIL (kV)	Catalog number						
			Approximate dimensions - in (mm)			Mounting (including live parts, end fittings)*		Live parts (including end fittings)	End fittings (disconnect only)
			Diameter	Clip center	Length	Porcelain insulator	Glass-polyester insulator		
CLE									
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

Medium voltage fuses

* 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.

Dimensions (see catalog number tables for values)



5

Medium voltage fuses

Current-limiting

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 Intermediate construction							
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.

Data Sheet: 10353

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

Medium voltage fuses

5

Medium voltage fuses

Current-limiting

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.

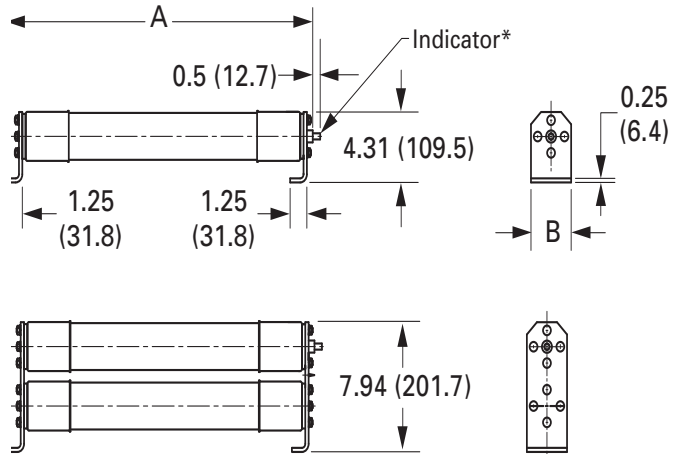
Agency information:

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

Recommended live parts for clip-lock fuses

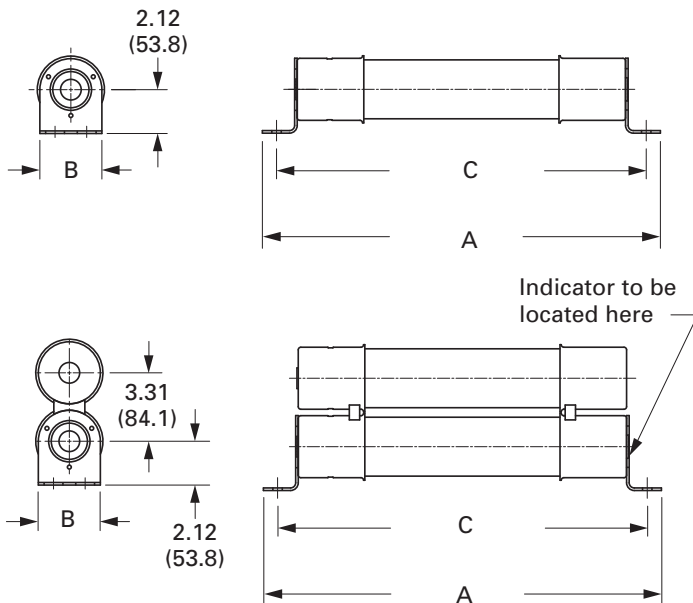
- Catalog number HCL-NL-1

HCL



Dimensions - in (mm)

BHLE



Data Sheet: 10353

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.

Medium voltage fuses

5

Medium voltage fuses

Current-limiting

2.4kV R-Rated fuses



Description:

- Indoor/enclosure, R-Rated medium voltage, current-limiting fuses for motor circuit protection.

Catalog symbols:

Code-(amps)R	Construction
2CLS-25	Standard (25A only)
2ACLS-25	AMPGARD Hookeye (25A only)
JCK-_R	Standard (2R-24R)
JCK-A-_R	AMPGARD Hookeye* (2R-24R)
2HCLS-_R	Hermetically sealed AMPGARD Hookeye* (25A/2R-24R)
2BCLS-_R	Bolt-on (25A/2R-24R)

* For use in 400 amp AMPGARD motor starters.

Recommended fuse clips/holders for standard constructions:

Amp range	Description	Cat. No.
Fuseclips		
25-230A	3" Enclosed fuseclip*	A3354730
25-450A	3" Open fuseclip	1A0065
	3" Spring loaded open fuseclip	9078A67G04
Fuse holders		
25-230A Single barrel	Non-disconnect holder, porcelain	2CLE-PNM-D
	Non-disconnect holder, glass polyester	2CLE-GNM-D
	Disconnect holder, porcelain	2CLE-PDM-D
	Disconnect holder, glass polyester	2CLE-GDM-E
390-450A Double barrel	Non-disconnect holder, porcelain	2CLE-PNM-E
	Non-disconnect holder, glass polyester	2CLE-GNM-E
	Disconnect holder, porcelain	2CLE-PDM-E
	Disconnect holder, glass polyester	2CLE-GDM-E

* Single barrel only, not sold in pairs.

2.4kV R-Rated fuse catalog numbers

Amp rating	"R" Designation	Mounting style (minimum interrupting rating in amps)				Number of barrels
		AMPGARD Hookeye				
		Standard	Regular	Hermetically sealed	Bolt-on	
25	—	2CLS-25* (90)	2ACLS-25* (90)	2HCLS-25* (90)	2BCLS-25* (90)	1
70	2R	JCK-2R (165)	JCK-A-2R (165)	2HCLS-2R (170)	2BCLS-2R (170)	1
100	3R	JCK-3R (220)	JCK-A-3R (220)	2HCLS-3R (245)	2BCLS-3R (245)	1
130	4R	JCK-4R (320)	JCK-A-4R (320)	2HCLS-4R (340)	2BCLS-4R (340)	1
150	5R	JCK-5R (410)	JCK-A-5R (410)	2HCLS-5R (430)	2BCLS-5R (430)	1
170	6R	JCK-6R (480)	JCK-A-6R (480)	2HCLS-6R (500)	2BCLS-6R (500)	1
200	9R	JCK-9R (720)	JCK-A-9R (720)	2HCLS-200* (1000)	2BCLS-9R (1000)	1
230	12R	JCK-12R (970)	JCK-A-12R (970)	2HCLS-230* (1250)	2BCLS-12R (1250)	1
390	18R	JCK-18R (1430)	JCK-A-18R (1430)	2HCLS-390* (1700)	2BCLS-18R (1700)	2
450	24R	JCK-24R (1880)	JCK-A-24R (1880)	2HCLS-24R (2100)	2BCLS-24R (2100)	2

Ratings:

- Volts
 - 2.4kV (nominal)
 - 2.54kV (max design)
- Amps 25-450A
- Interrupting ratings
 - 50kA Sym
 - 80kA Asym

Agency information:

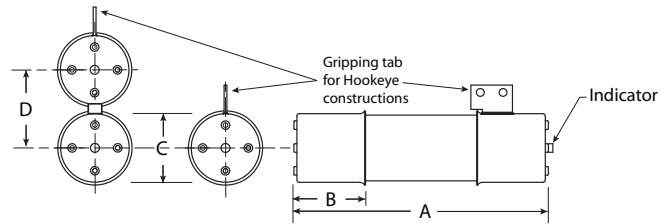
- UL Recognized: Guide #MSSS2, File #E96676

Dimensions - in [mm]

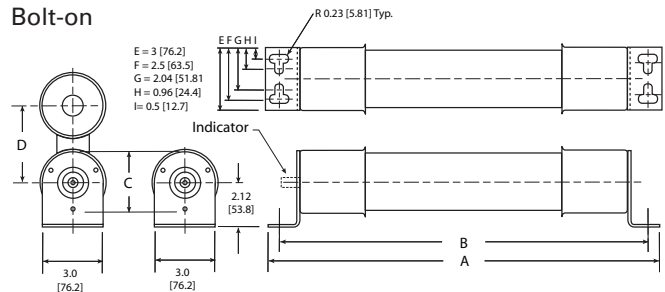
Construction	Amp range	Dimension			
		A	B	C	D
Standard - short	25-230A	10.8 (274)	3 (76)	3 (76)	—
	390-450A	10.8 (274)	3 (76)	3 (76)	3.3 (84)
AMPGARD Hookeye*	70-230A	10.8 (274)	3 (76)	3 (76)	—
	390-450A	10.8 (274)	3 (76)	3 (76)	3.3 (84)
Bolt-on	25-230A	19.2 (488)	17.9 (455)	3 (76)	—
	390-450A	19.2 (488)	17.9 (455)	3 (76)	3.3 (84)

* Includes hermetically sealed versions.

