

Control module NIBE SMO 40

The NIBE SMO 40 gives optimised control of the climate system and is designed to be combined with NIBE air/water heat pumps to provide an integrated climate system for homes and properties.

The NIBE SMO 40 offers maximum flexibility when it comes to system solutions. The control module can be connected to components such as a water heater, additional heat sources and other accessories specific to a customised installation. Up to eight NIBE air/water heat pumps can be connected to a control system.

Thanks to smart technology, the product gives you control over your energy consumption and will be a key part of your connected home. The efficient control system automatically adjusts the indoor climate for maximum comfort, and you do nature a favour at the same time.

- Smart, user-friendly control system for maximum flexibility.
- Property solutions with up to eight NIBE air/water heat pumps.
- Smart, connected system for optimum remote control.



This is how NIBE SMO 40 works

SMO 40 can be connected together with other products from NIBE in several different ways, some of which are shown below (accessories may be required).



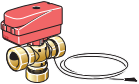



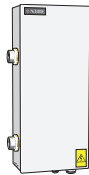

More information about the alternatives is available at nibe.eu and in the relevant assembly instructions for the accessories used.

Installations with SMO 40 can produce heating and hot water.

On cold days of the year when the access to energy from the air is reduced the additional heating can compensate and help to produce heat. The additional heating is also good to have as assistance if the heat pump ends up outside its working range or if it has been blocked for any reason.

System solutions

The following combinations of products are recommended for control by SMO 40.

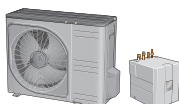
							
<i>Control module</i>	<i>Air/water heat pump</i>	<i>HW control</i>	<i>Accumulator with hot water heater</i>	<i>Circ. pump</i>	<i>Water heater</i>	<i>Addition</i>	<i>Volume vessel</i>
SMO 40	AMS 10-6 / HBS 05-6	VST 05	VPA 450/300 VPAS 300/450 VPA 300/200 VPA 450/300 VPAS 300/450	CPD 11-25/65 CPD 11-25/75	VPB 200 VPB 300 VPBS 300 VPB 500 VPB 750-2 VPB 1000	ELK 15 ELK 26 ELK 42	UKV 40 UKV 100 UKV 200 UKV 300 UKV 500
	AMS 10-8 / HBS 05-12						
	F2040 – 6						
	F2040 – 8						
	F2120 – 8	VST 11					
	AMS 10-12 / HBS 05-12						
	F2040 – 12						
	F2120 – 12						
	F2120 – 16	VST 20					
	AMS 10-16 / HBS 05-16						
	F2040 – 16						
	F2120 – 20						
	VPB 500 VPB 750-2 VPB 1000	AMS 10-16 / HBS 05-16			VST 20		
F2040 – 16							
F2120 – 20							

Outdoor modules

COMPATIBLE AIR/WATER HEAT PUMPS

NIBE SPLIT HBS 05

AMS 10-6 *HBS 05-6*
Part no. 064 205 Part no. 067 578



AMS 10-8 *HBS 05-12*
Part no. 064 033 Part no. 067 480

AMS 10-12 *HBS 05-12*
Part no. 064 110 Part no. 067 480

AMS 10-16 *HBS 05-16*
Part no. 064 035 Part no. 067 536

F2040

F2040-6 *F2040-8*
Part no. 064 206 Part no. 064 109



F2040-12
Part no. 064 092

F2120

F2120-8 1x230V *F2120-8 3x400V*
Part no. 064 134 Part no. 064 135



F2120-12 1x230V *F2120-12 3x400V*
Part no. 064 136 Part no. 064 137

F2120-16 3x400V *F2120-20 3x400V*
Part no. 064 139 Part no. 064 141

Check the software version of compatible older NIBE air/water heat pumps, see page 11.

System principles

This is the outline diagram. Actual installations must be planned according to applicable standards.

NIBE does not supply all components in this outline diagram.

See nibe.eu/ODM for more detailed docking options.

EXPLANATION

AA25 Control module (SMO 40)

BT1	Outside sensor
BT6	Temperature sensor, hot water charging ¹⁾
BT7	Temperature sensor, hot water top ¹⁾
BT25	Temperature sensor, external supply ¹⁾
BT50	Room sensor ¹⁾
BT63	Temperature sensor, external supply line after electric heater
BT71	Temperature sensor, external return line ¹⁾
GP10	Circulation pump, heating medium
QN10	Reversing valve, hot water / heating medium ²⁾

CL11 to 12 Pool system 1 to 2

AA25	Unit box with accessory board ⁶⁾
BT51	Temperature sensor, pool ⁶⁾
EP5	Exchanger, pool
GP9	Circulation pump, pool
HQ4	Particle filter, pool
QN10	Reversing valve, pool ⁶⁾
RN10	Trim valve

EB1 Additional heat

CM5	Expansion vessel
EB1	Immersion heater
FL10	Safety valve
KA1	Auxiliary relay / Contactor
RN11	Trim valve
QM42	Shut-off valve
QM43	Shut-off valve

