NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:
Indicating Element
Digital Electronic
Model: 185
n_{max}: 6 000
Accuracy Class: III / IIIL

Submitted By:
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Standard Features and Options

Standard Features:

- Semi-Automatic (push-button) Zero Setting
- Automatic Zero Tracking (AZT)
- Semi-Automatic (push-button) Tare
- Power Saving Feature (Automatic Shutoff)
- Gross/Net Display
- Bi-Directional RS-232 Communication Port
- AC Power Supply via wall adapter
- Motion Detection
- kg/g/lb/oz Unit Capability
- Remote Printer Capability
- External unit conversion key
- Category 1 wire security seal (optional)
- Category 1 audit trail (standard)

Options:

- DC power via an internal battery pack. Battery charge level is monitored via annunciator depicting three bars.

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.

James Cassidy
Committee Chair, National Type Evaluation Program Committee
Issued: November 28, 2018

Cardinal Scale Manufacturing Company
Indicating Element / 185

Application: General-purpose indicating element when connected to a NTEP certified and compatible weighing/load-receiving element.

Identification: The tamper evident self-destructive identification label for the Model 185 is located on the back of the enclosure.

Sealing: Category 1 physical seal and category 1 audit trail. **Category 1 physical seal**: The setup/calibration jumper switch is accessed inside the indicator housing by separating the housing enclosure. The enclosure is secured with four screws, two of which have drilled heads, allowing installation of a physical lead-wire security seal. The indicator automatically returns to weighing mode after all setup/calibration steps are complete. **Category 1 Audit trail:** Press **Fn** key, the display will show **Fn**=. Press Net/Gross Key the display will show CAL=. Press **Tare** Key calibration counter will be displayed. Press **Tare** key again and the display will show **CFg**=. Press **Tare** key again and the configuration counter will be displayed. Press **Tare** key again to return to weighing mode.

Test Conditions: This certificate supersedes Certificate of Conformance Number 18-075 and is issued to add a category 1 audit trail. A Cardinal Scale Co. Model 185 indicating element was submitted for the evaluation. All portions of the sealing checklist were performed, multiple configuration and calibration changes were made independently and combined to verify compliance of the calibration and configuration counters. Linearity testing at ambient temperature was performed to verify adding the audit trail didn't alter the metrological integrity of the indicating element. Previous test conditions are below.

Certificate of Conformance 18-075: The emphasis of the evaluation was on the device design, operation, marking requirements, performance and compliance with influence factors. A Cardinal model 185 indicating element was submitted for evaluation and interfaced with a Cardinal weighing load receiving element to verify compliance with zero, zone of uncertainty and motion detection. The model 185 was interfaced with a load cell simulator and multiple increasing/decreasing tests were performed. The device was tested over a temperature range of -10 ºC to 40 ºC (14 ºF to 104 ºF). Line voltage tests were conducted using 85 VAC, 264 VAC and 7.7 VDC, 9.0 VDC.

Evaluated By: J. Gibson (OH) 18-075, 18-075A1

Type Evaluation Criteria Used: *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices,* 2018 Edition. *NCWM Publication 14 Weighing Devices,* 2018 Edition.

Conclusion: The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

Information Reviewed By: J. Truex (NCWM) 18-075, 18-075A1

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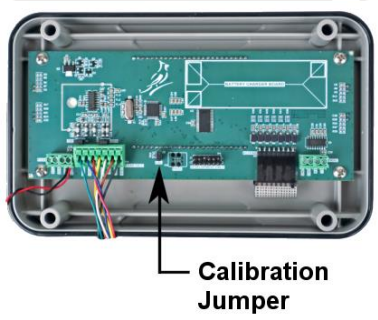
Indicating Element / 185

Examples of Device: Front of Device Rear of Device



Rear Panel Removed