an ideal tomorrow

Operating Manual

Domestic hot water tank
Solar domestic hot water tank

Accessory for heat pumps

UK

www.aitgroup.com

83018600mUK

1 Please read first

This operating manual provides important information on the handling of the unit. It is an integral part of the product and must be stored so that it is accessible in the immediate vicinity of the unit. It must remain available throughout the entire service life of the unit. It must be handed over to subsequent owners or users of the unit.

Read the operating manual before working on or operating the unit. This applies in particular to the chapter on safety. Always follow all instructions completely and without restrictions.

It is possible that this operating manual may contain instructions that seem incomprehensible or unclear. In the event of any questions or if any details are unclear, contact the factory customer service department or the manufacturer's local partner.

Since this operating manual was written for several different models of the unit, always comply with the parameters for the respective model.

This operating manual is intended only for persons assigned to work on or operate the unit. Treat all constituent parts confidentially. The information contained herein is protected by copyright. No part of this manual may be reproduced, transmitted, copied, stored in electronic data systems or translated into another language, either wholly or in part, without the express written permission of the manufacturer.

2 Symbols

The following symbols are used in the operating manual. They have the following meaning:

Information for operators.

Information or instructions for qualified technicians.

DANGER
Indicates a direct impending danger resulting in severe injuries or death.

WARNING
Indicates a potentially dangerous situation that could result in serious injuries or death.

CAUTION
Indicates a potentially dangerous situation that could result in medium or slight injuries.

IMPORTANT
Indicates a potentially dangerous situation, which could result in property damage.

NOTE
Emphasised information.

1., 2., 3., … Numbered step within a multi-step instruction for action.
Adhere to the given sequence.

► Single-step instruction for action

● List

→ Reference to further information elsewhere in the operating manual or in another document.

Contents

3 Intended use

The storage tank is designed for household use and may only be used as intended.

This means as a domestic hot water tank suitable for normal drinking water in conjunction with:

- Air/water heat pumps
- Brine/water heat pumps
- Water/water heat pumps

CAUTION
The electrical conductivity of the domestic hot water must be > 100 µS/cm and must lie within the drinking water quality values.

NOTE
With solar domestic hot water tanks (SWWS) it is possible to connect solar systems.

► If local regulations apply, observe: laws, standards and directives.

4 Disclaimer

The manufacturer is not liable for losses resulting from any use of the unit which is not its intended use.

The manufacturer's liability also expires:

- if work is carried out on the unit and its components contrary to the instructions in this operating manual.
- if work is improperly carried out on the unit and its components.
- if work is carried out on the unit which is not described in this operating manual, and this work has not been explicitly approved by the manufacturer in writing.
- if the unit or components in the unit have been altered, modified or removed without the explicit written consent of the manufacturer.

5 Safety

The unit is safe to operate when used for its intended purpose. The construction and design of the unit conform to current state-of-the-art standards, all relevant DIN/VDE regulations and all relevant safety regulations.

The operating manuals supplied with the product are intended for all users of the product.

The operation of the product via the heating and heat pump control and work on the product which is intended for end customers / operators is suitable for all age groups of persons who are able to understand the activities and the resulting consequences and can carry out the necessary activities.

Children and adults who are not experienced in handling the product and do not understand the necessary activities and the resulting consequences must be instructed and, if necessary, supervised by persons experienced in handling the product and who are responsible for safety.

Children must not play with the product.

The product may only be opened by qualified personnel.

All instructional information in this operating manual is solely directed at qualified, skilled personnel.

Only qualified, skilled personnel is able to carry out the work on the unit safety and correctly. Interference by unqualified personnel can cause life-threatening injuries and damage to property.

► Ensure that the personnel is familiar with the local regulations, especially those on safe and hazard-aware working.

Work on the system may only be carried out by qualified personnel (heating installer, plumbing installer).

Every person who carries out work on the unit must comply with the applicable accident prevention and safety regulations. This applies in particular to the wearing of personal protective clothing.

During the warranty and guarantee period, servicing and repair work may only be carried out by personnel authorised by the manufacturer.

5.1 Personal protective equipment

During transport and work on the unit, there is a risk of cuts due to the sharp edges of the unit.

► Wear cut-resistant protective gloves.

During transport and work on the unit, there is a risk of foot injuries.

► Wear safety shoes.

When working on liquid-conveying lines, there is a risk of injury to the eyes due to leakage of liquids.

► Wear safety goggles.

5.2 Residual risks

Injuries caused by high temperatures

► Before working on the unit, let it cool down.

Safety instructions and warning symbols

► Observe the safety instructions and warning symbols on the packaging and on and in the unit.

6 Contact

Addresses for purchasing accessories, for servicing or for answers to questions about the unit and this operating manual can be found on the internet and are kept up-to-date.

→ “Contact” in the heat pump operating manual

7 Warranty / Guarantee

For warranty and guarantee conditions, please refer to the purchase documents.

NOTE
Please contact your dealer about all matters concerning warranties and guarantees.

8 Maintenance of the unit

The functional safety of the safety valve and the pressure reducer, if integrated in the system (to be provided on site) must be checked at regular intervals. We also recommend annual cleaning / servicing of the tank by a specialist firm.

CAUTION
Have the magnesium anode checked and if necessary renewed by the customer service for the first time after 2 years and then at appropriate intervals.
Renew anode if protective current lower than 0.3 mA. After replacing the anode, re-install earthing cable between anode and storage tank jacket.

NOTE
Descale electric heating elements (if installed) annually, or at shorter intervals depending on the hardness of the water. Carry out a functional check at the same time.

9 Disposal

When withdrawing the old unit from service, comply with the relevant local laws, guidelines, directives andstandards concerning recovery, recycling and disposal.

10 Scope of delivery

Domestic hot water storage tank enamelled to DIN 4753 with smooth tube heat exchanger designed especially for heat pumps, integrated corrosion protection anode and 1 sensor for the heating and heat pump controller.

1. Check the delivery for outwardly visible signs of damage.
2. Check to make sure that the delivery is complete. Report defects or incorrect deliveries immediately.

Refer to the rating plate attached to the delivered storage tank to find out what type of storage tank it is. The abbreviations stand for the following:

- WWS = domestic hot water tank
- SWWS = solar domestic hot water tank (domestic hot water tank with ability to connect solar systems)

Accessories

CAUTION
Use only original accessories from the manufacturer of the unit.

Use of electric heating elements is only allowed up to 14°dH.

→ For electric heating elements suitable for the respective storage tank: „Technical Data“, from page 10.

CAUTION
When assembling an electric heating element, always ensure that the electric heating element is insulated from the storage jacket (is not in contact with the metal of the storage jacket).

→ For details of the quantity and positioning of the heating element sockets: dimensioned drawing of the respective tank.

11 Transport, Installation, Mounting

Observe the following when performing all work:

CAUTION
The tank must be installed in a frostproof room, to prevent frost damage to the storage tank, pipe system and connections.

NOTE
Install the storage tank as close as possible to the heat generator, to keep the heat losses as low as possible. Ensure the shortest possible pipe lengths to the load.

CAUTION
The floor or ground at the place of installation must be dry, firm and able to safely support the weight of the tank.

→ For the weight of the tank: dimensioned drawing for the respective model.

11.1 Transport to installation location

To avoid damage during transport, transport the storage tank (secured on the wooden pallet) to its final installation location using a lifting truck.

WARNING!
The unit can tip over when being removed from the wooden pallet and during transport with a hand truck or lift truck. This can result in personal injuries and damage.

► Take suitable precautions to prevent the tipping hazard.

► Dispose of the transport and packaging material in an environmentally friendly way and in accordance with local regulations.

NOTE
For transport and installation, the insulation in the form of half-shells can be removed from the following models:

Item number	Short description	Insulation
15069801	WWS 202	firmly foamed
15091901	WWS 303.1	firmly foamed
15211001	WWS 303.2	firmly foamedt
15211301	SWWS 404.2	firmly foamed
15211101	WWS 405.2	firmly foamed
15211201	WWS 507.2 silver grey	firmly foamed
15211401	SWWS 506.2	firmly foamed
15038801	SWWS 806	detachable
15038901	SWWS 1008	detachable

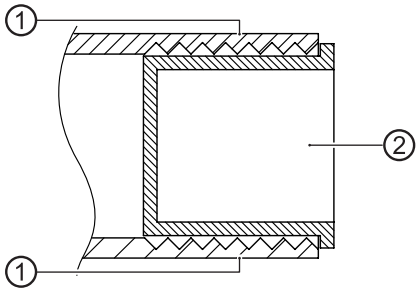
11.2 Installation

When installing the tank, ensure sufficient clearance from walls and other objects to enable the connection pipes to be fitted.

