

180D gR Size 3HT fuse links



Product description

Eaton's Bussmann series 180D gR DC fuse links size 3HT 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



Powering Business Worldwide

Catalogue symbol

- 180D36xx, e.g 180D3615 (250 A to 500 A)
- 180D3419 (600 A)

Technical data

- Rated voltage: see table below
- Rated current: 250 A to 600 A
- Fuse body size: 3HT
- Operating class: gR
- Breaking capacity: see table below
- Time constant: 10 ms

Standards/Approvals

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

Microswitches

- 170H0236

Fuse holders

- SB3L-S

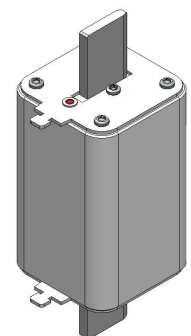
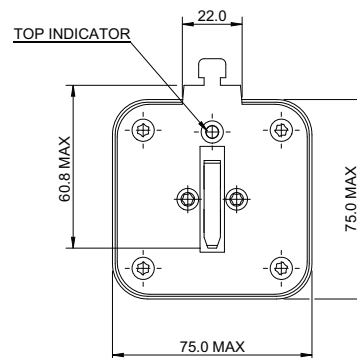
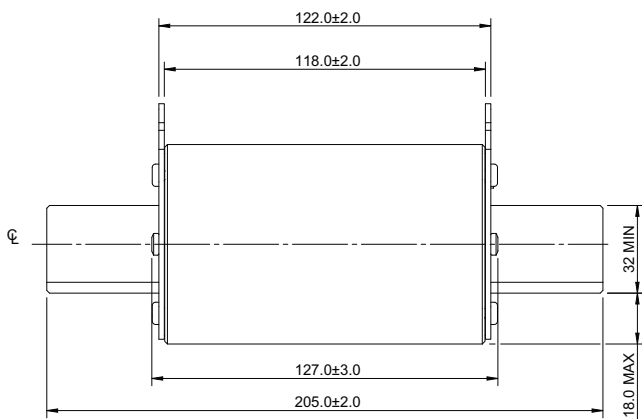
Packaging

