

Operating and installation instructions

REMKO KWT series

Monobloc air conditioners

**Wall-mounted units without an outdoor unit for cooling and
heating**

KWT 180 DC, KWT 240 DC, KWT 300 DC





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!



Translation of the original

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1 Safety and usage instructions

1.1 General safety notes

- Carefully read the manual before commissioning the units or their components for the first time. It provides useful tips and notes such as hazard warnings to prevent injury and material damage. Failure to follow the directions in this manual can endanger persons, the environment and the equipment itself or its components and will void any claims for liability.
- Store this manual and the information required for the operation of this system (e.g. refrigerant datasheet) in the vicinity of the units.
- This unit may only be installed and operated as described in this manual.
- Independent conversion and/or modification of any kind is strictly prohibited.
- National regulations in connection with installation must be observed.
- Children must not be left unsupervised when close to the unit.
- For safety reasons, people with mental, physical or other health limitations must not operate this unit unattended.
- The unit is not permitted to be operated with damaged cables. The unit must be repaired by a specialist immediately.
- The unit may only be operated via a power supply with grounding.
- The use of extension cables is not recommended.
- The air filter must be cleaned at intervals of no more than 2 weeks.
- The unit is not permitted to be operated in the vicinity of heat sources.
- The unit must be transported upright. Residue from the condensate must be drained off before transport. The unit must be stood upright for 1 hour prior to commissioning.
- Combustible substances and pressure containers must be kept at least 50 cm from the unit.
- The unit must not be stored and operated in rooms with oil, gas or sulphur.
- The unit must always be switched off with the on/off switch.
- Do not place anything on the device in particular heavy or hot objects.
- Repairs may only be carried out by authorised and certified specialist personnel.
- The unit must not be covered with plastic sheets.
- This unit must be disposed of professionally in accordance with environmental protection.

- The safety notes in regards to the room sizes and the flammability of the refrigerant must not be removed from the machine.
- The units may only be operated in well ventilated areas.
- The unit can be used by children 8 years and up and by persons without physical, mental or other health limitations if this knowledge has been obtained via the necessary safety notes.
- Children must never play with the unit.
- Cleaning the units must not be carried out by children without parental/guardian supervision.

1.2 Additional safety notes when handling refrigerant R290 and R32



Warning of inflammable substances!

The refrigerant used in the system is flammable. If applicable, observe the local safety conditions.

- The units contain 0.149 kg of refrigerant R290 depending on the unit type.
- The units must not be burned, drilled or pierced.
- Only use cleaning agents which have been approved by the manufacturer for cleaning.
- The unit must never be operated in rooms with naked flames (e.g. gas heaters, open fireplaces, etc.).
- Refrigerant circuit components must not be deformed.
- The contained refrigerant R290 is colourless and odourless.
- The accumulation of refrigerant due to leakages can lead to a fire and explosions in rooms which are too small due to the development of heat or ignition sources.
- The units must be stored carefully. Mechanical damage must be avoided.
- Intervention in the refrigeration circuit may only be done by certified specialist personnel taking into account the safety notes of the manufacturer.
- Maintenance and repairs may only be carried out by authorised personnel which have the corresponding knowledge in regards to flammable refrigerant.

WARNING!

Do not use anything other than the agent recommended by the manufacturer to speed up a possible defrosting process or to clean the units. The unit may only be operated and stored in rooms where there are no devices with potential ignition sources. Note that leaking refrigerant is colourless and odourless. The unit must not be burned or pierced!

1.3 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.

1.4 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.

1.5 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.

1.6 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.

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1.7 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.

1.8 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.

1.9 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.

1.10 Intended use

Depending on the model, the units and the additional fittings with which they are equipped are only intended to be used as an air-conditioner for the purpose of cooling or heating the air in an enclosed space.

Any different or additional use is a non-intended use. The manufacturer/supplier assumes no liability for damages arising from a 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.

1.11 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.

1.12 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!

1.13 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.



Disposal of equipment and components

Only recyclable materials are used in the manufacture of the devices and components. Help protect the environment by ensuring that the devices or components (for example batteries) are not disposed in household waste, but only in accordance with local regulations and in an environmentally safe manner, e.g. using certified firms and recycling specialists or at collection points.



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2 Technical data

2.1 Unit data

Series		KWT 180 DC	KWT 240 DC	KWT 300 DC
Operating mode		Local, two-hose air conditioner with inverter technology for cooling and heating		
Nominal cooling output ¹⁾	kW	1.73 (0.7-2.4)	2.35 (0.92-3.10)	2.87 (1.40-3.50)
Energy efficiency ratio - cooling		A	A+	A
Energy efficiency rating EER ¹⁾		3.01	3.22	2.74
Energy consumption, hourly	kWh/60 min	0.57	0.73	1.0
Nominal heating ¹⁾	kW	1.71 (0.8-2.4)	2.36 (1.10-2.67)	2.75 (1.35-3.50)
Energy efficiency ratio - heating		A		
Energy efficiency rating COP ¹⁾		3.15	3.28	3.12
Energy consumption, hourly	kWh/60 min	0.54	0.72	1.0
Dehumidification capacity	l/h	0.9	1.1	1.2
Application area (room volume), approx.	m ³	60	80	100
Setting range	°C	16-31		
Operating range, cooling	°C/r.F.%	-5 to +43/35-65		
Operating range, heating	°C/r.F.%	-10 to +24/35-65		
Refrigerant ³⁾		R290	R410A	R32
Refrigerant, basic quantity	kg	0.15	0.56	0.5
CO ₂ equivalent	t	0.00	1.69	0.34
Max. operating pressure	bar	38		
Air flow volume per stage	m ³ /h	240/300/360	270/320/400	300/350/450
Sound pressure level min/max ²⁾	dB(A)	27/39	27/41	29/43
Sound power level max.	dB(A)	57	58	57
Power supply	V/Ph/Hz	230/1~/50		
Enclosure class		IPX0		
Max. power consumption	W	900	1060	1450
Max. current consumption	A	3.9	4.8	6.3
Connection diameter pipe channel	mm	160		200
Max. pipe channel length	m	1		

Series		KWT 180 DC	KWT 240 DC	KWT 300 DC
Dimensions - height	mm	549	555	555
Dimensions - width	mm	810	1030	1030
Dimensions - depth	mm	165	170	170
Weight	kg	38.0	49.0	41.0
EDP no.		1609180	1609240	1609300

1) Per EN 14511

2) Per EN 12102

3) Contains greenhouse gas per Kyoto protocol (R410A: GWP 2088 / R290: GWP 3 / R32: GWP 675)

2.2 Unit dimensions

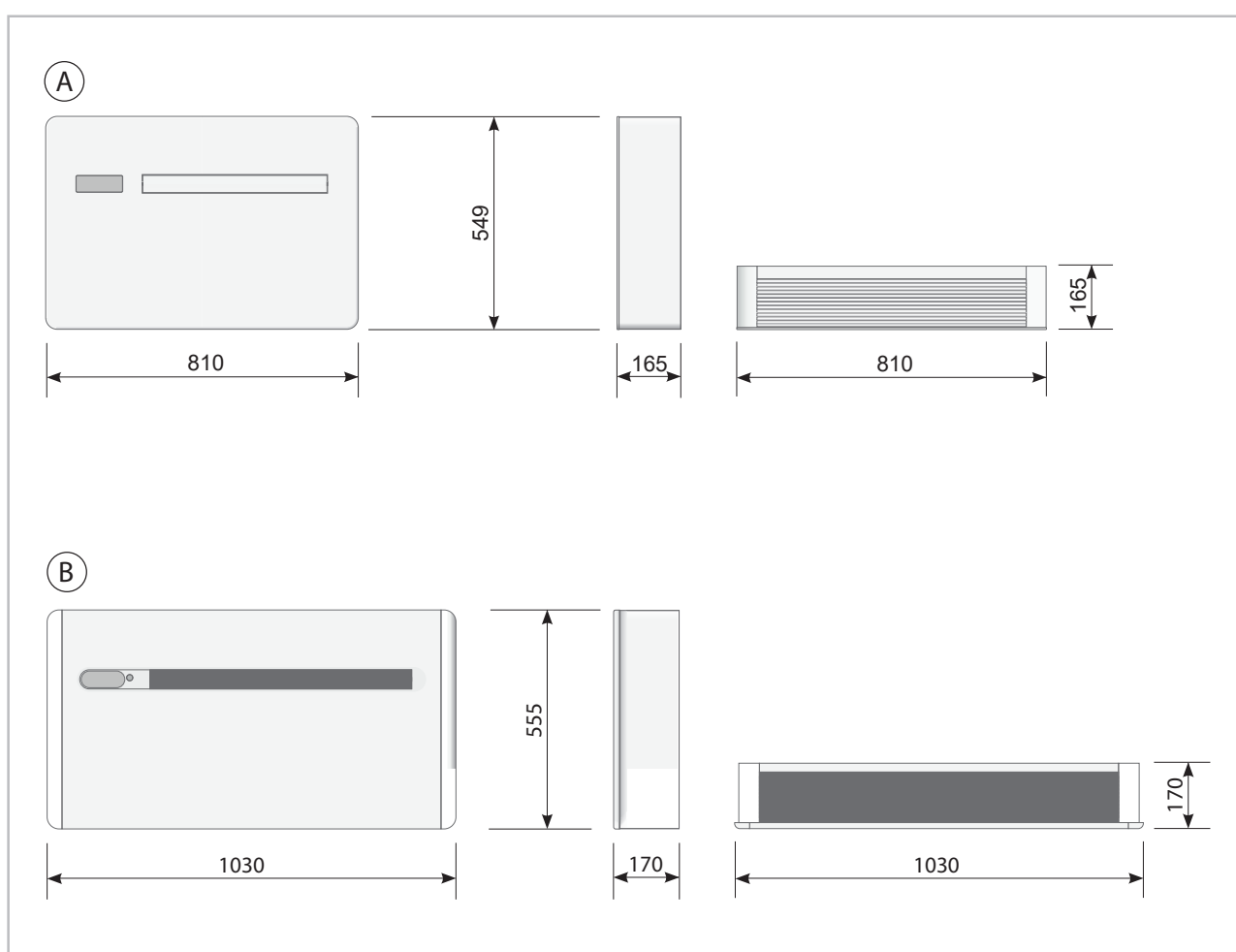


Fig. 1: Unit dimensions (all measurements in mm)

