CHB EN 2126-2
531237

USER AND INSTALLER MANUAL

Indirect heated storage water heater NIBE VPB S/ VPBS S *UK*

NIBE

Table of Contents

1 Important information

Safety information

This manual describes installation and service procedures for implementation by specialists.

The manual must be left with the customer.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

This is an original manual. It may not be translated without the approval of NIBE.

Rights to make any design or technical modifications are reserved.

Water may drip from the safety valve's overflow pipe. The entire length of the overflow water pipe must be routed to a suitable drain and be inclined to prevent water pockets, and must also be frost-proof. The overflow pipe must be at least the same size as the safety valve. The overflow pipe must be visible and its mouth must be open and not located close to electrical components.

The safety valves must be actuated regularly to remove dirt and to check that they are not blocked.

SYMBOLS

NOTE

This symbol indicates danger to person or machine .

Caution

This symbol indicates important information about what you need to consider when installing, servicing or maintaining the installation.

MARKING

Explanation of symbols that may be present on the product's label(s).

CE The CE mark is obligatory for most products sold in the EU, regardless of where they are made.

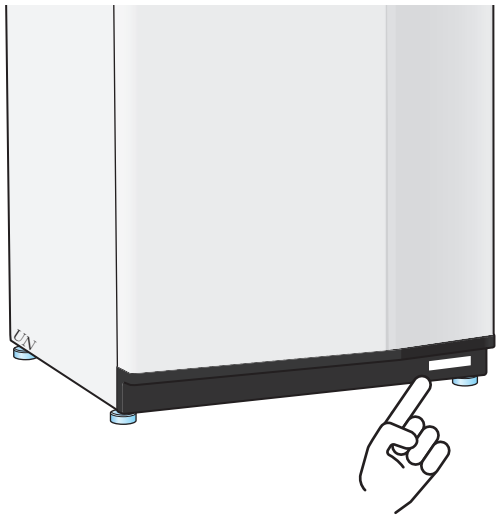
General

VPB S/ VPBS S is designed and manufactured according to good technical practice[1] in order to ensure safe usage.

[1] Pressure Equipment Directive 2014/68/EU Article 4 point 3.

Serial number

The serial number can be found at the bottom right of the front cover.



Caution

You need the product's (14 digit) serial number for servicing and support.

Recovery

Leave the disposal of the packaging to the installer who installed the product or to special waste stations.

Do not dispose of used products with normal household waste. It must be disposed of at a special waste station or dealer who provides this type of service.

Improper disposal of the product by the user results in administrative penalties in accordance with current legislation.

Country specific information

UNITED KINGDOM

This installation is subject to building regulation approval, notify the local Authority of intention to install.

Use only manufacturer's recommended replacement parts.

For more information see nibe.co.uk.

benchmark
COLLECTIVE MARK
THE MARK OF QUALITY FOR THE INSTALLATION, COMMISSIONING AND SERVICING OF DOMESTIC HEATING AND HOT WATER SYSTEMS

Warranty and insurance information

Thank you for installing solar energy fromNIBE water heater in your home.

NIBE water heaters are manufactured in Sweden to the very highest standard so we are pleased to offer our customers a comprehensive guarantee.

The product is guaranteed for 24 months for parts and labour from the date of installation or 33 months from the date of manufacture, whichever is the shorter.

The NIBE guarantee is based on the unit being installed and commissioned by a NIBE accredited installer, serviced every year and the Benchmark documents completed. Where this condition is not met, any chargeable spare parts or components issued within the applicable guarantee period still benefit from a 12 month warranty from the date of issue by the manufacturer.

We recommend the installer completes and returns as soon as possible, your guarantee registration card or completes the guarantee form on the NIBE website www.nibe.co.uk

Please ensure that the installer has fully completed the Benchmark Checklist in the end of the Installation Instructions supplied with the product and that you have signed to say that you have received a full and clear explanation of its operation. The installer is legally required to complete a commissioning checklist as a means of complying with the appropriate Building Regulations (England and Wales).

All installations must be notified to Local Area Building Control either directly or through a Competent Persons Scheme. A Building Regulations Compliance Certificate will then be issued to the customer who should, on receipt, write the Notification Number on the Benchmark Checklist.

This product should be serviced regularly to optimise its safety, efficiency and performance. The service engineer should complete the relevant Service Record on the Benchmark Checklist after each service.

The Benchmark Checklist may be required in the event of any warranty work and as supporting documentation relating to home improvements in the optional documents section of the Home Information Pack.

Compatible products

VPB S300

- S1155-6,12,16*
- F1126-8,12*
- F1145-6,8,10,12*
- S2125-8,12
- F2120-8,12,16
- F2040-8,12
- F2030-7,9

VPBS S300

- S1155-6,12,16*
- F1145-6,8,10,12*
- S2125-8,12
- F2120-8,12,16
- F2040-8,12
- F2030-7,9

For ground-source heat pumps, the recommendation applies for max. 10°C brine temperature and 53°C in the tank applies.

Caution

VPBS S300 is not available on all markets.

Caution

In installations with an air/water heat pump, a control module is also necessary.

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.

✔	*Description*	*Notes*	*Signa-ture*	*Date*
Heat pump (page 15)				
	Shut off valves			
	Venting valve			
	Shut off valve			
Hot water (page 15)				
	Shut off valves			
	Mixing valve			
	Expansion vessel			
	T&P valve			
	Tundish			
Cold water (page 15)				
	Shut off valves			
	Non-return valve			
	Safety valve			
	Tundish			
Electricity (page 20)				
	Connected supply			
	Sensors			
	Temperature limiter			
Miscellaneous				
	Benchmark checklist			

2 For the User

Maintenance

EXPANSION RELIEF VALVE

You can find the expansion relief valve on the incoming pipe (cold water) to VPB S/ VPBS S.

The water heater's expansion relief valve sometimes releases a little water after hot water usage. This is because the cold water, which enters the water heater to replace the hot water, expands when heated, causing the pressure to rise and the expansion relief valve to open.

The function of the expansion relief valve must be checked regularly by a person who is competent for the task. Perform the checks as follows:

1. Open the valve.
2. Check that water is flowing through it.
3. Close the valve.

NOTE

If this pressurised water heater develops a fault, e.g. a flow of hot water from the overflow pipe, turn the heat pump off and contact your installer.

NOTE

Do not remove or adjust any components that are part of this pressurised water heater. Contact your installer!

TIP

The expansion relief valve is not delivered with VPB S/ VPBS S. Contact your installer if you are unsure how to check it.

EMPTYING

Water heater

Draining is performed through the siphon (using hose) in the cold water connection (XL3).

