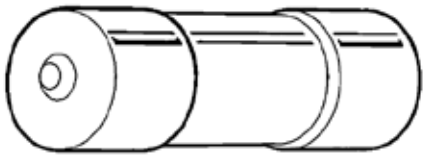
Industrial cylindrical cartridge fuses gG type

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



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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

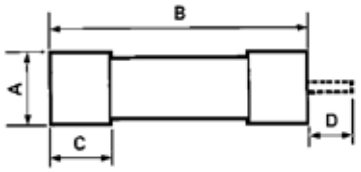
Power consumption in watts at rated current (warm state)

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

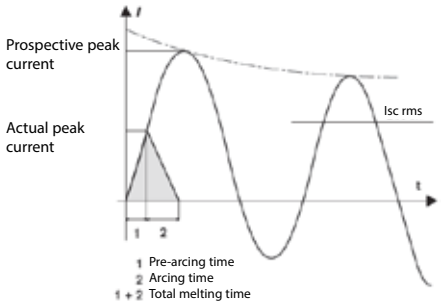
4. REFERENCE STANDARDS AND DIRECTIVES

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

5. DEVICE SELECTION

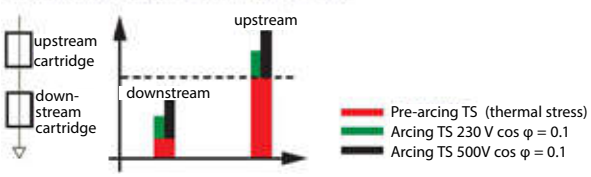
■ 5.1 How to choose a protection system

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



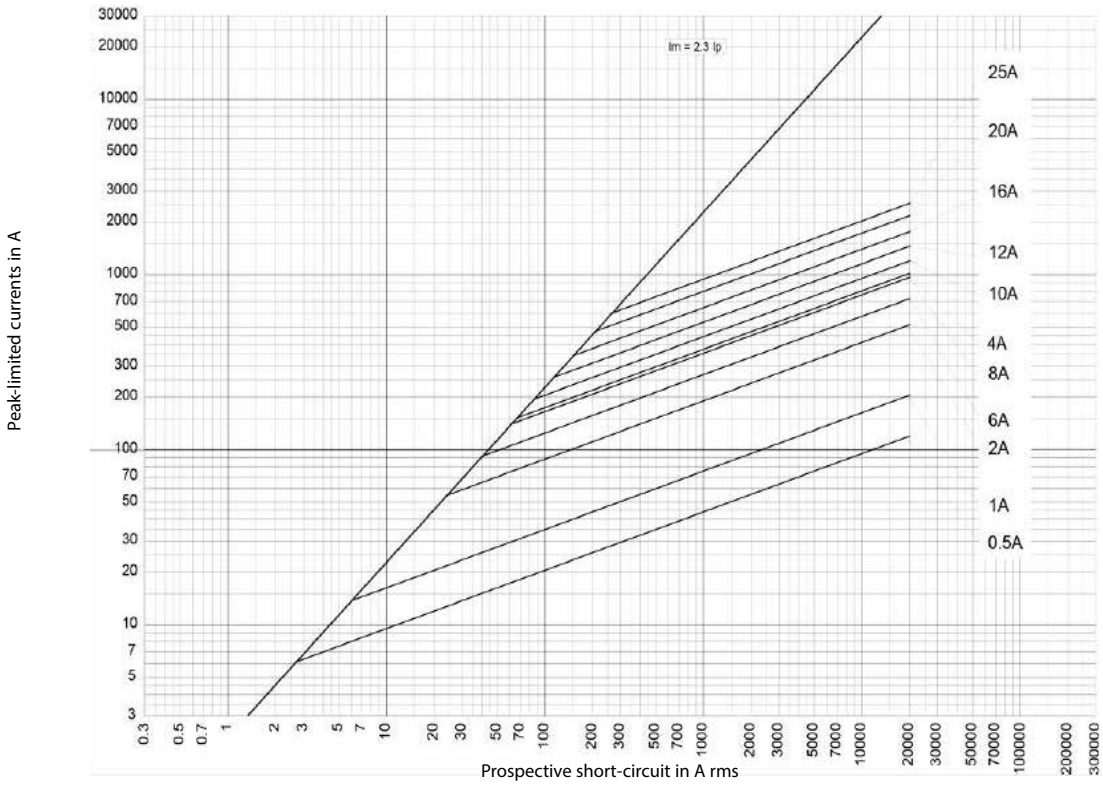
- Short-circuits: use the thermal stress selection charts. The total downstream protection device integral must be less than the upstream device pre-arcing integral.

