

	WMD 30	WMD 50	WMD 80
Power supply voltage	230V, 50Hz	230V, 50Hz	230V, 50Hz
Current absorption	1,5 (A)	3,9 (A)	5,1 (A)
Protection		10 A/T	
Power absorption	310 W	720 W	1150 W
Protection rating		IP 20	
Dimensions W×H×D	560×323×416 mm	560×400×416 mm	560×504×518 mm
Dry weight	20,2 kg	28,2 kg	41,8 kg
Working temperature	+10°C / +30°C	+10°C / +30°C	+10°C / +30°C
Air flow	250 m³/h	600 m³/h	900 m³/h
Refrigerant, CFC-free	115g (R290)	450g (R1234yf)	1000g (R1234yf)
Max pressure	1.89 Mpa	1,6 MPa	1,6 MPa
Indicative handling volume	300 m³	850 m³	1200 m³
Condensate collection tank capacity	-	-	-
Condensate capacity at 20°C / 60%r.H.	10,3 l/24	19,8 l/24h	29 l/24h
Noise level at 1 metre distance	54 dBa	56 dBa	55 dBa

Tab.A – Main data

## Symbols



This symbol indicates that the appliance has been loaded with flammable refrigerant gas.



Read this manual carefully.



Operator's manual, instructions for operation and routine maintenance.



ATTENTION: this warning indicates a possible dangerous condition or highlights situations that, if not handled properly, could result in property damage or personal injury. Carefully follow the description.



Important note: notes will highlight conditions and features that can make using the unit easier and better.



DANGER, live electrical parts.

Tab.B – Symbols

## General safety rules



**Preserve and carefully read this manual as all warnings provide important safety information on installation, use and maintenance.**



**This appliance contains flammable pressurized refrigerant: any maintenance concerning the refrigerant circuit must be carried out by technical personnel who have a valid certificate issued by an accredited organization, which certifies their competence to operate safely with this type of refrigerants.**

- The refrigerant fluid is odourless: if you suspect that there is a refrigerant gas leak, properly ventilate the room before doing anything else.
- The appliance must be placed in a room where there are NO sources of ignition continuously operating (for example: open flames, electric or gas heaters).
- This dehumidifier SHOULD not operate in rooms where a danger of explosion exists.
- This dehumidifier is NOT intended for people, including children, with limited physical, sensory or mental capabilities or without enough experience and knowledge, unless they have been instructed on its proper use by a person responsible for their safety. Keep it away from children and animals.
- Do NOT use this dehumidifier in environments with air containing oil, sulphur or chlorine.
- Always keep the inlet and outlet air grids free.
- Do NOT put any tool inside the unit.
- Do not puncture or burn.



***This appliance must be connected to a grounded electrical system. Make sure that the power supply voltage corresponds to that indicated in Tab.A, that the electrical system complies with current regulations and is adequately protected.***

- In the event of damages the cable must be replaced with a similar one only by experienced and qualified staff.
- Installation and maintenance must be performed by qualified and experienced staff, able to work according to the instructions described in this manual.

## Correct use

The appliances of the WMD series are air dehumidifiers that **remove the humidity from the environment using a refrigerating circuit**: the new electronic control manages all of the dehumidifier's functions, including automatic start and stop and defrosting cycle if necessary. These dehumidifiers were designed for a domestic and not industrial use.

## Reasonably foreseeable misuse



***Do not use this appliance in ways other than the one described in this manual: any other use is considered potentially dangerous both for the machine and for people.***

## Main components

### ***The bracket for wall mounting***

The dehumidifier, in order to function properly it must be installed on the wall using the bracket supplied as standard.

### ***The control panel***

The dehumidifier has a control panel, on the front side, which allows you to set the operating mode that best suits your needs. Once set, the operation is fully automatic.

### ***The air filter***

The air filter is located on the right side of the dehumidifier and can be easily disassembled for cleaning.



***Do not run the dehumidifier without the air filter to avoid accumulating dust on the heat exchanger.***

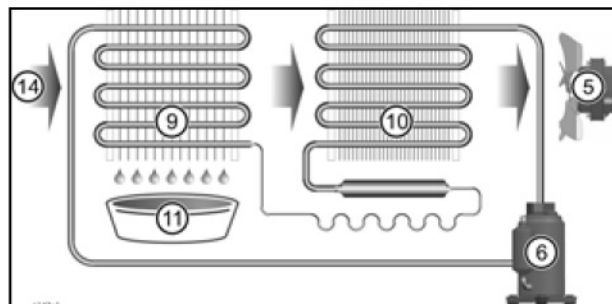
### ***The condensate drain***

The connection of the condensate drain pipe is located on the lower right side of the dehumidifier.