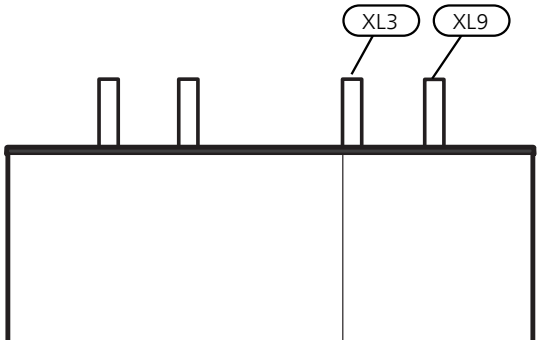
Charge coil

Draining is performed through the siphon (using hose) in the docking connection, return to heat pump (XL9).

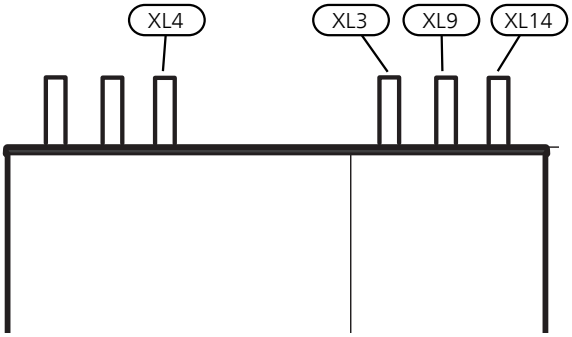
Solar coil

Draining is performed through the siphon (using hose) in the connection, return to solar heating system (XL14).

VPB S300



VPBS S300



SERVICE

If servicing is required, contact your installer for suitable measures.

Caution

You need the product's (14 digit) serial number for servicing and support.

VPB S/ VPBS S must be serviced once a year by competent and qualified personnel, such as a NIBE a service engineer or other qualified professional.

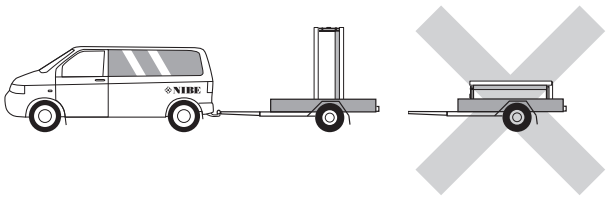
When replacing components on VPB S/ VPBS S only replacement parts from NIBE may be used.

3 For the Installer

Delivery and handling

TRANSPORT

VPB S/ VPBS S should be transported and stored vertically in a dry place. The VPB S/ VPBS S may, however, be carefully laid on its back when being moved into a building.

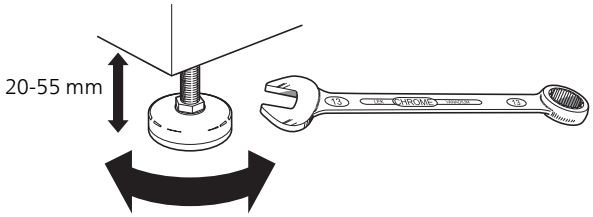


ASSEMBLY

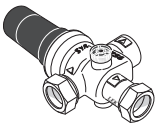
The water heater is only designed for upright installation.

The water heater's installation area should always have a temperature of at least 10 °C (to prevent the risk of damage from frost) and equipped with a floor drain.

Position VPB S/ VPBS S on a firm base that can take the weight, preferably on a concrete floor or foundation. Use the product's adjustable feet to obtain a horizontal and stable set-up.

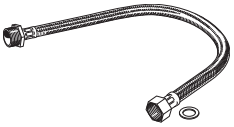


SUPPLIED COMPONENTS

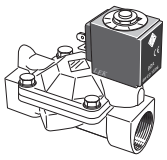


1 x pressure reduction valve

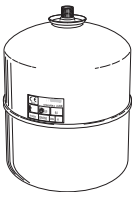
1 x tundish (2 for VPBS S300)



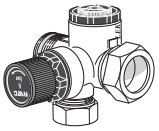
1 x armoured hose (expansion vessel) (2 for VPBS S300)