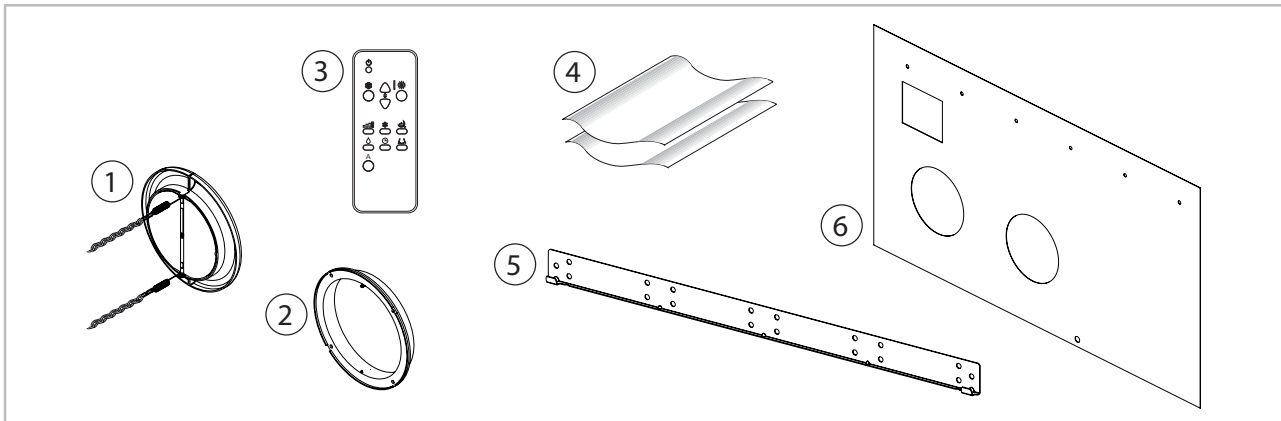
A: KWT 180 DC

B: KWT 240 DC / KWT 300 DC

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

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2.3 Scope of delivery



- 1: Air duct outside panels (2 pcs.)
- 2: Air duct internal spigots (2 pcs.)
- 3: IR remote control

- 4: Plastic sheet (2 pcs.)
- 5: Wall-mounted bracket
- 6: Mounting template

3 Design and function

3.1 Unit description

The local room air conditioner consists of a compact housing and 2 exhaust air ducts to remove or supply heat.

The condenser built into the unit is used to pass the heat removed from the room to the outside air when in cooling mode. In heating mode, the heat received via the evaporator is released into the air in the room to be heated via the condenser. In both operating modes, the compressor adjusts its power exactly to the requirements and thereby regulates

the setpoint temperature with minimal temperature fluctuations. Thanks to this inverter technology energy is saved compared to conventional room air conditioners and the noise emissions are reduced to a particularly low level.

The air conditioner is designed to be located indoors near the bottom of the wall. It is operated by an infrared remote control or via the integrated touch display.

The air conditioner consists of a compressor, evaporator and condenser in a lamella design, evaporator and condenser fans as well as the controller and condensate tray.

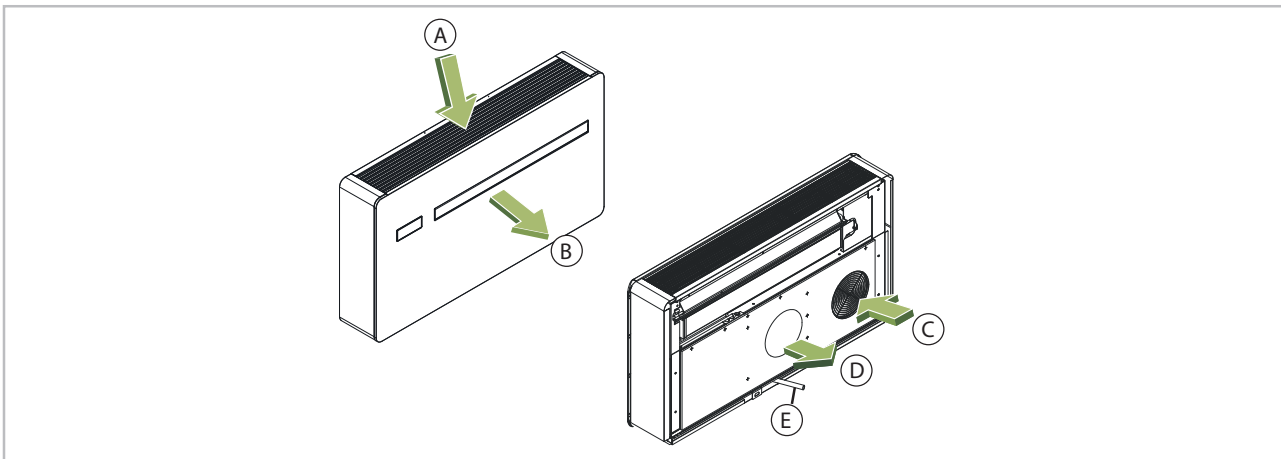


Fig. 2: Unit function

- A: Inside air inlet
- B: Inside air outlet
- C: Outside air inlet

- D: Outside air outlet
- E: Condensate drain

4 Operation

The system can be operated by means of the touch panel on the unit or via the infrared remote controller. The functional operation is identical.

Infrared remote control

The infrared remote control sends the programmed settings a distance of up to 6 m to the receiver of the indoor unit. Data will only be received correctly if the remote control is pointed at the receiver and no objects are obstructing the transmission path.

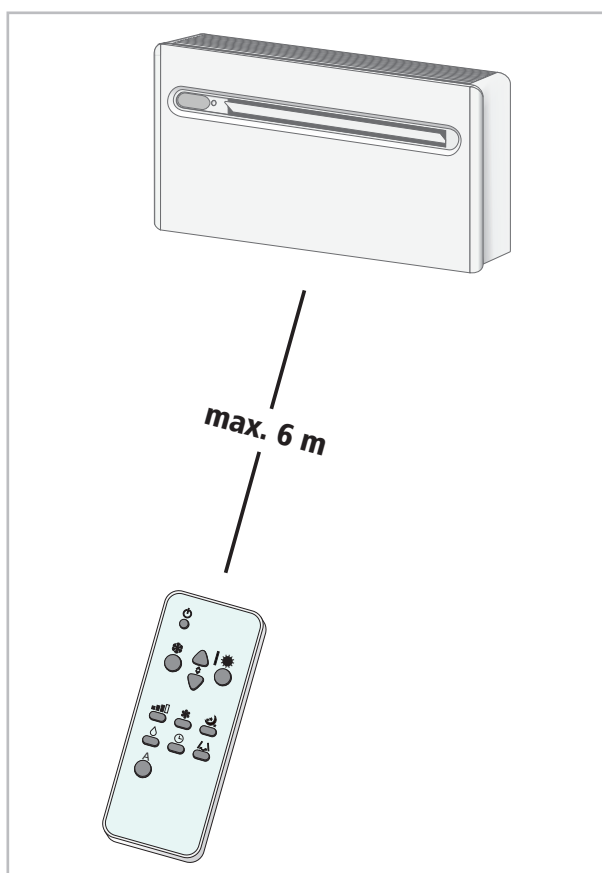


Fig. 3: Maximum distance

! NOTICE!

Immediately replace flat batteries with a new set, otherwise there is a risk of leakage. It is recommended that the batteries are removed if the equipment is shut down for longer periods.

The infrared remote control is operated via a button battery of type CR2430. Replacement is carried out at the rear of the remote control. Turn the cover counter-clockwise with a flat object (e.g. a coin) to open. Then, the old button battery can be removed and the new button battery inserted with the positive terminal facing upwards. Ensure that only button batteries of type CR2430 (3V) are used when replacing.

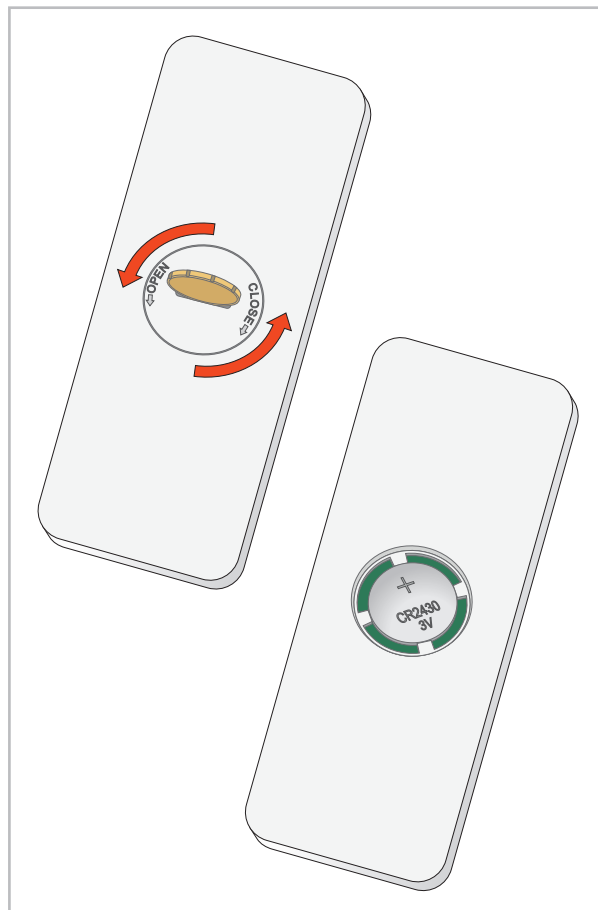


Fig. 4: Changing the battery



Help save on energy consumption in stand-by mode! If the device, system or component is not in use, we recommend disconnecting the power supply. Components with a safety function is excluded from our recommendation!

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Keys and displays of the operating unit and their functions

The system can be operated by means of the touch panel on the unit or via the standard infrared remote controller. The functional operation of the keys are identical.

