REMKO AMT 45-E to 115-E

Air dehumidifiers

Operation · Technology · Spare parts

Edition GB – D09

Contents

CE

Made by REMKO

Carefully read this operating manual prior to commissioning/using the unit!
This operating manual is a translation of the German original.

These instructions are an integral part of the unit and must always be kept in the vicinity of the installation location or on the unit itself.

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

Air dehumidification

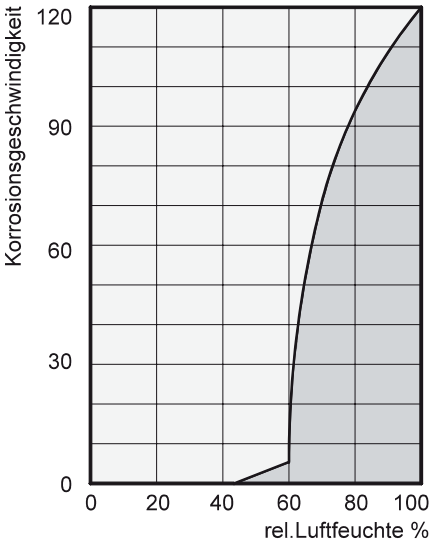
The correlations occurring when air is dehumidified are based on physical laws.
These are depicted here in graphical form in order to provide you with a brief overview of the principles of air dehumidification.

The use of REMKO air dehumidifiers

- Even if windows and doors are well insulated, water and moisture are still capable of penetrating thick concrete walls.
- The water required for setting in the production of concrete, mortar and plaster etc. may only be diffused after 1-2 months.
- Even moisture trapped in the masonry after high-water or a flood is released very slowly.
- The same is also true of moisture contained in stored materials for example.

The moisture (water vapour) released from parts of a building or materials is absorbed by the surrounding air. As a result, the moisture content increases, which ultimately gives rise to corrosion, mould, rot, peeling of paint and other unwanted damage.

By way of example, the diagram shows the corrosion rate of metal in different levels of humidity.



It is evident that the corrosion rate below 50% relative humidity (RH) is low, and below 40% is negligible.

The corrosion rate increases significantly above 60% RH. This threshold for damage as the result of humidity also applies to other materials, such as powdery substances, packaging, wood and electronic units.

Buildings may be dried in a variety of ways:

1. **By heating and air exchange:**

   The air in the room is heated in order for moisture to be removed and then this air is fed outside. All of the energy that is involved is lost together with the moist air that is released.

2. **By air dehumidification:**

   The moist air that is present within an enclosed space is continuously dehumidified according to the condensation principle.

With regard to energy consumption, air dehumidification has one distinct advantage:

Energy expenditure is limited exclusively to the air volumes present. The mechanical heat that is released by the dehumidification process is fed back into the room.

Under normal use, the air dehumidifier uses approximately 25% of the energy that is required for the "heating and ventilating" principle.

Relative air humidity

Our ambient air is a gaseous mixture which always contains a certain volume of water in the form of water vapour. This volume of water is specified in g per kg of dry air (absolute moisture content).

1m³ of air weighs approx. 1.2 kg at 20°C

Depending on the temperature, each kg of air is only capable of absorbing a certain volume of water vapour. Once this capacity has been reached, the air is referred to as "saturated" and has a relative humidity (RH) of 100%.

Relative humidity is understood to mean the ratio between the current quantity of water vapour in the air and the maximum possible quantity of water vapour at the same temperature.

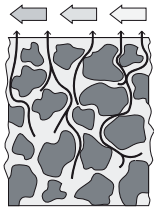
The ability of the air to absorb water vapour increases as the temperature rises. I.e. the maximum possible (absolute) water content becomes greater as the temperature rises.

Temp.	Water vapour content in g/m³ at humidity of			
°C	40%	60%	80%	100%
-5	1.3	1.9	2.6	3.3
+10	3.8	5.6	7.5	9.4
+15	5.1	7.7	10.2	12.8
+20	6.9	10.4	13.8	17.3
+25	9.2	13.8	18.4	23.0
+30	12.9	18.2	24.3	30.3

Drying of materials

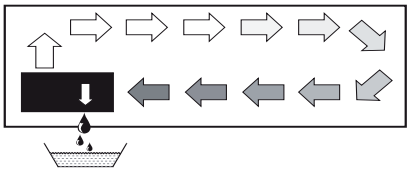
Building materials and structures are capable of absorbing considerable volumes of water, such as brick 90-190 l/m³, heavy concrete 140-190 l/m³ and limestone 180-270 l/m³.
The drying of moist materials such as masonry is effected as follows:

- The moisture moves from the inside of the material to its surface

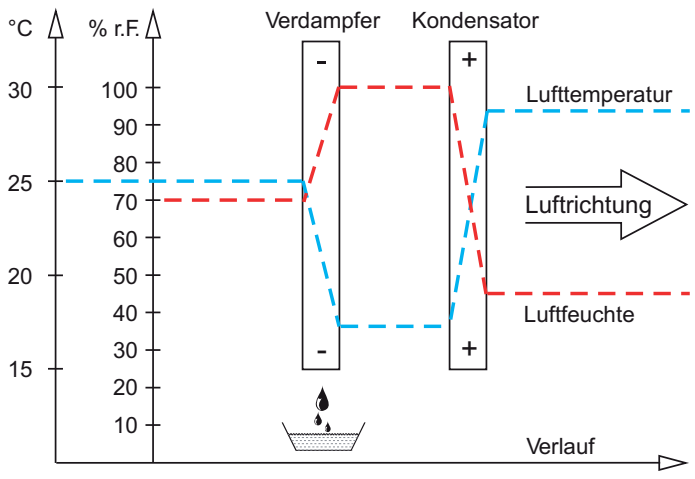


- Evaporation occurs on the surface = Transfer of water vapour to the ambient air
- The air containing water vapour is constantly circulated through the REMKO air dehumidifier. The air is dehumidified and, slightly heated, leaves the unit in order to re-absorb water vapour
- In this way, the moisture contained in the material is reduced gradually. ***The material is dried!***

The accumulated condensate is collected in the unit from where it is drained off.



As it flows through or over the evaporator, the air stream is cooled to dew point. The water vapour condenses, and is collected in a condensate trap from where it is drained off.



The condensation of water vapour

Because the capacity for the maximum possible volume of water vapour increases as the air is heated, the volume of water vapour contained remains constant and so relative humidity falls.

In contrast, because the capacity for the maximum possible volume of water vapour decreases as the air is cooled, the volume of water vapour contained remains constant and so relative humidity increases.
If the temperature continues to fall, the capacity for the maximum possible volume of water vapour is reduced so much so that it is ultimately equal to the volume of water vapour contained in the air. This temperature is referred to as the dew point. If the air is cooled to below the dew point, the volume of water vapour in the air will become greater than the maximum possible volume of water vapour.
At this point, the water vapour begins to precipitate.
It then condenses to water.
Humidity is then removed from the air.

Examples of condensation include steamed-up window panes in winter, or the moisture on the outside of a cold drinks bottle.

As the relative humidity of the air increases, so to does the dew point, making it easier for the temperature to fall below it.

Condensation heat

The Energy transferred to the air from the condenser consists of:

1. the amount of heat derived beforehand in the evaporator.
2. the electrical drive energy.
3. the condensation heat released by the liquefying of the water vapour.

