ZODIAC®

DT 850 E

Instructions for installation and use - English
Dehumidifier
Translation of the original instructions in French

EN

More documents on:
www.zodiac.com

H0369900_REVC - 2021/01

⚠ WARNINGS

Carefully read the instructions in this manual before using the unit.

- Before handling the appliance, it is vital that you read this installation and user manual, as well as the "Warranties" booklet delivered with the appliance. Failure to do so may result in material damage or serious or fatal injury and will void the warranty.
- Keep and pass on these documents for reference during the appliance's service life.
- The distribution or modification of this document in any way is prohibited, without prior authorisation from the manufacturer.
- The manufacturer is constantly developing its products to improve their quality. The information contained herein may therefore be modified without notice.

GENERAL WARNINGS

- Failure to respect the warnings may cause serious damage to the pool equipment or cause serious injury, even death.
- Only a person qualified in the technical fields concerned (electricity, hydraulics or refrigeration) is authorised to carry out maintenance or repair work on the appliance. The qualified technician working on the appliance must use/wear personal protective equipment (such as safety goggles and protective gloves, etc.) in order to reduce the risk of injury occurring when working on the appliance.

- Before handling the appliance, check that it is switched off and isolated.
- The appliance is intended to be used for pools and spas for a specific purpose; it must not be used for any purpose other than that for which it was designed.
- This appliance is not intended for use by individuals (including children) with impaired physical, sensorial or mental abilities, or persons lacking in knowledge and experience, unless they receive supervision or prior instructions on using the appliance from a person responsible for their safety. Children must be supervised to ensure that they do not play with the appliance.
- This appliance can be used by children over 8 and adults with impaired physical, sensory or mental capabilities, or who lack experience and knowledge, if they are correctly supervised or have been instructed in how to use the appliance safely and understand the hazards involved. This appliance should not be cleaned or maintained by children without supervision.
- The appliance must be installed according to the manufacturer’s instructions and in compliance with local and national standards. The installer is responsible for installing the appliance and for compliance with national installation regulations. Under no circumstances may the manufacturer be held liable in the event of failure to comply with applicable local installation standards.
- For any work other than the simple user maintenance described in this manual, the product should be referred to a qualified professional.
- If the appliance suffers a malfunction, do not try to repair it yourself; instead contact a qualified technician.
- Deactivating, eliminating or by-passing any of the safety mechanisms integrated into the appliance shall automatically void the warranty, in addition to the use of spare parts manufactured by unauthorised third-party manufacturers.
- Do not spray insecticide or any other chemical (inflammable or non-inflammable) in the direction of the appliance, as this may damage the body and cause a fire.
- Do not touch the fan or moving parts or insert objects or your fingers into the appliances' grids or near moving parts when the appliance is in operation. Moving parts can cause serious injury or even death.

WARNINGS ASSOCIATED WITH ELECTRICAL APPLIANCES

- The power supply to the appliance must be protected by a dedicated 30 mA Residual Current Device (RCD), complying with the standards and regulations in force in the country in which it is installed.
- Do not use any extension lead when connecting the appliance; connect the appliance directly to a suitable power supply.
- Before carrying out any operations, check that:
  - The required input voltage indicated on the appliance information plate corresponds to the mains voltage;
  - The mains supply is compatible with the appliance's electricity needs and is correctly grounded.
- In the event of abnormal operation or the release of odours from the appliance, turn it off immediately, unplug it from its power supply and contact a professional.
- Before servicing or performing maintenance on the appliance, check that it is powered off and completely disconnected from the power supply. Moreover, check that the heating priority (where applicable) is deactivated and that any other device or accessory connected to the appliance is also disconnected from the power supply.
- Do not disconnect and reconnect the appliance to the power supply when in operation.
- Do not pull on the power cord to disconnect it from the power supply.
- If the power cord is damaged, it must be only replaced by the manufacturer, an authorised representative or a repair shop.
- Do not perform maintenance or servicing operations on the appliance with wet hands or if the appliance is wet.
- Before connecting the appliance to the power supply, check that the connection unit or socket to which the appliance will be connected is in good condition and shows no signs of damage or rust.
- In stormy weather, disconnect the appliance from the power supply to prevent it from suffering lightning damage.
- Do not immerse the appliance in water or mud.
- Always unplug the device from the mains when it is not in use.

WARNINGS CONCERNING APPLIANCES CONTAINING REFRIGERANT

- R290 refrigerant is classed under category A3 as highly flammable.
- The appliance must be stored in a room without any permanent ignition source (such as open flames, operating gas appliance or operating electric heating).
- Do not use means for accelerating the defrosting or cleaning process other than those recommended by the manufacturer.
- No not perforate or incinerate.
- Please note that R290 refrigerant may give off a certain odour.

INSTALLATION AND MAINTENANCE

- The appliance may not be installed close to combustible materials, or the air duct inlet of an adjacent building.
- With some appliances, it is essential to fit a "protection grid"-type accessory if the unit is installed in an area with uncontrolled access.
- During installation, troubleshooting and maintenance, pipes may not be used as steps: the pipe could break under the weight, spilling refrigerant and possibly causing serious burns.
- When servicing the appliance, the composition and state of the heat transfer fluid must be checked, as well as the absence of any traces of refrigerant.
- During maintenance work, ensure there are no traces of corrosion or oil around the cooling components.

