

# REMKO AMT

*Dehumidifier*

*Operation · Technology · Spare Parts*





## Contents

<i>Dehumidification</i>	4
<i>Safety Instruction</i>	6
<i>Proper use</i>	7
<i>Customer Service and Warranty</i>	7
<i>Environmental Protection and Recycling</i>	7
<i>Equipment Description</i>	8
<i>Installation</i>	9
<i>Commissioning</i>	10
<i>Shutdown</i>	12
<i>Unit transport</i>	13
<i>Maintenance and Service</i>	13
<i>Trouble Shooting</i>	14
<i>Electrical wiring diagram</i>	15
<i>Exploded view AMT 40-E</i>	16
<i>Spare parts list AMT 40-E</i>	17
<i>Exploded view AMT 55-E + 80-E</i>	18
<i>Spare Parts List AMT 55-E + 80-E</i>	19
<i>Exploded view AMT 110-E</i>	20
<i>Spare parts list AMT 110-E</i>	21
<i>Maintenance log</i>	22
<i>Technical Data</i>	23

**Before commissioning/use of the equipment, these operating instructions must be read carefully!**

**These instructions are a part of the device and must thus always be kept in the direct vicinity of the mounting site or on the device itself.**

*Subject to changes, errors and typographical errors excepted.*

## Dehumidification

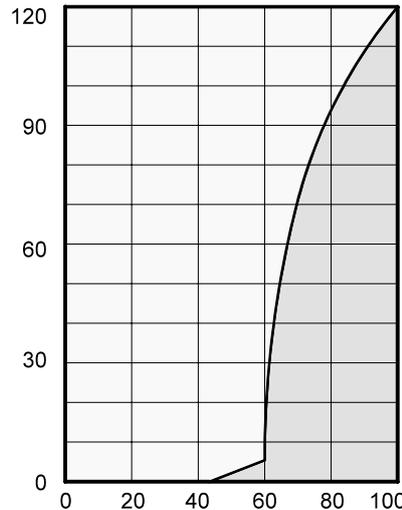
The interrelated processes that take place during dehumidification are based on physical laws. These are to be illustrated here in simplified form in order to explain the principle of dehumidification.

### The use of REMKO dehumidifiers

- No matter how well windows and doors are insulated, damp and moisture can penetrate even through thick concrete walls.
- The water volumes required for binding concrete, mortar, plaster, etc. are diffused out initially after 1-2 months under certain circumstances.
- Even moisture that has penetrated masonry following high water or flooding, is only released very slowly.
- This applies similarly, e.g. also to moisture contained in deposited materials.

The moisture (water vapour) escaping from buildings or materials is absorbed by the ambient air. This increases their moisture content and ultimately results in corrosion, mould, rot, peeling of paint coatings and other unwanted moisture damage.

The diagram opposite shows an example of the rate of corrosion, e.g. for metal at different humidity levels.



This shows that the rate of corrosion below 50% relative humidity (R H) is insignificant and below 40% R H can be disregarded.

From 60% R H, the rate of corrosion increases considerably. This moisture damage limit applies also to numerous other materials, e.g. powders, packaging, wood or electronic units.

Buildings can be dried out in different ways:

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

The room air is heated to absorb moisture in order to then be discharged to the atmosphere. The total input energy is lost with the discharged, moist air.

#### 2. By dehumidification:

The moist air in an enclosed room is continuously dehumidified by the condensation principle.

In terms of energy consumption, dehumidification has one decisive advantage:

Energy expenditure is restricted solely to the existing room volume. The mechanical heat released through the dehumidification process is returned to the room.

**With correct use, the dehumidifier only uses about 25% of the energy that would be needed for the „heating and ventilation“ principle.**

### The relative humidity

Our ambient air is a gas mixture and contains always a certain amount of water in the form of water vapour. This water volume is expressed in g per kg dry air (absolute water content).

**1m<sup>3</sup> air weighs about 1,2 kg at 20 ° C**

Depending on the temperature, each kg of air is only able to absorb a certain amount of water vapour. When this absorptive capacity is reached, reference is made to “saturated” air; this has a relative humidity of (R H) 100%.

Relative humidity is therefore understood to be the ratio between the amount of water vapour currently contained in the air and the maximum water vapour volume at the same temperature.

The ability of air to absorb water vapour increases with increasing temperature. This means that the maximum (= absolute) water content increases with increasing temperature.

Temp. °C	Water vapour content in g/m <sup>3</sup> at a humidity of			
	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



## The condensation of water vapour

Since the maximum water vapour volume increases when the air is heated, the contained water vapour volume remains the same however, this results in a reduction of the relative humidity.

In contrast, when the air is cooled, the capacity to absorb the maximum water vapour volume reduces, the water vapour volume contained in the air remains the same and the relative humidity increases. If the temperature falls further, the capacity to absorb the maximum water vapour volume is reduced until it is equal to the contained water vapour volume.

This temperature is called the dew-point temperature. When the air is cooled below the dew-point temperature, the contained water vapour volume is larger than the maximum water vapour volume. Water vapour is released.

This condenses to water. The air is relieved of moisture.

Examples of condensing are misted windows in winter or misting of a cold drinks bottle.

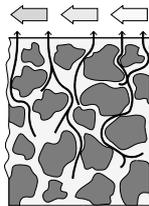


The higher the relative humidity, the higher the dew-point temperature, which is easier to fall below.

## Drying materials

Building material and structures can absorb considerable amounts of water, e.g. bricks 90-190 l/m<sup>3</sup>, heavy concrete 140-190 l/m<sup>3</sup>, sand-lime bricks 180-270 l/m<sup>3</sup>. The drying of moist materials, e.g. masonry, takes place as follows:

- The contained moisture moves from within the material to its surface

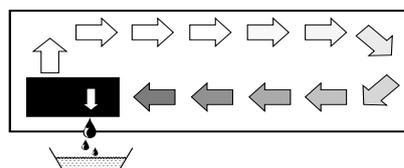


- Evaporation takes place on the surface = change to water vapour in the ambient air

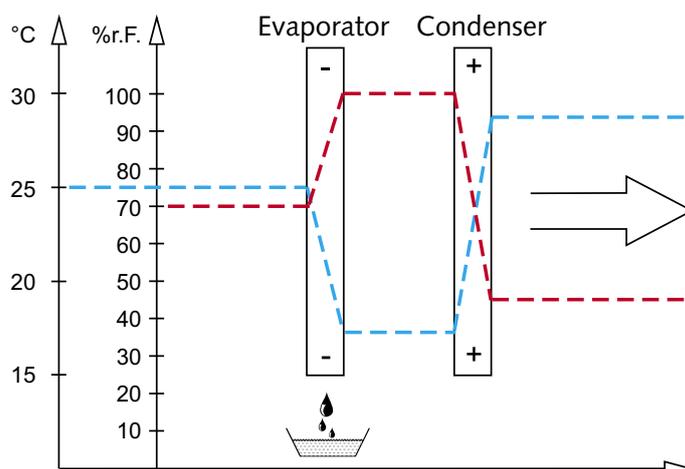
- The air enriched with water vapour continuously circulates the REMKO dehumidifier. It is dehumidified and leaves the unit at a slightly higher temperature to absorb water vapour from anew.

- In this way, the moisture contained in the material is gradually reduced  
**The material dries!**

The produced condensate is collected in the unit and discharged



The air flow is cooled on its way through or via the evaporator to below the dew point. The water vapour condenses and is collected in a condensate trap and discharged.



