Square body fuse links

170M - Size 4, Flush end contact, 1250 V a.c. (IEC), 800 A to 2500 A

Specifications

Description

Square body, flush end contact, high speed fuse links, for the protection of power rectifiers.

Technical data

- Rated voltage:
  - 1250 V a.c. (IEC)
  - 1200 V d.c. (UL)
- Rated current: 800 A to 2500 A
- Operating class: aR

Standards / Agency information

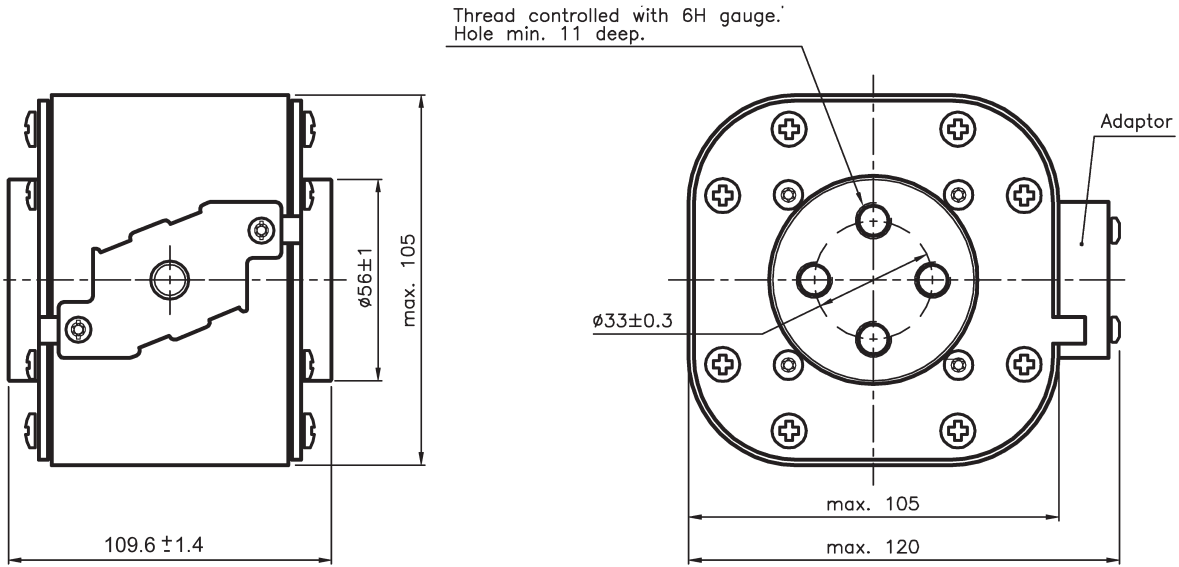CE, Designed and tested to IEC 60269 Part 4, UL

Catalogue numbers

Fuse link body size	AC		DC		Rated current (Amps)	I²t (A² Sec)		Watts loss (W)	Catalogue numbers	
	Rated voltage	Breaking capacity	Rated voltage	Breaking capacity		Pre-arcing	Clearing at 1250 V a.c.		-BKN/110 Type K indicator	-SBKN/105 Type K indicator
4	1250 V a.c.	100 kA	1000 V d.c.	180 kA IR UL	800	145,000	905,000	195	170M7802	-
					1000	275,000	1,750,000	220	170M7803	-
					1200	495,000	3,100,000	240	170M7804	-
					1400	800,000	5,000,000	250	170M7217[1]	170M7512
					1500	1,000,000	6,200,000	260	170M7597	170M7510
			1200 V d.c.	85 kA IR UL	1700	1,400,000	8,700,000	275	170M7676	170M7511
					1800	1,700,000	11,000,000	280	170M7532	170M7976
					2000	2,300,000	14,500,000	305	170M7633	170M7513
					2200	3,100,000	19,500,000	315	170M7592	170M7546
					2400	4,000,000	25,000,000	330	170M7107	170M7516
					2500	4,500,000	28,000,000	340	170M7595[2]	170M7978