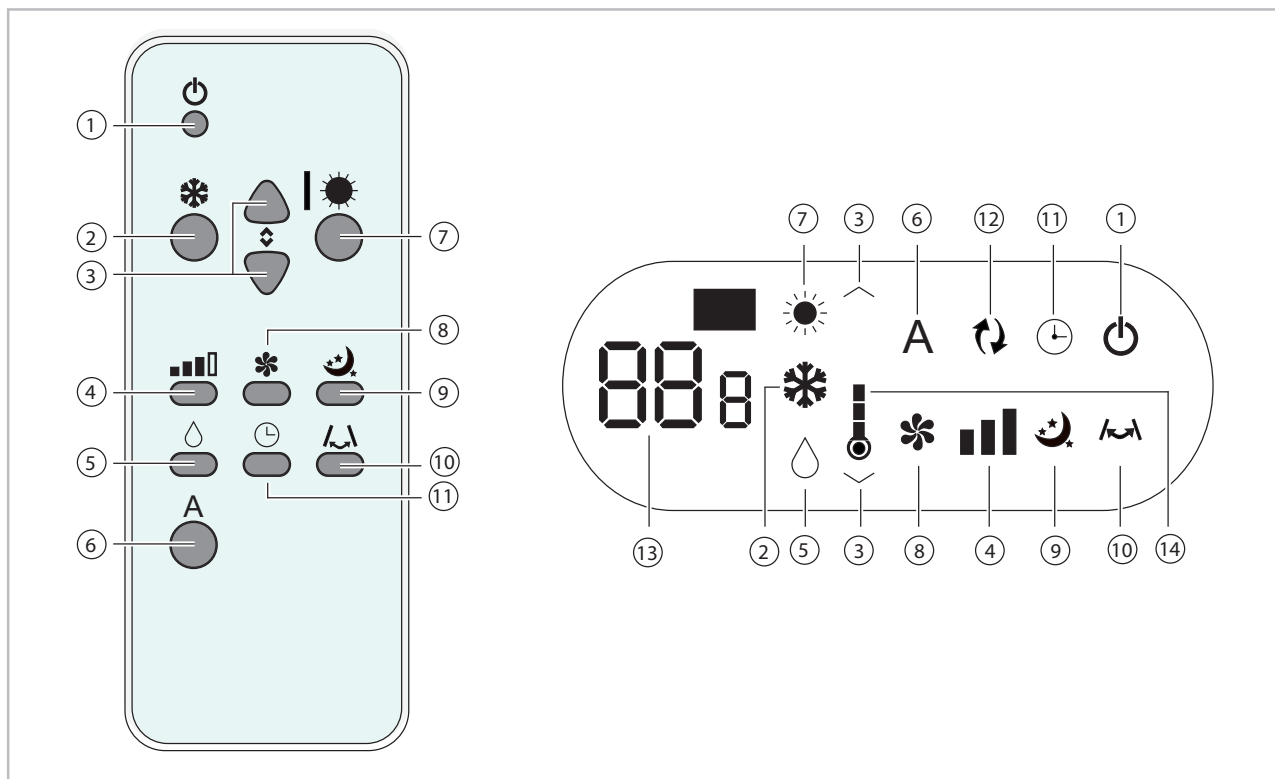


Fig. 5: Keys on the remote control

① "⏻" - on/off key

Press this key to operate the unit.

② "❄️" key - "Cooling" mode

Hold down this key to activate cooling mode.

③ "⬆️" and "⬆️" keys - Temperature setting

Using these keys, the set temperature can be increased or lowered in 1 °C steps between 16 and 31 °C.

④ "📶" key - Fan speed

Operating this key adjusts the fan speed in the following steps:

"📶" symbol - low

Low fan speed

"📶" symbol - medium

Medium fan speed

"📶" symbol - high

High fan speed

"📶 (flashing)" symbol - boost:

The boost function provides a 30 minute performance increase for quick cooling or heating.

"📶 (sliding)" symbol - automatic:

Automatic speed adjustment to meet required performance.

Adjusting the fan speed is possible in cooling, heating and recirculation mode.

⑤ "💧" key - Dehumidifying

Dehumidifying mode is activated by holding down this key. In this mode, the temperature and fan speed cannot be adjusted.

⑥ "A" key - Automatic

Automatic mode is activated by holding down this key. In this mode, the unit switches automatically between the cooling and heating operating modes based on the room temperature and the setpoint which has been selected. The fan speed is also controlled by the unit.

⑦ "☀️" key - "Heating" mode

Heating mode is activated by holding down this key.

⑧ "❄️" key - "Recirculation" mode

Recirculation mode is activated by holding down this key.

⑨ "🌙" key - Night mode

Night mode is activated by pressing this key.

Cooling mode:

The temperature set is increased by 1 °C after 1 hour and a further degree after 2 hours. After the second hour, the temperature no longer changes and after a further 6 hours the unit goes into standby mode.

Heating mode:

The temperature set is lowered by 1 °C after 1 hour and a further degree after 2 hours. After the second hour, the temperature no longer changes and after a further 6 hours the unit goes into standby mode.

The function can be deactivated again by pressing the key again.

⑩ "🔄" key - Swing function

Pressing this key activates the Swing function. The discharge fin can be oscillated and locked to the desired position by pressing the key again.

⑪ "⌚" key - Timer-

It is possible to activate the timer function using this key.

By pressing this key with the unit deactivated, it is possible to automatically start the unit after the time set.

It is also possible with the unit active to automatically stop the unit after the time set using this key.

The time can be adjusted with the arrow keys ("↶" and "↷") in a range of 1 to 24 hours.

After the desired time has been set, the input can be confirmed by pressing the timer key again.

If the timer key is held down for 3 seconds, key lock is activated. All inputs by the user are prevented with key lock active. Key lock can be deactivated by holding down the timer key again for 3 seconds.

⑫ "🏠" key - Hotel mode

Hotel mode limits the adjustment range in cooling mode from 22 °C to 28 °C and in heating mode from 16 °C to 24 °C. The automatic function is also deactivated.

After holding the key down for 10 seconds, hotel mode can be activated (En) or deactivated (dS) with a quick press. The display returns after 5 seconds and stores the settings.

A quick press of the key on the base screen does nothing.

⑬ Digital display

The current set temperature is displayed in normal operation on the digital display. The display is also used for further function settings and for displaying error codes in the event of a fault.

⑭ Graphical temperature display

The graphical temperature display shows the approximate ambient temperature using 7 bars and lights up either red (heating) or blue (cooling) in the respective operating mode. The temperature display also makes a sliding motion when boost mode is active.

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5 Assembly and installation

5.1 Important notes prior to installation

When installing the unit, observe the following points:

- The installation must be carried out on a flat wall
- Ensure that the wall meets the static requirements (consider the weight of the device as well as the required holes to be drilled)
- Ensure that the minimum clearances are observed to allow trouble-free maintenance and/or servicing
- Ensure that no water pipes, power cables or similar are inside the wall of the installation area as they could be damaged by drilling holes
- Ensure that there are no adjacent objects which may obstruct the air circulation
- Do not install the unit in close proximity to or above heat sources or electrical devices
- By correctly placing the unit, ensure that the air stream is not directly aimed at people
- A mains socket suitable for a plug with protective contact, must be provided in the vicinity of the system

5.2 Minimum clearances

Observe the minimum clearances to allow access for maintenance and repair work and facilitate optimum air distribution.

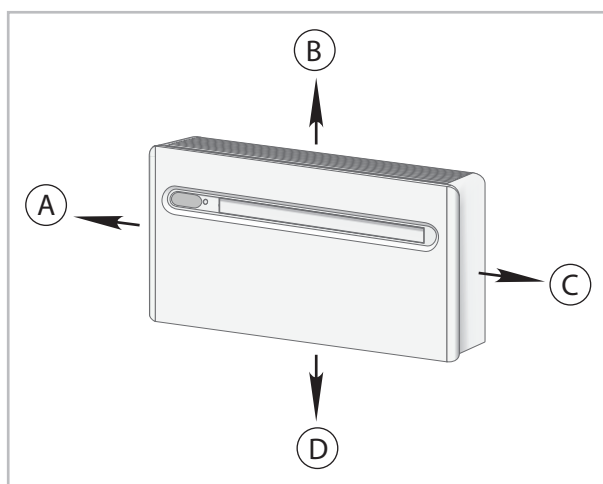


Fig. 6: Minimum clearances

Minimum clearances (all measurements in mm)

	KWT DC
A	60
B	120
C	60
D	50

Observe minimum clearances even outside and ensure that vegetation and plants also keep to the minimum distances. Heavy contamination of the condenser and increased maintenance costs must be expected if there are leaves or needles in the vicinity of the ventilation ducts.

Furthermore, depending on the region, ensure that the ventilation ducts are not blocked with snow to prevent the entry of snow into the unit or limitation of the air flow.

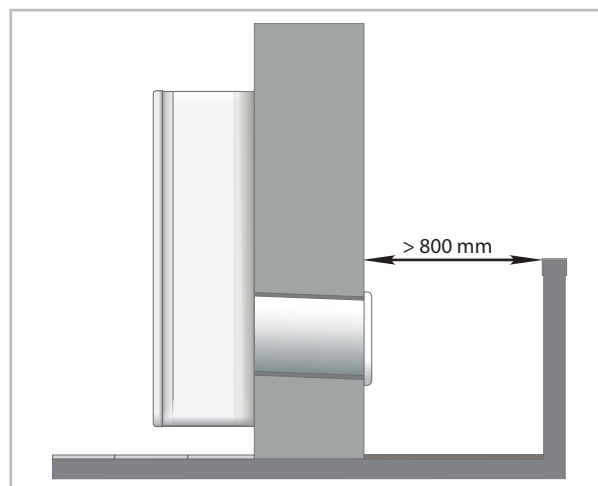


Fig. 7: Minimum clearances

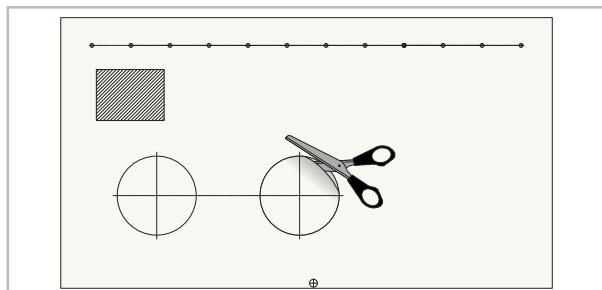
5.3 Installation materials

The unit must be fastened to a suitable wall using the wall bracket with sufficient screws. Only use suitable fastening materials for your application case.

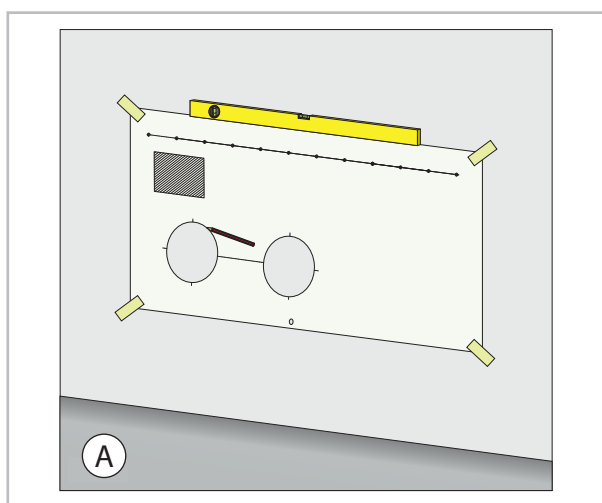
5.4 Installation

Perform the installation as follows:

1. ➤ Cut the required holes out of the mounting template.

