

R-Rated medium voltage fuses for motor circuit protection



Description:

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

Features and benefits

- Current-limiting R-Rated fuses will safely interrupt all currents between their minimum and maximum interrupting ratings and will melt in a range of 15 to 35 seconds at a value of 100 times the “R” number per ANSI C37.46.
- R-Rated fuses are physically dimensioned for easy installation in existing hardware.
- Available in standard, AMPGARD Hookeye and hermetically sealed, and bolt-on mounting styles to meet application needs.
- 4.8 kV Limitamp® bolt-on constructions available in ratings from 2R to 24R.
- 2.4 kV and 4.8 kV AMPGARD hermetically sealed constructions are suitable for Class I, Group D, Div. 2 hazardous locations.
- Open fuse indicator on all mounting styles speeds troubleshooting.
- Classified as backup fuses for current-limiting protection of medium voltage motor controllers (short-circuit performance only).
- These fuses are in a self-contained, non-venting package for installation indoors or outdoors in an enclosure.

Typical applications:

- Medium voltage motors and controllers

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2.4 kV R-Rated fuses

Catalog symbols:

Code-(amps)R	Construction
JCK_R 2CLS_R	Standard
JCK-A_R* 2ACLS_R	
JCH_R 2HCLS_R	AMPGARD Hookeye Hermetically sealed AMPGARD
JCK-B_R 2BCLS_R	Bolt-on

* For use in 400 amp AMPGARD motor starters.

Ratings:

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

Agency information:

- UL Recognized: Guide MSSS2, File E96676 (JCK_R [2R-12R] and JCK-A_R [2R-12R])

Recommended fuse 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

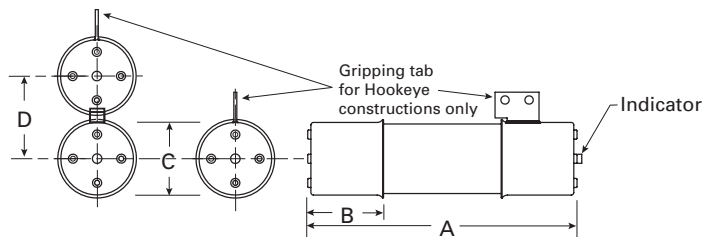
* Single barrel only, not sold in pairs.

Dimensions - in [mm]

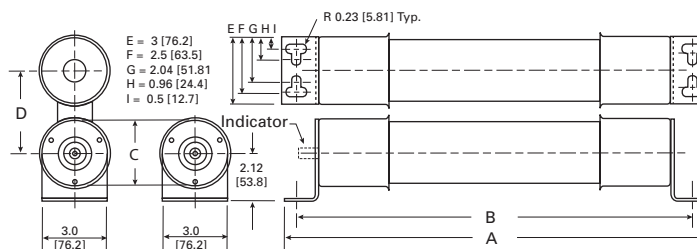
Construction	Amp range	Dimension			
		A	B	C	D
Standard - short	25-230A	10.8 (274)	3 (76)	3 (76)	—
	390-450A				3.3 (84)
AMPGARD Hookeye*	70-230A	19.2 (488)	17.9 (455)	3 (76)	—
	390-450A				3.3 (84)
Bolt-on	25-230A	19.2 (488)	17.9 (455)	3 (76)	—
	390-450A				3.3 (84)

* Includes hermetically sealed versions.

Standard and AMPGARD Hookeye



Bolt-on



2.4 kV R-Rated fuse catalog numbers

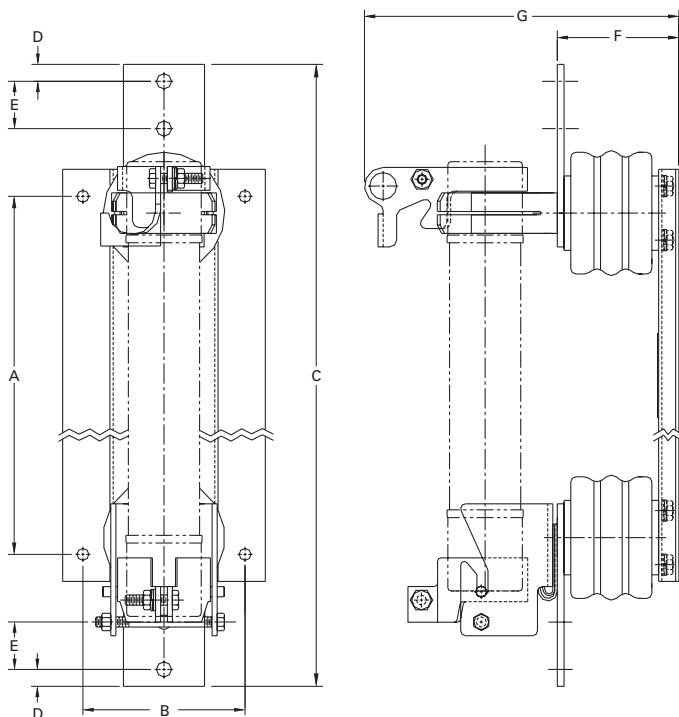
"R"		Mounting style (minimum interrupting rating in amps)								No. of barrels
Amps	Des.	Standard	Standard	AMPGARD	Hermetically sealed	AMPGARD	Bolt-on			
25	—	—	2CLS-25* (100)	—	2ACLS-25* (90)	JCH-30* (90)	2HCLS-25* (90)	JCK-B-25* (90)	2BCLS-25* (90)	1
70	2R	JCK-2R (165)	2CLS-2R (180)	JCK-A-2R (165)	2ACLS-2R (180)	JCH-2R (180)	2HCLS-2R (180)	JCK-B-2R (180)	2BCLS-2R (180)	
100	3R	JCK-3R (220)	2CLS-3R (270)	JCK-A-3R (220)	2ACLS-3R (270)	JCH-3R (270)	2HCLS-3R (270)	JCK-B-3R (270)	2BCLS-3R (270)	
130	4R	JCK-4R (320)	2CLS-4R (360)	JCK-A-4R (320)	2ACLS-4R (360)	JCH-4R (360)	2HCLS-4R (360)	JCK-B-4R (360)	2BCLS-4R (360)	
150	5R	JCK-5R (410)	2CLS-5R (450)	JCK-A-5R (410)	2ACLS-5R (450)	JCH-5R (450)	2HCLS-5R (450)	JCK-B-5R (450)	2BCLS-5R (450)	
170	6R	JCK-6R (480)	2CLS-6R (540)	JCK-A-6R (480)	2ACLS-6R (540)	JCH-6R (540)	2HCLS-6R (540)	JCK-B-6R (540)	2BCLS-6R (540)	
200	9R	JCK-9R (720)	2CLS-200* (740)	JCK-A-9R (720)	2ACLS-200* (740)	JCH-200* (740)	2HCLS-200* (740)	JCK-B-200* (740)	2BCLS-200* (740)	
230	12R	JCK-12R (970)	2CLS-230* (1080)	JCK-A-12R (970)	2ACLS-230* (1080)	JCH-230* (1080)	2HCLS-230* (1080)	JCK-B-230* (1080)	2BCLS-230* (1080)	
390	18R	JCK-18R (1430)†	2CLS-390* (1500)	JCK-A-18R (1430)†	2ACLS-390* (1500)	JCH-390* (1500)	2HCLS-390* (1500)	JCK-B-390* (1500)	2BCLS-390* (1500)	
450	24R	JCK-24R (1880)†	2CLS-450* (2200)	JCK-A-24R (1880)†	2ACLS-450* (2200)	JCH-450* (2200)	2HCLS-450* (2200)	JCK-B-450* (2200)	2BCLS-450* (2200)	

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

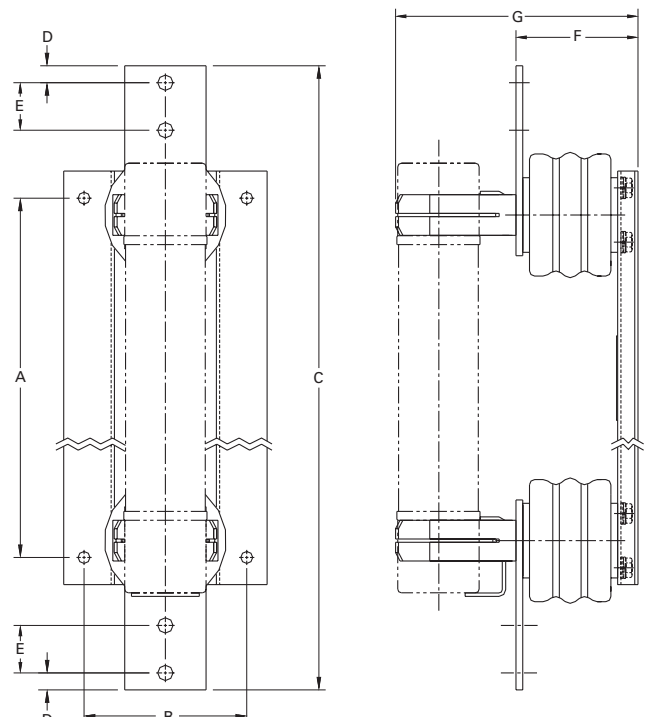
JCK and 2HCLS Type mountings -in (mm)

Catalog number	Hole centers		Overall length C	Hole Inset D	Hole centers E	Contact height F	Overall height G	BIL (kV)
	A	B						
Disconnect single barrel†								
2CLE-GDM-D	8.24 (209.3)	6 (152.4)	18 (457.2)	0.62 (15.7)	1.75 (44.4)	4.5 (114.3)	11.72 (297.7)	60
2CLE-PDM-D								
Disconnect double barrel†								
2CLE-GDM-E	8.24 (209.3)	6 (152.4)	18 (457.2)	0.62 (15.7)	1.75 (44.4)	4.5 (114.3)	15.28 (388.1)	60
2CLE-PDM-E								
Non-disconnect single barrel								
2CLE-GNM-D	8.24 (209.3)	6 (152.4)	18 (457.2)	0.62 (15.7)	1.75 (44.4)	4.5 (114.3)	8.79 (223.3)	60
2CLE-PNM-D								
Non-disconnect double barrel								
2CLE-GNM-E	8.24 (209.3)	6 (152.4)	18 (457.2)	0.62 (15.7)	1.75 (44.4)	4.5 (114.3)	12.48 (317.0)	60
2CLE-PNM-E								

