



Certificate

No. FI 06.1.01 Revision 4

Inspecta

EC type-approval certificate of a non-automatic weighing instrument

Issued by	Inspecta Tarkastus Oy Notified Body Number 0424	
In accordance with	The Council Directive 2014/31/EU on Non-automatic Weighing Instruments	
Issued to	Joint Stock Company "MASSA-K", 15 A, Pirogovskaya nab, St-Petersburg, Russia	
In respect of	A graduated, self-indicating, electronic, single-interval non-automatic weighing instrument.	
Characteristics	Manufacturer	Joint Stock Company "MASSA-K"
	Type	MK
	Accuracy class	III
	Number of verification intervals	$n \leq 3\ 200$
	Verification scale interval	$e \geq 1\text{ g}$
	Maximum capacity	$3\text{ kg} \leq \text{Max} \leq 32\text{ kg}$
Description and documentation	The principal characteristics and approval conditions are set out in the descriptive Annex to this certificate documented in the documentation folder 230036-2.	
Valid until	8 th of February 2026	
Date of issue	Vantaa, 6 th of July 2016	

Signatories

Markku Luomansuu
Business Area Manager

Ari Paajanen
Technical Expert

Inspecta Tarkastus Oy
P.O. BOX 1000, Sörnäistenkatu 2
FI-00581 Helsinki, Finland
Tel. +358 10 521 600
Fax. +358 10 521 6211



Group headquarters: Inspecta Group Oy, Helsinki, Finla

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DESCRIPTIVE ANNEX of EC type-approval of a non -automatic weighing instrument

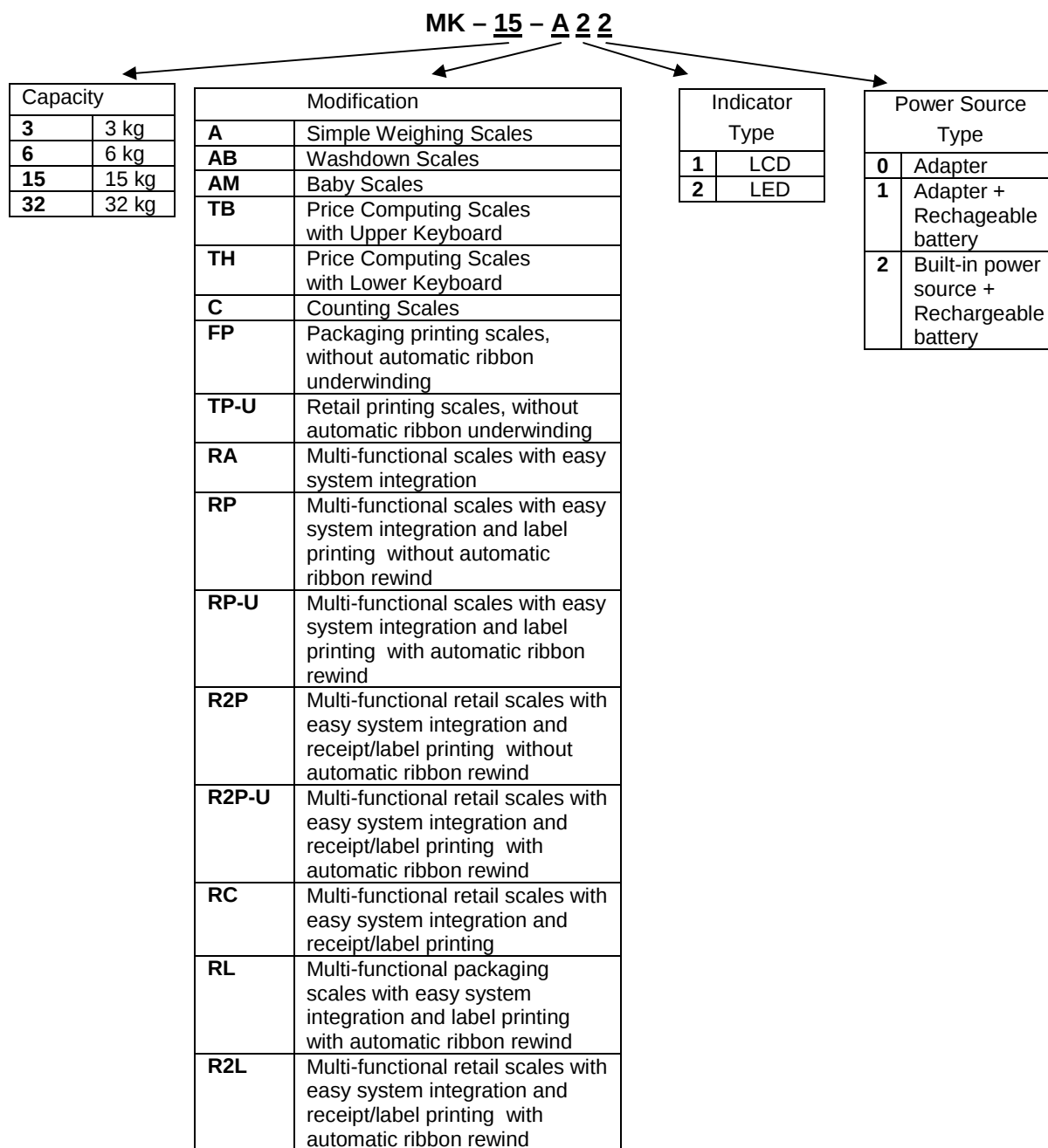
NAME AND TYPE OF INSTRUMENT

The name of the type of the instrument is MK and depending on the purpose the model is one of the following:

Model	Purpose
MK-3-A11, MK-6-A11, MK-15-A11, MK-32-A11, MK-3-A21, MK-6-A21, MK-15-A21, MK-32-A21, MK-3-A22, MK-6-A22, MK-15-A22, MK-32-A22	Simple Weighing Scales
MK-3-AB20, MK-6-AB20, MK-15-AB20, MK-32-AB20	Washdown Scales
MK-3-AM11, MK-6-AM11, MK-15-AM11, MK-32-AM11 MK-3-AM21, MK-6-AM21 MK-15-AM21, MK-32-AM21	Baby Scales
MK-3-TB21, MK-6-TB21, MK-15-TB21, MK-32-TB21, MK-3-TB22, MK-6-TB22, MK-15-TB22, MK-32-TB22	Price Computing Scales with Upper Keyboard
MK-3-TH21, MK-6-TH21, MK-15-TH21, MK-32-TH21, MK-3-TH22, MK-6-TH22, MK-15-TH22, MK-32-TH22	Price Computing Scales with Lower Keyboard
MK-3-C11, MK-6-C11, MK-15-C11, MK-32-C11, MK-3-C21, MK-6-C21, MK-15-C21, MK-32-C21, MK-3-C22, MK-6-C22, MK-15-C22, MK-32-C22	Counting Scales
MK-6-FP10, MK-15-FP10, MK-32-FP10	Packaging printing scales, without automatic ribbon underwinding
MK-6-FP-U10, MK-15-FP-U10, MK-32-FP-U10	Packaging printing scales, with automatic ribbon underwinding
MK-6-TP10, MK-15-TP10, MK-32-TP10	Retail printing scales, without automatic ribbon underwinding
MK-6-TP-U10, MK-15-TP-U10, MK-32-TP-U10	Retail printing scales, without automatic ribbon underwinding
MK-6-RA11, MK-15-RA11, MK-32-RA11	Multi-functional scales with easy system integration
MK-6-RP10, MK-15-RP10, MK-32-RP10	Multi-functional scales with easy system integration and label printing without automatic ribbon rewind
MK-6-RP-U10, MK-15-RP-U10, MK-32-RP-U10	Multi-functional scales with easy system integration and label printing with automatic ribbon rewind
MK-6-R2P10, MK-15-R2P10, MK-32-R2P10	Multi-functional retail scales with easy system integration and receipt/label printing without automatic ribbon rewind
MK-6-R2P-U10, MK-15-R2P-U10, MK-32-R2P-U10	Multi-functional retail scales with easy system integration and receipt/label printing with automatic ribbon rewind
MK-6-RC11, MK-15-RC11, MK-32-RC11	Multi-functional retail scales with easy system integration and receipt printing
MK-6-RL10, MK-15-RL10, MK-32-RL10	Multi-functional packaging scales with easy system integration and label printing with automatic ribbon rewind
MK-6-R2L10, MK-15-R2L10, MK-32-R2L10	Multi-functional retail scales with easy system integration and label printing with automatic ribbon rewind

The instrument can in addition have a commercial model designation of their own together with one of the following brand names: "IMBA MK-6-A11" (IMBA ITALY SAS), "OPI MK-15-TB22" (OPI S.R.L.), "TAMTRON MK-6-A11" (Tamtron Oy), "SCALESHOUSE MK-15-TB22" (Scaleshouse Ltd.), "GIROPES MK-32-C22" (Giropes S.L).

