PR **5**LON

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 ±10%, 50/60 Hz

Consumption: 2 VA (typ), 5 VA (max)

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

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

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

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

<u>Microprocessor</u>: PIC18F6722, 8 bits, 40 MHz, 128KB FLASH memory

Communication: Modbus RTU (RS485), up to 127 nodes

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

<u>Wiring</u>: Removable screw-type terminal blocks (max 16 AWG) and RJ45 modular jacks

Dimensions: 157 mm x 133 mm (6.2" x 5.2")

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