

400 Volts NH gFF fuse links



Product description

Eaton's Bussmann® series NH 400 V a.c. gFF fuse links have been designed for the protection of low voltage installations where expected short circuit currents are low.

They are used for fast protection of low voltage installations and long aluminium cable runs, acting faster than class gG NH fuse links.

Features

- The use of gFF fuse links reduces nuisance operation over gR type fuse links due to superior overload withstand capability without compromising speed of operation under fault conditions.
- Fast speed of operation makes gFF fuse links the ideal solution for utility network protection (especially in large rural areas) where long aluminium cable runs are used, and low overload faults may occur.
- The gFF fuse links characteristics allow for secure network protection with long fuse link life, minimising the risk of power outages.
- The use of M-effect technology ensures the distribution network is protected from both low overloads and short-circuits.
- Insulated metal gripping lugs allows for a safer installation as the lug is voltage free, compared to a standard NH fuse link in which the lug is a live part.
- Designed in accordance with IEC 60269-1 and dimensions to IEC 60269-2. Operating characteristics in accordance with AMKA standards.
- Eaton's patented dual indicator system provides clear indication, ensuring extremely reliable local and remote* signalling, decreasing fuse link replacement time and costs.

* with the use of an optional micro switch accessory

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Powering Business Worldwide

Catalogue symbol

- (amp)NHFF(size)BI-400

Catalogue number structure example

| | |
|-------------------------------|----------------------|
| Current rating | 50 |
| NH fuse link | NH |
| gFF Utilisation class | FF |
| Body size | 000 |
| Eaton's Bussmann series | B |
| Insulated metal gripping lugs | I |
| Rated voltage | 400 |
| Complete Catalogue Numbers | 50 NH FF 000 B I 400 |

Catalogue number **50NHFF000BI-400** represents a **50** Amps **NH** Fuse link, **gFF** operating class, body size **000**, **Bussmann series'** fuse link with **Insulated metal gripping lugs**, rated at **400** Volts

NH Fuse body size

- 000, 00, 1, 02, 2 and 3

Technical data

- Rated voltage: 400 V a.c.
- Rated current: 10 to 630 A
- Breaking capacity: 120 kA, 80 kA for NH00 80 A and 160 A
- Operating frequency: 50 Hz
- Class of operation: gFF

Standard/Approvals

- IEC 60269 part 1
- Dimensionally in accordance to IEC 60269 part 2 and DIN 43620 part 1 and 3

Microswitches

| NH Fuse link body size | Suitable microswitch |
|------------------------|----------------------|
| 000 | 170H0236 |
| 00 | 170H0236 |
| 1 | 170H0236 |
| 02 | BVL50 |
| 2 | 170H0235 or 170H0236 |
| 3 | 170H0235 |

Compatible fuse holders and fuse gear

| Description | Type | Data sheet number |
|---------------------------|--------------------------------------|-------------------|
| Fuse bases 1-pole | DIN-Rail mounting SD-D | 10163 |
| | Screw mounting SD-S | 10163 |
| Fuse bases 3-pole | DIN-Rail mounting TD-D | 10163 |
| Fuse bases accessories | IP20, Shroud and phase barriers kits | 10163 |
| Fuse rails | Vertical EBF | 10240 |
| Fuse switch disconnectors | Vertical EBV | 10275 |
| | Horizontal - EBH size 000 | 10292 |
| | Horizontal - EBH sizes 00 to 4 | 10293 |

