NILAN®
OUTSTANDING INDOOR CLIMATE

GO GREEN BY NILAN

Compact S

Compact S is an energy-efficient total indoor climate solution for all types of low-energy buildings, single-family homes, flats and small office areas in commercial leases with a ventilation requirement of up to 340 m³/h.

Compact S recovers the energy from the extracted air using a highly efficient counter flow heat exchanger. The remaining energy that is not utilised by the counter flow heat exchanger is used by the heat pump to produce hot water, and to further heat the supply air.

The heat pump has a reversible cooling circuit, which means that, in the summer, the unit can cool the supply air by up to 10 °C. On cooling, the supply air is dehumidified, which gives a more pleasant indoor climate than is possible with an ordinary ventilation unit without a heat pump.

Compact S is supplied with a Nilan Gateway for App option.

Control system: CTS602 with HMI-panel

Ventilation < 340m³/h
Passive heat recovery
Active heat recovery
Comfort heating
Comfort cooling
Sanitary hot water production

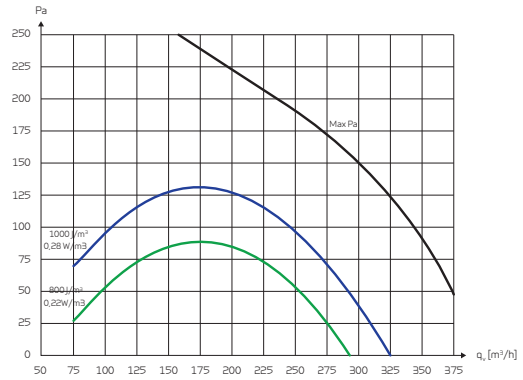
MADE IN DENMARK

Dimensions (W x D x H)	600 x 600 x 2250 mm
Weight	160 kg
Plate type casing	Aluzinc steel plate, white powder coating RAL9016
Heat exchanger type	Polyethylenterephthalat counterflow heat exchanger
Fan type	EC, volume constant
Filter class	Greencycle ISO Coarse >75% (G4)
Duct connections	Ø 160 mm
Condensate drain	PVC, Ø 20×1,5 mm
Refrigerant	R134a
Refrigerant filling	2.25 kg
Capacity hot water tank	180 l
Supplementary electrical heating (sanitary hot water)	1,5 kW

Connection dimension	3/4"
Supply voltage	230 V (±10 %), 50/60 HZ
Max. input/power (*1)	2,2 kW/ 9.6 A
Max. input/power (*2)	2,8 kW/12.2 A
Tightness class	IP31
Standby power	3 W
Ambient temperature	-20/+40 °C
Power consumption build-in preheating element (Polar)	600 W
External leakage (*3)	< 0.79%
Internal leakage (*4)	< 1.47%

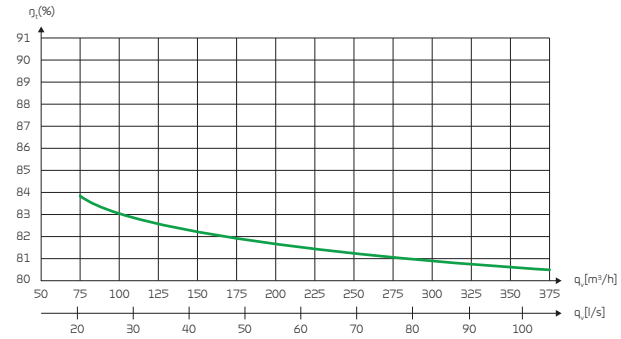
*1 Input without heating element (accessory)
*2 Input Compact S Polar
*3 At ± 250 Pa and 265 m³/h according EN 13141-7
*4 At ± 100 Pa and 265 m³/h according EN 13141-7

Capacity



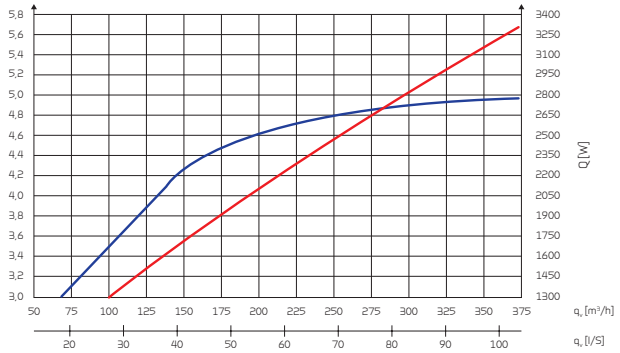
Capacity of standard unit as a function of qv and Pt,ext. Acc. EN 13141-7 for standard units with ISO Coarse >75% (G4) filters and without heating element. SEL values comprise the unit's total power comsumption.

Temperature efficiency



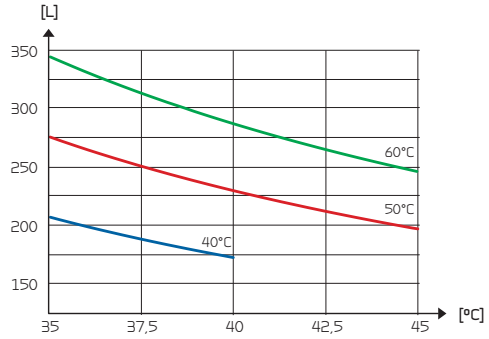
Temperature efficiency as a function of volume flow qv [m³/h] for unit with counter-flow heat exchanger. Temperature efficiency acc. EN13141-7 (2°C / 20°C). NB! The temperature efficiency, is for the heat exchanger only (without heat pump operation).

COP (air-air)



Heat output factor COP [-] supply air as a function of outdoor temperature t21 [°C] and volume flow qv [m3/h] in accordance with EN14511 at a room temperature t11 = 21°C. Blue: COP air-air / Red: Heat output supply air

Tapped water



Tapped volume in liters Vmax [L] from Compact S tank as a function of tapped temperature t [C°] and tank temperature at 40°, 50° and 60°C.

Sound data

Octave band Hz	Surface dB	Supply air dB	Extract air dB	Discharge dB	Outdoor air dB
63	-	50.7	40.5	57.5	40.3
125	-	55.7	43.9	59.8	46.1
250	-	55.4	43.1	58.7	45.6
500	-	56.1	36.3	58.9	36.7
1.000	-	60.3	32.5	62.2	26.8
2.000	-	51.7	27.1	56.1	21.2
4.000	-	43.7	19.1	45.7	15.8
8.000	-	35.7	6.1	39	6.8
Total ±2	50	64	48	67.1	49.7
Lpa	42				

Sound data is for qv = 210 m³/h and Pt, ext = 100 Pa acc. EN 9614-2 for surface and EN 5136 for ducts.

Accessories

- Electrical pre-heating element
- Electrical heating element
- Pollen filter ISO ePM1 50-65% (F7)
- CO2-sensor
- Expansion PCB
- EM-box
- Flexible silencing
- Safety group - hot water tank
- Anti-scald safety valve group - hot water tank
- Extension cable HMI control panel
- Trolley

At **www.en.nilan.dk** you can find more information e.g. design data, dimensional drawings, installation instructions and ecodesign data.

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