MODEL DESIGNATION



DESCRIPTION

Construction

The weighing instrument consists of following parts:

- Digital load module DLM-MK (Figure 1.)
4 modules which type is depending on scales modification
- Control module
- Display module
- Power module
- Weighing platter

Modules are connected together by I²C Internal Bus Interface

Devices

- Device to check the display
- Semi-automatic subtractive tare weighing device
- Semi-automatic zero-setting device
- Automatic zero-setting device
- Initial zero-setting device
- Zero indicating-device
- Memory storage device
- Freezing the indication after stable equilibrium (only baby scales) which may be by-passed by pressing a tare key during the switch on and display checking of the scale
- Sum function device
- Unit weight calculation device (counting scales)

Table of construction of different MK models

Model	Digital Module	Control Module	Display Module	Power Module	Weighing Plater
MK-3(6;15;32)-A11	DLM-MK	CD-A-LCD		PU-DC	P-A
MK-3(6;15;32)-A21		CD-A-LED		PU-DC	
MK-3(6;15;32)-A22		CD-A-LED		PU-AC	
MK-3(6;15;32)-AB20		CD-AB-LED		PU-DC	P-B
MK-15-AM11		CD-AM-LCD		PU-DC	P-M
MK-15-AM21		CD-AM-LED		PU-DC	
MK-3(6;15;32)-TB21		CD-TB-LED	DD-TB(TH)LED	PU-DC	P-A
MK-3(6;15;32)-TB22				PU-AC	
MK-3(6;15;32)-TH21		CD-TH-LED		PU-DC	
MK-3(6;15;32)-TH22				PU-AC	
MK-3(6;15;32)-C11		CD-C-LCD		PU-DC	
MK-3(6;15;32)-C21		CD-C-LED		PU-DC	
MK-3(6;15;32)-C22		CD-C-LED		PU-AC	
MK-3(6;15;32)-FR10			DD-FP-LCD	PU-DC-P	
MK-3(6;15;32)-FR-U10			DD-FP-LCD		
MK-3(6;15;32)-TR10					
MK-3(6;15;32)-TR-U10					
MK-3(6;15;32)-RA11			DD-RA-LCD		P-B
MK-3(6;15;32)-RP10			DD-RP-LCD		
MK-3(6;15;32)-RP-U10					
MK-3(6;15;32)-R2P10					
MK-3(6;15;32)-R2P-U10			DD-R2P-LCD		
MK-3(6;15;32)-RC11			DD-RC-LCD		
MK-3(6;15;32)-RL10			DD-RL-LCD		
MK-3(6;15;32)-R2L10			DD-R2L-LCD		

TECHNICAL DATA

Model	MK-3-A MK-3-AB MK-3-TH MK-3-TB MK-3-C	MK-6-A MK-6-AB MK-6-TH MK-6-TB MK-6-C MK-6-FP MK-6-FP-U MK-6-TP MK-6-TP-U MK-6-RA MK-6-RP MK-6-RP-U MK-6-R2P MK-6-R2P-U MK-6-RC MK-6-RL MK-6-R2L	MK-15-A MK-15-AB MK-15-AM MK-15-TH MK-15-TB MK-15-C MK-15-FP MK-15-FP-U MK-15-TP MK-15-TP-U MK-15-RA MK-15-RP MK-15-RP-U MK-15-R2P MK-15-R2P-U MK-15-RC MK-15-RL MK-15-R2L	MK-32-A MK-32-AB MK-32-TH MK-32-TB MK-32-C MK-32-FP MK-32-FP-U MK-32-TP MK-32-TP-U MK-32-RA MK-32-RP MK-32-RP-U MK-32-R2P MK-32-R2P-U MK-32-RC MK-32-RL MK-32-R2L
Maximum capacity, kg	3	6	15	32
Readability, g	1	2	5	10
Maximum subtractive tare, kg	1	2	5	10
Zero setting range, % of Max capacity	20	20	20	20
Platform dimensions, mm	340(W)x244(D)x15(H)*			
Operating temperature range, °C	-10...+40			
Accuracy class	III			
Minimum capacity	Min = 20 e			
Power supply	230 V, 50 Hz or/and battery operated 7-12 VDC			

*Note : Washdown scales - 340mm(W)x321mm(D)x56mm(H)
 Baby Scales - 540mm(W)x290mm(D)x70mm(H)

PERIPHERAL DEVICES AND INTERFACES

Peripheral devices may be connected via RS 232 protective interface.

APPROVAL CONDITIONS

No parts of weighing instrument, no matter if they are mentioned or not, may be in conflict with the essential requirements of the Annex 1 of the Directive 2014/31/EU.

SEALING

Sealing is described in figures 20, 21, 22 and 23.

LOCATION OF CE MARK AND INSCRIPTIONS

A sticker with the CE mark of conformity is placed near the front panel.

The instrument bears markings according to the Annex IV in Council Directive 2014/31/EU in such a way that the markings cannot be removed. Max, Min and e are marked near the indication device.

The weighing instrument bears the type-approval number, manufacturers name, accuracy class and serial number.

ILLUSTRATIONS

Figure 1. Digital Load Module DLM-MK general view

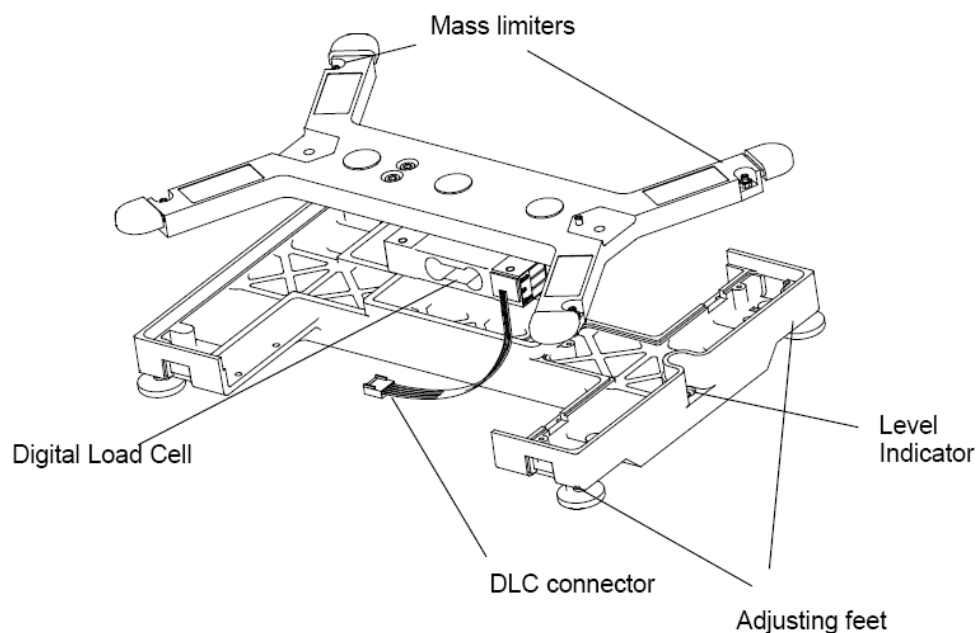


Figure 2. Simple weighing scales MK-A

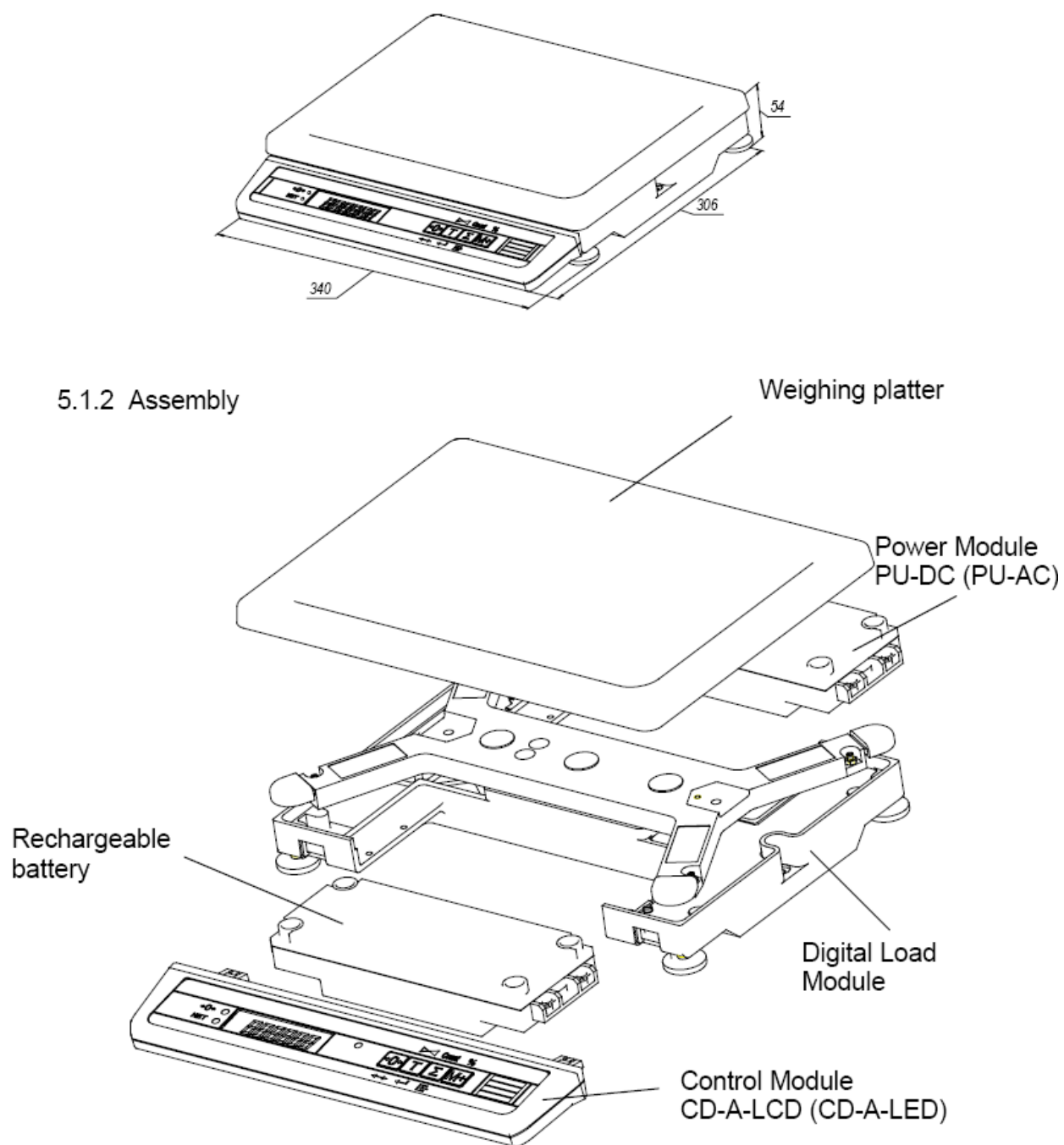
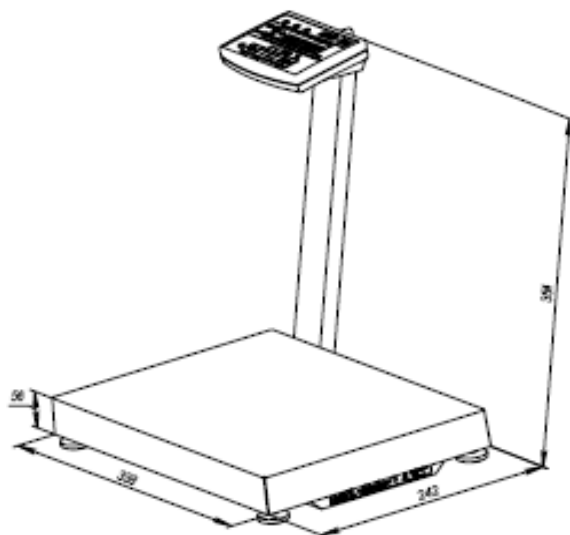