Packaging

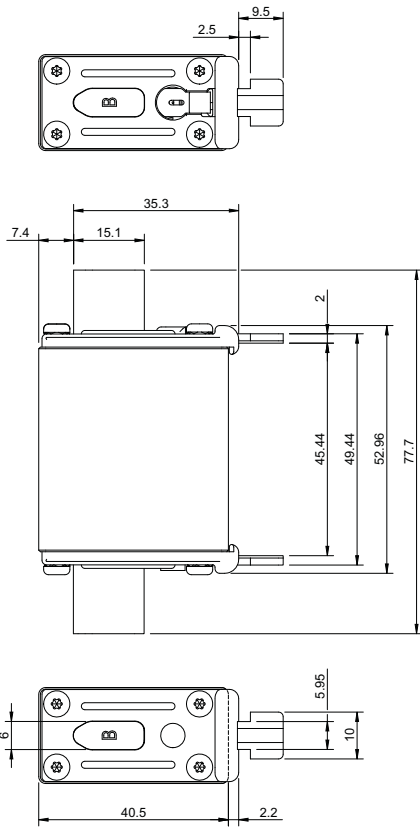
- MOQ: 3

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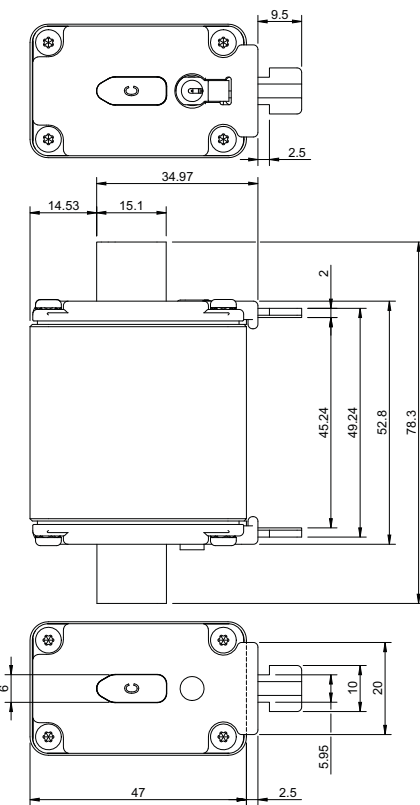
Catalogue numbers

| Size | Current (Amps) | 400 V a.c. class gFF | | I ² t (Amps ² Seconds) | | Watts loss (W) | Net weight per fuse (kg) | Pack Quantity |
|------|----------------|--|--|--|---------------------|----------------|--------------------------|---------------|
| | | Insulated conducting metal gripping lugs | | Minimum pre-arcing | Total at 400 V a.c. | | | |
| 000 | 10 | 10NHFF000BI-400 | | 44 | 180 | 1.7 | 0.113 | 3 |
| | 16 | 16NHFF000BI-400 | | 160 | 600 | 2.3 | | |
| | 25 | 25NHFF000BI-400 | | 1000 | 3200 | 2.3 | | |
| | 35 | 35NHFF000BI-400 | | 2700 | 8300 | 2.7 | | |
| | 50 | 50NHFF000BI-400 | | 3100 | 8800 | 5.4 | | |
| | 63 | 63NHFF000BI-400 | | 6400 | 18700 | 6.5 | | |
| | 80 | 80NHFF000BI-400 | | 12300 | 32000 | 8 | | |
| | 100 | 100NHFF000BI-400 | | 24600 | 59000 | 9 | | |
| 00 | 63 | 63NHFF00BI-400 | | 6400 | 18,700 | 6.5 | 0.165 | 3 |
| | 80 | 80NHFF00BI-400 | | 12,300 | 32,000 | 8 | | |
| | 100 | 100NHFF00BI-400 | | 24,600 | 59,000 | 9 | | |
| | 125 | 125NHFF00BI-400 | | 41,800 | 98,600 | 11 | | |
| | 160 | 160NHFF00BI-400 | | 46,700 | 133,000 | 13 | | |
| 1 | 35 | 35NHFF1BI-400 | | 1600 | 4400 | 5.5 | 0.348 | 3 |
| | 50 | 50NHFF1BI-400 | | 3200 | 9900 | 6 | | |
| | 63 | 63NHFF1BI-400 | | 6400 | 18,700 | 7.1 | | |
| | 80 | 80NHFF1BI-400 | | 14,600 | 39,400 | 7.4 | | |
| | 100 | 100NHFF1BI-400 | | 23,700 | 72,300 | 11 | | |
| | 125 | 125NHFF1BI-400 | | 35,100 | 92,400 | 11.5 | | |
| | 160 | 160NHFF1BI-400 | | 75,600 | 187,000 | 14 | | |
| | 200 | 200NHFF1BI-400 | | 109,000 | 260,000 | 18 | | |
| | 224 | 224NHFF1BI-400 | | 130,000 | 310,000 | 22 | | |
| | 250 | 250NHFF1BI-400 | | 186,000 | 425,000 | 24 | | |
| 02 | 160 | 160NHFF02BI-400 | | 67,400 | 168,000 | 15 | 0.453 | 3 |
| | 200 | 200NHFF02BI-400 | | 90,000 | 214,000 | 21 | | |
| | 250 | 250NHFF02BI-400 | | 186,000 | 425,000 | 24 | | |
| 2 | 315 | 315NHFF2BI-400 | | 152,000 | 472,000 | 33 | 0.515 | 3 |
| | 355 | 355NHFF2BI-400 | | 242,000 | 726,000 | 33 | | |
| | 400 | 400NHFF2BI-400 | | 354,000 | 1,070,000 | 34 | | |
| 3 | 450 | 450NHFF3BI-400 | | 325,000 | 980,000 | 46 | 0.904 | 3 |
| | 500 | 500NHFF3BI-400 | | 456,000 | 1,370,000 | 47 | | |
| | 630 | 630NHFF3BI-400 | | 1,230,000 | 3,700,000 | 48 | | |

