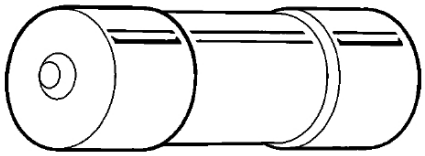
Industrial cylindrical cartridge fuses gG type

Cat. No(s): 0 123 01 to 16 - 0 124 02 to 16 - 0 133 01 to 94 0 134 02 to 25 - 0 143 02 to 50 - 0 145 04 to 50 0 153 04 to 97 - 0 155 10 to 97



CONTENTS Page

1. Description and use.....1
2. Range and characteristics.....1
3. Neutrals.....2
4. Reference standards and directives.....2
5. Device selection.....3
6. Limitation curves.....3
7. Melting curves.....6
8. Thermal stress.....10

1. DESCRIPTION AND USE

Protects conductors in electrical circuits in the event of overloads or short-circuits.

Ceramic body and silver-plated copper end pieces.

2. RANGE AND CHARACTERISTICS

2.1 Rated currents

Rating	8 × 32		10 x 38 HRC		14 x 51 HRC		22 x 58 HRC	
	Without indicator	With indicator	Without indicator	With indicator	Without striker	With striker	Without striker	With striker
0.5			0 133 94					
1	0 123 01		0 133 01					
2	0 123 02	0 124 02	0 133 02	0 134 02	0 143 02			
4	0 123 04	0 124 04	0 133 04	0 134 04	0 143 04	0 145 04		
6	0 123 06	0 124 06	0 133 06	0 134 06	0 143 06	0 145 06		
8	0 123 08	0 124 08	0 133 08	0 134 08				
10	0 123 10	0 124 10	0 133 10	0 134 10	0 143 10	0 145 10	0 153 10	0 155 10
12	0 123 12	0 124 12	0 133 12	0 134 12				
16	0 123 16	0 124 16	0 133 16	0 134 16	0 143 16	0 145 16	0 153 16	0 155 16
20			0 133 20	0 134 20	0 143 20	0 145 20	0 153 20	0 155 20
25			0 133 25	0 134 25	0 143 25	0 145 25	0 153 25	0 155 25
32					0 143 32	0 145 32	0 153 32	0 155 32
40					0 143 40	0 145 40	0 153 40	0 155 40
50					0 143 50	0 145 50	0 153 50	0 155 50
63							0 153 63	0 155 63
80							0 153 80	0 155 80
100							0 153 96	0 155 96
125							0 153 97 (1)	0 155 97 (1)

(1) Non-standard oversizing

2.2 Rated voltage and breaking capacity

Sizes	Rated voltage (V)	Breaking capacity (A)
8 × 32	400	20
10 × 38	500	100
14 × 51	500	100
22 × 58	500 (except 125 A: 400 V)	100

Can be used to protect DC circuits, supplied at a voltage of 48 VDC max.

2. RANGE AND CHARACTERISTICS (continued)

■ 2.3 Frequency

Operating frequency from 45 Hz to 62 Hz

■ 2.4 Power consumption table

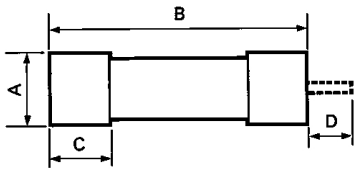
Power consumption in watts at rated current (warm state)

Cartridge	Ratings																	
	0.5	1	2	4	6	8	10	12	16	2	25	32	40	50	63	80	100	125
8 × 32		0.35	0.45	0.60	0.83	1	1.2	1.3	1.7									
10 × 38	0.07	0.45	0.5	0.85	0.95	1.15	1.3	1.4	1.9	2.4	2.7							
14 × 51			0.75	1.1	1.2		1.65		02:35	2.75	3.1	3.6	4	4.8				
22 × 58							1.9		2.5	3.4	3.5	3.7	4.3	5.3	6.3	7.4	8.3	11.3 (1)

(1): Intermittent duty. For compliance with standard IEC 60269-2, recommended permanent load < 110 A

■ 2.5 Dimensions

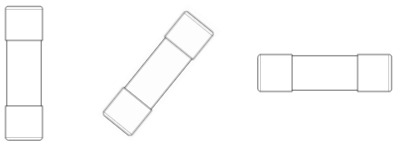
Sizes	A (mm)	B (mm)	C (mm)	D (mm)
8 x 32 (mm)	8.5	31.5	6.7	-
10 x 38 (mm)	10.3	38	10.5	-
14 x 51 (mm)	14.3	51	13.8	7.5
22 x 58 (mm)	22.2	58	16.2	7.5



■ 2.6 Storage and usage conditions

Storage ambient temperature: -40°C to 70°C
Usage ambient temperature: -25°C to 40°C
Maximum operating altitude: 2000 m

Orientation:



Vertical Tilted Horizontal

Provided that a Legrand fuse carrier is used

3. NEUTRALS

Tubes with the same dimensions as the cartridges to ensure continuity of the neutral

Cat. Nos.	For dimensions	In (A) max
0 123 00	8 × 32	20 A
0 133 00	10 × 38	25 A
0 143 00	14 × 51	50 A
0 153 00	22 × 58	125 A

