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)

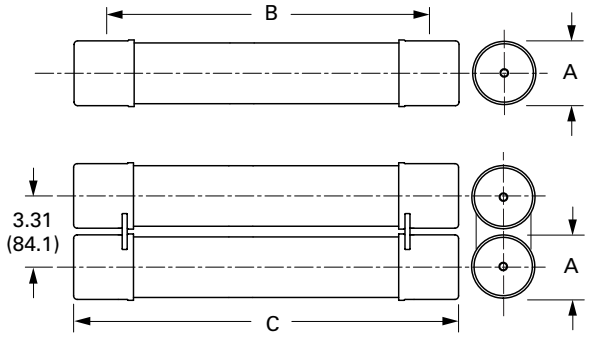
Ratings*:

- 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			
						Mounting (including live parts, end fittings)**		Live parts (including end fittings)	End fittings (disconnect only)
			Diameter A	Clip center B	Length C	Porcelain insulator	Glass-polyester insulator		
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

* 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

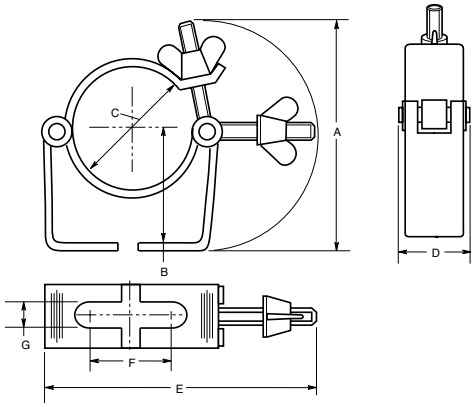


Figure 2

Figure 3

CLE and HLE type fuses

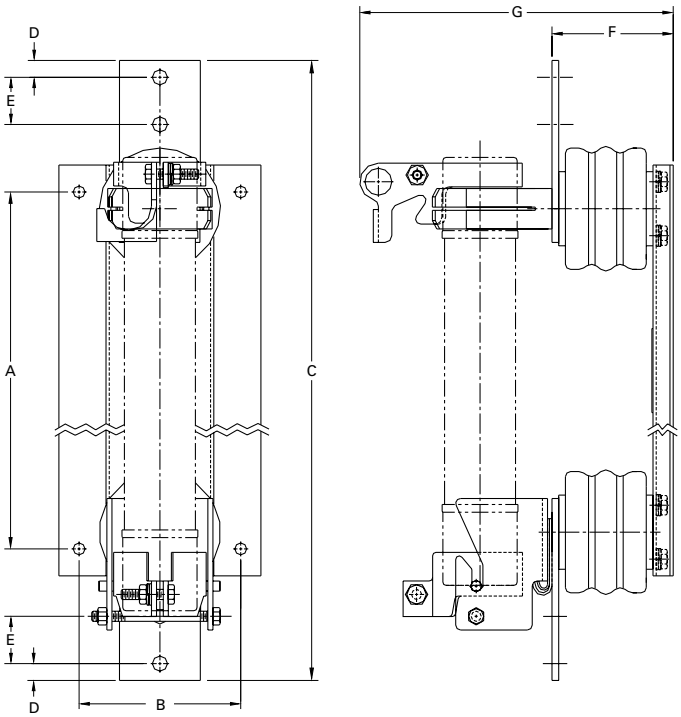
Amp rating	Dimensions - in (mm)			Interrupting rating kA (RMS Sym.)	Number of barrels	Installation location	Catalog number
	Length A	Diameter B	Clip centers C				
CLE Long construction (Westinghouse)							
10	17.9 (455)	3 (76)	14 (356)	50	1	Indoor/outdoor	8CLE-10E-D
15	15.5 (394)	2 (51)	14 (356)	50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