Standard and AMPGARD Hookeye



Bolt-on



4.8kV

Catalog symbols:

Code-(amps)R	Construction
5CLS-30	Standard - short (30A)
JCL-_R	Standard - short (2R - 24R)
5LCLS-_R	Standard - long (2R - 24R)
JCL-A-_R	AMPGARD Hookeye* (2R - 24R)
5ACLS-30	AMPGARD Hookeye* (30A)
5HCLS-30	Hermetically sealed AMPGARD Hookeye* (30A)
5HCLS-_R	Hermetically sealed AMPGARD Hookeye* (2R-24R)
5BCLS-30	Bolt-on (30A)
5BCLS-_R	Bolt-on (2R - 44R)

* For use in 400 amp AMPGARD motor starters.

Ratings:

- Volts
 - 4.8kV (nominal)
 - 5.08kV (max design)
- Amps 30-450A
- Interrupting ratings
 - 50kA Sym
 - 80kA Asym

Agency information:

- UL Recognized: Guide #MSSS2, File #E96676 (JCL-_R [2R-24R] and JCL-A-_R [2R-24R])

Recommended fuse holders for standard constructions:

Amp range	Description	BIL (kV)	Cat. No.
Fuseclips			
30-230A	3" Enclosed fuseclip*	—	A3354730
30-450A	3" Open fuseclip	—	1A0065
	3" Spring loaded open fuseclip	—	9078A67G04
Fuse holders for CLS / JCL / 5HCLS			
30-230A Single barrel	Non-disconnect holder, porcelain	60	5HLE-PNM-D
	Non-disconnect holder, glass polyester	60	5HLE-GNM-D
	Disconnect holder, porcelain	60	5HLE-PDM-D
	Disconnect holder, glass polyester	60	5HLE-GDM-D
390-450A Double barrel	Non-disconnect holder, porcelain	60	5HLE-PNM-E
	Disconnect holder, porcelain	60	5HLE-PDM-E
	Disconnect holder, glass polyester	60	5HLE-GDM-E
Fuse holders for 5LCLS†			
70-230A Single barrel	Non-disconnect holder, porcelain	60	5CLE-PNM-D
	Non-disconnect holder, glass polyester	60	5CLE-GNM-D
	Disconnect holder, porcelain	60	5CLE-PDM-D
	Disconnect holder, glass polyester	60	5CLE-GDM-D
	Disconnect holder, porcelain	75	8CLE-PDM-D
390-450A Double Barrel	Disconnect holder, porcelain	60	5CLE-PDM-E
	Disconnect holder, glass polyester	60	5CLE-GDM-E

* Single barrel only, not sold in pairs.

** Not available for standard - long constructions

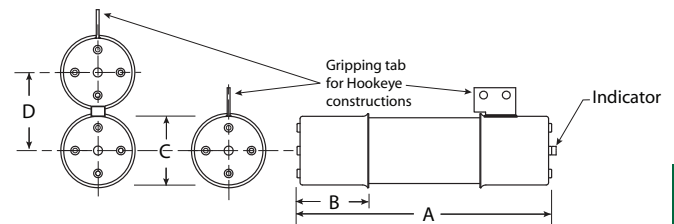
† Not available for 390 to 450 amp ratings.

Dimensions - in [mm]

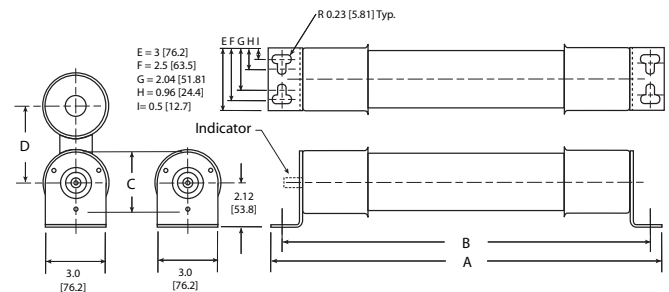
Construction	Amp range	Dimension			
		A	B	C	D
Standard - short	30-230A	15.9 (404)	3 (76)	3 (76)	—
	390-450A	15.9 (404)	3 (76)	3 (76)	3.3 (84)
Standard - long	70-230A	17.9 (455)	3 (76)	3 (76)	—
	390-450A	17.9 (455)	3 (76)	3 (76)	3.3 (84)
AMPGARD Hookeye*	30-230A	15.9 (404)	3 (76)	3 (76)	—
	390-450A	15.9 (404)	3 (76)	3 (76)	3.3 (84)
Bolt-on	30-230A	19.2 (488)	17.9 (455)	3 (76)	—
	390-450A	19.2 (488)	17.9 (455)	3 (76)	3.3 (84)

* Includes hermetically sealed versions.

Standard (short and long) and AMPGARD Hookeye



Bolt-on



5

Medium voltage fuses

Current-limiting

4.8kV R-Rated fuse catalog numbers

Amp Rating	"R" Designation	Mounting style (minimum interrupting rating in amps)					Number of barrels
		Standard - short	Standard - long	AMPGARD Hookeye			
				Regular	Hermetically sealed	Bolt-on	
30	—	5CLS-30* (95)	—	5ACLS-30* (95)	5HCLS-30* (95)	5BCLS-30* (95)	1
70	2R	JCL-2R (165)	5LCLS-2R (165)	JCL-A-2R	5HCLS-2R (180)	5BCLS-2R (180)	1
100	3R	JCL-3R (220)	5LCLS-3R (220)	JCL-A-3R	5HCLS-3R (270)	5BCLS-3R (270)	1
130	4R	JCL-4R (320)	5LCLS-4R (320)	JCL-A-4R	5HCLS-4R (350)	5BCLS-4R (350)	1
150	5R	JCL-5R (410)	5LCLS-5R (410)	JCL-A-5R	5HCLS-5R (450)	5BCLS-5R (450)	1
170	6R	JCL-6R (480)	5LCLS-6R (480)	JCL-A-6R	5HCLS-6R (540)	5BCLS-6R (540)	1
200	9R	JCL-9R (720)	5LCLS-9R (720)	JCL-A-9R	5HCLS-9R (700)	5BCLS-9R (700)	1
230	12R	JCL-12R (970)	5LCLS-12R (970)	JCL-A-12R	5HCLS-12R (1000)	5BCLS-12R (1000)	1
390	18R	JCL-18R (1430)	5LCLS-18R (1430)	JCL-A-18R	5HCLS-18R (1450)	5BCLS-18R (1450)	2
450	24R	JCL-24R (1880)	5LCLS-24R (1880)	JCL-A-24R	5HCLS-24R (2000)	5BCLS-24R (2000)	2
600	32R	—	—	—	—	5BCLS-32R (2600)	2
650	36R	—	—	—	—	5BCLS-36R (3000)	2
800	44R	—	—	—	—	5BCLS-44R (3250)	2

* Does not comply with ANSI C37.46 for "R" rating.

7.2kV R-Rated fuses

Catalog symbols:

Code-(amps)R	Construction
8CLS-_R	Standard (2R - 6R)
7CLS-_R	Standard (9R - 24R)
8ACLS-_R	AMPGARD Hookeye* (2R - 6R)
7ACLS-_R	AMPGARD Hookeye* (9R - 24R)
7BCLS-_R	Bolt-on (2R - 44R)

* For use in 400 amp AMPGARD motor starters.