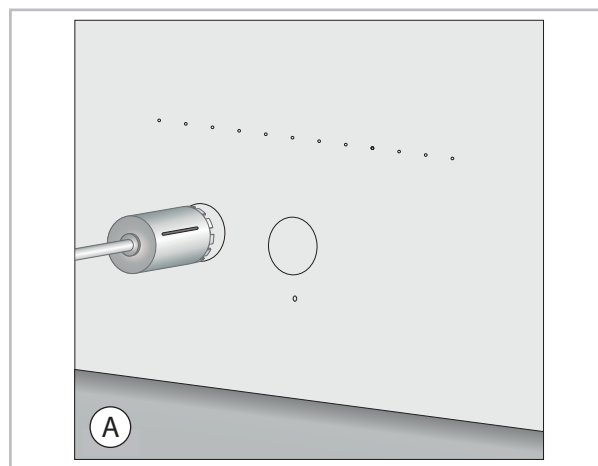


2. ➤ Fasten the mounting template to the wall. Ensure that this is level.
3. ➤ Mark the required core holes, the fastening points for the mounting rails and the holes for the condensate drain and the lift protection bracket.



A: Inside

4. ➤ Remove the mounting template.
5. ➤ Using a corresponding core drill machine, drill two 162 mm diameter holes in the wall for the air supply and exhaust air (the pilot hole should be 5-10 mm. Use an incline of approx. 3% to prevent the penetration of water from outside.

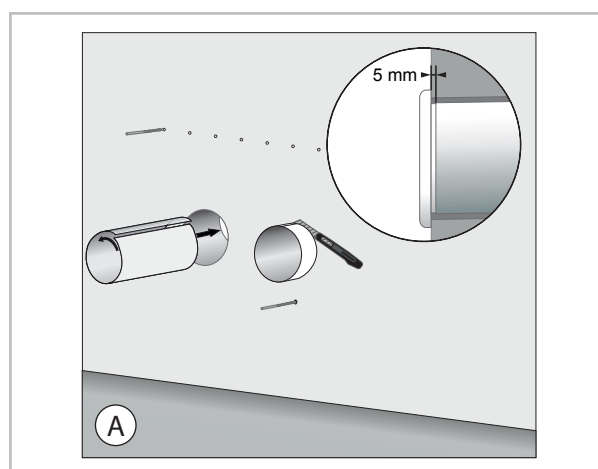


A: Inside

6. ➤ Drill the remaining holes for the condensate drain (min. 18 mm), the wall bracket and the lift protection bracket. The condensate drain must have an incline of at least 3 %.
7. ➤ Insert the supplied plastic sheets into the drill holes and cut off the excess material so that the plastic sheets on the outside are 5mm shorter than the wall thickness. Ensure that the junction line points upwards. Then insert the condensate hose into the hole provided.

! NOTICE!

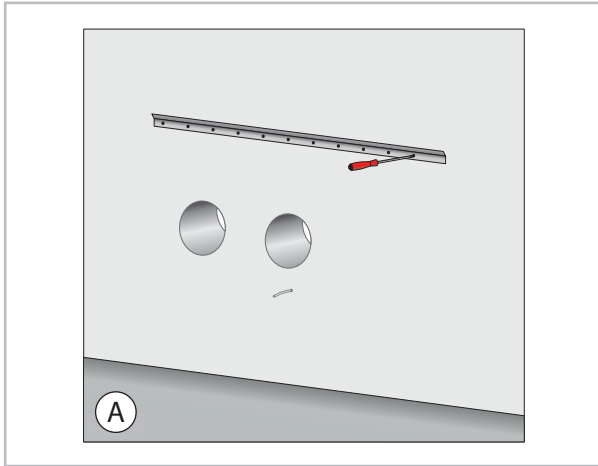
If the heating mode is to be used, may be additional insulation between the plastic sheets and the masonry necessary. The need of insulation depends on wall construction and the environmental conditions and is supposed to form condensation prevent inside the wall.



A: Inside

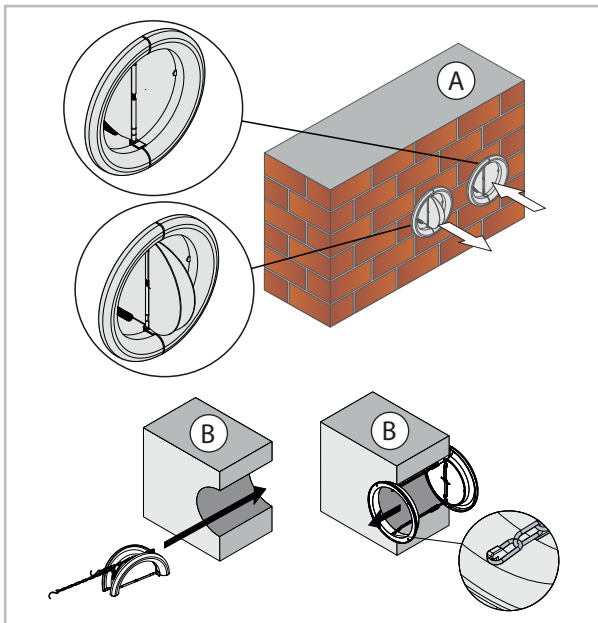
8. ➤ Install the wall bracket with sufficient screws to guarantee a secure hold.

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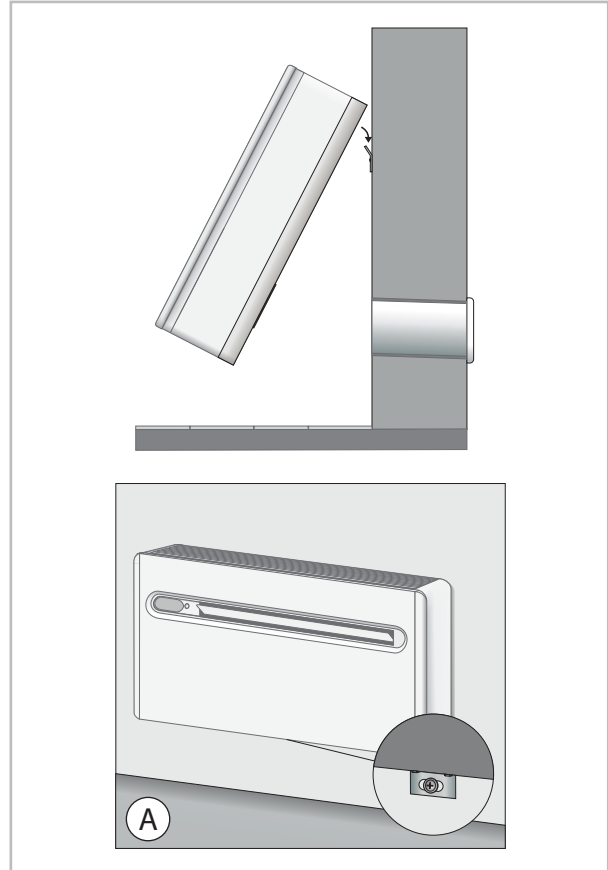
A: Inside

- 9.** Fold the outside panels together and insert them through the drill hole. Align the panel and place the inside panel. If necessary, the inside panel can also be screwed to the inside wall. Tighten the chain of the outside panel and hook it into the inside panel at the desired length. Cut off the excess length of the chain. Repeat the process for the second drill hole. The outside panels are equipped with non-return flap valves. Pay attention to the direction of the air flow when installing (see fig. below).



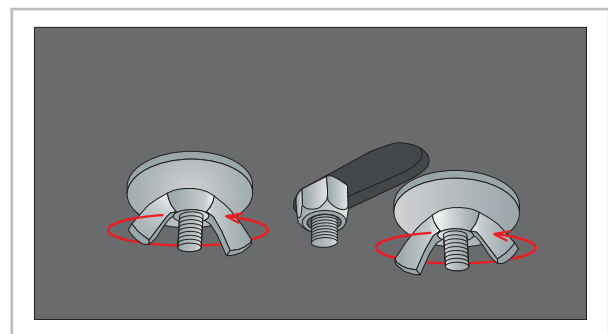
A: Outside wall / B: Inside wall

- 10.** Suspend the unit on the wall-mounted bracket and check the alignment of the unit. Pay attention to the connection of the condensate hose and to the electrical power supply. Fasten the lift protection bracket to the wall beneath the unit.