11.3 Mounting

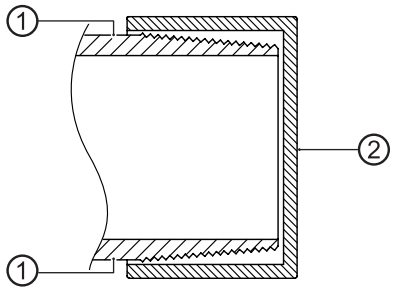
CAUTION
With our domestic-hot-water tanks, the following plastic protective components can be deployed on and in the connections:

- Plastic plugs **for internal threads** (Protect the threads and must be removed during installation. For connections which are not required, they must be replaced with pressure-resistant plugs):



1 Connecting piece
2 Plastic plug

- Plastic caps **for external threads** (Protect the threads and must be removed during installation. For connections which are not required, they must be replaced with pressure-resistant caps):



1 Connecting piece
2 Plastic sleeve

NOTE
To level out pressure fluctuations or water hammer in the cold water network and to avoid unnecessary water loss, we recommend installation of a suitable expansion vessel with flow fittings.

CAUTION
Do not exceed the operating pressures specified on the rating plate. If necessary, install a pressure reducer.

NOTE
Close off any connections not required with appropriate plugs.

→ For position of the connections: dimensioned drawing for the respective model.

CAUTION
Always integrate the tank in the system according to the connection instructions.

→ „Connection instructions“, from page 22.

Use the safety valve according to the respective current standards, guidelines and directives and according to the maximum allowae operating pressures of the storage tank and components.

The safety discharge of the safety valve must be discharged into the drain via a funnel-shaped odour trap according to the respective current standards, guidelines and directives!

Water can drip from the safety valve.

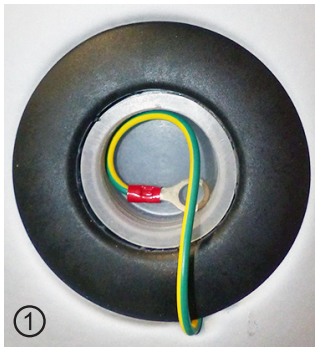
Assembling the earth cable for the protective anodes

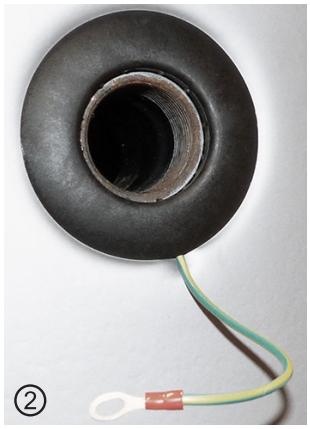
(only WWS 806 – 1006, SWWS 806 – 1008)

CAUTION
The protective anodes (included in the scope of delivery) must be installed by the customer for the WWS 806, WWS 1006, SWWS 806 or SWWS 1008 storage tanks. The earthing cable connected to the storage jacket must be fitted to the protective anodes after the protective anode has been inserted in order for the protective anodes to function correctly.

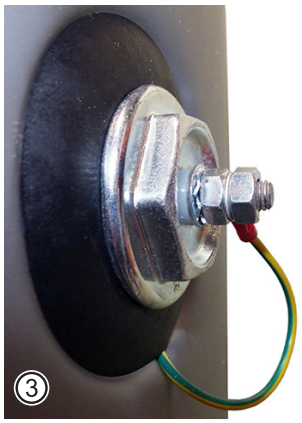
1. Pull out the earth cable (refer to Figure ①) on both two sleeves for the protective anodes and remove the plastic plugs (refer to Figure ②).

→ Dimensonal drawings:
“WWS 806 • WWS 1006", page 18
“SWWS 806 • SWWS 1008", page 21





2. Apply seals (included in the scope of delivery) to the protective anodes. Insert protective anodes into the storage tank and screw tightly.
3. Assemble the earth cable onto each protective anode (refer to Figure ③).



11.4 Installation of the sensor for the heating and the heat pump regulator

Depending on the unit model, you must install the sensor included in the scope of supply for the heating and heat pump controller on site in of the sensor pockets provided for this purpose. (In some models this sensor is installed in the factory).

Insertion depth from top edge of immersion sleeve
→ Table“Sensor positions", page 8

Sensor connection:
→ Heat pump operating manual.

Domestic hot water temperature setting
→ Controller operating manual

NOTE
In case of installation of the solar circuit with simultaneously installed electric heating element the maximum storage tank temperature must be set so that the safety temperature limiter (overheat cut-off device) does not trip. To this end, follow the separate operating instructions of the heating element and solar controller.

Sensor positions

Item number	Item description	installation depth
15069801	WWS 202	550 mm
15211001	WWS 303	550 mm
15211101	WWS 405	550 mm
15211201	WWS 507	550 mm
15038801	SWWS 806	1000 mm
15038901	SWWS 1008	1000 mm
15211301	SWWS 404	550 mm
15211401	SWWS 506	550 mm

12 Commissioning

1. Flush and fill the domestic hot water circuit and heat exchanger before commissioning.

→ The quality of the flushing water can be found in the operating manual of the heat pump.

2. Flush and fill the domestic hot water circuit and the storage tank.
3. Check the safety valve is working properly (and if applicable the pressure reducer)
4. Make sure that the earth cable of the protective anode(s) is connected to the metal storage jacket.

13 Insulation of the connections and the storage tank

NOTE
Insulate in accordance with applicable local standards and guidelines/directives.

1. Check all hydraulic connections for leaks. Perform leak test.
2. **Insulate** all connections and pipes.

14 Draining

The storage tank is drained via the drain valve.

→ For position: dimensioned drawing for respective model.

Shut-off valves must remain closed during draining. The connection at the hot water outlet should be open to the atmosphere.

Technical Data

Tank name			WWS 202
Domestic hot water tank | Solar domestic hot water tank	• yes	– no	• | –
Domestic hot water reservoir			
Energy efficiency class according to ErP		…	B
Standing loss according to ErP (at 65°C)		W	57
Total tank volume according to ErP		l	199
Nominal capacity		l	184
Max. operating pressure		bar	10
Test pressure		bar	13
Operating temperature minimum | maximum		°C	– | 95
Corrosion protection according to		…	DIN 4753
Enamelled surface	• yes	– no	•
Heating water circuit heat exchanger			
Capacity		l	15
Pressure loss | flow rate		bar | l/h	0,015 | 1000
Max. operating pressure		bar	16
Test pressure		bar	21
Operating temperature minimum | maximum		°C	110
Maximum heating output of the heat pump at heat source max.		kW	10
Solar circuit heat exchanger			
Capacity		l	–
Pressure loss | flow rate		bar | l/h	– | –
Max. operating pressure		bar	–
Test pressure		bar	–
Operating temperature minimum | maximum		°C	– | –
Installation location			
Room temperature minimum | maximum		°C	7 | 35
Relative humidity maximum (non-condensing)		%	65
General unit data			
Tightening torque cleaning flange		N/m	43
Maximum output of electric heating element		kW	1 x 4,5
Tests		…	SVGW / SEV
Insulation			
Material: Rigid foam | soft foam	• yes	– no	• | –
Insulation thickness		mm	45
as per DIN 4753	• yes	– no	•
Sheet metal jacket ı Foil jacket	• yes	– no	– | •
*) for further details see dimensional drawing | Manufacturer: ait deutschland GmbH | Index: a			813609

