Ventilation in balance®

VENTILATION AND INDOOR CLIMATE

Modular Buildings

AIRMASTER®

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VENTILATION AND INDOOR CLIMATE
TO MEET THE NEEDS OF MODULAR BUILDINGS

Airmaster has developed specialised ventilation solutions for modular buildings using our 20 years experience as the manufacturer and supplier of decentral air handling units.

An extensive product range means we can meet the needs of modular buildings for flexibility in terms of performance, installation and price. Our air handling units are produced using innovative technology and high quality components. The result is energy-efficient, quiet air handling units with a wealth of installation and setting options. Our units are therefore extremely flexible for uses in building modules.

Airmaster can also provide complete consultancy during the design phase on choice of unit, installation and indoor design conditions.

SUPPLIER OF A HEALTHY **INDOOR CLIMATE** FOR MODULAR BUILDINGS

Tougher building rules mean that modern buildings need to be extremely airtight. It's important that buildings can breathe to be able to remove humid, used air. Airmaster supplies decentral ventilation solutions that are perfect for modular buildings today and in the future.

VENTILATION TO MEET FUTURE STANDARDS

Demand controlled mechanical ventilation with heat recovery ventilates buildings in a controlled and energy-efficient way. Apart from savings in running costs and longer building lifetime, demand controlled ventilation has a positive impact on human welfare and health.

Airmaster provides flexible options designed to help find the right ventilation solution, regardless of whether the module will be used for offices, institution, hospital or accommodation. Airmaster products meet the requirements for air handling units of the future, as our entire range meets the Danish 'Bygningsreglementets 2020' standards for energy consumption, indoor climate and ventilation.

AN INVESTMENT FOR THE FUTURE

An Airmaster decentralised air handling unit enables you to offer your customers energy-efficient ventilation with a comfortable, flexible ventilation solution. Airmaster uses the highest quality components to help ensure quiet ventilation with a high degree of heat recovery and minimal energy consumption.

Regardless of whether a modular building is for hire or sale, an Airmaster air handling unit will always be a sound investment. Airmaster units can be leased to ensure developers achieve more financial flexibility during the building phase. Because our units can be reused, thanks to simple reprogramming, control and operation, Airmaster air handling units are always a sound investment for the future.

Offer your customers a building in which energy-efficiency, health and comfort are in focus.

Two AM 300 air handling units are installed in the office, integrated into the ceiling.

The office building from the outside. Intake and exhaust pass through the facade covered by a facade grille.

FLEXIBILITY
FOR USE AND PERFORMANCE

Inlet

Airmaster's three product ranges and unique cooling module provide a wide range of options for performance and operation. Their discreet, space-saving design makes them easy to integrate into any room.

DECENTRALISED VENTILATION

Decentralised ventilation is installed and offers demand controlled ventilation to those rooms that require improved indoor air quality. Short air transport distances avoid energy loss, making efficient use of energy resources. Airmaster units remove the need for long ductwork running throughout the building.

The decentralised air handling unit is located close to an outer wall. The intake for fresh air and exhaust for used air pass directly through the unit via two holes in the ceiling or the wall. Fresh air is supplied into the room through the inlet opening, and extract air is passed out again through the extraction grille.

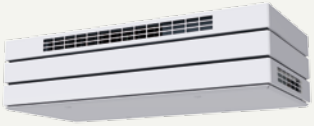
SIMPLE, INTELLIGENT DESIGN

Most of the units in Airmaster's three ranges can be fully or partially integrated into the ceiling, achieving greater flexibility for interior design and more m^2 of space.

The AM range consists of wall-mounted and floor-standing units, with flexible positioning of horizontal or vertical intake and exhaust. The CV range consists of compact units, with flexible positioning of ducting, this could remove the need for any fire dampers. The CV and DV ranges are suitable for integration in suspended ceilings, leaving only the base plate visible, flush with the ceiling.

AM series

AM 100, AM 300, AM 500,
AM 800, AM 900, AM 1200



- Horizontal or vertical model.
- Wall-mounted, floor-standing or integrated into a ceiling.
- A cooling module can be connected to wall-mounted, horizontal models.

