



ENTHALPY

Indoor/Outdoor Monitoring Controllers

The A/ENT-CTRL and A/DIFF-ENT are enthalpy controllers used to monitor indoor and outdoor temperature and humidity before converting them into a relay output with the 24 VAC/VDC supply voltage sourced through the relay contacts when reaching its internal trip points. The supply voltage to the A/ENT-CTRL or A/DIFF-ENT is common to both the N/O or N/C contacts of the 10A Form C relay. The A/ENT-CTRL-F1C's version includes a dry contact closure or switch instead of sourcing the supply voltage through the relay contacts.

The A/ENT converts a capacitive type humidity sensor into a linear 2-wire, 4 to 20 mA loop powered output or it can be used in conjunction with the A/DIFF-ENT to determine whether

your indoor or outdoor Enthalpy is greater. The A/ENT can be used with your Economizer control to monitor the indoor or outdoor Enthalpy over a range of 0 to 50 BTU's. Each unit in this series features a conformally coated circuit board and field selectable elevation adjustments.

Applications: Economizers, OEM's

The ACI Enthalpy Series is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, www.workaci.com.

PRODUCT SPECIFICATIONS

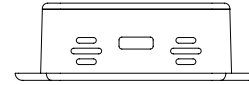
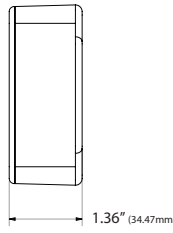
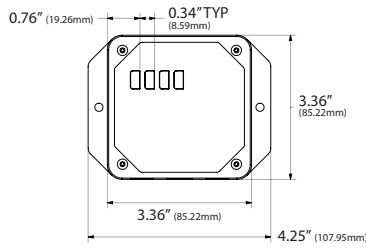
Supply Voltage:	+24 to 36 VDC or 24 VAC +/- 10% (A/ENT-CTRL & A/DIFF-ENT) +24 to 36 VDC (A/ENT)
Supply Current:	70 mA max (A/ENT-CTRL & A/DIFF-ENT), 25 mA maximum (A/ENT)
External Input (A/DIFF-ENT Only):	4-20 mA (0 to 50 BTU's) from A/ENT
Enthalpy Measurement:	0-50 BTU's (A/ENT)
RangeOutput/Contact Rating:	4-20 mA (A/ENT) 10A @ 250 VAC (A/ENT-CTRL & A/DIFF-ENT)
Relay Deadband:	1 BTU or 0.5°F (0.27°C)
Enthalpy Accuracy:	+/- 1 BTU @77°F (25°C)
Long-term Stability:	Less than 2% RH Drift/5 years
Sensitivity:	0.1% RH
Repeatability:	0.5% RH
Operating RH Range:	0 to 95% RH (non-condensing)
Operating Temperature Range:	-40°F to 140°F (-40°C to 60°C)
Standard Elevation:	1000' above sea level (standard)
Product Dimensions (All Enthalpy Types):	(H) 3.36" (85.22mm) x (W) 4.25" (107.95mm) x (D) 1.36" (34.47mm)
Product Weight:	0.35 lbs (0.159 kg)



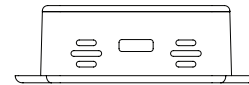
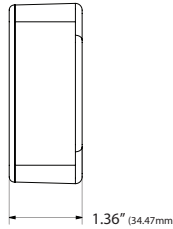
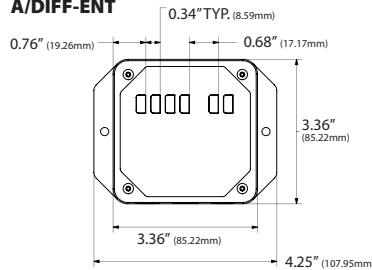


DIMENSIONAL DRAWING

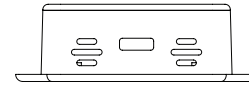
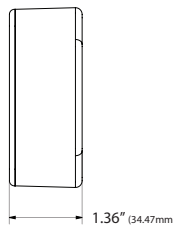
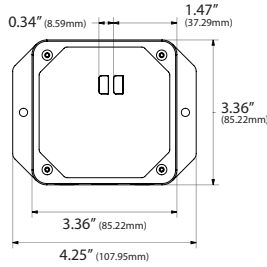
A/ENT-CTRL, A/ENT-CTRL-F1C



A/DIFF-ENT



A/ENT



Front View

Right View

Top View

STANDARD ORDERING

Model # Example: **A/ENT-CTRL-F1C** -OR- **122441**

Model #	Item #	Description
A/DIFF-ENT*	122426	Differential Enthalpy Changeover Control, Indoor vs Outdoor, 24 VAC Form 1C Relay Contact
A/ENT-CTRL	122440	Outdoor Enthalpy/Temperature Changeover Control, 24 VAC Form 1C Relay Contact
A/ENT-CTRL-F1C	122441	Outdoor Enthalpy/Temperature Changeover Control, Form 1C Dry Contact Relay
A/ENT*	122439	Enthalpy Transmitter, 0 to 50 BTU, 4 to 20 mA Loop Powered

Note*: A/DIFF-ENT should be ordered in conjunction with the A/ENT

CUSTOM ORDERING

Model # Example: **A/ ENT**

MODEL #

A. Sensor Series No Selection Required	A/	A/
B. Accuracy Select One (1)	DIFF-ENT = Differential Enthalpy Control ENT-CTRL = Outdoor Enthalpy/Temperature Changeover Control ENT-CTRL-F1C = Outdoor Enthalpy/Temperature Changeover Control ENT = Enthalpy Transmitter, 0 to 50 BTU, 4 to 20 mA Loop Powered	
C. Elevation No Selection Required	---- = 0-2K ft Above Sea Level (Default)	
D. Curve No Selection Required	---- = 28 BTU/lb 75°F (Default)	
E. Slope No Selection Required	---- = Direct Acting / Positive Slope (Default)	

Note: See product instructions for additional field selections (elevations, curves, slopes)