### BUSSMANN SERIES

# AMX/AMXL Automotive bolt in fuse



#### **Product features**

- · Small size for high current applications
- 63 Vdc/100 Vdc/125 Vdc Voltage rating
- · Ceramic body with bolt in terminal design
- · UL recognized

#### **Applications**

- · Mild hybrid automotive
- · Vehicle power distribution
- · Material handling systems
- · All supercapacitor and battery systems
- · High current wire protection

#### **Agency information**

• cURus recognized file: E91958, guide JFHR2 and JFHR8



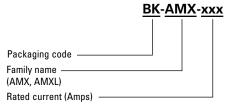
#### **Environmental compliance**







#### Ordering part number



#### Packaging code

BK - 50 parts per tray

Blank - 1 part per polybag, 10 parts per inner box



#### **Electrical characteristics**

Amp rating 1.0 In		3.0 In	
80 - 350	4 hours minimum	< 10 seconds	

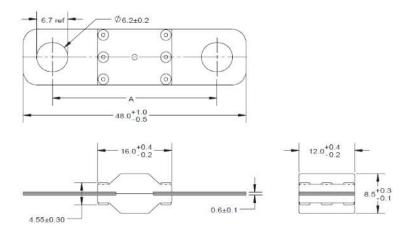
#### **Product specifications**

Part number	Rated current (A)	Voltage rating (Vdc)	Breaking capacity <sup>1</sup>	Typical cold resistance (mOhms) <sup>2</sup>
AMX(L)-80	80	63/100/125	8 kA @ 63 Vdc* 6 KA @ 100 Vdc* 3 kA @ 125 Vdc	0.51
AMX(L)-100	100	63/100/125	8 kA @ 63 Vdc* 6 KA @ 100 Vdc* 3 kA @ 125 Vdc	0.43
AMX(L)-150	150	63/100/125	8 kA @ 63 Vdc* 6 KA @ 100 Vdc* 3 kA @ 125 Vdc	0.33
AMX(L)-200	200	63/100/125	8 kA @ 63 Vdc* 6 KA @ 100 Vdc* 3 kA @ 125 Vdc	0.24
AMX(L)-250	250	63/100/125	8 kA @ 63 Vdc* 6 KA @ 100 Vdc* 3 kA @ 125 Vdc	0.19
AMX(L)-300	300	63/100/125	8 kA @ 63 Vdc* 6 KA @ 100 Vdc* 3 kA @ 125 Vdc	0.16
AMX(L)-350	350	63/100/125	3 kA @ 125 Vdc	0.13

<sup>1. \*=</sup>Self-certified for 63 Vdc/8 kA and 100 Vdc/6 kA Breaking Capacity, TC < 1.5 ms

#### Dimensions- mm

Drawing not to scale



Part number	Dimension A (mm)	
AMX-XXX	30.0 +/- 0.3	
AMXL-XXX	35.5 +/- 0.3	

Recommended torque: M6: 5-5.5N·m M5: 3.5-4N·m

<sup>2.</sup> Cold resistance is measured at <10% rated current

#### Marking detail

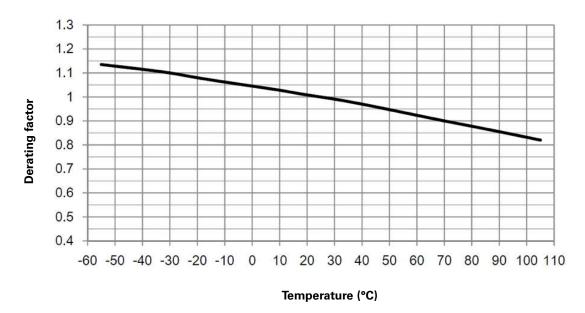


Part number	Marking on body
AMX-80	BUSS cURus AMX-80 125 Vdc
AMX-100	BUSS cURus AMX-100 125 Vdc
AMX-150	BUSS cURus AMX-150 125 Vdc
AMX-200	BUSS cURus AMX-200 125 Vdc
AMX-250	BUSS cURus AMX-250 125 Vdc
AMX-300	BUSS cURus AMX-300 125 Vdc
AMX-350	BUSS cURus AMX-350 125 Vdc
AMXL-80	BUSS cURus AMXL-80 125 Vdc
AMXL-100	BUSS cURus AMXL-100 125 Vdc
AMXL-150	BUSS cURus AMXL-150 125 Vdc
AMXL-200	BUSS cURus AMXL-200 125 Vdc
AMXL-250	BUSS cURus AMXL-250 125 Vdc
AMXL-300	BUSS cURus AMXL-300 125 Vdc
AMXL-350	BUSS cURus AMXL-350 125 Vdc

