High Performance RH Controller Panel-Mount Design

RHCN Series



- Controls Both RH and Temperature
- ✓ Two 5A Relay Contacts
- Adjustable Deadbands for Relative Humidity and Temperature
- Dual Recorder Outputs
- ✓ Remote RH/Temperature Probe Included
- Adjustable/Removable Probe Duct Flange Easily Adjusts Probe Depth

The RHCN Series controllers are economical, panel-mounted instruments designed to monitor and control RH and temperature, and feature dual relay contacts for on/off control. An easily accessible front panel switch toggles the large LED display between a continuous reading of either relative humidity or air temperature. The RHCN features 2 standard recorder outputs of 10 mV/% RH and 10 mV/degree, for simple interfacing with a computer or datalogging device.

The solid state humidity and 100 Ω Platinum RTD temperature sensors are enclosed in a compact probe which may be mounted virtually any distance away from the controller.

Specifications

Measuring Ranges: 3 to 95% RH (temperature compensated -10 to 175°F); 0 to 85°C (0 to 180°F)

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Accuracy: ±2% RH; ±1°F/°C

Display Resolution: 1% RH; 1°F/°C

Response Time: Less than 20 seconds

Setpoint Controls: Digitally adjustable from 0% to 100% RH, 0 to 85°C

(0 to 180°F); deadband adjustable from ±0% RH to ± 50% RH, and ± 0°F/°C to

±50°F/°C

Control Outputs: Dual SPDT relays,

5 A/250 Vac

Recorder Outputs: 10 mV/% RH, and

Display: 14 mm (0.56") LED, off-scale indication for open input, relay "on" LED indication

Controller Mounting: Panel mount with adjustable mounting bracket, adjusts up to 9.5 mm (%") thick panels

Power: 115 or 230 Vac ±15%,

50/60 Hz, 5 W max

10 mV/degree

Connections: Screw terminals, 14 AWG max; probe supplied with 4-pin mating connector, 26 to 18 AWG wires

Probe Mounting: Duct mount with adjustable/removable duct flange [adjustable from 25 to 216 mm (1 to 8.5")]; 83 mm (3.25") diameter cutout, 27 mm (1.062") diameter flange with 4 evenly spaced 4 mm (0.156") holes on 57 mm (2.25") circle; wall mounting bracket included

Dimensions:

Controller:

45 H x 92 W x 127 mm D (1.772 x 3.622 x 5.0") **Probe, CPVC Tube:**

235 L x 22 mm D (9.25 x 0.84")

Panel Cutout: 45 H x 92 mm W (1.772 x 3.622"), ½ DIN

temperature/humidity probe and mounting hardware. Shown smaller than actual size.

RHCN-1F

controller.

System comes complete with

Weight:

Controller: 539 g (19 oz) **Probe:** 142 g (5 oz)

To Order	
Model No.	Description
RHCN-1F	Relative humidity/temperature controller, °F display, 120 Vac, includes probe
RHCN-1C	Relative humidity/temperature controller, °C display, 120 Vac, includes probe
RHCN-2F	Relative humidity/temperature controller, °F display, 230 Vac, includes probe
RHCN-2C	Relative humidity/temperature controller, °C display, 230 Vac, includes probe
2319	Replacement RH/temperature probe
CAL-3-HU*	NIST-traceable calibration

Controller comes complete with humidity/temperature probe and operator's manual.

Ordering Examples: RHCN-1C, relative humidity/temperature controller with °C display

and probe with CAL-3-HU, NIST-traceable calibration.

RHCN-2F, relative humidity/temperature controller with °F display.