(UK/0126/0063) MI-006

NATIONAL WEIGHTS AND MEASURES LABORATORY

United Kingdom of Great Britain and Northern Ireland

Certificate of EC type-examination of a measuring instrument Number: UK/0126/0063 revision 2

issued by the Secretary of State for Business, Innovation and Skills
Notified Body Number 0126

In accordance with the requirements of the Measuring Instruments (Non-Prescribed Instruments) Regulations 2006 which implement, in the United Kingdom, Council Directive 2004/22/EC, this certificate of EC type-examination has been issued to:

Prisma Industriale S.R.L.
Via la Bionda, 17
I-43036 Fidenza (PR)
Italy

in respect of a family of automatic checkweighers designated the D3 and having the following characteristics:

Maximum capacity	Max ≤ 8000 g
Minimum capacity	Min ≥ 100 g
Scale interval	e ≥ 1 g
Number of scale intervals	n ≤ 1600
Maximum belt speed	75 m/min
Accuracy class	XIII(1)

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 certificate.

Signatory: P R Dixon
for Chief Executive
National Weights & Measures Laboratory
(Part of the National Measurement Office)
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Descriptive Annex

1 INTRODUCTION

The automatic catchweighing instruments within the family designated the D3 operate as automatic checkweighers (Category X).

The instruments comprise a cabinet with user interface, weighing device, mechanical handling facilities and reject device. The instruments are designed to weigh packs dynamically.

2 FUNCTIONAL DESCRIPTION

2.1 Mechanical

2.1.1 The instrument (Figure 1) is constructed in stainless steel. The framework is a fabricated floor standing stainless steel frame on adjustable feet. On the frame are mounted the modular conveyor sections (in-feed, weigh platform, and out-feed) and the main cabinet with user interface. The out-feed conveyor can be equipped with one of a number of reject devices. The instrument is designed to be permanently installed, with a level indicator is located on the frame at the front of the machine.

2.1.2 The control cabinet, situated behind the conveyors, houses the electrical hardware. A console at the top of the control cabinet contains the keyboard and LCD display type PR500 (Figure 2). Photocells mounted at either end and either side of the conveyor are used for pack detection.

2.1.3 Weigh platform unit

2.1.3.1 The weighing device comprises two strain gauge load cells located below the centre of the weigh conveyor.

The load cell type may be as follows: Tedea Huntleigh 1042 C3, capacity according to section 3.1 of this certificate.

Any compatible load cell may be used providing the following conditions are met:

- There is a respective OIML Certificate of Conformity (R60) or a test certificate (EN45501) issued for the load cell by a Notified Body responsible for type examination under Directive 2009/23/EC.
- The certificate contains the load cell types and the necessary load cell data required for the manufacturer's declaration of compatibility of modules (WELMEC 2, Issue 5, May 2009, No 11), and any particular installation requirements. A load cell marked NH is allowed only if humidity testing to EN45501 has been conducted on this load cell.
- It is not a load cell with digital output
- The characteristics of the replacement load cell such as nlc, Y, Z are the same or better than the Tedea Huntleigh 1042 C3, capacity 5 kg
- The design of the load cells and the material are the same
- No oil damper is used

2.1.3.2 Packs are weighed as they pass over the weigh head conveyor which runs continuously at the speed of the in-feed and out-feed conveyors.

2.2 Electrical

2.2.1 The control cabinet is accessed from a door at the back. Inside are the main board, load cell module, filters, circuit breakers, power supplies, motor drive cards and appropriate input/output modules for external electrical interfaces such as the out-feed mechanisms and external peripherals.

2.2.2 The A/D converter unit type PR302 is directly connected to the load cell with a 6-wire shielded cable and reads and digitises the analogue load cell signal. The digitised signal is then transmitted by means of a serial line to the control unit.

2.2.3 The control unit type PR202 receives this digital value and performs digital filtering and processing of the signal to produce the individual pack weight, manages the user interface, and controls the conveyor belt motors and the ejection system.