Figure 3. Washdown Scales MK-AB



5.2.2 Assembly

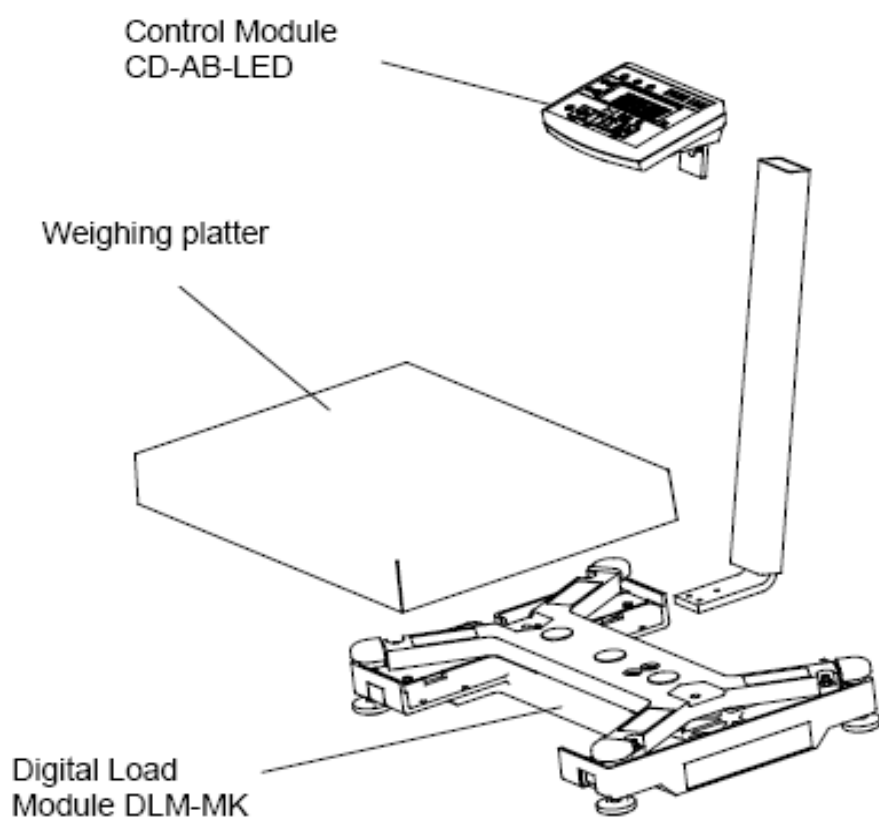
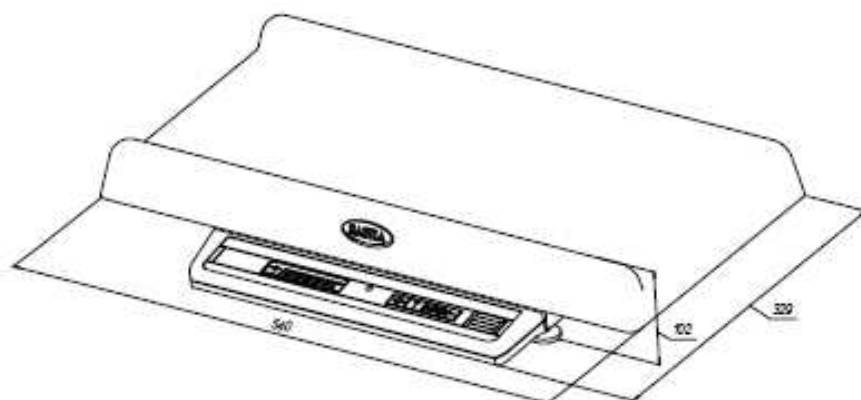


Figure 4. Baby Scales MK-AM



5.3.2 Assembly

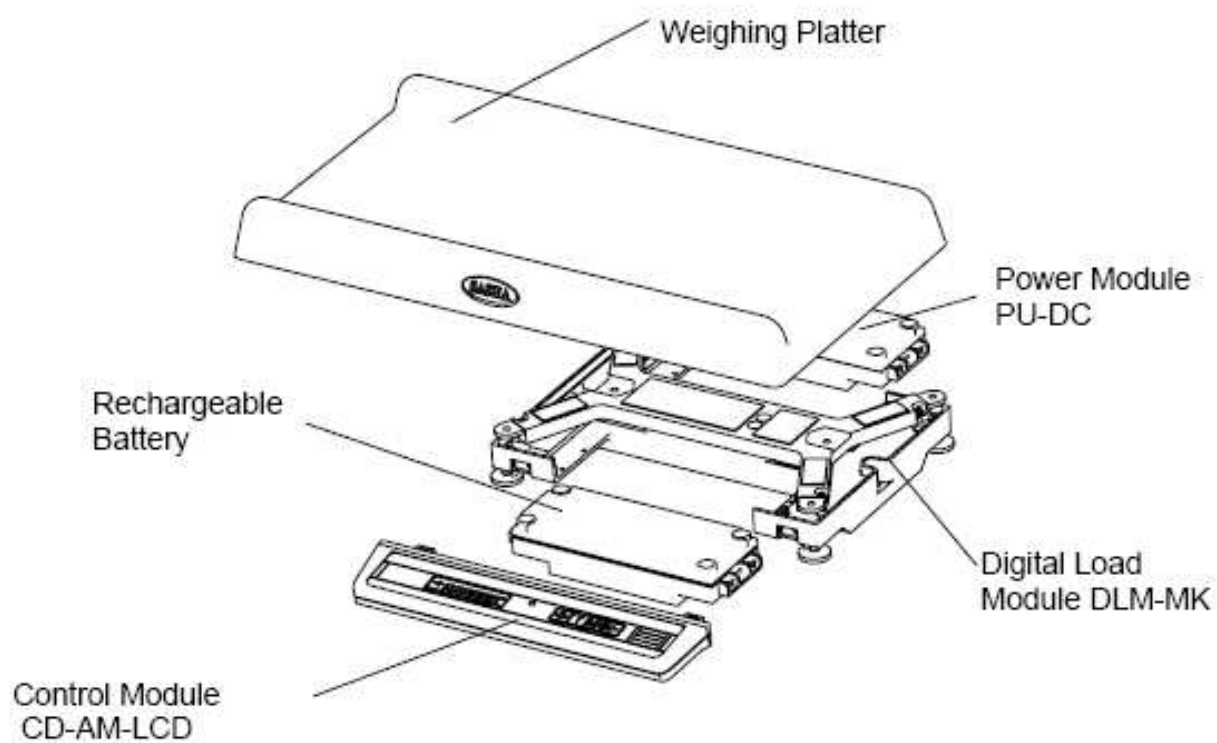
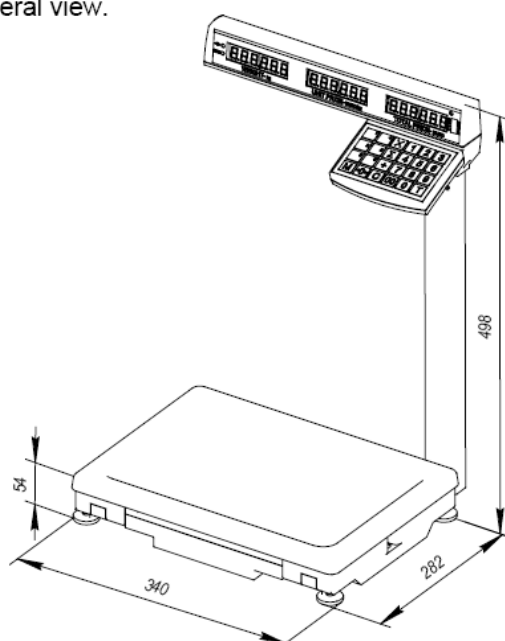


