

# EC type-approval Certificate

Number **T8457** revision 0 Project number 13200599 Page 1 of 1

| Issued by                                 | conformity modules mentioned in  | etherlands to perform tasks with respect to<br>article 9 of Directive 2009/23/EC, after<br>iring instrument meets the applicable<br>/EC, to: |  |
|---|--|--|--|
| Manufacturer                              | Mettler-Toledo, LLC<br>1150 Dearborn Drive<br>Worthington, Ohio 43085-6712<br>United States of America |  |  |
| Measuring instrument                      | A Non-automatic weighing ins   | trument + + + + + + + + + + + + +  |  |
| * * * * * * * * *                         | Type   | + :+ BC series + + + + + + + + + + + +   |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   | Particular test strategies   | <u> </u>   |  |
|   | Further properties are described in<br>– Description T8457 revision 0;                                 |  |  |
|   | - Documentation folder T8457-1.  |  |  |
|   |  |  |  |
| Valid until                               | 6 May 2024   |  |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
| Issuing Authority                         | NMi Certin B.V., Notified Body   | number 0122 + + + + + + + + + +  |  |
| + + + + + + + + +                         | 6 May 2014   | number 0122  |  |
|   | + + + + + + + + + + + +  |  |  |
|   |  |  |  |
|   | +  |  |  |
|   |  |  |  |
| * * * * * * * * *                         | C. Oosterman<br>Head Certification Board   |  |  |
|   |  |  |  |
| NMi Certin B.V.                           | This document is issued under the provision  | Parties concerned can lodge  |  |
| Hugo de Grootplein 1<br>3314 EG Dordrecht | that no liability is accepted and that the applicant shall indemnify third-party liability.            | objection against this decision,<br>within six weeks after the date of   |  |
| The Netherlands<br>T +31 78 6332332       | The designation of NMi Certin B.V. as Notified   | submission, to the general manager<br>of NMi (see www.nmi.nl).   |  |
| certin@nmi.nl                             | Body can be verified at http://  | INCPECTION   |  |
| www.nmi.nl                                | ec.europa.eu/enterprise/newapproach/nando/   | Reproduction of the complete document only is permitted.   |  |



Number **T8457** revision 0 Project number 13200599 Page 1 of 4

### **1** General information about the non-automatic weighing instrument

All properties of the non-automatic weighing instrument, whether mentioned or not, shall not be in conflict with the legislation.

#### 1.1 Essential parts

| Number    | Pages | Description   | Remarks |
|-----------|-------|---------------|---------|
| 8457/0-01 | 1     | Block diagram | -       |

The electronics;

The mechanical assembly with load cell.

EMI protection measures:

- The instrument is built into a metal housing.

### **1.2 Essential characteristics**

| Accuracy class                    | (II)   |  |
|-----------------------------------|--|--|
| Maximum capacity                  | 15 kg $\leq$ Max $\leq$ 60 kg                          |  |
| Verification scale interval       | e ≥ 5 g  |  |
| Weighing range(s)                 | Single interval<br>Multi-interval<br>Multiple range    |  |
| Maximum number of scale intervals | $n \le 3000$ divisions (per partial weighing range)    |  |
| Maximum number of weighing ranges | 2  |  |
| Tare                              | T ≤ -Max   |  |
| Temperature range                 | -10 °C / +40 °C  |  |
| Power supply voltage              | 5 V DC (USB)   |  |
| Application                       | Intended to be used for determining a transport tariff |  |
| Software identification           | 30099478 Version 0.00.0002<br>Checksum: 0x4B8B4440     |  |

Software:

- Press and hold the up arrow;
- Select the ``Info`` tab then press Enter;
- Select the ``SW Ver`` tab then press Enter.

<sup>-</sup> The identification number will be displayed after pressing the key sequence:



Number **T8457** revision 0 Project number 13200599 Page 2 of 4

### 1.3 Essential shapes

The non-automatic weighing instrument is built according to the drawings:

| Number    | Pages | Description          | Remarks       |
|-----------|-------|----------------------|---------------|
| 8457/0-02 | 1     | Scale assembly GSP60 | Exploded view |
| 8457/0-03 | 1     | Scale assembly GSP30 | Exploded view |

The data plate is secured against removal by sealing or will be destroyed when removed. The inscriptions Max, Min, e, as required by Directive 2009/23/EC annex IV article 1.4 are presented in the display by software.

Inside the cabinet is an adjustment lock, located on the main board.