[1] 170M7217 rated 850 V d.c./1250 V a.c. (IEC), 1000 V d.c. 180 kA IR (UL), 1200 V d.c. 85 kA IR (UL)
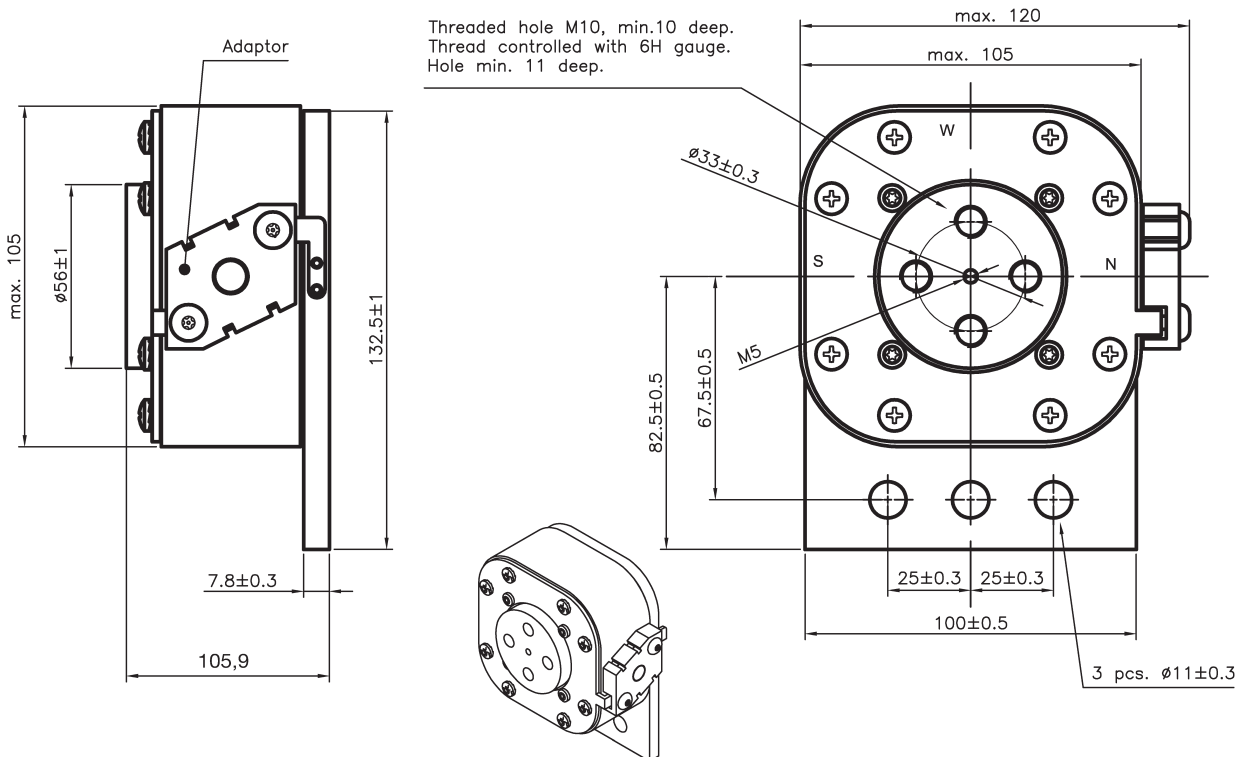
[2] 170M7595 rated at 1200V d.c. 85kA only

Data sheets: 170K6640 (1400 A to 2400 A), 170K6642 (800 A to 1200A and 2500 A)

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Dimensions (mm) - 4KBN/110

Thread controlled with 6H gauge.
Hole min. 11 deep.

