

Ferrule fuse-links 8x31 aM 400VAC

LOW VOLTAGE IEC FUSES

IEC CYLINDRICAL FUSE-LINKS



Mersen aM and gG fuse-links cover a wide range of physical sizes and ampere ratings for 400, 500, and 690VAC for protection in electrical distribution circuits and various industrial applications. Most ratings are available in size 8x31 and size 10x38 with an optional indicator, and in size 14x51 and 22x58 with an optional striker to activate an auxiliary contact. Size 10x38 is also available with striker. All cylindrical fuse-links have ceramic bodies and silver-plated contacts.

Cylindrical fuse-links "aM" are partial range fuses. They protect electrical devices in case of unacceptable high short-circuit against destruction due high current limiting and low thermal let-through values. They cut off currents more than $6.3 \times I_n$ until the maximum breaking capacity (rated breaking capacity). Cylindrical fuse-links "aM" are mainly used for the protection of installation switch gear in motor circuit currents. For classification of the cylindrical fuse-links the nominal current of the fuse-link can be selected respective to the nominal current of the motor.

Our technology and process was designed to ensure highly reliable technical performance.

TECHNICAL DATA OVERVIEW

| | |
|----------------------|----------------------|
| Voltage AC | 400 VAC |
| Ampere Range (A) | 1 ... 12 A |
| Speed/Characteristic | aM |
| I.R. AC (IEC) | 20 kA |
| Body Material | Ceramic |
| Body Style | cylindrical |
| Contact Materials | Silver plated copper |
| Product Size | 8x31 mm |

FEATURES & BENEFITS

- Reduced size
- Visual indication of fuse operation
- Safest and most reliable protection system

APPLICATIONS

- aM type for protection of motors, transformers and other loads with in-rush currents.

STANDARDS

- IEC 60269-1 & -2



Ferrule fuse-links 8x31 aM 400VAC

PRODUCT RANGE

Size 8,5x31,5 aM 400VAC without indicator



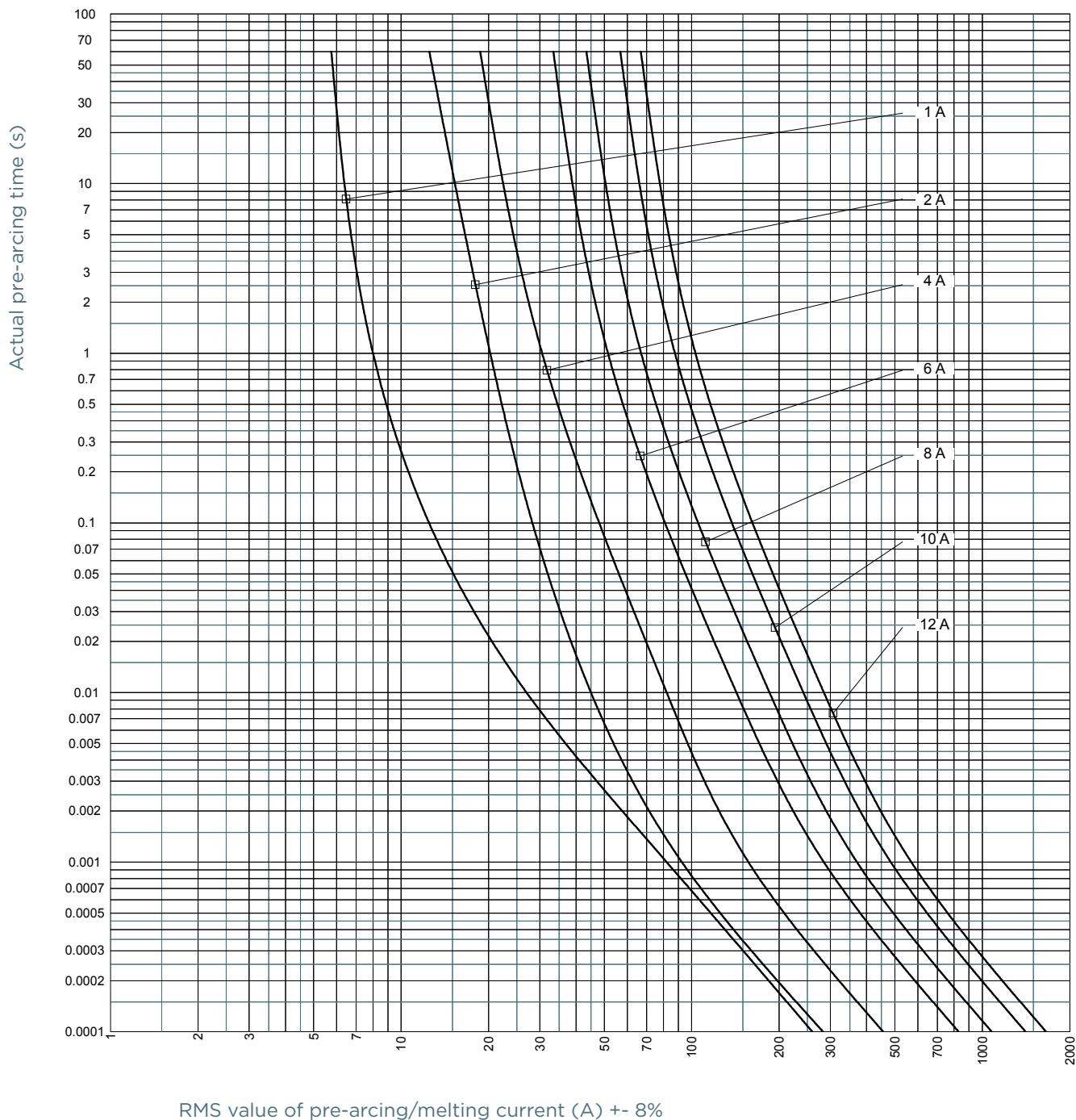
FR8AM40V2

| Catalog number | Item number | Rated voltage AC (IEC) | Rated current I_n | Rated breaking capacity AC | Power dissipation at I_n | Weight |
|----------------|-------------|------------------------|---------------------|----------------------------|----------------------------|--------|
| FR8AM40V1 | C217168 | 400 V | 1 A | 20 kA | 0.09 W | 4.4 g |
| FR8AM40V2 | R218193 | 400 V | 2 A | 20 kA | 0.15 W | 4.4 g |
| FR8AM40V4 | S219229 | 400 V | 4 A | 20 kA | 0.26 W | 4.4 g |
| FR8AM40V6 | C222205 | 400 V | 6 A | 20 kA | 0.35 W | 4.4 g |
| FR8AM40V8 | F200749 | 400 V | 8 A | 20 kA | 0.47 W | 4.4 g |
| FR8AM40V10 | W201292 | 400 V | 10 A | 20 kA | 0.55 W | 4.4 g |
| FR8AM40V12 | V1007188 | 400 V | 12 A | 20 kA | 0.7 W | 4.4 g |

Ferrule fuse-links 8x31 aM 400VAC

TIME CURRENT CHARACTERISTIC CURVES

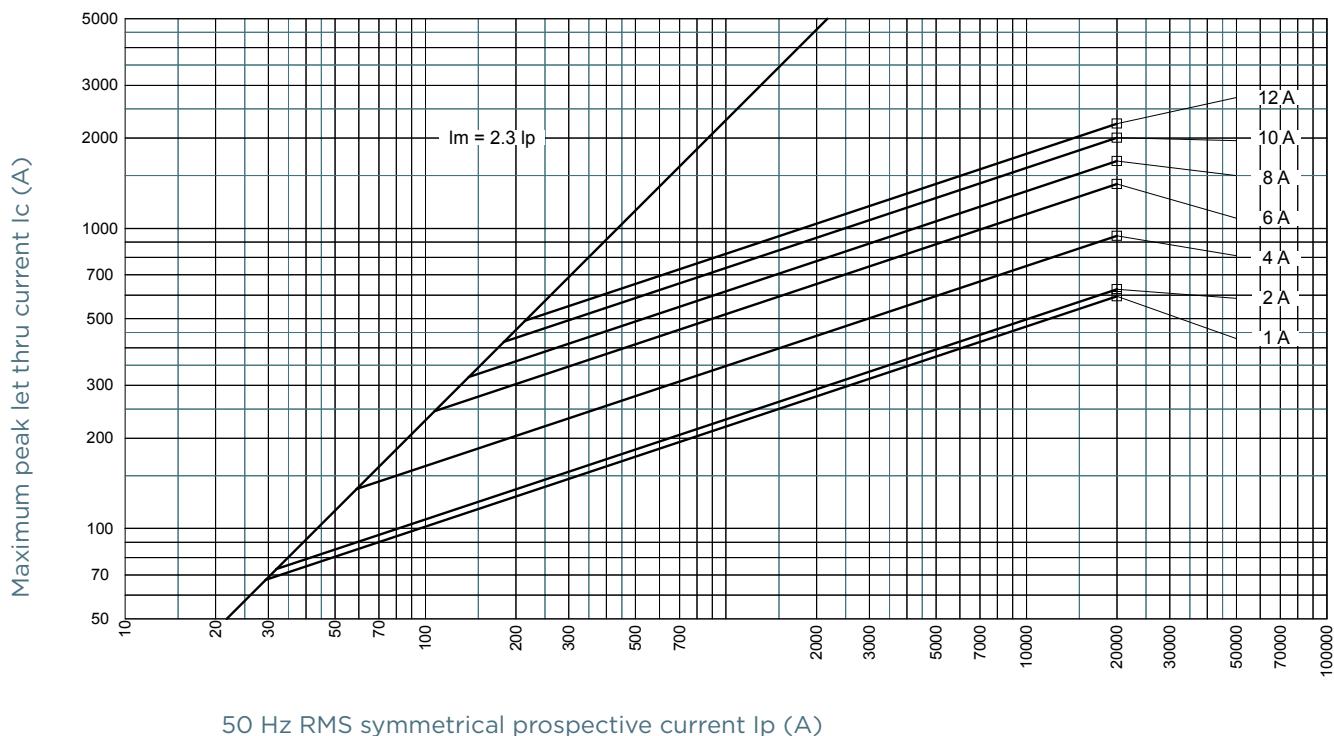
Size 8x32 400V aM



Ferrule fuse-links 8x31 aM 400VAC

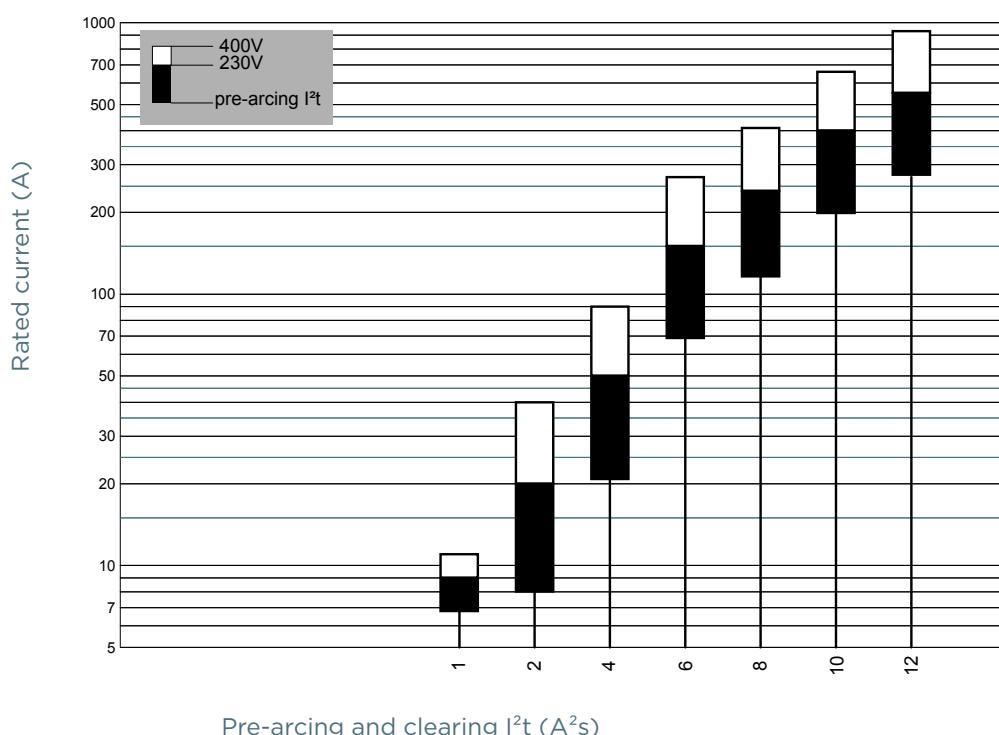
CUT-OFF CURRENT CHARACTERISTIC

Size 8x32 400V aM



PRE-ARCING AND OPERATING I^2t CHARACTERISTICS

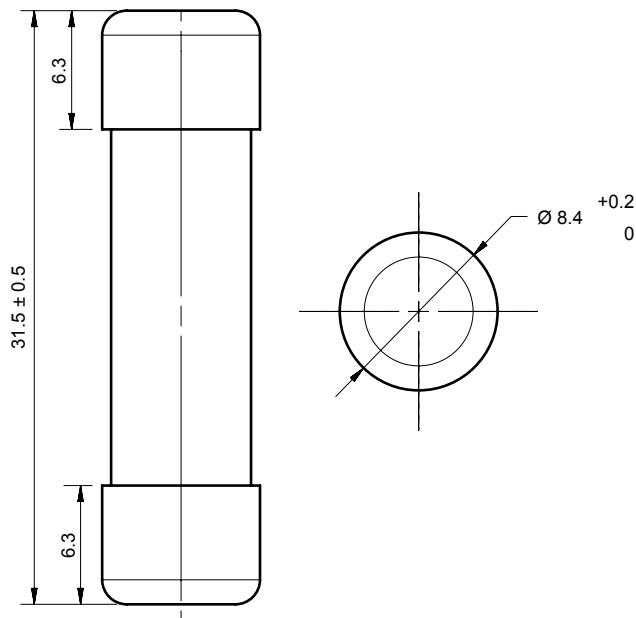
Size 8x32 400V aM



Ferrule fuse-links 8x31 aM 400VAC

DIMENSIONS

Size 8x31 aM without indicator (1001204)



Dimensions in mm

Ferrule fuse-links 10x38 aM 400 to 690VAC

LOW VOLTAGE IEC FUSES

IEC CYLINDRICAL FUSE-LINKS



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TECHNICAL DATA OVERVIEW

| | |
|----------------------|----------------------|
| Voltage Range AC | 400 ... 690 VAC |
| Ampere Range (A) | 0.16 ... 32 A |
| Speed/Characteristic | aM |
| I.R. AC (IEC) | 120 kA |
| Body Material | Ceramic |
| Body Style | cylindrical |
| Contact Materials | Silver plated copper |
| Product Size | 10x38 mm |

FEATURES & BENEFITS

- Reduced size
- Visual indication of fuse operation
- Safest and most reliable protection system
- Optional indicator

APPLICATIONS

- aM type for protection of motors, transformers and other loads with in-rush currents.

