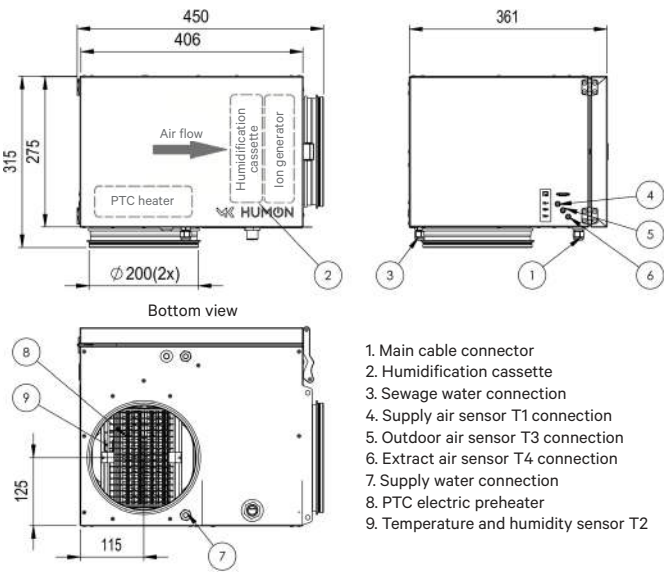


ADIABATIC DUCT TYPE HUMIDIFIER HUMON HV200



Preliminary data



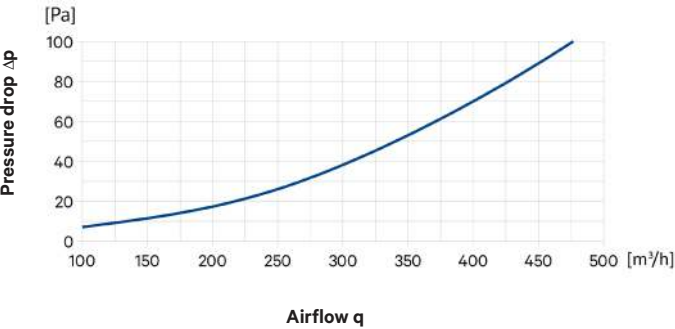
DESCRIPTION

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	361 x 275 x 415 mm
Air duct connections	Ø200 mm
Humidification capacity	0-3,0 l/h
Power supply	230 V/50 Hz
Rated current	12,1 A
Rated power, total	1400 W
Energy consumption	6,5 W in stand by mode 10 W during humidification and ionisation 700-1400 W when the heater is operating
Water consumption	0-4 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 ½-½
Operating air volume	80-500 m³/h
Weight	11,2 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 HV200



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		Heat exchanger type	Supply air parameters before the humidifier			The amount of moisture saturated additionally, RH, %	The amount of relative humidity after the humidifier, RH, %
T, °C	RH, %		T, °C	RH, %	Q, m³/h		
10	80	Plate	19	45	100	26	
	90				300	24	
5	80			50	100	26	
	90				300	23	
0	80			32	100	32	
	90				300	28	
-5	80			36	100	31	
	90				300	26	
-10	80			22	100	36	
	90				300	28	
	80			25	100	36	
	90				300	26	
	80	Rotary	19	15	100	39	
	90				300	27	
	80			16	100	39	
	90				300	27	
	80			9	100	39	
	90				300	30	
	80			11	100	39	
	90				300	29	
	80		Enthalpy plate	45	100	26	
	90				300	24	
	80			47	100	26	
	90				300	23	
	80			33	100	32	
	90				300	28	
	80			34	100	31	
	90				300	26	
	80			30	100	36	
	90				300	28	
	80			31	100	36	
	90				300	26	
	80			28	100	39	
	90				300	27	
	80			28	100	39	
	90				300	27	
	80			27	100	39	
	90				300	30	
	80			28	100	39	
	90				300	29	
	80		Enthalpy plate	51	100	26	
	90				300	24	
	80			51	100	26	
	90				300	23	
	80			48	100	32	
	90				300	28	
	80			49	100	31	
	90				300	26	
	80			45	100	36	
	90				300	28	
	80			46	100	36	
	90				300	26	
	80			43	100	39	
	90				300	27	
	80			43	100	39	
	90				300	27	
	80			42	100	39	
	90				300	30	
	80			43	100	39	
	90				300	29	

Calculation conditions: 20°C/50% in the room; +19°C before the humidifier; +18°C after the humidifier

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



Tested and certified
The device complies with the
EMC Directive (2014/30/EU)
and Low Voltage Directive
(2014/35/EU).



To find out more visit:
www.humon.it/en



Country of origin: Lithuania
UAB MK Technika
www.mktechnika.lt/en/