2.4 kV disconnect mounting†

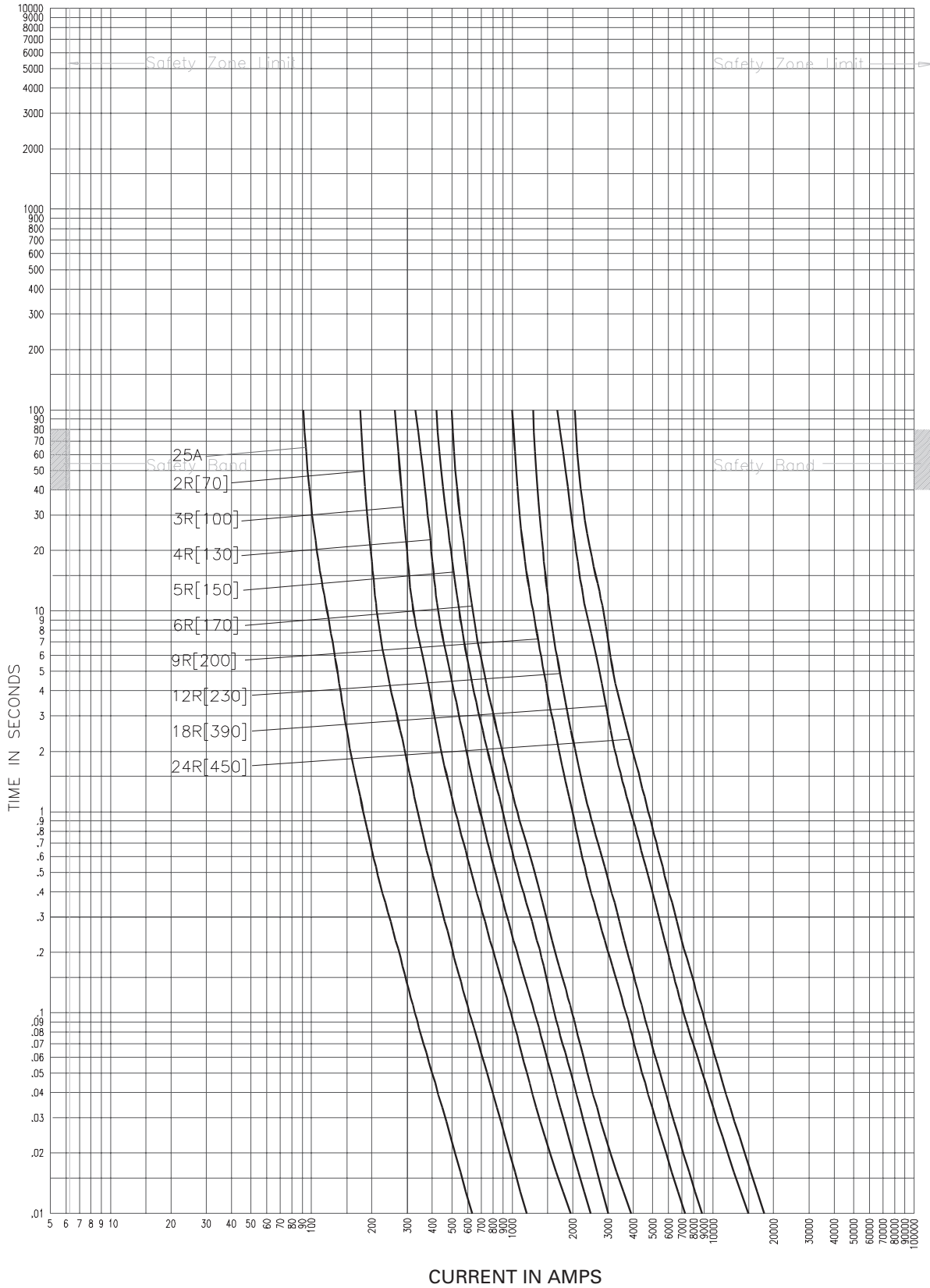


2.4 kV non-disconnect mounting



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

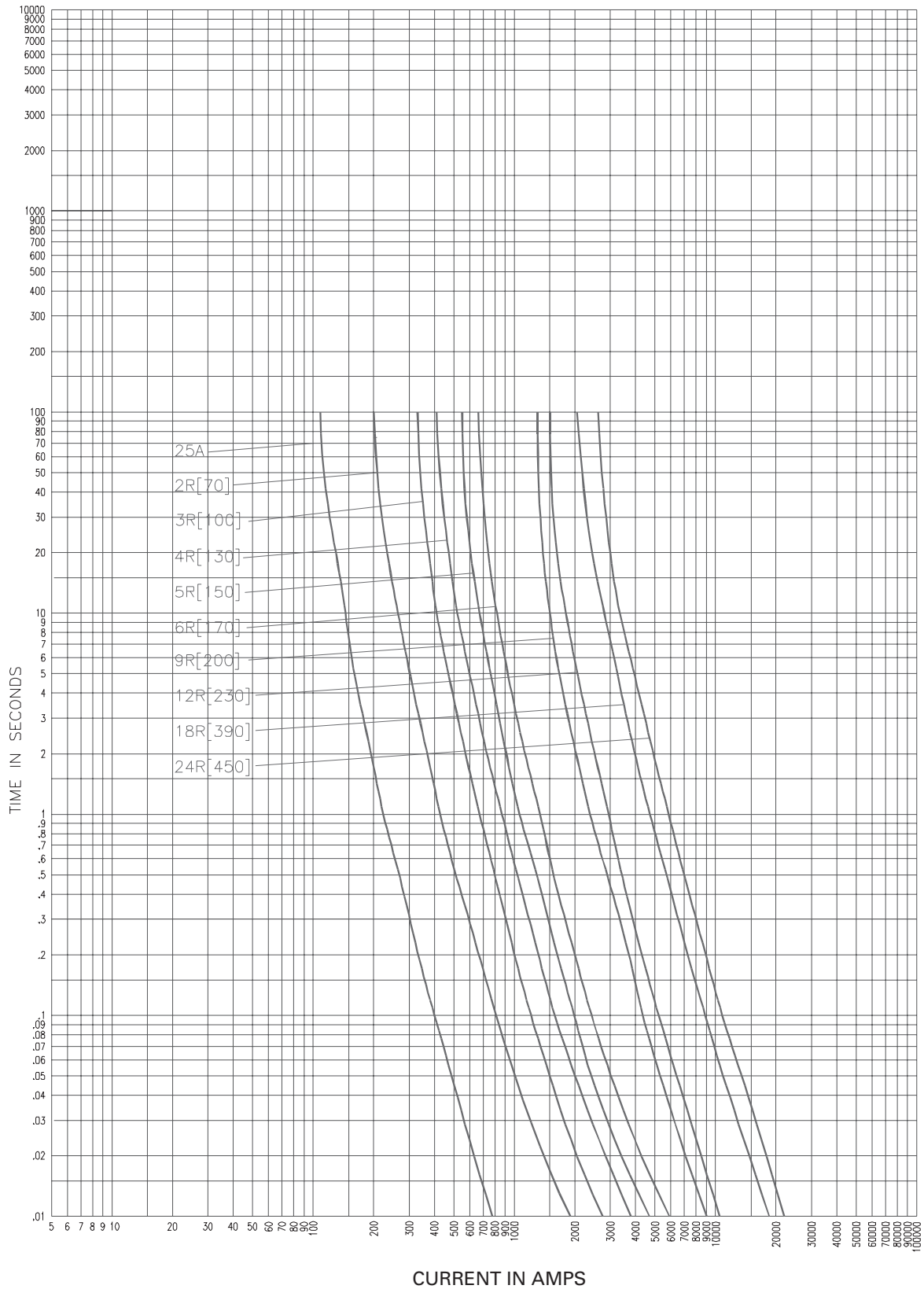
2.4 kV Time-current curves — minimum melting for 2HCLS-_R and 2BCLS-_R (25A, 2R-24R
@25°C)



2HCLS-_R and 2BCLS-_R

CURVE 66664702
January 2001
Reference # 666647,
512853, 639405

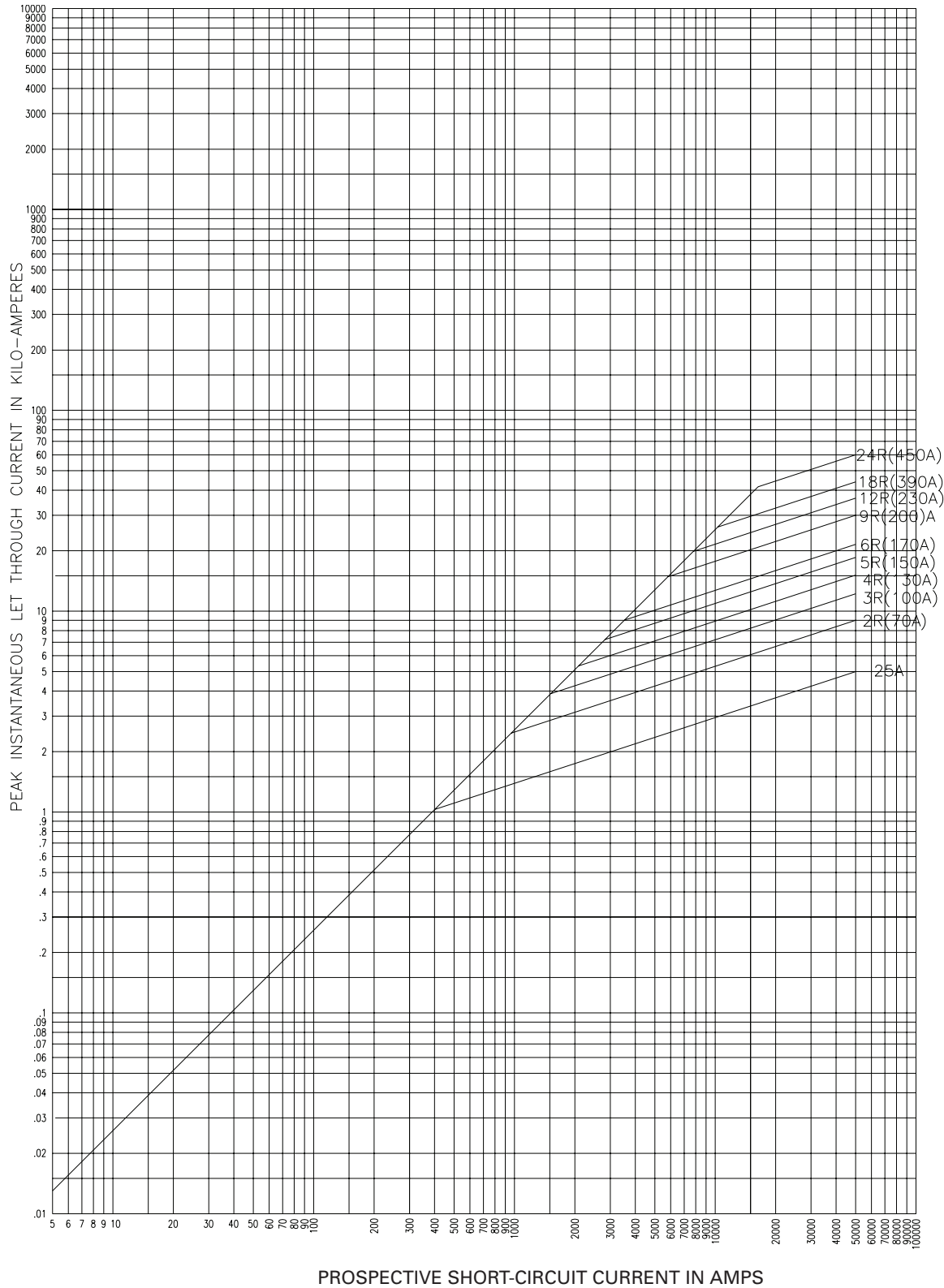
2.4 kV Time-current curves — total clearing for 2HCLS-_R and 2BCLS-_R (25A, 2R-24R @25°C)



