



DESCRIPTION

The **Vector Model TCY-BH-U Wall Mount Humidistat** is a stand-alone programmable electronic humidistat designed for controlling humidification and dehumidification equipment in HVAC and energy management systems. The **TCY-BH-U Series** features one internal humidity sensor, one external temperature sensor input and two relay outputs. Humidity reset is possible using the **ST-024** outdoor air temperature sensor for cold weather applications to prevent condensation. The **TCY-BH-U-D Series** comes with all of the features of the base model plus a time clock feature for advanced programming with 48 hour backup.



TCY-BH-U



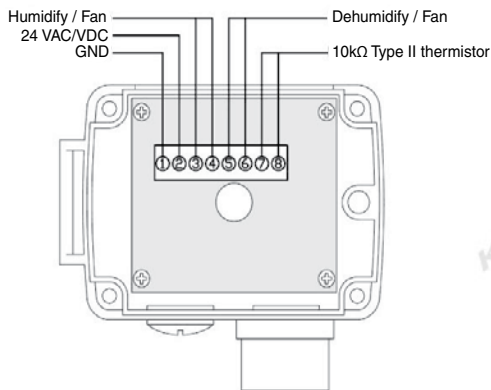
FEATURES

- **Humidification and dehumidification control**
- **External temperature input for set point setback**
- **Programmable user interface**
- **Optional time clock**
- **2 relay outputs**
- **Easy to read display**
- **Replaceable sensor**

SPECIFICATIONS

Accuracy	±5% RH (10-90%)	Enclosure Rating	NEMA 1, ABS plastic (UL94 class V-0)
Supply Voltage	24 VAC ±10%, 50/60 Hz @ 1.5 VA; 24 VDC ±10% @ 62.5 mA	Wiring Terminations	Terminal block (12 to 24 AWG)
Analog Input	10k Type II (Type 24) Thermistor	Dimensions	4.4"H x 2.9"W x 1.8"D (11.2 x 7.3 x 4.7 cm)
Relay Output	2 NO SPST Relays, 1.2 Amps @ 24 VAC	Weight	0.58 lb (0.26 Kg)
Operating Temperature	32° to 122°F (0° to 50°C)	Approvals	CE
Operating Humidity	0% to 95% non-condensing	Warranty	2 years

CONNECTION TERMINALS



Terminal-description:

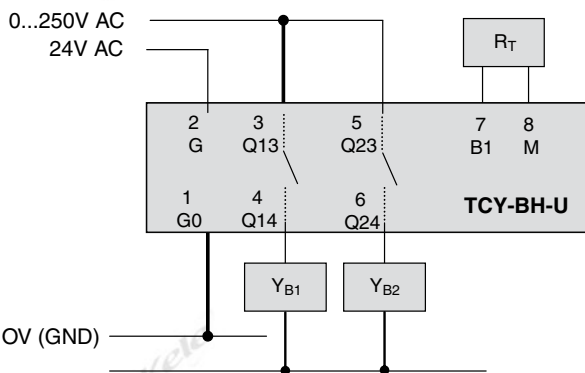
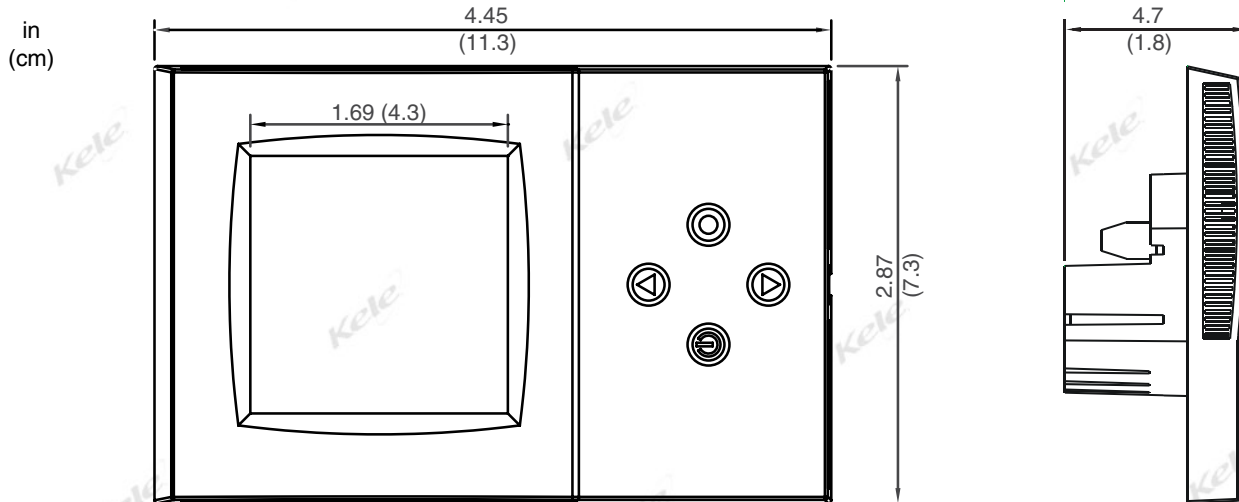
1. Connection for power-supply (24 VAC/VDC, ±10%). In case of DC, connect the negative power-terminal. Common connection for analog inputs and outputs.
2. Connection for power-supply (24 VAC/VDC, ±10%). In case of DC, connect the positive power-terminal.
3. Contact "DO 1" Humidify or Fan, 2A maximum
4. Contact "DO 1" Humidify or Fan, 2A maximum
5. Contact "DO 2" Dehumidify or Fan, 2A maximum
6. Contact "DO 2" Dehumidify or Fan, 2A maximum
7. Thermistor input "RT" (10kΩ Type II thermistor)
8. Thermistor input "RT" (10kΩ Type II thermistor)



