



DESCRIPTION

Hydro line I-ZC-8 Intelligent Heating & Cooling Zone Controller – Modbus RTU Open Protocol

- A Single Heating & Cooling Controller
- Multiple Controllers – 128 Devices Per Network
- Modbus RTU communication for BMS & remote access
- Humidity Sensing for Dew Point Control on Cooling
- 2 Wire Sensor Bus and 4 wire Modbus Network Bus

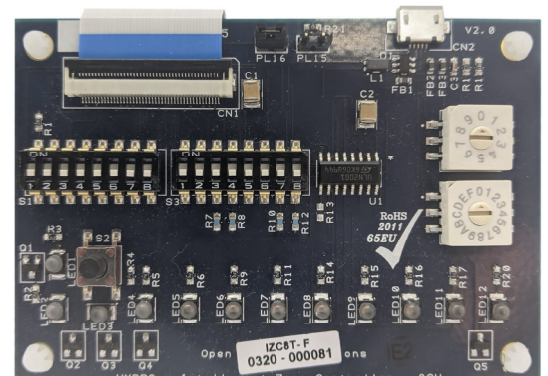
The underfloor heating controller has the following:

- 8 x 230vAC Outputs (Channel 1 – Channel 8) shown as Red LEDs on the front cover. Red LED ON = Demand for heat.
- 1 x Green LED that indicates 230vAC Power supply to the controller. Green flashing LED = OK.
- 1 x Green LED that indicates the on board relay for the Boiler /HIU output is ON – This output is volt free.
- 1 x Green LED that indicates the on board relay for the Pump Output is ON – This is a 230vL & N Output to the pump.
- 1 x Green LED that indicates the Output for the ‘A’ Auxiliary Relay is ON –See opposite.

There is a Separate Output that is a configurable relay via a row of DIP switches. This relay can operate if Cooling mode is selected or High Supply water temperature is detected – via the application /supply water sensor.

The terminals on the outputs to the thermal heads are double stacked so that a maximum of 4 thermal actuator heads can be connected to 1 Zone. (Max thermal heads per controller 14)

Top PCB Board





open system solutions

Hydro line I-ZC-8 Zone Controller



SPECIFICATIONS

Power supply	230V AC +10/-15% 50Hz	
Analog inputs	2x Thermistor input – 10K3A1 – Supply Temp & App Sensor	
Digital inputs	2x dry contact input – Night Setback & Heating/Cooling	
Analog outputs	NONE	
Digital outputs	Boiler relay-volt free	Max 4A Resistive
	Aux relay-volt free	Max 4A Resistive
	Pump relay output Actuator channel outputs	230V AC Max 4A 230V AC Max 1A
	Max total load for actuator channels combined – 1A	
Interface	RS485, Modbus up to 128 devices on the bus	
Address	Set by rotary switch in range from 1 to 159	
Baudrate	Set by software in range from 2400 to 38400bps	
Ingress protection rating	IP20 for indoor installation	
Temperature	Operating: -10°C to +60°C Storage: -25°C to +70°C	
Relative humidity	0 to 90% RH (without condensation)	
Connectors	Non-Separable, max 2.5 mm ² (18 – 12 AWG)	
Dimension	305x125x56 mm	
Mounting	Screw to wall or panel	
Housing material	Self-extinguishing ABS (UL94-V0)	