Czech Metrology Institute

Member state
Czech Republic

OIML Certificate No.
R76/2006-CZ-16.02

OIML BASIC CERTIFICATE OF CONFORMITY

Issuing Authority

Name: Czech Metrology Institute
Address: Okružní 31,
638 00 Brno, CZ
Person responsible: Jan Kalandra

Applicant

Name: **RADWAG WAGI ELEKTRONICZNE Witold Lewandowski**
Address: **ul. Bracka 28**
26-600 Radom
Poland

Manufacturer of the certified type
Name: **RADWAG WAGI ELEKTRONICZNE Witold Lewandowski**
Address: **ul. Bracka 28**
26-600 Radom
Poland

Identification of the certified type

Non-automatic weighing instrument
Type: AS xxx.R2.yyy

Further characteristics see pages 3 - 7.

This certificate attests the conformity of above identified type (represented by the sample (s) identified in the OIML Basic Type Evaluation Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

OIML R 76, edition 2006 for accuracy class (I)

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This certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML Recommendation identified above.

This certificate does not bestow any form of legal international approval.

The conformity was established by the results of tests and examinations provided in the associated OIML Basic Type Evaluation Report(s):
No. 6051-PT-0025-13 from 29 September 2013 having 31 pages.
No. 8551-PT-E0134-13 from 26 August 2013 having 44 pages.

Certificate history:

Issue no.	Date	Description of the modification

The OIML Issuing Authority
Pavel Klenovský

12 August 2016

Important note: Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate is issued, partial quotation of the Certificate and of the associated OIML Basic Type Evaluation Report(s) is not permitted, although either may be reproduced in full.

Instrument description:
Balance AS xxx.R2.yyy series is a model operating on basis of electromagnetic compensation of weighed load. This series features a measuring range to 310g and measuring resolution 0,01mg or 0,1mg or 1mg respectively. High resolution, repeatability and measuring range of the AS xxx.R2.yyy series is maintained by highly stable electronic and mechanical components, as well as application of automatic internal adjustment system. Balance has LCD display, plastic cover, stainless steel plate, weighing chamber, automatic internal adjustment system. Symbol xxx stands for Max (g) and symbol yyy stands for special purpose of balance e.g. jewelry balance – CT.

Description of the instrument:

Description	**Drawing number**
Schedule of balance working	AS-R2-01-010
Side view	AS-R2-01-001 sheet 4/4
Localization of nominal label	AS-R2-01-001 sheet 2/4
Display	AS-R2-20-000
Data plate	AS-R2-90-400
View with open case	AS-R2-01-002 sheet 3/4

Metrological characteristic

Type	**AS 60/220.R2**	**AS 110.R2**	**AS 160.R2**	**AS 220.R2**	**AS 310.R2**
Maximum - Max	220g	110g	160g	220g	310g
Minimum - Min	10 mg				
Resolution – d	0,01/0,1 mg	0,01 mg	0,1 mg		
Verification interval – e	1 mg				
Tare range – T	-220g	-110g	-160g	-220g	-310g
Working temperature	+10 °C / +40 °C				
Supply	100 V – 240 VAC, 50-60 Hz / 12 – 16 VDC				
Accuracy class	(I)				

The above table is an example of some models within the approved range.

Characteristics and devices

The instruments must be equipped with a level indicator with a sensitivity of at least 2 mm for a tilt of 2/1000.

Devices:

- Zero indicator
- Stability indicator
- Internal adjustment
- Service menu via switch on the main board
- Initial zero-setting
- Zero-tracking
- Data Storage Device (Alibi Memory)
- Weighing in carat units*)

*) For instruments that are able to display in both units if the Max, Min and e values are on a label then they must be marked on the instrument in both units. If the values are shown on a display, then they can be switched.

Data Storage Device (Alibi Memory)
Models of AS xxx.R2.yyy balances are equipped with a Data Storage Device (Alibi memory) acting as a long term memory. It automatically saves weighing results in the internal flash memory. A program operates as a simple embedded software without any operating system which prevents from running any external application. The program allows to upload the content of the alibi memory to an external flash drive for archival purposes. The program does not allow to download the alibi memory content to the balance. Each measurement is identified by the following data:

- Measurement date
- Measurement time
- Measurement value (mass)
- Tare value
- Operator (if logged on)
- Product (if chosen)

The memory size allows to save 100 000 weighing results. After the full capacity is reached the single records of the oldest data are overwritten by new data. Single records and the whole database are protected by checksums. Any corruption of data prevents them from viewing or printing.

