

AXM

Air handling units from 1,000 to 30,000 m³/h



Expert solutions for air handling

AX'M

An **extensive range of solutions** for all markets

The AX'M range benefits from Hydronic's expertise in air handling to provide an ideal solution to the needs and constraints of the construction industry. AX'M air handling units offer reliable, tailored solutions in a single compact product.



Air handling units certified for all markets

The AX'M range benefits from the continuous improvement policy applied at our plant, which is a Centre for Industrial Excellence, thus ensuring the highest levels of quality, reliability and durability.



Service industry

Indoor air quality has become a key success factor for all new service industry projects, from office suites and administrative facilities to shops, hotels, museums and airports, and its importance will only continue to grow.



Healthcare

In hospitals, clinics, nursing homes, retirement homes and throughout the healthcare sector, stringent regulations necessitate high sanitary safety levels to protect all patients and residents.



Industry and clean rooms

Numerous high-tech industrial processes, in sectors such as pharmacy, microelectronics, special chemicals and cosmetics, have precise atmosphere requirements to ensure full reliability and safety.

Contributing to **energy optimisation** on your projects



Today, the energy balance of all new and renovated buildings is expected to be favourable for the environment and occupants.

Energy-related regulations are becoming ever stricter (ErP 2018, carbon balance and, for example, the French BBC, HQE and RT 2012 requirements), and this trend is set to continue.

Energy optimisation has become an inescapable reality for all construction industry professionals.

Energy recovery: the choice for the best performance

Three heat exchanger systems are available in the AX'M range, to suit different applications.

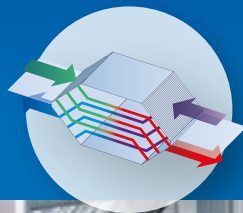
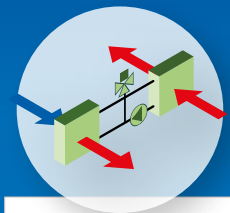


Plate heat exchanger



Rotary heat exchanger



Run-around coils



High-efficiency electronically commutated motors combined with high-efficiency filters to maximise performance

Hydronic has selected components with low power consumption for the AX'M range:

- High-efficiency induction motors (IE2 or IE3) to comply with new standards and directives.
- High-efficiency electronically commutated motors for lower electricity consumption.
- High-efficiency filters to reduce pressure losses, thereby resulting in significantly lower power consumption and sound levels.

A certified range

Eurovent certification provides an impartial guarantee from an independent organisation which tests all equipment on the market under similar conditions, in its accredited laboratory.



AX'M

Maximum performance in a compact form

Self-supporting structure for a consistent, more adaptable design

The self-supporting structure ensures zero air leakage, reduces thermal bridges and lowers the sound level.

The tunnel is made from double-skinned panels, 50 mm thick, insulated using rock wool with a density of 40 kg/m³. The inner and outer panels are made of steel with an Aluzinc coating, offering class C4 corrosion resistance.

Option: galvanised sheet steel with white precoating, or stainless steel.



The housings can be assembled from the inside or the outside, facilitating installation. The AX'M range can be delivered as housings to be assembled, or fully assembled on frames with factory-fitted seals between housings.

Doors for enhanced accessibility and zero air leakage

Generous access via doors with lift-off hinges, and detachable façade panels, to simplify maintenance.



Lift-off hinge



Lock

High-efficiency filters for controlled air quality

The AX'M range offers a wide range of filtration options (G4 to H14 filtration, activated carbon filters, used singly or combined) to suit all requirements.



Clamped rack



Universal frames



Buckets



orm factor



Technical panel to save time with simplified installation

A technical panel towards the top of each AX'M unit comprises all the hydraulic and electrical components, monitoring and adjustment devices, including coil manifolds, pressure switches and lighting switches.

This technical panel frees up space on the façade, facilitating all maintenance and cleaning operations.

The panel also acts as a cable tray, providing easy routing for pressure hoses and electrical cables.



The technical panel provides full access, enabling quick installation of accessories and total or partial wiring of the unit.

Coils for energy optimisation

Hydronic designs and manufactures its own coils: copper, steel or stainless steel pipes; aluminium, coated aluminium or copper fins; and special coatings. Full access to coils and to the condensate drain pan via wide doors. Removable pan with sloped stainless steel base.



Ventilation for controlled consumption

A wide range of high-efficiency fans is available: plug fans with direct drive, induction motor (IE2 or IE3) or electronically commutated motor.

Option: corrosion protection.



Plug fan with induction motor



Plug fan with electronically commutated motor

AX'M

Tailored AHUs...

Hydronic offers a variety of energy recovery options to meet your needs:

- Rotary heat exchangers made from aluminium with epoxy or hygroscopic coatings, constant or variable speed.
- Aluminium or epoxy-coated plate heat exchangers, with partial or full bypass.
- Run-around coils to avoid any cross-contamination between fresh air and return air, with copper pipes and aluminium, coated aluminium or copper fins.

Silencers

Glass fibre or fray-resistant mats

Reduce noise from the unit intake and discharge.



Humidification

- Steam humidifier
- Adiabatic humidifier (runoff or spray)



Frame

for delivery of assembled, factory-sealed units

An AX'M system comprising several units can be delivered on a frame for easy installation, unit by unit or fully assembled.

Flat-packed delivery for difficult-to-access areas

Unit fully assembled on site.

Viewing ports for easier monitoring

Quickly check on the internal components of your unit via viewing ports in the doors.



Unit legs

setting the height of the AX'M range

AX'M units can be mounted on various leg heights, from 100 to 500 mm,

depending on your installation needs.