Energy must be supplied when liquid is converted into a gas. This energy is designated as evaporation heat. It does not cause any increase in temperature, but is required to convert a liquid into a gas.
Conversely, energy is released when gas is liquefied, this is designated as condensation heat. The amount of energy from evaporation heat and condensation heat is the same.

For water, this is:
2250 kJ/kg (4.18 kJ = 1kcal)

From this it is evident that the condensation of water vapour causes a large quantity of energy to be released.
With drying operations, a heat cycle is created, whereby heat is consumed for evaporation and released for condensation.

Generally speaking, the time required for the drying process is not only dependent on the output of the unit, but is determined to a greater extent by the speed at which the material or building section loses its moisture.

Safety notes

The units were subjected to extensive material, functional and quality inspections prior to delivery.
However, dangers can result from the units if they are used improperly or not as intended by untrained personnel.
The following notes must be observed in full:

- The units may not be installed or operated in explosive environments
- The units must not be installed or operated in atmospheres containing oil, sulphur, chlorine or salt
- The units must be installed upright and in a stable position
- The units must not be exposed to direct jets of water
- An unobstructed air inlet and air outlet must be guaranteed at all times
- The air-inlet grille must always be kept free of dirt and loose objects
- The units must not be covered during operation
- Never stick foreign objects into the units
- The units must not be transported while they are running
- The units must only be transported when the condensate container is empty and the evaporator is dry
- All electrical cables on the outside of the units must be protected against damage (e.g. by animals etc.)
- Before each change of location, the condensate container must be emptied

⚠ ATTENTION

Extensions to the connection cable must only be conducted by authorised specialist electricians, taking into consideration the unit power consumption, cable length and local use.

⚠ ATTENTION

Work on the refrigerant system and on the electrical equipment must only be conducted by a specially-authorised specialist!

Intended use

The units are designed exclusively for drying and dehumidification purposes in industrial or commercial situations on the basis of their structural design and equipment.

The units must only be operated by appropriately instructed personnel.

With non-observance of the manufacturer's specifications, the respective local legal requirements or after arbitrary alterations to the units, the manufacturer shall not be liable for resulting damages.

NOTE

Operation other than the types listed in this operating manual is prohibited.
With non-observance, any liability and claim to guarantee expire.

ATTENTION

Customer service and Guarantee

As a prerequisite for any guarantee claims to be considered, it is essential that the ordering party or its representative complete and return the **"certificate of guarantee"** to REMKO GmbH & Co. KG at the time when the units are purchased and commissioned.

The units were tested at the factory several times to verify their correct function.
However, if malfunctions should arise that cannot be remedied by the operator with the assistance of the troubleshooting section, please contact your specialist dealer or contractual partner.

NOTE

Adjustment and maintenance work may only be carried out by authorised qualified technicians.

Important information concerning recycling

The units are operated with environmentally-friendly and ozone-neutral R410A refrigerant. The mixture of refrigerant and oil within the unit must be disposed of properly in accordance with the statutory or locally-applicable regulations.

Environmental protection and recycling

Disposing of packaging

When disposing of packaging material, please consider our environment.
Our units are carefully packed and delivered in stable cardboard transport packaging and, if applicable, on a wooden pallet.
The packaging materials are environmentally-friendly and can be recycled.
By recycling packaging materials, you make a valuable contribution to the reduction of waste and conservation of raw materials.
Therefore, only dispose of packaging material at appropriate collection points.

Disposal of the old unit

The manufacturing process for the units is subject to continuous quality control.

Only high-grade materials are processed, the majority of which are recyclable.

You also contribute to environmental protection by ensuring that your old equipment is only disposed of in an environmentally-friendly manner.

Therefore, only bring the old unit to an authorised recycling business or to an appropriate collection point.

REMKO AMT

Unit description

The units have been designed for universal and straightforward air dehumidification.
Their compact dimensions allow the unit to be transported and set up with ease.
The units operate in accordance with the condensation principle and are equipped with a hermetically sealed refrigerant system, low-noise and low-maintenance fan, operating hours counter and connection cable with plug.
Fully-automatic electronic control, a condensate container with integrated overflow protection (not AMT 115-E) in addition to connection ports for direct condensate drainage help to ensure continuous fault-free operation.

The units conform to the fundamental health and safety requirements of the appropriate EU stipulations. The units are dependable and offer ease of operation.

Locations at which units are used

The units are used in all locations, where dry air is a must and where economic consequential damage (such as that caused by mould) must be prevented.

The units may be used for the drying and dehumidification of areas such as:

- New buildings, industrial buildings
- Basements, storage rooms
- Archives laboratories
- Weekend homes, caravans
- Bathrooms, wash rooms and changing rooms etc.

Operating sequence

Switching on the units puts the electrical control into operation.
The green indicator light on the operating switch illuminates.
Due to an automatic pressure equalisation, the units start with a time delay of around 10 seconds.

The fan extracts the moist room air through the dust filter, evaporator and the condenser behind.

Heat is removed from the room air on the cold evaporator. The air is then cooled to below dew point. The water vapour contained in the room air is then deposited as condensate or rime on the evaporator fins.

If the temperature sensor here measures a pre-set minimum, it activates a timer with a 30 minute delay.
If the evaporator temperature stops increasing during this period, the cooling cycle switches to hot gas defrosting after the timer cycle.

The fan remains out of operation during the defrosting phase.

As soon as the rime (ice) has been defrosted and the temperature at the probe has increased, the unit switches back to normal dehumidification mode.

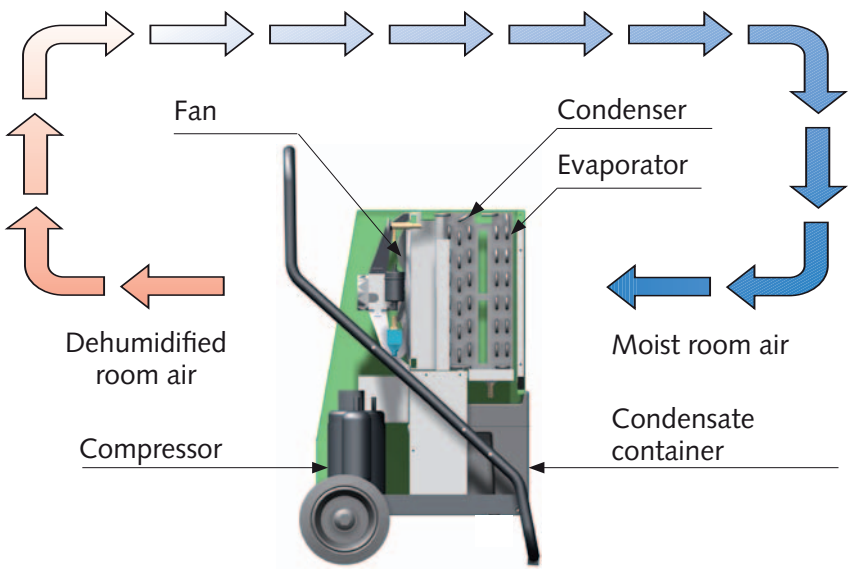
If the room temperature is sufficiently high, the surface of the fins will not be cold enough for rime formation to occur, rendering defrosting unnecessary. *Therefore, the air dehumidifiers work economically.*

The cooled and dehumidified air is re-heated by the *condenser* (heat exchanger), and blown back into the room through the outlet grille.
The processed, dry, heated air then re-mixes with the room air.