■ 5.2 Derating

See technical data sheet for modular fuse carriers

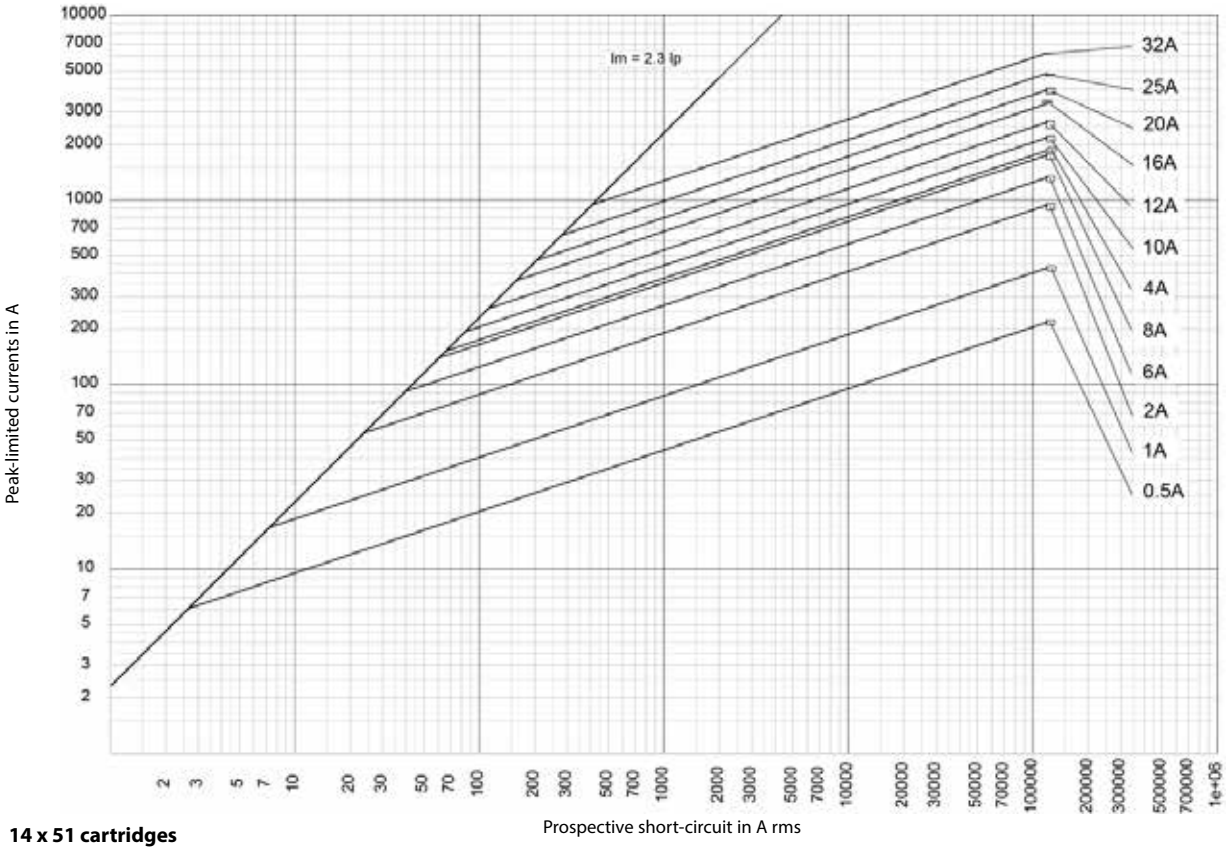
6. LIMITATION CURVES