- 1

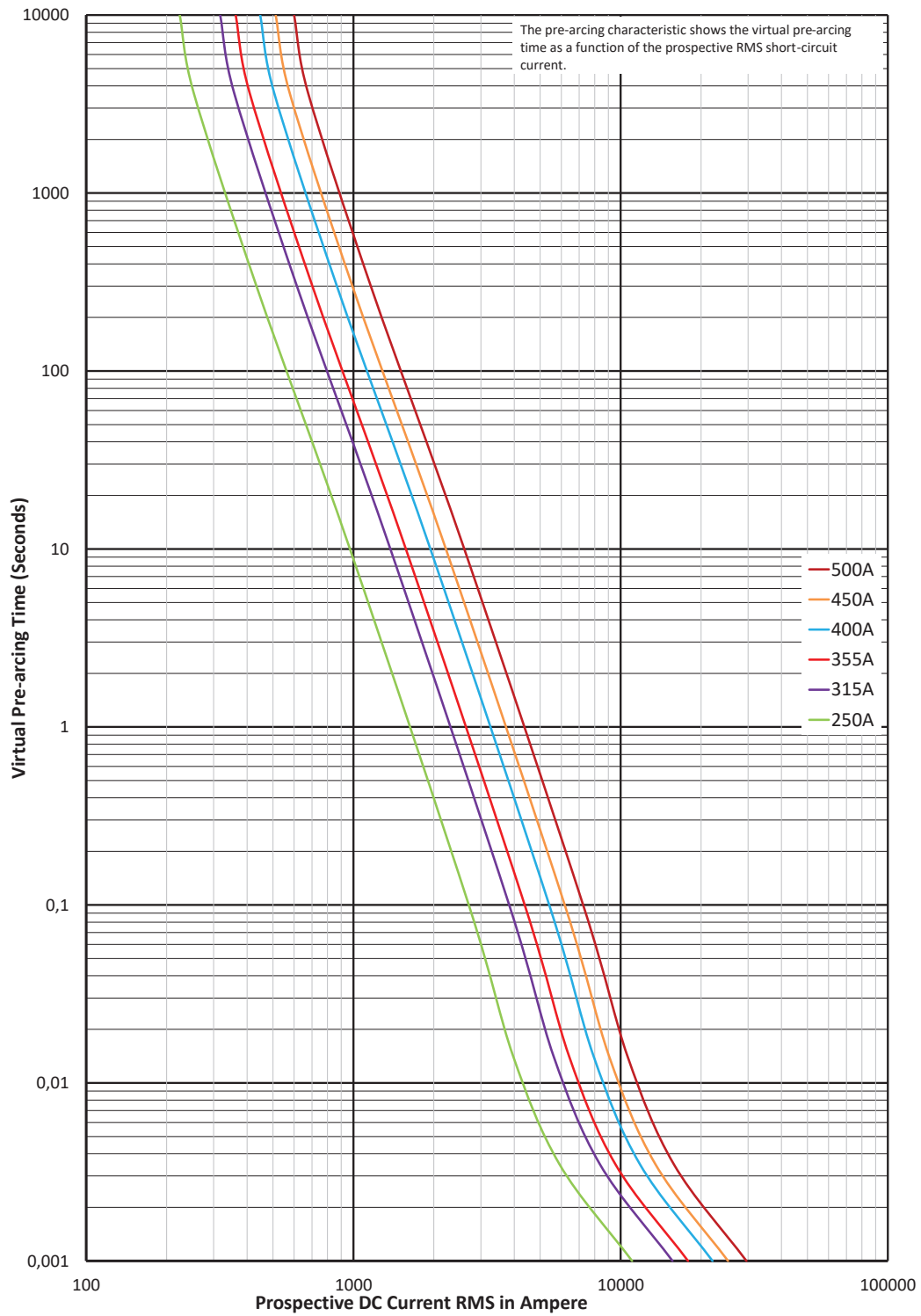
Technical data

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)
180D3615	3HT	250	1000	1125	100	500	74,000	431,000	49
180D3616	3HT	315	1000	1125	100	630	150,000	873,000	52
180D3617	3HT	355	1000	1125	100	710	195,000	1,134,000	59
180D3618	3HT	400	1000	1125	100	800	296,000	1,721,000	61
180D3619	3HT	450	1000	1125	100	900	412,000	2,396,000	67
180D3620	3HT	500	1000	1125	100	1000	532,000	3,093,000	73
180D3419	3HT	600	1000	1000	50	1200	137,000	1,262,000	108

