

EXHAUST AIR HEAT PUMP NIBE™ F110

Complete heat pump unit that provides hot water and ventilation

NEW



Features of NIBE™ F110

NIBE F110 consumes much less energy than an equivalent conventional electric water heater

Gives great savings thanks to the large compressor with intelligent controls

Can operate with air temperatures down to -10°C (at outdoor air installation)

The integrated water heater is insulated with environmentally friendly, recyclable cellular plastic for minimal heat loss

Display unit with easy-to-read colour screen

Low energy fan

Scheduling of hot water, and ventilation if applicable, as well as holiday mode

The design of the ventilation section gives a low noise level and a high ventilation capacity with exhaust air installation

NIBE F110

NIBE F110 is a heat pump that works with exhaust air, outdoor air or the surrounding air. It has integrated fan and a water heater with copper or stainless steel corrosion protection.

Energy is recovered from the air using the heat pump and is supplied to the water heater, where the domestic hot water is heated. With exhaust air installation the unit also ventilates the house.

 **NIBE**

A

Energy efficiency class product label for NIBE F110

Technical specifications

NIBE™ F110

Type of installation	Exhaust air	Outdoor air	Surrounding air
Declared tap profile	XL	XL	XL
Efficiency class product label	A	A	A
Specified output according to EN16147 (kW)	1.32 ¹⁾	1.08 ²⁾	1.32 ¹⁾
COP	2.89	2.36	3.27
Efficiency class hot water	A	A	A+
Min air flow, air temperature < 10 °C (l/s)	–	83	–
Min air flow, air temperature > 10 °C (l/s)	25	42	25
Capacity water heating according to EN 16147 ³⁾			
Capacity hot water 40 °C at Normal-comfort (Vmax) (litres)	365		
Output immersion heater (W)	1.3		
Voltage (V)	230V ~ 50 Hz		
Driving power circulation pump (W)	5 – 20		
Driving power exhaust air fan (W)	20 - 75		
Enclosure class	IP21		
Type of refrigerant	R134A		
Refrigerant amount (kg)	0.38		
Temperature range for compressor operation °C	–10 – +37		
Volume, water heater (litres)	265		
Max pressure in water heater (MPa/bar)	1.0/10.0		
Width (mm)	600		
Depth (mm)	605		
Height (mm)	2 100–2 125		
Required ceiling height (mm)	2 270		
Weight (kg)	127		
Savings/year ⁵⁾ ; exhaust air 180 m ³ /h (kWh)	2 812		
Savings/year ³⁾ ; outdoor air cold climate (kWh)	2 276		
Savings/year ³⁾ ; outdoor air average climate (kWh)	2 250		
Savings/year ³⁾ ; outdoor air warm climate (kWh)	2 725		

¹⁾ at 180 m³/h and 20 °C air temperature

²⁾ at 250 m³/h and 7 °C air temperature

³⁾ A20(12) exhaust air flow 150 m³/h

⁴⁾ Calculated hot water requirement 4250 kWh. Compared with a traditional electric water heater

⁵⁾ Depending on type of installation and tap profile

Maintenance

A minimum level of maintenance is required. The only actions required are to check the safety valve and clean the air filter. With an exhaust air installation, the ventilation system exhaust air valve must also be cleaned. A special cassette system makes filter cleaning very simple. This facilitates service and maintenance. The filter area is also very large, which reduces the chances of accidental blockage.

Equipment

The heat pump has a complete set of valves, consisting of a combined safety/drain valve, non-return valve as well as shut-off valve and vacuum valve.