EB101 to EB104 Heat pump system

AA25	Accessory board ⁷⁾
BT3	Temperature sensor, return ³⁾
BT12	Temperature sensor, condenser supply line ³⁾
EB101-EB104	Heat pump
FL10	Safety valve, heat pump
GP10	External circulation pump, climate system

GP12	Charge pump ⁵⁾
QZ2	Filterball ³⁾
QM1	Drain valve, heating medium
QM31	Shut-off valve, heating medium, supply
QM32	Shut off valve, heating medium, return
QM43	Shut-off valve
RM11	Non-return valve

EP21 to EP22 Climate system 2 to 3

AA25	Unit box with accessory board ⁸⁾
BT2	Temperature sensor, heating medium supply ⁸⁾
BT3	Temperature sensor, heating medium return ⁸⁾
GP20	Circulation pump ⁸⁾
QN25	Shunt valve ⁸⁾
BT2	Temperature sensor, heating medium supply ⁸⁾

QZ1 Hot water comfort (HWC)

AA25	Accessory board ⁷⁾
BT70	Temperature sensor, outgoing hot water ⁷⁾
GP11	Circulation pump, domestic hot water circulation
FQ1	Mixer valve, hot water
RM23, RM24	Non-return valve
RN20, RN21	Non-return valve

Miscellaneous

CM1	Expansion vessel closed, hot water
CP5	Buffer vessel (UKV)
CP10	Accumulator tank with hot water heating
CP11	Accumulator tank with hot water heating
EB10	Hot water / additional water heater
EB20	Immersion heater
FL2	Safety valve, heating medium
KA1	Auxiliary relay / Contactor
RN10, RN43	Control valve
RN60, RN63	Control valve

Designations according to standard IEC 81346-2

1) Included in and enclosed SMO 40

2) Included in and enclosed VST 11 / VST 20

3) Included in and enclosed NIBE heat pump (can vary depending on heat pump)

4) Included in and enclosed HR 10

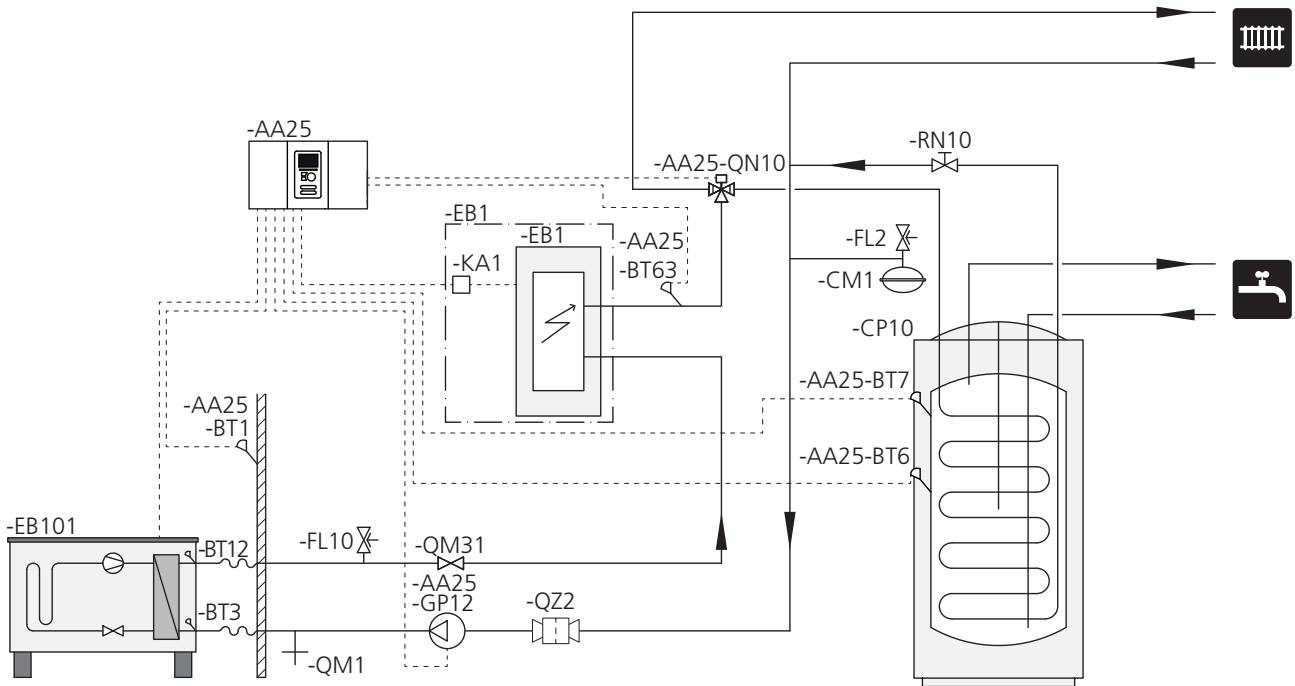
5) Included in and enclosed CPD 11

6) Included in and enclosed POOL 40

7) Included in and enclosed AXC 30

8) Included in and enclosed ECS 40 / ECS 41

AIR HEAT PUMP TOGETHER WITH SMO 40 AND ELECTRIC HEATER BEFORE REVERSING VALVE FOR HOT WATER (FLOATING CONDENSING)