1 x solenoid valve(2 for VPBS S300



1 x expansion vessel with holder

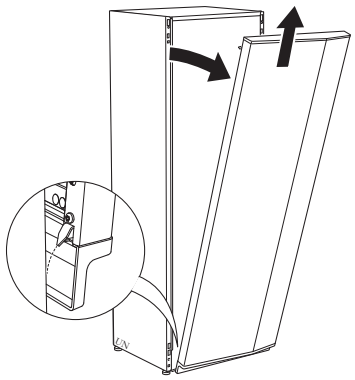


1 x cold water inlet and expansion relief valve, water heater

1 x seal

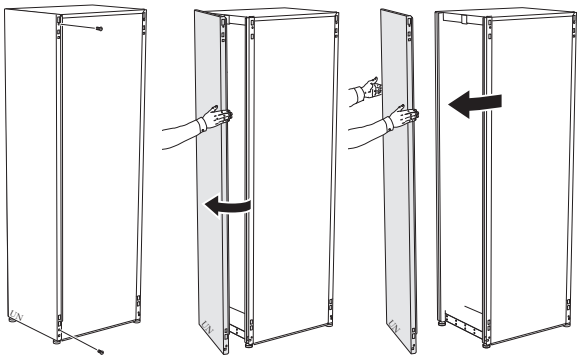
REMOVING THE COVERS

Front cover



1. Disconnect the front cover at the top edge and pull it straight out.
2. Lift the front cover upwards.

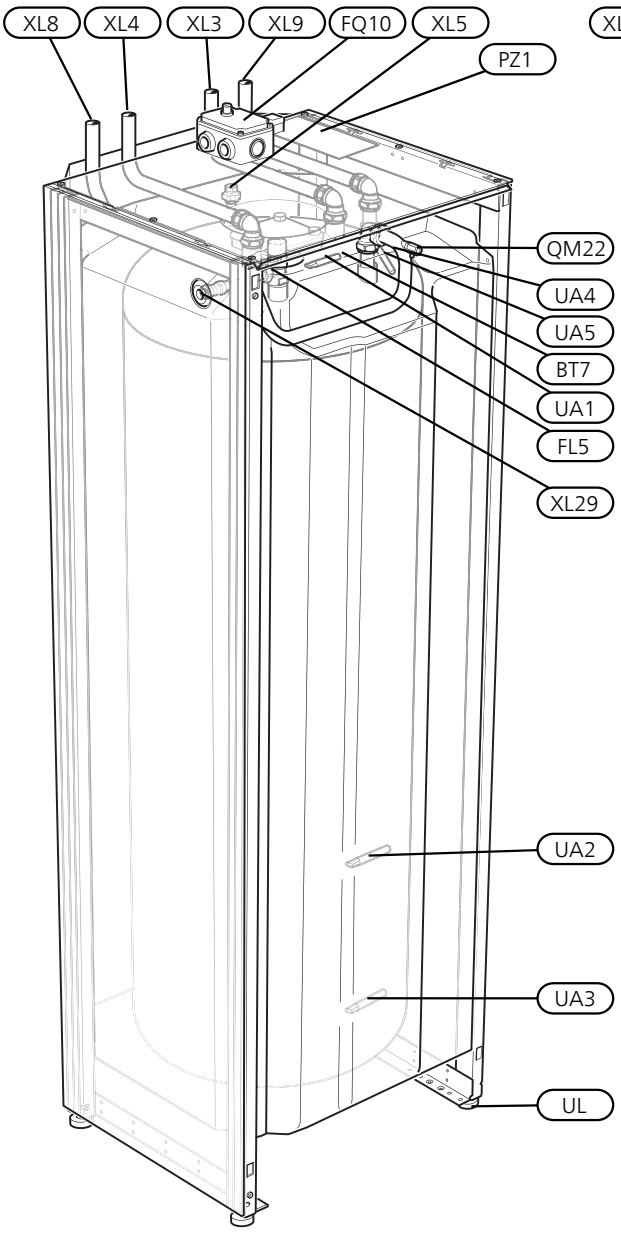
Side panels



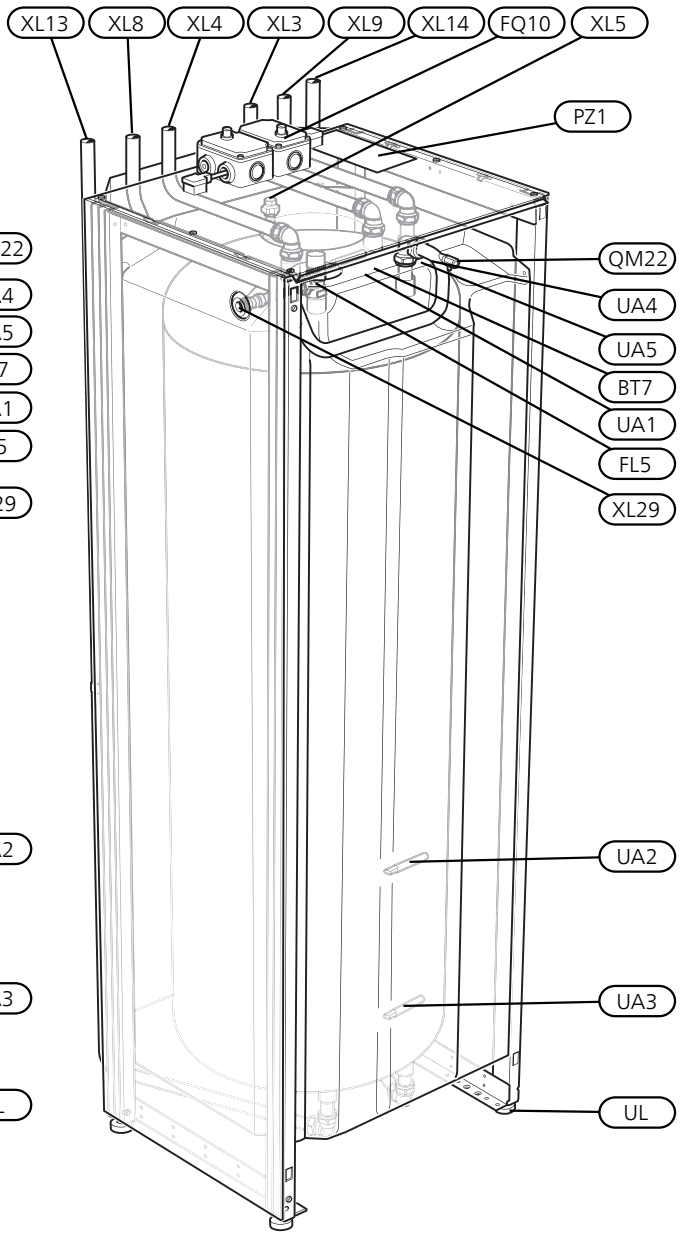
1. Remove the screws from the upper and lower edges.
2. Twist the cover slightly outward.
3. Move the hatch backwards and slightly to the side.
4. Pull the cover to one side.
5. Pull the hatch forwards.

The water heater design

VPB S300



VPBS S300



EXPLANATION

Pipe connections

XL3 Cold water connection
XL4 Hot water connection
XL5 Connection, hot water circulation (does not apply to VPBS S300 copper)
XL8 Docking connection, supply line (from heat pump[1])
XL9 Docking connection, return line (to heat pump[1])
XL13 Solar heat connection, supply line (from solar heating system) (VPBS S300 only)
XL14 Solar heat connection, return line (to solar heating system) (VPBS S300 only)
XL29 Connection, T&P valve

1 or other heat source

HVAC components

FL5 T&P valve
QM22 Venting, charge coil
UA1 Submerged tube for displaying hot water sensor (BT7)
UA2 Submerged tube for controlling hot water sensor (BT6)
UA3 Submerged tube for control sensor for external heat source (BT54)
UA4 Submerged tube for temperature limiter
UA5 Submerged tube for temperature limiter

Sensors

BT7 Display hot water sensor

Electrical components

FQ10 Temperature limiter

Miscellaneous

PZ1 Rating plate
UL Adjustable feet

Designations according to standard EN 81346-2.

Pipe installation

GENERAL

NOTE

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

NOTE

This installation is subject to building regulation approval, notify the local Authority of intention to install.

NOTE

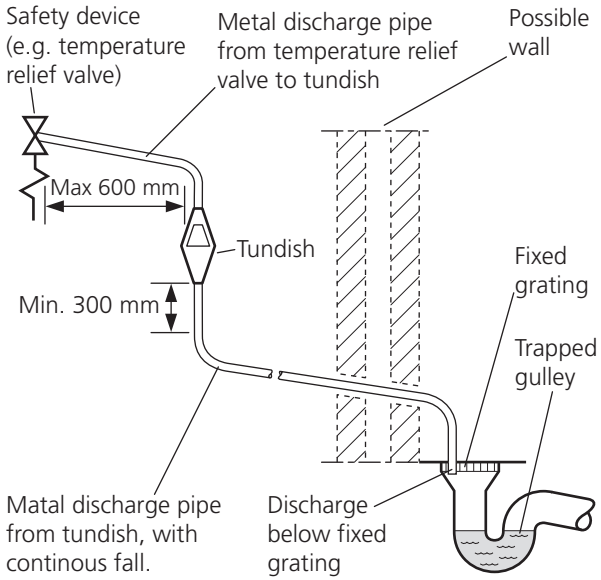
Use only manufacturer's recommended replacement parts.

Waste water from safety valves is led via an unpressurised overflow pipe to the drain, so hot water splashes cannot cause harm.

The mouth of the overflow pipe must be visible and not placed close to electrical components. In addition, the mouth of the overflow pipe (tundish), drain valves and motorised valves should also be positioned well away from all electrical components. This is the only permitted use of unpressurised overflow pipes. Overflow pipes from tundish (WM1) connected to the expansion relief valve (FL1) must also be connected to the drain in the same way.

