

## SBP 100 Plus

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## 1 General information



Read these instructions carefully before using the appliance and retain them for future reference. Pass on these instructions along with the appliance as necessary.

### 1.1 Symbols in this document

Symbol	Meaning
	This symbol indicates possible property damage, equipment damage, consequential damage or environmental damage.
	General information is indicated by the adjacent symbol.
	This symbol indicates that you have to do something.
	This symbol indicates that you must fulfil certain prerequisites before you perform the following steps.
	This symbol indicates a result or intermediate result.
	These symbols show you the software menu level (in this example level 3).
	This symbol indicates a reference to the corresponding page number (page 11 in this example).

### 1.2 Symbols on the appliance

Symbol	Meaning
	Inlet/intake
	Outlet/discharge
	Heat pump
	Heating
	Sensor
	Air vent valve

### 1.3 Units of measurement

All measurements are given in mm unless stated otherwise.

### 1.4 Other applicable documents

- Operating and installation instructions for the connected heat pump

### 1.5 Target groups

#### Operator

Person without specialist expert knowledge

#### Qualified heating contractor

Person with specialist expert knowledge in the following areas: heating technology, heating media, building services and engineering, ventilation and air conditioning technology, measuring technology, heat pump technology, environmental technology, occupational safety and fire safety

#### Qualified electrical contractor

Person with specialist expert knowledge in the following areas: electrical engineering, measuring technology, occupational safety and fire safety

#### Apprentice

Apprentices may only carry out the assigned tasks under professional supervision and instruction.

#### Professional qualification

Subject to local legislation, training, a course of studies or skill development is required.

Specialist expert knowledge applies subject to local regulations.

#### Gender-sensitive documentation

We endeavour to follow language changes and use gender-aware linguistic form without compromising fluency. We aim to recognise, include and speak to all genders in our documentation.

## 2 Safety

### 2.1 Structure of the warning notices

#### 2.1.1 Section-specific warning notices

Section-specific warning notices apply to all steps in the section.

#### Injury

#### CAUTION



#### Type and source of risk

Consequence(s) of failure to observe the warning notice

- ▶ Hazard prevention measure(s)

#### Property damage, consequential losses, environmental pollution

#### NOTICE



#### Type and source of risk

Consequence(s) of failure to observe the warning notice

Hazard prevention measure(s)

#### 2.1.2 Embedded warning notices

Embedded warning notices apply only to the step immediately following the notice.

- ▶ **SIGNAL WORD: Consequence(s) of failure to observe the warning notice. Hazard prevention measure(s).** Step to which the warning notice refers

#### 2.1.3 Key to symbols

Symbol	Type of risk
	Injury
	Electrocution
	Burns, scalding

## 2.1.4 Signal words

Signal word	Meaning
DANGER	Failure to observe this information will result in death or serious injury
WARNING	Failure to observe this information may result in death or serious injury
CAUTION	Failure to observe this information may result in moderate or minor injury
NOTICE	Failure to observe this information may result in property damage, consequential losses or environmental damage

## 2.2 Intended use

The appliance is intended for the seasonal storage (around 5 months at a room temperature of 24 °C and relative humidity of 40 %) of heating water cooled to +7 °C. Constant cooling operation with heating water below +11 °C is not permissible.

The appliance extends the runtime of the heat generator and bridges blocking times. The appliance enables hydraulic separation between the heat pump circuit and heating circuit flows.

The appliance is intended for domestic use. It can be used safely by untrained persons. The appliance can also be used in non-domestic environments, e.g. in small businesses, as long as it is used in the same way.

Observation of these instructions and of instructions for any accessories used is also part of the intended use of this appliance.

## 2.3 Foreseeable misuse

Any other use beyond that described shall be deemed to be outside the intended use.

Using the appliance for heating fluids other than water or for water supplemented with chemicals, such as brine, is also deemed inappropriate.

## 2.4 Safety instructions

- Unsuitable spare parts and accessories may jeopardise user and appliance safety. Always use original spare parts and original accessories.

# 3 Appliance description

The appliance extends the runtime of the heat generator and bridges blocking times. The appliance enables hydraulic separation between the heat pump circuit and heating circuit flows.

