

180D gR Size 01HT fuse links



Product description

Eaton's Bussmann series 180D gR DC fuse links, size 01HT, are specifically designed for the protection of low overcurrent occurrences.

Features and benefits

- Excellent low overload and cable protection preventing damaged caused by overheated cables
- Low power dissipation, to prevent abnormal temperature rise, increases energy efficiency and lowers running cost
- Microswitches options available for indication of fuse operation
- Demonstrated performance in extreme temperature cycling conditions ensure your installation will be protected by the best possible and most suitable electrical circuit protection solutions.
- Eaton's Bussmann® series High-speed fuse links have leading DC performance making them the ideal choice for the protection of high-power DC applications
- Low minimum breaking current which offers easy coordination within DC applications and reduces dimensioning requirements of DC contactors to optimize space and decrease overall cost of System

Applications

- DC drives
- DC to DC Converters
- Power conversion systems
- DC to AC Inverters
- Electric Vehicle charging stations
- DC common bus protection
- DC cable protection

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Catalogue symbol

- 180D16xx, e.g 180D1608

Technical data

- Rated voltage:
 - 1000 V d.c. (IEC)
 - 1125 V d.c. (UL)
- Rated current: 50 A to 125 A
- Fuse body size: 01HT
- Operating class: gR
- Breaking capacity: 100 kA
- Time constant: 10 ms

Standards/Approvals

- Designed and tested to IEC 60269 part 4
- UL 248-13 Recognised
- RoHS/REACH Compliant

Microswitches

- 170H0235

Fuse holders

- SB1XL-S

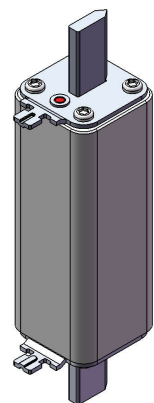
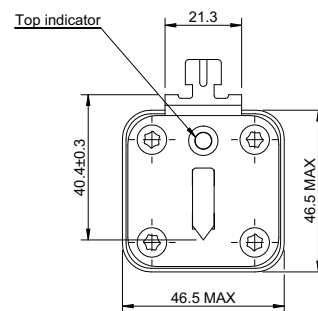
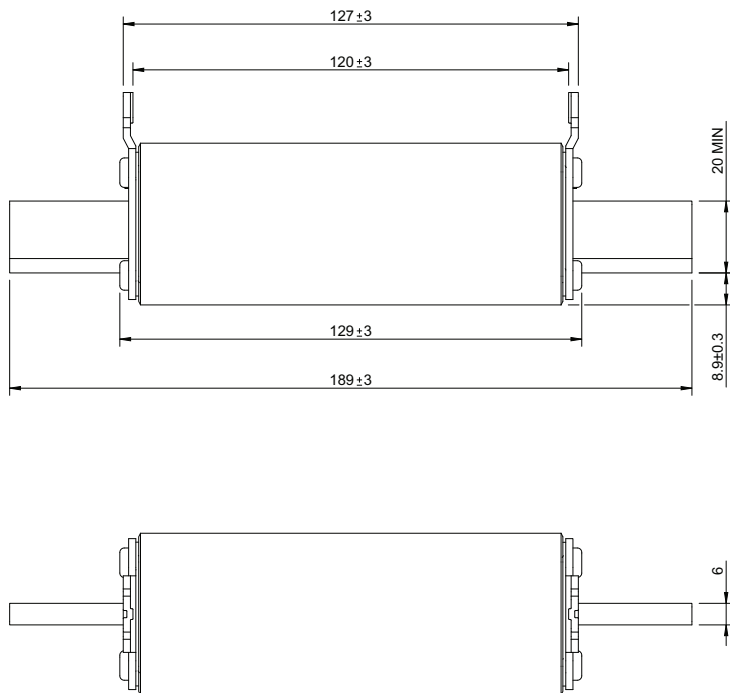
Packaging