2.5 Devices

2.5.1 The instrument has the following devices:

- Semi-automatic zero-setting (not accessible to the user, calibration mode only)
- Initial zero-setting
- Zero-tracking
- Automatic zero setting device active during automatic operation (at least every 5 min)
- Pre-set tare device (subtractive)
- Static calibration not accessible to the user
- Dynamic calibration (not accessible to the user)
- Belt speed setting (accessible to the user)
- Internal memory for storage of batch reports
- Device that acts upon significant faults
- Screen check at power-up

3 TECHNICAL DATA

3.1 The instruments have the following technical characteristics:

Model	08D3	09D3	10D3
Maximum capacity:	1600 g	3200 g	8000 g
Minimum capacity (Min):	100 g	200 g	500 g
Scale interval (e =):	1 g	2 g	5 g
Maximum number of scale intervals:	1600		
Load cells E_{max}	5 kg	10 kg	10 kg
Maximum belt speed:	75 m/min		
Tare:	T ≤ - Max		
Climatic environment	5°C to +40 °C		
	Non-condensing (closed)		
Electromagnetic environments	E1 and E2		
Power supply	230 Va.c. 50 Hz		
Accuracy class	XIII(1)		

3.2 Documentation and drawings

Description	Drawing / Document number	Rev.
Technical reference Manual	0m18d30301	001M
Dimensional drawings (O8D3) Dimensional drawings (O9D3) Dimensional drawings (10D3)	PA010085 PD090002 PD090003	A00 A00 A00
Electrical assembly drawings	51590102	01
PCB drawings	PR202 PR302 PR402 PR700	F D D C

3.3 Software

3.3.1 The general software is designated G6IJ, the legally relevant module is designated 9DE7. These software designations are shown in the start-up window as "software release" and "legal release", respectively. The general software release may also be displayed in the upper left corner of the OPTIONS menu pages, which can be accessed from the main menu page by pressing the F5 function key and then F3.

3.3.2 Security

Access to the legally relevant part of the software is password protected. Every time the metrological parameters or the calibration are changed an audit counter is incremented. This counter, designated "Access counter", can be displayed by accessing the "WEIGHING OPTIONS" menu page, and should be written on a tamper-evident label located on or near the rating plate.

4 PERIPHERAL DEVICES AND INTERFACES

4.1 Interfaces

4.1.1 The instrument may have a number of the following interfaces:

- RS 232
- USB (only for data collection on memory stick)

4.2 Peripheral devices

4.2.1 The instrument may be connected to any peripheral device that has been issued with a parts certificate by a Notified Body responsible for Annex B (MI-006) under Directive 2004/22/EC in any Member State and bears the CE marking of conformity to the relevant directives; or

A peripheral device without a parts certificate may be connected under the following conditions:

- it bears the CE marking for conformity to the EMC Directive;
- 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 Paragraph 8.1 of Annex I.

5 APPROVAL CONDITIONS

The certificate is issued subject to the following conditions:

5.1 Legends and inscriptions

5.1.1 The instrument bears the following legends (Figure 3):

'CE' marking
Supplementary metrology marking
Notified body identification number
Accuracy class
Serial number
Manufacturers mark or name
Certificate number

6 LOCATION OF SEALS AND VERIFICATION MARKS

6.1 The 'CE' marking, supplementary metrology marking and certificate number are located on the side of the control cabinet. The CE mark shall be impossible to remove without damaging it. The data plate shall be impossible to remove without it being destroyed.

The markings and inscriptions shall fulfil the requirements of Paragraph 9 of Annex I of the Directive 2004/22/EC.

6.2 Components that may not be dismantled or adjusted by the user (load cell) will be secured by either a wire and seal or tamper evident label and securing mark. The securing mark may be either:

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

7 ALTERNATIVES

7.1 Having a modified software allowing the dynamic setting to be available to the user. A dynamic calibration (60 packs) is required whenever a stored program is modified by the user, the resulting dynamic correction is automatically recorded along with the last calibration date and time for the program. Dynamic correction and calibration date and time cannot be modified during automatic operation and are included in the final batch report. They are automatically deleted when the program is changed, a new calibration is required to run the program. The dynamic setting operates over the complete weighing range.

The general software is designated G6LN, the legally relevant module is designated 981A (displayed as per section 3.3.1).