Material: tinned CuZn brass

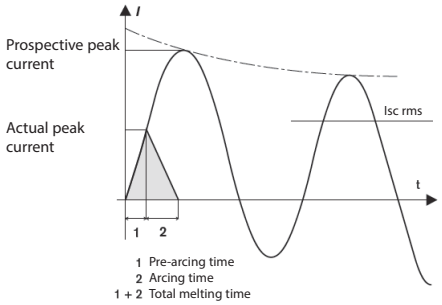
4. REFERENCE STANDARDS AND DIRECTIVES

NFC 60-200, 63-210, 63-211
EN 60269-1 and 2
IEC 60269-1 and 2
NFC 63-213 (July 1995)
RoHS
REACH

5. DEVICE SELECTION

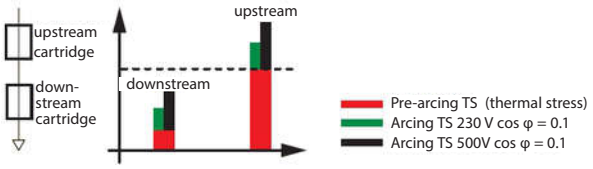
■ 5.1 How to choose a protection system

The permissible thermal stress (or value of the breaking current integral over the total melting time) for the downstream protection device, expressed in A^2s, must be less than the upstream protection device pre-arcing time.



- Overload: use the operating curves for the various protection devices. Curves must not overlap on the same circuit.

■ Example of good protection



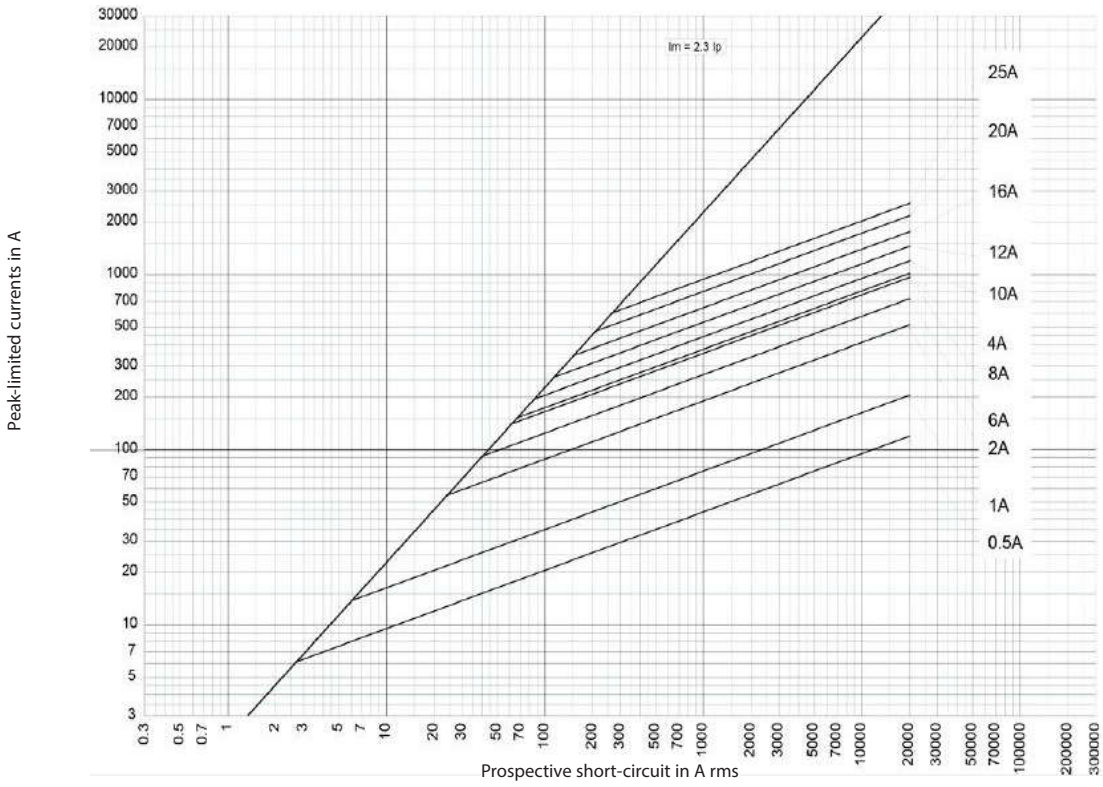
- Short-circuits: use the thermal stress selection charts. The total downstream protection device integral must be less than the upstream device pre-arcing integral.