Ratings:

- Volts
 - 7.2kV (nominal)
 - 8.3kV (max design 70-170A standard and AMPGARD Hookeye)
 - 7.2kV (max design 200-450A standard and AMPGARD Hookeye)
 - 7.2kV (max design 70-800 bolt-on)
- Amps 25-450A
- Interrupting ratings
 - 50kA Sym
 - 80kA Asym

Recommended fuse holders for standard constructions:

Amp range	Description	BIL (kV)	Cat. No.
Fuseclips			
70-230A	3" Enclosed fuseclip*	—	A3354730
70-450A	3" Open fuseclip	—	1A0065
	3" Spring loaded open fuseclip	—	9078A67G04
Fuse holders for 7CLS and 8CLS			
70-230A Single barrel	Non-disconnect holder, porcelain	75	8HLE-PNM-D
	Non-disconnect holder, glass polyester	75	8HLE-GNM-D
	Disconnect holder, porcelain	75	8HLE-PDM-D
	Disconnect holder, glass polyester	75	8HLE-GDM-D
390-450A Double barrel	Non-disconnect holder, porcelain	75	8HLE-PNM-E
	Non-disconnect holder, glass polyester	75	8HLE-GNM-E
	Disconnect holder, porcelain	75	8HLE-PDM-E
	Disconnect holder, glass polyester	75	8HLE-GDM-E

* Single barrel only, not sold in pairs.

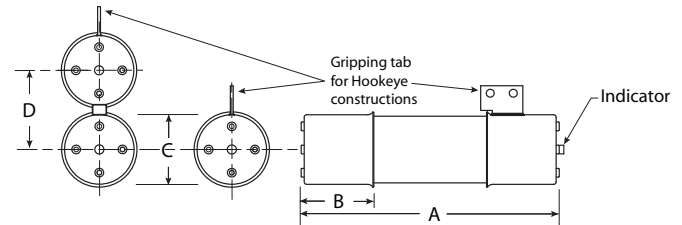
7.2kV R-Rated fuse catalog numbers

Amp rating	"R" Designation	Mounting style (minimum interrupting rating in amps)			Number of barrels
		Standard	AMPGARD Hookeye	Bolt-on	
70	2R	8CLS-2R (160)	8ACLS-2R (160)	7BCLS-2R (160)	1
100	3R	8CLS-3R (250)	8ACLS-3R (250)	7BCLS-3R (250)	1
130	4R	8CLS-4R (325)	8ACLS-4R (325)	7BCLS-4R (325)	1
150	5R	8CLS-5R (390)	8ACLS-5R (390)	7BCLS-5R (390)	1
170	6R	8CLS-6R (500)	8ACLS-6R (500)	7BCLS-6R (500)	1
200	9R	7CLS-9R (750)	7ACLS-9R (750)	7BCLS-9R (750)	1
230	12R	7CLS-12R (1000)	7ACLS-12R (1000)	7BCLS-12R (1000)	1
390	18R	7CLS-18R (1450)	7ACLS-18R (1450)	7BCLS-18R (1450)	2
450	24R	7CLS-24R (2500)	7ACLS-24R (2500)	7BCLS-24R (2500)	2
650	36R	—	—	7BCLS-36R (3000)	2
800	44R	—	—	7BCLS-44R (3250)	2

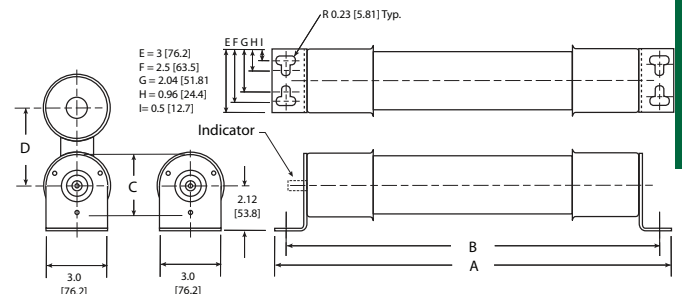
Dimensions - in [mm]

Construction	Amp range	Dimension			
		A	B	C	D
Standard	70-230A	15.8 (401)	3 (76)	3 (76)	—
	390-450A	15.8 (401)	3 (76)	3 (76)	3.3 (84)
AMPGARD Hookeye	70-230A	15.8 (401)	3 (76)	3 (76)	—
	390-450A	15.8 (401)	3 (76)	3 (76)	3.3 (84)
Bolt-on	70-230A	19.2 (488)	17.9 (455)	3 (76)	—
	390-650A	19.2 (488)	17.9 (455)	3 (76)	3.3 (84)
	800A	19.2 (488)	17.9 (455)	4 (102)	3.3 (84)

Standard and AMPGARD Hookeye



Bolt-on



Medium voltage fuses

5

Medium voltage fuses

Current-limiting

PT E-Rated fuses



Description:

- Indicating and non-indicating E-Rated, current-limiting, medium voltage fuses for potential, small power and control transformers.

E-Rated PT medium voltage fuses

Catalog symbols (by maximum voltage rating):

- 2.475kV 2NCLPT_
- 3.6kV 3.6ABCNA_
3.6ABWNA_
3.6CAV_
- 5.5kV JCW_
5CLPT-_E
5NCLPT-_E
5NCLPT-_E-A
5.5ABWNA_E
5.5AMWNA_E
5.5CAV_E
5.5CAVH_E
- 7.2kV 7.2ABWNA_
7.2ABCNA_
7.2AMWNA_E
7.2CAV_
- 8.3kV 8CLPT-_E-A
8CLPT-_E-B
8NCLPT-_E
8NCLPT-_E-A
8NCLPT-_E-B
- 12kV 12ABCNA_
12CAV_
- 15.5kV 15CLPT-_E
15NCLPT-_E-A
15NCLPT-_E-B
15.5CAV_E
15.5CAVH_E
- 17.5kV 17.5ABGNA_
17.5CAV_
- 24kV 24ABGNA_
24CAV_
- 25.5kV 25CLPT-_E
- 36kV 36ABGNA_
36CAV_
- 38kV 38CAV_E
38CAVH_E
38CLPT-_E

Data Sheet: 6002

Ratings*:

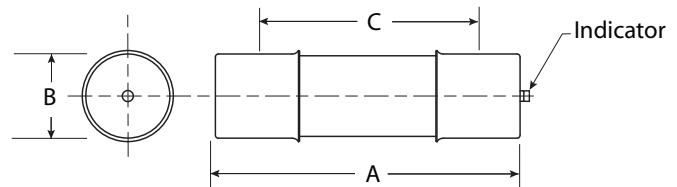
- Volts — 2.4kV to 38kV
- Amps — 0.25 to 15A
- Interrupting ratings — 25 to 80kA RMS Sym

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

Agency information:

- Those PT fuses conforming to the requirements for E-Rating meet the performance characteristics of ANSI C37.46

Dimensions (see catalog number tables for values)



Recommended fuseclips:

Description	Cat. No.
Open fuseclip for 0.8 (20mm) dia. fuses	1A1837
Open fuseclip for 1.0 (25.4mm) dia. fuses	A3354705
Open fuseclip for 1.56 (39.7mm) / 1.6 (40.6mm) dia. fuses	1A0835

2.475kV maximum system voltage

Amp rating	Dimensions - in (mm)			Catalog No. (Interrupting rating - kA)		Recommended fuseclip
	Length A	Diameter B	Clip centers C	Indicating	Non-indicating	
0.25	4.5 (114)	0.8 (20)	3.9 (99)	—	2NCLPT-.25E (63)	1A1837
0.5				—	2NCLPT-.5E (63)	
1				—	2NCLPT-1E (40)	
2				—	2NCLPT-2E (40)	
5				—	2NCLPT-5E (25)	

Dimensions (see catalog number tables for values)

Recommended fuseclip and fuse block:

Description	Cat. No.
Open fuseclip for 0.8 (20mm) dia. fuses	1A1837
Single-pole open fuse block with #10-32 phil-slot screw terminals rated 2500V, 5A maximum and 63kA withstand rating. UL Recognized E14853	PTFB-2500-JCD

