MCD
Dehumidifier

Features

- Efficient dehumidification between -20°C and 40°C

- Modulating humidity control including wet air temp sensor

- Communication and external control options

- Filter and rotor stop alarm as standard

- Energy saving options

- Service and running indicator alarm as external indicators

Product description

The MCD140 combines traditional Munters strengths like efficiency and robustness with modern state of the art technology like modulating RH control and communication.

Low energy consumption and reliability are important in todays processes. Our modern control system together with high efficient fans which, meet the EU Ecodesign directive, supported with frequency converters give you numerous options to optimise your energy consumption. The Energy Recovery Purge (ERP) is available as a standard option in order to save energy.

The MCD140 is equipped with a number of alarm functions to ensure total control of the dehumidification process. Frame casing and outer panels are made of corrosion resistant AluZink and coated in RAL 7035.

The MCD140 dehumidifier covers a wide range of needs by providing a variety of standard functions. The numerous options will allow pre- and post-treatment by simply adding mechanical and electrical components.

The MCD140 can be supplied with 3 different reactivation alternatives - electrical, steam and gas. A service indicator activates when a preventative service is due, this is a standard feature. To make installation easier the process fan inlet has been designed to allow for different outlet positions.

The electrical equipment conforms to EN 60204 (IEC204). The MCD series of dehumidifiers conform to both harmonised European standards and technical specifications for CE marking.
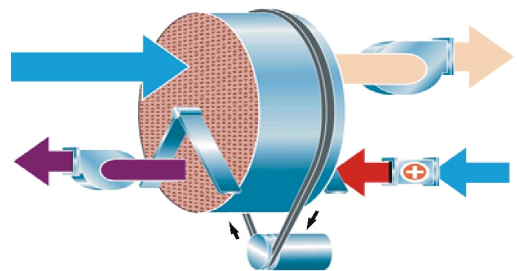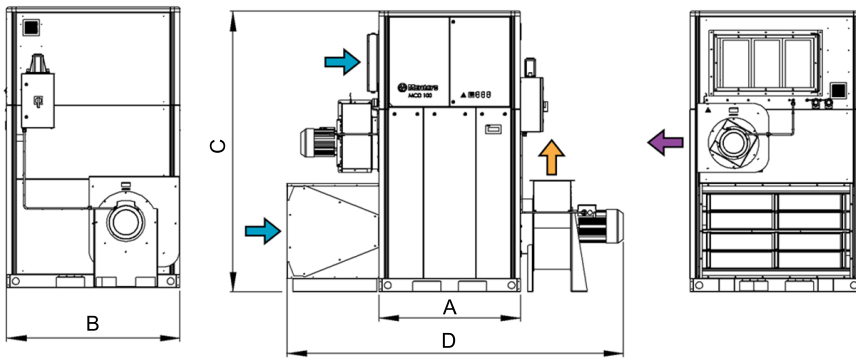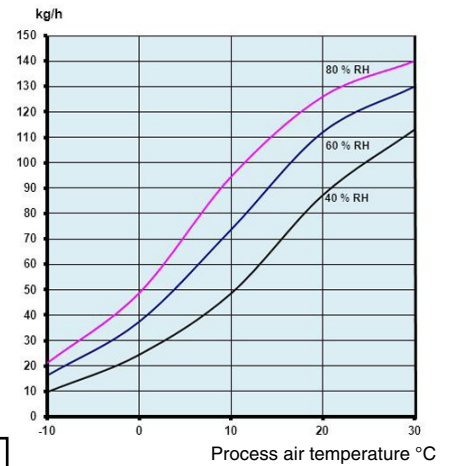
Munters Rotor Technology

Munters desiccant rotors are highly effective moisture-absorbing substances. An option for the MCD series rotor technology is the ERP solution reducing the energy consumption.

Model MCD140

Diagram measurements are for reference only.

Width (A/D)	Depth (B)	Height (C)	Dry air	Wet air	Weight
1300/2917mm	1590mm	2575mm	337x630mm	244x450mm	1153 kg

Dehumidification Capacity

Approximate capacity in kg/h at different inlet process air relative humidity % RH

Technical Specification

Process Air
Rated airflow (m³/h)	14000
Available static pressure (Pa)	250
Fan power (kW)	11

Reactivation air
Rated airflow (m³/h)	4500
Fan Power (kW)	4
Static Pressure at rated airflow (m³/h)	300

Total power, voltage and current (amps/phase)
Total power (kW) Electrical	165.7
Total power (kW) Steam/Gas	15.7
440V 3-60 Hz (A) El.	225
440V 3-60 Hz (A) St/Gas	28
Max sulphur content (ppm) HPS Rotor	30
380V 3-50 Hz (A) Electrical	261
380V 3-50 Hz (A) Steam/Gas	33
400V 3-50 Hz (A) Electrical	248
400V 3-50 Hz (A) Steam/Gas	31
415V 3-50 Hz (A) Electrical	239
415V 3-50 Hz (A) Steam/Gas	30
Max steam working pressure (bar) (g)	7
Gas consumption (m³/h)	14.77
Natural gas pressure (mbar)	18-30

Max sulphur content (ppm) HPS Rotor	30
Steam consumption 3 bar (g/s)	70.3
Steam consumption 5 bar (g/s)	71.9
Total power with ERP,Electrical (kW)	147.7
Steam consumption with ERP 3 bar (g)	61.9
Gas consumption with ERP (m3/h)	12.99
Moisture removal 20°C, 60% (kg/24hr)	2660
Steam consumption with ERP 5 Bar (g)	63.3

Miscellaneous Data
Operating temperature (ºC)	-20/+40
Sound power level to room Lw(A) dB, all inlets and outlets ducted	95
Air filter standard	G4
IEC protective class (unit)	33
IEC protective class (electrical panel)	54
Motor winding insulation	F

Options

• Communication via Modbus, BACnet or Lon
• Energy Recovery Purge (ERP)
• External controls
• Filters M5, G4 or G4/F7 combination
• Heaters-Gas,electric or steam
• Pre-react heaters- heat water or steam
• Insulated process air inlet
• Sensors (RH, absolute and low dew point)
• Touch screen display

Munters

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