STANDARDS

- IEC 60269-1 & -2 (electrically only for the range with striker)
- Approved by various shipping organizations



Ferrule fuse-links 10x38 aM 400 to 690VAC

PRODUCT RANGE

Size 10,3x38 aM 690VAC without indicator



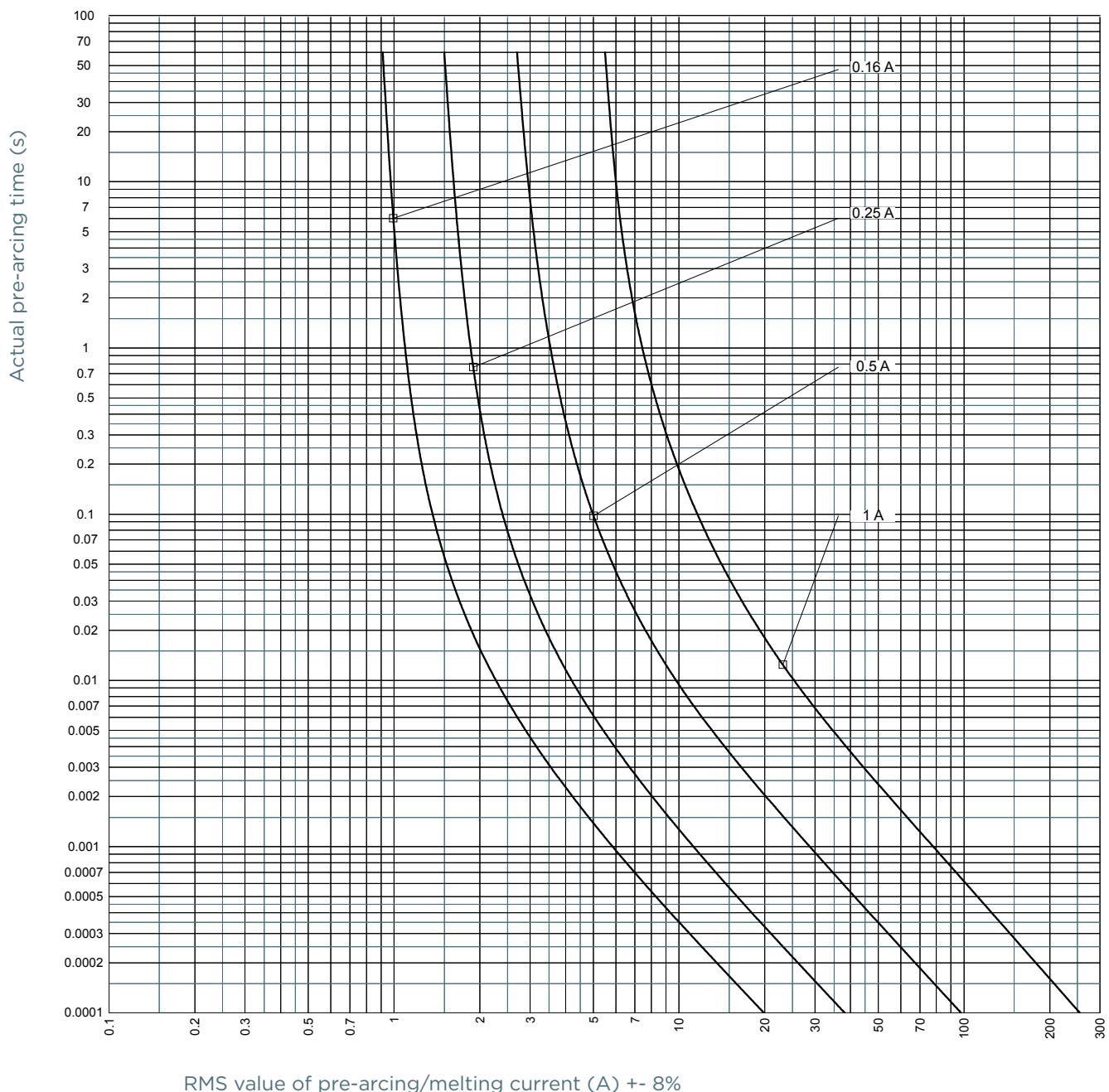
| Catalog number | Item number | Rated voltage AC (IEC) | Rated current I_n | Rated breaking capacity AC | Power dissipation at I_n | Weight |
|----------------|-------------|------------------------|---------------------|----------------------------|----------------------------|--------|
| FR10AM69V1 | H302779 | 690 V | 1 A | 120 kA | 0.1 W | 8.3 g |
| FR10AM69V2 | J302780 | 690 V | 2 A | 120 kA | 0.14 W | 8.3 g |
| FR10AM69V4 | K302781 | 690 V | 4 A | 120 kA | 0.28 W | 8.3 g |
| FR10AM69V6 | L302782 | 690 V | 6 A | 120 kA | 0.38 W | 8.3 g |
| FR10AM69V8 | M302783 | 690 V | 8 A | 120 kA | 0.55 W | 8.3 g |
| FR10AM69V10 | N302784 | 690 V | 10 A | 120 kA | 0.62 W | 8.3 g |
| FR10AM69V12 | P302785 | 690 V | 12 A | 120 kA | 0.78 W | 8.3 g |

