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OPERATING NOTES
For
Electronic Humidity Controller
Model EHC-100

INTRODUCTION

Model EHC-100 is a reliable and accurate humidity controller. These electronic humistats overcome the limitations of typical controllers that rely on the expansion of plastic, mylar, or hair elements. The controller can be wired to operate humidifiers or dehumidification with air conditioning units.

The N/C Contacts are closed on a rise in humidity.

The N/O Contacts are closed on a fall in humidity.

OPERATION

1. Make connections to the terminal block located on the unit. The controller can be wired for dry contacts or live contacts as per Figure 1 or 2, respectively. Note the position of the jumper on J3. Both of these diagrams show connections for humidification. Wire to the N/C terminal for dehumidification. The controller can operate on either a 24V DC or AC input.

2. Wire the controller to a 24 VAC / VDC power supply and turn the power on.

3. Allow at least 30 minutes stabilization before changing the set point for a typical room. The controller is limited by the response of the internal sensor. There is no over/under range indication, and the accuracy is not rated beyond specified system limits.

The EHC-100 has no internal user adjustments.

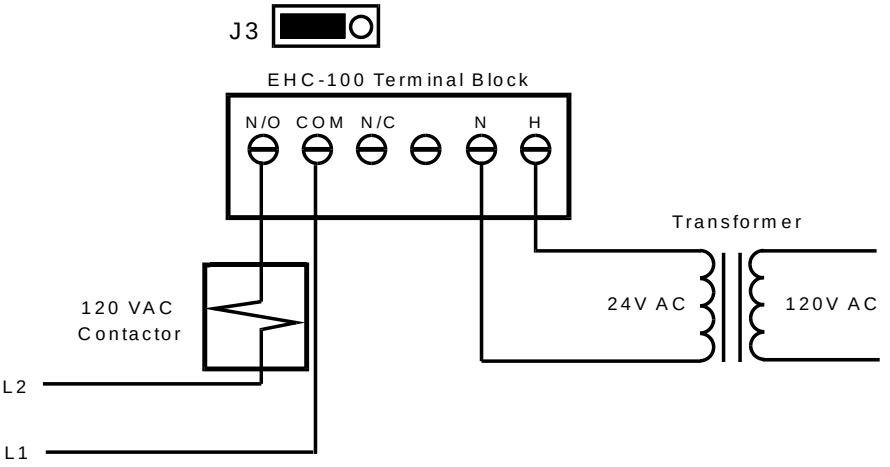

Figure 1: Humidification wiring with dry contacts

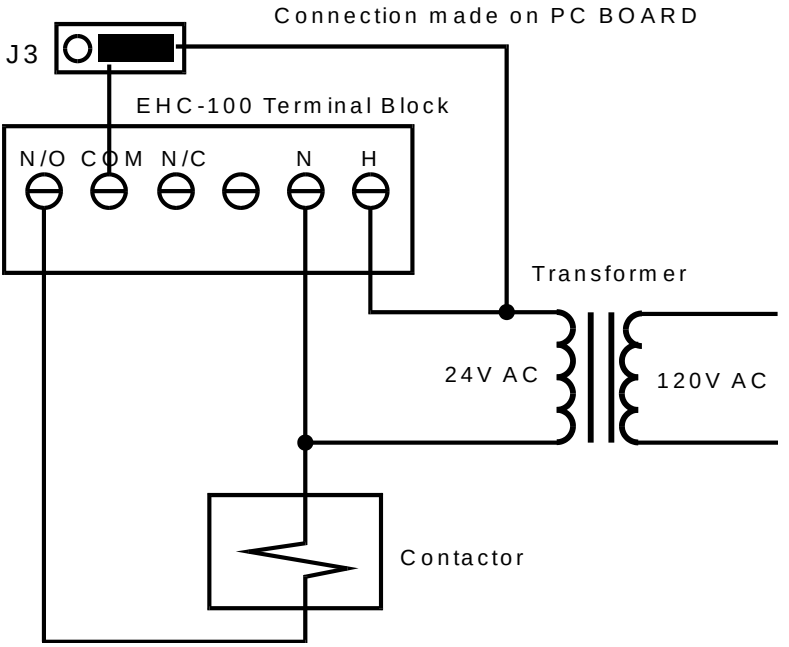

Figure 2: Humidification wiring with live contacts

SENSOR PRECAUTIONS

Under normal operating conditions, the sensors used by the EHC-100 will maintain specifications for over five years of continuous use, assuming that the precautions outlined below have been followed. The following is a list of limits of operation. Exceeding these limits can cause sensor failure and voids all warranties.

