

Humimax™

Evaporative Humidifier

# HM2 4000



## EQUIPMENT

# HM2 4000

- Superb controllability – PI control
- No risk of over-saturation
- Low running costs
- Safe and hygienic
- Modulating fan speed controller
- Water reservoir that is automatically emptied and refilled with fresh water on a regular basis
- Low noise level
- Easy operation
- Easy to install
- Easy maintenance
- EMC tested
- CE marked

Humimax™ is a series of self contained humidifier units. They provide excellent humidification as well as automatic control of humidity level throughout a broad range of application areas.

Humimax series is comprised of a range of three different sizes where HM2 4000 constitutes the middle unit. It is designed to meet various application requirements and to give optimum balance between required humidification efficiency and stability as well as low energy consumption.

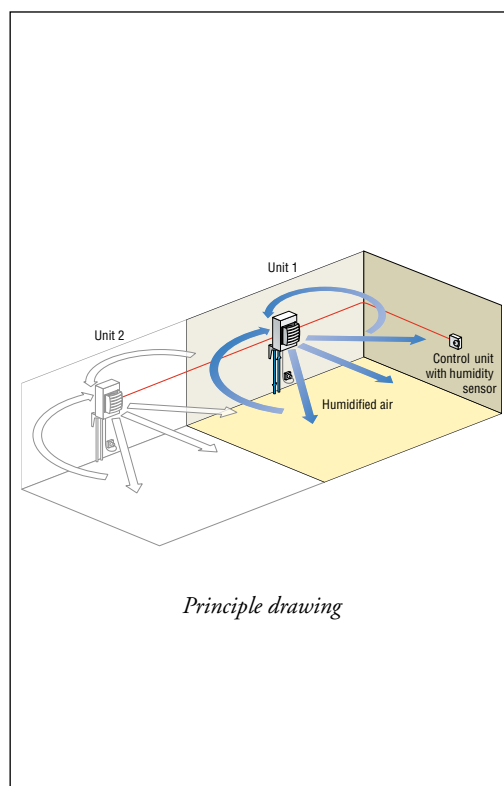
Humimax is an excellent choice to keep the right humidity in many kind of premises such as printing industry, wood and furniture, food industry, museums and computer rooms as well as numerous other premises.

It is very easy to install and maintain.

The Humimax is a self contained evaporative humidifier designed to recirculate and humidify air within the room desired. The air passes through an evaporative media where it picks up moisture. The highly absorbent media ensures a very large contact surface between water and air providing a simple and reliable method of humidification, with all the unique advantages of evaporative humidification.

## Technology

Evaporative humidifying is nature's own way of adding moisture. Air is passed over a wetted surface where it picks up moisture. No aerosols are formed with this process and over saturation of the air is not possible. Unlike other methods this method supplies only pure water (cold steam) during the humidification process and therefore does not cause any airborne undesired mineral deposits. Evaporative humidifiers are also very economical to run and the normal maintenance is limited to cleaning and exchanging of the evaporative media.



*Principle drawing*

## Basics

Humimax is delivered ready to connect to a single phase electrical supply, water supply and drain. This compact unit is easily installed with a simple and straight forward starting procedure.

The energy that is needed for the evaporation is taken from the air itself. The air that leaves the humidifier is therefore humidified and cooled simultaneously without any external energy supply for the evaporation. This is in essence the adiabatic cooling process. It is very efficient and the consumption of energy is extremely low.

It allows the use of water straight from the tap with no need for water treatment (i.e. demineralisation plants). Minerals and pollutants stay behind in the humidifier to be washed away with the discharge water keeping the total humidification process pure.