Adaptor

max. 105

ø56±1

ø33±0.3

max. 105

max. 120

109.6 ±1.4

Dimensions (mm) - 4SBKN/105

Adaptor

Threaded hole M10, min.10 deep.
Thread controlled with 6H gauge.
Hole min. 11 deep.

max. 120

max. 105

ø33±0.3

W

max. 105

ø56±1

S

N

132.5±1

M5

82.5±0.5

67.5±0.5

7.8±0.3

105,9

25±0.3   25±0.3
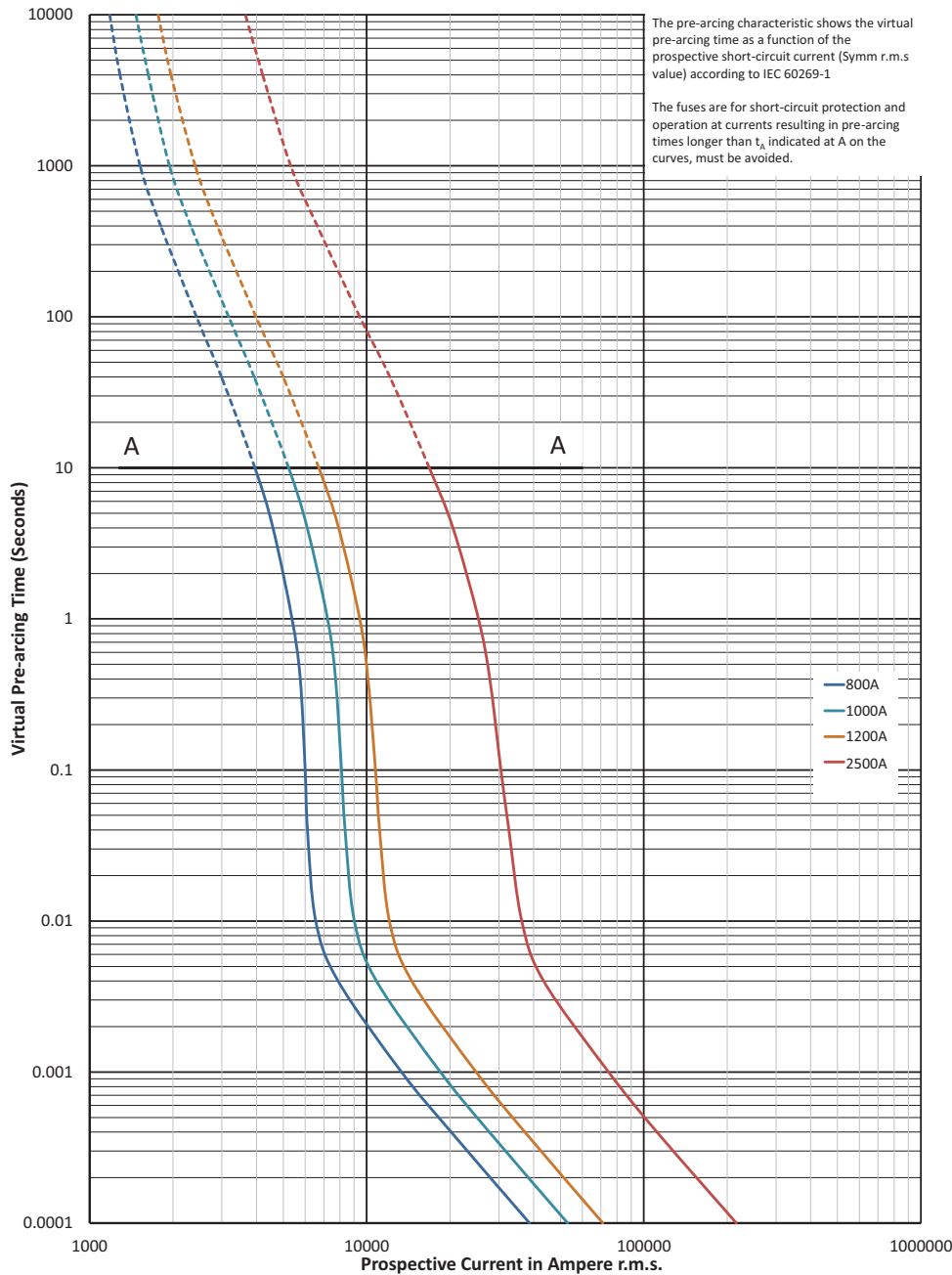
100±0.5

3 pcs. ø11±0.3