■ 5.2 Derating

See technical data sheet for modular fuse carriers

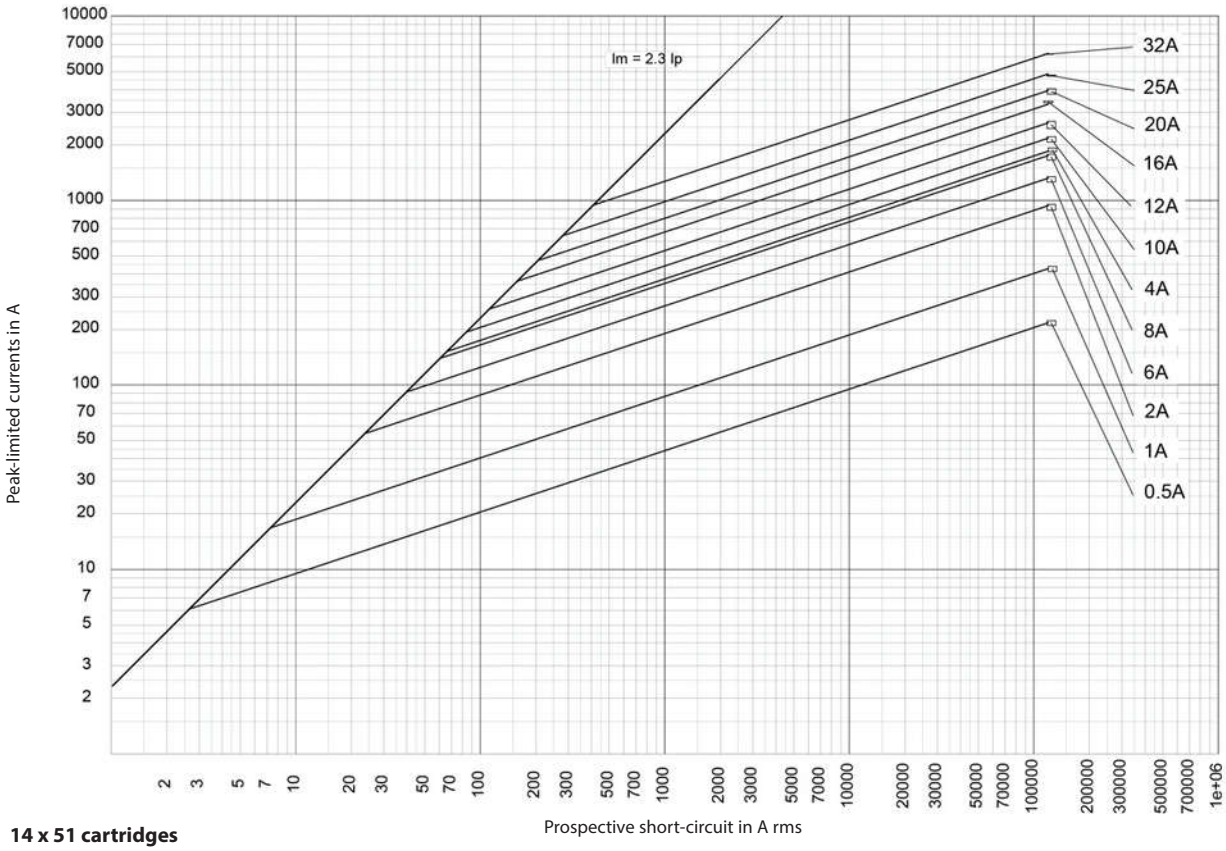
6. LIMITATION CURVES

