



# Energy efficient climate control



## MX2 PLUS CLIMATE SYSTEM - FOR COMPLETE CLIMATE CONTROL

#### Compact climate system solution

The heart of the MX<sup>2</sup> Plus Climate System is Munters' new and highly energy efficient MX<sup>2</sup> stand alone dehumidifier. Based on customers specific needs and requirements, modules are added to provide full climate control, controlling both temperature and humidity.

The MX<sup>2</sup> Plus Climate System can be easily configured with pre- and/or post treatment modules for humidifying, cooling, heating and filtration.

The system is built up and fully tested at our factory. It will be delivered in modules on base frames, easily assembled and connected on site.



#### Small footprint - easy installation

By standardising it has been possible to minimize the foot print measurements.

This enables a simple integration of MX<sup>2</sup> Plus Climate System into most humidity sensitive production processes and air conditioning applications.

#### Airflow range from 1,000-12,300 m<sup>3</sup>/h

The airflow range from  $1,000-9,500 \text{ m}^3/\text{h}$  through the desiccant wheel (rotor). When bypassing the desiccant wheel, airflows up to  $12,300 \text{ m}^3/\text{h}$  can be provided.

Munters supplies both smaller and bigger Climate Systems to meet any requirements, namely:

- ML Plus Climate Systems, airflows up to 5,500 m<sup>3</sup>/h
- MDU Climate Systems, airflows starting at 10,000 m<sup>3</sup>/h

## MX2 PLUS CLIMATE SYSTEM - BENEFITS





# FOR SENSITIVE PROCESSING AND PRESERVATION

#### Controlling humidity the Munters way

In the 1950's Carl Munters developed and patented the first desiccant wheel dehumidifier. The principle has developed into the most energy efficient technique for creating humidity controlled environments.

Thanks to the high dehumidification capacity and flexibility MX<sup>2</sup> Plus Climate System is perfect for use in different parts of humidity sensitive processes or wherever there is a need for controlled humidity.









#### Process Industry

For sensitive food-, pharma- and chemical production processes the MX<sup>2</sup> Plus Climate System offers an energy saving climate control in a single system - creating an optimal production climate around the year.

#### Preservation

Storing valuable artefacts or documents means high demand on humidity control. As our MX<sup>2</sup> Plus Climate System offers both humidification and dehumidification in one and the same unit, the system will ensure perfectly controlled humidity and temperature conditions.



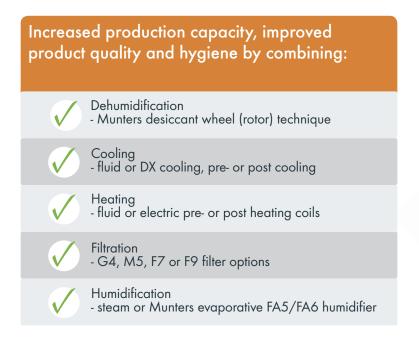
## FOR PROCESS AND PRESERVATION APPLICATIONS





- For preservation of humidity sensitive documents and artefacts
- Archives
- Storage
- Museums
- Multiple preservation applications

# IDEAL & STRICTLY CONTROLLED CLIMATE AROUND THE YEAR





## CLIMATIX - THE INTELLIGENT CONTROL SYSTEM

#### Advanced controls

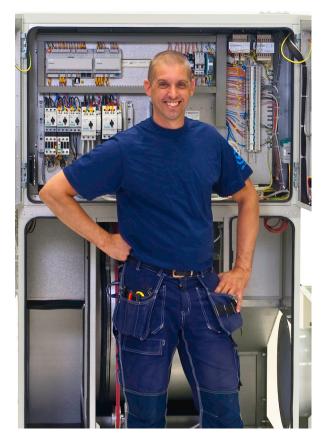
The Climatix control system offers superior control options including:

- Precise temperature and humidity control
- Energy saving thyristor control of heater
- Frequency converter controlled fans for energy efficient operation
- Modbus TCP/IP, Modbus RTU, BACnet IP and WEB options for remote connectivity

#### Options for even higher efficiency and flexibility:

- Mixing box
- Bypass section
- Mirror handed set-up
- EC fans on process side
- Energy efficiency (EEP) and recovery (ERP) rotor purge sections for even lower energy consumption

### SERVICE - LET US HELP YOU FORGET ABOUT MAINTENANCE



#### Your global trusted Service Partner

Sign up for a ServiceCaire® agreement with Munters and rest assured that your new MX² Plus Climate System will operate at its maximum performance and the lowest possible energy consumption.

Our Service engineers are dedicated to support you with technical documentation, training and advice.