FR10AM69V10

Ferrule fuse-links 10x38 aM 400 to 690VAC

TIME CURRENT CHARACTERISTIC CURVES

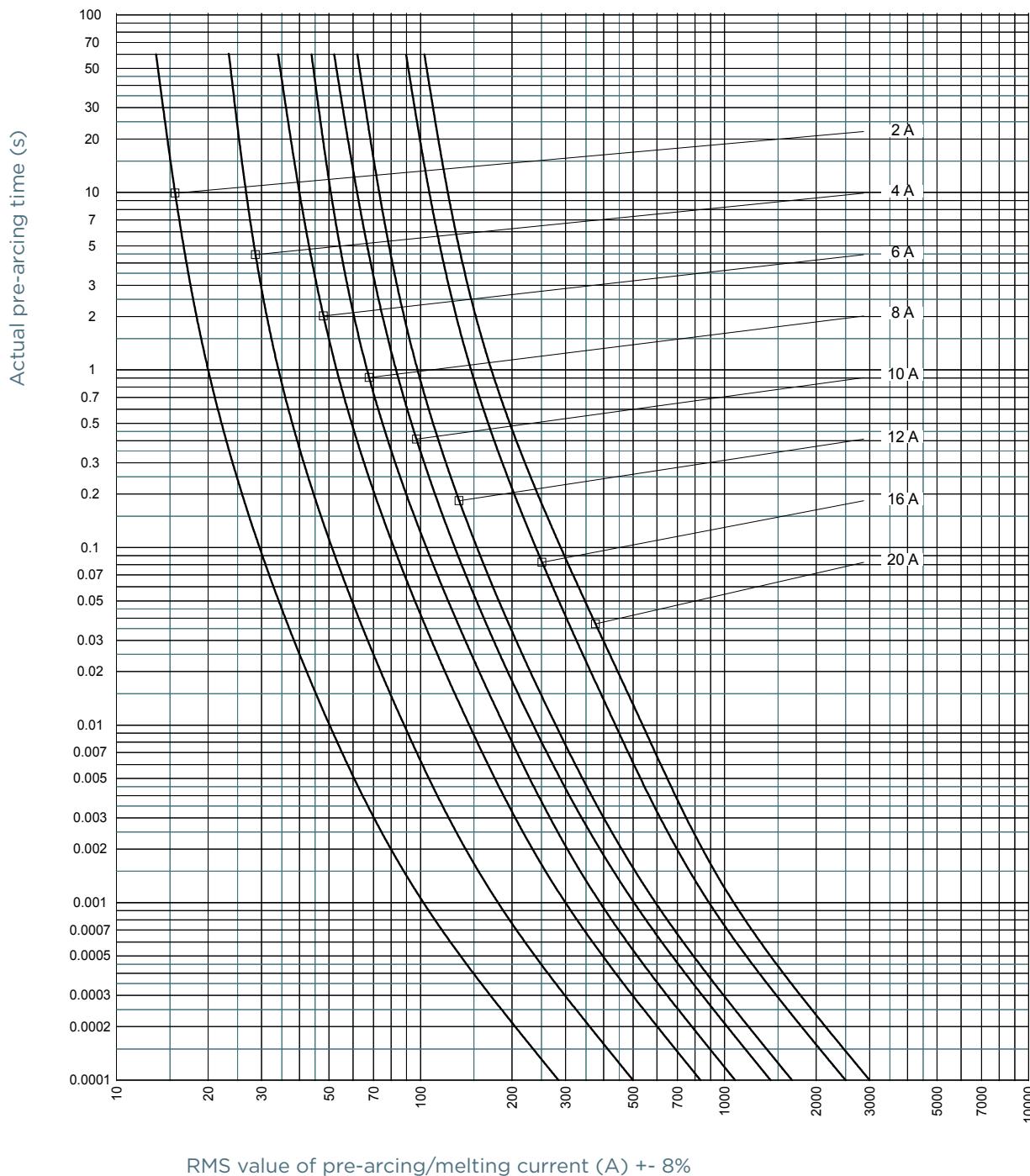
Size 10x38 500V aM without striker



Ferrule fuse-links 10x38 aM 400 to 690VAC

TIME CURRENT CHARACTERISTIC CURVES

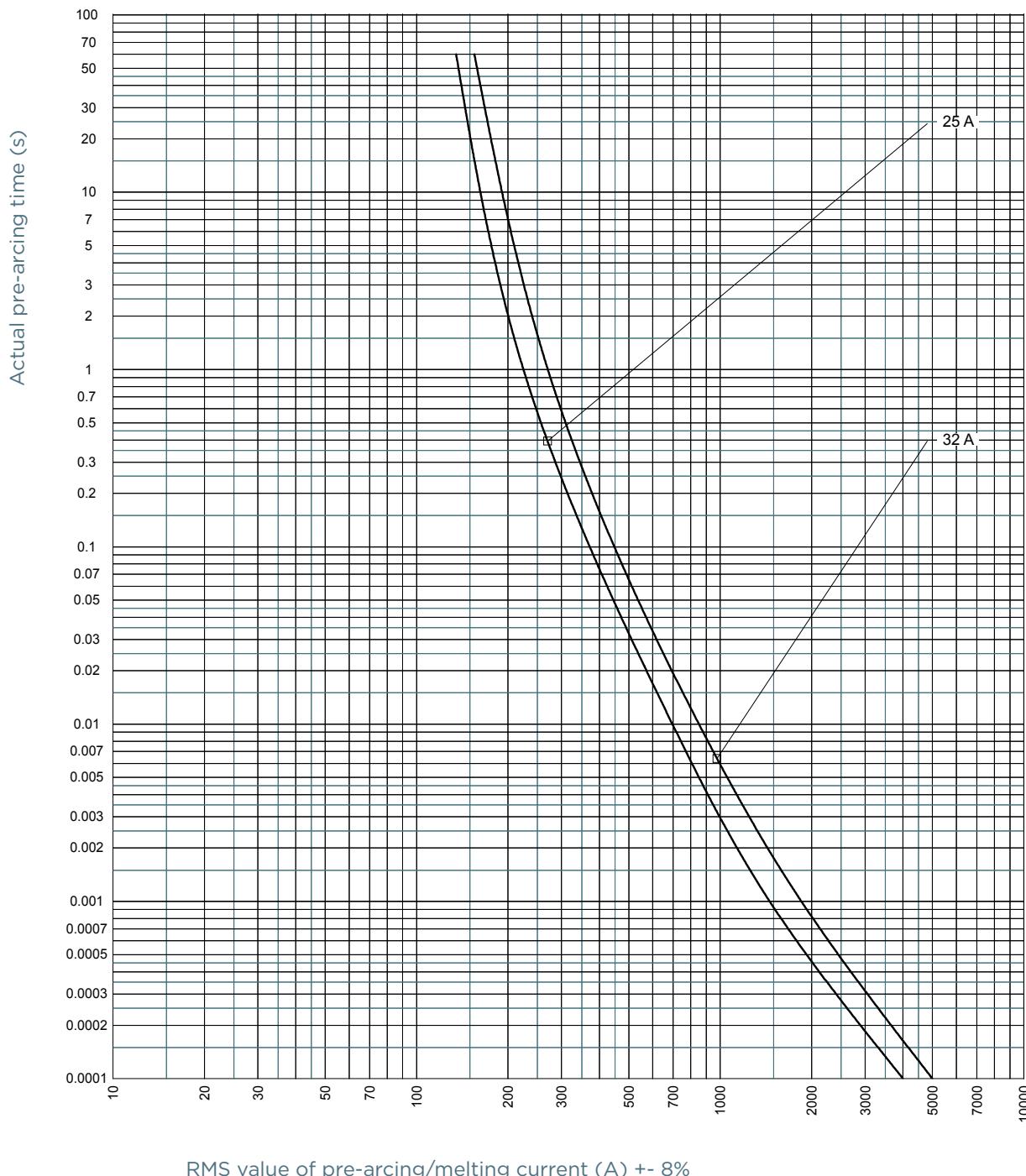
Size 10x38 500V aM without striker



Ferrule fuse-links 10x38 aM 400 to 690VAC

TIME CURRENT CHARACTERISTIC CURVES

Size 10x38 400V aM without striker

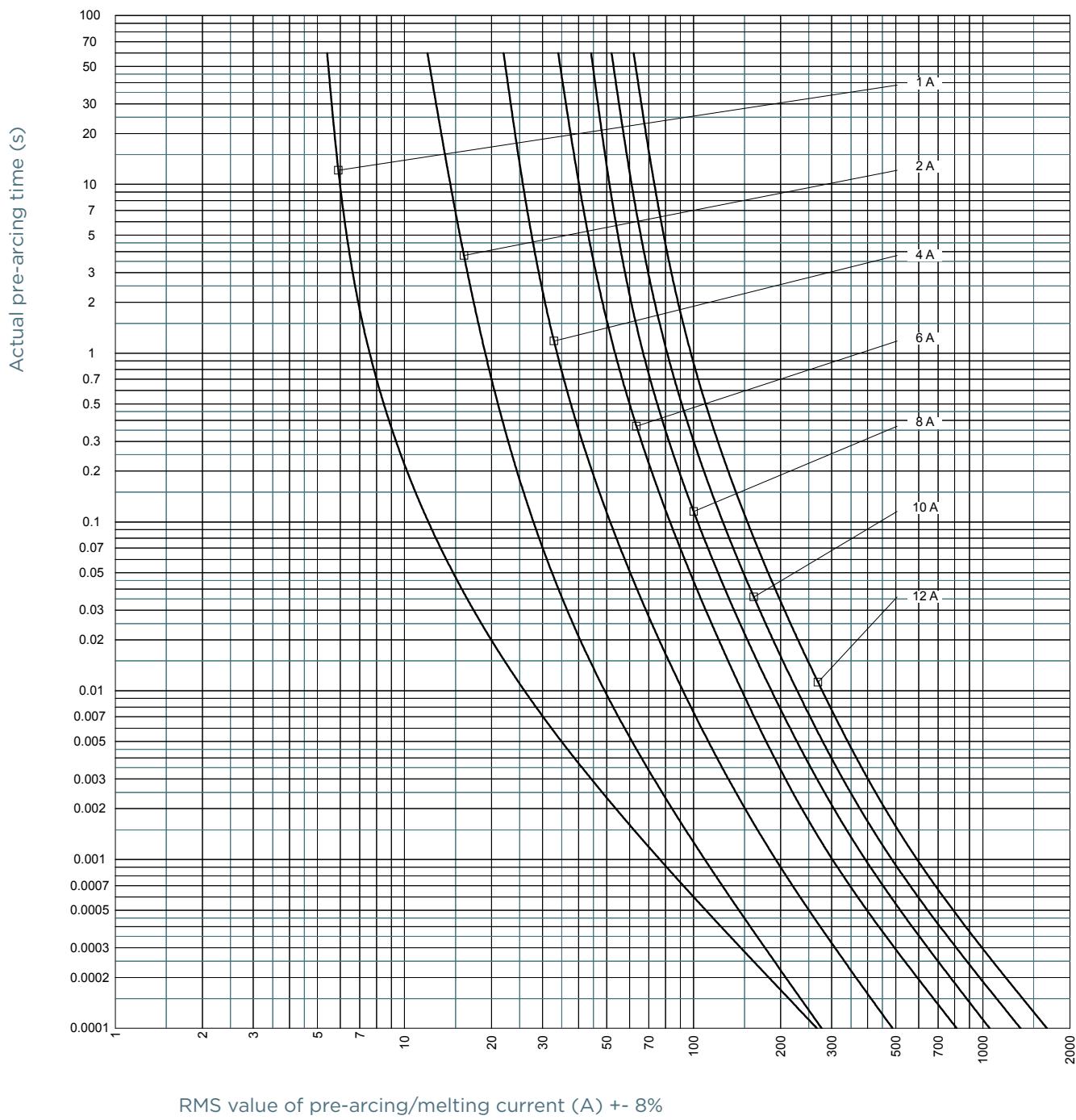


RMS value of pre-arching/melting current (A) +- 8%

Ferrule fuse-links 10x38 aM 400 to 690VAC

TIME CURRENT CHARACTERISTIC CURVES

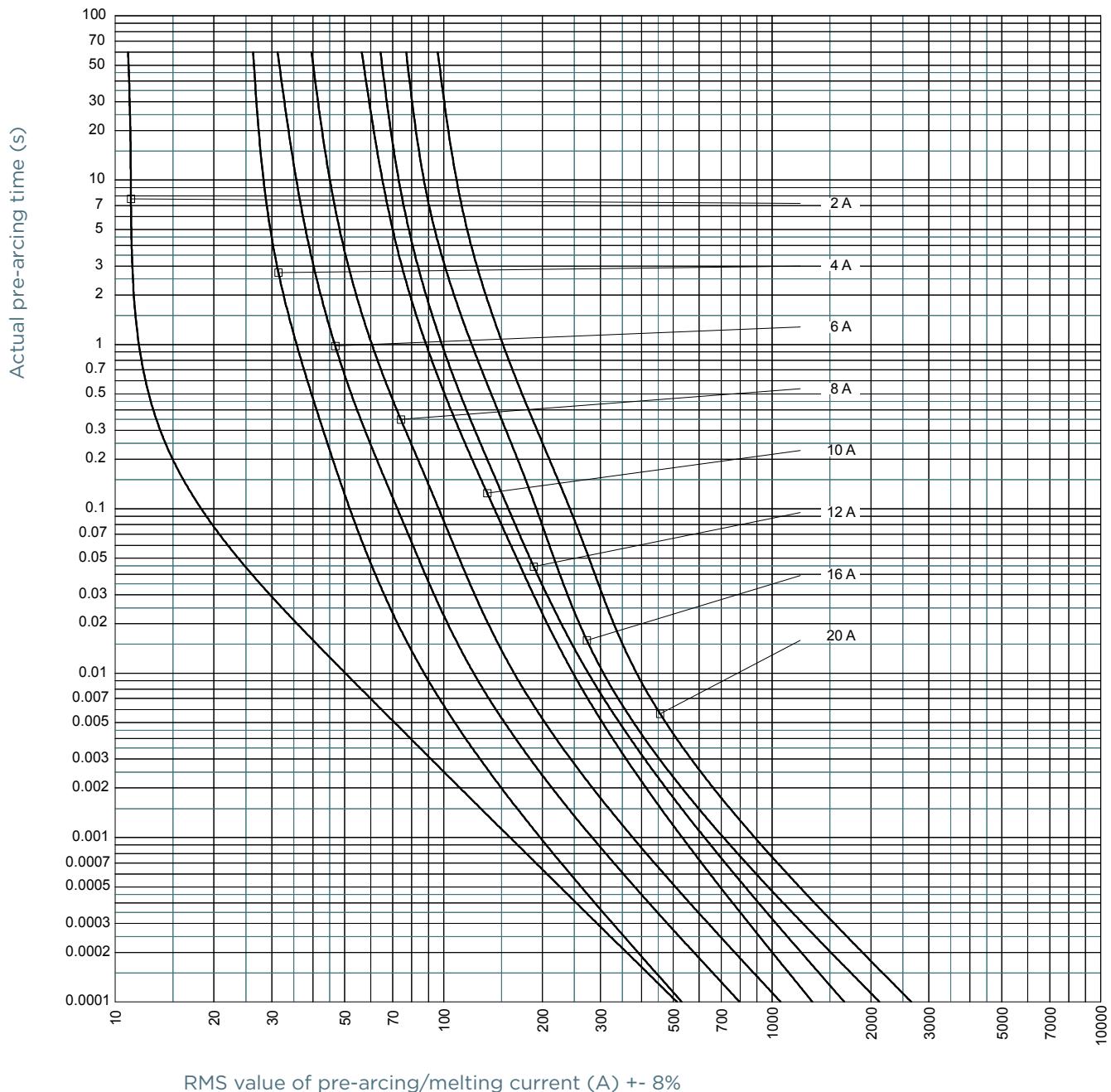
Size 10x38 690V aM without striker



Ferrule fuse-links 10x38 aM 400 to 690VAC

TIME CURRENT CHARACTERISTIC CURVES

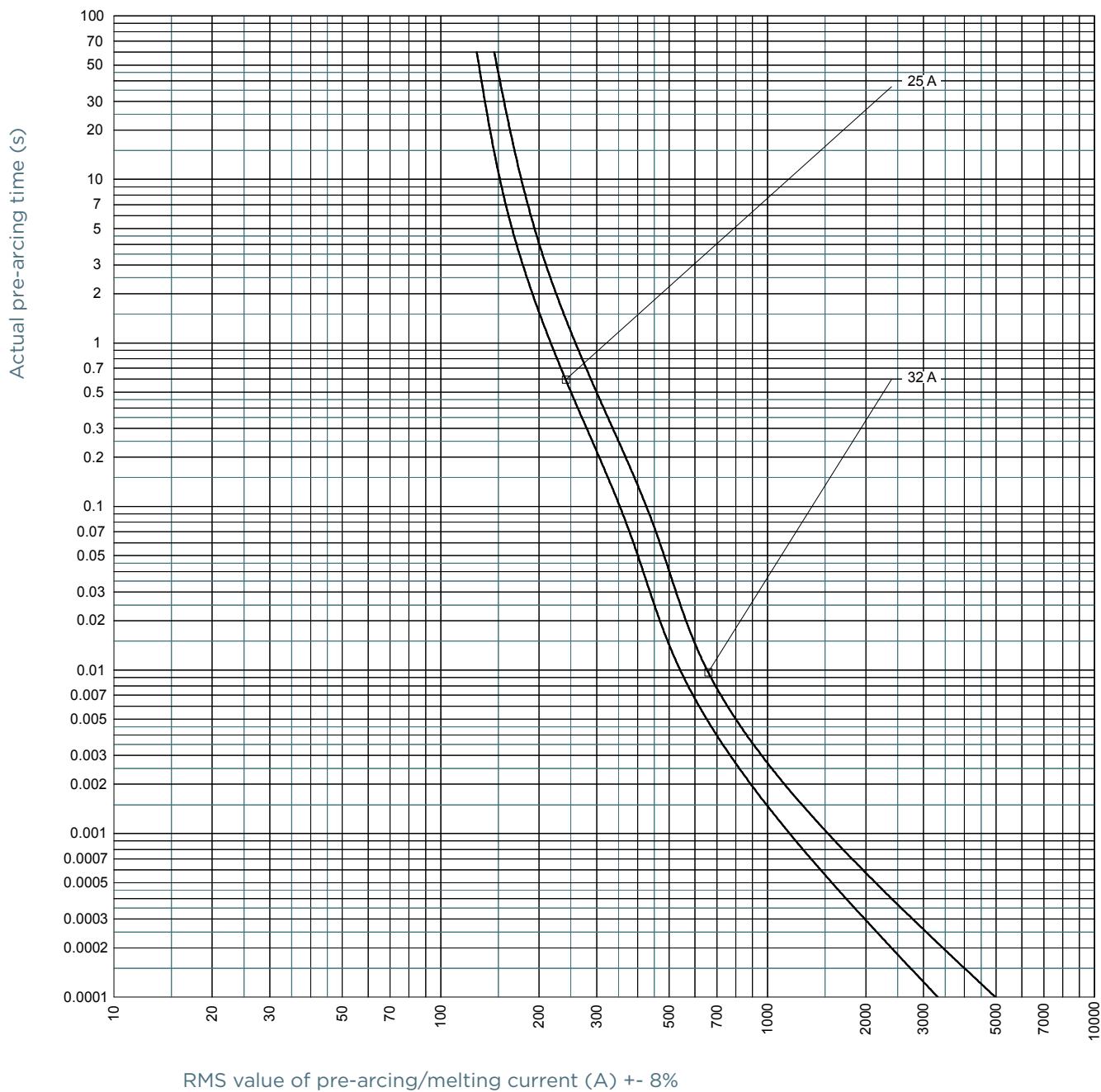
Size 10x38 400V aM with striker



Ferrule fuse-links 10x38 aM 400 to 690VAC

TIME CURRENT CHARACTERISTIC CURVES

Size 10x38 250V aM with striker

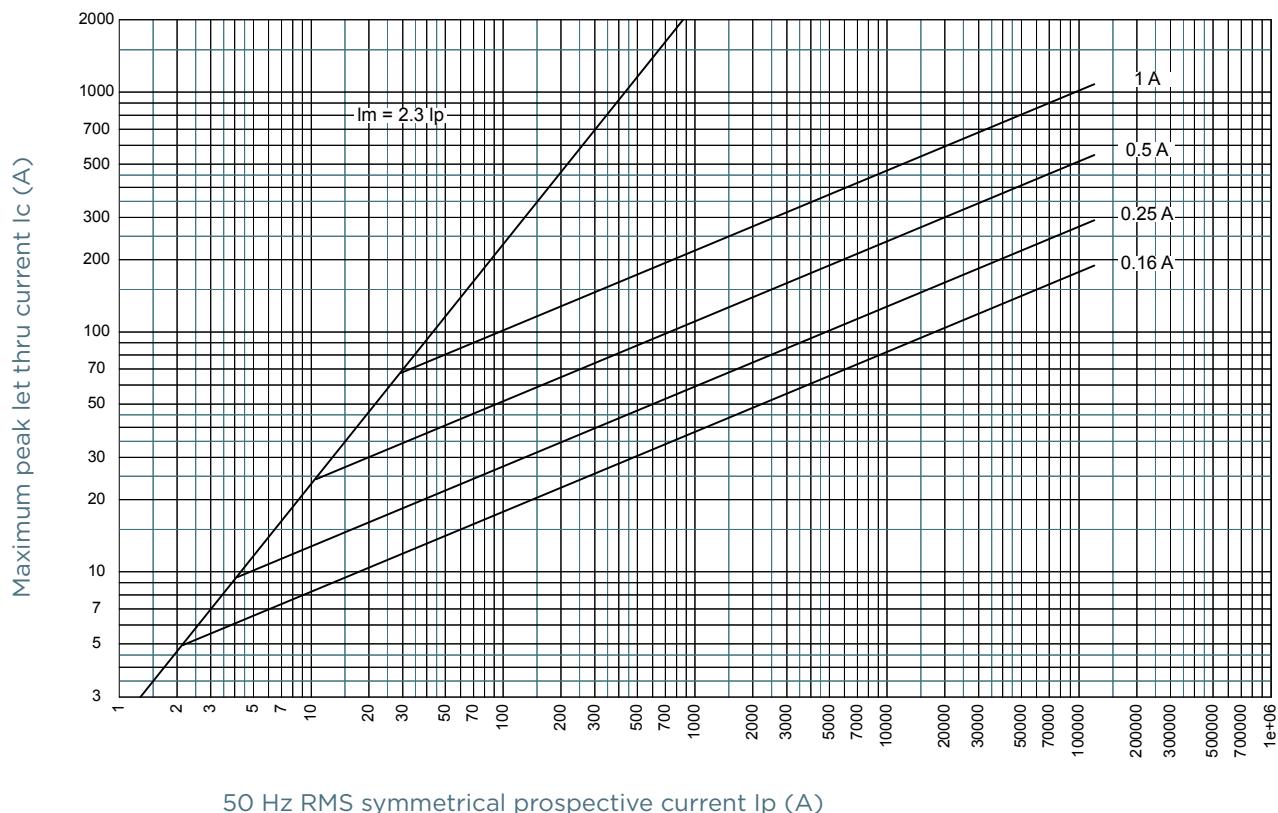


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Ferrule fuse-links 10x38 aM 400 to 690VAC

CUT-OFF CURRENT CHARACTERISTIC

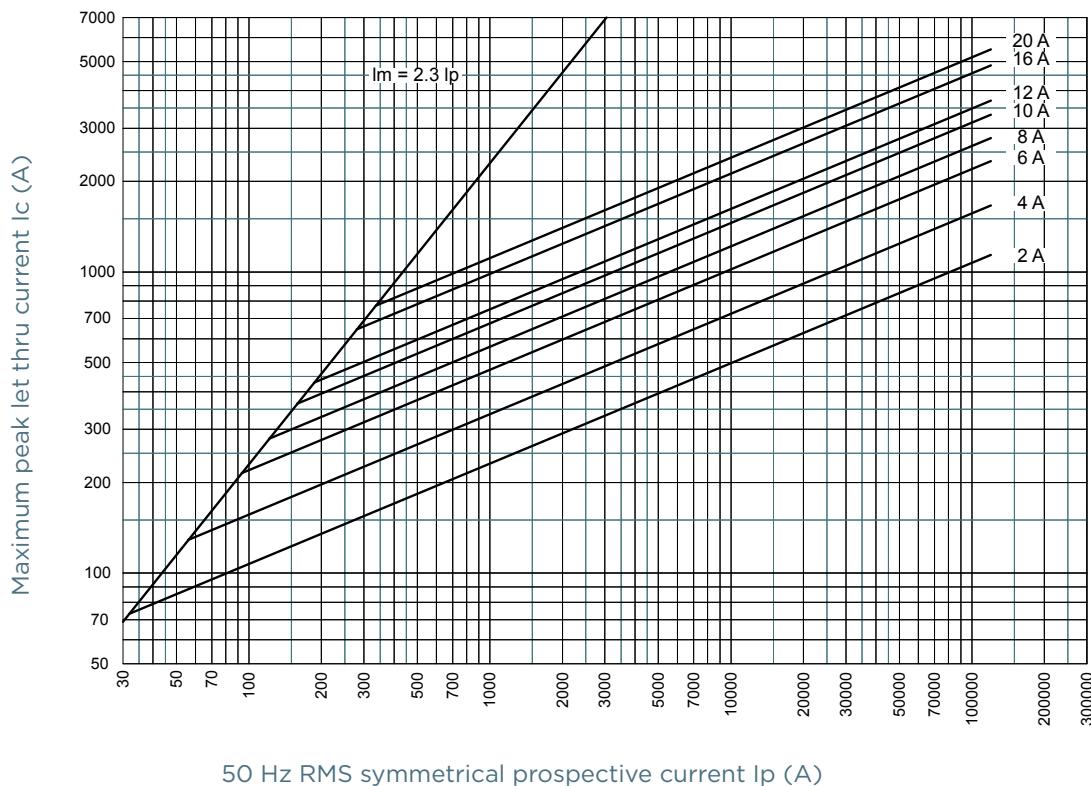
Size 10x38 500V aM without striker



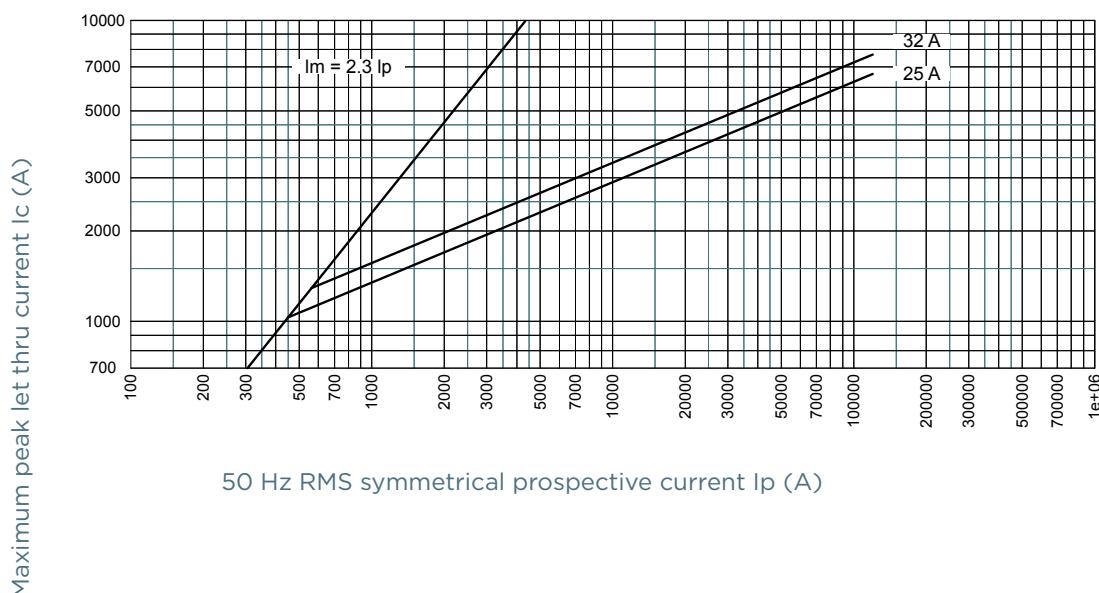
Ferrule fuse-links 10x38 aM 400 to 690VAC