Continuous circulation of the room air through the unit gradually reduces the relative humidity (% RH) in the room to the desired humidity level.

Depending on the room temperature and the humidity, only 30 - 40% electrical energy is required, in accordance with the output of the unit.

Schematic depiction of the workings of a REMKO air dehumidifier



Set-up

For the best economic and safe use of the units, the following notes must be followed in full:

- The units must be set up in an upright and level position, to ensure that the condensate can drain freely
- To ensure optimum air circulation, the units should be set up in the centre of the room, where possible
- It must be ensured that the air can be sucked in on the front of the unit and blown out of the rear of the unit without obstruction
- Observe a minimum clearance of 50 cm from walls at all times
- Units must never be set up in the immediate vicinity of heaters or other sources of heat
- The room being dried or dehumidified must be closed to the neighbouring atmosphere
- Air circulation is improved if the unit is set up approx. 1 m above the ground
- Avoid having opened windows and doors etc., and avoid frequent entry to or exit from the room as much as possible
- If the units are to be used in dusty environments, appropriate care and maintenance measures should be taken according to the relevant conditions
- The output of the unit is entirely dependent on the conditions inside the room, room temperature, relative humidity and observance of the set-up instructions
- The units may not be used in environments containing a great deal of dust or chlorine, or in places with atmospheres containing ammonia

Electrical connection

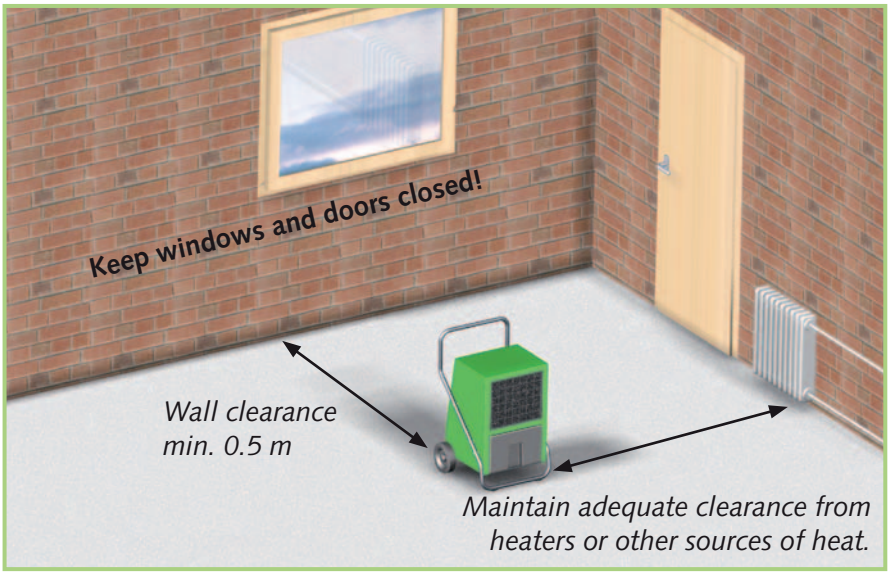
- The units are operat with 230 V / 50 Hz alternating current
- The electrical connection is made using a built-in mains cable with earthed safety plug

NOTE

The electrical connection to the units must be made at feedpoints with residual current devices in accordance with VDE 0100, Section 704.

When installing the units in extremely damp environments such as laundry rooms, showers etc., the unit must secured with a residual current device provided by the customer in accordance with the regulations.

- Extensions to the connection cable may only be carried out by authorised electricians, subject to the length of the cable, connected load of the unit and taking into consideration how the unit is used at its location



ATTENTION

All cable extensions must only be used in fully un-reeled or reeled off condition.

Commissioning

Before commissioning the unit or if local requirements dictate, the air-inlet grille and air-outlet grille must be checked for contamination.

NOTE

A contaminated grille or filter must be cleaned or replaced immediately.

important notes prior to commissioning

- All extensions to the electrical connection must be of a sufficient cable size and must only be used fully rolled out or unrolled
- Never use the power supply connection cable as a pull cord
- After being switched on, the units operate fully-automatically until switched off by the float when the condensate container is full (not AMT 115-E)
- The condensate container must be inserted properly
- In order to prevent damage to the condenser, the units are equipped with a mechanism that prevents the compressor from being immediately switched back on after it is switched off
  The compressor does not switch back on until after a waiting time of around one minute!

NOTE

*In room temperatures below **10°C** and relative humidity below **40%**, economical use of the unit can no longer be guaranteed.*

Control panel

1 = Operating hours counter

2 = Operating switch with "*Indicator light*"

3 = -YELLOW- indicator light "*Container full*"

4 = -RED- indicator light „*Malfunction / overheating*"

Starting the unit

1. Move the operating switch [2] to the "0" (off) position.

2. Connect the unit's power plug to a properly installed and fused mains socket.
   230V/50 Hz

3. Move the operating switch [2]to the "I" (on) position.

The green indicator light on the switch [2] illuminates. *The units switch on with a time delay of around 10 seconds and then run in permanent operating mode.*

Operation with a humidity switch

The REMKO humidity switch (accessories) is supplied with a special adapter.
The following procedure must be followed when commissioning units in conjunction with a humidity switch:

1. Insert the adapter into a properly fused mains socket.
2. Place the humidity switch in a suitable location within the room being dehumidified.
   Not in the immediate vicinity of the units or sources of heat.
3. Insert the power plug (or a cable extension) into the adapter.
4. Set the desired air humidity on the humidity switch.
5. Move the operating switch [2] on the unit to position "I".

The units will switch on automatically when the air humidity in the room exceeds the pre-set level on the humidity switch.

The units will now operate fully-automatically until the desired relative humidity (% RH) has been reached or until the unit is switched off by the float when the condensate container is full (not AMT 115-E). In the event that this occurs, the yellow "*Container full*" indicator light will illuminate.

Condensate

Depending on the air temperature and the relative humidity, condensed water will drip into the condensate trap or into the condensate container either continuously or only during the defrosting phases.
The condensate is fed into the condensate container below via a connection nozzle (not AMT 45-E and AMT 115-E).

A float is located inside the condensate container.
In the event that the container is full, the float will activate a water stop switch which will switch off dehumidification mode.

To guard against accidental stops caused by flooding water etc., this switch does not activate until after a time delay of 10 seconds.
The unit will switch off and the yellow indicator light on the control panel will illuminate.

To empty the condensate container, the following procedure must be followed:

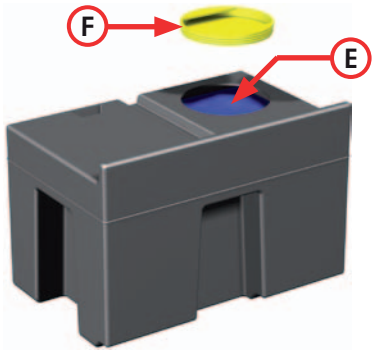
1. Move the operating switch [2] to the "0" (off) position.
   Otherwise, the AMT 65-E and AMT 85-E units would restart immediately after the container is removed.

2. Remove the condensate container.
   To do this, lift the container slightly using the embedded recessed grip and then pull it carefully forwards and out.

NOTE

Beware of dripping condensate.
After switching off the units, the evaporator may continue to defrost under the influence of the ambient temperature.

