Technical Data ELX1307



# **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



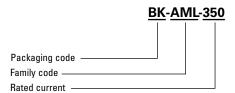
#### **Environmental compliance**







## Ordering part number



#### Packaging code

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



## **Electrical characteristics**

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

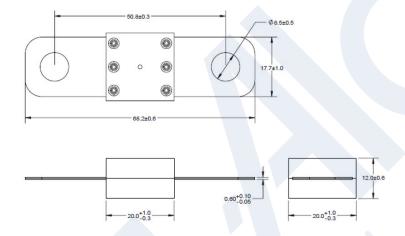
## **Product specifications**

Part number	Rated voltage	Rated current (A)	Breaking capacity	Typical cold resistance $^1$ (m $\Omega$ )	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

<sup>1.</sup> Cold resistance is measured at <10% In and +25  $^{\circ}\text{C}$  ambient temperature

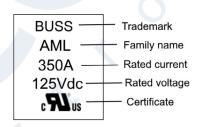
#### **Dimensions- mm**

Tolerances unless otherwise specified One place  $x.x = \pm 0.3$  mm Two place  $x.xx = \pm 0.13$  mm



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

# Part marking



## **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,
  a) maintain the samples at standard conditions for 4 hours
  b) increase T to 55 +/-2 °C at 95% to 99% RH within 0.5 hours
  c) maintain T at 55 +/-2 °C at 95% to 99% RH for 10 hours
  d) decrease T to -40 +/-2 °C within 2.5 hours; the humidity is uncontrolled
  e) maintain T at -40 +/-2 °C for 2 hours; the humidity is uncontrolled
  f) increase T to 120 +/-2 °C within 1.5 hours from -40 +/-2 °C; the humidity is uncontrolled
  g) maintain T at 120 +/-2 °C for 2 hours; the humidity is uncontrolled
  h) allow to return to RT within 1.5 hours; the humidity is uncontrolled
- 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

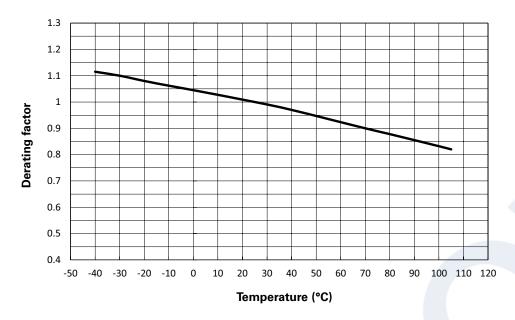
Transient current cycling: JASO D622 6.3.2 (reference), The transient current start from 2.0 In for 0.25 seconds, then drop to 0.5 In and keep this current to 15 seconds to finish one cycle, total 50000 cycles

Lubricant & fuel oil resistance: GB/T31465.1-5.4, Wipe the marking with lubricant or oil 30 seconds

## **Packaging information**

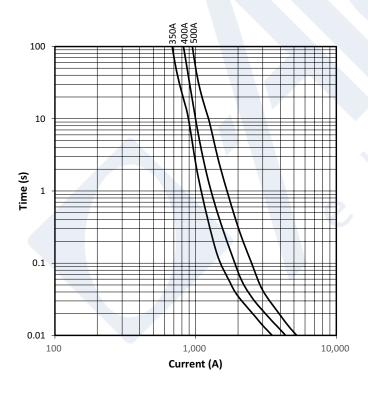
Terminals	Inner package	Ship package	
BK	30 pieces/tray	300 pieces/box	
Blank	10 pieces/box	140 pieces/box	

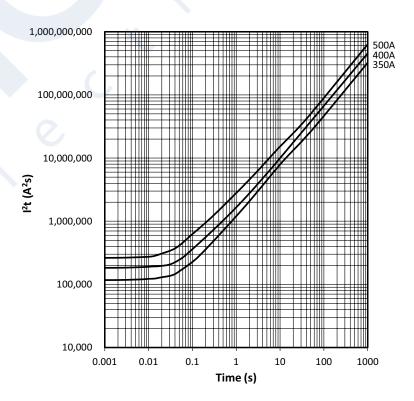
# Temperature derating curve



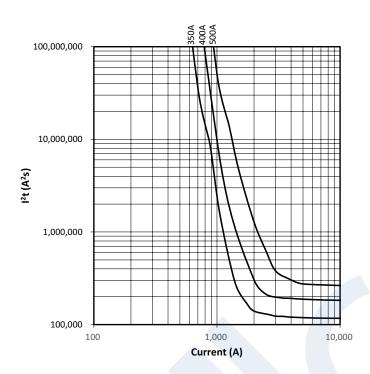
#### Current vs. time curve

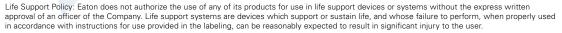
I<sup>2</sup>T vs. time curve





#### l2t vs. current curve





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