3.6kV maximum system voltage

Amp rating	Dimensions - in (mm)			Catalog No. (Interrupting rating - kA)		Recommended fuseclip
	Length A	Diameter B	Clip centers C	Indicating	Non-indicating	
2	8.7 (221)	1.6 (41)	7.6 (193)	—	3.6CAV2 (50)	1A1837
3.15	5.6 (142)	1 (25)	4.4 (112)	—	3.6ABWNA3.15 (50)	A3354705
3.15	7.7 (195)	1 (25)	6.5 (165)	—	3.6ABCNA3.15 (50)	
6.3	5.6 (142)	1 (25)	4.4 (112)	—	3.6ABWNA6.3 (50)	
6.3	7.7 (195)	1 (25)	6.5 (165)	—	3.6ABCNA6.3 (50)	
10				—	3.6ABCNA10 (50)	

Medium voltage fuses

5

Medium voltage fuses

Current-limiting

5.5kV maximum system voltage

Amp rating	Dimensions - in (mm)			Catalog No. (Interrupting rating - kA)		Recommended fuseclip
	Length A	Diameter B	Clip centers C	Indicating	Non-indicating	
0.5	5.6 (142)	0.8 (20)	4.8 (122)	—	5.5AMWNA0.5E (50)	1A1837
0.5	5.6 (142)	1 (25)	4.4 (112)	—	5.5ABWNA0.5E (50)	A3354705
0.5	7.4 (188)	1.6 (41)	6.2 (157)	5.5CAVH0.5E (63)	JCW-1/2E (40)	1A0835
0.5	9.5 (241)	1.6 (41)	8.1 (206)	5CLPT-.5E (80) [†]	5NCLPT-.5E-A (63)	
1	5.6 (142)	1 (25)	4.4 (112)	—	5.5ABWNA1E (50)	A3354705
1	5.6 (142)	0.8 (20)	4.8 (122)	—	5.5AMWNA1.0E (50)	1A1837
1	7.4 (188)	1.6 (41)	6.2 (157)	5.5CAVH1E (63)	JCW-1E (40)	1A0835
1	9.5 (241)	1.6 (41)	8.1 (206)	5CLPT-1E (80) [†]	5NCLPT-1E-A (63)	
1.5	9.5 (241)	1.6 (41)	8.1 (206)	5CLPT-1.5E (80) [†]	—	1A0835
2	5.6 (142)	1 (25)	4.4 (112)	—	5.5ABWNA2E (50)	A3354705
2	5.6 (142)	0.8 (20)	4.8 (122)	—	5.5AMWNA2.0E (50)	1A1837
2	7.4 (188)	1.6 (41)	6.2 (157)	5.5CAVH2E (63)	JCW-2E (40)	1A0835
3	5.6 (142)	1 (25)	4.4 (112)	—	5.5ABWNA3E (50)	A3354705
3	5.6 (142)	0.8 (20)	4.8 (122)	—	5.5AMWNA3.0E (50)	1A1837
3	9.5 (241)	1.6 (41)	8.1 (206)	5CLPT-3E (80)	—	1A0835
3	7.4 (188)	1.6 (41)	6.2 (157)	—	JCW-3E (40)	1A0835
4	5.6 (142)	0.8 (20)	4.8 (122)	—	5.5AMWNA4.0E (50)	1A1837
4	7.3 (185)	1.6 (41)	5.9 (150)	—	JCW-4E (40)	1A0835
5	9.5 (241)	1.6 (41)	8.1 (206)	5CLPT-5E (80)	—	1A0835
5	5.6 (142)	1 (25)	4.4 (112)	—	5.5ABWNA5E (50)	A3354705
5	5.6 (142)	0.8 (20)	4.8 (122)	—	5.5AMWNA5.0E (50)	1A1837
5	7.3 (185)	1.6 (41)	5.9 (150)	—	JCW-5E (40)	1A0835
10	9.5 (241)	1.6 (41)	8.1 (206)	5CLPT-10E (80)	—	1A0835
15	7.4 (188)	1.6 (41)	6.2 (157)	—	5.5CAV15E (63)	

[†] Does not comply with ANSI C37.46 for "E" rating.

CLPT Type mountings and hardware 5.5kV maximum (4.8kV nominal)*

Amp rating	Fuse mounting type**	BIL (kV)	Catalog number			
			Mounting (including live parts, end fittings)***		Live parts (including end fittings)***	End fittings (disconnect only)
			Porcelain insulator	Glass-polyester insulator		
CLPT and NCLPT-A Mounting						
0.5-10	Non-disconnect	60	5CLPT-PNM-A	5CLPT-GNM-A	CLPT-NL	—
	Disconnect [†]	60	5CLPT-PDM-A	5CLPT-GDM-A	CLPT-DL	CLPT-DF

* Refers to 5CLPT and 5NCLPT-A fuses only.

** See page 70 for dimensions and diagrams of typical mounting.

*** End fittings supplied only when required.

7.2kV maximum system voltage

Amp rating	Dimensions - in (mm)			Catalog No. (Interrupting rating - kA)		Recommended fuseclip
	Length A	Diameter B	Clip centers C	Indicating	Non-indicating	
0.5	5.6 (142)	0.8 (20)	4.8 (122)	—	7.2AMWNA0.5E (50)	1A1837
1	5.6 (142)	0.8 (20)	4.8 (122)	—	7.2AMWNA1.0E (50)	
2	5.6 (142)	0.8 (20)	4.8 (122)	—	7.2AMWNA2.0E (50)	1A0835
2	8.7 (221)	1.6 (41)	7.5 (190)	—	7.2CAV2 (63)	
3	5.6 (142)	0.8 (20)	4.8 (122)	—	7.2AMWNA3.0E (50)	1A1837
3.15	5.6 (142)	1 (25.4)	4.4 (112)	—	7.2ABWNA3.15 (45)	A3354705
3.15	7.7 (195)	1 (25.4)	6.5 (165)	—	7.2ABCNA3.15 (45)	
4	5.6 (142)	0.8 (20)	4.8 (122)	—	7.2AMWNA4.0E (50)	1A1837
4	8.7 (221)	1.6 (41)	7.5 (190)	—	7.2CAV4 (63)	1A0835
5	5.6 (142)	0.8 (20)	4.8 (122)	—	7.2AMWNA5E (50)	1A1837
6	8.7 (221)	1.6 (41)	7.5 (190)	—	7.2CAV6 (63)	1A0835
6.3	5.6 (142)	1 (25.4)	4.4 (112)	—	7.2ABWNA6.3 (45)	A3354705
6.3	7.7 (195)	1 (25.4)	6.5 (165)	—	7.2ABCNA6.3 (45)	
10	8.7 (221)	1.6 (41)	7.5 (190)	—	7.2CAV10 (63)	1A0835

8.3kV maximum system voltage

Amp rating	Dimensions - in (mm)			Catalog No. (interrupting rating - kA)		Recommended fuseclip
	Length A	Diameter B	Clip centers C	Indicating	Non-indicating	
0.5	9.5 (241)	1.6 (41)	8.1 (206)	8CLPT-.5E-A (80) [†]	8NCLPT-.5E-A (50)	1A0835
1	5 (127)	1.1 (28)	4 (102)	—	8NCLPT-1E (50)	A3354705
1	9.5 (241)	1.6 (41)	8.1 (206)	—	8NCLPT-1E-A (50)	1A0835
2	8 (203)	0.8 (20)	7.2 (183)	—	8NCLPT-2E (25)	1A1837
2	9.5 (241)	1.6 (41)	8.1 (206)	—	8NCLPT-2E-A (50)	1A0835
3	12.9 (328)	1.6 (41)	11.5 (292)	8CLPT-3E-B (80)	8NCLPT-3E-B (50)	
4	8 (203)	0.8 (20)	7.2 (183)	—	8NCLPT-4E (25)	1A1837
5	5 (127)	1.1 (28)	4 (102)	—	8NCLPT-5E (50)	A3354705
5	12.9 (328)	1.6 (41)	11.5 (292)	8CLPT-5E-B (50)	8NCLPT-5E-B (50)	1A0835
10	12.9 (328)	1.6 (41)	11.5 (292)	8CLPT-10E-B (50)	8NCLPT-10E-B (50)	

[†] Does not comply with ANSI C37.46 for "E" rating.

