



## A SYSTEM FOR HIGH-PERFORMANCE HUMIDIFICATION

ML Princess, ML Solo, ML Flex  
Air humidification



condair

# YOUR ADVANTAGES

## ML PRINCESS, ML SOLO, ML FLEX AIR HUMIDIFICATION

### **When it has to be more**

The ML systems are designed for high-volume humidification applications. The individual modules have flexible expansion options and some offer unlimited humidification capacities. Customer-specific combined water treatment systems can handle volumes up to 10,000 litres.

### **Flexibility**

All ML systems are planned and executed as customer-specific projects. Depending on requirements, a range of nozzle sizes can be selected, as well as different diameters for the high-pressure hoses and variable water supply capacities. This guarantees the assembly of a plant system that is precisely tailored to match requirements and on-site conditions.

### **Stainless steel for safety**

All parts of ML systems that convey water are made from stainless steel. This guarantees a long useful life and uncompromising hygiene.

### **High pressure – low energy**

High pressure humidification offers low operating costs and reduced cooling costs. The evaporation of water particles in air requires energy, 0.68 kW per liter of atomized water which is taken from the surrounding air.

### **Service and safety**

We offer maintenance service contracts to guarantee troublefree system operation. All ML systems satisfy stringent hygiene standards. As an extra level of safety, we run microbial and bacterial tests on plant during servicing.



MLPrincess MLSolo MLFlex

# HIGH PERFORMANCE

## ML PRINCESS AIR HUMIDIFICATION



### High capacity

The ML Princess is suited to large manufacturing and production areas to maintain consistent levels of humidification in very large spaces with high ceilings. Levels of up to 36 l/h are possible with a single unit.

### Uniform humidification

The ML Princess consists of a high-pressure ring plus an in-built fan. The fan distributes the moisture within the room to ensure that a uniform level of humidity can be evenly distributed throughout the space.



### Technical details

	ML Princess 2
Humidification performance (l/h)	12 – 36
No. of nozzles	8
Operating pressure	35 – 70 bar
Operating voltage	200 – 240 VAC
Power input (W)	75
Weight (kg)	9,2
Dimensions (diameter / height)	540 / 310 mm

# HIGHLY VERSATILE

## ML SOLO AIR HUMIDIFICATION



### Custom positioning options

The ML Solo high-pressure air humidification system offers solutions especially suited to different spatial conditions such as low ceilings or angled rooms.

### Easily adjustable

The ML Solo 1 and 2 can be attached either to ceilings or walls, and can thus accommodate the individual needs of any interior.

### Targeted humidification

The ML Solo is fitted with easily adjustable support brackets, which enable precise orientation of the units. Water is directed into the room with high precision and at high pressure. The optimum fan design ensures the humidifying fog is directed precisely into the room and immediately absorbed by ambient air.

### Technical details

	ML Solo 1	ML Solo 2
Humidification performance (l/h)	1.5 – 2.5	3 – 5
No. of nozzles	1	2
Operating pressure	50 – 70 bar	50 – 70 bar
Operating voltage	24 VAC, 50 – 60 Hz	24 VAC, 50 – 60 Hz
Power input (W)	15 / 16	15 / 16
Weight (kg)	2	2
Dimensions (W x H x D)	150 x 180 x 170 mm	150 x 180 x 170 mm
Installation	Ceiling- or wall-mounted	Ceiling- or wall-mounted

# NO LIMITS

## ML FLEX AIR HUMIDIFICATION



### Direct, zoned air humidification

ML Flex is impressively easy to install and has very low running costs. Deployment in explosion-secure areas is also possible, since no electronic modules are fitted to the nozzles, thus avoiding both heat generation and sparking.

### Unlimited combination options

The ML Flex system has a wide range of possible applications, which are modified to suit the individual conditions on site. The system can be mounted onto both walls and ceilings. Since the high-pressure nozzles are engineered as T-pieces, they can be adjusted individually to set the nozzles as desired. Humidification volume can be expanded without restrictions.

### Stainless steel technology

The ML Flex system is made from high-quality stainless steel, which guarantees a long-term return on your investment.



### Technical details

ML Flex	
Humidification performance (l/h)	1 – ∞
Operating pressure	35 – 70 bar
Min. distance to ceiling	200 mm
Min. fogging zone	1.5 m

# HIGH PRESSURE – PURIFIED WATER

## MLP RO

### 2-in-1

The MLP RO packages the required reverse osmosis unit and high-pressure pump into a single, space-saving system. It is compatible with all ML systems. Modules in a range of separate sizes are integrated to match humidification volume – and even high-capacity systems require only a single installation footprint. The systems are naturally also available without reverse osmosis, if this feature is not required.

### High pressure, high quality

The high-pressure pump is manufactured from high-quality stainless steel. It works using water hydraulics and is therefore completely oil-free. This saves on maintenance work and extends product lifetime. We guarantee 8,000 maintenance-free hours of operation for the high-pressure pumps in the first two years.

### Crystal-clear water

The reverse osmosis unit fitted to the MLP RO removes minerals from the water supply, ensuring trouble-free and hygienic water fogging. The pores of the membrane used are so fine that they can filter out 95 – 98 % of all minerals and bacteria.