- 1

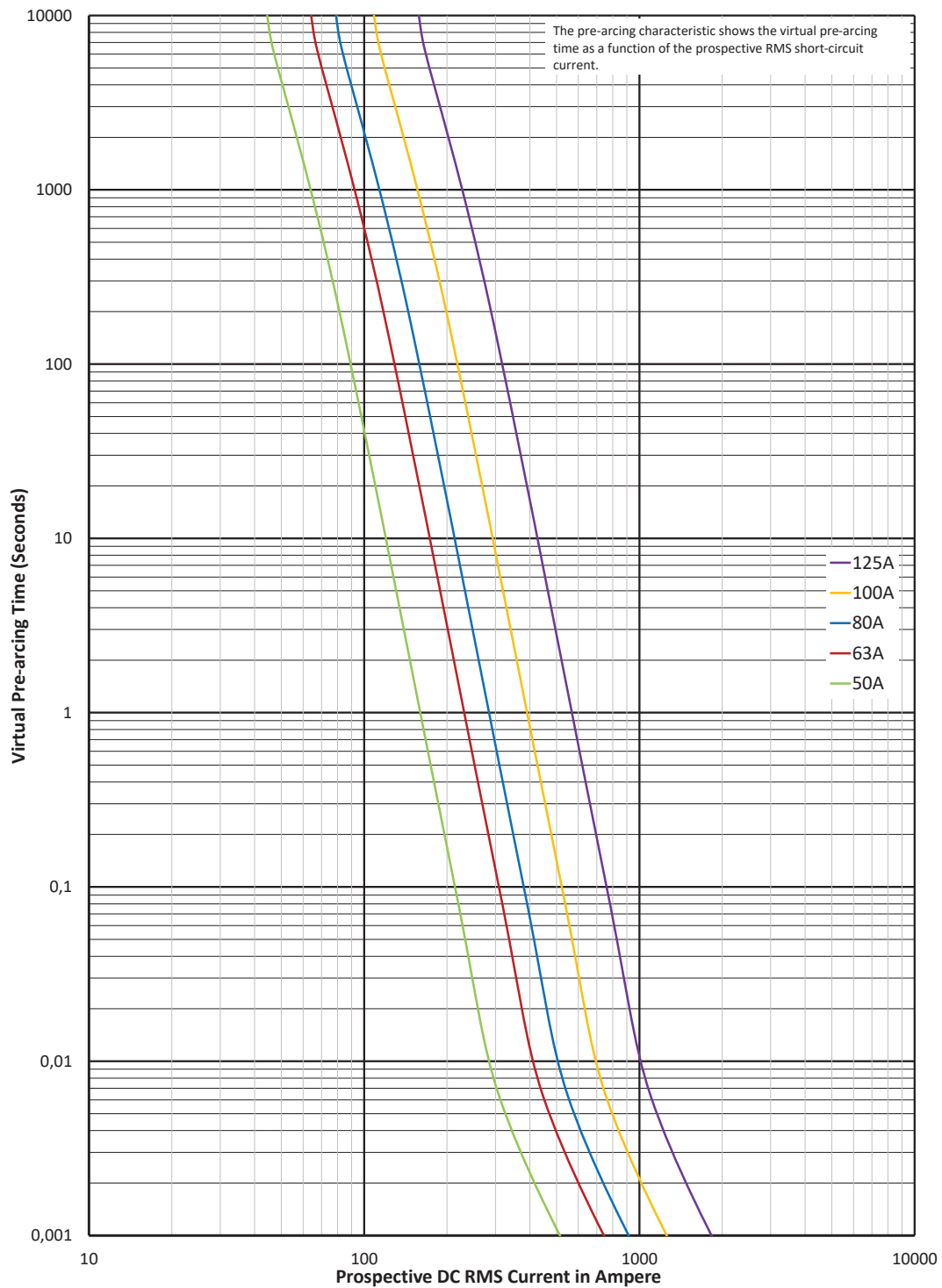
Technical data

| Catalogue number | Fuse body size | Rated current (Amps) | Rated voltage (V d.c.) IEC | Rated voltage (V d.c.) UL | Breaking capacity (kA at 10ms) | Minimum Breaking Current (A) @1000 V d.c. | Minimum Pre-arcing integral (from cold) A²S | Maximum Clearing Integral A²s @ 1000 V d.c. 10ms L/R | Power loss at I _n (W) |
|------------------|----------------|----------------------|----------------------------|---------------------------|--------------------------------|---|---|--|----------------------------------|
| 180D1608 | 01HT | 50 | 1000 | 1125 | 100 | 100 | 175 | 1200 | 25 |
| 180D1609 | 01HT | 63 | 1000 | 1125 | 100 | 126 | 362 | 2500 | 26 |
| 180D1610 | 01HT | 80 | 1000 | 1125 | 100 | 160 | 565 | 3900 | 35 |
| 180D1611 | 01HT | 100 | 1000 | 1125 | 100 | 200 | 1100 | 7500 | 40 |
| 180D1612 | 01HT | 125 | 1000 | 1125 | 100 | 250 | 2200 | 15,000 | 44 |

