

Assembly and installation instructions

REMKO KP-6 condensate pump





Read these operating instructions carefully before commissioning / using this device!

These instructions are an integral part of the system and must always be kept near or on the device.

Subject to modifications; No liability accepted for errors or misprints!

Assembly and installation instructions (translation of the original)

Table of contents

1	Safety and usage instructions	4
1.1	General safety notes	4
1.2	Identification of notes	4
1.3	Personnel qualifications	4
1.4	Dangers of failure to observe the safety notes	4
1.5	Safety-conscious working	4
1.6	Safety notes for the operator	5
1.7	Safety notes for installation, maintenance and inspection	5
1.8	Unauthorised modification and changes	5
1.9	Intended use	5
1.10	Warranty	5
1.11	Transport and packaging	6
1.12	Environmental protection and recycling	6
2	Technical data	7
2.1	Unit data	7
2.2	Delivery rate	8
3	Unit description	8
4	Installation	9
5	Electrical wiring	13
6	Care and maintenance	14
7	Unit illustration and scope of delivery	15
8	Index	16

REMKO KP-6 condensate pump

1 Safety and usage instructions

1.1 General safety notes

Carefully read the operating manual before commissioning the units for the first time. It contains useful tips and notes such as hazard warnings to prevent personal injury and material damage. Failure to follow the directions in this manual not only presents a danger to people, the environment and the system itself, but will void any claims for liability.

Keep this operating manual and the refrigerant data sheet near to the units.

1.2 Identification of notes

This section provides an overview of all important safety aspects for proper protection of people and safe and fault-free operation. The instructions and safety notes contained within this manual must be observed in order to prevent accidents, personal injury and material damage.

Notes attached directly to the units must be observed in their entirety and be kept in a fully legible condition.

Safety notes in this manual are indicated by symbols. Safety notes are introduced with signal words which help to highlight the magnitude of the danger in question.

DANGER!

Contact with live parts poses an immediate danger of death due to electric shock. Damage to the insulation or individual components may pose a danger of death.

DANGER!

This combination of symbol and signal word warns of a situation in which there is immediate danger, which if not avoided may be fatal or cause serious injury.

WARNING!

This combination of symbol and signal word warns of a potentially hazardous situation, which if not avoided may be fatal or cause serious injury.

CAUTION!

This combination of symbol and signal word warns of a potentially hazardous situation, which if not avoided may cause injury or material and environmental damage.

NOTICE!

This combination of symbol and signal word warns of a potentially hazardous situation, which if not avoided may cause material and environmental damage.



This symbol highlights useful tips and recommendations as well as information for efficient and fault-free operation.

1.3 Personnel qualifications

Personnel responsible for commissioning, operation, maintenance, inspection and installation must be able to demonstrate that they hold a qualification which proves their ability to undertake the work.

1.4 Dangers of failure to observe the safety notes

Failure to observe the safety notes may pose a risk to people, the environment and the units. Failure to observe the safety notes may void any claims for damages.

In particular, failure to observe the safety notes may pose the following risks:

- The failure of important unit functions.
- The failure of prescribed methods of maintenance and repair.
- Danger to people on account of electrical and mechanical effects.

1.5 Safety-conscious working

The safety notes contained in this manual, the existing national regulations concerning accident prevention as well as any internal company working, operating and safety regulations must be observed.

1.6 Safety notes for the operator

The operational safety of the units and components is only assured providing they are used as intended and in a fully assembled state.

- The units and components may only be set up, installed and maintained by qualified personnel.
- Protective covers (grille) over moving parts must not be removed from units that are in operation.
- Do not operate units or components with obvious defects or signs of damage.
- Contact with certain unit parts or components may lead to burns or injury.
- The units and components must not be exposed to any mechanical load, extreme levels of humidity or extreme temperature.
- Spaces in which refrigerant can leak sufficient to load and vent. Otherwise there is danger of suffocation.
- All housing parts and device openings, e.g. air inlets and outlets, must be free from foreign objects, fluids or gases.
- The units must be inspected by a service technician at least once annually. Visual inspections and cleaning may be performed by the operator when the units are disconnected from the mains.

1.7 Safety notes for installation, maintenance and inspection

- Appropriate hazard prevention measures must be taken to prevent risks to people when performing installation, repair, maintenance or cleaning work on the units.
- The setup, connection and operation of the units and its components must be undertaken in accordance with the usage and operating conditions stipulated in this manual and comply with all applicable regional regulations.
- Local regulations and laws such as Water Ecology Act must be observed.
- The power supply should be adapted to the requirements of the units.
- Units may only be mounted at the points provided for this purpose at the factory. The units may only be secured or mounted on stable structures, walls or floors.
- Mobile units must be set up securely on suitable surfaces and in an upright position. Stationary units must be permanently installed for operation.
- The units and components should not be operated in areas where there is a heightened risk of damage. Observe the minimum clearances.