HUMIDITY

5% WALL MOUNT HUMIDISTAT TCY-BH SERIES

DIMENSIONS / WIRING



Humidify/Dehumidify, TCY-BH-U (-D)

YB1	Humidifier	0...24 VAC or 0...30 VDC
YB2	De-humidifier	0...24 VAC or 0...30 VDC
RT	Temperature input for setback:	NTC 10kΩ @ 25°C (77°F)

Humidify plus fan control, TCY-BH-U (-D) - W04

YB1	Humidifier	0...24 VAC or 0...30 VDC
YB2	Fan	0...24 VAC or 0...30 VDC
RT	Temperature input for setback:	NTC 10kΩ @ 25°C (77°F)

Dehumidify plus fan control, TCY-BH-U (-D) - W05

YB1	Fan	0...24 VAC or 0...30 VDC
YB2	De-humidifier	0...24 VAC or 0...30 VDC
RT	Temperature input for setback:	NTC 10kΩ @ 25°C (77°F)

ORDERING INFORMATION

MODEL	DESCRIPTION
TCY-BH-U-W20	5% wall mount humidistat for humidification and dehumidification with display
TCY-BH-U-W24	5% wall mount humidifying humidistat with display, fan control option
TCY-BH-U-W25	5% wall mount dehumidifying humidistat with display, fan control option
TCY-BH-U-D-W20	5% wall mount humidistat for humidification and dehumidification with display with programmable time clock
TCY-BH-U-D-W24	5% wall mount humidifying humidistat with display and fan control option with programmable time clock
TCY-BH-U-D-W25	5% wall mount dehumidifying humidistat with display and fan control option with programmable time clock

RELATED PRODUCTS

AES-HT-A5	5% Replacement humidity element
AMC-1	Cable gland for SDC-H1
AMC-2	Conduit fitting, 1/2 in NPT for SDC-H
S-TN10-2	Raw temperature sensor with six foot cable, 10kΩ Type II thermistor
SD-TN10-12-2	Eight inch duct sensor with six foot cable, 10kΩ Type II thermistor
SD-TN10-20-2	Eight inch duct sensor with six foot cable, 10kΩ Type II thermistor
SDB-TN10-12-W	Five inch duct sensor with housing and six foot cable, 10kΩ Type II thermistor
SDB-TN10-20-W	Eight inch duct sensor with housing and six foot cable, 10kΩ Type II thermistor
SOD-TN10	Outdoor temperature sensor
DCPA-1.2	Power supply, 120 VAC IN to 24 VAC/24 VDC OUT
691-K0A	Control transformer, 120:24 VAC, 40 VA, Class 2
DCP-1.5-W	Power supply, 24 VAC IN to 24 VDC OUT