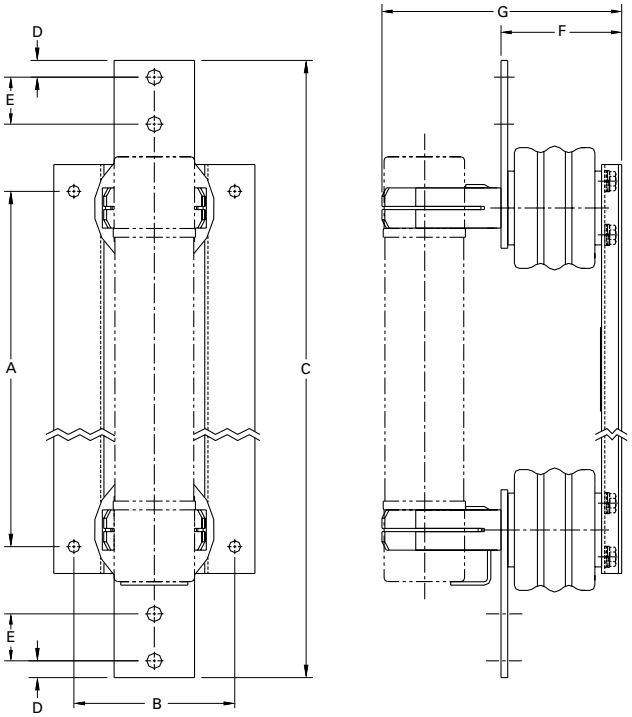
CLE and HLE type mountings - in (mm)

Catalog number		Hole centers	Overall length	Hole Inset	Hole centers	Contact height	Overall height	BIL
	A	B	C	D	E	F	G	kV
Disconnect single barrel†								
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-C	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
Disconnect double barrel†								
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
Non-disconnect single barrel								
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
Non-disconnect double barrel								
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.

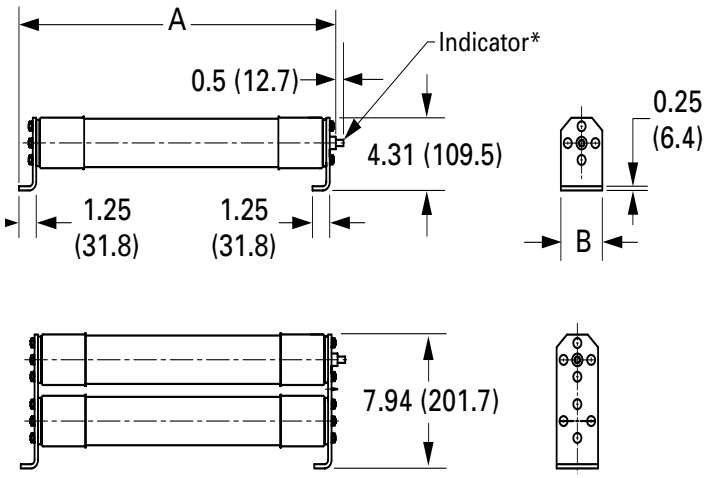
Agency information:

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

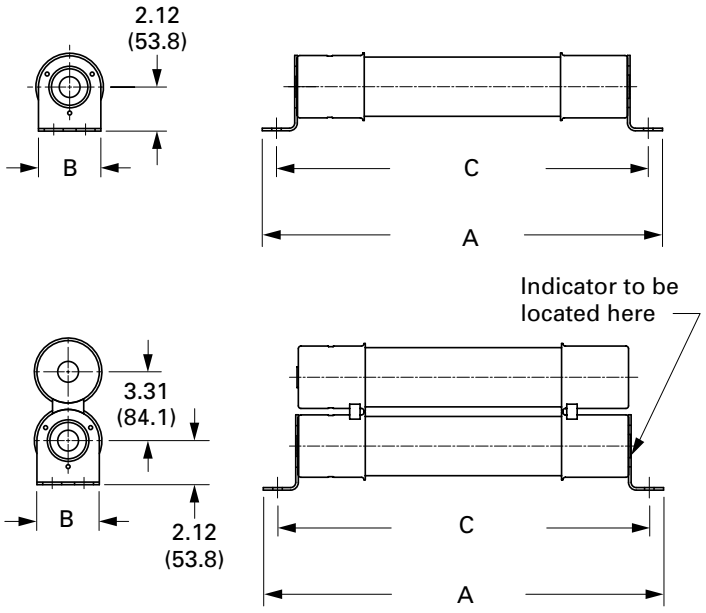
Recommended live parts for clip-lock fuses