■ 6.1 8 x 32 cartridges

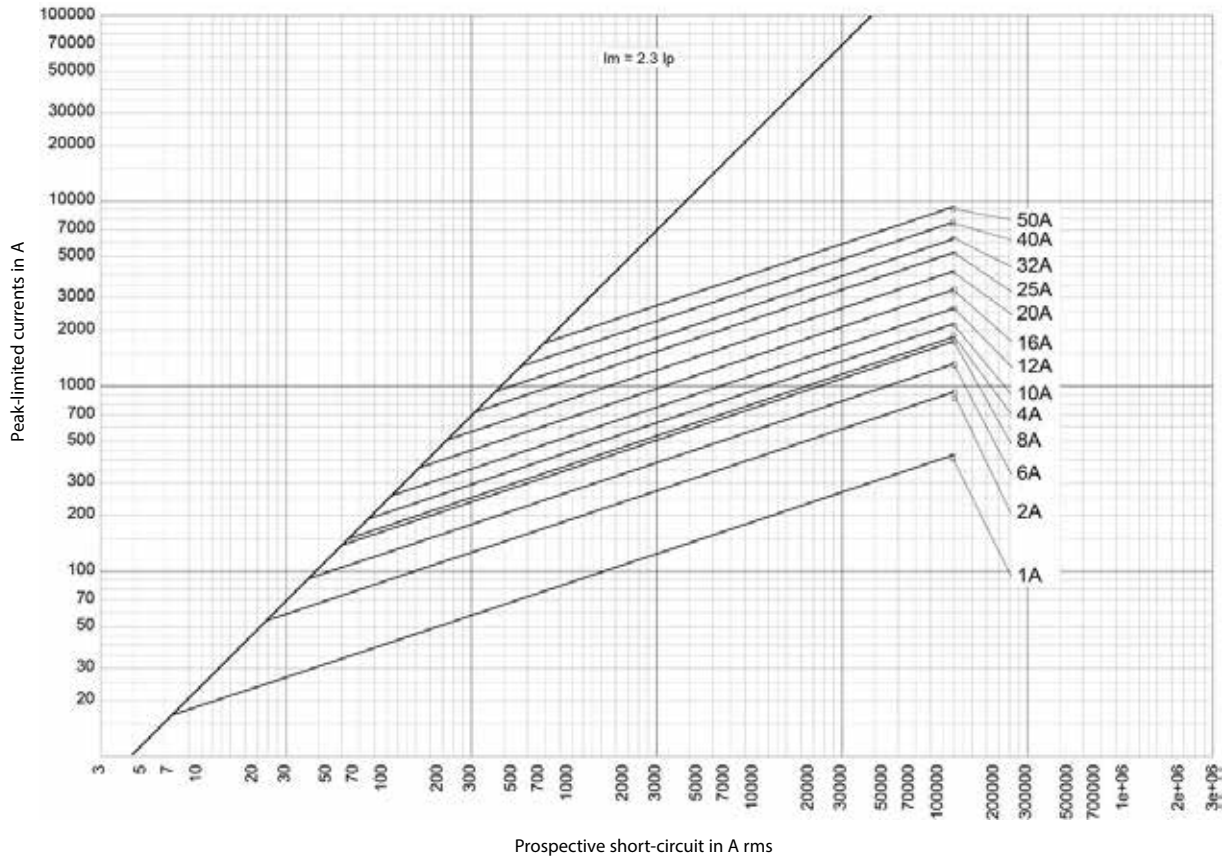


6. LIMITATION CURVES (continued)

6.2 10 x 38 cartridges