#### **General specifications**

Item	Standard/Specification	Conditions	Acceptable value/range
Operating temperature		-40 °C to +105 °C with proper derating	
Strength of terminals	JASO D622 ISO8820-8	M6: 5-5.5N·m; M5: 3.5-4N·m	
Temperature rise	JASO D622 IS08820-8	0.5 ln, 40 min	not exceed 50 K, electrical performance within spec
Temperature humidity cycling	JASO D622 IS08820-8	a) maintain the samples at standard conditions for 4 h; b) increase T to 55+/-2 °C at 95% to 99% RH within 0.5 h; c) maintain T at 55+/-2 °C at 95% to 99% RH for 10 h; d) decrease T to -40+/-2 °C within 2.5 h; the humidity is uncontrolled; e) maintain T at -40+/-2 °C for 2 h; the humidity is uncontrolled; f) increase T to 120+/-2 °C within 1.5 h from -40+/-2 °C; the humidity is uncontrolled; g) maintain T at 120+/-2 °C for 2 h; the humidity is uncontrolled; h) allow to return to RT within 1.5 h; the humidity is uncontrolled; 10 cycles.	Resistance change <10% electrical performance within spec
Thermal shock	JASO D622 ISO8820-8 (reference)	a) -40+/-2 °C, 20 min; b) 15 sec dwell time; c) 125+/-2 °C, 20 min; d) 15 sec dwell time; 48 cycles.	Resistance change <10%, electrical performance within spec
Vibration	UL248-20 IEC 60068-2-64	Random vibration. Condition C: rms 30.2 m/s2, 3 directions, 8 hrs each.	Resistance change <10%, electrical performance within spec
Transient current cycling	JASO D622 IS08820-8 (reference)	23+/-5 °C, each cycle current 2 In/0.25 sec, 0.5 In/5 sec, 50000 cycles.	Resistance change <10%, electrical performance within spec
Lubricant & fuel oil resistance	GB/T31465.1-5.4	Wipe the marking with lubricant or oil 30 s	Marking can be identified
Breaking capacity		Follow the spec	IR > 0.1 Mohm, no explosion

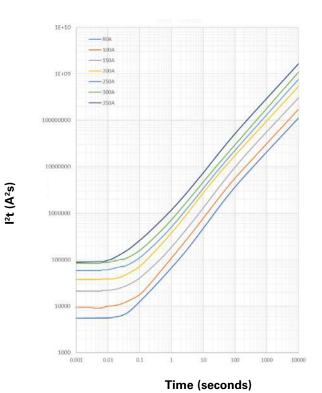
#### Temperature derating curve



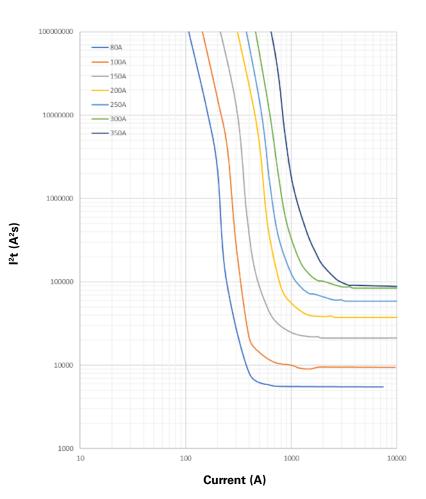
#### Current vs. time curve

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



#### l²t vs. current curve



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Eaton Electronics Division 1000 Eaton Boulevard Cleveland, OH 44122

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