The connection for the T&P valve (XL29) must not be used for any other purpose. Valves may not be positioned between the T&P valve (FL5) and the water heater.

Overflow pipes from tundish must be routed with a fall and be at least 300 mm long, before bends or angles in the pipework (see image) and must also be frost-proof.



NOTE

The expansion vessel accomodates expansion that results from heating the water inside the unit. The expansion vessel must be connected between the expansion valve and the cylinder. The location of the expansion vessel should allow access to recharge the pressure as and when necessary.

Valve outlet size	*Minimum size of discharge pipe*	*Minimum size of discharge pipe from tundish*	*Maximum resistance allowed, expressed as a lenght of straight pipe (i.e. no elbows or bends)*	*Resistance created by each elbow or bend*
G1/2	15 mm	22 mm	up to 9 m	0.8 mm
G1/2	15 mm	28 mm	up to 18 m	1.0 mm
G1/2	15 mm	35 mm	up to 27 m	1.4 mm
<G3>/4	22 mm	28 mm	up to 9 m	1.0 mm
<G3>/4	22 mm	35 mm	up to 18 m	1.4 mm
<G3>/4	22 mm	42 mm	up to 27 m	1.7 mm
G1	28 mm	35 mm	up to 9 m	1.4 mm
G1	28 mm	42 mm	up to 18 m	1.7 mm
G1	28 mm	54 mm	up to 27 m	2.3 mm

Table sizing of copper discharge pipe for common temperature relief valve outlet sizes.

Hard water areas

Normally, there should not normally be any problem installing VPB S/ VPBS S in hard water areas, as the operating temperature is 50–60°C.

Cleaning the climate system

When the water heater and the climate system have been filled with water, VPB S/ VPBS S must operate at maximum normal temperature for at least one hour. Thereafter the system must be drained of water and refilled.

Before installing the heat pump in an existing system, it is important that the system is properly flushed through.

Even if the heat pump is to be installed in a new system, the heat pump and system should be flushed.

> ⚠ *NOTE*
>
> Ensure that cleaning agent has been removed from the entire system before adding inhibitor.

After flushing an inhibitor should be used for long-term anti-corrosion protection.

NIBE Energy Systems Limited recommends water treatments (supplied by e.g. Fernox and Sentinel) specifically designed for heat pumps.

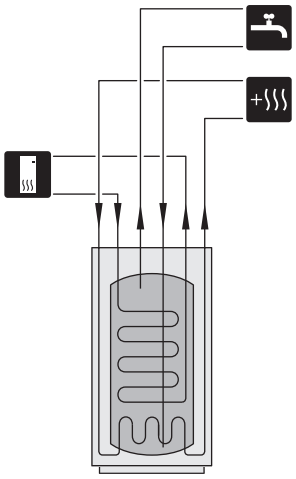
SYSTEM DIAGRAM

VPB S/ VPBS S is a series of water heaters that are suitable for connection to e.g. a heat pump.

VPB S/ VPBS S consists of a hot water tank with internal anti-corrosion protection made of copper, stainless steel or enamel, as well as a charge coil

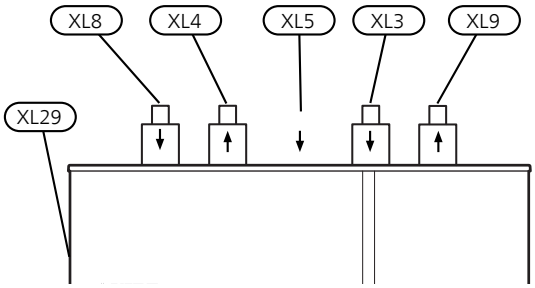
The charge coil heats the domestic water, resulting in excellent properties for hot water charging.

VPBS S300 has an additional coil, which is used for an external heat source, e.g. thermal solar panels or a stove with a back boiler.

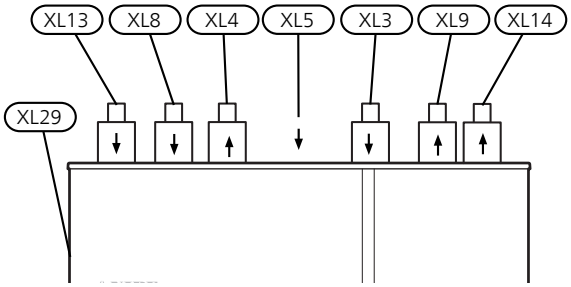


PIPE CONNECTIONS

VPB S300



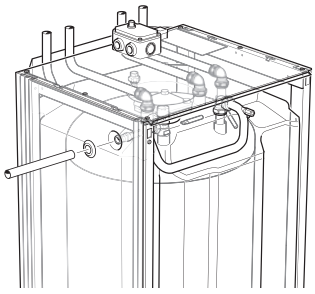
VPBS S300



Connection		
XL3 Cold water Ø	mm	22
XL4 Hot water Ø	mm	22
XL5 Hot water circulation Ø	mm	15
XL8 Docking connection, supply line Ø	mm	22
XL9 Docking connection, return line Ø	mm	22
XL13 Solar heat connection, supply Ø	mm	22
XL14 Solar heat connection, return Ø	mm	22
XL29 T&P valve Ø	mm	15

T&P VALVE

Install the pipe for the T&P valve as illustrated below.



SYMBOL KEY

Symbol	*Meaning*
	Unit box
	Shut-off valve
	Non-return valve
	Mixing valve
	Circulation pump
	Expansion vessel
	Filterball
	Shut off valve
	Pressure gauge
	Safety valve
	Temperature sensor
	Pressure reduction valve
	Manual reversing valve/shunt
	Radiator system
	Domestic hot water
	Addition
	Hot water circulation

TO HEAT PUMP

VPB S/ VPBS S can be docked with another heat source, for example NIBE S1155.

- Install expansion vessel and pressure gauge as illustrated.
- Install the safety valve as illustrated. Recommended opening pressure is 0.25 MPa (2.5 bar). For information about max opening pressure, see technical specifications.

Before installing VPB S/ VPBS S in an existing system, it is important for the system to be properly flushed through.

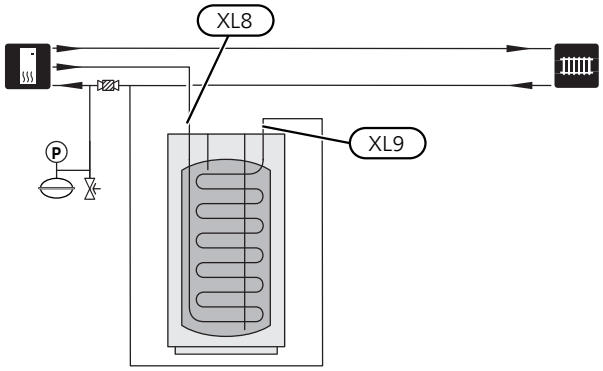
Even if VPB S/ VPBS S is to be installed in a new system, the heat pump and system should be flushed.