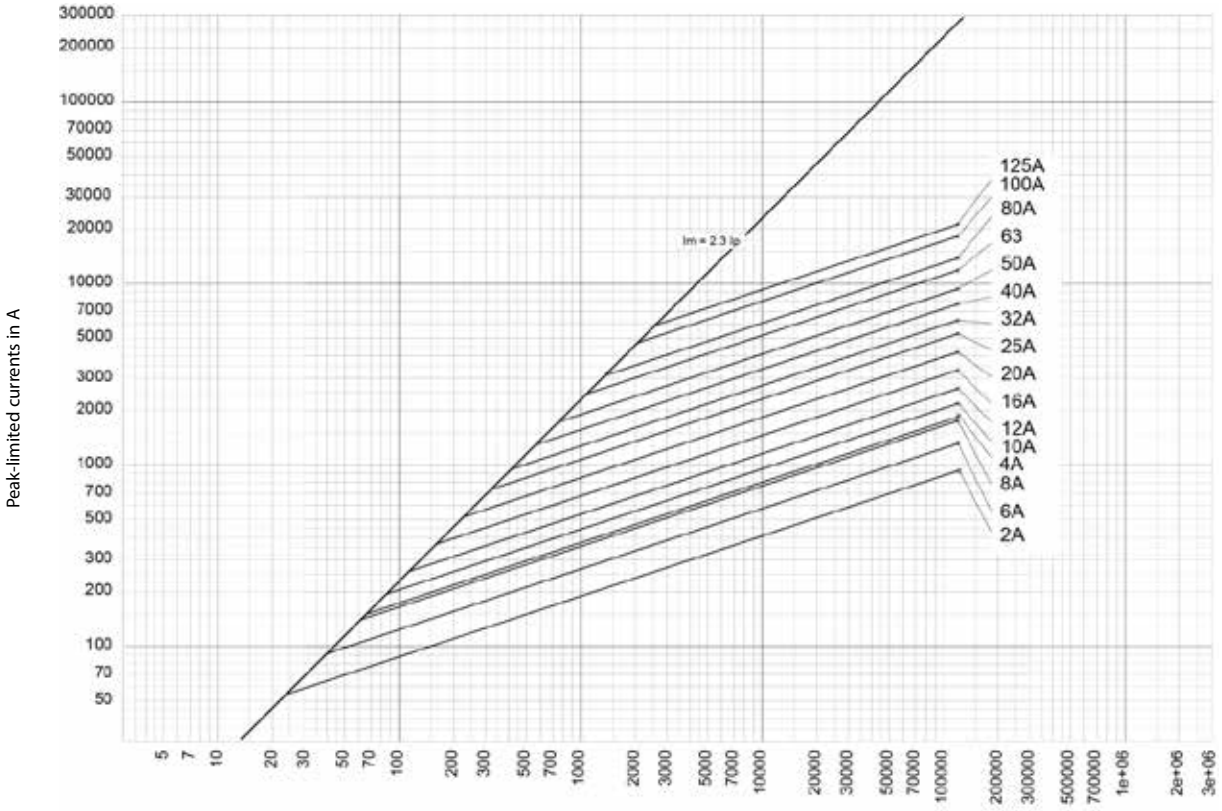


6.3 14 x 51 cartridges



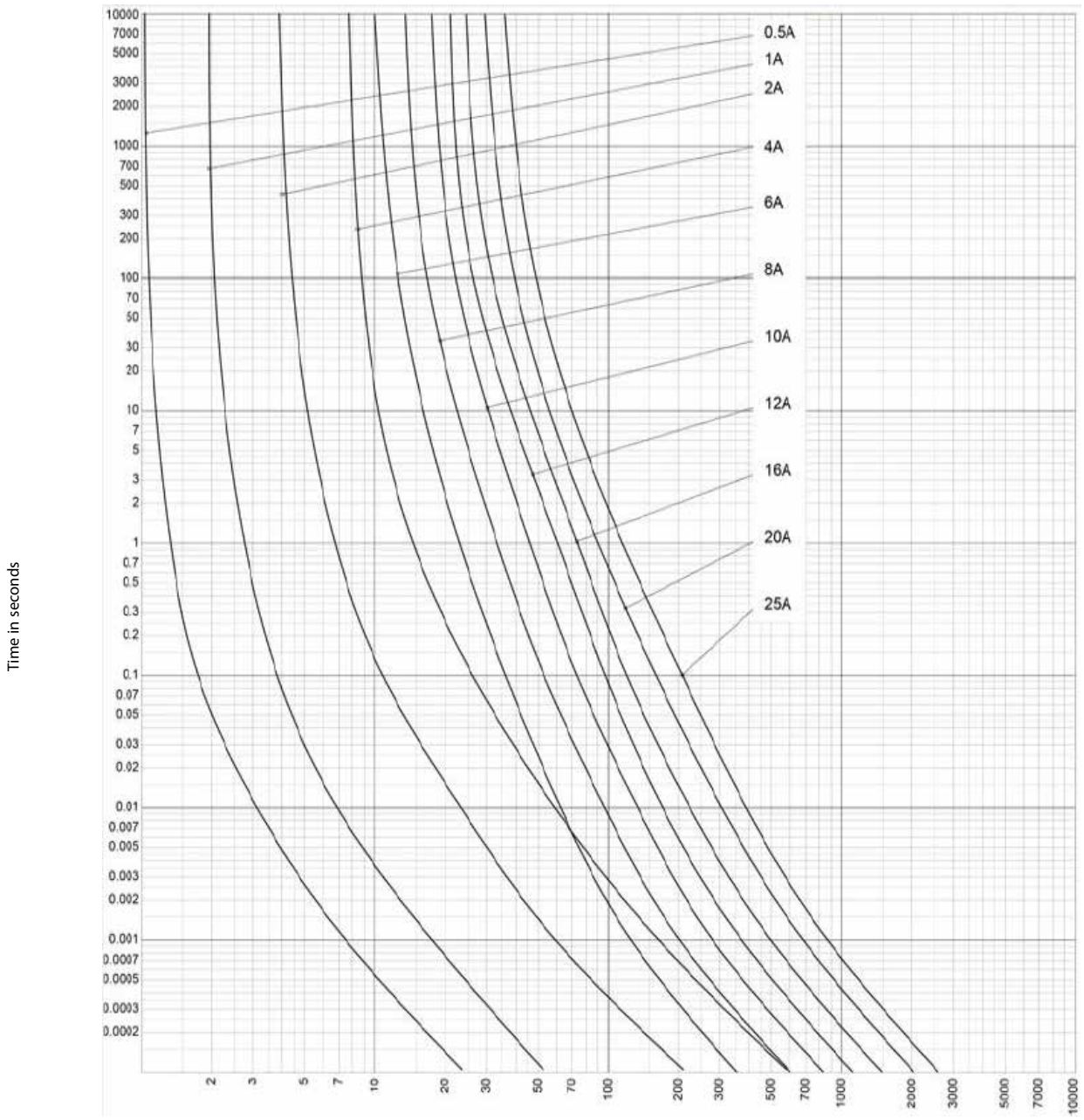
6. LIMITATION CURVES (continued)

