

AMBIENT HUMIDIFICATION

Keeping a correct value for ambient humidity it is sometimes a necessary pre-requisite in several industrial processes. An ambient humidification system can perform additional functions like keeping ambient temperature within certain limits, keeping flying dust under control, disinfect the room atmosphere or even keep a fire under control while the fire fighting squad reaches the place.

We supply the components shown in the following or can quote a complete system.

A perfect system is obviously based on high quality atomizers and instrumentation, manufactured and guaranteed by qualified and experienced professionals.

We present in the following our MA ultrasonic atomizers and MX air actuated atomizers, which have been designed for optimum performance and applied successfully in tens of thousands to the most different industrial processes.

These long proven devices are complemented by our long time proven regulation and programming cabinets, continuously reconsidered and upgraded to the latest technologies.

Both atomizers shown in this page can be supplied with the following accessories:

- Wall support with swivel joint.
- Quick couplings for air and water

AIR ACTUATED ATOMIZERS

An air actuated MX atomizer is a highly efficient component in a humidification system. It can be delivered as a standard with two air inlets, for liquid atomizing and cylinder control, or with a single air inlet to perform both tasks.

The latter type allows for simultaneous control of several atomizers assembled in line with only one air line, and requires a minimum air pressure value of 2 bars.

Our unique needle design assures perfect tightness when atomizers are shut off.

The swivel mount allows for the best jet orientation to obtain fast and uniform evaporation, while optional coatings are available for the inner nozzles to prevent lime build-up and reduce maintenance cost.



RECOMMENDED MODELS

Stainless steel	two air inlets	MXB 2142 B1B
	single air inlet	MXB 2142 B1BU
Nickel coated brass	two air inlets	MXB 2142 T8B
	single air inlet	MXB 2142 T8BU

ULTRASONIC ATOMIZERS

The ultrasonic atomizers MA are recommended for humidification systems designed for large surfaces because of their long spray throw and their large liquid capacity.

Operating these atomizers originates a low frequency sound which limits their applications to those systems where personnel is not present at the time when the humidification process starts.

Electric control

The special atomizer body (PVC) contains an electro-valve controlling the liquid supply.

Because of the short liquid path from the valve to the orifice, no dripping occurs.

Each atomizer requires an electrical connection (options 220V, 48V, 24V).

Air control

The atomizer body in stainless steel contains a pneumatic valve controlling the liquid supply.

Liquid feed is automatically stopped when air pressure value falls under 2,5 bar.

This is a very simple system, and easy to be assembled since no electrical connection is required.

However the pneumatic valve can only handle pure water, no additives are allowed.



RECOMMENDED MODELS

MAD 1131 B1
MAD 0802 B1

AMBIENT HUMIDIFICATION

REGULATION CABINET



Maximum system capacity

Code	LI	AA	AC	Maximum system capacity	
				MXB 2142	MAD 1131
UMQ AA01 V0	1/4"	3/8"	1/4"	20	6
UMQ AA02 V0	3/8"	1/2"	1/4"	40	12
UMQ AB01 V0	1/4"	3/8"	*	20	6
UMQ AB02 V0	3/8"	1/2"	*	40	12

LI = Water inlet

AA = Atomizing air inlet

AC = Cylinder air inlet

* These cabinets are for single air line atomizers

A regulation cabinet serves the purpose of adjusting the pressure values for air and water in order to obtain the quantity of water evaporated per time unit and the droplet size which best fit the system requirements.

Our cabinets are delivered pre-assembled and tested, complete with all the necessary parts to control the air and water lines, ready to be mounted into the system.

The following devices are included i:

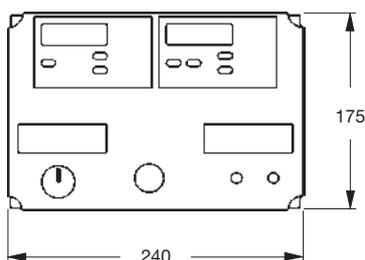
- Ball valves for air and water
- Inlet water filter, 100 micron
- Fine water filter, 5 micron
- Air filter, 100 micron
- Air and water lines electro-valves
- Pressure regulators on air and water lines, each one fitted with control manometer.
- Ball valves for filter purge, on water and air lines.

Cabinet body is in steel sheet, epoxy painted, IP55 electric protection grade

The following table shows the cabinet codes with connection sizes and number of atomizers allowed.

Further info on our Data Sheet 9197.

CONTROL CABINET



This very modern control cabinet, at the latest technology level, offers all the advantages of microprocessor control.

When assembled before the regulation cabinet it allows to handle the atomizing process in a completely automatic way, with the right timing for each single application being easily programmed.

- Manual (On/Off) or automatic operation.
- Automatically performing atomizing cycles, with pre-fixed idle times.
- Desired humidity and temperature values are kept automatically.
- Digital display indication of present humidity and temperature values.
- Automatic stop when temperature descends below programmed value.
- Humidity and temperature sensors are included in supply.
- Electrical supply 220 V, 50 Hz.

Product code **UMQ B001 V0**

Detailed information on PNR Data Sheet 9198.