



# MAXIMUM PERFORMANCE

System Solutions for industrial  
Humidification and Cooling

ML **Princess**

ML **Solo**

ML **Flex**



Humidification and Evaporative Cooling

 **condair**



## MLP RO

### 2-in-1 Efficiency

The MLP RO system combines a high-pressure pump and reverse osmosis unit in one compact, space-saving solution. It's fully compatible with all ML products and available in various module sizes to match your humidification demands. Also available as separate High-pressure or RO if required.

### High Pressure. High Quality.

Our high-pressure pumps are crafted from premium stainless steel and operate using pure water hydraulics—completely oil-free. This not only reduces maintenance but also extends the pump's service life. We guarantee 8,000 hours of maintenance-free operation. And yes, we've successfully delivered systems with flow rates exceeding 10,000 litres per hour.

### Crystal-Clear Water

The integrated reverse osmosis unit removes minerals from the water supply, ensuring clean, hygienic misting and trouble-free operation. Its ultra-fine membrane filters out 95–98% of all minerals and bacteria. For even higher purity, the system can be upgraded with an ion exchange or EDI (electrodeionization) module.



## ML Princess

### High Capacity. Flexible Design

The ML Princess is designed for both small and large production areas—perfect for maintaining stable humidity levels across a wide range of applications. From high-ceiling manufacturing halls to compact spaces, it adapts easily to your specific needs.

### Performance to Match

Choose from four nozzle sizes and adjust the fan speed to suit your needs. The ML Princess supports up to 8 high-pressure nozzles, allowing you to fine-tune output for optimal humidity control with minimal energy consumption.

### Even Distribution

The built-in fan and high-pressure ring work together to deliver consistent, uniform humidification throughout the room.



## ML Solo

### **Customised installation 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.



## ML Flex System

### **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.

The ML Flex system is made from high-quality stainless steel.



### **When Performance Matters**

Our solutions are built for a wide range of humidification needs. The modular design allows for flexible system expansion — some configurations even support virtually unlimited humidification capacity. For demanding setups, our custom-built water treatment systems can handle flow rates of up to 10,000 litres per hour.

### **Tailored to Fit**

Every system we deliver is designed as a customer-specific project. From nozzle sizes to high-pressure hose diameters and water supply capacities, all components are selected to match your exact requirements and local site conditions. The result? A perfectly tailored system that works reliably from day one.

### **Built to Last – In Stainless Steel**

All metal parts in contact with water are made from stainless steel to ensure long-term durability and optimal hygiene. Our entire value chain in Condair A/S — from production to installation and service — is ISO 22000 certified for food-grade hygiene standards in humidification systems.

### **High Pressure, Low Energy**

High-pressure humidification is an energy-efficient solution with minimal operating costs. As water evaporates, it absorbs 0.68 kW of energy per litre from the surrounding air — reducing your cooling needs at the same time.

### **Service You Can Count On**

We offer tailored service agreements to keep your system running smoothly. All ML systems are designed to meet the highest hygiene standards, and our technicians routinely carry out bacterial testing during service visits — adding an extra layer of safety and peace of mind.





# ML Princess ML Solo ML Flex



## Water treatment

- UV-light sterilisation (Standard)
- Water softening
- Chlorine removal
- Silt filtration
- Microbiological filtration  
Bacteria filter
- TDS filtration  
Reverse Osmosis 95-98%  
Double RO > 98%  
Ion exchange > 99%
- EDI
- Antiscalant
- Antichlor

## Technical details

### MLP RO

	MLP RO 100	MLP RO 300	MLP RO 500	MLP RO 800	MLP RO 1500
Humidification performance (l/h)* at 50 Hz	100	300	500	800	1500
Dimensions (H x W x D) in mm for pump station	860 x 700 x 1600	860 x 700 x 1600	860 x 700 x 1600	1400 x 700 x 1600	1400 x 700 x 1600
Dimensions (H x W x D) in mm for external tank	Internal tank	Internal tank	600 x 600 x 995	800 x 800 x 1250	800 x 800 x 1250
Weight (kg)	140	150	170	180	180
At 50 Hz	3 x 230 VAC + GND+N 2.8KW, 16A or 3 x 400 VAC + GND 2.8KW 16A	3 x 230 VAC + GND+N 3.9KW, 16A or 3 x 400 VAC + GND 3.9KW 16A	3 x 230 VAC + GND+N 3.9KW, 16A or 3 x 400 VAC + GND 3.9KW 16A	3 x 230 VAC + GND+N 4.7KW, 20A or 3 x 400 VAC + GND 4.7KW 16A	3 x 400 VAC + GND 8.4KW 20A
At 60 Hz	3 x 208 VAC + GND+N 2.9KW, 16A or 3 x 480 VAC + GND 3.1KW 16A	3 x 208 VAC + GND+N 3.7KW, 16A or 3 x 480 VAC + GND 4.1KW 16A	3 x 208 VAC + GND+N 4.3KW, 20A or 3 x 480 VAC + GND 4.8KW 16A	3 x 208 VAC + GND+N 5.1KW, 20A or 3 x 480 VAC + GND 4.8KW 16A	3 x 480 VAC + GND 9.3KW 16A

\* For potable water

### ML Princess

	ML Princess 2	ML Princess 2 Max
Humidification performance (l/h)	10 – 36 l/h	52 l/h
No. of nozzles	8	8
Operating pressure	35 – 70 bar	35 – 70 bar
Operating voltage	200–240 VAC or 100–120 VAC	200–240 VAC or 100–120 VAC
Power input (W)	26	49
Weight (kg)	6.6	6.6
Dimensions (diameter/height)	540 / 310 mm	540 / 310 mm

### ML Solo

	ML Solo 1	ML Solo 2
Humidification performance (l/h)	1.5 – 2.5 l/h	3 - 5 l/h
No. of nozzles	1	2
Operating pressure	35 – 70 bar	35 – 70 bar
Operating voltage	24 VAC	24 VAC
Power consumption	15/16 W	15/16 W
Weight (kg)	2	2
Dimensions (height/width/depth)	180x150x170 mm	180x150x170 mm

### ML Flex

	ML Flex
Humidification performance (l/h)	1 – ∞
Operating pressure	35 – 70 bar
Min. distance to ceiling	200 mm
Min. fogging zone	1,5 m