3. Place the container carefully outside the unit and open the sealing cover [F] of the pouring opening [E].



4. Pour the water into a drain.

5. Close the pouring opening [E] and carefully insert the condensate container back into the unit.

NOTE

After being emptied, the condensate container incl. float must be checked for damage, contamination etc.

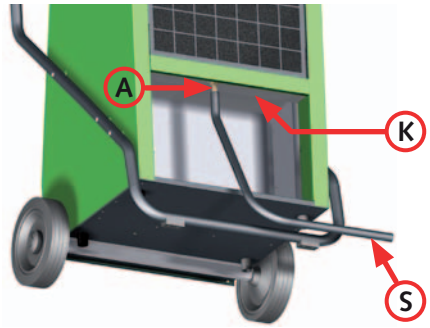
6. Switch the unit back on using the operating switch [2].

NOTE

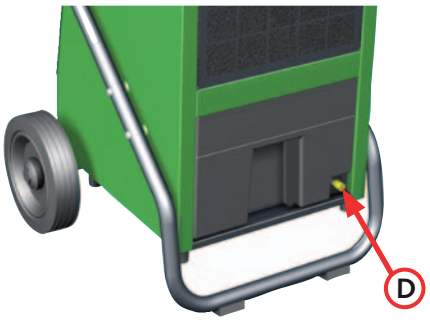
The AMT 45-E units are only fully functional if the condensate container is inserted properly.

Unit operation with hose connection

The condensate traps [K] of the AMT 65 and 85-E are equipped with a ½" connection nozzle [A].
After removing the condensate container, a standard ½" water hose [S] may be connected to this.
The hose [S] is not provided from the factory.



In the AMT 45-E, the hose is connected directly to the ½" connection nozzle [D] of the condensate container.



To operate the units, the condensate container must always be inserted correctly in the AMT 45-E.

In unattended permanent operating mode, the condensate should preferably be drained into a lower-level flow.
If using a collection container (pan, bucket, etc.), the unit must be placed at a correct height.

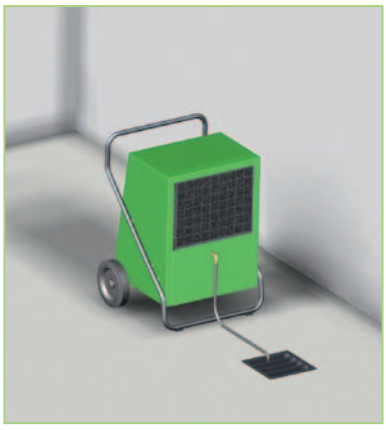
For further suggestions, see the next page!

AMT 115-E condensate drain

Due to their high dehumidification capacity, the AMT 115-E units are not equipped with an internal condensate container.
The condensate drainage is to be provided by the customer in suitable containers via the exterior unit connection nozzles (½").
The following variants (for example) are available to drain the condensate water that arises:

Variant A
The water is collected in a container that is provided by the customer and that is of sufficient size.
The container **must** be checked regularly and emptied if necessary.
There is no overflow protection!

Variant B
The water is first collected in a container and fed into a higher drain via a separate submerged pump or drained outside directly.
This variant is suitable for installation locations with an insufficient incline or without a drain.



Variant C
The water is fed into a lower drain via a ½" hose pipe.
This variant enables unattended permanent operating mode.

Shutdown

Move the operating switch to the "0" (off) position.

If the units are inactive for longer periods, disconnect th the mains power supp

Empty the condensat and dry with a clean *Beware of dripping c*

When storing the unit, cover with a plastic sheet/foil if necessary and store in an upright position in a sheltered and dry location.

To save space when storing, the units can be stacked on top of one another.
For this purpose, they are equipped with rubber pads on the base plate.

NOTE

These variants can also be used in the same way for continual condensate drainage for all other unit types.

ATTENTION

The units must be protected against falling down and unauthorised access after stacking.

Transportation

For easy transportation, the units are equipped with 2 large wheels and an ergonomic transportation and protective clamp.
This can also be dismantled easily if required.

When transporting the units, observe the following:

1. Before each change of location, switch off the unit and remove the power plug from the mains socket.

2. Drain the condensate container.

3. If moisture remains on the evaporator or water remains in the condensate container, the units must only be transported in an upright position.

NOTE

Beware of dripping condensate.
After switching off the units, the evaporator may continue to defrost under the influence of the ambient temperature.

ATTENTION

The mains cable must never be used as a pull cord or fixing device.

Care and maintenance

NOTE

Regular care and maintenance is fundamental to a long service life and fault-free operation of the unit.

All moving parts have a low-maintenance permanent coat of lubricant. The refrigerant system is designed as a hermetically sealed system and may only be repaired by a specialist.

ATTENTION

Before undertaking any work on the units, the power plug must be removed from the mains socket.

- Observe the regular care and maintenance intervals

ATTENTION

Check the inlet and outlet grille for contamination on a regular basis.

- In accordance with the operating conditions, the units must, if necessary, be checked at least yearly by a specialist to ensure that they are in a condition that is safe to use
- Keep the units free of dust and other debris
- Only clean the units with a dry or moistened cloth
- Never subject to direct jets of water.
  e.g. pressure washers etc.
- Never use abrasive or solvent-based cleaners
- Use only suitable cleaners for heavy contamination

Cleaning the dust filter

ATTENTION

Check the inlet and outlet grille and the dust filter for contamination on a regular basis.

Slide the protection grid upwards slightly, then pull forwards and remove downwards.

Then remove the dust filter which has now been released.
Light contamination of the dust filter may be remedied with careful blowing or suction.

Heavier contamination may be remedied by rinsing the filter in a lukewarm (max. 40°C) soap solution.
Finally, always rinse the filter carefully with clear water and allow to dry!

Before refitting the dust filter, ensure that its fully dry and that no damage has been sustained.

NOTE

Heavily contaminated dust filters must be replaced with new parts.
Only original replacement parts may be used.

The units may only be operated with the dust filter in place.

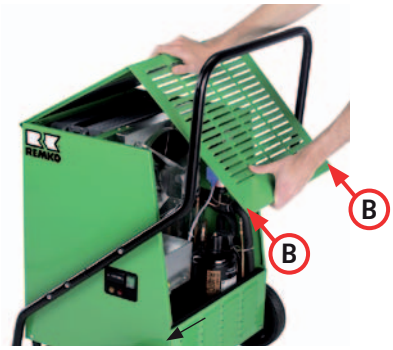
Cleaning the units

The unit housing must be opened to allow the inside of the unit to be cleaned and to provide access to electrical components.

NOTE

Adjustment and maintenance work may only be carried out by authorised qualified technicians.

1. Remove the 2 fastening screws [B].
2. Lift the housing part and unhinge the front flaps.



3. Clean the condenser fins by blowing, with suction or using a smooth brush.
4. Clean the evaporator fins, for example with a lukewarm soap solution, or similar.

NOTE

When cleaning the exchanger, particular care must be taken because the fine aluminium fins bend very easily.

5. Never subject to direct jets of water.
6. Rinse with clean water to remove any remaining soap.
7. Clean the internal surfaces of the unit and the fan blade.
8. Clean the condensate trap and the connection nozzles.
9. Once cleaning has been completed, the unit should be dried. *Take particular care with electrical components!*
10. Re-install all dismantled components in reverse order.
11. Carry out a unit function check and electrical safety check.