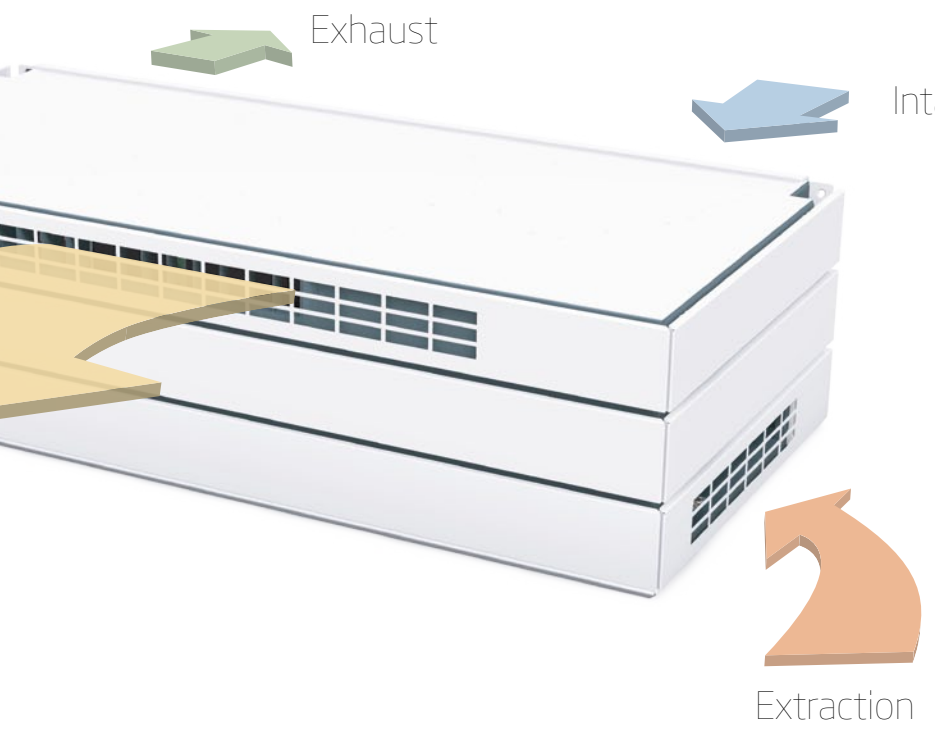
Uses include where comfort is required, e.g. in meeting rooms, class rooms and offices.

CV series

CV 80, CV 200

- Right, left and centre models.
- 12 (CV 200) or 54 (CV 80) installation versions, depending on location of inlet, extraction, intake and exhaust.
- Integration into ceiling.

Uses include homes, toilet and bathrooms or offices with a printer room.



The widest range of installation options on the market. Airmaster's three ventilation ranges provide a ventilation solution suited to any kind of room and requirement.

COMFORT COOLING (CC)
Airmaster's CC is available as a option for the AM 100, AM 300, AM 500, AM 800 and DV 1000.

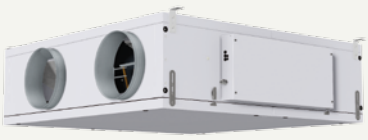
These highly-efficient, modulating units are designed by Airmaster, and built using high quality components with an intelligent operating system. The cooling module can be ordered with an Airmaster air handling unit or retro-fitted.

The high efficiency/COP values of the cooling module helps provides low energy consumption. Integration of the module directly on the back of the air handling unit means that lower energy consumption can be consistently maintained.

The module can cool down fresh air by up to 15°C before it is supplied into the room. This ensures high air quality and air replacement without recirculation.

» On-demand cooling with very low electrical consumption.
» Cooling module and air handling unit with the same control system type.
» No recirculation, no drying out of the air.

DV series

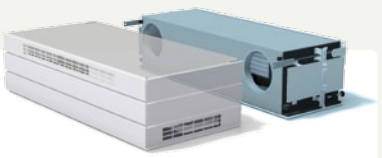


DV 1000

» Fixed location of intake, exhaust, inlet and extraction.
» Integration into ceiling.

Uses include in large areas with printer room, photocopier room, toilets and bathrooms.