## Heat of condensation

The energy transferred from the condenser to the air is composed of:

1. Heat energy extracted from the evaporator.
2. Electrical drive power.
3. The heat of condensation released through the condensation of water vapour.

For the change from a liquid to a gaseous state, energy is necessary. This energy is termed heat of evaporation. It does not cause any rise of temperature, it is only necessary for the change from a liquid to a gaseous state. Vice versa,

energy is released during the liquefaction of gas, which is termed heat of condensation.

The amount of heat of evaporation and condensation is the same.

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

This shows that a relatively large amount of energy is released through the condensation of water vapour.

If the moisture to be condensed is not introduced through evaporation in the room itself, but from outside, e.g. via ventilation, the heat of condensation released in the process contributes towards room heating. In drying processes,

the heat energy is recirculated, which is consumed during evaporation and released during condensation. The supplied air during dehumidification creates a large amount of heat energy, which is expressed as a rise of temperature.

**The time necessary for drying normally does not depend only on the unit capacity, but is rather determined by the rate at which the material or parts of the building release their moisture.**

## Safety Instructions

The units were subjected to extensive material, functional and quality inspections and tests prior to delivery.

The unit can however constitute a hazard if used improperly by untrained persons or not for the intended purpose.

The following information must be observed:

- The units must not be installed or operated in locations subject to explosion hazards
- The units must not be installed and operated in oil, sulphur, chlorine or salt containing atmospheres
- The units must be installed upright and stable

- The units must not be subjected to a direct jet of water
- The air inlet and outlet must always be kept free
- The intake guard grilles must always be free of dirt and loose objects
- The units must not be covered during operation
- Never insert objects in the unit
- The units must not be transported during operation
- The units must only be transported with drained condensate containers and dry evaporator

- All electric cables outside the units must be protected against damage (e.g. due to animals)
- The condensate containers must be drained prior to each change of location

### CAUTION

*Extension of the connecting cable may only be carried out by authorised electricians taking into account the unit power consumption, cable length and local use.*

### CAUTION

*Only specially authorised firms may carry out work on the refrigeration system and electrical equipment.*

## Proper Use

The units are designed and equipped for drying and dehumidification purposes in industrial or commercial use.

The equipment may be operated only by accordingly trained personnel.

The manufacturer is not liable for damage that occurs due to nonobservance of manufacturer instructions or the legal requirements or due to unauthorised changes to the device.

### NOTE

*Another operation other than that described in these operating instructions is not permitted. Nonobservance leads to the extinguishment of any liability and warranty claims.*

## Customer service and Warranty

The prerequisite for any warranty claims is that the customer or its recipient has returned the completed „**Warranty Document**“ included in delivery to REMKO GmbH & Co. KG at the time of the sale and commissioning of the equipment.

The equipment was tested several times at the factory for perfect function. If any malfunctions should occur, however, which cannot be eliminated by trouble shooting measures performed by the operator, please consult your dealer or contract partner.

### NOTE

*Adjustment and maintenance tasks may be performed only by authorised expert personnel!*

## Important information on recycling

The units are operated with environmentally-friendly and ozone neutral refrigerant R407c or R134a.

In accordance with legal and locally applicable requirements, the mixture of refrigerant and oil contained in the unit must be disposed of properly.



## Environmental Protection and Recycling

### Disposal of packaging

When disposing of the packaging material, please think of the environment.

Our equipment is carefully packed for transport and delivered in a stable cardboard transport package on a wooden pallet, if necessary. The packaging materials are environmentally-friendly and can be recycled.

With the reuse of packaging material, you make a valuable contribution to the reduction of waste and the preservation of raw materials.

***You should thus dispose of the packaging material at the corresponding disposal sites.***

### Disposal of the old device

The unit production is subject to continuous quality control.

Only high-quality materials are used, the majority of which are recyclable.

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

***For this reason, bring the old equipment only to an authorised recycling company or to a corresponding disposal site.***



## Device Description

The units are designed for universal and problem-free dehumidification.

Owing to their compact size, they are easy to transport and install. The units operate according to the condensation principle and feature a hermetically sealed refrigeration system, low noise and maintenance circulating fan, operating hour counter and connecting cable with plug.

Fully automatic electronic control, condensate container with integrated overflow protection (not with AMT 110-E) as well as connections for direct condensate removal ensure trouble-free continuous use.

The units comply with the fundamental safety and health requirements of the permanent EU regulations. The units are reliable and easy to operate.

### Unit applications

The units are used wherever dehumidification is necessary and consequential damage (e.g. through mould formation) is to be prevented.

The units are also suitable for drying and dehumidification of:

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

### Sequence of functions

The electronic control is activated when the unit is switched on.

The green pilot light in the switch illuminates.

Owing to automatic pressure equalisation, the units start with a delay of about 10 seconds and then operate in continuous duty.

The circulating fan sucks the moist room air via the dust filter, evaporator and downstream condenser.

At the cold *evaporator*, heat is extracted from the room air and cooled to below the dew point. The water vapour contained in the room air deposits as condensate or frost on the evaporator fins.

When the temperature sensor measures a specific minimum value here, a timer is activated with a delay of 30 minutes.

If during this time the evaporator temperature does not rise again, the cooling circuit is switched to hot gas defrost after the time has elapsed.

During the defrost phase, the circulating fan is off.

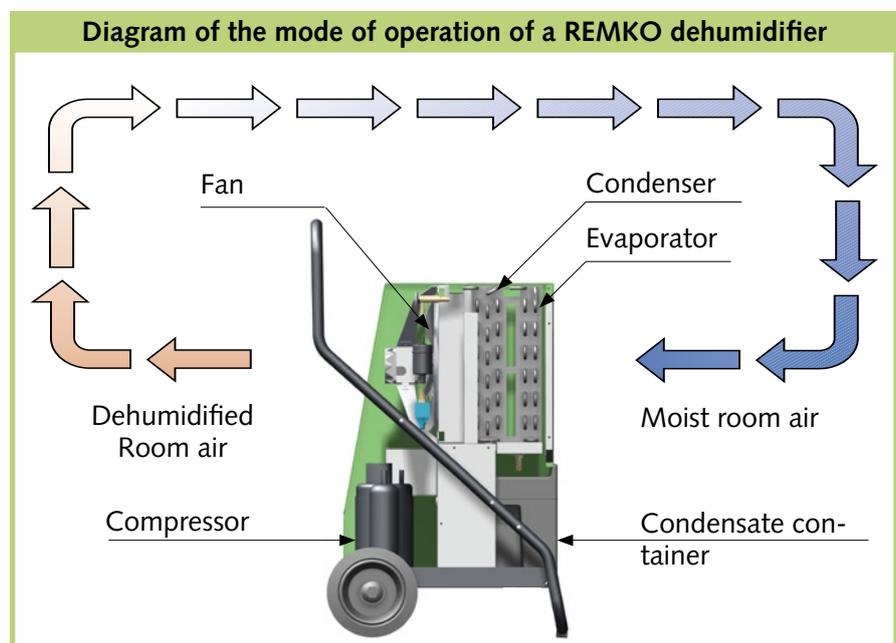
As soon as the frost (ice) has defrosted and the temperature at the sensor rises again, the unit switches back to normal dehumidification operation.