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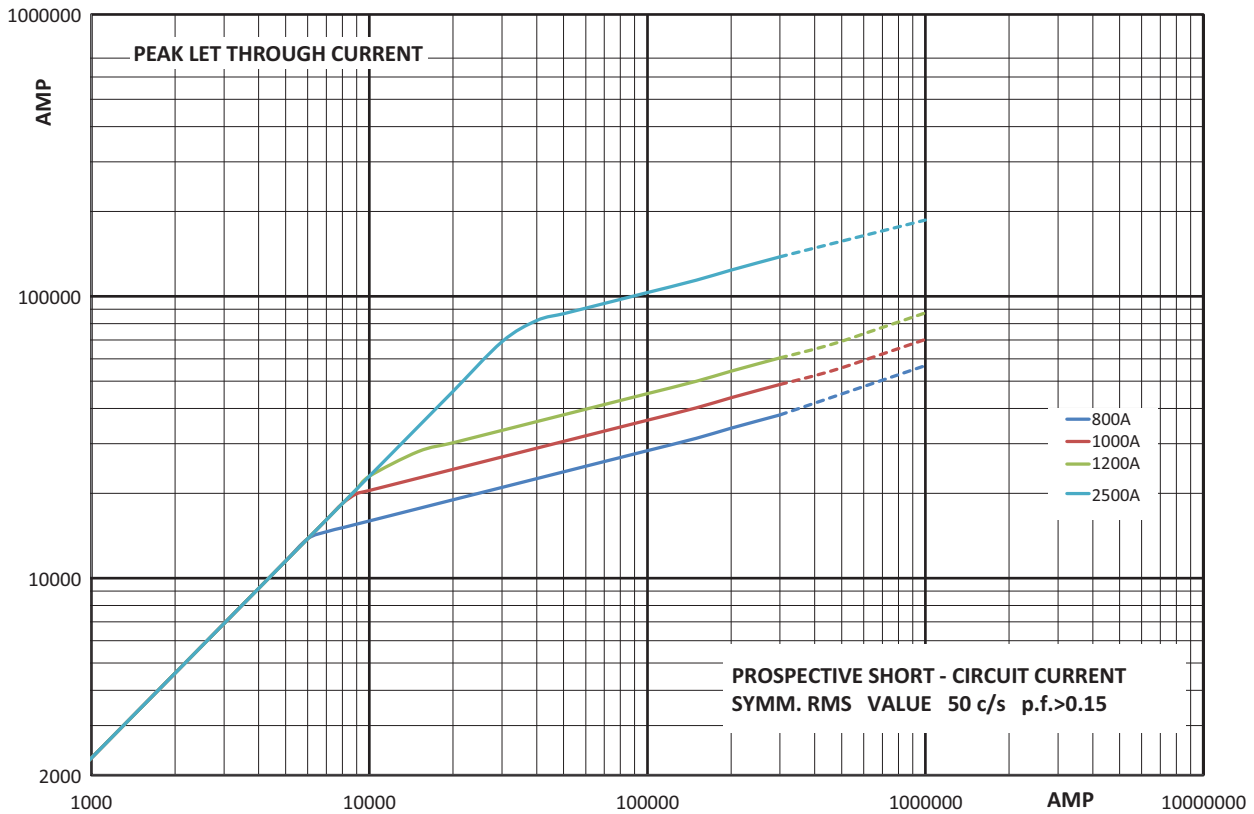
Time-current curve - 800 A to 2500 A

The pre-arcing characteristic shows the virtual pre-arcing time as a function of the prospective short-circuit current (Symm r.m.s value) according to IEC 60269-1

The fuses are for short-circuit protection and operation at currents resulting in pre-arcing times longer than t_A indicated at A on the curves, must be avoided.

