

EC type-approval certificate UK 2839 Revision 4

Issued by:

**The National Measurement Office
Notified Body Number 0126**

In accordance with the requirements of the Non-automatic Weighing Instruments Regulations 2000 (SI 2000/3236) which implement, in the United Kingdom, Council Directive 2009/23/EC, this EC type-approval certificate has been issued to:

**Fabricantes de Basculas Torrey, S.A. de C.V.
Ave. Los Andes 605
Col. Coyoacan C.P. 64510
Monterrey Nuevo León
Mexico**

in respect of Class III non-automatic weighing instruments designated the Torrey L-EQ and EQ.

Max	Min (20 e)	e	n
4 kg	0.020 kg	0.001 kg	4000
8 kg	0.040 kg	0.002 kg	4000
10 kg	0.100 kg	0.005 kg	2000
20 kg	0.100 kg	0.005 kg	4000

The necessary data (principal characteristics, alterations, securing, functioning etc) for identification purposes and conditions (when applicable) are set out in the descriptive annex to this certificate.

This revision replaces previous versions of this certification.

Issue Date: 18 March 2015
Valid Until: 23 January 2018
Reference No: TS1201/0082


**Signatory: P R Dixon
for Chief Executive**

Descriptive Annex

1 NAME AND TYPE OF INSTRUMENT

These instruments are the Torrey L-EQ and EQ, Class III, mains operated; self-indicating, non-automatic weighing instruments (Figures 1 and 2).

The individual models are as follows:

Model	Max	Min	e =	n
L-EQ-4/8	4 kg	0.020 kg	0.001 kg	4000
L-EQ-8/16	8 kg	0.040 kg	0.002 kg	4000
L-EQ-10/20	10 kg	0.100 kg	0.005 kg	2000
L-EQ-20/40	20 kg	0.100 kg	0.005 kg	4000
EQ-4/8	4 kg	0.020 kg	0.001 kg	4000
EQ-8/16	8 kg	0.040 kg	0.002 kg	4000
EQ-10/20	10 kg	0.100 kg	0.005 kg	2000
EQ-20/40	20 kg	0.100 kg	0.005 kg	4000

2 DESCRIPTION

2.1 Construction

2.1.1 Mechanical

Main features:

- Stainless steel construction.
- Single display
- Stainless steel load receptor.
- Level indicator (under front of load receptor).

The L-EQ (Figure 1) has the following twelve keys: OFF, ON, backlight on/off, ZERO, TARE, PRINT, kg, lb (disabled for use under this approval), oz (disabled for use under this approval), SET LIMIT (to set alarm limits), HI (to display high alarm limit or increment limit value), LO (to display low alarm limit or increment limit value).

The EQ (Figure 2) has the following 6 keys: OFF, ON, backlight on/off, ZERO, TARE, kg/oz/lb (disabled for use under this approval so that the instrument can only show kg).

The L-EQ and EQ have identical circuitry but different housings, and the EQ has fewer functions.

2.1.2 Devices

- Initial zero setting device ($\leq 20\%$ of Max)
- Semi-automatic zero setting device ($\leq 4\%$ of Max)
- Zero tracking device
- Net indicator
- Zero indicator
- Semi-automatic subtractive tare balancing device

2.1.3 Load cell

The load cell is a Medidata model M022.

2.1.4 Power supply

The remote power supply unit is an ABLEX model 128A-9-500D, and supplies 9 V DC to the instrument.

2.2 Operation

2.2.1 Switch-on

At switch-on, a display test is performed to ensure that all segments are active.

2.2.2 Zero-tracking

Zero tracking operates provided that the instrument is within range of not more than 4% of its capacity.

2.2.3 Semi-automatic zero setting

The zero button operates provided that the instrument is within range of not more than 4% of its capacity.

2.2.4 Over-range and under-range

If the load is less than gross zero, then the display shows "NEG".

The instrument may be set to display weight up to nine divisions above Max. At greater loads the display shows "OVRLOAD".

2.2.5 Tare

Subtractive tare balancing can be performed.

2.2.6 Alarm (L-EQ only)

High and low alarm levels can be set. When the weight is less than the set low level or more than the set high level, the appropriate annunciator is lit.

3 TECHNICAL DATA

3.1 Power supply

The instrument operates on a 230 V AC supply via its remote power supply (see above).

4 PERIPHERAL DEVICES AND INTERFACES

4.1 Peripheral devices

The instrument may be connected to any peripheral device that has been issued with a Test Certificate by a Notified Body responsible for type approval under Directive 90/384/EEC; or

A peripheral device without a Test Certificate under the following conditions:

- it bears the CE marking for conformity to the EMC Directive 89/336/EEC;
- it is not capable of transmitting any data or instruction into the weighing instrument, other than to release a printout, checking for correct data transmission or validation;
- it prints weighing results and other data as received from the weighing instrument without any modification or further processing; and
- it complies with the applicable requirements of EN45501, i.e. 4.2, 4.4, 4.6 and 4.7.

4.2 Interfaces

The instrument may have the following interface types:

- RS232 serial output.
- Tare footswitch connector.