■ 6.1 8 x 32 cartridges

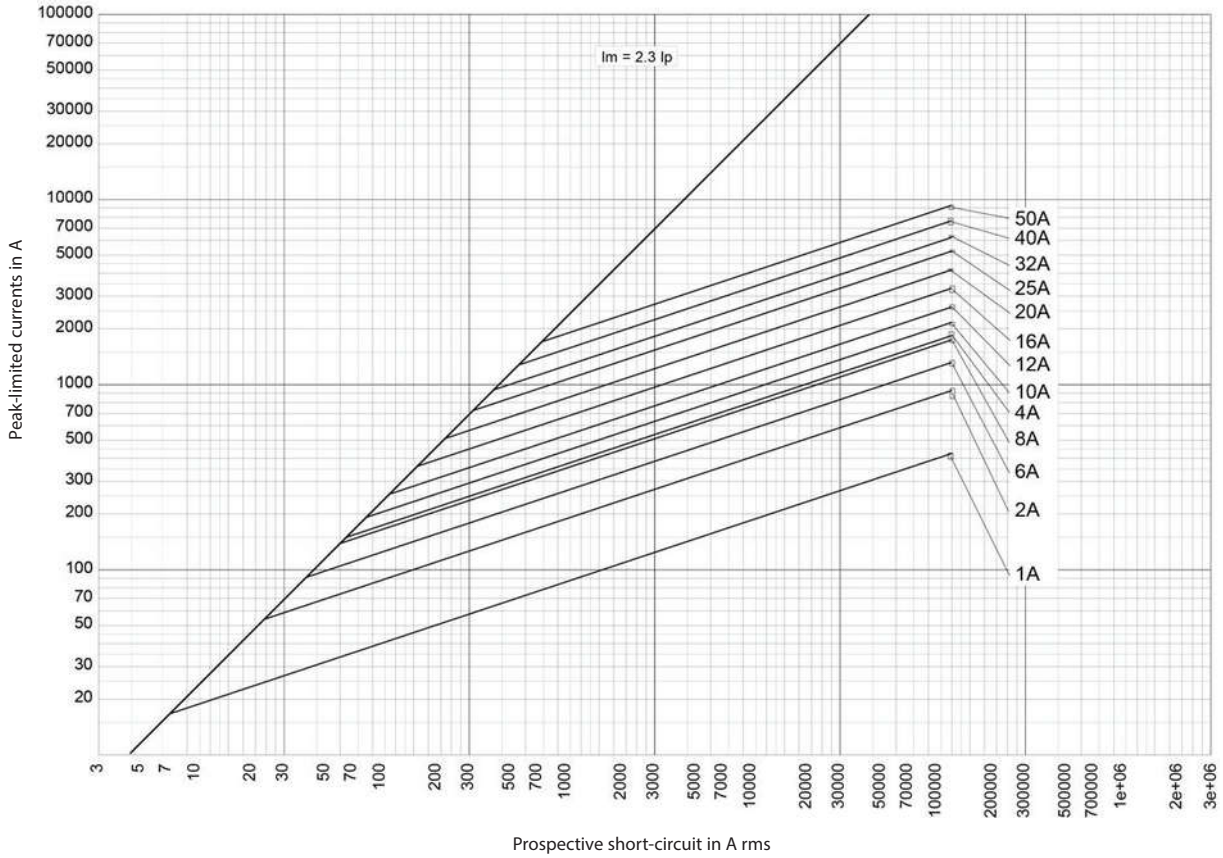


6. LIMITATION CURVES (continued)

6.2 10 x 38 cartridges

