# AML

## Bolt-down EV fuse


### Product features

- Current rating: 350 A to 500 A
- 125 Vdc rating
- High breaking capacity for high energy applications
- Designed to JASO D622, ISO8820-8, GB/T31465
- Produced in a factory with ISO9001 & IATF16949 certification
- Bolt-down terminals
- Minimum breaking capacity 300% In at rated DC voltage
- Fuse accessories:

  BSCR-101: *(48.45 x 18.7 x 45.9 mm) fuse holder*

### Applications

- Automotive and commercial vehicle on-board chargers
- Uninterruptible power supplies (UPS)
- 3-phase EVSE and charging infrastructure
- Motor protection
- Rectifiers and inverters
- Energy storage systems
- On-board electric vehicle powertrain and distribution

### Agency information

cURus Recognition file number: E91958

### Environmental compliance

HALOGEN HF FREE · RoHS · Pb

### Ordering part number

**BK-AML-350**

- Packaging code
- Family code
- Rated current

### Packaging code

BK - 30 parts per tray
Blank -10 parts per box

## Electrical characteristics

| Amps (A) | Minimum (seconds) | Maximum (seconds) |
|---|---|---|
| 1.0 In | 14,400 | - |
| 3.0 In | - | 10 |

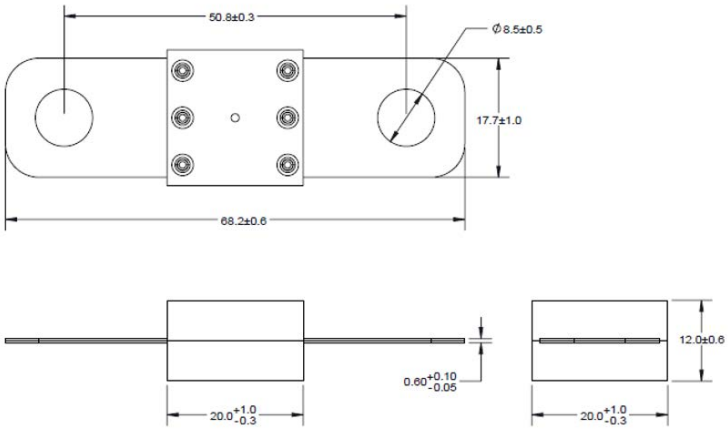
## Product specifications

| Part number | Rated voltage | Rated current (A) | Breaking capacity | Typical cold resistance[1] (mΩ) | Typical voltage drop (mV) |
|---|---|---|---|---|---|
| AML-350 | 125 Vdc | 350 | 125 Vdc/20 kA | 0.137 | 92 |
| AML-400 | 125 Vdc | 400 | 125 Vdc/20 kA | 0.120 | 93 |
| AML-500 | 125 Vdc | 500 | 125 Vdc/20 kA | 0.102 | 106 |

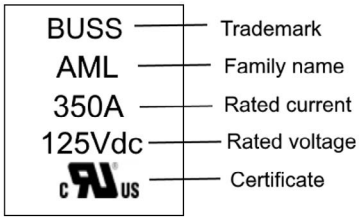
1. Cold resistance is measured at <10% In and +25 °C ambient temperature

## Dimensions- mm

Tolerances unless otherwise specified
One place x.x = ± 0.3 mm
Two place x.xx = ± 0.13 mm