5 APPROVAL CONDITIONS

This certificate is issued subject to the following conditions:

5.1 Legends and inscriptions

5.1.1 The instrument bears the following legends on or near the display:

Max
Min
e =
T =

5.1.2 The instrument shall bear the following legends:

Class III
CE marking
Green M
Serial number
Manufacturer's mark or name
Certificate number

The markings and inscriptions shall fulfil the requirements of Paragraph 1 of Annex IV of the Directive 90/384/EEC.

6 SECURING AND VERIFICATION MARKS

6.1 The data plate is secured, either by sealing or by being of a form such that it is destroyed when removed.

6.2 The housing must be secured by a suitable tamper-resistant label placed over the join between the two parts of the housing. This securing label may bear either:

- a mark of the manufacturer and/or manufacturer's representative, or
- an official mark of a verification officer.

6.3 Calibration and configuration are accessed by pressing buttons in a sequence and then entering a passcode. There are two associated counters which can be read, but not changed, as described in the User Manual. The two relevant counter numbers must be shown on a tamper-resistant label.

7 ALTERNATIVES

7.1 Having an alternative manufacturer designated as LESÁK-ZEMAN s.r.o. This manufacturer will also be incorporating an alternative scale design designated the KS1-XX series where the XX relates to the capacity of the instrument. This design features the same components as the Torrey L-EQ, but has a slightly different overlay cover.

7.1.1 The company name of the alternative manufacturer, designated as LESÁK-ZEMAN s.r.o., is changed to ZEMAN VAHY s.r.o. Figure 4 shows the amended overlay cover.

7.2 Having an alternative overlay cover for the L-EQ. as shown in Figure 5

7.3 Having a new brand name, CORECO, with an alternative Operator overlay and Display overlay (Figure 6 & 7).

7.4 Having the mark of the manufacturer and/or manufacturer's representative, as detailed in section 6.2, as shown in Figure 8.

8 ILLUSTRATIONS

- Figure 1 Torrey L-EQ
- Figure 2 Torrey EQ
- Figure 3 LESÁK-ZEMAN s.r.o model KS1- xx series
- Figure 4 ZEMAN VAHY s.r.o model KS1- xx series
- Figure 5 Alternative overlay for the L-EQ
- Figure 6 Alternative [CORECO] Operator overlay
- Figure 7 Alternative [CORECO] Display overlay
- Figure 8 The mark of the manufacturer and/or manufacturer's representative

CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
UK 2839	24 January 2008	Type approval first issued.
UK 2839 Revision 1	17 February 2009	Section 7.1 added to alternatives, new alternative manufacturer LESÁK-ZEMAN s.r.o, together with a new model design KS1-XX.
UK 2839 Revision 2	19 August 2013	Section 7.1.1 added to alternatives, The name of the alternative manufacturer is changed to ZEMAN VAHY s.r.o. Addition of Figure 4 Change to text in 8 ILLUSTRATIONS and Figure 3: KS1- 08 is replaced by KS1- xx series
UK 2839 Revision 3	25 October 2013	Addition of section 7.2 and Figure 5
UK 2839 Revision 4	18 March 2015	Addition of: sections 7.3 and 7.4, and Figures 6, 7 & 8.



Figure 1 Torrey L-EQ
(Note: legends should be as in Section 5.1.1)



Figure 2 Torrey EQ
(Note: legends should be as in Section 5.1.1)



Figure 3 LESÁK-ZEMAN s.r.o model KS1- xx series



Figure 4 ZEMAN VAHY s.r.o model KS1- xx series

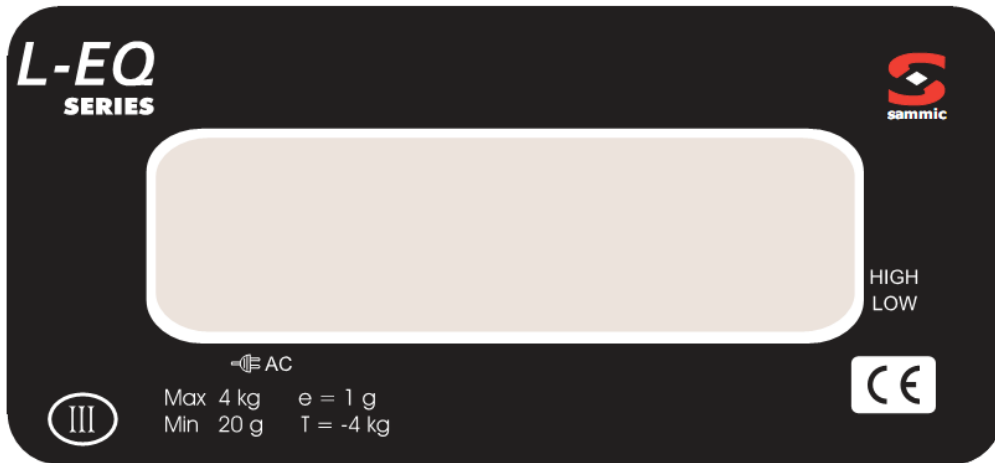


Figure 5 Alternative overlay for the L-EQ



Figure 6 Alternative [CORECO] Operator overlay



Figure 7 Alternative [CORECO] Display overlay



Figure 8 **The mark of the manufacturer and/or manufacturer's representative**