NOTE

Ensure that cleaning agent has been removed from the entire system before adding inhibitor.

After flushing an inhibitor should be used for long-term anti-corrosion protection.

NIBE Energy Systems Limited recommends water treatments (supplied by e.g. Fernox and Sentinel) specifically designed for heat pumps.



CONNECTING COLD AND HOT WATER

The settings for hot water are made in the compatible product's menu system.

Stop temperature for hot water must be at least 60°C.

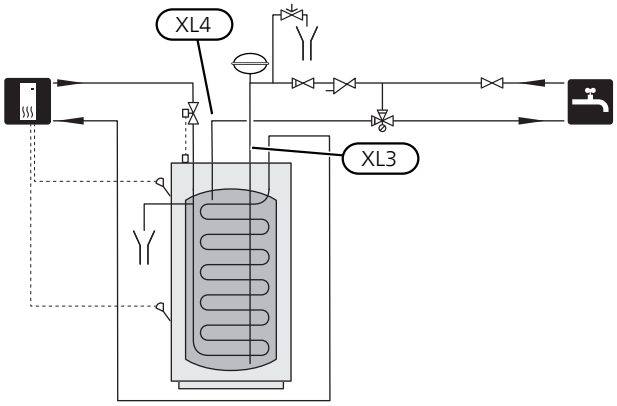
Install as follows:

- controlling hot water sensor (BT6) (placed in the middle of the water heater)
- shut-off valve
- non-return valve
- expansion relief valve

  The expansion relief valve must have a maximum 0.6 MPa (6.0 bar) opening pressure and be installed on the incoming domestic water line as shown.
- mixing valve

  A mixing valve must be installed when the factory setting for hot water is changed. National regulations must be observed.
- pressure relief valve
- expansion vessel

  The expansion vessel (CM4) accomodates expansion that results from heating the water inside the unit. The expansion vessel must be connected between the expansion releif valve (FL1) and the water heater. The location of the expansion vessel should allow access to recharge the pressure as and when neccessary.
- tundish



INSTALLATION ALTERNATIVE

> ⚠ *NOTE*
>
> This is the outline diagram. Actual installations must be planned according to applicable standards.

VPB S/ VPBS S can be installed in several different ways, some of which are shown here.

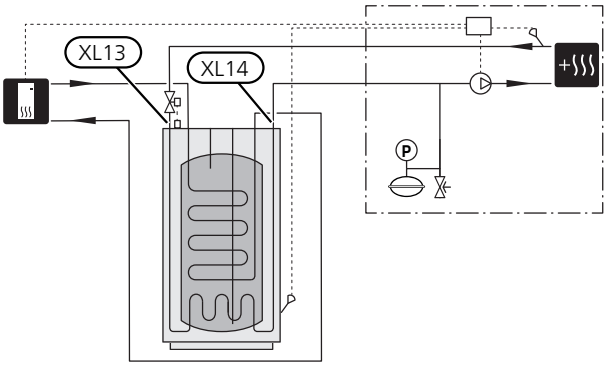
Further option information is available at nibe.eu/ODM and in the respective assembly instructions for the heat sources used.

To external heat source

VPBS S300 can be docked to an external heat source, e.g. a stove with a back boiler or a thermal solar installation.

Install as follows:

- sensor for external heat source, tank (BT54)
- solenoid valve (FL7).
- pressure gauge
- expansion vessel
- pressure relief valve
- AXC module
- circulation pump
- sensor, external heat source (BT53)

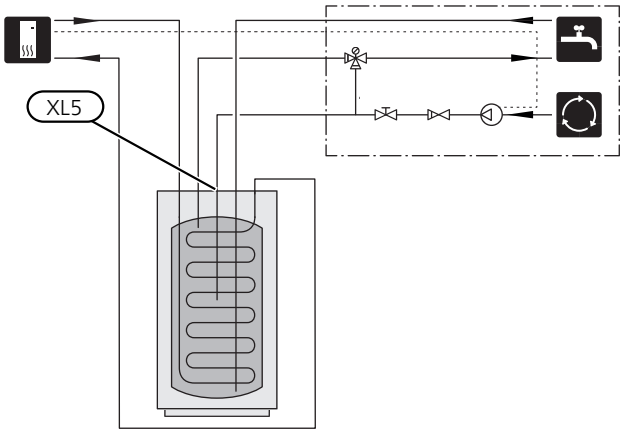


Connecting hot water circulation (VVC)

VPB S/ VPBS S has a connection that allows hot water circulation, the HWC return is connected to this (XL5).

Hot water circulation

A circulation pump can be controlled by a ground-source heat pump or exhaust air heat pump, indoor module or control module for circulation of the hot water. The circulating water must have a temperature that prevents bacterial growth and scalding, and national standards must be met.



Electrical installation

GENERAL

Electrical installation and wiring must be carried out in accordance with national provisions.

NOTE

Electrical installation and any servicing must be carried out under the supervision of a qualified electrician. Disconnect the current using the circuit breaker before carrying out any servicing.

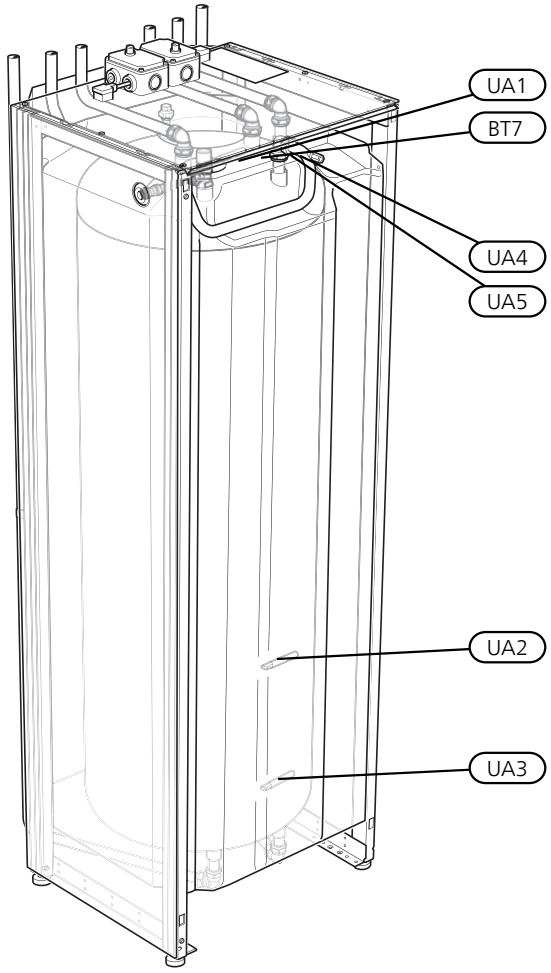
SENSORS

VPB S300 can be supplemented with up to two hot water sensors, one for display and one for control. The displaying sensor (BT7) is fitted at the factory and placed in a submerged tube (UA1), the controlling hot water sensor is placed in the submerged tube for control sensor (UA2). In cases where it is only possible to connect one sensor, use the submerged tube for the controlling sensor (UA2).

