



Data Sheet

The Colt HumiStream is a highly efficient humidification system. It is suited to a wide range of applications, from factories to warehouses, and is ideally suited to both the food and pharmaceutical industries where stringent temperatures must be maintained. This is largely due to its flexible variable control system. It is easy to install and low on maintenance.

HOW IT WORKS

HumiStream works using the principle of evaporation. Recirculated air is passed over a moist surface, and picks up humidity without producing water droplets. It differs from other systems in that only pure water molecules are carried in the airstream, which prevents Legionella bacteria from being transported in it.

COMPONENTS

At the inlet of the HumiStream stainless steel enclosure is a wetted media, over which air is drawn by an axial fan.

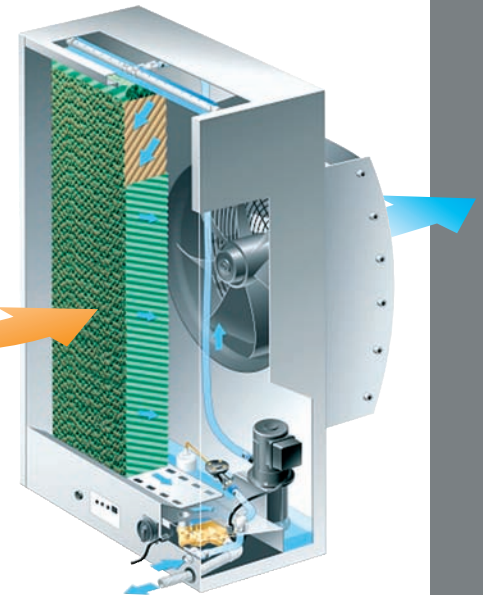
The level of fresh water within the reservoir is controlled by a float valve and magnet valve. The water is pumped over the front face of medium by a distribution system.

Any water that is not required returns to the reservoir. In order to preserve water quality, the contents of the reservoir need to be changed regularly. This is achieved by an automatic drain valve.

A sensor is usually positioned in the surrounding internal space in order to maintain the selected level of humidity, and this switches off the unit when this level has been reached. There are variable controls that operate the unit, and up to eight HumiStream units can be controlled by one controller.

INSTALLATION

HumiStream is delivered fully assembled and requires only single phase power, a supply of water from the mains, and a drainpipe. No special treatment of the water is required, and since the drainpipe takes away any accumulated impurities in the water, the unit remains free from harmful dirt. If required a dosing system can be installed in accordance with VDI 6022 04/2006.

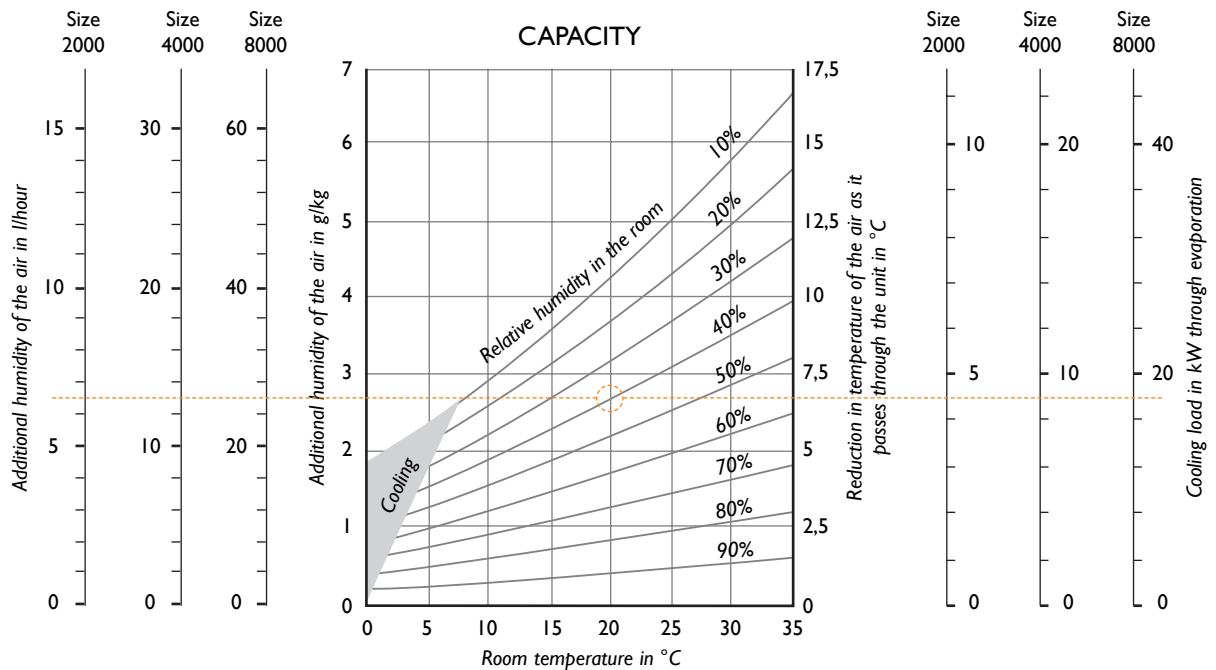


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TECHNICAL DATA	HS2000	HS4000	HS8000
Maximum airflow rate (m ³ /h)	2,000	4,000	8,000
Operating temp (°C)	0-40/>0	0-40/>0	0-40/>0
Insulation			
Class IP	44	44	44
Dimensions (mm)			
Depth with air deflector	550	650	750
Depth	350	350	350
Height	675	1175	1175
Breadth	730	730	1330
Weight dry/humid (kg)	37/45	57/66	86/107
Electrical Data			
Supply (V/Hz)	230/50	230/50	230/50
Power (W)	230	355	790
Current (A)	1.1	1.65	3.9
Noise			
LwA dB at full speed	66/51	67/52	78/63
LA ¹⁾ at 3 m dB (A)	50/35	51/36	60/45
LA ²⁾ at Raum dB (A)	48/33	49/34	57/42

1) At 3m and an absorption coefficient of $\mu = 0.10$ (dry space) and an absorption factor of 1500 m²

2) In night time cooling conditions under conditions described in note 1.



EXAMPLE CALCULATION: INTERNAL TEMPERATURE 20 °C, REQUIRED RELATIVE HUMIDITY = 40%

Each unit will reduce the incoming temperature by 6.5K, with a humidifying input of 2.8 g/kg of dry air.

HS2000	Humidifying input 6.5 l/h	Cooling load 4.5 kW
HS4000	Humidifying input 13 l/h	Cooling load 9 kW
HS8000	Humidifying input 26 l/h	Cooling load 18 kW