

PROJECT ANALYSIS SUMMARY

Project Title / Ref:

Treyford

P6281

Selection :

Andromeda

1000 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
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 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

✗ Not included

Room Air cooling

✗ Not included

Controls package

✓ Digital Electronic

Ducting required

✓ Pool air intake, pool air supply

Design Criteria:

Pool Room Air temperature:

30 °C

Pool water surface area:

21 m²

Pool water temperature:

29 °C

Uncovered Hrs. Norm/Max:

2 / 6

No spa included

Pool Room Space Volume:

167 m³

Min. ambient temperature:

-5 °C

Room structural heat loss:

3.6 kW

Fresh air heat loss:

1.0 kW

Air ducting heat loss:

0.7 kW

Water heat loss:

2.7 kW

Performance data:

Dehum via heatpump :

5.2 L/Hr.

Recirculation Air Flow :

1500 M³/Hr.

Air heating coil :

(LTHW)

9 kW

Pool Heat Exchanger :

(LTHW)

13 kW

Total Required Boiler duty :

14 kW

Min. Flow Temperature :

70 °C

Electrical supply options :

Single phase 230v 50Hz :

25 Amps

Three phase 400v 50Hz :

Amps/Ph

Annual Energy use analysis:

Building regulation compliance :



Prepared for you by : ROB PURKISS
robert@heatstar.com Tel : 01983 521465

www.heatstar.com