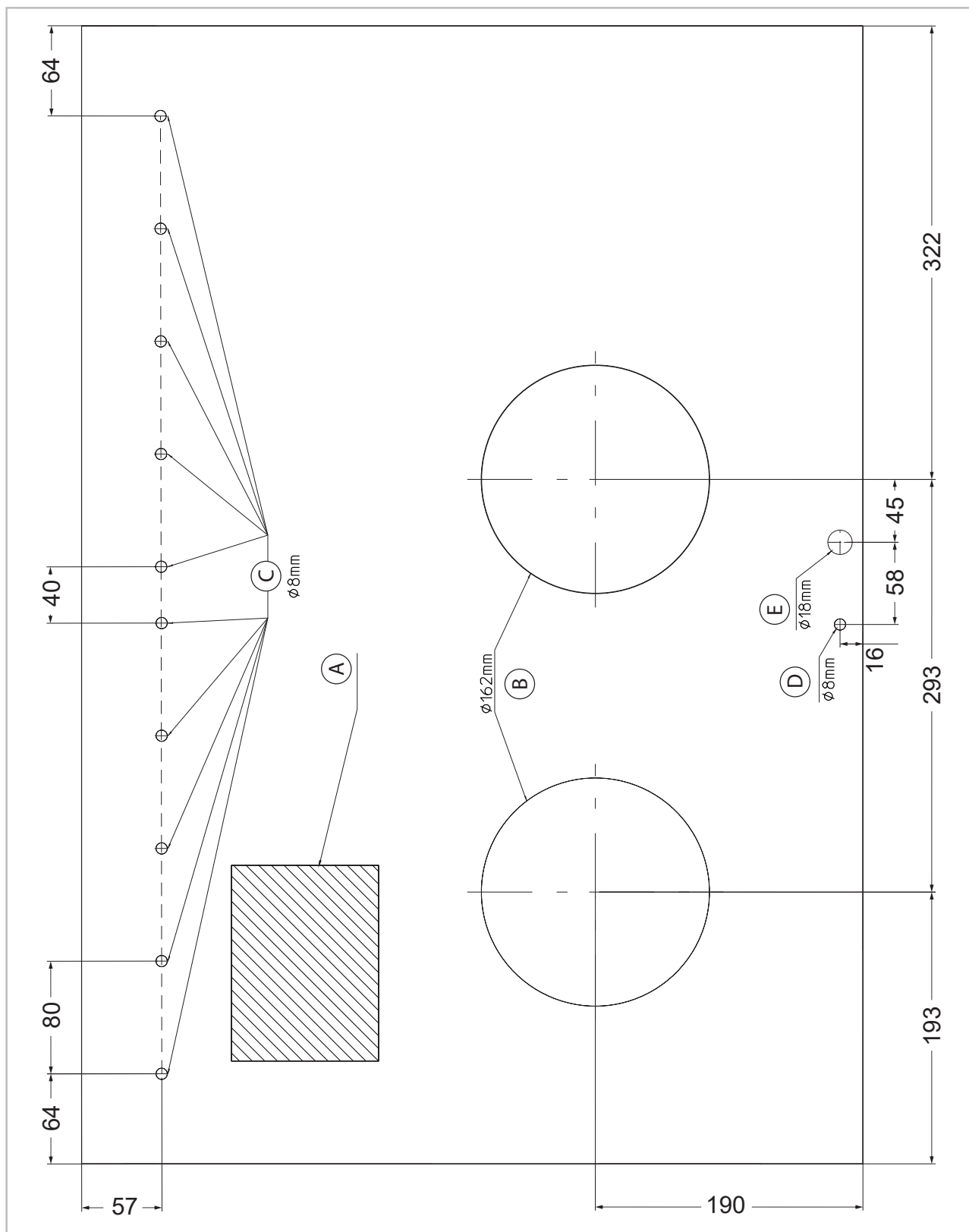


A: Inside

- 11.** Loosen and remove the wing nuts on the underside of the unit to remove the transport lock.



Mounting template KWT 180 DC

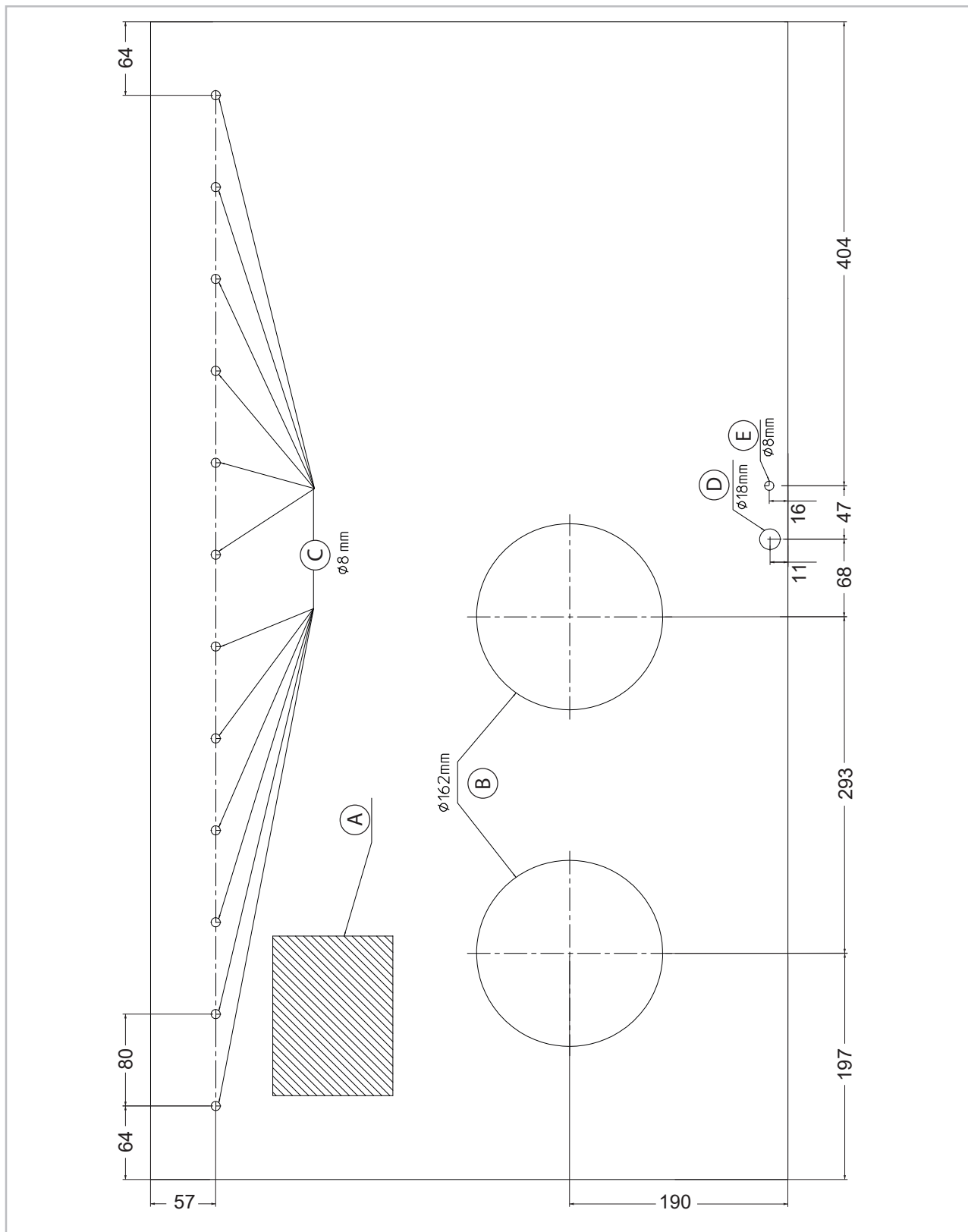


- A: Area for the electrical connection
- B: Drilling holes for the air inlet and outlet
- C: Drilling holes for the anchors

- D: Drilling hole for the condensate drainage connection
- E: Drilling hole for the lift protection bracket

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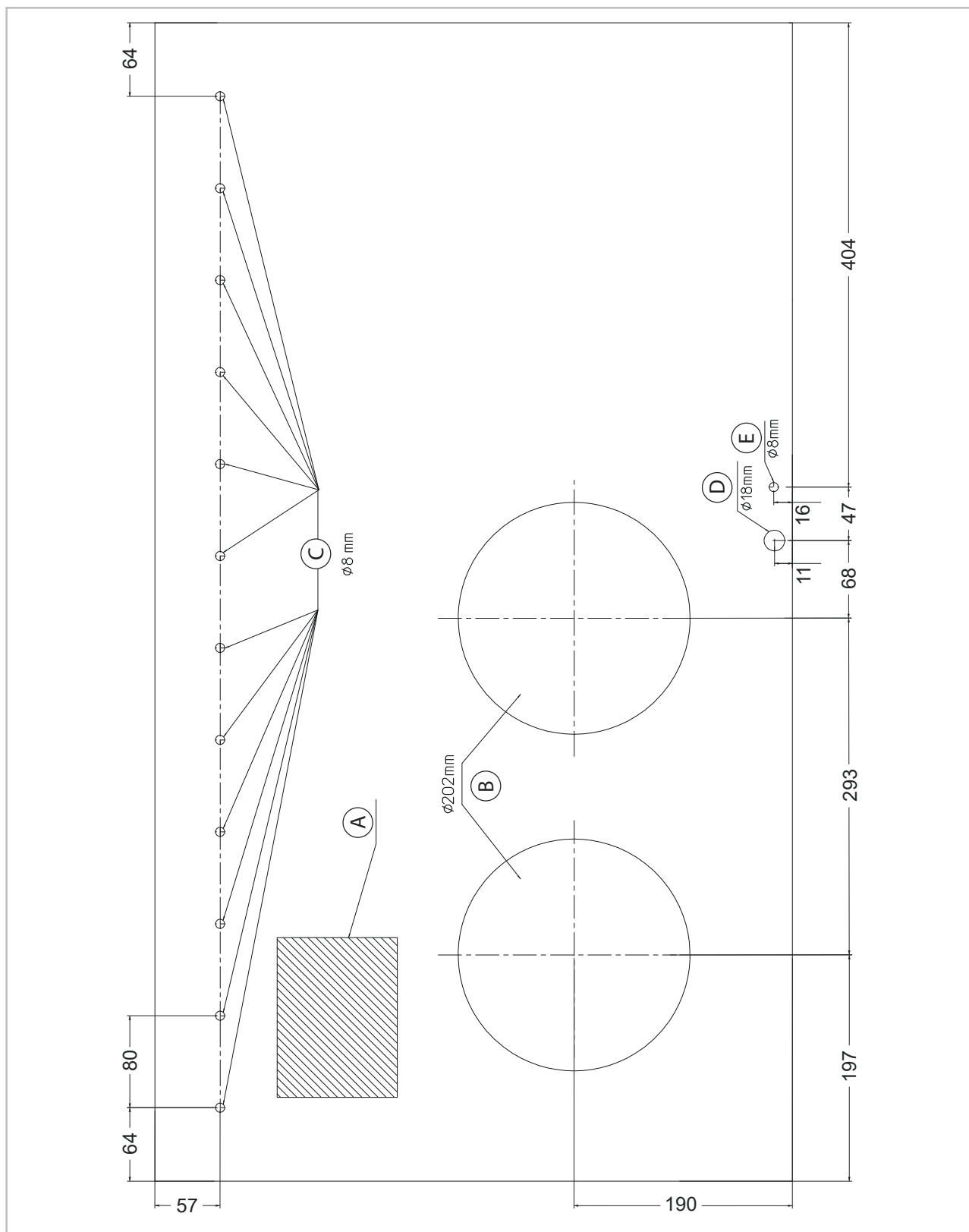
Mounting template KWT 240 DC



- A: Area for the electrical connection
- B: Drilling holes for the air inlet and outlet
- C: Drilling holes for the anchors

- D: Drilling hole for the condensate drainage connection
- E: Drilling hole for the lift protection bracket

Mounting template KWT 300 DC



- A: Area for the electrical connection
- B: Drilling holes for the air inlet and outlet
- C: Drilling holes for the anchors

- D: Drilling hole for the condensate drainage connection
- E: Drilling hole for the lift protection bracket

REMKO KWT series

5.5 Condensate removal

In cooling mode:

The unit is equipped with automatic drainage of the condensate water that arises while in cooling mode. For this purpose, the water that arises is collected in the condensate tray of the unit and dispersed by a pump on the condenser. Here, it evaporates and is fed outside with the aid of the exhaust air.