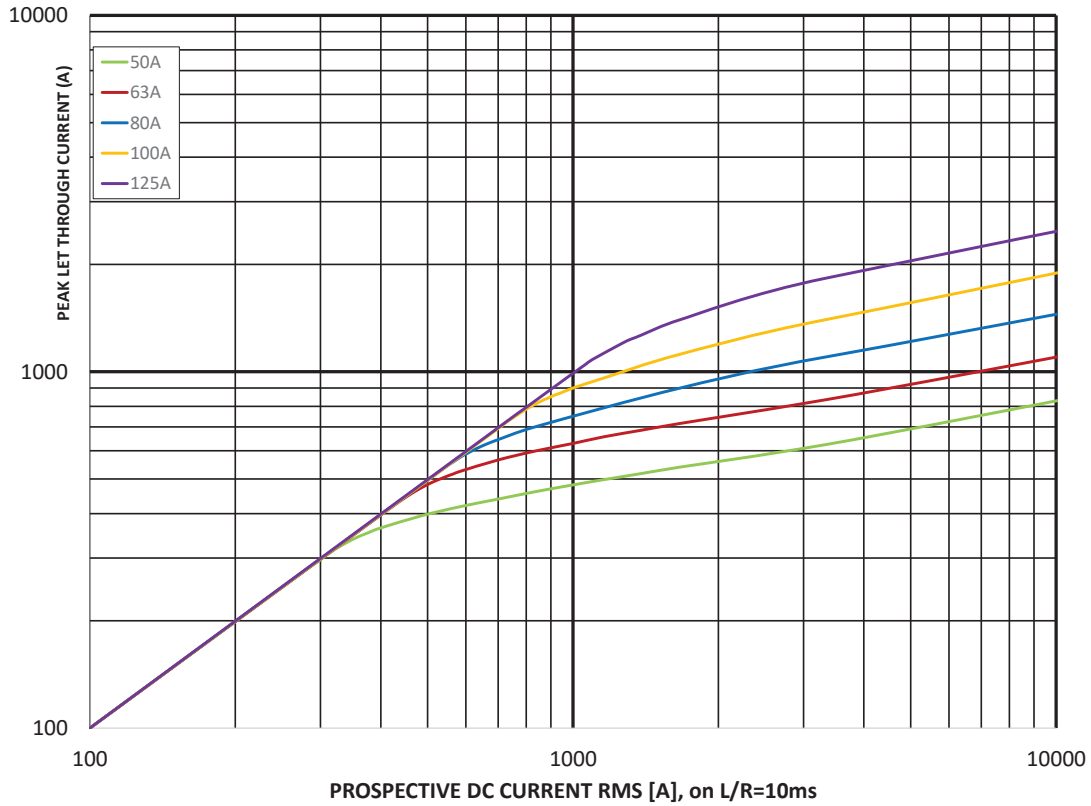
Dimensions mm



Time-current curve

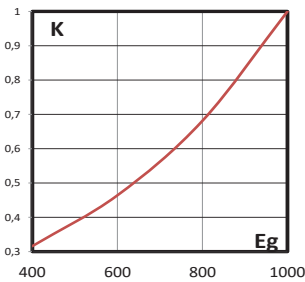


Peak let-through curve



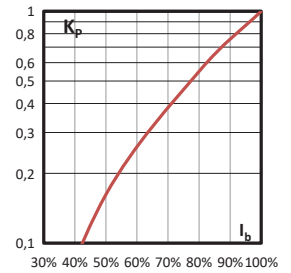
Total clearing I²t

The total clearing I²t at rated voltage and tested DC time constant are given in electrical characteristics. For other voltages the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltages, E.



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.



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Publication No. TD135016EN
July 2023