

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For: Non-Computing Scale Counter/Bench, Digital Electronic Models: EQB Series n<sub>max</sub>: See Table Below Capacity: See Table Below Platform: See Table Below

Accuracy Class: III

#### **Submitted By:**

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		Standard Features and Opt	tions	
Semi-automatic zero settin	g mechanism	AC to DC power	r adapter	
Automatic zero setting mechanism (AZSM)		Gross/net display		
Initial zero setting mechanism (IZSM)		Liquid crystal alphanumeric display		
Semi-automatic tare		Pound/kilogram conversion		
Battery power supply		RS-232 serial port		
Models		Capacity	Platform Size	n <sub>max</sub>
EQB-20/40	40 lb x	0.01 lb (20 kg x 0.005 kg)	12 in x 15 in	4000
*EQB 20/40-W	40 lb x	0.01lb (20 kg x 0.005 kg)	12 in x 15 in	4000
*EQB 50/100	100 lb x	0.02lb (50 kg x 0.01 kg)	15 in x 19 in	5000
EQB 50/100-V	V 100 lb x	0.02lb (50 kg x 0.01 kg)	15 in x 19 in	5000
EQB I 50/100	100 lb x	0.02lb (50 kg x 0.01 kg)	15 in x 19 in	5000
EQB I 50/100-	-W 100 lb x	0.02lb (50 kg x 0.01 kg)	15 in x 19 in	5000
*EQB I 100/200	) 200 lb x	0.05lb (100 kg x 0.02 kg)	15 in x 19 in	4000 (5000)
EQB I 100/200	0-W 200 lb x	0.05lb (100 kg x 0.02 kg)	15 in x 19 in	4000 (5000)
EQB 100/200	200 lb x	0.05lb (100 kg x 0.02 kg)	15 in x 19 in	4000 (5000)
EQB 100/200	-W 200 lb x	0.05lb (100 kg x 0.02 kg)	15 in x 19 in	4000 (5000)

\*Models Tested

**Options:** A "W" suffix indicates a "washdown safe" scale. An "I" in the model number indicates a plastic enclosure rather than an aluminum enclosure.

Load Cells: Model EQB 20/40-X: Medidata M 1140-20kg (Certificate of Conformance Number 96-122) Model EQB 50/100-X: Medidata M 1140-50kg (Certificate of Conformance Number 89-075A2) Model EQB I 50/100: Medidata M042-50kg Model EQB 100/200-X and EQB I 100/200: Medidata M042-100kg

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

Brett Gurney Chairman, NCWM, Inc.

James P. Ca James Cassidy

Committee Chair, National Type Evaluation Program Committee Issued: January 10, 2019

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### Fabricantes de Basculas Torrey, S.A. de C.V.

Non-Computing Scale / EQB Series

Application: General purpose bench and counter scale.

**Identification:** A metal identification tag is on the rear of the tower indicator. Additionally, a metal identification tag is attached to the scale base and is visible when the platter is removed. The word "Void" will appear on the scale after any attempt is made to remove the identification tag.

Sealing: The scale uses a Category 1 electronic audit trail with two event counters (calibration and configuration).

To access the calibration counter:

- (1) Turn the scale on.
- (2) During the initial countdown, press the following buttons:
  - W, kg/lb, TARE, ZERO, ZERO, ZERO

The tower indicator will display "CA. XXX", where XXX represents the number of times the scale has been calibrated.

To access the configuration counter:

- (1) Turn the scale on.
- (2) During the initial countdown, press the following buttons:
  - , kg/lb, TARE, ZERO, ZERO, TARE

The tower indicator will display "CF. XXX", where XXX represents the number of times the scale has been configured.

To return to the normal weighing mode, turn the scale off and on.

<u>Test Conditions</u>: This certificate supersedes Certificate of Conformance Number 98-206A1 and was issued to recognize a sale of the company to Fabricantes de Equipos para Refrigeracion S.A. de C.V., recognized in the Submitted By: box on page one. Information provided by the manufacturer was reviewed. No additional testing was deemed necessary. Previous test conditions are listed below for reference.

<u>Certificate of Conformance 98-206A1</u>: This certificate supersedes Certificate of Conformance Number 98-206 and is issued to add additional capacities (50 kg and 100kg) with different load cells. The models EQB 50/100 and EQB I 100/200 were evaluated. The emphasis of this evaluation was on device design, operation, performance, and compliance with influence factor requirements over a range of  $-10^{\circ}$ C to  $40^{\circ}$ C (14°F to 104°F). A load of approximately one-half capacity was applied to the scales over 100 000 times, with shift tests and increasing/decreasing load tests conducted every 25 000 weighments. Additional tests were conducted using 100 VAC, 130 VAC, and a range of DC voltages (8.1 VDC to 9.9 VDC).

<u>Certificate of Conformance Number 98-206</u>: The Models EQB 50/100 and EQB 20/40-W were submitted for evaluation. The emphasis of the evaluation was on device design, operation, performance, and compliance with influence factor requirements. The devices were evaluated for discrimination, power interruption, zero tests, and print format. Several increasing/decreasing load and shift tests were conducted. The devices were tested over a temperature range of

-10 °C to 40 °C. A load of approximately one-half capacity was applied to the scales over 100 000 times. The scales were tested periodically during that time. Additionally, tests were conducted using 100 VAC, 130 VAC, and a range of DC power supply voltages.

Type Evaluation Criteria Used: NIST Handbook 44, 2006 Edition, NCWM Publication 14, 2006 Edition

Tested By: S. Chan (CA) 98-206, J. Latham (CA) and S. Boyd (CA) 98-206A1

**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 (NCWM) 98-206A1; J. Truex (NCWM) 98-206A2



## Fabricantes de Basculas Torrey, S.A. de C.V.

Non-Computing Scale / EQB Series

# **Examples of Device:**



EQB 100/200