- Before beginning work on the cooling circuit, stop the appliance and wait for a few minutes before fitting the temperature and pressure sensors. Some elements such as the compressor and piping may reach temperatures in excess of 100°C and high pressures with the consequent risk of severe burns.

TROUBLESHOOTING

- All brazing must be carried out by qualified brazers.
- Replacement pipes must always be made of copper in compliance with standard NF EN 12735-1.
- Leak detection; pressure test:
  - never use oxygen or dry air, risk of fire or explosion,
  - use dry nitrogen or the mixture of nitrogen and refrigerant indicated on the information plate,
  - the test pressure for both the high and low pressure circuits must not exceed 42 bar in cases where the appliance is equipped with the optional pressure gauge.
- The high pressure circuit pipes are made of copper and have a diameter equal to or greater than 1’’5/8. A certificate as indicated in §2.1 in compliance with standard NF EN 10204 must be requested from the supplier and filed in the installation's technical file.
- Technical data relative to the safety requirements of the various applicable directives are indicated on the information plate. All this information must be recorded in the appliance's installation manual, which must be kept in its technical file: model, code, serial number, maximum and minimum OT, OP, year of manufacture, CE marking, manufacturer’s address, refrigerant and weight, electrical parameters, thermo-dynamic and acoustic performance.

LABELLING

- The equipment must be labelled so as to specify that it is out of order and that the refrigerant has been drained.
- The label must be dated and signed.
- For appliances containing a flammable refrigerant, check that labels are placed on the equipment stating that it contains a flammable refrigerant.

RECOVERY

- When draining the refrigerant for maintenance or decommissioning, best practices should be followed in order to safely drain all of the refrigerant.
- When transferring refrigerant to a cylinder, make sure that you use a recovery cylinder that is compatible with the refrigerant. Make sure that the correct number of cylinders are provided for recovering all of the refrigerant. All cylinders used must be intended for the recovery of refrigerant and must be labelled for this specific refrigerant. The cylinders must be equipped with a vacuum valve and a stop gate in good working order. Empty collection cylinders are drained and, where possible, cooled before recovery.
- The recovery equipment must be in good working order, the instructions for using the equipment must be within reach and the equipment must be compatible for use with the refrigerant concerned, including, where appropriate, a flammable refrigerant. Moreover, a set of calibrated scales must be available and in good working order. The pipework must be complete, have no leaks or disconnected connectors, and must be in good condition. Before using the recovery unit, check that it is in good working order, that it has been well maintained and that the associated electric components are sealed so as to prevent any risk of fire in the event of refrigerant

being released. If you have any doubts, contact the manufacturer.

- The recovered refrigerant must be sent to the refrigerant supplier in its recovery cylinder with a waste transfer note. Do not mix different refrigerants in the recovery units, and in particular in the cylinders.
- If the compressor has been removed or if oil from the compressor has been drained, check that the refrigerant has been completely removed to prevent it from mixing with the lubricant. The draining process must be carried out before returning the compressor to the supplier. Only the electric heater of the compressor body can be used to accelerate this process. This operation can be carried out safely once all liquids within the system have been drained.

Recycling

This symbol is required by the European directive DEEE 2012/19/EU (directive on waste electrical and electronic equipment) and means that your appliance must not be thrown into a normal bin. It will be selectively collected for the purpose of reuse, recycling or creating value. If it contains any substances that may be harmful to the environment, these will be eliminated or neutralised. Contact your retailer for recycling information.

CONTENTS

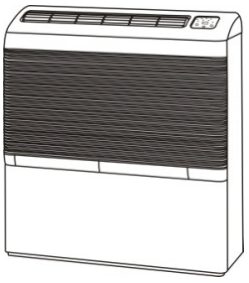
Tip: to make it easier to contact the retailer

- Write down the retailer's contact details to help you find them more easily and fill in the "product" information on the back of the manual: the retailer will ask for this information.

1 Specifications

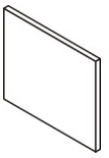
1.1 I Description

Ⓐ



Ⓑ

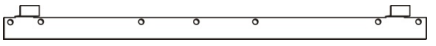
Ⓒ



Ⓓ

Ⓔ

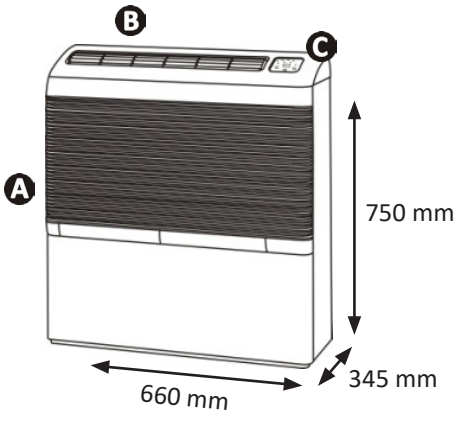
Ⓕ



Ⓐ	DT 850 E	✔
Ⓑ	Anti-vibration studs (round)	✔
Ⓒ	Anti-vibration studs (rectangular)	✔
Ⓓ	Screw	✔
Ⓔ	Plugs	✔
Ⓕ	Mounting bracket	✔