ATTENTION

An electrical safety check must be carried out in accordance with VDE 0701 after any work on the units.

Troubleshooting

The units are manufactured using state-of-the-art production methods and tested several times to verify their correct function. However, if a functional fault should occur, the unit should first be checked in accordance with the following list.

The unit does not start

- Check the setting of the operating switch. The green indicator light should illuminate
- Check the power supply and the power fuse provided by the customer 230V/1~/50 Hz
- Check the power plug and the cable for damage
- Check the level and correct positioning of the condensate container (not AMT 115-E)
- Check the setting of the humidity switch (accessories). The pre-set value must be lower than the relative humidity in the room
- Check the humidity switch adapter for damage and correct positioning

The red indicator light (Malfunction) illuminates

- The cooling cycle is overloaded or overheated
- Before starting the unit again, first identify the cause of the malfunction. Note that the re-start is automatic after the cooling process is complete!

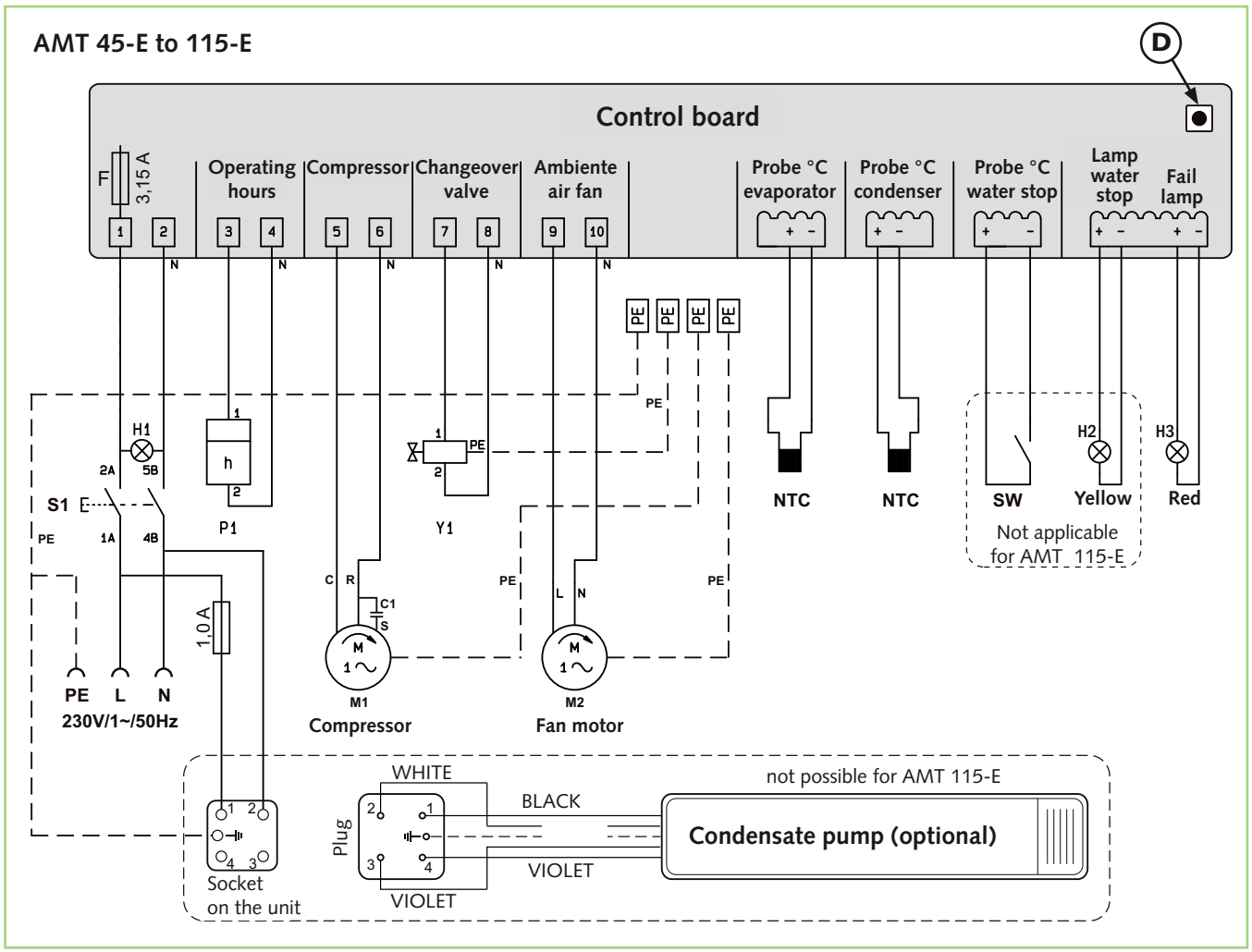
The unit runs but does not form any condensate

- Check the room temperature The operating range of the unit is between 3°C and 32°C
- Check the humidity of the air, min. 40% RH required
- Check the dust filter for contamination and clean or replace if necessary
- Check the evaporator and condenser fins for contamination and clean if necessary
- Check the evaporator for ice or rime formation. If ice has formed, check the functionality of the automatic defrost and the temperature sensor
- If the unit fails to function correctly after the checks have been carried out, an authorised specialist

ATTENTION

Work on the refrigerant system and on the electrical equipment must only be conducted by a specially-authorised specialist!

