

EC Type-Approval Certificate UK2790 Revision 2

issued by:

**The National Measurement Office
Notified Body Number 0126**

In accordance with the requirements of the Non-automatic Weighing Instruments Regulations 2000 (SI 2000/3236) which implement, in the United Kingdom, Council Directive 2009/23/EC, this EC Type-Approval Certificate has been issued to:

**Charder Electronic Co Ltd
103 Kuo Chung Road
Dah Li City
Taichung Hsien
Taiwan**

in respect of an Class III non-automatic weighing instrument designated the DP-2400 V5 indicating device (Test Certificate GB-1233) connected to a platform and having the following characteristics:

$n \leq 6000$ for Class III instruments with single or multi-interval indication

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: 19 July 2011
Valid Until: 22 August 2016
Reference No: T1128/0073**



**Signatory: P R Dixon
for Chief Executive**



BIS
**Department for Business
Innovation & Skills**

Descriptive Annex

1 INTRODUCTION

This instrument utilises the digital indicating device designated the DP-2400 V5 indicator connected to a weighing platform to form a Class III, mains or battery powered self-indicating non-automatic weighing instrument.

2 FUNCTIONAL DESCRIPTION

2.1 Devices

The DP-2400 V5 digital weight indicator is fully described in Test Certificate GB-1233.

The “Professional” version of the DP-2400 V5 indicator is shown in Figure 1. Further details and illustrations of other versions are shown in the Test Certificate.

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:

- 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 4, 2004, 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 loadcell.
- 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.
- The loadcell 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 the Test Certificate.

4 PERIPHERAL DEVICES AND INTERFACES

4.1 Interfaces

The instrument has the following protected interfaces:

- Load cell connection
- RS232 communications interface

4.2 The weighing system may be connected to any peripheral device that has been issued with a test certificate by a Notified Body responsible for type approval under Directive 2009/23/EC in any Member State and bear the CE marking of conformity to the relevant directives; or

A peripheral device without a test certificate 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 EN45501, i.e. 4.2, 4.4, 4.6 and 4.7.

5 APPROVAL CONDITIONS

The certificate is issued subject to the following conditions:

5.1 Legends and inscriptions

5.1.1 The instrument shall bear the following legends near the display of the weighing result:

Max
Min
e =

5.1.2 The instrument shall bear the following legends

CE mark
Green M
Class III
Serial number
Manufacturer's mark or name
Certificate number
Temperature range: + 5 °C to + 35 °C

5.2 This system is not to be used for direct sales to the public.

6 LOCATION OF SEALS AND VERIFICATION MARKS

6.1 The CE marking, Green M and Certificate number are located on the indicator housing. The data plate is mounted in such a manner that it is easily accessible and clearly visible in its regular operating position. The CE marking 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 1 of Annex IV of the Directive 2009/23/EC.

6.2 The indicator housing is sealed using two drilled screws underneath, and a wire and seal.

The load cell cable passes directly into the housing.

Components that may not be dismantled or adjusted by the user (e.g. load cell connections) are secured by either a wire and seal, or by a 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 DP-2701 (Figure 2), DP-3100 (Figure 3) and DP-3300 (Figure 4) indicators, as described in the Test Certificate GB-1233 (Revision 1 or later). These use the same components as the DP-2400 V5 indicator and have the same technical characteristics, but have a different circuit board and different housings.

7.2 Having indicator DP-3900 (Figure 5) which is a variant of DP-2400 and therefore shares the same technical characteristics but has a different housing.

8 ILLUSTRATIONS

Figure 1 "Professional" version of DP-2400 V5 indicator

Figure 2 DP-2701 indicator

Figure 3 DP-3100 indicator

Figure 3 DP-3100 indicator

Figure 5 DP-3900 indicator

9 CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
UK 2790	23 August 2006	Type approval first issued.
UK 2790 Revision 1	9 November 2006	Addition of Section 7.1, allowing DP-2701, DP-3100 and DP-3300 indicators.
UK 2790 Revision 2	19 July 2011	Authorised alternative added in Section 7.2



Figure 1 “Professional” version of DP-2400 V5 indicator
 (Note: legends should be as described in Section 5.1.)



Figure 2 DP-2701 indicator



Figure 3 DP-3100 indicator



Figure 4 DP-3300 indicator



Figure 5 DP-3900 indicator