

NEXUS



SPECIAL FEATURES

The Vian Nexus range is expertly designed for space efficiency, offering flexible installation options to suit any setting. Its compact size, strategically placed connections, and control panels allow for closer positioning to your spa, optimising heat transfer and enhancing overall performance while lowering energy consumption. Beyond its exceptional performance, the Vian Nexus boasts a sleek, modern design that elevates the look of any space. With this new range, you get superior functionality and style all in one.

In summary, the Vian Nexus range offers three cutting-edge models - the Nexus 5, Nexus 6, and Nexus 7 EVI - each designed to meet the specific needs of various climates and applications. With improved performance, energy efficiency, space-saving design, and stylish aesthetics, the Vian Nexus is the perfect solution for hot tub and swim spa customers seeking reliable, high-performance heat pumps for any environment.



Super Charged EVI

Supercharged EVI Technology enhances heating efficiency in extreme cold using Enhanced Vapor Injection (EVI). With a COP of up to 14.2, it ensures optimal performance even at temperatures as low as -25°C, maximizing heating capacity in harsh winter conditions.



Heating/Cooling Technology

This versatile system provides both heating and cooling capabilities, allowing year-round temperature control.



WarmCore Technology

WarmCore technology provides targeted heating to the compressor body and tray base (model dependent) to melt ice buildup, making it ideal for colder climates and winter use.



R32 Refrigerant

All of the Nexus range use R32 is an eco-friendly refrigerant with a lower global warming potential than traditional options. It enhances energy efficiency, improves system performance, and reduces environmental impact, making it a sustainable choice.



Hybrid Logic

Hybrid Logic features 3kW Direct Electric Heater Out Logic for rapid heating, making it ideal for holiday lets and short-stay accommodations. This system ensures quick client turnaround by efficiently boosting water temperature when needed.



WiFi

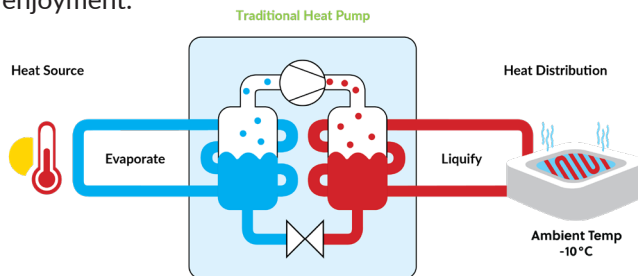
Equipped with WiFi connectivity, this system allows remote monitoring and control, enabling users to track performance, adjust settings, and optimise efficiency from anywhere using a smartphone or smart device.

Warranty: 2 Years - Whole Product | 3 Years - Fan, Motor and Heat Exchanger | 5 Years - Compressor

ABOUT HEAT PUMPS

WHAT IS AN AIR SOURCE HEAT PUMP?

Air source heat pumps offer an energy-efficient and environmentally friendly way to heat your hot tub or swim spa. By harnessing heat from the surrounding air, they provide consistent warmth while reducing energy costs and carbon footprint. This advanced technology ensures reliable heating performance, even in colder temperatures, making it an ideal solution for year-round enjoyment.



HOW DOES AN AIR SOURCE HEAT PUMP WORK?

The fan in the air source heat pump draws air over a network of tubes that look a little like a car radiator.

These tubes are filled with an eco-friendly R32 refrigerant. The air then passes over the tubes warming up the refrigerant and turning it from a liquid into a gas.

This gas is passed through a compressor which increases the pressure and significantly raises the

temperature of the gas, which is then passed through a titanium heat exchanger.

The swim spa or hot tub's water circulation system is plumbed through the air source heat pump and the heat from the gas travels through the heat exchanger, which in turn heats the water from the hot tub or swim spa as it passes over it.

The refrigerant then cools and turns back into a liquid and starts the process all over again.

Due to how the system works, our air source heat pumps will still produce heat even if the ambient air temperature is below zero as the compression process of the refrigerant gas creates a lot of heat.

Not only is this a far more cost-effective solution to heat your hot tub or swim spa, but it is also a much more eco-friendly option.



INSTALLATION

Electrical requirements:

The heat pump does not need any additional electrical installation on site as the unit can take its power from the hot tub or swim spa.

