



Products:

- → VAV and CAV
- ➔ Air-Flow measuring devices
- Chilled beams
- → Grilles and diffusers
- → Fan Coil Units ------
- → Controls

Product development:

- Climate laboratory
- → Acoustic reverberation room

Sustainability

- → Energy savings
- ➔ Light switching through thermostat
- ✤ Use of sustainable materials
- ✤ CO, control
- → LEED / BREEAM compatible

HC Barcol-Air is part of HC Groep. Other companies:

- + Holland Conditioning: Chillers
- → HC KP: Climate ceilings
- → HC TN: Air handling units
- → HC PS: Car parking ventilation
- → HC RT: Controls
- → HC TS: Staircase pressurising systems

HC Barcol-Air

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YOUR CLIMATE, OUR CARE



INDUCTION VAV - OUR GREEN COMFORT SOLUTION



HC Barcol-Air is part of HC Groep



Induction VAV: sustainable comfort solution

Energy Saving

Individual Control

Comfort

Zoning Flexibility

Ventilation

Heating

100

- 80

60

Building

Pressurization

breeam

Cooling

Single source, single responsibility

VAV systems have proven in the past to be very energy efficient in providing an optimal indoor climate.

The latest standards and requirements for energy efficiency and human thermal comfort make it more and more challenging to design new HVAC systems that comply to these standards.

Energy could be saved by reducing primary air volume to a minimum during reduced load conditions.

However with conventional VAV systems this could cause "cold air dumping" and lack of air movement in the room, resulting in occupants discomfort and a consequent decrease in productivity.

Induction VAV is the best solution to maintain proper air circulation and comfort levels reducing the primary treated air to a very minimum (20% of maximum). Without the use of an additional fan, room air will be induced and induction VAV guarantees that the required standards for comfort will always be achieved.

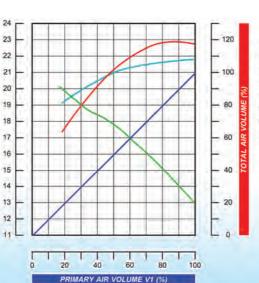
The optimum indoor climate and energy efficient system

- → Optimum in comfort
- ➔ Energy conscious
- → Capacity up to 200 W/m2 without loosing comfort
- → Cooling, heating and ventilation done by a single VAV terminal
- ➔ Pressure independent
- ✤ Induction without use of a fan and filter
- No cold air dumping
- → Compact in size
- → Savings in primary ductwork
- → Low noise levels
- → Maintenance free

City Hospital

Dubai - UAE

- → Standard VAV controller can be used
- ➔ High accurate Flo-Cross[®] air flow sensor





Emaar Business Park Down Town Dubai - UAE

Keira Street **Financial Harbour** Manama - Bahrain Wollongong - Australia Sydney - Australia

NAB House

NUS Singapore

Qtel building West Bay Doha - Qatar Jakarta - Indonesia

Tempo Scan Tower

Flo-Cross® air flow sensor

- High accuracy (better than 2,5%) • 24 test points
- Centre-averaging chamber
- · Amplifying wings
- Aluminium construction with
- PP connections
- Low pressure drop
- One-time diameter, straight duct length required



- BACnet[®] or LonMark[®] controls to match with BMS
- Compatible with any BMS system
- ➔ Quality installation
- ✤ Factory calibrated and error-free
- Comfort control by single supplier
- ✤ Meets the delivery requirements
- → VAV and controls as a single package
- Minimize the coordination by contractors
- Saves time and costs
- BL BACnet® (BTL Certified)



Plug & Play Controls

- Pre-fitted
- Pre-wired
- Pre-calibrated
- Pre-tested





Room thermostat

- Digital display
- Set point adjustment
- Actual temperature measurement
- Programmable override button (optional)
- Built-in CO sensor (optional)
- Built-in humidity sensor (optional)