Electrical wiring diagram

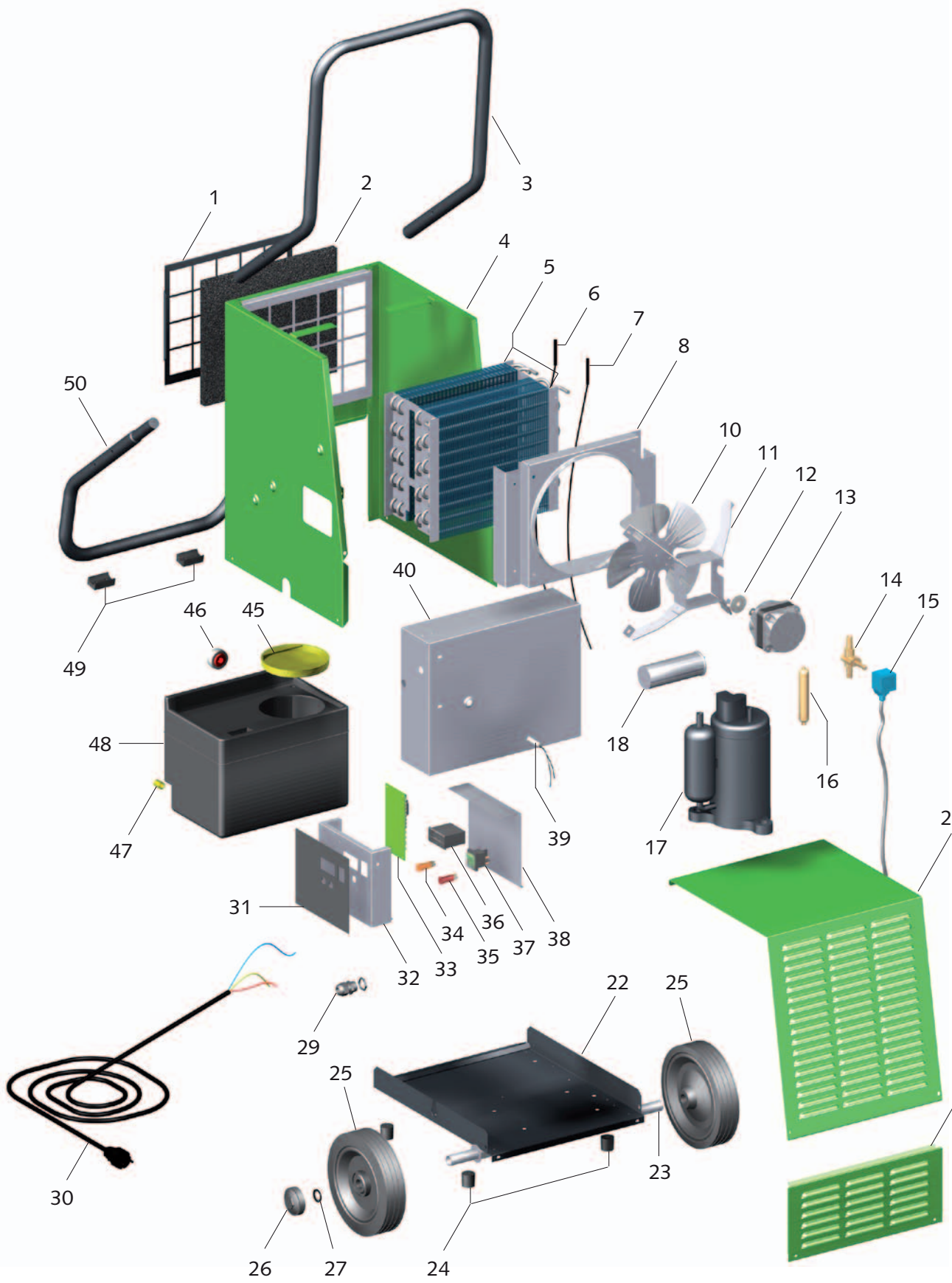


D = Test button

The test button is only provided for maintenance and checking tasks carried out by the service personnel.
When it is pressed, the defrosting timer settings are reduced.

REMKO AMT

Exploded view of the AMT 45-E unit



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

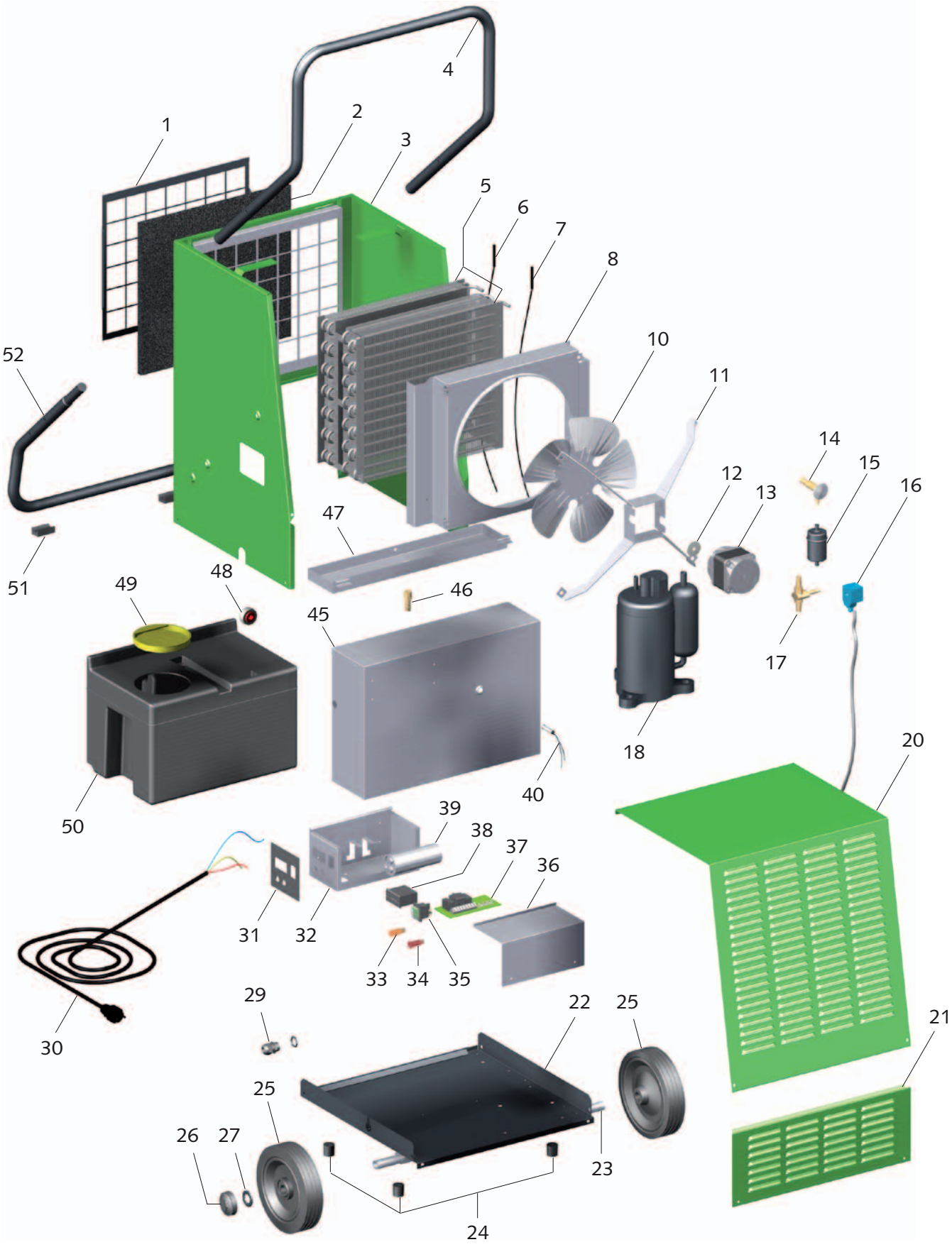
Spare parts list AMT 45-E

No.	Description	EDP no.
1	Air-inlet grille	1105601
2	Dust filter	1105602
3	Transportation bracket	1105603
4	Fixed base cpl.	1105604
5	Evaporator fin package cpl.	1105905
6	NTC evaporator probe	1105606
7	NTC condenser probe	1105607
8	Fan housing	1105608
10	Fan blade	1105609
11	Engine mounting cpl.	1105610
12	Drive clutch	1108455
13	Fan motor	1108077
14	Solenoid valve	1105715
15	Coil for solenoid valve	1105714
16	Dry filter	1105908
17	Compressor, cpl.	1105909
18	Operating condenser	1105910
20	Inspection housing part cpl.	1105618
21	Completion panel	1105619
22	Base plate	1105956
23	Axle	1105621
24	Base plate rubber stop (set)	1105622
25	Wheel	1102155
26	Hubcap	1101623
27	Locking ring	1101622
29	Strain relief	1101267
30	Mains cable with plug	1105624
31	Insulation	1105625
32	Switch cabinet housing	1105911
33	Control board cpl.	1105913
34	Indicator light, yellow	1105611
35	Indicator light, red	1105612
36	Operating hours counter	1105515
37	Operating switch with indicator light	1105628
38	Housing cover	1105912
39	Water stop probe	1105723
40	Support frame	1105914
45	Container seal	1105632
46	Magnetic float	1105633
47	Sealing cap	1105634
48	Condensate container cpl.	1105635
49	Stand rubber stop (set)	1105636
50	Stand	1105637

When ordering replacement parts, please always state the EDP no. and unit number (see name plate)!

