

MUNTERS PRODUCT INFORMATION

ML-L Series Dehumidifier with Air Cooled Condenser

Complete Dehumidification Package



ML270L

High Efficiency and Reliability

- Desiccant dehumidification – dehumidifies efficiently, even at low temperatures
- Advanced rotor technology – high capacity with low energy consumption
- Heat recovery – condenser heat available for use in the application
- Efficiently designed electrical system – enhanced reliability

Easy Installation and Operation

- Closed looped reactivation circuit – no wet air duct connection needed
- Corrosion resistant reactivation circuit components – virtually maintenance-free
- Basic control panel – monitors the system operation status
- Humidistat control – optional control of entire system or reactivation heater only
- Easily removed access panels – fast installation and service
- Replaceable EU3 filter – enhances air quality
- Duct connections conform to ISO 7807 standards – simplifies duct installation

Product Description

The ML270L desiccant dehumidifier with air cooled condenser is designed to efficiently dehumidify in unheated closed spaces. The wet air from the dehumidifier is passed through the air cooled condenser and then returned to the rotor in a closed loop circuit. The components within the closed loop are constructed of stainless steel and thermoset plastic. Water removed by the condenser is drained away. The heat

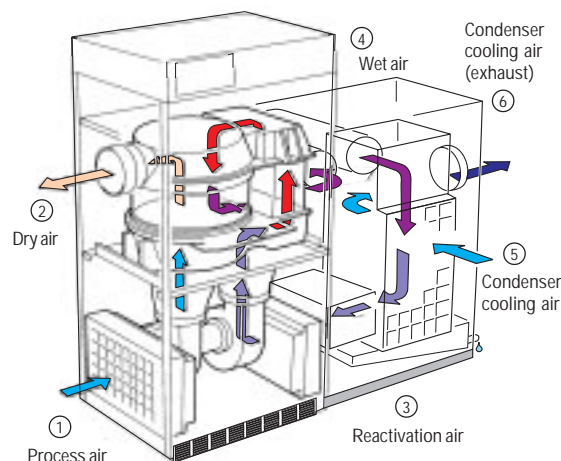
from the air cooled condenser is then either used in the application or ducted away.

Its rugged formed metal frame and access panels are produced from corrosion resistant ALUZINK®. The electrical system conforms to established ML Series standards as well as to both harmonised European Standards and to CE marking specifications.

Munters Rotor Technology

The desiccant rotor is manufactured from a corrugated composite material that is highly effective at attracting and holding water vapour. Every Munters dehumidifier applies a unique rotor technology. Airflows, air conditions, rotor sections, and rotor rotation speeds are optimised for specific applications. An innovative control system maximises the units energy efficiency.

A characteristic of the ML-L Series rotor technology is an extra rotor sector which provides high capacity, while simultaneously recovering heat, thereby effectively reducing the electrical power requirement. The wet air is reapplied as reactivation air.



Model ML270L

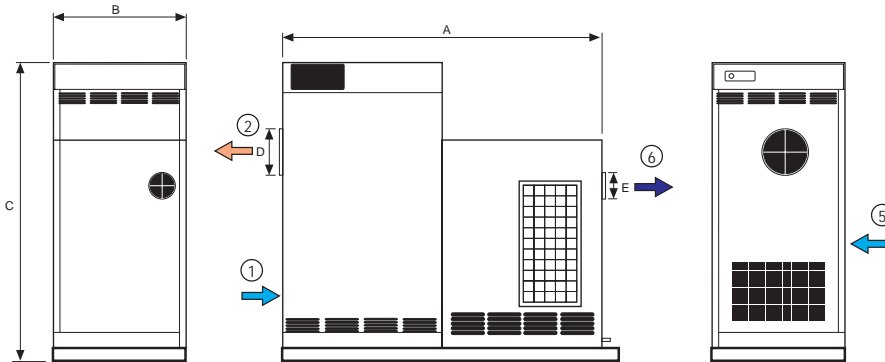
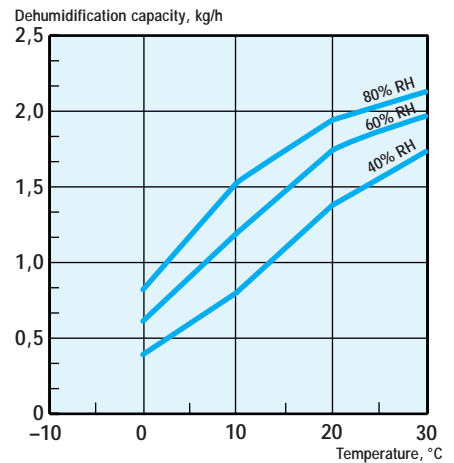
Diagram measurements are for reference only.