At a sufficiently high room temperature, the gill surface is not cold enough for the formation of frost so that defrosting is unnecessary. *This makes dehumidifiers particularly economical in operation.*

At the *condenser* (heat exchanger), the cooled and dehumidified air is reheated and blown back into the room via the air outlet. The conditioned, drier and heated air mixes with the room air again.

Due to the constant circulation of the room air through the unit, the relative humidity in the room is gradually reduced to the required humidity (% R.H).

Depending on the room temperature and humidity, only about 30-40% of electrical energy is required depending on the unit cooling capacity.



## Installation

For economical and reliable unit operation, the following information must be followed in any event:

- The units must be installed stable and horizontal to ensure un-hindered condensate discharge
- The units must be installed in the centre of the room if possible, so that optimal air circulation is ensured
- It must be ensured that air is able to be sucked in freely at front of the unit and blown out freely at the rear of the unit
- A minimum distance of 50 cm to walls must be maintained
- The units should not be installed in the immediate vicinity of radiators or other heat sources
- Room air circulation can be improved by installing the units raised about 1 metre
- The room to be dried or dehumidified must be closed with respect to the ambient atmosphere
- Open windows, doors, etc. as well as frequent entering and leaving the room must be avoided as far as possible
- If the units are used in dust-laden environments or in stables, care and maintenance measures specially adapted to the particular conditions must be taken
- The unit capacity is solely dependent upon the spatial conditions, room temperature, relative humidity and observance of the installation instructions

## Electrical connection

- The equipment is operated at 230 V/50 Hz AC.



- Electrical connection takes place via a fitted mains cable with earthing pin plug.

### NOTE

*Electrical connection must take place to supply points with residual-current protective unit according to VDE 0100, part 704.*

*For installation of the units in damp areas such as utility rooms, shower rooms or similar, the units must be protected with a residual-current-operated circuit-breaker complying with the requirements.*

- Extension of the connecting cable may only take place by authorised electricians, taking into account the cable length, unit installed load and local use.

### CAUTION

*All cable extensions may be used only when unrolled.*



## Commissioning

Prior to each commissioning or as required, the air inlet and outlet must be checked for clogging.



### NOTE

*Clogged outlets and filters must immediately be cleaned or replaced.*

### Prior to commissioning

- All electric extension cables must have an adequate cross-section and must only be used fully uncoiled or unrolled.
- Do not pull at the cable.
- After switching on, the units operate fully automatically until switched off normally via the float switch of the filled condensate container. (not with AMT 110-E).
- The condensate container must be placed correctly.
- In order to prevent compressor damage, the units must be provided with a safeguard preventing immediate reconnection of the compressor after switching off.  
**The compressor initially switches on again after a waiting time of about 1 minute!**



### NOTE

*At room temperatures below 10°C and a relative humidity below 40%, economical/efficient use of the unit is not ensured.*

### Control panel



- 1 = Operating hour counter
- 2 = Operating switch with "pilot light"
- 3 = YELLOW - Pilot light „Container full“
- 4 = -RED-Pilot light „Fault/Overheating“

### Starting the unit

1. Set operating switch [2] to position "0" (Off). 
2. Connect the mains plug of the unit to a correctly installed and protected socket-outlet.  **230V/50 Hz.**
3. Set the operating switch [2] to position "I" (On). 

The green pilot light in the switch [2] illuminates.  
*The units switch on with a delay of about 10 seconds and then operate in continuous duty.*

### Operation with a hygrostat

The REMKO hygrostat (accessory) is supplied with a special adapter plug. Commissioning of the units in conjunction with a hygrostat and its operation take place as follows:

1. Plug the adapter plug into a correctly protected socket-outlet.
2. Place the hygrostat at a suitable point in the room to be dehumidified. *Not in the immediate vicinity of the unit and heat sources.*
3. Plug the mains plug (or a cable extension) into the adapter plug.
4. Set the required humidity on the hygrostat.
5. Set the operating switch [2] on the unit to the position "I".  
The units switch on automatically when the prevailing humidity is higher than the value preset on the hygrostat.



The units now operate fully automatically until the relative humidity (% RH) is reached or normal switch off takes place via the float switch in the condensate container (not with AMT 100-E). In this case, the yellow "container full" pilot light illuminates.

## Condensate

Depending on the air temperature and relative humidity, the condensed water drips steadily or only during the defrost phases in the condensate trap or condensate container.

Via a connection (not with AMT 40-E and 110-E), the condensate flows into the condensate container located below.

In the condensate container is a float switch which interrupts dehumidification via a water stop switch when the container is full.

For protection against unintentional shut-off with splashing water, etc., this protective unit initially switches off with a delay of 10 seconds. The unit switches off and the yellow pilot light on the control panel lights up.

The procedure for emptying the condensate container is as follows:

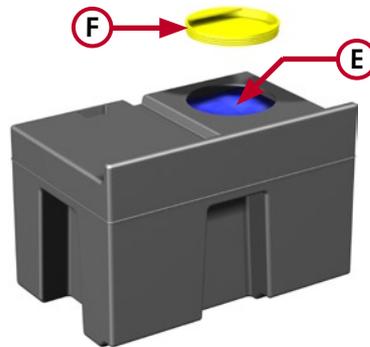
1. Set operating switch [2] to position "0" (Off).  
*Otherwise, the units AMT 55-E and AMT 80-E would immediately restart after the container is removed.*

2. Remove the filled condensate container.  
For this purpose, lift the container slightly via the recessed handle and carefully pull out.

### NOTE

*Attention must be paid to dripping condensate. After switching off the unit, the evaporator can continue to defrost under the influence of the ambient temperature.*

3. Carefully place the container outside the unit and open the sealing cover [F] of the drain opening [E].



4. Pour the water into a drain.



5. Close the drain opening [E] again and carefully place the emptied condensate container back in the unit.

### NOTE

*After each emptying, the condensate container including float switch must be checked for any damage, fouling, etc.*

6. Switch on the unit again via the operating switch [2].

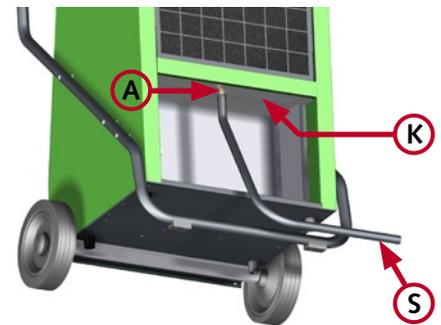
### NOTE

*The AMT 40-E units are only functional with correctly placed condensate container.*

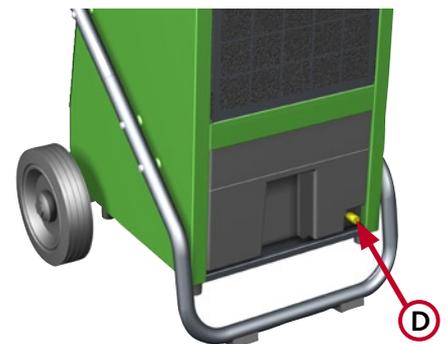
## Unit operation with hose connection

The condensate traps [K] of the AMT 55 and 80-E are provided with a connection [A]. A standard water hose [S] can be connected to this connection after removing the condensate container.

*The discharge hose [S] is not contained in the factory scope of supply.*



With the AMT 40-E, connection of the hose takes place directly to the connection [D] of the condensate container.



For unit operation, the condensate container must always be placed correctly in the AMT 40-E.