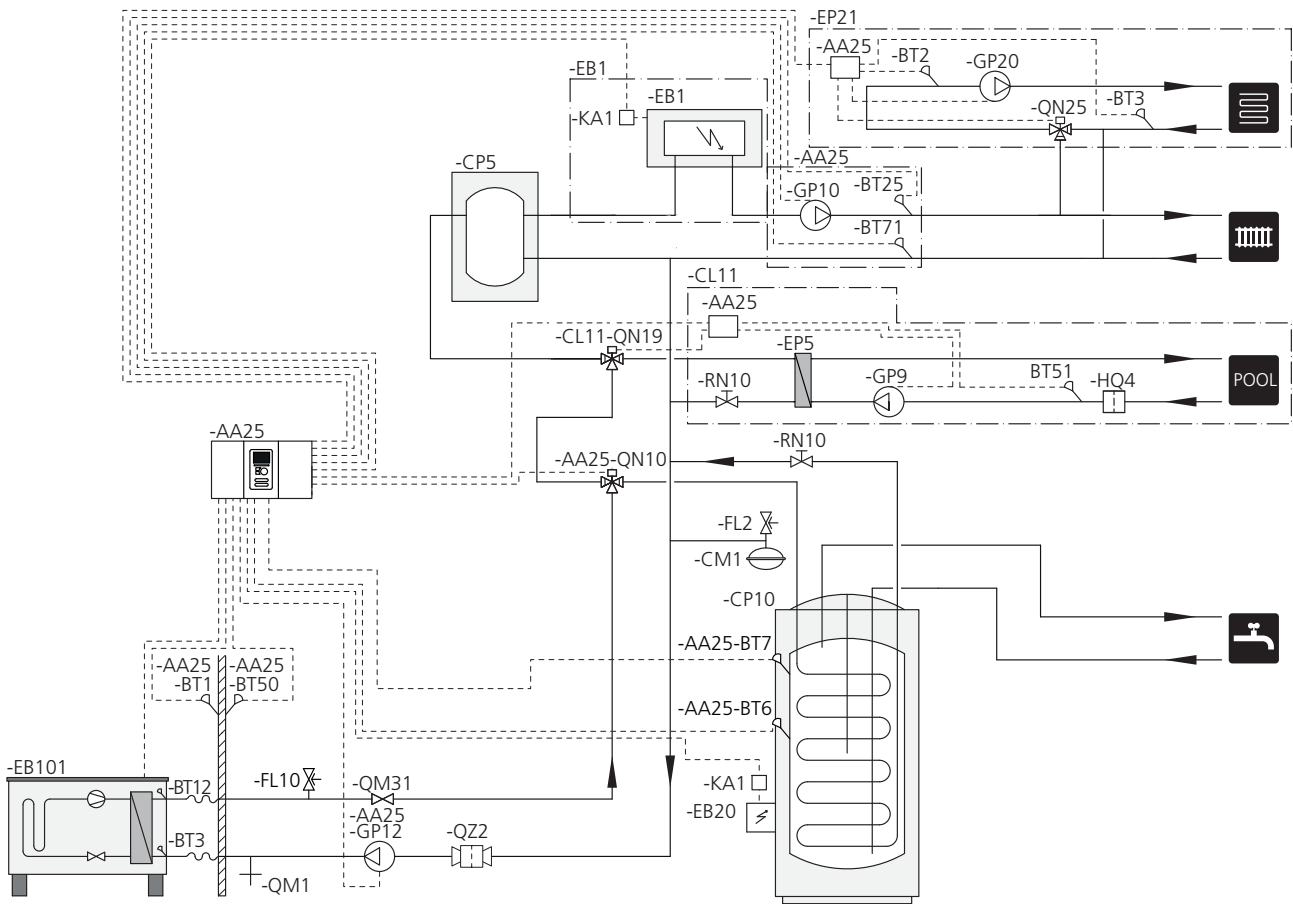
This installation alternative is suitable for simpler installations with a focus on low installation costs.

SMO 40 (AA25) starts and stops the heat pump (EB101) to meet the heating and hot water demand of the installation. During simultaneous heating and hot water demand, the reversing valve (AA25-QN10) switches periodically between the climate system and the water heater / accumulator tank (CP10). When the water heater / accumulator tank (CP10) is fully charged, the reversing valve (AA25-QN10) switches to the climate system.

Additional heat (EB1) is connected automatically if the energy demand for the installation exceeds the heat pump capacity. This is used for both heating and charging hot water.

The additional heat can also be used if a higher temperature in the hot water is required than the heat pump can produce.

