Economizer Sensors

C7400A Enthalpy Sensor

Analog enthalpy sensor for use with W7212 and W7459 economizer controllers.

- C7400 solid state elements sense enthalpy (temperature and humidity); use two sensors for differential control, maximizing energy savings.
- Use one sensor in outdoor air for single sensor control; use two sensors, one in return air and one in outdoor air, for differential control.
- C7400 mount in any position up to 200 ft (61 m) away from Economizer Logic Module.
- UL94-5V enclosure.

Sensor: 4-20 mA output
Color: Gray
Mounting: Mounted in any position where it is exposed to freely circulating air
Operating Humidity Range (% RH): 11 to 89% RH
Operating Temperature Range: -40°F to 150°F (-40°C to 66°C)

Approximate, Dimensions: 4.25 in. high x 2.17 in. wide x .81 in. deep (108 mm high x 55 mm wide x 20.5 mm deep)
Electrical Connections: Two 1/4 in. quick-connect terminals
Approvals, Underwriters Laboratories Inc.: Component Recognized

Material Number	Application	Ambient Temperature Range	Description	Used With
C7400A2001/U	Enthalpy economizing Sensor for a solid state enthalpy sensor designed to sense temperature and humidity with 5% accuracy	66°C Maximum (150°F Maximum)	Enthalpy Sensor for supply duct or return air with a 4-20 mA output sensor. Sold in Bulk Packs.	W7210, W7212A, W7213, W7214, W7215, W7459, W7460

C7400S Enthalpy Sensor

Digital enthalpy (humidity/temperature) sensor for use with S-Bus devices and W7220 economizer controller.

- This unit mounted C7400S enthalpy sensor includes solid state temperature and humidity sensors.
- Outputs a digital communicating signal on a two-wire Sylkbus communications link, reporting the temperature and humidity separately to the controller.
- The controller determines the enthalpy (total heat), enabling economizer modes of operation when outside air enthalpy is suitable for free cooling.
- When used with an economizer, the enthalpy boundary curve is programmed via the controller. When the temperature and humidity are determined to be suitable based on the relationship to the boundary, the controller allows outside air for economizing.
- Ambient temperature operating range from -40°F to 150°F.
- Dual enthalpy sensors in outside air and return switches the controllers to economizer mode of operation anytime the outside enthalpy is less than the return air enthalpy.
- UL recognized component (Guide info XAPX).

Sensor: 7-21Vdc
Color: Gray
Mounting: Mounted in any position where it is exposed to freely circulating air
Operating Humidity Range (% RH): 10 to 90% RH
Operating Temperature Range: -40°F to 150°F (-40°C to 66°C)

Approximate, Dimensions: 4.25 in. high x 2.17 in. wide x .81 in. deep (108 mm high x 55 mm wide x 20.5 mm deep)
Electrical Connections: 2-pin header-pin style or 2-pin card edge removable terminal blocks
Approvals, Underwriters Laboratories Inc.: Component Recognized

Material Number	Application	Ambient Temperature Range	Description	Used With
C7400S1000/U	Provides Honeywell Sylkbus signal in relation to enthalpy - 5% accuracy sensor for a solid state enthalpy sensor designed to sense temperature and humidity with 5% accuracy. Use with W7220 economizer control, for use in outdoor air intakes of HVAC rooftop.	66°C Maximum (150°F Maximum)	S-Bus Enthalpy Sensor for supply duct or return air with Sylkbus Communication Protocol. Sold in Bulk Packs.	W7220