Figure 5. Price Computing scales with upper keyboard MK-TB

5.4.1 General view.



5.4.2 Assembly

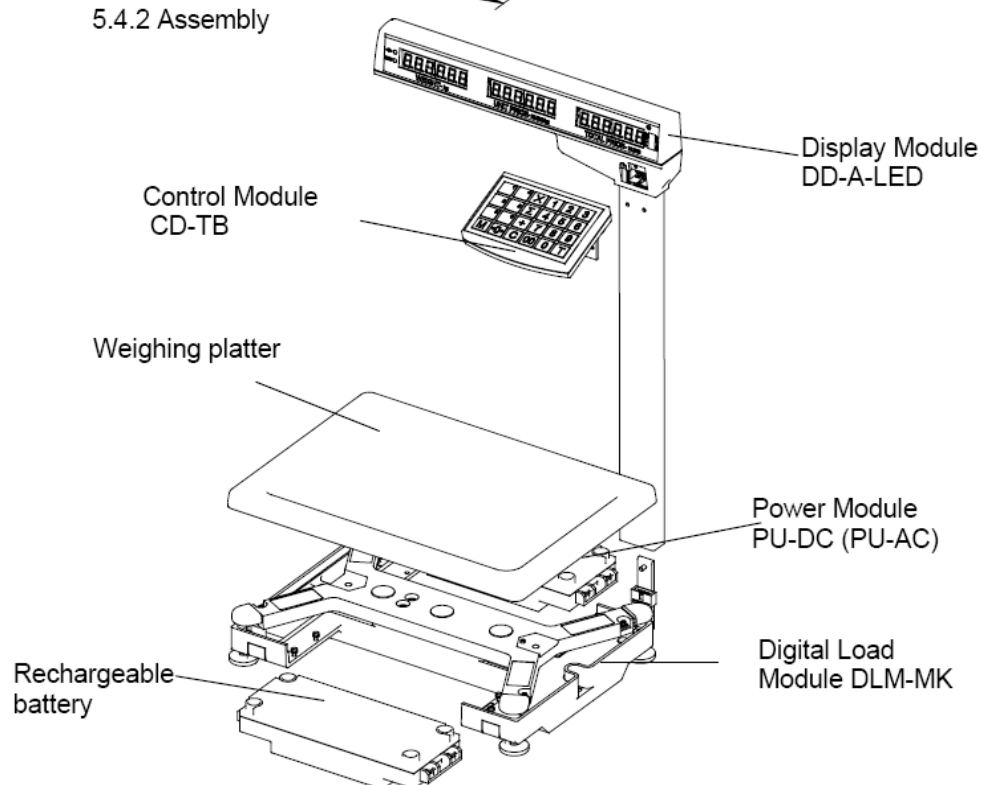
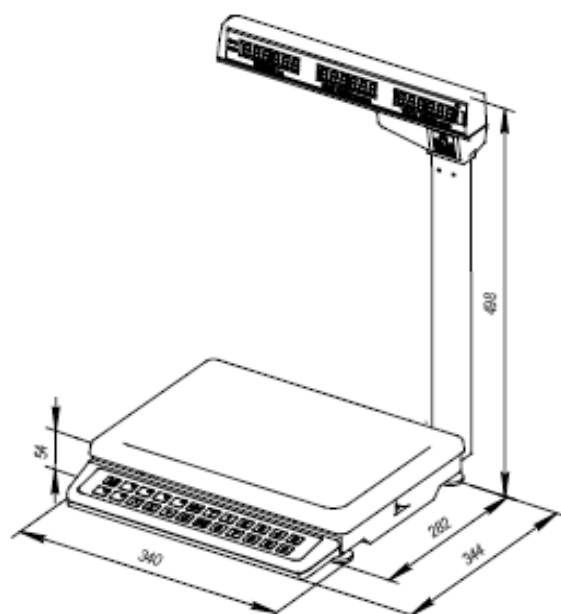


Figure 6. Price Computing scales with lower keyboard MK-TH



5.5.2 Assembly

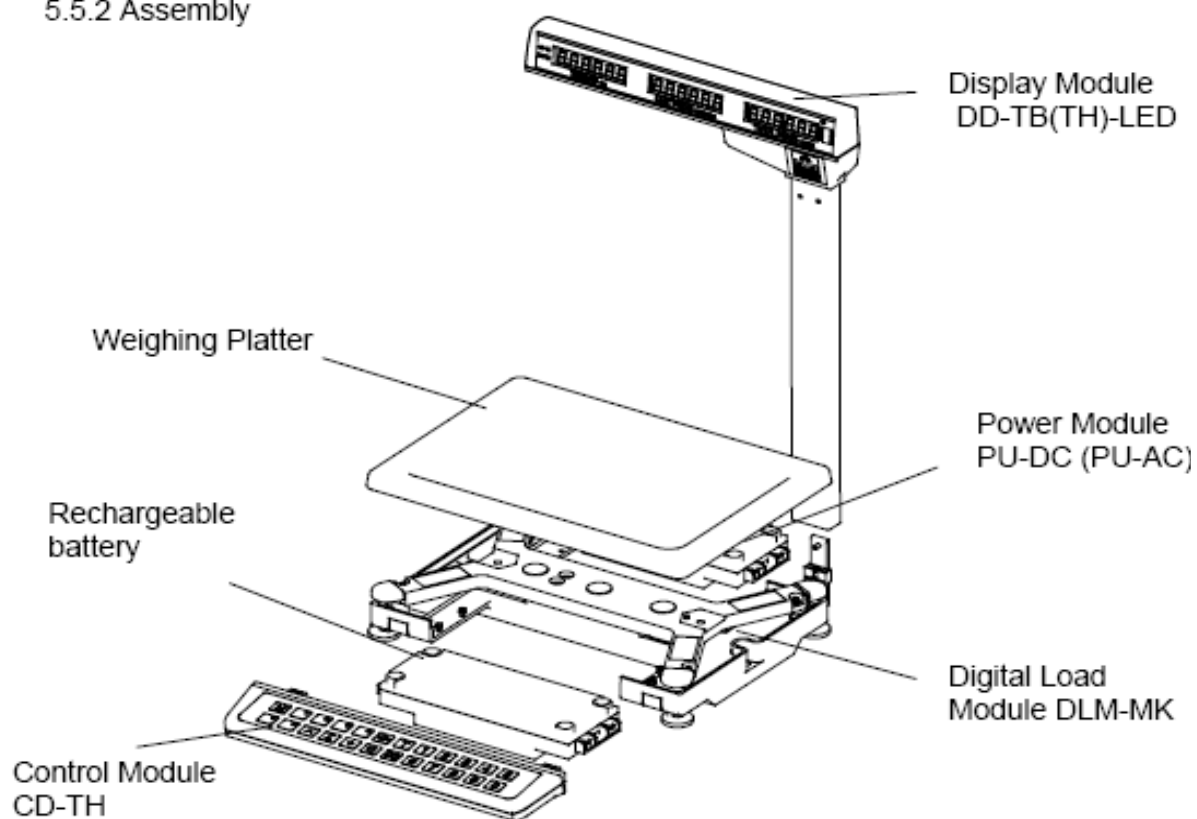
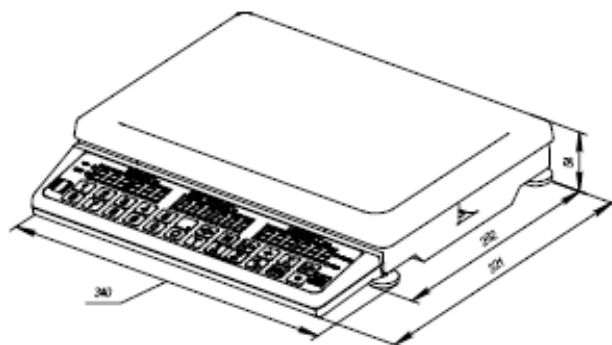