- 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

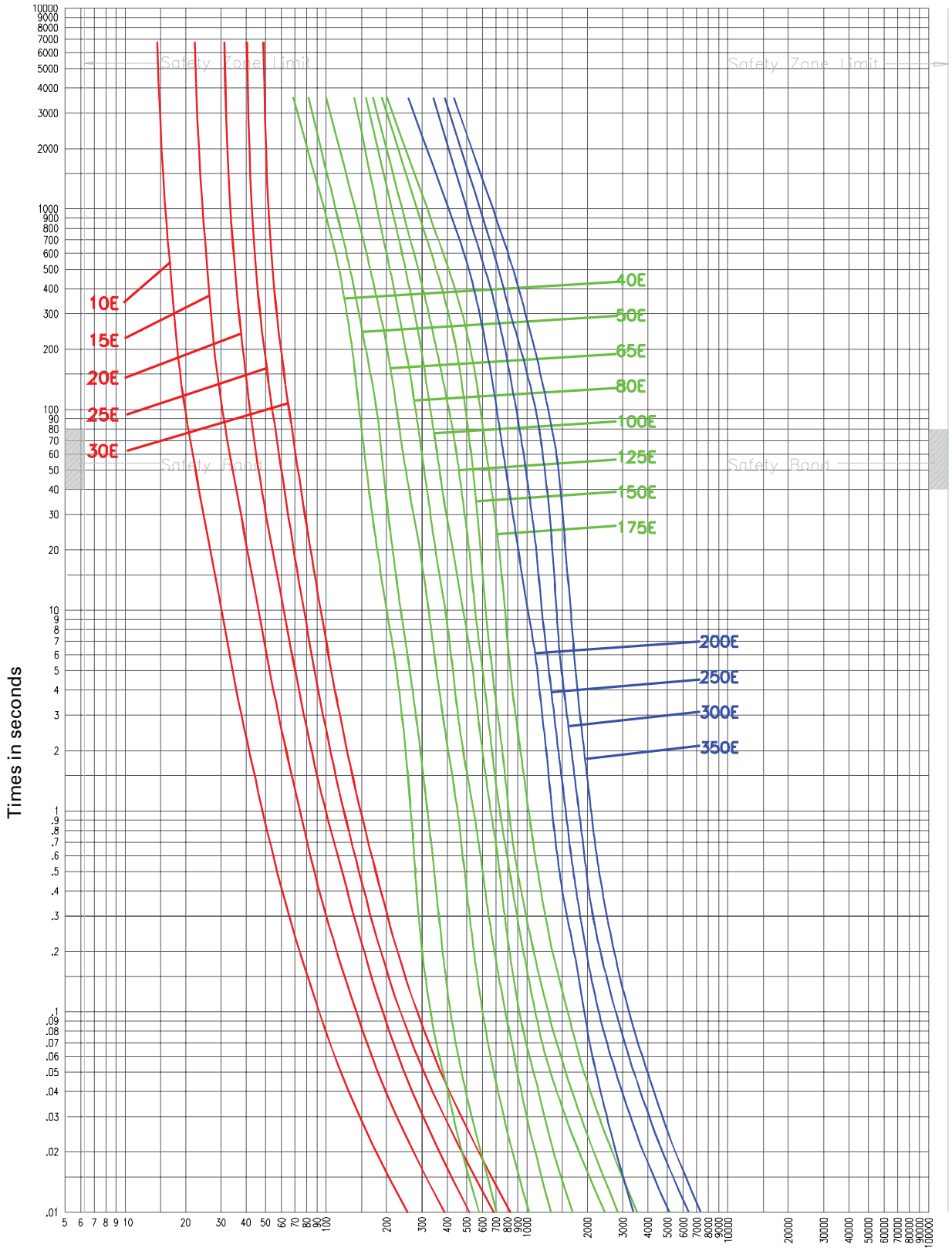
BHLE bolt-on versions

	Dimensions - in (mm)						
Amp rating	Overall length	Diameter	Hole centers	Interrupting rating kA (RMS Sym.)	Number of barrels	Installation location	Catalog number
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

	Dimensions - in (mm)						
Amp rating	Overall length	Diameter	Hole centers	Interrupting rating kA (RMS Sym.)	Number of barrels	Installation location	Catalog number
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