AIR HEAT PUMP TOGETHER WITH SMO 40 AND ELECTRIC HEATER AFTER REVERSING VALVE FOR HOT WATER (FLOATING CONDENSING)



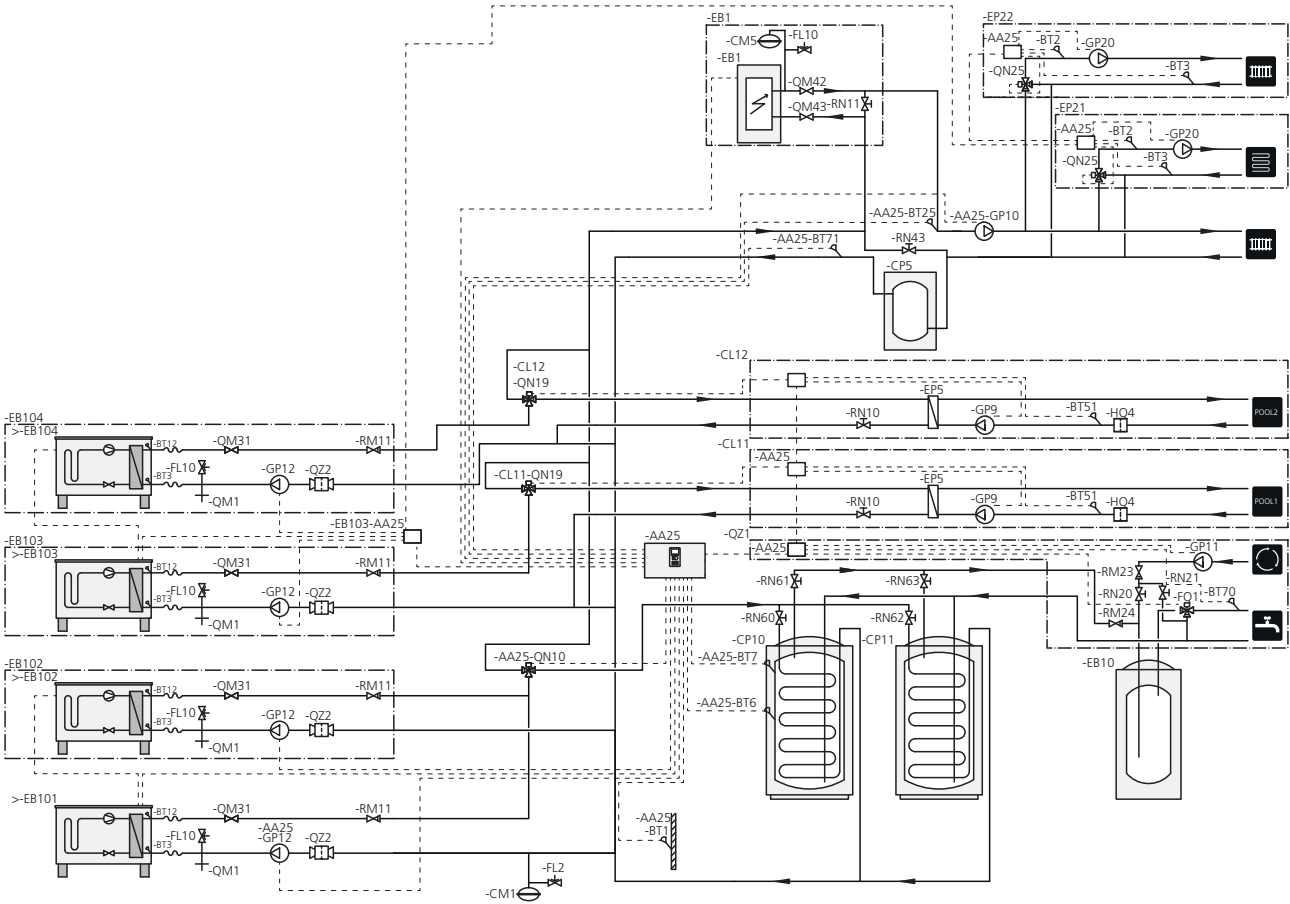
This installation alternative is suitable for more complex installations with a focus on comfort.

SMO 40 (AA25) starts and stops the heat pump (EB101) to meet the heating and hot water demand of the installation. During simultaneous heating and hot water demand, the reversing valve (AA25-QN10) switches periodically between the climate system and the water heater / accumulator tank (CP10). When the water heater / accumulator tank (CP10) is fully charged, the reversing valve (AA25-QN10) switches to the climate system and pool. When the pool needs heating, the reversing valve (CL11-QN19) switches from the climate systems to the pool system.

Additional heat (EB1) is connected automatically if the energy demand for the installation exceeds the heat pump capacity. Immersion heater (EB20) in the water heater / accumulator tank (CP10) is used during this time to produce hot water if the heat pump (EB101) is used for heating the building at the same time.

The additional heat can also be used if a higher temperature in the hot water is required than the heat pump can produce.

AIR/WATER HEAT PUMPS TOGETHER WITH SMO 40 AND ELECTRIC HEATER AFTER REVERSING VALVE FOR HOT WATER AS WELL AS POOL AND EXTRA CLIMATE SYSTEM (FLOATING CONDENSING)



This installations alternative is suitable for more complex installations with a focus on comfort.

SMO 40 (AA25) starts and stops the heat pumps (EB101) and (EB102) to meet the heating and hot water demand of the installation. The heat pumps (EB103) and (EB104) are used for heating and pool heating (one heat pump for each pool).

During simultaneous heating and hot water demand, the reversing valve (AA25-QN10) switches periodically between the climate system and the water heater / accumulator tank (CP10). When the hot water heater / accumulator tank (CP10) is fully charged, the reversing valve (AA25- QN10) switches to the climate systems. When the pool needs heating, the reversing valve (CL11-QN19) or (CL12-QN19) switches from the climate systems to the pool system.