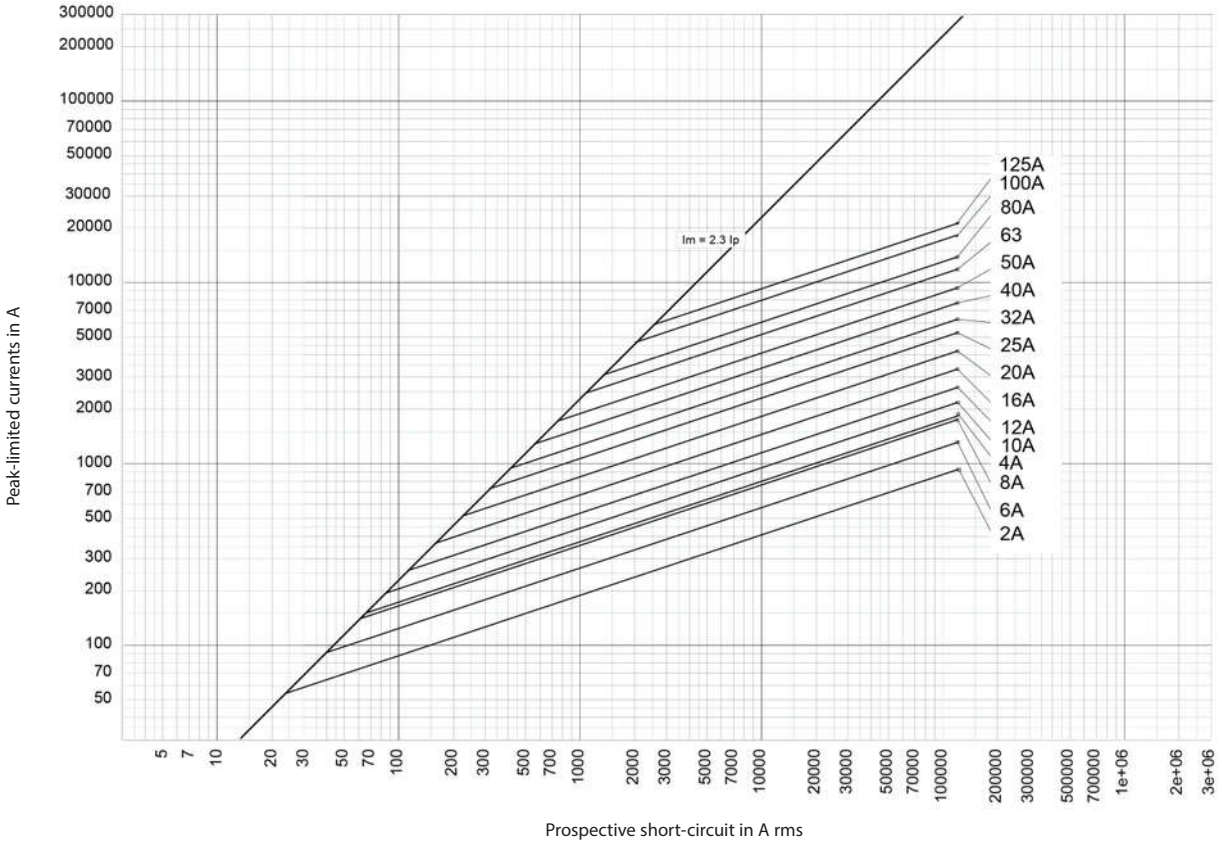


6.3 14 x 51 cartridges



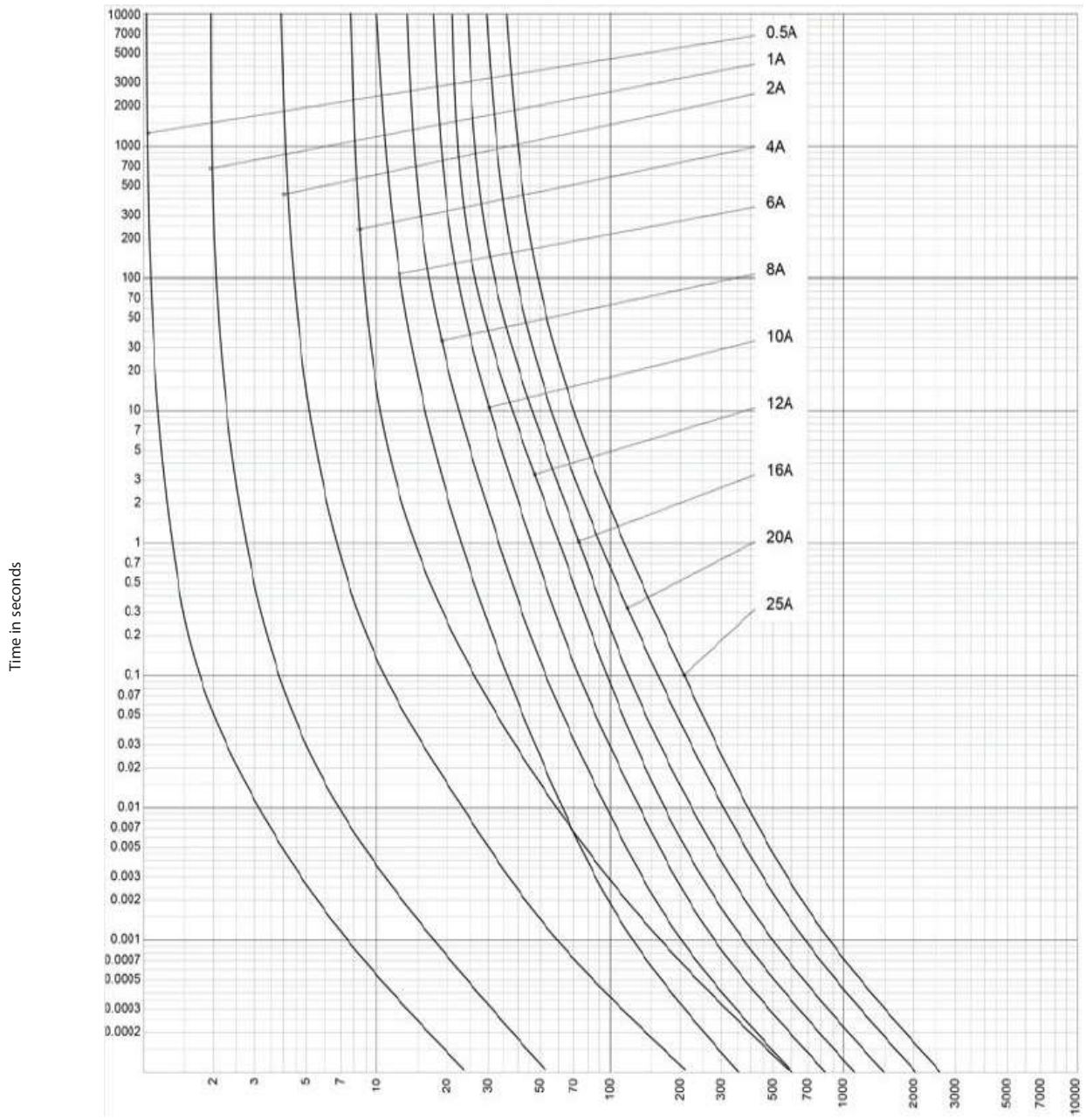
6. LIMITATION CURVES (continued)