If the unit is operated for a prolonged period of time, or if it is operated at a very high outdoor air humidity, it is possible that the quantity of condensate water that arises is greater than the quantity that can be evaporated. In this case, the unit switches off via the integrated liquid level switch and "OF" appears on the display.

! NOTICE!

It is recommended to provide continuous condensate drainage even for cooling mode.

Beneath the unit there is a condensate drainage connection for the permanent condensate drainage connection and a T-piece with a closed emergency drainage nozzle. Both connections are sealed at the factory with a rubber stopper.

! NOTICE!

In heating mode, automatic discharge through evaporation is not possible and a permanent condensate drain is absolutely necessary.

The condensate drain must be frost-proof.

Emergency drainage

Hold a container (with a min. container capacity of 3 litres) beneath the unit and open the emergency drainage to discharge. Then close off the emergency drainage nozzle with the rubber stopper.

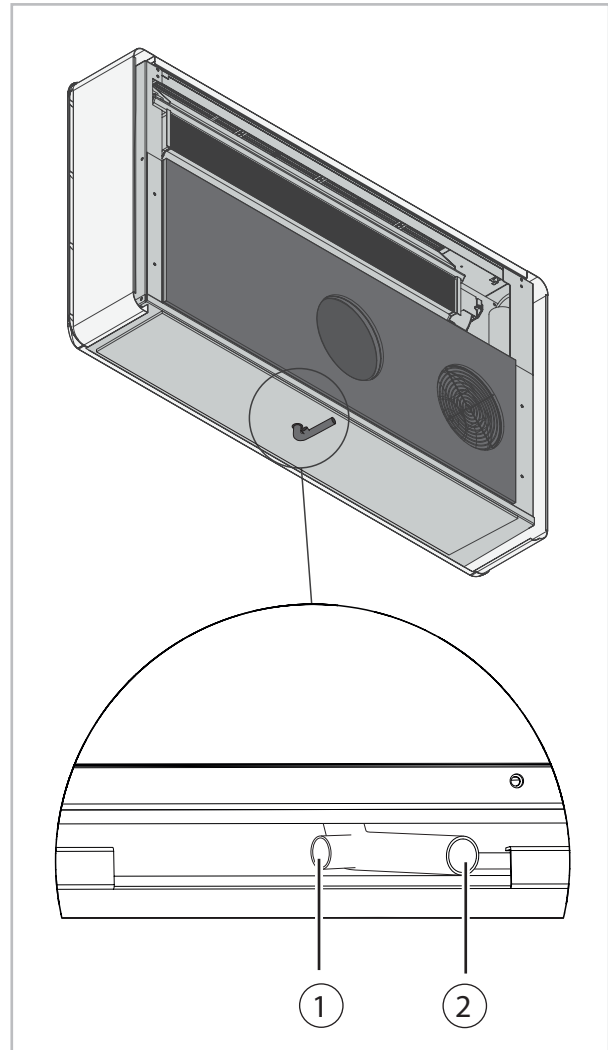


Fig. 8: Condensate removal

- 1: Emergency drainage nozzle
- 2: Connection for permanent discharge (13 mm)

6 Electrical wiring

Electrical drawings

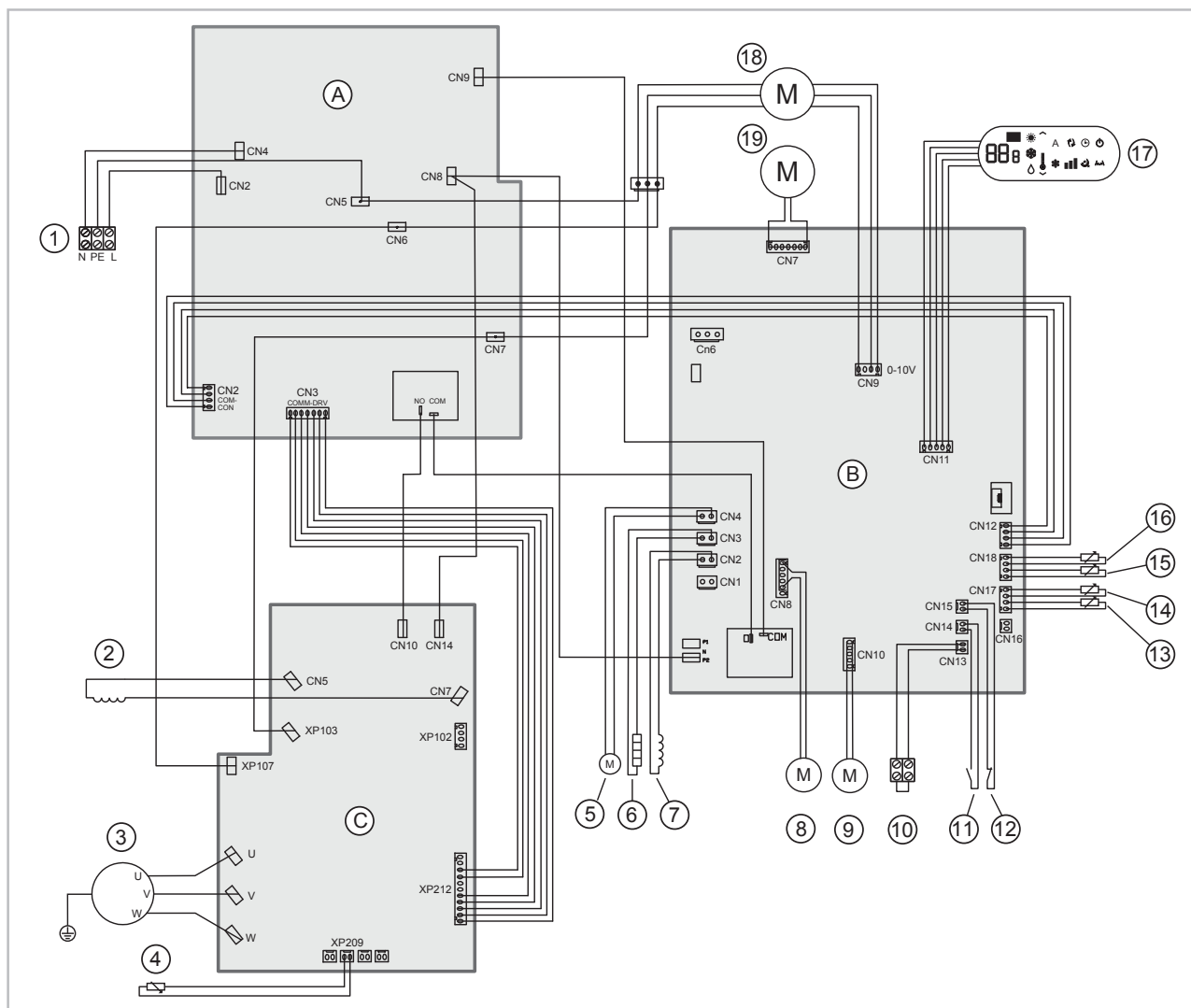


Fig. 9: Electrical drawings

- | | |
|--|---|
| A: Power PCB | 9: Fin positioning motor |
| B: Control board | 10: External contact on/off |
| C: Inverter board | 11: Condensate pump liquid level switch |
| 1: Mains power supply cable | 12: Liquid level switch alarm/off |
| 2: Reactor coil | 13: Condenser temperature probe |
| 3: Compressor | 14: Outside air inlet temperature probe |
| 4: Compressor outlet temperature probe | 15: Temperature probe, evaporator |
| 5: Condensate pump | 16: Inside air inlet temperature probe |
| 6: Thermo-actuator | 17: Touch display |
| 7: 4-way valve | 18: Condenser fan motor |
| 8: Expansion valve actuator | 19: Evaporator fan motor |

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

REMKO KWT series

7 Commissioning

Before every commissioning the air inlet and outlet openings should be checked for foreign bodies and the air inlet filter must be checked for dirt. Blocked or soiled grills and filters must be cleaned immediately, see "Care and maintenance" chapter.

Before starting up, ensure that the power supply is present.

Cooling mode

1. Use the "⏻" key to switch the unit on.
2. Select cooling mode with the "❄️" key.
3. Set the desired room temperature with the "⏮" and "⏭" keys.
4. Select the desired fan speed using the "🌀" key.

Heating mode

1. Use the "⏻" key to switch the unit on.
2. Select heating mode with the "🔥" key.
3. Set the desired room temperature with the "⏮" and "⏭" keys.
4. Select the desired fan speed using the "🌀" key.

Automatic operating mode

1. Use the "⏻" key to switch the unit on.
2. Select automatic mode with the "A" key.
3. Set the desired room temperature with the "⏮" and "⏭" keys.

The fan speed is selected automatically by the unit.

Dehumidifying mode

1. Use the "⏻" key to switch the unit on.
2. Select Dehumidifying mode with the "💧" key.

The fan speed and temperature are selected automatically by the unit.

8 Troubleshooting and customer service

The unit has been manufactured using state-of-the-art production methods and has been tested several times to ensure that it works properly. If malfunctions should occur, please check the unit as detailed in the list below. Please inform your dealer if the unit is still not working correctly after all the function checks have been performed.

Error description	Cause	Remedial measures
The unit cannot be switched on	No power supply	Check the power supply
	The batteries in the remote control are empty.	Replace the batteries
The unit does not start or switches itself off.	Power supply interrupted.	Check power supply.
	Operational temperature range too low/exceeded.	Observe operational temperature range 18 to 35 °C.
The unit does not work or works at reduced cooling capacity.	Exhaust duct is blocked or longer than 1 metres.	Ensure that there is a clear path for the exhaust air. Shorten the exhaust duct.
	Filter contamination, inlet and/or outlet blower openings blocked by foreign objects.	Clean filter.
	Minimum clearances too small.	Observe minimum clearances.
	Windows and doors open/heat load was increased.	Close doors and windows/reduce heat load.
	"Cooling" operating mode is not selected.	Select the correct operating mode.
The unit does not respond to the infra-red remote control.	Batteries in the remote control are empty or the distance to the receiver is too great.	Insert new batteries/reduce distance.
	After battery exchange, incorrect polarity of batteries.	Insert the batteries with the correct polarity. Observe marking.
The touch display does not respond to inputs.	Key lock activated.	Deactivate key lock. (See chapter "Operation")
Condensate discharge on unit.	Unit is not level.	Adjust the unit so it is level
	The stopper for the condensate drain or the emergency discharge is not correctly inserted or is damaged	Insert stopper correctly or replace if necessary.

