

## Calibration complies with ISO/IEC 17025, ANSI/NCSL Z540-1, and 9001

1661



Traceable® Certificate of Calibration for Humidity/Temperature Pen

Manufactured for and distributed by : Control Company 12554 Galveston Rd B230, Webster, TX 77598

Instrument Identification:

Model: 4093,

S/N: 181211058

Manufacturer: Control Company

Standards/Equipment:

<u>Description</u>

Digital Thermometer

Serial Number

Due Date

NIST Traceable Reference

05 Oct 2018

4000-8859710

Chilled Mirror Hygrometer

221197993 31874/1H2048MR

15 Dec 2018

15660

**Certificate Information:** 

Technician: 126

Procedure: CAL-17

Cal Date: 20 Apr 2018

Cal Due Date: 20 Apr 2020

Test Conditions: 3

38.5%RH 23.54°C 1022mBar

Calibration Data: (New Instrument)

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±U	TUR
%RH	N.A.	N.A.		41.88	40	Υ	38.9	44.9	0.47	>4:1
°C	N.A.	N.A.		25.06	24.9	Υ	24.06	26.06	0.051	>4:1

This certificate indicates Traceability to standards provided by (NIST) National Institute of Standards and Technology and/or a National Standards Laboratory.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement: (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tol=In Tolerance; Min/Max=Acceptance Range; ± U=Expanded Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2; Min=As Left Nominal(Rounded) – Tolerance; Max= As Left Nominal(Rounded) + Tolerance;

Rid Rodriguez

Nicol Rodriguez, Quality Manager

Aaron Judice, Technical Manage

## Maintaining Accuracy:

In our opinion once calibrated your Humidity/Temperature Pen should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Humidity/Temperature Pen change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

## Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.