

TECHNICAL CHARACTERISTICS

Electrical characteristics	Hydraulic characteristics	Thermostat characteristics
Power Supply230 V (single-phase)	Max. pressure 2 bars	Setting range 15 à 30°C
Consumed power 12 to 14A	Max. flow 20 m ³ /h	°C Resolution 2 degrees
Protection index IP-55	Min. flow 5 m ³ /h	
Insulation Classe II		

PRESENTATION

The heater 3kW is specially designed to heat the pool water. It is equipped with an immersion resistance providing an optimal protection against corrosion. The heater must always be installed before any water treatment device (see chapter "Connection"). It is highly recommended to connect the heater to the electric box provided by the manufacturer. In the contrary, connect imperatively the heater to a socket controlled by the filtration.

THE HEATER SHOULD NEVER RUN WITHOUT WATER CIRCULATION (exclusion of guarantee)

OPERATION

As the power supply of the heater should be controlled by the filtration, the latter must be under operation to program your heater.

- The On / Off of the heating program of the device is done by the switch

When pressing it the setting temperature is blinking.

At this moment it is possible to modify the setting temperature with the switches PLUS and MINUS.

The setting range is from 15°C to 30°C.

- Pressing the switch  a second time enables to confirm the value and to start the heating program.

- Pressing once again the switch  enables to stop the heating. "OFF" will appear on the display.

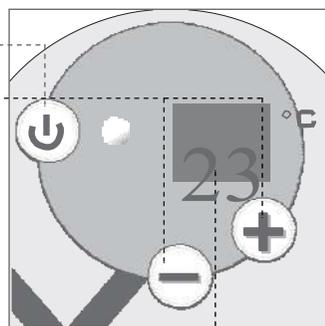
The start of the heating program makes it possible to supply the heater with power if the pool temperature is lower than the set value and if the filtration is on. As soon as the set temperature is reached, the heater stops.

It is dangerous to start the heating program when there is no flow. It is extremely important to be sure that the filtering pump is correctly connected and that water flows in the heater before starting this function.

In case of a detection of a too fast water temperature increase (for example if there is no water flow) the heater will show the default "E3" and stop automatically for safety reasons. Check then the water flow in the heater before restart.

The set temperature will be saved in case of power failure.

If the heating program is "ON" it will stop with the filtration thanks to its connection. With the next power input (that's to say with the next filtration run) it will get "ON" and proceed to the water heating if the set temperature is higher than the water temperature.



Display for informations / temperature

INSTALLATION

In order to use this device under the most favourable conditions, it is advised to respect the following parameters:

- to install it in a dry place protected from freezing
- hydraulic connection (see chapter "hydraulic connection")

Before the installation and the use of this device it is nevertheless very important to have a healthy and clear water in the pool.

In case of a water treatment containing chlorine it is recommended to control the pH and chlorine level and to adjust them if needed:

- the pH level should be between 6.9 and 7.5
- the free chlorine level should be between 0.4 and 1.4mg/l

In case of a different water treatment, the retailer will have to check the compatibility with our material.

START UP, HEATER MAINTENANCE

- AFTER THE INSTALLATION OF THE HEATER, it is required to check that there is no leak in the pipes.

- BEFORE THE FIRST OPERATION START check if there is water in the piping system. Never put the heater on if it may be frozen up. Check that there is no air in (put simply the filtration on before starting the heater)

■ DURING THE FIRST OPERATION START:

- Make sure that the heater starts heating when you increase the set temperature (higher than the current temperature) The LED should light on.
- Make sure that the heater stops and that the light blinks when you decrease the set temperature and when the filtration doesn't run.

CONNECTION

HYDRAULIC CONNECTION

The heater should be installed before every water treatment device. It is recommended to make sure that there is always water in the device!

Nota 1 : Use teflon for the connection to the pipe

Nota 2 : The arrows hereunder show the flow direction

ELECTRICAL CONNECTION

The power supply of the heater should be protected by a 30mA differential device which intensity should correspond to the power of the heater (16A)

The device must be connected to the earth.

The heater is delivered with a power supply cable.

THIS CABLE SHOULD BE CONNECTED TO A SOCKET CONTROLLED BY THE FILTRATION in order to ensure that the heater runs only during the filtration cycles.



WINTERING

During the winter, it is advised to desinstall the heater. If it remains in place it is recommended to stop it, to cut off its power supply and to drain the hydraulic system.

In any case the heater should be kept in a dry place protected against freezing.

USEFUL INFORMATIONS

TEMPERATURE INCREASE

For a first use end of May / beginning of June

For a pool from 25 to 30 m³.

With the use of a solar cover (with bubbles of 1cm height). 26°C as set temperature.

These values are given as per example, they may vary according to the shape of the pool, the depth of the water and the climate.

EXPOSURE	STARTING WATER TEMPERATURE		
	19 °C	17 °C	15 °C
Full in the sun.	2 days	3 days	4.5 days
Sheltered from the wind.			
Sunny the best part of the day.	3 days	4 days	6 days
Sheltered from the wind.			
Sunny only few hours per day.	4 days	5.5 days	8.5 days
Sheltered from the wind			

POWER CONSUMPTION IN kW/H FOR A USE IN SEASON APPROX. 120 DAYS

The power consumption depends little on the needed time for the first temperature increase. It depends a lot more on the climate conditions during the whole period of use

Our estimate is done with regards on following parameters:

- 12h of use per day (more than 12h in beginning and end of season, and less than 12h during the hottest months). The total of days of use is 120 (mid May to Mid September)

EXTRAPOLATION : Add 8% on the consumption for every additional degree over 26°C.

The increase of the requested temperature will result in an increase of the needed heating hours per day, the power consumption will thus change.

NOTE : The power consumption is proportional to the heating hours per day. A 15h use in average per day instead of 12h brings the consumption 25% up.

A 9h use in average per day instead of 12h brings the consumption 25% down.