

#### NATIONAL TYPE EVALUATION PROGRAM

# Certificate of Conformer for Weighing and Measuring Devices

For:

Automatic Bulk Weighing System

Controller **8XYCBW Series** nmax: 10 000

Accuracy Class: III / III L

**Submitted By:** 

Cardinal Scale Manufacturing Company

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#### **Standard Features and Options**

- Alphanumeric Dot Matrix Display.
- Programmed Commodity Names.
- Time and Date.
- 800 Series Indicator Model (denoted by "XY" in the model number)
- XY" = 25 for Model 825CBW.
- Graphics Display.
- When used as part of a bulk weighing system for grain, it must meet Class III tolerances.
- When used as part of a bulk weighing system for commodities other than grain, it must meet the appropriate Class III or Class IIIL tolerances.

#### **Options Features:**

• S in model designates NEMA 4 enclosure.

#### **System Components:**

- Cardinal 800 Series Weight-indicating instrument (NTEP Certificate of Conformance Number 08-046) with bulk weighing software.
- Cardinal Model P500 tape printer, or other compatible printer.
- Multi-scale Select (for multiple scale interface with Summing Capability up to 10 scales)

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.

Gene Robertson Chair, NCWM, Inc.

Mahesh Albuquerque Chair, NTEP Committee Issued: April 23, 2024

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#### 9011 South 83rd street / Lincoln, Nebraska 68516

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Automatic Bulk Weighing System /8WYCBW Series

<u>Application</u>: The system controller may be used in any bulk weighing scale system. When used as part of a system to weigh grain, it must be marked as a Class III device. When used in a bulk weighing system for any commodity other than grain, it must be marked as Class III or Class IIIL, whichever is appropriate.

<u>Identification</u>: The identification badge is located on the rear of the weight-indicating instrument enclosure and may be viewed by tilting the indicator forward. The identification badge is located on the side of the NEMA 4X enclosure (identified by the letter "S" in the model number.)

The self-destructive identification label for the Model 825 is located on the right-side panel of the enclosure.

<u>Sealing</u>: A Category 1 physical seal or a Category 1 audit trail utilizing two event counters, may be used to seal the indicator. Selection of the sealing method is made by placing the "CAL" switch (located inside the device on the main circuit board) in the desired position.

CAL Switch Position	Sealing Method	Calibration Enabled?
DOWN	Event Counters	YES
UP	Lead-Wire Seal	NO

With the CAL switch in the UP position, the physical security seal must be used. The physical seal is located on the rear panel of the indicator and the wire may be threaded through two drilled-head screws securing the rear panel. Note that with the CAL switch in the UP position and the lead-wire security seal installed, attempting to access the setup and calibration mode will display the message "HARDWARE CALIBRATION DISABLED" and calibration will not be permitted.

To use the event counter security seal, place the CAL switch in the DOWN position. To view the event counters, turn the instrument on. After the self-test and startup screen is displayed, press the front panel Navigation down arrow key to the LEGAL METROLOGY INFORMATION / SETUP option. Then press the ENTER key to enter the LEGAL METROLOGY INFORMATION / SETUP menu screen. Pressing the "1" key or using the navigation keys, highlighting the "VIEW EVENT COUNTERS" and pressing the ENTER key. The display will now show the contents of the event counters. To print the information, press the "P" key. Press any other key to return to the Setup Menu.

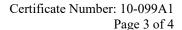
For the 825 Series the CAL jumper in the On position, the physical security seal must be used. The physical seal is located on the rear panel of the indicator and the wire may be threaded through two drilled-head screws securing the rear panel. Note that with the CAL jumper in the On position and the lead-wire security seal installed, attempting to access the setup and calibration mode will display the message "HARDWARE CALIBRATION DISABLED" and calibration will not be permitted.

To use the event counter security seal:

- 1. Place the CAL jumper in the Off position.
- 2. To view the event counters, turn the instrument on.
- 3. After the self-test and startup screen is displayed, press the front panel Navigation down arrow key to the LEGAL METROLOGY INFORMATION / SETUP option.
- 4. Then press the ENTER key to enter the LEGAL METROLOGY INFORMATION / SETUP menu screen.
- 5. Pressing the "I" key or using the navigation keys, highlight the "VIEW EVENT COUNTERS" and pressing the ENTER key.
- 6. The display will show the contents of the event counters.
- 7. To print the information, press the "P" key.
- 8. Press any other key to return to the Setup Menu.

<u>Test Conditions</u>: This certificate supersedes Certificate of Conformance Number 10-099 and is an editorial change issued to add updated pictures of Model 825XYCBW Series indicator to operate the automatic bulk weighing software. The automatic bulk weighing software remains unchanged.

<u>Certificate of Conformance 10-099</u>: This Certificate of Conformance is issued to allow use of an 800 series weight indicator traceable to NTEP Certificate of Conformance Number 08-046. A Model 825CBW was submitted for a laboratory evaluation. The emphasis of the evaluation was on device design, operation, display, and interaction with the weighing device. The device was







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interfaced with a scale simulator then evaluated for proper operation. The Model 825 indicator is metrologically equivalent to the Model 700 series indicator, which was evaluated in the laboratory and in the field under actual operating conditions, no field evaluation was deemed necessary.

Evaluated By: Dan Parks (CA) and Gary Castro (CA) 10-099; B. Stone (OH) 10-099A1 (CN 11045)

<u>Type Evaluation Criteria Used:</u> NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2024 Edition. NCWM Publication 14 Measuring Devices, 2024 Edition.

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

Information Reviewed By: J. Truex (NCWM) 10-099; D. Flocken (NCWM) 10-099A1

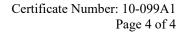
# **Examples of Device:**



Front of Device



Back of Device







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Front of Device



Front of Device



Front of Device



Back of Device



Back of Device



Back of Device