- The units and components must be kept at an adequate distance from flammable, explosive, combustible, abrasive and dirty areas or atmospheres.
- Safety devices must not be altered or bypassed.

1.8 Unauthorised modification and changes

Modifications or changes to units and components are not permitted and may cause malfunctions. Safety devices may not be modified or bypassed. Original replacement parts and accessories authorised by the manufacturer ensure safety. The use of other parts may invalidate liability for resulting consequences.

1.9 Intended use

Depending on the model, the unit and the additional fittings with which it is equipped is intended to be used only as a condensate pump for pumping water and only within an enclosed space.

Any different or additional use shall be classed as non-intended use. The manufacturer/supplier assumes no liability for damages arising from non-intended use. The user bears the sole risk in such cases. Intended use also includes working in accordance with the operating and installation instructions and complying with the maintenance requirements.

The threshold values specified in the technical data must not be exceeded.

1.10 Warranty

For warranty claims to be considered, it is essential that the ordering party or its representative complete and return the "certificate of warranty" to REMKO GmbH & Co. KG at the time when the units are purchased and commissioned.

The warranty conditions are detailed in the "General business and delivery conditions". Furthermore, only the parties to a contract can conclude special agreements beyond these conditions. In this case, contact your contractual partner in the first instance.

REMKO KP-6 condensate pump

1.11 Transport and packaging

The devices are supplied in a sturdy shipping container. Please check the equipment immediately upon delivery and note any damage or missing parts on the delivery and inform the shipper and your contractual partner. For later complaints can not be guaranteed.



WARNING!

Plastic films and bags etc. are dangerous toys for children!

Why:

- Leave packaging material are not around.
- Packaging material may not be accessible to children!

1.12 Environmental protection and recycling

Disposal of packaging

All products are packed for transport in environmentally friendly materials. Make a valuable contribution to reducing waste and sustaining raw materials. Only dispose of packaging at approved collection points.



Disposing of the units and their components

For the manufacture of the units and components, only recyclable materials have been used. Help protect the environment by ensuring that the units or components (for example batteries) are not disposed of in household waste, but only in accordance with local regulations and in an environmentally safe manner, e.g. using authorised disposal and recycling specialists or council collection points.



2 Technical data

2.1 Unit data

Series		KP-6
Maximum delivery volume	l/h	20
Maximum delivery height	m	10
Noise level at 1m in accordance with EN ISO 3744	dB(A)	22
Max. condensate temperature	°C	35
Max. environmental temperature	°C	50
Pressure hose ø	mm	6
Return flow valve on pressure side		Present
Motor protection (therm. switch-off point)	°C	115
Power supply	V/~ /Hz	230V/1~/50Hz
Elec. rated current consumption	A	0.3
Max. rated power consumption	W	14
Enclosure class		IPX4
Colour		RAL 9003
Duct dimensions		
Length	mm	750
Width	mm	80
Height	mm	60
Angle dimensions		
Length	mm	130
Width	mm	130
Height	mm	60
Weight	kg	1.55
EDP no.		1613251

We reserve the right to modify the dimensions and design as part of the ongoing technical development process.

REMKO KP-6 condensate pump

2.2 Delivery rate

Delivery height (m)	Total hose length inner Ø 6 mm, 1/4"			
	5 m	10 m	20 m	30 m
0	20	19	18	17
2	16	15	14	13.5
4	11.5	11	10.5	10
6		8.5	7.5	6.5
8		6	5	4
10		4	3.5	2.5

