Dehumidifier-D 950

- installation and user manual

version 13

Contents

1.Device description

1.1.General information

Dehumidifiers are designed for use in indoor swimming pools, restaurants, hair salons, laundries, telecommunications centers, kitchens and other enclosed spaces where problems with increased air humidity arise.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

1.2.Technical data :

Dehumidification	:	77 liters/day
Maximum filtered air volume Air	:	680 m^3/h
intake	:	in advance
Air displacement	:	over the hill
Condensate hose connection	:	external⌀15 mm
		internal⌀11 mm
Air filter area	:	1,440 cm^2
Electrical power supply	:	230V / 50Hz
Electrical power consumption	:	1,250W
Humidity controller	:	built-in / external
IP	:	24
Operating air temperature	:	10 - 35 °C
Dimensions w x h x d	:	660 x 750 x 345 mm
Weight	:	39 kg

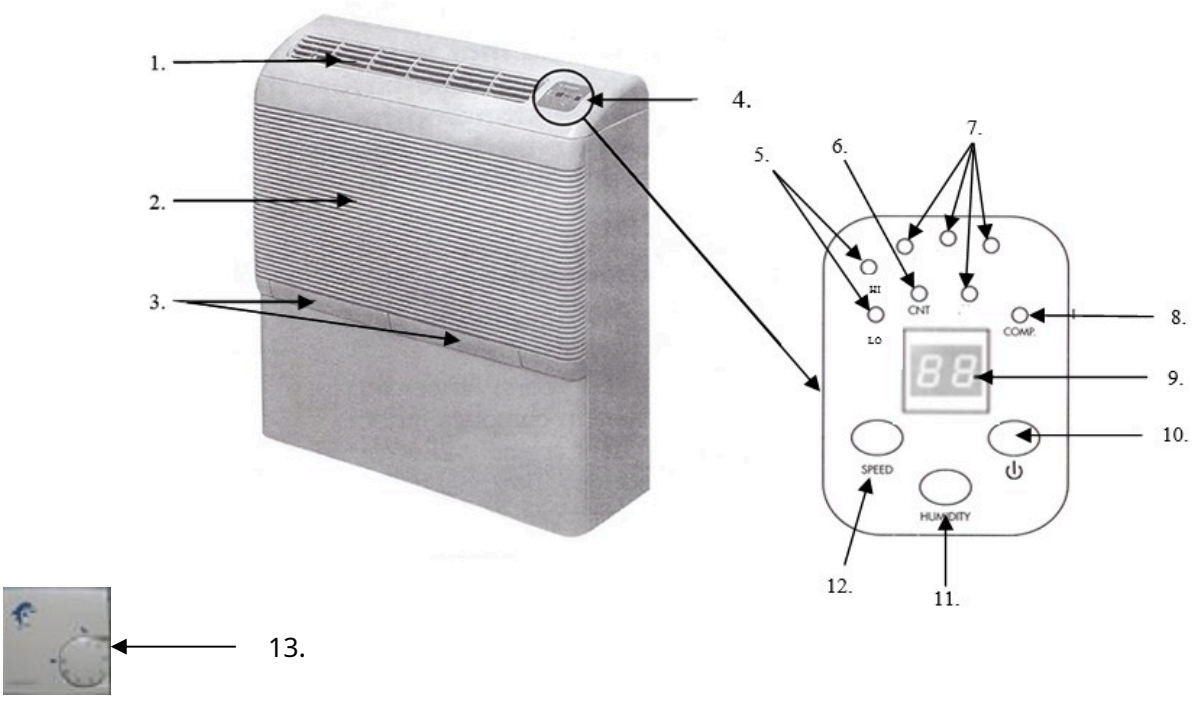
2.Use and operation

2.1.Use

The D 950 dehumidifier is designed for indoor swimming pools and other closed indoor rooms with increased humidity, where there is no air conditioning. It removes air humidity and thus prevents condensation of water vapor on windows, ceilings, doors and walls.

To reduce the humidity in a given space, a suitably sized dehumidifier must be used. Using an insufficiently powerful dehumidifier may damage it. The dehumidifier is not intended for operation in an environment with increased dust. Excessive concentration of disinfectants in the water or insufficient air exchange in the pool hall may cause corrosion on the device. The dehumidifier must be transported or carried in a vertical position. Under no circumstances should you tilt or overturn the machine, as this would damage it.

