Australian Government
Department of Industry, Innovation and Science

National Measurement Institute

Certificate of Approval

NMI 6/4D/365

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the instruments herein described.

A&D Model HV15KRS Weighing Instrument

submitted by A & D Australasia Pty Ltd
32 Dew Street
Thebarton SA 5031

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This approval has been granted with reference to document NMI R 76, *Non-automatic weighing instruments, Parts 1 and 2*, dated July 2004.

This approval becomes subject to review on **1/08/22**, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 & 2 approved – certificate issued	11/07/12
1	Pattern & variants 1 & 2 amended (software), **reviewed** – certificate issued	31/05/17

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number ‘NMI 6/4D/365’ and only by persons authorised by the submittor.

It is the submittor’s responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with document NMI P 106.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificates No S1/0/A or No S1/0B.

Special

Certain aspects of this instrument (in particular label, ticket and receipt formats) are able to be configured by the user. Whilst NMI believes that acceptable label, ticket and receipt can be achieved for typical basic sales modes, it is also possible for the instrument to be configured to produce unacceptable formats, and use of some formats may be inappropriate for different sales modes. It is the responsibility of the user to ensure that acceptable and appropriate formats are used in any particular situation.

Signed by a person authorised by the Chief Metrologist to exercise their powers under Regulation 60 of the *National Measurement Regulations 1999*.

Dr A Rawlinson

TECHNICAL SCHEDULE No 6/4D/365

1. Description of Pattern

approved on 11/07/12
amended on 31/05/17

An A&D model HV15KRS class (III) non-automatic self-indicating price-computing multiple range weighing instrument (Figure 1) with a verification scale interval (e_1) of 0.001 kg up to 3 kg, a verification scale interval (e_2) of 0.002 kg from 3 kg up to 6 kg and a verification scale interval (e_3) of 0.005 kg from 6 kg to the maximum capacity of 15 kg.

The pattern comprises an A&D model HV15KRS basework with a nominal platform size of 347 mm × 287 mm, and certain GaP Solution components namely:

- A model EZI-SCALE S1000 touchscreen operator display/keyboard attached directly to the basework;
- a model GAP POS-CSD customer display which may be mounted remotely and/or on a column; and
- a model Zebra model GK402d label printer.

An Epson model TM-T88V M244A receipt printer is also connected.

Instruments operate with GaP Solution version 2.2.16.x or 2.5.x.x software (the x indicates a 'wildcard' – various numbers may replace the x) and have unit price up to $999.99/kg, price up to $999.99, and a product look up (PLU) facility.

The instrument operates from mains AC power (220-240 V AC, 50/60 Hz).

1.1 Zero

The initial zero-setting device has a nominal range of not more than 20% of the maximum capacity of the instrument.

The instrument has a semi-automatic zero-setting device with a nominal range of not more than 4% of the maximum capacity of the instrument.

1.2 Tare

A semi-automatic subtractive tare device and/or non-automatic keyboard-entered pre-set subtractive tare device up to maximum capacity may be fitted.

Pre-set tare values may be associated with product look up (PLU) items.

A separate display of tare values including pre-set tare is provided.

1.3 Display Check

A display check of both the operator and customer displays is performed at initial power up of the instrument.

1.4 Interfaces

The indicator may be fitted with interfaces for the connection of auxiliary and/or peripheral devices. Any interfaces shall comply with clause 5.3.6 (including sub-clauses) of document NMI R76, the basic intent of which is that it shall not be possible to alter weight or price-computing via the interfaces – however, the downloading of PLU tables is acceptable.

Instruments may be fitted with serial interfaces such as RS-232, Ethernet and USB.

1.5 Levelling

The instrument is provided with adjustable feet and a level indicator.

1.6 Descriptive Markings and Notices

Instruments are marked with the following data, together in one location, in the form shown at right:

Manufacturer's mark, or name written in full	A & D Company Limited
Name or mark of manufacturer's agent	A & D Australasia Pty Ltd
Indication of accuracy class	(III)
Pattern approval mark for the instrument	NMI 6/4D/365
Maximum capacity	*Max* .../.../... g or kg #1
Minimum capacity	*Min* .../.../... g or kg #1
Verification scale interval	*e* = .../.../.... g or kg #1
Maximum subtractive tare	*T* = - ……. g or kg #2
Serial number of the instrument	……..

