

Installation Instructions



LT-AXM-II-01

WARNING! Install all equipment in accordance with the National Electric Code and in a manner acceptable to the local authority having jurisdiction. Read these instructions and the AXM Installation & Operations Guide carefully before installing equipment. Failure to follow all instructions may result in equipment damage or a hazardous condition.

ATTENTION! Installez tout le matériel en conformité avec le Code national de l'électricité et d'une manière acceptable pour l'autorité locale compétente. Lisez ces instructions et le guide d'installation et fonctionnement de l'AXM avant l'installation du matériel. Le non respect des instructions peut entraîner des dommages matériels ou une situation dangereuse.

Overview

Control the AXM with a VLX or ACM with a Dual Port EIA-485 Option Card. AXMs can be combined with EXPs.

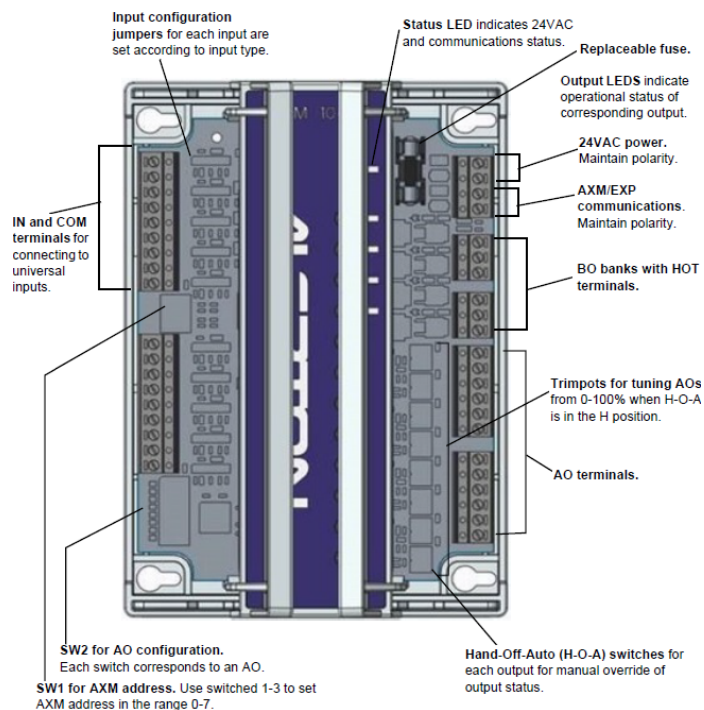


Fig. 1 Typical AXM (I/O expansion module), AXM-1048 shown.

- ◆ Mount the AXM in a clean, dry, indoor location, out of direct sunlight, and avoid excessive vibration and electrical noise.
- ◆ Keep temp. between 32 deg. F–131 deg. F (0 deg. C–55 deg. C) and relative humidity between 0-95%, non-condensing.
- ◆ The AXM, VLX and ACM can be mounted in separate enclosures if the enclosures are immediately adjacent and the AXM communications bus runs in conduit that does not contain any high-voltage wiring.
- ◆ Mount the AXM in any vertical or horizontal orientation.
- ◆ Use single-point grounding and separate 24 VAC power for the BO loads to help ensure proper grounding.

- ◆ Properly ground the panel, then terminate grounded components of power, communications, and I/O wiring.

Power

Each AXM requires a 24 VAC, 50-60Hz, 20 VA minimum power supply. Use a UL Listed transformer. VLXs, AXMs and EXPs are half-wave devices so they may share an appropriately sized transformer. Use a separate transformer to power AXM and EXP BOs. AXM and EXP power consumption ranges from 10 VA to 20 VA, depending on the number and type of input devices connected.

WARNING! The ACM is a full-wave device. All full-wave devices must have a dedicated transformer.

WARNING! Half-wave and full-wave devices cannot share a transformer or equipment damage will occur. If a VLX shares a transformer with other devices, ensure all devices use a half-wave rectifier.

WARNING! Do not share VLX/ACM/AXM/EXP power with any VLC. VLCs require an independent 24 VAC power source.

WARNING! Do not connect 24 VAC terminals to ground or equipment damage will occur. Maintain polarity of the power connection among all devices sharing power.

Communications

AXMs communicate over a simple, twisted-pair communications bus. Up to eight AXMs can connect to a single global controller in a multi-drop configuration.

Universal inputs

Configure UIs to accept resistance (10K Ohm or 3K Ohm thermistors or potentiometers), voltage (0-10VDC, 0-5VDC), current (4-20mA), dry contact, solid-state switch (transistor), or pulse-type inputs (IN-1, IN-2, and IN-3 only).

Outputs

Analog outputs support 4-20mA or 0-10VDC outputs. Binary outputs; rated for 12VA (24VAC @ 0.5A). 20VDC terminals can provide a power source up to 250mA total.

Installation

- ◆ Mount the AXM on an EN50022 standard 7.5mm x 35mm DIN rail or panel mount.