Technical Data

Tank name		WWS 303.1	WWS 303.2	WWS 405.2
Domestic hot water tank | Solar domestic hot water tank • yes – no		• | –	• | –	• | –
Domestic hot water reservoir				
Energy efficiency class according to ErP	…	A	B	B
Standing loss according to ErP (at 65°C)	W	44	70	63
Total tank volume according to ErP	l	300	295	374
Nominal capacity	l	276	271	339
Max. operating pressure	bar	10	10	10
Test pressure	bar	13	13	13
Operating temperature minimum | maximum	°C	– | 95	– | 95	– | 95
Corrosion protection according to	…	DIN 4753	DIN 4753	DIN 4753
Enamelled surface • yes – no		•	•	•
Heating water circuit heat exchanger				
Capacity	l	24	24	35
Pressure loss | flow rate	bar | l/h	0,024 | 2000	0,024 | 2000	0,035 | 2000
Max. operating pressure	bar	16	16	16
Test pressure	bar	21	21	21
Operating temperature minimum | maximum	°C	110	110	110
Maximum heating output of the heat pump at heat source max.	kW	16	16	23
Solar circuit heat exchanger				
Capacity	l	–	–	–
Pressure loss | flow rate	bar | l/h	– | –	– | –	– | –
Max. operating pressure	bar	–	–	–
Test pressure	bar	–	–	–
Operating temperature minimum | maximum	°C	– | –	– | –	– | –
Installation location				
Room temperature minimum | maximum	°C	7 | 35	7 | 35	7 | 35
Relative humidity maximum (non-condensing)	%	65	65	65
General unit data				
Tightening torque cleaning flange	N/m	43	43	43
Maximum output of electric heating element	kW	1 x 4,5	1 x 4,5	1 x 4,5
Tests	…	SVGW / SEV	SVGW / SEV	SVGW / SEV
Insulation				
Material: Rigid foam | soft foam • yes – no		• +VIP | –	• | –	• | –
Insulation thickness	mm	45	45	70
as per DIN 4753 • yes – no		•	•	•
Sheet metal jacket ı Foil jacket • yes – no		– | •	– | •	– | •
*) for further details see dimensional drawing | Manufacturer: ait deutschland GmbH | Index: a		813611	813612	813613

Technical Data

Tank name		WWS 507.2	WWS 806	WWS1006
Domestic hot water tank | Solar domestic hot water tank • yes – no		• | –	• | –	• | –
Domestic hot water reservoir				
Energy efficiency class according to ErP	…	B	–	–
Standing loss according to ErP (at 65°C)	W	72	130	133
Total tank volume according to ErP	l	461	823	919
Nominal capacity	l	412	790	886
Max. operating pressure	bar	10	6	6
Test pressure	bar	13	12	12
Operating temperature minimum | maximum	°C	– | 95	– | 95	– | 95
Corrosion protection according to	…	DIN 4753	DIN 4753	DIN 4753
Enamelled surface • yes – no		•	•	•
Heating water circuit heat exchanger				
Capacity	l	49	33	33
Pressure loss | flow rate	bar | l/h	0,046 | 2000	0,085 | 4000	0,085 | 4000
Max. operating pressure	bar	16	10	10
Test pressure	bar	21	15	15
Operating temperature minimum | maximum	°C	110	95	95
Maximum heating output of the heat pump at heat source max.	kW	30	26	26
Solar circuit heat exchanger				
Capacity	l	–	–	–
Pressure loss | flow rate	bar | l/h	– | –	– | –	– | –
Max. operating pressure	bar	–	–	–
Test pressure	bar	–	–	–
Operating temperature minimum | maximum	°C	– | –	– | –	– | –
Installation location				
Room temperature minimum | maximum	°C	7 | 35	7 | 35	7 | 35
Relative humidity maximum (non-condensing)	%	65	65	65
General unit data				
Tightening torque cleaning flange	N/m	43	50	50
Maximum output of electric heating element	kW	2 x 4,5	1 x 4,5	1 x 4,5
Tests	…	SVGW / SEV	SVGW / SEV	SVGW / SEV
Insulation				
Material: Rigid foam | soft foam • yes – no		• | –	• | –	• | –
Insulation thickness	mm	70	90	90
as per DIN 4753 • yes – no		•	•	•
Sheet metal jacket ı Foil jacket • yes – no		– | •	– | •	– | •
*) for further details see dimensional drawing | Manufacturer: ait deutschland GmbH | Index: a		813614	813615	813616