■ 6.4 22 x 58 cartridges



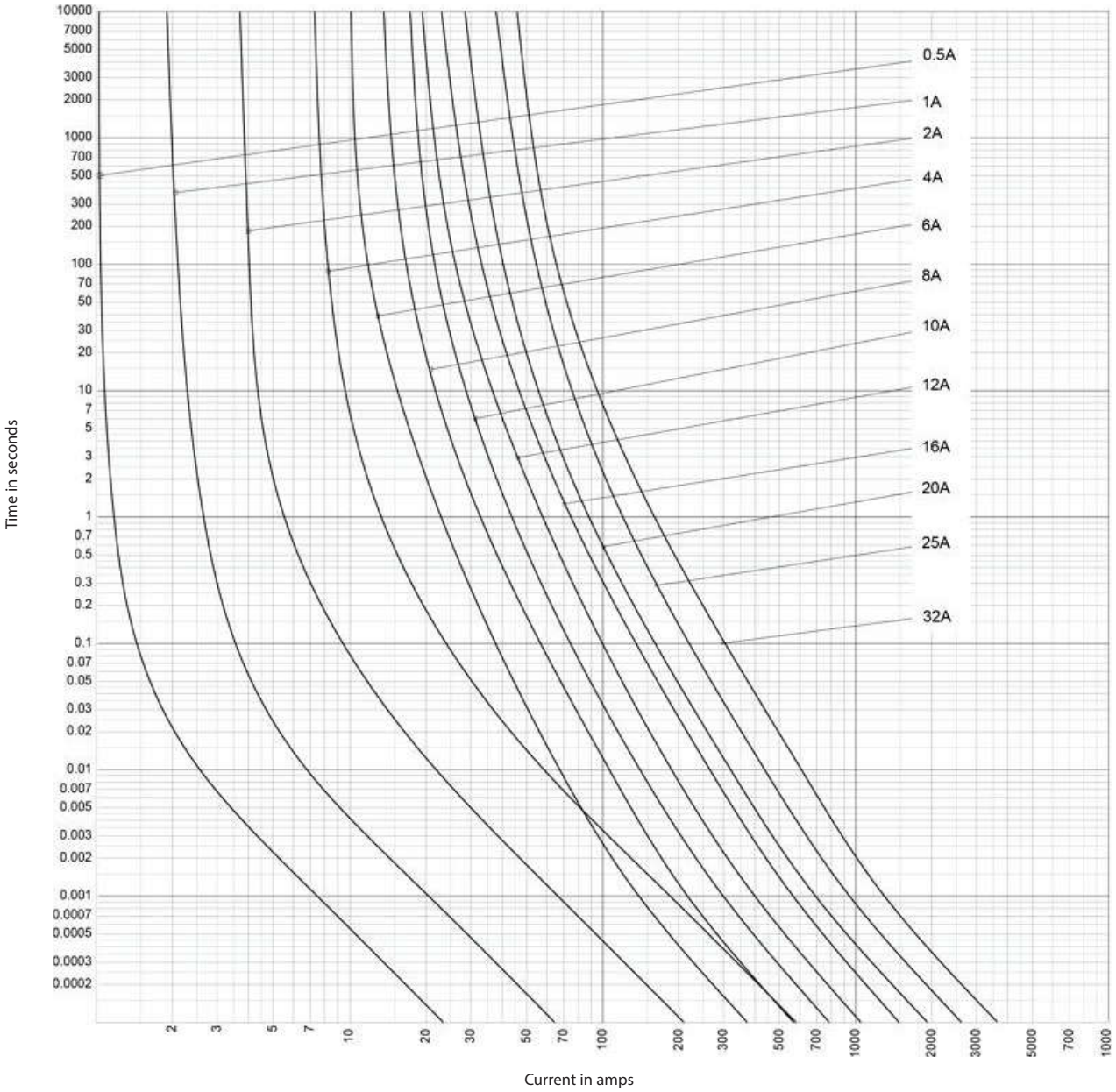
7. MELTING CURVES

■ 7.1 8 x 32 cartridges



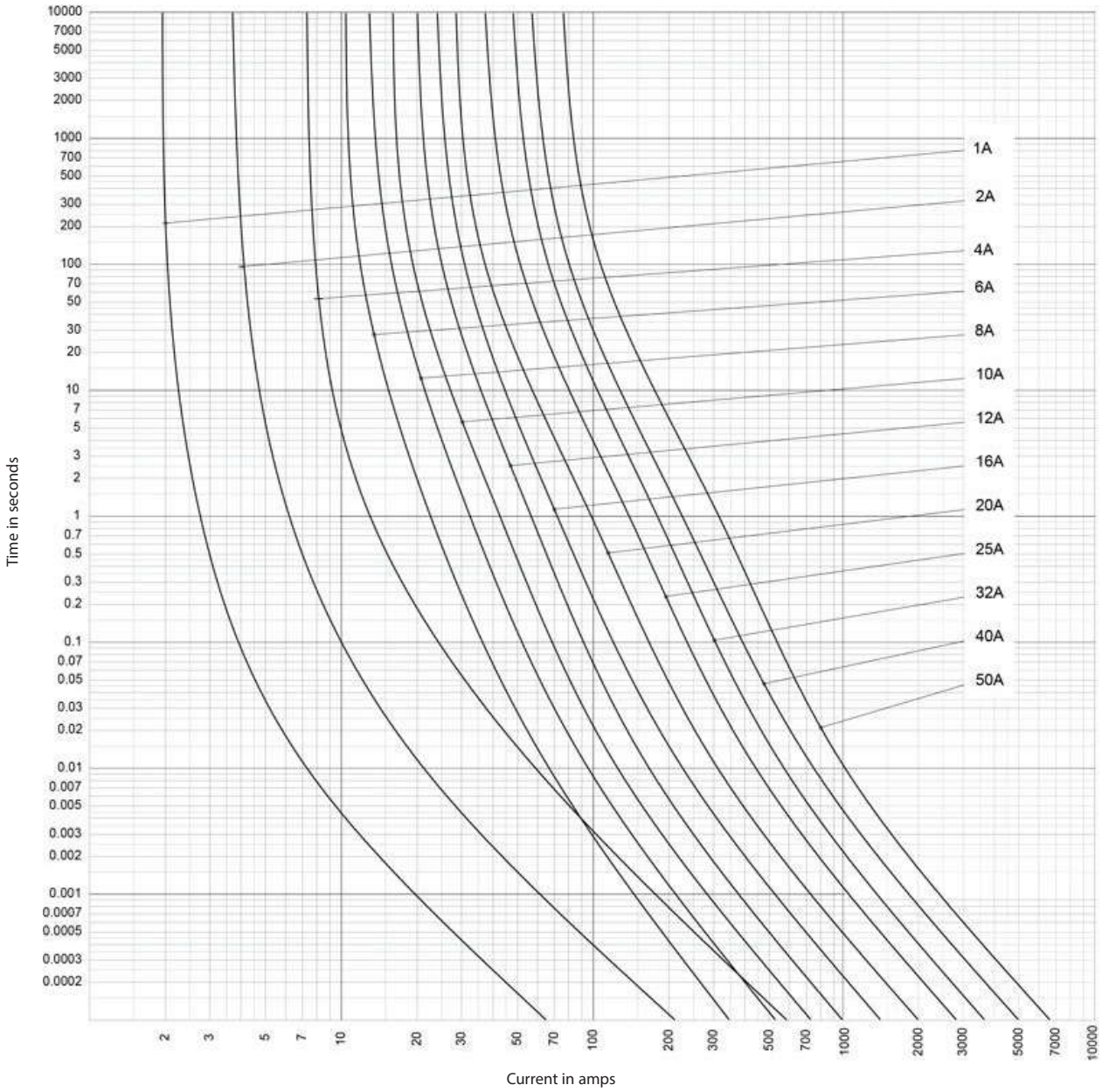
7. MELTING CURVES (continued)