***Do not operate the dehumidifier without first installing the condensate drain pipe. This dehumidifier is NOT equipped with tank and the water is directly discharged.***

## Operating principle



Pic.1 - Main components

The appliance uses a fan (5) to suck up the air (14) to be dehumidified and pass it through the refrigerant circuit evaporator (9). In this way the temperature of the air is lowered to below its dew point and the vapour condenses to form drops of water that are collected in the appropriate tank (11).



***The condensate water is NOT drinkable. Do NOT drink this water anyway.***

The air thus dehumidified is passed through the condenser (10) that raises its temperature slightly higher than the initial value. In this way the quantity of humidity contained in the environmental air is gradually decreased until it reaches the desired value.



***When the dehumidifier works in a room it reduces the humidity of the walls and floor of the room, as well as in the materials contained therein.***

### ***The defrosting cycle***

If the temperature goes below 16°C ice may form on the evaporator (9). The ice must be regularly melted to prevent it from reducing the air passage. The electronic board automatically performs the defrosting cycle (see ahead). During the defrosting cycle the compressor (6) stops. The time it takes to melt the ice changes with the humidity and temperature.



***Do not use any external tool to speed up the defrost process: wait for the defrost to be completed by the dehumidifier control.***

## Installation

For correct installation, follow the series of operations described below.



**The appliance must be placed in a room where there are NO sources of ignition continuously operating (for example: open flames, electric or gas heaters).**

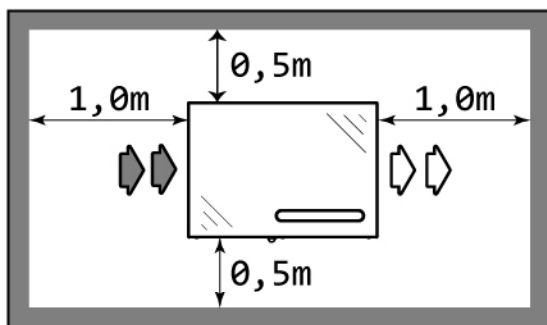
### Handling

Before installation it is advisable to bring the packed dehumidifier as close as possible to the place where it will be mounted.



**CAUTION: The size and the weight of the machine require the aid of means such as pallet trucks and trolleys for handling. NEVER lift the machine alone.**

### Placement



Pic.2 - Positioning and minimum distances



**Respect the minimum distances (Pic.2) and be sure the inlet and outlet grids are never obstructed.**

### Wall installation

- Use the bracket as a template to mark the holes on the wall as shown in Pic.3.

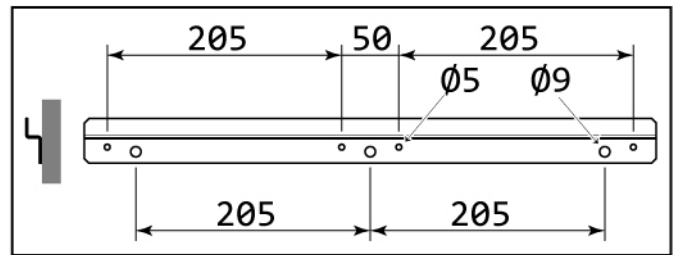


**Make sure that the wall is able to support the device in operating conditions.**

- Drill on the wall n.3 holes Ø10mm, 65mm deep as shown in Pic.3. Alternatively, you can apply smaller screws (not supplied) using the four Ø5 holes.
- Clean the inside of the holes.
- Insert the three supplied expansion plugs holding in vertical position the expansion tabs.
- Secure the bracket using the three screws supplied.

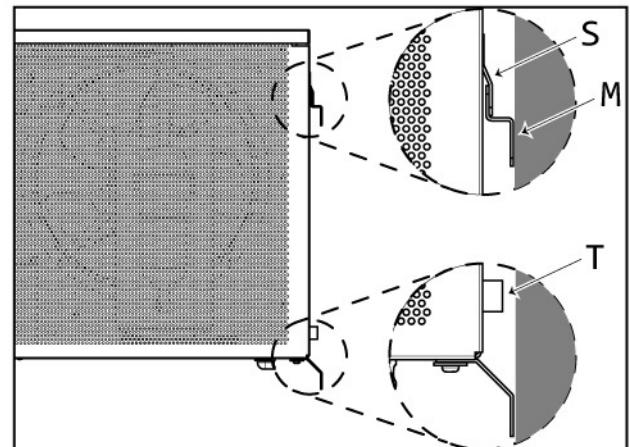


**To respect the minimum distance of 0,5 meters from the bottom (Pic.2) drill the holes to at least 0.8 meters from the floor.**



Pic.3 - The wall bracket

- Lift the machine and hook the rear bracket S to M bracket mounted on the wall.