REMKO KWT series

Error codes

If the unit detects an error, it is shown on the unit display using an error code. In the list below, the individual error codes with the respective cause and possible remedial measures are listed. Repair work may only be carried out by qualified specialist personnel.

Error code	Cause	Remedial measures
E1	Room temperature sensor faulty	Replace room temperature sensor
E2	Evaporator package sensor faulty	Replace evaporator package sensor
E3	Outside temperature sensor faulty	Replace outside temperature sensor
E4	Condenser package sensor faulty	Replace condenser package sensor
E5	Evaporator fan motor defective	Replace evaporator fan motor
E6	Condenser fan motor defective	Replace condenser fan motor
E7	Control board, power PCB or display board communication error	Replace control board, power PCB or display board
E8	Compressor outlet temperature sensor faulty	Replace compressor outlet temperature sensor
CP	External enabling contact open, external enabling signal not issued	Jumper contact, check on-site controller
OF	Condensate liquid level switch triggered	Discharge condensate via emergency drainage

9 Care and maintenance

Regular care and observation of some basic points will ensure trouble-free operation and a long service life.

DANGER!

Prior to performing any work, ensure the equipment is disconnected from the voltage supply and secured to prevent accidental switch-on!

- Clean the unit using a damp cloth. Do not use a jet of water.
- Do not use any caustic, abrasive or solvent-based cleaning products.
- Only use suitable cleaning agents, even in the event of severe soiling.
- Ensure that no moisture gets into the unit. Clean the exhaust air and outlet openings regularly and thoroughly. This is where dirt most often collects first

NOTICE!

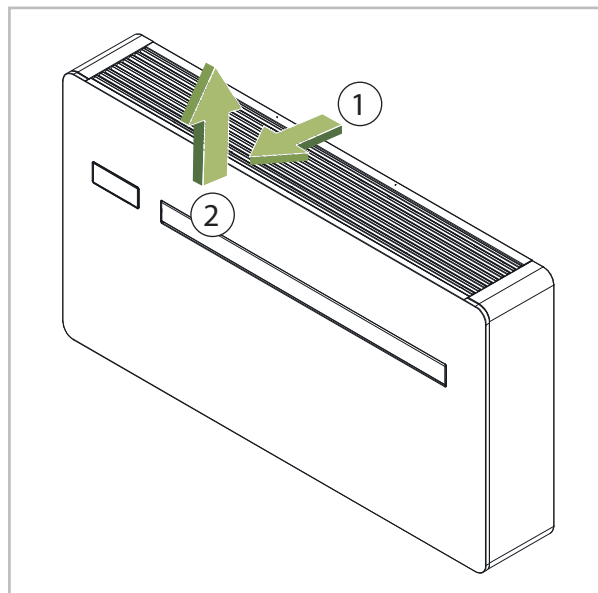
Check the level of dirt on the on the exchanger fins.

- The heat exchanger that is in the outside air flow is particularly prone to contamination due to outside influences depending on the installation location. Have this checked regularly by a specialist company to ensure trouble-free operation.
- Clean the unit's air filter at regular intervals, more frequently if necessary.
- It is recommended that you take out a maintenance contract with an appropriate specialist firm.

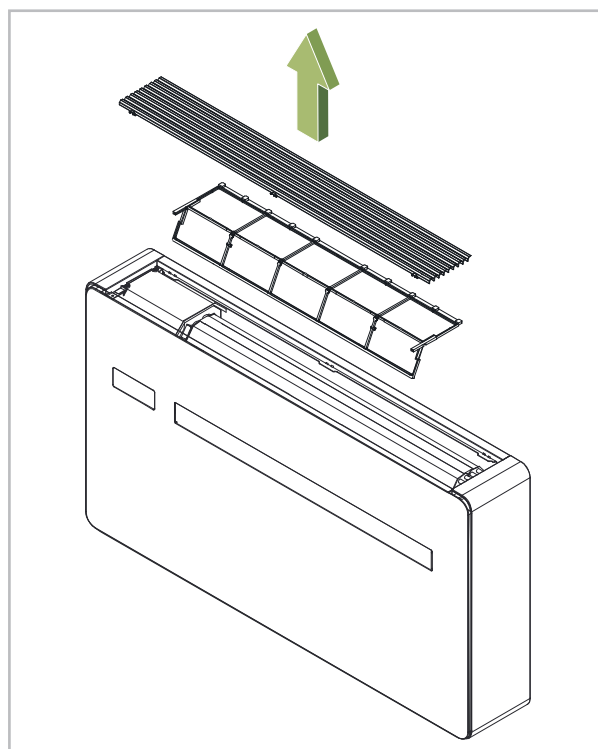
Filter cleaning

The unit is equipped with an air filter. This is found in the air intake and filters recirculated room air. The filter must be cleaned at regular intervals. We recommend cleaning every 100 operating hours. Reduce this interval in the case of heavily contaminated air.

1. ➔ Switch the unit off and pull out the power plug.
2. ➔ The filter is beneath the upper air intake grille. The grille can be pulled out [1] from the front and then removed from above [2].

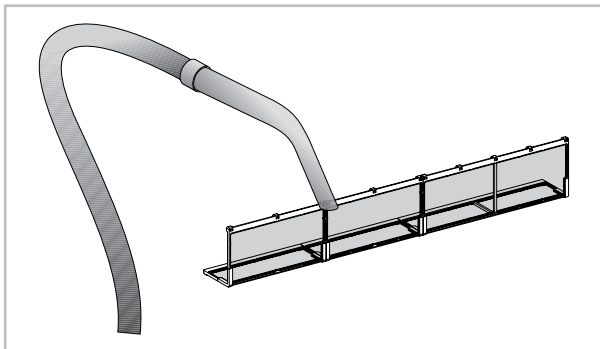


3. ➔ The filter can now be pulled out from above.

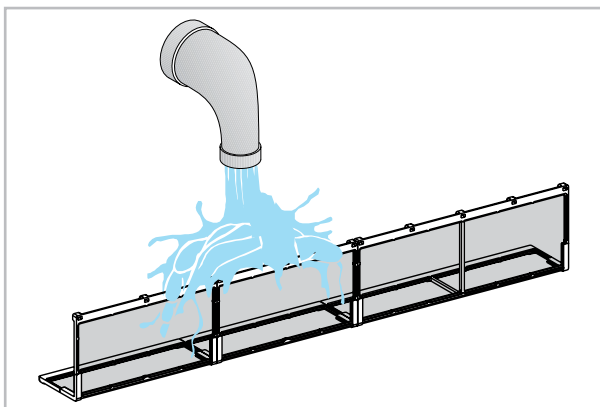


REMKO KWT series

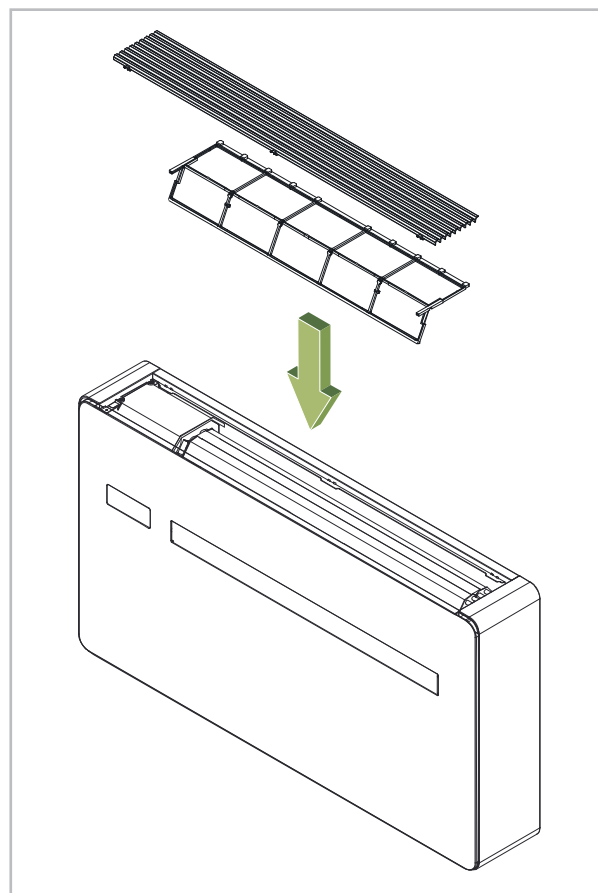
4. ➤ In the case of light soiling, clean the filter with a vacuum cleaner.



5. ➤ In the case of heavy soiling clean the filter carefully in lukewarm water.



6. ➤ Then allow the filter to dry in the air.
7. ➤ Insert the filter and the grille back into the unit.



8. ➤ Ensure that the filter is dry and undamaged.

! NOTICE!

Never operate the air conditioner without an original filter. The heat exchanger fins will be contaminated without the filter and the unit will suffer performance loss.

10 Shutdown

! NOTICE!

Never switch off the equipment by pulling out the mains plug.

Temporary shutdown

If it is planned to shut down the unit for longer periods e.g. during the winter, proceed as follows:

1. ➤ Let the unit run in recirculating operation for approx. 2 hours in order to dry the surfaces of the evaporator fins. This will transport the remaining moisture out of the unit and this will avoid unpleasant odours when the unit is re-commissioned.
2. ➤ Switch off the unit using the "ON/OFF" key, pull out the power plug and wind up the power supply cable. Ensure that the cable is not kinked or too severely bent.
3. ➤ Place a suitable container underneath the condensate drain of the internal reservoir. The condensate drain is located on the underside of the unit.
4. ➤ Pull out the stopper from the condensate drain and collect the condensate that drains out.
5. ➤ Then insert the stopper once again. A missing stopper or an incorrectly inserted stopper will result in condensate leaking out after re-commissioning.
6. ➤ Store the unit in an upright position in a cool, dry and dust-free location protected from direct sunlight. Cover the unit with a synthetic cover to protect it against dust if desired.