**Part marking**




Note: recommended tightening torque is 11 - 13 Nm for M8 Screw

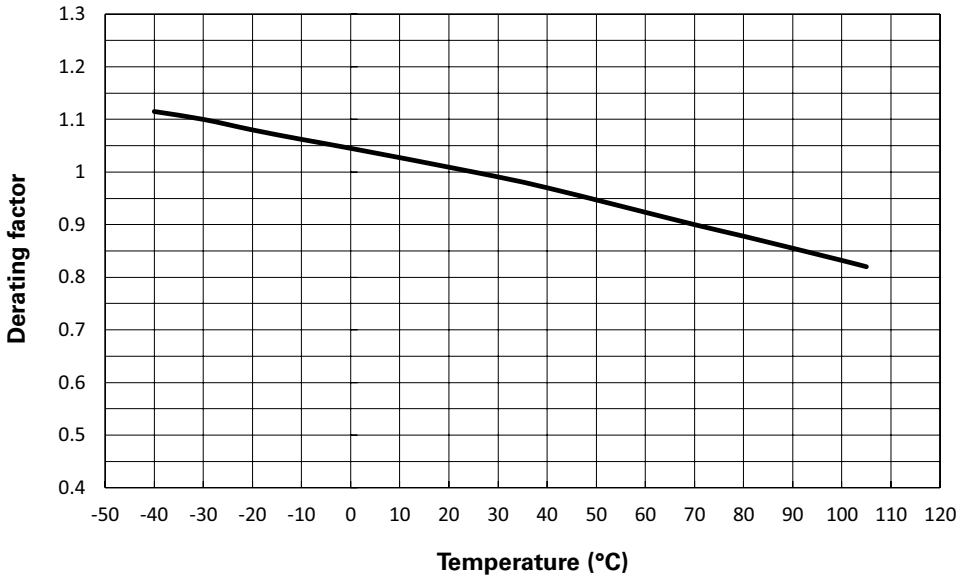
## General specifications

| |
|---|
| Operating temperature: -40 °C to +105 °C with proper derating factor applied |
| Strength of terminals: JASO D622 6.3.9, mounting torque 12 +/-1 Nm, 3 times |
| Temperature humidity cycling: JASO D622 6.3.4.1,<br>a) maintain the samples at standard conditions for 4 hours<br>b) increase T to 55 +/-2 °C at 95% to 99% RH within 0.5 hours<br>c) maintain T at 55 +/-2 °C at 95% to 99% RH for 10 hours<br>d) decrease T to -40 +/-2 °C within 2.5 hours; the humidity is uncontrolled<br>e) maintain T at -40 +/-2 °C for 2 hours; the humidity is uncontrolled<br>f) increase T to 120 +/-2 °C within 1.5 hours from -40 +/-2 °C; the humidity is uncontrolled<br>g) maintain T at 120 +/-2 °C for 2 hours; the humidity is uncontrolled<br>h) allow to return to RT within 1.5 hours; the humidity is uncontrolled 10 cycles. |
| Thermal shock: ISO8820-8 GB/T31465.6, 200 cycles; -40 °C to 120 °C, each cycle 60 minutes |
| Vibration: JASO D622 6.3.3, 10-55 Hz, 3 directions, 2 hours each direction |
| Transient current cycling: JASO D622 6.3.2 (reference), The transient current start from 2.0 In for 0.25 seconds, then drop to 0.5 In and keep this current to 15 seconds to finish one cycle, total 50000 cycles |
| Lubricant & fuel oil resistance: GB/T31465.1-5.4, Wipe the marking with lubricant or oil 30 seconds |

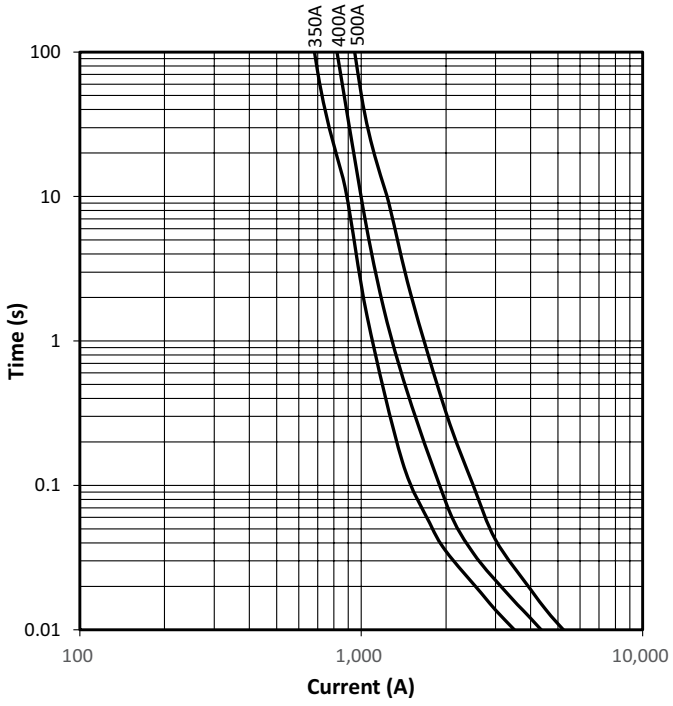
## Packaging information

| Terminals | Inner package | Ship package |
|---|---|---|
| BK | 30 pieces/tray | 300 pieces/box |
| Blank | 10 pieces/box | 140 pieces/box |