Figure 7. Counting Scales MK-C



5.6.2 Assembly

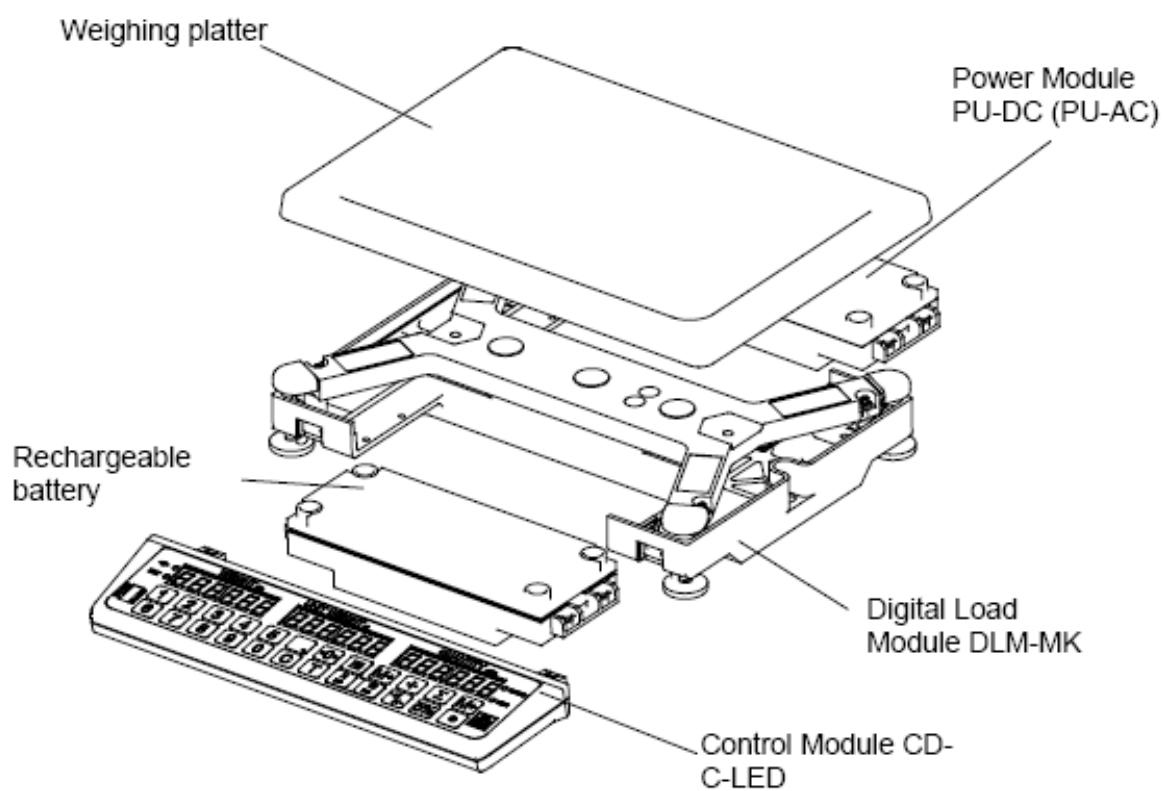


Figure 8. Packaging printing scales FP modification without automatic ribbon under winding

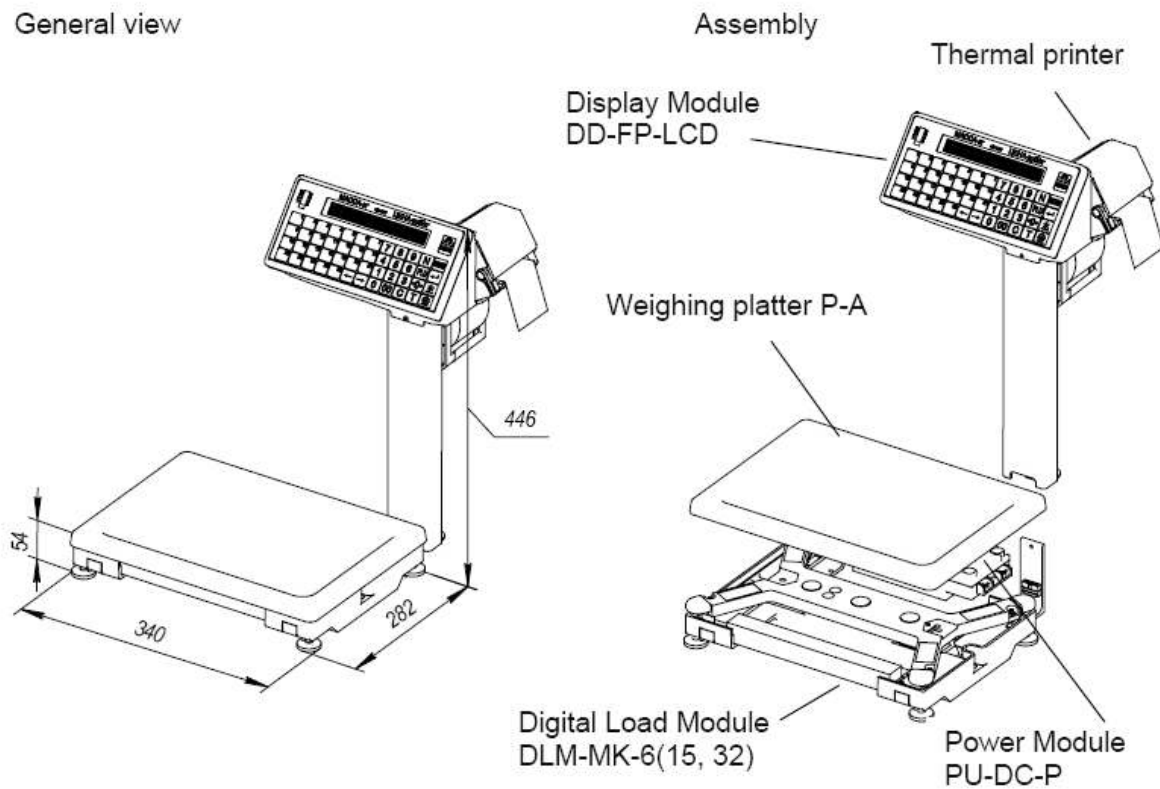


Figure 9. Packaging printing scales FP-U modification with automatic ribbon under winding

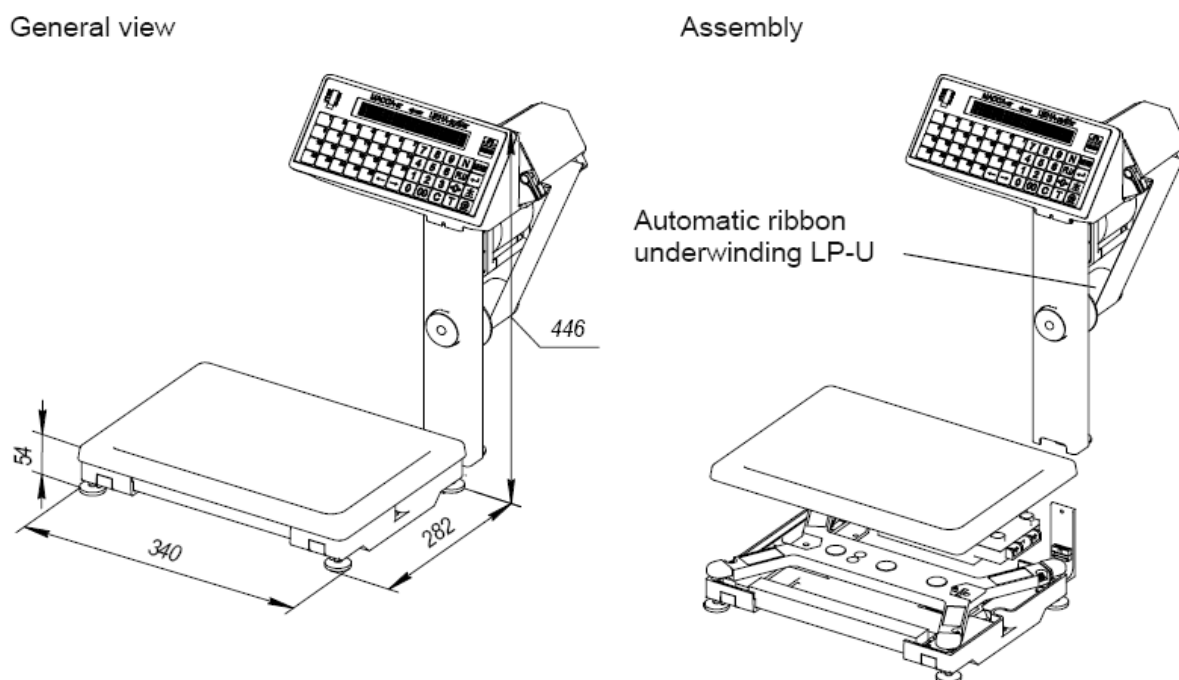


Figure 10. Retail printing scales TP modification without automatic ribbon under winding

