

PROJECT ANALYSIS SUMMARY

Contact:	T	F	
Company:			22/09/2017
Project Title / Ref:			P14142B

Selection :	Phoenix	1000 Super Plus
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Description : *Packaged Total Environmental Control unit purpose designed for indoor pool application
Hybrid system utilising both dehumidifying heat pump & heat recuperator
Single speed direct drive, forward curved, format air fan
Full rate fresh air ventilation capability
Complete heating of room air and pool water via integral heat emitters
Plant room located - central ventilation principle with air ducting channels*

Provisions :	✓	Condenser boiler temperatures compensated
Humidity control	✓	By Dehumidifying Heat Pump AND ventilation with fresh air
Energy recycling	✓	Back to room air & pool water via Dehumidifying Heat Pump
Heat recovery	✓	From expelled room air using 'Cross Flow' heat recuperator (permanent)
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	✓	Dilution provision & Full rate capability
Room Air cooling	✓	Dissipation of heat via induction of cooler fresh air (subject to temperature)
Controls package	✓	Digital Electronic
Ducting required	✓	Pool air intake, pool air supply, fresh air intake, exhaust air to outside

Design Criteria:		Performance data:	
Pool Room Air temperature:	32 °C	Dehum via heatpump :	5.0 L/Hr.
Pool water surface area:	32 m ²	Recirculation Air Flow :	1500 M ³ /Hr.
Pool water temperature:	30 °C	Exhaust/Fresh Air Flow:	1100 M ³ /Hr.
Uncovered Hrs. Norm/Max:	24 / 24	Air heating coil : (LTHW)	14 kW
No spa included		Pool Heat Exchanger : (LTHW)	25 kW
Pool Room Space Volume:	130 m ³	Total Required Boiler duty :	25 kW
Min. ambient temperature:	-5 °C	Min. Flow Temperature :	80 °C
Room structural heat loss:	1.8 kW	Electrical supply options :	
Fresh air heat loss:	9.4 kW	Single phase 230v 50Hz :	23 Amps
Air ducting heat loss:	0.7 kW	Three phase 400v 50Hz :	8 Amps/Ph
Water heat loss:	4.4 kW		

Annual Energy use analysis:	
Probable Heat & Vent cost:	£ 2,279
Source of heat energy:	Mains Gas
Energy consumption kWh:	43,500
kg CO ² :	8,463

EX WORKS PRICE :	£ 13,723	DELIVERY COST :	Not Included
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AVAILABILITY : Normally 4-6 weeks from Confirmation of Order & Final Specification

Payment terms : To be confirmed with AstralPool UK Ltd. A deposit may be required.
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

