2020-07-27

Datasheet ERV389-H500

Boundary conditions		
Flow rate extracted air	V_{11} [m³/h]	175
Temperature extracted air	t_{11} [°C]	25
Relative humitity extr. air	rF_{11} [%]	50
Temparature intake air	t_{21} [°C]	5
Relative humitity intake air	rF_{21} [%]	70
Temperature supply air	t_{22} [°C]	20,1
Relative humitity supply air	rF_{22} [%]	50,0
Temperature exhaust air	t_{12} [°C]	9,9
Relative humitity exhaust air	rF_{12} [%]	83,9
Barometric pressure	p_{atm} [Pa]	97500
Mass flow ratio	M_1/M_2	1
Condensate	m_C [ml/h]	no condensate

Information

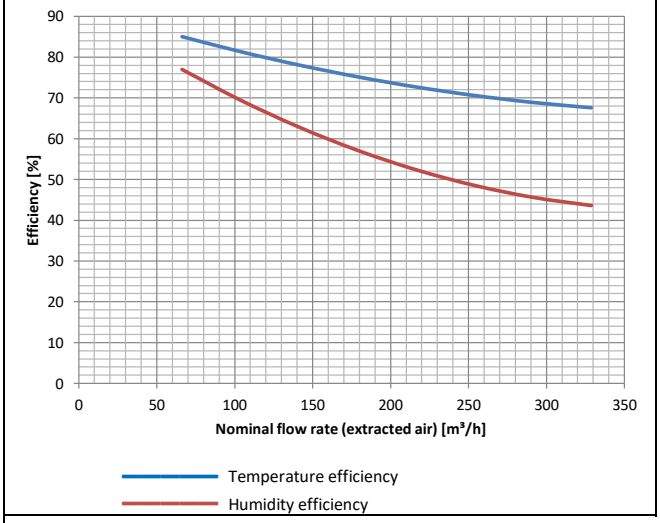
The values shown in the charts and tables are based on calculations and experience. It is only an orientation for the operating range of the heat exchanger under ideal conditions. Criteria such as inflow, insulation, leakage, orientation, arrangement of the fans etc. can have a strong influence on the operation conditions of the heat exchanger. The actual values to be achieved can only be determined by a corresponding measurement. Furthermore the occurrence and amount of condensate or ice depends on the boundary conditions and on the properties of the surrounding structure. In the case of condensation or freezing, the characteristic of the heat exchanger can change over time what could cause deviations of the values

Temperature efficiency η_t	**75,4%**
Humidity efficiency η_x	**57,7%**

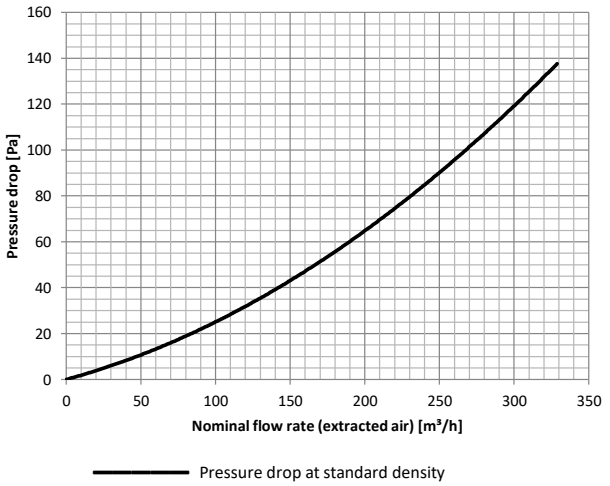
Pressure drop Δp	**53 Pa**
At entered flow rate and standard density 1,2 kg/m³ dry air.	

According boundary conditions (see above) following DIN EN 308:1997-06 Heat exchangers - Test procedures for establishing performance of air to air and flue gases heat recovery devices.

Efficiency



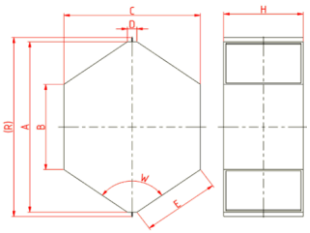
Pressure drop



Value table

Nominal flow rate (extracted air)	Temperature efficiency	Humidity efficiency
V	η_t	η_x
m³/h	%	%
66	85,0	77,0
104	81,3	69,4
141	78,1	62,8
179	75,2	57,2
216	72,7	52,4
254	70,6	48,5
291	68,9	45,6
329	67,6	43,6

Dimensions (with standard casing)



A	397 mm
B	246 mm
C	172 mm
D	21 mm
E	107 mm
W	90 °
H	500 mm
R (optional)	417 mm

PAUL Wärmerückgewinnung GmbH
August-Horch-Str. 7
08141 Reinsdorf

Tel.: +49 (0) 375 303505 - 0
Fax: +49 (0) 375 303505 - 55
E-Mail: info@paul-lueftung.de