✔: Included

1.2 I Dimensions and marking



Ⓐ	Suction grid
Ⓑ	Blower grid
Ⓒ	User interface

EN

1.3 I Technical specifications

		DT 850 E
Voltage		220-240 V / 1N / 50 Hz
Nominal absorbed intensity*	A	4.30
Maximum current input (at start-up)	A	20
Minimum cable section**	mm^2	75
		3G0
Dehumidifying capacity*	L/h	2.2
Nominal power input*	W	970
Air flow (at maximum speed)	m^3/h	500
Sound pressure at 1 m	db(A)	20
Approximate weight	kg	37
Cooling fluid		R290
Cooling fluid load	kg	0.3
Service pressure (min/max)	bar	8.5/22
	MPa	0.85/2.2
Operating range of pool room	°C	7 - 35
Protection rating		IP24

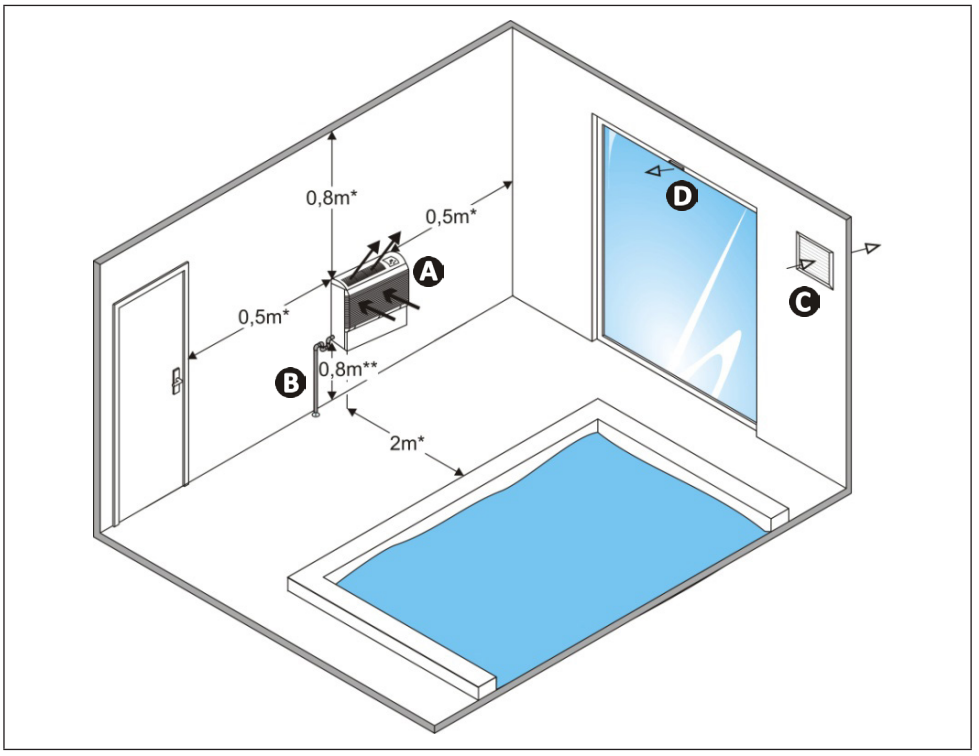
* Following nominal conditions: ambient air at + 30°C, relative humidity of 70%
** Values provided as a guide only for a maximum length of 20 metres, these must be verified and adjusted to suit the installation requirements and the installation standards of the country.

2 Installation

2.1 I Installing the appliance

2.1.1 Selecting the location

- **The appliance must be installed in accordance with the IEC/HD 60364-7-702 standard and the national regulations in force for swimming pools.**
- **Only indoor installation is possible: ensure there is easy access to the appliance for maintenance and connections.**
- **Leave at least 60 cm between the top of the appliance and any other object.**
- **The appliance should only be installed in a room at least 15 m².**
- **Ensure the appliance is installed level on its four feet or on the mounting bracket to prevent any overflows from the condensation tray,**
- **The appliance's feet must not be soaking in water,**
- **Place nothing in front of or on the blowing and suction grids,**
- **Risk of stratification:**
  - **height of the room < 4 to 5 metres: mechanical ventilator unit or extractor,**
  - **height of the room > 5 to 8 meters: ceiling fans with large blades.**
- **Building requirements: pool room = high relative humidity,**
- **During building make sure that:**
  - **the materials used are compatible with a swimming pool environment,**
  - **the walls are sufficiently waterproofed and insulated to prevent condensation from forming in the room when relative humidity reaches 60 to 70%,**
- **Buildings with lightweight structures (verandas, shelters, etc.): : there is no risk of deterioration of the structure, even in case of dew (they are designed to support this, even with a relative humidity of 70%),**
- **Ventilation, renewal of air:**
  - **private pools: highly recommended,**
  - **public pools: compulsory,**
- **The air can be renewed by:**
  - **a simple mechanical ventilation unit,**
  - **a wall or roof extractor with fresh air intake grids.**
- **This ventilation ensures the hygienic renewal of air, the removal of any chloramines or other corrosive chemicals present in the air, and the elimination of excessively hot air, whilst contributing to the dehumidification of the room.**



