

# 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.
- 4.8kV Limitamp® bolt-on constructions available in ratings from 2R to 24R.
- 2.4kV and 4.8kV AMPGARD hermetically sealed constructions are suitable for Class I, Group D, Div. 2 hazardous locations.
- Open fuse indicator on all mounting styles speeds troubleshooting.
- Optional remote contact signaling microswitch available.
- 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

**Contents**

Description	Page	Description	Page
<b>2.4kV R-Rated fuses</b> .....	<b>2-7</b>	<b>7.2kV R-Rated fuses</b> .....	<b>17-21</b>
Introduction .....	2	Introduction .....	17
Catalog numbers .....	3	Catalog numbers .....	18
Curves .....	4-7	Curves .....	19-21
<b>4.8kV R-Rated fuses</b> .....	<b>8-16</b>		
Introduction .....	8		
Catalog numbers .....	9		
Curves .....	10-16		

## 2.4kV R-Rated fuses

### 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.

### 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

### Recommended fuse holders for standard constructions:

Amp range	Description	Cat. No.
<b>Fuseclips</b>		
25-230A	3" Enclosed fuseclip*	A3354730
25-450A	3" Open fuseclip	1A0065
	3" Spring loaded open fuseclip	9078A67G04
<b>Fuse holders</b>		
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

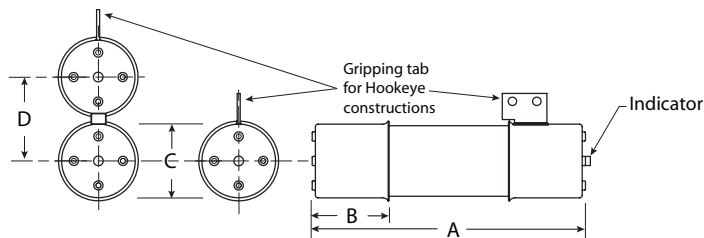
\* Single barrel only, not sold in pairs.

### Dimensions - in [mm]

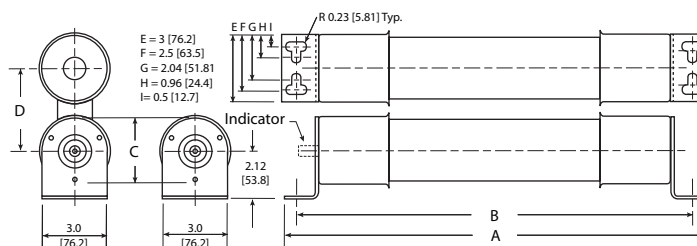
Construction	Amp range	Dimension			
		A	B	C	D
Standard - short	25-230A	10.8 (274)	3 (76)	3 (76)	—
	390-450A	10.8 (274)	3 (76)	3 (76)	3.3 (84)
AMPGARD Hookeye*	70-230A	10.8 (274)	3 (76)	3 (76)	—
	390-450A	10.8 (274)	3 (76)	3 (76)	3.3 (84)
Bolt-on	25-230A	19.2 (488)	17.9 (455)	3 (76)	—
	390-450A	19.2 (488)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

\* Includes hermetically sealed versions.

### Standard and AMPGARD Hookeye



### Bolt-on



2.4kV R-Rated fuse catalog numbers

Amp rating	"R" Designation	Mounting style (minimum interrupting rating in amps)				Number of barrels
		Standard	AMPGARD Hookeye		Bolt-on	
			Regular	Hermetically sealed		
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

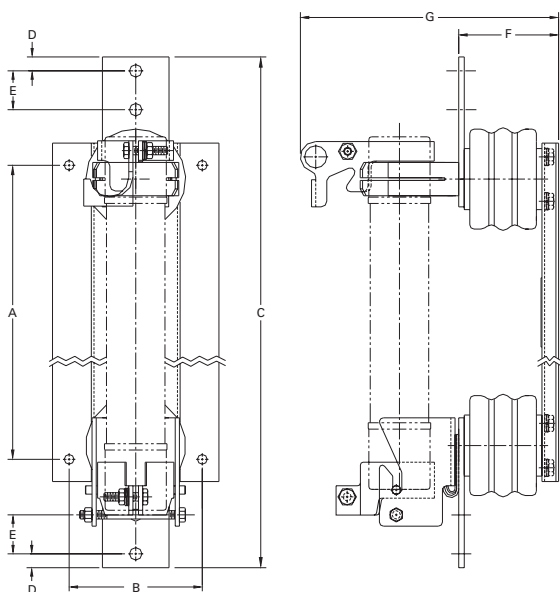
\* Does not comply with ANSI C37.46 for "R" rating.

\*\* Not UL Recognized

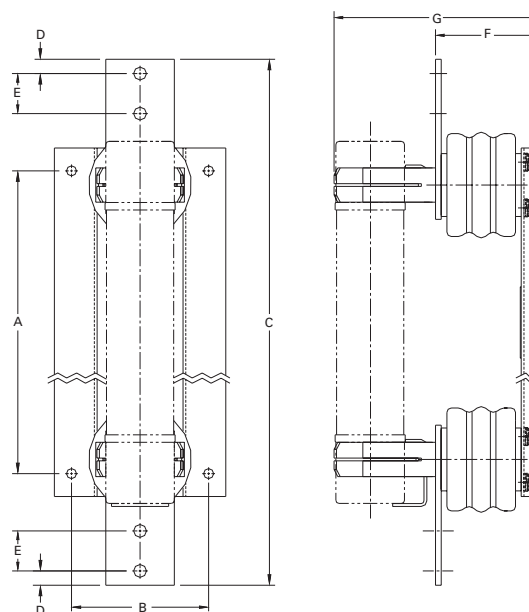
JCK and 2HCLS Type mountings -in (mm)

Catalog number	Hole centers		Overall length C	Hole Inset D	Hole centers E	Contact height F	Overall height G	BIL rating (kV)
	A	B						
<b>Disconnect single barrel†</b>								
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	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
<b>Disconnect double barrel†</b>								
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	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
<b>Non-disconnect single barrel</b>								
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	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
<b>Non-disconnect double barrel</b>								
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	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