### **1.4 Conditional parts**

The non-automatic weighing instrument may be equipped with peripheral equipment which is used for the applications listed in article 1(2)(a) of Directive 2009/23/EC, provided that the peripheral equipment is certified to be connected to a non-automatic weighing instrument by a Notified Body responsible for type examination under Directive 2009/23/EC, or, that the equipment and the use of the equipment complies with the requirements of WELMEC 2.5 Issue 2, 2.2.

The non-automatic weighing instrument may be equipped with an electronic Point Of Sale (POS) or an Electronic Cash Register (ECR), provided that the POS and ECR are certified to be connected to an non-automatic weighing instrument EC type-approved by a Notified Body responsible for type examination under Directive 2009/23/EC.

The non-automatic weighing instrument may be equipped with Electronic Funds Transfer equipment (EFT/ECU), if the EFT/ECU represents only the price total on the display.

The non-automatic weighing instrument is fitted with a levelling device and a level indicator, unless the instrument is installed in a fixed position. A ring on the level indicator indicates when the maximum tilt is exceeded.

#### **1.5** Non-essential parts

The non-automatic weighing instrument may be connected to non-essential devices, for example but not limited to bar code readers, foot switches, second display's and cash drawers, provided that:

- They do not present primary data used for purposes mentioned in article 1(2)(a) of Directive 2009/23/EC unless the "preliminary observations" in Annex 1 of this directive is satisfied;
- They do not lead to an instrument having other essential characteristics than those fixed by this type-approval document.

Other non-essential parts:

- AC/DC plug-in power supply.



Number **T8457** revision 0 Project number 13200599 Page 3 of 4

# 2 Information about the main constituent parts of the non-automatic weighing instrument

### 2.1 The electronics

### 2.1.1 Essential parts

| Number    | Pages | Description                            | Remarks    |
|-----------|-------|--|------------|
| 8457/0-06 | 1     | PCBA GSP mainboard - 64090864C         | Layout     |
| 8457/0-07 | 3     | PCBA GSP mainboard - 64090864C         | Parts list |
| 8457/0-08 | 1     | PCBA GSP Rito Herman board - 64091235B | Layout     |
| 8457/0-09 | 2     | PCBA GSP Rito Herman board - 64091235B | Parts list |

## 2.1.2 Essential characteristics

Software:

| Producer       | Туре    | Certificate number |
|----------------|---------|--------------------|
| Mettler-Toledo | Rainbow | TC8039             |

List of legally relevant functions:

- Determination stability of equilibrium;
- Zero indicator;
- Semi-automatic zero-setting;
- Initial zero-setting;
- Zero-tracking;
- Semi-automatic subtractive tare weighing;
- Gravity compensation;
- Adjustment / set-up mode via a switch on the main board;
- Acting upon significant faults;
- Checking the display;
- Displaying the price supplied by an external device through the interface.

#### 2.1.3 Conditional parts

The non-automatic weighing instrument may be equipped with one or more of the following protective interfaces that have not to be secured:

- USB device.



Number **T8457** revision 0 Project number 13200599 Page 4 of 4

### 2.1.4 Non-essential parts

Display; Keyboard.

## 2.2 The mechanical assembly with load cell

### 2.2.1 Essential parts

| Number    | Pages | Description       | Remarks |
|-----------|-------|-------------------|---------|
| 8457/0-04 | 1     | Loadcell assembly | MT1041  |
| 8457/0-05 | 1     | Loadcell assembly | 0785    |

### 2.2.2 Essential characteristics

 $e \geq E_{max}$  / 10000, or  $e_1 \geq E_{max}$  / 10000 in case of multi-interval instrument; Excitation power supply 5 V DC.

#### 2.2.3 Essential shapes

See drawings in chapter 2.2.1.

#### 3 Seals

To secure components that may not be dismantled or adjusted by the user, the non-automatic weighing instrument has to be secured in a suitable manner on the locations indicated in the drawings:

| Number    | Pages | Description | Remarks |
|-----------|-------|-------------|---------|
| 8457/0-10 | 2     | Sealing     | -       |

#### 4 Conditions for conformity assessment

The marks, facilities for the marks and the inscriptions on the non-automatic weighing instrument fulfill the requirements of article 1 of Annex IV of Directive 2009/23/EC.

In case the weighing instrument is equipped with an electronic Point Of Sale the conformity assessment procedure of WELMEC 2.2 Issue 3, 2.2 shall be taken into account.