- 800A
- 1000A
- 1200A
- 2500A

X-axis: Prospective Current in Ampere r.m.s.
Y-axis: Virtual Pre-arcing Time (Seconds)

K_b = 1   N = 1.7

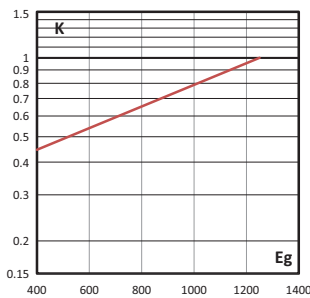Data sheets: 170K6640 (1400 A to 2400 A), 170K6642 (800 A to 1200A and 2500 A)

170M - Size 4, Flush end contact, 1250 V a.c. (IEC), 800 A to 2500 A
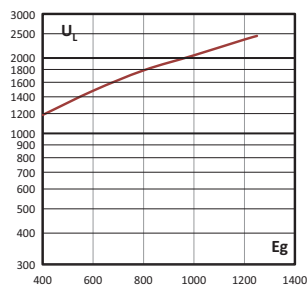
Cut-off curve - 800 A to 2500 A

Total clearing I²t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_g, (RMS).
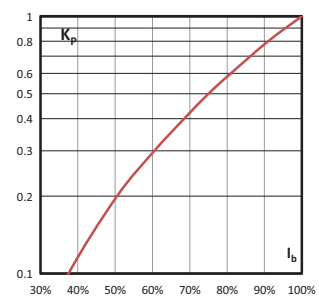

Arc voltage

This curve gives the peak arc voltage, U_L, which may appear across the fuse during its operation as a function of the applied working voltage, E_g, (RMS) at a power factor of 15 percent.

Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, K_p , is given as a function of the RMS load current, I_b , in percent of the rated current.
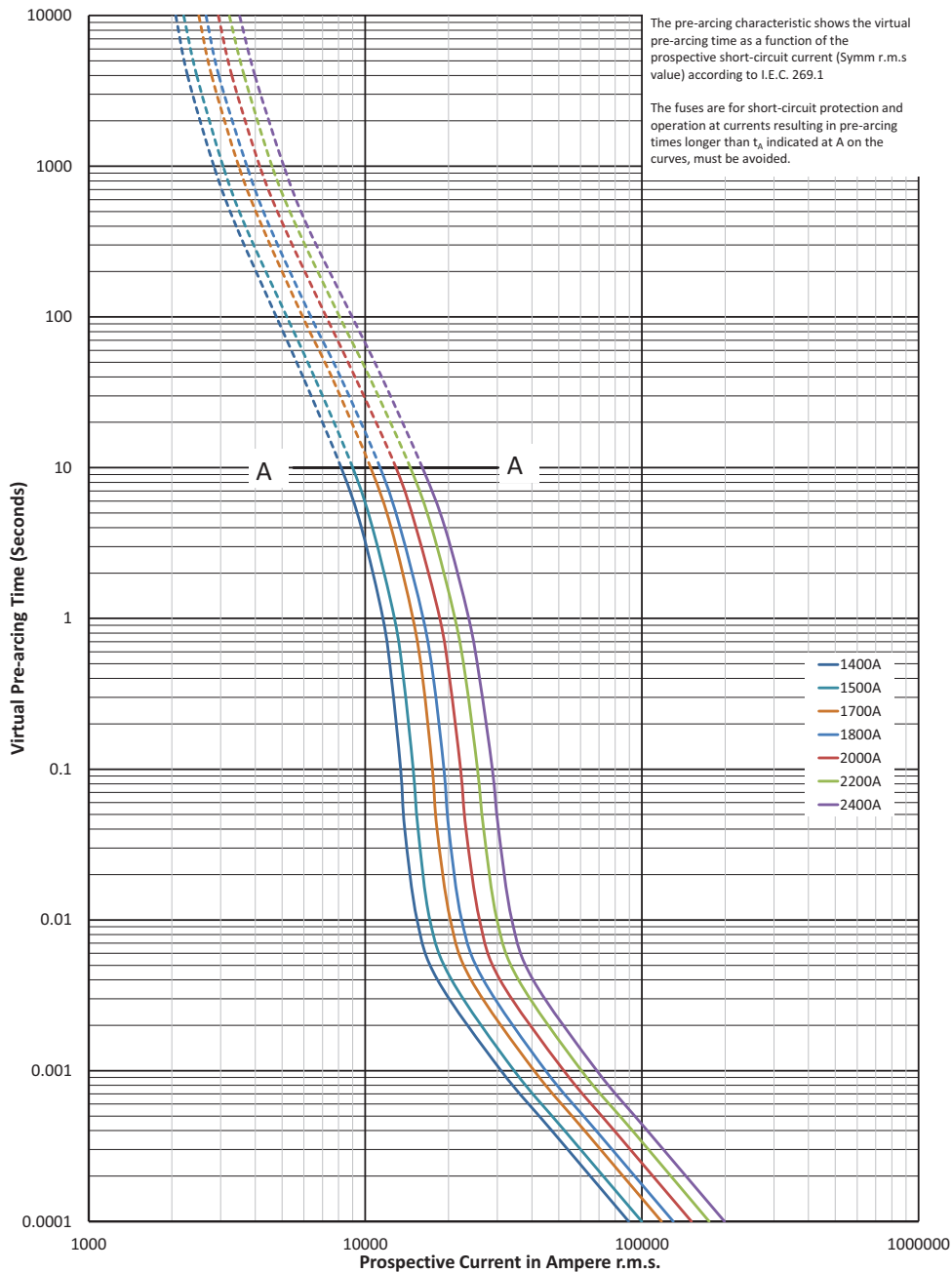