#1 These markings are also shown near the display of the result if they are not already located there.

#2 This marking is required if *T* is not equal to *Max*.

1.7 Verification Provision

Provision is made for the application of a verification mark.

1.8 Sealing Provision

Provision is made for the calibration adjustments to be sealed by means of destructible adhesive labels placed over the access points under the platform shown in Figure 2a, and over the access to the calibration switch (Figure 2b). Note: The calibration adjustment for the pattern is carried out by using an A&D model HV15KRS indicator which may be removed after the adjustment has been completed.

2. Description of Variant 1 approved on 11/07/12

The A&D model HV15KRS-D2 weighing instrument uses the same basework as the pattern but uses a double-sided column-mounted keypad and display unit to display mass only. The instrument has the same metrological characteristics as the pattern but it does not have price computing or printing facilities, and the pre-set tare function must be disabled.

Instruments may be fitted with a counting function, provision for display in terms of percentage of a set value, accumulation of mass values, and a facility for 'HI', 'LO' and 'OK' values to be entered to indicate a target range, for a visual and audible indication of when the target is reached, and for switching of outputs relating to the target range. Indications other than the indications of measured mass (i.e. gross or net) displayed either on the indicator or on an auxiliary or peripheral device, are not for trade use.

3. Description of Variant 2 approved on 11/07/12

The A&D model HV15KRS-D1 weighing instrument which is similar to the model HV15KRS-D2 (variant 1) except it has only a single-sided keypad and display unit.

Instruments are marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' unless the display is located such that all primary indications are clearly and simultaneously displayed to both the vendor and the customer.

TEST PROCEDURE No 6/4D/365

Instruments shall be tested in accordance with any relevant tests specified in the National Instrument Test Procedures.

Maximum Permissible Errors

The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

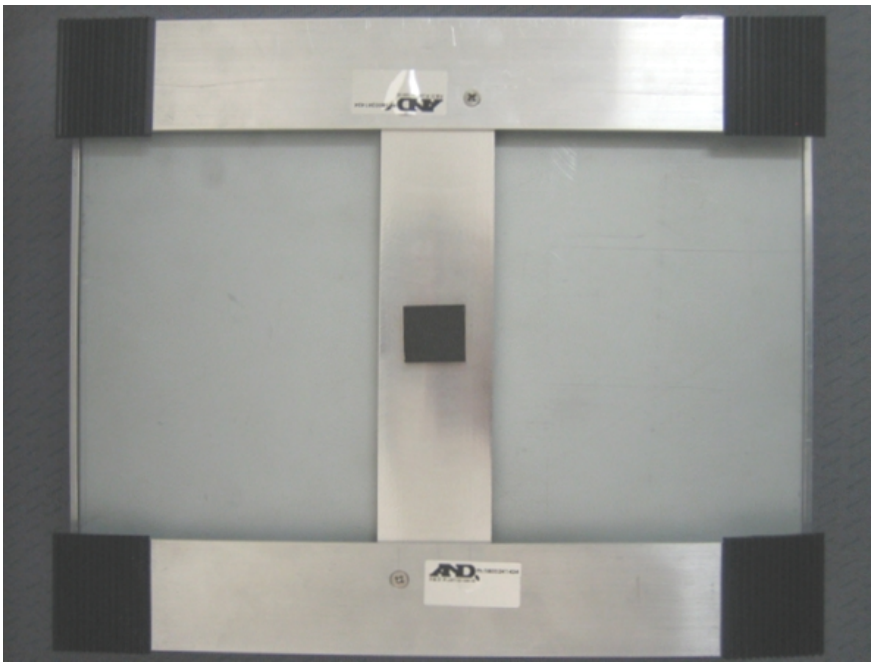
Tests

For multiple range instruments with verification scale intervals of e_1, e_2 …, apply e_1 for zero adjustment, and maximum permissible errors apply e_1, e_2 …, as applicable for the load.

FIGURE 6/4D/365 – 1

A&D Model HV15KRS Weighing Instrument

FIGURE 6/4D/365 – 2



(a) Sealing of access points under the platform

(b) Sealing of calibration access point

Typical Sealing

~ End of Document ~