

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 *Submitted By: Contact Info. Updated December 2018 Hardy Instruments, Inc. 9440 Carroll Park Drive, Suite 150 San Diego, CA 92121 Tel: 858-255-6801 Fax: 858-675-1241 Contact: Debra Lawson Email: debra.lawson@hardysolutions.com Web site: www.hardysolutions.com

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

Accuracy Class: III/III L

- 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.

Brett Gurney

Chairman, NCWM, Inc.

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James Cassidy Committee Chair, NTEP Committee Issued: June 29, 2007

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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	AC - Alternating	EIP - Ethernet	DN - DeviceNet	DIO - Digital
PM - Panel	Current	ROC - Rate of	4ANA - 4 Channel	Input/Output
	DC - Direct	Change	Analog Output	4ANB - 4 Channel
	Current	MD - Modbus	N2 - No Network	Analolg
		N1 - No Internal		Output
		Options		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.

<u>Sealing</u>: 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.

<u>Test Conditions</u>: 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)

<u>Conclusion</u>: 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)

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