Data sheets: 170K6640 (1400 A to 2400 A), 170K6642 (800 A to 1200A and 2500 A)

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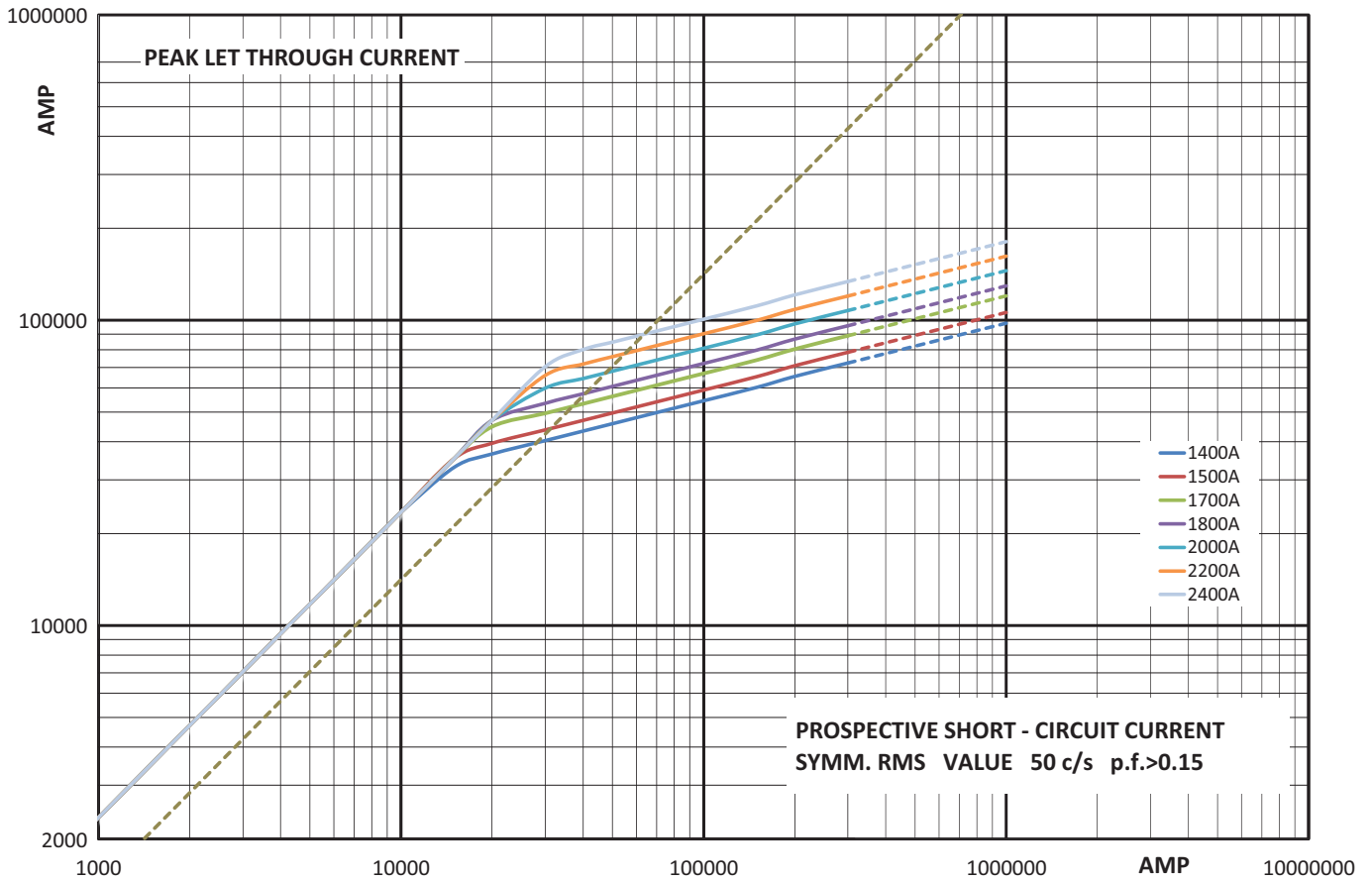
Time-current curve - 1400 A to 2400 A