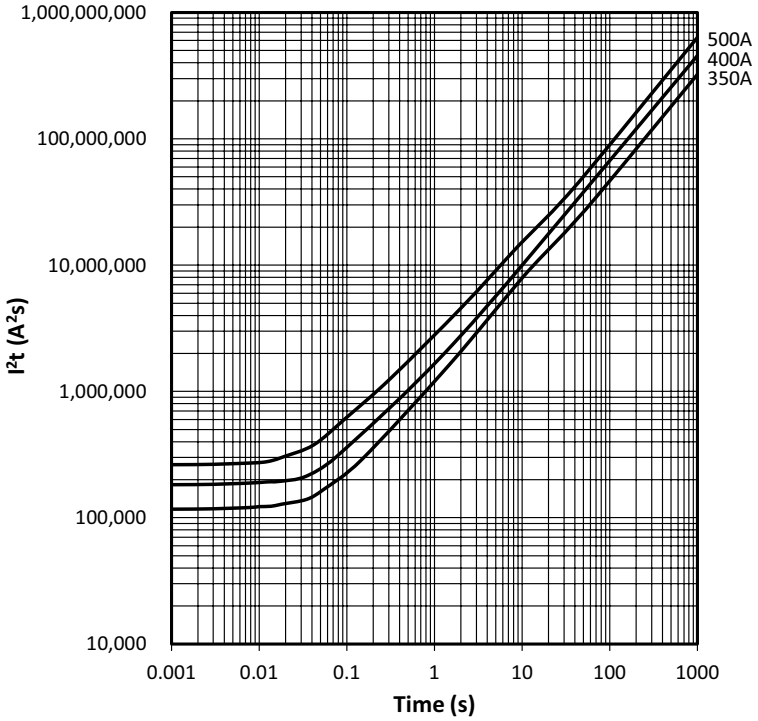
**Temperature derating curve**



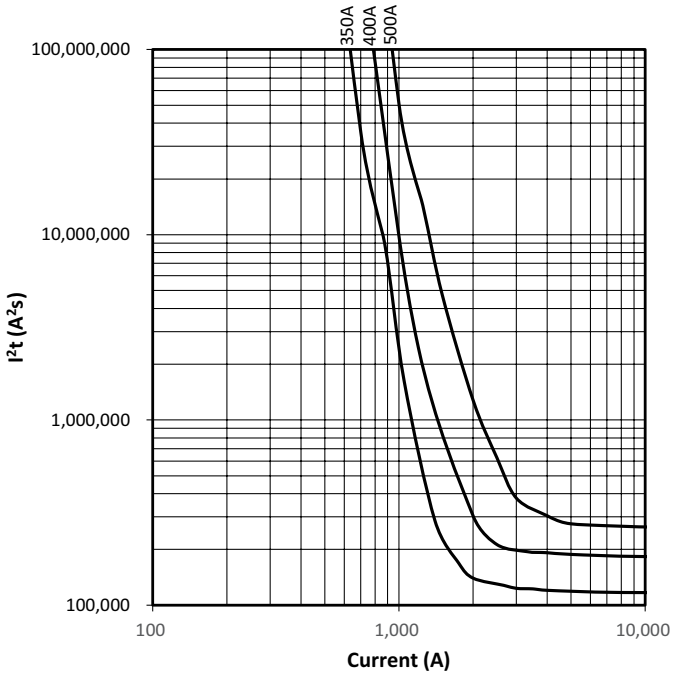

**Current vs. time curve**




**I²T vs. time curve**



### $I^2t$ vs. current curve

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