CLPT Type mountings and hardware 8.3kV maximum (7.2kV nominal)*

Amp rating	Fuse mounting type**	BIL (kV)	Catalog number			
			Mounting (including live parts, end fittings)**		Live parts (including end fittings)**	End fittings (disconnect only)
			Porcelain insulator	Glass-polyester insulator		
0.5-2	Non-disconnect	75	8CLPT-PNM-A	8CLPT-GNM-A	CLPT-NL	—
	Disconnect***	75	8CLPT-PDM-A	8CLPT-GDM-A	CLPT-DL	CLPT-DF
3-10	Non-disconnect	75	8CLPT-PNM-B	8CLPT-GNM-B	CLPT-NL	—
	Disconnect***	75	8CLPT-PDM-B	8CLPT-GDM-B	CLPT-DL	CLPT-DF

* Refers to 8CLPT and 8NCLPT-A or -B fuses only.

** 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.

5

Medium voltage fuses

Current-limiting

12kV maximum system voltage

Amp rating	Dimensions - in (mm)			Catalog No. (Interrupting rating - kA)		Recommended fuseclip
	Length A	Diameter B	Clip centers C	Indicating	Non-indicating	
2	8.7 (221)	1.6 (41)	7.5 (190)	—	12CAV2 (40)	1A0835
3.15	7.7 (195)	1 (25)	6.5 (165)	—	12ABCNA3.15 (45)	A3354705

15.5kV maximum system voltage

Amp rating	Dimensions - in (mm)			Catalog No. (Interrupting rating - kA)		Recommended fuseclip
	Length A	Diameter B	Clip centers C	Indicating	Non-indicating	
0.5	12.9 (328)	1.6 (41)	11.5 (292)	15.5CAVH0.5E (80)	15NCLPT-.5E-A (63)	1A0835
1	12.9 (328)	1.6 (41)	11.5 (292)	15.5CAVH1E (80)	15NCLPT-1E-A (63)	
2	12.9 (328)	1.6 (41)	11.5 (292)	15.5CAVH2E (80)	15NCLPT-2E-A (63)	
3	12.9 (328)	1.6 (41)	11.5 (292)	—	15.5CAV3E (80)	
3	17.6 (447)	1.6 (41)	16.1 (409)	—	15NCLPT-3E-B (63)	
3	17.6 (447)	1.6 (41)	16.1 (409)	15CLPT-3E-B (63)	—	
5	12.9 (328)	1.6 (41)	11.5 (292)	—	15.5CAV5E (80)	
5	17.6 (447)	1.6 (41)	16.1 (409)	15CLPT-5E-B (80)	15NCLPT-5E-B (63)	
7	12.9 (328)	1.6 (41)	11.5 (292)	—	15.5CAV7E (80)	
10	17.6 (447)	1.6 (41)	16.1 (409)	15CLPT-10E-B (50)	15NCLPT-10E-B (63)	

CLPT Type mountings and hardware 15.5kV maximum (14.4kV nominal)

Amp rating	Fuse mounting type*	BIL (kV)	Catalog number			
			Mounting (Including live parts, end fittings)*		Live parts (including end fittings)*	End fittings (disconnect only)
			Porcelain insulator	Glass-polyester insulator		
0.5–2	Non-disconnect	95	15CLPT-PNM-A	15CLPT-GNM-A	CLPT-NL	—
	Disconnect**	95	15CLPT-PDM-A	15CLPT-GDM-A	CLPT-DL	CLPT-DF
3–10	Non-disconnect	95	15CLPT-PNM-B	15CLPT-GNM-B	CLPT-NL	CLPT-DF
	Disconnect**	95	15CLPT-PDM-B	15CLPT-GDM-B	CLPT-DL	—

* 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.

17.5kV maximum system voltage

Amp rating	Dimensions - in (mm)			Catalog No. (Interrupting rating - kA)		Recommended fuseclip
	Length A	Diameter B	Clip centers C	Indicating	Non-indicating	
2	8.7 (221)	1.6 (41)	7.5 (190)	—	17.5CAV2 (40)	1A0835
4				—	17.5CAV4 (40)	
6				—	17.5CAV6 (40)	
10				—	17.5CAV10 (40)	

24kV maximum system voltage

Amp rating	Dimensions - in (mm)			Catalog No. (Interrupting rating - kA)		Recommended fuseclip
	Length A	Diameter B	Clip centers C	Indicating	Non-indicating	
2	13.49 (340)	1.6 (41)	12.2 (310)	—	24CAV2 (40)	1A0835
3				—	24CAV3 (40)	
4				—	24CAV4 (40)	

25.5kV maximum system voltage

Amp rating	Dimensions - in (mm)			Catalog No. (interrupting rating - kA)		Recommended fuseclip
	Length A	Diameter B	Clip centers C	Indicating	Non-indicating	
0.5	17.6 (447)	1.6 (41)	16.1 (410)	25CLPT-5E (44) [†]	—	1A0835
1	17.6 (447)	1.6 (41)	16.1 (410)	25CLPT-1E (44) [†]	—	

[†] Does not comply with ANSI C37.46 for "E" rating.

CLPT Type Mountings and Hardware 25.5kV Maximum (23kV Nominal)

Amp rating	Fuse mounting type*	BIL (kV)	Catalog number			
			Mounting (including live parts, end fittings)*		Live parts (including end fittings)*	End fittings (disconnect only)
			Porcelain insulator	Glass-polyester insulator		
0.5-1	Non-disconnect	150	25CLPT-PNM-A	—	25CLPT-NL	—
	Disconnect**	150	25CLPT-PDM-A	—	25CLPT-DL	CLPT-DF

* 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.

36kV maximum system voltage

Amp rating	Dimensions - in (mm)			Catalog No. (Interrupting rating - kA)		Recommended fuseclip
	Length A	Diameter B	Clip centers C	Indicating	Non-indicating	
2	17.3 (439)	1.6 (41)	16.1 (410)	—	36CAV2 (40)	1A0835
4				—	36CAV4 (40)	

38kV maximum system voltage

Amp rating	Dimensions - in (mm)			Catalog No. (interrupting rating - kA)		Recommended fuseclip
	Length A	Diameter B	Clip centers C	Indicating	Non-indicating	
0.5	17.3 (439)	1.6 (41)	16.1 (409)	38CAVH0.5E (38)	—	1A0835
0.5	18.6 (472)	1.6 (41)	17.1 (434)	38CLPT-0.5E (44) [†]	—	
1	17.3 (439)	1.6 (41)	16.1 (409)	38CAVH1E (38)	—	
2	17.3 (439)	1.6 (41)	16.1 (409)	38CAVH2E (38)	—	
4	17.3 (439)	1.6 (41)	16.1 (409)	—	38CAV4E (38)	
				—	38CAV4E (38)	

[†] Does not comply with ANSI C37.46 for "E" rating.

CLPT Type Mountings and Hardware 38kV Maximum (34.5kV Nominal)

Amp rating	Fuse mounting type	Catalog number			
		Mounting (including Live Parts, End Fittings)*		Live Parts (including end fittings)*	End fittings (disconnect only)
		Porcelain insulator	Glass-polyester insulator		
0.5	Disconnect [†]	Not applicable	Not applicable	25CLPT-NL	CLPT-DF
	Non-disconnect	Not applicable	Not applicable	25CLPT-DL	—

* 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.