Scaled and dimensioned AutoCAD drawings are available in Munters' DryCap program.

Dehumidification capacity

Approximate capacity in kg/h. For more detailed information, please contact your nearest Munters location or refer to Munters' DryCap program.

1. Process air temperature, °C
2. Process air relative humidity, % RH
3. Dehumidification capacity, kg/h
moisture removal kg/hour)



Width (A)	Depth (B)	Height (C)	Diam. (D)	Diam. (E)	Weight
1141 mm	410 mm	1010 mm	160 mm	200 mm	118 kg

Technical Specifications

Process air¹

Rated airflow (m³/s) _____ 0,075
 Rated airflow (m³/h) _____ 270
 Available static pressure (Pa) _____ 200
 Fan motor power (kW) _____ 0,36

Reactivation air¹

Rated airflow (m³/s) _____ 0,027
 Rated airflow (m³/h) _____ 99
 Available static pressure (Pa) _____ -
 Fan motor power (kW)² _____ -

Condenser air

Rated airflow (m³/s) _____ 0,180
 Rated airflow (m³/h) _____ 650
 Available static pressure (Pa) _____ 200
 Fan motor power (kW) _____ 0,4
 Sensible heat, condenser air (kW) _____ 2,0
 (calculated at +20°C 50%RH)

Total power, voltage and current (amps/phase)

Total power (kW) _____ 3,70
 200V 3~50Hz (A) _____ -
 200V 3~60Hz (A) _____ -
 220V 3~50Hz (A) _____ 10,9
 230V 3~50Hz (A) _____ 10,7

380V 3~50Hz (A) _____ 6,0
 400V 3~50Hz (A) _____ 5,8
 415V 3~50Hz (A) _____ 5,6
 440V 3~60Hz (A) _____ 5,4

Reactivation air heater

Heater power (kW) _____ 2,7
 Temperature increase across heater (°C) _____ 95
 Heater power, condenser (kW) _____ 0,22

Miscellaneous data

Operating temperature (°C) _____ ±0/+25
 Drive motor power (W) _____ 5
 Max noise through duct (dBA) _____ 79
 Air filter, standard _____ EU3
 IEC protective class _____
 unit _____ IP44
 electrical panel _____ IP54
 Winding insulation grade _____
 Fan motor _____ Class F
 Drive motor _____ Class F
 High temperature cut-out (°C) _____ 160±5
 Amperage rating _____
 remote on relay _____ 2A, 250VAC (max)
 alarm contact _____ 2A, 250VAC (max)
 Control voltage _____ 24VAC

¹ Stated performance based on 20°C and air density of 1,2kg/m³

² Common motor for process and reactivation fans

Options

- Hours run counter (monitors the number of hours the system is operational)
- Humidity control system with alarm and display
Refer to the RH98 product data sheet
- Stainless steel sheet metal casing



Munters Europe AB
www.munters.com

Munters Europe AB
 Dehumidification Division
 Box 434
 S-191 24 Sollentuna
 SWEDEN
 Tel: +46 8 626 63 00
 Fax: +46 8 626 63 65

Distributor

Subject to change without notice.

Produced by Munters, Umeå, Sweden
 Printed matter, License 341 051

DH/MEA/PGBint-0045-08/98