### Technical details

	MLP RO 100	MLP RO 300	MLP RO 500	MLP RO 800
Humidification performance (l/h)* at 50 Hz	100	265	440	750
Dimensions (W x H x D)	860 x 1600 x 700 mm	860 x 1600 x 700 mm	860 x 1600 x 700 mm	1400 x 1600 x 700 mm
Dimensions external tank (W x H x D)	internal tank	internal tank	600 x 955 x 600 mm	800 x 1250 x 800 mm
Weight (kg)	125	130	240	270
At 50 Hz	220 – 240 V / 308 – 415 V3	220 – 240 V / 308 – 415 V3	220 – 240 V / 308 – 415 V3	220 – 240 V / 308 – 415 V3
– Power consumption (kW)	0.50	0.75	1.50	2.20
– RO performance (kW)	0.37	0.75	0.70	1.57

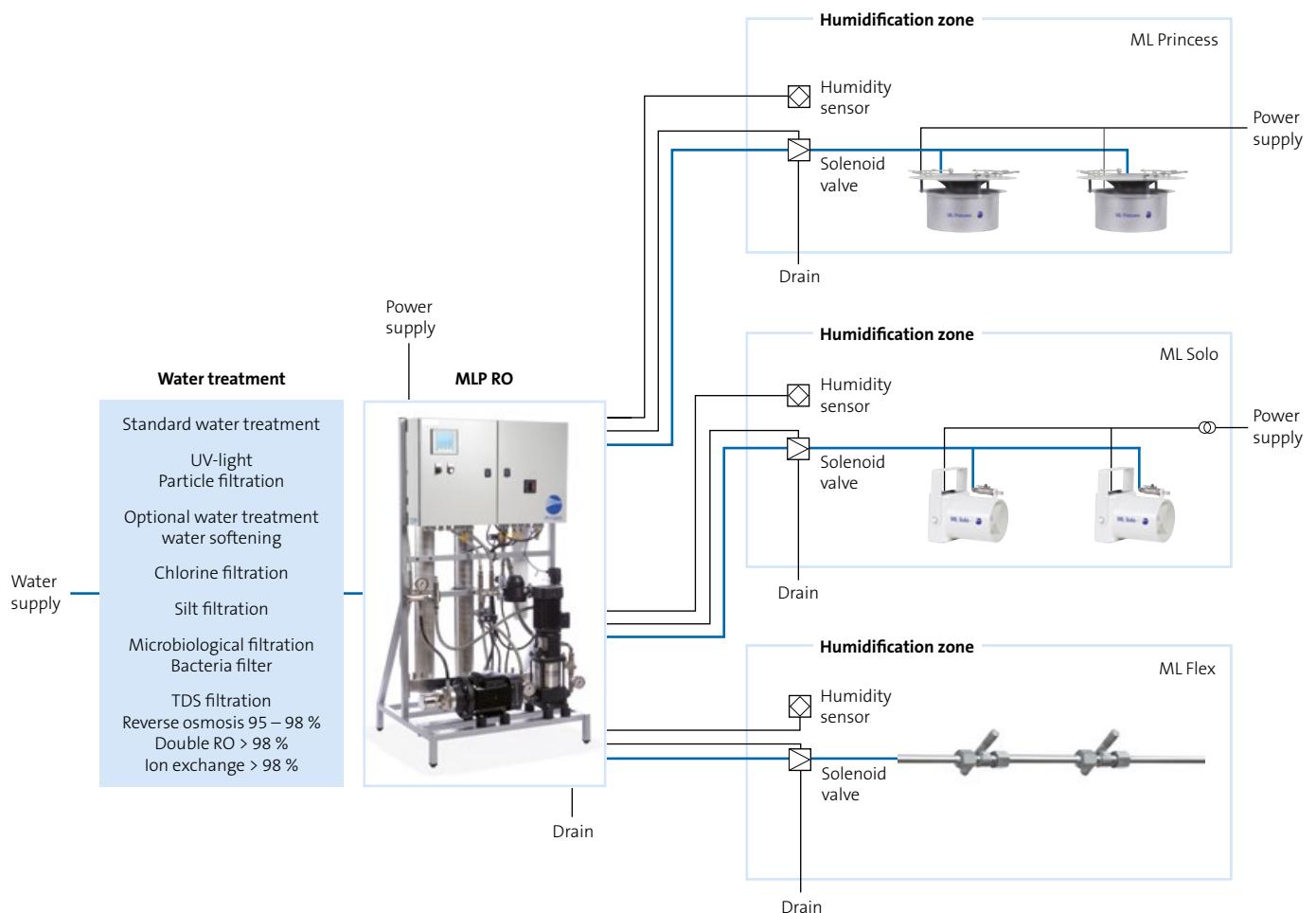
\* For potable water

**MLPRO**

# THE SYSTEM

## ML PRINCESS, ML SOLO, ML FLEX AIR HUMIDIFICATION

### Schematic diagram



# HIGH-PERFORMANCE HUMIDIFICATION

## ML SYSTEMS



Condair GmbH  
Nordportbogen 5  
22848 Norderstedt  
Germany  
Phone: +49 40 853277-0  
E-Mail: [en.info@condair.com](mailto:en.info@condair.com)  
Internet: [www.condair.de/en](http://www.condair.de/en)

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