

## 8.3kV E-Rated

Medium voltage fuses for feeder circuit, switchgear and transformer protection



### Description:

- E-Rated, current-limiting, medium voltage fuses 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:

- 8CLE\_E-D (10-25A)
- 8CLE\_E (10-350A)
- 8HLE\_E (10-350A)

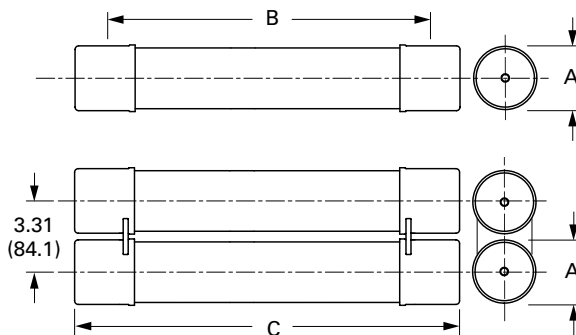
#### Ratings\*:

- 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)**	Porcelain insulator	Glass-polyester insulator	Live parts (including end fittings)	End fittings (disconnect only)
<b>CLE</b>										
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	
<b>HLE</b>										
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	

\* See page 4 for illustrations and dimensions

\*\* End fittings supplied only when required.

#### Recommended 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 fuseclip	3 (76)	3	See dimensions drawing							9078A67G04

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

Figure 1



Figure 2

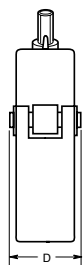


Figure 3



**CLE and HLE type fuses**

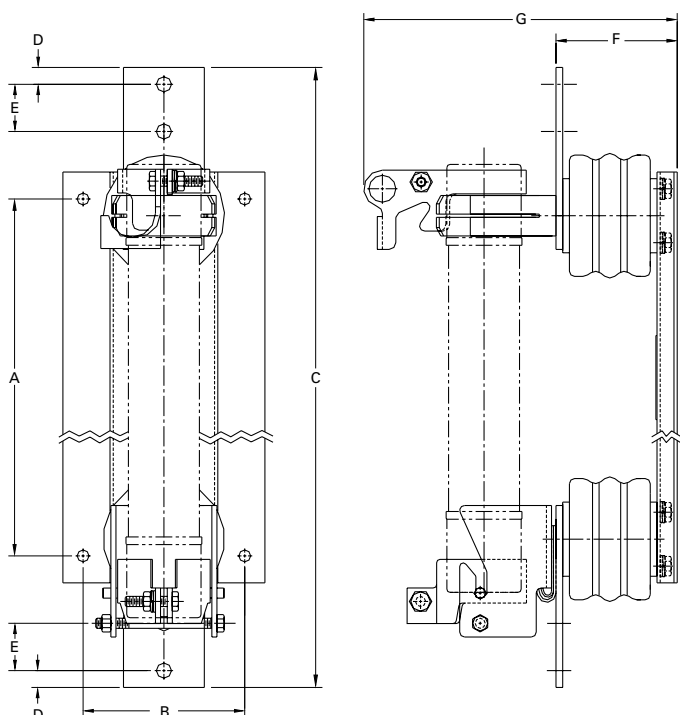
Amp rating	Dimensions - in (mm)			Interrupting rating kA (RMS Sym.)	Number of barrels	Installation location	Catalog number
	Length A	Diameter B	Clip centers C				
<b>CLE Long construction (Westinghouse)</b>							
10	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	8CLE-10E-D
15	15.5 (394)	2 (51)	14 (356)	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
<b>HLE Short construction</b>							
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.

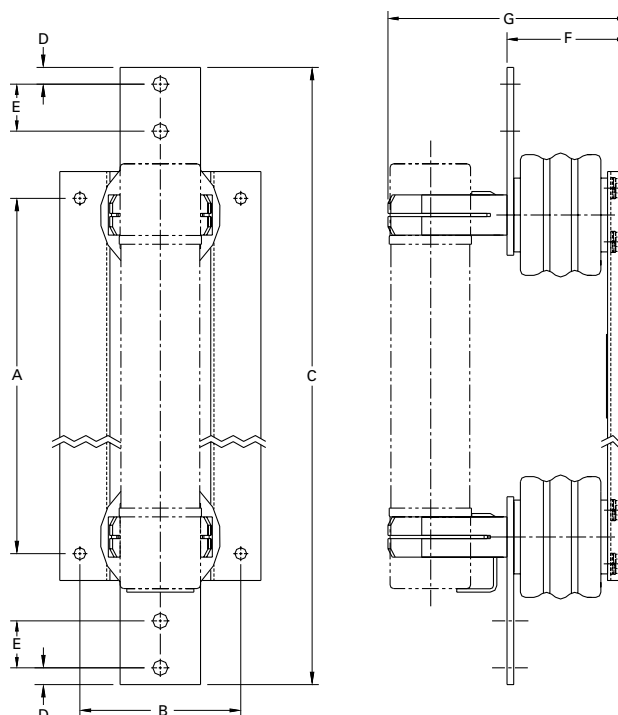
**CLE and HLE type mountings - in (mm)**