2HCLS-_R and 2BCLS-_R

CURVE 66664704
January 2000
Reference # 666647,
512854, 639406

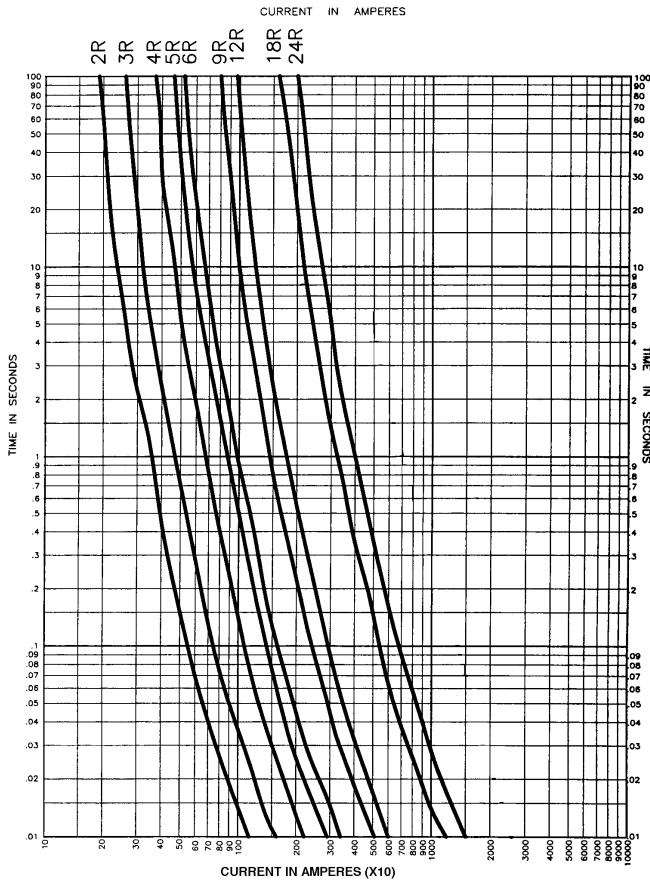
2.4 kV Peak let-through curves for 2HCLS-_R and 2BCLS-_R (25A, 2R-24R @25°C)



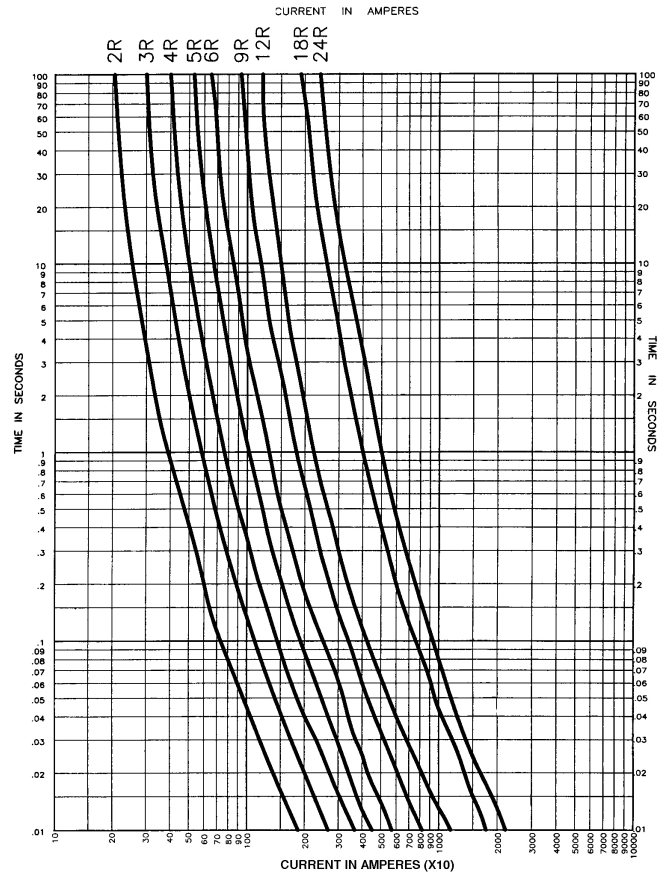
2HCLS-_R and 2BCLS-_R

CURVE 66700202
January 2001
Reference # 639315

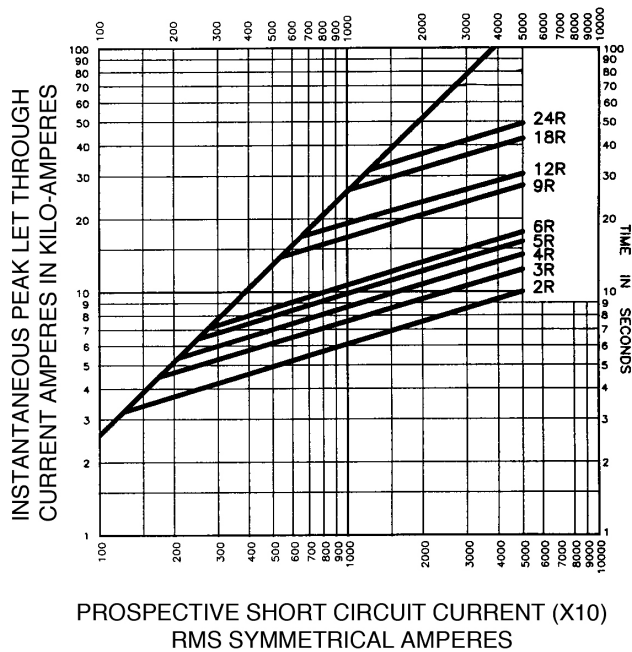
2.4 kV Time-current curves — minimum melting for JCK-_R and JCK-A-_R (2R-24R @25°C)



2.4 kV Time-current curves — total clearing for JCK-_R and JCK-A-_R (2R-24R @25°C)



2.4 kV Peak let-through curves for JCK-_R and JCK-A-_R (2R-24R @25°C)



4.8 kV R-Rated fuses

Catalog symbols:

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

* For use in 400 amp AMPGARD motor starters.

Ratings:

- Volts
 - 4.8 kV (nominal)
 - 5.0 kV (max design)
- Amps 30-800 A
- Interrupting ratings
 - 50 kA Sym
 - 80 kA Asym

Agency information:

- UL Recognized, Guide MSSS2
 - File E96676: JCL-_R [2R-12R], JCL-A-_R [2R-12R], 5MCLS-_R-A [2R-24R], and 5MCLS-_R-B [2R-24R]
 - File E60757: 5CLS-30, 5CLS-_R [2R-18R], 5ACLS-30, and 5ACLS-_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		5HLE-PNM-D	
	Non-disconnect holder, glass polyester		5HLE-GNM-D	
	Disconnect holder, porcelain	60	5HLE-PDM-D	
	Disconnect holder, glass polyester		5HLE-GDM-D	
390-450A Double barrel	Non-disconnect holder, porcelain		5HLE-PNM-E	
	Non-disconnect holder, glass polyester		5HLE-GNM-E	
	Disconnect holder, porcelain		5HLE-PDM-E	
Fuse holders for 5LCLS†				
70-230A Single barrel	Non-disconnect holder, porcelain		5CLE-PNM-D	
	Non-disconnect holder, glass polyester		5CLE-GNM-D	
	Disconnect holder, porcelain	60	5CLE-PDM-D	
	Disconnect holder, glass polyester		5CLE-GDM-D	
390-450A Double Barrel	Disconnect holder, porcelain	75	8CLE-PDM-D	
	Disconnect holder, glass polyester		8CLE-GDM-D	
	390-450A Double Barrel	Disconnect holder, porcelain	60	5CLE-PDM-E
		Disconnect holder, glass polyester		5CLE-GDM-E

* Single barrel only, not sold in pairs.

**Not available for standard - long constructions

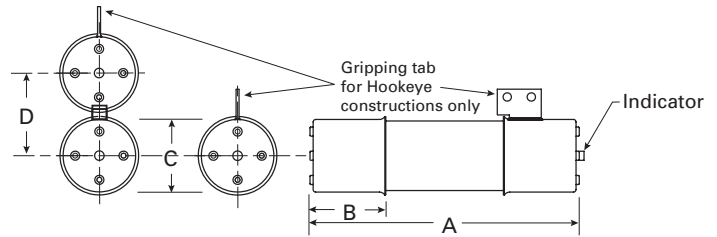
† Not available for 390 to 450 amp ratings.

Dimensions - in [mm]

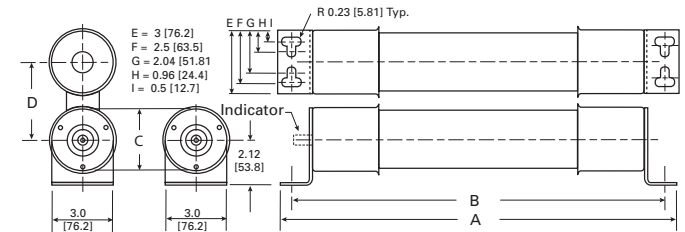
Construction	Amp range	Dimension			
		A	B	C	D
Standard - short	30-230A	15.6 (396)			—
	390-450A				3.3 (84)
Standard - long	70-230A	17.9 (455)	3 (76)	3 (76)	—
	390-450A				3.3 (84)
AMPGARD Hookeye*	30-230A	15.9 (404)			—
	390-450A				3.3 (84)
Bolt-on	30-230A	19.2 (488)	17.9 (455)	3 (76)	—
	390-450A				3.3 (84)
	600-800A				4 (101)
Limitamp (-A)	70-230	18.3 (465)	18.8 (478)	1.4 (36)	4.8 (122)
	390-450				7.4 (188)
Limitamp (-B)	70-230	18.3 (465)	18.8 (478)	1.4 (36)	3.0 (76)
	390-450				2.4 (61)

* Includes hermetically sealed versions.

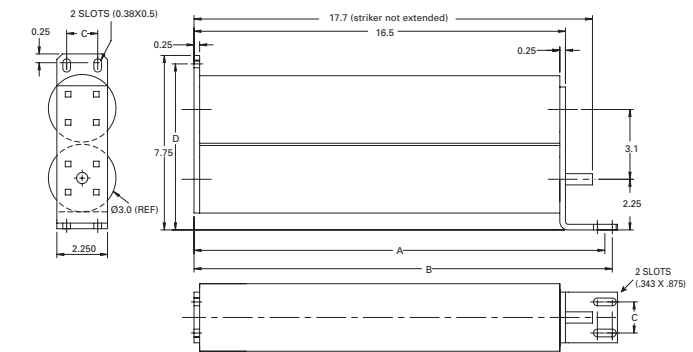
Ferrule JCL, 5LCLS, 5CLS and AMPGARD Hookeye



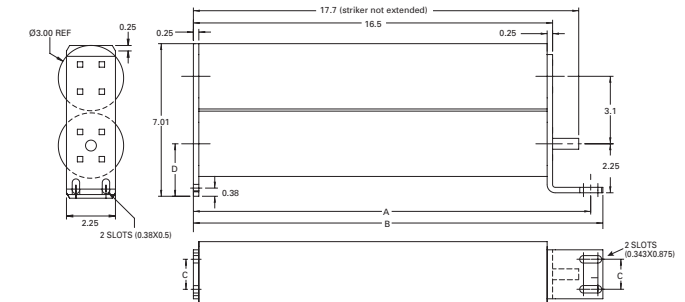
Bolt-on — 5BCLS_



Bolt-on — 5MCLS-_R-A



Bolt-on — 5MCLS-_R-B



4.8 kV R-Rated fuse catalog numbers

Ferrule constructions (min. interrupting rating in amps)					
Amps	Short	Short	Long	No. of barrels	
30	5CLS-30* (100)	—	—	1	
70	5CLS-2R (180)	JCL-2R (165)	5LCLS-2R (180)†		
100	5CLS-3R (270)	JCL-3R (220)	5LCLS-3R (270)†		
130	5CLS-4R (360)	JCL-4R (320)	5LCLS-4R (360)†		
150	5CLS-5R (450)	JCL-5R (410)	5LCLS-5R (450)†		
170	5CLS-6R (540)	JCL-6R (480)	5LCLS-6R (540)†		
200	5CLS-9R (740)	JCL-9R (720)	5LCLS-9R (740)†		
230	5CLS-12R (1080)	JCL-12R (970)	5LCLS-12R (1080)†		
390	5CLS-18R (1500)	JCL-18R (1430)†	5LCLS-18R (1500)†		2
450	5CLS-24R (2200)†	JCL-24R (1880)†	5LCLS-24R (2200)†		

* Does not comply with ANSI C37.46 for "R" rating.
† Not UL Recognized.

