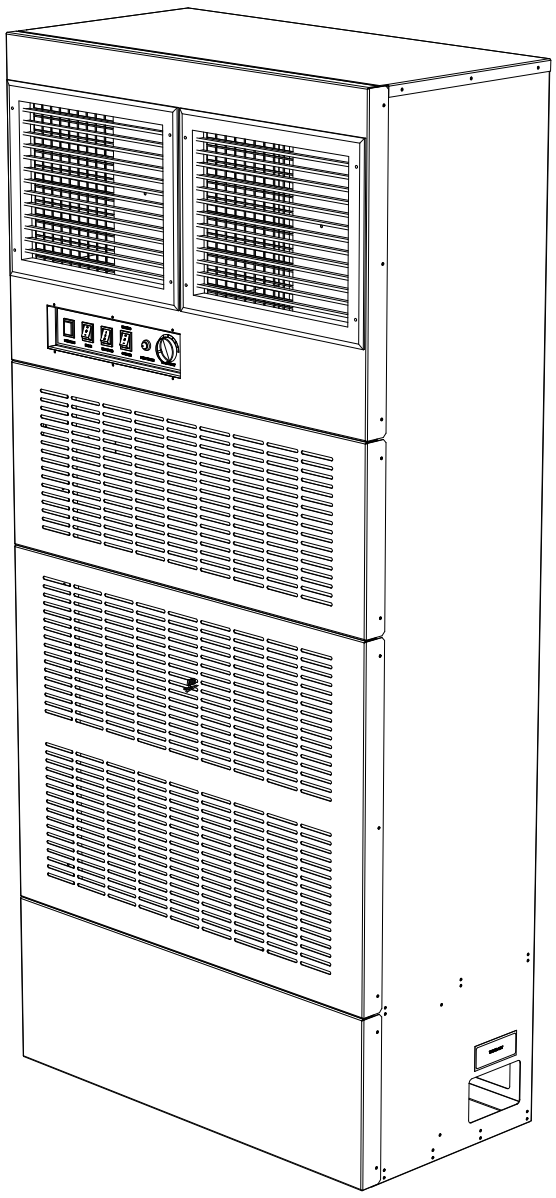
AHU50
50Kw AIR HANDLING UNIT.
PRODUCT MANUAL.



WARNINGS

These instructions should be read by:

The specifying engineer.
The installation engineer.
The user.
The service engineer.

- **Failure to follow these instructions may result in risk of personal injury or damage to the equipment.**
- **Damage due to a failure to follow these instructions will invalidate the warranty.**
- **The appliance must be serviced by qualified engineers in compliance with local regulations.**
- **The appliance must be switched off and disconnected from the power supply before any work is carried out.**
- **There are no user controls inside the appliance casing.**
- **Do not place anything on top of the appliance.**
- **An air gap of at least 400mm should be allowed at the front of the unit to ensure a clear airflow.**
- **Do not disconnect the appliance from the supply under load.**
- **For internal use only. Do not use out of doors.**
- **Extension cables should be correctly rated for the load,fully unwound and never run through water or over sharp edges.**
- **Always transport in an upright position.**
- **Maximum water temperature 60˚C.**

Specifications:

The AHU50 is a 50Kw air handling unit.
It is connected to a 13 Amp. 230Vac. 50Hz power supply and comes fitted with a fused uk moulded plug.

