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Project Name: \_\_\_\_\_

Location: \_\_\_\_\_

IDN# \_\_\_\_\_ Quantity: \_\_\_\_\_

Catalog# \_\_\_\_\_

CAT NO. **XH50P**

**Anti-Sweat Controller**

## Modulating Anti-Sweat Dew Point Controller

The XH50P is a networkable controller that can manage anti-sweat heaters on walk-in's or reach-in's by using internal temperature and humidity sensors to calculate Dew Point.

You can add a remote temperature sensor to mount right near or on the glass as an option. The 0/10V output is paired to an outboard SSR (solid state relay) that modulates the heaters instead of pulsing them on and off, greatly extending the life of the heaters and reducing energy usage.

The XH50P (powered by 12-24Vac/dc) also can be connected to an XWEB LAN via the RS485 Serial connection.

A digital input can be enabled to initiate Energy Saving Mode, to temporarily change the setpoint to conserve energy during peak demand periods.

The serial communication enables the XH50P to connect to XWEB Monitoring Systems and other open systems using ModBus-RTU.

### Applications include Control of:

- Walk-in Coolers & Freezers
- Reach-in Coolers & Freezers
- Temperature and Humidity Monitoring
- Energy Saving



Optional Glass Door Sensor



Solid State Relay

APPROVALS:

DATE:

**OVERVIEW**

The Control measures temperature and humidity and calculates Dew Point. The control then supplies a 0/10V Analog output to a SSR (Solid State Relay) to modulate the anti-condensate heaters in a refrigeration application to keep the glass doors free from condensate. The unit has 3 LED Indicators, On/Tx./Alarm and it has one Digital Input (voltage free open/closed circuit) that can place the unit into Energy Saver mode. It also has one 8A relay output. It has an RS485 Serial Connection.

**MOUNTING**

The product is wall mounted using multiple wall mounting options on the back of the 4.75" x 3.25" case.

**SENSORS**

The product has one internal %RH and Temperature (NTC) sensors, and one optional remote temperature sensor. The unit can work with either the internal, the external or a ratio between the two.

**POWER**

The product is powered by 12 - 24Vac - 3VA max.

**INPUTS**

The control has one Digital Input (open/closed circuit) that is typically used to place the unit into Energy Saving Mode (as defined by the HES parameter).

**OUTPUTS**

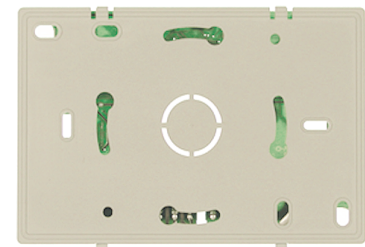
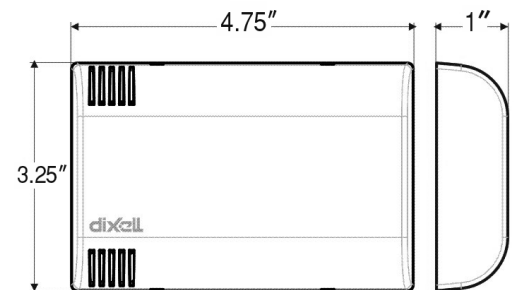
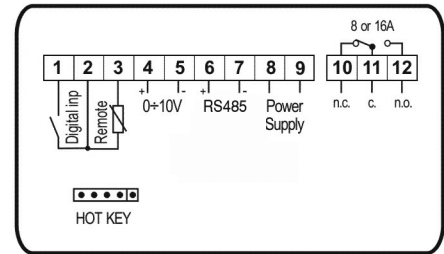
The XH50P has one 8A SPDT relay output, and a 0/10V analog output (47ohm /10mA maxium).

**COMMUNICATIONS**

The Control has a RS485 Serial port. The two way communication protocol shall be MOD-BUS-RTU. The Module has a settable serial address from 1 to 32. MOD-BUS Comments, Registers and Hex Codes are free and open, and are available on request.

**PROGRAMMING**

The control is pre-programmed and pre-addressed with an internal Dew Point calculation. There are 2 levels of control parameters that are password protected. A Hot Key flash memory device can upload or download a program to the unit. The program will remain in internal memory without power.



Easy to install wall bracket

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

**WARRANTY**  
ONE YEAR