Additional heat (EB1) is connected automatically if the energy demand for the installation exceeds the heat pump capacity. Immersion heater (EB20) in the water

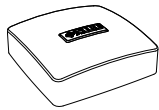
heater / accumulator tank (CP10) is used to produce hot water if the heat pump (EB101) is used for heating at the same time.

The additional heat can also be used if a higher temperature in the hot water is required than the heat pump can produce.

Good to know about SMO 40

Supplied components Mounting

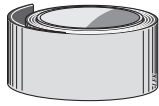
Local differences in the enclosed kit may occur. See relevant installer manual for more information.



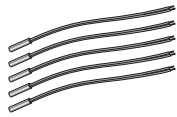
Outside sensor



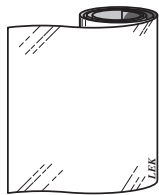
Room sensor



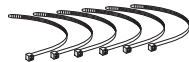
Insulation tape



Temperature sensor



Aluminium tape



Cable ties



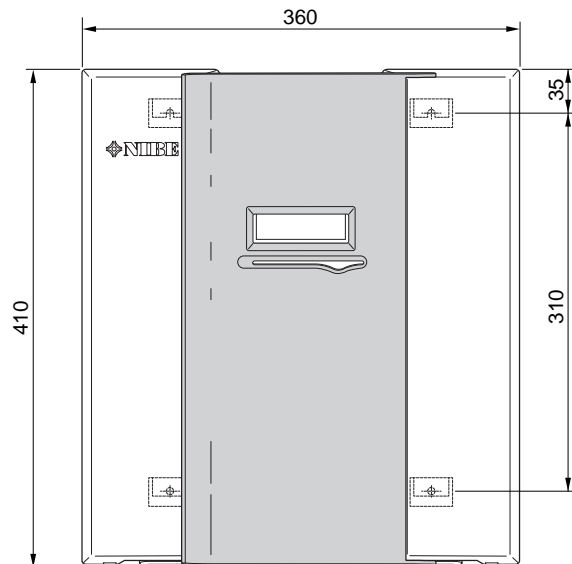
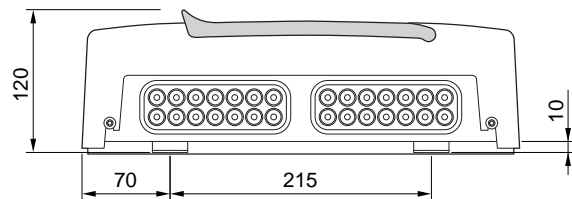
Heating pipe paste



Current sensor



IHB SMO 40 Accessory board



Use all mounting points and install SMO 40 upright flat against the wall without any part of the control module protruding beyond the edge of the wall.

Leave at least 100 mm free space around the control module to facilitate access and cable routing on installation and service.

For wall mounting, use screws suitable for the surface. Screws for removing the front cover are reached from underneath.

Installation

Inspection of the installation

Current regulations require the heating installation to be inspected before it is commissioned. The inspection must be carried out by a suitably qualified person and should be documented. The above applies to closed heating systems.

If the heat pump is replaced, the installation must be inspected again.

Pipe installation

Pipe installation must be carried out in accordance with applicable regulations. See manual for compatible NIBE air/water heat pump for installation of the heat pump.

The pipe dimension should not be less than the recommended pipe diameter according to the table. However, each system must be dimensioned individually to manage the recommended system flows.

Minimum system flows

The installation must be dimensioned at least to manage the minimum defrosting flow at 100% pump operation, see table.

<i>Air/water heat pump</i>	<i>Minimum flow during defrosting (100% pump speed (l/s))</i>	<i>Minimum recommended pipe dimension (DN)</i>	<i>Minimum recommended pipe dimension (mm)</i>
F2120-8 (1x230V)	0.27	20	22
F2120-8	0.27	20	22
F2120-12	0.35	25	28
F2120-16	0.38	25	28
F2120-20	0.48	32	35

<i>Air/water heat pump</i>	<i>Minimum flow during defrosting (100% pump speed (l/s))</i>	<i>Minimum recommended pipe dimension (DN)</i>	<i>Minimum recommended pipe dimension (mm)</i>
F2040-6	0.19	20	22
F2040-8	0.19	20	22
F2040-12	0.29	20	22

<i>Air/water heat pump</i>	<i>Minimum flow during defrosting (100% pump speed (l/s))</i>	<i>Minimum recommended pipe dimension (DN)</i>	<i>Minimum recommended pipe dimension (mm)</i>
HBS 05-6/ AMS 10-6	0.19	20	22
HBS 05-12/ AMS 10-8	0.19	20	22
HBS 05-12/ AMS 10-12	0.29	20	22
HBS 05-16/ AMS 10-16	0.39	25	28

An undersized system can result in damage to the machine and lead to malfunctions.

COMPATIBLE NIBE AIR/WATER HEAT PUMPS

Compatible NIBE air/water heat pump has to be equipped with a control board that, as a minimum, has the software version given in the following list. The control board's version is shown in the heat pump's display (if applicable) at start-up.