CC cooling module



CC 100, CC 300, CC 500, CC 800, CC 1000

» Cooling module for wall-mounted AM and DV units. (AM 100, AM 300, AM 500, AM 800 and DV 1000)
» Can also be retrofitted.

Uses include south-facing rooms where temperature control is required for comfort.

THE MARKET'S BROADEST **RANGE**

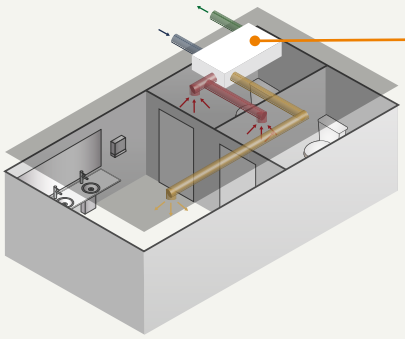
AM 100

Capacity 100 m³/h at 35 dB(A)
75 m³/h at 30 dB(A)

Airmaster air handling units are designed to be able to supply any room with fresh air and demand controlled ventilation, regardless of size, use or occupancy level.

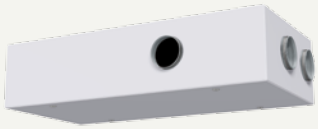
AM 900

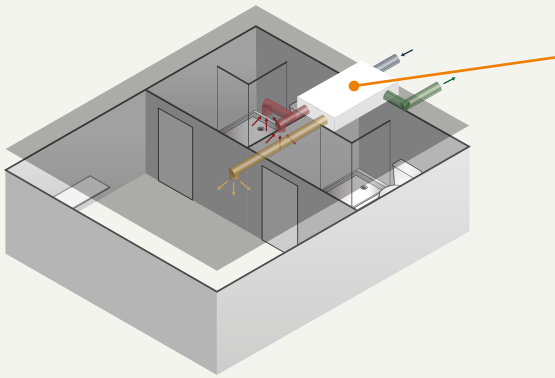
Capacity 830 m³/h at 35 dB(A)
690 m³/h at 30 dB(A)

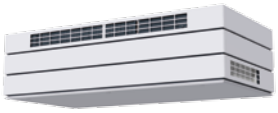


CV 80

Capacity 80 m³/h at 30 dB(A)







AM 500

Capacity 550 m³/h at 35 dB(A)
430 m³/h at 30 dB(A)

AM 300

Capacity 300 m³/h at 35 dB(A)
240 m³/h at 30 dB(A)

AM 800

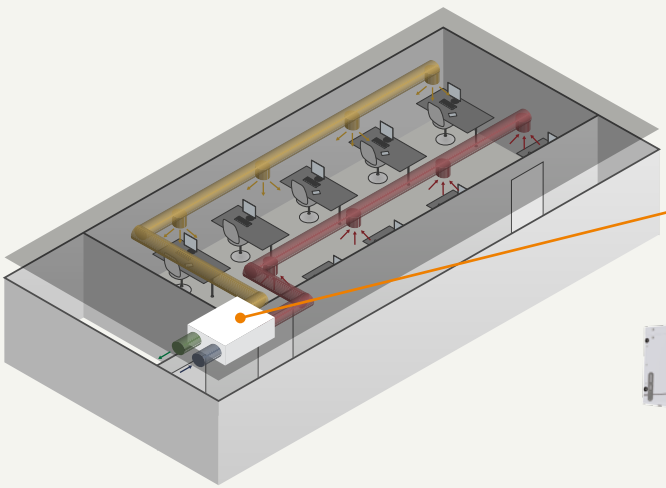
Capacity 725 m³/h at 35 dB(A)
650 m³/h at 30 dB(A)

AM 1200

Capacity 1310 m³/h at 35 dB(A)
1050 m³/h at 30 dB(A)

CV 200

Capacity 285 m³/h
at 50 Pa external pressure drop
and 1000 SFP W/(m³/s)



DV 1000

Capacity 1011 m³/h
at 50 Pa external pressure drop and
1000 SFP W/(m³/s)

DESIGNED
TO SAVE TIME AND MONEY

Simple installation in just a few hours ensures the units are up and running quickly.

SIMPLE, SPACE-SAVING INSTALLATION
The basic installation for all units in the three ranges is the same, rationalising the installation process if units from different ranges are to be installed in a single project. Regardless of unit model, Airmaster air handling units have the same type of control system platform, making them easy to run.