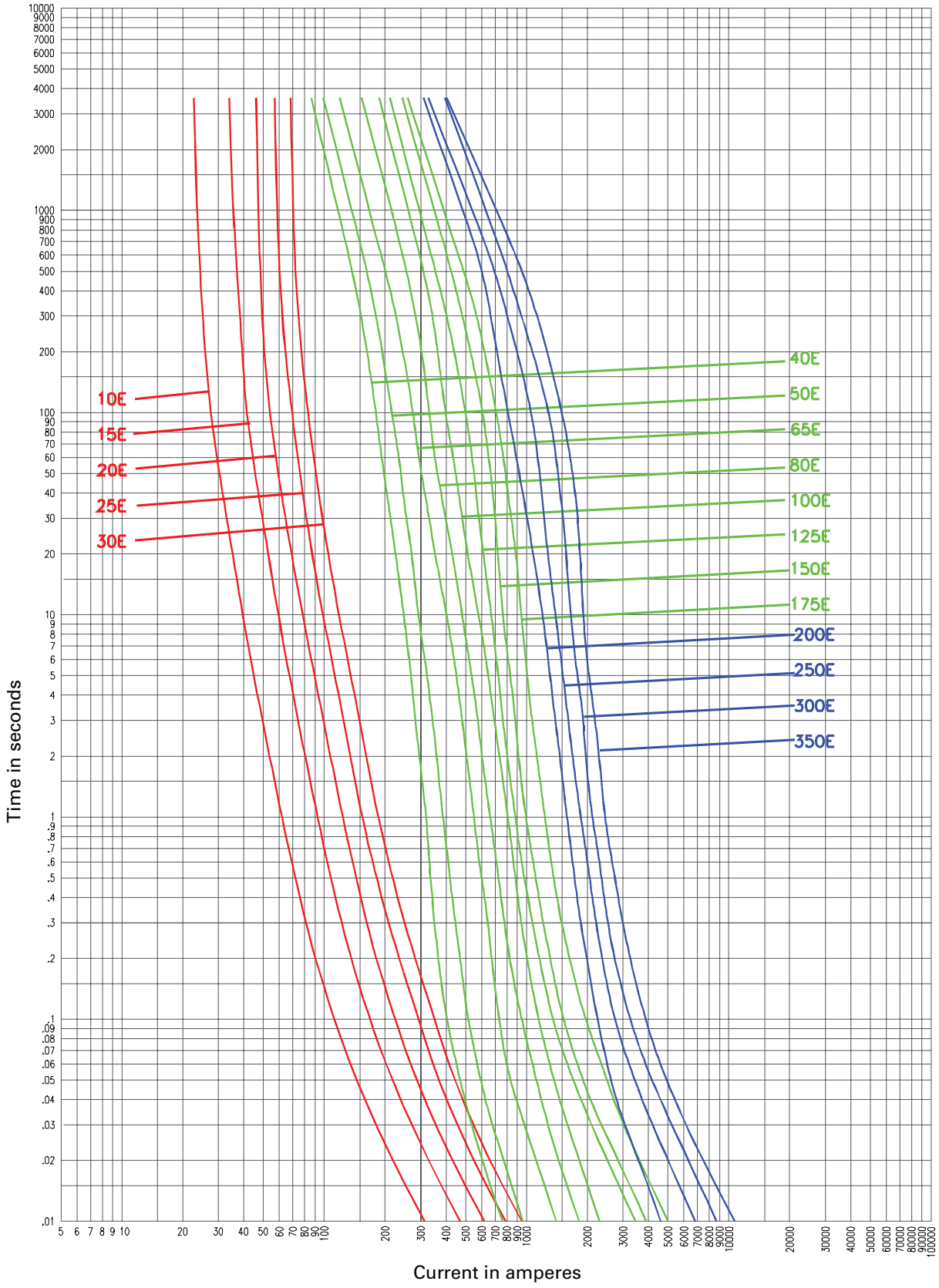
Curve 70548501
April 16, 1999
Reference # 563532