The condensate must preferably be discharged to a lower located outlet in unsupervised continuous duty.

When using a collecting container (container, bucket, etc.), the unit must be installed at a raised level.

*Further ideas, see next page!*

# REMKO AMT

## Condensate drain AMT 110-E

AMT 110-E units are not provided with an internal condensate container due to their high dehumidification capacity.

Condensate discharge must take place locally into suitable containers or via the external unit connection.

The following variants are available for discharge of the produced condensate water:



### Variant A

The water is collected in a sufficiently large dimensioned container to be provided locally.

The container **must** be checked regularly and emptied as necessary.

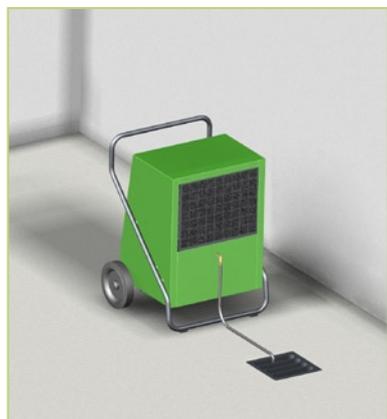
**No overflow protection is provided!**



### Variant B

The water is initially collected in a container and pumped to a raised outlet or to the outside via a separate submersible pump.

This variant is suitable for installation sites without sufficient gradient or without drain.



### Variant C

The water flows via a hose into a lower located drain.

This variant enables unsupervised continuous duty.

## Shutdown

Set the operating switch to the position „0“ (Off).



In case of longer standstills, disconnect the equipment from the power mains.



The condensate container must be emptied and dried with a clean cloth.

**Pay attention to dripping condensate!**

For storage purposes, the units should be covered with plastic/sheeting and stored in an upright position in a protected and dry location.

The units can be stacked one on top of the other for space-saving storage.

For this purpose, they are provided with special rubber pads on the base plate.



### CAUTION

*The units must be secured after stacking to prevent them falling over and against unauthorised access.*

### NOTE

*These described variants can be used analogous also for all other unit types for continuous condensate discharge.*

## Unit transport

For convenient transport, the units are provided with two large wheels and an ergonomically shaped transport and protective handle. This can easily be removed if required.

The following must be observed for unit transport:

1. Prior to a change of location switch off the unit and disconnect the mains plug from the socket-outlet.
2. Empty the condensate container.



3. As long as there is still moisture on the evaporator or water in the condensate container, the units must only be transported in an upright position.

### NOTE

*Attention must be paid to dripping condensate. After switching off the unit, the evaporator can continue to defrost under the influence of the ambient temperature.*

### CAUTION

*The mains cable must never be used for pulling or fixing purposes.*

## Maintenance and Care

### NOTE

*Regular care and maintenance is a basic precondition for a long useful life and trouble-free operation of the unit.*

All moving parts are provided with low-maintenance permanent lubrication. The refrigeration system is a hermetically sealed system and must only be repaired by authorised specialist companies.

### CAUTION

*Before carrying out all work on the units, the mains plug must be removed from the socket-outlet.*

Observe the regular care and maintenance intervals.

### CAUTION

*Regularly check air inlet and air outlet for fouling.*

- Depending on the particular operating conditions, the units must be inspected annually as required, however, at least once by an expert for their safe working condition
- Keep the units free of dust and other deposits
- Clean the devices only with a dry or moistened cloth
- Do not use a direct water jet **such as a high-pressure cleaner, and so on!**
- Do not use caustic cleaning agents or cleaning agents containing solvents
- Only use suitable cleaning agent, even in case of heavy soiling

## Cleaning the dust filter

### CAUTION

*Regularly check air inlet and air outlet as well as the dust filter for fouling.*

Lightly push the guard grille upwards, pull out and remove downwards.

Remove the exposed dust filter. If lightly soiled, the dust filter can be cleaned by carefully blowing out or by suction.

For heavy fouling, the filter can be rinsed in a luke-warm (max. 40°C) soap solution. Subsequently rinse thoroughly with clear water and allow to dry!

It must be ensured that the dust filter is completely dry and undamaged prior to refitting.

### NOTE

*Heavily clogged dust filters must be replaced with new ones. Only original spare parts must be used.*

The units must only be operated with the dust filter fitted.

## Cleaning the units

For cleaning the interior of the unit and to gain access to the electrical components, it is necessary to open the unit housing.

### NOTE

*Adjustment and maintenance tasks may be performed only by authorised expert personnel!*

1. Remove the two fixing screws [B].
2. Lift the housing part and hang out the front tabs.



3. Clean the condenser fins either by blowing out, suction or with a soft brush.
4. Clean the evaporator fins, e.g. with a luke-warm soap solution or similar.

### NOTE

Particular care must be taken when cleaning the exchanger as the fine aluminium fins bend very easily.

5. Do not use a direct water jet.
6. Rinse with clean water to remove adhering soap residues.
7. Clean the inner surfaces of the unit and fan impeller.
8. Clean the condensate trap and connection.

9. After cleaning, the unit must be dried.

*Pay special attention to the electrical components!*

10. Refit all removed parts correctly in reverse order.
11. Carry out a functional check and safety test on the unit.

### CAUTION

*After completing all work on the units, an electrical safety test must be carried out in accordance with VDE 0701.*

## Trouble Shooting

The units were manufactured using the latest production methods and tested repeatedly for perfect function. If faults should still occur, the unit must be checked against the following list.

### The unit does not start.

- Check the operating switch setting. The green pilot light must illuminate
- Check the supply connection and local system fuse 230V/1~/50Hz
- Check the mains plug and mains cable for damage
- Check the level in the condensate container and the container for correct seating. (not for AMT 110-E)
- Check the hygrostat setting (accessory). The setting must be lower than the relative humidity in the room in which the unit is installed
- Check the adapter plug of the hygrostat for damage and correct seating

### The red (Fault) pilot light illuminates

- The cooling circuit is overloaded or overheated
- Before restarting the unit, the cause of the fault must first be located. To be noted is that the unit restarts automatically after cooling down