REMKO KWT series

11 Exploded view and spare parts lists

11.1 View of the unit KWT 180 DC

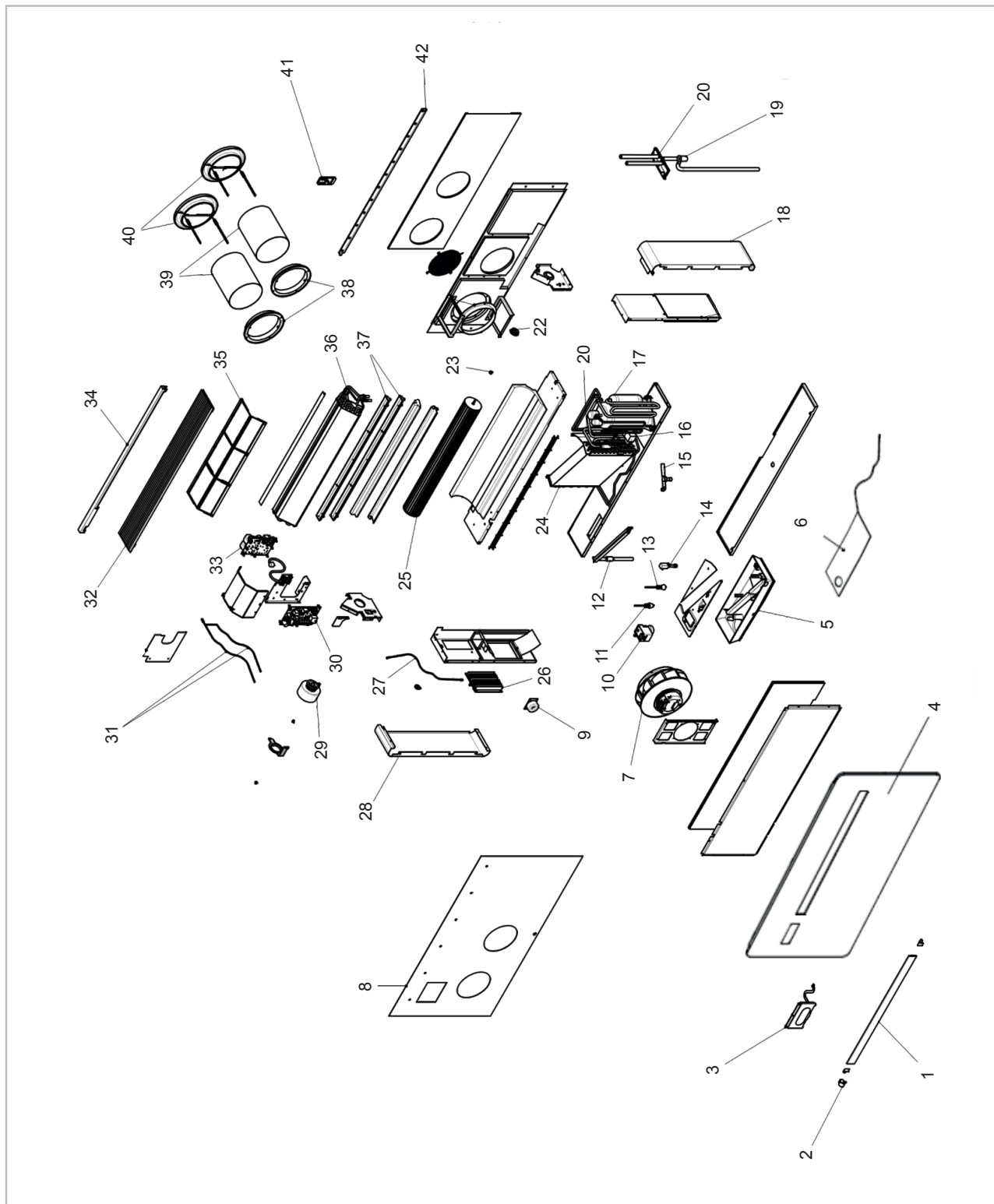


Fig. 10: Exploded view - Housing

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

11.2 Spare parts list KWT 180 DC



IMPORTANT!

To ensure the correct delivery of spare parts, please always the device type with the corresponding serial number (see type plate)

No.	Designation	KWT 180 DC
1	Swing fin	On request by providing the serial number
2	Swing motor	
3	Display (with WiFi)	
4	Unit panel, front	
5	Condenser condensate tray	
6	Heating mat condensate tray 35 W	
7	Complete condenser fan	
8	Mounting template	
9	Choke	
10	Condensate pump	
11	Liquid level switch alarm/off	
12	Condensate distributor non-return valve	
13	Condensate pump liquid level switch	
14	Condensate drain thermo-actuator	
15	Condensate drainage connection T-piece	
16	4-way valve (incl. coil)	
17	Compressor	
18	Right housing panel	
19	Odour trap	
20	Condensate collector	
21	Coil, expansion valve	
22	Evaporator fan vibration damper	
23	Evaporator fan teflon bearings	
24	Condenser	
25	Inverter board	
26	Evaporator fan wheel	
27	Compressor outlet temperature probe	
28	Left housing panel	
29	Evaporator fan motor	
30	Control board	

REMKO KWT series

No.	Designation	KWT 180 DC
31	Combination temperature sensor	On request by providing the serial number
32	Air inlet grill	
33	Power PCB	
34	Housing strut, rear of unit	
35	Air filter	
36	Evaporator	
37	Evaporator condensate tray	
38	Air duct internal spigots	
39	Air duct plastic sheets	
40	Air duct outside panels, set	
41	Infrared remote control	
42	Wall-mounted bracket	
Spare parts not illustrated		
	Condensate hose connector	On request by providing the serial number

11.3 View of the unit KWT 240 DC / KWT 300 DC

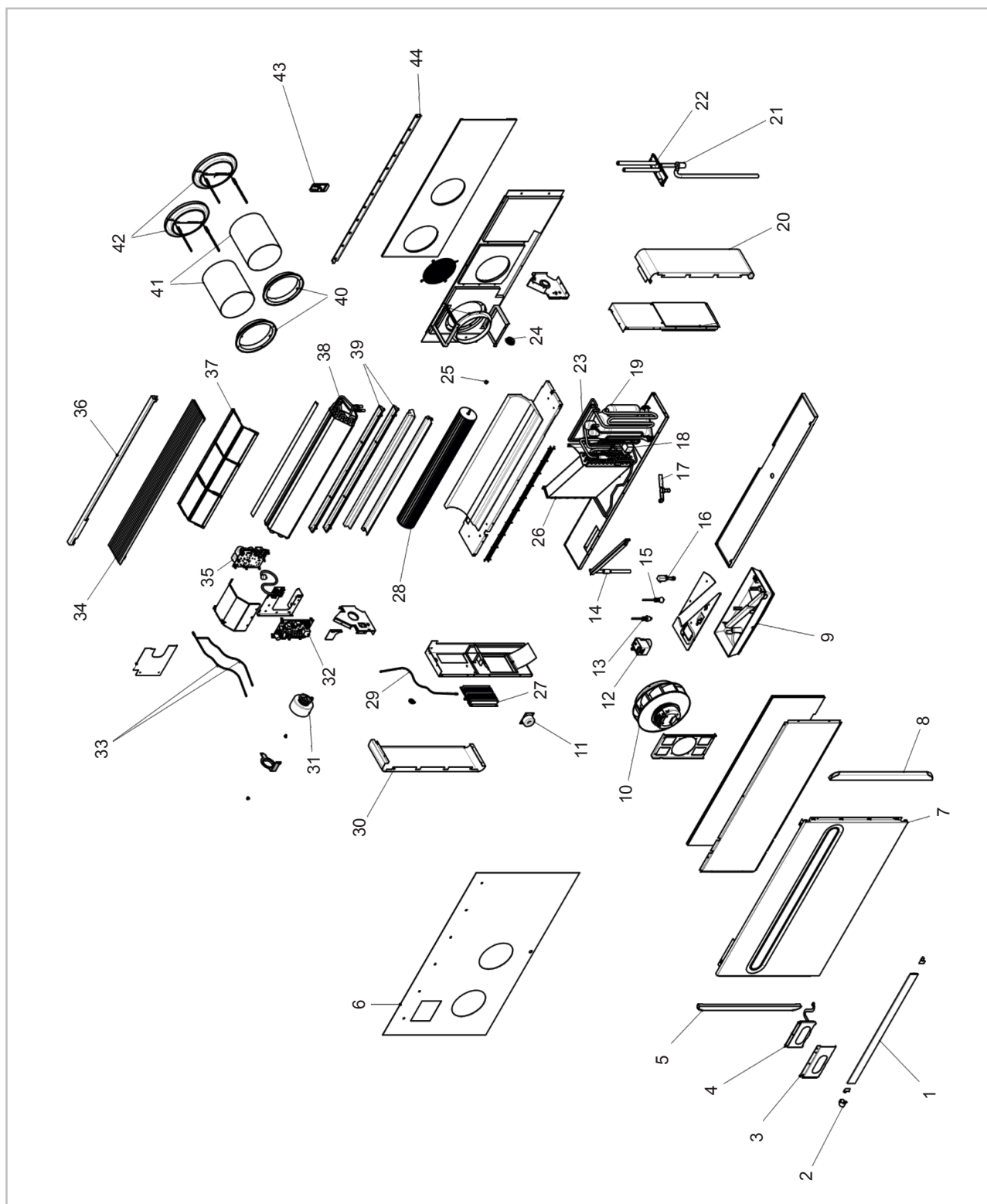


Fig. 11: Exploded view - Housing

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

REMKO KWT series

11.4 Spare parts list KWT 240 DC / KWT 300 DC

IMPORTANT!

To ensure the correct delivery of spare parts, please always the device type with the corresponding serial number (see type plate)

No.	Designation	KWT 240 DC / KWT 300 DC
1	Swing fin	On request by providing the serial number
2	Swing motor	
3	Display bracket	
4	Display (with WiFi)	
5	Side panel, front	
6	Mounting template	
7	Unit front panel	
8	Side panel, front	
9	Condenser condensate tray	
10	Complete condenser fan	
11	Choke	
12	Condensate pump	
13	Liquid level switch alarm/off	
14	Condensate distributor non-return valve	
15	Condensate pump liquid level switch	
16	Condensate drain thermo-actuator	
17	Condensate drainage connection T-piece	
18	4-way valve (incl. coil)	
19	Compressor	
20	Right housing panel	
21	Odour trap	
22	Condensate collector	
23	Coil, expansion valve	
24	Evaporator fan vibration damper	
25	Evaporator fan teflon bearings	
26	Condenser	
27	Inverter board	
28	Evaporator fan wheel	
29	Compressor outlet temperature probe	
30	Left housing panel	

No.	Designation	KWT 240 DC / KWT 300 DC
31	Evaporator fan motor	On request by providing the serial number
32	Control board	
33	Combination temperature sensor	
34	Air inlet grill	
35	Power PCB	
36	Housing strut, rear of unit	
37	Air filter	
38	Evaporator	
39	Evaporator condensate tray	
40	Air duct internal spigots	
41	Air duct plastic sheets	
42	Air duct outside panels, set	
43	Infrared remote control	
44	Wall-mounted bracket	
Spare parts not illustrated		
	Condensate hose connector	On request by providing the serial number

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