VPBS S300 can also be supplemented with a sensor for an external heat source (BT54). This is placed in the submerged tube for the external heat source (UA3).

Use the sensors provided with the heat pump/control module. When no heat sensors have been provided these must be ordered from the manufacturer of the heat pump/control module.

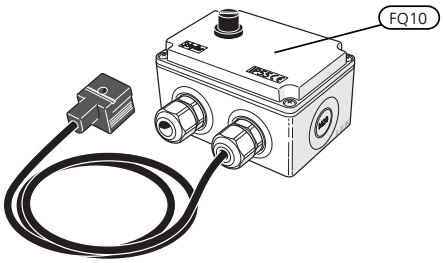
The figure shows VPBS S300.

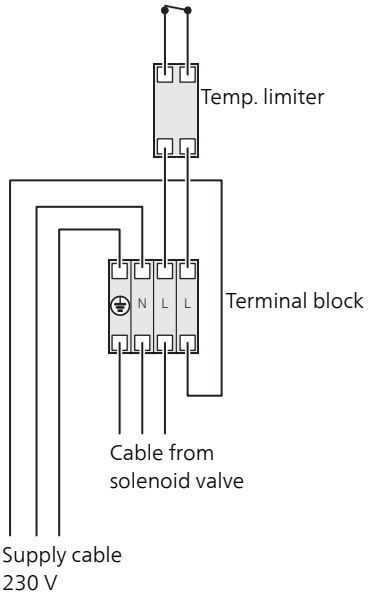


TEMPERATURE LIMITER

Power supply to temperature limiter (FQ10) is 230 V.

Temperature limiter (FQ10) is connected electrically to the solenoids, one for each heat source.





Temperature limiter wiring diagram

Commissioning and adjusting

FILLING AND VENTING

> *NOTE*
>
> At the time of commissioning, complete all relevant sections of the Benchmark Checklist located at the back of this document.
>
> Completion of the Benchmark Checklist is a condition of warranty. For full terms and conditions of warranty, please see our website nibe.co.uk.

Filling the hot water heater

1. Open a hot water tap in the house.
2. Fill the hot water heater through the cold water connection (XL3).
3. When the water that comes out of the hot water tap is no longer mixed with air, the water heater is full and the tap can be closed.

Filling and venting the charge coil

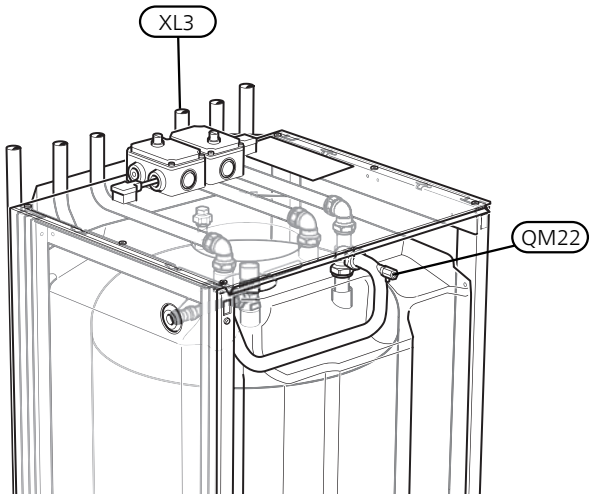
Filling

1. Open the externally mounted filling valve. Fill the coil in the hot water heater and the rest of the climate system with water.
2. Open the vent valve (QM22).
3. When the water that exits the vent valve (QM22) is not mixed with air, close the valve. After a while, the pressure starts to rise.
4. Close the filling valve when the correct pressure is obtained.

Venting

1. Vent the coil via the vent valve (QM22) and the rest of the climate system via the relevant vent valves.
2. Keep topping up and venting until all air has been removed and the pressure is correct.

The figure shows VPBS S300.

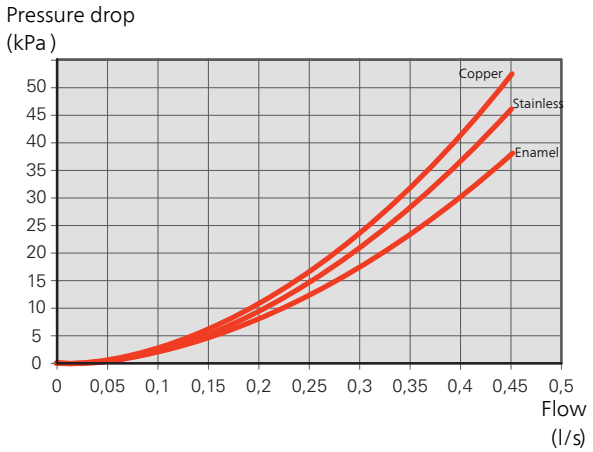


START-UP AND INSPECTION

Pressure drop diagram, charge coil

Docking connection, supply line (XL8) and docking connection, return line (XL9).

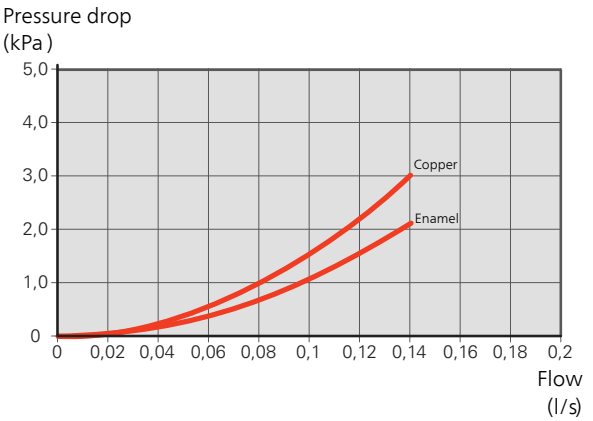
VPB S300 / VPBS S300



Pressure drop diagram, solar coil

Connection, supply line solar heating system (XL13) and connection, return line solar heating system (XL14).

VPBS S300



Service and maintenance

NOTE

After servicing, complete the relevant Service Interval Record section of the Benchmark Checklist located at the back of this document.

Completion of the Service Interval Record is a condition of warranty. For full terms and conditions of warranty, please see our website nibe.co.uk.

NOTE

Maintenance may only be carried out by persons with the necessary expertise.

When replacing components on VPB S/ VPBS S only replacement parts from NIBE may be used.

NOTE

NOTE

Use only manufacturer's recommended replacement parts.

MAINTENANCE

General inspection

Check the following:

1. Condition of casing.
2. Electrical connections.
3. Pipe connections.

Correct any fault before continuing.

Water heater

Check the following:

1. Pressure controlled bypass valve.
2. T&P valve.
3. Overflow pipe.
4. Pressure expansion vessel.
5. Expansion relief valve.