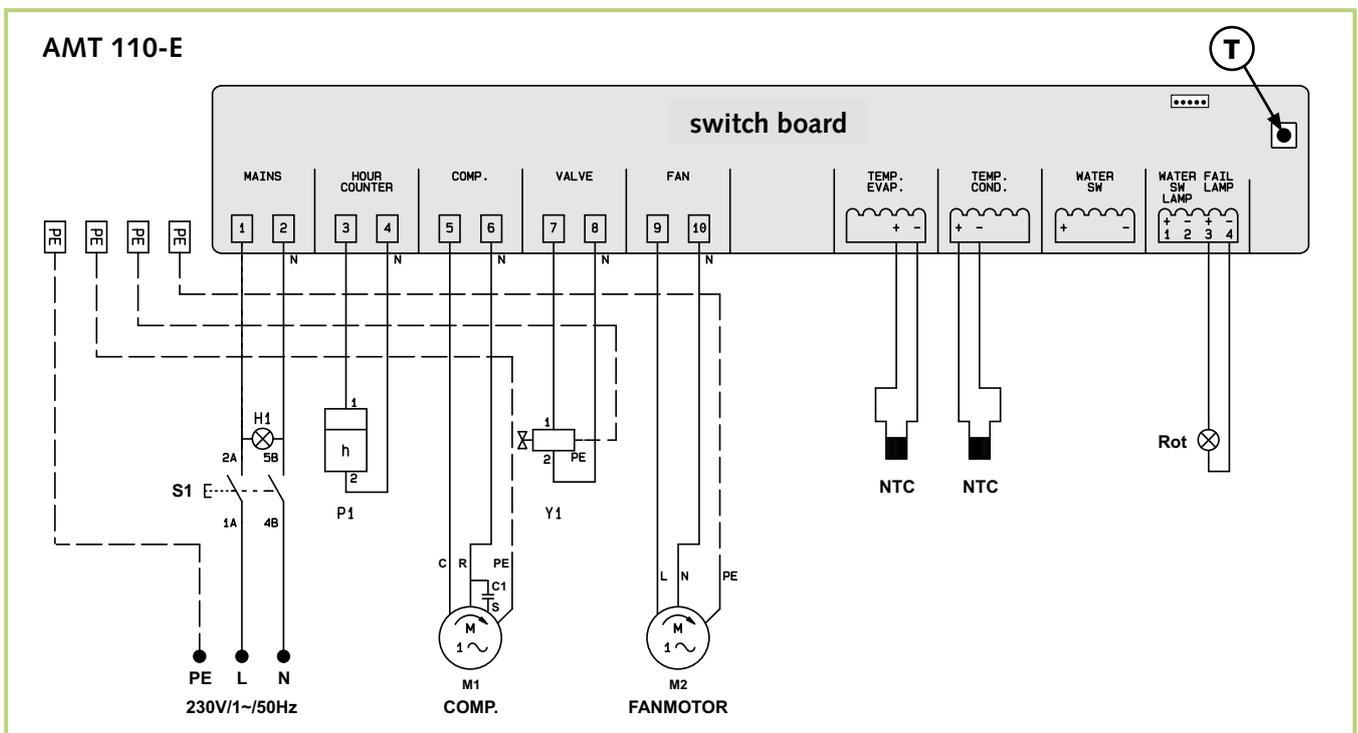
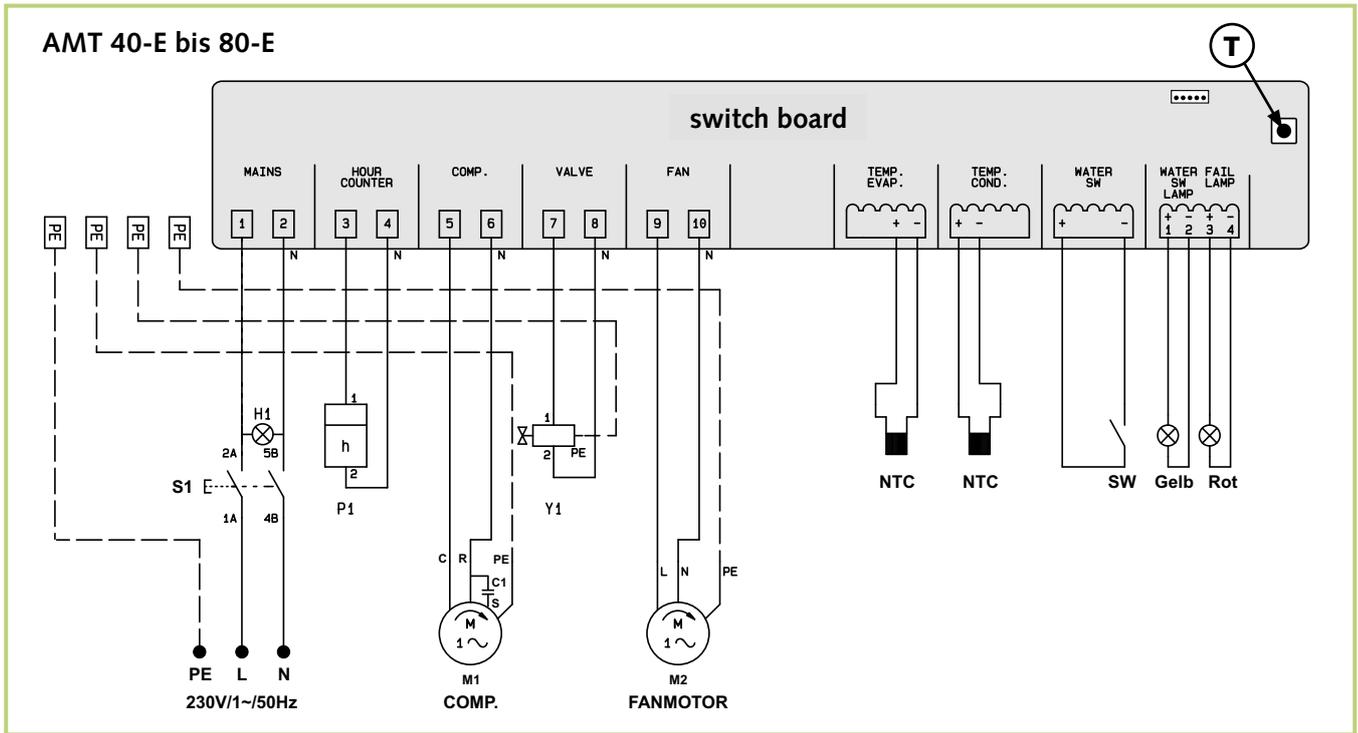
### The unit operates, but no condensate forms

- Check the room temperature. The operating range of the unit is between 3°C and 32°C
- Check the humidity, min. 40% RH necessary
- Check the dust filter for clogging and clean or replace as necessary
- Check the evaporator and condenser fins for clogging and clean if necessary
- Check the evaporator for possible icing/frost formation. If this is the case, the automatic defrost function and temperature sensor must be checked
- If the unit does not operate correctly despite the checks carried out, an authorised specialist company should be notified

### CAUTION

*Only specially authorised firms may carry out work on the refrigeration system and electrical equipment.*