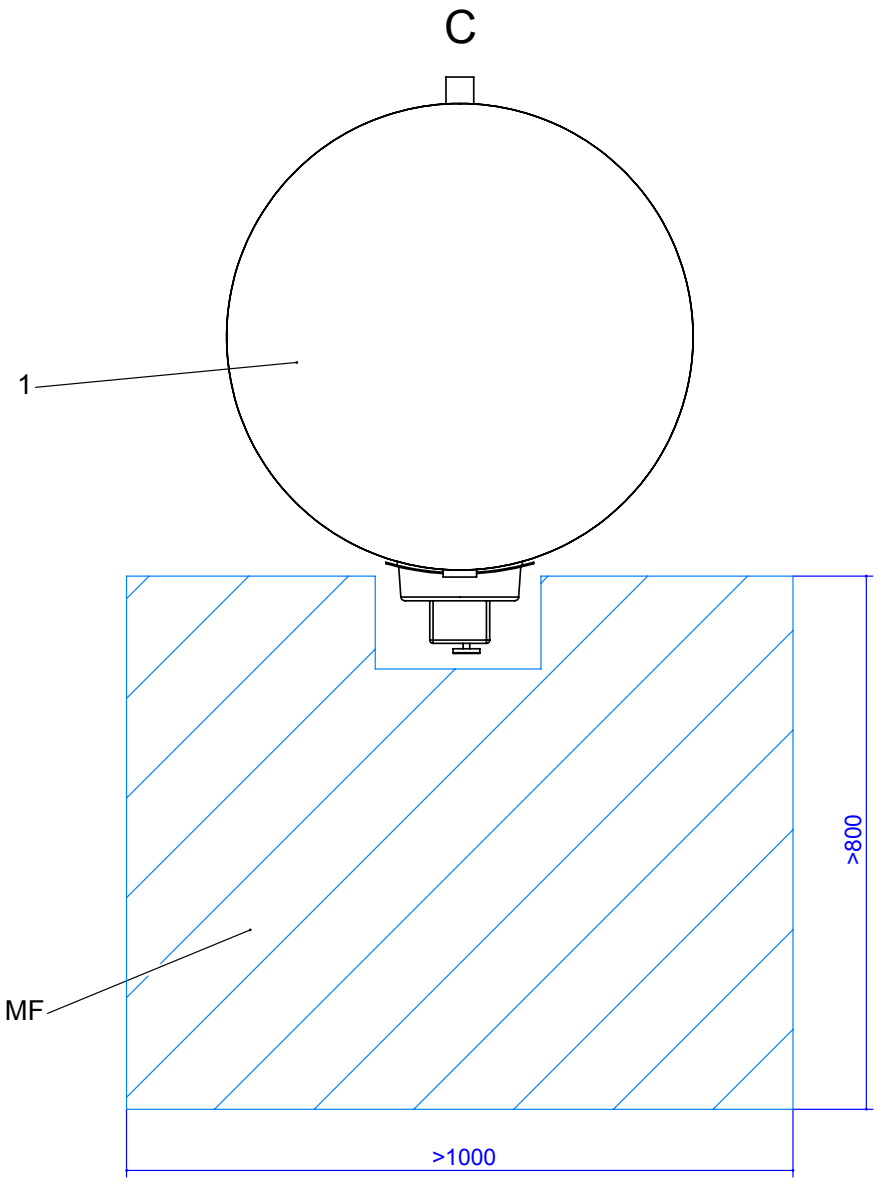
Technical Data

Tank name		SWWS 404.2	SWWS 506.2	SWWS 806
Domestic hot water tank | Solar domestic hot water tank	• yes – no	• | •	• | •	• | •
Domestic hot water reservoir				
Energy efficiency class according to ErP	…	B	B	–
Standing loss according to ErP (at 65°C)	W	64	73	138
Total tank volume according to ErP	l	373	462	822
Nominal capacity	l	339	418	783
Max. operating pressure	bar	10	10	6
Test pressure	bar	12	13	12
Operating temperature minimum | maximum	°C	– | 95	– | 95	– | 95
Corrosion protection according to	…	DIN 4753	DIN 4753	DIN 4753
Enamelled surface	• yes – no	•	•	•
Heating water circuit heat exchanger				
Capacity	l	24	30	28
Pressure loss | flow rate	bar | l/h	0,024 | 2000	0,025 | 2000	0,073 | 4000
Max. operating pressure	bar	16	16	10
Test pressure	bar	21	21	15
Operating temperature minimum | maximum	°C	110	110	95
Maximum heating output of the heat pump at heat source max.	kW	15	18	18
Solar circuit heat exchanger				
Capacity	l	10	14	11
Pressure loss | flow rate	bar | l/h	0,011 | 2000	0,013 | 2000	0,033 | 4000
Max. operating pressure	bar	10	10	10
Test pressure	bar	13	13	13
Operating temperature minimum | maximum	°C	– | 110	– | 110	– | 95
Installation location				
Room temperature minimum | maximum	°C	7 | 35	7 | 35	7 | 35
Relative humidity maximum (non-condensing)	%	65	65	65
General unit data				
Tightening torque cleaning flange	N/m	43	43	50
Maximum output of electric heating element	kW	2 x 4,5	2 x 4,5	1 x 4,5
Tests	…	SVGW / SEV	SVGW / SEV	SVGW / SEV
Insulation				
Material: Rigid foam | soft foam	• yes – no	• | –	• | –	• | –
Insulation thickness	mm	70	70	90
as per DIN 4753	• yes – no	•	•	•
Sheet metal jacket ı Foil jacket	• yes – no	– | •	– | •	– | •
*) for further details see dimensional drawing | Manufacturer: ait deutschland GmbH | Index: a		813617	813618	813619

Technical Data

Tank name		SWWS 1008
Domestic hot water tank | Solar domestic hot water tank	• yes – no	• | •
Domestic hot water reservoir		
Energy efficiency class according to ErP	…	–
Standing loss according to ErP (at 65°C)	W	141
Total tank volume according to ErP	l	914
Nominal capacity	l	864
Max. operating pressure	bar	6
Test pressure	bar	12
Operating temperature minimum | maximum	°C	– | 95
Corrosion protection according to	…	DIN 4753
Enamelled surface	• yes – no	•
Heating water circuit heat exchanger		
Capacity	l	33
Pressure loss | flow rate	bar | l/h	0,086 | 4000
Max. operating pressure	bar	10
Test pressure	bar	15
Operating temperature minimum | maximum	°C	95
Maximum heating output of the heat pump at heat source max.	kW	26
Solar circuit heat exchanger		
Capacity	l	17
Pressure loss | flow rate	bar | l/h	0,051 | 4000
Max. operating pressure	bar	10
Test pressure	bar	13
Operating temperature minimum | maximum	°C	– | 95
Installation location		
Room temperature minimum | maximum	°C	7 | 35
Relative humidity maximum (non-condensing)	%	65
General unit data		
Tightening torque cleaning flange	N/m	50
Maximum output of electric heating element	kW	1 x 4,5
Tests	…	SVGW / SEV
Insulation		
Material: Rigid foam | soft foam	• yes – no	• | –
Insulation thickness	mm	90
as per DIN 4753	• yes – no	•
Sheet metal jacket ı Foil jacket	• yes – no	– | •
*) for further details see dimensional drawing | Manufacturer: ait deutschland GmbH | Index: a		813620

Installation plan

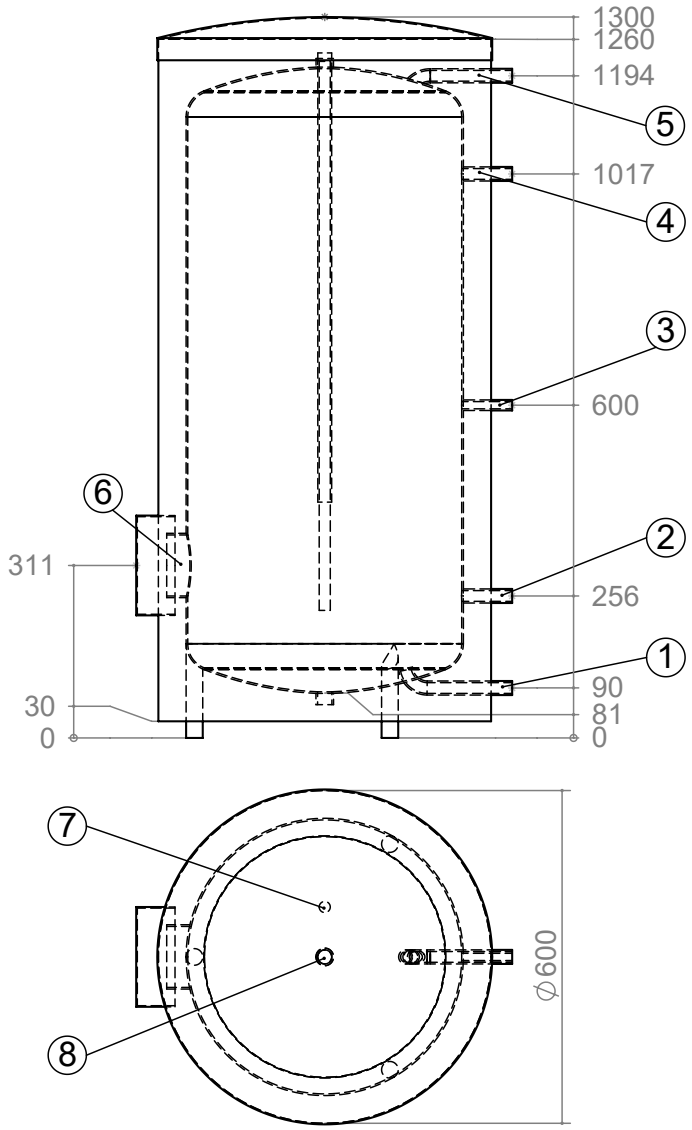


Keys: UK819397
All dimensions in mm.

Pos.	Name
C	Top view
1	Storage tank
MF	Minimum area to ensure ability to operate and service

Dimensonal drawings

WWS 202



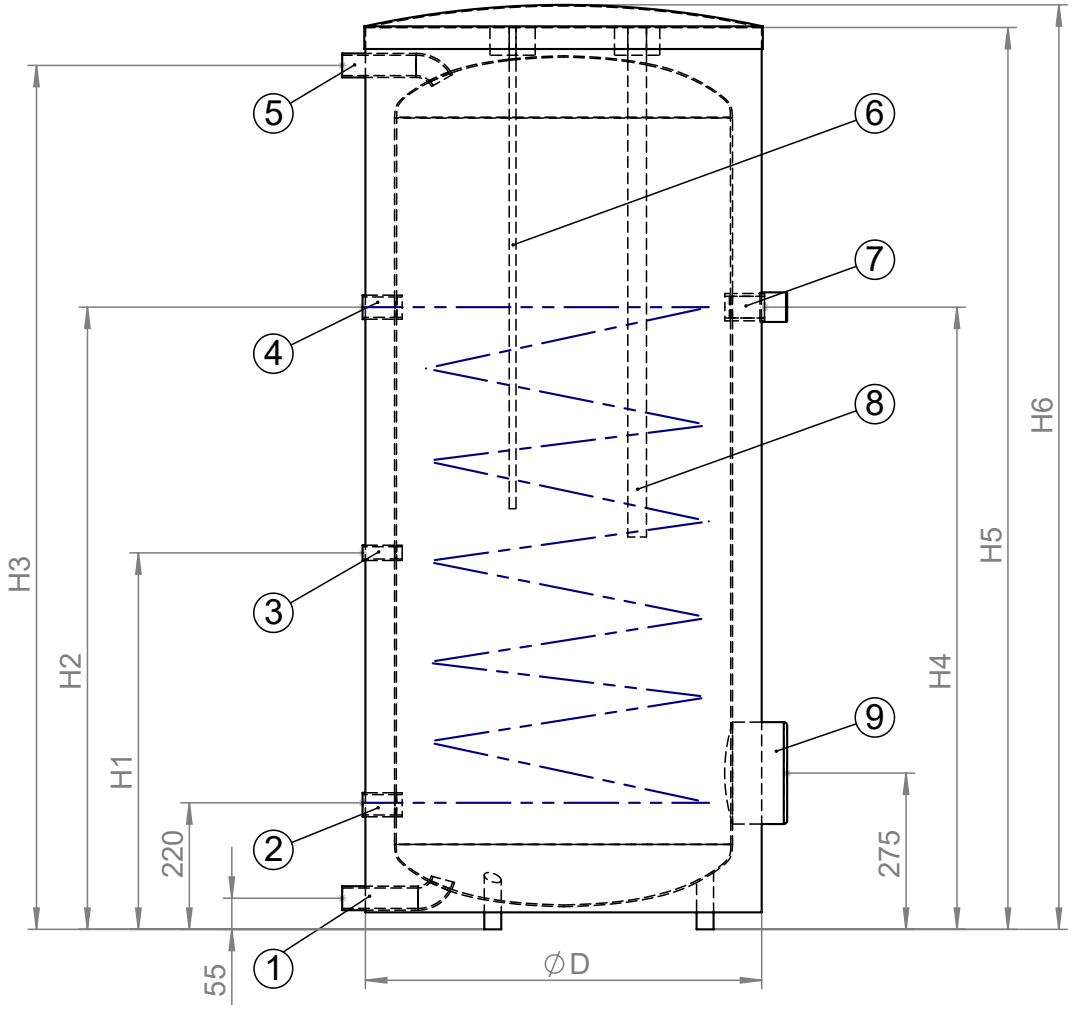
Keys: UK819394d
All dimensions in mm.