Picture No. 1 -*description of the dehumidifier and control panel*



1. Air displacement
2. Air intake
3. Dust filters
4. Control panel
5.Low/high fan speed indication
6. Continuous operation indication
7. Set desired humidity level
8. Compressor operation indication
9.*Display of measured humidity*
10. Power switch
11. Humidity controller – setting the desired humidity
12. Fan speed switch
13. External humidistat

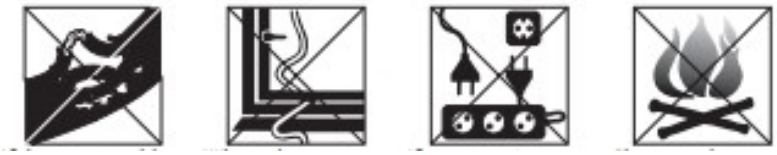
2.2. Location and assembly

Place the dehumidifier on a horizontal surface or on a wall (in case of wall mounting, it is necessary to use screws corresponding to the weight of the device) and connect it to a 230 V / 50 Hz power supply. Make the electrical connection according to ČSN. We recommend using a residual current device with a tripping fault current In 30 mA and a 10 A circuit breaker (with motor characteristic).

It must be installed in indoor, temperature-controlled areas that are not at risk of frost. Never place the device in a place where direct sunlight hits. Prevent children from climbing on the unit. No chemicals should be stored near the device (e.g. for pool maintenance). In case of placing the dehumidifier in a swimming pool hall, it is necessary to place the device in zone 2 (min. 2 m horizontally from the edge of the water surface and 2.5 m vertically from the surface)
- according to ČSN 33 2000-7-702 ed.3.

DO NOT use extension cords or adapters..

Important notes:



1. Never use the device if the cable is damaged.
2. Avoid damaging the cable.
3. Do not use extension cords.
4. Avoid using any heat source and open flames near the device.

5. Do not leave children unattended, prevent their access to the device.
6. Avoid spilling liquids on the device.
7. Do not store any chemicals in the room with the D950.
8. Prevent foreign objects from entering the device.

Refrigerant R 290 is a flammable natural gas. It may only be handled by trained personnel. Improper handling may result in health hazards and property damage.**Equipment with this refrigerant can be placed in a space of at least 15m2.2, never to a smaller one!!**

Place the dehumidifier against the wall of the room so that the stream of dry, dehumidified air flows directly onto the windows, where water condensation most often occurs. It is necessary that the dehumidified air is not directed above the pool surface, as this would significantly increase the evaporation of water from the pool surface. The dehumidifier is equipped with a hygrostat, which is located at the top of the device (or an external one at an additional cost).

Drain the condensed water into the sewer.

Do not place any objects in front of or on the air inlet and outlet grilles to prevent them from being blocked. Never place any objects on or cover the appliance.

Do not use the device at temperatures below 10 °C!

2.3. Preparation for commissioning and start-up

The dehumidifier has a button located on the control panel *SPEED* (*see Fig. 1/12.*), which allows you to select the air flow speed (two speeds can be selected).

Another control element is the humidity regulator – hygrostat. Humidity regulator ensures that the compressor is switched on or off and thus maintains a constant air humidity. The hygrostat is set using the button *HUMIDITY* (*see Fig. 1/11*) by turning it again you select the desired humidity level of 40 - 70%. The selected humidity value is indicated by the corresponding indicator light in the upper part of the control panel (*see Fig. 1/7*)

This way you set your desired humidity level and the dehumidifier will automatically turn on and off to maintain this level. In some cases it may take several days for the humidity to drop to the desired level.

The desired humidity level and fan speed can also be set using an external hygrostat (Fig. 1/13) - *for an additional fee* . If you have an external hygrostat installed, you can regulate the humidity by turning the knob (13). In this control mode, the maximum dehumidification capacity (CNT) must be set on the control panel (4).

The air temperature must be 2-3°C higher than the water temperature. If the air temperature is the same or lower than the water temperature, the evaporation of water from the pool surface will be significantly higher, which must be taken into account when designing the dehumidification device. However, in this case, the purchase and operating costs of the dehumidification device are much higher.

2.4. Operation

Air in every state contains moisture in the form of vapor. This is called humidity. The amount of moisture that air can contain depends on temperature, i.e. the warmer the air, the more moisture it can contain.