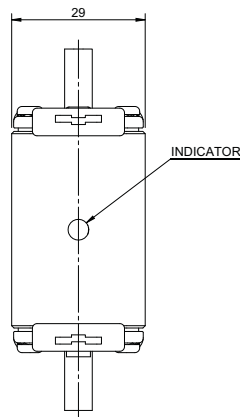
Outline drawings - mm



Size 000

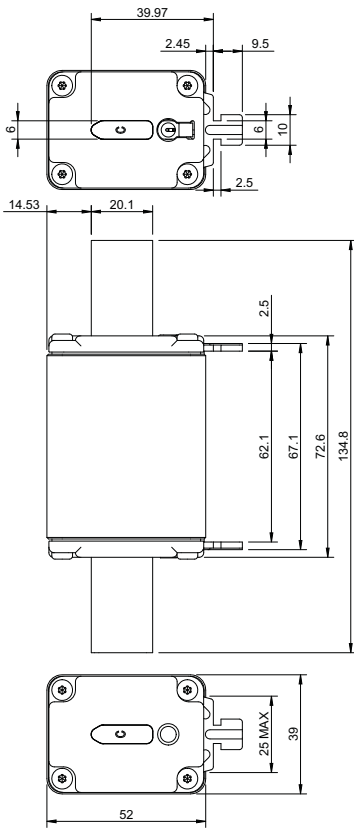


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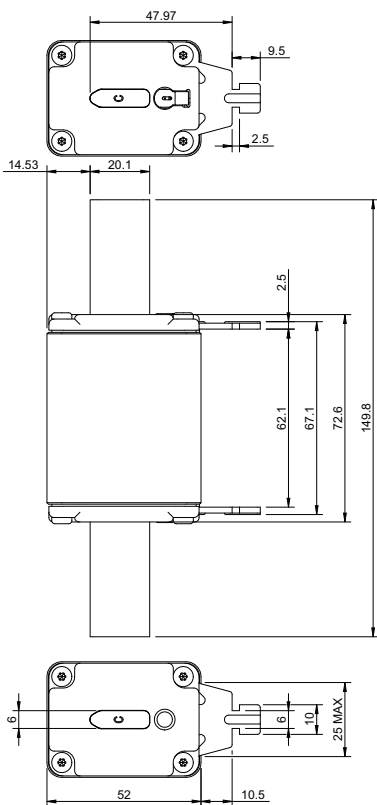
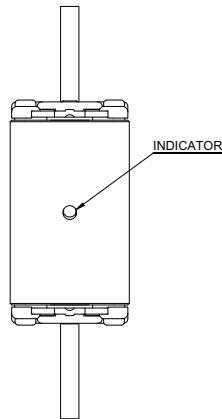


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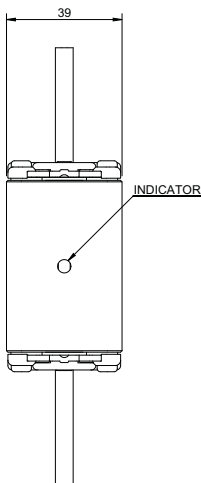
Outline drawings - mm