■ 6.4 22 x 58 cartridges



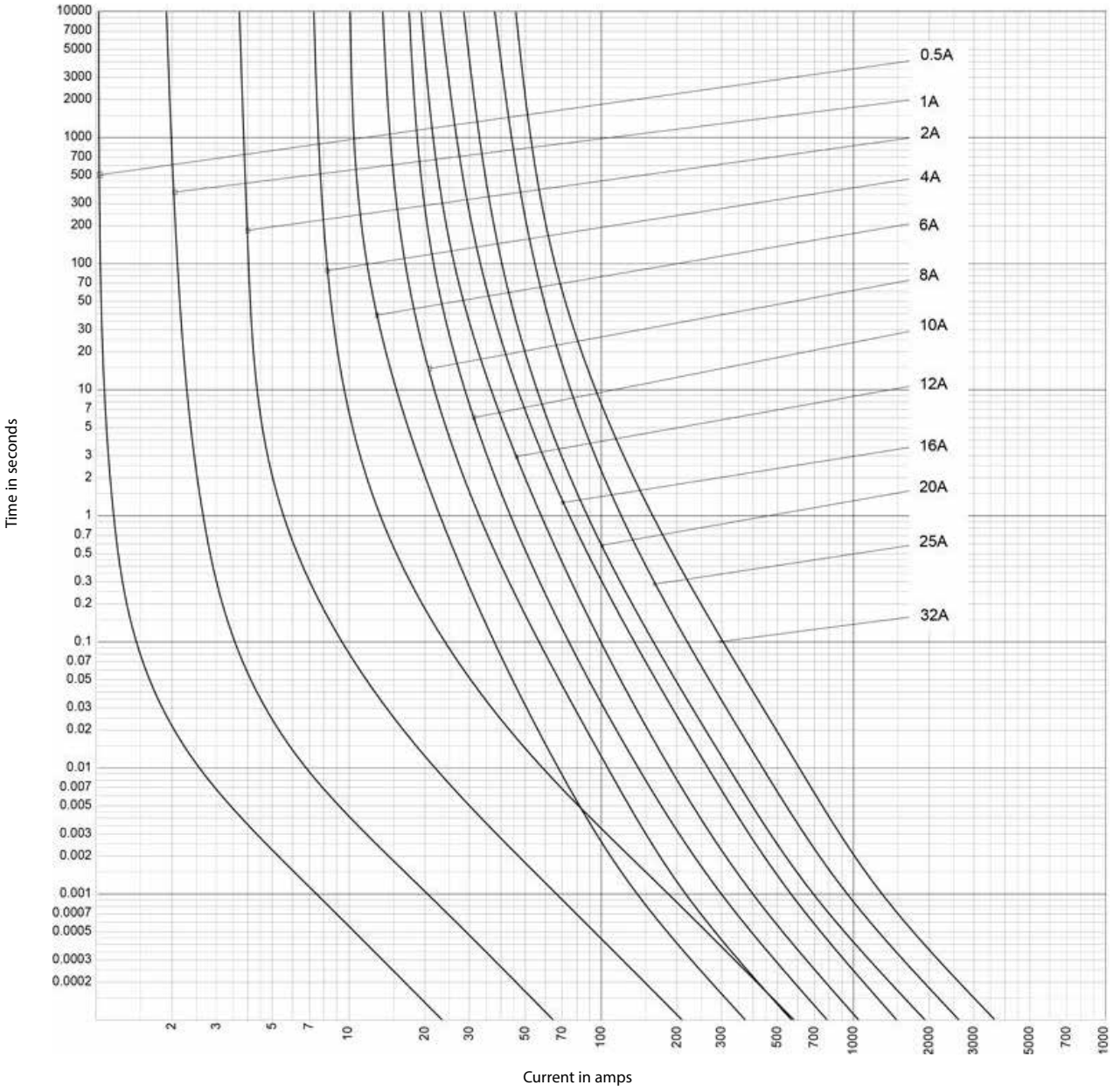
7. MELTING CURVES

