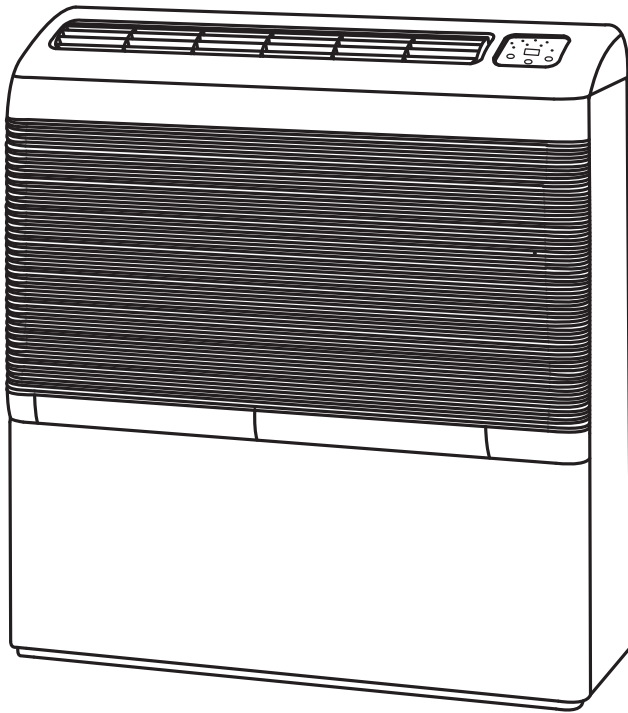
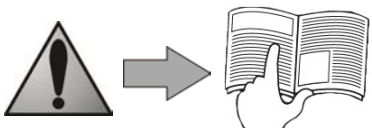




DT850E



Instructions for installation and use
English

EN



- Read this manual carefully before installing, maintaining or repairing this device!
- The symbol  indicates important information that must be taken into account in order to avoid risk of personal injury and/or damage to the appliance.
- The symbol  indicates useful information.



Warnings



- Our products may be subject to change without notice as part of our continuous improvement policy.
- Exclusive use: for dehumidifying swimming pool premises (must not be used for any other purpose),
- It must be installed in premises that are closed and well aired; in an area that is: not exposed to freezing risk, out of reach of water splashes, and where no pool maintenance products are stored,
- The device must be installed by a qualified technician according to the manufacturer's instructions and in compliance with local regulations. The installer is responsible for the correct installation of the device and for ensuring compliance with local regulations. The manufacturer shall not be held liable for any potential issues that may occur as a result of failure to comply with local standards pertaining to installation,
- Incorrect installation may cause serious damage and/or personal injuries (possibly death),
- This appliance must be handled by competent and qualified personnel (physically and mentally) who are familiar with the operating instructions (by reading the user guide). Persons who do not satisfy these requirements must not handle the device so as to avoid exposure to potentially dangerous parts.
- If the device malfunctions: do not attempt to repair the device yourself, call your retailer,
- Before carrying out any operation on the machine, check that the power supply is cut and that the machine is tagged out
- Do not insert any objects into the openings,
- Prior to any operation, check that:
 - The voltage on the identification plate of the appliance corresponds to the main voltage available on site,
 - the socket and the power supplied are adapted to the power requirements of the appliance, and that they are grounded,
 - the electrical plug is adapted to the socket available,
- The warranty will automatically become void if any safety device is removed or shunted. This will also apply if any parts are replaced with parts purchased anywhere else than from our stores,
- Keep the appliance out of the reach of children,
- Do not vent R410A fluid into the atmosphere: R410A is a fluorinated greenhouse gas, covered by the Kyoto Protocol, with a Global Warming Potential (GWP) = 1975 - (see regulation on fluorinated greenhouse gases, European Community Directive EC 842/2006).

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Available in appendix at the end of the manual:

- wiring diagrams
- dimensions

1. Information before installation


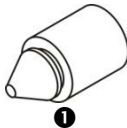
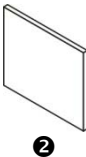


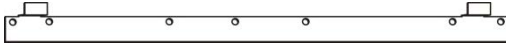
1.1 General terms of delivery, storage and transport

Any equipment, even carriage and packing free, travels at the consignee's risk. The consignee shall make reservations in writing on the carrier's bill of lading if damage is detected, caused during transport (confirmation to be sent to the carrier within 48 hours by registered mail with acknowledgement of receipt).

