

SATS The Natural Alternative

# STEAMaster+™



*SATS...the natural alternative*



The **STEAMaster+** series is available in capacities from 3.3 to 285 lbs/hr, making the STEAMaster+ humidifiers the most evolved and flexible solution for a wide range of humidification needs, from museums to clean rooms, from commercial to industrial applications. During the design of the new STEAMaster+ humidifiers, special attention was paid to the maintenance aspects, using new long-life cylinders with an advanced electrode shape and a full body drain filter to extend the operating time between maintenance cycles. A new highly sophisticated control algorithm, controls the chemistry in the cylinder precisely to reduce mineral buildup and provide stable, long-life operation. Disposable or cleanable cylinders are available. Remote supervision of the humidifiers is allowed through a high-speed RS485 serial network connection.

## Cylinder design

The STEAMaster+ humidifiers use new, larger cylinders, while maintaining the same overall footprint. The larger cylinders allow greater water volume, which allows more uniform and slower formation of mineral deposits, thus providing longer cylinder life. A new, exclusive "full body" filter virtually eliminates drain valve jamming - a major source of maintenance in competitive humidifiers.



## Electrode shape

The STEAMaster+ humidifier uses newly-designed galvanized electrodes, shaped to minimize sharp electric arc points, while optimizing mineral adherence. The new electrodes, with their greater surface area and advanced shape, work with Stulz-ATS's updated control algorithm to improve electrical operation stability and retard mineral deposits, allowing longer cylinder life and improved performance.



## Cleanable cylinders

STEAMaster+ humidifiers come standard with longlife "disposable" steam generator cylinders, made from UL class 94-HB fire-resistant plastic. Optionally, STEAMaster+ humidifiers can use our new cleanable steam cylinders, made from UL 94-V0 fire-resistant plastic, which feature a full perimeter band clamp and rubber gasket (NO flat surfaces with nuts and bolts). When necessary, the cylinder may be easily opened, the electrodes cleaned or replaced, and then closed and returned to duty.





## Ventilated steam distributor

The STEAMaster+ series features a new optional ventilated steam distributor, with optional base which can be unit or remote mounted. The tangential blower is powered directly from the STEAMaster+ humidifier. The steam distributor is all stainless steel, and is mounted with a deflector to vertically adjust the air flow. An optional blower speed regulator is also available to adjust the flow rate for noise reduction or ceiling height.

## Duct steam distributors

The DP duct steam distributors are constructed of stainless steel and supplied complete with mounting bracket and hardware. Each pipe is precision drilled, with evenly spaced discharge orifices that ensure even distribution across the duct. Condensate removal from the end of the pipe helps prevent spitting and allows a smaller profile and lower pressure drop. Smaller output units and OEM units can use the SDPOEM plastic steam discharge nozzles which fit easily in small ducts or air-conditioners.



## Controls and sensors

STEAMaster+ humidifiers can operate On/Off or proportional. In proportional operation, they can be controlled by a BMS signal or they can be connected to humidity sensors and provide stand-alone control. Stand-alone units can also provide a dehumidify contact for full humidity control integration. Stulz-ATS provides a complete selection of controls and sensors for On/Off or proportional operation.



## Remote communications

The modulating versions also feature an RS485 serial interface for connection to BMS systems, as well as to STEAMaster+ remote terminal controller with graphic display, which allows local area networks of different humidifiers to be created at distances of up to 3200 feet. The monitoring controller allows simple centralized management of all the units, with full graphic display of all operating parameters, alarms, and working curves.