Dimensions mm

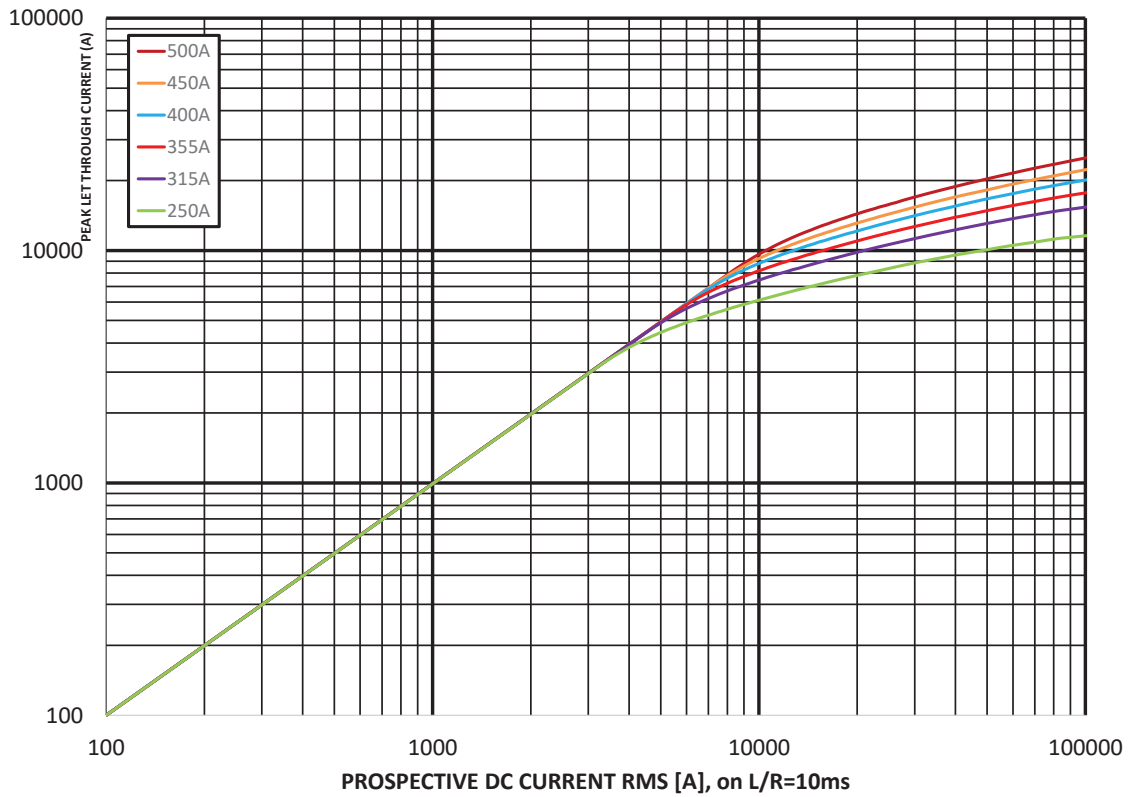


Time-current curve - 250 A to 500 A



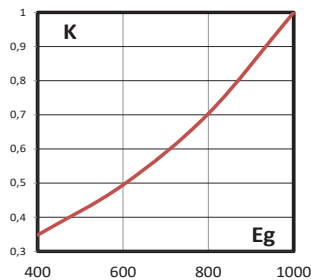
$K_b = 1$ $N = 1,6$

Peak let-through curve - 250 A to 500 A



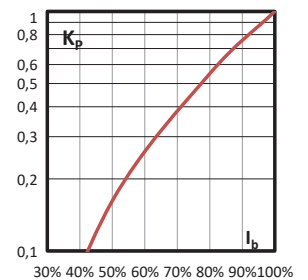
Total clearing I^2t

The total clearing I^2t at rated voltage and tested DC time constant are given in electrical characteristics. For other voltages the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltages, E.

