

Electrode Steam Humidifiers

Designed for internal use in specialty air handling equipment











computer rooms
hi-tech
telecommunications
clean rooms
laboratories

The Nortec MES2 Series humidifier resolves demanding OEM needs.

Condair is a world leader in state-of-the-art humidification technology. Our focus is concentrated exclusively on designing and building better humidification systems.

MES2 Electrode Steam Humidifiers employ the most advanced technology yet devised to reliably maintain interior environments at critical humidity levels. They provide the best of both worlds — top quality design and construction, with economy of installation and operation.

Every Nortec MES2 model has been engineered to meet the highest standards of cost-effective, efficient performance. They are designed for ease of installation, adaptability, simplicity of operation, ease of maintenance and servicing, energy efficiency, cleanliness and long-term reliability.



Operating Advantages

Precise control

MES2 Series electrode humidifier installations handle the most demanding challenges. Each unit is controlled by its own integral electronics. All MES2 humidifiers have an automatic test routine, self diagnostic functions, and service indication. Continuous self service adjustments ensure the humidifier operates under any condition. MES2 humidifiers can be configured for simple on/off operation, precise modulating control and can even accept command inputs from a Building Management System via Modbus.

Economy

Unlike other systems that are often difficult and costly to maintain, the MES2 electrode steam system produces pure, uncontaminated moisture with minimal maintenance downtime. There are no heating elements to get coated with mineral deposits and sludge. Any water-borne impurities are deposited in a replaceable cylinder where they are periodically flushed through the automatic drain.

Operating costs are reduced through efficient steam conversion rates and minimal energy losses due to low hot water drain rates. MES2 electrode humidifiers use up to 5 times less water than other technologies.

Installation Flexibility

MES2 Series humidifiers offer unprecedented installation flexibility. They can be configured for both small and large systems and are ideal in computer room and specialty air handling systems. Each capacity boasts its own powder coated cabinet to minimize unit footprint.



Technology

Electrode Stem

- Produces mineral free, sterile steam
- Quick and easy cylinder replacement
- 98% thermal efficiency
- Adjustable output
- Adjusts to varying potable water conditions

Modbus Communication

The optional Modbus interface provides monitoring and control of all operational parameters via the Building Management System. The Modbus interface board can be added at the time of order or can be easily added in the field.

System Features				
Minimal size per capacity				
On/Off or modulation control				
Patented Auto-Adaptive Control				
Drain water tempering to 140°F (60°C) max				
Three day inactivity hygienic drain				
Capacity adjustment down to 20%	•			
End of cylinder life pre-notification	•			
Remote fault indication	•			
Two year limited warranty				
C_UL-US Recognized Component	•			
Plumbing enclosure	•			
Modbus Interface	•			
Enable/disable unit				
End of cylinder life				
Operation run time				
Steam output				
Amp draw				
Faults				

■ Standard ■ Optional

System Configurations

Condair offers a choice of five product configurations. Each configuration is offered in a capacity range of 5-30 pounds of moisture per hour.

Remote Open Electrical



Remote Closed Flectrical





Attached Open Electrical



Attached Closed Electrical with optional plumbing enclosure



Attached Closed Electrical



Primary Voltage Wiring (Closed Attached Electrical Only)



Technical Data

SPECIFICATIONS	05	10	15	20	25	30	
Capacity: lbs/hr (kg/hr)	5 (2.3)	10 (4.5)	15 (6.8)	20 (9.1)	25 (11.3)	30 (13.6)	
Maximum Input - kW	1.7	3.4	5.1	6.8	8.5	10.2	
Voltage	208, 220-240, 277, 380, 440-480, 550-600						
Phase	1	1	1 and 3	1 and 3	3	3	
Cylinder	100	200	300	300	400	400	
Physical Dimensions*							
Depth - in (cm)	6.4 (16.3)		7.9 (20.1)		9.8 (24.9)		
Width (remote electrical) - in (cm)	7.5 (19.0)		8.9 (22.6)		10.3 (26.2)		
Width (attached electrical) - in (cm)	9.8 (24.8)		11.2 (28.4)		12.6 (32)		
Height - in (cm)	12.7 (35.3)	16.8 (42.7)	20.0	(50.8)	20.7 (52.6)		
Net weight – lbs (kg)	10.7 (5.0)	12.4 (5.8)	16.5	(7.8)	20.2 (9.5)		
Full weight – lbs (kg)	14.2 (6.6)	18.4 (8.5)	30.5	(14.2)	43.2 (20.0)		

 $^{^{}st}$ Dimensions reflect fully enclosed cabinets. Given weights include attached enclosed electronics.



Cylinder Technology

Why Cylinders?

- Energy efficient
- Reduce down time and costly maintenance
- No special tools required to remove cylinder
- Removes all minerals left behind
- No need for specially treated water
- Keep humidifiers working at optimum performance

Output vs. Cylinder Life

Unlike other humidifiers whose performance degrades gradually throughout the life of the cylinder, the MES2 Series maintains maximum efficiency from beginning to end.

As minerals build-up on the electrodes in the cylinder of the MES2 Series, the patented Auto-Adaptive control system automatically raises the water level slightly in the cylinder. This exposes fresh electrode surface to the water and maintains peak output and efficiency from the humidifier. Once the electrode surface is completely insulated by the minerals, the user is alerted to change the cylinder.







As the leading manufacturer of commercial/industrial humidification systems for more than 70 years, Condair has the technology and application expertise to meet the needs of any application.

Contact us today and ensure you have the best humidification solution for your application.

USA 2700 90th Street, Sturtevant, WI 53177

Canada 2740 Fenton Road, Ottawa, Ontario K1T 3T7

Tel 1.866.667.8321 Fax 613.822.7964 Email na.info@condair.com

www.condair.com

