EC type-approval certificate

Number **T7708** revision 1
Project number 11200720

Issued by	NMi Certin B.V. Hugo de Grootplein 1 3314 EG Dordrecht The Netherlands
In accordance with	The Council Directive 2009/23/EC on non-automatic weighing instruments.
Manufacturer	Dibal S.A. Astinze Kalea, 24-Pol. Ind. Neinver 48160 Derio (Bilbao-Vizcaya) Spain
In respect of	A class (III), electronic, single- or multi-interval **non-automatic weighing instrument**, intended to be used for direct sales to the public. Manufacturer mark/name: Dibal, Cely Type : SPC-S / SPC-T / QC0 / PC50 / TPC-S / TPC-T / TP0 / QC50
Characteristics	3 kg ≤ Max ≤ 30 kg e ≥ 1 g n ≤ 3000 divisions (per partial weighing range) Maximum of 2 partial weighing ranges T ≤ -Max Temperature range -10°C / +40°C In the description number T7708 revision 1 further characteristics are described.
Valid until	15 March 2021
Description and documentation	The instrument is described in the description number T7708 revision 1 and documented in the documentation folder T7708-2, appertaining to this EC type-approval certificate.
Remarks	This revision EC type-approval certificate replaces the earlier version, including its documentation folder.

The Notified Body no. 0122
NMi Certin, 20 December 2011

C. Oosterman
Head Certification Board

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1 General information about the non-automatic weighing instrument

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

1.1 Essential parts

Indicator:

- The electronics;
- The mechanical assembly with load cell.

EMC protective measures SPC-S / SPC-T / TPC-S / TPC-T:
- Ferrite on cable between interface and main board (13 turns);
- Ferrite on cable between load cell and main board (1 turn);
- Ferrite on cable between power plug and main board (1 turn);
- Cable between main board and 2nd display is wrapped with copper tape and is connected to ground (Pole version).

EMC protective measures QC0 / PC50 / TP0 / QC50:
- Ferrite on cable between interface and main board (9 turns);
- Ferrite on cable between load cell cable and main board (1 turn);
- Ferrite on cable between battery and main board (1 turn).

1.2 Essential characteristics

Power supply:
- 230V AC, 50/60 Hz to 9V DC adapter or;
- 100~240V AC, 50/60 Hz to 12 DC;
- Rechargeable lead-acid battery 6V DC.

1.3 Essential shapes

The non-automatic weighing instrument is built according to the drawings:
- "Exploded view TPC-S, TP0, QC50", drawing number T7708/1-01;
- "Exploded view pole version TPC-T", drawing number T7708/1-02;
- "Exploded view SPC-S, QC0, PC50", drawing number T7708/1-03;
- "Exploded view pole version SPC-T", drawing number T7708/1-04.

The data plate is secured against removal by sealing or will be destroyed when removed.

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:
- "Sealing", drawing number T7708/1-05;

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, if the peripheral equipment is certified to be connected to an EC type-approved non-automatic weighing instrument by a Notified Body responsible for type examination under Directive 2009/23/EC.
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.

Battery;
AC/DC-adapter;
External power supply.

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

2.1 The electronics

2.1.1 Essential parts

Description	Drawing number	Remark
Main board	T7708/1-06	PCB layout, parts list

2.1.2 Essential characteristics

List of devices:
- Determination stability of equilibrium;
- Zero indicator;
- Semi-automatic zero-setting;
- Initial zero-setting;
- Semi-automatic subtractive tare balancing;
- Indication of stable equilibrium;
- Calibration / set-up mode via a switch on the main board;
- Acting upon significant faults;
- Checking the display;
- Price calculation;
- Check weighing mode;
- Counting device.

When equipped with a printer the following devices may be present:
- Non-weighed articles;
- PLU function.

2.1.3 Conditional parts

The interface section is located on the main board. The non-automatic weighing instrument may be equipped with one or more of the following protective interfaces that have not to be secured:
- RS232C.

2.1.4 Non-essential parts

Display;
Keyboard.

2.2 The mechanical assembly with load cell

2.2.1 Essential parts

Description	Drawing number	Remark
Load cell specifications	T7708/1-07	-
Exploded view TPC-S, TP0, QC50	T7708/1-01	-
Exploded view pole version TPC-T	T7708/1-02	-
Exploded view SPC-S, QC0, PC50	T7708/1-03	-
Exploded view pole version SPC-T	T7708/1-04	-

2.2.2 Essential characteristics

$e \geq E_{max}/5000$, 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 the drawings in chapter 2.2.1, essential parts.

3 Approval conditions

See chapter 1.3, essential shapes.

4 Seals and verification marks

See chapter 1.3, essential shapes.

5 CE-mark of conformity and inscriptions

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.