Munters

Product sheet

Munters MX3 PLUS

Desiccant dehumidification system

MX3 PLUS is an all-in-one highly customizable air treatment solution built around a standalone MX3 dehumidifier as the centerpiece. The pre- and/or post-treatment modules are easy to configure to fit the specific requirements of even the most demanding applications, ensuring straightforward delivery and installation. MX3 PLUS comes with the state-of-the art AirPro casing which enhances flexibility and ensures reliable, consistent performance through superior thermal break, increased strength for longevity, and improved energy efficiency.

At the heart of the MX3 is the powerful AirC800 controller, which provides intelligent, modulating humidity control to ensure optimal performance in any setting. Integrated communication options, including Modbus, BACnet, and LON, allow seamless connectivity with modern building management systems, enabling remote monitoring and controlling.

With connectivity capabilities, the MX3 ensures that your dehumidification system remains future-ready, scalable, and easy to integrate into existing industrial and commercial infrastructures.

The system is fully compliant with standards and

manufactured in an ISO 9001 certified production facility, ensuring Munters renowned quality in every part of the solution.

Features

→ Energy-efficient dehumidification

→ Gas, steam, or electric reactivation as standard

→ AirPro casing for increased durability, strength, and energy efficiency

→ Full humidity and temperature control

→ Airflow range from 1000 m³/h up to 14750 m³/h*

→ Configurable components in the PLUS-system based on customer requirements

→ Wide range of power supply options: 380–440 V, 50/60 Hz

→ Communication and external control options

→ Pressure switch for enhanced safety

→ 2D sketches and 3D models available

* Airflow data is measured under standard dry air conditions (20 °C, 1013 hPa)

All-in-one solution

Munters MX3 PLUS offers flexibility and full-function integration to create your ideal indoor climate whenever and wherever you need it. It comes in various configurable sizes to meet your specific needs. Choose from a range of different MX3 dehumidification units to match your desired dehumidification capacity. Additionally, Munters MX3 PLUS offers five selectable plenum sizes of the box-system, providing more customization options to suit your requirements.

Advanced communication and control

Munters MX3 PLUS is equipped with a custom-configured control system. Available controls include local or remote HMI systems and various remote connectivity options such as Munters AirC Connect, as well as flow- or pressure-based control.

Pre-configured wiring: All controls are factory-wired and tested before delivery, ensuring a seamless plug-and-play setup.

Alarm management: Includes monitoring and alarm functions for system safety and efficiency.

Industry standards compliance: The MX3 uses BTL Certified BACnet communication and conforms to CE marking specifications, RoHS & REACH and to the below EU standards:

→ EN 60204-1:2018
→ EN 61000-6-2:2019
→ EN IEC 61000-6-3:2021
→ IP class – IP44

### Enhanced system control and connectivity

User-friendly interface: Equipped with an intuitive HMI for easy local or remote operation.

Flexible connectivity: Supports Modbus TCP/IP, Modbus RTU, BACnet IP, and remote control options.

Precision control: Allows regulation by absolute humidity, relative humidity, dew point, flow, or pressure.

Flexibility and simplicity

Munters modular concept makes delivery and site installation easy.
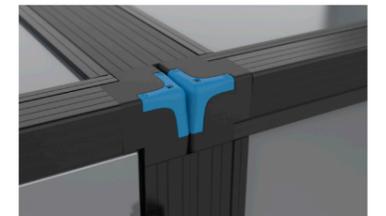
AirPro enclosure

The AirPro casing offers outstanding strength, reliability and efficiency over an extended period. The casing also improves thermalbreak and insulation and have minimal air leakage compared to predecessor. These enhancements result in a reduction in energy consumption while improving longevity and reliability.