REMKO AMT

Exploded view of the AMT 65-E and 85-E units



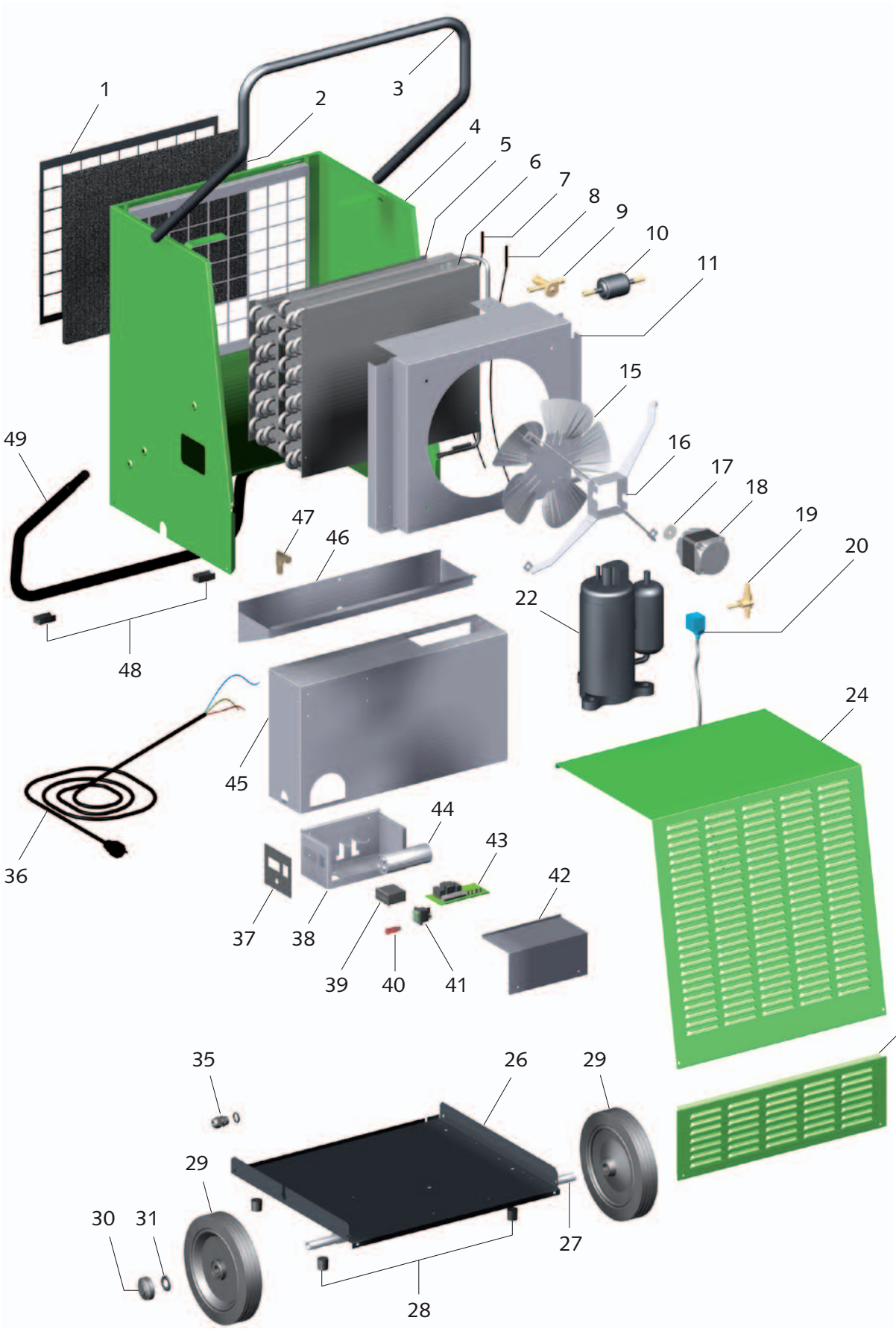
We reserve the right to modify the dimensions and design as part of the ongoing technical development process.

Spare parts list for the AMT 65-E and 85-E units

No.	Description	AMT 65-E	AMT 85-E
		EDP no.	EDP no.
1	Air-inlet grille	1105659	1105659
2	Dust filter	1105660	1105660
3	Fixed base cpl.	1105661	1105661
4	Transportation bracket	1105662	1105662
5	Evaporator fin package cpl.	1105711	1105731
6	NTC evaporator probe	1105606	1105606
7	NTC condenser probe	1105607	1105607
8	Fan housing	1105712	1105712
10	Fan blade	1105665	1105665
11	Engine mounting cpl.	1105666	1105666
12	Drive clutch	1101155	1101155
13	Fan motor	1105667	1105667
14	Temperature valve	----------	1105732
15	Dry filter	1105713	1105733
16	Coil for solenoid valve	1105714	1105714
17	Solenoid valve	1105715	1105715
18	Compressor cpl.	1105716	1105734
20	Inspection housing part cpl.	1105671	1105671
21	Completion panel	1105647	1105647
22	Base plate	1105957	1105957
23	Axle	1105673	1105673
24	Base plate rubber stop (set)	1105622	1105622
25	Wheel	1102155	1102155
26	Hubcap	1101623	1101623
27	Locking ring	1101622	1101622
29	Strain relief	1101267	1101267
30	Mains cable with plug	1105624	1105624
31	Insulation	1105651	1105651
32	Switch cabinet housing	1105717	1105717
33	Indicator light, yellow	1105611	1105611
34	Indicator light, red	1105612	1105612
35	Operating switch with indicator light	1105628	1105628
36	Housing cover	1105718	1105718
37	Control board cpl.	1105719	1105719
38	Operating hours counter	1105515	1105515
39	Operating condenser	1105720	1105735
40	Water stop probe	1105723	1105723
45	Support frame	1105721	1105721
46	Hose connection nozzles ½"	1105567	1105567
47	Condensate trap	1105722	1105722
48	Magnetic float	1105633	1105633
49	Container seal	1105632	1105632
50	Condensate container cpl.	1105657	1105657
51	Stand rubber stop (set)	1105636	1105636
52	Stand	1105676	1105676

When ordering replacement parts, please always state the EDP no. and unit number (see name plate)!

Exploded view of the AMT 115-E unit



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

Spare parts list AMT 115-E

No.	Description	EDP no.
1	Air-inlet grille	1105677
2	Dust filter	1105678
3	Transportation bracket	1105679
4	Fixed base cpl.	1105680
5	Fin evaporator	1105740
6	Fin condenser	1105741
7	NTC evaporator probe	1105606
8	NTC condenser probe	1105607
9	Temperature valve	1105742
10	Dry filter	1105743
11	Fan housing	1105950
15	Fan blade	1105686
16	Engine mounting cpl.	1105687
17	Drive clutch	1101155
18	Fan motor	1105555
19	Solenoid valve	1105715
20	Coil for solenoid valve	1105714
22	Compressor, cpl.	1105746
24	Inspection housing part cpl.	1105689
25	Completion panel	1105690
26	Base plate	1105951
27	Axle	1105692
28	Base plate rubber stop (set)	1105622
29	Wheel	1101621
30	Hubcap	1101623
31	Locking ring	1101622
35	Strain relief	1101267
36	Mains cable with plug	1105624
37	Insulation	1105693
38	Switch cabinet housing	1105952
39	Operating hours counter	1105515
40	Indicator light, red	1105612
41	Operating switch with indicator light	1105628
42	Housing cover	1105953
43	Control board cpl.	1105719
44	Operating condenser	1105954
45	Support frame	1105955
46	Condensate trap	1105697
47	Hose connection nozzles ½"	1105698
48	Stand rubber stop (set)	1105636
49	Stand	1105699

When ordering replacement parts, please always state the EDP no. and unit number (see name plate)!