AMPGARD Hookeye (min. interrupting rating in amps)					
Amps	Hookeye	Hookeye	Hermetic seal	No. of barrels	
30	5ACLS-30* (100)	—	5HCLS-30* (100)†	1	
70	5ACLS-2R (180)	JCL-A-2R (165)	5HCLS-2R (180)†		
100	5ACLS-3R (270)	JCL-A-3R (220)	5HCLS-3R (270)†		
130	5ACLS-4R (360)	JCL-A-4R (320)	5HCLS-4R (360)†		
150	5ACLS-5R (450)	JCL-A-5R (410)	5HCLS-5R (450)†		
170	5ACLS-6R (540)	JCL-A-6R (480)	5HCLS-6R (540)†		
200	5ACLS-9R (740)	JCL-A-9R (720)	5HCLS-9R (740)†		
230	5ACLS-12R (1080)	JCL-A-12R (970)	5HCLS-12R (1080)†		
390	5ACLS-18R (1500)	JCL-A-18R (1430)†	5HCLS-18R (1500)†		2
450	5ACLS-24R (2200)	JCL-A-24R (1880)†	5HCLS-24R (2200)†		

* Does not comply with ANSI C37.46 for "R" rating.
† Not UL Recognized.

Bolt-on (min. interrupting rating in amps)					
Amps	Regular	Regular		No. of barrels	
30	5BCLS-30* (100)†	—		1	
70	5BCLS-2R (180)†	JCL-B-2R (165)†			
100	5BCLS-3R (270)†	JCL-B-3R (220)†			
130	5BCLS-4R (360)†	JCL-B-4R (320)†			
150	5BCLS-5R (450)†	JCL-B-5R (410)†			
170	5BCLS-6R (540)†	JCL-B-6R (480)†			
200	5BCLS-9R (740)†	JCL-B-9R (720)†			
230	5BCLS-12R (1080)†	JCL-B-12R (970)†			
390	5BCLS-18R (1500)†	JCL-B-18R (1430)†			2
450	5BCLS-24R (2200)†	JCL-B-24R (1880)†			
600	5BCLS-32R (3000)†	—			
650	5BCLS-36R (3200)†	—			
800	5BCLS-44R (3600)†	—			

* Does not comply with ANSI C37.46 for "R" rating.
† Not UL Recognized.

GE Limitamp (min. interrupting rating in amps)					
Amps	Bolt-on	Bolt-on		No. of barrels	
30	—	—		1	
70	5MCLS-2R-A (180)	5MCLS-2R-B (180)			
100	5MCLS-3R-A (270)	5MCLS-3R-B (270)			
130	5MCLS-4R-A (360)	5MCLS-4R-B (360)			
150	5MCLS-5R-A (450)	5MCLS-5R-B (450)			
170	5MCLS-6R-A (540)	5MCLS-6R-B (540)			
200	5MCLS-9R-A (850)	5MCLS-9R-B (850)			
230	5MCLS-12R-A (1150)	5MCLS-12R-B (1150)			
390	5MCLS-18R-A (1725)	5MCLS-18R-B (1725)			2
450	5MCLS-24R-A (2350)	5MCLS-24R-B (2350)			

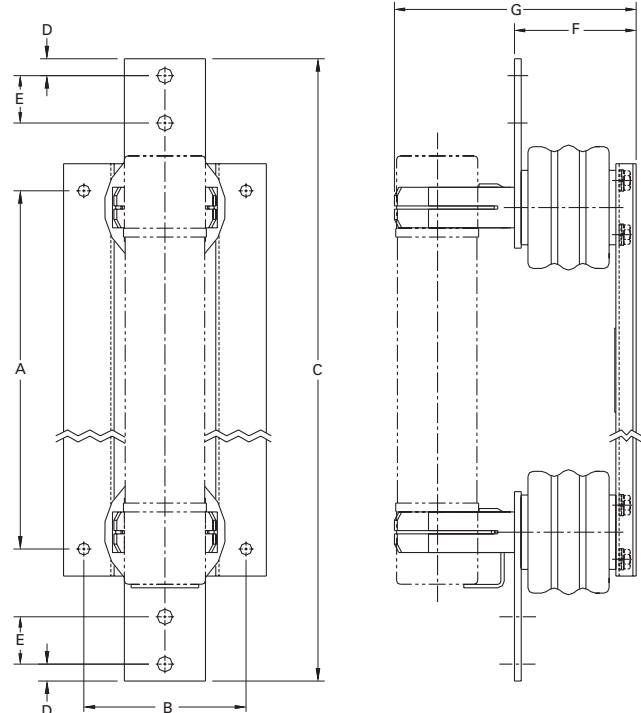
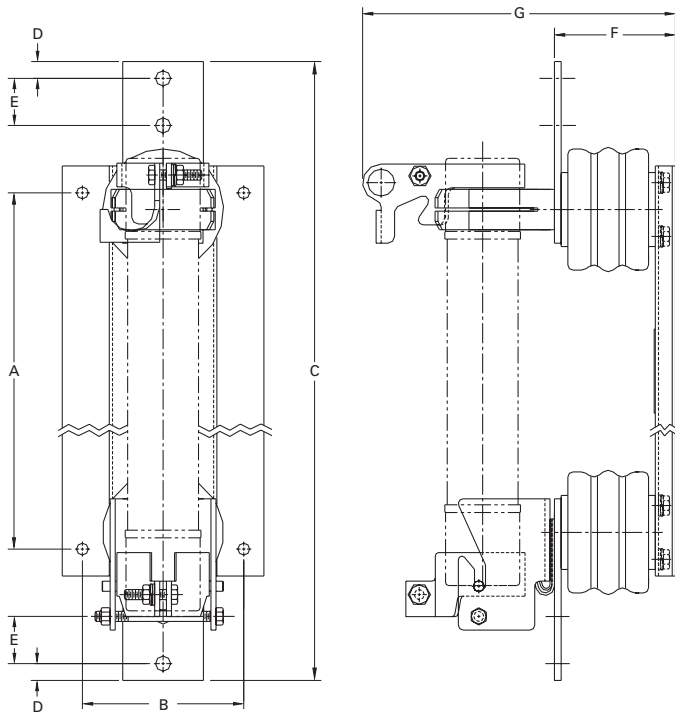
* Does not comply with ANSI C37.46 for "R" rating.
† Not UL Recognized.

5CLS, JCL, JCL-A, 5ACLS and 5HCLS Type mountings — in (mm)

Catalog number	Hole centers		Overall length C	Hole Inset D	Hole centers E	Contact height F	Overall height G	BIL rating (kV)
	A	B						
Disconnect single barrel†								
5CLE-GDM-D	15.24 (387.1)		25 (647.7)					
5CLE-PDM-D		6 (152.4)		0.62 (15.7)	1.75 (44.4)	4.5 (114.3)	11.72 (297.7)	60
5HLE-PDM-D	16.25 (412.8)		23 (584.2)					
5HLE-GDM-D								
Disconnect double barrel†								
5CLE-GDM-E	15.24 (387.1)		25 (647.7)					
5CLE-PDM-E		6 (152.4)		0.62 (15.7)	1.75 (44.4)	4.5 (114.3)	15.28 (388.1)	60
5HLE-GDM-E	16.25 (412.8)		23 (584.2)					
5HLE-PDM-E								
Non-disconnect single barrel								
5CLE-GNM-D	15.24 (387.1)		25 (635.0)					
5CLE-PNM-D		6 (152.4)		0.62 (15.7)	1.75 (44.4)	4.5 (114.3)	8.79 (223.3)	60
5HLE-GNM-D	16.25 (412.7)		23 (584.2)					
5HLE-PNM-D								
Non-disconnect double barrel								
5HLE-PNM-E	16.25 (412.7)	6 (152.4)	25 (635.0)	0.62 (15.7)	1.75 (44.4)	4.5 (114.3)	12.48 (317.0)	60
5HLE-GNM-E								

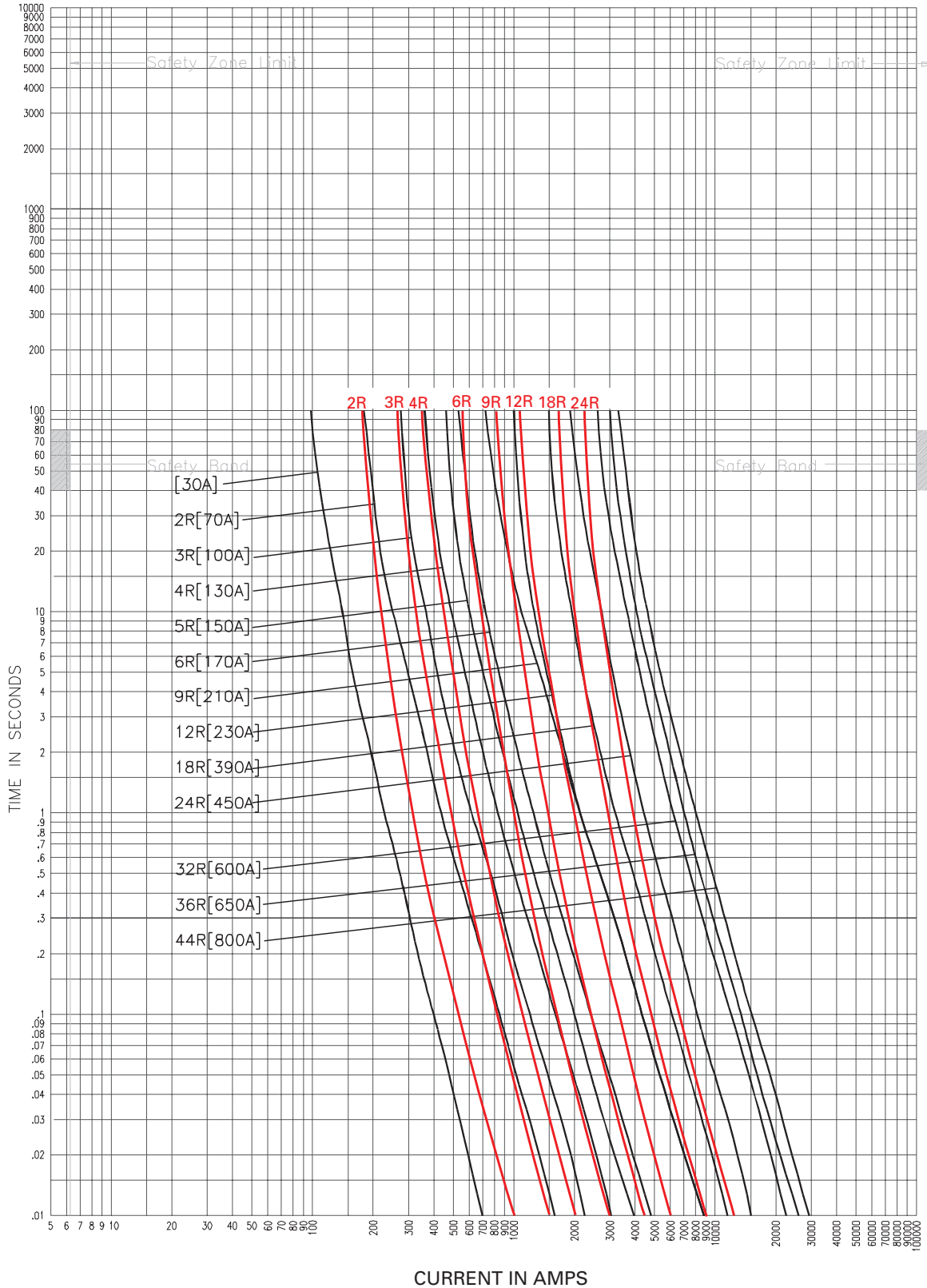
4.8 kV disconnect mounting†

4.8 kV 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.