Energy Recovery PowerPurge

The advanced rotor technology and innovative four sector rotor with Energy Recovery PowerPurge (ERPP) as a standard option, ensures that every unit extracts maximum moisture with minimal energy input. Whether operating in demanding industrial environments or controlled storage conditions, the MX3 guarantees efficient, reliable performance, while reducing your energy and total operational costs.
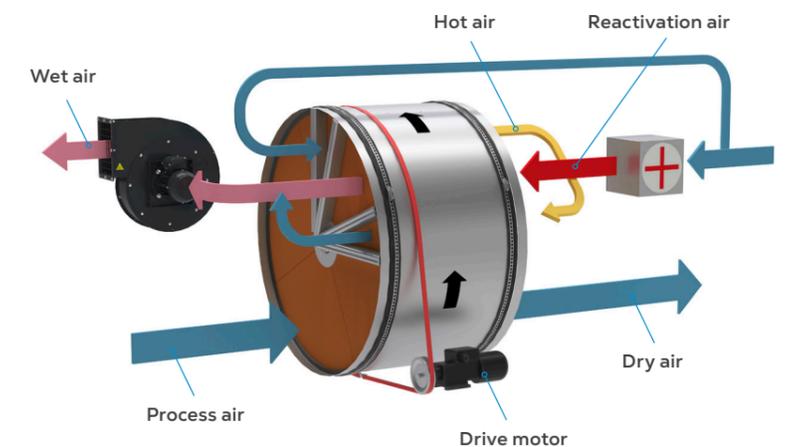
Quality assurance for peace of mind

Outstanding Munters design and quality components ensure reliable operation and optimal performance while complying with harmonized European standards and technical specifications for CE and UKCA marking. The new AirPro enclosure is TÜV tested and complies with European standards.
   Munters MX3 PLUS is manufactured in an ISO 9001 certified production facility.

Smart selection process

Genesys is our innovative and intuitive selection tool, ensuring you get the right Munters solution tailored to your specific needs. Our sales engineers provide you with preliminary mechanical sketches, flow diagrams, technical specifications, energy calculations, spare part lists and price details, offering a clear picture of the benefits and value. You receive comprehensive, accessible documentation from the outset.

Wet air

Hot air

Reactivation air

Process air

Drive motor

Dry air

Customizable MX3 PLUS components

Pre-react heater

Enable reduction of total energy consumption if hot water is available.

Integrated powerful AirC800 controller

Provides an intelligent, modulating humidity control. Type of sensors can be configured for each system and fully optional together with AirC Connect and AirC Wireless.

React heater

Available in electric, steam or gas.

Air damper

Robust and maintenance free. Configurable position and operation mode. Hand or motor controlled.

Evaporative humidifier

Munters evaporative solution featuring our outstanding evaporative media within a flexible unit built with efficiency and simplicity in mind. Works perfectly both for cooling and humidifying solutions.

React inlet

Performance

Munters high-performance silica gel desiccant media - designed to last.

Wet air outlet

Process fresh air inlet

Process return air inlet

Process dry air outlet

External bypass

Process fan

High efficiency fans with variable airflow, fixed speed or pressure control to achieve optimal working point.

Electric heating coil

For both pre- and/or post-treatment. Ensures optimal and consistent heating performance. Designed to meet demands for comfort and energy efficiency.