When warm air containing steam comes into contact with a cold surface and cools to the dew point, it is no longer able to hold the original amount of steam. As a result, the steam condenses in the form of droplets on the cooled surface.

The compressor, which is part of the dehumidifier's cooling system, keeps the surface of the cooler cool. The circulation fan draws in moist air from the room and first flows it over the cooling elements, where the humidity is reduced by condensation. The dehumidified air is then blown into the condenser, where the air is further dried by heating. Finally, the dried air is discharged back into the room.

The dehumidifier is equipped with automatic defrosting of the radiator. During the defrosting cycle, the fan draws in air, but the compressor is automatically switched off. This system automatically removes the ice that forms on the radiator coil.

Condensed water is continuously drained using a flexible hose connected to the outlet of the dehumidifier's collection tray.

It is necessary to make sure that the hose has a constant slope and its end flows freely into the waste pipe. **Under no circumstances should the end of the hose be immersed in water.**

Once a month (more often in dusty environments) check the condensate drain for patency and at the same time check the cleanliness of the dust filters.

2.5.Decommissioning

To shut down the dehumidifier, turn it off using the switch on the control panel (*see Fig. 1/10*).If the dehumidifier is to be left unused for a long period of time, disconnect it from the power supply and clean the filters.

2.6.Maintenance

2.6.1.Cleaning dust filters

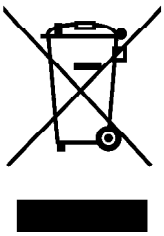
In order for the dehumidifier to work properly, it is necessary to clean the dust filters regularly (depending on the dustiness of the environment). This activity must be carried out by everyone themselves. Carefully pull the filters located on the front of the device under the grille downwards. Clean them of dust or deposits under a stream of water and, after thorough drying, put them back under the grille. The device must always have the filters in place when it is running.

WARNING: The dust filters must be cleaned at least once a month, more often in case of heavy dust. Failure to do so may result in damage to the device.

2.7 Environmental warnings

Information regarding the correct disposal of electrical and electronic appliances. At the end of its useful life, the product must not be disposed of with normal household waste.

You can return it free of charge to specialized collection points. For more information, please contact your dealer or visitwww.elektrowin.cz.
Separate disposal of electrical appliances means preventing negative impacts on the environment and health caused by inappropriate disposal. This disposal allows for the recycling of individual materials and thus significant savings in energy and raw materials. To emphasize the obligation to cooperate in separate collection, the product bears a graphic symbol indicating the recommendation not to use traditional containers for its disposal.



3.Possible malfunctions, their causes and methods of elimination

disorder	**cause or method of removal**
The device does not work	- failure in the electrical supply before entering the device: - check the electrical supply before entering the device, - if the voltage supplied to the device is OK, contact the supplying organization,
	- hygrostat switched off (e.g. during shutdown):

- check if the hygrostat is turned on,
- otherwise, set the hygrostat to the desired value, if the fault persists, contact the supplying organization,

- air cannot pass through the grille:
- check whether the dust filter is clogged,
- check that the dehumidifier is not too close to an obstacle that would prevent the air from passing through the inlet or outlet grille,
- place the dehumidifier further away from the wall or remove the cause preventing air flow,

If the fault persists, contact the supplying organization.

- The device makes noise:
- make sure the device is standing or hanging horizontally,
- when installing on a wall, make sure the dehumidifier is equipped with rubber pads
- otherwise, ensure that the dehumidifier is placed on a solid, horizontal surface; if the fault persists, contact the supplying organization.

- If water is leaking from the device:
- check if the condenser water drain hose is laid with a slope and is not broken,
- check if the condenser water drain hose is correctly fitted to the nozzle,
- check that the dehumidifier outlet is not clogged (with dust, etc.) or that the hose is not submerged in water,

If the fault persists, contact the supplying organization.

4.Guarantee

4.1.Warranty conditions

If the method of use specified in this documentation is followed, we guarantee that the product will have the properties specified in the relevant technical standards and technical data in Chapter 1 of this documentation throughout the warranty period, for a period of 24 months from the date of acceptance by the customer. The customer acknowledges that consumable materials, i.e. e.g.tFuses, dust filters, starting capacitors, etc. may have a standard life declared by the manufacturer, which is shorter than the warranty period provided. Regular inspection and possible replacement of parts whose life is shorter than 24 months will be carried out for a fee.