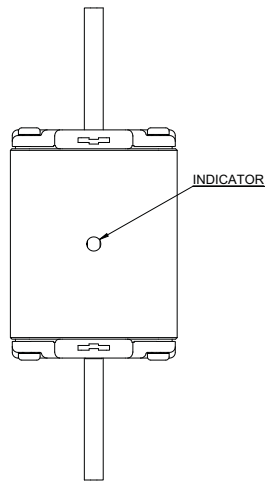
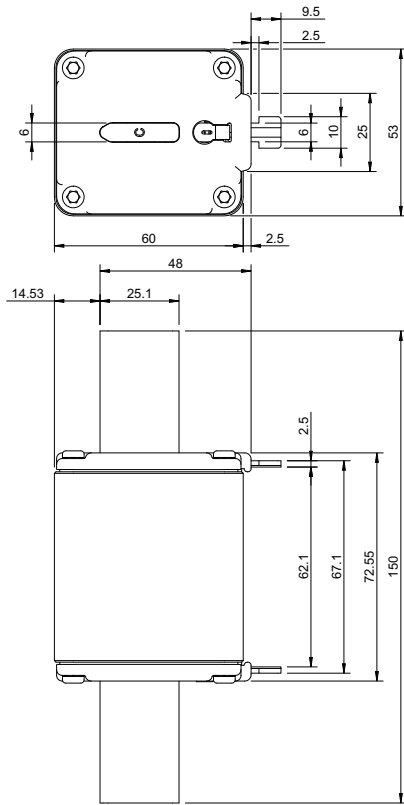
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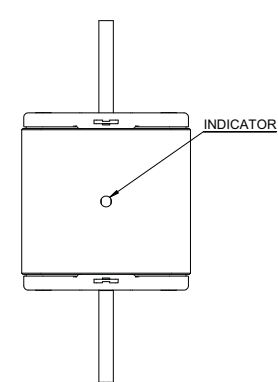
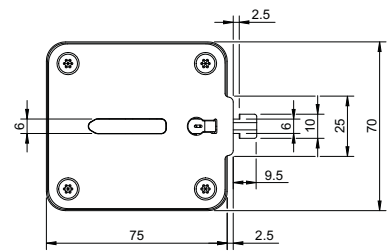
Size 02



