(UK2657) **V(0)a**

United Kingdom of Great Britain and Northern Ireland

Certificate of EC type-approval of a measuring instrument
Number: UK 2657

issued by the Secretary of State for Trade and Industry
Notified Body Number 0126

In accordance with the requirements of the Non-automatic Weighing Regulations 2000 (SI 2000/3236) which implement, in the United Kingdom, Council Directive 90/384/EEC, this certificate of EC type-approval has been issued to:

ThermoNobel
Murdock Road
Bedford
MK41 7PQ
United Kingdom

in respect of a class III non-automatic weighing instrument utilising the TAD3 indicating device connected to a load receptor.

$n \leq 10000$ divisions for Class III instruments with single interval
$1\ kg \leq$ maximum capacity $\leq 1000\ t$

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.

Signatory: R P Sanders
for Chief Executive
National Weights & Measures Laboratory
Department of Trade and Industry
Stanton Avenue
Teddington
TW11 0JZ
United Kingdom

Date: 06 November 2002
Valid Until: 05 November 2012
Reference No: STD 10760

Descriptive Annex

1 INTRODUCTION

This pattern of a class III non-automatic weighing instrument utilises the digital indicating device designated the ThermoNobel TAD3 connected to a weighing platform to form a weighing instrument.

2 FUNCTIONAL DESCRIPTION

2.1 The ThermoNobel TAD3 digital weight indicator (Figure 1) is fully described in Test Certificate Number 0402-MVm025 issued by SP Sveriges Provnings-och Forskningsinstitut, and has the following devices:

- semi-automatic zero-setting
- zero indication
- zero-tracking
- semi-automatic tare balancing
- pre-set tare

2.2 Load cells

The indicator can be connected to a weigh platform to form a complete weighing system. Any compatible load cell(s) may be used providing the following conditions are met:

(i) 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 90/384/EEC.

(ii) 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 3, 2000, 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.

(iii) The compatibility of the load cells and indicator is established by the manufacturer by means of the compatibility of modules calculation, contained in the above WELMEC 2 document, at the time of verification or declaration of EC conformity of type.

(iv) The load cell transmission must conform to one of the examples shown in the WELMEC Guide 2.4, "Guide for Load cells".

3 TECHNICAL DATA

3.1 Technical data for the indicator is provided in Test Certificate Number 0402-MVm025.

4 PERIPHERAL DEVICES AND INTERFACES

4.1 Interfaces

4.1.1 The instrument may have the following protective interfaces:

- RS485 (COM 1 and 2)
- Digital inputs
- Relay outputs

4.2 Peripheral devices

4.2.1 The following peripheral devices may be connected to the interfaces provided:

(i) Peripheral devices that have been issued with a test certificate by a Notified Body responsible for type approval under Directive 90/384/EEC; or

(ii) Peripheral devices without a test certificate under the following conditions:

- it bears the CE marking for conformity to the EMC Directive 89/336/EEC;
- 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;
- it complies with the applicable requirements of EN45501, i.e. 4.2, 4.4, 4.6 and 4.7.

A printing device may print additional information such as date or number to identify the printed weighing result(s) or sets of weighing results.

4.2.2 Pushbuttons may be connected to the digital inputs to permit the remote operation of the tare, gross/net, print and zero devices, with remote indications provided on the relay outputs to indicate zero, gross/net, etc.

5 SOFTWARE

The software is secured by an audit trail number. This prevents the entering or changing of calibration parameters without the generation of a new audit trail number. The audit trail number is inscribed on the data plate at the time of verification.

The trail number is displayed for 2 seconds during power-up (“AT:xxx”) and when entering the ‘Legal Lock’ menu. By comparing the number on the data plate (rear view) and the number on the display it is possible to determine if the calibration or configuration has been changed. If the trail number displays “AT:off” or is not shown then the instrument can not be verified.

The software version number displayed at power-up is “TxxxLxxx”, where x can be any digit.

6 APPROVAL CONDITIONS

This certificate is issued subject to the following conditions:

6.1 Legends

6.1.1 The instrument bears the following legends:

Max
Min
e =
Class III
CE mark

7 LOCATION OF SEALS AND VERIFICATION MARKS

7.1 The data plates are secured either by a sealing arrangement or by being of a form such that it is destroyed when removed.

7.2 The markings and inscriptions fulfil the requirements of Paragraph 1 of Annex IV of the Directive 90/384/EEC.

7.3 The location of the data plates and verification marks are shown in Figures 2 and 3.

8 ALTERNATIVES

There are as yet no authorised alternatives under this approval.

