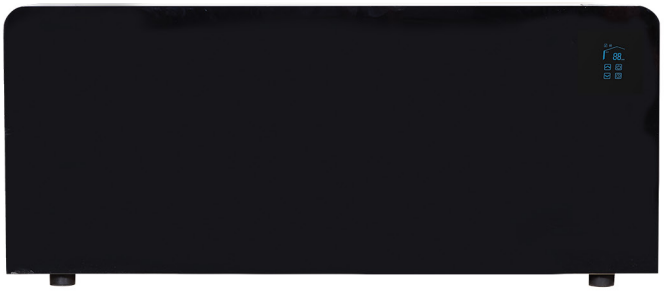
EVO HEAT
www.evoheat.com.au
HOT H_2O TECHNOLOGY

INSTALLATION & OPERATION MANUAL

EVO SOLACE PRO

INDOOR DEHUMIDIFIER



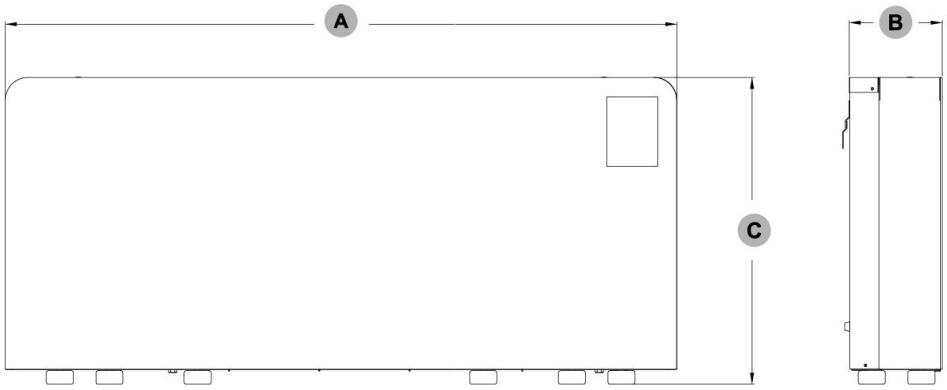
Contents

1. Introduction

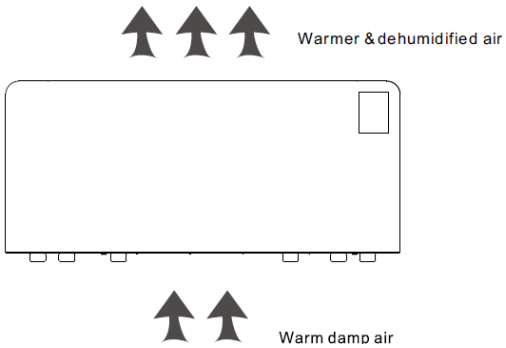
This manual contains information relating to the installation, troubleshooting, operation, and maintenance of this EvoHeat unit. Instructions in this manual must always be followed. Failure to comply with these recommendations will invalidate the warranty. Should you have any questions or require technical support, call the EvoHeat office on 1300 859 933 to speak to our team.

The Solace Pro series dehumidifier is designed to remove the moisture from the air in the room without losing the warmth contained within. The Solace Pro has the ability to remove up to 104 litres of moisture from an indoor pool room a day.

1.1 Dimensions



Length: A	Width: B	Height: C
1695mm	202mm	647mm



1.2 Working Principle

The Solace Dehumidifier works by drawing moist air over a refrigerated coil with a small fan. The cold coil of the refrigeration device condenses the water, which is removed. Then the air is reheated by the hot coil. This process works most effectively with higher ambient temperatures with a high dew point temperature.

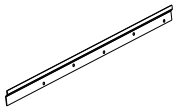
For best results we recommend that the room temperature is maintained within 5 degrees of the pool temperature.

