

PREMIER HEAT PUMPS Q & A's

It is cold (3°C) and the heat pump is not running. Is this normal?

There are 2 types of heat pumps: - traditional and "defrost" heat pumps. Traditional heat pumps function with an outdoor air temperature above +5°C. These are generally designed for outdoor pools intended for use from October to April depending on the region. The "defrost" heat pumps function with an outdoor air temperature of -10°C and a generally designed for use with indoor or sheltered pools.

There is water around my heat pump. Is this normal?

You have certainly noticed that there is sometimes water under your car in the summer. This is not a leak but simply condensation. The same applies to your heat pump.

The heater is not working; there is no difference between the water going in and the water coming out.

The temperature difference between the water inlet and outlet sides is greatly influenced by the water flow-rate through the unit. The higher the flow-rate, the lower the temperature difference and visa versa. This in no way influences the pool heating quality over an entire day.

I would like to build a shelter to protect my heat pump against bad weather, is this possible?

The heat pump has been designed for outdoor installation and is perfectly weather-resistant. If, nevertheless, you wish to protect it, you may construct a lean-to roof and side walls (allow a space of 1 metre for this purpose). The front of the unit should however be left free and unobstructed.

What do I have to do to my heat pump when overwintering?

Risk of frost in colder climates. It is essential to drain the heat exchanger in order to avoid ice formation which could cause the water pipes within the heat pump or the heat exchanger barrel to burst. This is best achieved by removing the water connections to the heat pump water heater and allowing the pool water system to by pass the unit.

Covering the unit and protecting it from the elements is also recommended during long periods of non use.

I switched the heating on 24 hours ago and my pool temperature has only increased 2°C, is this normal?

Yes,

A heat pump is not designed to increase your pool temperature quickly, but to maintain the temperature you wished to attain when selecting the unit.

For example, the average time required to increase the temperature of an 80 m³ pool in continuous operation with a cover from 15°C to 28°C is approximately 5 days using a 12 kW power heat pump.

How do I maintain my heat pump?

The heat pump requires very little maintenance. Each year, give the rear unit cooler a good wash (it looks like a car radiator). Do not use a high-pressure cleaner as this could damage the aluminum fins, a normal water spray is sufficient.

Before switching the unit back on again, contact your local pool specialist to have the electrical connections checked and to ensure all safety devices function correctly.

What is COP

The COP is the coefficient of performance. You can calculate this value by dividing the power delivered by the unit with the power drawn by the unit.

E.g.: COP for a premier Heat Pump model PHPM-600R heat pump: $14.5/2.8 = 5.2$.

The COP is measured under controlled conditions:

Restarting your Premier Heat Pump

At the beginning of the season, you will need to put your heat-pump back into service. **We therefore recommend you take note of the following tips:**

- If the unit cooler is soiled or clogged (at the rear of the heat pump), clean it with a small brush and fresh water spray (do not use a high-pressure spray). We recommend the use of a special-purpose heat pump cleaning agent.
- Before allowing water to circulate through the unit, always ensure there are no foreign bodies blocking the water inlet and outlet openings of the condenser unit as well as the associated pipes (mice, insects, leaves...).
- When connecting the hydraulic system, always respect the water flow direction.
- Progressively increase the water flow through the heat pump in order to avoid any water hammer effect (caused by rapid opening/closing of the valves).
- Check that the condenser unit is watertight. Be careful ! Incorrect over-wintering could result in damage to the condenser unit due to freezing.
- Check all electrical connections.
- Dust the electrical cabinet.
- Switch on the heat pump:
 - Set the required temperature on the regulator unit,
 - Start the pump,
- To bring the pool up to temperature, do not forget to run the filter system 24/24 until the desired temperature is attained or use the heating system first (see technical instructions).
- Ensure the heat pump switches off (fan and compressor) without fault when the filter pump is switched off (except A11 which indicates insufficient water flow-rate).

What is the advantage of a pool cover?

When the pool is heated, the cover helps limit temperature loss due to dissipation. This cover therefore allows you to reduce the power consumption of your unit and cut your running costs in half.

Heating a pool without a cover is like heating a house with the window open.

Is it better to heat the pool by day or by night?

Bearing in mind that it is recommended to filter a pool heated at 28°C 14 h/day (filter time = ½ the temperature), we recommend you heat your pool during the 8 off-peak hours and 6 other hours during the afternoon. This is important in order to keep the pool water crystal clear during the very hot periods.

Does the heat pump make a lot of noise?

The notion of silence and noisy is subjective. The elements which generate some noise in a heat pump are the compressor and the fan.

Premier Heat Pumps make full use of cutting-edge compression and ventilation technology in order to reduce these noise levels to a minimum. In all case, it is important not to install the heat pump less than 5 m away from your neighbour's or your own noise sensitive areas.

Can I install my heat pump in a technical room?

Heat pump units are designed for external installation. However they maybe installed in extremely well ventilated technical rooms. Heat pumps by their very nature require large volumes of outside air, as the air that they exhaust is greatly cooled as a by product of heating the pool water.

Can I install my heat pump more than 10 m away from my filter system?

Yes, but the limit is 15 m. beyond this distance, the heat loss in the pipes is excessive and the filter pump may not have enough power.

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