



Datasheet

Water Loop Controller (PL-C1000-WLC)

Description

The ProLon C1000 WLC water loop controller is designed to control a water loop system comprised of a boiler and a water tower with an internal pump. The built-in microprocessor offers precise digital control to maximize performance. The available control sequences are fully configurable, either locally or remotely with free software. The C1000 offers a variety of functions such as bypass valve control, cooling tower damper control and more.

Features

- Controls a boiler and water tower with internal pump based on supply temperature
- Bypass valve controlled by return temperature
- Up to 2 water tower (cooling) stages, one of which can be modulating
- Water tower damper sequence also available
- Stand-alone or networked (up to 127 nodes)
- Remote configuration and visualization with FREE ProLon Focus software
- 4 digital outputs and 1 analog output equipped with resettable fuses

Technical Specifications

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

Power: 2 VA (consumption), 5 VA (input)

Inputs: Supply water temp – thermistor 10K
Return water temp – thermistor 10K
Auxiliary temp – thermistor 10K
Auxiliary digital input – dry contact

Digital outputs: 4 triac outputs, 10-30 VAC source or dry contact, 300 mA max (resettable fuse)

Analog output: 1 output 0-10 VDC, 40 mA max (resettable fuse)

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

Microprocessor: PIC18F6722, 8 bits, 40 MHz, 128KB 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 (max 16 AWG) and RJ45 modular jacks

Dimensions: 6.5" x 5.3" (165 mm x 135 mm)

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

Certification: RoHS, FCC part 15: 2012 class B