1.3 Packing List

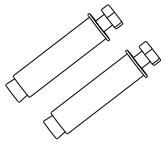
Manual

Solace Pro

Wall Suspension Bar



Expansion Bolts



2. Unit Specifications

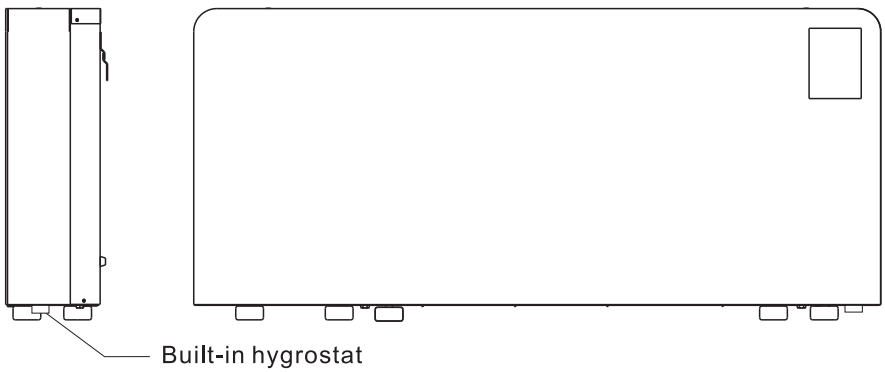
2.1 Technical Data

Evo Solace Pro Domestic Dehumidifier		
Rated Capacity at 80%RH - 30°C Air	L/h	4.5
Voltage/Phase		220-240V/1/50Hz
Rated Running Current	A	7.9
Max. Running Current	A	9.48
Rated Power Input	kW	1.7
Max. Power Input	kW	4.26
Connection Type		10amp
Refrigerant/Volume		R32/1.25kg
Relative Humidity	%RH	40 - 90
Running Temperature Ambient Range	˚C	10-32
Dehumidification Capacity per Day	L	108
Max. Pool Surface Area	m^2	20
Max. Indoor Room Floor Area	m^2	85
Noise	dB(A)	48
Condensation Pipe Diameter	mm	16
Net Weight	kg	82
Dimensions (LxWxH)	kg	1695 x 202 x 647

2.2 Hygrostat Control

The dehumidifier is controlled by a built-in hygrostat set on one side of the unit. The target RH value can be set in ranges from 30% to 90%.

The unit will not start to dehumidify until the actual RH is beyond the setting value. We recommend that an external hygrostat should be installed to ensure a constant measure of the humidity in the pool area. The location of the hygrostat is as following:



3. Safety Instructions

Installation, repair, or relocations must only be done by a fully qualified technician. If done incorrectly there is a number of hazards that can occur including fire, electric shock, water leakage and injury.

Always use a suitably qualified Electrician to perform any electrical work, they must read the manual before connecting. Ensure all cabling, circuit breakers, and protections are of a suitable size and specification in accordance with electrical wiring legislation for the heater being installed. Ensure to check that there is adequate voltage and current available at the heater connection to run the unit.

- Installation, repair or relocations must be done by a fully qualified technician. If done incorrectly it may cause fire, electric shock, water leakage and other hazards.
- Maintenance and operation must be carried out according to the recommended time and frequencies, as stated in this manual.
- To avoid risk of electrical shock, the unit must have a good power connection and earthing.
- If the supply cord is damaged, it must be replaced.
- Use genuine standard spare parts only.
- When an abnormality (smell of burning, etc.) occurs, stop the unit and disconnect the power or turn off the breaker. If the unit continues to be operated in an abnormal condition, it may cause a fire or hazards.
- For unit cleaning or maintenance, switch off and disconnect the power of the unit.
- Do not install the unit near flammable gas or spray flammable substances near it.
- Ensure the unit is installed on a strong and stable platform.
- A circuit breaker must be installed for the unit.
- Use a suitable fuse. Copper or iron will cause a failure or possibly a fire.
- Do not operate the unit with wet hands.
- Do not perform any modifications of safety or adjustment devices without authorisation.
- Even if the unit is disconnected from the mains supply, do not pull, cut or knot the electrical cables coming out of the unit.
- Do not poke objects through the inlet and outlet grills.
- Do not climb onto the appliance or rest any object on it.
- External parts of the unit can reach temperatures of more than 70°C, never touch it with your hands!
- The unit must be installed in accordance with national wiring regulations.

*Caution: Single wall heat exchanger, not suitable for potable water connection.

4. Installation

4.1 Location of Installation

Avoid installing the unit in close proximity to:

- Positions subject to exposure to direct sunlight
- Sources of heat
- Oil Fumes
- Areas subject to high frequencies

Ensure that:

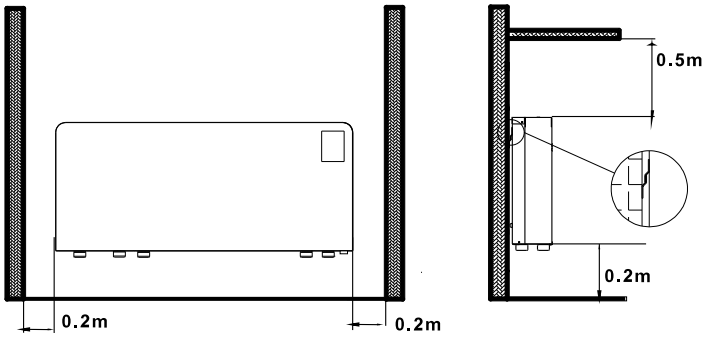
- The wall on which the unit is installed is strong enough to support the weight of the unit
- The part of the wall that the unit is installed does not have pipes or electrical wires passing through
- The wall is perfectly flat
- There are no obstacles around the unit that could interfere with the inlet and outlet air flow.
- It is preferable there is an outside perimeter-wall to allow the discharge of condensation outside.