## Description

The casing of the Humimax humidifier is made of stainless steel. A humidification pad is mounted in the air inlet. The air to be humidified is drawn through the pad by an axial fan positioned in the outlet of the unit. The bottom of the unit forms a water reservoir. Water is supplied to the reservoir through a water filter, a solenoid valve and a float valve that controls the water level. A circulation pump, in the water reservoir, feeds water to the distribution manifold located at the top of the humidification pad. The reservoir is emptied and refilled with fresh water to ensure low level of minerals, on a regular basis, using a drain valve that is opened or closed electrically. The unit is equipped with a built-in overflow protection.

A control unit mounted on the wall measures the humidity and controls the humidifier so that the right humidity is maintained. Up to eight units can be put in circuit together. The power required for the unit is single phase, 230 V, 50 Hz.

## Technical information

<b>Max humidifier air flow</b> [m³/h]	4,000
<b>Operating temp.</b> dry/wet [°C]	0-40 / >0
<b>Casing class</b>	
Unit – IP	44
Control unit – IP	30
<b>Dimensions</b> [mm]	
Depth with air deflector	650
Depth	350
Height	1,175
Width	730
<b>Weight</b> dry/wet [kg]	57/66
<b>Electrical data</b>	
Rated voltage [V/Hz]	230/50
Rated power [W]	355
Rated current [A]	1.65
<b>Noise data</b>	
LWA dB full speed/half speed	67/52
LA <sup>1)</sup> 3 m dB (A)	51/36
LA <sup>2)</sup> room dB (A)	49/34

<sup>1)</sup> At a distance of 3 m from the fan and with an average absorption coefficient  $\mu=0.10$  (less damped room) and room absorption area 2,500 m².

<sup>2)</sup> Within reverberation field of room, according to Note 1.

## Order information

HM2-4000-X-X

Code for pre-filter.

- 1 With pre-filter.
- 0 Without pre-filter.

Code for control unit. One control unit

can monitor up to eight units.

- 1 With control unit
- 0 Without control unit

e.g., HM2-4000-0-1

Wall mounting brackets are included in the delivery.

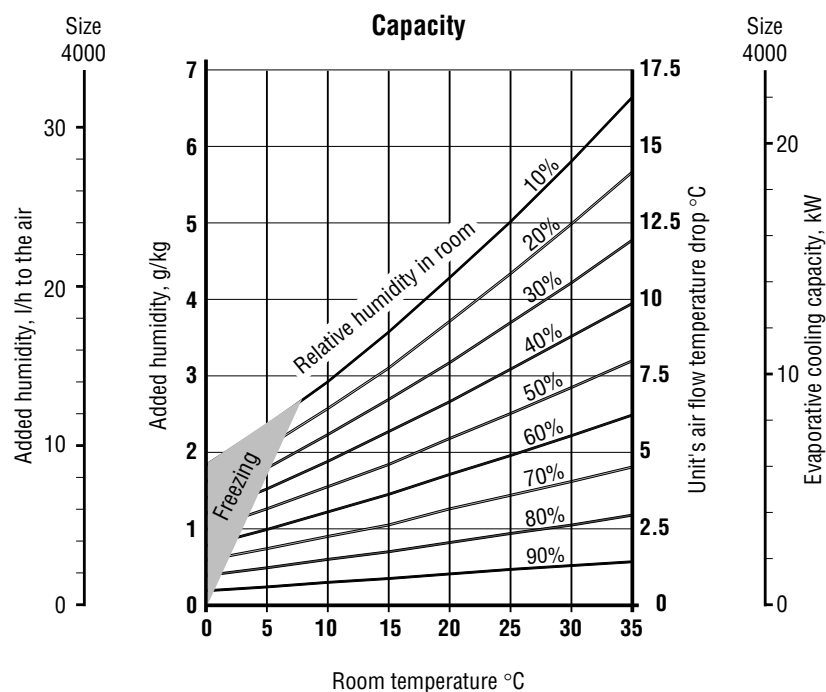
Signal cable is not included.

## Accessories

Dosing device

Order code

DS 1



Humimax and accessories are products of Munters Europe AB, Sweden.



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