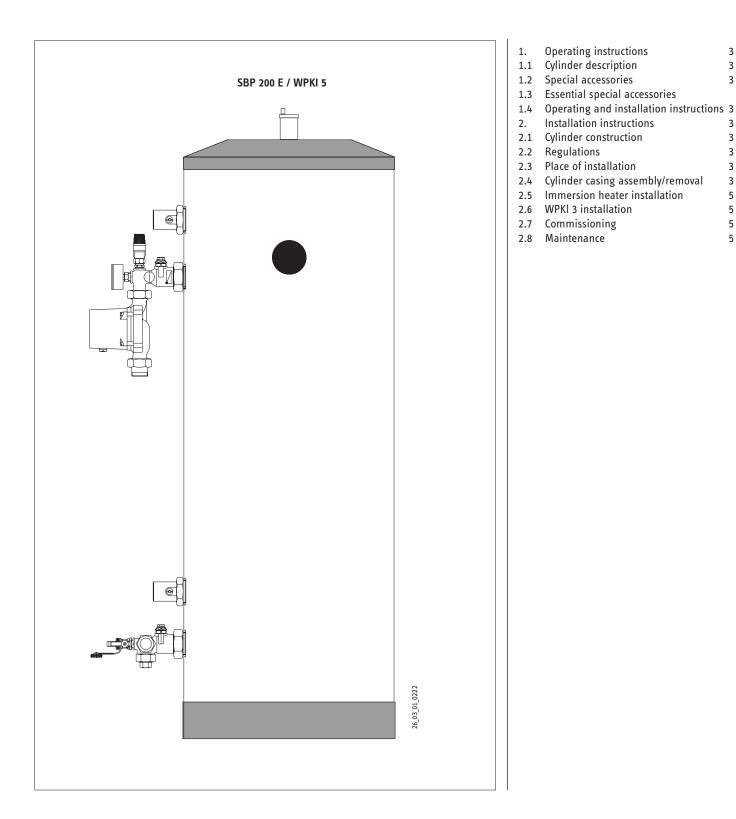
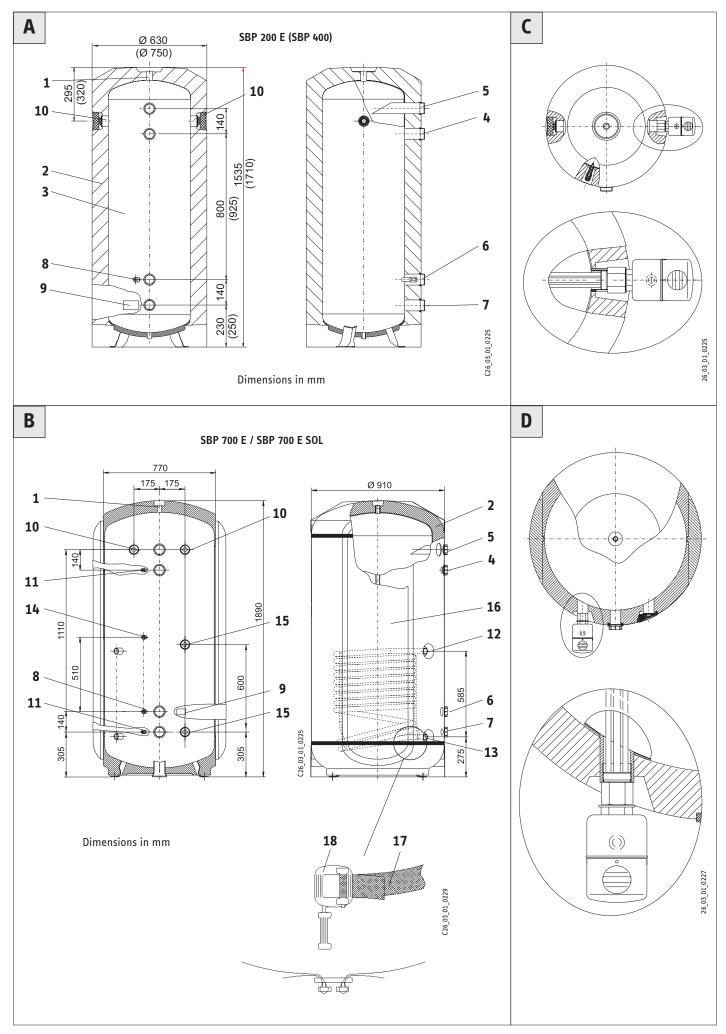
SBP 200 E, SPB 400 E, SBP 700 E, SBP 700 E SOL with WPKI 5

Operating and installation instructions





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Instructions for users and contractors

SBP 200 E	Part no:	18 54 58
SBP 700 E	Part no:	18 54 59
SBP 400 E	Part no:	22 08 24
SBP 700 E SOL	Part no:	18 54 60

1.1 Cylinder description

The sealed freestanding cylinder (with a volume of 200 or 700 litres) acts as buffer cylinder for heat pumps.