The pre-arcing characteristic shows the virtual pre-arcing time as a function of the prospective short-circuit current (Symm r.m.s value) according to I.E.C. 269.1

The fuses are for short-circuit protection and operation at currents resulting in pre-arcing times longer than t_A indicated at A on the curves, must be avoided.

- 1400A
- 1500A
- 1700A
- 1800A
- 2000A
- 2200A
- 2400A

Y-axis: Virtual Pre-arcing Time (Seconds)
X-axis: Prospective Current in Ampere r.m.s.

$K_b =$ 1 $N =$ 1.7

Data sheets: 170K6640 (1400 A to 2400 A), 170K6642 (800 A to 1200A and 2500 A)

170M - Size 4, Flush end contact, 1250 V a.c. (IEC), 800 A to 2500 A
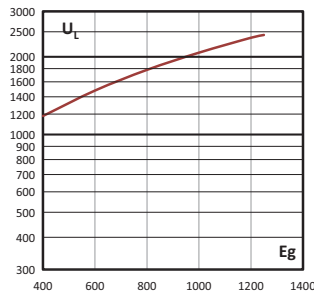
Cut-off curve - 1400 A to 2400 A

PEAK LET THROUGH CURRENT

AMP

1400A	
1500A	
1700A	
1800A	
2000A	
2200A	
2400A	

PROSPECTIVE SHORT - CIRCUIT CURRENT
SYMM. RMS   VALUE   50 c/s   p.f.>0.15

AMP

Total clearing I²t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_g, (RMS).
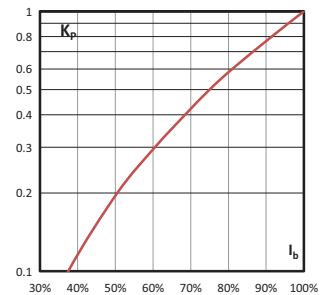

Arc voltage

This curve gives the peak arc voltage, U_L, which may appear across the fuse during its operation as a function of the applied working voltage, E_g, (RMS) at a power factor of 15 percent.

Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, K_p , is given as a function of the RMS load current, I_b , in percent of the rated current.

Data sheets: 170K6640 (1400 A to 2400 A), 170K6642 (800 A to 1200A and 2500 A)