

Humidistats

The J10 controls are designed to regulate the relative humidity of confined spaces by cycling humidifying or dehumidifying equipment. They are designed for use as internal components for portable humidifiers and dehumidifiers, and as wall mounted humidity controls for central systems.

The J10 is a relative humidity control, consisting of a humidity sensing element, adjustable setpoint cam and an electrical switch. The sensing element changes length in response to the exposed RH to move the switch mechanisms at the appropriate switch points.

APPLICATIONS

- Dehumidifiers.
- Space and Product Humidifiers.
- Ventilation fans for confined spaces.
- Materials processing.
- Central HVAC units.



FEATURES

- Strong plastic frame with integral switch.
- Improved woven nylon sensing element provides 12 times faster speed of response than film nylon elements.
- Greater stability of setpoints over dramatic changes in relative humidity.
- Improved differential allowing 5%RH.
- Switch grade plastic frame eliminates the need for grounding the control.
- Choice of 5% or 15%RH differentials.
- Choice of (2) SPST and (2) SPDT switches to better match applications.
- Choice of fixed or adjustable setpoints.
- Choice of dial shaft flat orientation.
- Gold-plated contacts available for microprocessor load applications.
- Available with case and cover for wall/duct mounting.
- Electronic controls available contact Ranco Marketing.

SPECIFICATIONS

Humidity Ranges

10 to 60%RH.
20 to 80%RH.
30 to 90%RH.

Differentials

5%RH or 15%RH.

Switch

SPDT or SPST.
6.3 X 0.8 mm Terminals.

Function of Terminals (when present)

- 1 Close on %RH increase
- 2 Common.
- 3 Close on %RH decrease.

Switch/Frame Insulation Material

Thermoplastic, Flame Class 94V-0.
Comparative Tracking Index 600.

Approvals

The controls meet IEC 60730 - 1 & 2 - 13, UL 873 and CSA C22.2, No. 24.

Control Cycle Ratings

Automatic switch cycles @60° C 50000.
Manual dial shaft cycles 6000.

Ambient Temperature Limitations

Switch Head 0° C to 60° C.
Shipping -30° C to 65.6° C.

Enclosure Protection

IP00.

Electrical Shock Protection

Class 1.

Method of Attachment

Screw; Optional user defined snap-in.

TYPICAL SPECIFICATIONS

(No case/cover)				Approved ratings at 125/250 VAC		
Code Series	Typical Application	Switch	Terminal Numbers	Inductive, FLA, amps	Inductive, LRA, amps	Resistive, NIA, amps
J10 - 1000	Dehumidification	SPST	2 - 1	12.0/3.7	50/22.2	12.0/3.7
J10 - 2000	Humidification	SPST	2 - 3	12.0/3.7	50/22.2	12.0/3.7
J10 - 7000 & J10 - 7300	Dehumidification & Humidification	SPDT	2 - 1 2 - 3	12.0/3.7 2.0/1.0	50/22.2 12.0/6.0	12.0/3.7 2.0/1.0
J10 - 7100	Humidification & Dehumidification	SPDT SPDT	2 - 3 2 - 1	12.0/3.7 2.0/1.0	50/22.2 12.0/6.0	12.0/3.7 2.0/1.0

UL/CSA approved to 6000 cycles.

EN approved ratings are at 250 VAC only, 50000 cycles.

(With case/cover)				UL/CSA Ratings				Special Features
Code Series	Function	RH Range	Switch	VAC	FLA	LRA	PD,VA	
J10 - 808	Humidistat	10% - 60%	SPST	<30	N/A	N/A	N/A	Wall / Duct Mount (Not Shown)
J10 - 809 W J10 - 809 V	Dehumidistat	20% - 80%	SPST	<30	N/A	N/A	N/A	Wall Mount
J10 - 810*	Dehumidistat	20% - 80%	SPST	125	7.5	4.5	250	Wall Mount (Verticle)
J10 - 821*	Humidistat	20% - 80%	SPST	125 250 24	7.5 3.3	4.5 20	250 250 72	Wall Mount (Horizontal)

*Ratings are CSA, NRTL only File LR 18321.

Note: J10 - 809 W = White Cover, J10 - 809 V =Verticle Mount.

TYPICAL DRAWINGS

Case

(Click on the above description to view the drawing)

Dial Layout

(Click on the above description to view the drawing)

Mechanism

(Click on the above description to view the drawing)

Contact Ranco North America marketing for further information or application assistance.