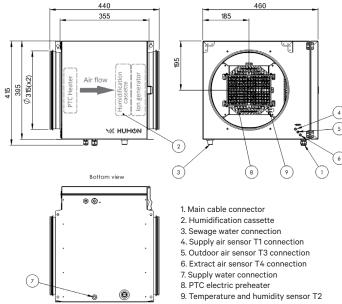
ADIABATIC DUCT TYPE HUMIDIFIER HUMON H315



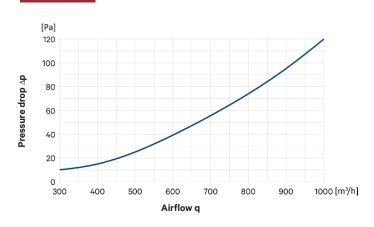
M HUMUN



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	463 x 395 x 354 mm		
Air duct connections	Ø315 mm		
Humidification capacity	0-6,0 l/h		
Power supply	230 V/50 Hz		
Rated current	15,2 A		
Rated power, total	2000 W		
Energy consumption	6,5 W in stand by mode 10 W during humidification and ionisation 1400-2000 W when the heater is operating		
Water consumption	0 - 9,5 I/h (depending on set points)		
Water supply connection	% 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	300–1000 m³/h		
Weight	12,8 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
- \bullet The relative humidity and temperature settings for the supplied $\operatorname{\sf air}$
- Interior finishing and furniture materials
- Ventilation system operation features
- Water temperature

ADIABATIC DUCT TYPE HUMIDIFIER HUMON H315



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.

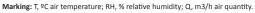
SAFETY AND CONNECTION FUNCTIONS

- 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 e	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	300	26		
10		-			700 300	24 24		
	90			50	700	23		
	80			32	300	34 29		
5					700 300	33		
	90			36	700	28		
0	80	0		22	300 700	40 30		
		Plate	19	25	300	39		
	90			25	700	30		
	80			15	300 700	41 30		
-5	90	1		16	300	40		
	30	_			700 300	31 42		
10	80			9	700	33		
-10	90	1		11	300	43		
			1	1	700 300	33 26		
10	80			45	700	24		
10	90	1		47	300	24		
		-	700 مر		700 300	23 34		
5	80			33	700	29		
5	90			34	300	33		
					700 300	28 40		
0	80	gu∠		30	700	30		
	90	- A		31	300 700	39 30		
				300	41			
-5	80			28	700	30		
	90			28	300 700	40 31		
-10	80			27	300	42		
	80			21	700	33		
	90			28	300 700	43 33		
	80			51	300	26		
10					700 300	24 24	• • •	
	90			51	700	23	0 0	
	80		Enthalpy plate		48	300	34	
5		-			700 300	29 33		
	90	l e		49	700	28		
0	80	pla.		45	300 700	40 30		
		<u>d</u> 19		300	39			
	90	l r	uţ.	46	700	30		
	80	ш	43	300 700	41 30			
-5	00			/2	300	40		
	90		43	700	31			
-10	80			42	300 700	42 33	0 0	
	90	1		43	300	43		
	30		oom; +19°C befo		700	33	0% 40% 60%	



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





