

# MCD40 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 MCD40 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 MCD40 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 MCD40 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

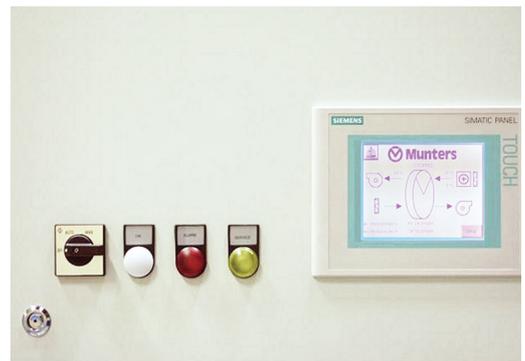
Munters desiccant rotors are highly effective moisture-adsorbing substances. An option for the MCD-series rotor technology is the ERP solutions reducing the energy consumption.

## PRODUCT INFORMATION

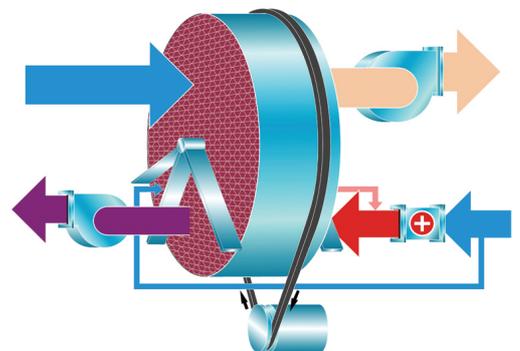
# MCD40

## 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

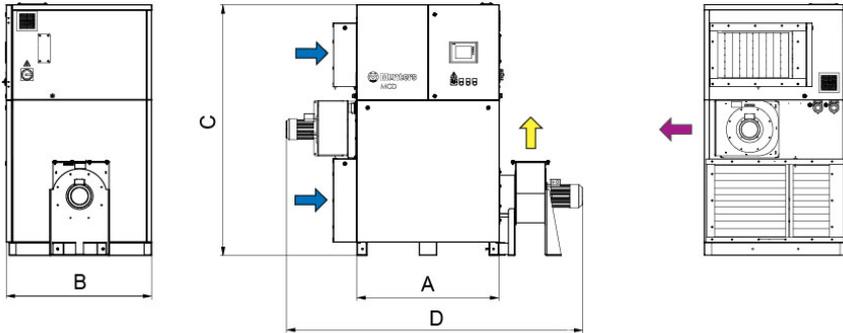


## Energy Recovery Purge (ERP)



# Model MCD40

Diagram measurements are for reference only.



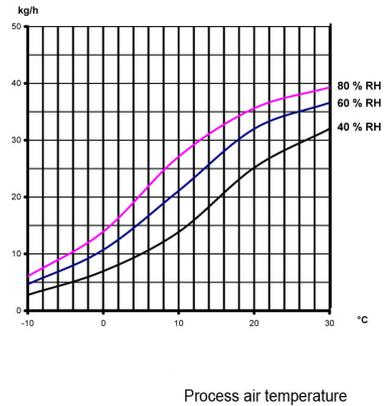
Height (C)	Dry air	Wet air	Weight	Width (A/D)	Depth (B)
1899	316x590	275x460	571	1068/2352	1091

## Technical Specification

<b>Process Air</b>		Moisture removal 20°C, 60% (kg/24hr)	768
Rated airflow (m <sup>3</sup> /h)	4000	Steam consumption with ERP 5 Bar (g)	17.26
Maximum static pressure (Pa)	300	<b>Miscellaneous Data</b>	
Fan power (kW)	3	Operating temperature (°C)	-20- 40
		Max. noise level, all ducts connected (dbA)	73
<b>Reactivation air</b>		IEC protective class (unit)	44
Rated airflow (m <sup>3</sup> /h)	1260	IEC protective class (electrical panel)	54
Fan Power (kW)	1.5	Filter class	G3
Static Pressure at rated airflow (m <sup>3</sup> /h)	300	Motor winding insulation	F
<b>Total power, voltage and current (amps/phase)</b>			
Total power (kW) Electrical	46.8		
Total power (kW) Steam/Gas	4.8		
380V 3-50 Hz (A) Electrical	74.5		
380V 3-50 Hz (A) Steam/Gas	10.6		
400V 3-50 Hz (A) Electrical	70.7		
400V 3-50 Hz (A) Steam/Gas	10.1		
415V 3-50 Hz (A) Electrical	68.2		
415V 3-50 Hz (A) Steam/Gas	9.7		
Max steam working pressure (bar) (g)	7		
Gas consumption (m <sup>3</sup> /h)	4.13		
Natural gas pressure (mbar)	18-49		
Max sulphur content (ppm) HPS Rotor	30		
Steam consumption 3 bar (g/s)	19.69		
Steam consumption 5 bar (g/s)	20.13		
Total power with ERP,Electrical (kW)	40.8		
Steam consumption with ERP 3 bar (g)	16.87		
Gas consumption with ERP (m <sup>3</sup> /h)	3.54		

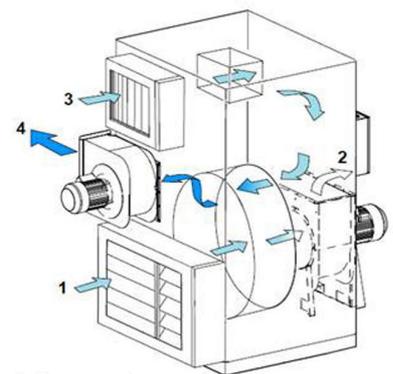
## Dehumidification Capacity

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



## 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