A buffer cylinder is recommended to ensure trouble-free heat pump operation. It acts as a bridge during electricity supply shutdown periods and as separator between the volume flow in the heat pump and that in heating circuits

Features of the SBP 700 E SOL

The cylinder SBP 700 E SOL is also fitted with a heat exchanger for boosting the DHW with solar energy.

1.2 Special accessories

WPKI 5 Part no: 22 08 30

The compact installation heat pump set WPKI 3 is designed especially for use with buffer cylinders SBP 200 E, SBP 400 and SBP 700 E (SOL). Clear and simple connection of buffer cylinder SBP to heat pumps WPL.

WPKI 6 Part no: 22 08 31

The compact heat pump set WPKI 4 is designed especially for use with buffer cylinders SBP 200 E and SBP 700 E (SOL). Clear and simple connection of buffer cylinder SBP to heat pumps WPF.

Inserts Part no: 00 37 11

For close fitting pipe connection of the buffer cylinder without heat pump compact installation WPKI 3. This set comprises 4 inserts, 4 gaskets and 4 union nuts G 2".

Thermally insulated pressure hoses

		SBP 200 E	SBP 400 E	SBP 700 E	SBP 700 E SOL
Weight: empty:	kg	56	82	145	176
full	kg	256	482	845	876
Height of unit when tilted:	mm	1650	1800	2000	2000
Permissible operating pressure	MPa (bar)	0,3 (3)	0,3 (3)	0,3 (3)	0,3 (3)

G 1¹/4" x 1 m (DN 25)	Part no: 07 44 15
G 1¹/4" x 2 m (DN 25)	Part no: 07 44 16
G 1¹/4" x 5 m (DN 25)	Part no: 07 44 17
G 1¼" x 1 m (DN 32)	Part no: 07 44 14
G 1¼" x 2 m (DN 32)	Part no: 18 20 19
G 1¼" x 5 m (DN 32)	Part no: 18 20 20

1.3 Essential special accessories

UP 25-60-180	Part no: 07 43 25
UP 25-80-180	Part no: 07 43 16
For further accessories, s	ee the design docu-
mentation.	

1.4 Operating and installation instructions

Observe the operating and installation instructions of the components for each relevant system.

Keep these operating instructions /!\ in a safe place and pass them on to any new user, should the equipment change hands. Let your contractor check their content in conjunction before commencing any maintenance or repair work

2. Installation instructions for contractors

To prevent damage and contamination, we recommend that the cylinder casing is removed for transportation and installation (see 2.3). Do not use a barrel clamp!

2.1 Cylinder construction (A. B. E)

- 1 Ventilation connectors R 3/4" and combined temperature and pressure relief valve
- PUR foam thermal insulation 2
- Steel container 3
- G 2" flow connector, heat pump compact 4 installation
- 5 G 2" heating flow connector
- G 2" heating return connector 6
- 7 G 2" return connector, heat pump compact installation
- 8 G 1/2" connector with protective pipe for HP return temperature sensor
- 9 Type plate (on the protective cover)
- G 1¹/2" connectors, for electric immersion 10 heater
- G 1/2" connector, sealed with plug 11
- G 1" flow connector, HE solar 12 (only SBP 700 E SOL)
- G 1" return connector, HE solar 13 (only SBP 700 E SOL)

- 14 G 1/2" connector with protective sleeve for temperature sensor (only SBP 700 E SOL)
- G 1¹/2" connector for additional heat source 15
- PUR foam body, thermal insulation segment 16
- 17 Retaining strap
- Buckle 18
- 19 Plastic casing
- Plastic lid 20
- Plastic plinth cover 21

2.2 Regulations

- Installation and commissioning, as well as the maintenance of this equipment, must only be carried out by an authorised qualified contractor in accordance with these instructions.
- Optimum function and safe operation can only be assured when using original, specialised accessories and spare parts intended for this equipment.

2.3 Place of installation

The installation location should be safe from frost. If the system is not in use at times when frost is likely, drain the cylinder and the whole system connected to it, to prevent damage.