■ 7.2 10 x 38 cartridges



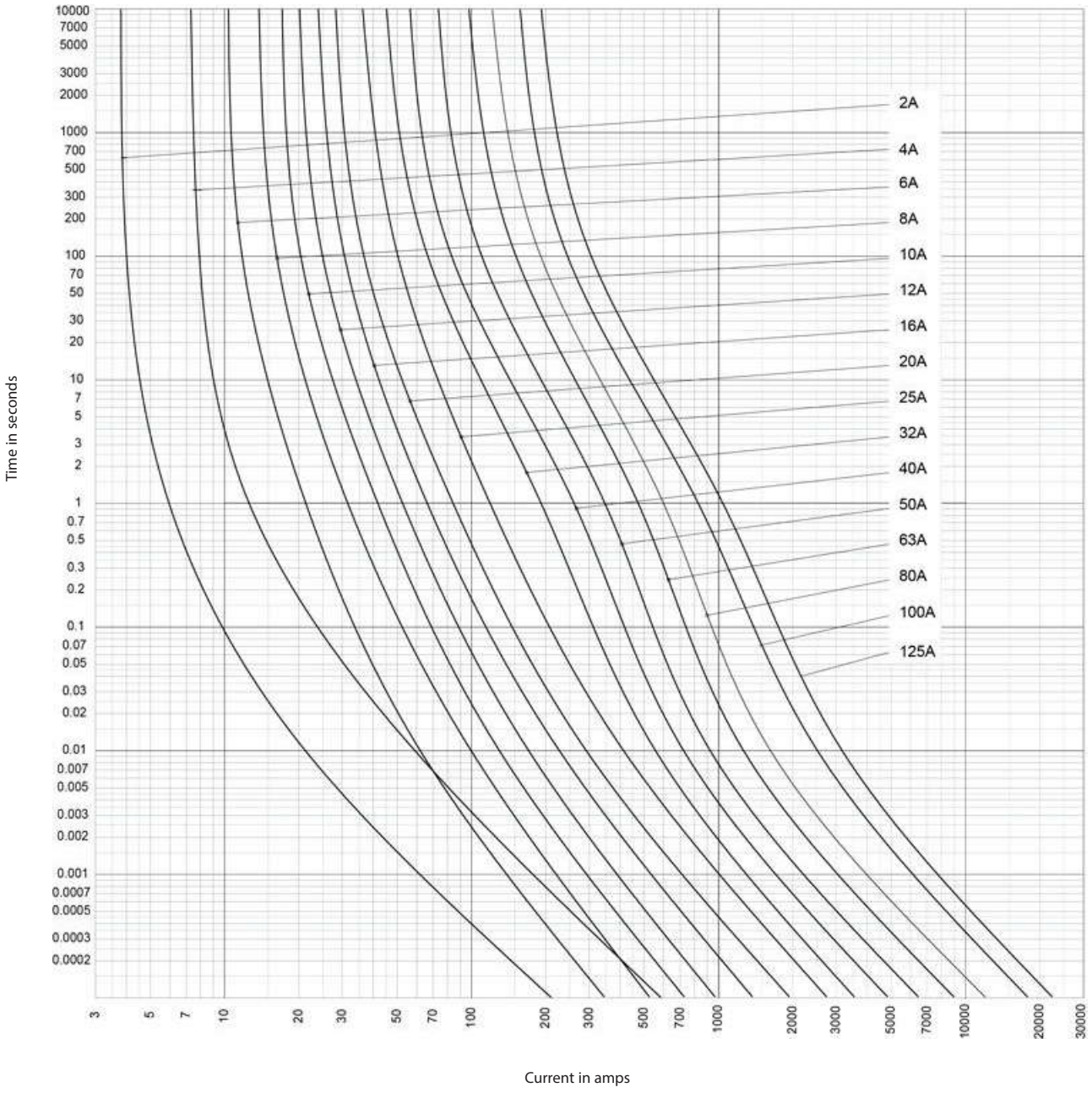
7. MELTING CURVES (continued)