Curve 70546201
April 1999
Reference # 705462

Curve 70546401
April 1999
Reference # 705464

8CLE-_

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



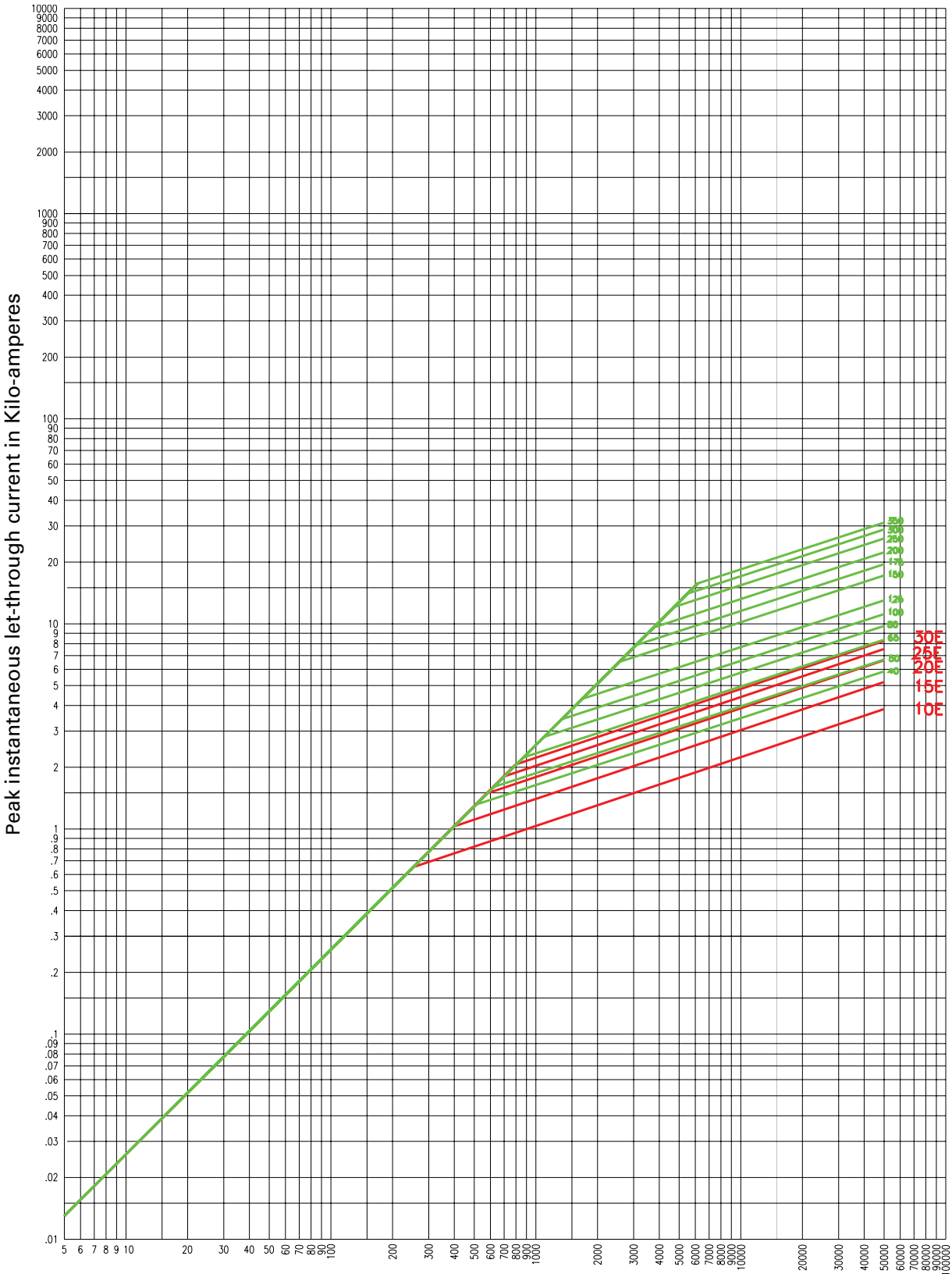
8CLE-_

Curve 70548601
April 16, 1999
Reference # 563533

Curve 70546301
April 1999
Reference # 705463

Curve 70546501
April 1999