The appliance is equipped with complete thermal insulation to protect against the formation of condensate.

# 4 Transportation (qualified contractors)

- ▶ Protect the appliance against heavy impact during transport.

# 5 Installation (qualified contractors)

## 5.1 Installation site

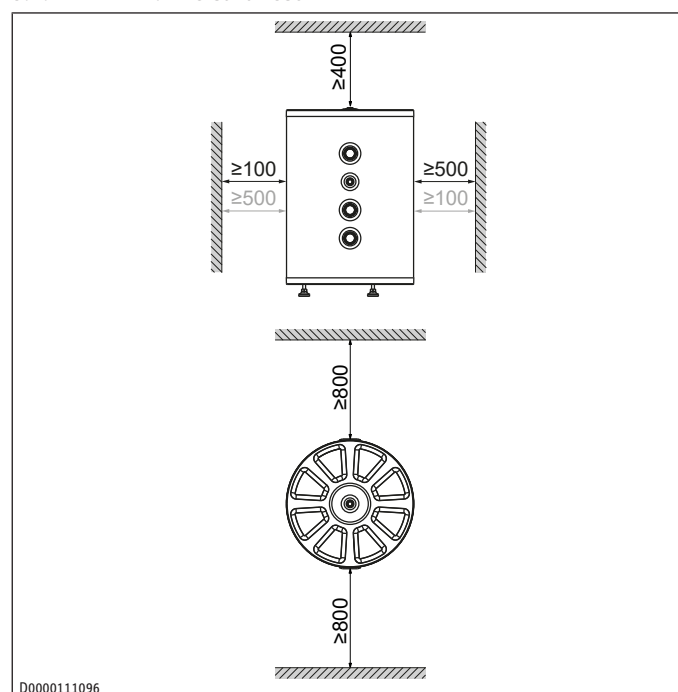
The installation site must fulfil the following requirements:

- Free from the risk of frost
- Dry

The substrate on which the appliance is to be installed must meet the following conditions:

- Horizontal
- Fixed
- Permanent
- Sufficient load bearing capacity (for weight of the appliance, see chapter *Data table* [▶ 13]).
- ▶ To reduce line losses, keep the distance short between the appliance and the heat pump.
- ▶ Observe the required room height (for height of the appliance, see chapter *Data table* [▶ 13]).

## 5.1.1 Minimum clearances



The minimum side clearances can be swapped between left and right.

- ▶ Maintain the minimum clearances in order to ensure trouble-free operation of the appliance and to allow enough space for maintenance work.

## 5.2 Siting the appliance

- ▶ Lift the appliance out of the packaging.
- ▶ Position the appliance in the final installation site.
- ▶ Observe chapter *Minimum clearances* [▶ 11].
- ▶ Use the adjustable feet to compensate for any unevenness in the floor.

## 5.3 Heating water connection

- ▶ **NOTICE: Foreign bodies, such as welding pearls, rust or sealing material, can impair the operational reliability of the appliance.** Flush the pipework thoroughly before connecting the appliance.
- ▶ Install the pipes carrying heating water (see chapter *Dimensions and connections* [▶ 13]).
- ▶ Connect the hydraulic connections with flat gaskets.

## Other connections

- ▶ Close off the connection "Do not use" (i31) (see chapter *Dimensions and connections* [▶ 13]).

### 5.3.1 Oxygen diffusion

#### Heating circuit oxygen diffusion

If oxygen gets into the heating system, steel parts may become corroded, e.g. the indirect coil in the DHW cylinder or the buffer cylinder. The products of corrosion (e.g. rusty sludge) can settle in the heating system components. This may cause the pipe cross-sections to narrow, leading to a lower output.

- ▶ Use oxygen diffusion-proof pipes and hoses (e.g. multi-layer composite pipes).
- ▶ If you have an open vented heating system, separate the heating circuit from the buffer cylinder. For example, you could use a plate heat exchanger for this.

### 5.3.2 Fitting the drain valve

- ▶ To facilitate maintenance work on the appliance, fit a drain valve (not included in standard delivery) in the lowest pipe line.