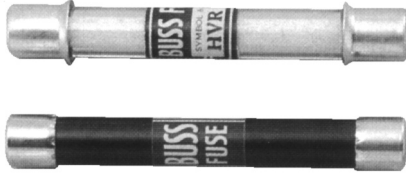
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Medium voltage fuses

Current-limiting

Fast-acting PT fuses

HVA, HVB,
HVJ, HVL, HVR,
HVT, HVU,
HVW & HVX



Specifications

Description:

Medium voltage, non-time delay, fast-acting fuses.

Dimensions: See basic catalog numbers table.

Ratings:

Volts: — 1-10kV (see basic catalog numbers table)

Amps: — 1/6-10A (see basic catalog numbers table)

Features and benefits

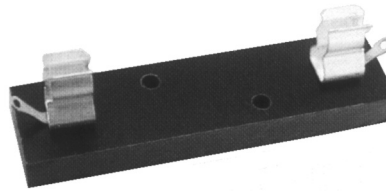
- Physical size varies with electrical rating of fuse to prevent over-fusing.
- Space saving size.

Typical applications

- Medium voltage instrument protection
- Medium voltage circuit protection

Test specifications

Basic catalog numbers	Load / opening time
HVA, HVB, HVJ, HVL	110% / 4 hours (min) 135% / 1 hour (max)
HVR, HVT, HVU, HVW, HVX	100% / 4 hours (min) 150% / 1 hour (max)



Fuse blocks: 4528, 4529

Voltage rating: 1000 to 10,000V

Basic catalog numbers	Fuse block catalog number	Fuse clip catalog number
HVA, HVR	4528	5960
HVB, HVT	4529	5960
HVJ, HVU	N/A	4180
HVL, HVX	N/A	4180

Use #8 screws on blocks 4528 and 4529.

Basic catalog number	kV	Amp ratings	Maximum S.C.	Dimensions - in (mm)	
				Diameter	Length
HVA	1	1/6, 1/4, 1/2, 3/4, 1, 1 1/2, 2, 3, 4, 6, 10	20kW DC/30kVA AC	0.41 (10.4)	3 (76.1)
HVB	2.5	1/2, 3/4, 1, 1 1/2, 2, 3	20kW DC/30kVA AC	0.41 (10.4)	4.5 (114.2)
HVJ	5	1/6, 1/4, 1/2, 3/4, 1, 1 1/2, 2, 4, 6, 10	20kW DC/30kVA AC	0.81 (20.6)	5 (126.9)
HVL	10	1/6, 1/4, 1/2, 1, 1 1/2, 2, 3	20kW DC/30kVA AC	0.81 (20.6)	10 (254)
HVR	1	1/2, 1, 2, 3, 4, 5	kVA-500 AC only	0.41 (10.4)	3 (76.2)
HVW	1.2	1, 2, 3, 4, 5, 8	kVA-12,000 AC only	0.41 (10.4)	2.25 (57.1)
HVT	2.5	1/2, 1, 2, 3, 5	kVA-1250 AC only	0.41 (10.4)	4.5 (114.2)
HVU	5	1/2, 1, 2, 3, 4, 5	kVA-2500 AC only	0.81 (20.6)	5 (126.9)
HVX	10	1/2, 1, 3, 5	kVA-5,000 AC only	0.81 (20.6)	10.0 (253.8)

Catalog number build-a-code

Basic catalog number Amps

Data Sheet: 6003

British standard dimensioned IEC fuses for motor circuit protection

The Bussmann series range of motor fuses are designed to meet the specific requirements necessary for motor protection. During the starting cycle of direct on-line motors, the fuse elements will reach a considerably higher temperature than during normal operation; (this is due to the high amount of current the motor will draw as it starts, typically, six times its normal load current value). This results in expansion and contraction of the fuse elements and could cause premature operation of the fuse.

Bussmann series of motor fuses encompass an advanced design to minimize this effect. This therefore, negates the need to over specify the fuse rating due to high values of motor starting current.

Bussmann series of motor fuses operate extremely quickly under heavy fault currents, resulting from the time / current characteristic. Low power dissipation ensures low temperature rise, important in multi-tier starters for example. Switching (arc), voltages are lower than permitted values, therefore, 5.5kV fuses are also suitable for 4.8kV and 2.4kV circuits.

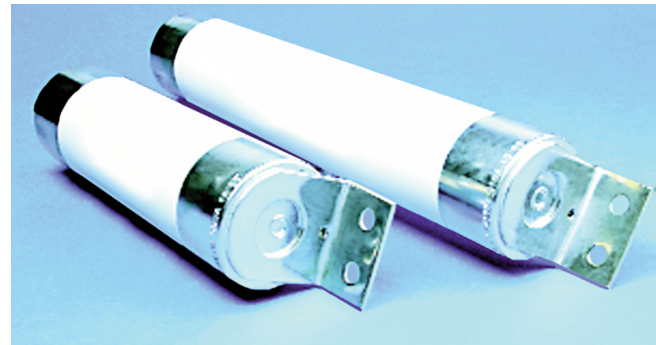


Table of ratings

Basic cat. number	Volts	Breaking capacity	Amp ratings	Dimensions - in (mm)		Dimensional standard
				Length	Diameter	
3.6WJON6	3.6kV	50kA	5, 6.3, 10, 16, 20, 25, 31.5, 40, 50	7.56 (192)	1.4 (35.6)	BS 2692 (TA1) Interchangeable with GEC Type K2 PA
3.6WDOH6	3.6kV	50kA	50, 63, 80, 100, 125	7.56 (192)	2 (50.8)	BS 2692 (TA1) or DIN 43625
3.6WFOH6	3.6kV	50kA	160, 200	7.56 (192)	3 (76.2)	BS 2692 (TA1) or DIN 43625
3.6WDLSJ	3.6kV	50kA	50, 63, 80, 100, 125	11.5 (292.1)	2 (50.8)	DIN 43625
3.6WFLSJ	3.6kV	50kA	160, 200	11.5 (292.1)	3 (76.2)	DIN 43625
3.6WDFHO	3.6kV	50kA	50, 63, 80, 100, 125	10 (254)	2 (51)	BS 2692 (TA2)
3.6WFFHO	3.6kV	50kA	160, 200	10 (254)	3 (76.2)	BS 2692 (TA2)
3.6WKFHO	3.6kV	50kA	250, 315, 355, 400	10 (254)	3 (76.2)	BS 2692 (TA2)
5.5VFNHA	5.5kV	60kA	2R-6R	15.86 (402.8)	3 (76.2)	ANSI R-Rated
5.5VKNHA	5.5kV	60kA	9R-24R	15.86 (402.8)	3 (76.2)	ANSI R-Rated
7.2WFNHO	7.2kV	40kA	25, 31.5, 40, 50, 63, 80, 100, 125, 160	15.86 (402.8)	3 (76.2)	BS 2692 (TA4)
7.2WKNH0	7.2kV	40kA	200, 224, 250, 315	15.86 (402.8)	3 (76.2)	BS 2692 (TA4)
7.2WFMSJ	7.2kV	63kA	25, 31.5, 40, 50, 63, 80, 125, 160	17.40 (442)	3 (76.2)	DIN 43625
7.2WKMSJ	7.2kV	63kA	200, 224, 250, 315, 355	17.40 (442)	3 (76.2)	DIN 43625

Catalog number build-a-code

kV Basic catalog number Amps
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Medium voltage fuses

5

Medium voltage fuses

Current-limiting

DIN dimensioned IEC fuses for transformer protection

DIN Dimension fuses

To Spec. DIN 43625



Specifications

Catalog Symbol: See basic catalog numbers table.

Description: DIN dimension fuses to Specification DIN 43625 covering current-limiting fuses with performance in compliance with IEC 60282-1. These are in accordance with the R10 and, in some cases, the R20 series of preferred numbers.

Dimensions: See catalog numbers table.

Volts: — See voltage associated with the basic catalog numbers in the table.

Amps: — See amp rating associated with the basic catalog numbers in the table.

IR: — See IR associated with the basic catalog numbers in the table.