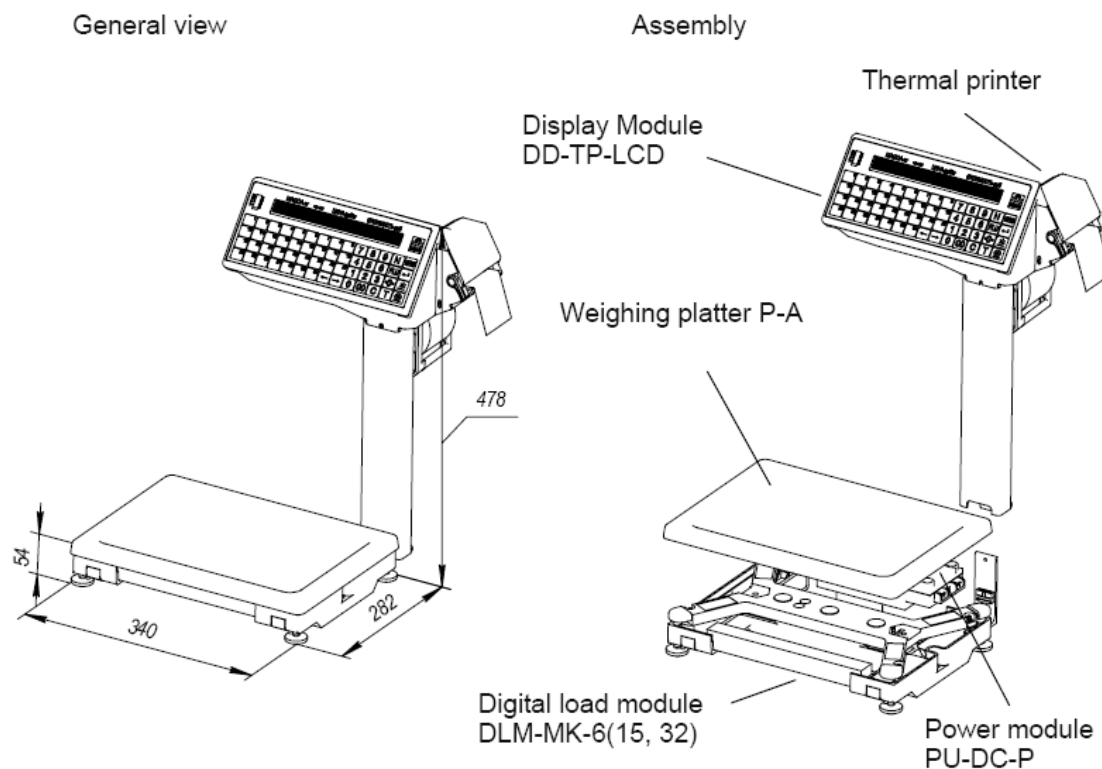


Figure 11. Retail printing scales TP-U modification with automatic ribbon under winding

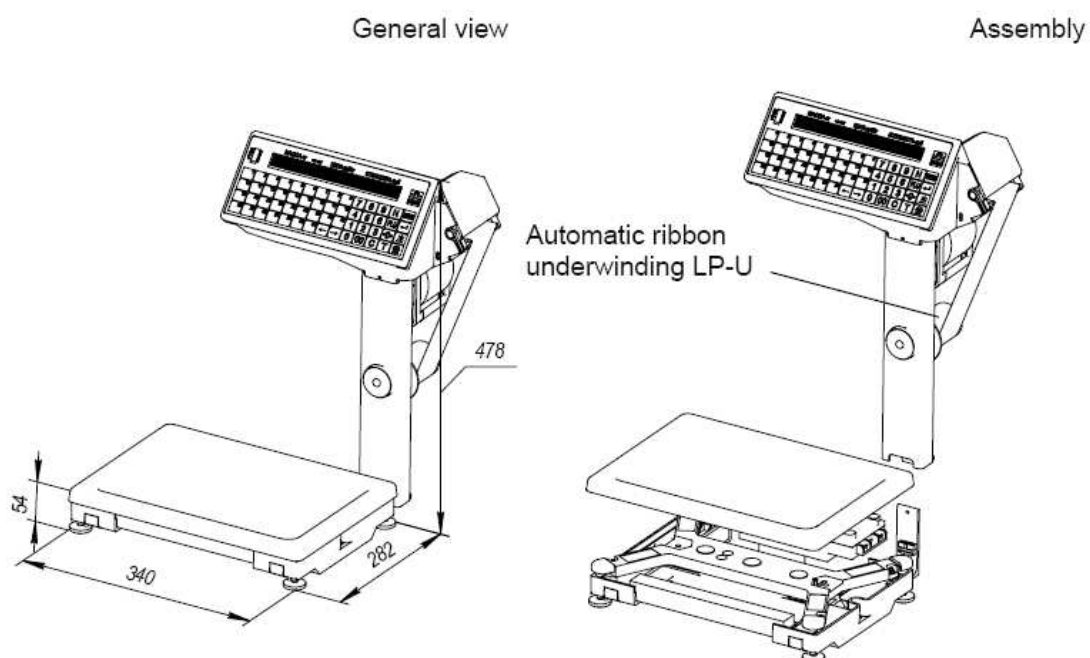


Figure 12. RA Multi-functional scales with easy system integration.

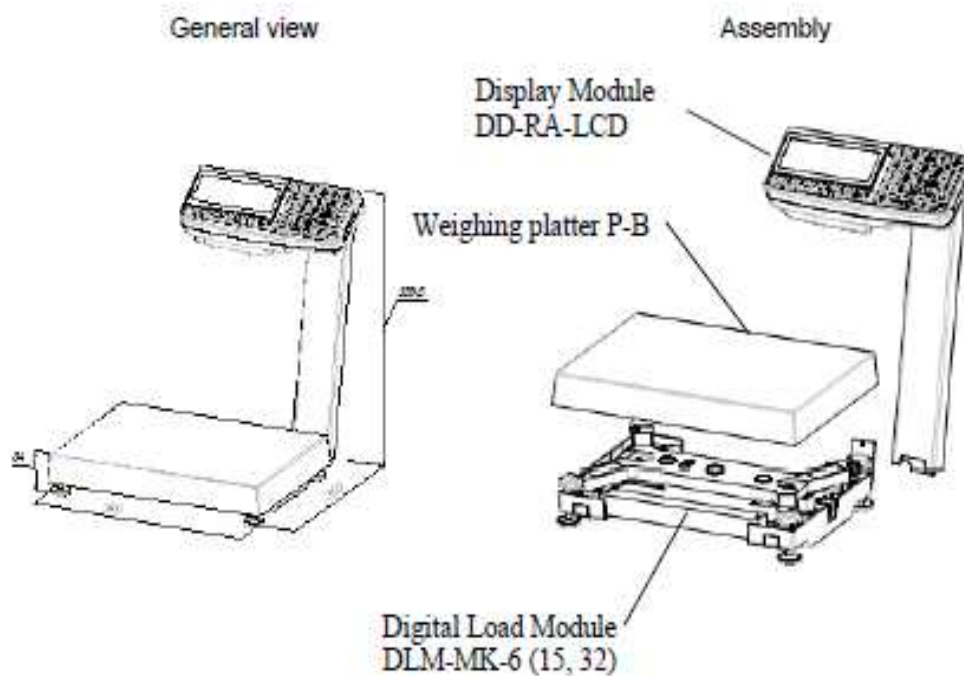


Figure 13. RP Multi-functional scales with easy system integration and label printing without automatic ribbon rewind.

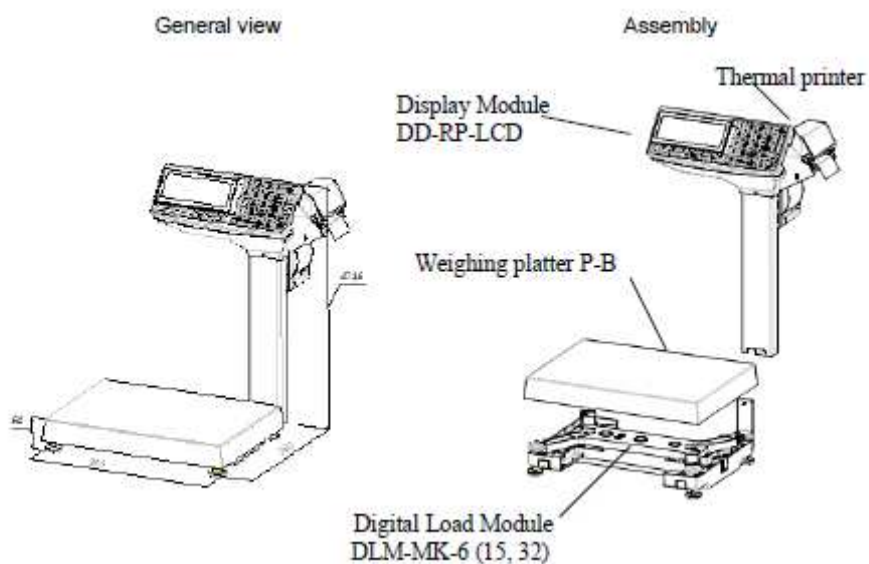


Figure 14. RP-U Multi-functional scales with easy system integration and label printing with automatic ribbon rewind.

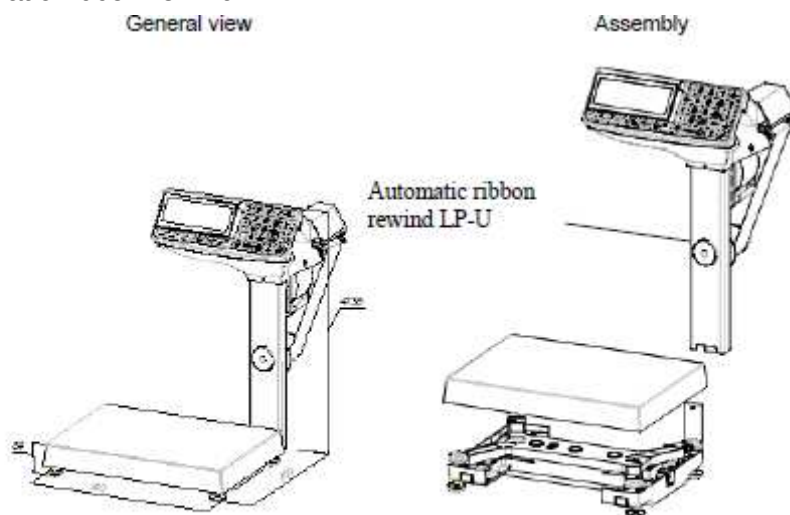


Figure 15. RP2 Multi-functional retail scales with easy system integration and receipt/label printing without automatic ribbon rewind.