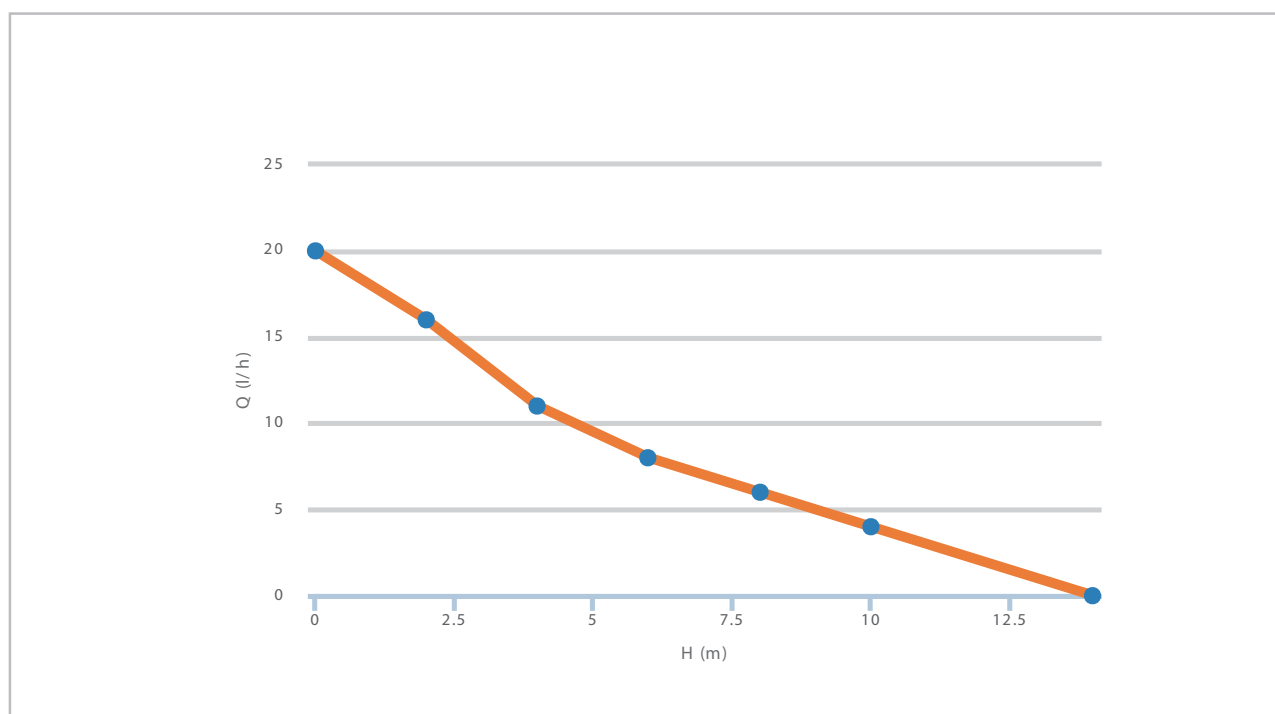


Fig. 1: Delivery rate

3 Unit description

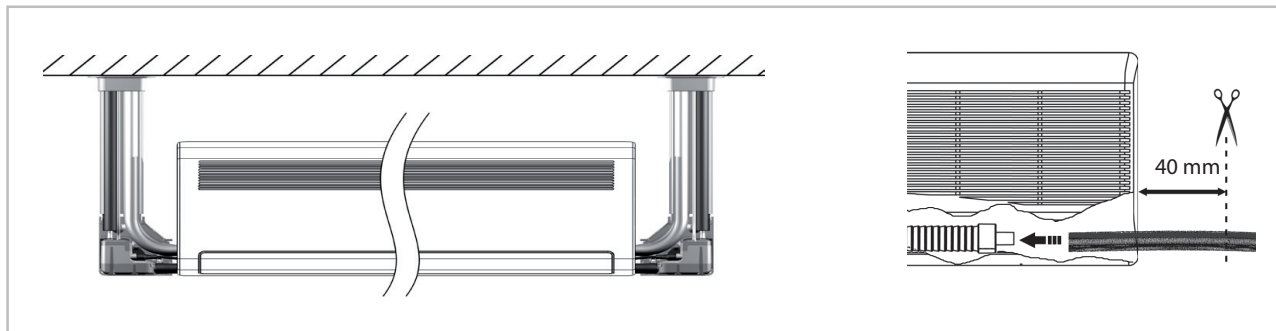
The KP-6 condensate pump is used to remove the condensate water from the indoor units or cold water collectors to higher drains. Depending on the space available, the condensate pump can be installed on the right or left, beneath the wall indoor unit on the wall. An integrated liquid level switch switches the pump on and off. If the condensate level is too high, the safety switch will switch off the cooling request (compressor contact) and release an alarm contact.

4 Installation

Assembling the condensate pump for the units RVT, RXW, MXW, ATY, MVW

Carry out the installation as follows:

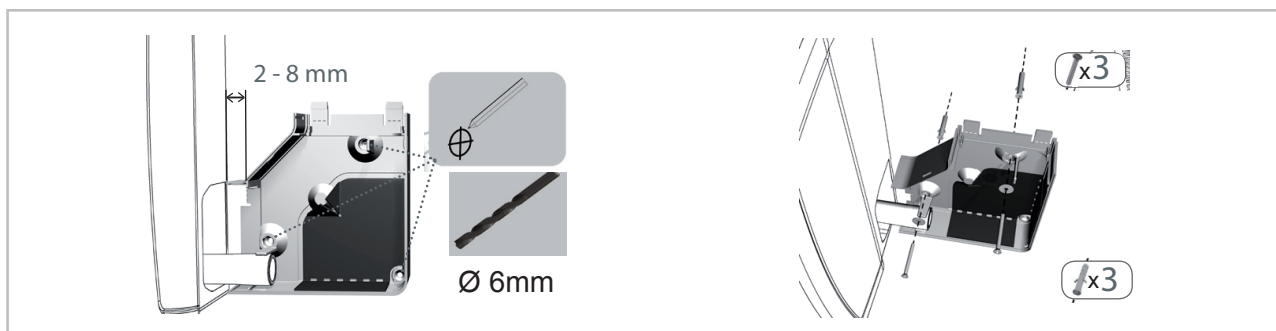
1. Connect condensate hose with an inner \varnothing of 15 mm to the condensate drain of the air conditioner. Shorten this to a length of 40 mm from the unit housing.