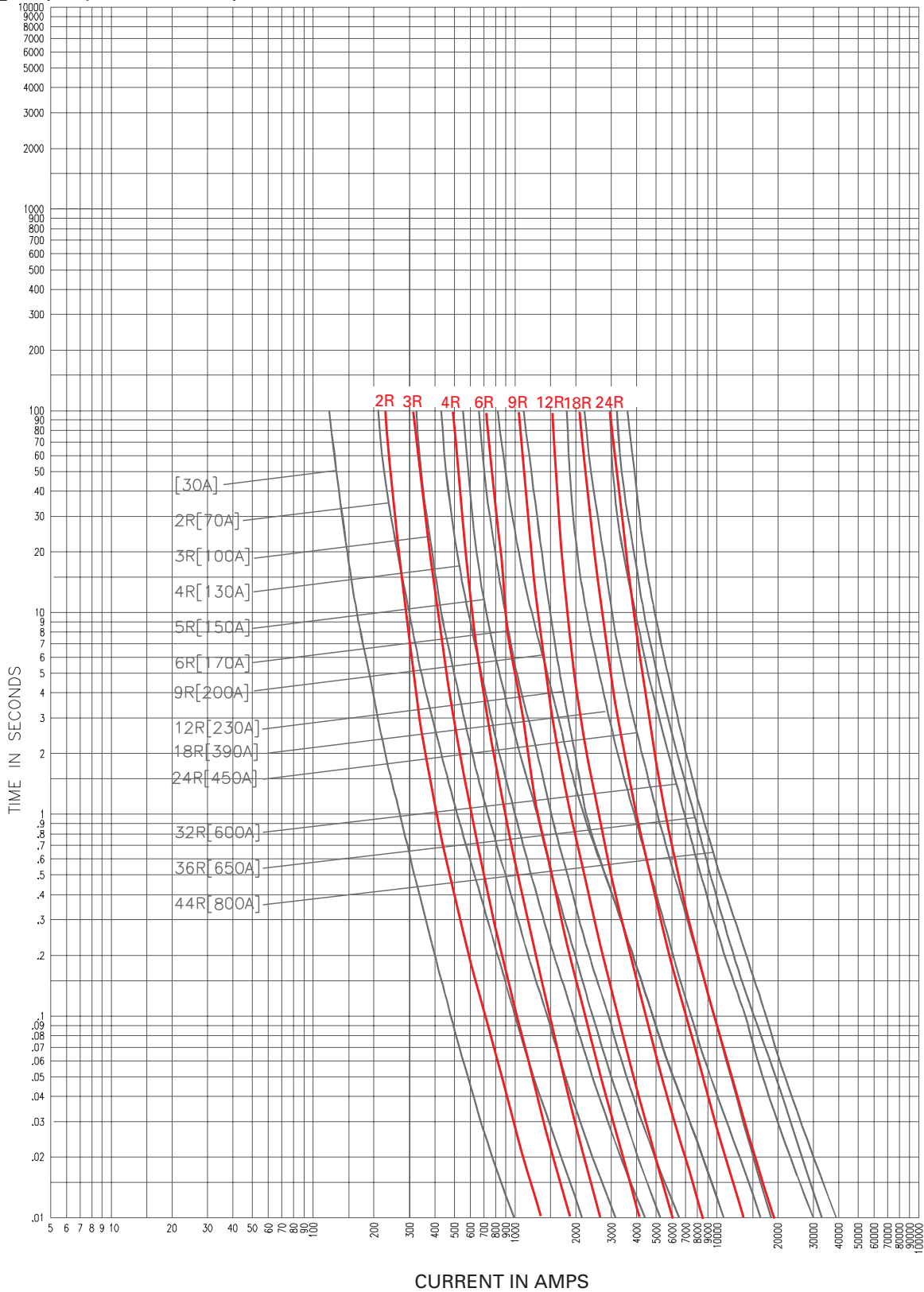
4.8 kV Time-current curves — minimum melting for 5ACLS-30, 5CLS-30, 5HCLS_R, 5BCLS-30, 5BCLS_R, 5MCLS_R-A and 5MCLS_R-B (30A, 2R-24R @ 25°C)



**5ACLS-30, 5CLS-30, 5HCLS_R, 5BCLS-30, 5BCLS_R,
5MCLS_R-A, 5MCLS_R-B**

CURVE 66690602
January 2001
Reference # 666907,
666703, 666910,
667000, 639472.

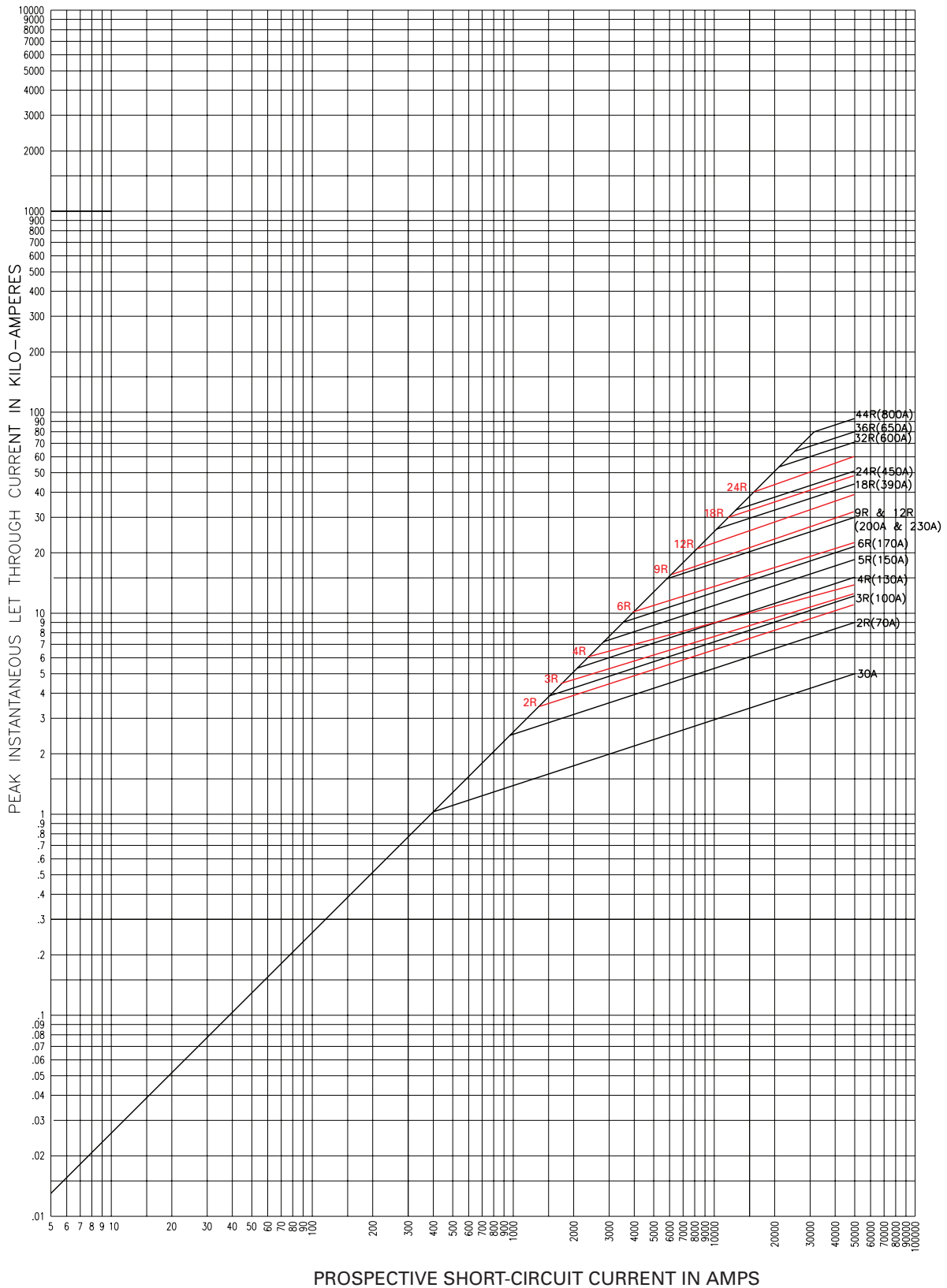
4.8 kV Time-current curves — total clearing for 5ACLS-30, 5CLS-30, 5HCLS-R, 5BCLS-30, 5BCLS-R, 5MCLS-R-A and 5MCLS-R-B (30A, 2R-24R @ 25°C)



CURVE 66690702
January 2001
Reference # 666907
666704, 666910,
6670001, 639472.

5ACLS-30, 5CLS-30, 5HCLS-R, 5BCLS-30, 5BCLS-R,
5MCLS-R-A, 5MCLS-R-B

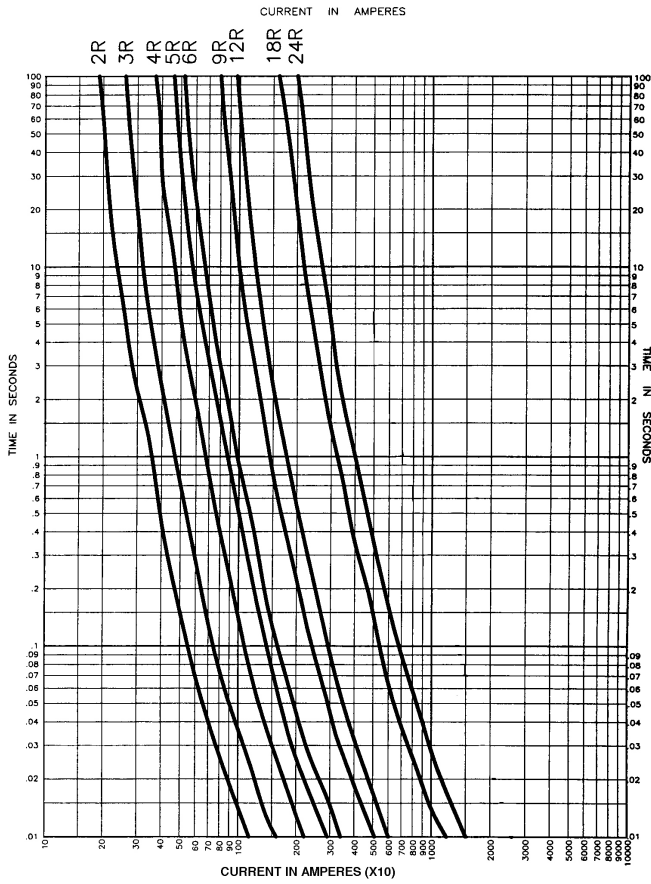
4.8 kV Peak let-through curves for 5ACLS-30, 5CLS-30, 5HCLS-R, 5BCLS-30, 5BCLS-R, 5MCLS-R-A and 5MCLS-R-B (30A, 2R-24R @ 25°C)