CUT-OFF CURRENT CHARACTERISTIC

Size 10x38 500V aM without striker



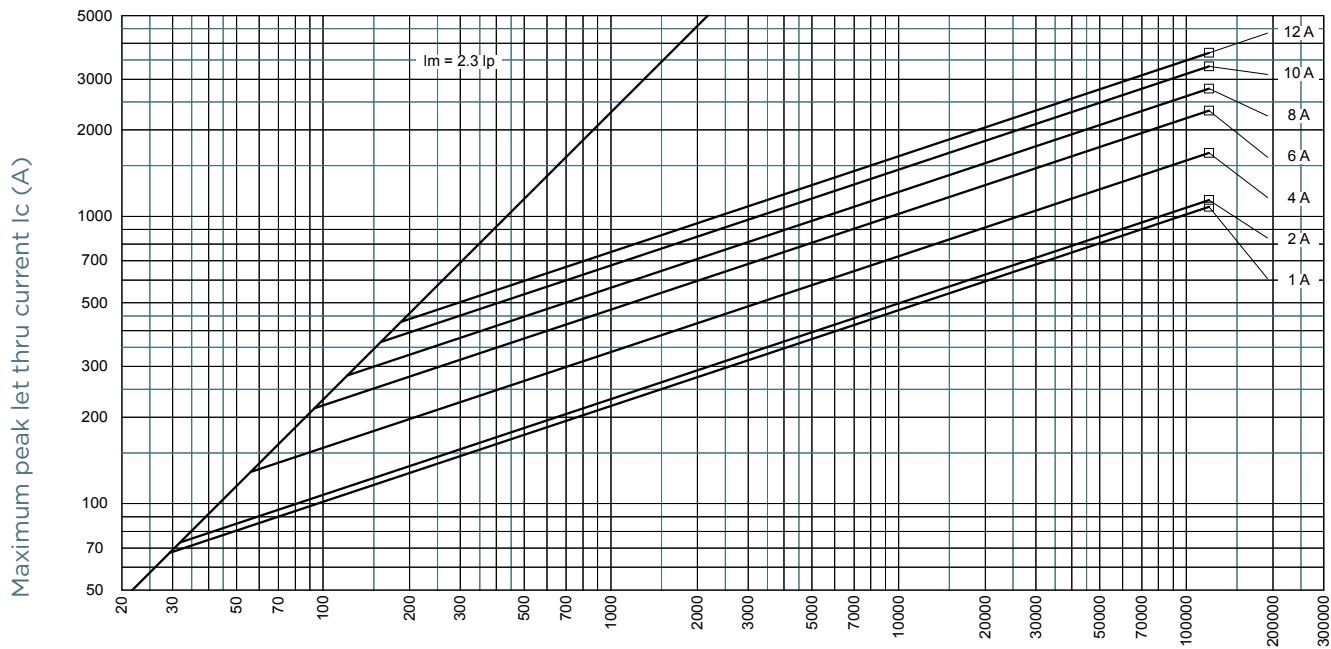
Size 10x38 400V aM without striker



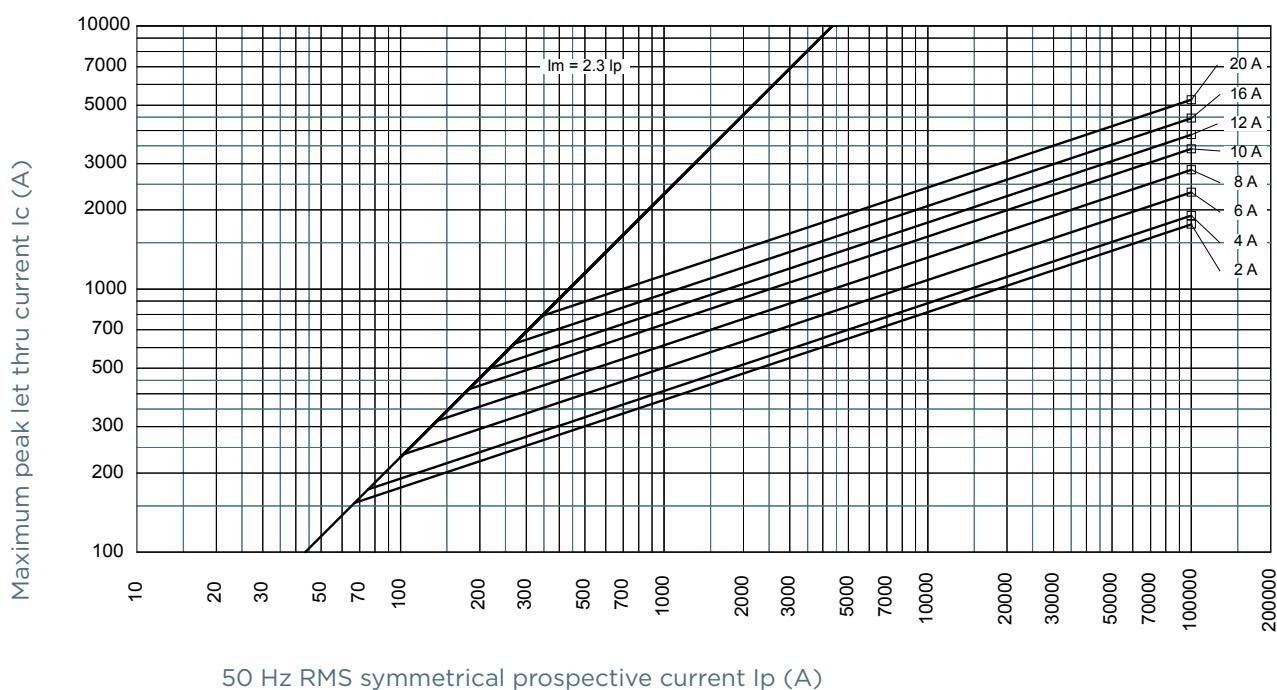
Ferrule fuse-links 10x38 aM 400 to 690VAC

CUT-OFF CURRENT CHARACTERISTIC

Size 10x38 690V aM without striker



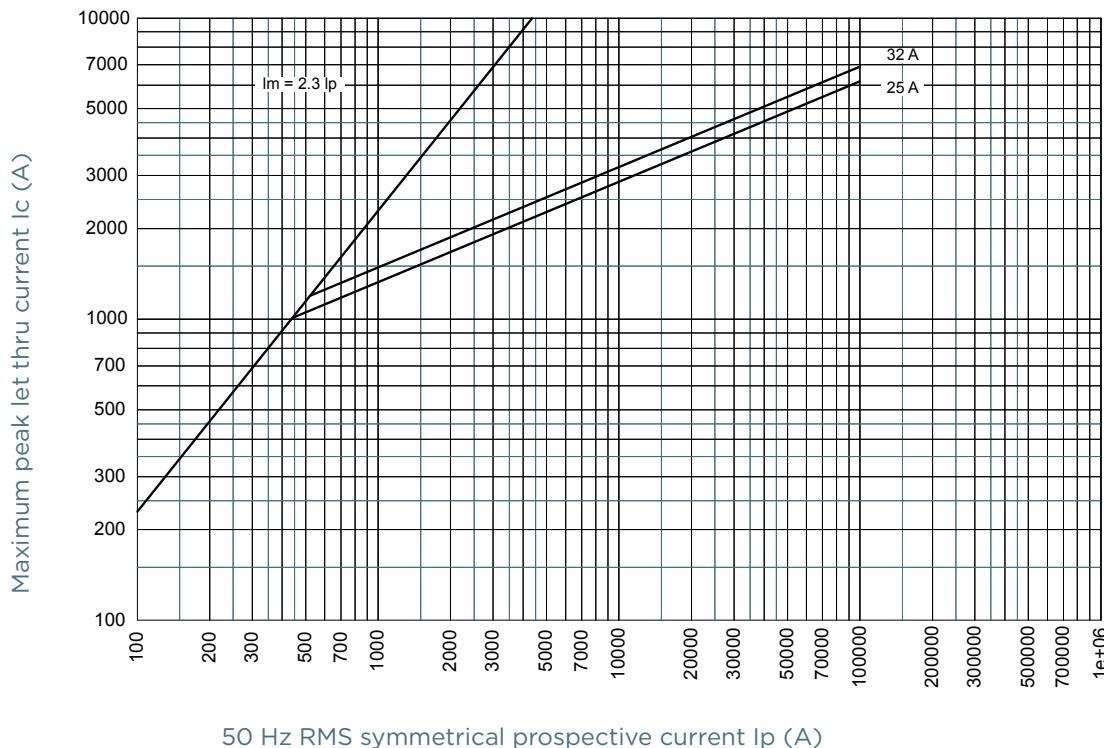
Size 10x38 400V aM with striker



Ferrule fuse-links 10x38 aM 400 to 690VAC

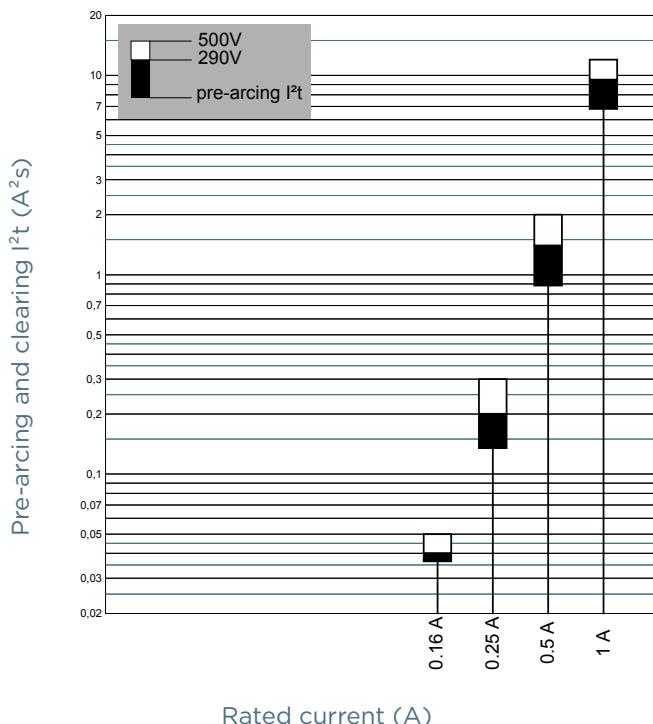
CUT-OFF CURRENT CHARACTERISTIC

Size 10x38 250V aM with striker



PRE-ARCING AND OPERATING I^2T CHARACTERISTICS

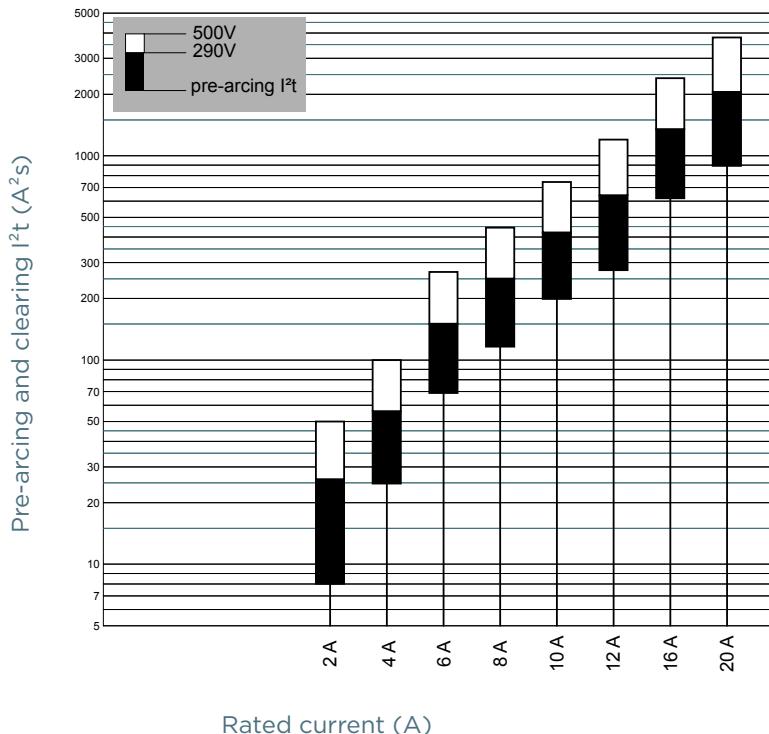
Size 10x38 500V aM without striker



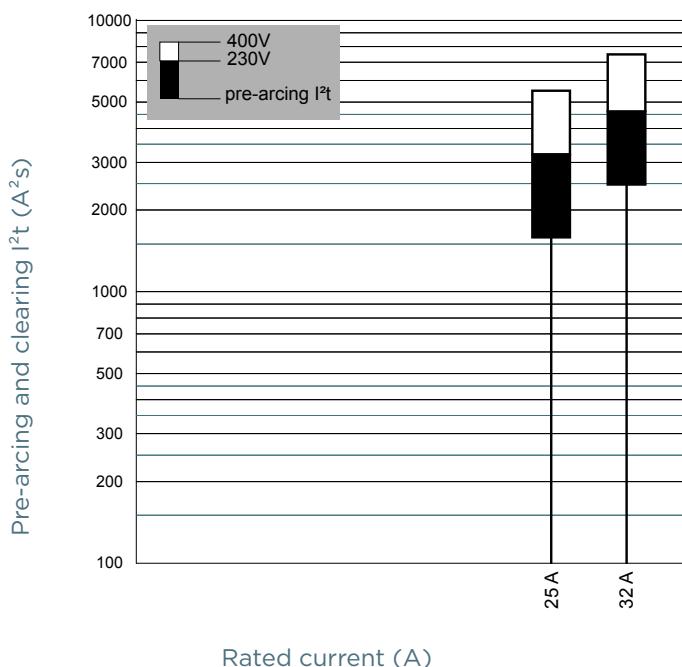
Ferrule fuse-links 10x38 aM 400 to 690VAC

PRE-ARCING AND OPERATING I²T CHARACTERISTICS

Size 10x38 500V aM without striker



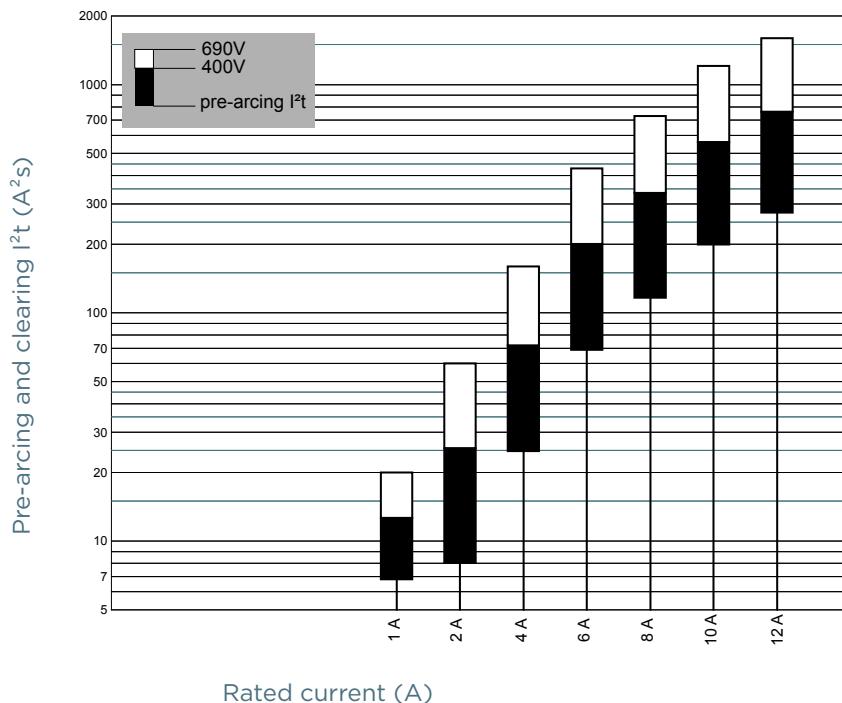
Size 10x38 400V aM without striker



Ferrule fuse-links 10x38 aM 400 to 690VAC

PRE-ARCING AND OPERATING I²T CHARACTERISTICS

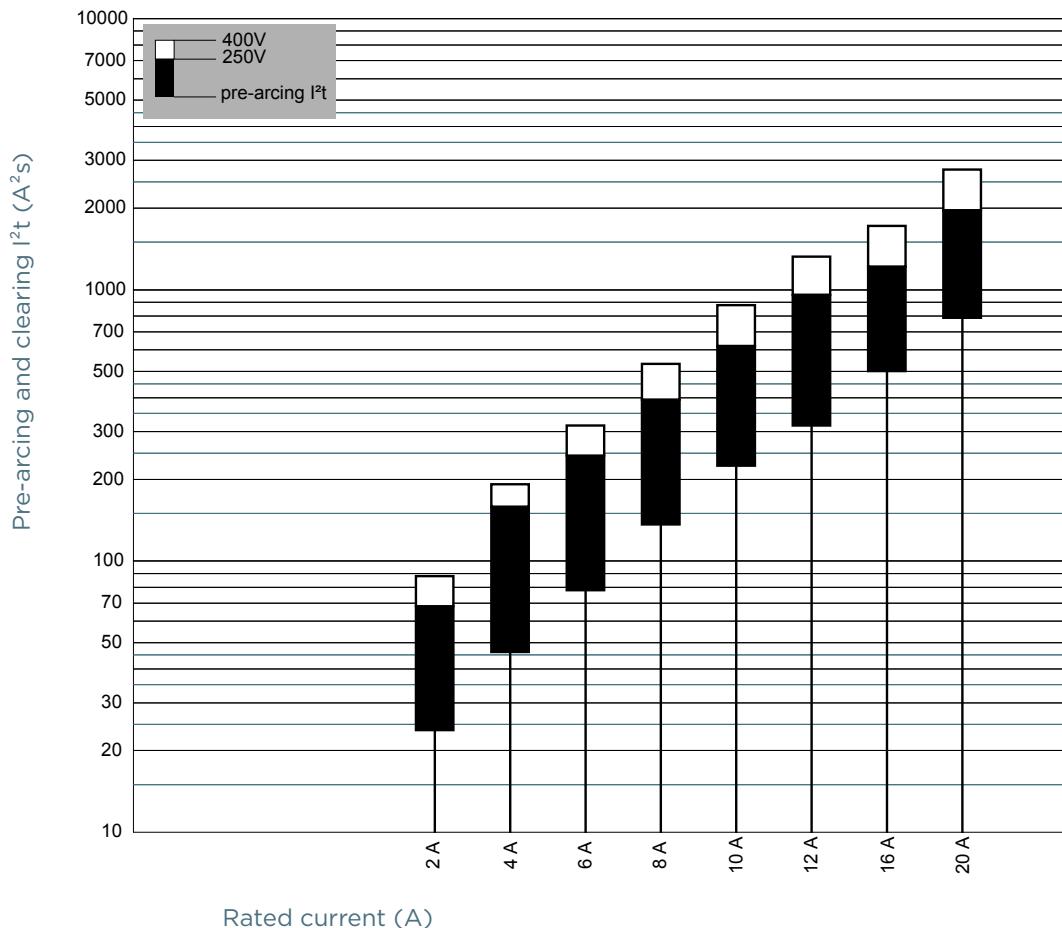
Size 10x38 690V aM without striker



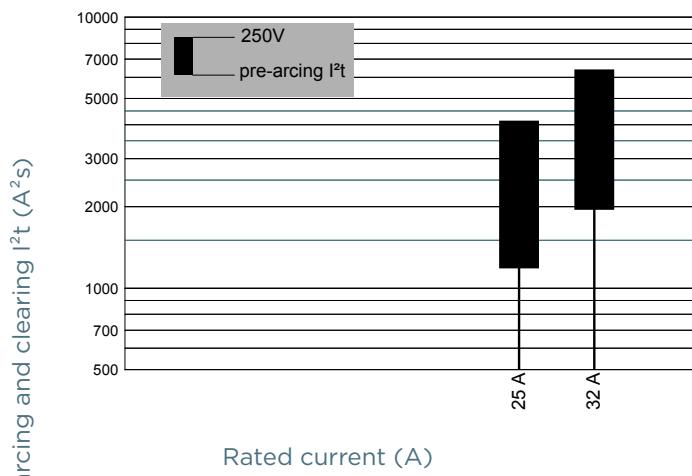
Ferrule fuse-links 10x38 aM 400 to 690VAC