2.4kV disconnect mounting†

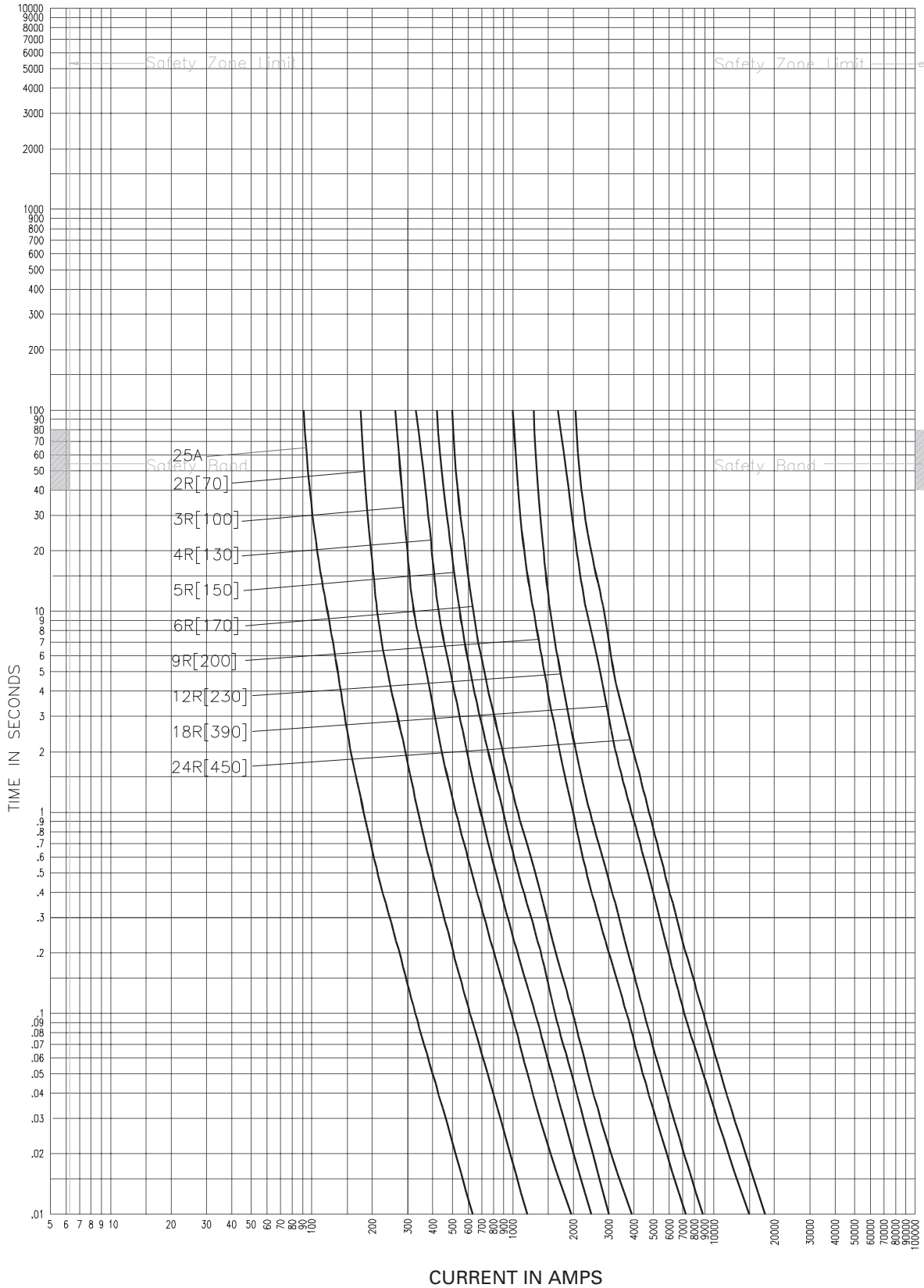


2.4kV non-disconnect mounting



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

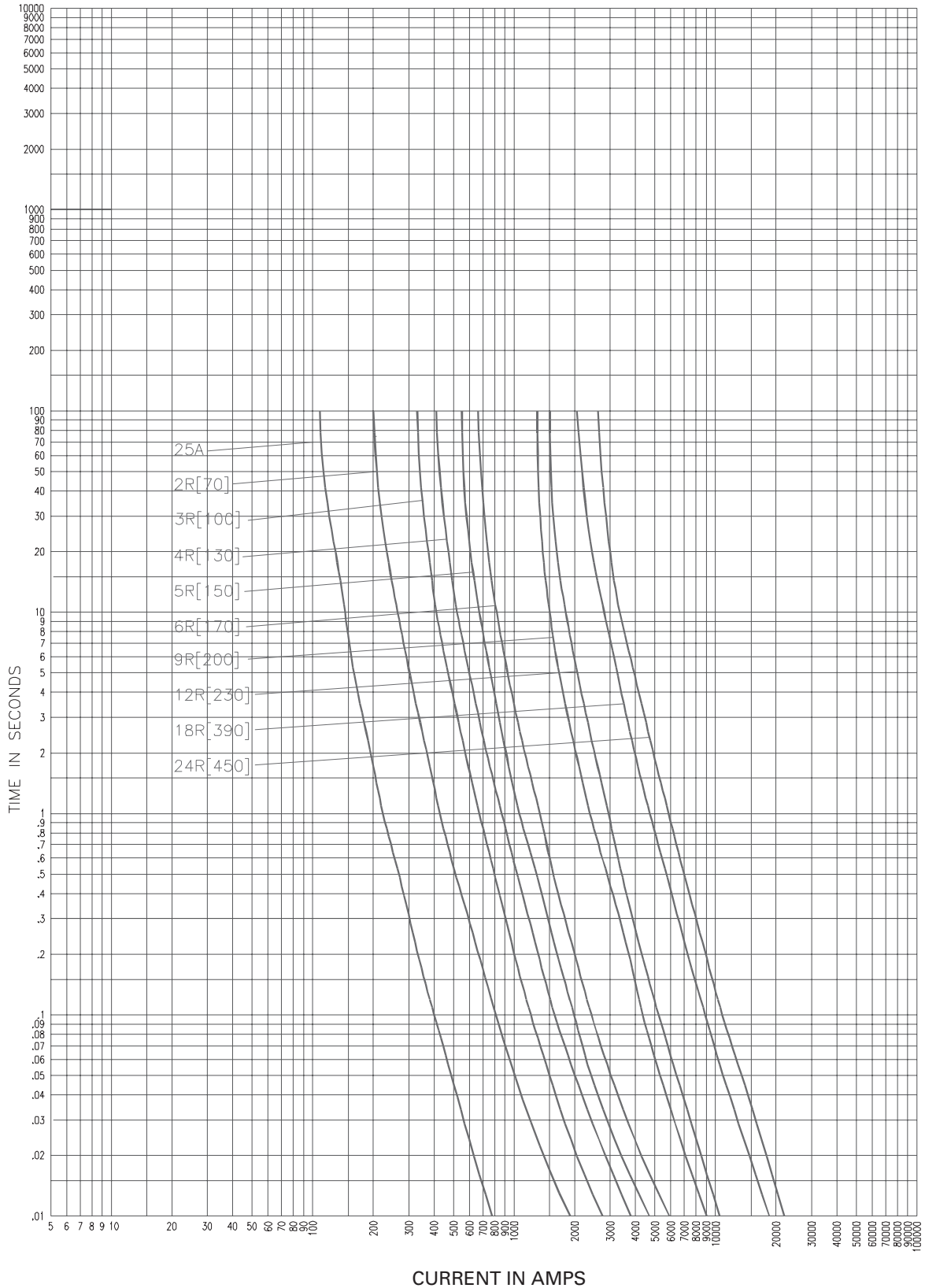
2.4kV Time-current curves — minimum melting for 2HCLS-\_R and 2BCLS-\_R (25A, 2R-24R @25°C)



CURVE 66664702  
 January 2001  
 Reference # 666647,  
 512853, 639405

2HCLS-\_R and 2BCLS-\_R

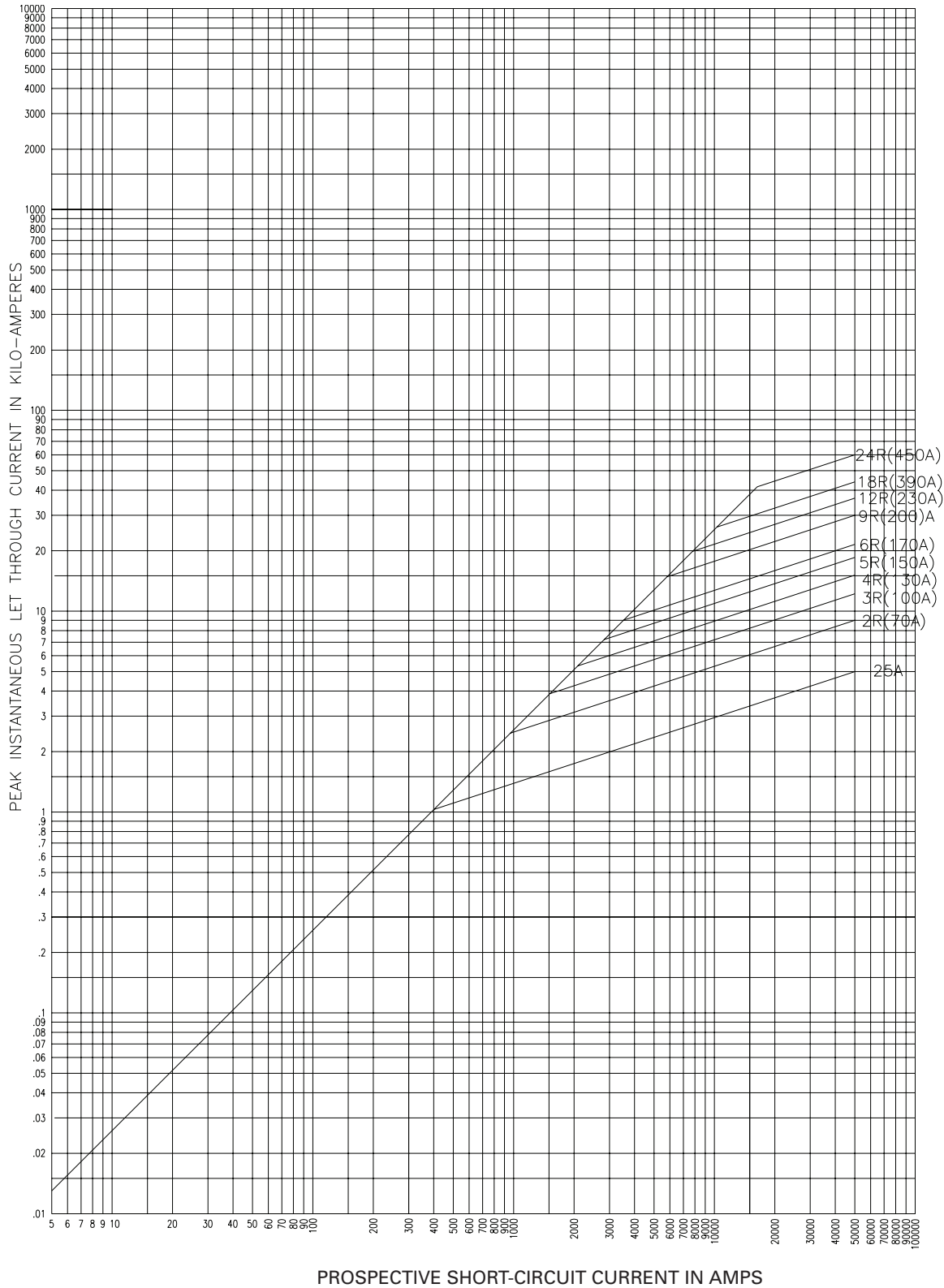
2.4kV Time-current curves — total clearing for 2HCLS-\_R and 2BCLS-\_R (25A, 2R-24R @ 25°C)



2HCLS-\_R and 2BCLS-\_R

CURVE 66664704  
January 2000  
Reference # 666647,  
512854, 639406

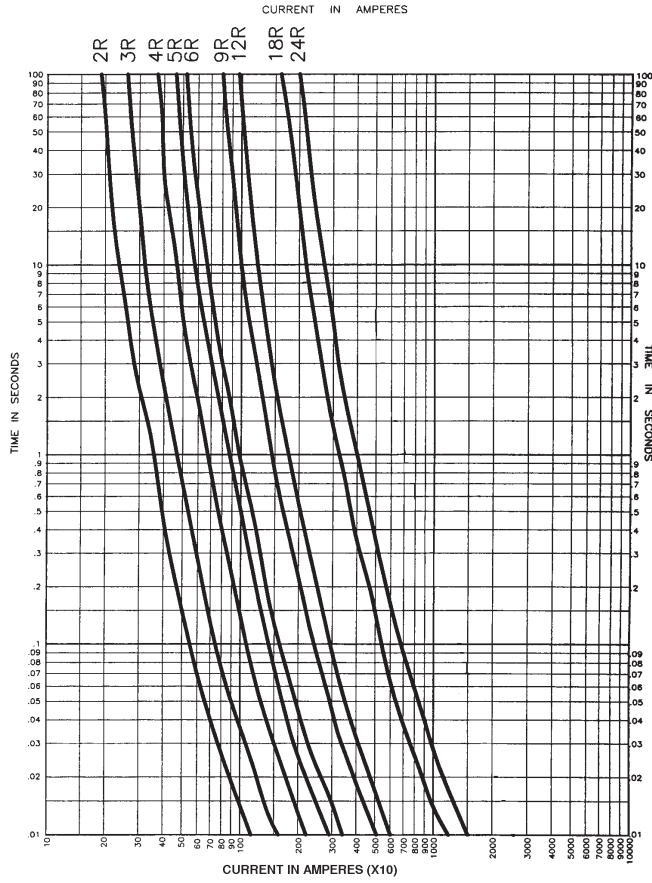
2.4kV Peak let-through curves for 2HCLS-\_R and 2BCLS-\_R (25A, 2R-24R @25°C)