The device must be transported and stored upright on its pallet in its original packaging.

If the device has been turned on its side, mention your reservations in writing to the carrier.

1.2 Content

					
X1	X 2	X 2	X 5	X 5	X 1

1.3 Operating conditions

Operating range:

- between 7 °C to 35 °C of temperature in the swimming pool hall,

1.4 Technical specifications

Appliance	Dehumidifying capacity *	Power consumed *	Air flow at maximum speed	Voltage	Nominal power consumption	Absorbed power at start up
DT 850 E	2.2 L/h	915 W	390 m ³ /h	230-240V-50Hz	4.15 A	20 A

* with ambient air at +15 °C and relative humidity of 70%

- protection class: **IP 24**
- class: I,
- refrigerant gas: **R410A**
- refrigerant charge: see product information plate

2. Installation

2.1 Installation requirements

- **Install the appliance on a level base on its four legs or on the dedicated fixing element, to avoid any overflows from the condensation tray,**
- **the legs must not be in contact with water,**
- **Easy access to the appliance for maintenance and connections,**
- **Place nothing in front of or on the blowing and suction grates,**
- **Risk of stratification:**
 - height of the room < 4 to 5 meters: mechanical ventilator unit or extractor,
 - height of the room > 5 to 8 meters: ceiling fans with large blades.
- **Building requirements:** swimming pool building = very damp room,
During building make sure that:
 - the materials used are compatible with a swimming pool environment,
 - the walls are sufficiently waterproofed and insulated to avoid condensation forming in the room when relative humidity reaches 60 to 70%,Light structure buildings (verandas, shelters...): there is no risk of deterioration of the structure, even in case of dew as 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 intakes,This ventilation ensures the hygienic renewal of air, the removal of any chloramines present in the air, and the elimination of excessively hot air, whilst contributing to the dehumidification of the room.



2.2 Installing the appliance

Caution! The appliance is powered by 230V ac connected to a mains socket.
Make sure that you comply with the norms that apply in the country where it is installed.
Following French norm NFC 15-100, the appliance should be installed:

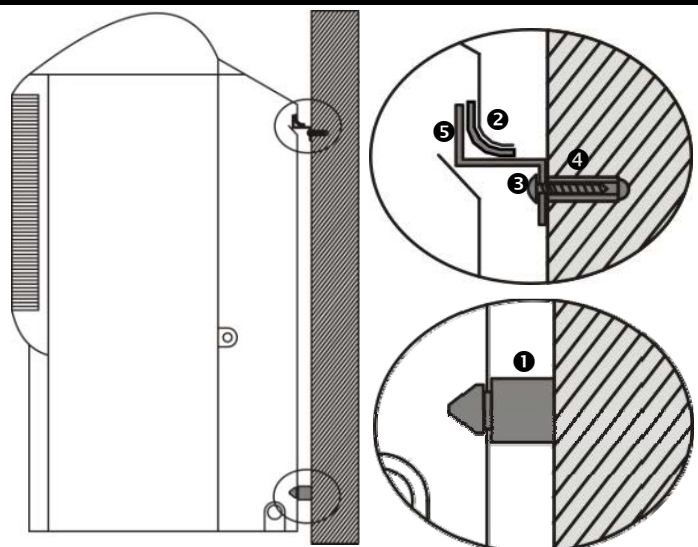


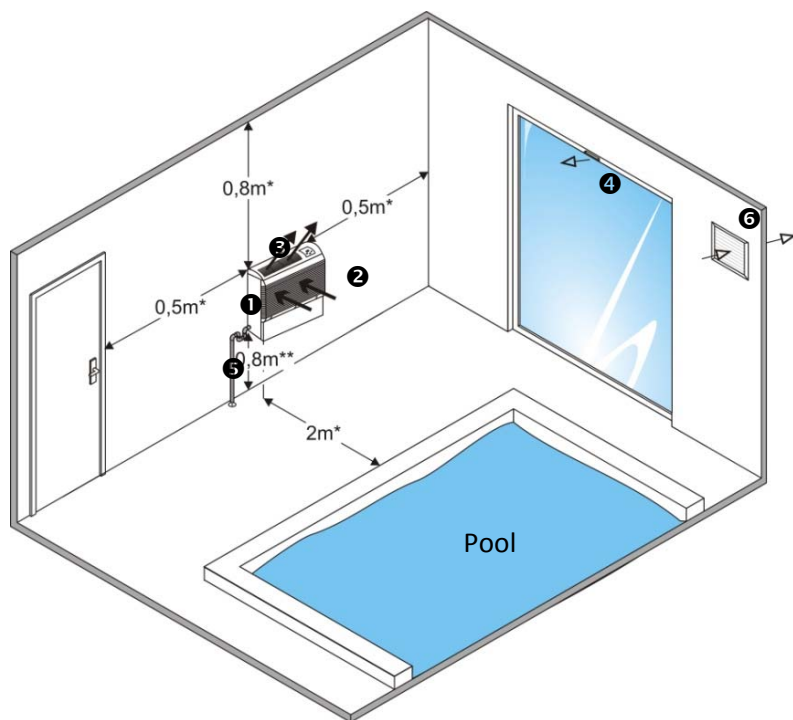
- **Outside of area 1 (more than 2 metres from the edge of the pool) provided it is out of reach of potential splashes and protected by a dedicated 30 mA fuse,**
- **Outside of area 2 (more than 3.5 metres from the edge of the pool) if the above conditions are not satisfied.**

The dehumidifier can be set on the ground or mounted on the wall using the supplied wall-mount bar.

In both cases, place the round anti-vibration blocks in the slots at the bottom rear of the appliance.

If the appliance is fitted on a wall: fix the wall-mount bar to a solid wall using the supplied screws and plugs. Place the supplied rectangular anti-vibration blocks between the wall-mount bar and the appliance to avoid propagation of vibrations to the wall.





* minimum distance (depending on the norms that apply in the country of installation)

** maximum distance

- ❶ DT 850 E
- ❷ suction grid
- ❸ blowing grid
- ❹ fresh air intake
- ❺ condensation drain with angle pipe
- ❻ air renewal system (see §2.1)

2.3 Connection of the condensation drain

- fit a drain pipe of appropriate size and length on the original outlet pipe (Ø16 outer diam.),
- allow a sufficient slope to ensure a proper flow for the drained water,
- connect the extremity of the pipe to a water evacuation drain with U-bend,
- ensure that the pipe is not bent or angled, and that the extremity of the pipe is not immersed.

The outlet is located on the right side of the device when viewed from the front (see marker "AØ16" § "Dimensions" in the appendix). This outlet can be moved to the left side (access via the rear panel).

2.4 Electrical connections

2.4.1 Voltage and protection

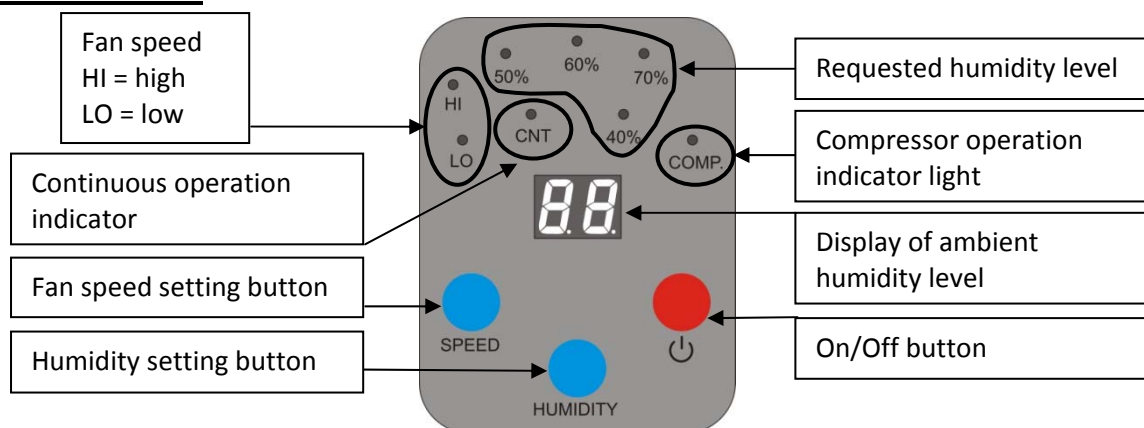
- The electrical supply must be provided through a protection and circuit breaking device (not supplied) complying with the standards and regulations in force in the country where it is installed,
- use the supply cable delivered with the appliance: H05VV-F in 3G0.75 mm²,
- **Extension cords and adapters must not be used. An adequately protected electrical socket must be installed close to the device by a qualified technician,**
- Electrical protection: 30 mA ground fault circuit breaker.