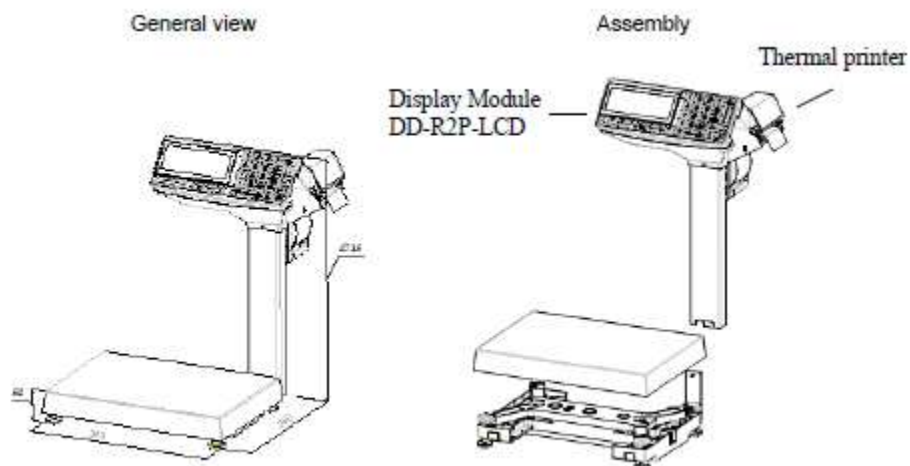


Figure 16. RP2-U Multi-functional retail scales with easy system integration and receipt/label printing with automatic ribbon rewind.

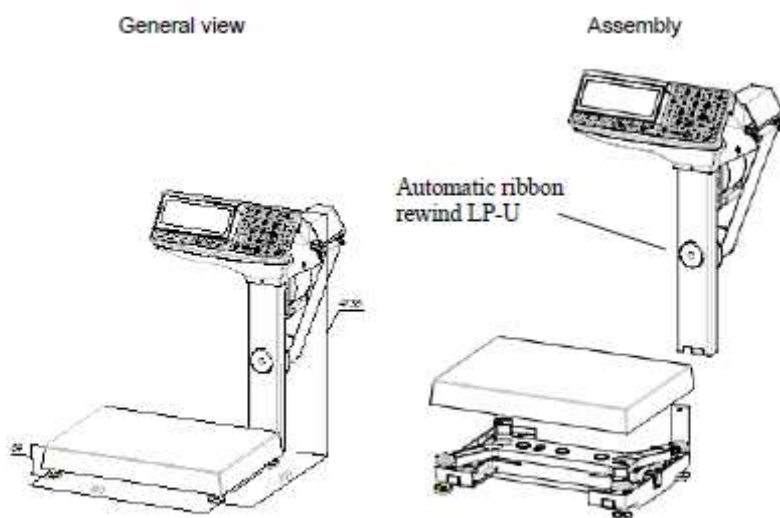


Figure 17. RC Multi-functional retail scales with easy system integration and receipt printing.

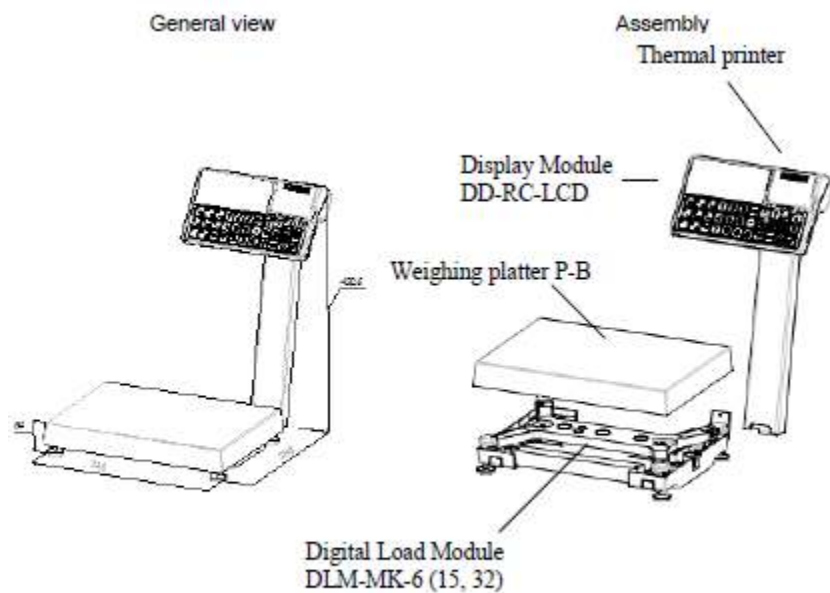


Figure 18. RL Multi-functional packaging scales with easy system integration and label printing with automatic ribbon rewind.

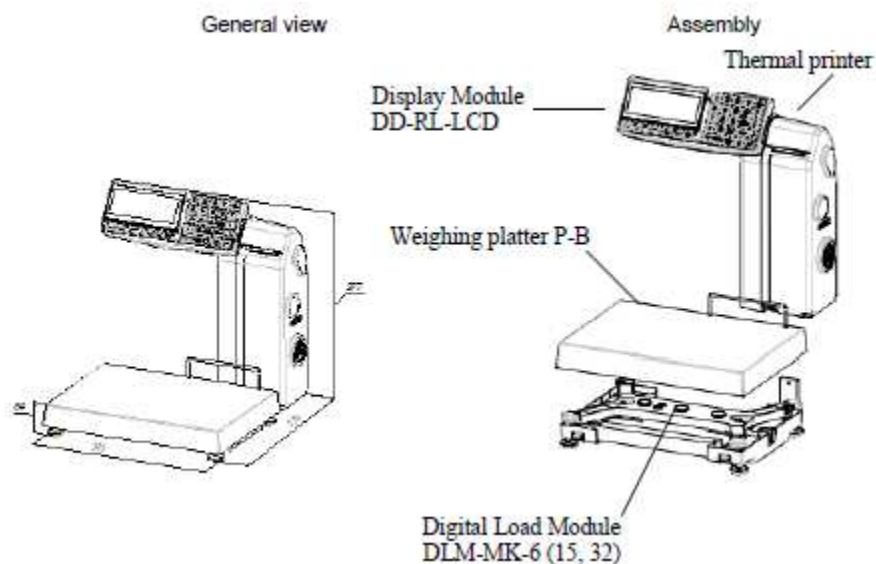


Figure 19. R2L Multi-functional packaging scales with easy system integration and label printing with automatic ribbon rewind.

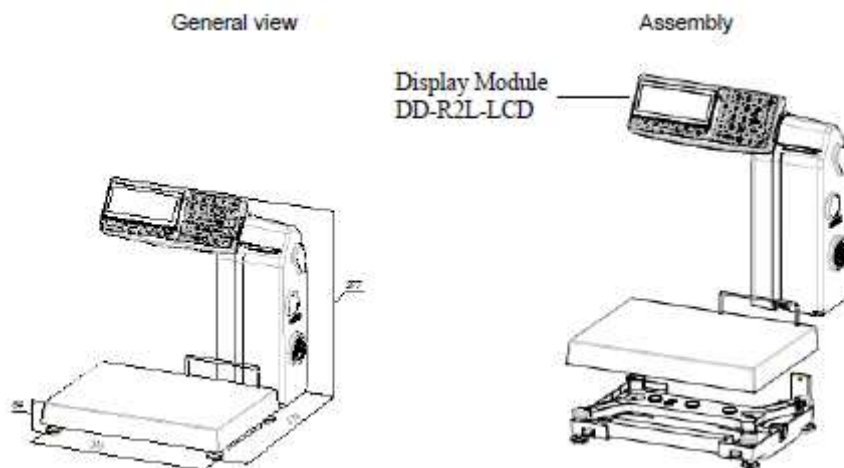


Figure 20. Sealing of the power module (PU-AC)