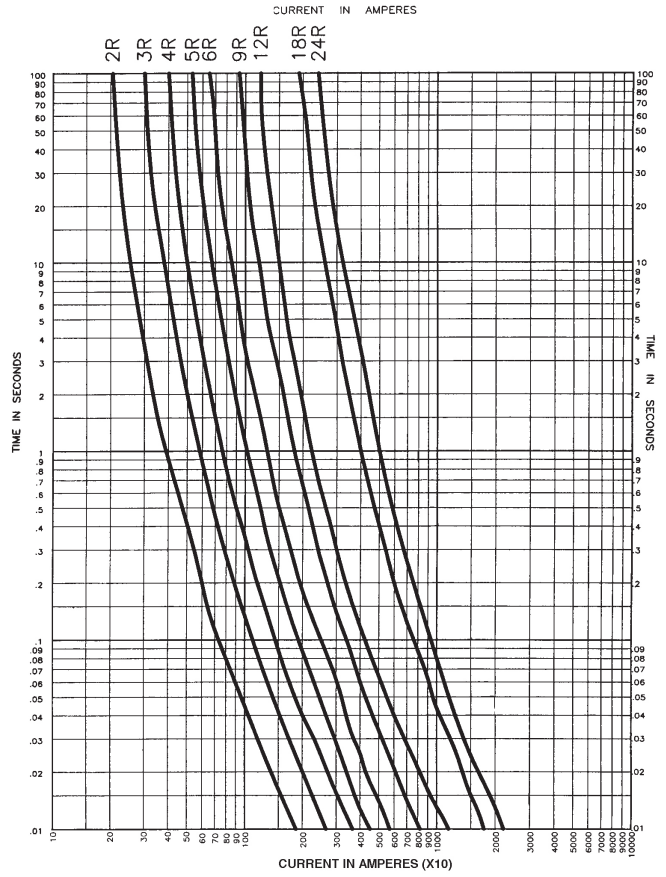
2HCLS-\_R and 2BCLS-\_R

CURVE 66700202  
 January 2001  
 Reference # 639315

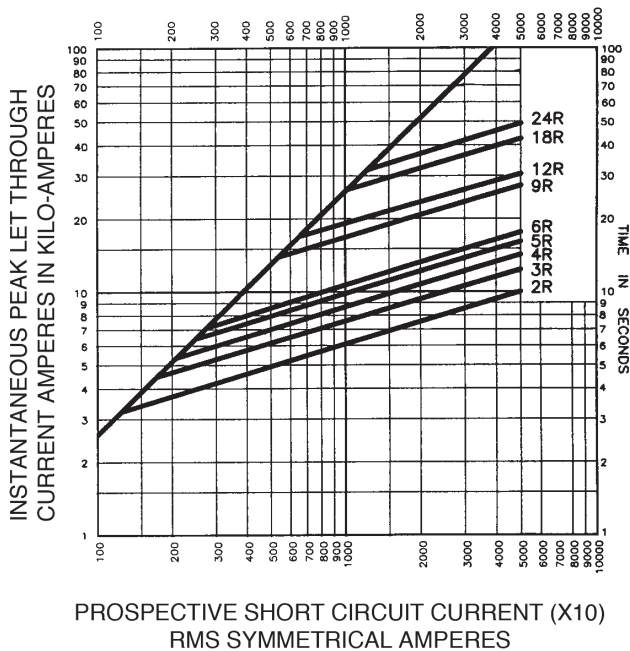
2.4kV Time-current curves — minimum melting for JCK-\_R and JCK-A-\_R (2R-24R @25°C)



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



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



4.8kV R-Rated fuses

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)
5MCLS-_R_	Bolt-on (2R- 24R) Limitamp fuses

\* For use in 400 amp AMPGARD motor starters.

Ratings:

- Volts
  - 4.8kV (nominal)
  - 5.08kV (max design)
- Amps 30-800A
- Interrupting ratings
  - 50kA Sym
  - 80kA Asym

Agency information:

- UL Recognized: Guide #MSSS2, File #E96676 (JCL-\_R [2R-12R] and JCL-A-\_R [2R-12R])

Recommended fuse holders for standard constructions:

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

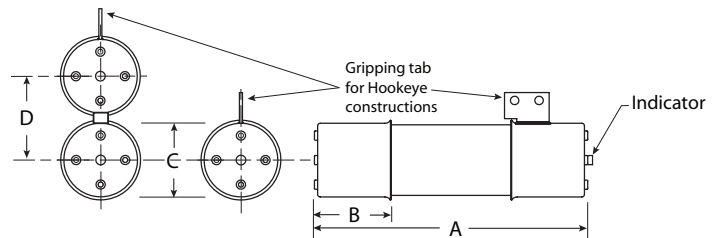
† Not available for 390 to 450 amp ratings.

Dimensions - in [mm]

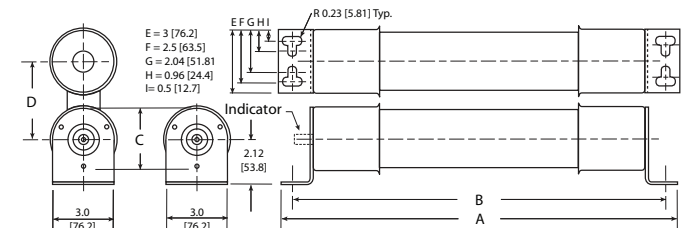
Construction	Amp range	Dimension			
		A	B	C	D
Standard - short	30-230A	15.6 (396)	3 (76)	3 (76)	—
	390-450A	15.6 (396)	3 (76)	3 (76)	3.3 (84)
Standard - long	70-230A	17.9 (455)	3 (76)	3 (76)	—
	390-450A	17.9 (455)	3 (76)	3 (76)	3.3 (84)
AMPGARD Hookeye*	30-230A	15.9 (404)	3 (76)	3 (76)	—
	390-450A	15.9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

\* Includes hermetically sealed versions.

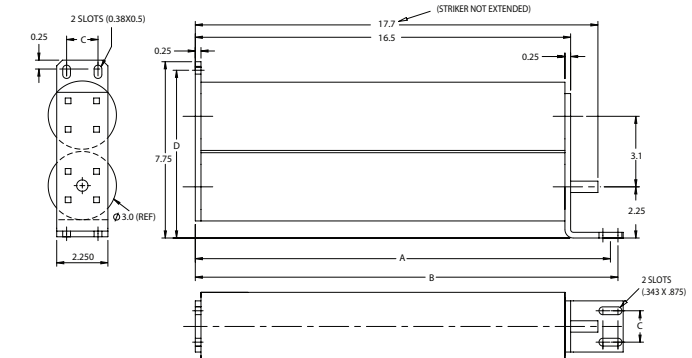
Standard (short and long) and AMPGARD Hookeye



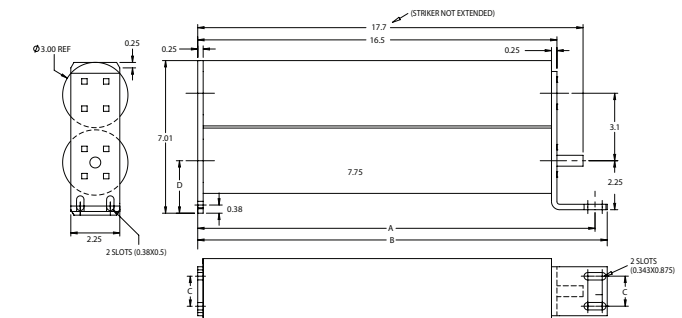
Bolt-on — 5BCLS\_



Bolt-on — 5MCLS-\_R-A



Bolt-on — 5MCLS-\_R-B





4.8kV R-Rated fuse catalog numbers

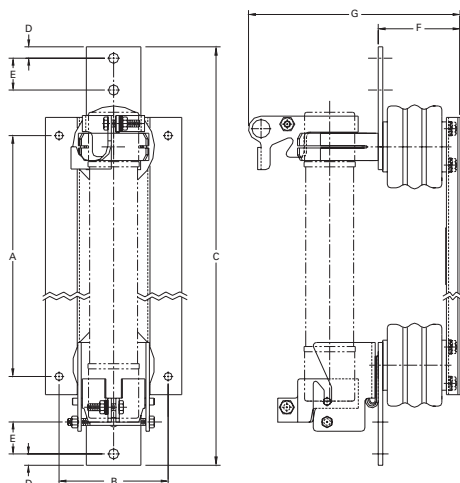
Amp Rating	"R" Designation	Mounting style (minimum interrupting rating in amps)								Number of barrels
		AMPGARD Hookeye						GE Limitamp bolt-on		
		Standard - short	Standard - long	Regular	Hermetically sealed	Bolt-on - 5BCLS-**-**	5MCLS-_-R-A	5MCLS-_-R-B		
30	—	5CLS-30* (95)	—	—	5ACLS-30* (95)	5HCLS-30* (95)	5BCLS-30* (95)	—	—	1
70	2R	JCL-2R (165)	5LCLS-2R (165)	JCL-A-2R (165)	5HCLS-2R (180)	5BCLS-2R (180)	5MCLS-2R-A (180)	5MCLS-2R-B (180)	—	1
100	3R	JCL-3R (220)	5LCLS-3R (220)	JCL-A-3R (220)	5HCLS-3R (270)	5BCLS-3R (270)	5MCLS-3R-A (270)	5MCLS-3R-B (270)	—	1
130	4R	JCL-4R (320)	5LCLS-4R (320)	JCL-A-4R (320)	5HCLS-4R (350)	5BCLS-4R (350)	5MCLS-4R-A (360)	5MCLS-4R-B (360)	—	1
150	5R	JCL-5R (410)	5LCLS-5R (410)	JCL-A-5R (410)	5HCLS-5R (450)	5BCLS-5R (450)	5MCLS-5R-A (450)	5MCLS-5R-B (450)	—	1
170	6R	JCL-6R (480)	5LCLS-6R (480)	JCL-A-6R (480)	5HCLS-6R (540)	5BCLS-6R (540)	5MCLS-6R-A (540)	5MCLS-6R-B (540)	—	1
200	9R	JCL-9R (720)	5LCLS-9R (720)	JCL-A-9R (720)	5HCLS-9R (700)	5BCLS-9R (700)	5MCLS-9R-A (850)	5MCLS-9R-B (850)	—	1
230	12R	JCL-12R (970)	5LCLS-12R (970)	JCL-A-12R (970)	5HCLS-12R (1000)	5BCLS-12R (1000)	5MCLS-12R-A (1150)	5MCLS-12R-B (1150)	—	1
390	18R	JCL-18R** (1430)	5LCLS-18R (1430)	JCL-A-18R** (1430)	5HCLS-18R (1450)	5BCLS-18R (1450)	5MCLS-18R-A (1725)	5MCLS-18R-B (1725)	—	2
450	24R	JCL-24R** (1880)	5LCLS-24R (1880)	JCL-A-24R** (1880)	5HCLS-24R (2000)	5BCLS-24R (2000)	5MCLS-24R-A (2350)	5MCLS-24R-B (2350)	—	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.  
\*\* Not UL Recognized.