■ 7.1 8 x 32 cartridges



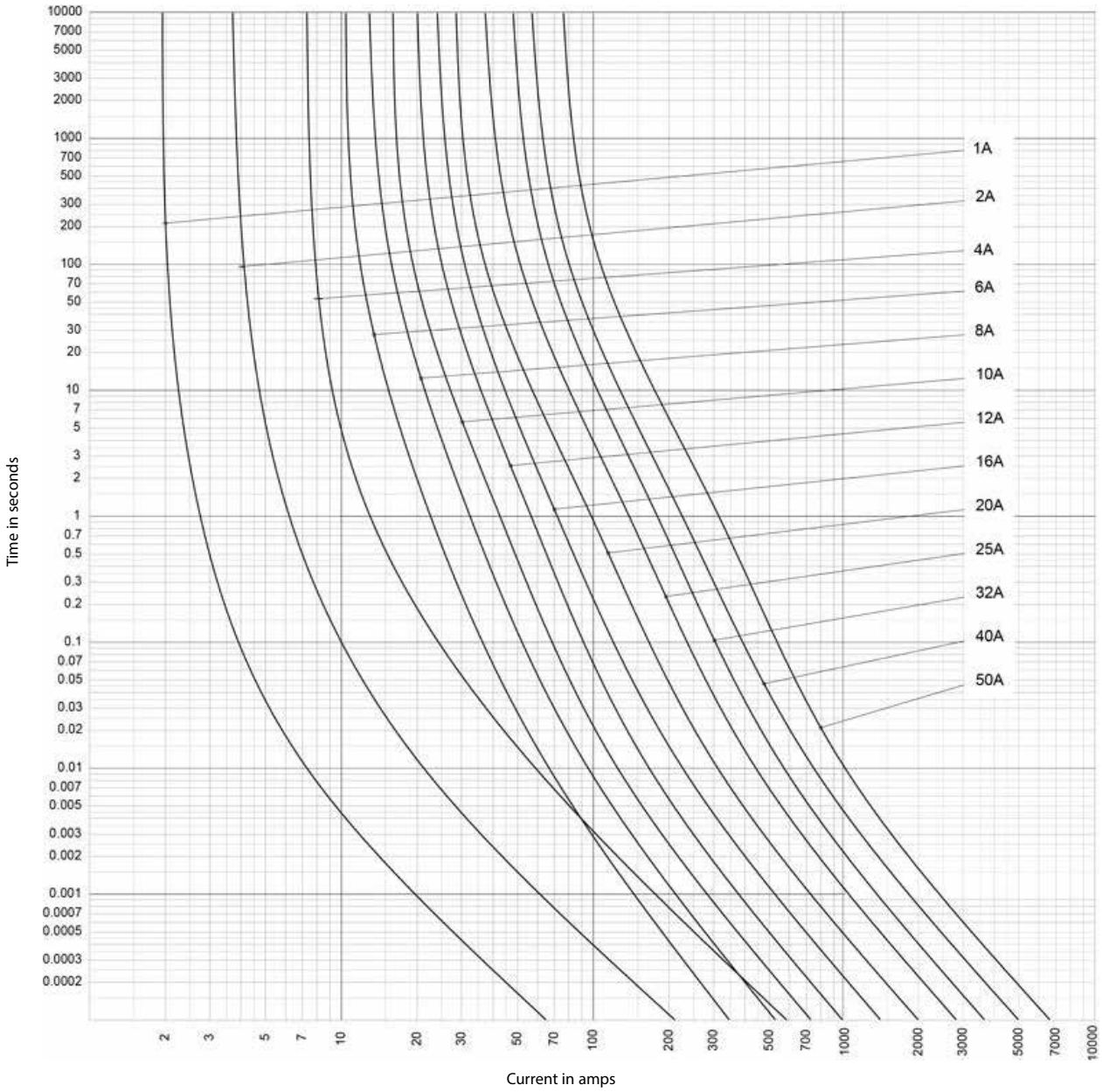
7. MELTING CURVES (continued)