A: DT 850 E

B: Condensates drain with siphon
C: Air renewal system
D: Fresh air intake

* Minimum distance (in compliance with the applicable standards in the country of installation)

** Maximum distance

EN

2.1.2 Positioning the appliance

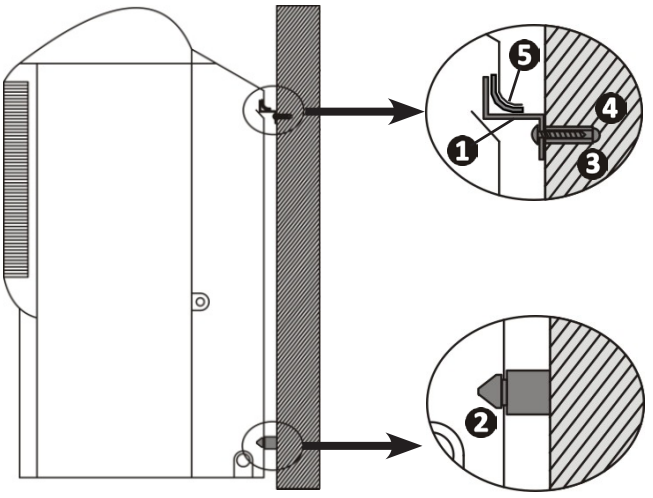
- The appliance can be installed on the floor or fixed to the wall using the supplied mounting bracket ❶.
- Make sure that the device is perfectly horizontal in both these cases.

- If the device is installed on the ground:
  - Fix the 2 supplied **round** anti-vibration studs ❷ in the intended locations at the bottom corners of the appliance's rear panel.
  - Make sure that all 4 feet are touching the ground.

- If the device is mounted on the wall:

• Only use fixing parts that are suitable for the supported weight (approximately 40 kgs)

  - Secure the mounting bracket ❶ to a solid wall using at least 5 screws ❸ and plugs ❹ (provided).
  - Stick the 2 supplied **rectangular** anti-vibration studs (self-adhesive) between the mounting bracket and the appliance ❺ to avoid vibrations spreading through the wall.
  - Fix the 2 supplied **round** anti-vibration studs ❷ in the intended locations at the bottom corners of the appliance's rear panel.
  - Fasten the appliance on the bracket.
  - Make sure that all the anti-vibration studs are correctly placed.

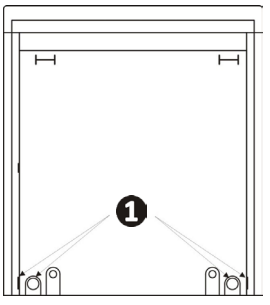


2.1.3 Connecting the condensate drainage line

Make sure that the pipe cannot freeze in conditions of extreme cold and frost.

- Join a suitable diameter drain pipe to the original pipe (external diameter Ø16),
- The angle should be sufficient to ensure a correct flow by gravity.
- Place the end of the pipe in a drainage fitting equipped with a siphon,
- Make sure the pipe is not twisted or bent, and that the end of the pipe is not submerged.

The condensates outlet can be modified by angling it towards the left or right rear of the appliance. To do this, remove the rear panel and run the drainage line to one of the chosen openings (see ref. ❶).



2.3 I Electrical connections

- **The appliance is only suitable for a grounded socket (2P + E wall socket), 220-240 Volt (50 Hz) connection voltage. If the power supply is not earthed, do not plug in your appliance until the appropriate earthing has been installed by a qualified professional.**
- **The appliance must be installed and protected by a residual current device (RCD) with a maximum current of 30 mA.**
- **All extension cables or multisocket connects are prohibited. Request the installation of a protected power socket near the appliance from a qualified technician.**
- **The installer must consult the electricity provider if necessary and ensure that the equipment is connected correctly to an electricity network with impedance under 0.095 ohm.**
- **The power supply must correspond to the voltage indicated on the appliance's information plate.**
- **The power cord must be insulated against any cutting or hot elements that may damage or crush it.**

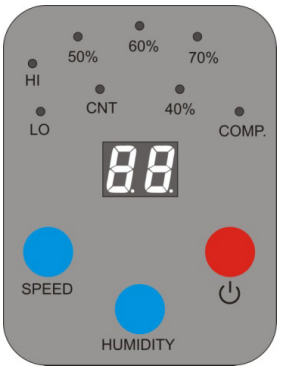
3 Use

EN

3.1 I Operating principle

This dehumidifier operates based on a heat pump with extraction of the warm, humid air in the pool room and delivery of dryer, hotter air.
It is ideal for maintaining a humidity level that is between 60 % and 70 %.
When the humidity level is lower than 60 %, this leads to a feeling of excessive cold when leaving the water.
When it is higher than 70 %, this leads to too much moisture and condensation in the room.

3.2 I User interface presentation



	Display
88	Ambient humidity level
	Buttons
	On/Off
HUMIDITY	Humidity level adjustment
SPEED	Fan speed adjustment
	Indicator lights
COMP.	Compressor operation
CNT	Continuous operating mode
HI LO	Fan speed ("HI": fast, "LO": slow)
40% 50% 60% 70%	Humidity level

3.3 I Starting the appliance

- **The appliance must have filters fitted when operating.**
- **Avoid opening doors and windows when using the appliance.**

- Power on the device by plugging in the power cable,
- Press the button ⏻ : the fan speed and desired humidity level indicators light up (last active settings),
- Set the desired humidity level using the "HUMIDITY" button (40%, 50%, 60%, 70%) or set the appliance to continuous operation using "CNT",

- The continuous operating mode does not take humidity levels into account: the device operates continuously.

