

## MUNTERS PRODUCT INFORMATION

# ML Series Desiccant Dehumidifier

## Complete Dehumidification Package



### Product Description

The ML690 desiccant dehumidifier is designed to efficiently dehumidify in low moisture applications. It is equipped with an internally sealed rotor unit. The rotor casing is constructed of durable thermoset plastic and contains isolated sections that provide a precise balance for dehumidification, reactivation, and heat recovery airflows. Its rugged formed metal frame and access panels are produced from corrosion resistant ALUZINK®.

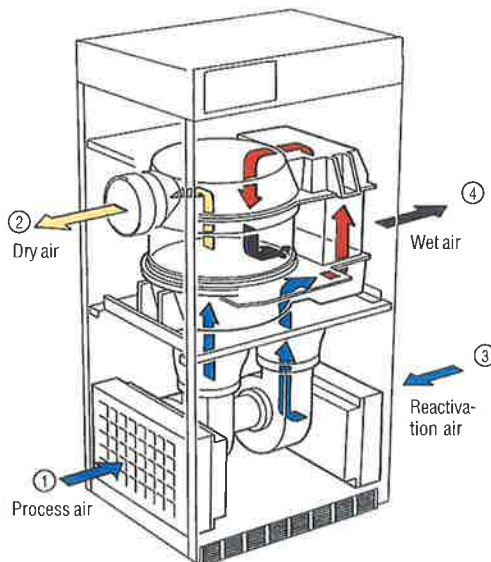
### Munters Rotor Technology

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 Series rotor technology is an extra rotor sector which provides high capacity, while simultaneously recovering heat, thereby effectively reducing the electrical power requirement.

The electrical control system conforms to EN 60204 (IEC204) standards. The electrical components are mounted on busbars and are constructed of halogen-free plastic. The electrical system is designed for up to 690V and 60° C.

ML Series dehumidifiers conform to both harmonised European Standards and to CE marking specifications.



# ML690

### High Efficiency and Reliability

- Desiccant dehumidification – high efficiency, even below 0° C
- Advanced rotor technology – high capacity with economic operating costs
- Internally sealed rotor unit – dehumidifies to low dewpoints
- Hard plastic rotor casing – corrosion resistant construction
- Efficiently designed electrical system – enhanced reliability

### Easy Installation and Operation

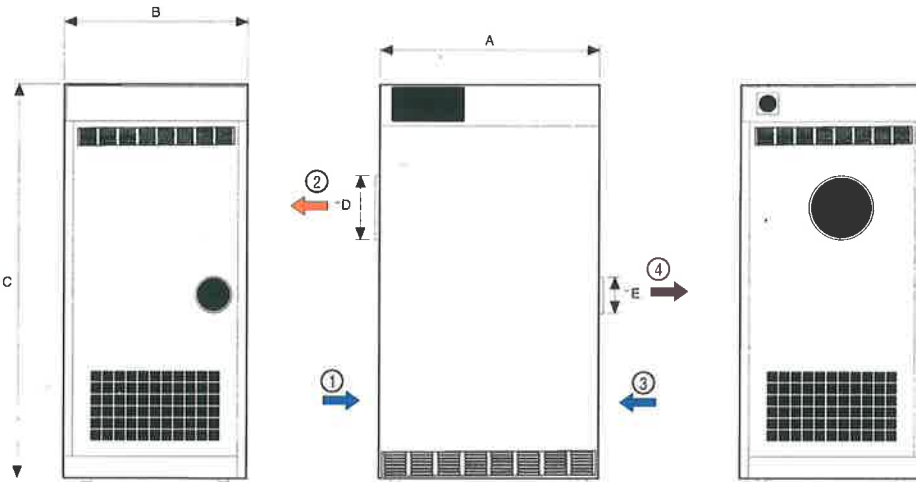
- Advanced control panel – diagnostic fault display eases maintenance
- Remote display and automatic control – increases installation flexibility
- Humidistat control – optional control of complete unit or reactivation heater only
- Easily removed access panels – fast installation and service
- Replaceable EU3 filter – enhances air quality
- Unit requires minimal floor area – allows installation in confined spaces
- Duct connections conform to ISO 7807 standards – simplifies air duct installation
- Interchangeable front and back panels – optional dry air installation



# Model ML690

Diagram measurements are for reference only.

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



Width (A)	Depth (B)	Height (C)	Diam. (D)	Diam. (E)	Weight
715 mm	590 mm	1352 mm	200 mm	125 mm	143 kg

## Technical Specifications

Rated airflow (m<sup>3</sup>/s) \_\_\_\_\_ 0,192  
 Rated airflow (m<sup>3</sup>/h) \_\_\_\_\_ 690  
 Available static pressure (Pa) \_\_\_\_\_ 300  
 Fan motor power (kW) \_\_\_\_\_ 0.55

### Reactivation air<sup>1</sup>

Rated airflow (m<sup>3</sup>/s) \_\_\_\_\_ 0,071  
 Rated airflow (m<sup>3</sup>/h) \_\_\_\_\_ 254  
 Available static pressure (Pa) \_\_\_\_\_ 300  
 Fan motor power (kW) \_\_\_\_\_ 0,37

### Total power, voltage and current (amps/phase)

Total power (kW) \_\_\_\_\_ 7,82  
 200V 3~50Hz (A) \_\_\_\_\_ 24,1  
 200V 3~60Hz (A) \_\_\_\_\_ -  
 220V 3~50Hz (A) \_\_\_\_\_ -  
 230V 3~60Hz (A) \_\_\_\_\_ 21,0  
 380V 3~50Hz (A) \_\_\_\_\_ 12,7  
 400V 3~50Hz (A) \_\_\_\_\_ 12,1  
 415V 3~50Hz (A) \_\_\_\_\_ 11,6  
 440V 3~50Hz (A) \_\_\_\_\_ 11,0

**Reactivation air heater**  
 Heater power (kW) \_\_\_\_\_ 6,9  
 Temperature increase across heater(°C) \_\_\_\_\_ 95

### Miscellaneous data

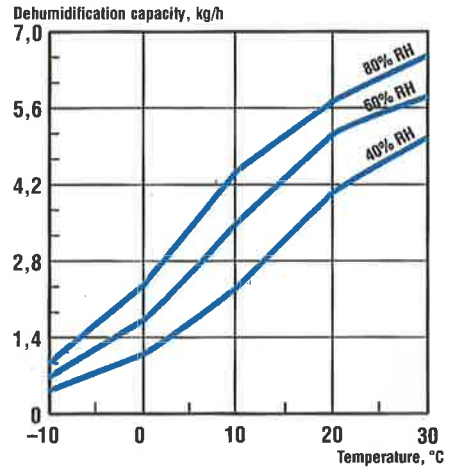
Operating temperature (°C) \_\_ -20/+40  
 Drive motor power (W) \_\_\_\_\_ 10  
 Max noise level unducted (dBA) \_\_\_\_ 74  
 Air filter, standard \_\_\_\_\_ EU3  
 IEC protective class \_\_\_\_\_  
 unit \_\_\_\_\_ IP44  
 electrical panel \_\_\_\_\_ IP54  
 Winding insulation grade \_\_\_\_\_  
 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

<sup>1</sup> Stated performance based on 20°C and air density of 1,2kg/m<sup>3</sup>

## 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)



## Options

- Hours run counter (monitors the number of hours the system is operational)
- Blocked filter alarm
- Rotor stopped alarm
- Humidity control system with alarm and display  
Refer to the RH98 product data sheet
- Air cooled condenser  
Refer to the ML690L product data sheet
- Stainless steel sheet metal casing



Distributor

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