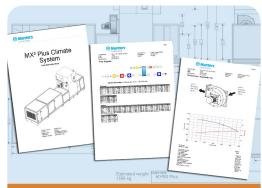
- Flexible ServiceCaire® agreement options
- Extended warranty options with PrimaCaire®
- Critical spare part kits available
- Remote monitoring possible
- Performance checks
- Energy updates



## DOCUMENTATION AT HAND FROM THE VERY BEGINNING

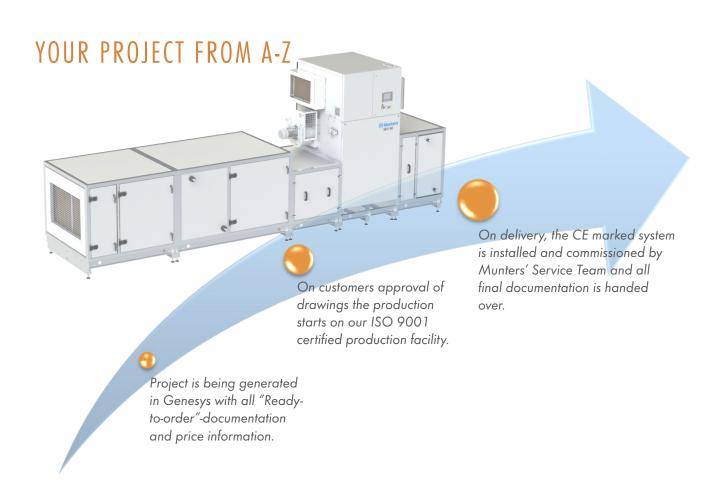


Genesys is our selection software used by our Sales Engineers to design the system that exactly matches your specific requirements.



Genesys provides you with a detailed overview including:

- All technical specifications
- Flow diagrams
- Mechanical sketches
- Price



### CUSTOMER REFERENCES

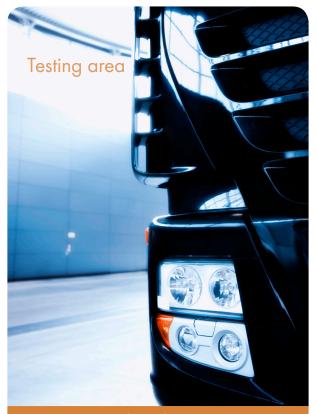


# GMP compliance possible with Munters MX<sup>2</sup> Plus Climate System

The facilities at Xellia Pharmaceuticals ApS in Copenhagen, Denmark are cGMP compliant. The ClassB cleanrooms need strict control of both temperature and humidity.

The Munters MX<sup>2</sup>Plus Climate System at Xellia was designed with both pre- and postcooling and fits into the existing AC system. It maintains conditions in the cleanroom at 20°C/ max. 20 %RH.

The system also solves a practical problem. Without dehumidification the weighing process conducted in the cleanroom could be seriously disturbed by outdoor weather conditions causing the production to be interrupted or postponed. Now the climate in the cleanroom is completely unaffected by outdoor variations in temperature and humidity and production can be precisely planned and executed.



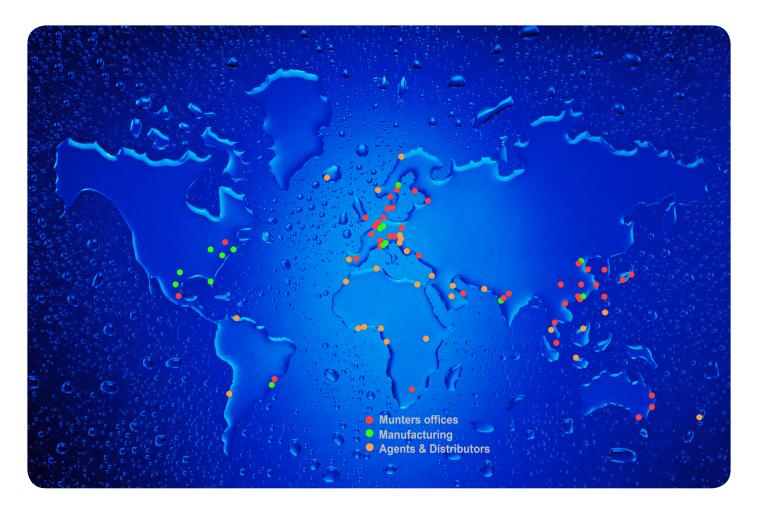
# Munters MX<sup>2</sup> Plus Climate System to fulfill individual customer requirements

For one of the World's leading manufacturers of trucks, Munters delivered a tailor made Climate System for motor testing area.

Munters provided a MX<sup>2</sup> Plus Climate System with pre- and postcoolers to create the correct climate for the test area.

The customer had some very specific demands and Munters delivered a 690 V system with a mirror handed layout, fully meeting their needs.

The modular concept of the MX<sup>2</sup> Plus Climate System enables individual solutions and designs beyond any standard layout. This flexibility is highly recognized among process industry customers, used to solutions built up by components from a number of different suppliers.



## An international name, where the customer comes first.

Munters, part of Nordic Capital, has offices in 30 countries and over 3,000 employees in many branches around the world. We are global leaders in energy efficient air treatment for comfort, process and environmental protection. Munters shares ideas within its international network, giving the Group an outstanding reputation as a reliable, fast-acting and customer-orientated expert in air conditioning. Munters philosophy of customer satisfaction is central to our decision-making. When developing and manufacturing our systems, we see happy customers as our number one target. And this is what our employees strive to ensure every day.

For more information on Munters, please visit www.munters.com

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Your local office