## Electrical wiring diagram

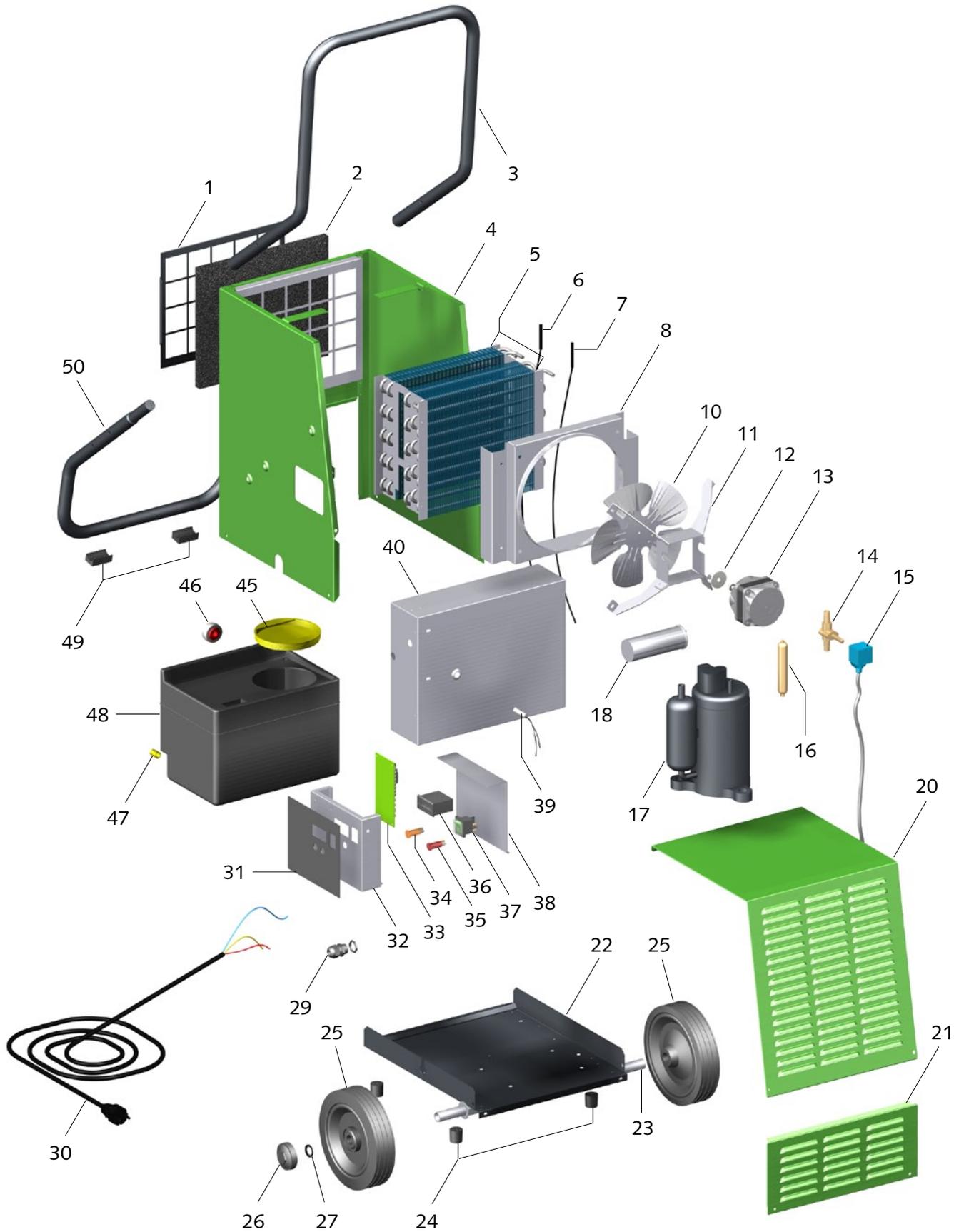


**T = Testknopf**

The test button is only intended for service and testing on the control pcb.  
Pressing this button reduces the timer times.

# REMKO AMT

## Exploded view AMT 40-E



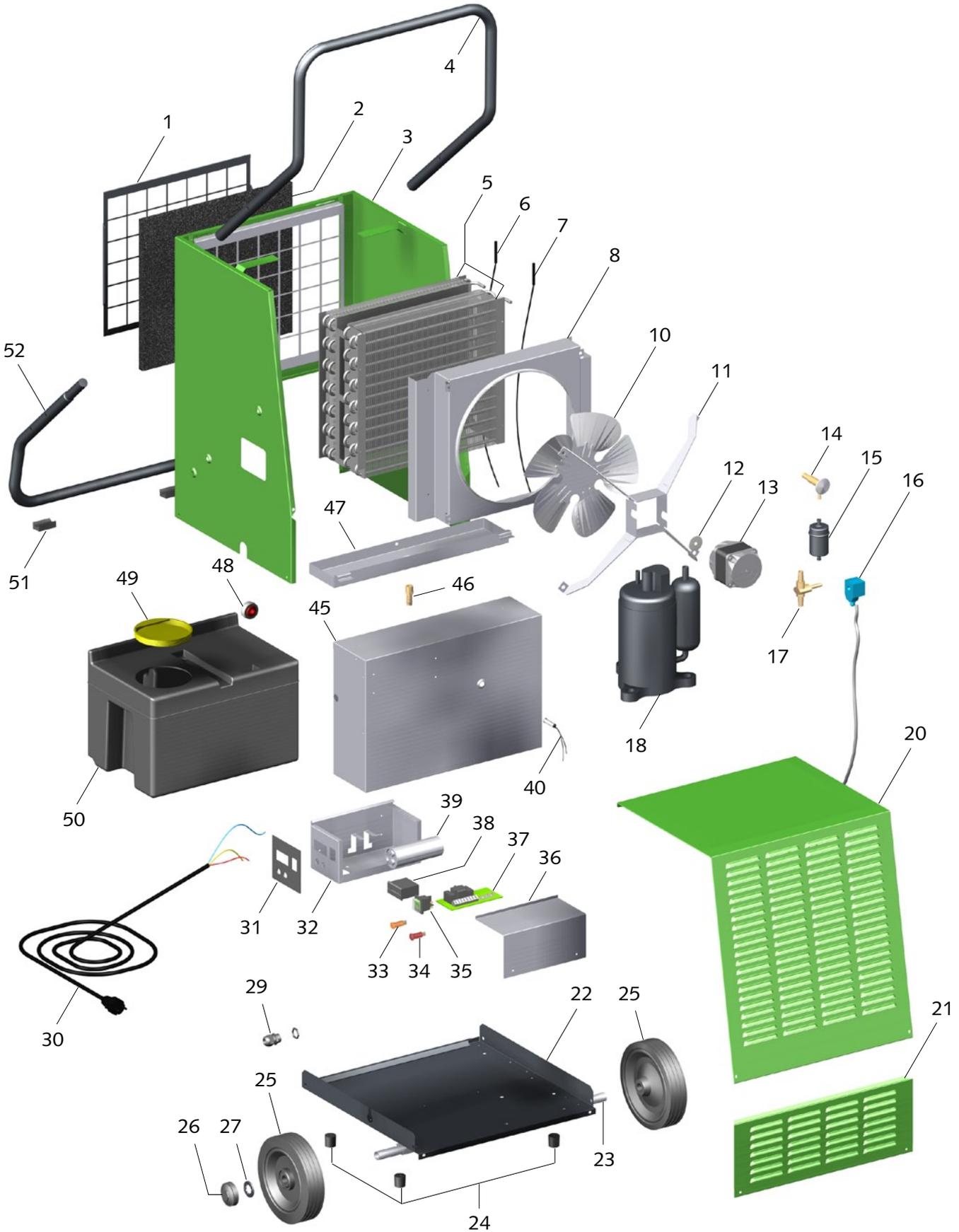
We reserve the right to make changes in dimensions and design in the interest of technical advances.

## Spare parts list

No.	Designation	EDP no.
1	Intake guard grille	1105601
2	Dustfilter	1105602
3	Transport handle	1105603
4	Basic housing complete	1105604
5	Finned exchange assembly, complete	1105605
6	NTC-thermistor, evaporator	1105606
7	NTC-thermistor condenser	1105607
8	Fan housing	1105608
10	Fan blade	1105609
11	Motor support, complete	1105610
12	Driving coupling	1108455
13	Fan motor	1108077
14	Solenoid valve	1105613
15	Coil for solenoid valve	1105614
16	Dry filter	1105615
17	Compressor, complete	1105623
18	Capacitor	1105674
20	Housing part inspection complete	1105618
21	End cover	1105619
22	Base plate	1105620
23	Wheelaxle	1105621
24	Rubber stopper supporting stand (set)	1105622
25	Wheel	1102155
26	Wheel cap	1101623
27	Circlip	1101622
29	Pull relief	1101267
30	Mains cable with plug	1105624
31	Insulation	1105625
32	Switch cabinet housing	1105626
33	Control pcb, complete	1105627
34	Pilot light, yellow	1105611
35	Pilot light, red	1105612
36	Operating hour counter	1105515
37	Operating switch with pilot light	1105628
38	Housing cover	1105629
39	Water stop sensor	1105630
40	Supporting frame	1105631
45	Container lock	1105632
46	Solenoid float switch	1105633
47	Sealing cap	1105634
48	Condensate container, complete	1105635
49	Rubber stopper Stand stirrup (set)	1105636
50	Stand stirrup	1105637

# REMKO AMT

## Exploded view AMT 55-E + 80-E



We reserve the right to make changes in dimensions and design in the interest of technical advances.

