

Accu - A

60-100-200 l.

EN

SAFETY INFORMATION
O&M INFORMATION
INSTALLATION MANUAL
TDS - TECHNICAL DATA SHEET



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OSO

HOT WATER

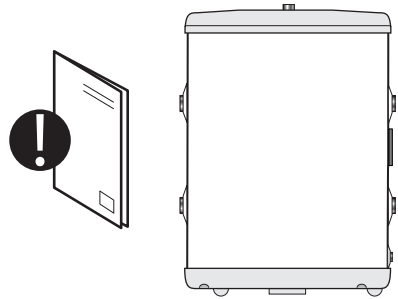
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1. SAFETY INSTRUCTIONS

1.1 General information

- Read the following safety instructions carefully before installing, maintaining or adjusting the buffer tank.
- Personal injury or material damage may result if the product is not installed or used in the intended manner.
- Keep this manual and other relevant documents where they are accessible for future reference.
- The manufacturer presupposes compliance (by the end-user) with the safety, operating and maintenance instructions supplied and with the installation manual and relevant standards and regulations in effect at the date of installation.



Symbols used in this manual:

	WARNING	Could cause serious injury or death
	CAUTION	Could cause minor or moderate injury or damage to property
	DO NOT	
	SHALL BE DONE	

1.2 Safety instructions for users

⚠ WARNINGS	
⚠	The appliance may be used by children older than 8 years old, elderly persons and persons with physical, sensory or mental disabilities or lacking experience and knowledge, if they are under supervision or taught about safe use of the appliance and if they are aware of the potential dangers.
⊘	Children shall not play with the appliance.
⊘	Children shall not clean or perform maintenance on the appliance without supervision.
❗	Installation shall be carried out in accordance with the valid regulations and according to the instructions of the manufacturer and by qualified staff.
❗	In a closed, pressurised system of installation, it is obligatory to install a safety valve (not included) on the system with a rated pressure of max. 0.3 MPa (3 bar) (see the label), which prevents the elevation of pressure in the buffer by more than 0.1 MPa (1 bar) above the rated pressure.
❗	The outlet of the safety valve shall be installed facing downwards and in a non-freezing area.
❗	To ensure proper functioning of the safety valve, the user shall perform regular controls (min. annually) to remove any limescale and make sure the safety valve is not blocked.
⊘	Do not install a stop valve between the buffer and the safety valve.
❗	If the system has to be switched off, please drain any water from the buffer to prevent freezing.
⊘	Please do not try to fix any defects of the buffer on your own. Call the nearest authorized service provider.

2. PRODUCT DESCRIPTION

2.1 Product identification

Identification details for your product can be found on the type plate fixed to the product. The type plate contains details of the product in accordance with EN 12897:2016 as well as other useful data. See Declaration of Conformity at the manufacturers' for more information.

The product is designed and manufactured in accordance with:

- Pressure vessel standard EN 12897:2016

The manufacturer is certified according to the following standards:

- Welding quality EN ISO 3834-2
- Quality ISO 9001
- Environment ISO 14001
- Work environment ISO 45001

2.2 Intended use

The product is designed for use as a buffer tank for both heating and cooling systems, and is designed for fitting in a closed circuit system.

2.3 CE marking



The CE mark shows that the product complies with the relevant Directives. See Declaration of Conformity at the manufacturers' website for more information.

The Product complies with the following directive(s):

- Pressure Equipment Directive PED 2014/68/EU

The safety valve(s) used must be CE marked and conform to PED 2014/68/EU.

2.4 Technical data

Product No.	Product code:	Capacity persons	Weight kg.	DiaxHeight-mm.	Freight vol. m ³	Thermostat setting °C	Volume 40°C	Heat-up time /t 65°C	Heat loss W
8000483	ACCU - A60	-	16	ø430x750	0,18	-	-	-	44
8000484	ACCU - A100	-	28	ø435x1166	0,27	-	-	-	55
8000487	ACCU - A200	-	39	ø595x1265	0,46	-	-	-	46

2.5 ErP data - Technical Data Sheet

Brand	Model no.	Model name	ErP-profile	ErP-rating	AEC kWh/a	Thermostat setting °C	Heat loss W	Actual volume L
OSO Hotwater AS	11009165	ACCU - A60	-	C	-	-	44	57
OSO Hotwater AS	11003162	ACCU - A100	-	C	-	-	55	100
OSO Hotwater AS	11009745	ACCU - A200	-	B	-	-	46	199
Regulation: 2017/1369/EU - Regulation: EU 812/2013			Directive: 2009/125/EF - Regulation: EU 814/2013					
Heat loss tested acc. to standard: EN 12897: 2015								

3. INSTALLATION INSTRUCTIONS

3.1 Products covered by these instructions

- 8000483 Accu - A60
- 8000484 Accu - A100
- 8000487 Accu - A200

3.2 Included in delivery

Ref no.	Pcs.	Description
1	1	Buffer tank with sensor bracket
2	1	Manual (this document)
3	1	Stainless steel wall bracket - included (not A200)
4	1	Cooling kit (included - A200 only)

3.3 Product dimensions


All dimensions in mm.