Humidity:	0 to 100% RH Non-condensing
Temperature:	40 to 120°F
Excitation:	The sensor current is not to exceed 50µA.

— NEVER TEST THE SENSOR WITH A D.C. OHMMETER —

Particulate Contamination:	The sensors should be shielded from particulate contaminants.
Chemical Contamination:	The sensors should not be exposed to corrosive or reactive chemicals.

SPECIFICATIONS

Power:	24 VAC or VDC
Water Vapor Sensor:	SC-600
Range:	25 - 85% RH
Accuracy:	±3% RH
Response:	15 Seconds for 63% step change
Condensation:	15 Minutes for full recovery from condensation in non-moving air
Relay:	10 A, SPDT Resistive, Rated at 24 VDC
Hysteresis:	±1.5%RH
Operating Temp:	40 - 120°F
Enclosure:	Vented ABS, Meets UL-94-V

WARRANTY

Not withstanding any provision of any agreement the following warranty is exclusive.

Ohmic Instruments COMPANY warrants each instrument it manufactures to be free from defects in material and workmanship under normal use and service for the period of 1-year from date of purchase. This warranty extends only to the original purchaser. This warranty shall not apply to fuses or any product or parts which have been subjected to misuse, neglect, accident, or abnormal conditions of operation.

In the event of failure of a product covered by this warranty, Ohmic Instruments Co. will repair and recalibrate an instrument returned within 1 year of the original purchase: provided the warrantor's examination discloses to its satisfaction that the product was defective. The warrantor may, at its option, replace the product in lieu of repair. With regard to any instrument returned within 1 year of the original purchase, said repairs or replacement will be made without charge. If the failure has been caused by misuse, neglect, accident, or abnormal conditions of operations, repairs will be billed at a nominal cost. In such case, an estimate will be submitted before work is started, if requested.

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS, OR ADEQUACY FOR ANY PARTICULAR PURPOSE OR USE. OHMIC INSTRUMENTS COMPANY SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER IN CONTRACT, TORT, OR OTHERWISE.

If any failure occurs, the following steps should be taken:

1. Notify Ohmic Instruments Co. giving full details of the difficulty, and include the model, type, and serial numbers (where applicable). On receipt of this information, service data, or shipping instructions will be forwarded to you.

2. On receipt of shipping instructions, forward the instrument, transportation prepaid. Repairs will be made and the instrument returned, transportation prepaid.

SHIPPING TO MANUFACTURER FOR REPAIR OR ADJUSTMENT

All shipments of Ohmic Instruments Co. instruments should be made via United Parcel Service or "Best Way" prepaid. The instrument should be shipped in the original packing carton, or if it is not available, use any suitable container that is rigid and of adequate size. If a substitute container is used, the instrument should be wrapped in paper and surrounded with at least four inches of excelsior or similar shock absorbing material.

CLAIM FOR DAMAGE IN SHIPMENT TO ORIGINAL PURCHASER

The instrument should be thoroughly inspected immediately upon delivery to purchaser. All material in the shipping container should be checked against the enclosed packing list. The manufacturer will not be responsible for shortages against the packing sheet unless notified immediately. If the instrument is damaged in any way, a claim should be filed with the carrier immediately. (To obtain a quotation to repair shipment damage, contact Ohmic Instruments.) Final claim and negotiations with the carrier must be completed by the customer.

Ohmic Instruments Company will be pleased to answer all application or use questions, which will enhance your use of this instrument. Please address your requests or correspondence to: Ohmic Instruments Company, 508 August St., Easton, Maryland 21601, ATTN: Technical Support. Or call Ohmic Technical Support at 410-820-5111.

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