Electrical cabinet: pre-wired unit

Hydronic can add a factory-fitted electrical cabinet to your AX'M unit.



Outdoor version

to free up indoor space

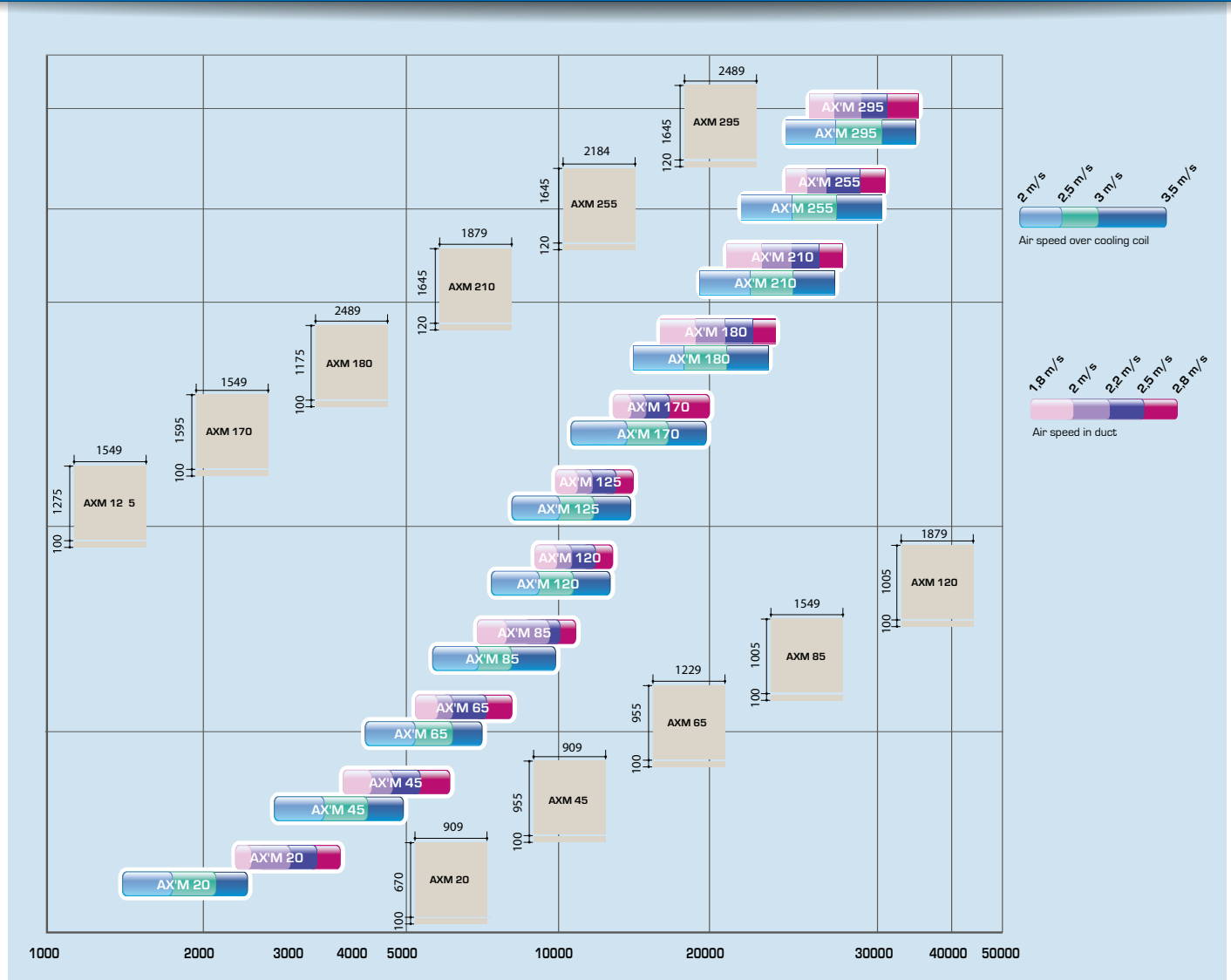
Sloped roof for natural rainwater runoff, with no rain traps.



... from 1,000 to 30,000 m³/h

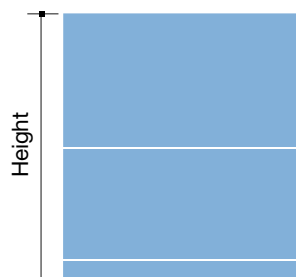
There are 11 standard sizes in the AX'M range of air handling units, covering air flow rates from 1,000 to 30,000 m³/h.

Select the air flow rate and air speed you need: several dimensions are available for a given flow rate. Together, taking account of your needs and conditions of use (available space), we determine the characteristics of your AX'M unit.



Dual-flow / High efficiency, compact

Size	Height
20	1417
45	1987
65	1987
85	2087
120	2087



Hydronic, wherever **air handling** is crucial



Hydronic has been designing, developing, manufacturing and marketing air handling units at Mortagne-au-Perche for over 50 years. This site is organised as a centre of excellence, placing customer needs and environmental protection at the heart of its industrial organisation. Hydronic's expertise encompasses innovation, manufacturing quality, performance and energy savings.



The Quinoa Group, with its Autogyre, DMO, HBH, Hydronic, Panol, Sotis and Strulik brands, offers technical expertise in the following core construction industry fields:

- Ventilation
- Fire protection
- Air handling
- Air diffusion

Strong distribution

Via focused brands with specific sales networks.

Top-level **sales** and technical support teams.



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