Agency information: Comply with DIN dimensional standard DIN 43625, VDE 0670 part 4, VDE 0670 part 40Z and with IEC 60282-1 (2005).

Features and benefits

- DIN dimensioned for retrofitting in existing hardware
- Open fuse indicator for ease in troubleshooting
- Designed for use in IEC equipment

Typical applications

- Medium voltage IEC designed equipment

Catalog number build-a-code

kV Basic catalog number Amps

Catalog numbers

kV	Catalog numbers	Amp ratings	Dimensions - in (mm) diameter x length	IR RMS Sym
3.6	3.6ADOSJ(amp)	6.3, 10, 16, 20, 25, 31.5, 40	2.00 x 7.56 (51 x 192)	50kA
	3.6WDOSJ(amp)	50, 63, 80, 100, 125	2.00 x 7.56 (51 x 192)	
	3.6WFOSJ(amp)	160, 200	3.00 x 7.56 (76 x 192)	
	3.6ADLSJ(amp)	25, 40	2.00 x 11.50 (51 x 292)	
	3.6WDLSJ(amp)	50, 63, 80, 100, 125	2.00 x 11.50 (51 x 292)	
	3.6WFLSJ(amp)	160, 200	3.00 x 11.50 (76 X 292)	
	3.6WKLSJ(amp)	250, 315, 400	3.00 x 11.50 (76 X 292)	
7.2	7.2DLSJ(amp)	6.3, 10, 16, 20, 25, 31.5, 40, 50, 63	2.00 x 11.50 (51 x 292)	40kA
	7.2FLSJ(amp)	80, 100, 125, 160	3.00 x 11.50 (76 x 292)	
	7.2WKMSJ(amp)	200, 225, 250, 315, 355	3.00 x 17.41 (76 x 442)	
12	12DLEJ(amp)	6.3, 10, 16, 20, 25, 31.5, 40, 50, 63	2.00 x 11.50 (51 x 292)	63kA
	12HLEJ(amp)	80, 100	2.52 x 11.50 (64 x 292)	
	12KLEJ(amp)	125	3.00 x 11.50 (76 x 292)	
	12XLEJ(amp)*	160, 200	3.50 x 11.50 (88 x 292)	
17.5	17.5DLSJ(amp)*	6.3, 10, 16, 20, 25, 31.5, 40	2.00 x 11.50 (51 x 292)	35.5kA
	17.5FLSJ(amp)*	50	3.00 x 11.50 (76 x 292)	
	17.5DMEJ(amp)	6.3, 10, 16, 20, 25, 31.5, 40, 50, 63	2.00 x 17.41 (51 x 442)	50kA
	17.5HMEJ(amp)	80, 100	2.52 x 17.41 (64 x 442)	
	17.5KMEJ(amp)	125	3.00 x 17.41 (76 x 442)	
24	24DMEJ(amp)	6.3, 10, 16, 20, 25, 31.5, 40, 50	2.00 x 17.41 (51 x 442)	50kA
	24HMEJ(amp)	63	2.52 x 17.41 (64 x 442)	
	24FMEJ(amp)	80, 100* ¹	3.00 x 17.41 (76 x 442)	
	24XMEJ(amp)*	125 ² , 160	3.46 x 17.41 (88 x 442)	
36	36DQSJ(amp)	3.15 ³ , 6.3, 10, 16, 20, 25	2.00 x 21.16 (51 x 537)	35.5kA
	36FQSJ(amp)	31.5, 40, 50	3.00 x 21.16 (76 x 537)	
	36XQEJ(amp)*	63	3.46 x 21.16 (88 x 537)	20kA

Recommended fuseclips for DIN style fuses – 270303, A3354745 see page 120.

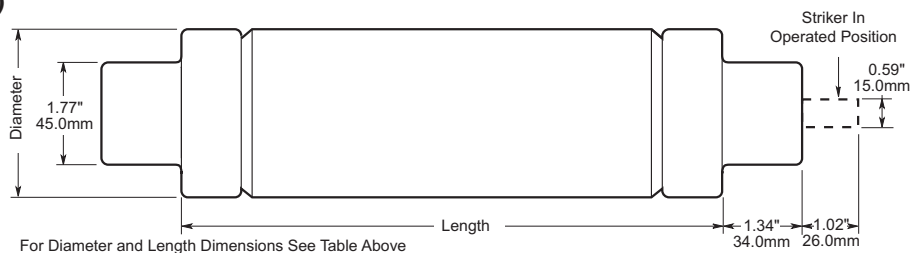
*Not compliant with VDE 0670, part 402.

¹IR RMS Sym is 63kA

²IR RMS Sym is 40kA

³IR RMS Sym is 20kA

Dimensions - In (mm)



Expulsion fuse links for use in high voltage distribution cut-outs

Specifications

Description: Expulsion fuse links available in a wide range of options from 15kV to 72kV in ANSI T and K characteristics.

Ratings:

Volts: — 15 to 72kV
 Amps: — 1 to 100A
 Breaking capacity: depends on voltage but is approximately 8kA

Agency information:

Type T: complies with ANSI C37-42
 Type K: complies with ANSI C37-42

Features and benefits

- Wide range of options available from 15kV to 72kV in ANSI T and K characteristics.
- Extra rapid option also available.

Packaging:

Up to and including 50A: 25 in a carton
 From 60A to 100A: 10 in a carton
 To avoid incorrect replacement the fuse links have colour coded labels:
 Pink label: Type XA
 Yellow label: Type K
 Green label: Type T



Typical applications:

- Primary side transformer protection
- Feeder protection
- Capacitor bank protection

Use of application

Expulsion fuse links current ratings should be selected on the basis of maximum expected transient no damage currents rather than on full load current. In addition, the selection of higher current ratings will reduce the possibility of supply interruption due to transient surges such as those due to lightning strikes.

Links should be handled with a reasonable degree of care when installing. Excessively rough handling may damage the element.

It is normal, under certain fault conditions, for arc extinguishing material and/or metal particles to be expelled from the fuse assembly. It is therefore recommended that reasonable precautions be taken to prevent the installation being approached by unauthorised persons.

How to order - parts referencing system

Rated voltage (kV)	1st letter Type of current characteristics	2nd letter Type of termination	Rated current (A)
15 25 46 72	<p>T = complies with ANSI C 37-42 requirements for slow acting T characteristics</p> <p>K = complies with ANSI C 37-42 requirements for fast acting K characteristics</p> <p>XA = this type of expulsion fuse link has an extra rapid characteristic. It is suitable for applications where a high degree of system protection is required at the expense of discrimination</p> <p>S = Solid links rated at 100A are also available in both button head and universal versions for fitting into expulsion fuse carriers where required. These can be ordered in a similar way using the abbreviation S, e.g. 15SB, etc</p>	<p>B = a fixed NEMA button head link</p> <p>U = a universal link, with double tail and slip off NEMA button head</p> <p>D = double tailed link without NEMA button head</p> <p>BR = as pattern B but the button head is attached via a 1/4 UNF thread to allow use of an extension rod.</p> <p>See outline drawings opposite page for reference</p>	1, 2, 3, 4, 5, 6, 7.5, 8, 10, 12, 15, 20, 25, 30, 40, 50, 60, 65, 75, 80, 100

Thus a typical ordering reference for a 15kV NEMA Type K, button head 30A fuse link would be 15KB30 expulsion fuse link.

The fuse link assembly for a given range is standard to all rated voltages. The exception is that the tail length is varied to suit the dimensions of expulsion carrier of different ratings.