Installation is also time-saving, as the units do not require complicated ductwork that could impact in other building services for example fire control and lighting.

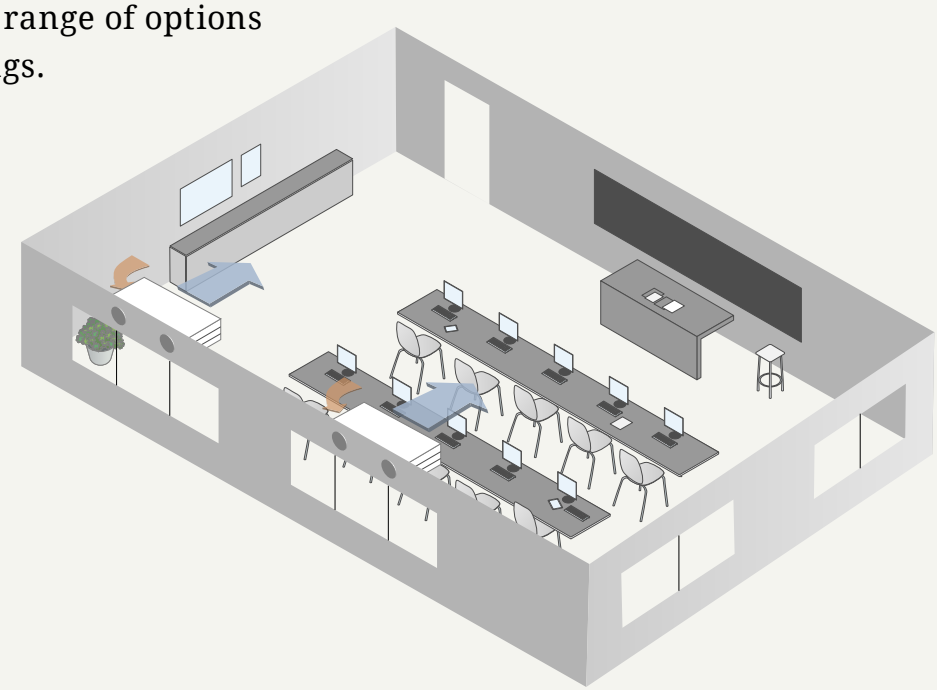
FACTORY INSTALLATION
Our air handling units can be installed in a modular building at the factory. If the building is to be used for a purpose that requires adjustments to the ventilation, removal and reprogramming of the units is quick and easy. Reprogramming from one Airlinq BMS to another is simple, and does not require the purchase of other control systems.

- Factory installation.
- Plug & Play: Fast, low cost installation.
- Flexible delivery and leasing as an option.
- Rapid, simple removal and reprogramming of units.

Airmaster air handling units are designed to be integrated into the wide range of options offered by modular buildings.

Classrooms

It can be beneficial to use two units in large classrooms. In this instance, two AM 500 air handling units. The units are wall-mounted with horizontal ducting through the outer wall.