For DIN rail Mounting:

- Holding the AXM with its top tilted in toward the DIN rail, hook the two retaining tabs on the back of the AXM onto the top of the DIN rail.
- Push down and in to latch the two bottom latching tabs of the AXM onto the DIN rail

—OR—

For Panel Mounting:

NOTE: The panel housing the AXM requires a ground bus that connects to a suitable known ground. Ground the panel bus by directly connecting to the closest point in the building's electrical service grounding electrode system.

- Open the AXM cover.
- Use the mounting holes in the back cover to attach it to the panel with appropriate fasteners (not included). See Fig. 2.

- **To connect the AXM to a global controller:**

- 1 Remove power from the VLX/ACM/AXM.
- 2 Connect AXM communications. Maintain polarity.
- 3 Connect power to the VLX/ACM/AXM.

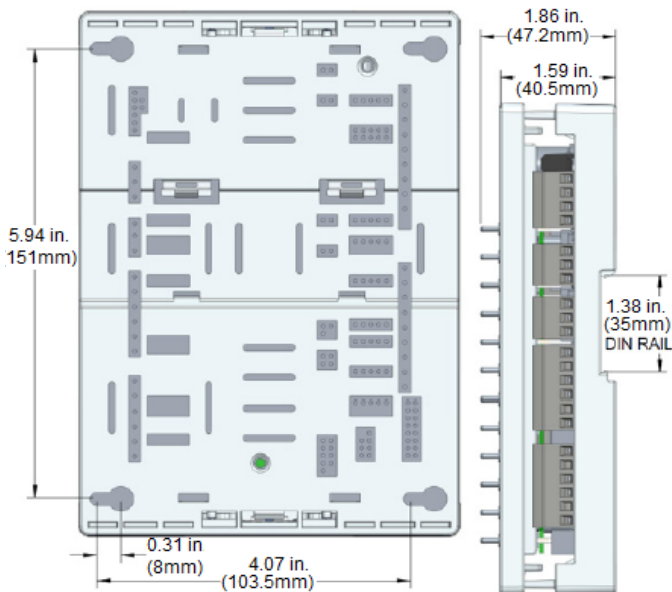


Fig. 2 AXM controller dimensions in inches (mm).

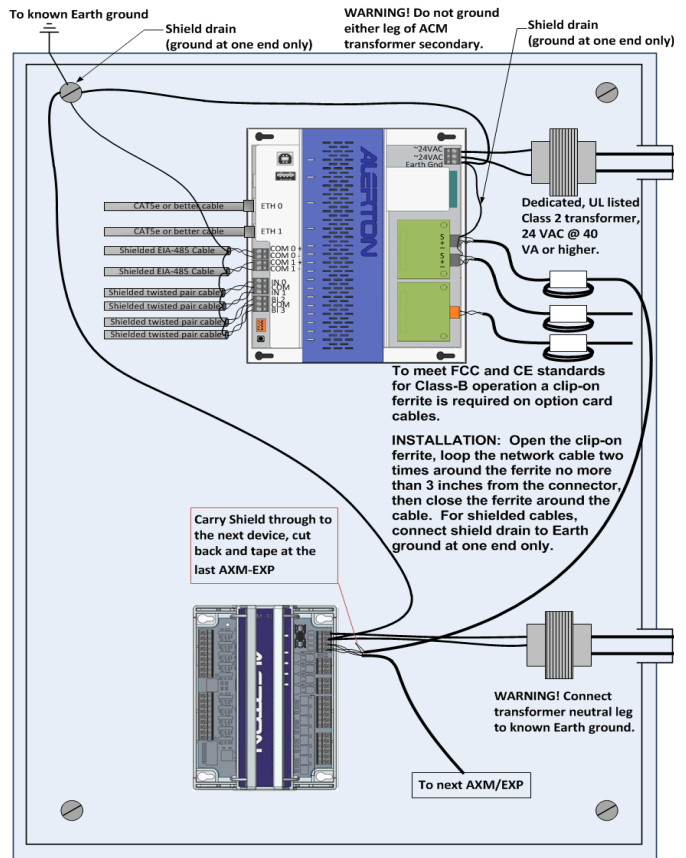
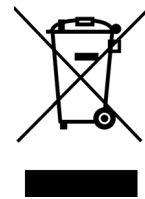


Fig. 3 Typical power connections for ACM and AXM. For AXM BO power see Fig. 4.

Disposal



WEEE Directive 2012/19/EC Waste Electrical and Electronic Equipment directive

The product should not be disposed of with other household waste. Check for the nearest authorized collection centers or authorized recyclers. The correct disposal of end-of-life equipment will help prevent potential negative consequences for the environment and human health. Do not burn this device.

Electrostatic sensitivity



The AXM and its components may be susceptible to electrostatic discharge (ESD). Use appropriate ESD grounding techniques while handling the product. When possible, always handle the product by its non-electrical components.

Fig. 4 Typical power and BO connections for VLX and AXMs.

