

## AIR HANDLING UNIT (A.H.U.) SPECIFICATION

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#### General

<b>Dimensions:</b>	Length 2200 mm Width 1700 mm Height 2280 mm (including stacking peg.)
<b>Weight:</b>	1750 kgs
<b>Framework:</b>	<ol style="list-style-type: none"><li>1. 50 mm rolled steel hollow section welded</li><li>2. Foam insulated</li><li>3. Anti corrosive coating (Galvanised an option/Stainless Steel an option)</li><li>4. Fork lift pockets and lift points on stacking pegs</li></ol>
<b>Panel Work:</b>	<ol style="list-style-type: none"><li>1. 50 mm double skin</li><li>2. Foam insulated</li><li>3. Galvanised inner</li><li>4. Outer - plasticised Solent Blue (18-E-55)</li></ol>
<b>Fan:</b>	<ol style="list-style-type: none"><li>1. 4.17 m<sup>3</sup> / SEC (15,000 m<sup>3</sup> / hour)</li><li>2. 800 pa external resistance</li><li>3. 415 V/3 phase / 50 Hz motor rating</li><li>4. D.O.L. starting method</li><li>5. Backward curve - centrifugal type</li></ol>
<b>Drive:</b>	SPZ 1850 belts (to maintain standard parts)
<b>Filtration:</b>	<ol style="list-style-type: none"><li>1. Pleated panel</li><li>2. 594 x 594 x 48</li><li>3. EU4 efficiency</li><li>4. Front withdrawal filter frames</li></ol>
<b>Guards:</b>	<ol style="list-style-type: none"><li>1. Drive pulleys, belts. Shaftes</li><li>2. Inlet spigot</li><li>3. Outlet spigot</li></ol>
<b>Locks:</b>	EMKA flush fitting security locks



**Coil Duty:**


1. Air On 5°C dry bulb / wet bulb
2. Air Off -2°C dry bulb / wet bulb
3. CW On -8°C (25% Glycol)
4. CW Off -4°C (25% Glycol)
5. CW Flow Rate 4.2 L/sec
6. Pressure Drop 39.0 kpa

**Coil Physical:**

1. To be fitted with 18 kW electrical defrost with removable body panels to allow access to electrical terminations
2. CU/AI polyester coated finned coils, which are to be "steam cleaned prior to installation
3. Stainless Steel removable condensate pan. Complete with trace heating and condensate pump.
4. 3 port valve, actuator and spindle heater to be supplied and installed with coil and associated pipe work
5. All internal pipe work is to be lagged
6. The electrical defrost system is to be controlled by an Electro-Mechanical Time Clock
7. Coil connections do not exceed dimensions of AHU casework
8. Process connections (2" Bauer) will be supplied "gratis" These are to be fitted with "Boss White and Hemp" or a similar heavy duty sealant (Not Stag)
9. Coil air bleed is to be an automatic ball operated type and is to be easily accessible
10. A facility to drain the remnants of fluid from the coil after use must be available

**Control Panel:**

1. To be housed within vestibule and be weatherproof
2. Phase failure / rotation protection installed
3. Hour meter fitted in visual panel door
4. Lamp annunciation for:-
  - (a) Power
  - (b) Phase failure
  - (c) Running
  - (d) Tripped
  - (e) Defrost On
5. Unit power supply to be provided via 15 metres of SY flexible armoured cable, connected to panel via an isolator terminated in the control panel.  
This cable assembly is to be housed in vestibule with facility to run out cable with unit outer door closed and locked
6. Investigate the feasibility of a trace heating socket to allow the external condensate pipe work to be heated prior to drainage
7. A control thermostat is to be mounted externally, but with ample protection from damage

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- Condensate Pump:**
1. "Little Giant" float operated type
  2. To be fitted with bracket arrangement and designed specifically to be removed
  3. All internal condensate pipe work is to be lagged
  4. Pump minimum capacity = 100 Ltr / hour at 2 metre head
- Air Inlet Outlet:**
1. Inlet via optional louvre panel or inlet spigot panel
  2. Outlet via axed spigot
  3. Spigot size 610 mm x 2
  4. All spigots to be formed with "keepers" to allot the fitting of flexible ducting

All of the aforementioned specifications are the requirements for Dawsonrentals Low Temperature AHU's at this date.

It is understood that specific features and ideas in the design may develop before a certain and final specification is reached.

The input of both Dawsonrentals staff and suppliers who wish to tender for this order is appreciated.

All quotations for supply are to include:-

- a) Delivery to Dawsonrentals Portable Cold Storage, Sutton in Ashfield
- b) Two Year Parts & Labour Warranty
- c) Firm delivery dates on receipt of order

A separate quotation will be required for 48 hours spares availability. This will probably require some components to be purchased and held in bond for our specific use.