Ensure that the floor at the installation location is a load bearing surface, which must be level and even.

Secure the cylinder feet firmly to the floor to prevent tipping.

Minimum ceiling height: 1.80 m for SBP 200 E, 2.00 m for SBP 400 E and

2.10 m for SBP 700 E.

2.4 Cylinder casing assembly / removal

The cylinder casing is fitted in the delivered condition. It can be removed if necessary.

Removal (E):

- Removing the plastic lid (20) 1.
- 2. Removing the plastic plinth cover (21)
- Removing the plastic casing (19) 3.

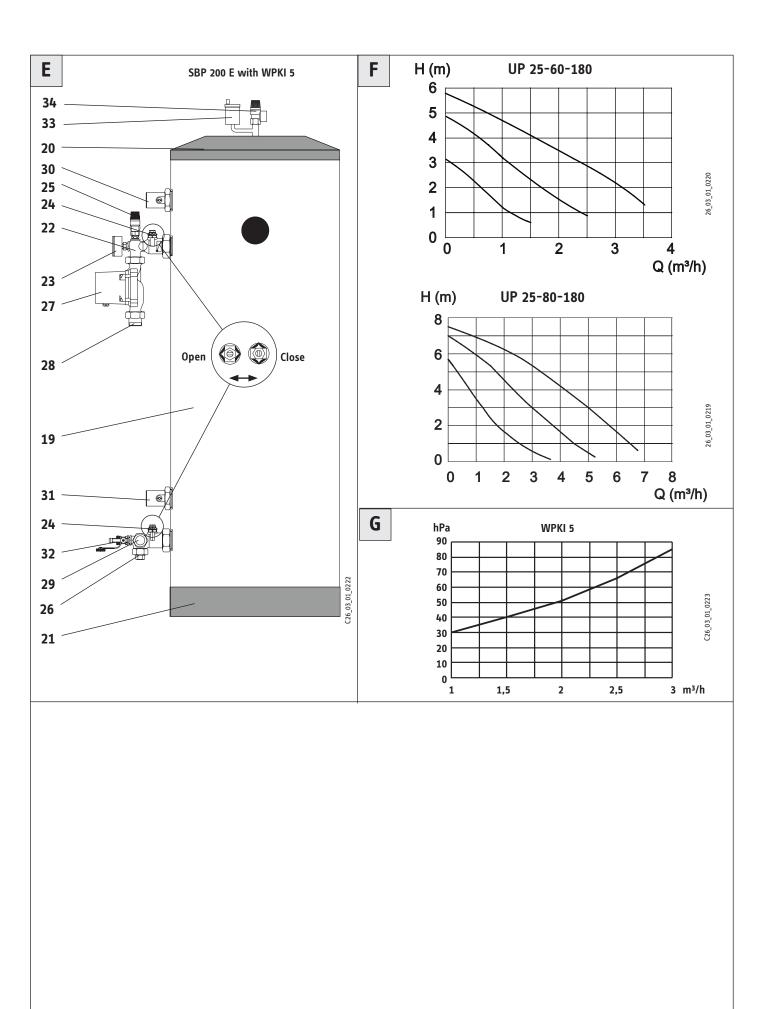
Installation in reverse order.



Fit the cylinder casing before installation work begins on the immersion

Features of the SBP 700 E and the SPB 700 E SOL (B)

The two polyurethane foam segments, attached to both sides of the cylinder, can be removed to ensure safe transportation of the cylinder through narrow passages and door-



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ways. To do this, undo the retaining straps (17) at the buckles (18). In the installed condition, the buckles should be near a joint (segment/ cylinder thermal insulation).

Information about using additional connectors for the sensor protection sleeve of the SBP 700 cylinder (B)

Should it be necessary to install further sensor protection sleeves in the cylinder, two additional connectors are available at the top and bottom, under the foam insulation (11). To do this, drill holes at the marked places of the plastic casing with, for example, a 70 mm hole saw. Remove the thermal insulation from around the connectors so that the sensor protection sleeves can be fitted.

2.5 Immersion heater installation (C, D)

To boost the heat input, one electric immersion heater can be installed into the SBP 200 E and SBP 400 E (either from the right or from the left); two immersion heaters can be installed into model SBP 700 E. To do this, remove the connector cap (**10**) and unscrew the vent plug. Removing the vent plug requires a socket wrench (SW 32).

