

ALM2 Alarm Module

Self-Contained Interoperable Controller Model UCP-1

SUPERSEDES: November 12, 2010

EFFECTIVE: June 11, 2012

Job: _____ Engineer: _____
Contractor: _____ Rep: _____
Date: _____ Tag/Item #: _____

ALM2

The iWorx[®] ALM2 alarm module is a stand-alone microprocessor based controller for alarm generation. The application is for heating, ventilating, and air conditioning (HVAC) equipment.

Overview

The ALM2 provides alarm detection and reporting by monitoring up to eight inputs. Each input can be configured to support a temperature reading using a thermistor or a dry contact reading.

Each alarm event detected is reported to the network. Digital outputs are provided to drive external alarm indication such as lamps or buzzers.

The controller is based on the LONWORKS[®] networking technology. The controller can be networked to a higher-level control system for monitoring and control applications.

Features

- Temperature based alarms
- Digital based alarms using dry contacts
- Alarm-controlled triac outputs
- LONWORKS interface to building automation systems.
- Automatic configuration with the iWorx[®] Local Control Interface (LCI)

SPECIFICATIONS

Electrical

Inputs

- Cabling: twisted shielded pair, 18 AWG recommended—500 feet max. (152 meters)
- Resolution: 10 bit

Thermistor Inputs

- Precon Type III 10K thermistor

Switch Inputs

- Dry Contact
- Normally closed or normally open
- 5 Volts DC Max

Outputs

- 24 Volts AC
- 1 Amp @ 50C, 0.5 Amp @ 60C, limited by the Class 2 supply rating

Power

Power Requirements

- 24VAC (20VAC to 28VAC), requires an external Class 2 supply

Power Consumption

- 7.2W with no external loads, maximum limited by the Class 2 supply rating

Recommended Sensor Wire

Cable Type	Pairs	Details	Taco Catalog No.
18AWG	1	Stranded Twisted Shielded Pair, Plenum	WIR-018

FTT-10A Network

- Speed: 78KBPS
- Cabling: Maximum node-to-node distance: 1312 feet (400 meters)
- Maximum total distance: 1640 feet (500 meters)

Cable Type	Pairs	Details	Taco Catalog No.
Level 4 22AWG (0.65mm)	1	Unshielded, Plenum, U.L. Type CMP	WIR-022

For detailed specifications, refer to the *FTT-10A Free-Topology Transceiver User's Guide* published by Echelon Corporation (www.echelon.com/support/documentation/manuals/transceivers).

Mechanical**Housing**

- Dimensions: 5.55" (141mm) high, 6.54" (166 mm) wide, 1.75" deep (44 mm)
- ABS

Weight

- Controller Weight: 0.70 pounds (0.32 kilograms)
- Shipping Weight: 1.0 pounds (0.46 kilograms)

Electronics

- Processor: 3150 Neuron 10 MHz
- Flash: 48 Kilobytes
- SRAM: 8 Kilobytes
- Termination: 0.197" (5.0 mm) Pluggable Terminal Blocks, 14-22 AWG

Environmental

- Temperature: 32 °F to 140 °F (0 °C to 60 °C)
- Humidity: 0 to 90%, non-condensing

Agency Listings

- UL Listed for US and Canada, Energy Management Equipment PAZX and PAZX7.

Agency Compliances

- FCC Part 15 Class A

CONTROLS MADE EASY®

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