Location:

The heat pump requires a minimum of 500mm of inlet space and is recommended to have 1m of unobstructed space for the fan outlet.

Planning:

Each installation will vary, and a site survey to review and discuss the best fitment and location for the heat pump can be arranged. This is a great opportunity to discuss the best option for the installation of the heat pump and answer any questions.

Fitment:

When installing the heat pump some basic modifications to your hot tub or swim spa will be made. This is to plumb the heat pump into the heating and circulation system. There will be an inlet and an outlet pipe plumbed into the hot tub base or cabinet to provide circulation through the heat pump.

THE NEXUS EVO 7 EVI



The flagship model of the range, the Nexus 7 EVI, is designed to perform exceptionally even in the harshest climates. Using Enhanced Vapor Injection (EVI) technology, it delivers a COP of up to 14.2 and operates efficiently at temperatures as low as -25°C. This advanced system maximises heating capacity in extremely low temperatures.

Supercharged EVI Technology, for enhanced heating efficiency in extreme cold.

Operates down to -25°C, for reliable performance in freezing conditions.

Nexus Communication, that can interpret and respond to latest Balboa control signals.

Hybrid Logic, 3kW Direct Electric Heater Out Logic.

Input Switch for Gecko In.Grid & Balboa Relay

WarmCore heating to compressor body and tray base to melt ice build-up.

NEXUS EVO 7	Full DC Inverter Heat Pump with EVI			
	kW Out		CoP @	
CAPACITY @°C	ECO	Full	ECO	Full
Plus 26°C	14.21kW	6.19kW	14.21	6.19
0°C	1.54kW	3.91kW	4.05	2.38
Minus 25°C	0.75kW	1.92kW	2.42	1.42
Max Power Input	2.2 kW			
Usage	Hot Tubs, Swim Spas & Holiday Let			
Operating Range	-25°C to 43°C			
Heating Range	15°C to 40°C			
Flow Rate	50L/pm			
Sound @ 1 m dB	<51			
Step Designed to Cover Heat Pump	YES			
Dimensions L - W - H	626mm - 464mm - 476mm			

ABOUT EVI TECHNOLOGY

WHAT IS EVI?

EVI (Enhanced Vapour Injection) is an advanced compressor technology that improves the efficiency and performance of heat pumps, especially in extremely cold temperatures. Unlike standard heat pumps, which struggle below -10°C to -15°C , EVI technology allows heat pumps to operate efficiently down to -25°C . This makes EVI-equipped heat pumps a reliable and energy-efficient solution for year-round heating, even in harsh winter conditions.

Why is EVI Beneficial?

More Heat Output in Cold Weather

EVI technology ensures consistent and higher heat output, even in freezing conditions, making it ideal for cold climates like the UK during winter.

Higher Efficiency (Better COP)

With improved COP (Coefficient of Performance), EVI technology helps save energy, reducing running costs while still providing effective heating.

Longer Compressor Lifespan

Reduced strain on the compressor leads to greater durability, meaning fewer maintenance issues and a longer lifespan.

More Reliable Heating Performance

EVI ensures no sudden drops in efficiency, providing consistent and dependable heating when you need it the most.

HOW DOES EVI WORK?

EVI technology functions like a supercharger in a car engine. A standard heat pump (EEV) operates well under normal conditions but struggles in extreme cold.

EVI “supercharges” the refrigerant cycle by injecting extra vapour at an intermediate stage, increasing heating capacity and efficiency, even in freezing temperatures.

This results in more reliable heating performance, lower energy costs, and greater durability of the heat pump.

EVI vs EEV

Cold Weather Performance

EEV Compressor: Efficiency drops below -10°C .

EVI Compressor: Maintains efficiency down to -25°C .

Heating Power Output

EEV Compressor: Reduced at low temperatures.

EVI Compressor: Higher heat output in extreme cold.

Longer Compressor Lifespan

EEV Compressor: Decreases in freezing weather.

EVI Compressor: Higher COP, even in sub-zero conditions.

More Reliable Heating Performance

EEV Compressor: Works harder in cold.

EVI Compressor: Reduced strain, resulting in longer lifespan.