<i>Product</i>	<i>Software version</i>
F2015	55
F2016	55
F2020	118
F2025	55
F2026	55
F2030	all versions
F2040	all versions
F2120	all versions
F2300	55
NIBE SPLIT HBS 05: AMS 10-6 + HBS 05-6 AMS 10-8 + HBS 05-12 AMS 10-12 + HBS 05-12 AMS 10-16 + HBS 05-16	all versions

Electrical connections

- Disconnect SMO 40 before insulation testing the house wiring.
- If the building is equipped with an earth-fault breaker, SMO 40 should be equipped with a separate one.
- SMO 40 must be installed via a circuit breaker with a minimum breaking gap of 3 mm.
- For the electrical wiring diagram for the control module, see the Installer Manual.
- Use a three core, screened cable for communication with the heat pump.
- Communication and sensor cables to external connections must not be laid close to high current cables.
- The minimum area of communication and sensor cables to external connections must be 0.5 mm² up to 50 m, for example EKKX, LiYY or equivalent.
- When cable routing into SMO 40, cable grommets (UB1 and UB2, marked in image) must be used.

Electrical installation and service must be carried out under the supervision of a qualified electrician. Cut the current with the circuit breaker before carrying out any servicing. Electrical installation and wiring must be carried out in accordance with the stipulations in force.

See outline diagram for your system for physical location of the temperature sensor that is to be installed.

Miniature circuit-breaker

The control module's operating circuit and parts of its internal components are internally fused by a miniature circuit breaker.

EXTERNAL CONNECTION OPTIONS

SMO 40 has software-controlled inputs and outputs for connection of sensors and external switch function.

This means that a sensor or an external switch function can be connected to one of six special connections where the function for connection is determined in the control module software.

Functions

Control, general

The indoor temperature depends on several different factors. Sunlight and heat emissions from people and household machines are normally sufficient to keep the house warm during the warm seasons. When it gets colder outside, the climate system needs to help heat the house. The colder it is outside, the warmer radiators and underfloor heating systems have to be.

Control of the heat production is performed based on the "floating condensing" principle, which means that the temperature level needed for heating at a specific outdoor temperature is produced based on collected values from the outdoor and supply temperature sensors. The room sensor can also be used to compensate the deviation in room temperature.

Heat production



The supply of heat to the house is regulated in accordance with the heating curve setting selected. After adjustment, the correct amount of heat for the current outdoor temperature is supplied. The supply temperature of the heat pump will oscillate around the theoretically required value.

OWN CURVE

SMO 40 has pre-programmed non-linear heating curves. It is also possible to create your own defined curve. This is an individual linear curve with a number of break points. You select break points and the associated temperatures.

Hot water production



Hot water charging starts when the temperature has fallen to the set start temperature. Hot water charging stops when the hot water temperature at the hot water sensor has been reached.

For temporary higher hot water demand, there is a function that allows the temperature to be raised temporarily for up to 12 hours or by a one time increase (can be selected in the menu system).

With the Smart Control function activated, SMO 40 learns how much hot water is used and when. The Smart Control function memorises the previous week's hot water consumption and adapts the hot water temperature for the coming week to ensure minimal energy consumption.

It is also possible to set SMO 40 in holiday mode, which means that the lowest possible temperature is achieved without the risk of freezing.

Alarm indications

The status lamp lights red in the event of an alarm and the display shows detailed information depending on the fault. An alarm log is created with each alarm containing a number of temperatures, times and operating status.

Extra functions

LOAD MONITOR

When many power consumers are connected in the property at the same time as the electric additional heat is operating, there is a risk of the property's main fuses tripping. The control module has an integrated load monitor that controls the power steps for the electric additional heat by disconnecting step-by-step in event of overload in a phase. A current sensor should be installed on each incoming phase conductor in to the electrical distribution unit to measure the current.

The size of the property's main fuse is set in the menu.

ROOM SENSOR

A room sensor can be connected to SMO 40. The room sensor has up to three functions:

Show current room temperature in the control module display.

Provides the option of changing the room temperature in °C.

Makes it possible to change/stabilise the room temperature.

SMO 40 operates without the sensor, but if you want to read off the home's indoor temperature in the control module's display, the sensor must be installed. If the sensor is to be used to change the room temperature in °C and / or to change / stabilise the room temperature, the sensor must be activated in the menu.

STEP CONTROLLED ADDITIONAL HEAT

External step-controlled additional heat can be controlled by up to three potential-free relays in the control module (three step linear or seven step binary). Alternatively, two relays (two step linear or three step binary) can be used for step-controlled additional heat, which means that the third relay can be used to control the immersion heater in the water heater / accumulator tank. With the AXC 30 accessory, a further three potential-free relays can be used for additional heat control, which then gives a further three linear or seven binary steps.

SHUNT CONTROLLED ADDITIONAL HEAT

This connection enables an external additional heater, e.g. an oil boiler, gas boiler or district heat exchanger, to aid with heating.

SMO 40 controls a shunt valve and start signal for the additional heat using three relays. If the installation does not manage to maintain the correct supply temperature, the additional heat starts. When the heating demand has dropped sufficiently so the additional heat is no longer required, the shunt closes.