Note: The rating plate no longer shows the list of dynamically calibrated (and sealed) products, and is shown in Figure 4.

8 ILLUSTRATIONS

Figure 1 08D3 Checkweigher
Figure 2 Control and display console
Figure 3 Rating plate
Figure 4 Rating plate (authorised alternative 7.1)

9 CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
UK/0126/0063 rev 2	02 February 2011	Authorised alternative 7.1 and Figure 4 added.
UK/0126/0063 rev 1	17 November 2009	09D3 and 10D3 models added. Automatic zero setting frequency changed from 10 to 5 min.
UK/0126/0063	24 September 2009	Type examination certificate first issued.

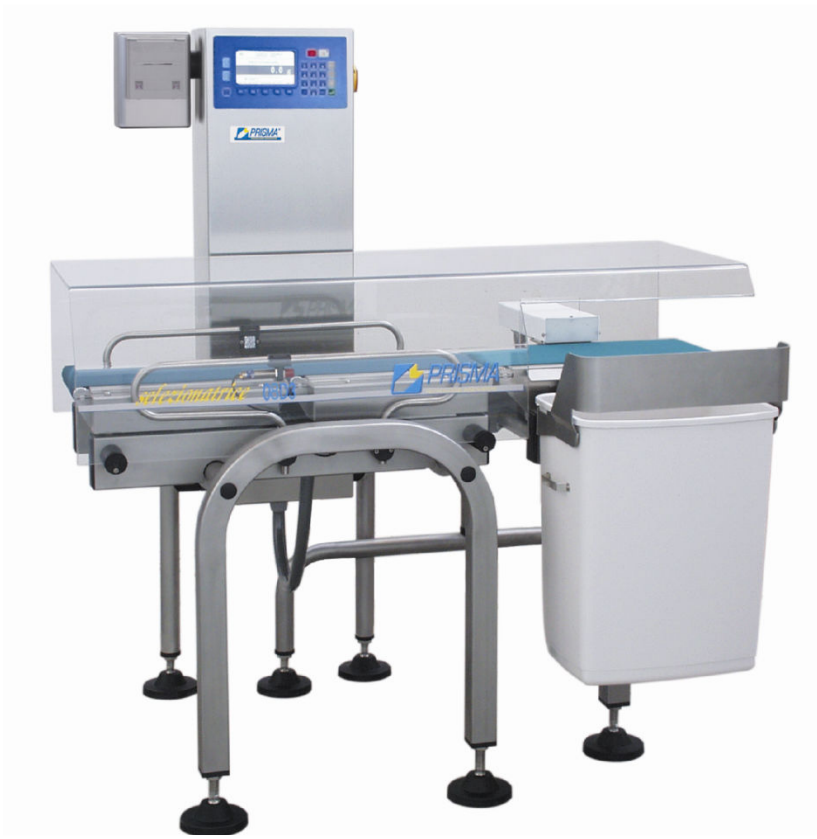

Figure 1 08D3 Checkweigher

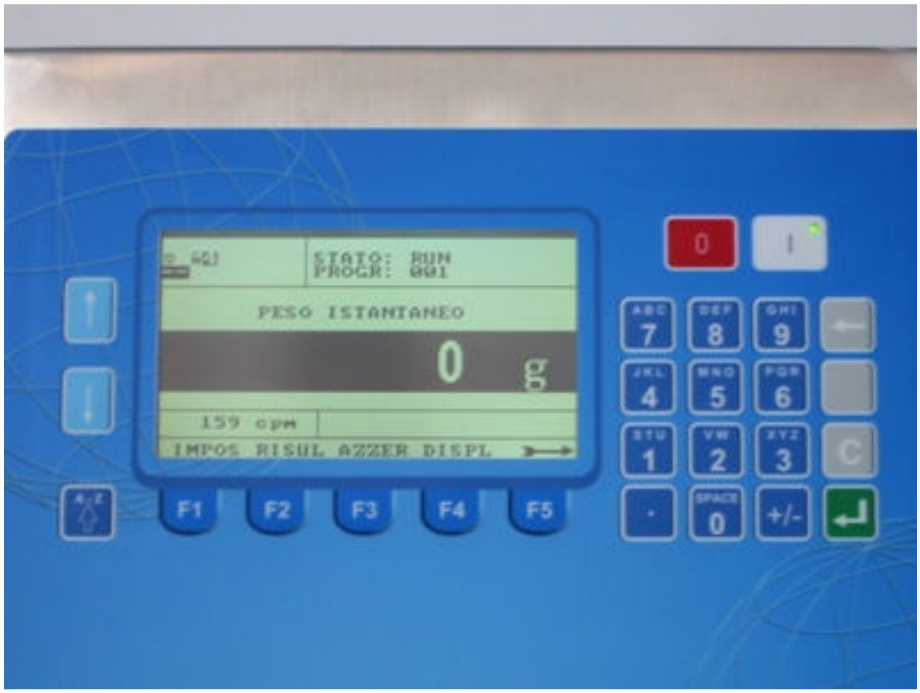

Figure 2 Control and display console

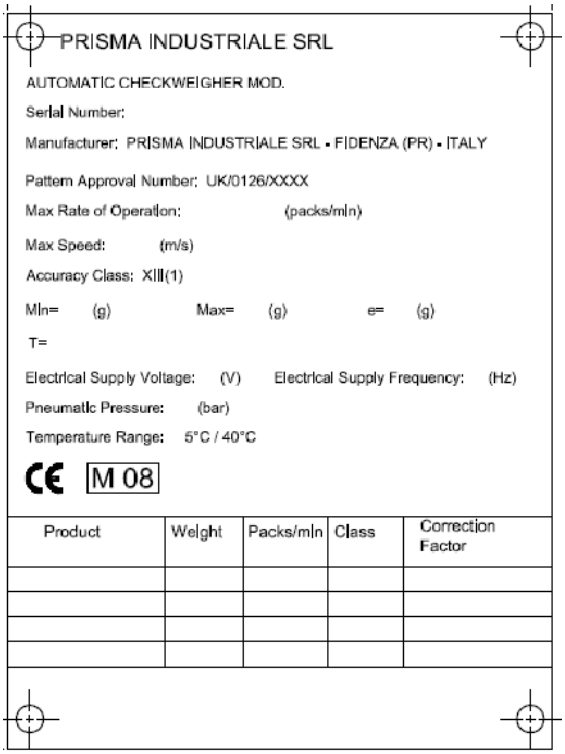

Figure 3 Rating plate

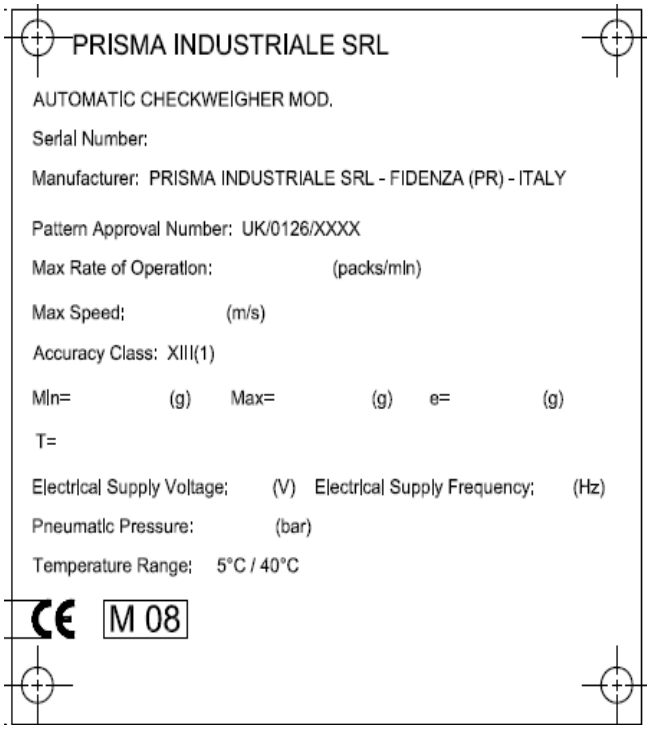

Figure 4 Rating plate (authorised alternative 7.1)