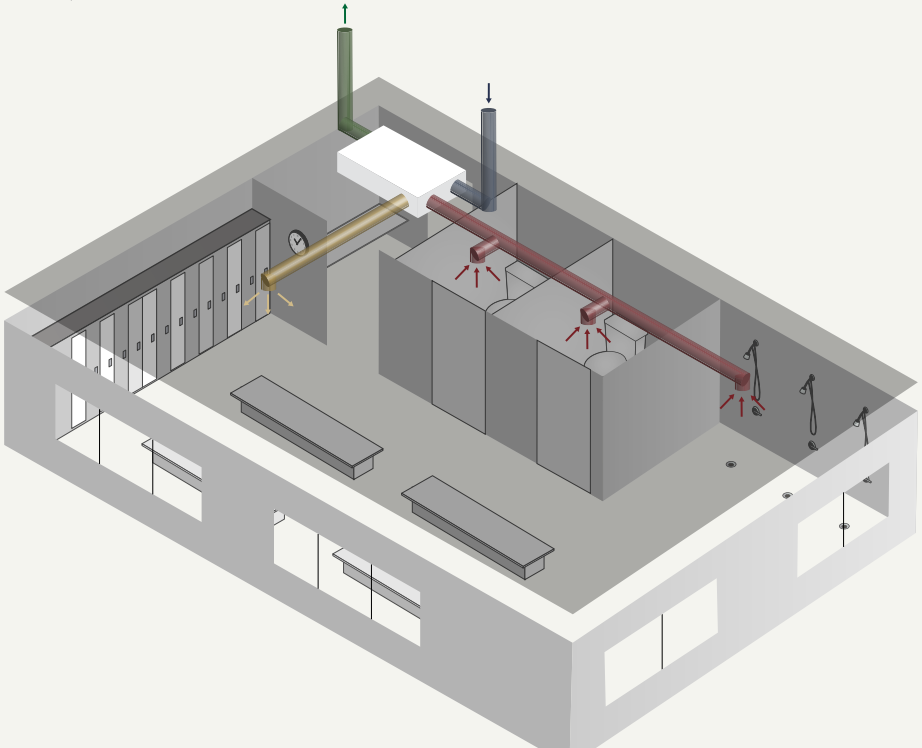


Meeting rooms and offices

Two AM 300 air handling units are installed in a meeting room, with one AM 100 unit in each office. The units are vertical models, with ducting running through the ceiling.

Changing room

A CV 200 air handling unit is installed above the ceiling with inlet into the changing area and extraction in the toilet and showers.



VENTILATION THAT MEETS MARKET REQUIREMENTS

AIRMASTER AS A PARTNER

Airmaster has a team of expert consultants and engineers able to advise on the legal requirements for indoor climate and ventilation. We understand how important it is to invest in an efficient, long-term ventilation solution.

We help with project planning for Airmaster ventilation products to ensure you get the right one. We can also provide insight into the installation and control of our units.

See a filter change performed in less than **5 mins.**

Planning and advice

- Planning, measuring up and advice on unit type and model according to the use of the modular building.
- Matching expectations.
- Unit location and installation.
- Advice on legislation governing ventilation and indoor climate (air volume, energy consumption, noise levels and installation).

Training

We can train your personnel with:

- Unit location.
- Assembly and installation.
- Connection and control.
- Service and filter change.

Classrooms at further education institution · Denmark

We have learned from over 20 years experience of working with modular builders, engineers and architects at international level. We have listened to what the industry wants and developed ventilation solutions in response.

Flexible, space-saving installation

- There are a host of integration and location advantages to be gained from wall-mounted, floor-standing and ceiling-integrated air handling units.
- Location options under a ceiling or integrated into a suspended ceiling mean full utilisation of floor and wall surfaces.
- No need for ducting, fire dampers or plant room.

A sound investment

- Demand controlled ventilation for each room adapts air volume and operation according to needs.
- Minimal heat loss thanks to short ducting.
- No expenditure on fireproofing ductwork.
- Units can be fine-tuned to meet mandatory requirements for the use of any given room.
- Built-in CO_2 and movement sensors mean greater flexibility for use.

Simple installation and removal.

- Quick and easy installation without long duct runs.
- The units can be installed during module production.
- Easy reprogramming and leasing scheme for air handling units if unit or module are to be redeployed.

Service and maintenance

- Highly-durable components with minimum maintenance.
- Service agreements (including guarantee schemes and filter replacement) available.
- Easy, user-friendly filter change with automatic filter alarm from the Airlinq control system.

Classrooms at further education college · Denmark

A PERFECTLY BALANCED INDOOR CLIMATE

Airlinq is the intelligent control system for the perfect indoor climate.

Viva control panel

The touch panel has a simple, user-friendly interface via which air volume can be adjusted. By connecting the User Tool, the unit's basic parameters and settings can be set.

THE USER-FRIENDLY AIRLINQ CONTROL SYSTEM

The concept behind Airmaster's intelligent Airlinq control system is fully-automatic control according to demand. A sustainable, healthy indoor climate can thus be maintained.