Outline drawings - mm

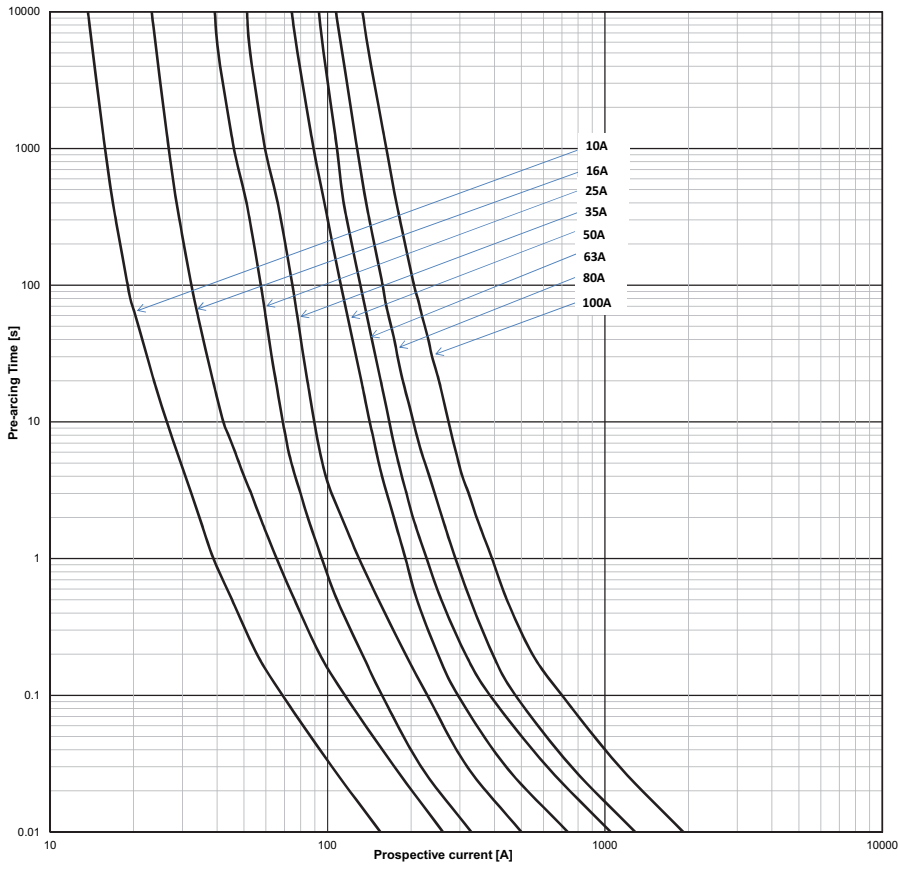


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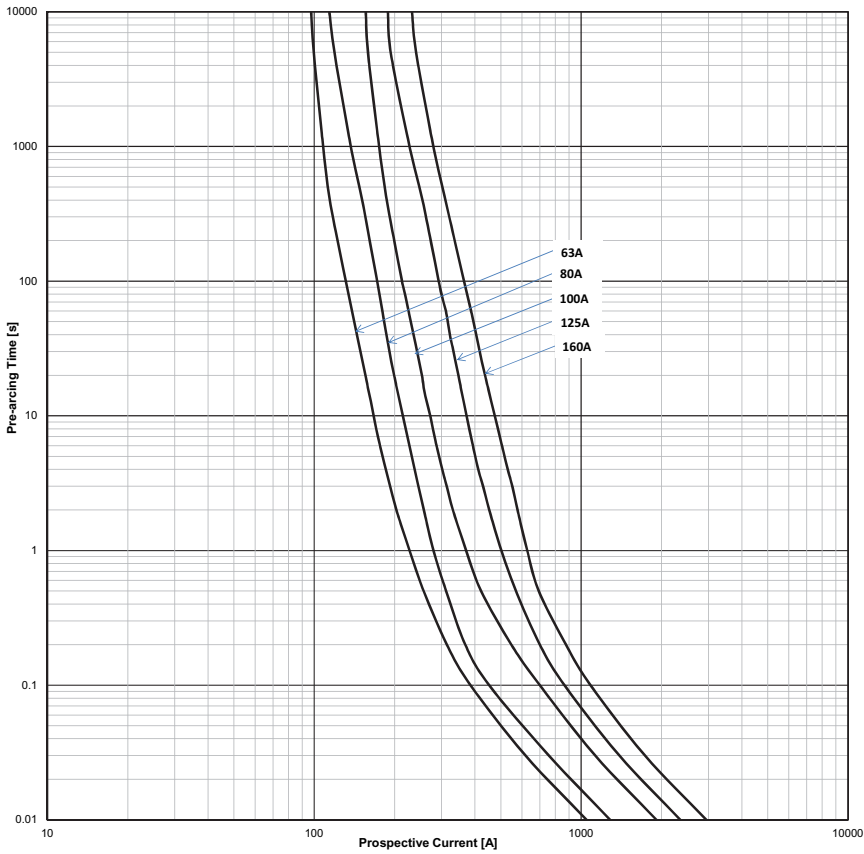