If a defect occurs during the warranty period that was not caused by the user or an unavoidable event (e.g. a natural disaster) and if it is not a defect in a component with a shorter lifespan than the stated warranty period, the device will be repaired free of charge provided that:

- no more than 24 months have passed from the time of receipt to the time of the complaint,

- the device has been properly maintained according to these instructions,

- the conditions specified in this documentation were observed during operation,

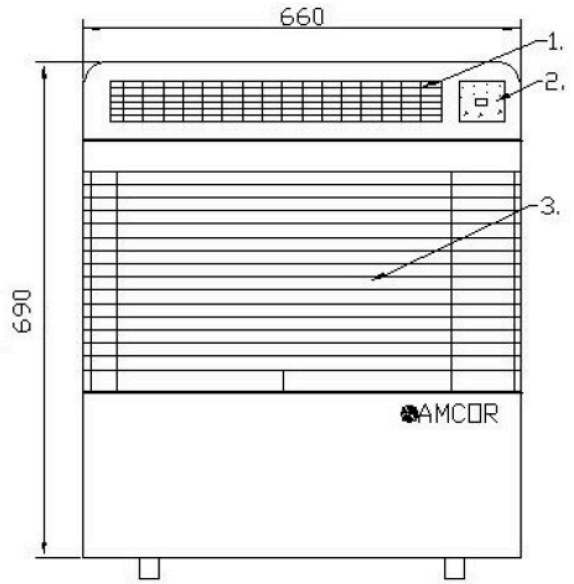
- the device has not been subjected to violent mechanical damage,

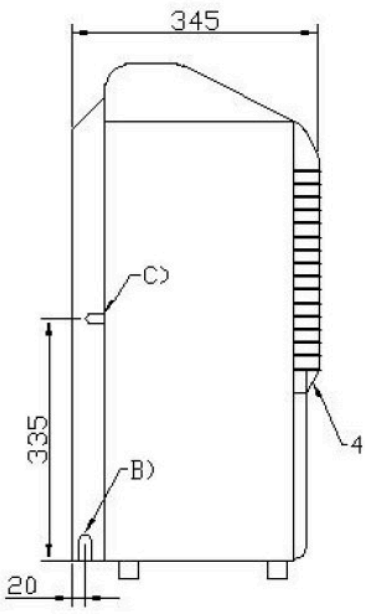
- the device was not placed in an environment with increased dust,

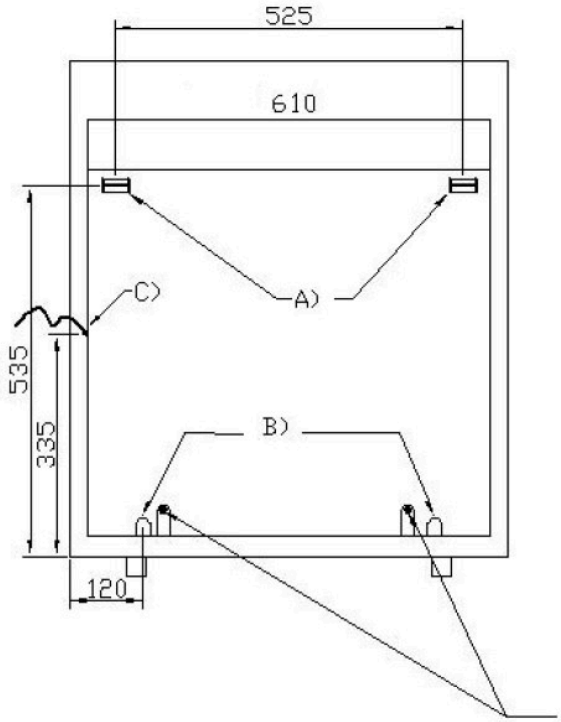
- the device was properly dimensioned for the given space and the specifications for determining the type of dehumidifier were met,

- no modifications, repairs or unauthorized manipulation have been made to the product.

5. D 950 device diagram







1. Výtlak suchého ohřátého vzduchu (Pohyblivá mřížka, možnost nastavení směru proudění vzduchu.)
2. Ovládací panel
3. Nasávání vlhkého vzduchu
4. Výsuvné prachové filtry

A) Otvory pro kotvící prvek na stěnu
B) Odvod kondenzátu
C) Otvor pro napájecí kabel

V případě instalace na stěnu nutno osadit gumový mezikus zabraňující dotyku odvlhčovače se stěnou.