Air filtration

Configurable filter classes for both panel and bag filter according to filter standard ISO16890.
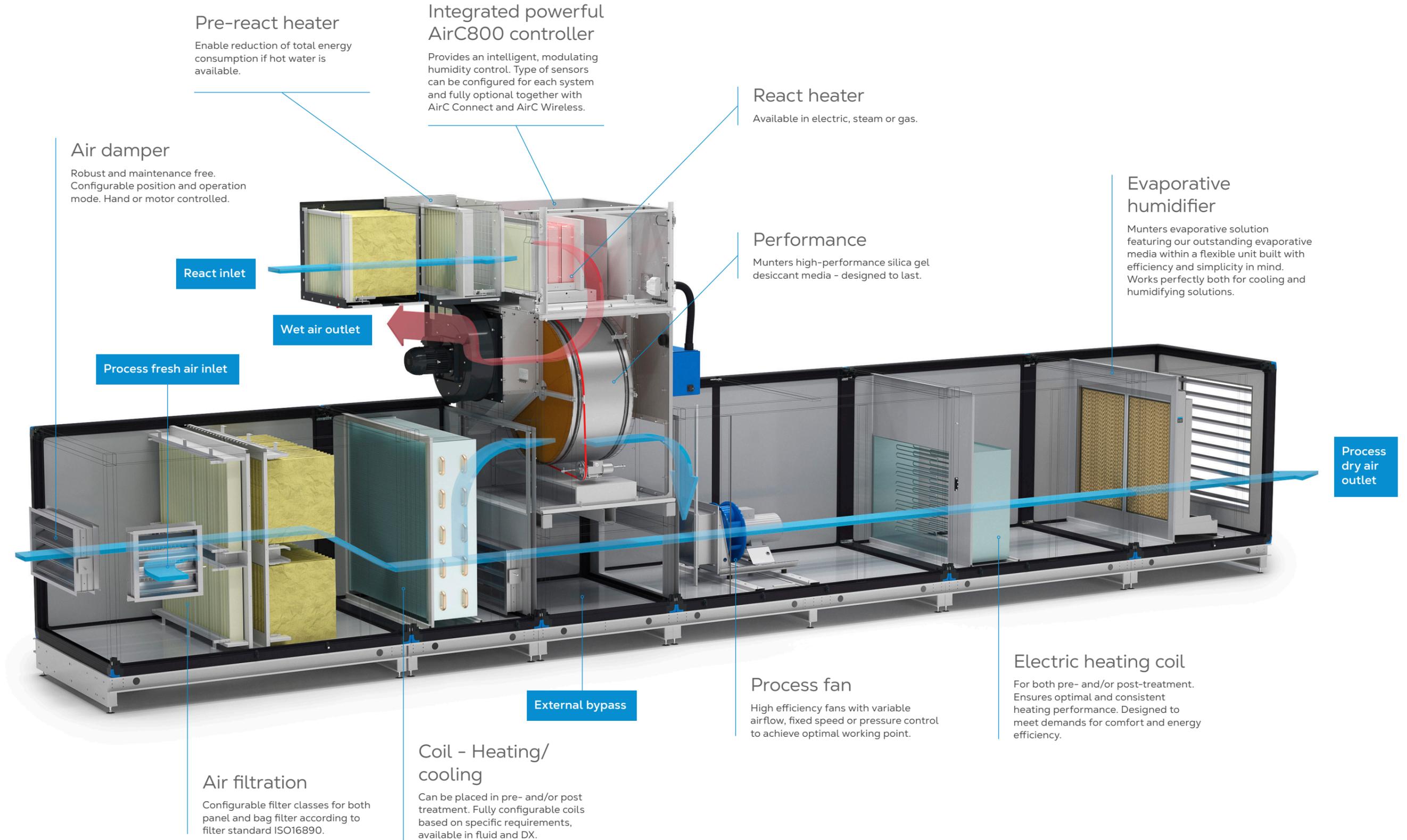
Coil - Heating/ cooling