Catalog number	Hole centers		Overall length C	Hole Inset D	Hole centers		Contact height F	Overall height G	BIL kV
	A	B			E				
<b>Disconnect single barrel†</b>									
8CLE-GDM-C	15.24 (387.1)	6 (152.4)	28 (711.2)	0.75 (19)	1.75 (44.4)	7 (177.8)	12.25 (311.1)	75	
8CLE-GDM-D	15.24 (387.1)	6 (152.4)	25 (647.7)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	14.22 (361.2)	75	
8CLE-PDM-C	15.24 (387.1)	6 (152.4)	28 (711.2)	0.75 (19)	1.75 (44.4)	7 (177.8)	12.25 (311.1)	75	
8CLE-PDM-D	15.24 (387.1)	6 (152.4)	25 (647.7)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	14.22 (361.2)	75	
8HLE-GDM-D	16.25 (412.8)	6 (152.4)	23 (584.2)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	11.72 (297.7)	75	
8HLE-PDM-D	16.25 (412.8)	6 (152.4)	23 (584.2)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	11.72 (297.7)	75	
<b>Disconnect double barrel†</b>									
8CLE-GDM-E	15.24 (387.1)	6 (152.4)	25 (647.7)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	17.78 (451.6)	75	
8CLE-PDM-E	15.24 (387.1)	6 (152.4)	25 (647.7)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	17.78 (451.6)	75	
8HLE-GDM-E	16.25 (412.8)	6 (152.4)	23 (584.2)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	17.78 (451.6)	75	
8HLE-PDM-E	16.25 (412.8)	6 (152.4)	23 (584.2)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	17.78 (451.6)	75	
<b>Non-disconnect single barrel</b>									
8CLE-GNM-C	15.25 (387.3)	6 (152.4)	24.5 (622.3)	0.75 (19)	1.75 (44.4)	7 (177.8)	9.75 (247.6)	75	
8CLE-PNM-C	15.25 (387.3)	6 (152.4)	24.5 (622.3)	0.75 (19)	1.75 (44.4)	7 (177.8)	9.75 (247.6)	75	
8CLE-GNM-D	15.25 (387.3)	6 (152.4)	25 (635)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	11.29 (286.7)	75	
8CLE-PNM-D	15.25 (387.3)	6 (152.4)	25 (635)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	11.29 (286.7)	75	
8HLE-GNM-D	16.25 (412.7)	6 (152.4)	23 (584.2)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	8.79 (223.3)	75	
8HLE-PNM-D	16.25 (412.7)	6 (152.4)	23 (584.2)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	8.79 (223.3)	75	
<b>Non-disconnect double barrel</b>									
8CLE-GNM-E	15.24 (387.1)	6 (152.4)	25 (635)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	14.98 (380.5)	75	
8CLE-PNM-E	15.24 (387.1)	6 (152.4)	25 (635)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	14.98 (380.5)	75	
8HLE-GNM-E	16.25 (412.7)	6 (152.4)	23 (584.2)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	14.98 (380.5)	75	
8HLE-PNM-E	16.25 (412.7)	6 (152.4)	23 (584.2)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	14.98 (380.5)	75	