■ 7.2 10 x 38 cartridges



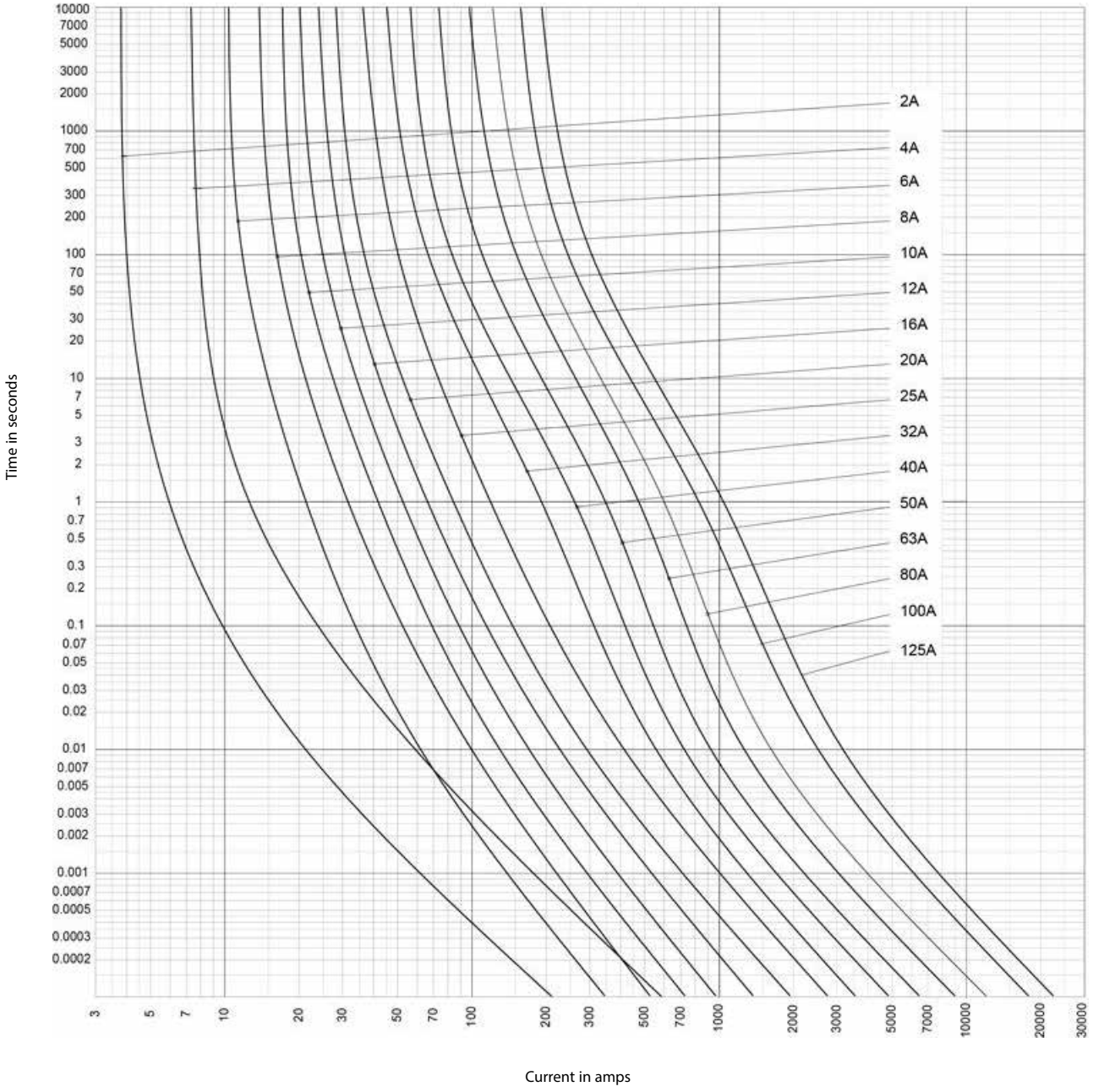
7. MELTING CURVES (continued)