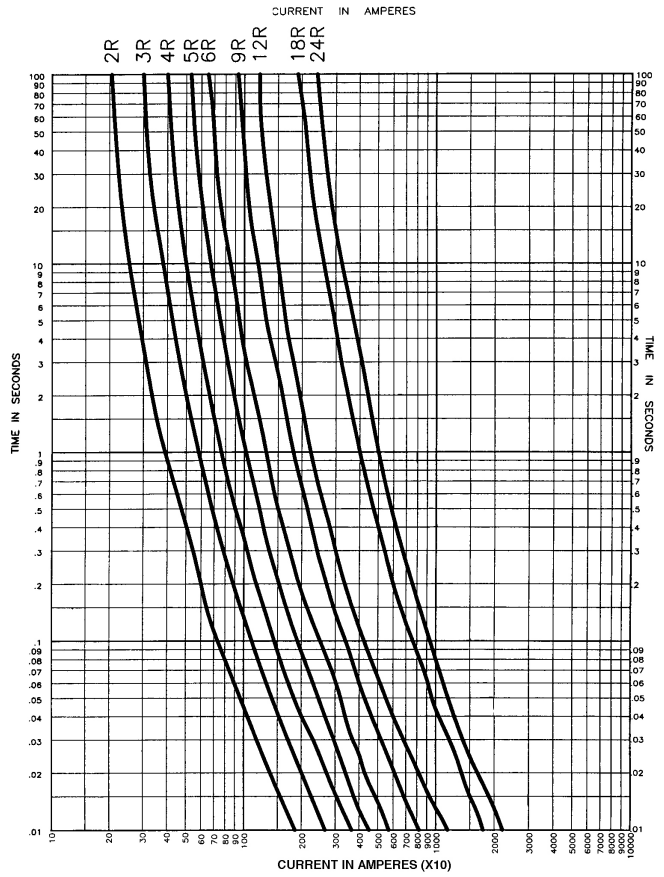
5ACLS-30, 5CLS-30, 5HCLS-R, 5BCLS-30, 5BCLS-R,
5MCLS-R-A, 5MCLS-R-B

CURVE 66700203
January 2001
Reference # 639315
667002, 667008

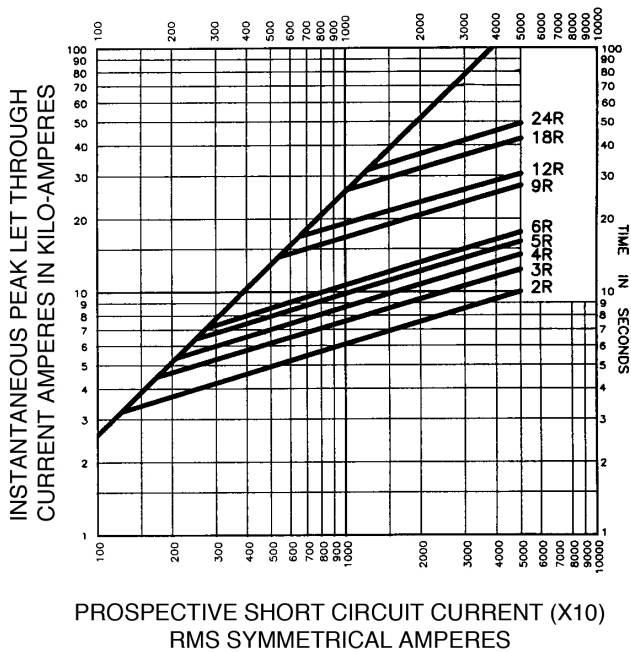
4.8 kV Time-current curves — minimum melting for JCL_R and JCL-A_R (2R-24R @25°C)



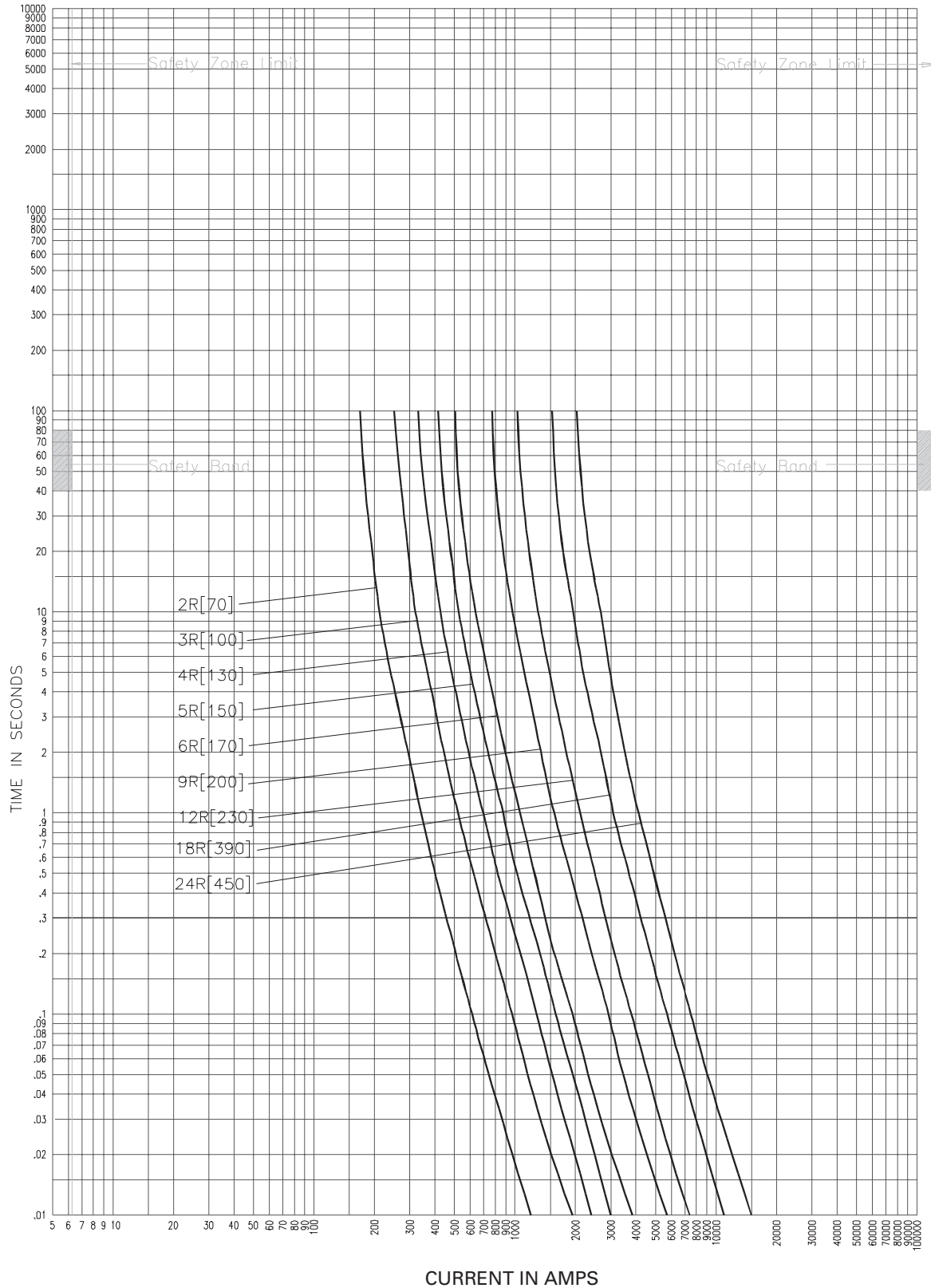
4.8 kV Time-current curves — total clearing for JCL_R and JCL-A_R (2R-24R @25°C)



4.8 kV Peak let-through curves for JCL_R and JCL-A_R (2R-24R @25°C)



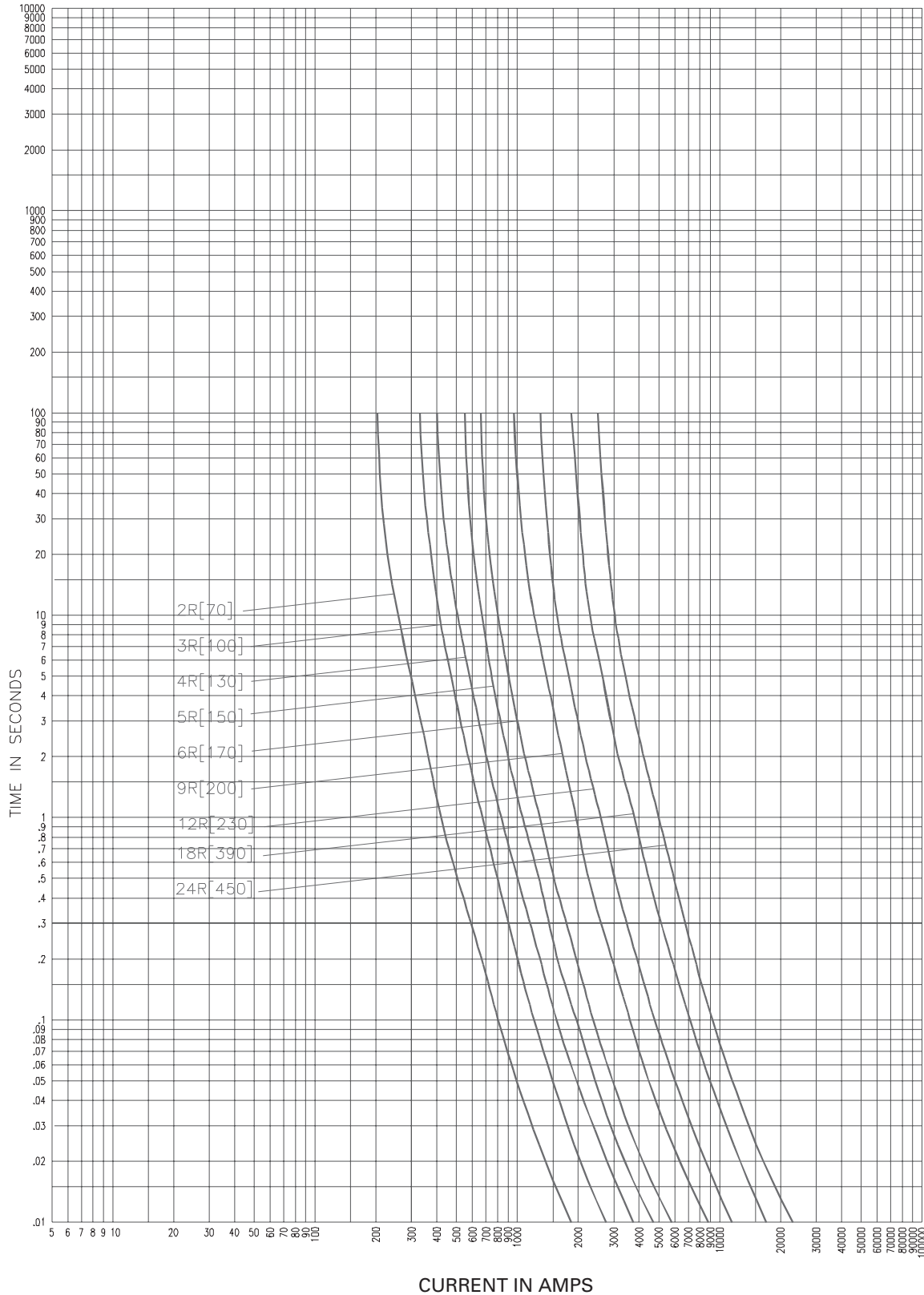
4.8 kV Time-current curves — minimum melting for 5LCLS_R (2R-24R @ 25°C)



5LCLS_R

CURVE 51285302
January 2001
Reference # 512853,
563863.

