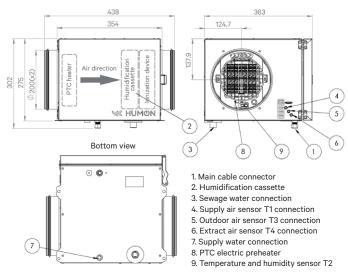
ADIABATIC DUCT TYPE HUMIDIFIER HUMON H200



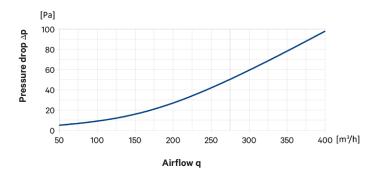




DESCRIPTION

HUMON is an adiabatic duct type humidifier intended for humidification of supply air in small and medium-sized spaces, such as family houses, flats and offices. Humidification is based on natural evaporation processes. Suitable power supply, fresh water connection and wastewater trap should be provided by the Customer. In all cases, the device should be installed in the ventilation system's supply air duct between the HRV unit and the air outlet to the premises. The purpose of the HUMON device is to ensure continuous humidification of the supply air in the ventilation system. The air passing through the evaporating media becomes more moisturised and slightly cooled due to the adiabatic humidification process. The water filter integrated in the HUMON humidifier cleans the water, removing Legionella bacteria. The ionisation device helps to clean the supply air from viruses and bacteria. All the integrated safety equipment guarantees the safe and healthy operation of the device. The HUMON humidifier is made of aluminium zinc-coated steel sheets (corrosion class C4-M/C3-H). It can be installed in premises with a temperature range from +5 to +40°C.

TECHNICAL DATA



TECHNICAL DATA

Description	Parameters		
Dimensions WxHxL	363 x 275 x 354 mm		
Air duct connections	Ø200 mm		
Humidification capacity	0-3,2 l/h		
Power supply	230 V/50 Hz		
Rated current	8,1 A		
Rated power, total	1100 W		
Energy consumption	6,5 W in stand by mode 10 W during humidification and ionisation 600–1200 W when the heater is operating		
Water consumption	0–4.5 l/h (depending on set points)		
Water supply connection	¾ internal thread with a connection to a 4 mm tube		
Water drain tray connection	½ thread adapter to the 1x90° elbow 1/2-1/2		
Operating air volume	80–500 m³/h		
Weight	9,5 kg		
Water quality	Hardness < 9 dGH, 5 mg-eq/l, TDS < 350 ppm		
Factory settings	Supply air settings 50%, 18°C Indoor humidification up to 45% Start-up is triggered by the outdoor air temperature below +12°C		

Factors affecting indoor air moisturisation:

- Outdoor humidity and temperature
- Type of HRV unit
- Supplied air volume
- The relative humidity and temperature settings for the supplied air
- Interior finishing and furniture materials
- Ventilation system operation features
- Water temperature



ADIABATIC DUCT TYPE HUMIDIFIER **HUMON H200**



HUMON ensures humidification of the supply air under pre-defined parameters in the ventilation system. The recommended reference values for relative humidity are established in the national Hygiene standards. The desired relative humidity values are easily set in the device control system.

SAFETY AND CONNECTION FUNCTIONS

- PTC heater with automatic overheating protection
- Airflow sensor for start/stop humidifier
- Additional on/off dry contact
- 0-10 V external start-up input
- Option to connect pressure relay for airflow indication
- Option to connect external humidity regulator
- External extract air humidity sensor T4

ADVANTAGES

- Quiet operation. The humidifier components reduce the noise level in the supply air duct by an average of 5 dB(A)
- The supplied air is humidified up to the relative humidity of 75%. (The humidification intensity depends on the outdoor air temperature and humidity in the supply duct after the HRV unit)
- Built-in PTC air preheater ensures adiabatic humidification process conditions
- Touch-type control panel for convenient parameter setting
- Integrated water filter to trap Legionella bacteria
- Bipolar ionisation device for air purification from viruses and bacteria
- Removable stainless steel drain tray for hygienic operation
- Inspection door with a locking handle for easier maintenance
- · Housing made of aluminium zinc-coated steel sheets for high corrosion protection

Outdoor air parameters		at nger	Supply air parameters before the humidifier		The amount of moisture					
T, °C	RH, %	Heat exchanger type	T, °C	RH, %	Q, m³/h	saturated additionally, RH, %	The amount of relative humidity after the humidifier, RH, $\%$			
	80			45	100	27				
10		-			300 100	25 27				
	90			50	300	23	0 0			
	80			32	100	36				
5	80	_		32	300	29				
	90			36	100 300	34 27				
0 80					100	40				
	80	Plate	19	22	300	29				
	90			25	100	40				
					300 100	27 45				
_	80			15	300	30				
-5	90			16	100	45				
	90			10	300	30				
	80			9	100 300	46 33	0 0			
-10					100	46				
	90			11	300	32				
80	80			45	100	27				
10					300 100	25 27				
	90			47	300	23				
	80			33	100	36				
5	80			33	300	29				
Ü	90			34	100 300	34 27				
					100	40				
0	80	ary	10	19 30	300	29				
	90	Rotary	la la		100	40				
					300 100	27 45				
	80			28	300	30				
-5	90			28	100	45				
	90			20	300	30				
-10	80			27	100 300	46 33				
					100	46				
	90			28	300	32				
		80					51	100	27	
10							300 100	25 27		
	90			51	300	23	• • • • • • • • • • • • • • • • • • •			
	80			48	100	36				
5	- 50			40	300	29				
	90			49	100 300	34 27	• • • • • • • • • • • • • • • • • • •			
	- 00	Enthalpy plate		/-	100	40				
0	80) Ad	19	45	300	29	0 0			
U	90	hal			100	40				
		E E			300 100	27 45				
-	80			43	300	30				
-5	90			43	100	45				
					300	30 46				
	80			42	100 300	33	0 0			
-10 90	00			43	100	46				
	90	I	1	43	300	32				

Marking: T, ^oC air temperature; RH, % relative humidity; Q, m3/h air quantity.

Note: when the amount of relative humidity after the humidifier is up to 75%, the intensity of humidification automatically reduces.