Nominal volume	Net weight	Tilted height	Smooth tube heat exchanger
184 litres	65 kg	1400	2.28 m²

Pos.	Name	Dim.
1	Cold water / Draining	R 1" External thread
2	Heating water, return	R 1" External thread
3	Circulation	R ¾" External thread
4	Heating water, flow	R 1" External thread
5	Hot water	R 1" External thread
6	Cleaning flange	DN 110
7	Sensor pocket with sensor	Ø internal 7
8	Protective anode	Ø 26

WWS 303.1 • WWS 303.2 • WWS 405.2 • WWS 507.2

Dimensonal drawings



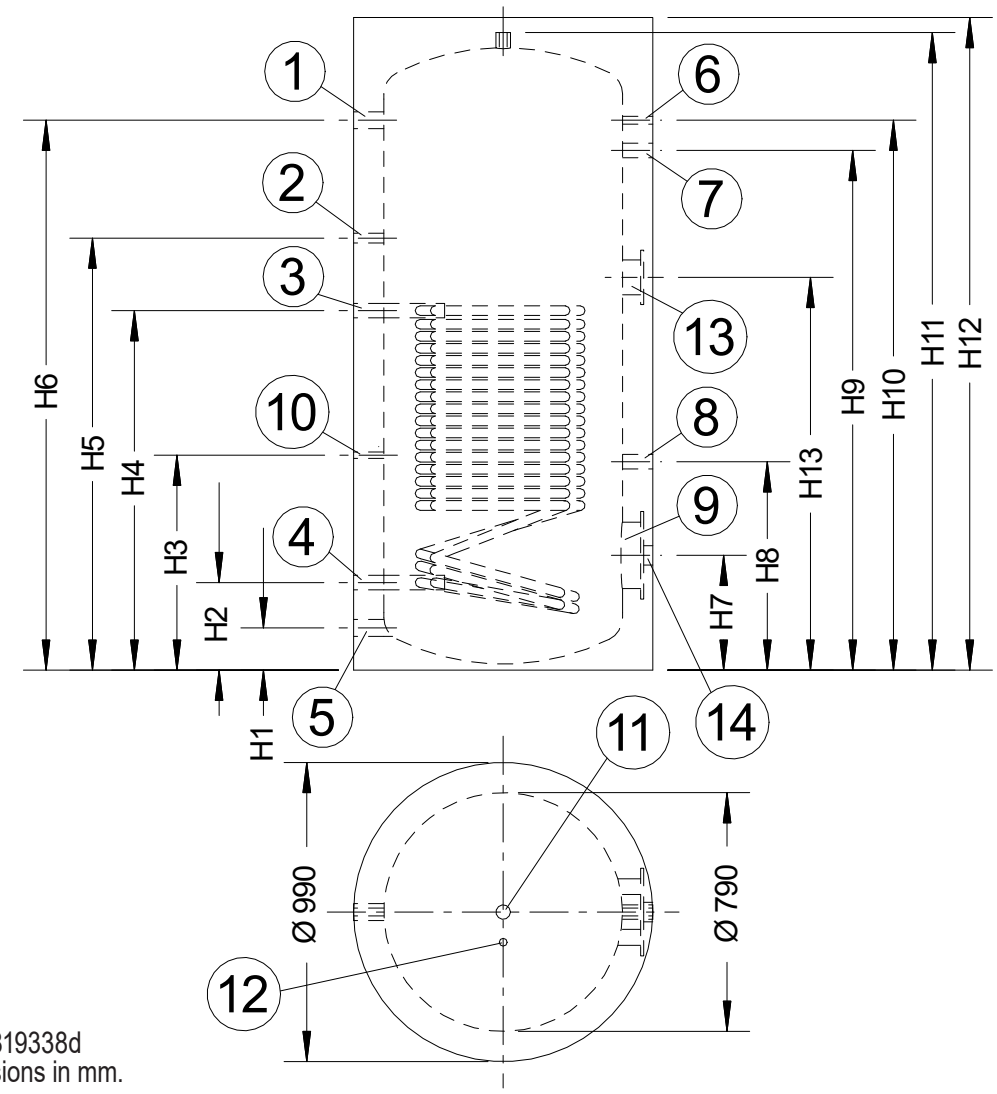
Keys: UK819291g
All dimensions in mm.

Name	Nominal volume	Net weight	Tilted height	Smooth tube heat exchanger Hot water circuit	H1	H2	H3	H4	H5	H6	Ø D
WWS 303.1	276 litres	135 kg	1440	3.50 m²	645	830	1230	–	1295	1335	700
WWS 303.2	271 litres	135 kg	1440	3,50 m²	645	830	1230	–	1295	1335	700
WWS 405.2	339 litres	158 kg	1720	5.00 m²	665	1100	1525	–	1590	1630	700
WWS 507.2	412 litres	215 kg	2030	7.00 m²	965	1415	1855	1480	1920	1960	750

Pos.	Name	Dim.
1	Cold water / Draining	R 1¼" External thread
2	Heating water, return	Rp 1¼" Internal thread
3	Circulation	R ¾" Internal thread
4	Heating water, flow	Rp 1¼" Internal thread
5	Hot water	R 1¼" External thread
6	Sensor pocket with sensor	Ø internal 7
7	Socket for electric heating element (in WWS 507.2 only)	R 1½" Internal thread
8	Protective anode	Ø 33
9	Cleaning flange	DN 110