- Adjust the speed of the fan with the "SPEED" button.
- Check that the appliance is draining condensates when in operation (see "2.1.3 Connecting the condensate drainage line").

- After a 5 minute delay, if the level of ambient humidity is higher than the desired humidity level, the compressor starts up and the "COMP." indicator lights up.
- A comfortable humidity rate for pool use is 60%.
- Ventilation is permanent while the appliance is switched on.
- The dehumidifier is equipped with a defrosting system which starts automatically as soon as frost forms during low temperatures. The compressor automatically starts-up or stops based on the ambient temperature. The fan operates continuously.
- When the humidity level is less than 35% in continuous operation mode, the appliance permanently displays "LO" but the compressor and the fan continue to operate at the selected speed. Switch off the appliance or select a humidity rate so that it rises to the ideal or desired rate.

4 Maintenance

4.1 I Maintenance

- **Before performing any maintenance operation on the appliance, carefully read the safety instructions, see "4.1.1 Safety instructions for appliances containing R290 refrigerant".**
- **Before any maintenance work on the appliance, you must cut the electricity supply as there is a risk of electric shock which may cause material damage, serious injury or even death.**
- **It is recommended that the appliance undergo general servicing at least on a yearly basis to ensure its proper operation, maintain performance levels, prevent any possible failures, and protect the building.**
- **These operations are at the users' charge and must be performed by a qualified technician.**
- **Never clean the dehumidifier by spraying it with water or immersing it in water (risk of short-circuit).**

EN

4.1.1 Safety instructions for appliances containing R290 refrigerant

Area check

- Before starting work on systems containing flammable refrigerants, safety checks must be carried out to guarantee a minimal ignition risk.

Work procedure

- The work must be carried out according to a controlled procedure in order to reduce the risks of releasing a flammable gas or vapour while working.

General work area

- All maintenance staff and other personnel working in the surrounding area must be made aware of the work carried out. Work conducted in enclosed areas must be avoided.

Check for the presence of refrigerant

- The area must be analysed using a suitable refrigerant detector before and during work so that the technician is informed of the presence of a potentially toxic or flammable atmosphere. Check that the leak detection equipment used is suitable for use with all refrigerants concerned, i.e. that it does not cause a spark, is correctly isolated or is entirely safe.

Check for the presence of a fire extinguisher

- If work must be carried out on the cooling equipment or any part associated therewith at a certain temperature, suitable fire extinguishing means must be within reach. Place a dry chemical fire extinguisher or CO<g-1776156949>2</g-1776156949> fire extinguisher near the work area.

No source of ignition

- No person carrying out work on a cooling system involving exposing the piping may use any ignition source, which could create a fire or explosion risk. All possible ignition sources, in particular cigarettes, must not enter within a sufficient perimeter of the installation, repair, removal or disposal site, in the event that refrigerant could be released into the surrounding space. Before starting the work, the area around the equipment must be examined to check for all fire or ignition risks. "No smoking" signs must be displayed.

Area ventilation

- Before accessing the unit in any manner whatsoever with the intention of performing any maintenance task, check that the area is open and well-ventilated. Suitable ventilation must be provided throughout the maintenance task to allow any refrigerant that could be released into the atmosphere to be safely dispersed.

Refrigeration equipment check

- The manufacturer's recommendations in terms of care and maintenance must always be complied with. When replacing electric components, check that components used are of the same type and category as those recommended/approved by the manufacturer. When in doubt, contact the manufacturer's technical department for assistance.
- The following checks must be applied to installations using flammable refrigerants:
  - if an indirect cooling circuit is used, the presence of refrigerant in the secondary circuit must be analysed;
  - the markings on the equipment must remain visible and legible; any illegible markings or signs must be rectified;
  - the hoses or components of the cooling circuit are installed in a position where they are unlikely to be exposed to any substance capable of corroding the components containing refrigerant, unless the components are made from materials that are typically corrosion-proof or correctly protected from such corrosion.

Electric component check

- The repair and maintenance of electric components must include initial safety checks and component inspection procedures. If a defect capable of jeopardising safety arises, no power supply must be connected to the circuit until the problem has been completely resolved. If the defect cannot be rectified immediately and if maintenance work must continue, an appropriate temporary solution must be found. This must be reported to the equipment's owner so that all persons concerned are made aware.
- The repair and maintenance of electric components must include the following initial safety checks:
  - the capacitors are discharged: this must be carried out safely to prevent all risks of ignition;

- no electric component or live wiring is exposed while charging, overhauling or draining the system;
- the system must be grounded at all times.

