

MCD80 Dehumidifier



Product description

The MCD (Munters Configurable Dehumidifier) combines traditional Munters strengths like efficiency and robustness with modern state of the art technology like modulating RH control and multiple language display.

Low energy consumption and reliability are important in today's processes. The new electronic control panel uses a touch display for a number of different energy saving opportunities including optional Variable Frequency Drive (VFD).

The Energy Recovery Purge (ERP) design is available as a standard option in order to save energy. The MCD80 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 MCD80 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 MCD80 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) standards. The electrical system is designed for voltages up to 415V and an ambient temperature of up to 50°C. The MCD series of dehumidifiers conform to both harmonised European standards and technical specifications for CE marking.

Munters Rotor Technology

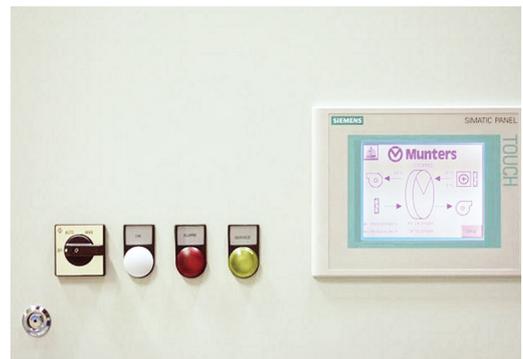
Munters desiccant rotors are highly effective moisture-adsorbing substances. An option for the MCD-series rotor technology is the ERP solutions reducing the energy consumption.

PRODUCT INFORMATION

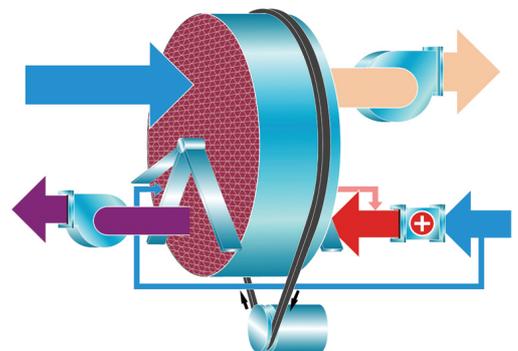
MCD80

Features

- Efficient dehumidification between -20°C and 40°C
- Modulating humidity control incl. temp sensor
- Touch screen control
- Filter and rotor stop alarm as standard
- Energy saving options
- Service and running indicator alarm as external indicators

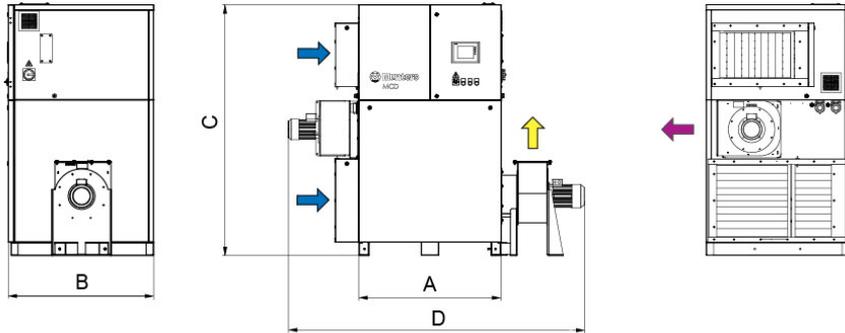


Energy Recovery Purge (ERP)



Model MCD80

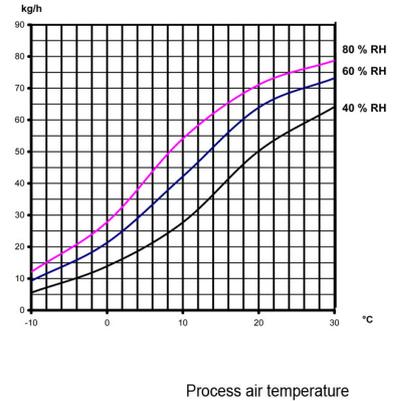
Diagram measurements are for reference only.



Height (C)	Dry air	Wet air	Weight	Width (A/D)	Depth (B)
2204	370x770	300x610	761	1068/2522	1307

Dehumidification Capacity

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

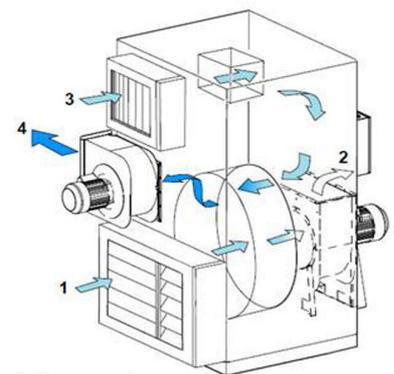


Technical Specification

Process Air		Moisture removal 20°C, 60% (kg/24hr)	1550
Rated airflow (m ³ /h)	8000	Steam consumption with ERP 5 Bar (g)	37,39
Maximum static pressure (Pa)	300	Miscellaneous Data	
Fan power (kW)	7,5	Operating temperature (°C)	-20-40
		Max. noise level, all ducts connected (dbA)	-
Reactivation air		IEC protective class (unit)	44
Rated airflow (m ³ /h)	2520	IEC protective class (electrical panel)	54
Fan Power (kW)	3	Filter class	G3
Static Pressure at rated airflow (m ³ /h)	300	Motor winding insulation	F
Total power, voltage and current (amps/phase)			
Total power (kW) Electrical	94,8		
Total power (kW) Steam/Gas	10,8		
380V 3-50 Hz (A) Electrical	149,4		
380V 3-50 Hz (A) Steam/Gas	21,8		
400V 3-50 Hz (A) Electrical	141,9		
400V 3-50 Hz (A) Steam/Gas	20,7		
415V 3-50 Hz (A) Electrical	136,8		
415V 3-50 Hz (A) Steam/Gas	19,9		
Max steam working pressure (bar) (g)	7		
Gas consumption (m ³ /h)	8,27		
Natural gas pressure (mbar)	18-49		
Max sulphur content (ppm) HPS Rotor	30		
Steam consumption 3 bar (g/s)	39,37		
Steam consumption 5 bar (g/s)	40,27		
Total power with ERP,Electrical (kW)	88,8		
Steam consumption with ERP 3 bar (g)	36,56		
Gas consumption with ERP (m ³ /h)	7,68		

Options

- * Variable Frequency Drive (VFD) for process air fan
- * Energy Recovery Purge (ERP)
- * Pre-react-heater
- * Insulated process air inlet
- * Upgrade options for controller for pre- and post treatment
- * Mirror handed
- * Airflow indication
- * Filters F5, F7 or G4/F7 combination
- * Dewpoint sensor



1. Process air
2. Dry air
3. Reactivation air
4. Wet air