5

Medium voltage fuses

Expulsion fuse links

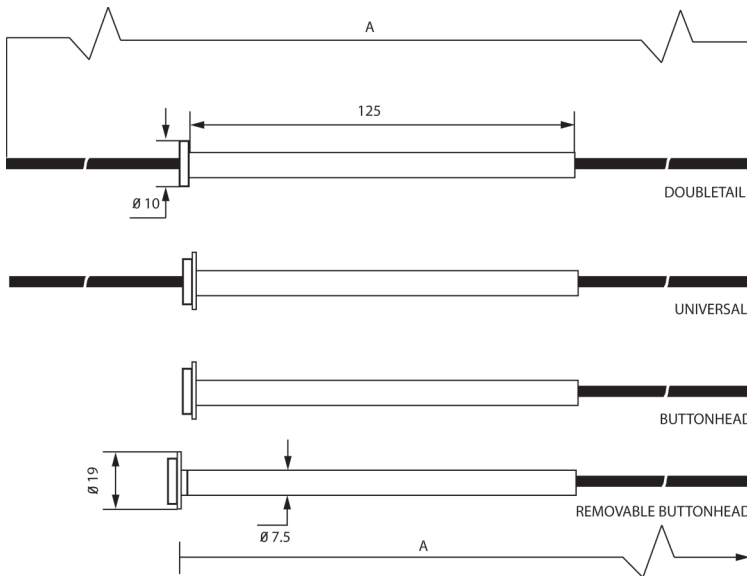
Expulsion fuse links for use in high voltage distribution cut-outs

Dimensions - mm (in)

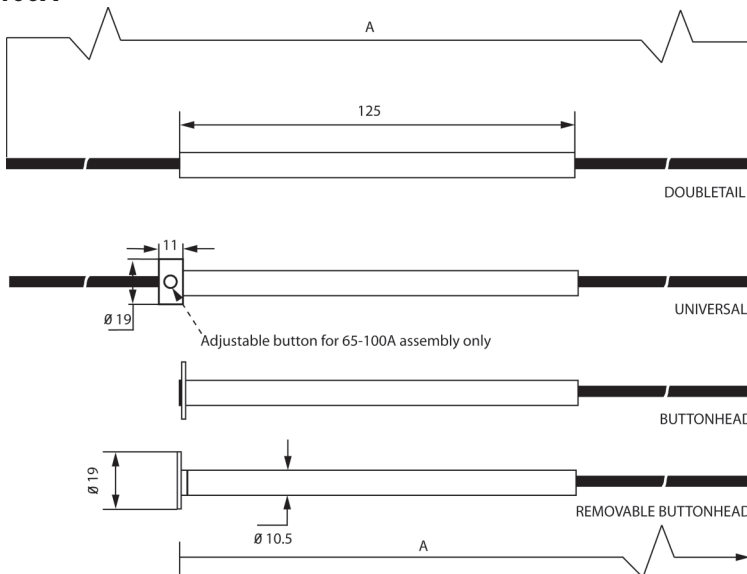
Type kV	A
15kV	533 (21")
25kV	660 (26")
46kV	787 (31")
72kV	1016 (40")

Notes: Type BR is similar to button head shown, except that the button head is attached via a ¼ UNF thread. Tails can be cut to any length.

1-50A



60-100A



EEI-NEMA Type K and T – Type H and N

FL: Type H and EEI-NEMA Type K and T fuses

Specifications

Description: Medium voltage fuses: Type H (high surge), EEI-NEMA Type K (fast-acting), EEI-NEMA Type T (slow-acting).

Ratings:

Amps: — 1-200A
(See catalog numbers tables)

Features and benefits

- Wide range of EEI-NEMA type fuse links for use in open fuse cutouts
- Voltage ratings up to 27kV.
- Can be coordinated with other overcurrent protective devices for sectionalizing to isolate feeder branches.

Typical applications

- Medium voltage fused cutouts

High-surge Type H fuses

High-surge, Type H fuses are manufactured in ratings of 1, 2, 3, 5, and 8A. They have been developed principally for primary fusing of small-sized transformers. Type H links are manufactured in the universal buttonhead design.

Type N fuses

Type N fuses conform to previous NEMA standards and have been superseded by Type K and T links. Type N fuses are manufactured in the universal button design in ratings of 5 through 200A for use in NEMA standard dimensioned cutouts rated through 27kV.



Catalog numbers

EEI-NEMA and High-surge universal tin element fuses for cutouts – rated to 27kV

Non-removable button-head for standard open or enclosed cutouts

Catalog numbers

Type H (High surge)	EEI-NEMA Type K (Fast)	EEI-NEMA Type T (Slow)	Amps
FL11H1	FL11K1	FL11T1	1
FL11H2	FL11K2	FL11T2	2
FL11H3	FL11K3	FL11T3	3
FL11H5	FL11K5	FL11T5	5
—	FL11K6	FL11T6	6
FL11H8	FL11K8	FL11T8	8
—	FL11K10	FL11T10	10
—	FL11K12	FL11T12	12
—	FL11K15	FL11T15	15
—	FL11K20	FL11T20	20
—	FL11K25	FL11T25	25
—	FL11K30	FL11T30	30
—	FL11K40	FL11T40	40
—	FL11K50	FL11T50	50
—	FL11K65	FL11T65	65
—	FL11K80	FL11T80	80
—	FL11K100	FL11T100	100
—	FL11K140	FL11T140	140
—	FL11K200	FL11T200	200

Removable button-head for cutouts requiring removable-button links

Catalog numbers

EEI-NEMA Type K (Fast)	EEI-NEMA Type T (Slow)	Amps
FL3K1	FL3T1	1
FL3K2	FL3T2	2
FL3K3	FL3T3	3
FL3K5	FL3T5	5
FL3K6	FL3T6	6
FL3K8	FL3T8	8
FL3K10	FL3T10	10
FL3K12	FL3T12	12
FL3K15	FL3T15	15
FL3K20	FL3T20	20
FL3K25	FL3T25	25
FL3K30	FL3T30	30
FL3K40	FL3T40	40
FL3K50	FL3T50	50
FL3K65	FL3T65	65
FL3K80	FL3T80	80
FL3K100	FL3T100	100
FL3K140	FL3T140	140
FL3K200	FL3T200	200

Adapter-type removable-button links with ferrule adapter to convert to double-leader links are available in K and T types. Order by description.

EEI-NEMA Type K universal silver-element fuses for cutouts – rated through 27kV

Non-removable button-head for standard open or enclosed cutouts

Catalog numbers

EEI-NEMA Type K	Amps
FL12K8	8
FL12K10	10
FL12K12	12
FL12K15	15
FL12K25	25
FL12K50	50

5

Medium voltage fuses

Fuseclips for medium and high voltage fuses

Recommended E-Rated/R-Rated/DIN fuseclips:

Description	Fuse diameter - in (mm)	Figure	Clip dimensions - in (mm)							Catalog number
			A	B	C	D	E	F	G	
Enclosed fuseclip	1.77 (45)	1	3.50 (89)	2.50 (63)	1.77 (45)	1.19 (30)	4.40 (114)	1.50 (38)	0.38 (10)	A3354745*
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 fuseclip	3 (76)	3	See dimensions drawing							9078A67G04

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

Figure 1

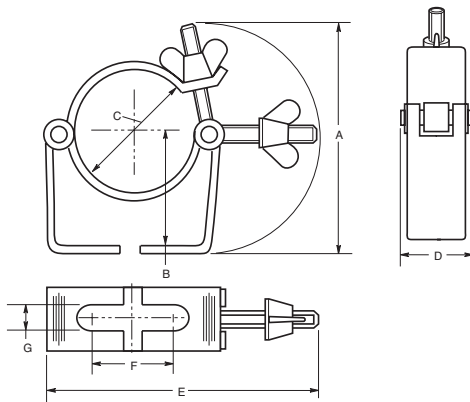


Figure 2

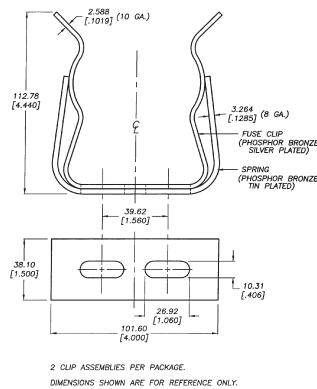


Figure 3