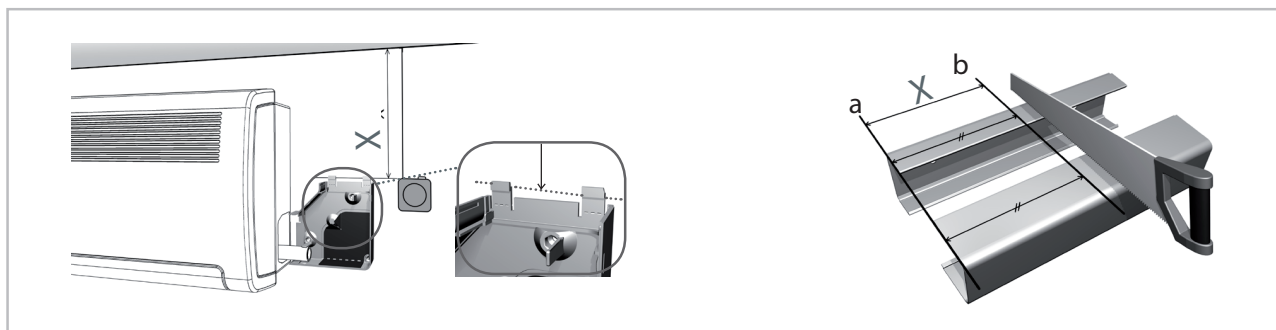
2. Place the mounting bracket on the left or right of the air conditioner and mark the drilling locations and boundary lines. The distance from the angle to the air conditioner should be 2-8 mm.

Drill the marked holes and insert the provided dowels.

Screw the duct elbow to the wall.