## 5.4 Sensor installation

- ✓ A temperature sensor is installed.
  - ▶ Install a sensor pocket at connection "Sensor heat pump return" (h02) (see chapter *Dimensions and connections* [▶ 13]).
  - ▶ Install an immersion sensor in the sensor pocket and wire the sensor up.
- ✓ No temperature sensor is installed.
  - ▶ Close off the connection "Sensor heat pump return" (h02) (see chapter *Dimensions and connections* [▶ 13]).

## 6 Commissioning (qualified contractors)

- ▶ If no safety valve is installed in the heat pump, install a safety valve on site.
- ▶ Fill the appliance.
- ▶ Unscrew the metal plug from the connection "Ventilation" (d46) until no more air is discharged (see chapter *Dimensions and connections* [▶ 13]).
- ▶ Seal off the appliance by reinserting the metal plug.
- ▶ Fit accessories as required.
- ▶ Check the accessories to ensure functionality and no leaks.

## 7 Cleaning (operators)

- ▶ Never use abrasive or corrosive cleaning agents. A damp cloth is sufficient for cleaning the appliance.
- ▶ Check the taps regularly. Limescale deposits at the tap outlets can be removed using commercially available descaling agents.

## 8 Maintenance (qualified contractors)

### 8.1 Draining the appliance

#### WARNING



#### Burns

Hot water may escape when draining the appliance.

- ▶ Wear heat-resistant protective gloves.

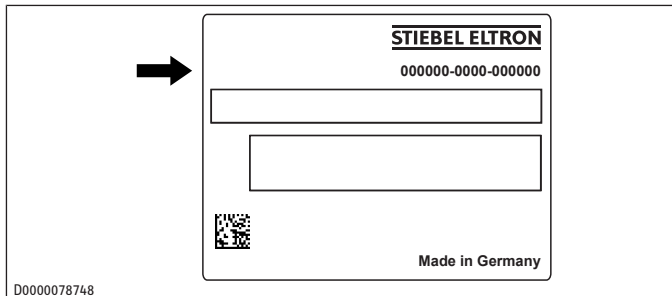
If you need to drain the appliance for maintenance purposes or when there is a risk of frost, follow the steps below.

- ▶ Close the shut-off valves in the inlet lines.
- ▶ Connect a drain line to the drain valve (neither are included in standard delivery).
- ▶ Open the drain valve.
- ✓ The overpressure is relieved.
- ▶ Unscrew the metal plug from the connection "Ventilation" (d46) (see chapter *Dimensions and connections* [▶ 13]).
- ▶ Fully drain the appliance.
- ▶ Seal off the appliance by reinserting the metal plug.

## 9 Troubleshooting (operators)

- ▶ Contact your qualified contractor.
- ▶ To facilitate and speed up your enquiry, please provide the qualified contractor with the number from the type plate.