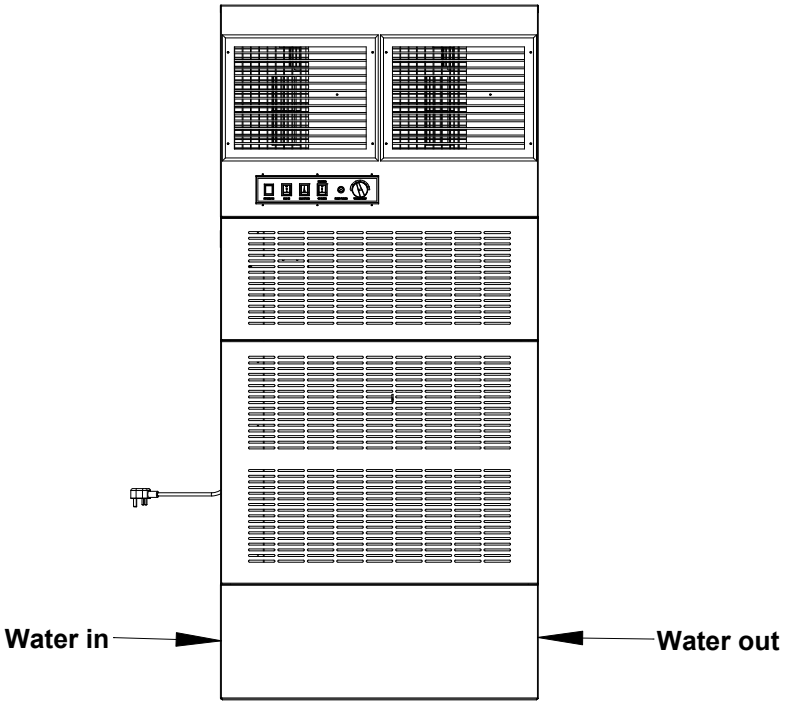
It is recommended that the supply to the machine should be protected by a 30mA RCD.

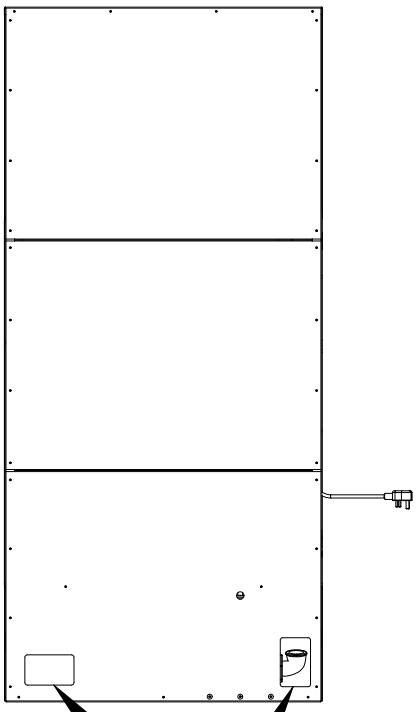
These units come with three fan speeds and condensate pumps as standard.

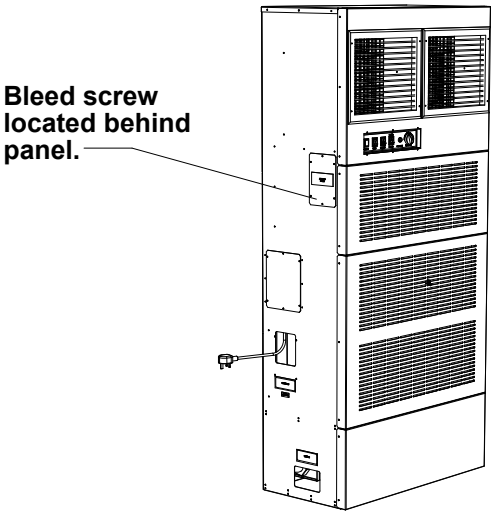
Set up and operation:

Water connection:

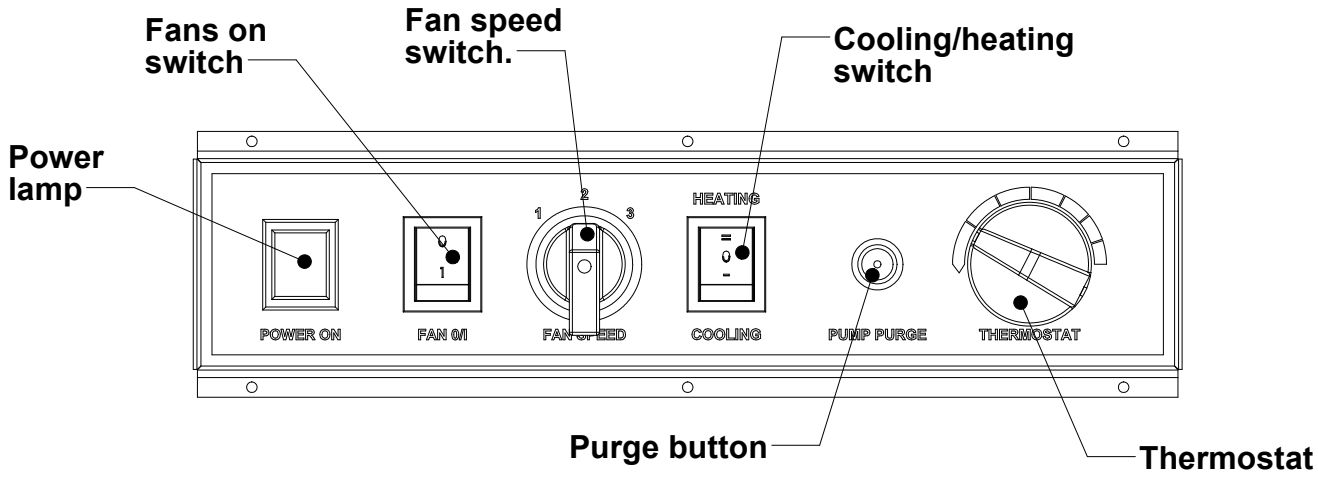
- **The unit comes with 31mm internal diameter inlet and outlet hoses. Couplers are not supplied. These hoses exit the machine through each side or through the rear of the unit. The inlet and outlet are clearly marked.**
- **Site the appliance on a firm level surface.**
- **Connect the in-coming and out-going water hoses to the chiller unit or boiler.**
-
- **Run the small clear condensate hose to a suitable drain.**
- **Connect the the unit to a suitable power supply. Turn the fan switch to '1' and the cooling/ heating switch to cooling, turn the thermostat fully anti-clockwise. (This will open the diverter valve and allow water to flow into the coil.) It should be noted that when the indicator on top of the motorised valve is in the 'open' position water will flow through the heat exchanger coil, when in the 'closed' position water will by-pass the coil.**
- **Fill the system with water and bleed all air using the internal air bleed valve. Ensure the valve cap is fully tightened.**
- **Fully inspect all water connections for leaks.**







Operation and controls:



- **Connect the unit to a 230Vac 50Hz power supply. The red 'Power on' lamp will illuminate.**
- **Turn the 'Fans on' switch to 'I'.**
- **Set the 'Fan speed' switch to the desired airflow; 1, 2 or 3. Slow, medium or fast.**
- **Turn the 'Cooling/ Heating' switch to the desired function. Note! Cooling/ Heating will not operate without the fan running.**
- **Turn the thermostat fully anti-clockwise for maximum cooling or fully clockwise for maximum heating in heating mode.**
  Once the desired temperature has been achieved carefully turn the thermostat in the opposite direction until an audible click is heard. The cooling/ Heating will now cycle to maintain this temperature.
- **Do not use water in excess of 60 °C.**

Condensate pump:

The unit is fitted with a condensate pump. When a preset level is reached in the pump reservoir the pump will operate and discharge through the small clear hose. This hose needs to be run to a suitable drain or receptacle.
The pump is fully automatic and requires no user maintenance.

Purge Button:

The condensate pump reservoir will hold a small amount of water during normal operation. When transporting the unit this water can be drained by pressing and holding this button.

Low temperatures:

When operating the unit in low ambient temperatures it is recommended that a glycol solution is added to the water to prevent freezing. Ensure this is in compliance with local regulations

If the unit is not used for prolonged periods of time it is recommended that the system is drained.

Consideration must be given to storing units in low ambient temperatures.All water must be drained from the machine before storage.Failure to follow this procedure can result in damaged heat exchangers.