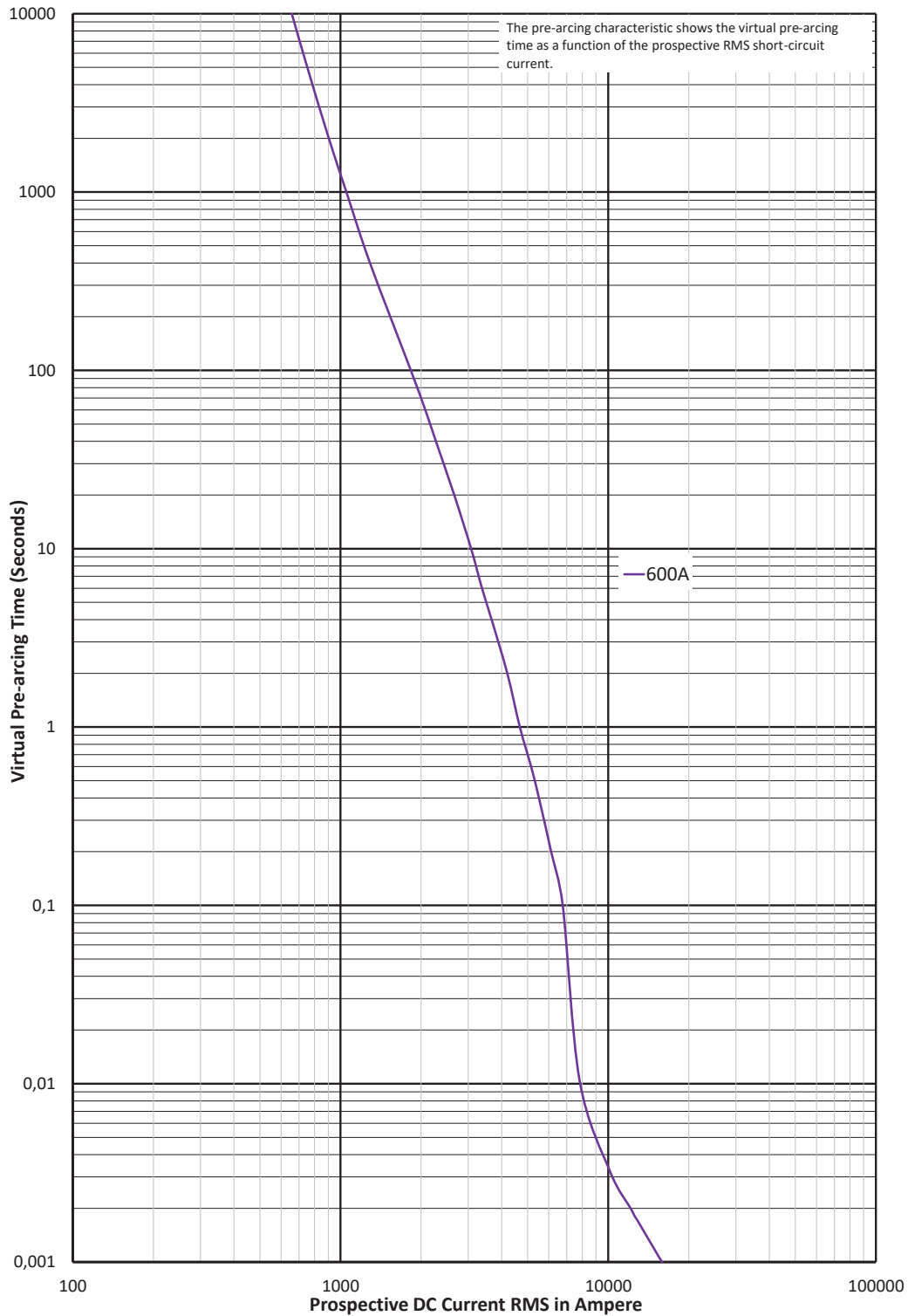


Watts losses

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.

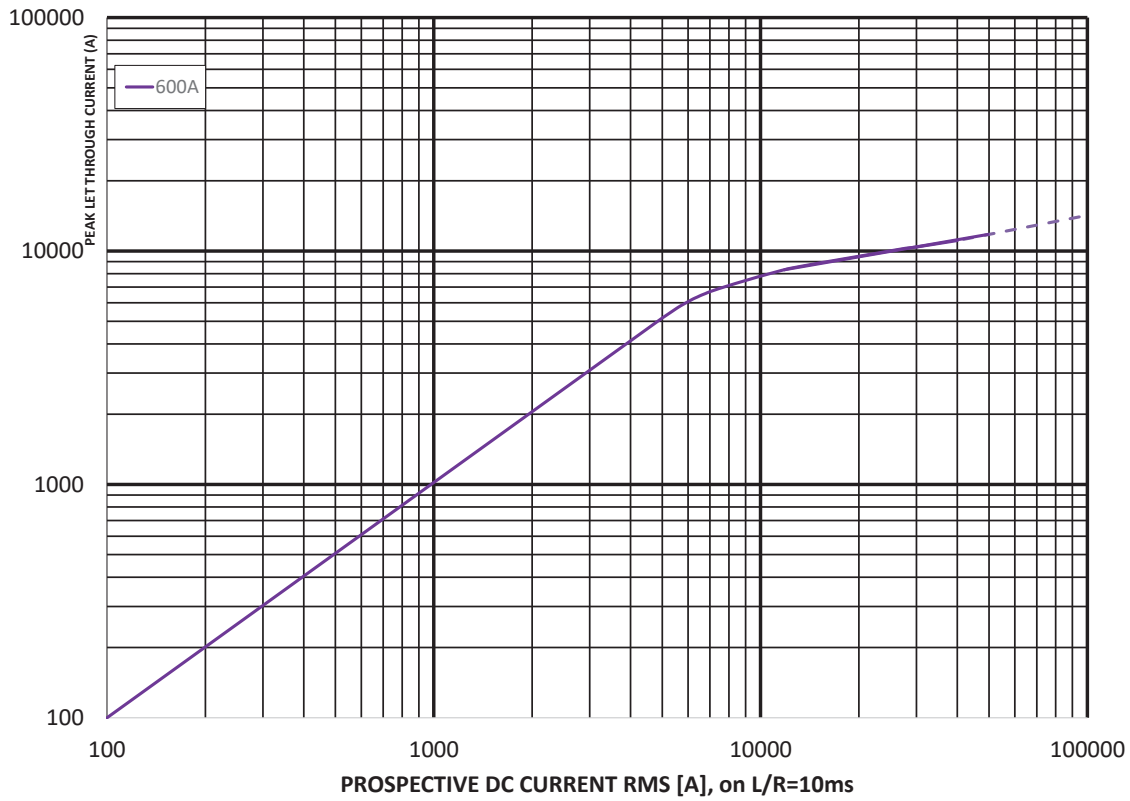


Time-current curve - 600 A



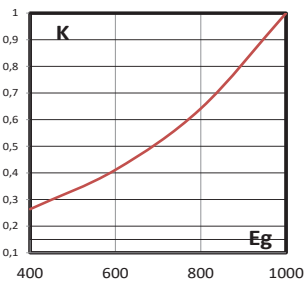
$K_b = 1$ $N = 1,6$

Peak let-through curve - 600 A



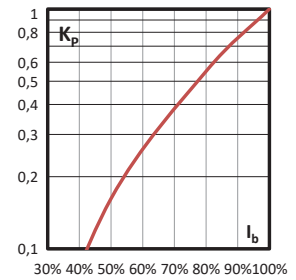
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