#### Example type plate

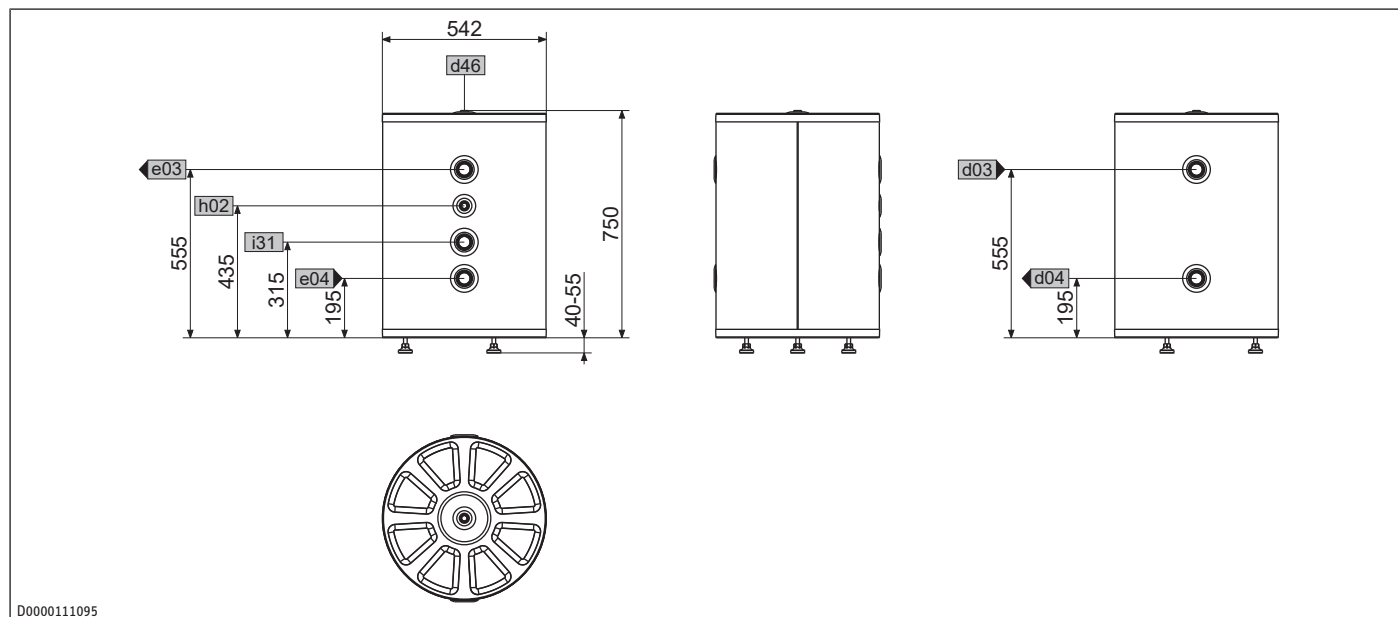


## 10 Shutdown (qualified contractors)

- ▶ Drain the appliance (see chapter *Draining the appliance* [▶ 12]).

## 11 Specification

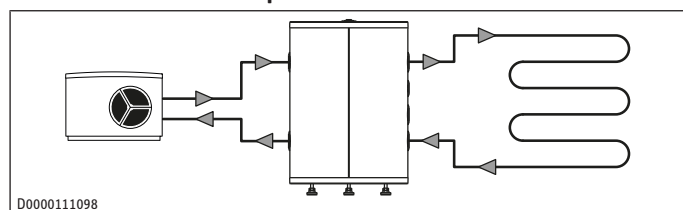
### 11.1 Dimensions and connections



D0000111095

			SBP 100 Plus
d03	Heat pump flow optional	Female thread	G 1 1/4
d04	Heat pump return optional	Female thread	G 1 1/4
d46	Ventilation	Female thread	G 1/2
e03	Heating flow optional	Female thread	G 1 1/4
e04	Heating return optional	Female thread	G 1 1/4
h02	Sensor heat pump return	Female thread	G 1/2
i31	Do not use		

#### 11.1.1 Installation example



D0000111098

#### 11.2 Energy consumption data

Product Fiche: Hot water storage tanks to Regulation (EU) No. 812/2013/ (S.I. 2019 No. 539 / programme 2)

			SBP 100 Plus
			206279
Manufacturer		STIEBEL ELTRON	
Supplier's model identifier		SBP 100 Plus	
Energy efficiency class		C	
Standing loss S	W	62	
Storage volume V	l	100	

#### 11.3 Data table

			SBP 100 Plus
			206279
Energy data			
Energy efficiency class		C	
Standby energy consumption/ 24 h at 65 °C	kWh	1.5	

			SBP 100 Plus
Hydraulic data			
Nominal capacity	l	100	
Application limits			
Max. permissible pressure	MPa	0.3	
Test pressure	MPa	0.45	
Max. permissible temperature	°C	95	
Dimensions			
Height	mm	750	
Width	mm	542	
Depth	mm	542	
Height when tilted	mm	935	
Weights			
Weight, full	kg	140	
Weight, empty	kg	40	

## 12 Guarantee

The guarantee conditions of our German companies do not apply to appliances acquired outside of Germany. In countries where our subsidiaries sell our products a guarantee can only be issued by those subsidiaries. Such guarantee is only granted if the subsidiary has issued its own terms of guarantee. No other guarantee will be granted.

We shall not provide any guarantee for appliances acquired in countries where we have no subsidiary to sell our products. This will not affect warranties issued by any importers.

## 13 Environment and recycling

We would ask you to help protect the environment. After use, dispose of the various materials in accordance with national regulations.



Comfort through Technology



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