### BUILT TO BE ON TOP



## NORDMANN AT4

Setting new standards in humidification For unmatched precision, reliability and flexibility Integrated self-cleaning





### NORDMANN AT4



#### Self-cleaning

A patented self-cleaning system prevents the formation of limescale on the electrodes and cylinder sides. It is simply removed using the blowdown pump. And for users that means maximum reliability and long service intervals.

#### Intelligent water management

The water regulator automatically adjusts to local water conditions, keeping water consumption to a minimum.

#### Easy to install

With a separate control unit, easy accessibility and external water and steam connections, the system could not be easier to install.





#### Easy to use

A big three-inch display shows steam output and easy-to-follow operating instructions. And with the user-friendly menu, entering the right settings couldn't be simpler.

Air intake duct 2

I

3

4

5

6

- Exhaust air duct
- Safety humidistat
- Humidity sensor
- Steam distributor
- Exhaust fan
- Steam humidifier 7

#### **Building technology**

The AT4 is integrated with existing building technology using the Modbus standard. If preferred, the steam humidifiers can be networked via @Link to BACnet/IP and LonWorks.



OR C 1

TTT =

#### Optimum steam distribution

For normal requirements NORDMANN supplies stainless-steel steam distributor pipes as standard. If space is restricted, the MultiPipe distributor system, which drastically reduces the distance travelled by the steam, is a practical alternative. For direct room humidification, the NORDMANN Fan4 system is the ideal choice.



# SJ System







Thanks to the integrated self-cleaning (SC) system, service intervals with the NORDMANN AT4 steam humidifier are twice as long as those for conventional electrode-based humidifiers.

The patented NORDMANN SC system drastically reduces the formation of limescale in steam cylinders and automatically expels the minerals in suspension.

The result: service intervals are much longer and reliable steam production is guaranteed.

The SC system has an unusual, advanced feature that puts it in a class of its own. Air is blown cyclically into the steam cylinder causing the water to swirl. This keeps the particles of limescale in the entire steam cylinder constantly in motion and prevents them from settling on the sides of the cylinder. The formation of limescale in steam humidifiers is inevitable when ordinary tap water is used. The longer the scale is left to form, the more it affects the efficiency and reliability of the heating electrodes and the steam cylinder walls.

The formation of limescale deposits on the heating electrodes and on the bottom and sides of the cylinder is prevented.

The fine particles of scale suspended in the water are rinsed out and removed during the automatic blowdown phase.

When the blowdown process is complete, the system is automatically refilled with fresh water and no interruption to operations.

The NORDMANN humidifier's SC system does not prevent the formation of limescale completely but it does make the interval between services significantly longer.



Characteristics	Standard	Option
SC-System	•	
5-line graphic display	•	
Multilanguage, user-friendly menu structure	•	
Program-, service and info level	•	
Adjustable de-scaling modes	•	
Real-time clock and timer programming	•	
Integrated PI humidity controller	•	
Self diagnostic capabilities	•	
RS485 interface with Modbus protocol	•	
Terminals	•	
Mounting rails	•	
Remote operation and fault indication		•
Split version		•
Remote control panel		•
Pressure compensation set up to 10'000 Pa		•
Building Management System (BACnet IP/Lon Works)		•







- I Separate control unit
- 2 Pump self-cleaning (SC) system
- 3 Steam cylinder
- 4 Electrogalvanized housing with powder coating
- 5 Blowdown pump

#### **Technical data**

Steam output	kg/h	5	8	15	23	32	45	46	64	65	90	130
Capacity range	kg/h	I-5	1.6-8	3-15	4.6-23	6.4-32	9-45	9.2-46	12.8-64	13-65	18-90	26-130
Nominal power	kW	3.8	6.0	11.3	17.3	24.0	33.8	2×17.3	2×24.0	48.8	2×33.8	2×48.8
Steam cylinder	Quantity	1	1	1	1	1	1	2	2	1	2	2
Heating voltage*	Volt	400V / 3~ / 5060 Hz										
Nominal current	Ampere	5.4	8.7	16.2	24.9	34.6	48.7		2×34.6	70.4	2×48.7	2×70.4
Classification	Туре	534	834	1534	2364	3264	4564		6464	6564	9064	13064
Heating voltage*	Volt					2	30V / 3~ /	5060 Hz				
Nominal current	Ampere	9.4	15.1	28.2	43.3	60.2		2×43.3	2×60.2			
Classification	Туре	532	832	1532	2362	3262		4662	6462			
Heating voltage*	Volt	400V / 2~ / 50.60 Hz										
Nominal current	Ampere	9.4	15.0									
Classification	Туре	524	824									
Heating voltage*	Volt	230V / 1~ / 50.60 Hz										
Nominal current	Ampere	16.3	26.1									
Classification	Туре	522	822									
Dimensions	Width mm	388	388	468	468	563	563	966	966	563	966	966
	Height mm	575	575	620	620	640	640	640	640	640	640	640
	Depth mm	255	255	345	345	350	350	350	350	350	350	350
Net weight	kg	12	12	19	19	28	28	62	62	30	64	64
Operating weight max.	kg	17	17	29	29	65	65	116	116	67	116	116
Control voltage	230VAC/1, 5060Hz											
Control signal	On/Off (24VDC), 05VDC, 010VDC, 15VDC, 210VDC, 016VDC, 3.216VDC, 0-20mA, 4-20mA											
Admissible duct air pressure	-0.8 kPa1.5 kPa; overpressure kit (option) up to 10.0 kPa											
Water quality	Untreated drinking water with a conductivity of 1251250 µs/cm											
Type of protection	IP21											
Conformity	CE, VDE, GOST											

\* other heating voltages on request

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