Correct any fault before continuing.

SERVICE ACTIONS

Safety valves

The function of the safety valves must be checked regularly. Perform checks as follows:

1. Open the valve by turning the knob anti-clockwise carefully.
2. Check that water flows through the valve.
3. Close the valve by releasing it. If it does not close automatically when released, turn it anti-clockwise slightly.

Cleaning

Inspect and clean the water heater by using a suitable instrument such as an endoscope. The hot water connection (XL4) must be removed to facilitate access.

When the water heater and the climate system have been filled with water, VPB S/ VPBS S must operate at maximum normal temperature for at least one hour. Thereafter the system must be drained of water and refilled.

Emptying the system by

1. Open external filler valve and external drain valve.
2. Flush the system for some minute. Watch out for water splashes from the safety valve.
3. Close the valves and check the stainer.

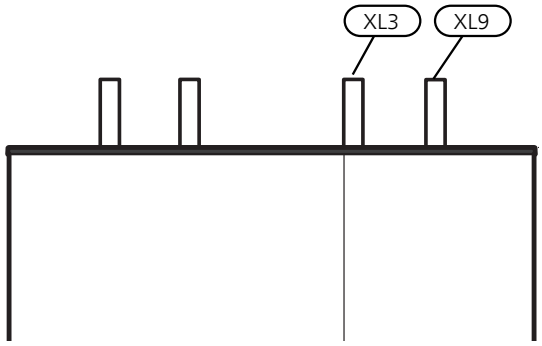
Emptying

The water heater is emptied through the siphon (with hose) in the cold water connection (XL3).

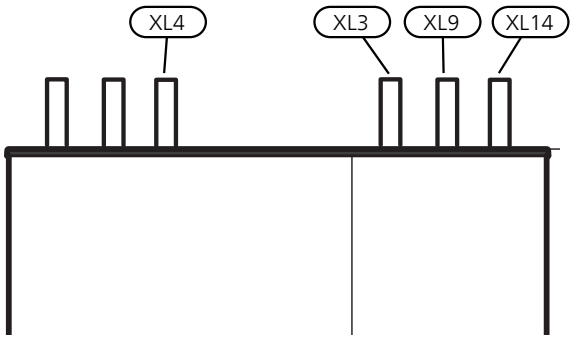
Drain the coil section through the siphon (with hose) on the docking connection, return to heat pump (XL9).

Drain the solar coil through the siphon (using hose) on the connection, return to solar heating system (XL14).

VPB S300



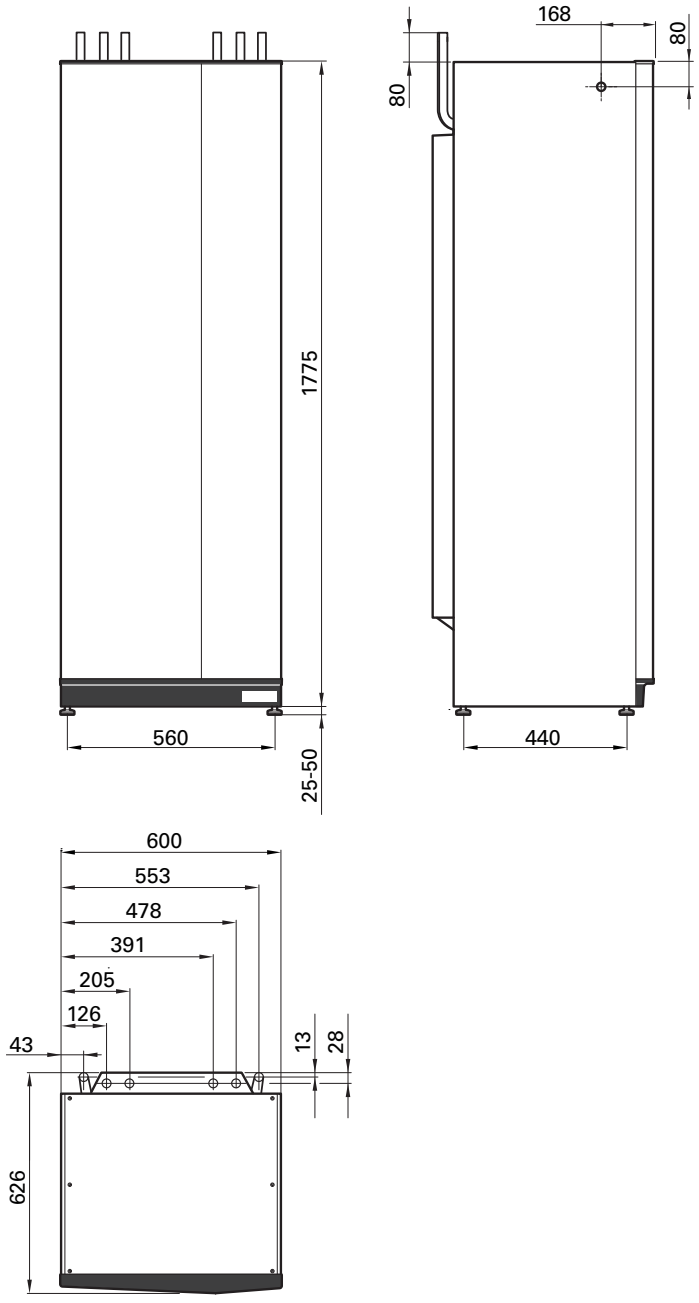
VPBS S300



4 Technical data

Dimensions

VPB S300 / VPBS S300



Technical specifications

VPB S300		*Stainless*
Volume	litre	276
Volume, charge coil	litre	8.8
Heat transfer (60/50°C at 50°C hot water temperature)	kW	13.1
Heat content at 50 °C	kWh	13.4
Equivalent amount of hot water (40 °C)[1]	litre	455
Heating time (12 °C to 62 °C)[2]	minutes	27
Primary coil capacity, domestic water (80 °C to 40 °C)	litre	268
Max operating temperature	°C	85
Max pressure, primary side	bar/MPa	3/0.3
Max pressure, water heater	bar/MPa	6/0.6
Max water supply pressure	bar/MPa	16/1.6
Pressure reduction valve, setting	bar/MPa	3.5/0.35
Max design pressure	bar/MPa	6 / 0.6
Exp. vessle, tap water, charge pressure	bar/MPa	3.5/0.35
Expansion relief valve, setting	bar/MPa	6/0.6
Max temperature, heating fluid	°C	85
Max operating pressure of T&P-valve	bar/MPa	7/0.7
Max operating temperature T&P-valve	°C	95
Height	mm	1800
Required ceiling height[3]	mm	1950
Width	mm	600
Depth	mm	626
Net weight	kg	125
Gross weight	kg	410
Part No.		081 147

1 At incoming temperatures 10 °C and hot water draining of 30 l/min.
2 At primary flow temperature 80 °C and primary flow 1025 l/h.
3 With the feet removed, the required ceiling height is approx. 1930 mm.

