Datasheet

Pre-Wired Prolon M2000 MUA Controller Panel
(PL-PN1-M2-MUA)

Description

The Prolon M2000 MUA Panel is built with the PL-M2000-MUA Make-Up Air Unit controller into a single pre-wired industrial control panel ready for quick deployment; It is an ideal starting point for each system within a Prolon network. The panel's compact design allows for multiple panels to be installed in your workspace and leaves your job with a clean, professional appearance. Save time with a complete unit solution that includes Isolation relays on all digital outputs, overcurrent fuse protection, and wire management channels inside the panel. This panel also includes ON/OFF/AUTO selector switch, LED indicator lights for Fan Operation and Lockout Mode mounted on panel door, and a Lockout Mode reset pushbutton. Clearly marked terminal blocks allow for easy wiring to equipment and connection to other Prolon panels and controllers and UL listing gives you and your customer peace of mind.

Features

- Pre-wired industrial control panel equipped with clearly marked terminal blocks and fuses

- ON/OFF/AUTO selector switch and Lockout Mode reset pushbutton mounted on panel door

- LED indicator lights for Fan Operation and Lockout Mode mounted on panel door

- Remote monitoring and configuration with FREE Prolon Focus software

- Stand-alone or networked (up to 127 nodes)

- Proportional integral (PI) control loops maximize performance

- 5 digital outputs and 3 analog outputs equipped with resettable fuses and Hand/Off/Auto switches

- Built-in real time clock can run standalone schedule up to 4 periods per day, 7 days per week, plus holiday calendar. Clock stays accurate for up to 10 days without power

- Highly customizable M2000 control sequences with protective limits, delays, and interlocks.

- All digital outputs are isolated with relays that are built into the panel

- Onboard LEDs allows for quick diagnostics of power, communication, and operation

Technical Specifications

- **Supply**: 24 VAC ±10%, 50/60 Hz, Class 2

- **Power**: 5 VA (consumption), 40 VA (input)

- **Overcurrent Protection**: Disconnect-Style Slo-Blo fuse (3A @ 250 VAC), with additional replacement fuse included

- **Inputs**: 9 analog inputs configurable (thermistor / dry contact / 4-20mA / 0-5 VDC / 1-5 VDC) individually configurable for each input

- **Digital Outputs**: 5 triac outputs, 24 VAC source, 300 mA max (resettable fuse). All digital outputs are isolated by relays in panel

- **Analog Output**: 3 outputs 0-10 VDC / 2-10 VDC / 0-5 VDC / 1-5 VDC, 40 mA max (resettable fuse)

- **Indication lights (LED)**: State of each output / Communication / Power / State of microprocessor

- **Casing**: Molded ABS, UL94-HB

- **Communication**: Modbus RTU (RS485) up to 127 nodes

- **Baud Rates**: 9600, 19200, 38400, 57600, 76800, 115200

- **Connection**: Removable screw-type terminal blocks (max 16 AWG) and RJ45 modular jacks

- **Dimensions**: 20.25" x 16.25" x 6.25" (514mm x 413mm x 159mm)

- **Weight**: 18.8 lbs (8.53 kg)

- **Environment**: -4 to 122 ºF (-20 to 50 ºC) non-Condensing

- **Certification**: UL916 Energy Management Equipment, CAN/CSA-C22.2, RoHS, FCC part 15: 2012 class B