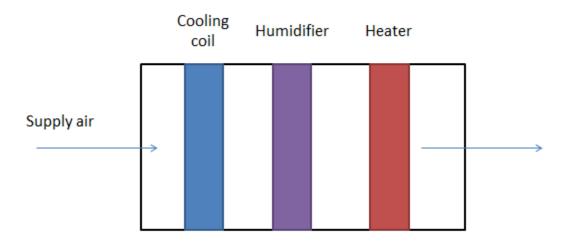
# **Specification**

Name of Item: Air handling unit (2000 CFM) Qty: 01 Nos. Schematic:



### Casing Construction of AHU Unit:

Construction: 50 mm thick panel with Fiber Glass insulation (48Kg/m³) & Thermal Break profile.

Material: Frame - Extruded Aluminium Profile. Outer Casing: 0.8mm Pre Plasticized Pre Coated GI Sheet & Inner Casing: 0.8mm Galvanized Steel Sheet.

## Air filter section with Damper.

Air filter: Efficiency of 90% down to 10 Microns (G4) with Aerofoil Design- Aluminum Dampers with Class III.

### Heater:

20 kW (4 kW x 5 Nos), Controls - 4 Nos : Fixed (ON/OFF) + 1 No with Thyristor Control & one RTD Sensor with temperature display on the side casing.

### Supply Air Fan

The fan Section shall be with direct driven plug fan, AMCA certified fans. The impeller and the fan casing shall be made of hot galvanized steelsheet. The impeller shall be statically and dynamically balanced.

Make: Nicotra/Kruger/Rosenberg

### Fan Motor:

Fan motor shall be energy efficient and suitable for 415 10% volts, 50 cycles,  $3\phi$  phase squirrel cage, totally enclosed fan cooled with IP - 55 protections. Drive shall be provided through belt - drive arrangement. Belts will be of oil resistant type. Both fan motors shall have a efficiency class of EFF-1.

Motor kW: 1.5 kW with VFD

## Humidifier:

Humidifier capacities of 4 to 8.0 kg/hr capacity with Modulating controller

Type: Horizontal

Construction: Tank made from 1.5mm S.S Sheet (304L), welded construction, Top Openable with S.S Bolts.

Controls: Level Switch for Low Level, Filter assembly, Motorized Valve with Timer for auto flushing, Mist outlet fan.

Control Panel: 16 Gauge CRC sheet Panel duly epoxy painted, Power Supply (SMPS), Contactor, M.C.B, Relay card, Cooling fan Connectors, On/Off Switch with Light, Indication Light for drain valve, Humidity Off, Supply On and Low Level.

### Cooling Coil Section – 1 Nos LT coil

Cooling coil section shall be provided with 6 RD cooling coil. Coil shall be capable desired dew point. Coil shall be chilled water type

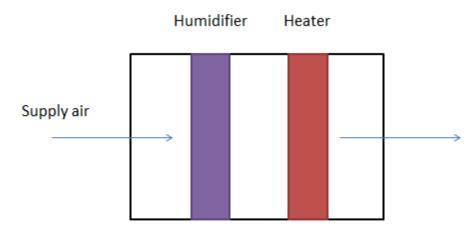
Coil should be rated as per AHRI Certification. Coil should be mounted in powder coated holding racks. Water coil supply and return connection shall be extended to the unit exterior.

Cooling coil should be mounted on an insulated SS drain pan.

## **Specification**

# Name of Item: Air handling unit (1000 CFM) Qty: 01 Nos.

### Schematic:



### Casing Construction of DOAS Units:

Construction: 50 mm thick panel with Fiber Glass insulation (48Kg/m3) & Thermal Break profile.

Material: Frame - Extruded Aluminium Profile. Outer Casing: 0.8mm Pre Plasticized Pre Coated GI Sheet & Inner Casing: 0.8mm Galvanized Steel Sheet.

### Air filter section with Damper.

Air filter: Efficiency of 90% down to 10 Microns (G4) with aerofoildesign- Aluminum Dampers with Class III.

### Heater:

10 kW (2 kW x 5 Nos) , Controls - 4 Nos : Fixed (ON/OFF) + 1 No with Thyristor control & one RTD Sensor with temperature display on the side casing.

### Supply Air Fan

The fan Section shall be with direct driven plug fan AMCA certified fans. The impeller and the fan casing shall be made of hot galvanized steelsheet. The impeller shall be statically and dynamically balanced.

Make:Nicotra/Kruger/Rosenberg

### Fan Motor:

Fan motor shall be energy efficient and suitable for 415 10% volts, 50 cycles, 3 $\varphi$ phase squirrel cage, totally enclosed fan cooled with IP – 55 protections. Drive shall be provided through belt – drive arrangement. Belts will be of oil resistant type. Both fan motors shall have a efficiency class of EFF-1.

Motor: 0.75 kW With VFD

### Humidifier:

Humidifier capacities of 0.5 to 4.0 kg/hr capacity with Modulating controller

Type: Horizontal

Construction: Tank made from 1.5mm S.S Sheet (304L), welded construction, Top openable with S.S Bolts.

Controls: Level Switch for Low Level, Filter assembly, Motorized Valve with Timer for auto flushing, Mist outlet fan.

Control Panel: 16 Gauge CRC sheet Panel duly epoxy painted, Power Supply (SMPS), Contactor, M.C.B, Relay card, Cooling fan Connectors, On/Off Switch with Light, Indication Light for drain valve, Humidity Off, Supply On and Low Level.