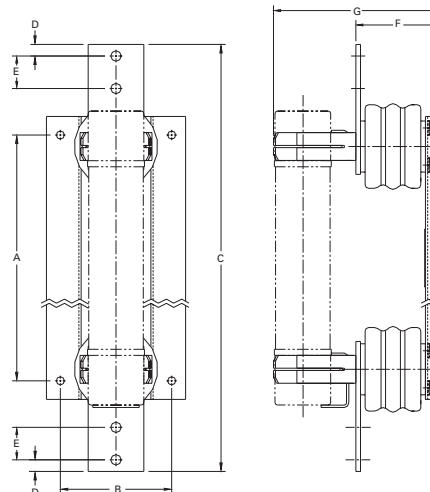
5CLS, JCL, JCL-A, 5ACLS, 5HCLS and 5LCLS Type mountings - in (mm)

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

4.8kV disconnect mounting†

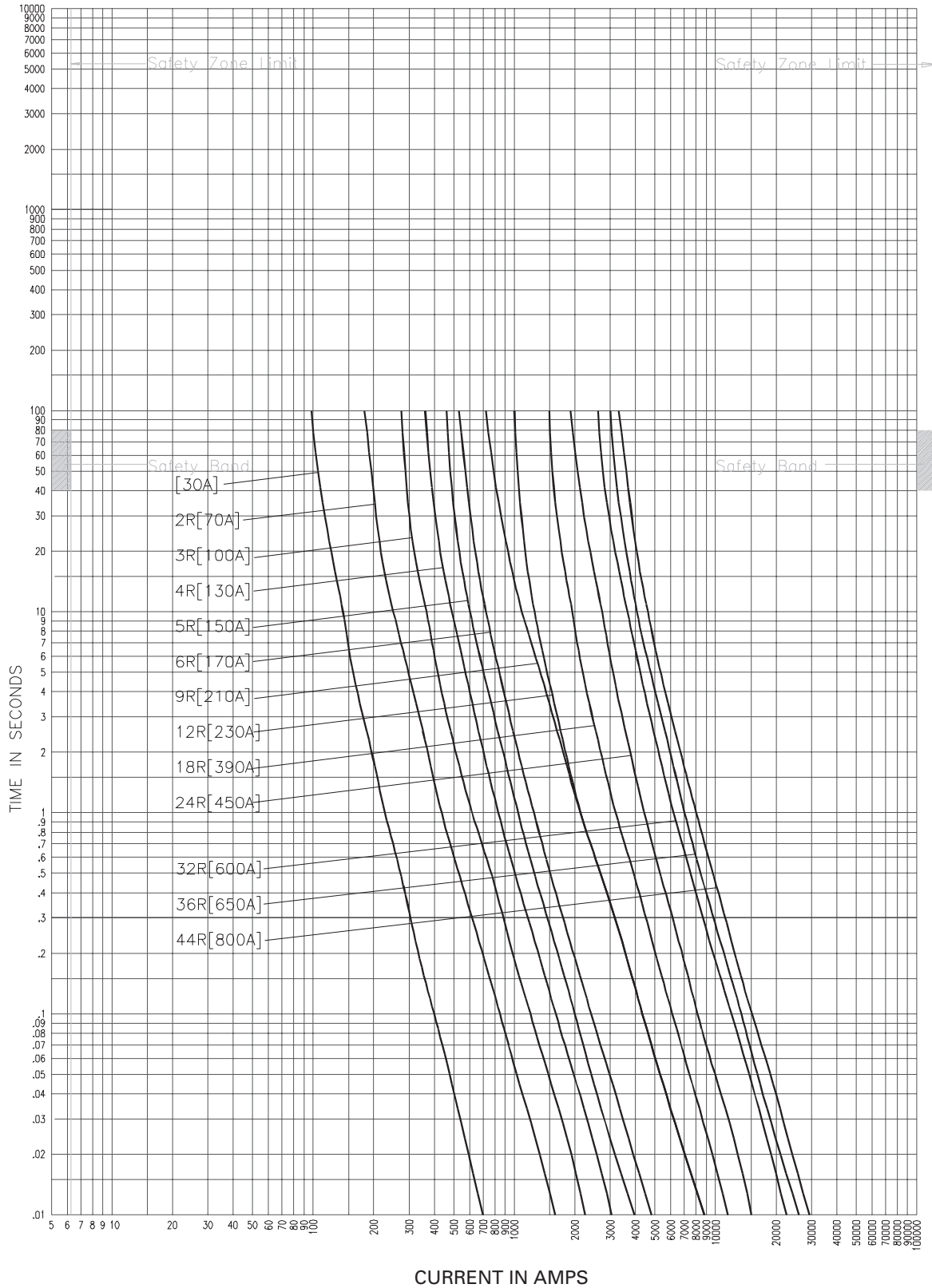


4.8kV non-disconnect mounting



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

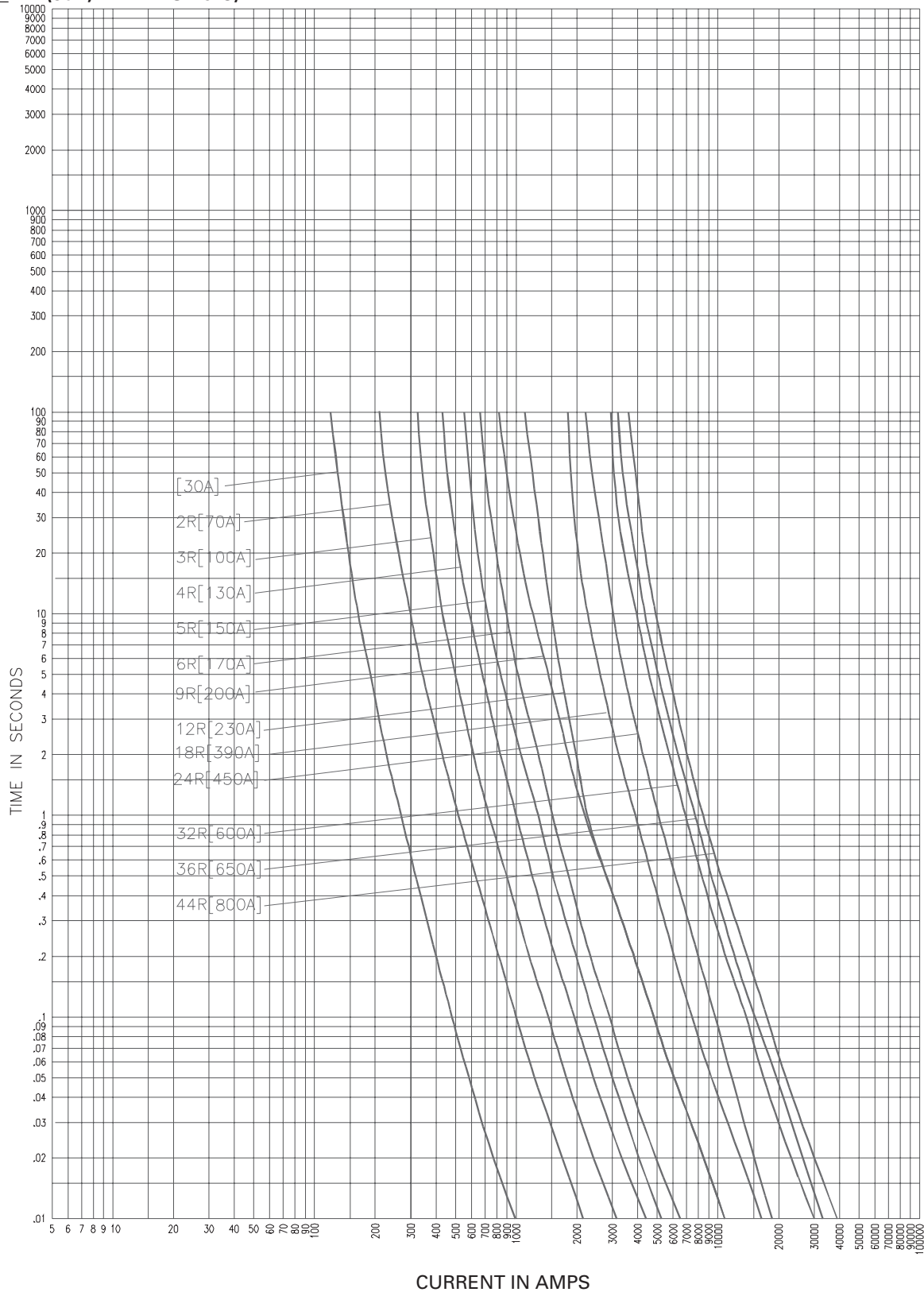
4.8kV Time-current curves — minimum melting for 5ACLS-30, 5CLS-30, 5HCLS-<sub>R</sub>, 5BCLS-30, 5BCLS-<sub>R</sub>, 5MCLS-<sub>R</sub>-A and 5MCLS-<sub>R</sub>-B (30A, 2R-24R @ 25°C)



