

Eaton high-power bolt-down fuses provide reliable overcurrent protection in industrial, energy storage, and transportation applications



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Product description

Eaton's BAT1 family bolt-down fuses are designed to provide reliable and efficient overcurrent protection in demanding high-power applications across industries, including industrial, energy storage, and transportation. These compact, high-performance fuses offer a wide range of current ratings from 30 A to 200 A, making them suitable for various high-power systems and devices.

Offering an interrupting capacity of 1000 A at 58 Vdc and 2000 A at 32 Vdc, the BAT1 family fuses have a bolt-down design that eases installation and maintenance, ensuring a secure connection within the application. The compact form factor helps conserve space on PCBs and within confined enclosures, making the fuses suitable for designers and engineers seeking to optimize their system layouts. Key applications for Eaton's BAT1 family fuses include industrial power tools, e-mobility (e.g., scooters), and energy storage systems.

Features and benefits

- Wide current rating range of 30 A to 200 A
- High breaking capacity of 1000 A at 58 Vdc and 2000 A at 32 Vdc
- Small-footprint bolt-down design with 30 mm spacing matching industry standard geometry
- UL certification to meet global safety standards and customer requirements
- Featuring a two-hole M5 tin-plated copper terminal bolt-in design allowing versatile mounting options and superior corrosion resistance
- Color coded based on amp
 rating
- Tested to ISO 8820-5

Recommended fuse holder

• HBAT1



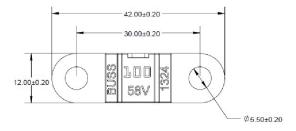
Product specifications

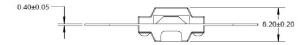
Part number	Rated voltage	Rated current (A)	Breaking capacity ^a	Typical cold resistance ^b (mOhms)	Voltage drop ^c (mV)	Typical pre-melting ^d I ² t (A ² sec)	Middle color code
BAT1-30-R	32 Vdc / 58 Vdc	30	2 kA @ 32 Vdc 1 kA @ 58 Vdc	2.30	105	5580	Orange
BAT1-40-R	32 Vdc / 58 Vdc	40	2 kA @ 32 Vdc 1 kA @ 58 Vdc	1.45	90	9440	Green
BAT1-50-R	32 Vdc / 58 Vdc	50	2 kA @ 32 Vdc 1 kA @ 58 Vdc	1.40	80	13750	Red
BAT1-60-R	32 Vdc / 58 Vdc	60	2 kA @ 32 Vdc 1 kA @ 58 Vdc	1.10	80	18000	Yellow
BAT1-70-R	32 Vdc / 58 Vdc	70	2 kA @ 32 Vdc 1 kA @ 58 Vdc	0.95	80	23520	Brown
BAT1-80-R	32 Vdc / 58 Vdc	80	2 kA @ 32 Vdc 1 kA @ 58 Vdc	0.85	75	29440	White
BAT1-100-R	32 Vdc / 58 Vdc	100	2 kA @ 32 Vdc 1 kA @ 58 Vdc	0.50	75	43000	Blue
BAT1-125-R	32 Vdc / 58 Vdc	125	2 kA @ 32 Vdc 1 kA @ 58 Vdc	0.45	75	64063	Pink
BAT1-150-R	32 Vdc / 58 Vdc	150	2 kA @ 32 Vdc 1 kA @ 58 Vdc	0.38	70	83250	Gray
BAT1-175-R	32 Vdc / 58 Vdc	175	2 kA @ 32 Vdc 1 kA @ 58 Vdc	0.33	70	101063	Tan
BAT1-200-R	32 Vdc / 58 Vdc	200	2 kA @ 32 Vdc 1 kA @ 58 Vdc	0.30	70	128000	Violet

a. UL certified

Dimensions - mm

Drawing not to scale





See data sheet for full specifications













b. Cold resistance is measured at <10% rated current at an ambient temperature of +25 $^{\circ}\text{C}$

C. Voltage drop measured at rated current and an ambient temperature of +25 $^{\circ}\text{C}$

d. Typical melting I^2t is measured at 10 ln