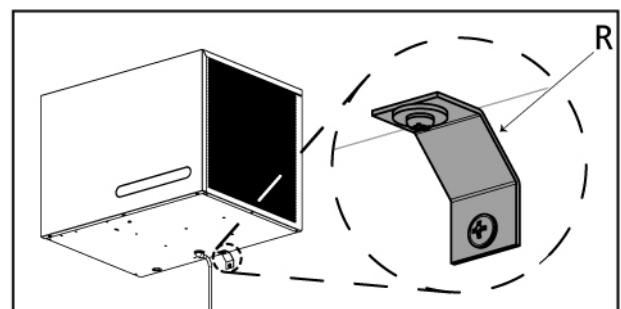


Pic.4 - Placement of the dehumidifier on the wall.

- Rotate the two legs T, which are located on the rear-bottom side of the frame, to make vertical the position of the dehumidifier.
- Make sure the dehumidifier fits completely on the rear bracket M.

### Safety locking

Install the safety bracket R in the bottom side of the dehumidifier. The bracket must be fixed to the wall and the structure of the dehumidifier with the screws.



Pic.5 - The safety bracket



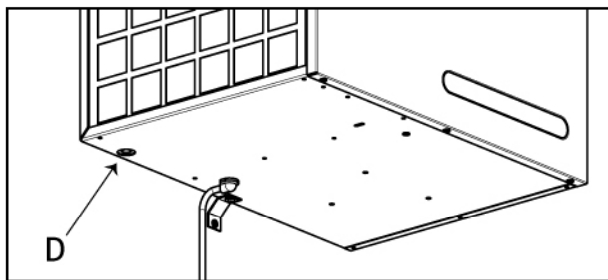
**Do not operate the dehumidifier without the safety bracket. The safety bracket must be firmly screwed to the dehumidifier and the wall.**



**The absence of the safety bracket may cause an accidental fall of the machine and cause damage, even serious, to persons and property.**

### The exhaust pipe

For the drain connect a 14mm internal diameter rubber hose to the connection D on the lower-left side of the frame.

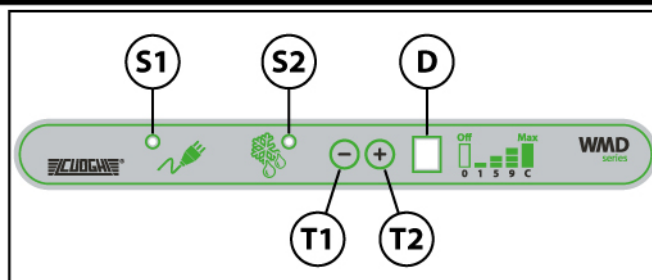


Pic.6 - The water drain



**To ensure proper drainage of water make sure that the drain hose is sloped and well laid out, with no elbows or narrowing of any kind.**

### The control panel



Pic.7 - The control panel

**S1 - Green light ON** The green light indicates when the dehumidifier is operative, otherwise it blinks on status 0 (powered but off).

**S2 - Red light, full tank** The light blinks, together with the green one S1, when the tank is full, missing or incorrectly positioned.

**S3 - Yellow light, defrost** The light switches on during the automatic defrosting cycle.

**T1 - Decrease button** Pushing this button will decrease the value of the display D down to 0.

**T2 - Increase button** Pushing this button will increase the value of the display D up to C.

**D - Display** The display shows the working state of the dehumidifier according to the table below (Tab.C). The value 0 means OFF, from 1 to 9 means automatic functioning and is controlled by the humidistat that switches the dehumidifier on or off if the value of the relative humidity is higher or lower than the one shown in Tab.C. The value C means ALWAYS ON and the dehumidifier works independently from the humidity value: nevertheless, any alarm has priority over the functioning mode.

Display	Functioning
0	Off
1 ÷ 2	from about 85% to 90% R.H.
3 ÷ 4	from about 70% to 80% U.R.
5 ÷ 6	from about 60% to 65% R.H.
7 ÷ 8	from about 45% to 55% R.H.
9	about to 40% R.H.
C	Continuous

Tab.C - Functioning modes

### Failures

The display is used by the electronic device to show particular situations (Tab.D) If an error message is displayed please contact your dealer for repair.

Display	Description
n	Temperature probe must be checked
u	Humidity probe must be checked

Tab.D - Error messages

## How to use

### Start-up

When the plug is connected the display D blinks for 5 seconds and shows the last functioning mode selected: then, if the functioning mode is different to zero, the display stops blinking.

### Shutdown

To switch off the dehumidifier push button T1 until the value displayed is 0. When zero is selected both the green light S1 and the display D blink.