5ACLS-30, 5CLS-30, 5HCLS-<sub>R</sub>, 5BCLS-30, 5BCLS-<sub>R</sub>,  
5MCLS-<sub>R</sub>-A, 5MCLS-<sub>R</sub>-B

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

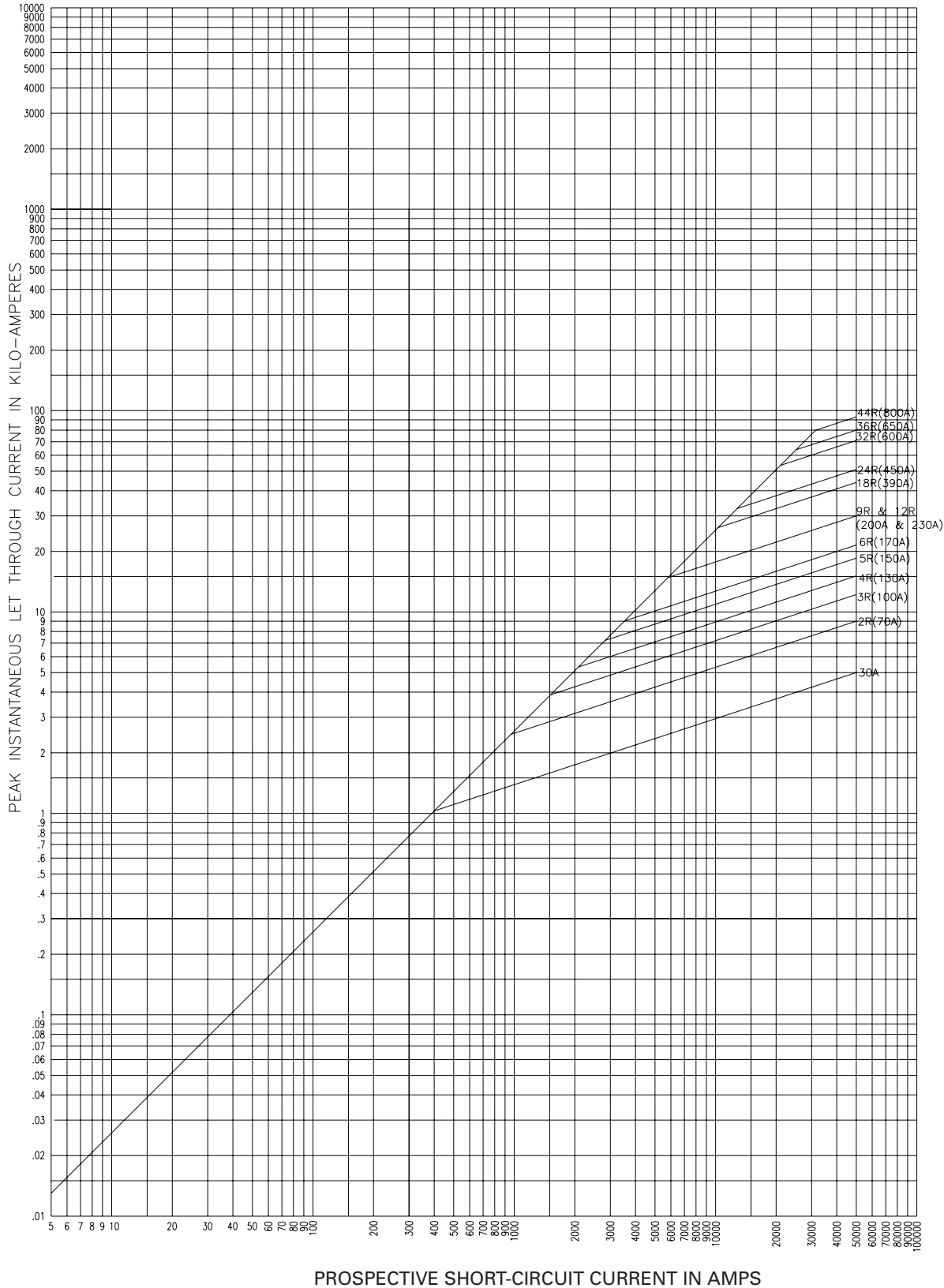
**4.8kV Time-current curves — total clearing for 5ACLS-30, 5CLS-30, 5HCLS-R, 5BCLS-30, 5BCLS-R, 5MCLS-R-A and 5MCLS-R-B (30A, 2R-24R @ 25°C)**



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

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

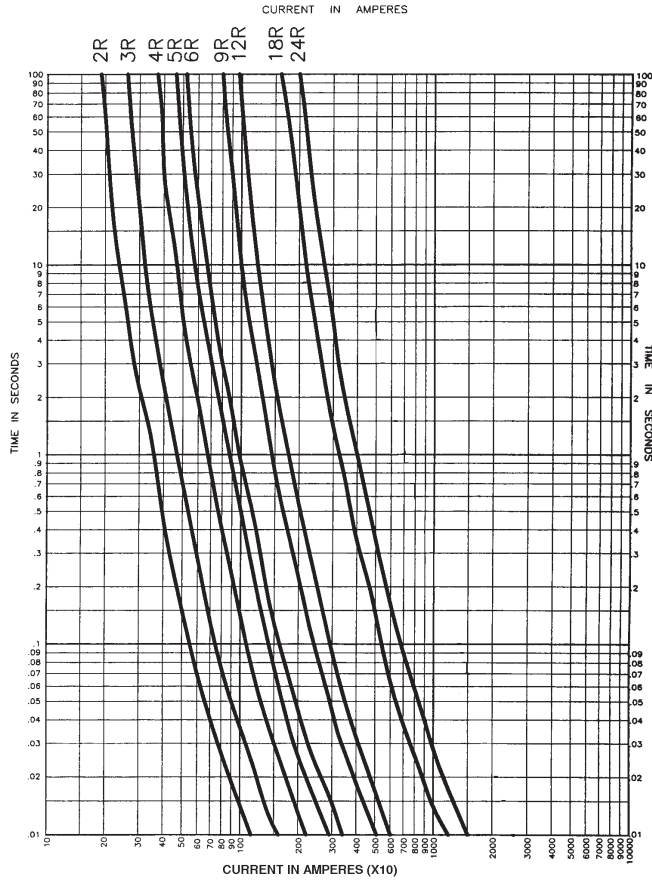
**4.8kV Peak let-through curves for 5ACLS-30, 5CLS-30, 5HCLS-\_R, 5BCLS-30, 5BCLS-\_R, 5MCLS-\_R-A and 5MCLS-\_R-B (30A, 2R-24R @ 25°C)**



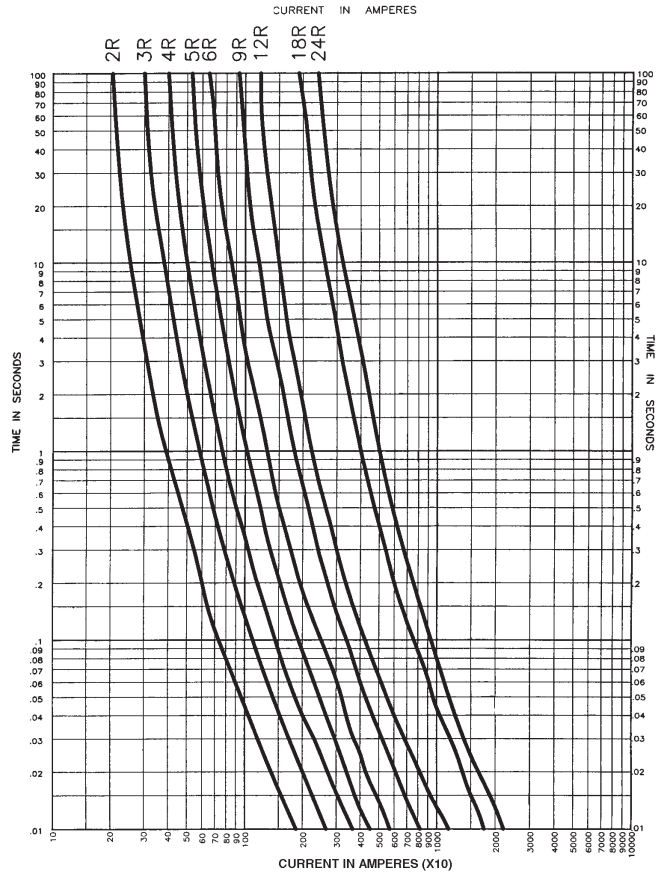
**5ACLS-30, 5CLS-30, 5HCLS-\_R, 5BCLS-30, 5BCLS-\_R,  
5MCLS-\_R-A, 5MCLS-\_R-B**

CURVE 66700203  
January 2001  
Reference # 639315  
667002, 667008

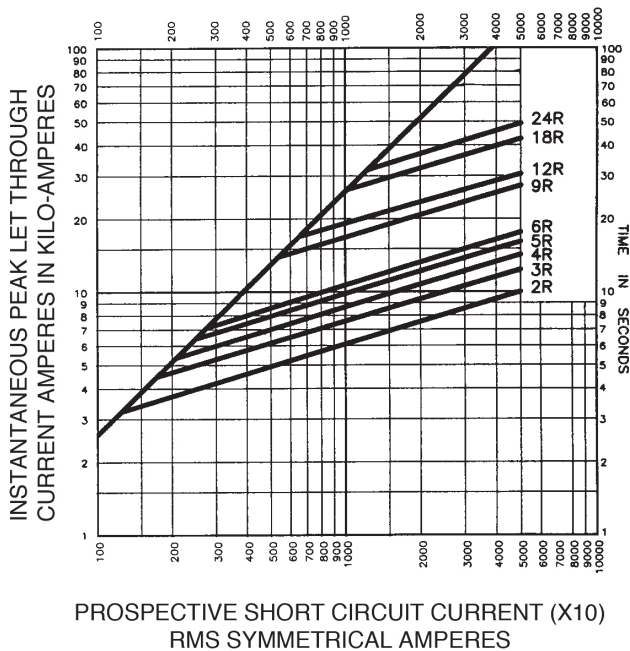
4.8kV Time-current curves — minimum melting for JCL-R  
and JCL-A-R (2R-24R @25°C)



