



MODEL 41382VC
RELATIVE HUMIDITY / TEMPERATURE PROBE
 with VOLTAGE OUTPUT

INSTRUCTION SHEET 41382VC-90
 REV E102613

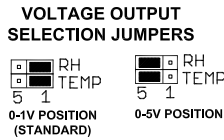
INTRODUCTION

The Model 41382VC Relative Humidity/Temperature Probe combines high accuracy humidity and temperature sensors in a single probe. The output signal is 0-1 V (standard) or 0-5 V (user selected option) for both relative humidity and temperature. RH range is 0-100%. Temperature range is -50 to +50°C.

INSTALLATION

Install the probe in a naturally ventilated or fan aspirated radiation shield. Mount probe and shield in a location with good air circulation clear of large thermal masses (buildings, pavement, solar panels, etc.), exhaust vents, electrical machinery and motors, water fountains and sprinklers.

Set 0-1 V or 0-5 V output with jumpers as shown in diagram. These jumpers are located below the terminals in the junction box.



MAINTENANCE

The probe provides years of service with minimal maintenance. Humidity calibration, which may drift slightly with time, can be checked or restored at the factory.

Periodically clean the humidity sensor filter when used in areas of high dust or contamination (smokestacks, seawater, etc.) Soak in clean water or use a mild soap solution. DO NOT USE SOLVENTS.

CE COMPLIANCE

This product complies with the European CE directive on EMC compatibility. Shielded cable must be used.

WARRANTY

This product is warranted to be free of defects in materials and construction for a period of 12 months from date of initial purchase. Liability is limited to repair or replacement of defective item. A copy of the warranty policy may be obtained from R. M. Young Company.

SPECIFICATIONS

RELATIVE HUMIDITY:
 Measuring range: 0-100% RH
 Accuracy at 23°C: ±1%
 Stability: Better than ±1%RH per year
 Response Time: 10 seconds (Without Filter)
 Sensor type: Rotronic Hygromer

TEMPERATURE:
 Measuring Range: -50 to +50°C
 Accuracy at 23°C: ±0.3°C
 Response Time: 10 seconds (Without Filter)
 Sensor type: Platinum RTD

Output signal: 0-1 or 0-5 VDC (jumper option)
 Power Required: 8-30 VDC at 7 mA
 Recommended Cable: 5 conductor shielded, Young 18446

Recommended Shields:
 Young Model 43502 Aspirated Radiation Shield
 Young Model 41003P Multi-Plate Radiation Shield

Declaration of Conformity

R. M. Young Company
 2801 Aero Park Drive
 Traverse City, MI 49686 USA

Model 41382VC RH/Temp Probe
 The undersigned hereby declares on behalf of R. M. Young Company that the above-referenced product, to which this declaration relates, is in conformity with the provisions of:

Council Directive 2004/108/EC (December 15, 2004)
 on Electromagnetic Compatibility

David Poinsett
 David Poinsett
 R&D Manager