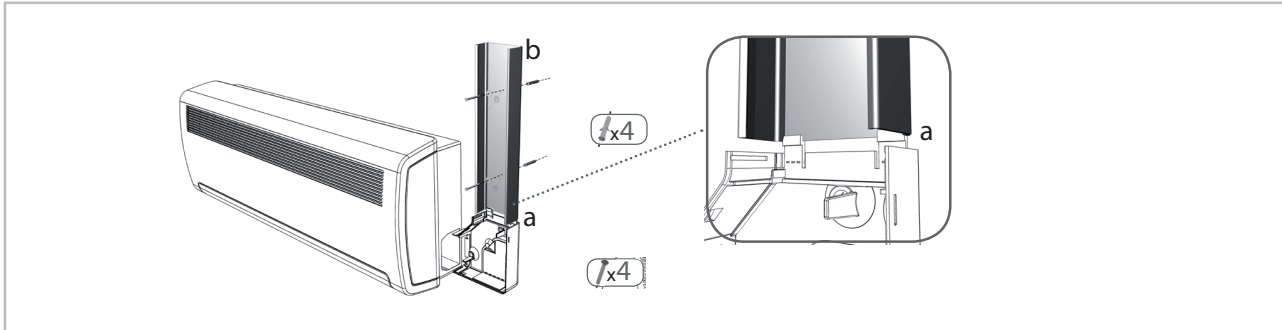


3. Measure the distance [X] between the mounting bracket and the ceiling, shorten the cable duct to length [X]



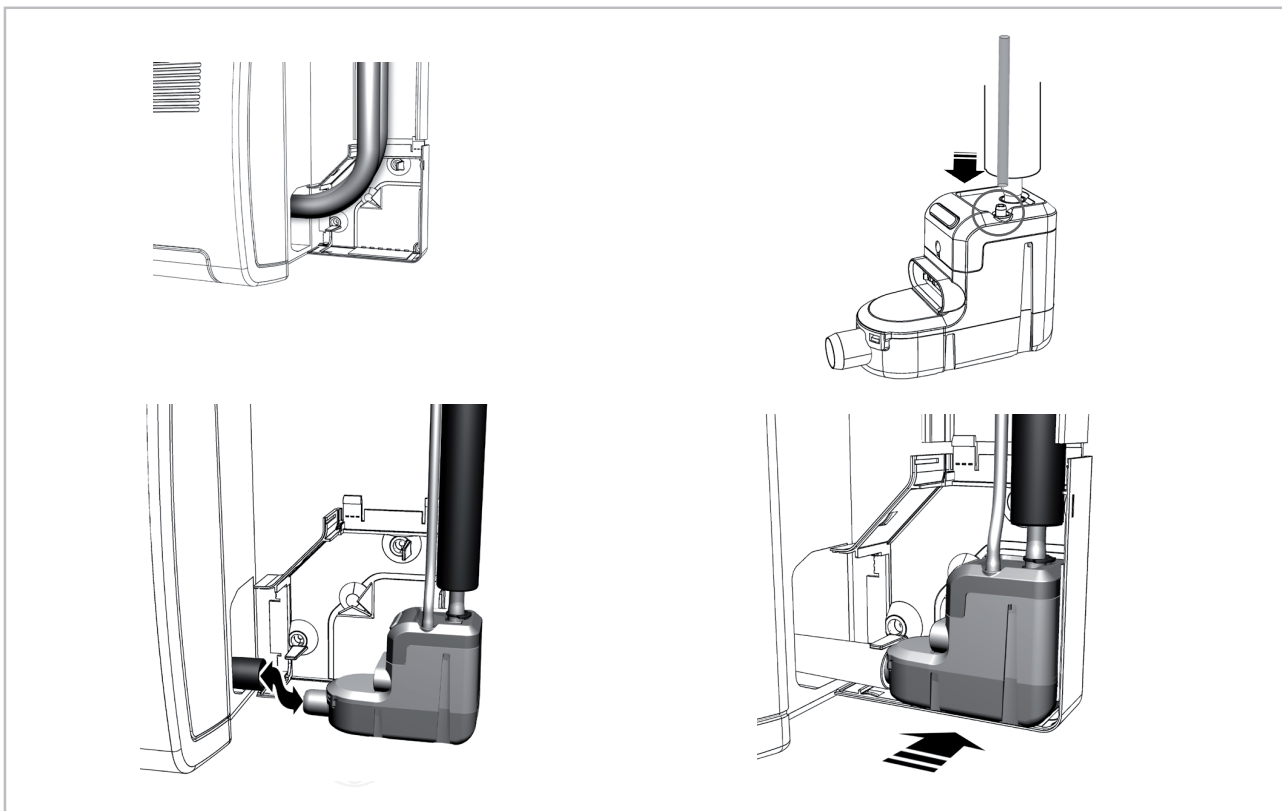
REMKO KP-6 condensate pump

4. ➤ Hold the cable duct level and mark the required drill holes. After drilling the holes, insert the dowels and screw the cable duct to the wall.

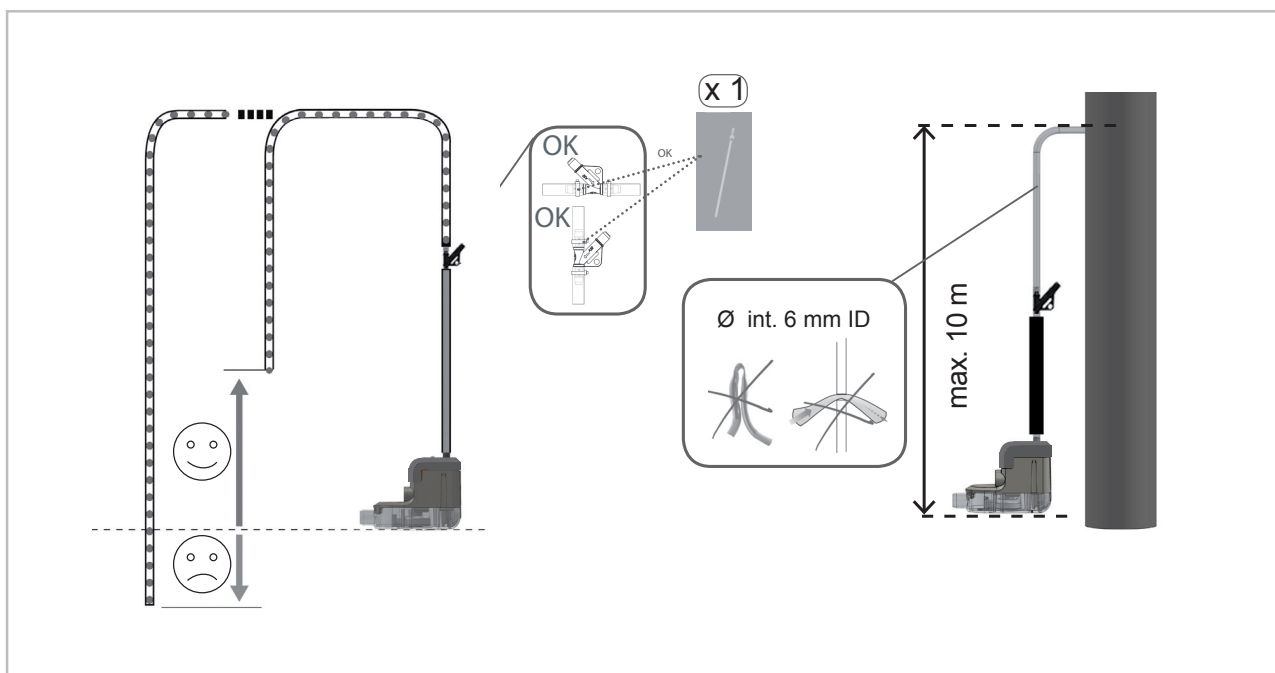


5. ➤

Place the condensate pump in the intended corner of the duct elbow. Connect the hose from the air conditioner to the float connector of the condensate pump. Plug the insulated condensate hose supplied into the pump discharge side. Ensure that the standard venting valve is installed.



