NIBE™ HPAC 40 COOLING MODULE





KEEPS YOU COOL.

- Elegant and timeless design
- High flexibility for the best indoor climate
- Passive cooling
- Active cooling in combination with the heating of hot water
- Installer-friendly
- Settings shown on the heat pump's display
- Compatible with heat pumps in the NIBE F1145/F1245 series

NIBE HPAC 40

The NIBE HPAC 40 accessory gives your installation a high degree of flexibility. It is compatible with the NIBE F1145/ F1245 series, which was developed in such a way as to enable all the heat pump's potential applications - both heating and cooling. Combine your heat pump with NIBE HPAC 40 for passive or active cooling. It works, even while your system is continually heating hot water.

NIBE HPAC 40 is easily controlled via the heat pump's control panel, where both settings and monitoring are easily handled at the push of a button. This accessory's timeless design means that it blends in well with your other heat pump equipment.

STAY COOL

NIBE HPAC 40 is a new cooling module designed to work together with the NIBE F1145/F1245 series.

High flexibility

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Functional description

The accessory HPAC 40 is a climate exchange module that forms part of a system with NIBE F1145/F1245 heat pump. NIBE F1145/F1245 has a built-in control system for the management of heating and cooling and built-in circulation pumps, and connects via the HPAC 40 module to outer collectors and the building's distribution system for heating and cooling. The heat exchange with the heat source (bedrock, soil, or a body of water) takes place via a closed system where water mixed with antifreeze circulates through the heat pump. Ground water can also be used as the heat source, but this requires an intermediate heat exchanger between the HPAC 40 and the ground water.

Passive cooling

When passive cooling is needed, the circulation pumps in the heat pump are activated, circulating fluid from the soil or bedrock collector into the building's climate-control system to cool the house. The cold is taken from the soil or bedrock collector.

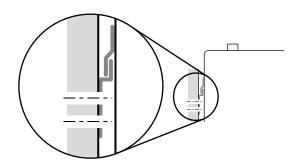
Active cooling

In active cooling, the compressor in the heat pump starts and the cooling generated is circulated to the building's climate control system, while the heat circulates out to the soil/bedrock collector.

Assembly

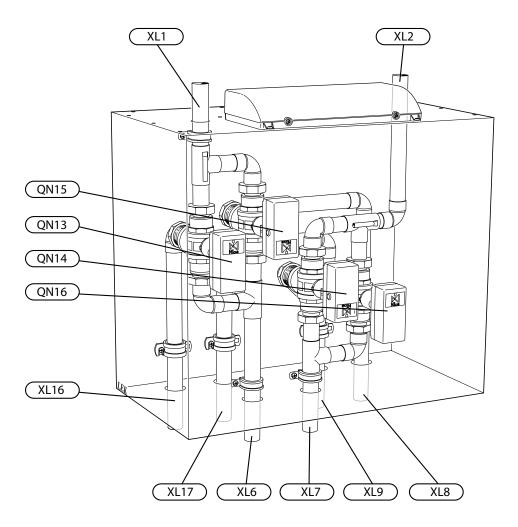
HPAC must be transported and stored horizontal and dry. Install NIBE HPAC 40 using the supplied mounting brackets, which should be screwed into place first, see the following illustration. Then mount the HPAC 40 on the brackets. HPAC 40 can now be moved sideways, to facilitate pipe installation.

Install the accompanying securing plate anywhere at the bottom rear of HPAC 40 for further fastening.



GOOD TO KNOW ABOUT NIBETM HPAC 40

Equipment



Pipe connections

QN13	Reversing	valve 1	, active	cooling

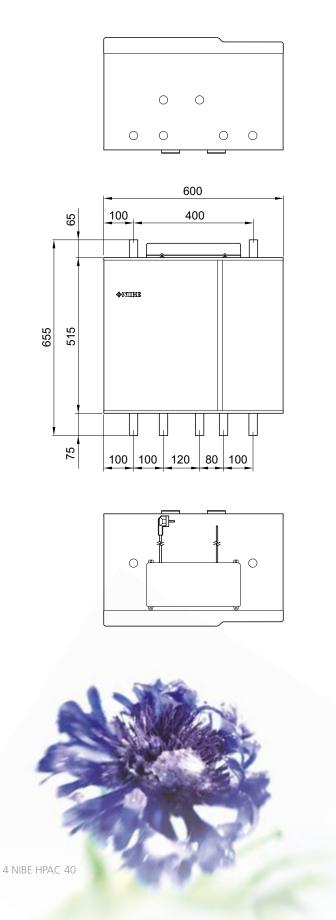
- QN14 Reversing valve 2, passive cooing
- QN15 Reversing valve 3. active cooling
- QN16Reversing valve 4, passive coolingXL1Docking connection, supply pipe
- XL1Docking connection, supply pipeXL2Docking connection, return pipe