PRE-ARCING AND OPERATING I²T CHARACTERISTICS

Size 10x38 400V aM with striker



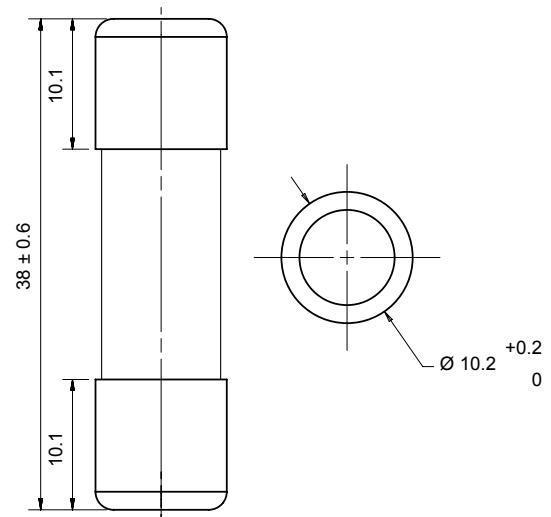
Size 10x38 250V aM with striker



Ferrule fuse-links 10x38 aM 400 to 690VAC

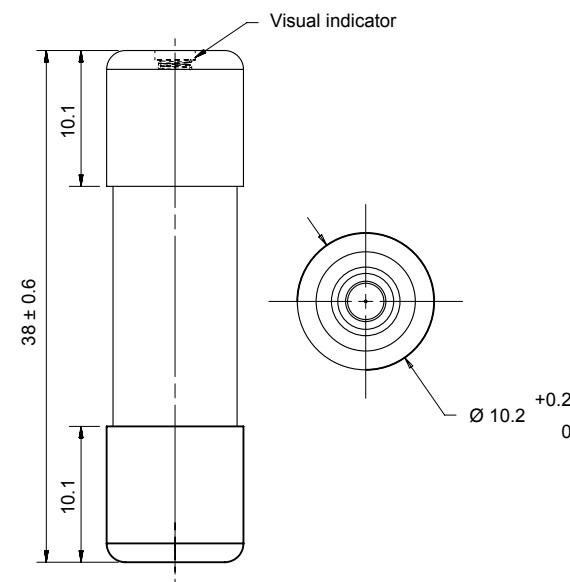
DIMENSIONS

Size 10x38 aM without indicator (1001210)



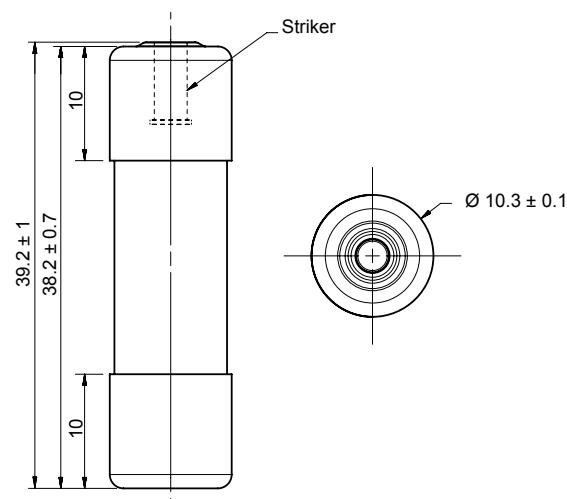
Dimensions in mm

Size 10x38 aM with indicator (1002537)



Dimensions in mm

Size 10x38 aM with striker (33907)



Dimensions in mm

Ferrule fuse-links 14x51 aM 500 to 690VAC

LOW VOLTAGE IEC FUSES

IEC CYLINDRICAL FUSE-LINKS



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Cylindrical fuse-links "aM" are partial range fuses. They protect electrical devices in case of unacceptable high short-circuit against destruction due high current limiting and low thermal let-through values. They cut off currents more than $6.3 \times I_n$ until the maximum breaking capacity (rated breaking capacity). Cylindrical fuse-links "aM" are mainly used for the protection of installation switch gear in motor circuit currents. For classification of the cylindrical fuse-links the nominal current of the fuse-link can be selected respective to the nominal current of the motor.

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TECHNICAL DATA OVERVIEW

| | |
|----------------------|----------------------|
| Voltage Range AC | 500 ... 690 VAC |
| Ampere Range (A) | 0.25 ... 50 A |
| Speed/Characteristic | aM |
| I.R. AC (IEC) | 120 kA |
| Body Material | Ceramic |
| Body Style | cylindrical |
| Contact Materials | Silver plated copper |
| Product Size | 14x51 mm |

FEATURES & BENEFITS

- Reduced size
- Striker version available for remote indication of fuse operation
- Safest and most reliable protection system

APPLICATIONS

- aM type for protection of motors, transformers and other loads with in-rush currents.

STANDARDS

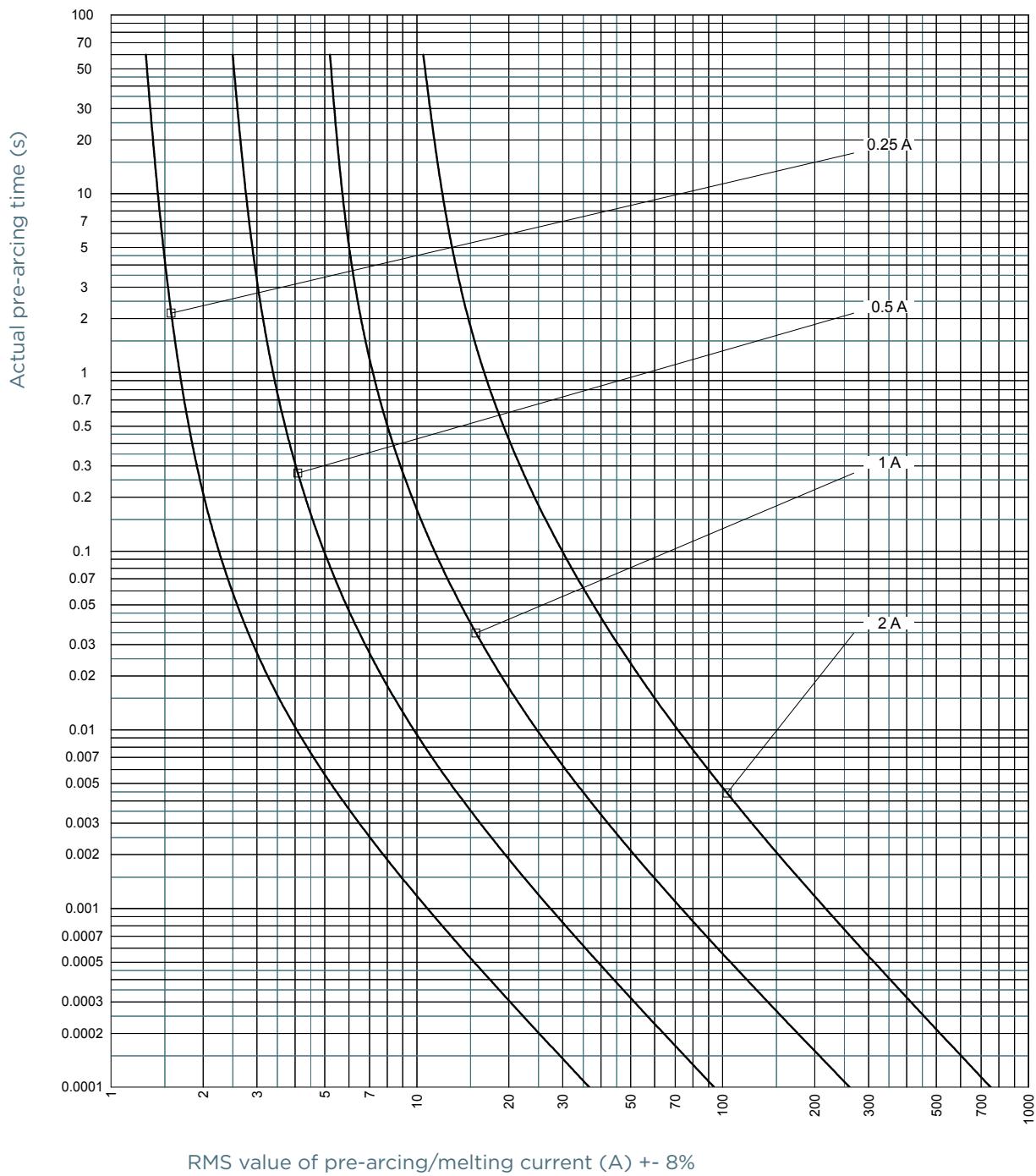
- IEC 60269-1 & -2
- Approved by Lloyd's Register of Shipping and Bureau Veritas