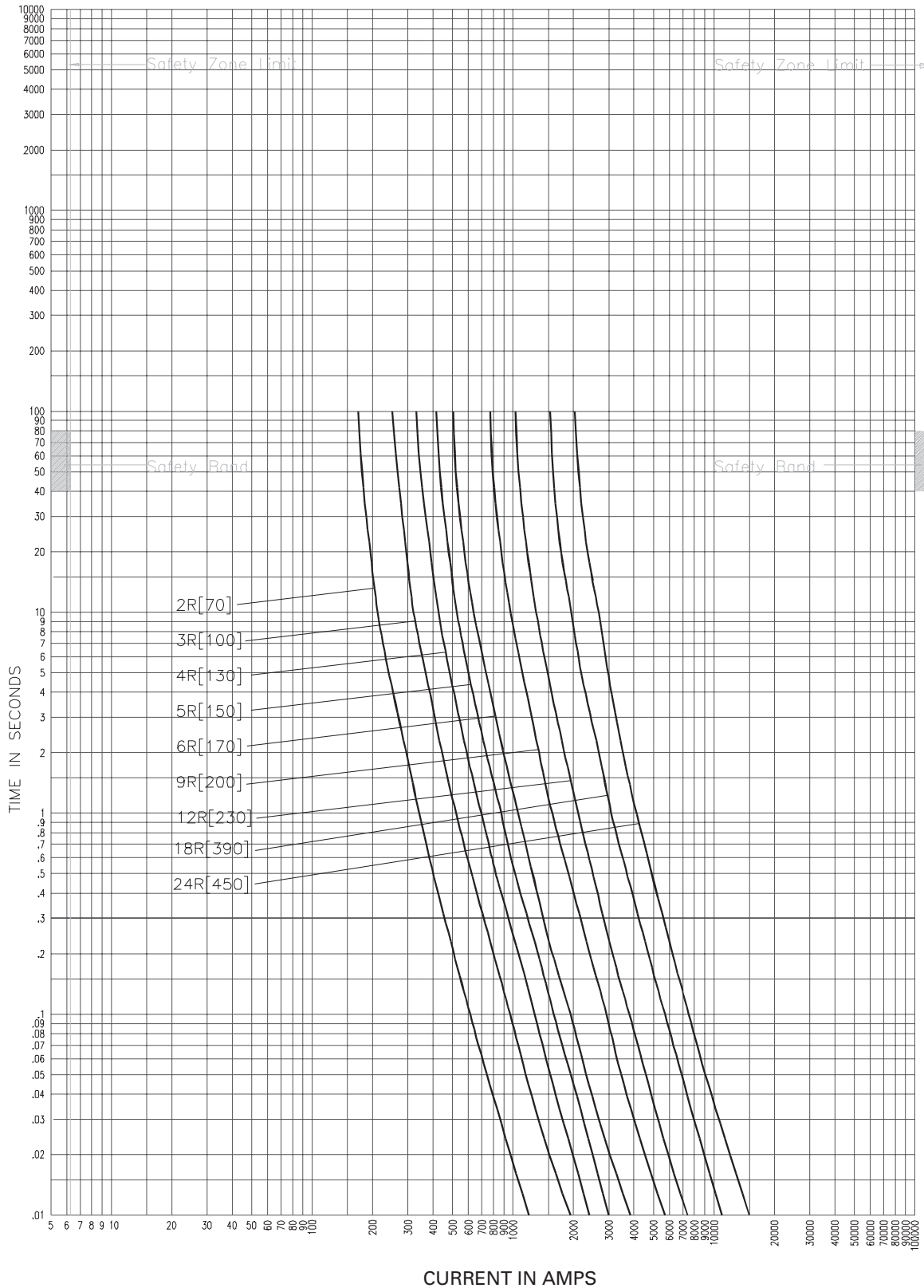
4.8kV Time-current curves — total clearing for JCL-R  
and JCL-A-R (2R-24R @25°C)



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



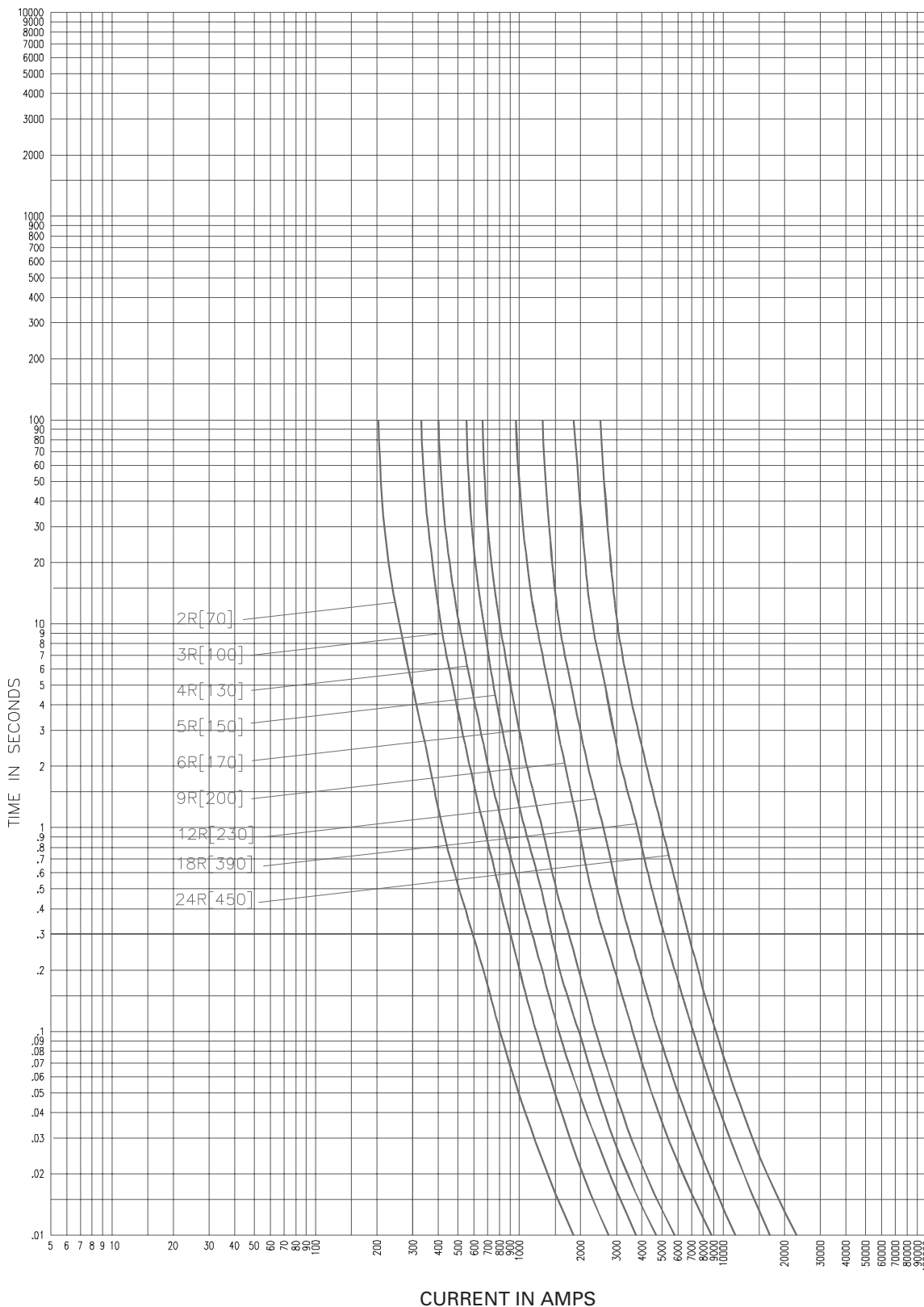
4.8kV Time-current curves — minimum melting for 5LCLS-R (2R-24R @ 25°C)



5LCLS-R

CURVE 51285302  
 January 2001  
 Reference # 512853,  
 563863.

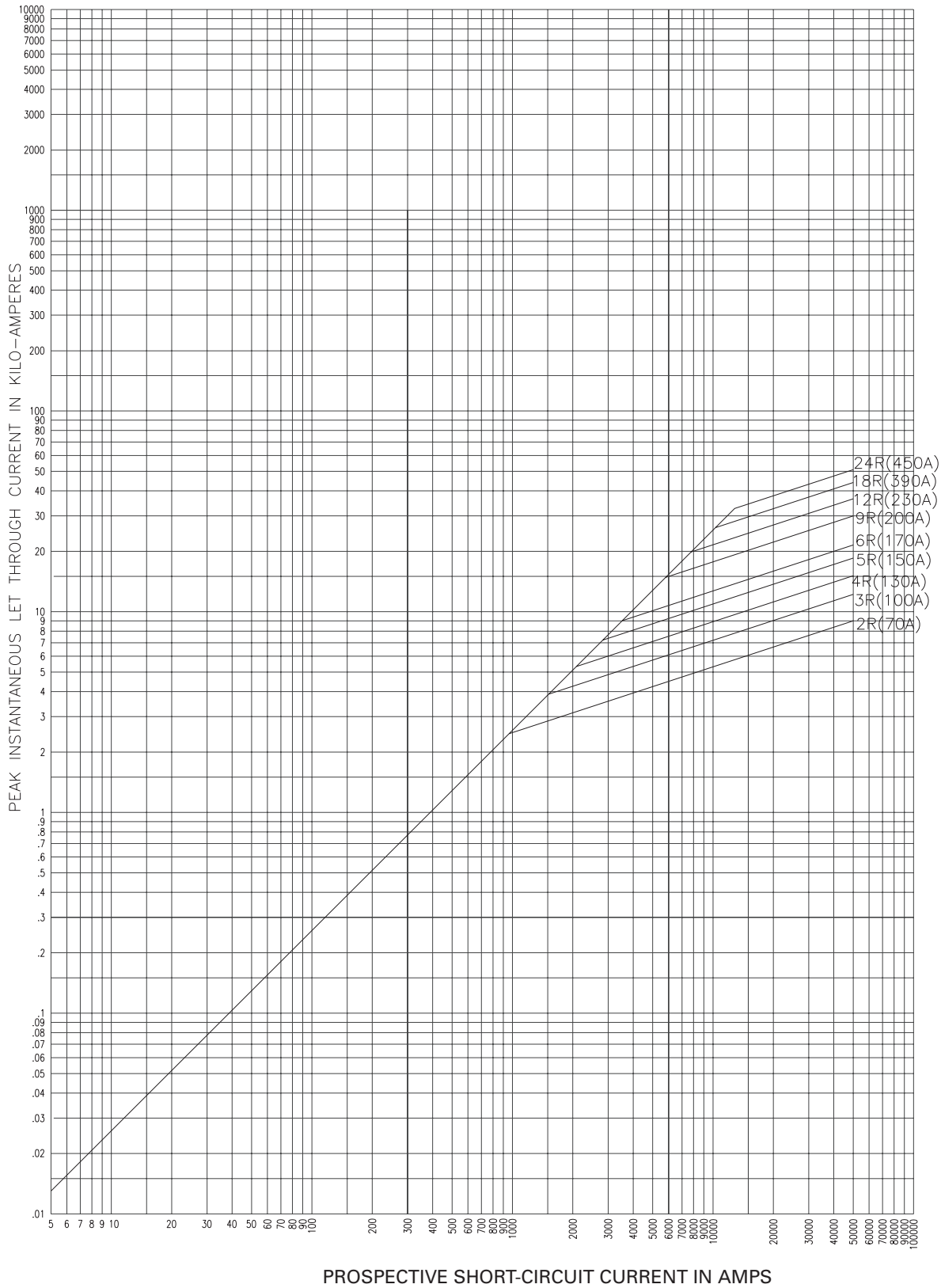
4.8kV Time-current curves — total clearing for 5LCLS- R (2R-24R @ 25°C)



5LCLS-R

CURVE 51285402  
January 2001  
Reference # 512854,  
563864.

4.8kV Peak let-through curves for 5LCLS-<sub>R</sub> (2R-24R @ 25°C)



5LCLS-<sub>R</sub>

CURVE 66700204  
 January 2001  
 Reference # 639315



## 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 70-800A
- Interrupting ratings
  - 50kA Sym
  - 80kA Asym

### Recommended fuse holders for standard constructions:

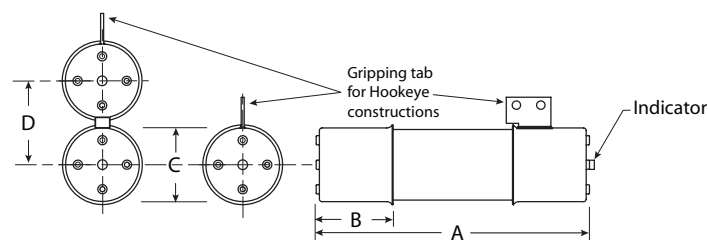
Amp range	Description	BIL (kV)	Cat. No.
<b>Fuseclips</b>			
70-230A	3" Enclosed fuseclip*	—	A3354730
70-450A	3" Open fuseclip	—	1A0065
	3" Spring loaded open fuseclip	—	9078A67G04
<b>Fuse holders for 7CLS and 8CLS</b>			
70-230A Single barrel	Non-disconnect holder, porcelain	75	8HLE-PNM-D
	Non-disconnect 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.

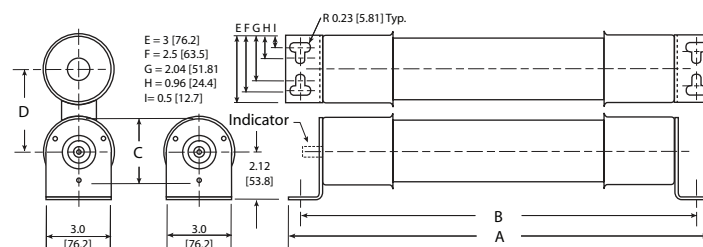
### Dimensions - in [mm]

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)	9 (229)

### Standard and AMPGARD Hookeye



### Bolt-on



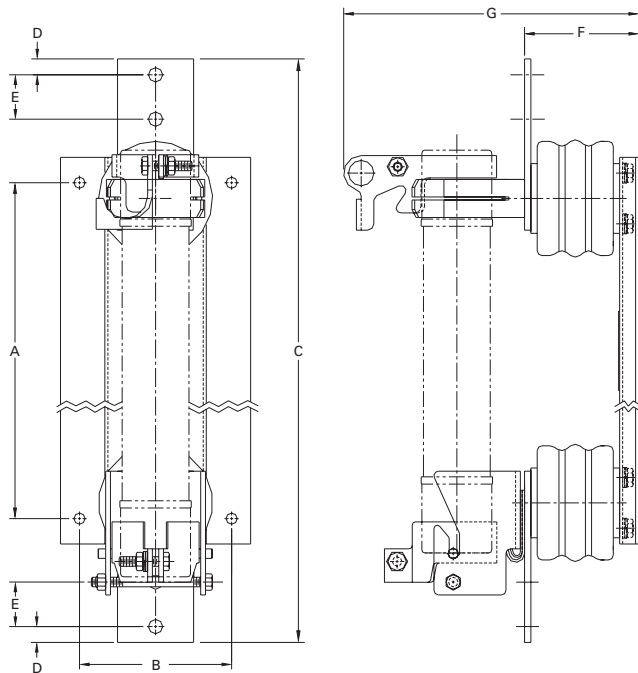
7.2kV R-Rated fuse catalog numbers

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
800	44R	—	—	7BCLS-44R (3250)	2

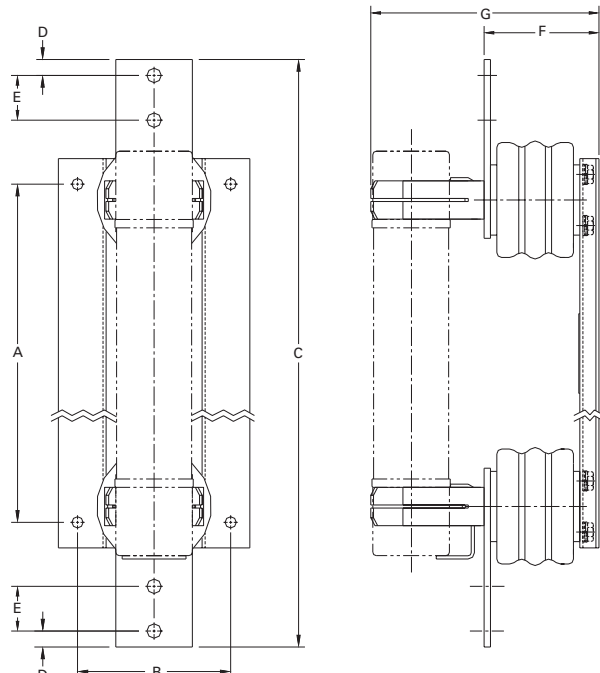
8CLS, 8ACLS, 7CLS, 7ACLS Type mountings - in (mm)

Catalog number	Hole centers		Overall length C	Hole inset D	Hole centers E	Contact height F	Overall height G	BIL rating (kV)
	A	B						
<b>Disconnect single barrel†</b>								
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>								
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>								
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	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
<b>Non-disconnect double barrel</b>								
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