Repair of insulated components

- When repairing insulated components, all power sources must be disconnected from the equipment on which the work is being carried out before removing the insulating cover, etc. If the equipment must be powered during maintenance work, a leak detector must continuously monitor for leaks at the most critical point in order to report any potentially hazardous situation.
- Particular attention must be paid to the following points to ensure that, when performing work on the electric components, the housing is not altered to the point of affecting the protection rating. This includes damaged wires, an excessive number of connections, terminals that do not comply with the original specifications, damaged seals, incorrect installation of the cable glands, etc.
- Make sure that the appliance is properly fixed.
- Make sure that the seals or insulating materials are not deteriorated to the point that they no longer prevent a flammable atmosphere from penetrating the circuit. Spare parts must be compliant with the manufacturer's specifications.

Repair of intrinsically safe components

- Do not apply any permanent electric capacitance or induction charge to the circuit without checking that it does not exceed the allowed voltage and intensity for the equipment being used.
- Typically safe components are the only types on which work can be carried out in the presence of a flammable atmosphere when live. The test appliance must fall under a suitable classification.
- Only replace components with parts specified by the manufacturer. Other parts could cause the refrigerant to leak and ignite in the atmosphere.

Wiring

- Check that the wiring shows no signs of wear, corrosion, excessive pressure, vibration, cutting edges or any other detrimental environmental effect. The check must also take into account the effects of ageing or continuous vibrations caused by sources such as compressors or fans.

Detection of flammable refrigerant

- Under no circumstances must potential ignition sources be used to search for or detect refrigerant leaks. A halide torch (or any other detector using a naked flame) must not be used.
- The following leak detection methods are considered to be acceptable for all cooling systems.
- Electronic leak detectors can be used to detect refrigerant leaks; however, in the case of flammable refrigerants, the sensitivity level may not be suitable or recalibration may be necessary. (The detection equipment must be calibrated in an area devoid of refrigerant). Check that the detector is not a potential ignition source and is appropriate for the refrigerant used. The leak detection equipment must be adjusted to a percentage of the refrigerant's LFL and must be calibrated according to the refrigerant used. The appropriate gas percentage (25% at most) must be confirmed.
- Leak detection fluids are also suited for use with most refrigerants, however the use of detergents containing chlorine must be avoided since it could react with the refrigerant and cause corrosion to the copper piping.
- If a leak is suspected, all naked flames must be removed/extinguished.
- If a refrigerant leak is detected and requires soldering, the entire quantity of refrigerant must be removed from the system or isolated (by way of shut-off valves) in part of the system located away from the leak.

Removal and discharge

- When accessing the cooling circuit to carry out repairs, or for any other reason, conventional procedures must be employed. However, for flammable refrigerants, the recommendations must be complied with in order to take account of the product's flammability. The following procedure must be followed:
  - remove the refrigerant;
  - purge the circuit with an inert gas;
  - drain;
  - purge with an inert gas;
  - open the circuit by cutting or soldering.
- The refrigerant charge must be recovered in suitable recovery cylinders. For appliances containing flammable refrigerants other than A2L refrigerants, the system must be bled with nitrogen devoid of oxygen to make the appliance suitable for receiving flammable refrigerants. You may need to repeat this process several times. Compressed air or oxygen must not be used to purge cooling systems.

Loading procedures

- Check that the vacuum pump outlet is not located in the vicinity of any potential ignition source and that ventilation is provided.
- In addition to conventional charging procedures, the following requirements apply.
  - Check that there is no possibility of cross-contamination between the different refrigerants when using charging equipment. Hoses or lines must be as short as possible to reduce the quantity of refrigerant contained therein.
  - Cylinders must be kept in an appropriate position, in accordance with the instructions.
  - Check that the cooling system is grounded before charging the system with refrigerant.
  - Label the system once charging is complete (if this is not already the case).
  - Pay close attention to not overfilling the cooling system.
- Before recharging the system, carry out a pressure test using a suitable purge gas. The system must be examined to make sure there are no leaks after the charging operation and before commissioning. A follow-up leak test must be carried out before leaving the site.

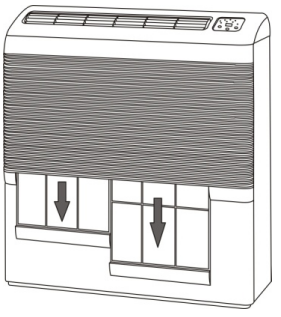
Dismantling

- Before dismantling, the technician must familiarise himself/herself with the equipment and its specifications. We highly recommend carefully recovering all refrigerants. Before this, oil and refrigerant samples must be taken if analyses are to be carried out before any other use of the recovered refrigerant. Check for the presence of a power

supply before starting work.

1. Familiarise yourself with the equipment and how it operates.
2. Electrically isolate the system.
3. Before starting work, check the following points:
   - mechanical handling equipment is available if needed to handle the refrigerant cylinders;
   - all personal protective equipment is available and used correctly;
   - the recovery process is monitored at all times by a cognisant person;
   - the recovery cylinders and equipment comply with the relevant standards.
4. Drain the cooling system where possible.
5. If a vacuum cannot be created, install a manifold in order to be able to remove the refrigerant from various locations within the system.
6. Make sure that the cylinder is located on the scales before starting recovery operations.
7. Start the recovery unit and operate as per its instructions.
8. Do not overfill the cylinders (no more than 80% of the volume must be filled with liquid).
9. Do not exceed the maximum working pressure of the cylinder, even temporarily.
10. When the cylinders have been filled correctly and the process is complete, check that the cylinders and the equipment are quickly removed from the site and that the alternative shut-off valves on the equipment are closed.
11. The recovered refrigerant must not be charged in another cooling system, unless it has been cleaned and inspected.