Tested according to standard EN 12897:2016.

VPBS S300		*Copper*
Volume (no dedicated solar storage volume)	litre	277
Volume, charge coil	litre	2
Volume, solar coil	litre	0.8
Volume, expansion vessel	litre	24
Heat content at 50 °C	kWh	12.4
Equivalent amount of hot water (40 °C)[1]	litre	470
Primary coil capacity, domestic water (60 °C to 40 °C)	litre	280
Solar coil capacity, domestic water (60 °C to 40 °C)	litre	282
Heating time, charge coil (10 °C to 60 °C)[2]	minutes	29
Heating time, solar coil (10 °C to 60 °C)[3]	h/m	1h52m
Max operating temperature	°C	85
Max pressure, primary side	bar/MPa	3/0.3
Max pressure, water heater	bar/MPa	5.5/0.55
Maximum pressure, solar coil	bar/MPa	3/0.3
Max water supply pressure	bar/MPa	16/1.6
Max design pressure	bar/MPa	6/0.6
Exp. vessle, tap water, charge pressure	bar/MPa	3.5/0.35
Expansion relief valve, setting	bar/MPa	6/0.6
Max temperature, heating fluid	°C	85
Max operating pressure of T&P-valve	bar/MPa	7/0.7
Max operating temperature T&P-valve	°C	95
Solar panels, max area	m^2	6
Height	mm	1800
Required ceiling height[4]	mm	1950
Width	mm	600
Depth	mm	626
Net weight	kg	137
Gross weight	kg	416
Part No.		081 148

1 At incoming temperatures 10 °C and hot water draining of 30 l/min.
2 At primary flow temperature 80 °C and primary flow 1025 l/h.
3 At primary flow temperature 80 °C and primary flow 278 l/h.
4 With the feet removed, the required ceiling height is approx. 1930 mm.

Tested according to standard EN 12897:2016.

Energy labelling

Supplier		*NIBE*	
Model		*VPB S300 R*	*VPBS S300 Cu*
Energy efficiency class		**C**	**C**
Heat loss	W	88	95
Volume	l	282	277

MAINS PRESSURE HOT WATER STORAGE SYSTEM COMMISSIONING CHECKLIST

This Commissioning Checklist is to be completed in full by the competent person who commissioned the storage system as a means of demonstrating compliance with the appropriate Building Regulations and then handed to the customer to keep for future reference.

Failure to install and commission this equipment to the manufacturer's instructions may invalidate the warranty but does not affect statutory rights.

Customer Name ______ Telephone Number ______

Address ______

Cylinder Make and Model ______

Cylinder Serial Number ______

Commissioned by *(print name)* ______ Registered Operative ID Number ______

Company Name ______ Telephone Number ______

Company Address ______

______ Commissioning Date ______

To be completed by the customer on receipt of a Building Regulations Compliance Certificate*:

Building Regulations Notification Number *(if applicable)* ______

ALL SYSTEMS PRIMARY SETTINGS (indirect heating only)

Is the primary circuit a sealed or open vented system?	Sealed ☐	Open ☐
What is the maximum primary flow temperature?		☐ °C

ALL SYSTEMS

What is the incoming static cold water pressure at the inlet to the system?			☐ *bar*
Has a strainer been cleaned of installation debris (if fitted)?		Yes ☐	No ☐
Is the installation in a hard water area (above 200ppm)?		Yes ☐	No ☐
If yes, has a water scale reducer been fitted?		Yes ☐	No ☐
What type of scale reducer has been fitted?			
What is the hot water thermostat set temperature?			☐ °C
What is the maximum hot water flow rate at set thermostat temperature (measured at high flow outlet)?			☐ *l/min*
Time and temperature controls have been fitted in compliance with Part L of the Building Regulations?			Yes ☐
Type of control system (if applicable)	Y Plan ☐	S Plan ☐	Other ☐
Is the cylinder solar (or other renewable) compatible?		Yes ☐	No ☐
What is the hot water temperature at the nearest outlet?			☐ °C
All appropriate pipes have been insulated up to 1 metre or the point where they become concealed			Yes ☐

UNVENTED SYSTEMS ONLY

Where is the pressure reducing valve situated (if fitted)?		
What is the pressure reducing valve setting?		☐ *bar*
Has a combined temperature and pressure relief valve and expansion valve been fitted and discharge tested?	Yes ☐	No ☐
The tundish and discharge pipework have been connected and terminated to Part G of the Building Regulations		Yes ☐
Are all energy sources fitted with a cut out device?	Yes ☐	No ☐
Has the expansion vessel or internal air space been checked?	Yes ☐	No ☐

THERMAL STORES ONLY

What store temperature is achievable?	☐ °C
What is the maximum hot water temperature?	☐ °C

ALL INSTALLATIONS

The hot water system complies with the appropriate Building Regulations	Yes ☐
The system has been installed and commissioned in accordance with the manufacturer's instructions	Yes ☐
The system controls have been demonstrated to and understood by the customer	Yes ☐
The manufacturer's literature, including Benchmark Checklist and Service Record, has been explained and left with the customer	Yes ☐

Commissioning Engineer's Signature ______

Customer's Signature ______

(To confirm satisfactory demonstration and receipt of manufacturer's literature)

*All installations in England and Wales must be notified to Local Authority Building Control (LABC) either directly or through a Competent Persons Scheme. A Building Regulations Compliance Certificate will then be issued to the customer.

benchmark COLLECTIVE MARK
THE MARK OF QUALITY FOR THE INSTALLATION, COMMISSIONING AND SERVICING OF DOMESTIC HEATING AND HOT WATER SYSTEMS

SERVICE RECORD

It is recommended that your hot water system is serviced regularly and that the appropriate Service Record is completed.

Service Provider
Before completing the appropriate Service Record below, please ensure you have carried out the service as described in the manufacturer's instructions.

SERVICE 1 Date

Engineer Name

Company Name

Telephone Number

Comments

Signature

SERVICE 2 Date

Engineer Name

Company Name

Telephone Number

Comments

Signature

SERVICE 3 Date

Engineer Name

Company Name

Telephone Number

Comments

Signature

SERVICE 4 Date

Engineer Name

Company Name

Telephone Number

Comments

Signature

SERVICE 5 Date

Engineer Name

Company Name

Telephone Number

Comments

Signature

SERVICE 6 Date

Engineer Name

Company Name

Telephone Number

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SERVICE 7 Date

Engineer Name

Company Name

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SERVICE 8 Date

Engineer Name

Company Name

Telephone Number

Comments

Signature

SERVICE 9 Date

Engineer Name

Company Name

Telephone Number

Comments

Signature

SERVICE 10 Date

Engineer Name

Company Name

Telephone Number

Comments

Signature

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info@nibe.co.uk
nibe.co.uk

CHB EN 2126-2 531237

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