9 ILLUSTRATIONS

Figure 1 TAD3 digital weight indicator
Figure 2 TAD3 data plate (front view)
Figure 3 TAD3 data plate and verification marks (rear view)

Figure 1 TAD3 digital weight indicator

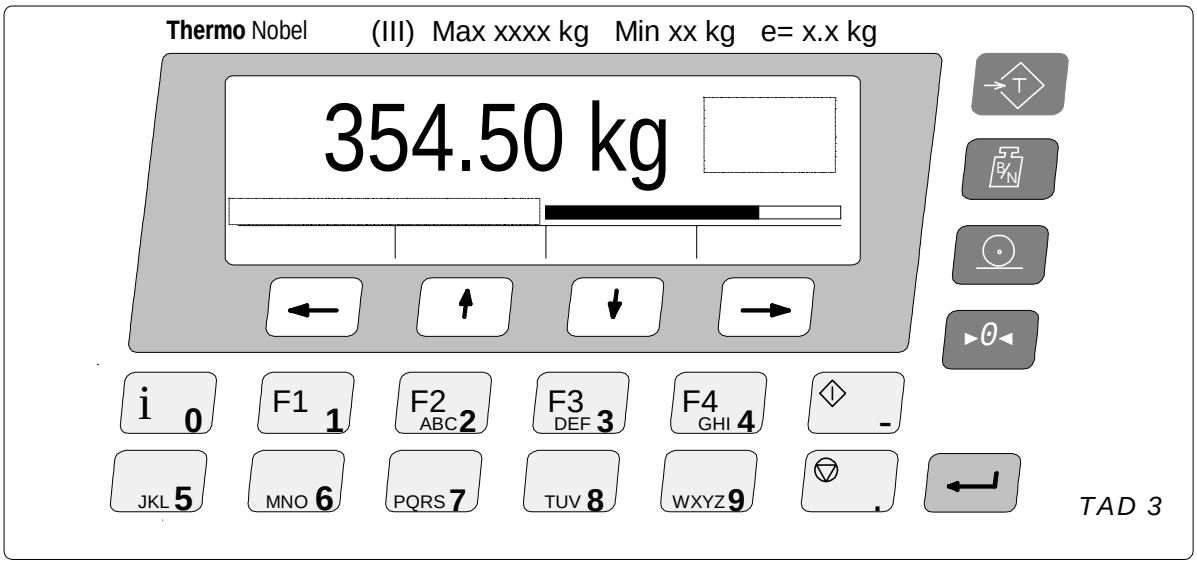

Figure 2 TAD3 data plate (front view)

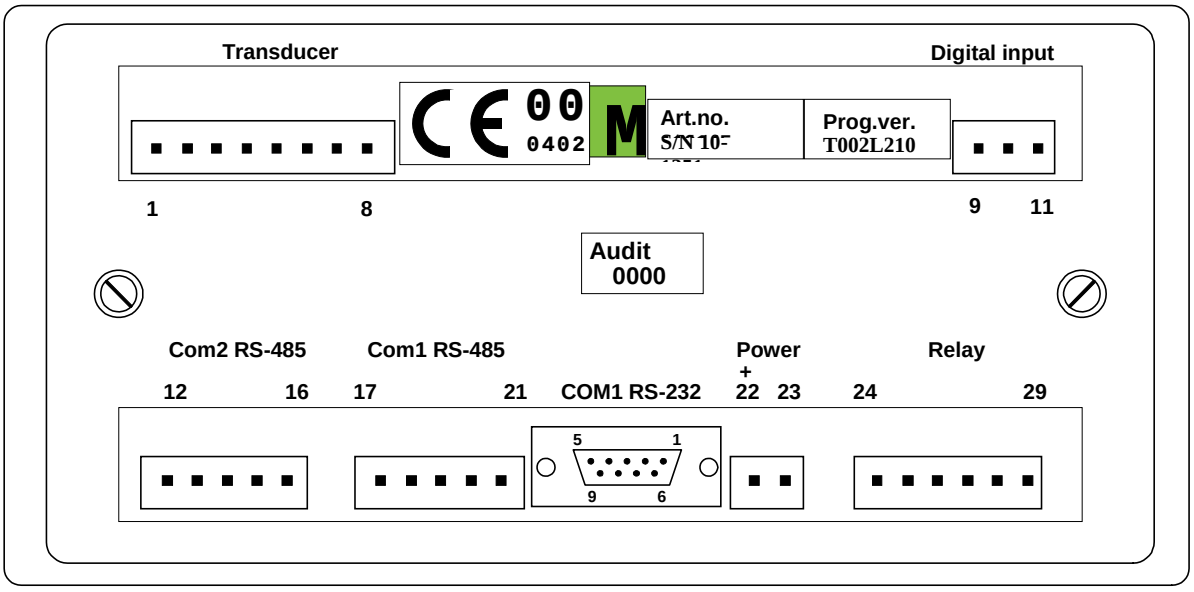

Figure 3 TAD3 data plate and verification marks (rear view)