4.2 Airflow Clearances

If hanging the unit on the wall, you are able to remove the rubber feet on the base of the unit.

The minimum mounting distances between the Solace Pro and other objects on the wall are:

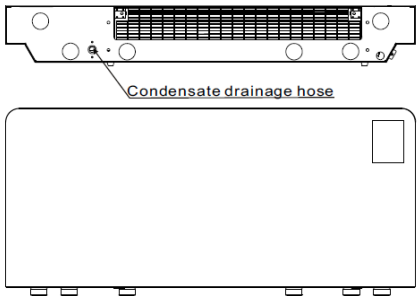
- 20cm from each end
- 50cm from above & below
- 20cm from below



4.3 Drainage

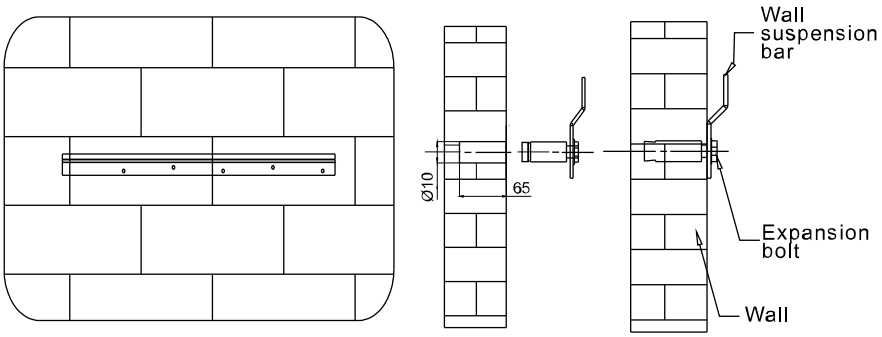
Select a suitably sized hose to connect to the built-in hose of the unit if required.

NOTE: If the condensation water discharges directly into a container, the condensate outlet should be located above the container to avoid it immersing in the container.



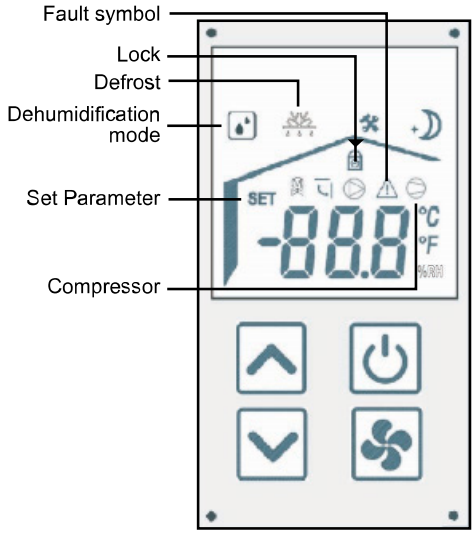
4.4 Wall Mounted Installation

Insert 5 Expansion Bolts into holes which are bored by a 10mm drill, then, fix the wall suspension bar horizontally.



5. Operation

5.1 The Controller



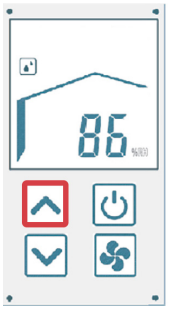
UP	• Press to check the relative humidity target value • Press again to increase relative humidity target value
DOWN	• Press to check relative humidity target value • Press again to decrease relative humidity target value
POWER	• Press to start up or shut down the unit. • Hold for 5 seconds to lock or unlock the keyboard.
WIND SPEED	• Press to confirm/save changes to parameters • Press to set the wind (fan) speed

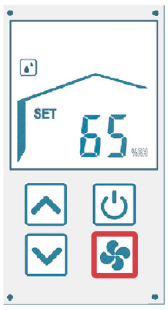
5.2 Functions

5.2.1 Power On/Off

To turn the unit on & off, press the **POWER** button.

When the unit is on, the display will show the current ambient relative humidity, and lights will be on for both the unit and control panel.

