

AXM DATA SHEET

EXPANSION MODULES (AXMS) PROVIDE I/O CAPABILITY FOR THE ASCENT ACM.

The versatile ACM/AXM configuration is the ideal choice for applications that put a premium on versatility, reliability, and performance—large air handling units, central plant systems, motor control centers, and other applications with numerous, interdependent control points.

AXMs connect to the ACM over a simple, twisted-pair, multi-drop AXM communications bus. The ACM supervises automation locally and provides connection to a BACnet internetwork. Combine a maximum of 8 AXMs per ACM for the I/O count your application requires.

Each AXM output has a Hand-Off-Auto (H-O-A) switch for manual override at the controller. Analog outputs also include a potentiometer to manually adjust the output when the switch is in Hand mode.

AXMs feature a high-speed microprocessor with flash memory for non-volatile program storage. The 12-bit universal inputs are software configurable to accept virtually any input type. CMOS circuitry, a four-layer circuit board with separate ground plane, and extensive hardware, software, and power-supply filtering ensure reliable and stable operation. The CMOS processor uses an internal watchdog, and power supply voltage is monitored to provide automatic shutdown and data backup.

	Universal Inputs	Binary Outputs	Analog Outputs
AXM-10-12-0	10	12	0
AXM-10-4-8	10	4	8
AXM-22-0-0	22	0	0

FEATURES

Scalable

Combine up to 8 AXM modules with a single ACM to create versatile control solutions.

Versatile

Onboard Hand-Off-Auto (H-O-A) switches and potentiometers enable manual override of outputs. Binary triac outputs and analog outputs are designed for complex applications.

Accurate

12-bit universal inputs accept a variety of industry-standard inputs, enabling wide application flexibility.



Technical Data

Power - Unit requires 24 VAC, 50-60 Hz, 20 VA minimum. Half-wave rectified. Output loads powered separately.

Inputs - Jumper-selectable, 12-bit universal inputs accept thermistor, dry contact, 0-5VDC, 4-20 mA, or 0-10 VDC signals. Inputs 1, 2, and 3 support pulsed inputs with 10 msec minimum pulse length. No external resistor is required for 4-20 mA.

Binary Outputs - Binary outputs rated 24 VAC @ 0.5 A with Hand-Off-Auto (H-O-A) switches for manual override. H-O-A status can be monitored in software. Power source isolated from AXM power.

Analog Outputs - Analog outputs are driven by precision D/A converter. DIP-switch configurable to provide 0-10 VDC or 0-20 mA. Each analog output has an H-O-A switch and potentiometer for manual override. H-O-A and potentiometer status can be monitored in software.

Max Dimensions - 6.95" (176.5 mm) H X 4.95" (125.7 mm) W X 1.6" (40.5 mm) D.

Terminations - Removable header-type screw terminals simplify field wiring

Environmental - 32-131°F (0-55°C). 0-95% RH, non-condensing

Communications - Twisted-pair, multi-drop AXM communications bus to ACM base unit.

Ratings

- Listed Underwriters Laboratory for Energy Management Equipment (PAZX) under the UL Standard for Safety 916. Listing includes both U.S. and Canadian certification.
- EN 60730-1 (European CE Mark).
- ICES-003 Issue 6.
- FCC Part 15, Subpart B, Section 15.107 & 15.109, Class B.



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Ordering Information

Item Number	Description
AXM-10-12-0	I/O expansion module with 10 inputs and 12 binary outputs
AXM-10-4-8	I/O expansion module with 10 inputs, 4 binary outputs, and 8 analog outputs
AXM-22-0-0	I/O expansion module with 22 inputs