- the appliance must be earthed.
- risk of electrical shock inside the device.
- If the power cable is damaged it must be replaced by a qualified technician.

3. Operation

3.1 The Control Panel



3.2 Starting the appliance

- Connect the appliance to the power mains,
- Press the  button. The fan speed and requested humidity level will be displayed (last settings),
- Set the desired humidity level using the 'HUMIDITY' button (40%, 50%, 60%, 70%) or set the appliance on continuous operation mode by pressing 'CNT' (ignores the humidity level),
- Set the desired fan speed using the 'SPEED' button,
- After a time lag of 3 minutes, if the ambient humidity level is higher than the requested level, the compressor will start up and the 'COMP' indicator will light up



- The optimal humidity level for comfort in swimming pool premises is 60%.
- Ventilation will run constantly when the dehumidifier is powered on.
- The appliance may occasionally perform defrosting cycles, the compressor will switch off, the corresponding indicator light will blink, and the ventilation will continue to run ('HI' displayed at times).
- In continuous operation mode, when the humidity level is less than 35%, the appliance displays "LO" continuously, but the compressor and the ventilator carry on operating at the selected speed. Turn off the appliance or select a different humidity level to increase the humidity level to the ideal level or the selected level.

3.3 Checks

- check that the appliance is draining condensation.

4. Maintenance

4.1 Maintenance instructions



A general servicing of the appliance is recommended both when winterizing and when restarting in order to ensure the proper operation of your heat pump, to preserve its performance and to prevent potential failures.

Servicing costs will be borne by the user.



Appliance powered off and unplugged from power supply!

The appliance must have filters fitted when operating.

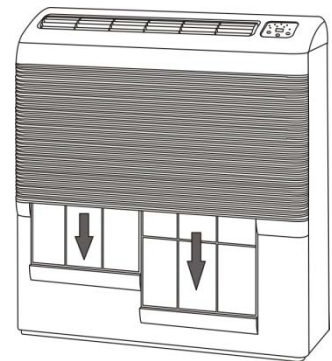
Do not clean by spraying or immersing into water.

4.1.1 Monthly checks

- check visually that the condensation is drained.
- check for clogging in the filter:
 - wash the filter with warm soapy water,
 - rinse it abundantly and dry it,
 - replace it if necessary.

4.1.2 Annual checks

- check the cleanliness of the condensation drainage tube,
- check that the power cord is in perfect condition
- check the adjustment and operation of the hygostat,
- clean the whole unit with a slightly damp cloth.



4.2 Additional recommendations

in relation to the Pressure Equipment Directive (PED-97/23/CE)

4.2.1 Installation and maintenance


- the unit may not be installed close to combustible materials, or the air duct inlet of an adjacent building .
- with some devices, it is essential to fit protection grids 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 heat carrying fluid must be checked, as well as the absence of any refrigerant.

- during the annual unit sealing test in accordance with applicable legislation, the high and low pressure switches must be checked to ensure that they are securely fastened to the coolant circuit and that they cutoff the electrical circuit when tripped.
- during maintenance work, ensure there are no traces of corrosion or oil around cooling components.
- before beginning work on the cooling circuit, stop the device 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 scalding.

4.2.2 Troubleshooting

- all soldering work must be carried out by a someone qualified to do so.
- 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.
- 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 will be requested from the supplier and filed in installation technical documentation.
- technical data relative to the safety requirements of the various applicable directives must be indicated on the information plate.
- **This data must be recorded in the installation instructions for the device which are included in the installation technical file: model, code, serial number, maximum and minimum OT, OP, year of manufacture, EC label, manufacturer’s address, refrigerant and weight, electrical parameters, thermo-dynamic and acoustic performances.**

4.3 Spare parts

Naming	Representation	Item number
Filter		W28FIDT5

4.4 Recycling the product



This symbol means that the equipment must not throw it into your household waste. It will be collected selectively so that it can be reused, recycled or recovered. Any substances it may contain which are potentially dangerous to the environment will be eliminated or neutralised.

