UK/0126/0063



MI-006

# EU-type examination certificate UK/0126/0063 Revision 5

Issued by:

## NMO Notified Body Number 0126

In accordance with the requirements of the Measuring Instruments Regulations 2016 (S.I. 2016 No. 1153) which implement, in the United Kingdom, Council Directive 2014/32/EU, this EU-type examination certificate 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 T3 and having the following characteristics:

Max ≤ 32,000 g
Min ≥ 15 g
e ≥ 0.5 g
n ≤ 3200
75 m/min
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 the certificate.

Issue date: Valid until 30 August 2017 23 September 2019

G Stones Technical Manager

For and on behalf of the Head of Technical Services



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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 DESCRIPTION

#### 2.1 Construction

**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 parts/test certificate (EN45501) issued for the load cell by a Notified Body responsible for type examination under Directive 2014/31/EU.
- 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, 2015, No 10), 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 n<sub>lc</sub>, 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.

#### 2.3 Devices

- **2.3.1** The instrument has the following devices:
  - Semi-automatic zero-setting ( $\leq 4\%$  Max)
  - Initial zero-setting ( $\leq 20\%$  Max)
  - Zero-tracking ( $\leq 4\%$  Max)
  - Automatic zero setting device active during automatic operation (at least every 35 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 instrument has the following technical characteristics.

Model	08D3	09D3	10D3	14D3	
Maximum capacity:	≤ 1600 g	≤ 3200 g	≤ 6400 g	≤ 16000 g	
Minimum capacity (Min):	≥ 15 g	≥ 30 g	≥ 60 g	≥ 120 g	
Scale interval (e = ):	≥ 0.5 g	≥1g	≥2g	≥5 g	
Maximum number of scale intervals:	3200				
Load cells E <sub>max</sub>	5 kg	10 kg	10 kg	20 kg	
Maximum belt speed:		75 m	n/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)	PA010085	A00
Dimensional drawings (O9D3)	PD090002	A00
Dimensional drawings (10D3)	PD090003	A00
Dimensional drawings (14D3)	PD090003	A00
Electrical assembly drawings	51590102	01
PCB drawings	PR202	F
	PR302	D
	PR402	D
	PR700	С

#### 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

The instrument may have the following interface types:

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

#### 4.2 Peripheral devices

The instrument may be connected to any peripheral device that has been issued with Parts Certificate by a Notified Body responsible for Module B under Directive 2014/32/EU 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 measuring instrument, other than to release a printout, checking for correct data transmission or validation;
- it prints measurement results and other data as received from the measuring 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 Inscriptions

The instrument shall bear the following inscriptions (Figure 3):

- CE marking
- Supplementary metrology marking
- Manufacturer's name, registered trade name or registered trade mark and postal address
- Identification number of the notified body involved in the production control phase
- Information in respect of its accuracy

and, when applicable:

- Information in respect of the conditions of use
- Measuring capacity
- Identity marking (a type, batch or serial number or other element allowing their identification)
- Number of the EU-type examination certificate
- Information whether or not additional devices providing metrological results comply with the provisions of Directive 2014/32/EU on legal metrological control

The markings and inscriptions shall fulfil the requirements of Article 8, Article 21, Article 22 and Point 9 of Annex I of Directive 2014/32/EU.

#### 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.

**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.

**7.2** Having the instrument designated the 08T3, 09T3, 10T3 and 14T3. The LCD display is replaced by a touch screen type T3 (Figure 5) connected to the PR205 board (PR202 board without LCD display).

The HMI is based on Windows operating system, the general software is designated 1.0 and may be modified. The communication software (legally relevant) between the HMI and the PR205 board is designated 860C. The general software on the PR205 board is designated 01EJ and the legally relevant module is designated 9DE7. All versions are displayed in the "Setup" – "Options" menu page.

The instrument may have a number of the following interfaces:

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

The documentation and drawings are as follows:

Description	Drawing / Document number	Rev.
Technical reference Manual	01080910T3MID	0
Dimensional drawings (O8T3)	PA010085	A00
Dimensional drawings (O9T3)	PD090002	A00
Dimensional drawings (10T3)	PD090003	A00
Dimensional drawings (14T3)	PD090003	A00
Electrical assembly drawings	62760101	01
PCB drawings	PR205 (PR202)	F
	PR302	D
	PR402	D
	PR700	С
	PR623	А

**7.3** The instruments may be fitted with a metal detector located on the in-feed conveyor. Any type may be used.

7.4 Having a modified construction, as shown in Figure 6.

**7.5** Having the instrument designated the 16D3 and 16T3. The load cells are as described in section 2.1.3.1. The display type is either the LCD display described in section 2.2.3 (16D3) or the touchscreen display described in section 7.2.