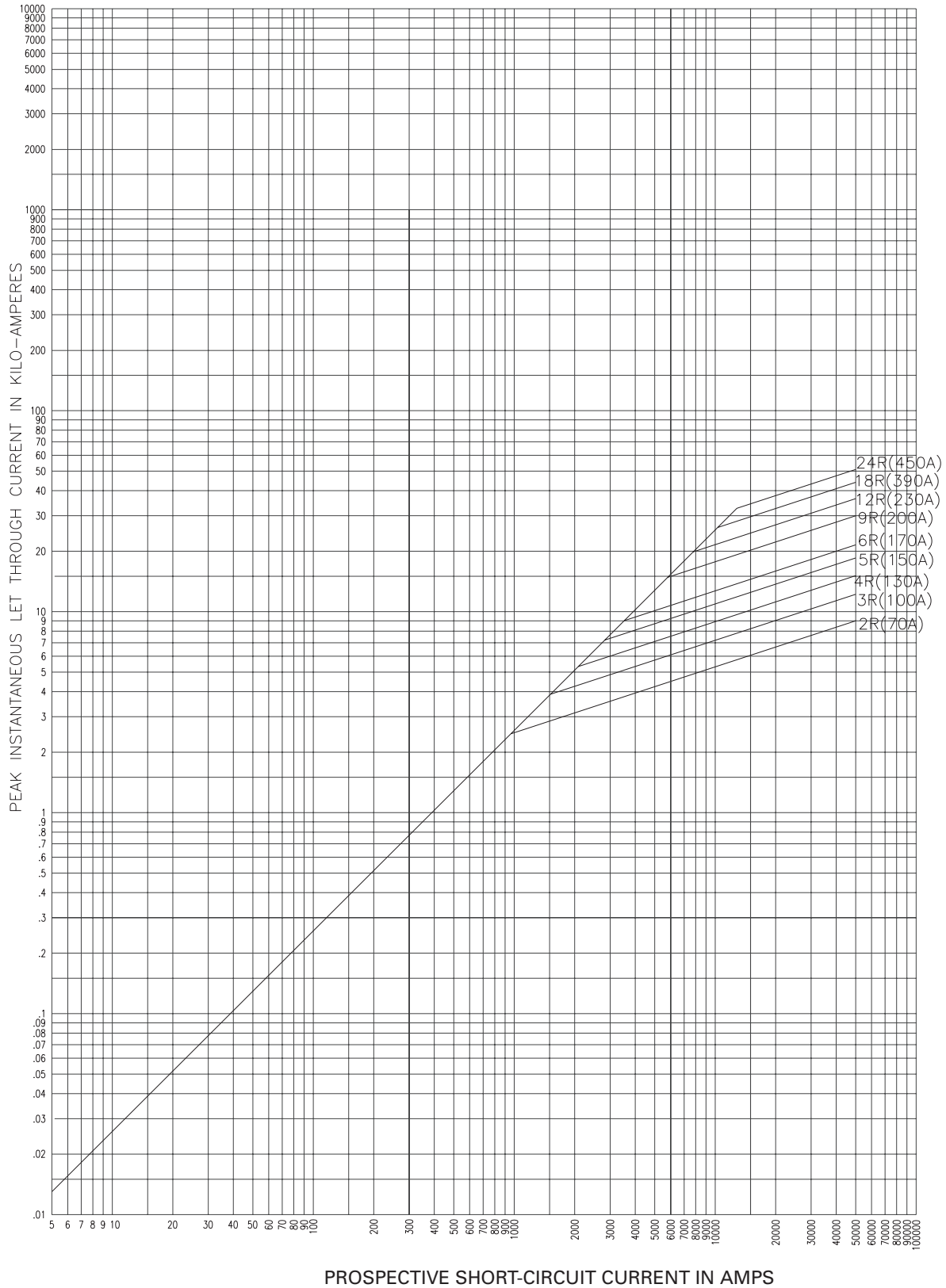
4.8 kV Time-current curves — total clearing for 5LCLS-R (2R-24R @ 25°C)



5LCLS-R

CURVE 51285402
 January 2001
 Reference # 512854,
 563864.

4.8 kV Peak let-through curves for 5LCLS_R (2R-24R @ 25°C)



5LCLS_R

CURVE 66700204
January 2001
Reference # 639315

7.2 kV R-Rated fuses

Catalog symbols:

Code-(amps)R	Construction
8CLS_R	Standard (2R - 6R)
8ACLS_R	AMPGARD Hookeye* (2R - 6R)
7BCLS_R	Bolt-on (2R - 6R)

* For use in 400 amp AMPGARD motor starters.

Ratings:

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

Recommended fuse holders for standard constructions:

Amp range	Description	BIL (kV)	Cat. No.
Fuseclips			
70-170	3" Enclosed fuseclip*	—	A3354730
	3" Open fuseclip		1A0065
	3" Spring loaded open fuseclip		9078A67G04
Fuse holders for 7CLS and 8CLS			
70-170	Non-disconnect holder, porcelain	75	8HLE-PNM-D
	Non-disconnect holder, glass polyester		8HLE-GNM-D
	Disconnect holder, porcelain		8HLE-PDM-D
	Disconnect holder, glass polyester		8HLE-GDM-D

* Single barrel only, not sold in pairs.

7.2 kV 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)	
130	4R	8CLS-4R (325)	8ACLS-4R (325)	7BCLS-4R (325)	
150	5R	8CLS-5R (390)	8ACLS-5R (390)	7BCLS-5R (390)	
170	6R	8CLS-6R (500)	8ACLS-6R (500)	7BCLS-6R (500)	

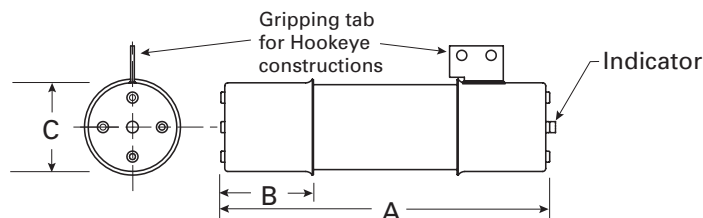
8CLS, 8ACLS, 7CLS, 7ACLS Type mountings — in (mm)

Catalog number	Hole centers		Overall length C	Hole inset D	Hole centers E	Contact height F	Overall height G	BIL (kV)
	A	B						
Disconnect single barrel†								
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								
Non-disconnect single barrel								
8HLE-GNM-D	16.25 (412.7)	6 (152.4)	23 (584.2)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	11.29 (286.7)	75
8HLE-PNM-D								

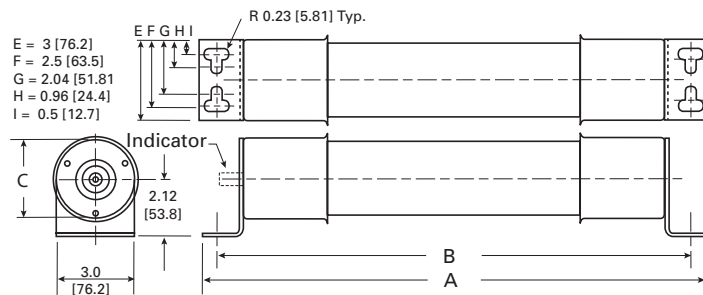
Dimensions — in [mm]

Construction	Amp range	Dimension		
		A	B	C
Standard	70-170	15.8 (401)	3 (76)	3 (76)
AMPGARD Hookeye		19.2 (488)	17.9 (455)	3 (76)
Bolt-on				

Standard and AMPGARD Hookeye



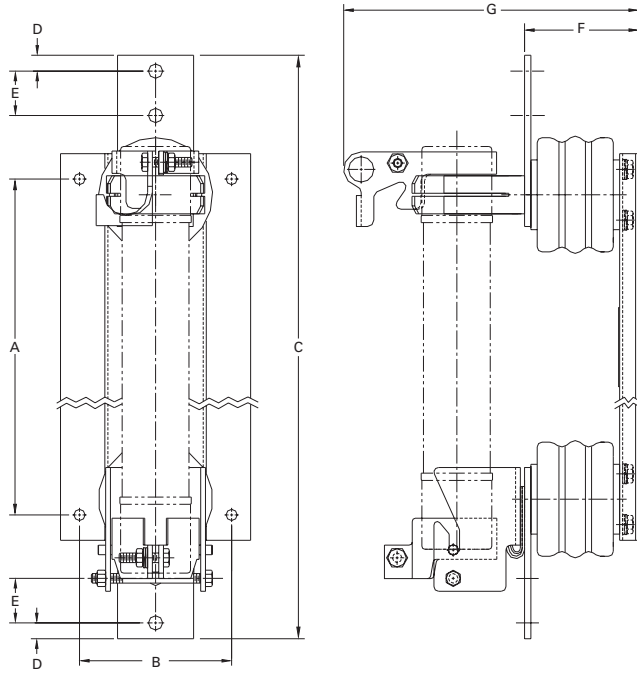
Bolt-on



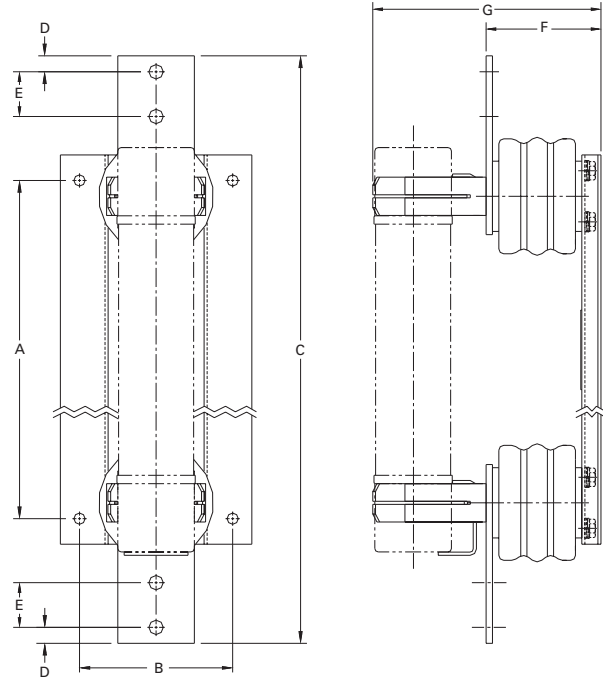
8CLS, 8ACLS, 7BCLS Type mountings — in (mm)

Catalog number	Hole centers		Overall length C	Hole inset D	Hole centers E	Contact height F	Overall height G	BIL (kV)
	A	B						
Disconnect†								
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								
Non-disconnect								
8HLE-GNM-D	16.25 (412.7)	6 (152.4)	23 (584.2)	0.62 (15.7)	1.75 (44.4)	7 (177.8)	11.29 (286.7)	75
8HLE-PNM-D								