2.6 WPKI 5 installation (E)

- Set components
- 22 Connector
- 23 Temperature pressure gauge
- 24 Ball shut-off valve
- 25 Safety valve
- 26 G ³/₄" A connection for expansion vessel
- 27 Circulation pump (special accessory)
- 28 G 1¹/4" A HP flow connector
- 29 G 1¹/4" A HP return connector
- 30 G 1¹/4" I connector with ball shut-off valve (heating flow)
- 31 G 1¹/4" I connector with ball shut-off valve (heating return)
- 32 Fill/drain valve
- 33 Automatic air-vent valve (on-site provision)
- 34 Combined temperature and pressure relief valve

Installation

The WPKI 5 set is delivered in pre-assembled individual parts. All pre-assembled parts are factory sealed.

It is recommended that the components in the WPKI 5 set and the selected circulation pump are connected to the cylinder and tightened by hand before installation. Once all components have been connected to the cylinder, tighten all fittings. Connect the expansion vessel and the fill/drain valve to the pre-determined connector (32) and (26).

Connect heat pump flow and return to the heat pump at positions (28) and (29).

Ensure that it is impossible to shutoff the safety valve on the heat source.. When there is a risk of frost in the alternative system, install a drain valve on-site to drain the external air/water heat pump (WPL connection hoses).

All shut-off devices are ball shut-off valves, which provide a good seal. A spanner (SW 19) is recommended to open and close the shut-off valves (24).

Circulation pump (cylinder primary pump)

The pump output curve (**F**) and the pressure loss of the WPKI 5 (**G**) can provide helpful information on which circulation pump set to select. Subject to the heat pump type and the following connection mode (**H**), at standard length, we recommend a circulation pump set from the following table.

	UP 32-60-180	UP 32-80-180
WPL 10	•	
WPL 13		•
WPL 18		•
WPL 23	•	
WPL 33	•	

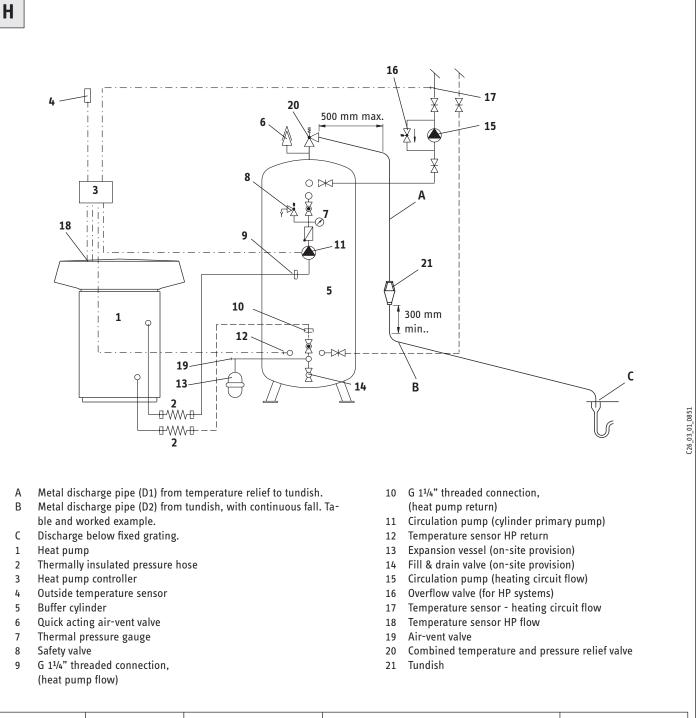
2.7 Commissioning

(to be implemented only by a qualified contractor)

- ① Fill and vent the freestanding cylinder.
- Follow user and installation instructions and check the functions of special accessories (immersion heater).
 Check the safety valve function.

2.8 Maintenance

- When working on permanently fitted electrical components, disconnect every part of the equipment from the mains.
- Regularly vent the safety valve until water flows from it. Shut off the safety valve after the inspection.



Valve outlet size	Minimum size of discharge pipe D1	0	Maximum resistance allowed, expressed as a length of straight pipe (i.e. no elbows or bends)	Resistance created by each elbow or bend
G3/4	22 mm	28 mm	Up to 9 m	1.0 m
		35 mm	Up to 18 m	1.4 m
		42 mm	Up to 27 m	1.7 m

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Guarantee

For guarantees please refer to the respective te rms and conditions of supply for your country.

The installation, electrical connection and first operation of this appliance should be carried out by a qualified installer.

The company does not accept liability for failure of any goods supplied which have not been installed and operated inaccordance with the manufacturer's instructions.

Environment and recycling

Please help us to protect the environment by disposing of the packaging in accordance with the national regulations for waste processing.

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