Size 3

Time-current curves

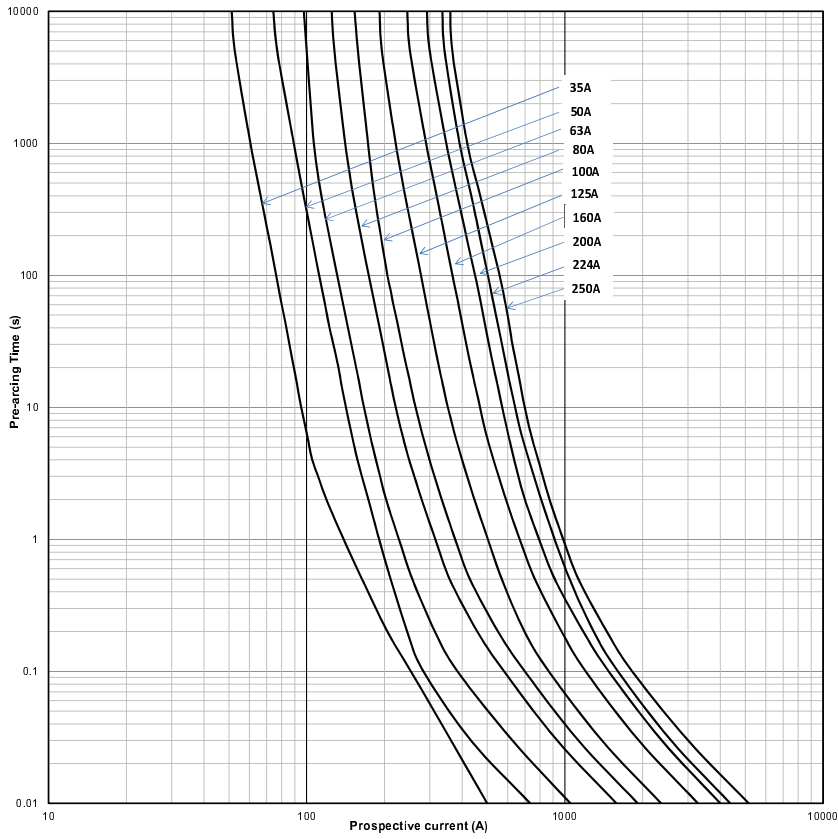


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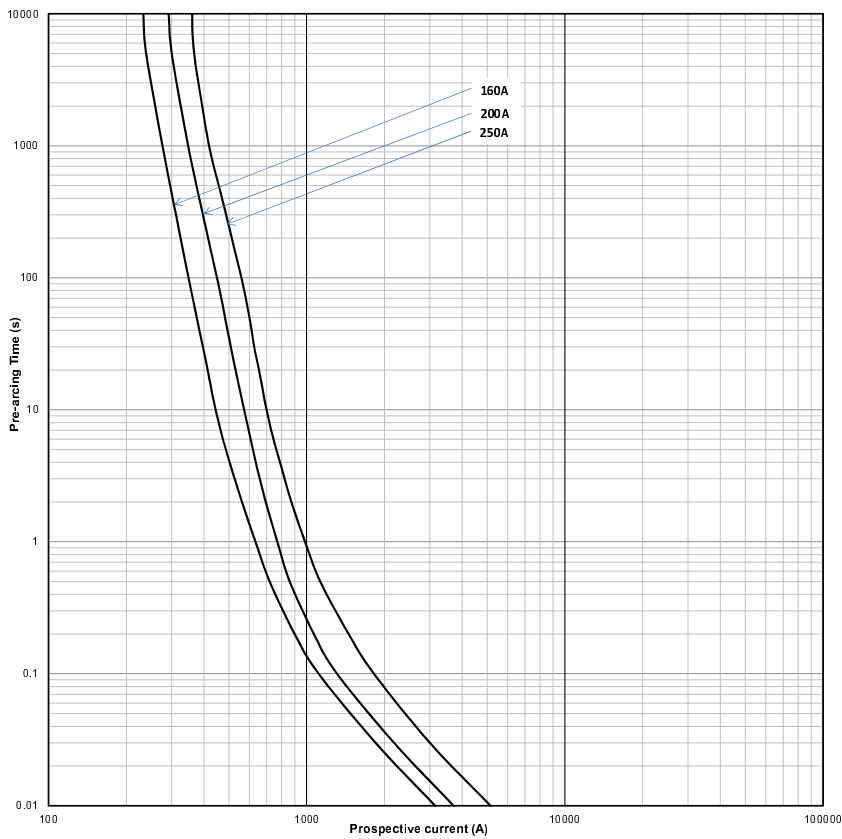