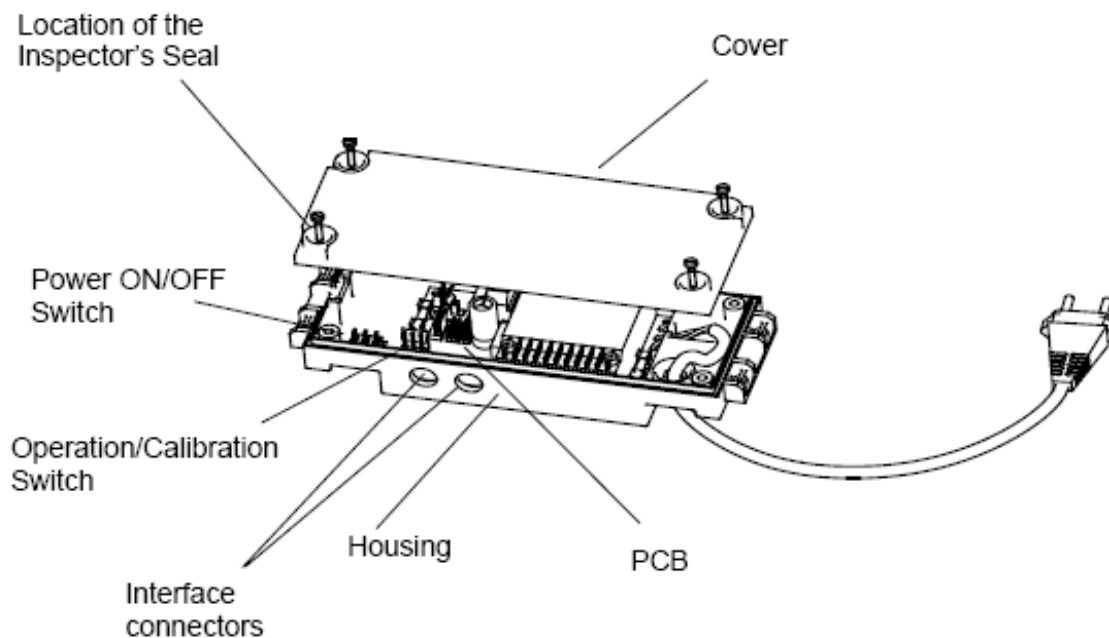


Figure 21. Sealing of the power module (PU-DC)

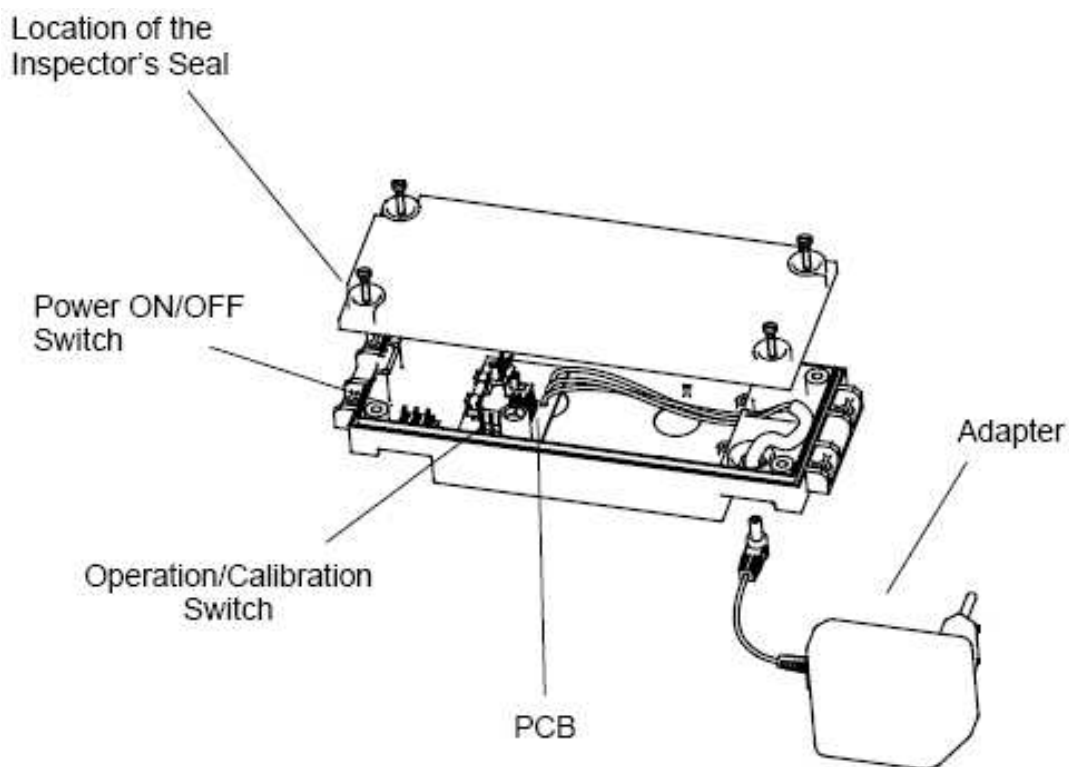


Figure 22. Sealing of power module PU-DC-P

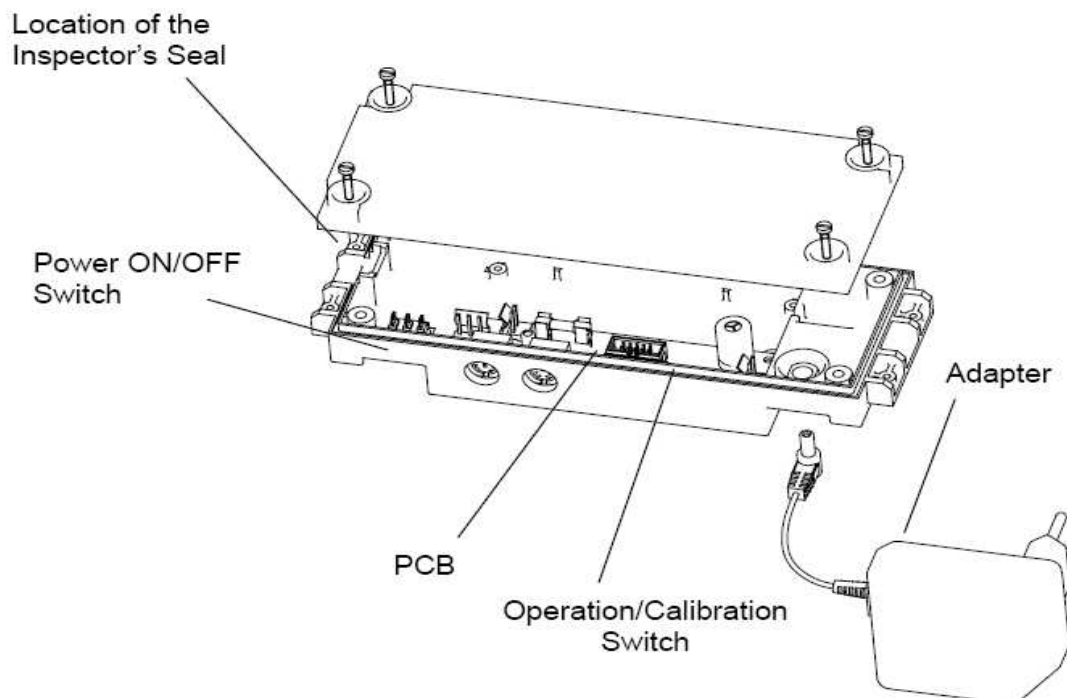
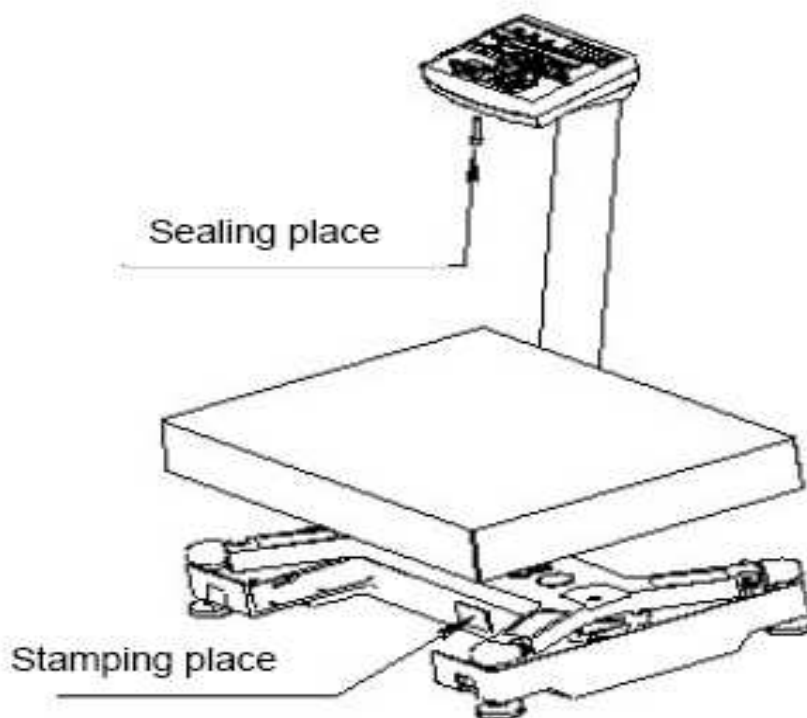


Figure 23. Sealing of the MK-AB



CERTIFICATE HISTORY

CERTIFICATE NO.	DATE	DESCRIPTION
FI 06.1.01	09.06.2006	Type examination certificate first issued.
FI 06.1.01 Revision 1	07.09.2007	More MK-...-AM models added.
FI 06.1.01 Revision 2	26.02.2009	More models added: MK-...-A21, MK-...-C21, MK-...-FP10, MK-...-FP-U10, MK-...-TP10, MK-...-TP-U10. Three new commercial brand names added.
FI 06.1.01 Revision 3	04.02.2016	Validity prolongation for Certificate (10 years).
FI 06.1.01 Revision 4	06.07.2016	More models added: MK-...-RA11, MK-...-RP10, MK-...-RP-U10, MK-...-R2P10, MK-...-R2P-U10, MK-...-RC11, MK-...-RL10, MK-...-R2L10.