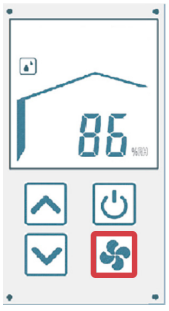




5.2.2 Set Relative Humidity

To change the desired humidity level:

- Press the **UP or DOWN** arrow keys so that the value begins flashing. Use the arrow keys again to change the target value.
- When complete, either press the **WIND SPEED** button to save, or leave the screen idle for 5 seconds to automatically save.



5.2.3 Wind Speed

Adjust the fan speed for effective air circulation. The unit offers three different levels of fan speed (1-3).

- Press the **WIND SPEED** key to access the setting.
- Use the **UP** or **DOWN** keys to choose a wind speed level.
- Press the **WIND SPEED** key to save the changes.

5.2.4 Fan Mode

This function manages the fan's behaviour when the target humidity is reached.

- Press the **WIND SPEED** key for 2 seconds to access the fan mode setting.
- Use the arrow keys to switch from **OFF** and **ON**.
  - **ON**: The fan will run continuously
  - **OFF**: The fan stops when the target humidity is reached.

5.2.5 Electric Heating Settings

The electric heating setting allows you to control the intensity of electric heating from the options of 0, 1 & 2.

- Hold the **DOWN** key for 5 seconds until the value flashes.
- Use the **UP** or **DOWN** arrows to select the electric heating level.
- Press the **WIND SPEED** button to save the changes.

5.2.6 Keyboard Lock

The keyboard can be locked to prevent unauthorised changes to settings.

- Hold the **POWER** button for 5 seconds to either lock or unlock the controller.
    - No changes can be made to settings while the unit is locked.

5.2.7 Fault Interface

This function displays fault codes for troubleshooting, see the troubleshooting section of this manual for definitions.

- When a fault occurs, press the **UP** or **DOWN** buttons to view the fault/s
- To exit checking faults, press the **POWER** button.

6. Troubleshooting

Malfunction	Code	Reason	Solution
High pressure protection has appeared 3 times in 30 mins	P1	High pressure protection too frequent	Check the below solutions to failure P1/P2/P3
High pressure protection	P2	Discharge pressure is too high	
Condenser outlet temp. over high	P3	Condenser coil temp. is too high	
Evaporator outlet temp. sensor failure	P5	Temp. sensor broken or in open/short circuit	Check or replace temp. sensor
Evaporator inlet temp. sensor failure	P6	Temp. sensor broken or in open/short circuit	Check or replace temp. sensor
Condenser outlet temp. sensor failure	P7	Temp. sensor broken or in open/short circuit	Check or replace temp. sensor
Humidity sensor failure	P8	Humidity sensor broken or in open/short circuit	Check or replace humidity sensor
Motor feedback signal failure	E0	Feedback wiring has bad connection or fan motor is damaged	Check feedback wiring of the fan motor or replace it
Return air temp. sensor failure	P9	Temp. sensor broken or in open/short circuit	Check or replace temp. sensor

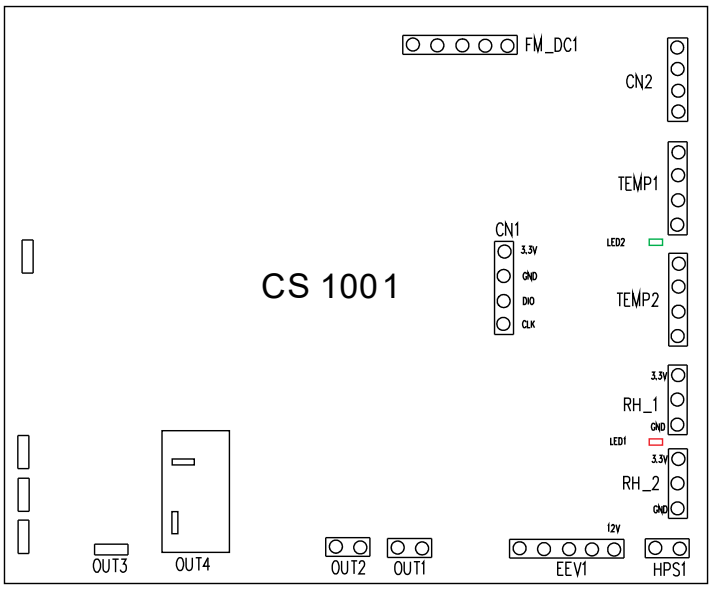
To resolve a P1, P2 and/or P3 error:

1. If other failure codes appear with P1, P2 or P3, resolve them first.
2. If there are no other failures of P3~E0, and P1 & P2 still exist, disconnect the power to the unit and try connecting again after 1 hour.
3. If only the P3 error exists, keep the fan running for 30 mins. If P3 still appears after running the fan, disconnect the power to the unit and try reconnecting it again after an hour.

