ADIABATIC DUCT TYPE HUMIDIFIER HUMON H200

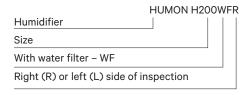




DESCRIPTION

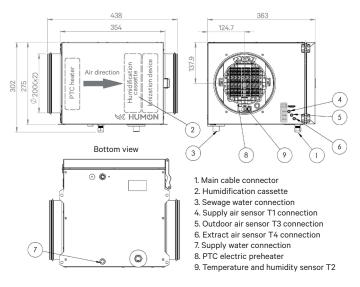
HUMON is an adiabatic duct type humidifier intended for humidification of supply air in small and medium-sized spaces, such as family houses, flats and offices. Humidification is based on natural evaporation processes. Suitable power supply, fresh water connection and wastewater trap should be provided 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.

ORDER CODE



Example: HUMON H200WFR is a model with 200 mm duct connection, with water filter and right inspection side.

DIMENSIONS



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 I/h (depending on set points)		
Water supply connection	3/4 internal thread with a connection to a 4 mm tube		
Water drain tray connection	½ thread adapter to the 16 mm spiral drainage tube		
Operating air volume	80–500 m³/h		
Weight	9,5 kg		
Water quality	Hardness < 8,5 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		

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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

	[Pa]									
	130									
ď	110									
Pressure drop ∆p	90									
sure	70									
Pres	50			/						
	30		/							
	100	150	200	250	300	350	400	450	500 [m³/h]
				Ai	rflow q					

Outdoor parameters		Inle	et parameters to the humidifier	Air volume	
T, °C	RH, %	T, °C	RH, % /	m³/h	 Additional relative humidity amount generated by the HUMON humidifier
	80		45/45/50/51	100	+Δ27%
				300	$+\Delta 25\%$
10		10		500	$+\Delta 20\%$
10		19	50/47/51/51	100	$+\Delta 27\%$
	90			300	$+\Delta 23\%$
				500	$+\Delta 20\%$
				100	+∆36%
	80		32/33/47/48	300	$+\Delta 29\%$
_				500	$+\Delta 22\%$
5		19	36/34/48/49	100	±∆34%
	90			300	+Δ27%
				500	+Δ21%
				100	+Δ40%
	80		22/30/43/45	300	+Δ29%
				500	+Δ21%
0		19	25/31/44/46	100	+440%
	90			300	+27%
				500	+\Delta 21%
				100	+Δ45%
	80		15/28/42/43	300	+A30%
	00		10/20/12/10	500	+Δ23%
-5		19		100	+Δ45%
	90		16/28/42/43	300	+\(\Delta\)30%
	"			500	+\Delta 23\%
			9/27/40/42	100	+A46%
-10	80			300	+A33%
	00	19		500	+424%
	90		11/28/41/43	100	+Δ46%
				300	+\(\Delta 2\)%
				500	+\Delta 24%
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	Calculation conditions: 20°C/50% in the room; +19°C before the humidifier; +18°C after the humidifier				10% 20% 30% 40%

ADVANTAGES

TECHNICAL DATA

- 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

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