Size 00

Time-current curves

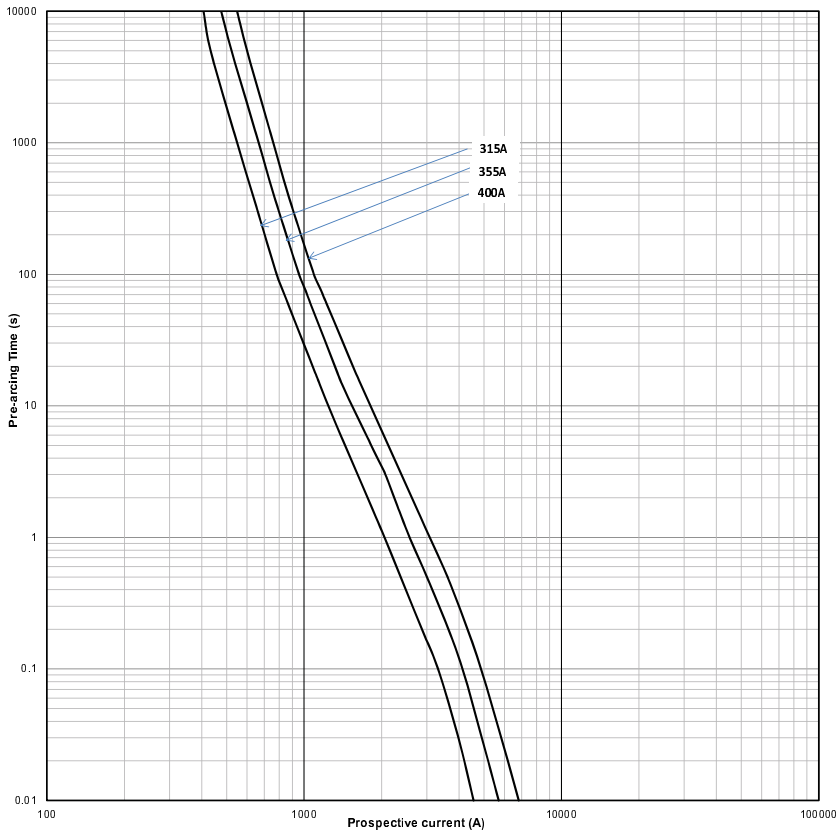


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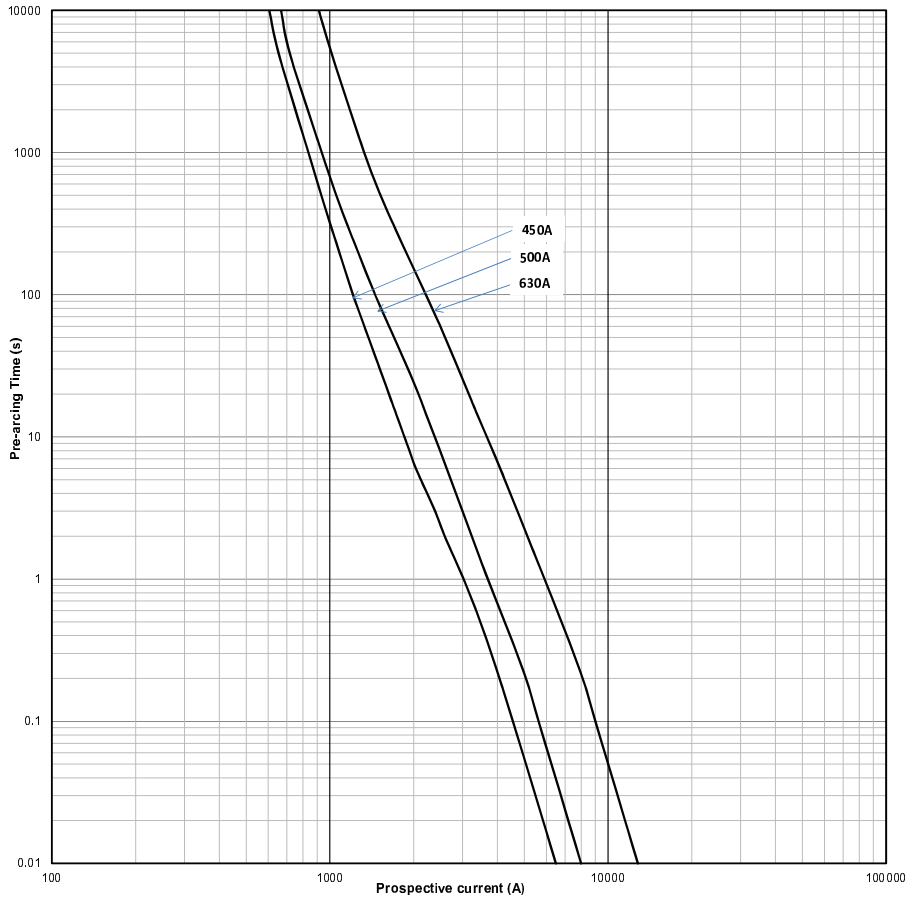
Size 02

Time-current curves



Size 2

Time-current curve



Size 3

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