Can be placed in pre- and/or post treatment. Fully configurable coils based on specific requirements, available in fluid and DX.
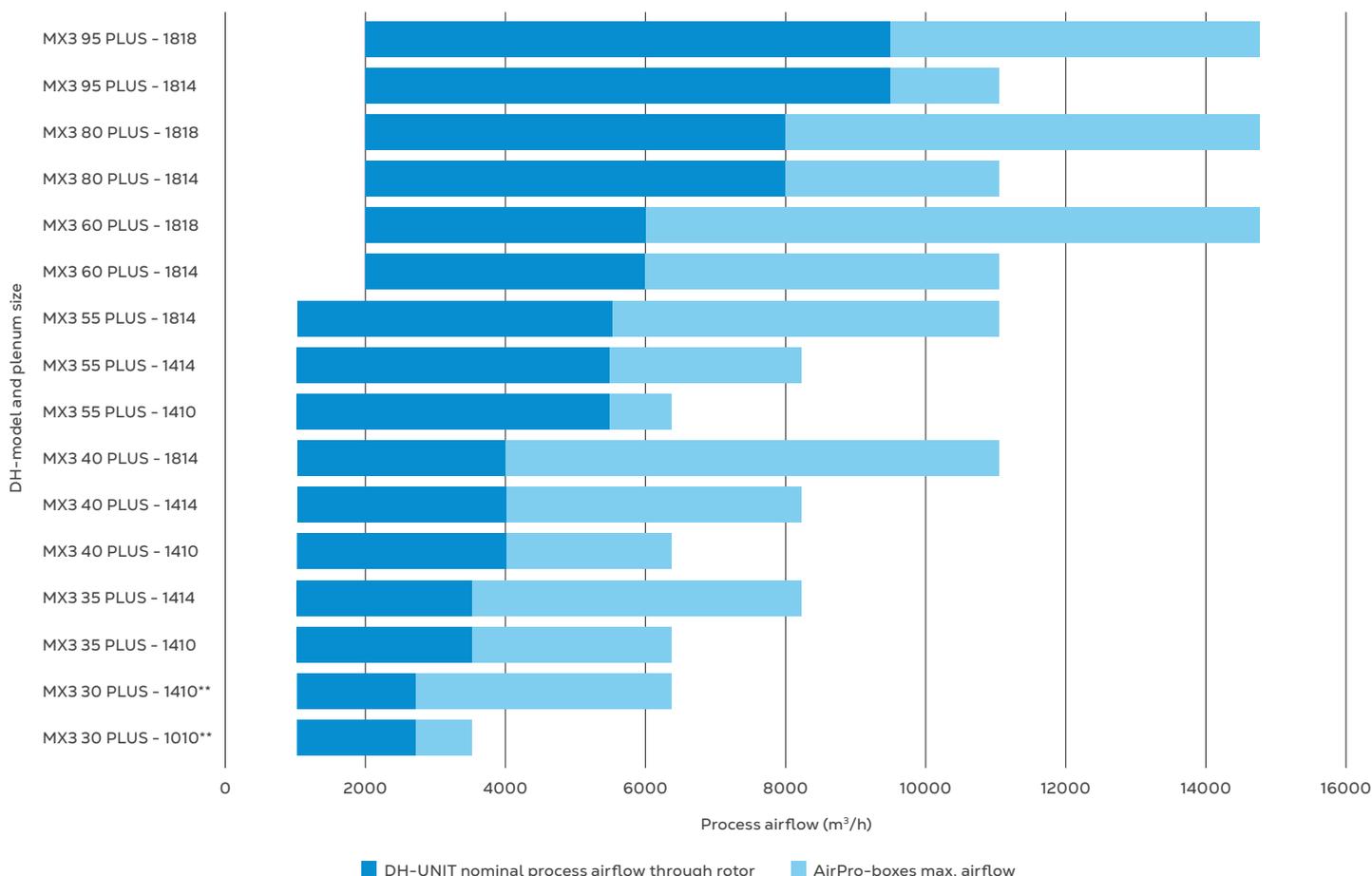
Munters MX3 PLUS – airflow range*

Chart: DH-model and plenum size (y-axis) vs Process airflow (m³/h) (x-axis)

DH-model and plenum size	DH-UNIT nominal process airflow through rotor	AirPro-boxes max. airflow
MX3 95 PLUS - 1818	~9500	~14800
MX3 95 PLUS - 1814	~9500	~11000
MX3 80 PLUS - 1818	~8000	~14800
MX3 80 PLUS - 1814	~8000	~11000
MX3 60 PLUS - 1818	~6000	~14800
MX3 60 PLUS - 1814	~6000	~11000
MX3 55 PLUS - 1814	~5500	~11000
MX3 55 PLUS - 1414	~5500	~8200
MX3 55 PLUS - 1410	~5500	~6400
MX3 40 PLUS - 1814	~4000	~11000
MX3 40 PLUS - 1414	~4000	~8200
MX3 40 PLUS - 1410	~4000	~6400
MX3 35 PLUS - 1414	~3500	~8200
MX3 35 PLUS - 1410	~3500	~6400
MX3 30 PLUS - 1410**	~2700	~6400
MX3 30 PLUS - 1010**	~2700	~3500

Legend:
- ■ DH-UNIT nominal process airflow through rotor
- ■ AirPro-boxes max. airflow

* The airflow range gives an indication of nominal/maximal airflow for MX3 PLUS, components added to the complete system can have impact on the total maximal airflow through the DH-system.

** The MX3 30 PLUS is a compact base-line model that offers a choice between ERP and EEP energy savings systems.

Munters Protect

Munters Protect is the best-in-class anti-corrosion protection on the European market. This special coating has self-healing properties eliminating the microscopic weak points coming from cuts, bend and hole punches and gives substantially longer protection to the metal than conventional galvanization. Benefits are a longer product life cycle, less maintenance, reduced total cost of ownership and less environmental impact.

Munters HPS – the optimal rotor choice

The Munters HPS (High Performance Silica) rotor is designed for optimal drying performance across a broad range of applications. Made from a non-metallic, ceramic composite, it offers superior strength and durability, ensuring long-lasting operation with high moisture adsorption capacity.

Find your nearest Munters office at **www.munters.com**