RELAY OUTPUT FOR EMERGENCY MODE

The emergency mode relay can be used to activate external additional heat, an external thermostat must then be connected to the control circuit to control the temperature. Ensure that the heating medium circulates through the external additional heating.

No hot water is produced when emergency mode is activated.

EXTERNAL CIRCULATION PUMP

Heat production is controlled by the outdoor temperature and a theoretical desired value of the indoor temperature. This occurs in accordance with a chosen setting of the regulating curve (curve slope and offset) in the menu..

To reach a high level of heating comfort during the heating phase, the external circulation pump circulates hot water in the heating system even when the domestic hot water output is high.

SHUTTLE VALVE

SMO 40 can be supplemented with an external reversing valve for hot water control. The reversing valve must be connected on the PCB.

The display

SMO 40 is controlled using a clear and easy to use display.

Instructions, settings and operational information are shown on the display. You can easily navigate between the different menus and options to set the comfort or obtain the information you require.

The display unit is equipped with a USB socket that can be used to update the software and save logged information in SMO 40.

Visit nibeuplink.com and click the "Software" tab to download the latest software for your installation.

NIBE Uplink



Using the Internet and NIBE Uplink, you can obtain a quick overview and the present status of the installation and the heating in your home.

You can obtain a good overall view, allowing you to monitor and control the heating and hot water comfort effectively. If the system is affected by a malfunction, you receive an alert via e-mail that allows you to react quickly.

NIBE Uplink also gives you the opportunity to control the comfort in your home easily, no matter where you are.

RANGE OF SERVICES

You have access to different levels of service via NIBE Uplink. A basic level that is free and a premium level where you can select different extended service functions for a fixed annual subscription fee (the subscription fee varies depending on the selected functions).

NIBE Uplink also available as an app from App Store and Google Play.

INSTALLATION AND ASSOCIATED EQUIPMENT REQUIREMENTS

NIBE Uplink needs the following in order to communicate with your SMO 40:

- network cable
- Internet connection to which SMO 40 can be connected
- web browser with JavaScript activated
- account on nibeuplink.com

We recommend our mobile apps for NIBE Uplink.

If it is not possible to connect to NIBE Uplink, SMO 40 can be controlled remotely via text message. For this, the SMS 40 accessory is required.

For more information, visit nibeuplink.com.

SMART HOME

When you have a smart home system that can communicate with NIBE Uplink, you can control the installation via an app by activating the "smart home" function.

By allowing connected units to communicate with NIBE Uplink, your heating system becomes a natural part of your homesmart home and gives you the opportunity to optimise the operation.

Remember that the "smart home" function requires NIBE Uplink in order to work.

NIBE SMART ENERGY SOURCE™



Smart Energy Source™ prioritises how / to what extent each docked energy source will be used. Here you can choose if the system is to use the energy source that is cheapest at the time. You can also choose if the system is to use the energy source that is most carbon neutral at the time.

SMS 40

SMO 40 can be controlled and monitored externally with the accessory SMS 40.

SMS 40 consists of a communications module, a GSM modem with an antenna and a separate power supply unit with a jack for plugging into a wall socket. The antenna can be placed outside the enclosure.

SMS 40 enables operation to be controlled and monitored, via a GSM module, using SMS messages from a mobile phone. For the GSM function to work, the communications module must be equipped with a valid GSM subscription. For example, this may be a pay-as-you-go card or a special telematics subscription.

For further presentation, visit nibe.eu.

MODBUS

The MODBUS 40 accessory enables SMO 40 to be controlled and monitored externally using a DUC (data substation) in the building.

Communication is then performed using MODBUS-RTU.

Speed-controlled charge pump (CPD 11)

It is possible to optimise the system flow from SMO 40, depending on the type of heat distribution system, radiator or underfloor heating. This means increased efficiency, with the heat pump giving the highest possible performance in relation to the demand. The same situation applies to domestic hot water production.

Because the impact of the ambient outdoor temperature on the air/water heat pumps, the speed-controlled charge pump can be used to adapt the flow better in different operating conditions, depending on the season.

Technical data

Technical data $\epsilon\epsilon$

<i>SMO 40</i>		
<i>Electrical data</i>		
Supply voltage		230V~ 50Hz
Enclosure class		IP21
Rated value for impulse voltage	kV	4
Pollution degree		2
Fuse	A	10
<i>Optional connections</i>		
Max number air/water heat pumps		8
Max number of sensors		8
Max number of charge pumps with internal accessory cards		4
Max number of charge pumps with external accessory cards		8
Max number of outputs for additional heat step		3
<i>Miscellaneous</i>		
Operation mode (EN60730)		Type 1
Area of operation	°C	-25 – 70
Ambient temperature	°C	5 – 35
Program cycles, hours		1, 24
Program cycles, days		1, 2, 5, 7
Resolution, program	min.	1
<i>Miscellaneous</i>		
Weight, (without packaging and enclosed components)	kg	5.15
Part no. SMO 40		067 225

Energy labelling

<i>Supplier</i>		<i>NIBE</i>
<i>Model</i>		<i>SMO 40 + F2040 / F2120</i>
Controller, class		VI
Controller, contribution to efficiency	%	4.0

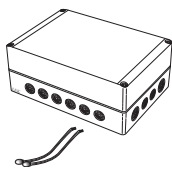
Accessories

Detailed information about the accessories and complete accessories list available at nibe.eu.