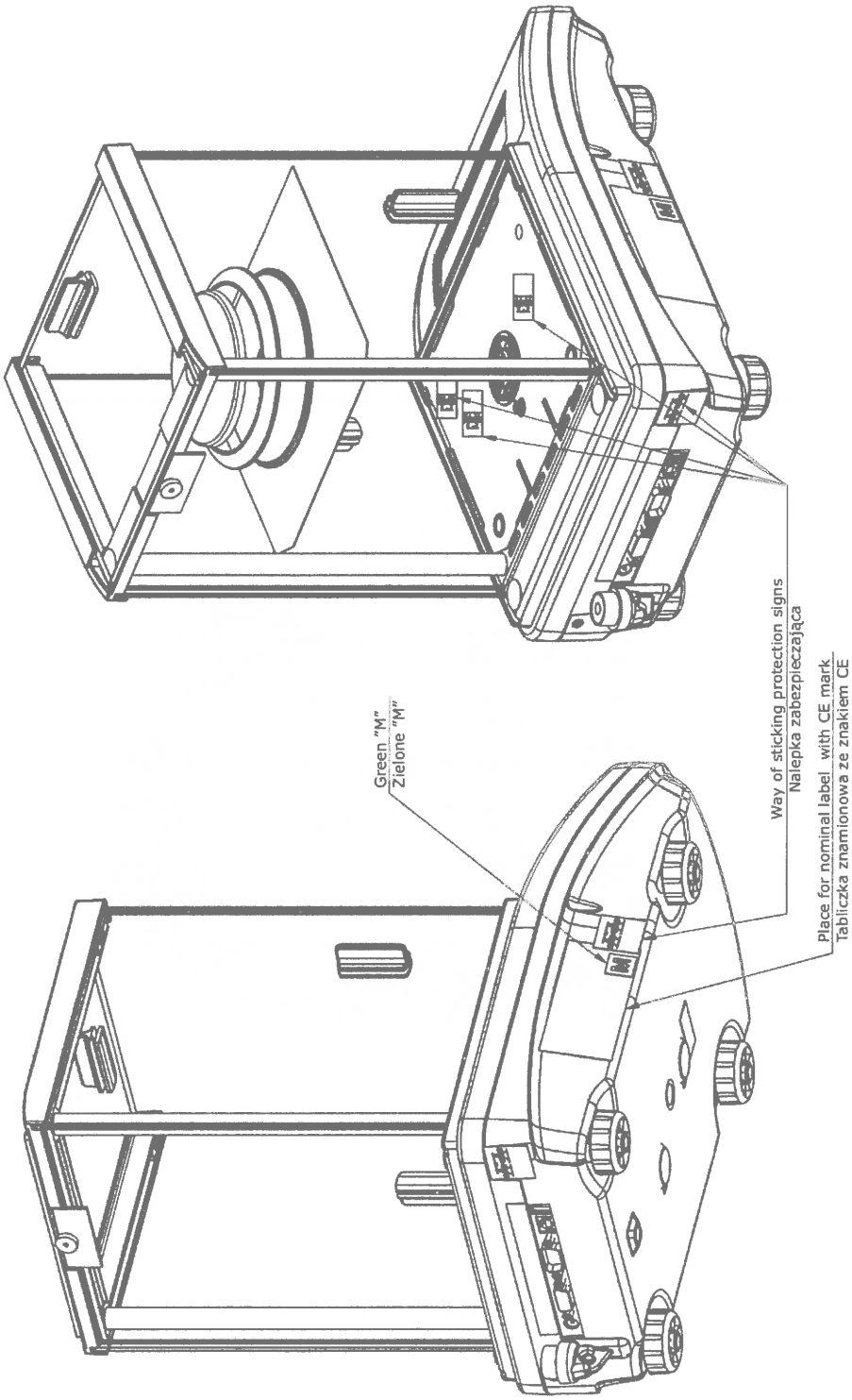
Interfaces
Interfaces used must comply with 5.3.6 of OIML R76 (2006). Following interface is used: RS 232, USB 2.0. Optionally the balances may be equipped in wireless interfaces WiFi or BlueTooth.