Reference # 705465

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

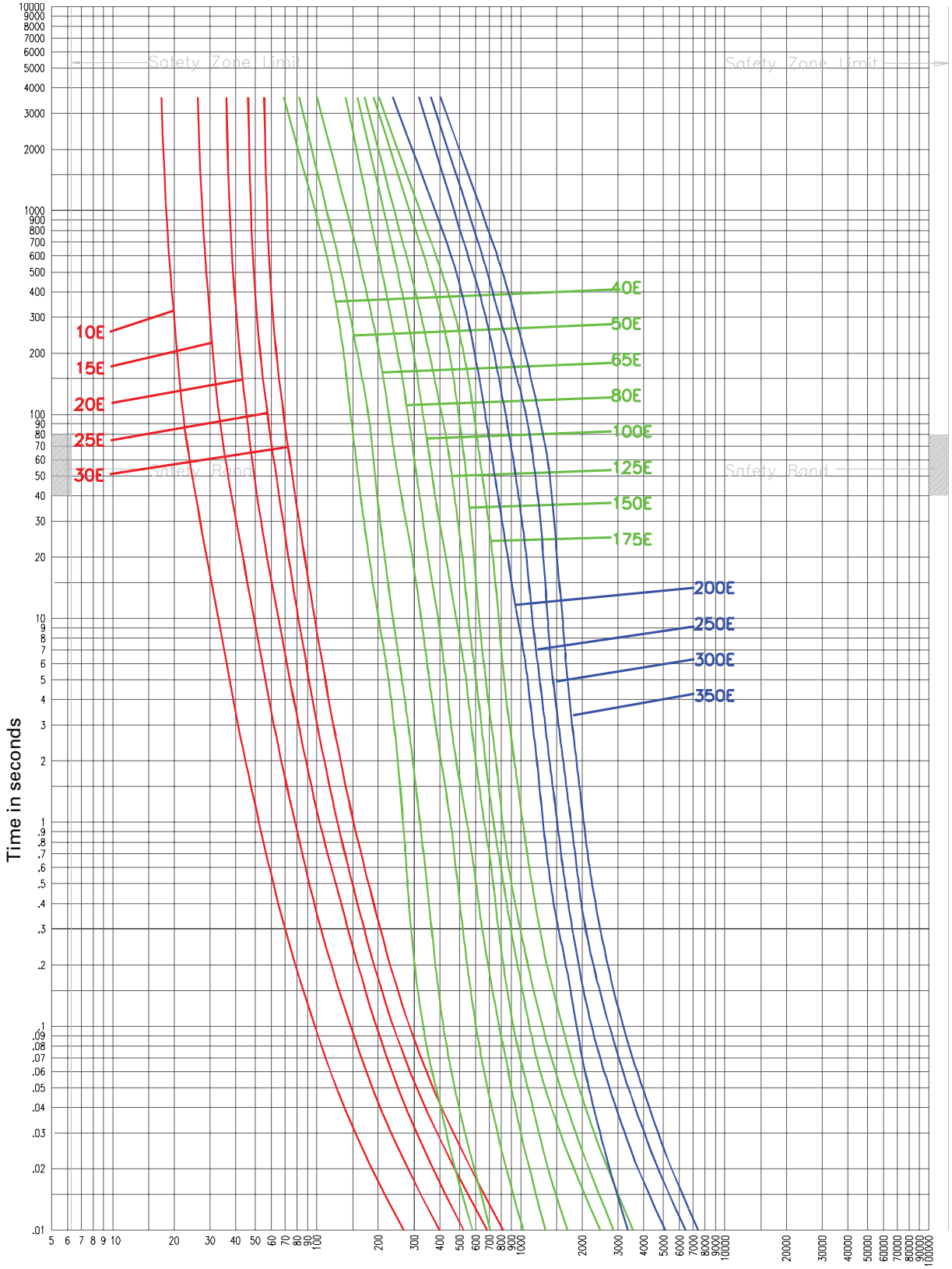


8CLE-_

Curve 70548801
September 1999
Reference # 705488

Curve 70547301
April 1999
Reference # 705473

8.3kV Time-current curves — minimum melt for 8HLE-_E, 8AHLE-_E and 8BHLE-_E



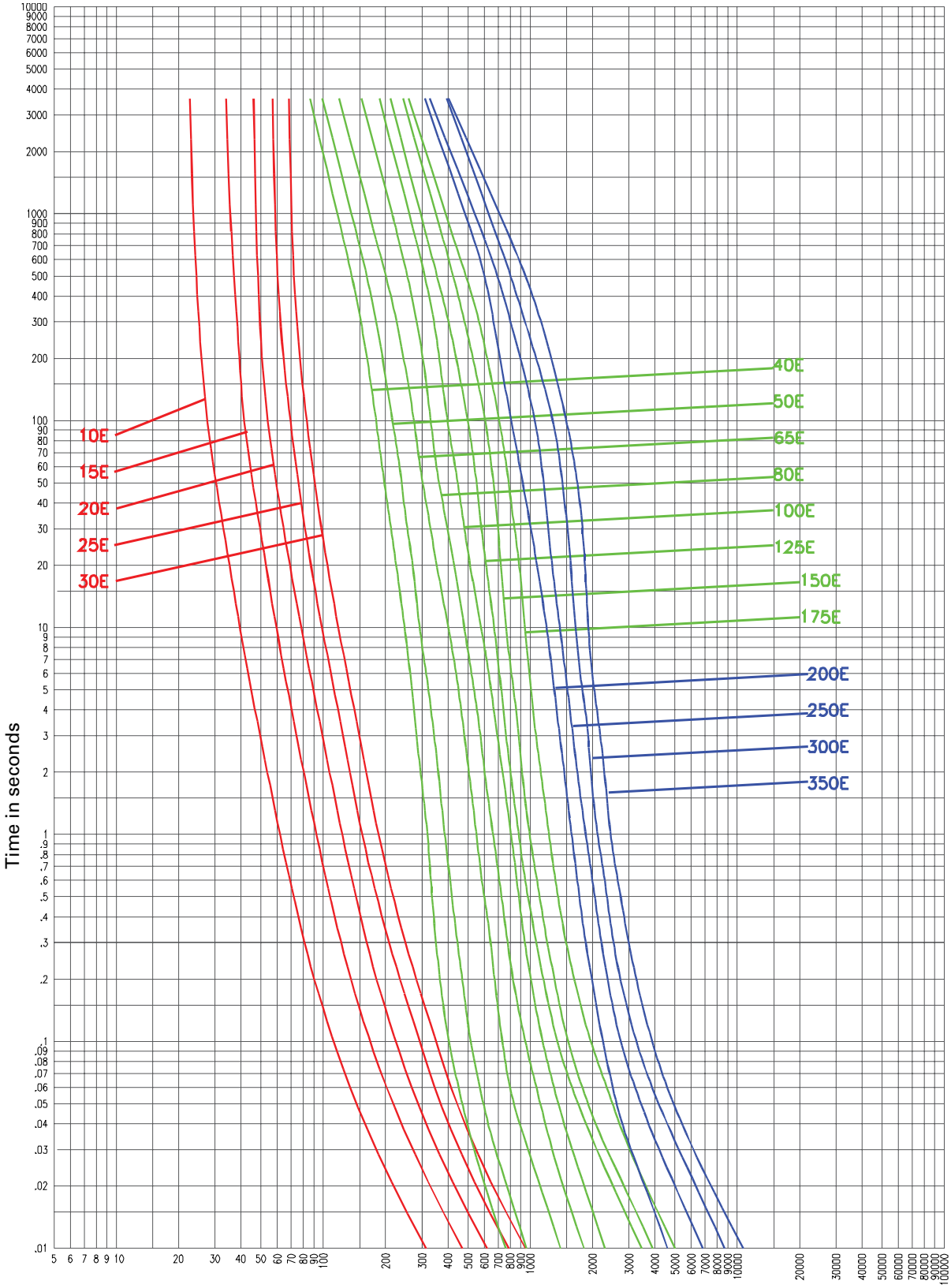