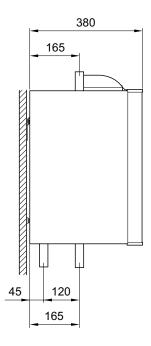
XL6ConnectionXL7ConnectionXL8ConnectionXL9DockingXL16DockingXL17Docking

Designations in component locations according to standard IEC 81346-1 and 81346-2. *or other external heat source.

GOOD TO KNOW ABOUT NIBETM HPAC 40

Dimensions





INSTALLATION

General

Pipe installation must be carried out in accordance with current norms and directives.

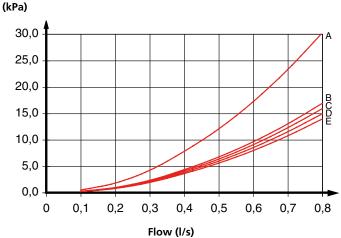
HPAC 40 can only operate up to a return temperature of about 50 °C and an outgoing temperature of about 65 °C from the heat pump. Since the heat pump is not equipped with shut-off valves, such valves must be fitted outside of the heat pump to make future servicing easier.

The fluid in the building's distribution system is the same as in the ground/rock collector, if no other heat exchanger is connected.

Pressure drop diagram

for HPAC 40 (25 % propylenglykol, 5 °C

Pressure drop



A: Passive cooling

B: Active cooling, brine circuit

C: Heating, brine circuit

D: Active cooling, heating medium circuit

E: Heating, heating medium circuit

25 % propylenglykol, 5 °C

Electrical installation

All electrical connections must be carried out by an authorised electrician. Electrical installation and wiring must be carried out in accordance with the stipulations in force.

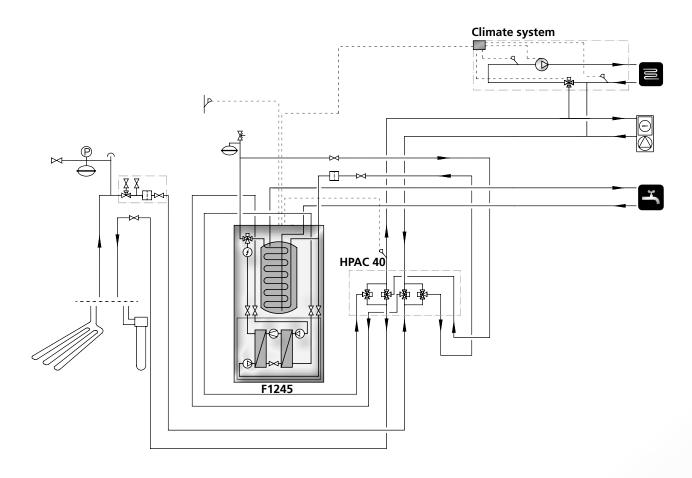
F1145/F1245 must not be powered when installing HPAC 40.

HPAC 40 is factory fitted with power cable and plug (W101, 3.0 length metres).

DOCKINGS

Docking F1245 with HPAC 40

Further option information is available at www.nibe.eu and in the respective assembly instructions for the heat sources used.





TECHNICAL SPECIFICATIONS

Туре		HPAC 40
Height	mm	515
Width	mm	600
Depth	mm	380
Weight	kg	40
Intended for heat pumps	kW	5-17
Pipe attachment	mm	R25 (1")
Voltage	V	1 x 230

Cooling effects in various operating situations.

SUPPLIED COMPONENTS









Wall mount

2 pc Screw

Heating pipe paste

Securing plate







25 x 200 mm

Temperature sensor

The enclosed kit is located on top of the NIBE HPAC 40.

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NIBE is ISO-certified: SS-EN ISO 9001:2000 SS-EN ISO 14001:2004

This brochure is a publication from NIBE. All product illustrations, facts and specifications are based on current information at the time of the publication's approval. NIBE makes reservations for any factual or printing errors in this brochure. Printed by: AM-tryck & reklam. Photos: www.benfoto.se. **©NIBE 2010**.





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