7. ➡ Then lay the on-site condensate drainage line



8. ➡ Set up the electrical plug connections and connect them as described in the “Electrical wiring” chapter

Function test

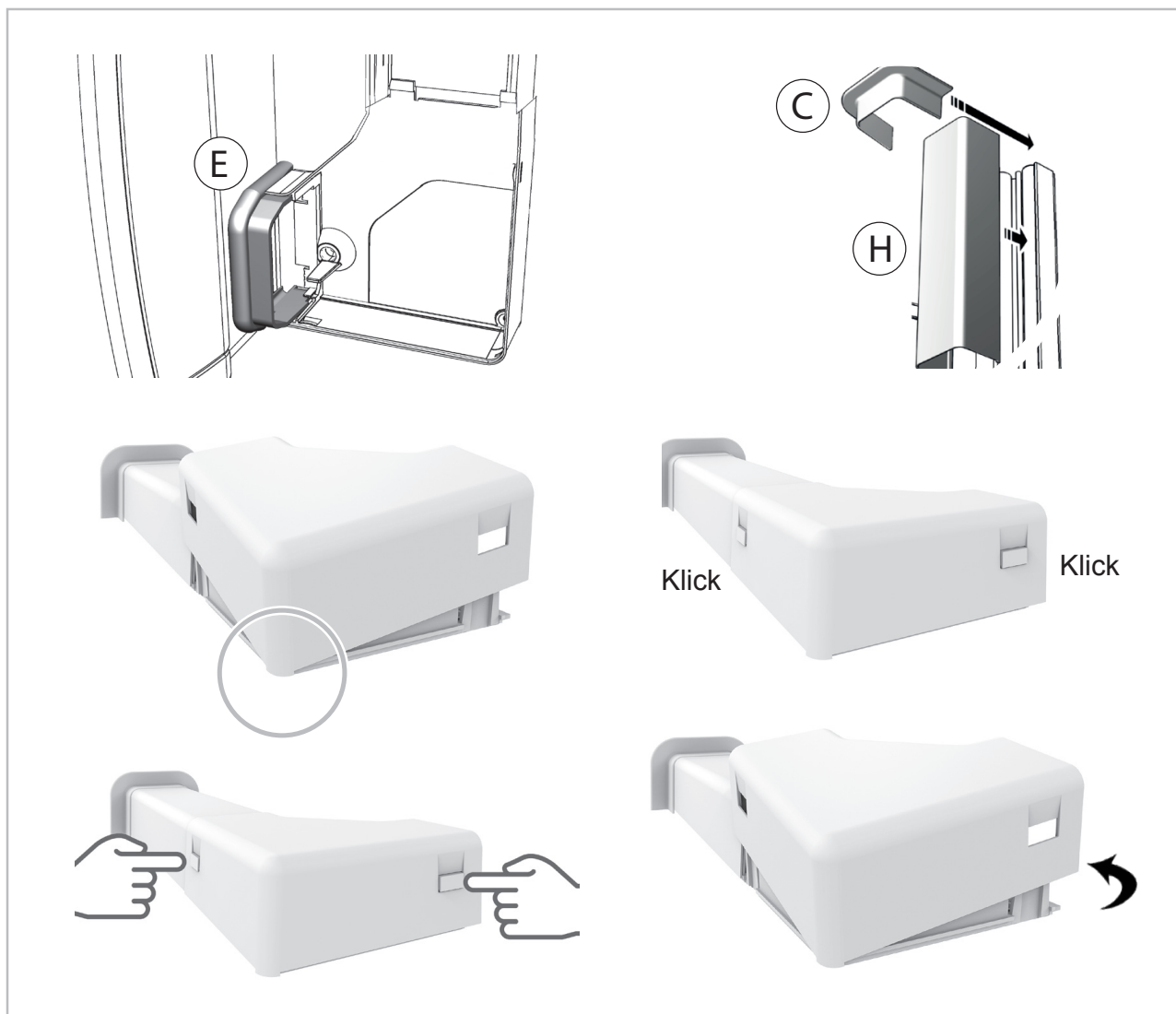
Check the assembly again and then carry out a function test:

1. ➡ Fill water into the condensate tray and check whether the pump is switched on and the condensate is being pumped out

2. ➡ To check the alarm contact, add enough water to trigger it

REMKO KP-6 condensate pump

Then attach the sealing lip [E] between the angle and the duct on the angle, as well as the cover [H] of the cable duct, angle [B] and ceiling edge [C].



! NOTICE!