Ferrule fuse-links 14x51 aM 500 to 690VAC

TIME CURRENT CHARACTERISTIC CURVES

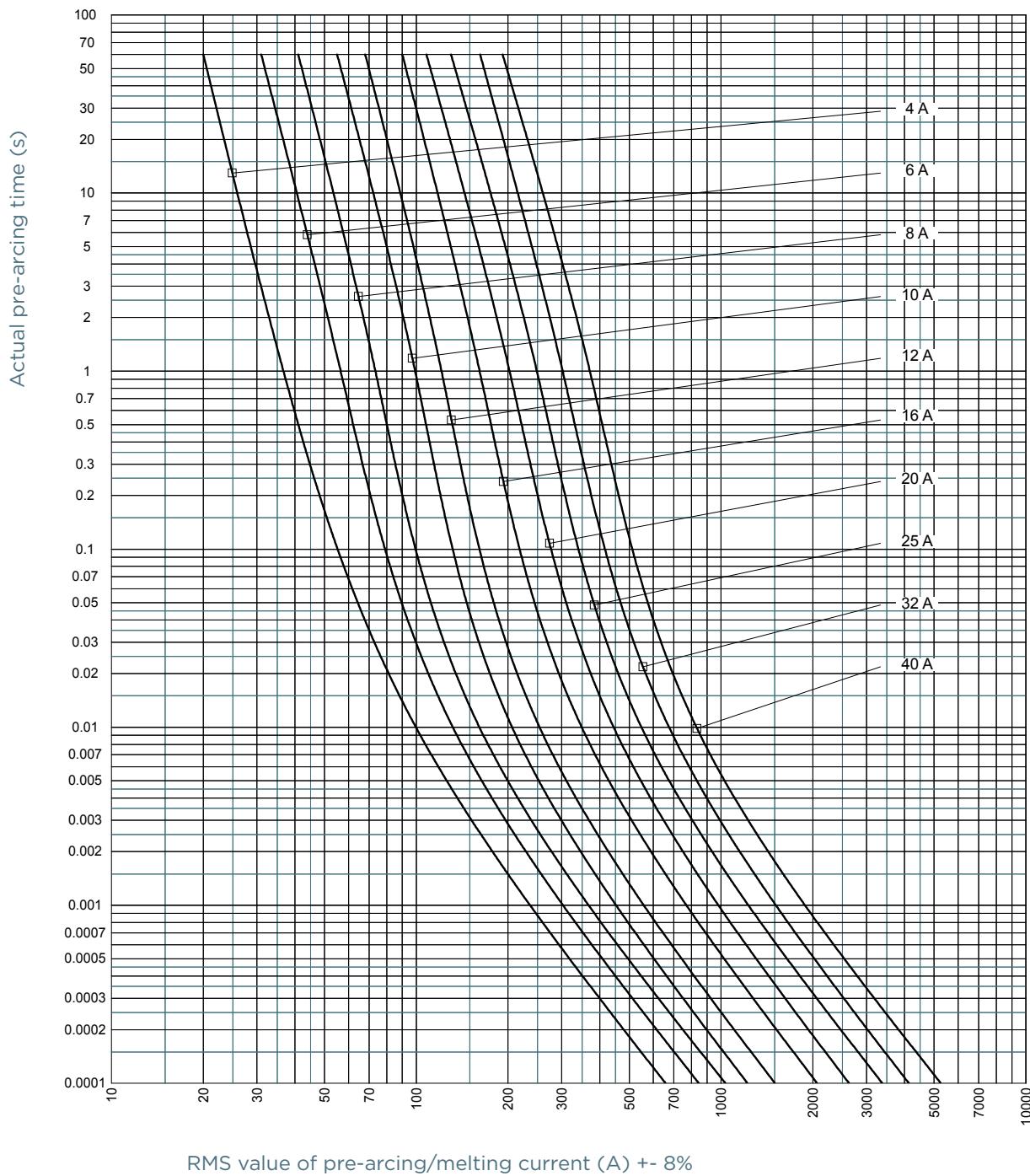
Size 14x51 690V aM



Ferrule fuse-links 14x51 aM 500 to 690VAC

TIME CURRENT CHARACTERISTIC CURVES

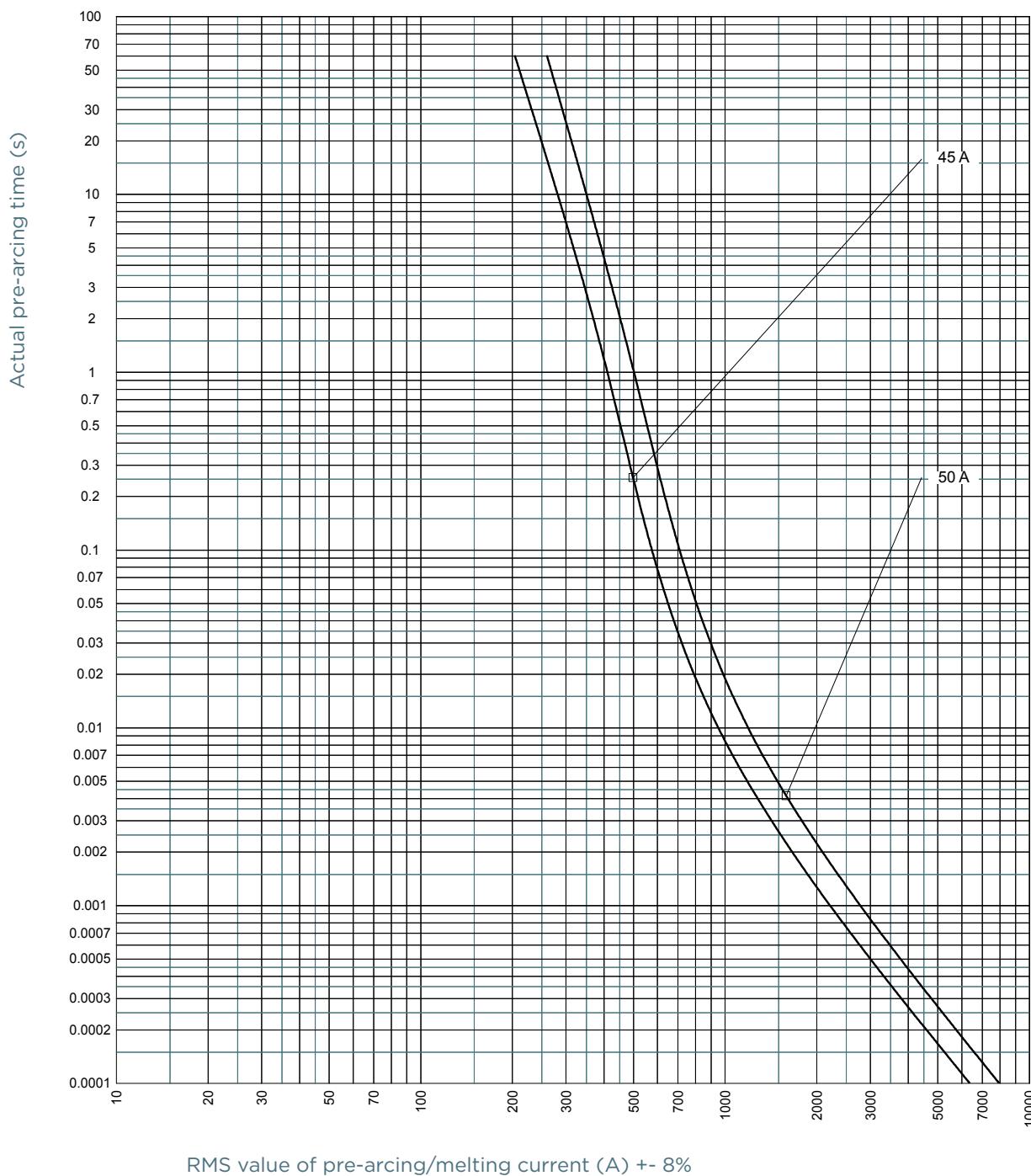
Size 14x51 690V



Ferrule fuse-links 14x51 aM 500 to 690VAC

TIME CURRENT CHARACTERISTIC CURVES

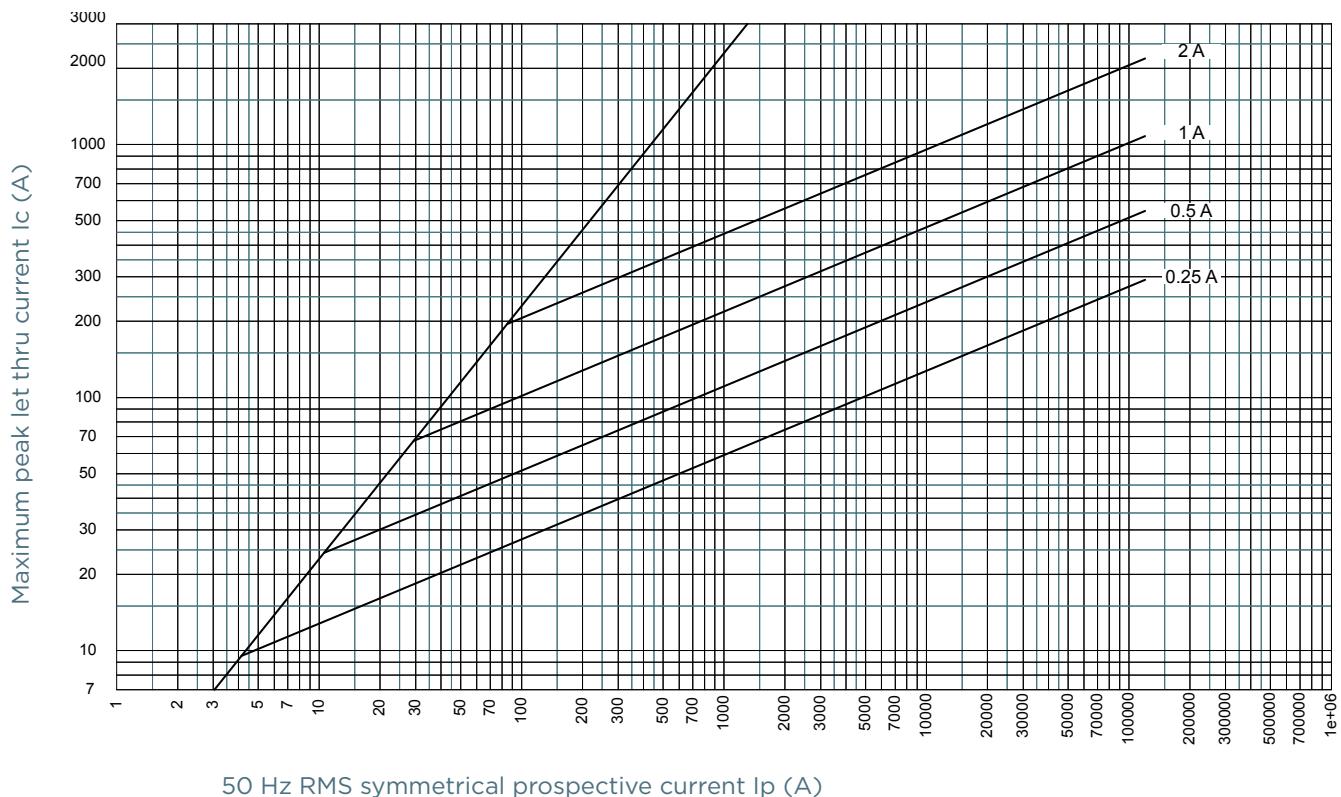
Size 14x51 500V aM



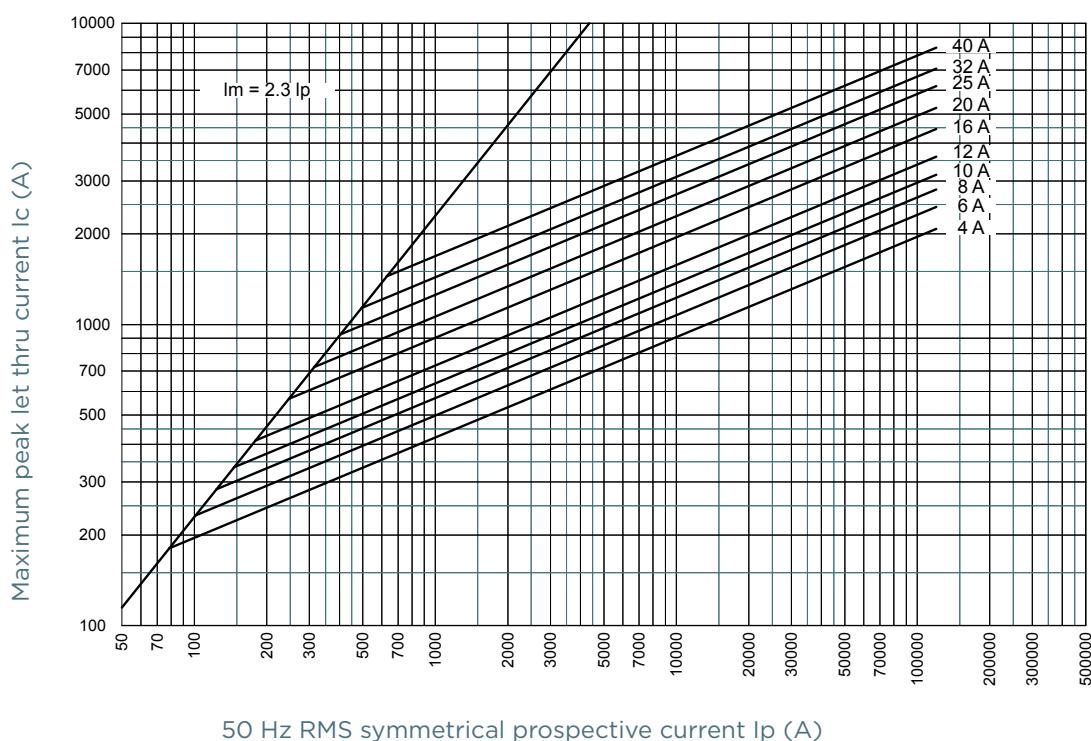
Ferrule fuse-links 14x51 aM 500 to 690VAC

CUT-OFF CURRENT CHARACTERISTIC

Size 14x51 690V aM



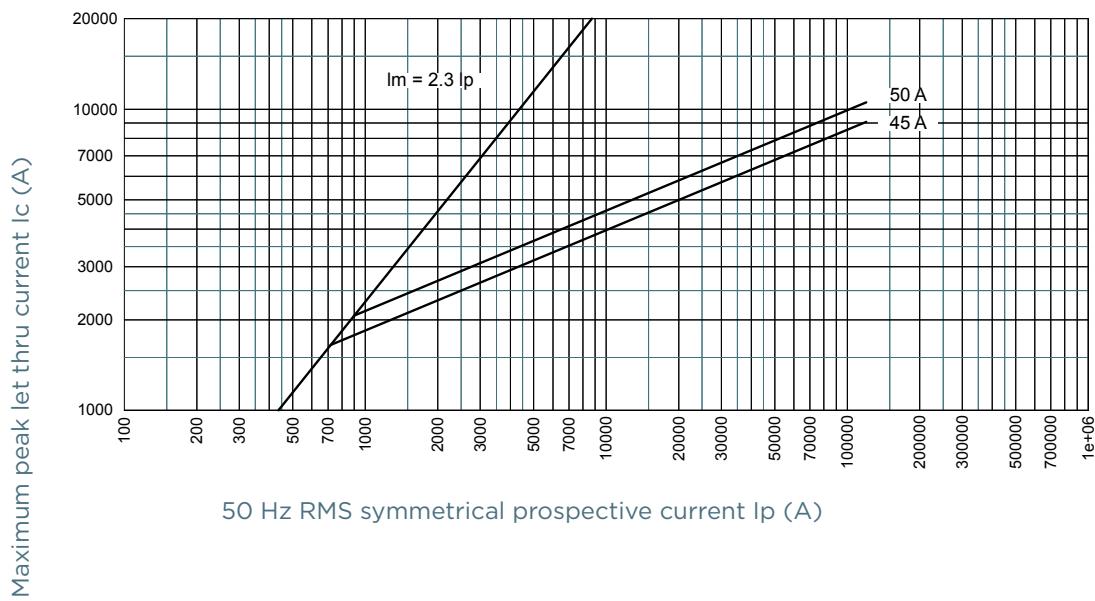
Size 14x51 690V



Ferrule fuse-links 14x51 aM 500 to 690VAC

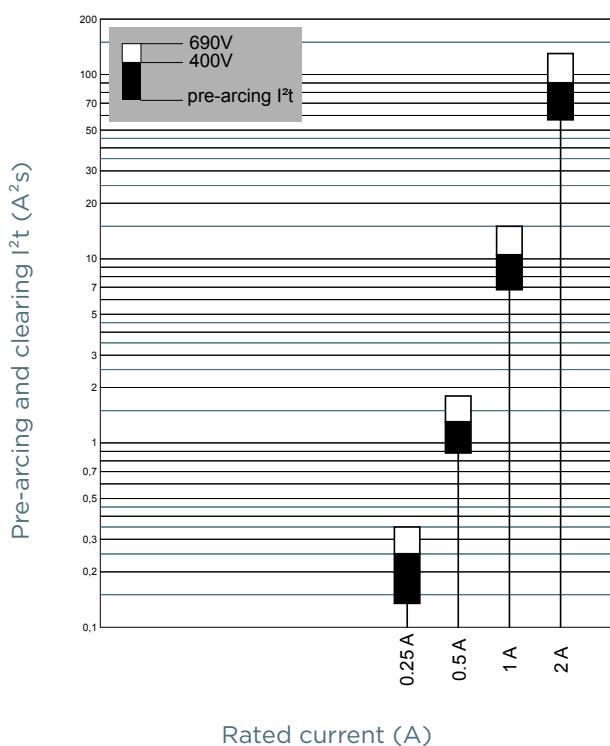
CUT-OFF CURRENT CHARACTERISTIC

Size 14x51 500V aM



PRE-ARCING AND OPERATING I^2t CHARACTERISTICS

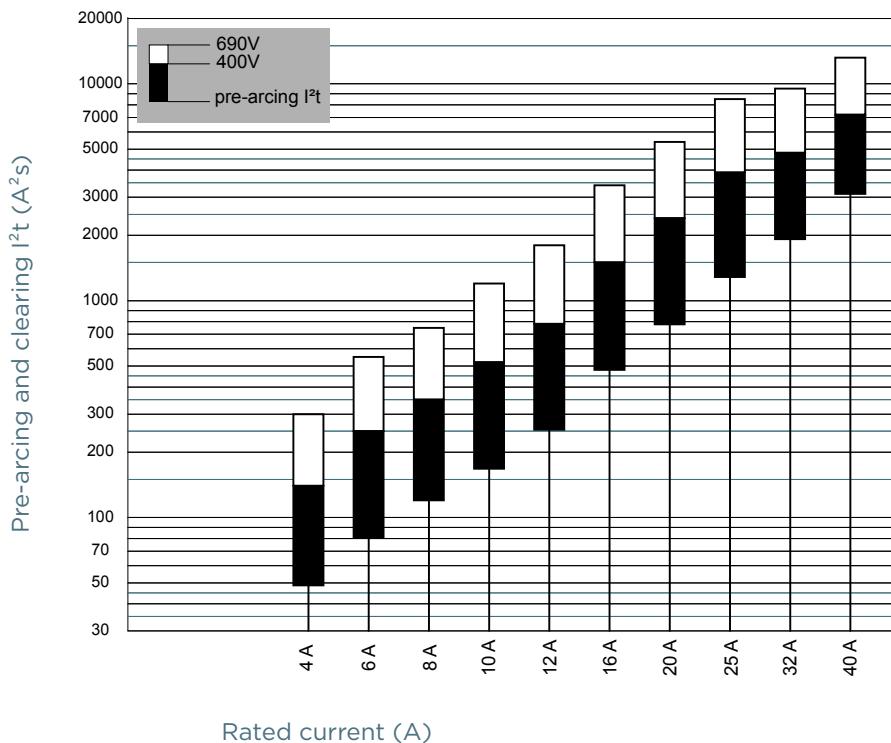
Size 14x51 690V aM



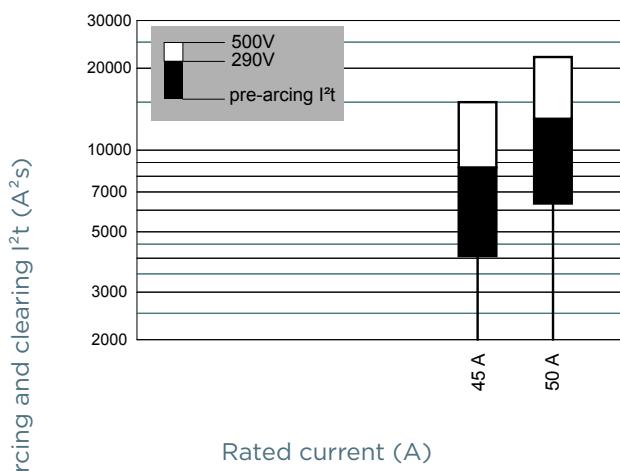
Ferrule fuse-links 14x51 aM 500 to 690VAC

PRE-ARCING AND OPERATING I²T CHARACTERISTICS

Size 14x51 690V



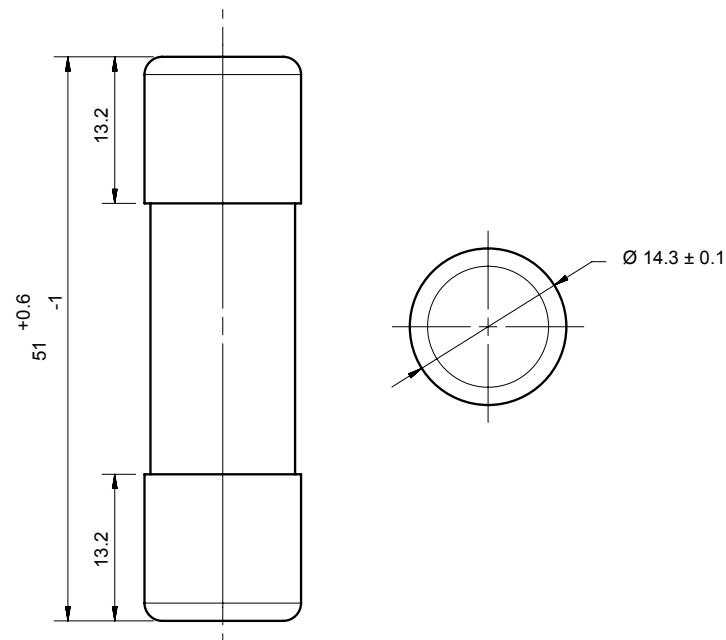
Size 14x51 500V aM



Ferrule fuse-links 14x51 aM 500 to 690VAC

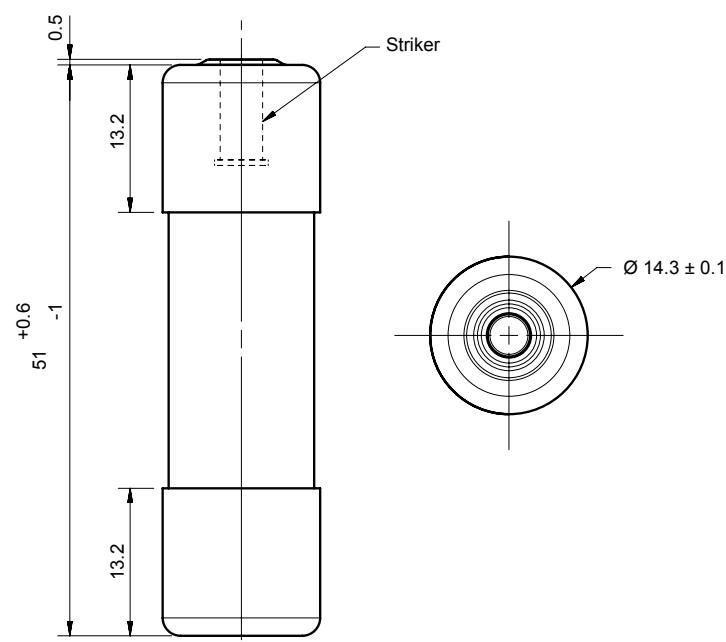
DIMENSIONS

Size 14x51 aM without indicator (1001212)



Dimensions in mm

Size 14x51 aM with striker (1001211)



Dimensions in mm

Ferrule fuse-links 22x58 aM 500 to 690VAC

LOW VOLTAGE IEC FUSES

IEC CYLINDRICAL FUSE-LINKS



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TECHNICAL DATA OVERVIEW

| | |
|----------------------|----------------------|
| Voltage Range AC | 500 ... 690 VAC |
| Ampere Range (A) | 1 ... 125 A |
| Speed/Characteristic | aM |
| I.R. AC (IEC) | 120 kA |
| Body Material | Ceramic |
| Body Style | cylindrical |
| Contact Materials | Silver plated copper |
| Product Size | 22x58 mm |

FEATURES & BENEFITS

- Reduced size
- Striker version available for remote indication of fuse operation
- Safest and most reliable protection system

APPLICATIONS

- aM type for protection of motors, transformers and other loads with in-rush currents.