### The defrosting cycle

The electronic board automatically performs the defrosting cycle to melt the ice and keep the air flow efficient even at lower temperatures. The yellow light S3 switches on when the defrosting cycle is started.

## Maintenance

### Ordinary maintenance

The dehumidifiers of the WMD series need no particular maintenance. It is advisable to dust them and keep the air intake and outlet grids clean.

### How to clean the filter

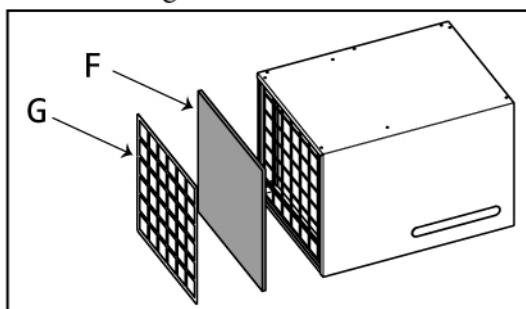
The filter can be cleaned with a vacuum cleaner or with water: in this case dry it before assembly.



**Keep the air filter clean, especially in dusty rooms: a dirty filter reduces the air flow and efficiency of the dehumidifier.**

### How to remove the air filter

Remove the front grid G, then remove the air filter F.



Pic.8 - The air filter.

### How to put the air filter on

Place the air filter F on the inlet grid, then mount the front grid G.

### Extraordinary maintenance

Contact your dealer if it should function badly or break down.



**This appliance contains flammable pressurized refrigerant: any maintenance concerning the refrigerant circuit must be carried out by technical personnel who have a valid certificate issued by an accredited organization, which certifies their competence to operate safely with this type of refrigerants.**

The refrigerant fluid is odourless: if you suspect that there is a refrigerant gas leak, properly ventilate the room before doing anything else.



**Maintenance on the electrical or mechanical parts must be carried out considering the flammable refrigerant fluid. Before intervening, make sure you have eliminated all possible ignition sources, check that the capacitors are discharged, that there are no live parts, that the appliance is properly connected to earth.**

## Storage

- Keep the appliance in a room with a temperature between  $-25^{\circ}\text{C}$  and  $+55^{\circ}\text{C}$ .
- When the appliance is still packed follow the instructions on the box.
- Do not place other heavy material on the box.

## Checks to carry out before and after a long period of inactivity

### Before

- Disconnect the plug.
- Cover the machine to protect it from dust.

### After

- The fan must turn freely without gripping;
- Start the machine following this manual's instructions.

## Disposal of the product

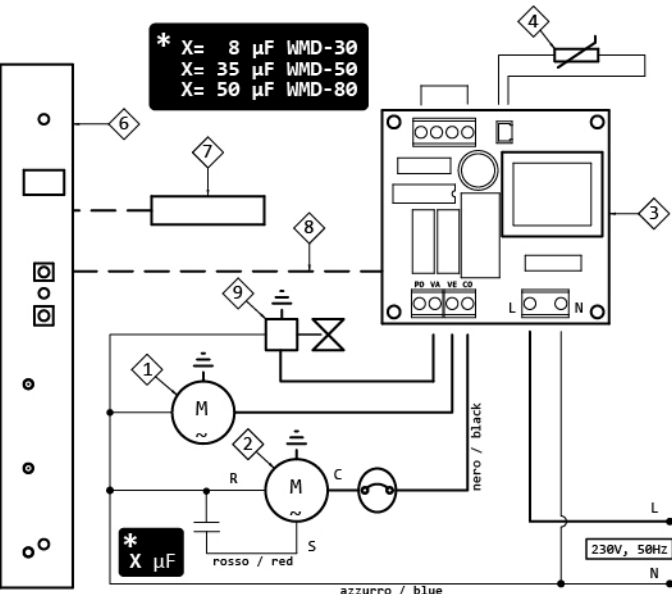
The crossed-out wheellie bin symbol indicates that the product must be collected separately from other waste at the end of its useful life.



The user must therefore take the appliance at the end of its useful life to a special centre for electrical and electronic waste collection or hand it back to the retailer upon purchase of a new product of an equivalent type, on a one-for-one basis.

Proper segregated waste collection of old appliances for subsequent recycling, treatment and environmentally compatible disposal helps avoid possible negative effects on the environment and health and favours recycling of the materials the product is made of.

# Wiring diagram



Pic.9 - Wiring diagram

Ref.	Description
1	Fan
2	Compressor
3	Electronic power board
4	Temperature probe
6	Electronic control board
7	Humidistat
8	10 poles cable with plugs
9	Solenoid valve

Tab.E - Wiring diagrams references