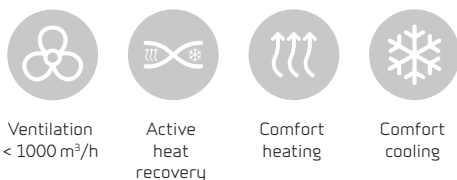


# HCR 800T

The HCR 800T is an advanced ventilation unit with highly efficient heat recovery, combining a rotary heat exchanger and a heat pump to provide ventilation for offices, schools, and commercial premises. The heat pump features a reversible cooling circuit, enabling precise temperature adjustment of the supply air for both heating and cooling, depending on the requirements.

The rotary heat exchanger and the strategic placement of condenser and evaporator surfaces ensure high cooling and heating performance. This results in an impressive EER of 10.26 and a COP of 23.9 at an air volume of 800 m<sup>3</sup>/h. The variable compressor allows precise regulation of the supply air temperature, optimizing both comfort and energy efficiency.

The HCR 800T is designed for easy and quick installation as well as straightforward maintenance. The unit comes with a hermetically sealed cooling circuit and pre-filled refrigerant, minimizing the need for additional preparation during installation. Operation is managed via the user-friendly CTS602i control system and an intuitive HMI panel.



## MADE IN DENMARK

Dimensions (W x D x H)	1100 x 621 x 1890 mm
Weight	205 kg
Plate type casing	Aluzinc steel plate, white powder coating RAL9016
Power consumption	2,3 kW
Power supply	1 x 230V + N, 50 Hz
Max. phase current	1 x 13 A
Compressor	Inverter controlled
Refrigerant cooling circuit	R 410 A / 1,2 kg
Condensation capacity	2,5 l/h (25 °C / 70% RH, nominal air volume)
Condensation outlet	PVC, Ø20x1,5 mm
Filter class	Fresh air: Bagfilter Posefilter ePM1 65% Extract air: Filter ePM10 50%
Condenser/evaporator (HxW)	404 x 352 mm
Duct connections	Ø 250 mm
Tightness class DS/EN 1886	L2

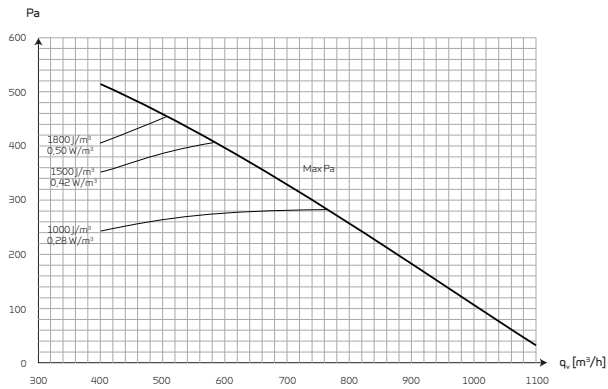
## Heating data

	800 m <sup>3</sup> /h	1000 m <sup>3</sup> /h
Airflow	800 m <sup>3</sup> /h	1000 m <sup>3</sup> /h
Extract temperature	+ 22 °C / 50% RH	+ 22 °C / 50% RH
Outdoor temperature	- 12 °C / 90% RH	- 12 °C / 90% RH
Sorption exchanger	10,98 kW	13,05 kW
Condenser	2,43 kW	2,53 kW
Total heating capacity	13,41 kW	15,58 kW
Supply air temperature	24,8 °C	21,8 °C
Compressor power consumption	0,56 kW	0,53 kW
Heating COP	23,9	29,4

## Cooling data

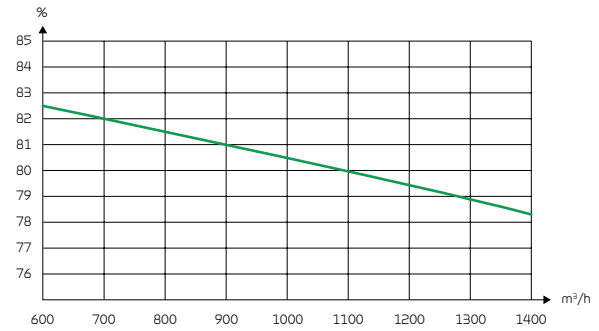
	800 m <sup>3</sup> /h	1000 m <sup>3</sup> /h
Airflow	800 m <sup>3</sup> /h	1000 m <sup>3</sup> /h
Extract temperature	+ 24 °C / 60% RH	+ 24 °C / 60% RH
Outdoor temperature	+ 35 °C / 60% RH	+ 35 °C / 60% RH
Sorption exchanger	7,72 kW	8,6 kW
Evaporator	2,95 kW	3,53 kW
Total cooling capacity	10,67 kW	12,13 kW
Supply air temperature	16,1 °C / 87% RH	20,1 °C / 86,1% RH
Compressor power consumption	1,04 kW	1,02 kW
Cooling EER	10,26	11,9

## Capacity



Max Pa capacity of standard unit, Pt,ext as a function of qv, to SFP-values. Acc. to EN13053 for a unit with filters, no heating element. Airflow speed above evaporator is measured at meters per second.

## Temperature efficiency



Temperature efficiency for units with counterflow heat exchanger according to EN308 (dry).

## Sound data

Octave band Hz	Surface dB(A)	Supply air dB(A)	Extract air dB(A)	Fresh air dB(A)	Discharge air dB(A)
63	33	50	40	40	50
125	41	60	49	49	60
250	35	63	52	52	63
500	29	67	53	53	67
1.000	25	69	52	52	69
2.000	29	72	47	47	72
4.000	31	70	37	37	70
Total ±2 dB(A)	-	77	-	-	77

Sound data for  $qV = 800 \text{ m}^3/\text{h}$  and  $P_{t, \text{ext}} = 250 \text{ Pa}$  according to EN 9614-2 for surfaces and EN 5136 for ducts.

## Accessories

- CO2 sensor kit
- Humidity sensor
- Extension cable for HMI control panel
- Gateway - LAN
- Key
- Lifting trolley

At [www.en.nilan.dk](http://www.en.nilan.dk) you can find more information e.g. design data, dimensional drawings, installation instructions and ecodesign data.

2024.12