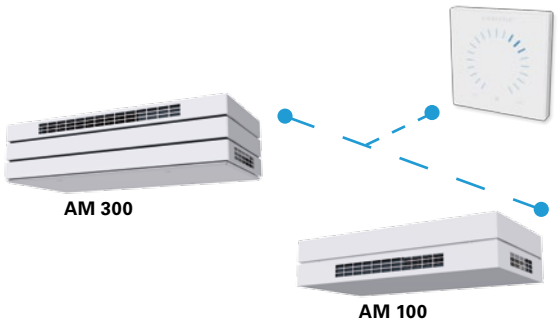
Airlinq is a simple, user-friendly control system with its touch-sensitive control panels Orbit and Viva. Depending on control requirement, the panels provide technicians and users with easy-to-use control.

They can be connected to PC-based applications Airlinq User Tool and Airlinq Service Tool using a USB memory stick, providing full overview of operating status, data storage (up to one year back), adjustment and analysis of all relevant parameters.

DEMAND CONTROLLED INDOOR CLIMATE WITH AIRLINQ

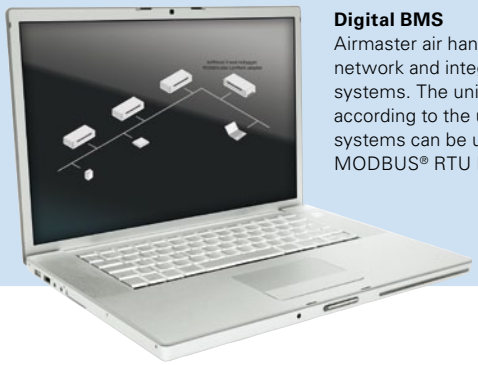
Airmaster air handling units have variable control to adjust air volume according to such factors as temperature, CO_2, humidity, activity level and number of people in the room.

Airlinq ensures optimum on-demand control of the inner climate, whilst reducing energy consumption.



Remote support

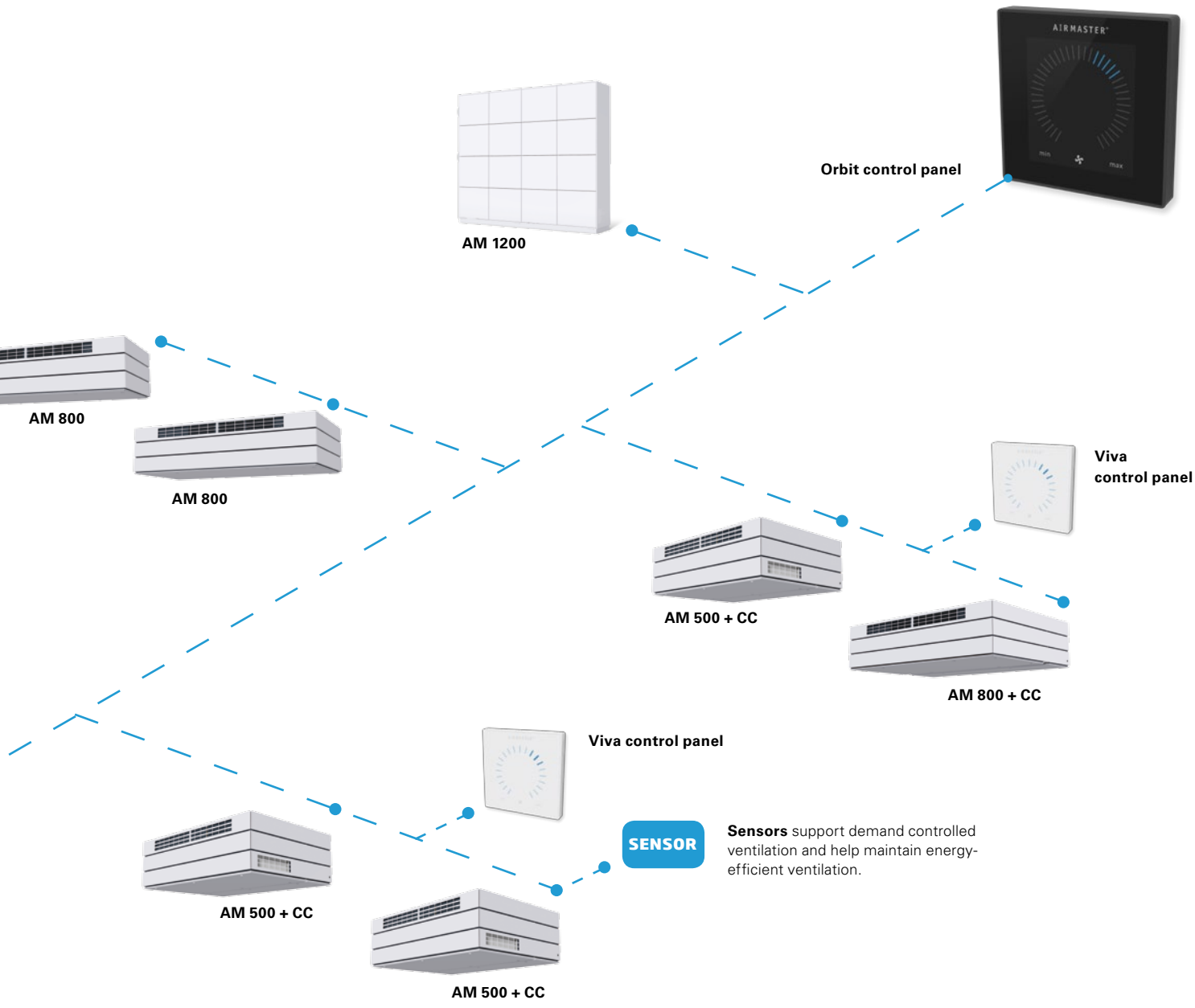
By connecting to Teamviewer, Airmaster can provide support for an Airlinq BMS regardless of installation address.