If you require technical support or have a question, call the EvoHeat Tech Support line on 1300 859 933.

7. Wiring Diagram

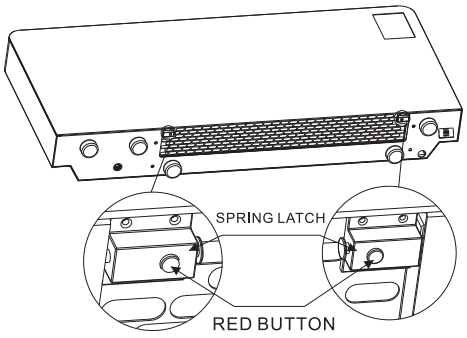
Ports	Meaning
OUT1	Reserved
OUT2	Reserved
OUT3	Electric Heating
OUT4	Compressor
RH_1	Return Air Humidity (Internal)
RH_2	Return Air Humidity (External)
TEMP 1-1	Condensation Outlet Temperature
TEMP 1-2	Return Air Temperature
TEMP 2-1	Evaporation Outlet Temperature
TEMP 2-2	Evaporation Inlet Temperature
HPS1	High Pressure Protection
FM_DC1	Dc Motor Output
CN1	Program Port
CN2	485 Communication



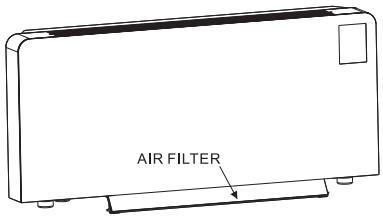
8. Maintenance

Before cleaning or maintaining the unit, cut off the power supply.

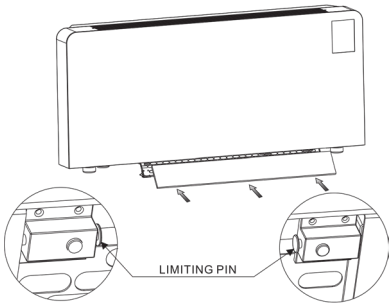
For optimal Solace Pro performance, we recommend cleaning and maintenance every 6 months.



1. Press the two red buttons and drag down slowly.



2. Separate the return air filter screen from the units, then flush the air filter with water



3. Set the filter net and the air return grill to the original place and press the limiting pin

4. Clean up the outer unit with a soft and damp rag. To protect the paint coat on the unit, do not use a rough sponge or corrosive detergent.

9. Warranty

Refer to the EvoHeat website for warranty details

- Australia: https://evoheat.com.au/warranty-terms/
- South East Asia: http://evoheat.com.sg/warranty/

1. Warranty terms are from date of purchase.

2. This warranty excludes any defect or injury caused by or resulting from misuse, abuse, neglect, accidental damage, improper voltage, vermin infestation, incompetent installation, any fault not attributable to faulty manufacture or parts, any modifications which affect the reliability or performance of the unit.

3. This warranty does not cover the following:

    a. Natural Disasters (hail, lightening, flood, fire etc.)
    b. Rust or damage to paintwork caused by a corrosive atmosphere
    c. When serviced by an unauthorized person without the permission of Evo Industries
    d. When a unit is installed by an unqualified person
    e. Where a unit is incorrectly installed
    f. When failure occurs due to improper or faulty installation
    g. Failure due to improper maintenance (refer Operating Instructions)
    h. 'No Fault Found' service calls where the perceived problem is explained within the operating instructions.
    i. Costs associated with delivery, handling, freighting, or damage to the product in transit.

4. If warranty service is required, you should:

    a. contact Evo Industries Australia on 1300 859 933 or via our Contact page on our web site
    b. provide a copy of your receipt as proof of purchase
    c. have completed the online *Warranty Registration Form*

5. Onsite technical service is available within the normal operating area of your Evo Authorised Service Agents. Service outside this area will incur a traveling fee.

6. Unless otherwise specified to the purchaser, the benefits conferred by this express warranty and additional to all other conditions, warranties, rights and remedies expressed or implied by the Trade Practices Act 1974 and similar consumer protection provisions contained in legislation of the States and Territories and all other obligations and liabilities on the part of the manufacturer or supplier and nothing contained herein shall restrict or modify such rights, remedies, obligations or liabilities.

REGISTER YOUR WARRANTY

EvoHeat highly recommend customers complete their warranty details online to ensure efficient warranty claim processing.

To register your warranty, scan our QR Code or head to our website and fill in the Warranty Registration Form: https://evoheat.com.au/warranty-registration/