# Technical Data

VAC Ph.	Factor	UNIT MODEL NUMBER: CAPACITY, AMPERAGE, WATTAGE														
		001	003	005	008	009	010	015	025	035	045	065	090	130		
208 (U) 1	Lbs/hr	3.3	6.6	11	N/A	20	N/A									
	kg/h	1.5	3	5		9										
	Amps	5.4	10.8	18		31.4										
	KW	1.13	2.25	3.75		6.52										
230 (D) 1	Lbs/hr	3.3	6.6	11	N/A	20	N/A									
	kg/h	1.5	3	5		9										
	Amps	4.9	9.8	16.3		29.3										
	KW	1.13	2.25	3.75		6.52										
208 (W) 3	Lbs/hr	N/A	6.6	11	17.6	N/A	22	33	55	77	99					
	kg/h		3	5	8		10	15	25	35	45					
	Amps		6.2	10.4	16.7		20.8	31.2	52.1	72.9	93.7					
	KW		2.25	3.75	6		7.5	11.25	18.76	26.26	33.76					
230 (K) 3	Lbs/hr	N/A	6.6	11	17.6	N/A	22	33	55	77	99					
	kg/h		3	5	8		10	15	25	35	45					
	Amps		5.6	9.4	15.1		18.8	28.2	47.1	65.9	84.7					
	KW		2.25	3.75	6		7.5	11.25	18.76	26.26	33.76					
460 (M) 3	Lbs/hr	N/A	6.6	11	17.6	N/A	22	33	55	77	99	143	198	286		
	kg/h		3	5	8		10	15	25	35	45	65	90	130		
	Amps		2.8	4.7	7.5		9.4	14.1	23.5	33	42.4	61.2	84.7	122.4		
	KW		2.25	3.75	6		7.5	11.25	18.76	26.26	33.76	48.76	67.52	97.53		
575 (N) 3	Lbs/hr	N/A	6.6	11	17.6	N/A	22	33	55	77	99	143	198	286		
	kg/h		3	5	8		10	15	25	35	45	65	90	130		
	Amps		3.8	6	6		7.5	11.3	18.8	26.4	33.9	49	67.8	97.9		
	KW		3.75	6	6		7.5	11.25	18.76	26.26	33.76	48.76	67.52	97.53		
Height	In. (mm)	24.4 (620)				28.0 (710)				35.0 (890)				37.2 (945)	37.2 (945)	
Width		14.4 (365)				14.4 (365)				21.9 (555)				25.6 (650)	45.5 (1155)	
Depth		10.8 (275)				10.8 (275)				14.2 (360)				17.9 (455)	17.9 (455)	
Dry weight	Lbs. (kg)	35.3 (16)				44.0 (20)				85.8 (39)				112.2 (51)	162.8 (74)	
Wet weight	Lbs. (kg)	41.9 (19)				59.5 (27)				133.4 (60.5)				206.8 (94)	352 (160)	
Water Feed	gpm (l/min)	0.16 (0.6)				0.32 (1.2)				1.06 (4.0)				1.85 (7)	3.7 (14)	
Water Inlet	In. (mm)	1/4" O.D. Comp.								3/8" O.D. Comp.						
Max. Drain	gpm (l/min)	1.32 (5)								6 (22.5)				12 (45)		
Drain Size	In. (mm)					1-5/8" hose (40)								1-5/8" hose (40) x 2		
Min. Drain	In. (mm)	3/4 (19)								1-1/2 (38)				2-1/4 (58)		
Cylinders						1								2		
Steam outlets	In. (mm)	7/8" (22) x 1		1-1/4" (30) x 1				1-5/8" (40) x 1		1-5/8" (40) x 2		1-5/8" (40) x 4				
Pressure	In. WC (Pa)	8" WC (2000)		6.4" WC (1600)		6.8" WC (1700)		9.2" WC (2300)								
Control		24 VAC 50/60 Hz., 30 VA						24 VAC 50/60 Hz., 40 VA						24 VAC 50/60 Hz., 80 VA		
Operating	°F (°C)	34-140 °F (1-40°C), 10-60 %RH														
Water Type		15 - 116 psi (1-8 bar), 125-1250 MicroMhos conductivity														
Ventilated steam distributor		VSDU0A 30 Watts 100 CFM (170 m3/h) 50 dBA 10 to 104°F (-10 to 40°C) 10 to 60%RH						VRDXL (X 2 for UE090 & UE130 35 Watts 382 CFM (650 m3/h) 40 dBA 14 to 140°F (-10 to 60°C) 0 to 80%RH								

**Globally close to you.**

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