



EC type-approval Certificate

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Project number SO13203616
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Issued by NMI Certin B.V.,
designated and notified by the Netherlands to perform tasks with respect to
conformity modules mentioned in article 9 of Directive 2009/23/EC, after
having established that the measuring instrument meets the applicable
requirements of Directive 2009/23/EC, to:

Manufacturer A&D Instruments Ltd
24-26 Blacklands Way
Abingdon Business Park
Abingdon OX14 1DY
United Kingdom

Measuring instrument A **Non-automatic weighing instrument**
Type : EW-...i

Further properties are described in the annexes:
– Description T6391 revision 1;
– Documentation folder T6391-1.

Valid until 17 December 2023

Remarks This revision replaces the earlier version(s), except for its documentation
folder.

Issuing Authority

NMI Certin B.V., Notified Body number 0122
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C. Oosterman
Head Certification Board

NMI Certin B.V.
Hugo de Grootplein 1
3314 EG Dordrecht
The Netherlands
T +31 78 6332332
certin@nmi.nl
www.nmi.nl

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Description

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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, shall not be in conflict with the legislation.

1.1 Essential parts

See drawing: EW-i Series Block Diagram, drawing number BD-EW-I-1;
The electronics;
The mechanical assembly with load cell.

EMC protection measures:

- The A/D board is shielded with a metal cover;
- The upper plate and the platform are made of metal;
- The ground plate inside the balance is made of metal.

1.2 Essential characteristics

Accuracy class	II or III
Maximum capacity	$30\text{ g} \leq \text{Max} \leq 12\text{ kg}$
Verification scale interval	$e \geq 0,02\text{ g}$
Maximum number of scale intervals	$n \leq 3000$ divisions (per partial weighing range)
Temperature range	+5 °C / +40 °C
Weighing range(s)	Single range Multiple range
Power supply voltage	Input AC/DC adapter: 220-240 V AC 50/60 Hz ; Input external power supply 7 ~ 10 V DC.

1.3 Essential shapes

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

- Exploded View, drawing number 1-1-1;
- Exploded View, drawing number 1-2-1.

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

Inside the cabinet is a calibration lock, located on the main board.



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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 an EC type-approved 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 comply with the requirements of WELMEC 2.5 Issue 2 Section 2.2.

The non-automatic weighing instrument is fitted with a levelling device and a level indicator, unless the instrument is installed in a fixed position. The level indicator has a sensitivity of at least 2 mm for a tilt of 2/1000.

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:

- Rechargeable 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

Number	Pages	Description	Remarks
2-1-2	1	Parts layout of PZ:3762	Main board
2-1-3	2	Parts list of PZ:3762	Parts list



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2.1.2 Essential characteristics

List of legally relevant functions:

- Determination stability of equilibrium;
- Zero indicator;
- Initial zero-setting;
- Zero-tracking;
- Combined initial zero-setting and subtractive tare balancing (only for class II);
- Combined semi-automatic zero-setting and subtractive tare balancing;
- Indication of stable equilibrium;
- Gravity compensation;
- Calibration / set-up mode via a switch on the main board;
- Underhook weighing;
- Acting upon significant faults;
- Checking the display;
- Indications other than primary indications;
- Indication of additional information.

2.1.3 Conditional parts

Number	Pages	Description	Remarks
2-3-2	1	Parts layout of PZ:3765	Rechargeable battery OP-09

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

- RS232C;
- Comparator Output OP-04 (optional).

2.1.4 Non-essential parts

- Display;
- Keyboard.

2.1.5 Non-essential characteristics

- Counting device (pcs);
- Percentage indication (%);
- Check weighing mode (Comparator).



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2.2 The mechanical assembly with load cell

2.2.1 Essential parts

Number	Pages	Description	Remarks
EW-I LC	1	Load cell drawings + specifications LC148-300 / LC140-3000 / LC140-12K	-

2.2.2 Essential characteristics

- In case $e < 1$ g: $e \geq E_{\max} / 30000$;
- In case $e \geq 1$ g: $e \geq E_{\max} / 12000$;
- Excitation power supply 5 V DC.

2.2.3 Essential shapes

Number	Pages	Description	Remarks
1-1-1	1	Exploded View EW-150-i	-
1-2-1	1	Exploded View EW-1500-I / EW-12Ki	-

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 drawing:

- Sealing diagram, drawing number figure 3.

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.