■ 7.3 14 x 51 cartridges



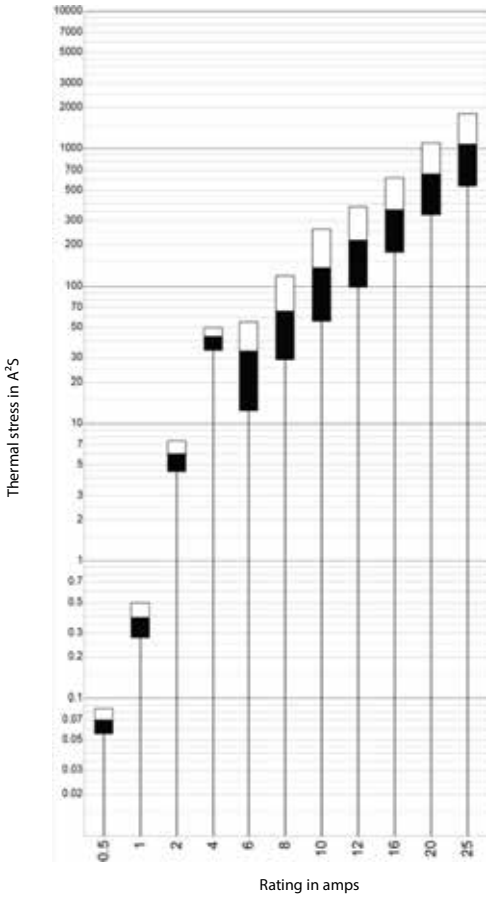
7. MELTING CURVES (continued)

7.4 22 x 58 cartridges

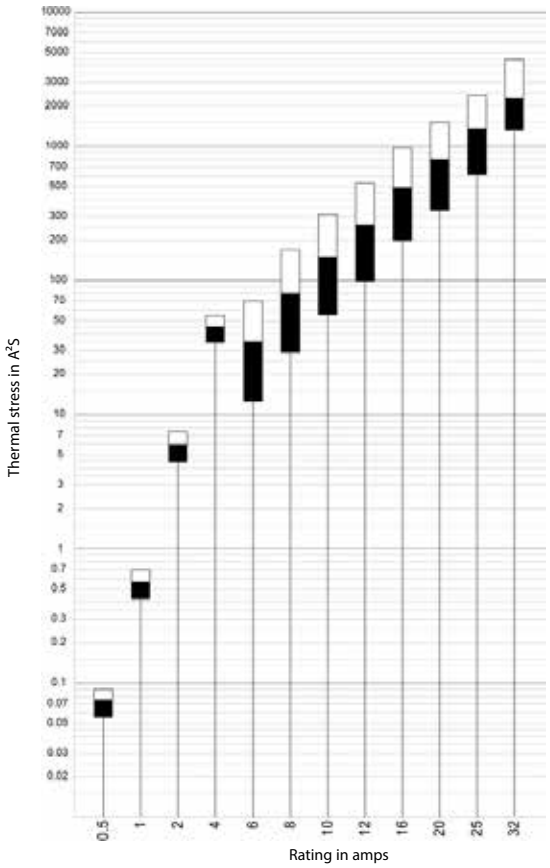


8. THERMAL STRESS

■ 8.1 8 x 32 cartridges

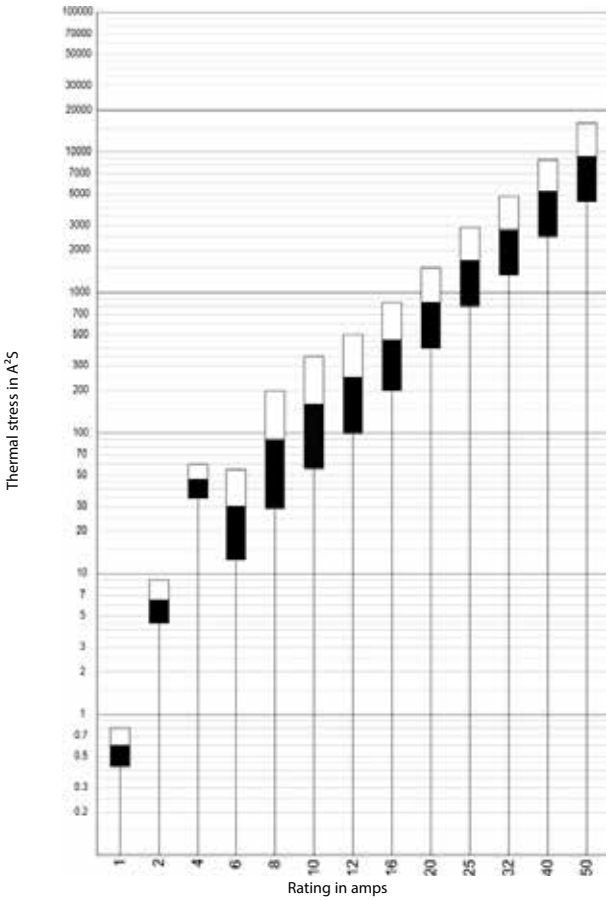


■ 8.2 10 x 38 cartridges



7. THERMAL STRESS (continued)

8.3 14 x 51 cartridges



8.4 22 x 58 cartridges