Digital BMS
Airmaster air handling units can be connected to a digital BMS network and integrated with the rest of the building's electronic systems. The unit can be monitored from a PC, and programmed according to the use of the room. The following digital network systems can be used: KNX®, BACnet™/IP, BACnet™ MS/TP, LON®, MODBUS® RTU RS485.

Orbit control panel

A touch panel with menu-based interface at several levels, with a wide range of control system settings. An Orbit panel on a local Airlinq BMS network can control up to 20 Airmaster units.



Sensors support demand controlled ventilation and help maintain energy-efficient ventilation.

Teacher training college · Denmark

Demand for flexible modular buildings is growing at home and abroad. Airmaster supplies ventilation systems that differ from the competition thanks to high quality and flexibility of operation, use and installation.

University hospital · Denmark

Primary school · UK

University College · Denmark

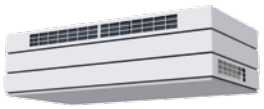
Secondary school · Denmark

Secondary school · Switzerland

Secondary school · Germany

The wide range and flexible installation options make Airmaster's decentralised air handling units adaptable, and can be incorporated into all types of modular buildings and cabins.

Product range

AM series	**Version**	**Capacity** *30/35 dBA*	**Size** *L x H x D*	
AM 100	H V	75/100 m³/h	1170 x 246 x 569 mm	 Cooling module optional
AM 300	H V	240/300 m³/h	1274 x 333 x 578 mm	 Cooling module optional
AM 500	H V	430/550 m³/h	1600 x 439 x 779 mm	 Cooling module optional
AM 800	H V	650/725 m³/h	1910 x 474 x 916 mm	 Cooling module optional
AM 900	H V	690/830 m³/h	800 x 2323 x 588 mm	
AM 1200	H V	1050/1310 m³/h	2427 x 2098 x 496 mm	

CV series	**Version**	**Capacity**	**Size** *L x H x D*	
CV 80	R L	*30 dBA* 80 m³/h	1170 x 275 x 560 mm	
CV 200	R L C	*50 Pa external pressure drop, 1000 SFP W/(m³/h)* 250 m³/h 273 m³/h 285 m³/h	1222 x 303 x 861 mm 1222 x 303 x 861 mm 1338 x 303 x 683 mm	

DV series	**Version**	**Capacity** *50 Pa external pressure drop, 1000 SFP W/(m³/h)*	**Size** *L x H x D*	
DV 1000	H S	1011 m³/h	1498 x 424 x 1384 mm 1512 x 501 x 1385 mm	 Cooling module optional

See the Airmaster product catalogue at www.airmaster-as.co.uk for complete technical details.

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