Heatstar Energy Technology Systems

ADVANCED SWIMMING POOL CLIMATE CONTROL SYSTEMS

PROJECT ANALYSIS SUMMARY

Contact:	**David**	T **01268-206560**	F
Company:	**HeatPumps4Pools**		**15/03/2016**
Project Title / Ref:			**P12054**

Selection : Orion TTW 100 Super Plus

Description :

Indoor pool Dehumidifier suitable for 'suck and blow' air distribution duct arrangment
Dehumidifying heat pump based system with energy recycling back to room air
Single speed direct drive, forward curved, format air fan
Complete heating of room air and pool water via integral heat emitters
Plant room located - available with easy install special flexi-duct kit with air grilles

Provisions :	✓	Condenser boiler temperatures compensated
Humidity control	✓	By Dehumidifying Heat Pump acting upon recirculated room air
Energy recycling	✓	Back to room air via Dehumidifying Heat Pump
Heat recovery	×	Not included
Room Air heating	✓	By integral multi-row LTHW heating coil
Pool Water heating	✓	By integral LTHW high capacity shell & tube heat exchanger coil
Fresh air ventilation	×	Not included
Room Air cooling	×	Not included
Controls package	✓	Mechanical humidistat / Digital thermostat
Ducting required	✓	Suck and blow flexi-duct kit included

Design Criteria:

Pool Room Air temperature:	30 °C
Pool water surface area:	18 m²
Pool water temperature:	29 °C
Uncovered Hrs. Norm/Max:	2 / 6
No spa included	
Pool Room Space Volume:	135 m³
Min. ambient temperature:	-5 °C
Room structural heat loss:	2.4 kW
Fresh air heat loss:	0.8 kW
Air ducting heat loss:	0.8 kW
Water heat loss:	2.4 kW

Performance data:

Dehum via heatpump :		4.1 L/Hr.
Recirculation Air Flow :		1500 M³/Hr.
Air heating coil :	(LTHW)	15 kW
Pool Heat Exchanger :	(LTHW)	17 kW
Total Required Boiler duty :		11 kW
Min. Flow Temperature :		80 °C
Electrical supply options :		
Single phase 230v 50Hz :		22 Amps
Three phase 400v 50Hz :		Not available

Annual Energy use analysis:

Probable Heat & Vent cost:	**£ 929**
Source of heat energy:	**Mains Gas**
Energy consumption kWh:	**20,018**
kG CO^2:	**3,862**

Building regulation compliance :

Classification of project for regulations :
L1B Existing building - Domestic

	Actual:	L1B Status:
Dry heat extraction from expelled air >70%:	0	N/A
Variable speed fan drive included ? :	No	N/A

PRICE : **£ 6,500** **+VAT** **DELIVERY COST :** **£219**

AVAILABILITY : Normally 4-6 weeks from Confirmation of Order & Final Specification

Payment terms : To be confirmed with AstralPool UK Ltd
Prices include all discounts, are net ex works, and are subject to VAT at applicable rates.
This quotation is subject to the terms and conditions of sale of AstralPool UK Ltd and is valid for 90 days.
Delivery cost excludes carriage via Hi-ab or timed deliveries and is subject to confirmation at time of order.
Performance ratings are nominal. Annual energy use analysis is indication only and not intended to be binding. E&OE

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