Enquire with your retailer for the conditions that apply to the recycling of your product.

5. Résolution de problème

5.1 FAQ

Why is my appliance draining water?	Your appliance gives off water, called condensation. This water is the humidity your dehumidifier condenses to dry the air.
Why are my french windows covered with water whilst my appliance is dehumidifying?	This is the dew point, which means the moment when the water vapour contained in the air will change states when in contact with a cold surface. This is 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.

6. Product registration

Register your product using our website:

- you will be among the first to be informed of new Zodiac products and special offers,
- You can help us to constantly improve our product quality.

Australia – New Zealand	www.zodiac.com.au
South Africa	www.zodiac.co.za
Europe and rest of the world	www.zodiac-poolcare.com

7. Conformity certificate

Z.P.C.E. declares that the following products or ranges:

Special pool dehumidifier: DT 850 E

are in compliance with the provisions of:

- **Electromagnetic compatibility directive 89/336/EEC**
- **Low voltage directive 73/23/EEC, as amended by 93/068/EEC**
- **The following harmonised standards have been applied: EN 60335.2.40**

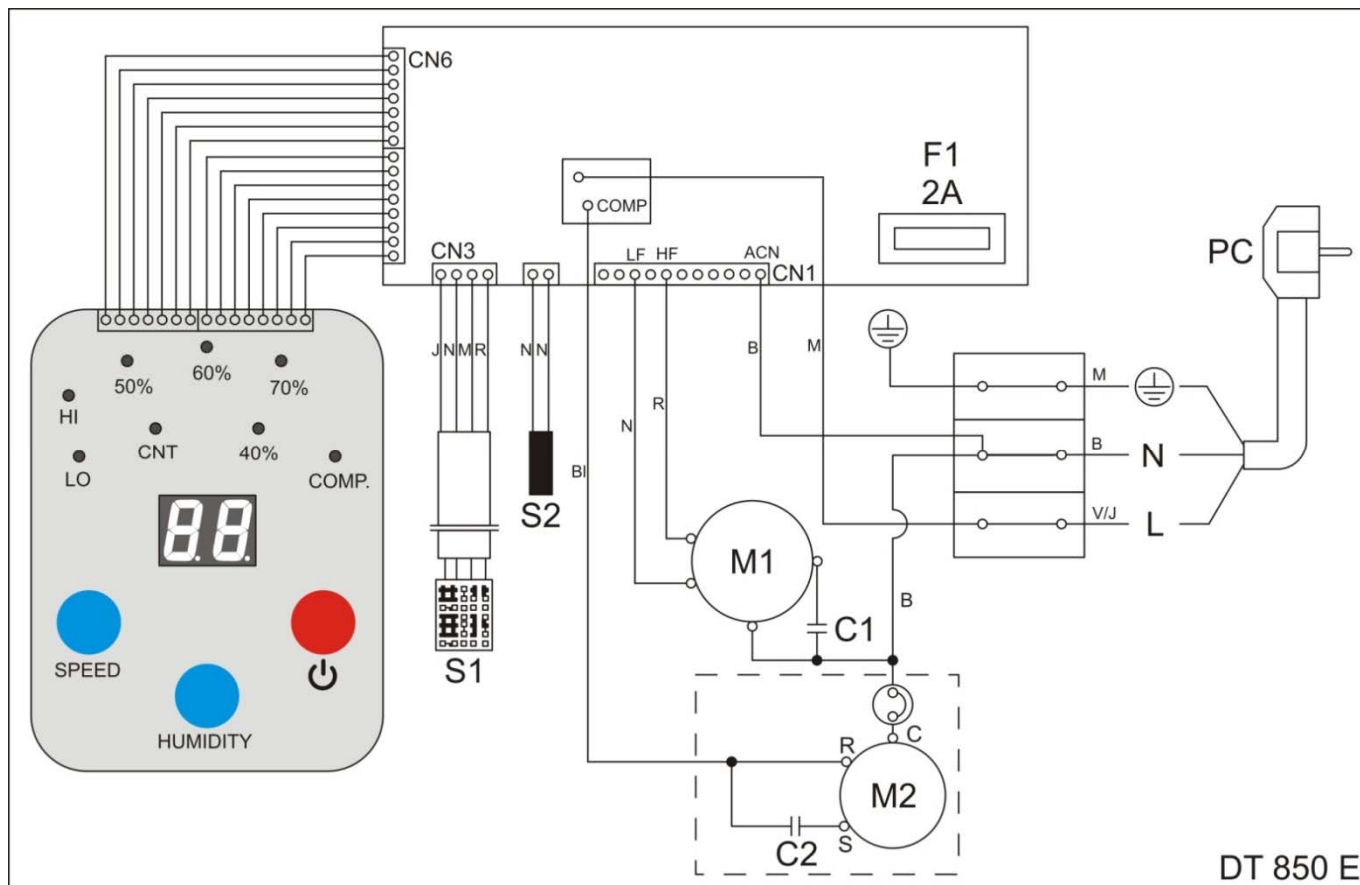


Notes


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Electrical diagram

DT 850 E

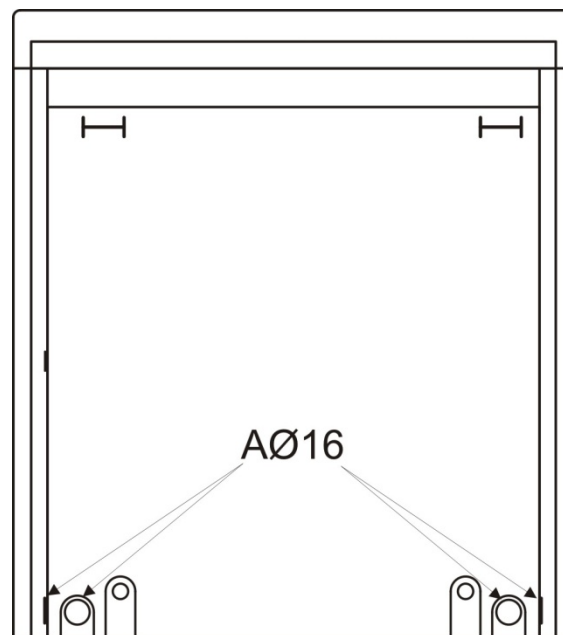
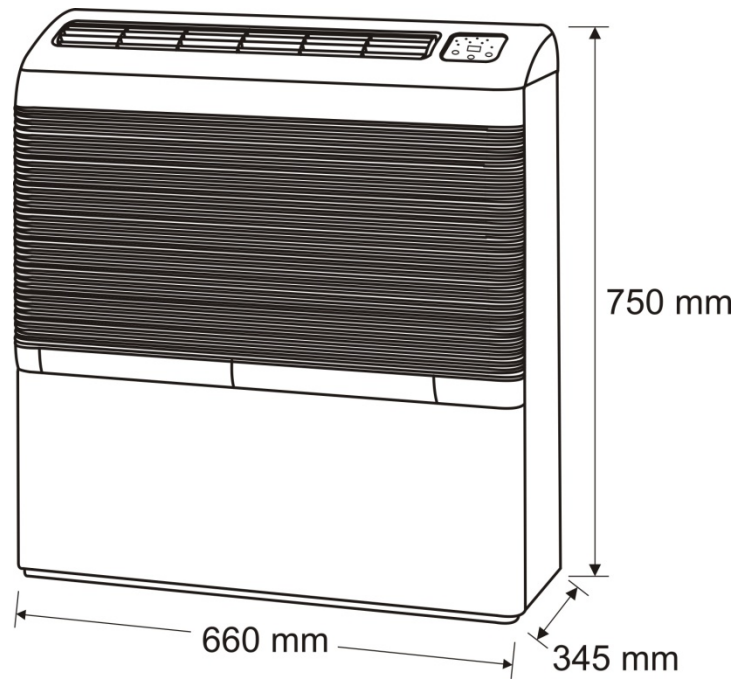


DT 850 E

L-N	Single phased power supply 230Vac-1N-50Hz
	Earth
N	black
B	blue
M	brown
Bl	white
J	yellow
R	red
V/J	Green-yellow
S1	air intake and humidity sensor
S2	Defrost sensor
M1	Fan motor
M2	Compressor motor
C1	Fan capacitor
C2	Compressor capacitor
PC	Electric plug
F1	Protection fuse 2A

Dimensions

	weight
DT 850 E	37 kg



www.zodiac-poolcare.com

Pour plus de renseignements, merci de contacter votre revendeur.
For further information, please contact your retailer.

Votre revendeur / your retailer