Not all accessories are available on all markets.

Accessory card AXC 30

An accessory board for active cooling (4-pipe system), extra climate system, hot water comfort or if more than two charge pumps are to be connected to SMO 40. It can also be used for step-controlled additional heat (e.g. external electric boiler), shunt-controlled additional heat (e.g. wood/oil/gas/pellet boiler).



An accessory board is required if for example an HWC pump is to be connected to SMO 40 at the same time that the common alarm indication is activated.

Auxiliary relay HR 10

Auxiliary relay HR 10 is used to control external 1 to 3 phase loads such as oil burners, immersion heaters and pumps.



Charge pump CPD 11

Charge pump for heat pump



Communications module MODBUS 40

MODBUS 40 enables SMO 40 to be controlled and monitored using a DUC (computer sub-centre) in the building.



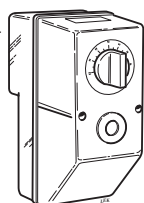
Communications module SMS 40

When there is no internet connection, you can use the accessory SMS 40 to control SMO 40 via SMS.



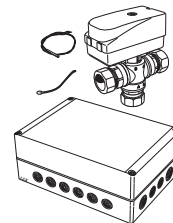
Connection box K11

Connection box with thermostat and overheating protection. (When connecting Immersion heater IU)



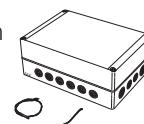
Docking kit Solar 40

Solar 40 means that SMO 40 (together with VPAS) can be connected to thermal solar heating.



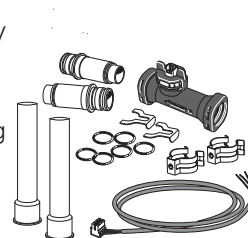
Docking kit Solar 42

Solar 42 means that SMO 40 (together with VPBS) can be connected to thermal solar heating.



Energy measurement kit EMK 300

This accessory is installed externally and used to measure the amount of energy that is supplied for the pool, hot water, heating and cooling in the building.



Energy measurement kit EMK 500

This accessory is installed externally and used to measure the amount of energy that is supplied for the pool, hot water, heating and cooling in the building.



Cu pipe Ø28.

Exhaust air heat pump F135

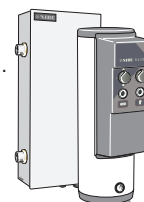
F135 is an exhaust air heat pump specially designed to combine the recovery of mechanical exhaust air with air/water heat pump. Indoor module/control module controls F135.



External electric additional heat ELK

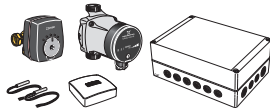
These accessories may need an accessory board AXC 30 (step controlled additional heat).

ELK 15	ELK 26
15 kW, 3 x 400 V	26 kW, 3 x 400 V
ELK 42	ELK 213
42 kW, 3 x 400 V	7-13 kW, 3 x 400 V



Extra shunt group ECS 40/ECS 41

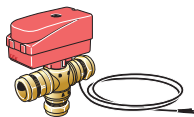
This accessory is used when SMO 40 is installed in houses with two or more different heating systems that require different supply temperatures.



Hot water control

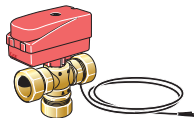
VST 05

Reversing valve, Cu pipe Ø22 mm
Max. heat pump size 8 kW



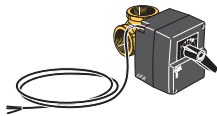
VST 11

Reversing valve, Cu pipe Ø28 mm
Max. recommended power, 17 kW



VST 20

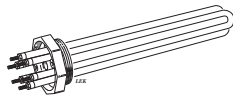
Reversing valve, Cu pipe Ø35 mm
(Max. recommended capacity, 40 kW)



Immersion heater IU

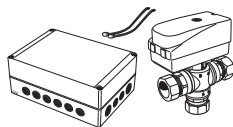
3 kW 6 kW

9 kW



Pool heating POOL 40

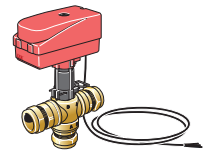
POOL 40 is used to enable pool heating with SMO 40.



Reversing valve for cooling

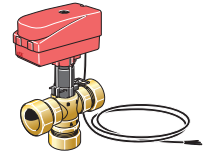
VCC 05

Reversing valve, Cu pipe Ø22 mm



VCC 11

Reversing valve, Cu pipe Ø28 mm



Room sensor RTS 40

This accessory is used to obtain a more even indoor temperature.



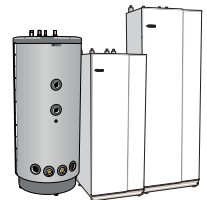
Room unit RMU 40

The room unit is an accessory that allows the control and monitoring of SMO 40 to be carried out in a different part of your home to where it is located.



Water heater/Accumulator tank

For information regarding suitable water heaters, see nibe.eu.





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