The instruments have the following technical characteristics:

Model	16D3	16T3
Maximum capacity:	≤ 32000 g	≤ 32000 g
Minimum capacity (Min):	≥ 240 g	≥ 240 g
Scale interval (e = ):	≥ 10 g	≥ 10 g
Load cells E <sub>max</sub>	50 kg	50 kg

#### 8 ILLUSTRATIONS

- Figure 1 08D3 Checkweigher
- Figure 2 Control and display console
- Figure 3 Rating plate
- Figure 4 Rating plate (authorised alternative 7.1)
- Figure 5 08T3 Checkweigher
- Figure 6 Alternative construction

#### **CERTIFICATE HISTORY**

ISSUE NO.	DATE	DESCRIPTION	
UK/0126/0063	24 September 2009	Type examination certificate first issued.	
UK/0126/0063 Revision 1	17 November 2009	09D3 and 10D3 models added. Automatic zero setting frequency changed from 10 to 5 min.	
UK/0126/0063 Revision 2	02 February 2011	Authorised alternative 7.1 and Figure 4 added.	
UK/0126/0063 Revision 3	08 August 2012	Authorised alternative 7.2 added.	
UK/0126/0063 Revision 4	19 September 2014	Specifications changed on the front page, T3 model added to the front page Frequency of automatic zero setting changed to 35 min in section 2.5.1. Semi-automatic zero setting now	
		available to the user (section 2.5.1).	
		Specifications changed in table 3.1. Model 14D3 and 14T3 added. Authorised alternatives 7.3 and 7.4 added.	

UK/0126/0063 Revision 5	30 August 2017	References to 2004/22/EC replaced with 2014/32/EU.
		Section 5.1 amended to reflect the requirements in 2014/32/EU.
		Numbering corrected for Sections 2.3 and 4.1.
		Section 7.2 Windows XP Embedded replaced with Windows operating system
		Front page Max ≤ 16,000 g changed to 32,000 g.
		Section 7.5 added.







Figure 2 Control and display console

		IALE SRI	-	4
AUTOMATIC CH	ECKWEIGHER	MOD.		
Serlal Number:				
Manufacturer: Pl	RISMA INDUST	RIALE SRL	FIDENZA	(PR) - ITALY
Pattern Approval	Number; UK/0	126/XXXX		
Max Rate of Ope	ration;	(packs	/min)	
Max Speed:	(m/s)			
Accuracy Class:	XIII(1)			
Min= (g)	Max=	(g)	em	(g)
T=		0000		
Electrical Supply	Voltage: (V)	Electrics	Supply F	requency: (Hz)
Electrical cupply	vonage. (v)	LIGOUIUE	a output i	
Pneumatic Press	ure (har)			
	10 di	°C		
Temperature Rar	nge: 5°C / 40	°C		
Temperature Rar	nge: 5°C / 40	°C		
Temperature Rar	nge: 5°C/40			Correction
Temperature Rar	nge: 5°C / 40	°C Packs/mln	Class	Correction Factor
Temperature Rar	nge: 5°C/40		Class	
Temperature Rar	nge: 5°C/40		Class	
Temperature Rar	nge: 5°C/40		Class	
Temperature Rar	nge: 5°C/40		Class	
Temperature Rar	nge: 5°C/40		Class	
CE MO	nge: 5°C/40		Class	

Figure 3 Rating plate

PRISMA INDUSTRIALE SRL -	$\Rightarrow$
AUTOMATIC CHECKWEIGHER MOD.	'
Serlal Number:	
Manufacturer: PRISMA INDUSTRIALE SRL - FIDENZA (PR) - ITALY	
Pattern Approval Number: UK/0126/XXXX	
Max Rate of Operation: (packs/min)	
Max Speed; (m/s)	
Accuracy Class: XIII(1)	
Mln= (g) Max= (g) e= (g)	
T=	
Electrical Supply Voltage; (V) Electrical Supply Frequency; (Hz)	
Pneumatic Pressure: (bar)	
Temperature Range: 5°C / 40°C	
<b>CE</b> M 08	
	$\rightarrow$



Rating plate (authorised alternative 7.1)



Figure 5 08T3 Checkweigher



Figure 6

Alternative construction

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