STANDARDS

- IEC 60269-1 & -2
- Approved by Lloyd's Register of Shipping and Bureau Veritas



Ferrule fuse-links 22x58 aM 500 to 690VAC

PRODUCT RANGE

Size 22x58 aM 500/690VAC without striker



FR22AM50V125

| Catalog number | Item number | Rated voltage AC (IEC) | Rated current I_n | Rated breaking capacity AC | Power dissipation at I_n | Weight |
|----------------|-------------|------------------------|---------------------|----------------------------|----------------------------|--------|
| FR22AM69V1 | M219776 | 690 V | 1 A | 120 kA | 0.2 W | 54 g |
| FR22AM69V2 | T222220 | 690 V | 2 A | 120 kA | 0.25 W | 54 g |
| FR22AM69V4 | Q222976 | 690 V | 4 A | 120 kA | 0.35 W | 54 g |
| FR22AM69V6 | Y200765 | 690 V | 6 A | 120 kA | 0.45 W | 54 g |
| FR22AM69V8 | N201308 | 690 V | 8 A | 120 kA | 0.6 W | 54 g |
| FR22AM69V10 | X201822 | 690 V | 10 A | 120 kA | 0.75 W | 54 g |
| FR22AM69V12 | T211042 | 690 V | 12 A | 120 kA | 0.85 W | 54 g |
| FR22AM69V16 | M211565 | 690 V | 16 A | 120 kA | 1.15 W | 54 g |
| FR22AM69V20 | S212076 | 690 V | 20 A | 120 kA | 1.35 W | 54 g |
| FR22AM69V25 | J212597 | 690 V | 25 A | 120 kA | 1.7 W | 54 g |
| FR22AM69V32 | V213113 | 690 V | 32 A | 120 kA | 2.2 W | 54 g |
| FR22AM69V40 | N213613 | 690 V | 40 A | 120 kA | 2.7 W | 54 g |
| FR22AM69V50 | R214122 | 690 V | 50 A | 120 kA | 3.6 W | 54 g |
| FR22AM69V63 | C215650 | 690 V | 63 A | 120 kA | 4.8 W | 54 g |
| FR22AM69V80 | H216667 | 690 V | 80 A | 120 kA | 6.2 W | 54 g |
| FR22AM50V100 | Y217693 | 500 V | 100 A | 120 kA | 6.65 W | 54 g |
| FR22AM50V125 | J218209 | 500 V | 125 A | 120 kA | 9.9 W | 54 g |

Size 22x58 aM 500/690VAC with striker



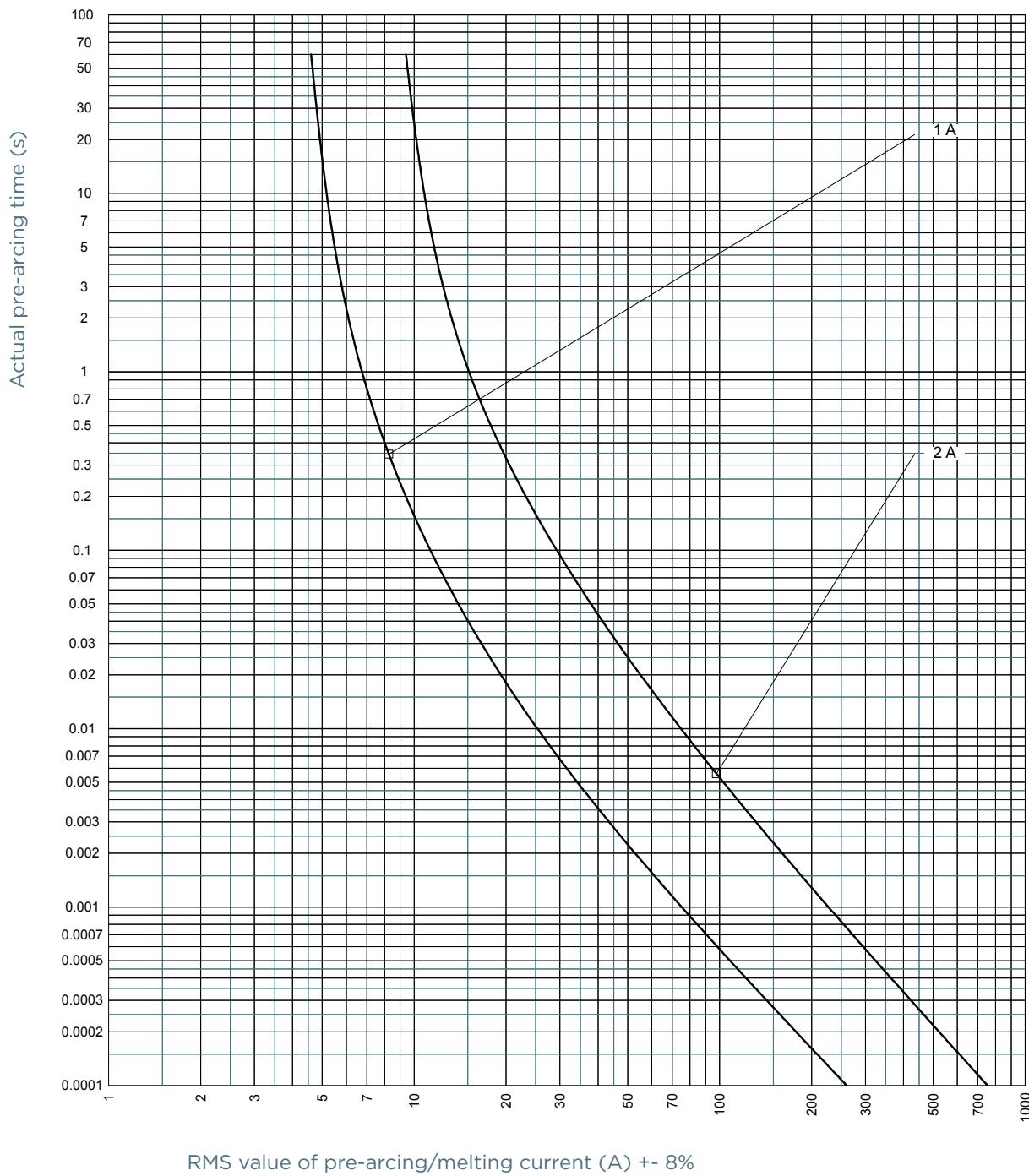
FR22AM50V100P

| Catalog number | Item number | Rated voltage AC (IEC) | Rated current I_n | Rated breaking capacity AC | Power dissipation at I_n | Weight |
|----------------|-------------|------------------------|---------------------|----------------------------|----------------------------|--------|
| FR22AM69V1P | E215652 | 690 V | 1 A | 120 kA | 0.2 W | 54 g |
| FR22AM69V2P | J216162 | 690 V | 2 A | 120 kA | 0.25 W | 54 g |
| FR22AM69V4P | A217695 | 690 V | 4 A | 120 kA | 0.35 W | 54 g |
| FR22AM69V6P | Y218728 | 690 V | 6 A | 120 kA | 0.45 W | 54 g |
| FR22AM69V8P | Q219779 | 690 V | 8 A | 120 kA | 0.6 W | 54 g |
| FR22AM69V10P | S222978 | 690 V | 10 A | 120 kA | 0.75 W | 54 g |
| FR22AM69V12P | R201311 | 690 V | 12 A | 120 kA | 0.85 W | 54 g |
| FR22AM69V16P | W211044 | 690 V | 16 A | 120 kA | 1.15 W | 54 g |
| FR22AM69V20P | W212079 | 690 V | 20 A | 120 kA | 1.35 W | 54 g |
| FR22AM69V25P | Q213615 | 690 V | 25 A | 120 kA | 1.7 W | 54 g |
| FR22AM69V32P | X214633 | 690 V | 32 A | 120 kA | 2.2 W | 54 g |
| FR22AM69V40P | F215653 | 690 V | 40 A | 120 kA | 2.7 W | 54 g |
| FR22AM69V50P | K216669 | 690 V | 50 A | 120 kA | 3.6 W | 54 g |
| FR22AM69V63P | A1022166 | 690 V | 63 A | 120 kA | 4.8 W | 54 g |
| FR22AM69V80P | C1022168 | 690 V | 80 A | 120 kA | 6.2 W | 54 g |
| FR22AM50V63P | B217696 | 500 V | 63 A | 120 kA | 4.8 W | 54 g |
| FR22AM50V80P | Z218729 | 500 V | 80 A | 120 kA | 6.2 W | 54 g |
| FR22AM50V100P | T222979 | 500 V | 100 A | 120 kA | 6.65 W | 54 g |
| FR22AM50V125P | S201312 | 500 V | 125 A | 120 kA | 9.9 W | 54 g |

Ferrule fuse-links 22x58 aM 500 to 690VAC

TIME CURRENT CHARACTERISTIC CURVES

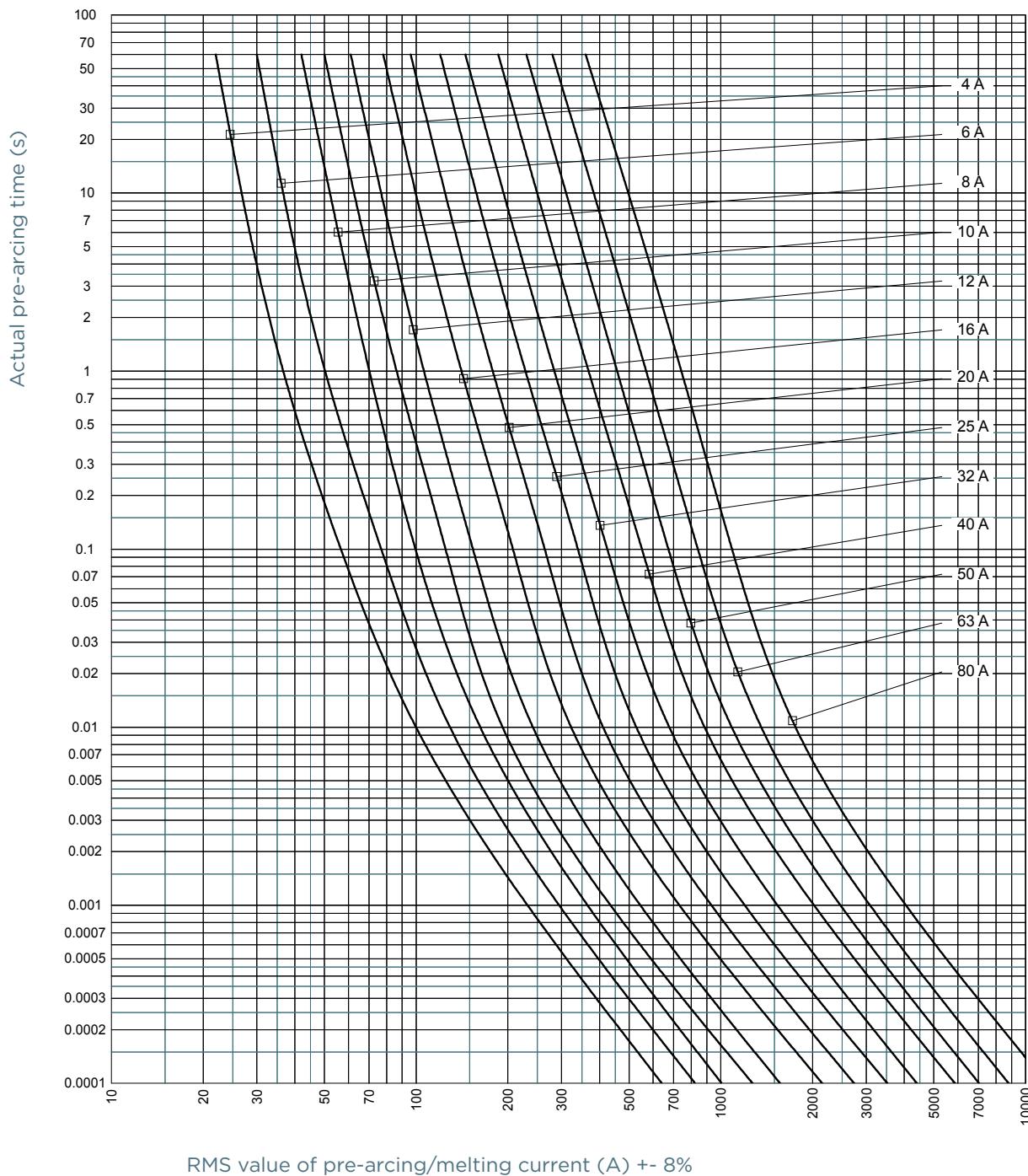
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Ferrule fuse-links 22x58 aM 500 to 690VAC

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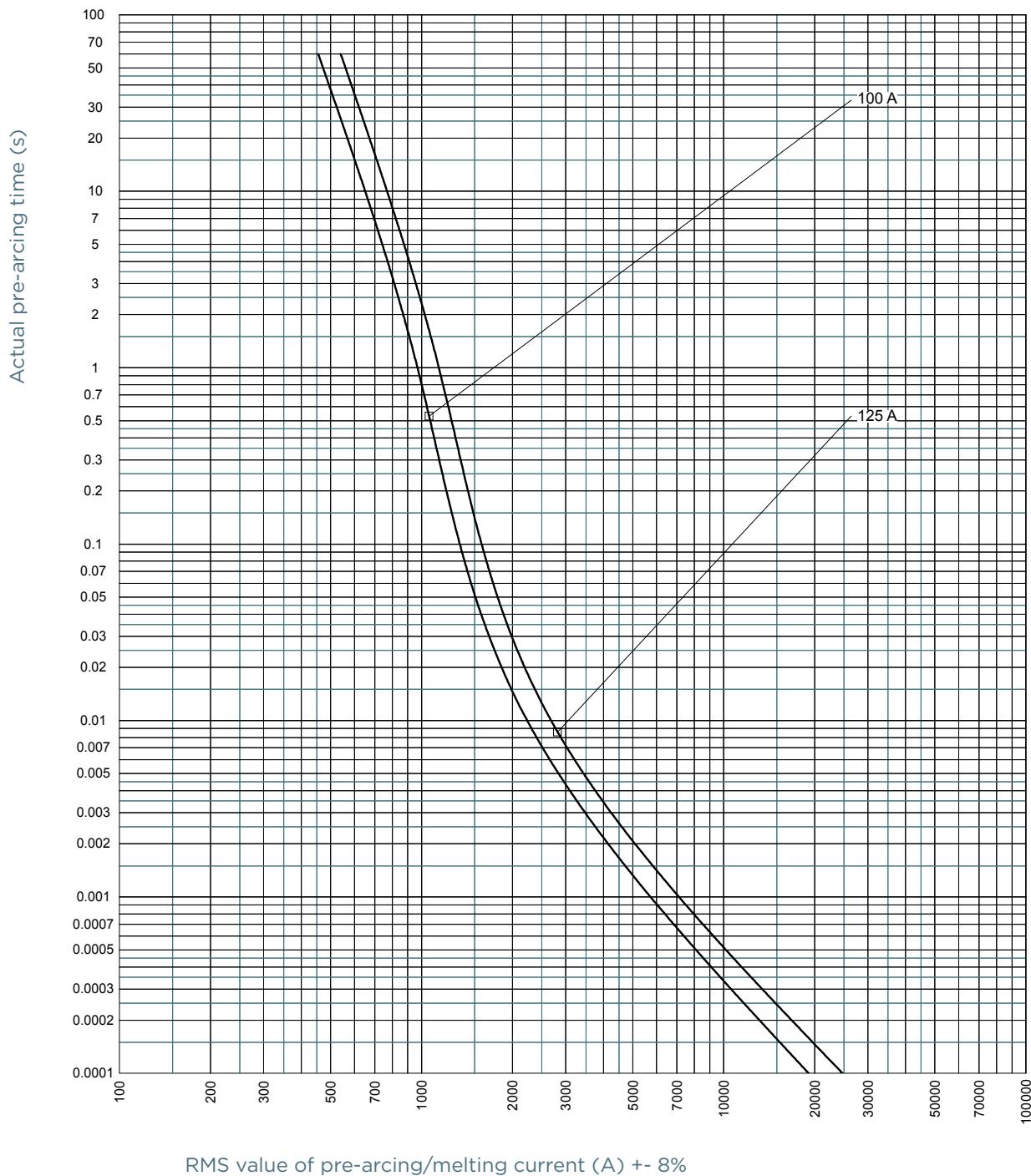
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Ferrule fuse-links 22x58 aM 500 to 690VAC

