

PROJECT ANALYSIS SUMMARY

Project Title / Ref: **Calorex Replacement** **P13960C**

Selection : **Andromeda FX 2000 Super Plus**

Description : *Packaged Total Environmental Control unit purpose designed for indoor pool application
Dehumidifying heat pump system with energy recycling back to room air & pool water
Single speed direct drive, forward curved, format air fan
Room air dilution with fresh air facility - negative room air pressure balance
Complete heating of room air and pool water via integral heat emitters
Plant room located - central ventilation principle with air ducting channels*

Provisions :

Humidity control	✓	By Dehumidifying Heat Pump acting upon recirculated room air
Energy recycling	✓	Back to room air & pool water 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	✓	Dilution provision via Fresh air & Exhaust ports (FX)
Room Air cooling	✗	Not included
Controls package	✓	Digital Electronic
Ducting required	✓	Pool air intake, pool air supply, fresh air and exhaust ports

Design Criteria:

Pool Hall Air temperature:	32 °C
Pool water surface area:	45 m ²
Pool water temperature:	31 °C
Uncovered Hrs. Norm/Max:	24 / 24
Spa water surface area:	3.1 m ²
Pool Hall Space Volume:	770 m ³
Min. ambient temperature:	-5 °C
Hall structural heat loss:	10.9 kW
Fresh air heat loss:	4.7 kW
Water heat loss:	7.6 kW

Performance data:

Dehum via heatpump :	7.1 Kg/Hr.
Recirculation Air Flow :	3500 M ³ /Hr.
Exhaust/Fresh Air Flow:	385 M ³ /Hr.
Air heating coil : (LTHW)	25 kW
Pool Heat Exchanger : (LTHW)	30 kW
Total Required Boiler duty :	30 kW
Min. Flow Temperature :	82 °C
Electrical supply options :	
Single phase 230v 50Hz :	30 Amps
Three phase 400v 50Hz :	10 Amps/Ph

Annual Energy use analysis:

Probable Heat & Vent cost:	£ #REF!
Source of heat energy:	Mains Gas
Energy consumption kWh:	#REF!
KG CO ² :	#VALUE!

Building regulation compliance :

Classification of project for regulations :	L2B Existing building - non-domestic		Actual: L2B Status:
Dry heat extraction from expelled air >50%:	0	No	N/A
Variable speed fan drive included ? :	No	Fail	

EX WORKS PRICE : **£ 11,841** **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