7.2 kV disconnect mounting†

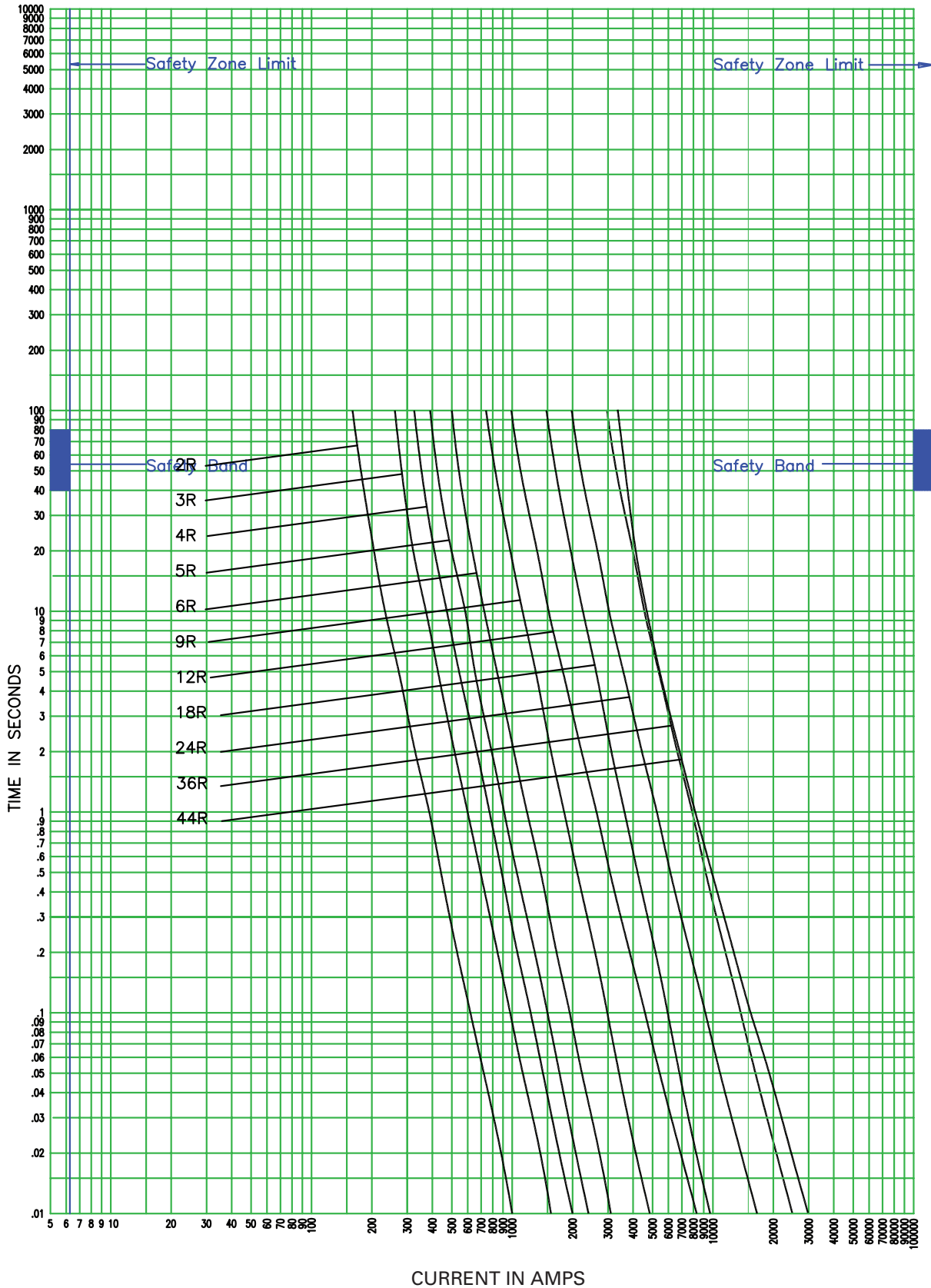


7.2 kV non-disconnect mounting



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

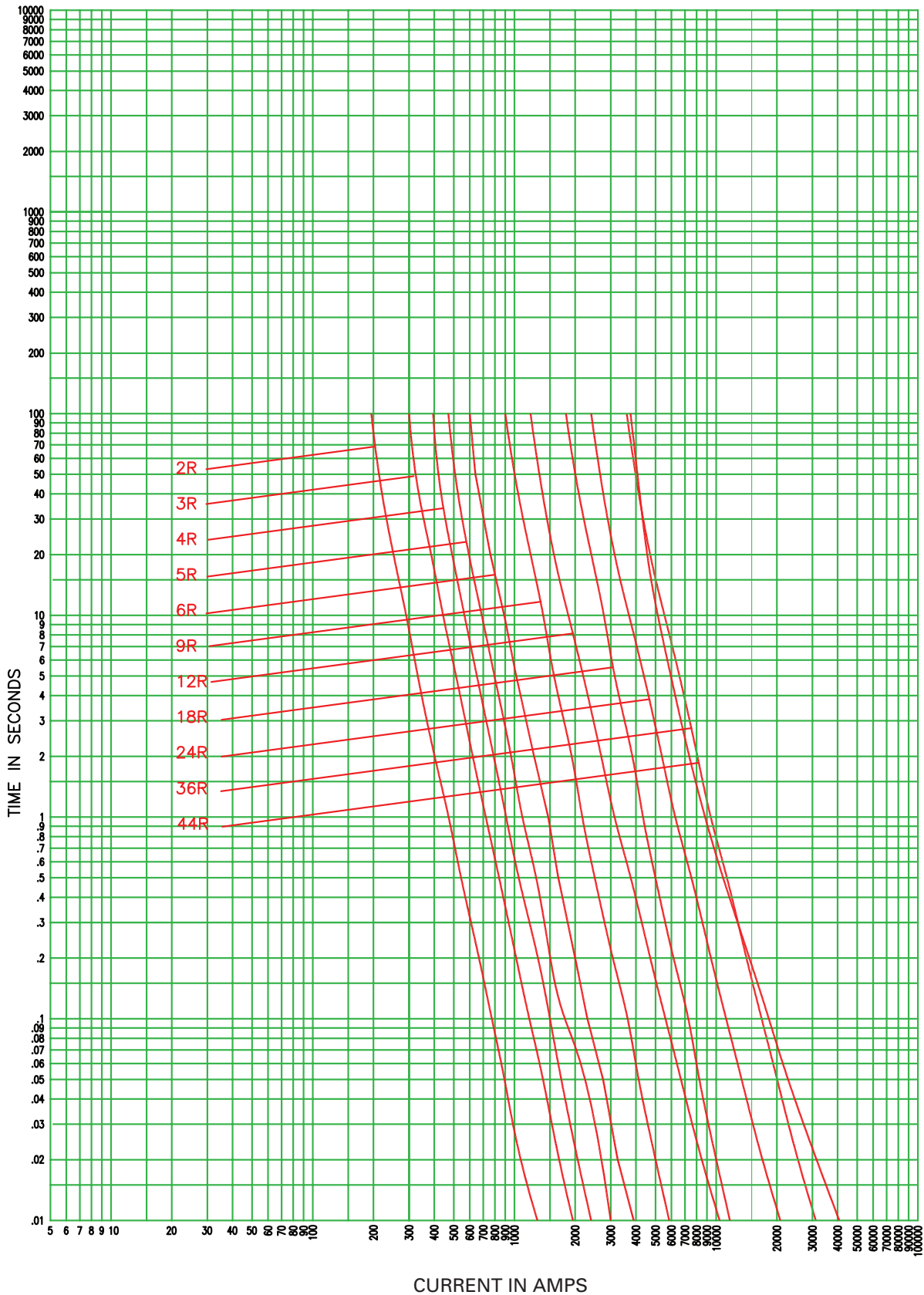
7.2 kV Time-current curves — minimum melting for 8CLS- R, 7CLS- R, 8ACLS- R, 7ACLS- R and 7BCLS- R (2R-44R @ 25C)



CURVE TC66700602
December 2008

8CLS- R, 7CLS- R, 8ACLS- R, 7ACLS- R and 7BCLS- R

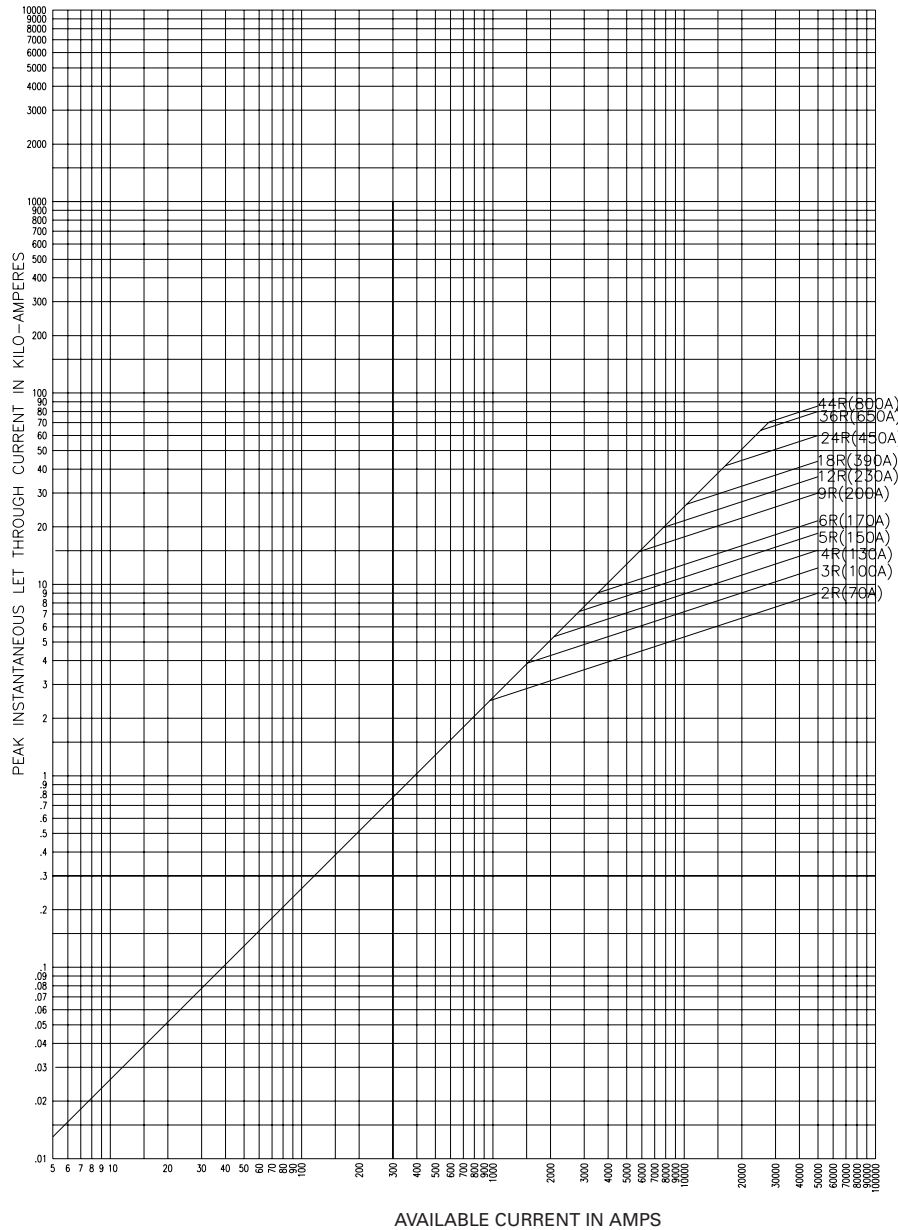
7.2 kV Time-current curves — total clearing for 8CLS-R, 7CLS-R, 8ACLS-R, 7ACLS-R and 7BCLS-R (2R-44R @ 25C)



8CLS-R, 7CLS-R, 8ACLS-R, 7ACLS-R and 7BCLS-R

CURVE TC66700702
December 2008

7.2 kV Peak let-through curves for 8CLS-_R, 7CLS-_R, 8ACLS-_R, 7ACLS-_R and 7BCLS-_R (2R-44R @ 25C)



CURVE 66700205
January 2001
Reference # 639315
667002, 667008

8CLS-_R, 7CLS-_R, 8ACLS-_R, 7ACLS-_R and 7BCLS-_R

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