8HLE-_, 8BHLE-_, 8AHLE-_

Curve 70548507
April 16, 1999
Reference # 563532

Curve 70546203
April 1999
Reference # 705462

Curve 70546403
April 1999
Reference # 705464

8.3kV Time-current curves — total clear for 8HLE-_E, 8AHLE-_E and 8BHLE-_E



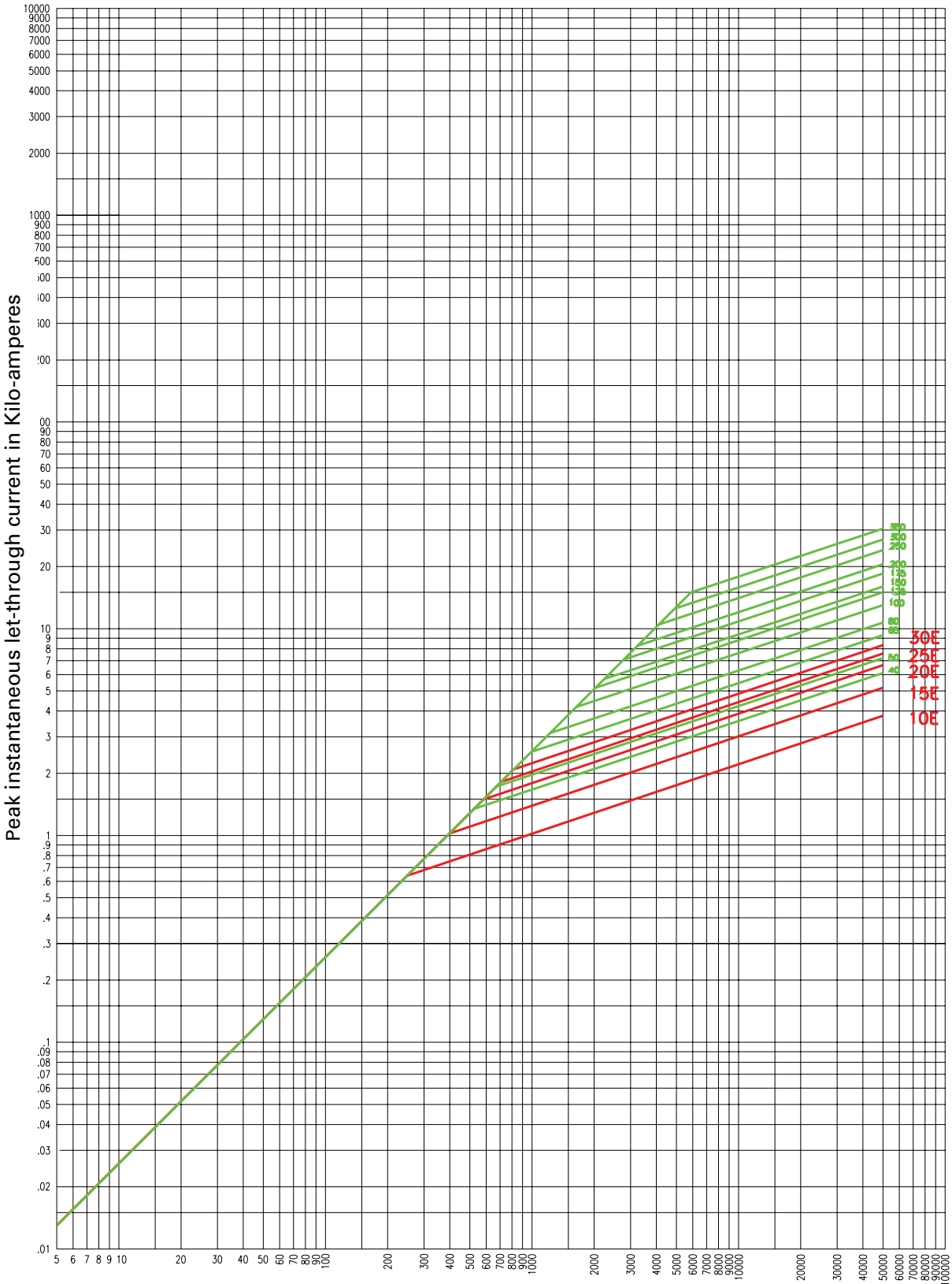
8HLE-_, 8BHLE-_, 8AHLE-_

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-_E, 8AHLE-_E and 8BHLE-_E



Curve 70548804
September 1999
Reference # 705488

Curve 70547201
April 1999
Reference # 705472

8HLE-_, 8BHLE-_, 8AHLE-_

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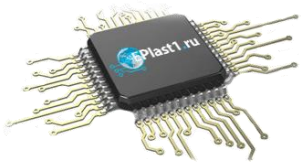

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