4.1.2 Monthly user maintenance



- Check visually that the condensates are drained.
- Check the electrical connections,
- Check for clogging in the filters:
  - Remove the filters (see opposite)
  - Wash them with warm soapy water,
  - Rinse them abundantly and dry them,
  - Replace them if necessary.

4.1.3 Annual maintenance to be performed by a qualified technician

- Check the cleanliness of the condensation drainage tube,
- Check the condition of the power cable,
- Check the hygrostat setting and operation,
- Clean the whole unit with a slightly damp cloth.

5 Troubleshooting

- **Before you contact the retailer, carry out these few simple checks using the following tables if a problem occurs.**
- **If the problem is not resolved, contact your retailer.**
- **: Actions to be performed by a qualified technician only**

5.1 I Appliance behaviour

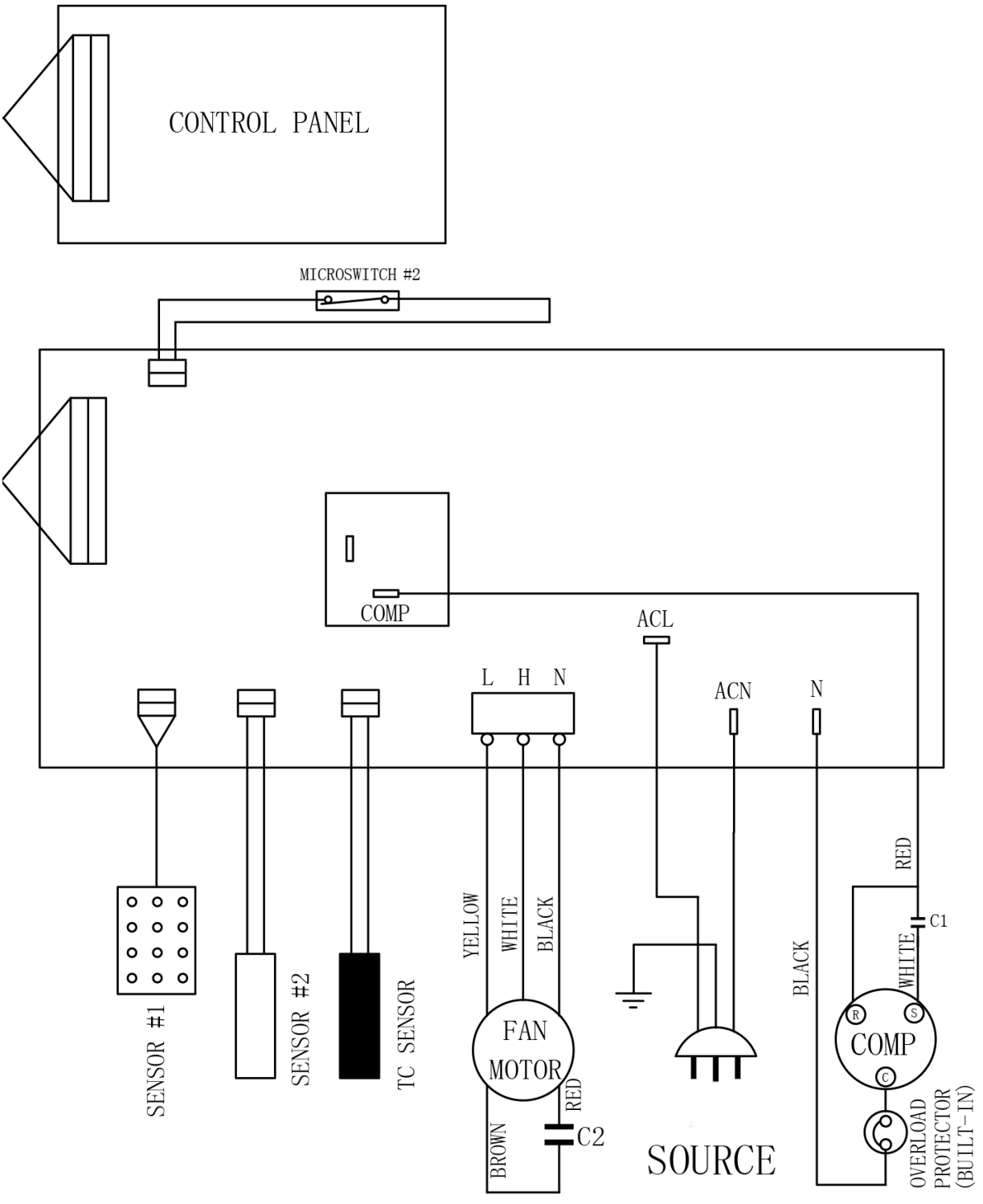
The appliance is discharging water	• The appliance is discharging water, known as condensates. This water is the humidity your dehumidifier condenses to dry the air.
The appliance is working but the windows are covered in water	• This is the dew point, which is the point at which the water vapour contained in the air changes states when in contact with a cold surface. This is known as the phenomenon of condensation. This does not mean your appliance is not working. This phenomenon is normal, because of the presence of humidity in the air (65% humidity in comfortable conditions), and a cold outside temperature.
The dehumidifier blows hot air even though the heating is absent or deactivated	• The dehumidification function is based on the thermodynamic principle which transforms part of the absorbed energy into heat, which is then transferred to the ventilated air flow.
The appliance begins defrosting	• The dehumidifier's cooling circuit is affected by the local operating conditions. Lower temperatures and the moisture content of the ambient air are more likely to create frost. • To ensure its correct operation, the appliance eliminates all traces of frost by initiating a short defrosting cycle lasting a few minutes.
The ventilation stays on even when the setpoint temperature(s) have been reached	• Ventilation continues for a few minutes after the temperature and humidity setpoints have been reached. This optimises the appliance's efficiency by evacuating the residual calories in the batteries that are still hot.
The dehumidifier is not working	• Check it is correctly connected. • Make sure the hygrostat is on.
The appliance is noisy	• Make sure the appliance is solidly installed and is level.

