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PROTEAM P21 ON/OFF Heat Pump



automatedenvironmentalsystems.co.uk



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Norwegian innovation

From humble origins in a Norwegian village in 1972, Proteam's manufacturing and distribution operations have expanded to several countries around the world.

There have been many changes during this time but the passion for innovation and the quest to achieve the best possible quality have remained the same.

Proteam heat pumps have always been specifically designed to have higher COPs at lower temperatures when maximum energy is needed.

All Proteam heat pumps are available with R32 gas, which is a more environmentally friendly option compared to the traditional R410a gas.

Thanks to the quality, reliability and performance of its products over many years, Proteam is today one of the leading global brands for pool heat pumps.



Sizing your heat pump

Heat pumps are an investment, normally paying for themselves with the savings you make in running costs.

When sizing a heat pump we don't just ask how big your pool is, instead we ask a series of questions such as how and when you use your pool, what temperature you want to achieve, what filter equipment you have connected and how well insulated your pool is – the answers help us to advise you on the correct heat pump for your needs.

Many of our customers choose to buy larger heat pumps - the extra heating capacity can provide an extended swimming season, higher water temperature, faster heating and even the option to increase your pool size at a later date - flexibility that can easily outweigh the additional cost.

Two step Norwegian quality control system covering:

- ▶ Checking of raw materials
- ▶ Welding
- ▶ Vacuum process
- ▶ Leak Testing
- ▶ Refrigerant charging
- ▶ Electrical Safety Testing






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Proteam P21 heat pumps maximise heat output and minimise energy input at lower temperatures, making them ideal for heating larger pools



- ▶ Maximum heating capacity 26kW, largest capacity single phase heat pump in Proteam range
- ▶ High efficiency performance, up to 6.2kW of heat for every kW used
- ▶ 1 1/2 inch female threaded or glue socket water connections
- ▶ Heats and cools
- ▶ Light grey ABS cabinet, strong and corrosion resistant
- ▶ Extended season model works down to -10°C
- ▶ Oversized coated evaporator
- ▶ Pre-charged defrosting system with bottom pan heating
- ▶ Easy digital temperature control with LCD display
- ▶ Low noise design, maximum noise level 56 dB(A)
- ▶ Flow switch prevents damage to the unit
- ▶ Titanium class A1 double coil heat exchanger
- ▶ R32 gas
- ▶ Winter cover
- ▶ Two year warranty, Seven year (total) parts warranty on the compressor and heat exchanger



A heat pump is up to
80% more efficient
than traditional
methods of heating
a swimming pool



COMPRESSOR

Low pressure gas from evaporator is compressed to increase pressure and raise temperature, becoming very hot gas



HEAT EXCHANGER

Heat from hot gas is transferred to your pool water as it passes through heat exchanger, condensation occurs as gas condenses and becomes warm liquid refrigerant again



EVAPORATOR

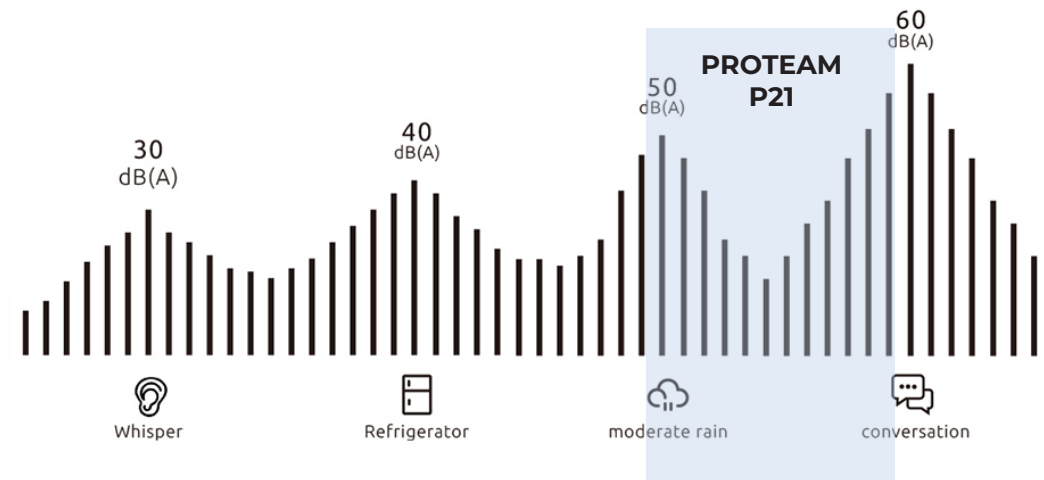
Cold liquid refrigerant absorbs heat from the ambient air as it evaporates and forms a low pressure gas, auto defrosting prevents the evaporator from freezing up



EXPANSION VALVE

Warm liquid refrigerant from heat exchanger is forced through valve, as the pressure drops it rapidly expands becoming an extremely cold liquid refrigerant

Proteam P21 heat pumps have a low noise design for very quiet operation, the maximum noise level is max 56dB(A)





**HIGH
COP**

The Proteam P21 heat pump can reach a COP as high as 6.2 at Air 24°C/ Water 26°C - meaning that for each kW of energy input, 6.2kW of heat would be output to your pool

PROTEAM ON/OFF SPECIFICATIONS

		P6	P8	P10	P13	P15	P17	P20	P21
Maximum Heating Capacity	kW	5.8	7.6	9.6	12.1	14.2	17.1	20.2	26
Ambient 24°C Water 26°C in, Humid 80%	Capacity (kW)	4.8	6.2	8.2	9.4	11.6	12.9	17.2	23.2
	COP	5.0	5.4	5.1	5.3	5.4	5.1	4.9	6.2
Ambient 15°C Water 26°C in, Humid 70%	Capacity (kW)	3.6	4.5	6.2	7.1	8.7	9.7	12.9	17.9
	COP	3.8	4.1	3.8	4.0	4.1	3.8	3.7	4.8
Input Power	kW	1.0	1.1	1.6	1.8	2.1	2.5	3.5	3.7
Working Ambient Temperature	°C	-10 ~ 43							
Power Supply		220V / 1Ph							
Minimum Fuse (C Type MCB)	A	13A Plug	13A Plug	13A Plug	16	16	20	25	32
Running Current	A	4.5	5.0	7.3	8.2	9.5	11.4	15.9	16.8
Compressor Type		Rotary						Scroll	
Condensor Type		Titanium Coil							
Fan		1	1	1	1	1	1	1	1
Airflow		Horizontal							
Water Flow Volume	m ³ /h	1 ~ 3	1 ~ 3	2 ~ 5	3 ~ 7	3 ~ 7	4 ~ 8	6 ~ 12	6
Water Connector Size	inch	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Refrigerant Type		R32							
Material of Casing		ABS							
Sound Pressure (Max)	dB(A)	50	50	53	54	54	56	56	56
Unit Net Dimensions(L*W*H)	mm	778*293*511		938*360*581	1015*370*621		1080*416*708		1078*416*958
Weight	Kg	33	35	48	55	60	68	92	99
Wi-Fi Connectivity		No							

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Two year parts and labour warranty

Seven year (total) parts warranty on the compressor and heat exchanger

Proteam heat pumps are sold exclusively through Automated Environmental Systems in the UK