



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Indicating Element
Digital Electronic
Model: HI 4050-MM-PP-II-NN-OO*
 n_{\max} : 10 000
Accuracy Class: III/III L

***Submitted By: Contact Info. Updated November 2024**

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Standard Features and Options

* Where MM-PP-II-NN-OO refer to device configuration options (see Page 2)


- Pound/kilogram/gram/ounce/ton unit conversions
- Liquid crystal display
- Alphanumeric display
- Gross/net weight display
- Keyboard tare
- Semi-automatic (push-button) tare
- Semi-automatic (push-button) zero
- Automatic zero setting mechanism (AZSM)
- AC power supply
- Ethernet communication port
- Category 1 audit trail

Options: See table on page 2

Temperature Range: -10 °C to 40 °C (14 °F to 104 °F)

This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of "NIST Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.


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Chairman, NCWM, Inc.


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Indicating Element / HI 4050-MM-PP-II-NN-OO

Options:

MM - Mounting	PP - Power	II - Internal	NN - Network	OO - Auxiliary
DR - Din Rail PM - Panel	AC - Alternating Current DC - Direct Current	EIP - Ethernet ROC - Rate of Change MD - Modbus N1 - No Internal Options	DN - DeviceNet 4ANA - 4 Channel Analog Output N2 - No Network	DIO - Digital Input/Output 4ANB - 4 Channel Analog Output N3 - No auxiliary Option

Application: General purpose indicating element for Class III and Class III L installations.

Identification: The identification is on a self-adhesive and tamper evident badge at the top of the indicator.

Sealing: Sealing is by Category 1 audit trail and is password protected. Access to the audit trail is initiated by pressing the “Enter” key to access the “Configuration Menu” which contains the “Audit Trail”. The Audit Trail contains the configuration and calibration parameters, and time and date each parameter was changed. Press “Exit” to leave the Audit trail.

Test Conditions: The Model HI 4050-PM-AC-N1-N2-N3 electronic indicator was submitted for evaluation. The emphasis of the evaluation was on device design, operation, performance, and compliance with influence factor requirements. The indicator was interfaced with a weight simulator and tested for accuracy over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). Tests were also conducted over a voltage range of 100 VAC to 130 VAC. Additionally, the indicator was interfaced with a weighing element to verify compliance with motion detection, momentary power loss, zero functions, and print format requirements.

Type Evaluation Criteria Used: NIST Handbook 44, 2007 Edition, NCWM Publication 14, 2007 Edition

Tested By: S. Boyd (CA)

Conclusion: The results of the evaluations and information provided by the manufacturer indicate the devices comply with applicable requirements.

Information Reviewed By: S. Patoray, L. Bernetich (NCMW)

Hardy Instruments Model 4050 I.D. Badge





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Front View