If the problem is not resolved, contact your retailer.

5.2 I Electrical diagram

Wiring diagram is available at the end of the document, see § 5.2 Schéma électrique / Wiring diagram / Schaltplan / Elektrischschema / Esquema eléctrico / Esquema eléctrico / Schema elettrico.

5.2 | Schéma électrique / Electrical diagram / Schaltplan / Bedradingschema / Esquema eléctrico / Esquema eléctrico / Schema elettrico



	Français	English	Deutsch	Nederlands	Español	Português	Italiano
SENSOR #1	Sonde de température ambiante et hygrométrie	Ambient temperature and humidity sensor	Raumtemperatur- und Luftfeuchtigkeitsfühler	Omgevingstemperatuur- en vochtigheidssensor	Sonda de temperatura ambiente y de higrometría	Sonda de temperatura ambiente e higrometria	Sonda di temperatura e di igrometria
SENSOR #2	Sonde de dégivrage	Defrost sensor	Abtaufühler	Ontdooiingssensor	Sonda de deshielo	Sonda de degelo	Sonda sbrinamento
TC SENSOR	Sonde de température du compresseur (prévention de la surchauffe)	Compressor temperature sensor (overheating protection)	Kompressor-temperaturfühler (Überhitzungsschutz)	Temperatuursensor van de compressor (voorkoming van oververhitting)	Sonda de temperatura del compresor (prevención de sobre-calentamiento)	Sonda de temperatura do compressor (prevenção do sobre-aquecimento)	Sonda di temperatura del compressore (prevenzione del surriscaldamento)
YELLOW	Jaune	Yellow	Gelb	Geel	Amarillo	Amarelo	Giallo
WHITE	Blanc	White	Weiß	Wit	Blanco	Branco	Bianco
BLACK	Noir	Black	Schwarz	Zwart	Negro	Preto	Nero
BROWN	Marron	Brown	Braun	Bruin	Marrón	Castanho	Marrone
RED	Rouge	Red	Rot	Ross	Rojo	Vermelho	Rosso
FAN MOTOR	Moteur ventilateur	Fan motor	Lüftermotor	Motor ventilator	Motor ventilador	Motor ventilador	Motore ventilatore
C1	Condensateur ventilateur	Fan capacitor	Lüfterkondensator	Condensator ventilator	Condensador ventilador	Condensador ventilador	Condensatore ventilatore
C2	Condensateur compresseur	Compressor capacitor	Betriebskondensator für Kompressor	Compressorcondensator	Condensador compresor	Condensador compressor	Condensatore compressore
SOURCE	Prise électrique	Electric plug	Stromsteckdose	Stopcontact	Toma eléctrica	Tomada elétrica	Presa elettrica
COMP	Moteur compresseur	Compressor motor	Kompressormotor	Compressormotor	Motor compresor	Motor compressor	Motore compressore
OVERLOAD PROTECTOR	Protection anti-surcharge	Overload protector	Überlastschutz	Overbelastingsbeveiliging	Protección de sobrecarga	Proteção anti-sobrecarga	Protezione anti-sovraccarico
ACL-ACN	Alimentation monophasée 230Vac-1N-50Hz	Single-phase power supply 230Vac-1N-50Hz	Einphasige Stromversorgung 230 V AC -1N-50Hz	Eenfasevoeding 230 VAC - 1 N - 50 Hz	Alimentación monofásica 230 Vac-1 N-50 Hz	Alimentação monofásica 230Vac-1N-50Hz	Alimentazione monofase 230Vac-1N-50Hz
⏚	Terre	Earth	Erde	Aarde	Tierra	Terra	Terra
MICRO SWITCH	Microrupteur	Microswitch	Mikroschalter	Microschakelaar	Micro interruptor	Micro-interruptor	Microinterruttore
CONTROL PANEL	Interface Utilisateur	User interface	Bedieneinheit	Gebruiksinterface	Interfaz de usuario	Interface Utilizador	Interfaccia utente

Votre revendeur *Your retailer*	
Modèle appareil *Appliance model*	
Numéro de série *Serial number*	

Pour plus d'informations, enregistrement produit et support client :
For more information, product registration and customer support:

www.zodiac.com

ZPCE - ZA La Balme - 31450 Belberaud - S.A.S.U. au capital de 1 267 140 € / SIRET 395 068 679 00046 / RCS TOULOUSE