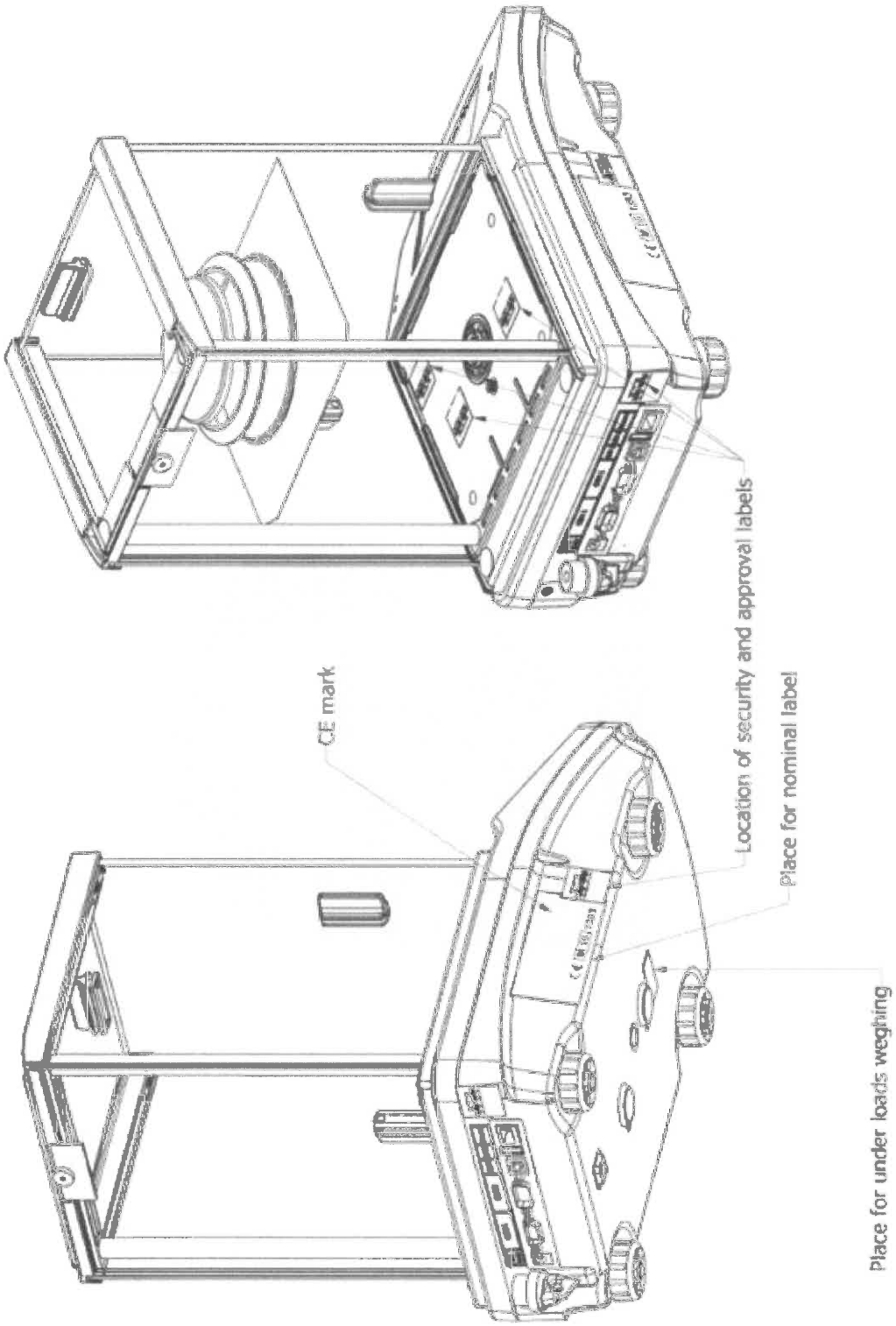
Software
Instruments are equipped with embedded software that is used in a fixed hardware and software environment and cannot be modified or uploaded via any interface or by other means after securing and/or verification. Software identification by its version number is accessible after pressing ON/OFF key on the overlay.
The valid software version is: 4.0.0

Connectable devices
For applications not subject to mandatory verification, any peripheral devices may be connected.

Drawing 1 - Side view:

Drawing 2 - Main label position and legalization sign:




CE mark
Location of security and approval labels
Place for nominal label
Place for under loads weighing

Drawing 3 – Overlay with display: