

EC type-approval certificate

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Issued by

NMi Certin B.V. Hugo de Grootplein 1 3314 EG Dordrecht The Netherlands

Notified Body Number 0122

In accordance

with

The Council Directive 90/384/EEC on non-automatic weighing instruments.

Applicant

CAS Corporation

#19, Ganap-ri, Gwangjuk-Myoun

Yangju-Gun, Geonggi-do

South Korea

In respect of

A class (III), electronic, non-automatic weighing instrument,

intended to be used for direct sales to the public.

Manufacturer

: CAS

Type

: PD-II

Characteristics $6 \text{ kg} \leq \text{Max} \leq 60 \text{ kg}$

e ≥ 2 g

 $n \le 3000$ divisions

Valid until

8 October 2014

Description and The instrument is described in the description number T6616 revision 1 and documentation documented in the documentation folder T6616-1, appertaining to this

EC type-approval certificate.

Remarks

This revision EC type-approval certificate replaces the earlier versions, except for its

documentation folder.

Delft, 1 November 2004

NMi Certin

Manager Product Certification

Nederlands Meetinstituut Hugo de Grootplein 1 3314 EG Dordrecht

Telephone +31 78 6332332 Telefax +31 78 6332309

(Chamber of Commerce no.27,228,701)

Subsidiary companies:

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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

The electronics:

The mechanical assembly with load cell.

EMC protection measures:

- The A/D board is shielded with a metal cover;
- The case and the platform are made of metal;
- Noise filter in power supply lines (inside scale);
- Ferrite around the external pole display cable (as close as possible near the scale).

1.2 Essential characteristics

Power supply: 230 V AC, 50 Hz.

1.3 Essential shapes

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

- Exploded view PD-II, drawing number 3000-PD2-0001-0;
- Exploded view PD-II R, drawing number 3000-PD2-0002-0.

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 drawing:

- Sealing method, drawing number 3000-PD2-0003-0;
- Sealing method, drawing number 3000-PD2-0004-0.

The securing component has to bear either:

- A mark of the manufacturer laid down in a notified body approved quality system (Annex II of the directive 90/384/EEC), or
- An official mark of a Member State of the EEC, or another party to the EEA agreement.

Inside the cabinet is a calibration 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 the EC Directive (90/384/EEC), if the peripheral equipment is certified to be connected to an EC type-approved non-automatic weighing instrument by a Notified Body appointed to certify non-automatic weighing instruments according to paragraph I of Annex II of the EC directive on Non-Automatic Weighing Instruments.

The non-automatic weighing instrument may be equipped with an Electronic Point of Sale (EPoS) or an Electronic Cash Register (ECR), if these EPOS and ECR are certified to be connected to an EC type-approved non-automatic weighing instrument by a Notified Body appointed to certify non-automatic weighing instruments according to paragraph I of Annex II of the EC Directive on Non-Automatic Weighing Instruments.



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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 the EC Directive (90/384/EEC) 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.

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	Rev.	Remarks
3.3. Wiring diagram	37		
Part location (Analog PCB) Parts name: Analog PCB assembly	PCB6121-PMD-0101		Drawing
	PL 6121-PMD-0101		Parts list
Part location (Main PCB)	PCB6100-PPD-2000-A		Drawing
Parts name: Main PCB assembly	PL 6100-PPD-2000-A		Parts list

2.1.2 Essential characteristics

List of devices:

- Determination stability of equilibrium;
- Zero indicator;
- Semi-automatic zero-setting;
- Initial zero-setting;
- Zero-tracking;
- Semi-automatic subtractive tare balancing;
- Indication of stable equilibrium;
- Gravity compensation;
- Calibration / set-up mode via a switch on the main board;
- Acting upon significant faults;
- Checking the display;
- Changing from kg to lb (only for the countries where the use of lb is allowed and complying with the requirements of the country where the instrument is taken into service).



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2.1.3 Conditional parts

Description	Drawing number	Rev.	Remarks
Part location (Power PCB) Parts name: Power PCB assembly	PCB6140-PPD-2000-A PL 6140-PPD-2000-A		Drawing Parts list

The interface section is located 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;
- Parallel;
- I/O for display, customer- and remote-display.

2.1.4 Non-essential parts

Display; Keyboard.

2.2 The mechanical assembly with load cell

2.2.1 Essential parts

Description	Drawing number	Rev.	Remarks
Load cell model BCA-xxL (in which xx = capacity of the load cell)	BCA-401	02	

2.2.2 Essential characteristics

 $e \ge E_{max}/6000$;

Excitation power supply 12 V DC.

The total dead load (= weighing construction + platform) on the load cell \leq 15.25% of E_{max} .

2.2.3 Essential shapes

Description	Drawing number	Rev.	Remarks
Exploded view PD-II	3000-PD2-0001-0		
Exploded view PD-II R	3000-PD2-0002-0		



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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.