7.2kV disconnect mounting†

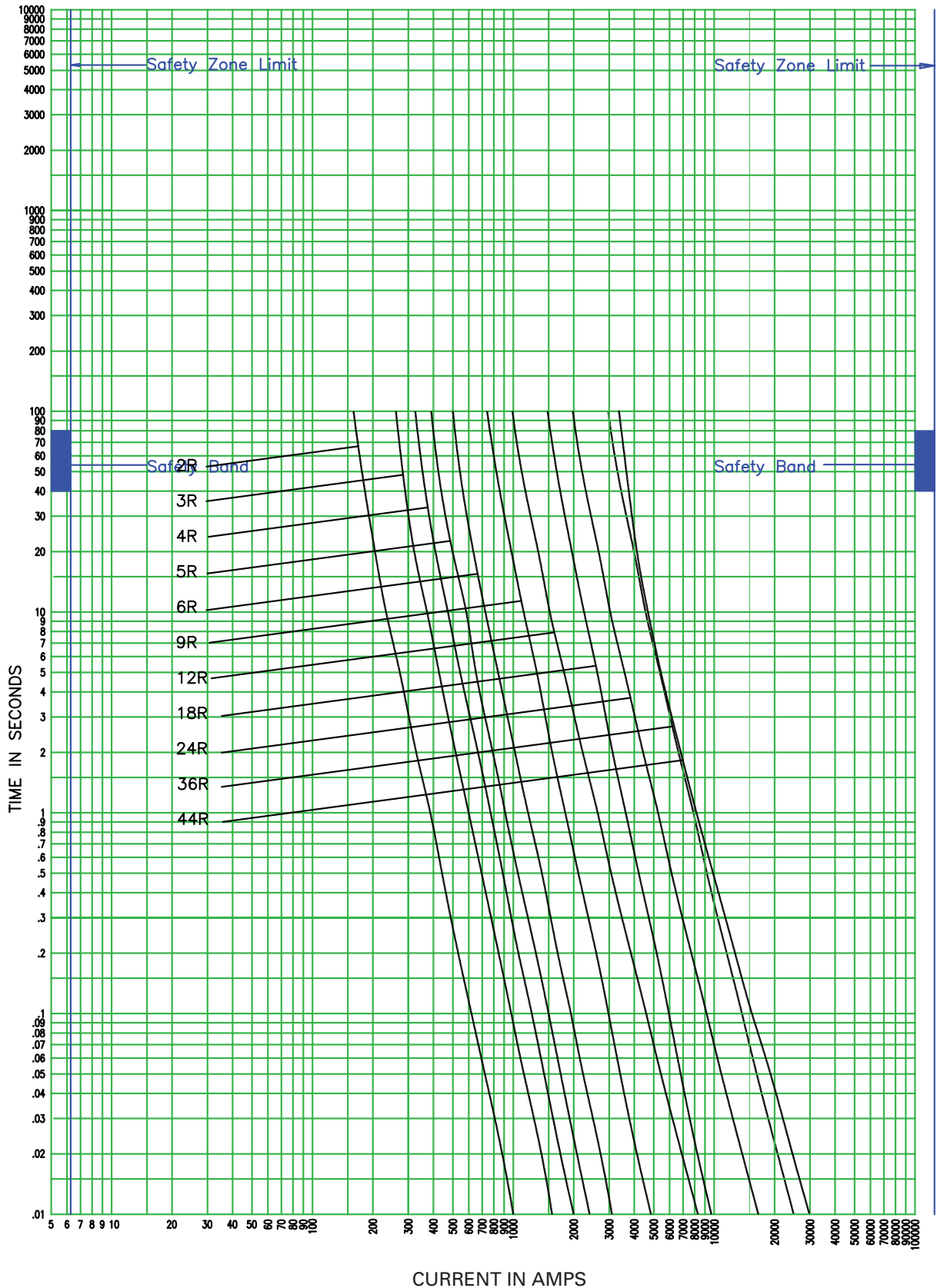


7.2kV non-disconnect mounting



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

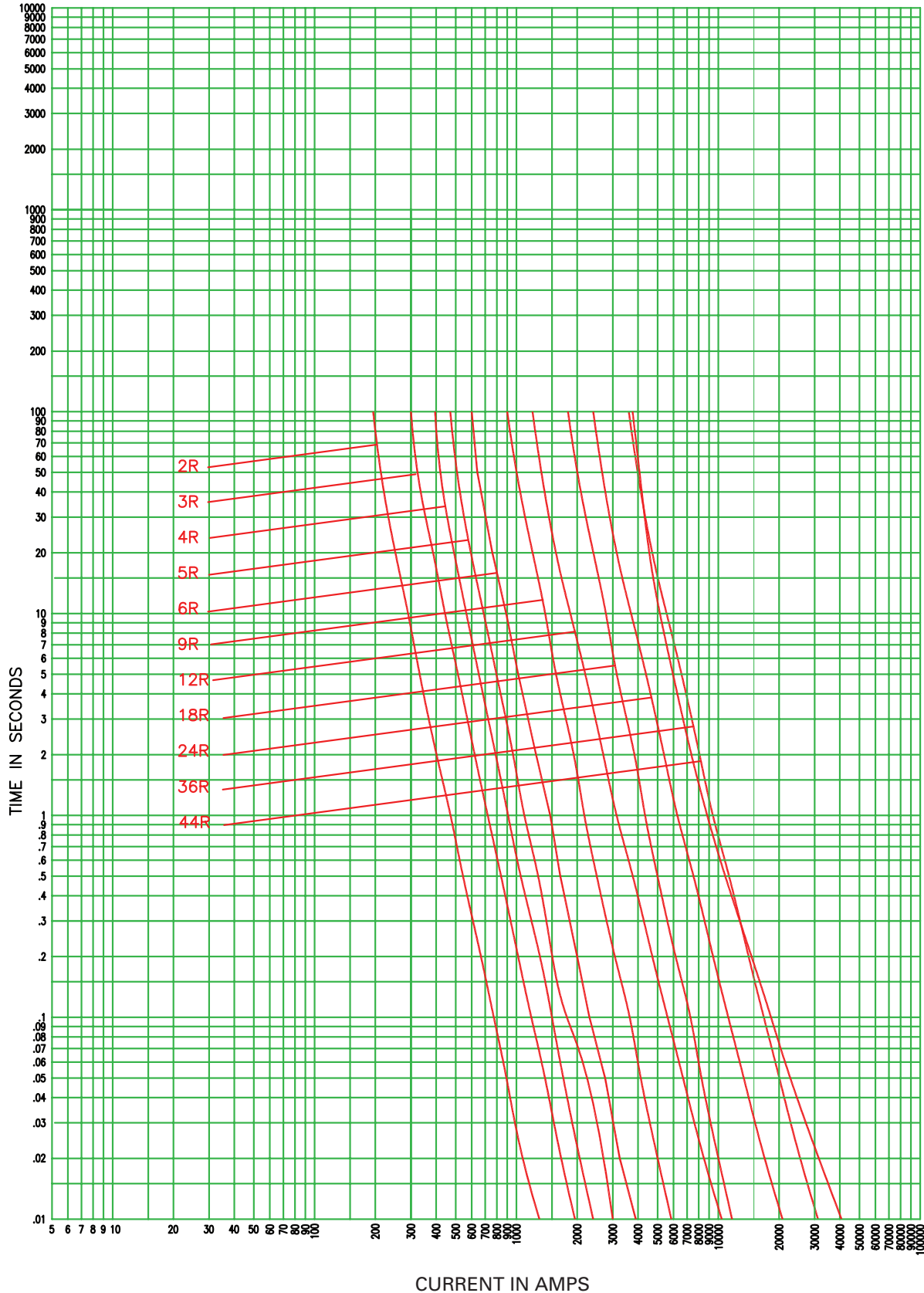
7.2kV Time-current curves — minimum melting for 8CLS-R, 7CLS-R, 8ACLS-R, 7ACLS-R and 7BCLS-R (2R-44R @ 25C)



CURVE TC66700602  
December 2008

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

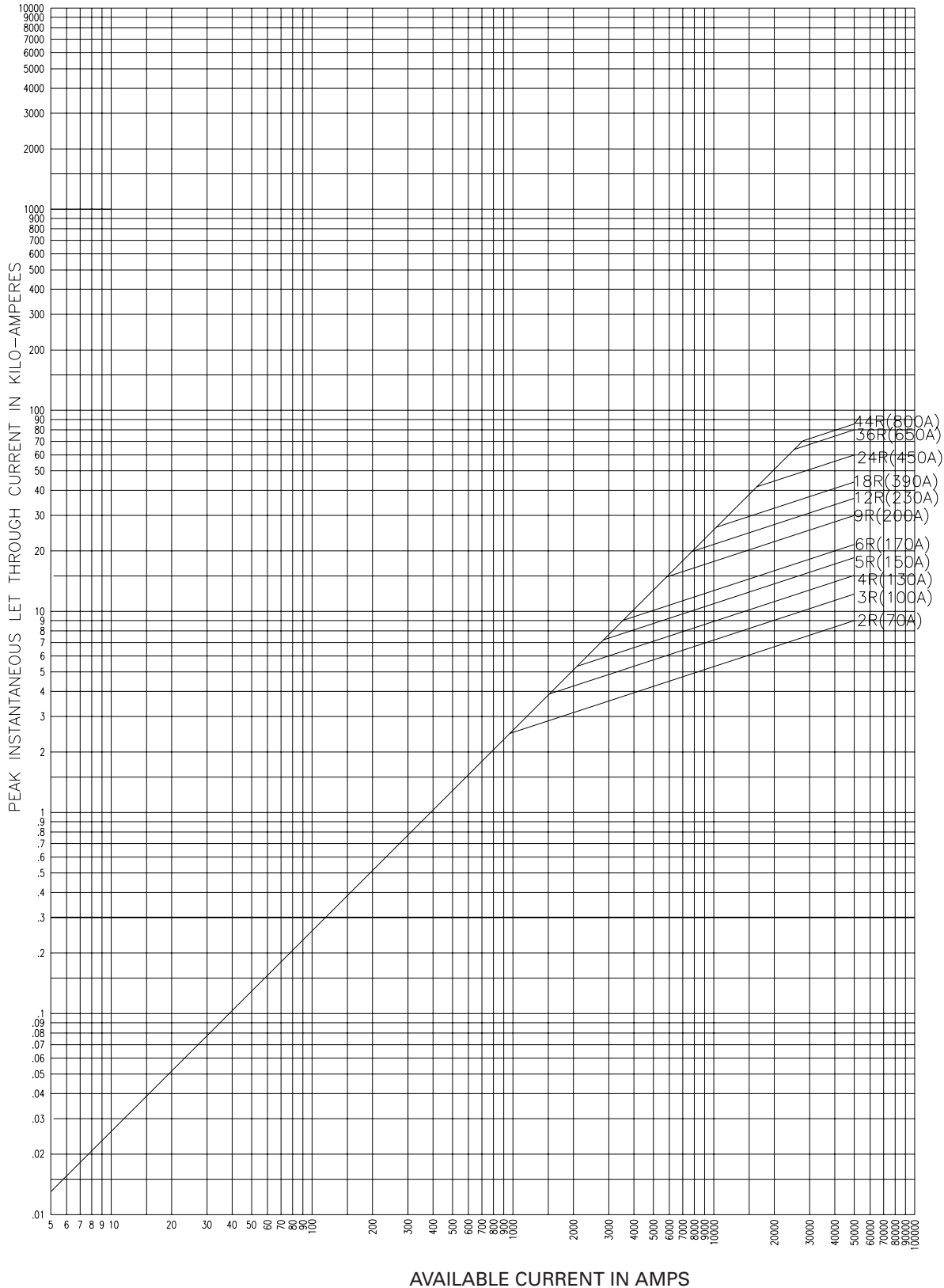
7.2kV Time-current curves — total clearing for 8CLS-\_R, 7CLS-\_R, 8ACLS-\_R, 7ACLS-\_R and 7BCLS-\_R (2R-44R @ 25C)



CURVE TC66700702  
 December 2008

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

7.2kV Peak let-through curves 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 66700205  
January 2001  
Reference # 639315  
667002, 667008

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