TIME CURRENT CHARACTERISTIC CURVES

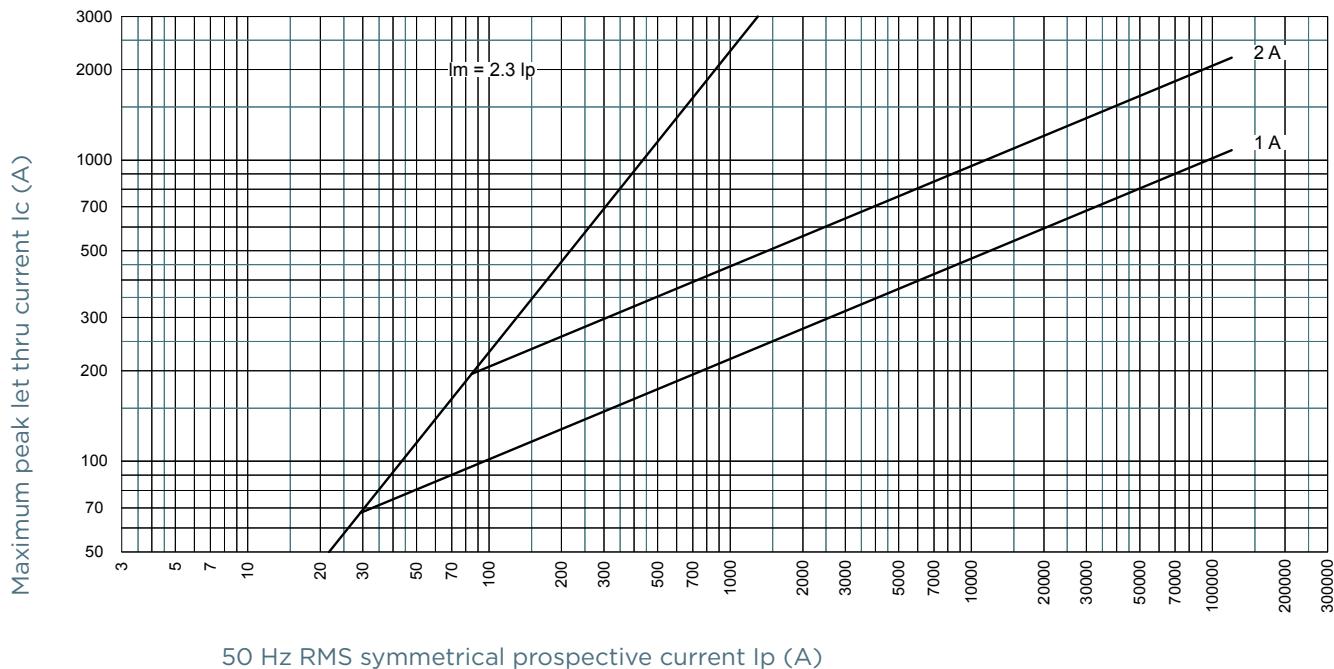
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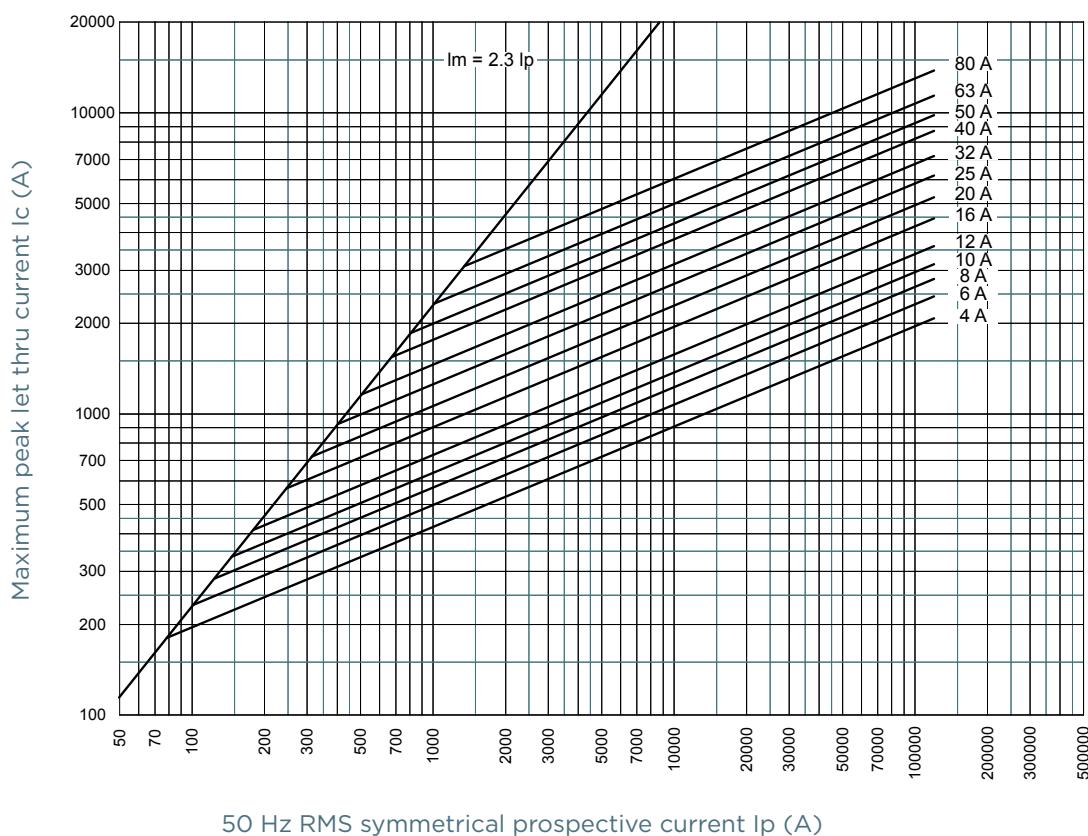
Ferrule fuse-links 22x58 aM 500 to 690VAC

CUT-OFF CURRENT CHARACTERISTIC

Size 22x58 690V aM



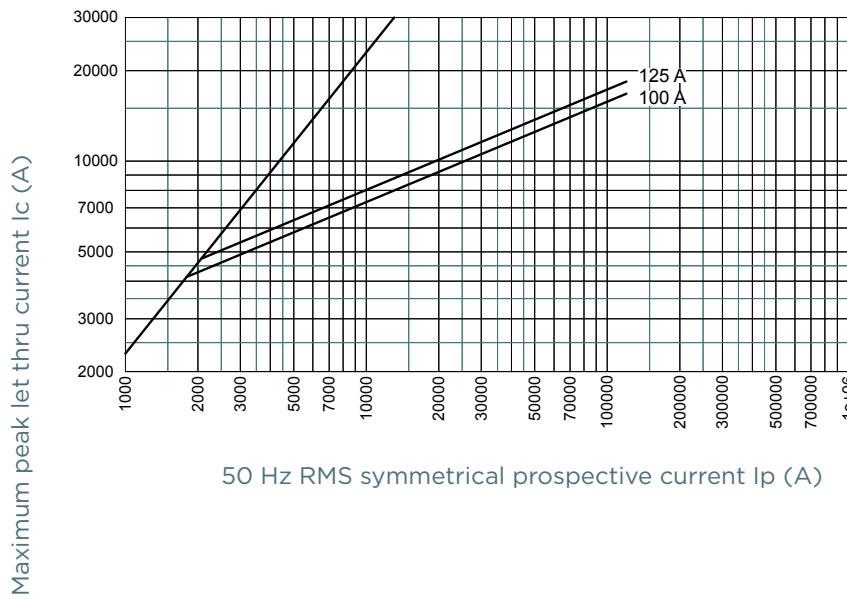
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Ferrule fuse-links 22x58 aM 500 to 690VAC

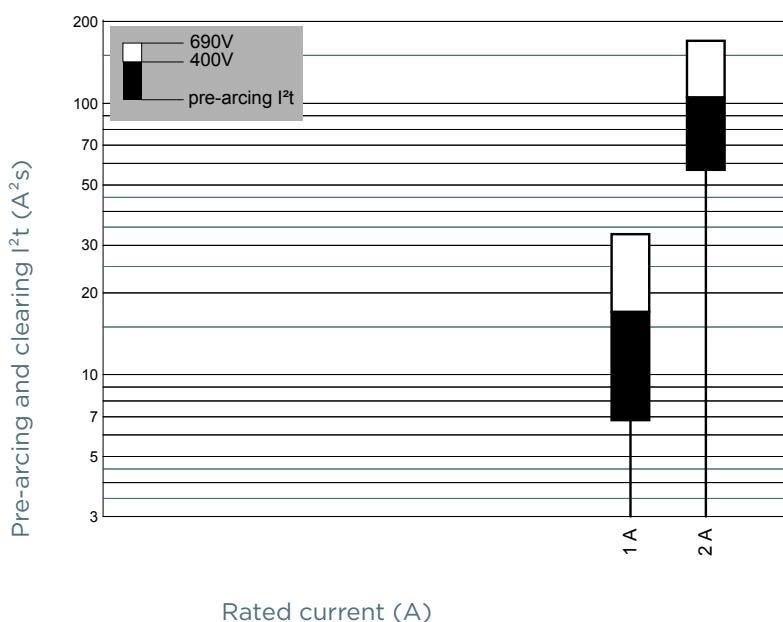
CUT-OFF CURRENT CHARACTERISTIC

Size 22x58 500V aM



PRE-ARCING AND OPERATING I^2t CHARACTERISTICS

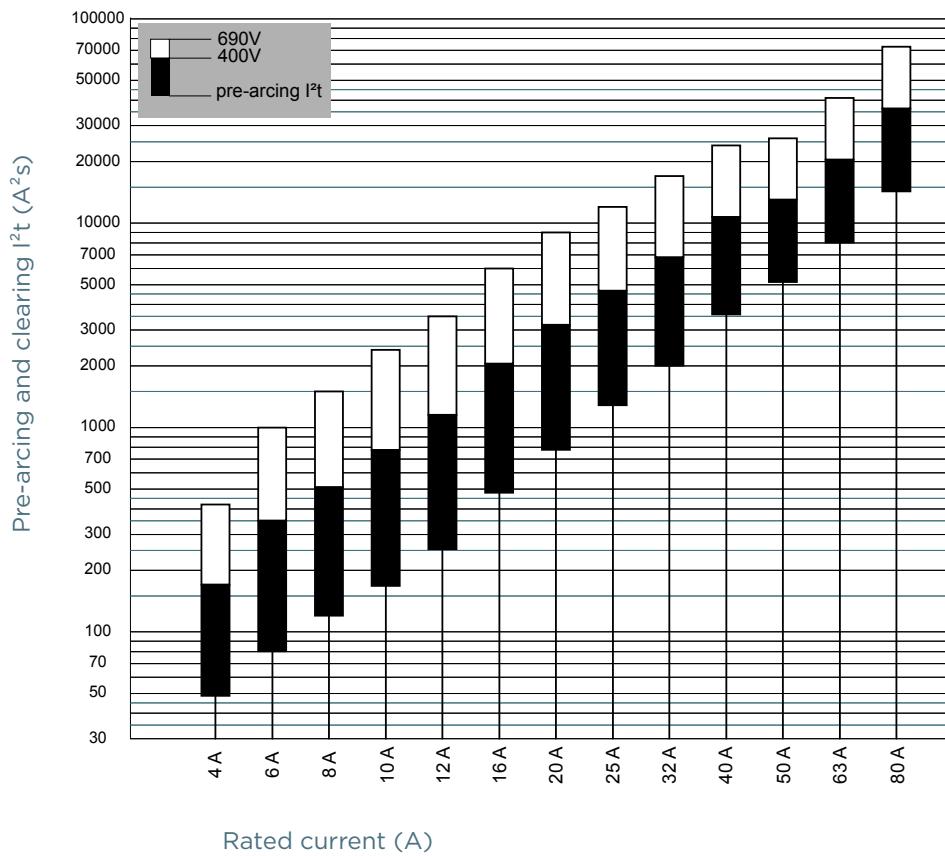
Size 22x58 690V aM



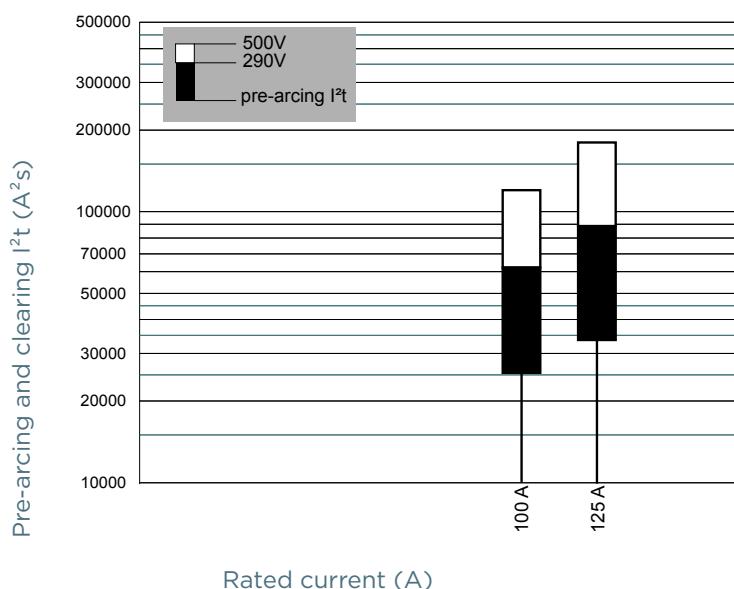
Ferrule fuse-links 22x58 aM 500 to 690VAC

PRE-ARCING AND OPERATING I²T CHARACTERISTICS

Size 22x58 690V aM



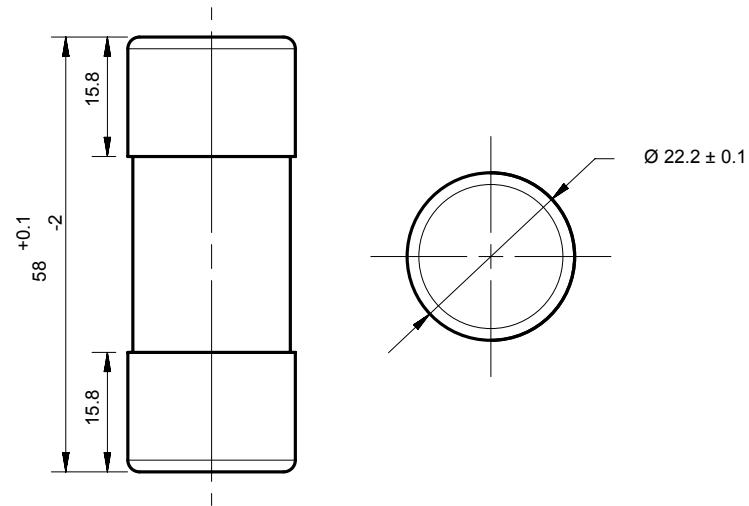
Size 22x58 500V aM



Ferrule fuse-links 22x58 aM 500 to 690VAC

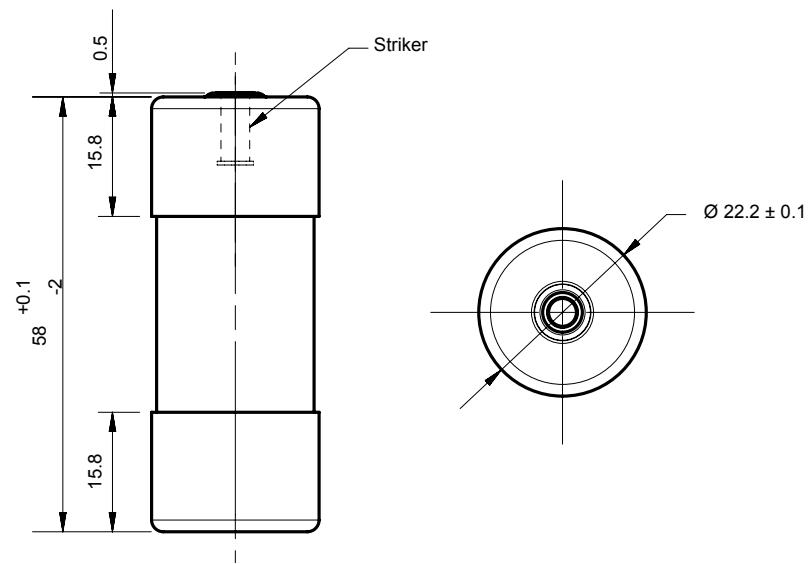
DIMENSIONS

Size 22x58 aM without indicator (1001214)



Dimensions in mm

Size 22x58 aM with striker (1001213)



Dimensions in mm