**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:**

- 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)**



**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

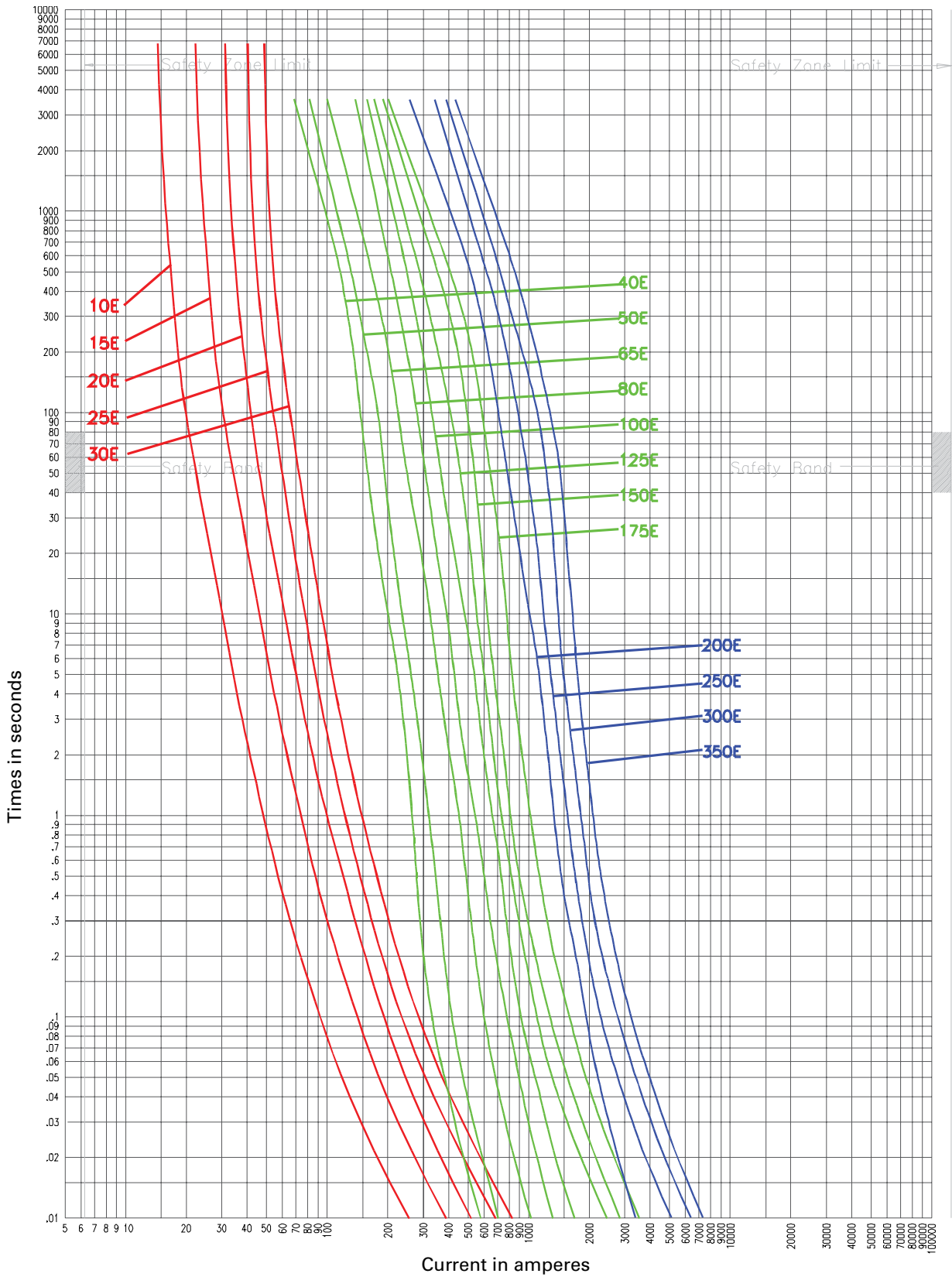
**BHLE bolt-on versions**

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

8.3kV time-current curves — minimum melt for 8CLE-E and 8CLE-D



8CLE-  

Curve 70548501  
April 16, 1999  
Reference # 563532

Curve 70546201  
April 1999  
Reference # 705462

Curve 70546401  
April 1999  
Reference # 705464

8.3kV time-current curves — total clear for 8CLE-\_E and 8CLE\_-\_D



Curve 70548601	Curve 70546301	Curve 70546501
April 16, 1999	April 1999	April 1999
Reference # 563533	Reference # 705463	Reference # 705465

8CLE-\_



8.3kV peak let-through for 8CLE-\_E and 8CLE-\_-D



8CLE-\_

Curve 70548801  
September 1999  
Reference # 705488

Curve 70547301  
April 1999  
Reference # 705473

8.3kV Time-current curves — minimum melt for 8HLE-<sub>E</sub>, 8AHLE-<sub>E</sub> and 8BHLE-<sub>E</sub>



8HLE-<sub>E</sub>, 8BHLE-<sub>E</sub>, 8AHLE-<sub>E</sub>

Curve 70548507	Curve 70546203	Curve 70546403
April 16, 1999	April 1999	April 1999
Reference # 563532	Reference # 705462	Reference # 705464

8.3kV Time-current curves — total clear for 8HLE-<sub>E</sub>, 8AHLE-<sub>E</sub> and 8BHLE-<sub>E</sub>



Available current in amperes

8HLE- <sub>E</sub> , 8BHLE- <sub>E</sub> , 8AHLE- <sub>E</sub>	Curve 70548607 April 16, 1999 Reference # 563533	Curve 70546303 April 1999 Reference # 705463	Curve 70546503 April 1999 Reference # 705465
--	--	--	--

8.3kV peak let-through for 8HLE-  , 8AHLE-   and 8BHLE-  



8HLE-  , 8BHLE-  , 8AHLE-  

Curve 70548804  
September 1999  
Reference # 705488

Curve 70547201  
April 1999  
Reference # 705472

The only controlled copy of this data sheet is the electronic read-only version located on the Eaton network drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

**Eaton**  
1000 Eaton Boulevard  
Cleveland, OH 44122  
United States  
Eaton.com

Bussmann Division  
114 Old State Road  
Ellisville, MO 63021  
United States  
Eaton.com/bussmannseries

© 2015 Eaton  
All Rights Reserved  
Printed in USA  
Publication No. 10352 – BU-SB15152  
December 2015

Eaton, Bussmann and AMPGARD are valuable trademarks of Eaton in the US and other countries. You are not permitted to use the Eaton trademarks without prior written consent of Eaton.

For Eaton's Bussmann series  
product information,  
call **1-855-287-7626** or visit:  
**Eaton.com/bussmannseries**

## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9