Dimensonal drawings

WWS 806 • WWS 1006

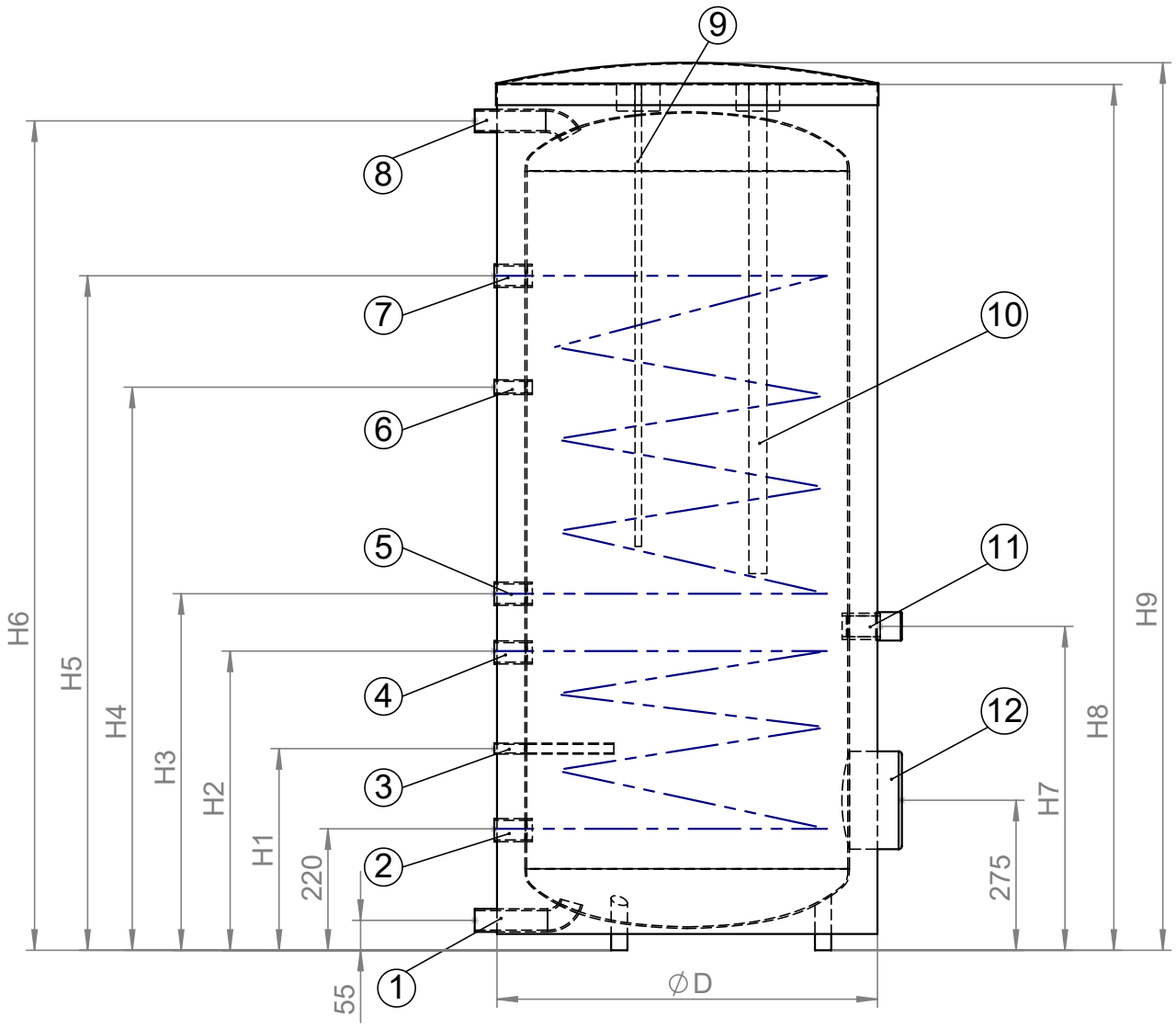


Keys: UK819338d
All dimensions in mm.

Name	Nominal volume	Net weight	Tilted height (without insulation)	Smooth tube heat exchanger
WWS 806	790 litres	290 kg	2020	5.6 m²
WWS 1006	886 litres	340 kg	2220	5.6 m²

Pos.	Name	Dim.
1	Hot water	Rp 2" Internal thread
2	Circulation	Rp 1" Internal thread
3	Heating water inlet	Rp 1¼" Internal thread
4	Heating water outlet	Rp 1¼" Internal thread
5	Cold water	Rp 2" Internal thread
6	Thermometer	Rp ½" Internal thread
7	Anode Ø32x700	Rp 1¼" Internal thread
8	Anode Ø32x520	Rp 1¼" Internal thread
9	Cleaning flange	DN 200
10	Sensor (depth max. 200)	Rp ½" Internal thread
11	Venting	Rp 1¼" Internal thread
12	Sensor sleeve (length 1000)	Rp ½" Internal thread
13	Cleaning flange	DN 110
14	Protective anode	Rp 1½" Internal thread

	WWS 806	WWS 1006
H1	175	175
H2	275	275
H3	660	660
H4	1195	1195
H5	1300	1300
H6	1765	1965
H7	350	350
H8	690	690
H9	1585	1785
H10	1685	1885
H11	1940	2140
H12	1980	2180
H13	1300	1300



Keys: UK819305e
All dimensions in mm.

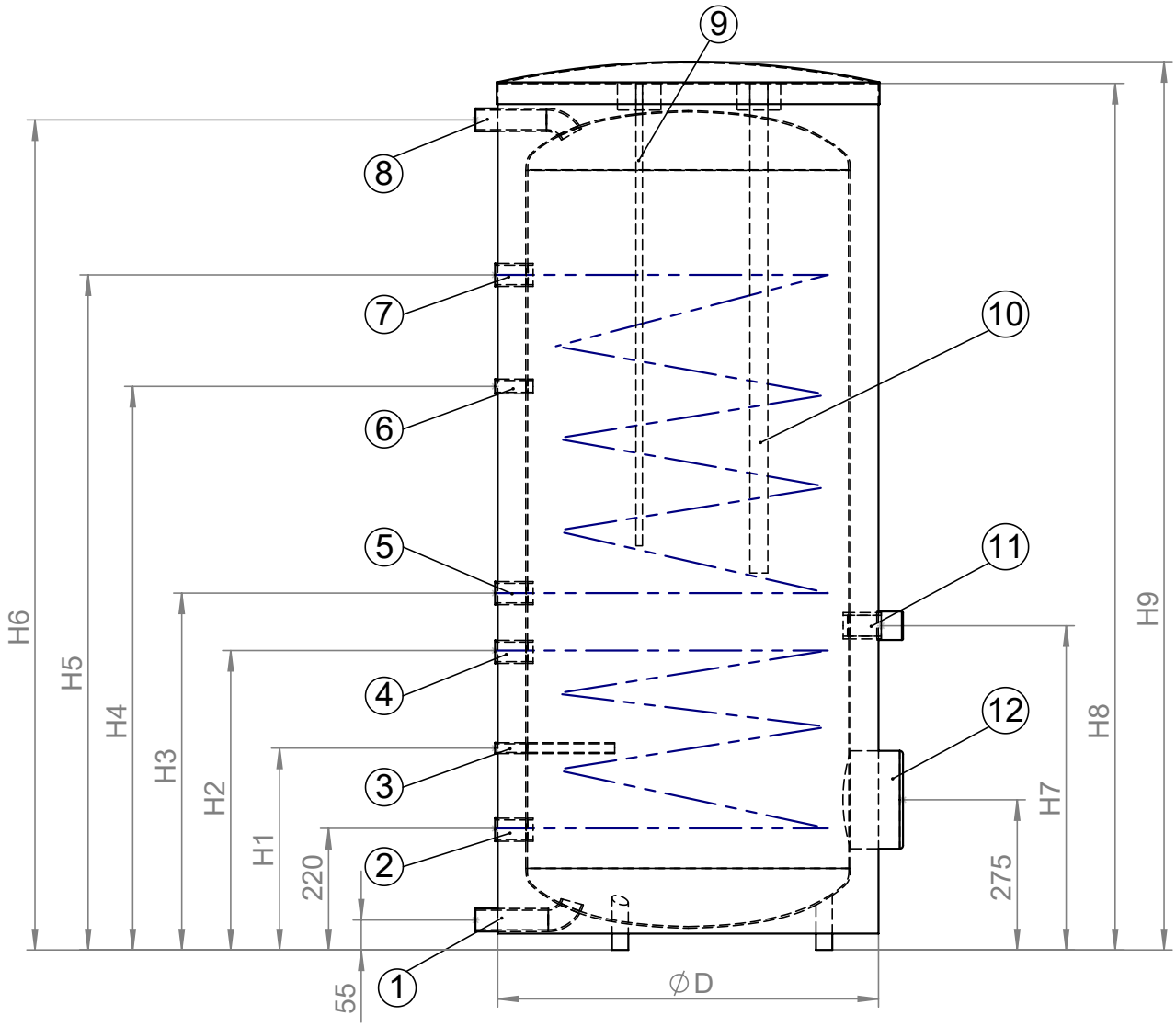
Name	Nominal volume	Net weight	Tilted height	Smooth tube heat exchanger	
				Hot water circuit	Solar circuit
SWWS 404.2	339 litres	174 kg	1720	3.50 m²	1.62 m²