REMKO AMT

Maintenance protocol

Unit type: ..... **Unit number: .....**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Unit cleaned - outside -																				
Unit cleaned - inside -																				
Fan blade cleaned																				
Fan housing cleaned																				
Condenser cleaned																				
Evaporator cleaned																				
Fan function checked																				
Air-inlet grid with filter cleaned																				
Unit checked for damage																				
Safety devices checked																				
All fastening screws checked																				
Electrical safety check																				
Test run																				

Comments: .....

.....

.....

1. Date: .... Signature	2. Date: .... Signature	3. Date: .... Signature	4. Date: .... Signature	5. Date: .... Signature
6. Date: .... Signature	7. Date: .... Signature	8. Date: .... Signature	9. Date: .... Signature	10. Date: .... Signature
11. Date: .... Signature	12. Date: .... Signature	13. Date: .... Signature	14. Date: .... Signature	15. Date: .... Signature
16. Date: .... Signature	17. Date: .... Signature	18. Date: .... Signature	19. Date: .... Signature	20. Date: .... Signature

Unit to be maintained only by authorised specialists in accordance with the statutory regulations.

Technical data

Series		AMT 45-E	AMT 65-E	AMT 85-E	AMT 115-E
Operating range, temperature	°C	3-32	3-32	3-32	3-32
Operating range, humidity	% RH	40-100	40-100	40-100	40-100
Dehumidification capacity max.	l/day	42	64	80	119
at 30°C/80% RH	l/day *(DER)*	37.4 *(2.32)*	56.8 *(2.96)*	70.8 *(3.07)*	106.4 *(3.47)*
at 20°C/70% RH	l/day *(DER)*	21.2 *(1.73)*	31.7 *(2.06)*	40.1 *(2.26)*	60.7 *(2.57)*
at 10°C/60% RH	l/day *(DER)*	6.9 *(0.78)*	9.4 *(0.93)*	13.2 *(0.89)*	18.0 *(1.01)*
Max. airflow volume	m^3/h	280	590	650	970
Condensate container capacity	Litres	8/7	18/15	18/15	without
Compressor / condenser	Configuration	Rotary piston			
Refrigerant [1]		R410A	R410A	R410A	R410A
Refrigerant quantity	g	480	580	750	1270
Power supply	V/Hz	230/1~/50			
Max. rated current consumption	A	3.2	4.0	4.8	6.7
Max. power consumption	kW	0.730	0.890	1.020	1.385
at 20°C/70% RH	kW	0.510	0.640	0.740	0.986
Customer-provided electrical protection	A	16	16	16	16
Sound pressure level L_{pA} 1m [2]	dB (A)	58	60	63	67
Depth	mm	490	530	530	605
Width	mm	480	615	615	710
Height	mm	640	795	795	895
Height incl. transportation bracket	mm	950			
Weight	kg	34	45.5	49.5	65
EDP no.		617400	617550	617800	617900

(DER) = Dehumidification output figure in accordance with DIn EN 810

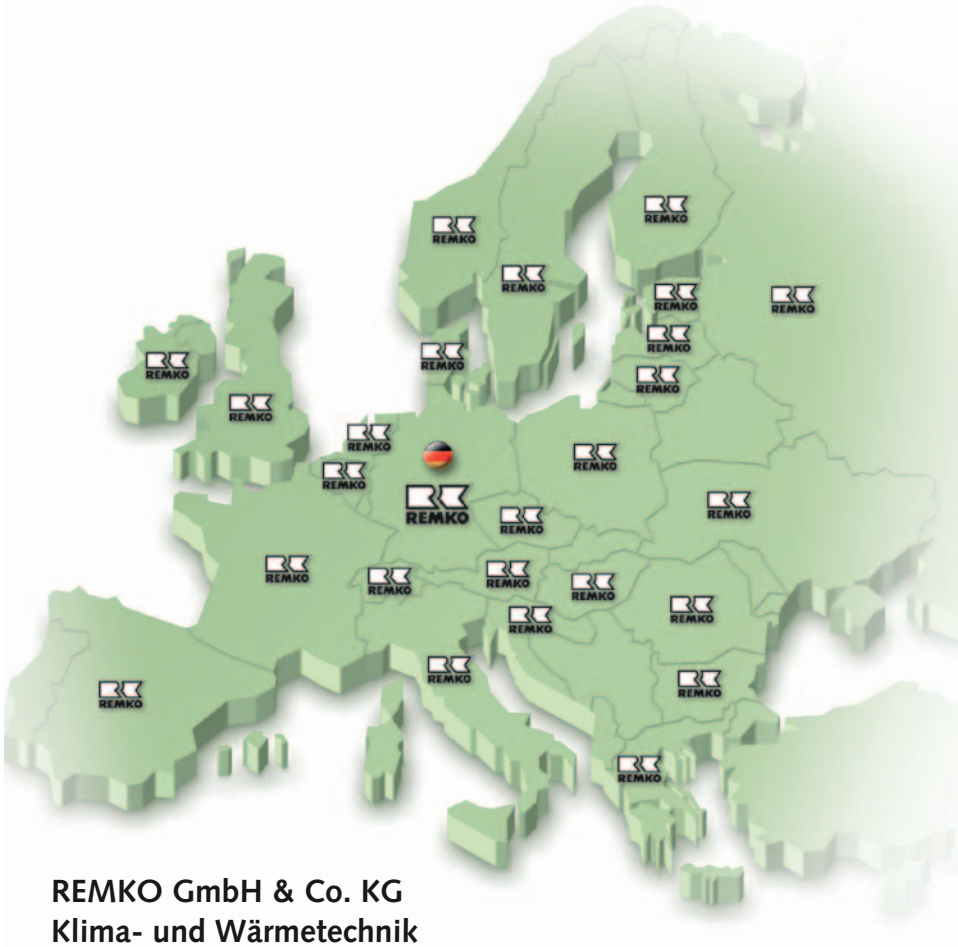
[1] Contains greenhouse gas according to Kyoto protocol

[2] Noise level measurement DIn 45635 - 13 - KL 3

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

REMKO INTERNATIONAL

... and also right in your neighbourhood! Take advantage of our experience and advice



Consulting
Thanks to intensive training, our consultants are always completely up-to-date when it comes to technical expertise. This has given us the reputation of being more than just an excellent, reliable supplier: REMKO, a partner who helps to solve problems.

Sales
REMKO offers not just a well-established sales network both nationally and internationally, but also has exceptionally highly-qualified sales specialists. REMKO employees in the field are more than mere salespeople: above all, they must be advisers to our customers in air conditioning and heating technology.

Customer service
Our units operate precisely and reliably. However, in the event of a malfunction REMKO customer service is quickly on the scene. Our comprehensive network of experienced dealers guarantees quick and reliable service.

REMKO GmbH & Co. KG
Klima- und Wärmetechnik

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