■ 7.3 14 x 51 cartridges



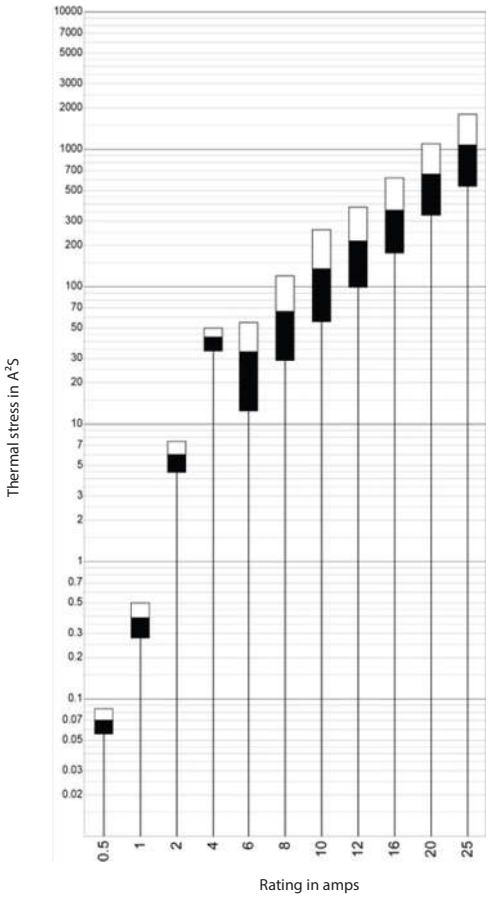
7. MELTING CURVES (continued)

7.4 22 x 58 cartridges

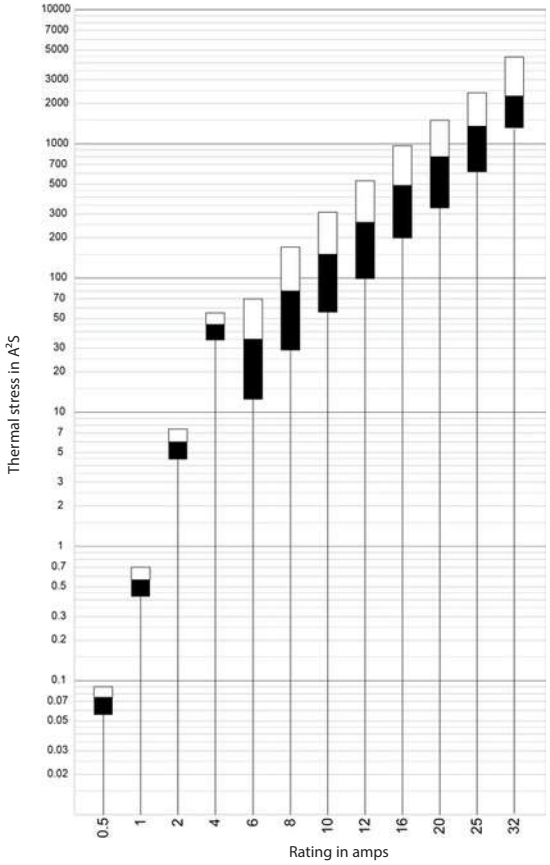


8. THERMAL STRESS

■ 8.1 8 x 32 cartridges

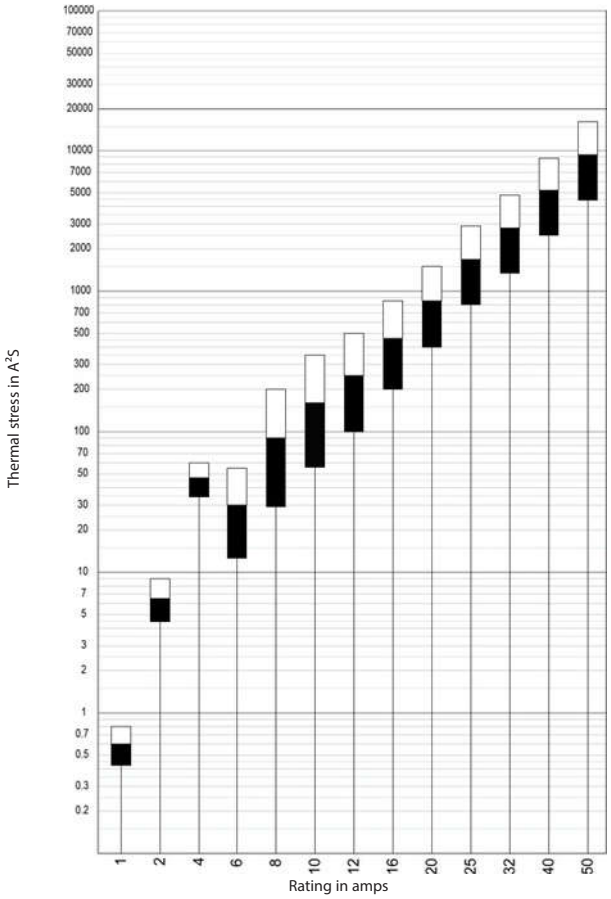


■ 8.2 10 x 38 cartridges



7. THERMAL STRESS (continued)

■ 8.3 14 x 51 cartridges



■ 8.4 22 x 58 cartridges