The pressure pipe must not be laid with an immediate incline, in order to prevent the pressure hose emptying



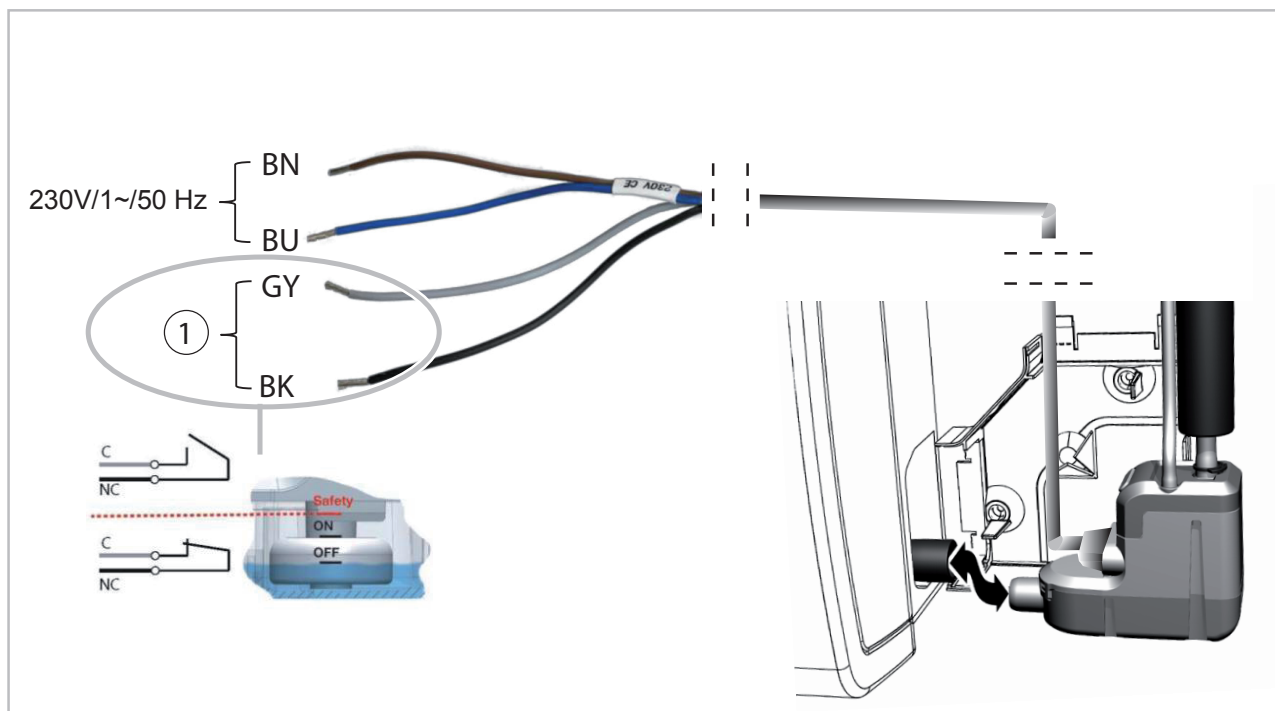
Depending on the unit type, lamps or acoustic devices can be connected to indicate malfunctions

! NOTICE!

Make sure that the installation is frost-free

5 Electrical wiring

Electrical wiring diagram



1: NC contact for alarm
BK: Black
BN: Brown

BU: Blue
GY: Grey

Indoor units connection table

Indoor unit	Connection to NC (grey)	Connection to C (black)
RXW	Control conductor, contact 3 on IT	Control conductor, contact 3 on AT
RVT	Control conductor, contact S on IT	Control conductor, contact S on AT
MXW	Control conductor, contact S on IT	Control conductor, contact S on AT
ML...DC	Control conductor, contact S on IT	Control conductor, contact S on AT
RXT	Phase conductor, input L on IT	*)
MVW	Disconnect the CN 19 (WATER) circuit board contact in the middle and connect the NC pump contacts (grey) and contact C (black) to one end each	

*) varies, depending on where the 230 V, 1~, 50 Hz power supply comes from!

! NOTICE!

When using the malfunction contacts, unused cable ends must be properly insulated (terminal block).

REMKO KP-6 condensate pump

6 Care and maintenance

Check the condensate tray, condensate hoses and pump connections as well as the float in the reservoir regularly for dirt.

Type of task	Commissioning	Half-yearly
General	X	X
Check voltage and current	X	
Check condensate drain/ventilation	X	X
Clean reservoir (see note)	X	X
Check insulation if necessary	X	
Check malfunction contact	X	X



Only neutral detergents may be used for cleaning.



The float must always be mounted with the magnetic ring upwards after cleaning.