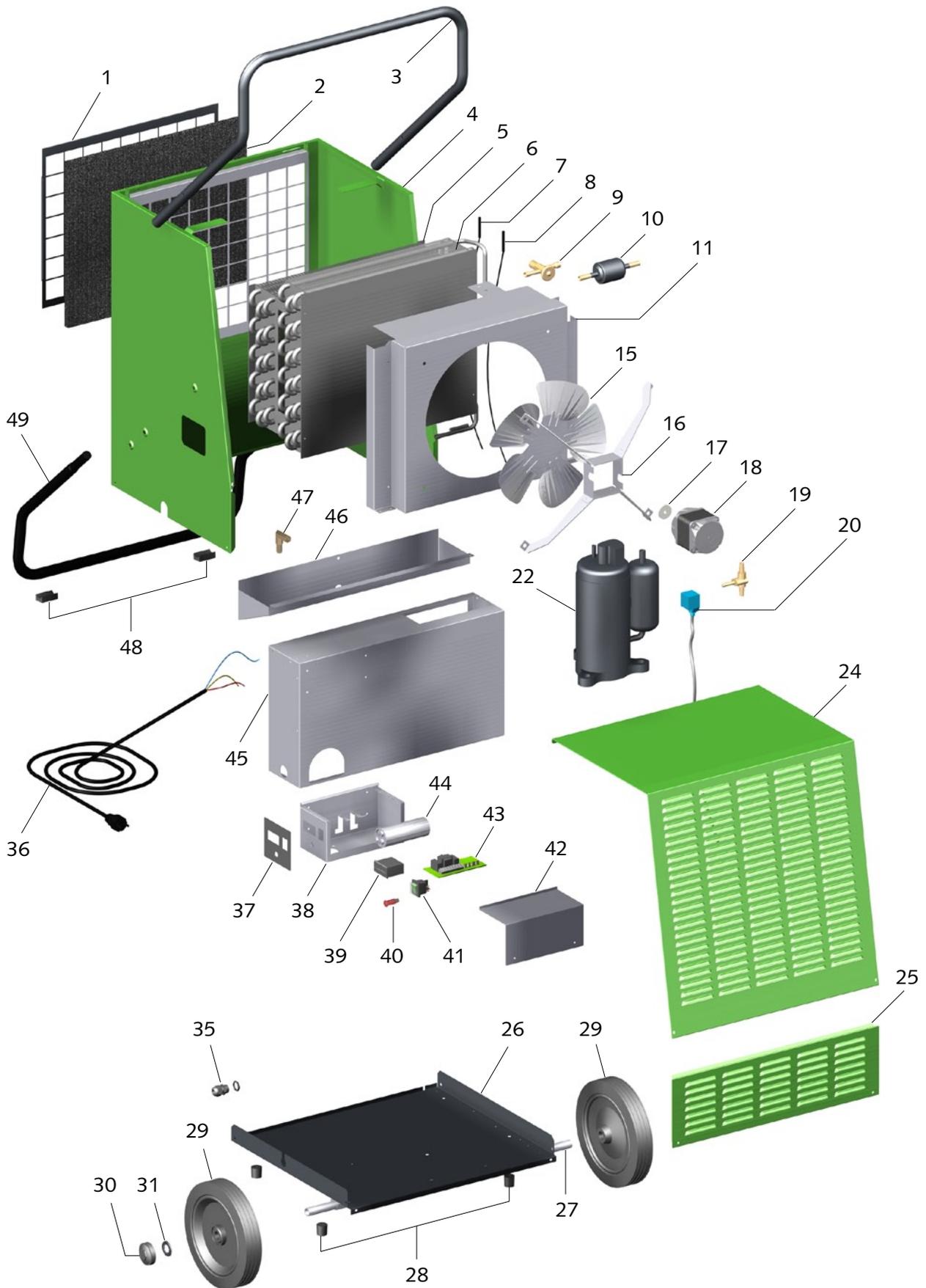
## Spare Parts List

No.	Designation	AMT 55-E	AMT 80-E
		EDP no.	EDP no.
1	Intake guard grille	1105638	1105659
2	Dustfilter	1105639	1105660
3	Basic housing complete	1105640	1105661
4	Transport handle	1105641	1105662
5	Finned exchange assembly, complete	1105642	1105663
6	NTC-thermistor, evaporator	1105606	1105606
7	NTC-thermistor condenser	1105607	1105607
8	Fan housing	1105650	1105664
10	Fan blade	1105609	1105665
11	Motor support, complete	1105600	1105666
12	Driving coupling	1108455	1101155
13	Fan motor	1108077	1105667
14	Thermo valve	1105643	1105668
15	Dry filter	1105644	1105644
16	Coil for solenoid valve	1105614	1105614
17	Solenoid valve	1105613	1105669
18	Compressor, complete	1105645	1105670
20	Housing part inspection complete	1105646	1105671
21	End cover	1105647	1105647
22	Base plate	1105648	1105672
23	Wheelaxle	1105649	1105673
24	Rubber stopper base plate (set)	1105622	1105622
25	Wheel	1102155	1102155
26	Wheel cap	1101623	1101623
27	Circlip	1101622	1101622
29	Pull relief	1101267	1101267
30	Mains cable with plug	1105624	1105624
31	Insulation	1105651	1105651
32	Switch cabinet housing	1105652	1105652
33	Pilot light, yellow	1105611	1105611
34	Pilot light, red	1105612	1105612
35	Operating switch with pilot light	1105628	1105628
36	Housing cover	1105653	1105653
37	Control pcb, complete	1105627	1105627
38	Operating hour counter	1105515	1105515
39	Capacitor	1105654	1105654
40	Water stop sensor	1105655	1105710
45	Supporting frame	1105656	1105681
46	Hose connection	1105567	1105567
47	Condensate trap	1105704	1105675
48	Solenoidfloat switch	1105633	1105633
49	Container lock	1105632	1105632
50	Condensate container, complete	1105657	1105657
51	Rubber stopper Stand stirrup (set)	1105636	1105636
52	Stand stirrup	1105658	1105676

When ordering spare parts, please indicate the reference number and the machine number (see model plate)!

# REMKO AMT

## Exploded view AMT 110-E



We reserve the right to make changes in dimensions and design in the interest of technical advances.

