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Installation Instructions Evaporation trap

KERN ALJ-A02

Version 1.0
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GB



GB

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Installation Instructions

Evaporation trap

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1 Introduction

Evaporation of the liquid during the weighing process whilst taking measurements may cause measurement errors. The purpose of the evaporation trap is to minimise this error.
Evaporation traps are crucial for reproducible results.

An evaporation trap must be used for pipettes of 50 µl or less.
(ISO 8655).
Evaporation traps reduce moisture loss by up to 60 times. The evaporation trap must be mounted on the balance before the pipette calibration is started.

The user must ensure that ISO8655 is followed, which specifies exactly how many samples must be carried out for the pipette test.

This evaporation trap is suitable for the following models:

- ALJ 210-5A
- ALJ 200-5DA



2 Technical data

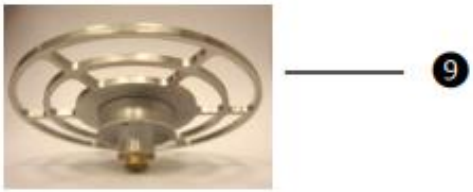
KERN	ALJ-A02
Item no./ Type	TALJ-A02-A

Unpacking and checking
Remove device and accessories from packaging, remove packaging material. Check if that there has been no damage and that all items of delivery scope are present.

Scope of delivery:



Pos.	Designation
1	Disc with test tube holder
2	Base of the evaporation trap
3	Lower glass
4	Connecting ring
5	Test tube for the test liquid
6	Liquid reservoir
7	Connecting ring
8	Glass lid with cap
9	Weighing plate for mounting the evaporation trap (not included in delivery)



3 Assembly of the evaporation trap

Assembly example ALJ 210-5A)

1. Open the draft shield (right or left side) of the balance. For a 0.01mg balance: Remove the draft shield ring.

2. Take the disc with the test tube holder (scope of delivery 1) and place it on the weighing pan as shown in figure 1, making sure that the three cylindrical supports under the disc fit into the free areas of the weighing pan.

3. Take the base of the evaporation trap (scope of delivery 2) and place it on the balance as shown in figure 2, centring it on the aluminium disc below. Make sure that the test tube holder is centred in the hole of the base without damaging it.

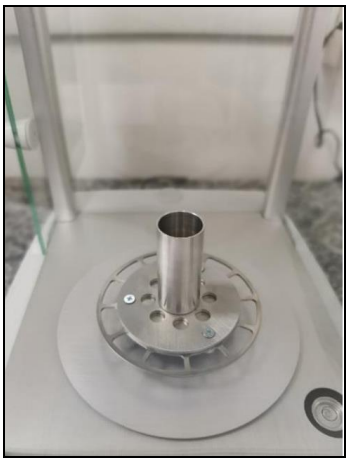


Figure 1



Figure 2



Figure 3

4. One after the other, attach the lower glass (scope of delivery 3), the connecting ring (scope of delivery 4) and above it the liquid container (scope of delivery 6), as shown in figures 3, 4 and 5.



Figure 4



Figure 5



Figure 6

5. Take the test liquid test tube (scope of delivery 5) and place it in the corresponding holder as shown in figures 6 and 7.



Figure 7



Figure 8



Figure 9

6. Attach the other connecting ring (scope of delivery 7) above the liquid reservoir (scope of delivery 6), as shown in figure 8 and place the glass lid with cap (scope of delivery 8) facing upwards as shown in figure 9.

7. The evaporation protection trap is now fully assembled.

8. At this point the draught shield of the balance can be closed.
   To start calibrating a pipette, the upper draught shield glass must be opened, and the liquid pumped into the test tube according to the various steps of the selected control procedure.

4 Preparation for the tests

- The balance must have been switched on for at least 8 hours and placed in a suitable environment and at a constant temperature (see the recommendations in the manual for the balance).
- Fill the container (scope of delivery 6) to 2/3 of its height with distilled water, taking care not to overflow. See figure 13.



Figure 10

Please note

- The balance with the mounted evaporation trap is ready for testing after about one hour. This time is needed to stabilise the humidity conditions in the trap

- The test tube (scope of delivery 6) gradually fills up while the tests are carried out. We recommend starting each pipette test with sufficient free volume in the test tube. The test tube can be emptied before the tests using either an external pump or with another pipette.

- According to ISO 8655, the test liquid to be used in the pipette must be grade 3 distilled or deionised water (ISO 3696).

- The test liquid must be at room temperature

5 Servicing, maintenance, disposal

Cleaning



Before any maintenance, cleaning and repair work disconnect the appliance from the operating voltage.



Fig. 11: Evaporation trap

1. Glass This can be removed as described below and cleaned with a commercially available glass cleaner.



Handle the glass plate with care.
Attention: Risk of breakage
Risk of cuts.

Disposal

Disposal of packaging and appliance must be carried out by operator according to valid national or regional law of the location where the appliance is used.