Pos.	Name	Dim.
1	Cold water / Draining	R 1¼" External thread
2	Solar return	Rp 1¼" Internal thread
3	Sensor pocket for solar sensor	Ø internal 16
4	Solar flow	Rp 1¼" Internal thread
5	Heating water, return	Rp 1¼" Internal thread
6	Circulation	R ¾" Internal thread
7	Heating water, flow	Rp 1¼" Internal thread
8	Hot water	R 1¼" External thread
9	Sensor pocket with sensor	Ø internal 7
10	Protective anode	Ø 33
11	Socket for electric heating element	Rp 1½" Internal thread
12	Cleaning flange	DN 110

	SWWS 404.2
H1	370
H2	550
H3	655
H4	1035
H5	1240
H6	1525
H7	595
H8	1590
H9	1640
Ø D	750

Dimensonal drawings

SWWS 506.2

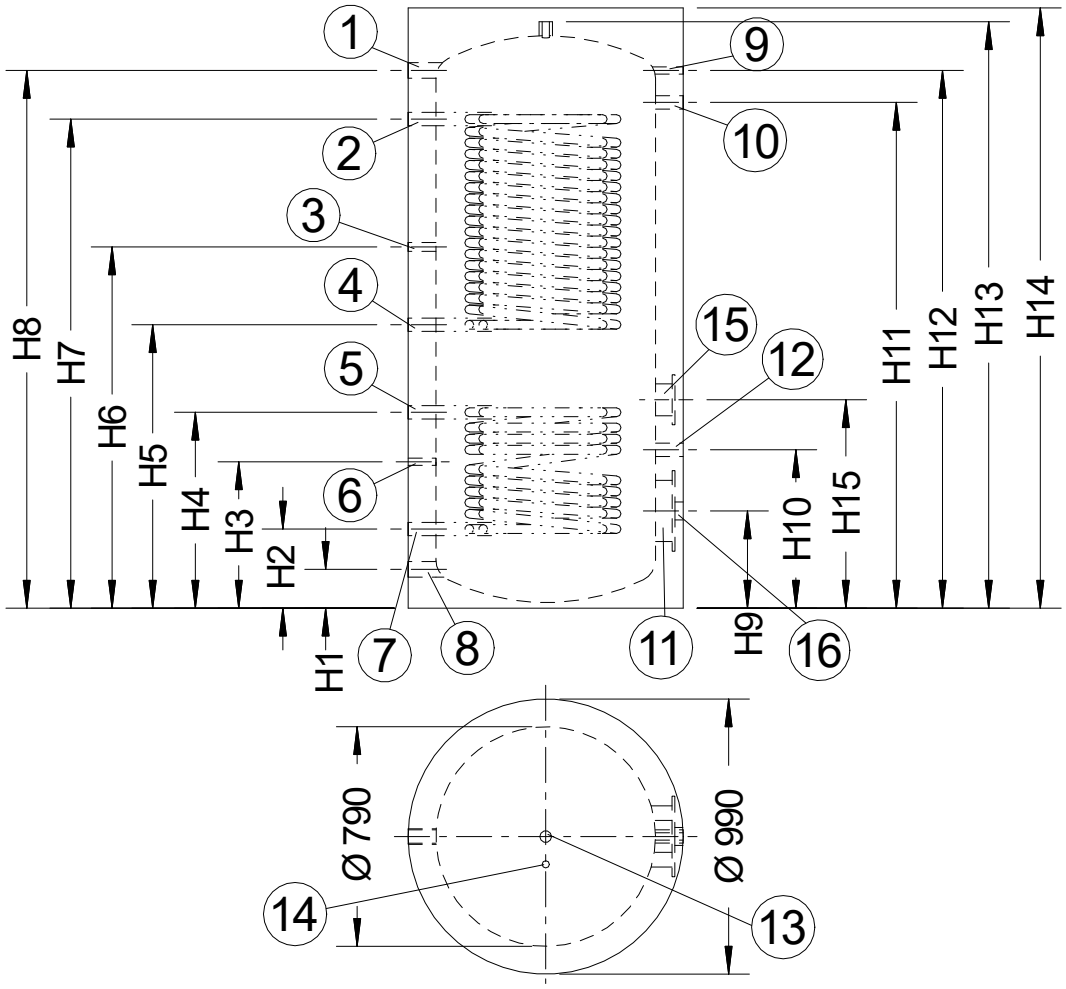


Keys: UK819305e
All dimensions in mm.

Name	Nominal volume	Net weight	Tilted height	Smooth tube heat exchanger	
				Hot water circuit	Solar circuit
SWWS 506.2	418 litres	209 kg	2030	4.30 m²	1.85 m²

Pos.	Name	Dim.
1	Cold water / Draining	R 1¼" External thread
2	Solar return	Rp 1¼" Internal thread
3	Sensor pocket for solar sensor	Ø internal 16
4	Solar flow	Rp 1¼" Internal thread
5	Heating water, return	Rp 1¼" Internal thread
6	Circulation	R ¾" Internal thread
7	Heating water, flow	Rp 1¼" Internal thread
8	Hot water	R 1¼" External thread
9	Sensor pocket with sensor	Ø internal 7
10	Protective anode	Ø 33
11	Socket for electric heating element	Rp 1½" Internal thread
12	Cleaning flange	DN 110

	SWWS 506.2
H1	420
H2	605
H3	700
H4	1080
H5	1420
H6	1855
H7	660
H8	1920
H9	1970
Ø D	750



Keys: UK819339e
All dimensions in mm.

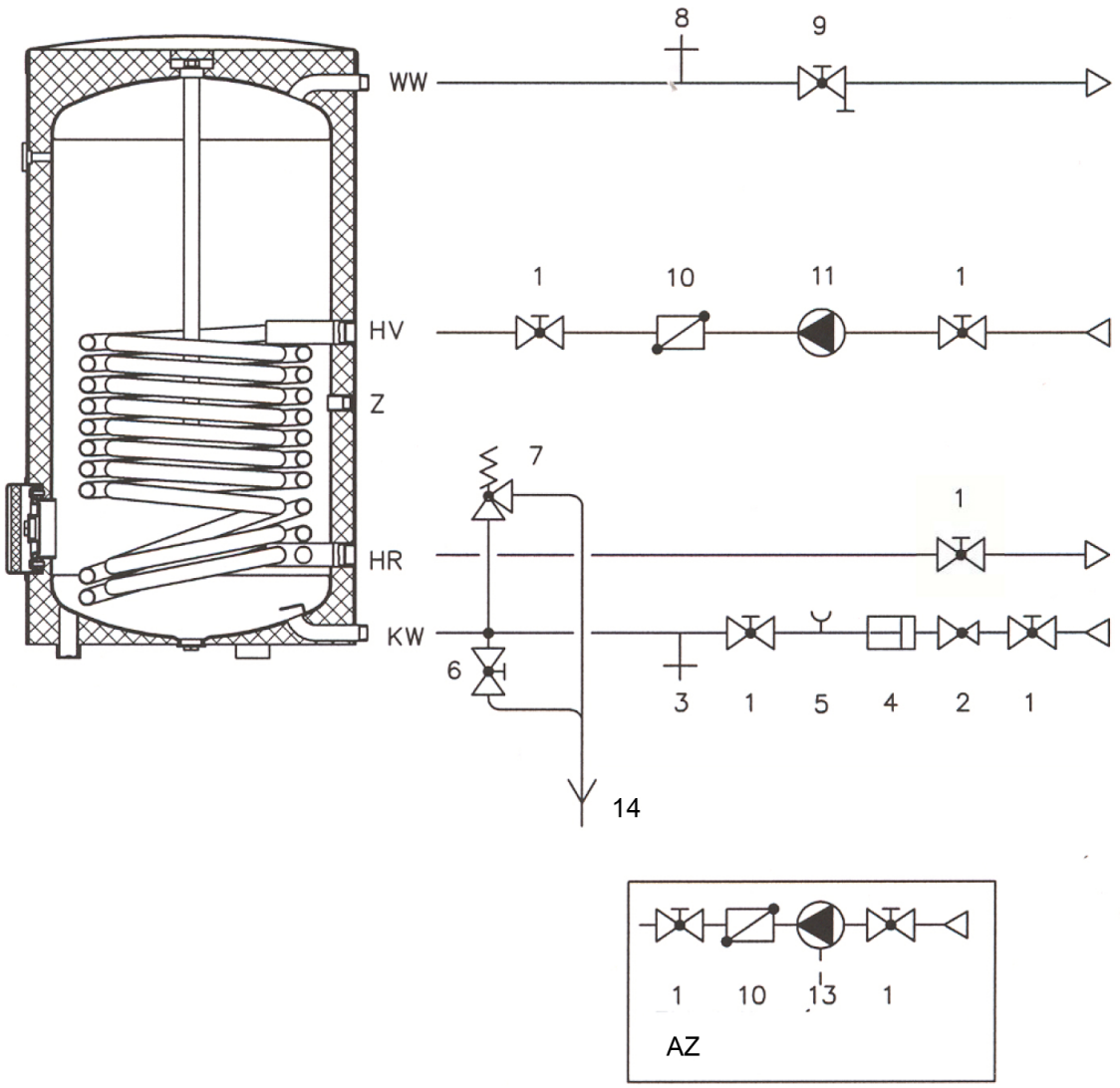
Name	Nominal volume	Net weight	Tilted height (without insulation)	Smooth tube heat exchanger	
				Hot water circuit	Solar circuit
SWWS 806	783 litres	284 kg	2020	4.6 m²	1.8 m²
SWWS 1008	864 litres	254 kg	2220	5.6 m²	3.0 m²

