



Datasheet

Hydronic Controller (PL-M2000-HYD)

Description

The M2000 HYD hydronic controller is designed to control a variety of different water-to-water heatpumps and hydronic systems. The on-board microcontroller offers precise digital control to maximize performance. The available control sequences are fully configurable, either locally or remotely, using free software. The M2000 HYD offers a variety of hydronic sequences such as hot and cold tank, dual recovery system, single hot tank with open or closed boiler loop, dual energy boilers and more.

Features

- Lead-lag sequences for the compressors
- Outdoor temperature reset for the tank setpoints
- Configurable heat/cool priority modes
- Setpoints can be offset by network provided demands
- Built-in auxiliary heat sequences
- Internal clock with configurable schedules and calendars
- A manual/off/auto switch for each of the eight outputs
- Remote monitoring and configuration with FREE ProLon Focus software
- Stand-alone or networked (up to 127 nodes)
- 5 digital outputs and 3 analog outputs equipped with resettable fuses
- Built-in protection sequences with configurable temperature limits and minimum delays

Technical Specifications

Supply: 24 VAC $\pm 10\%$, 50/60 Hz, Class 2

Power: 5 VA (consumption), 40 VA (Input)

Inputs: 9 configurable analog inputs whose roles vary according to the selected sequence. Input signals (thermistor / dry contact / 4-20mA / 0-5 VDC) individually configurable for each input

Digital Outputs: 5 triac outputs, 10-30 VAC source, 300 mA max (resettable fuse)

Analog Outputs: 3 x 0-10 VDC outputs, 40 mA max (resettable fuse)

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

Microprocessor: PIC18F6722, 8 bits, 40 MHz, 128Ko FLASH memory

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 (16 AWG max) and RJ45 modular jacks.

Dimensions: 5.39" x 4.41" (137 mm x 112 mm)

Environment: 32-122 °F (0-50 °C) Non-Condensing

Certification: UL916 Energy Management Equipment, CAN/CSA-C22.2, RoHS