



Air Handling Units (AHUs)

For data centre, retail and commercial environments

A highly versatile range of Air Handling Units, including R410A, free-cooling and indirect adiabatic cooling systems, maximising efficiency and minimising operational costs.



AireFlow™ 100-440kW

Next generation indirect adiabatic cooling

The AireFlow™ is an innovative indirect adiabatic air handling unit, designed for use in data centre environments for optimal efficiency.

Available in five footprints between 100 and 440kW, the AireFlow™ is designed for roof and wall connections and requires minimal mechanical cooling, delivering huge free-cooling potential to significantly reduce operational costs. No air mixing within the system prevents contaminants entering your data centre and eliminates the need for 100% DX back up cooling, which can be required in direct units if ambient air is contaminated and cannot be used.



Benefits

- Modules can be configured up to 440kW
- Minimal mechanical cooling required significantly decreases system running costs
- Extensive free-cooling capability
- No air mixing means 100% DX back up cooling is not necessary
- Data centre is isolated from outdoor pollutants
- Integral fresh air inlet for pressurisation and air quality (optional feature), removes need for a separate AHU
- PUE below 1.1 achievable through full free cooling
- No requirement for internal AC units maximising IT footprint
- Based on London, UK ambient temperatures, systems can achieve 100% free-cooling year round (operating inside the ASHRAE recommended envelope)

Key Features

- N+1 redundancy
- High efficiency EC fans with optimised control
- Adiabatic saturated media with UV system sterilisation
- Integrated fresh air inlet unit
- G3 / G4 / F7 filtration
- Iconographic display
- Air flow and pressure monitoring
- Suitable for both wall and roof connections
- Case sizes
(H x L x W) 160kW – 4.1m x 5.0m x 2.3m; 220kW – 4.1m x 5.0m x 3.4m



StoreMaster™ 50-77kW

Comfort cooling for retail applications

The R410A StoreMaster™ range of fully-packed / split system air conditioning units offers the flexibility of cooling or heating, with the addition of a highly efficient reverse cycle, dual circuit pump option.

Enhanced energy efficient technology includes EC fans for increased performance at reduced power input; electronic expansion valves; R410A optimisation and 0-100% free-cooling, significantly reducing lifecycle costs.

A robust AHU with a small footprint, the top unit return and supply air duct connections make the StoreMaster™ a compact and easy 'plug and play' system to install. Removable access panels and simple filter replacement enables easy access for both service and maintenance on all major components.



Key Features

- Two models: 50kW / 77kW nominal cooling capacity
- 57 - 75kW heating capacity with heat pump option
- Simultaneous DX / free-cooling with 3 full damper economiser sections allows 0-100% free-cooling
- Two stage single circuit DX cooling allows improved efficiency during part load operating conditions
- Hydrophilic coils protects from corrosion and improves moisture management
- Intelligent head pressure control for efficient operation of condenser fans and protection during low ambient temperatures
- Packaged or split modules (evaporator / condenser)

IsoFlow™ 60 & 85kW

Rooftop cooling

IsoFlow™ features two model sizes in R410A.

The 60kW unit is available in cooling only and heat pump, the 85kW unit is designed for cooling only.

The optional extract / free-cooling module has the capability to supply fresh air and full free-cooling.



Key Features

- Dual scroll compressors for staged cooling / heating control
- Electronic expansion valves enable lower head pressure set point decreasing energy consumption by 9%
- Optional extract / free cooling module supplies fresh air and sizable energy savings
- Direct drive EC fans with backward-curved impellers offer exceptional energy savings

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