

## Low Ambient Controller with Dry Contacts

### Prominent Features

- Separate Set-points for ODU thermistor and dry contacts
- Heartbeat LED
- Powered from 12V “thermostat” header on ODU board
- Uses popular 10K-2 Thermistor for ambient sensing



### Warranty

- 1-year limited warranty

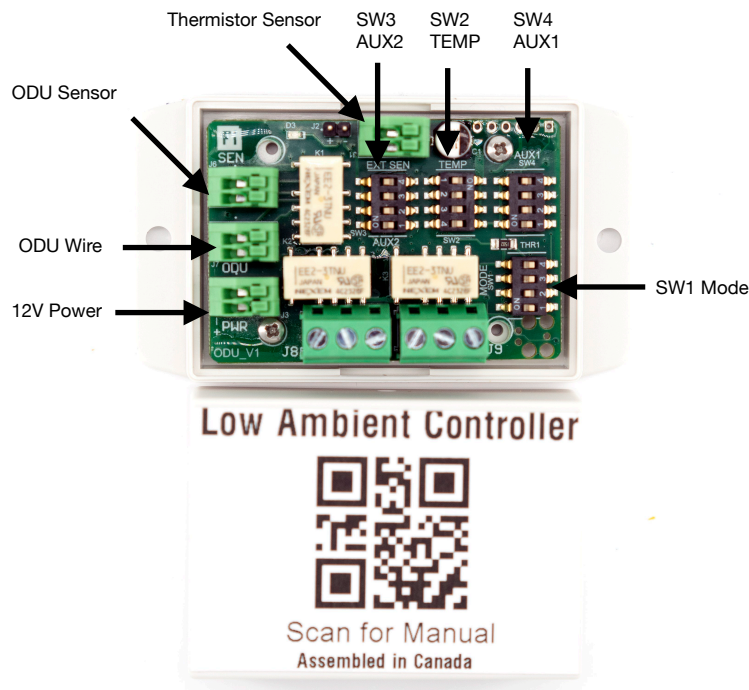
Specifications		
Power Supply		3.3-12Volt DC
Dimensions (in)	Height	1.25"
	Width	2"
	Depth	2.75"

NOTE – Specifications, Ratings and Dimensions subject to change without notice and without incurring liability. Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury.

## Operating Instructions

The PQCA1 Low Ambient Controller is designed to provide an alternate temperature value to the condenser unit allowing it to continue operation in lower ambient temperatures.

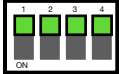

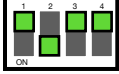

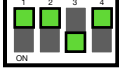










The two Auxiliary low-voltage dry-contacts can be set to signal additional equipment to provide additional protections for the compressor/condenser unit such as heat or airflow.



PQCA1 Low Ambient Controller

- 1) Disconnect the ODU thermistor sensor from its existing the wire-to-wire connector
- 2) Connect the wires/plug from the ODU thermistor sensor to the ODU Sensor of PQCA1 marked "SEN".
- 3) Connect the ODU wires/plug coming from the ODU control board
- 4) Connect the power wires to the PWR terminal on the PQCA1 board.
- 5) Connect the PQCA1 ambient temperature sensor (10K-2 thermistor) to the Thermistor Sensor Terminals marked "EXT SEN".
- 6) For using the thermistor set SW1 Dipswitch position 2 to ON and position 1 OFF. Setting position 1 to ON and position 2 to OFF will disable the thermistor and always supply 16C to the PQCA1 board.
- 7) Set Temperature and Aux set points to desired values. See Table-1 for dip-switch settings.

**Table 1 - Temperature Set-point Dip Switch Settings**

Temperature Setpoint	Dip Switch Position
ALWAYS OFF	
-36C (-33F)	
-33C (-27.5F)	
-30C (-22F)	
-27C (-16.5F)	
-24C (-11F)	
-21C (-6F)	
-18C (-0.5F)	
-15C (5F)	
-12C (10.5F)	
-9C (16F)	
-6C (21F)	
-3C (26.5F)	
0C (32F)	
3C (37.5F)	
ALWAYS ON	