7 Unit illustration and scope of delivery

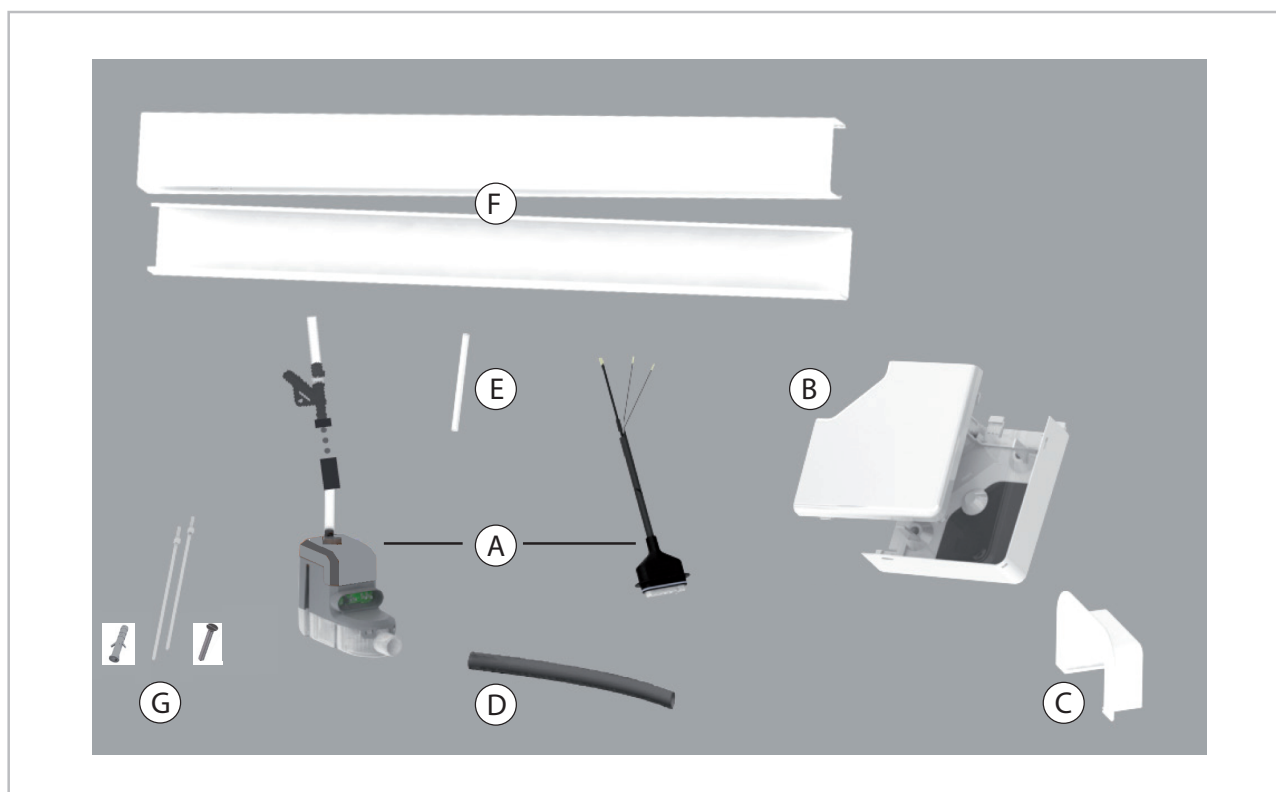


Fig. 2: View of the unit

Item	Designation
A	Oscillating piston pump consisting of: - Integrated liquid level switch - Transparent PVC hose: Inner diameter 6 mm, length 1 m, insulated to 800 mm, assembled with venting valve - 1.5 m cable: 2 wires for power supply, 2 wires for alarm contact
B	2-part duct elbow
C	Ceiling passage piece
D	500 mm rubber hose, inner Ø 15 mm
E	Ventilation hose
F	750 mm duct
G	Assembly accessories consisting of: - 2 cable ties and 6 screws and dowels for fixing the angle
	Optional accessories
	Condensate hose Ø 6 mm Article number: 1613067

REMKO KP-6 condensate pump

8 Index

C		
Care and maintenance	14	
D		
Delivery rate	8	
Dimensions	7	
E		
Electrical wiring	13	
Enclosure class	7	
Environmental protection	6	
F		
Function test	11	
I		
Installation	9	
Intended use	5	
N		
NC contact for alarm	13	
P		
Packaging, disposal	6	
Power supply	7	
R		
Recycling	6	
S		
Safety		
Dangers of failure to observe the safety		
notes	4	
General	4	
Identification of notes	4	
Notes for inspection	5	
Notes for installation	5	
Notes for maintenance	5	
Personnel qualifications	4	
Safety notes for the operator	5	
Safety-conscious working	4	
Unauthorised modification	5	
Unauthorised replacement part manufacture	5	
Scope of delivery	15	
T		
Technical data	7	
U		
Unit data	7	
Unit description	8	
Unit disposal	6	
V		
View of the unit	15	
W		
Warranty	5	

REMKO KP-6 condensate pump

REMKO QUALITY WITH SYSTEMS

Air-Conditioning | Heating | New Energies

REMKO GmbH & Co. KG
Klima- und Wärmetechnik

Im Seelenkamp 12
32791 Lage

Telephone +49 (0) 5232 606-0
Telefax +49 (0) 5232 606-260

E-mail info@remko.de
URL www.remko.de

Hotline within Germany
+49 (0) 5232 606-0

Hotline International
+49 (0) 5232 606-130