## Spare Parts List

No.	Designation	EDP no.
1	Intake guard grille	1105677
2	Dustfilter	1105678
3	Transport handle	1105679
4	Basic housing complete	1105680
5	Finned evaporator	1105681
6	Finned condensor	1105682
7	NTC-thermistor, evaporator	1105606
8	NTC-thermistor condenser	1105607
9	Thermo valve	1105683
10	Dry filter	1105684
11	Fan housing	1105685
15	Fan blade	1105686
16	Motor support, complete	1105687
17	Driving coupling	1101155
18	Fan motor	1105555
19	Solenoid valve	1105669
20	Coil for solenoid valve	1105614
22	Compressor, complete	1105688
24	Housing part inspection complete	1105689
25	End cover	1105690
26	Base plate	1105691
27	Wheelaxle	1105692
28	Rubber stopper base plate (set)	1105622
29	Wheel	1101621
30	Wheel cap	1101623
31	Circlip	1101622
35	Pull relief	1101267
36	Mains cable with plug	1105624
37	Insulation	1105693
38	Switch cabinet housing	1105694
39	Operating hour counter	1105515
40	Pilot light, red	1105612
41	Operating switch with pilot light	1105628
42	Housing cover	1105653
43	Control pcb, complete	1105627
44	Capacitor	1105695
45	Supporting frame	1105696
46	Condensate trap	1105697
47	Hose connection	1105698
48	Rubber stopper Stand stirrup (set)	1105636
49	Stand stirrup	1105699

When ordering spare parts, please indicate the reference number and the machine number (see model plate)!



## Maintenance log

Model ..... Model No. ....

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Clean unit – surface –																				
Clean unit – interior –																				
Clean fan blade																				
Clean fan housing																				
Clean condenser																				
Clean evaporator																				
Fan function checked																				
Intake grille with filter cleaned																				
Check unit for damage																				
Protective devices checked																				
All fixing screws checked																				
Electrical safety test																				
Test run																				

Remarks: .....

.....

.....

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

The unit must only be serviced by authorised specialists in compliance with the statutory requirements.

## Technical data

Series		AMT 40-E	AMT 55-E	AMT 80-E	AMT 110-E
Working area temperature	°C	3-32	3-32	3-32	3-32
Working area humidity	% relative humidity	40-100	40-100	40-100	40-100
Max. dehumidification output	l/day	38	55	80	107
at 30°C/80 r. h.	l/day (DER)	32,1 (2,38))	48,0 (2,27)	69,6 (2,69)	93,1 (2,38)
at 20 °C/70 r. h.	l/day (DER)	15,4 (1,46)	29,8 (1,94)	39,2 (1,99)	54,9 (1,88)
at 10 °C/60 r. h.	l/day (DER)	5,3 (0,61)	6,9 (0,58)	10,8 (0,68)	16,8 (0,71)
Max. air volume flow	m <sup>3</sup> /h	290	430	800	1200
Condensate tank capacity	litre	8/7	18/16	18/16	without
Compressor	Design	Rotating piston	Rotating piston	Rotating piston	Rotating piston
Refrigerant		R134a	R407c	R407c	R407c
Refrigerant quantity	kg	0,45	0,55	0,65	1,55
Voltage supply	V/Hz	230/1~/50			
Max. rated power consumption	A	2,8	4,0	4,9	7,2
Max. power consumption	kW	0,58	0,90	1,10	1,70
at 20 °C / 70 % r. h.	kW	0,44	0,64	0,82	1,22
Fuse protection (on site)	A	16	16	16	16
Noise pressure level L <sub>pA</sub> 1m <sup>1)</sup>	dB(A)	58	60	63	67
Depth	mm	490	530	535	605
Width	mm	480	605	605	710
Height	mm	640	705	790	895
Height incl. transport handle	mm	935			
Weight	kg	34	43	47	65
EDP no.		612400	612550	612800	612900

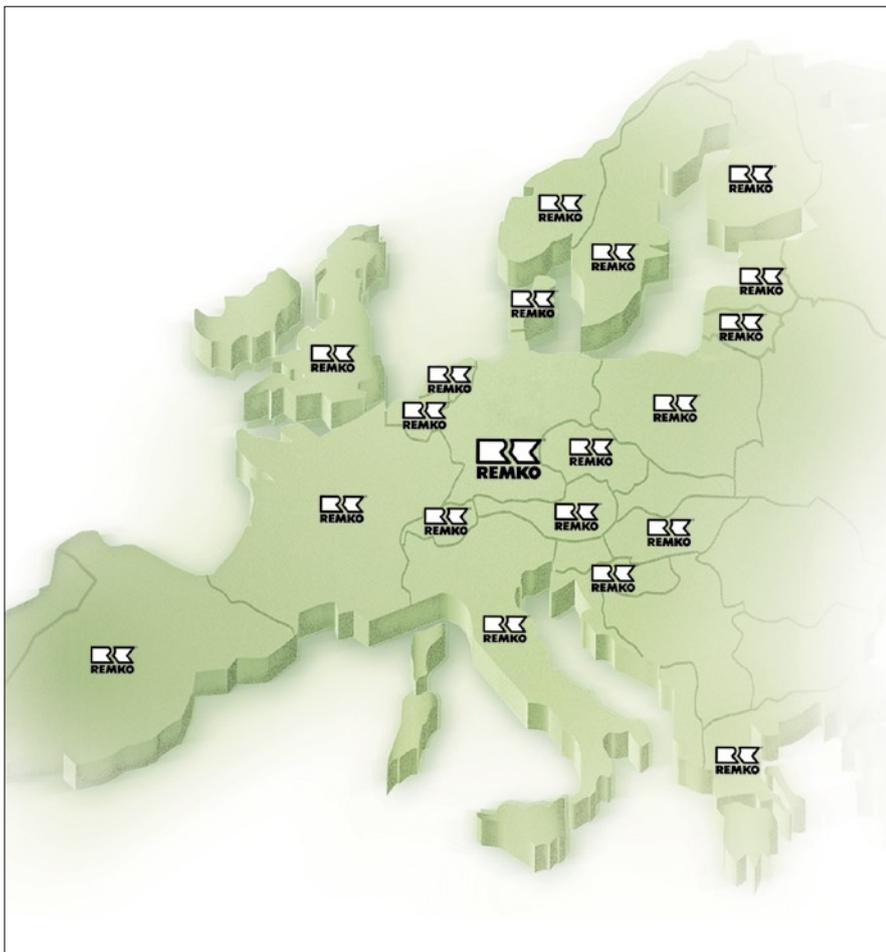
(DER) = dehumidification performance coefficient according to DIN EN 810

1) Noise measurement DIN 45635 - 13 - Category 3

# REMKO EUROPE-WIDE

*... and somewhere near you!*

*Take advantage of our experience and consulting services*



## **Consulting**

With intensive training seminars, we keep our consultants up to date with the latest technical knowledge. This has given us the reputation of being more than just a good, reliable supplier: REMKO, a partner that helps solve problems.

## **Sales**

REMKO not only provides an extensive sales network in Germany and abroad, but also unusually highly qualified sales experts.

REMKO sales representatives are more than just salespeople: they must also be customer consultants in air conditioning and heating technology.

## **Customer Service**

Our products are designed for precise and reliable operation. If a malfunction appears, however, REMKO Customer Care is on the job. Our extensive network of experienced specialist retailers guarantees our customers a fast and reliable service at all times.

**REMKO GmbH & Co. KG**  
**Air Conditioning and Heating Technology**

Im Seelenkamp 12 · 32791 Lage, Germany  
Post office box 1827 · D-32777 Lage  
Phone +49 5232 606-0  
Fax +49 5232 606-260  
E-mail [info@remko.de](mailto:info@remko.de)  
URL [www.remko.de](http://www.remko.de)