Pos.	Name	Dim.
1	Hot water	Rp 2" Internal thread
2	Heating water inlet	Rp 1¼" Internal thread
3	Circulation	Rp 1" Internal thread
4	Heating water outlet	Rp 1¼" Internal thread
5	Solar inlet	Rp 1¼" Internal thread
6	Sensor (depth max. 200)	Rp ½" Internal thread
7	Solar outlet	Rp 1¼" Internal thread
8	Cold water	Rp 2" Internal thread
9	Thermometer	Rp ½" Internal thread
10	Anode Ø32x700	Rp 1¼" Internal thread
11	Cleaning flange	DN 200
12	Anode Ø 32x520	Rp 1¼" Internal thread
13	Venting	Rp 1¼" Internal thread
14	Sensor sleeve (length 1000)	Rp ½" Internal thread
15	Cleaning flange	DN 110
16	Electric heating element	Rp 1½" Internal thread

	SWWS 806	SWWS 1008
H1	175	175
H2	275	275
H3	450	550
H4	675	835
H5	855	995
H6	1200	1400
H7	1530	1805
H8	1765	1965
H9	350	350
H10	570	570
H11	1585	1865
H12	1685	1965
H13	1940	2140
H14	1985	2185
H15	750	880

Connection instruction

Domestic hot water tank



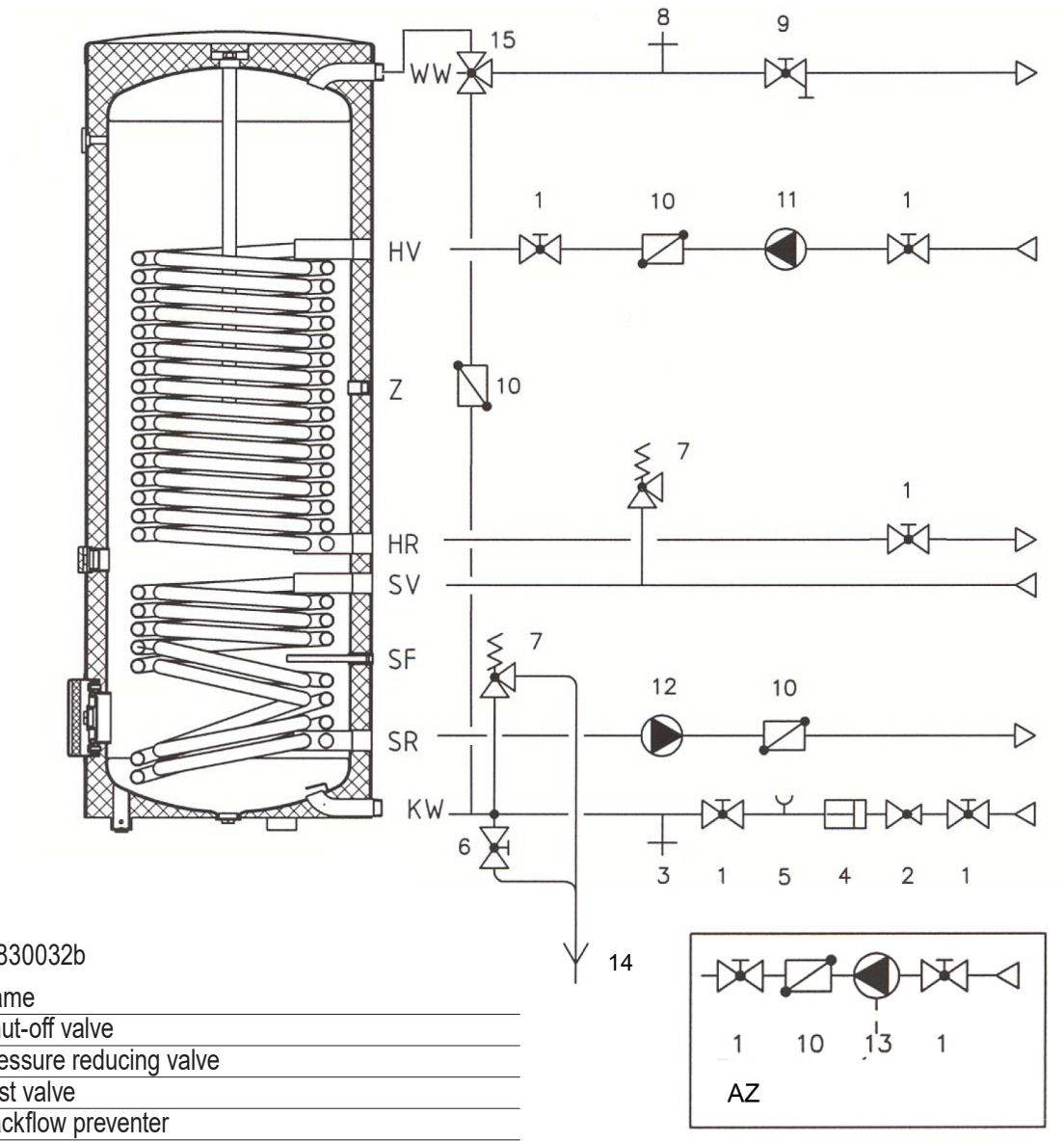
Keys: UK830032b

Pos.	Name
1	Shut-off valve
2	Pressure reducing valve
3	Test valve
4	Backflow preventer
5	Pressure gauge connection socket
6	Drain valve
7	Safety valve
8	Ventilation
9	Shut-off valve with draining
10	Check valve
11	Storage tank charge pump
13	Circulation pump
14	Cold water connection (to DIN 1988)

WW	Hot water
KW	Cold water
Z	Circulation
HV	Heating, flow
HR	Heating, return
AZ	Circulation connection (only if absolutely necessary)

NOTE

The positions of the individual connections illustrated here may differ from the positions of the connections on your tank.
Therefore, for the actual positions of the connections, please refer to the dimensioned diagram for the respective tank type or rather always note and follow the allocation of the connections indicated by the stickers on the tank.



Keys: UK830032b

Pos.	Name
1	Shut-off valve
2	Pressure reducing valve
3	Test valve
4	Backflow preventer
5	Pressure gauge connection socket
6	Drain valve
7	Safety valve
8	Ventilation
9	Shut-off valve with draining
10	Check valve
11	Storage tank charge pump
12	Solar charge pump
13	Circulation pump
14	Cold water connection (to DIN 1988)
15	Scald protection

WW	Hot water
KW	Cold water
Z	Circulation
HV	Heating, flow
HR	Heating, return
SV	Flow, solar circuit
SF	Solar sensor
SR	Return, solar circuit
AZ	Circulation connection (only if absolutely necessary)

NOTE

The positions of the individual connections illustrated here may differ from the positions of the connections on your tank.
Therefore, for the actual positions of the connections, please refer to the dimensioned diagram for the respective tank type or rather always note and follow the allocation of the connections indicated by the stickers on the tank.

an ideal tomorrow

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