Evaluation Certificate

Number **TC11766** revision 0
Project number 2373217

Issued by	NMi Certin B.V.
In accordance with	WELMEC 8.8 Issue 2, WELMEC 2.1 Issue 4, EN 45501:2015, OIML R 76-1 (2006).
Producer	Rinstrum Pty Ltd. 41 Success Street Acacia Ridge QLD 4110 Australia
Measuring instrument	An **Indicator**, tested as a part of a weighing instrument.

Type : C5xx series (xx= 00…99), WE2111

Producer`s mark or name : Rinstrum, HBM

Further properties are described in the annexes:
- Description TC11766 revision 0;
- Documentation folder TC11766-1.

An overview of performed tests is given in the annex:
- Description TC11766 revision 0.

Issuing Authority **NMi Certin B.V.**
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INSPECTION
RvA I 122

Description

1 General information about the indicator

All properties of the indicator, whether mentioned or not, shall not be in conflict with the standard mentioned in the certificate.

This certificate is the positive result of the applied voluntary, modular approach, for a component of a measuring instrument, as described in WELMEC 8.8. The complete measuring system must be covered by an EC type-approval certificate or an EU-type examination certificate.

1.1 Essential parts

Number	Pages	Description	Remarks
11766/0-01	1	Block diagram	-
11766/0-02	8	Mechanical overviews	-
11766/0-03	9	Exploded views	-
11766/0-04	2	Main processor board layout	-
11766/0-05	2	Main processor board parts list	-
11766/0-06	2	Connector/driver board layout	-
11766/0-07	6	Connector/driver board parts list	-

EMI protection measures:
- The A/D board is shielded with a metal cover.

1.2 Essential characteristics

Accuracy class	(III) or (IIII)
Weighing ranges	Single interval Multi-interval Multiple range
Maximum number of scale intervals (one weighing range)	$n \leq 10000$
Maximum number of scale intervals (multi-interval)	$n \leq 10000$ (per partial weighing range)
Maximum number of partial weighing ranges	2
Maximum number of scale intervals (multiple range)	$n \leq 10000$ (per weighing range)
Maximum number of weighing ranges	2

Description

Load cell excitation voltage	5 V DC
Minimum signal input voltage	U_{min} = 0,001 mV
Minimum input voltage per verification scale interval	0,5 µV
Minimum load cell resistance	21 Ω
Maximum load cell resistance	5000 Ω
Fraction of the maximum permissible error	0,5
Load cell connection	4-wire 6-wire (remote sensing)
Maximum value of the cable length per cross wire section between the indicator and the junction box or load cells	755 m/mm^2 for n ≤ 3000 378 m/mm^2 for n ≤ 6000 227 m/mm^2 for n ≤ 10000 In case a 4-wire connection is used the load cells are connected directly without junction box
Temperature range	-10 °C / +40 °C
Power supply voltage	100 - 240 V AC 50/60 Hz, or 12 – 24 V DC supplied by an AC/DC plug-in power supply or by a road vehicle power supply
Electromagnetic environment class	E3
Software identification	Version number: v1.0x (x= 0…9)

Software:
- The identification number will be displayed by holding the 'select' key and pressing it until 'ALIBI' is displayed then pressing 'OK';
- The indicator has embedded software.

List of legally relevant functions:
- Determination stability of equilibrium;
- Indication of stable equilibrium;
- Zero indicating;
- Semi-automatic zero-setting;
- Initial zero-setting;
- Zero-tracking;
- Semi-automatic subtractive or additive tare balancing;
- Preset tare;
- Gravity compensation;
- Gross/net indicator;
- Adjustment / set-up mode via a switch on the main board;
- Acting upon significant faults;
- Checking the display;
- Extended indicating, resolution 1/10 e for a period not exceeding 5 seconds after a manual command;
- Data Storage Device that complies with OIML R 76 (2006) clause 5.5.3 and EN 45501:2015 clause 5.5.3.

1.3 Essential shapes

The descriptive markings plate is secured against removal by sealing or will be destroyed when removed and contains at least the following information:
- This certificate number TC11766;
- Producer`s name or mark.

Inside the cabinet is an adjustment lock, located on the main board.

1.4 Conditional parts

Number	Pages	Description	Remarks
11766/0-08	3	AC power module exploded view and mechanical overview	-
11766/0-09	1	AC power module board layout	-
11766/0-10	1	AC power module parts list	-

The indicator may be equipped with one or more of the following protective interfaces that have not to be secured:
- RS232;
- RS485;
- USB host;
- USB device;
- Ethernet;
- I/O module;
- RINLINK (optical serial connection).

1.5 Non-essential parts

Display;
Keyboard.

2 Seals

To secure components that may not be dismantled or adjusted by the user, the indicator must be secured in a suitable manner on the locations indicated in the drawings:

Number	Pages	Description	Remarks
11766/0-11	11	Sealing	-

The connecting cable of the load cell or the junction box is provided with possibility to seal.

3 Conditions for conformity assessment

The compatibility of load cells and indicator is established by the manufacturer by means of the compatibility of modules form, contained in EN 45501:2015, clause F.4 at the time of putting into use.

Other parties may use this Evaluation Certificate only with the written permission of the producer.

4 Reports

An overview of performed tests is given in the reports:
- No. TR 627 dated 19 October 2012 that includes 28 pages;
- No. SN 1236 dated 19 October 2012 that includes 16 pages;
- No. SN 1278 dated 4 April 2014 that includes 20 pages;
- No. SN 1331 dated 3 February 2016 that includes 10 pages;
- No. SN 1403 dated 18 October 2017 that includes 10 pages;
- No. SN 1421 dated 18 June 2018 that includes 9 pages;
- No. P02155 revision 1 dated 18 July 2017 that includes 15 pages.

A report can be a test report, an evaluation report, a type evaluation report and/or a pattern evaluation report.