Product	A	B	C	D	ø
A60	741	528	198	102	430
A100	1175	962	192	96	430
A200	1265	941	301	155	595

Tolerance +/- 5 mm

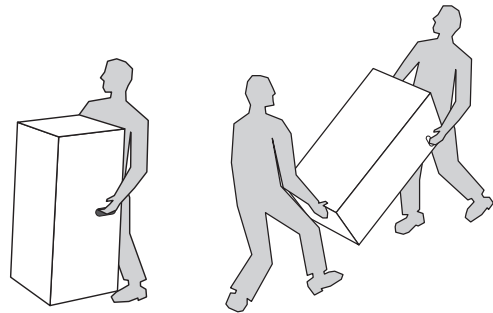
3.3.1 Delivery

The product shall be transported carefully as shown, with packaging. Use the handles in the box.



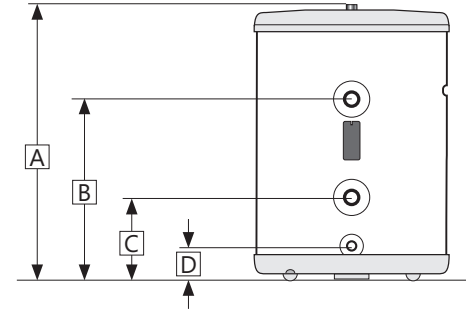
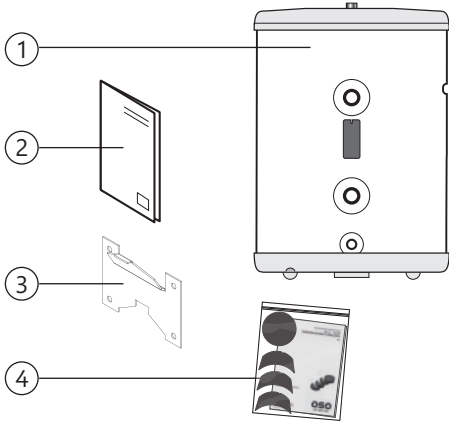
CAUTION

Pipe stubs, valves etc. shall not be used to lift the product as this could cause malfunctions.



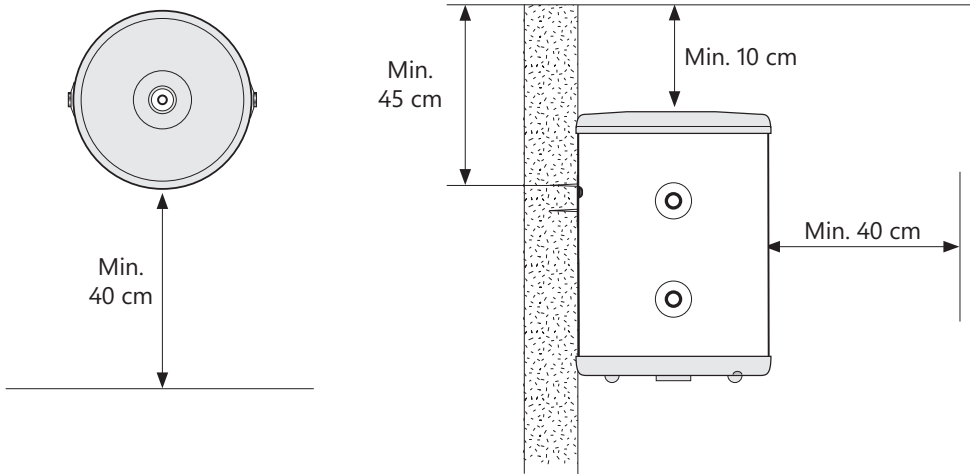
3.3.2 Fitting the A200 in a cooling system

If the A200 is fitted in a cooling system the included cooling kit must be fitted to the product. See installation manual supplied with the kit.



3.4 Requirements for installation location and positioning

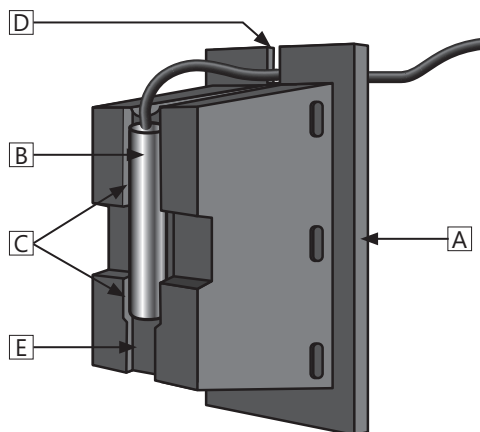
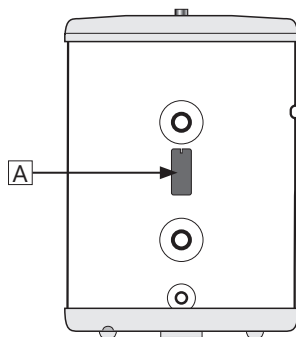
⚠ CAUTION	
❗	The product shall be placed in a room with a drain to prevent any damages in case of water escaping from the product..
❗	The product shall be placed in a dry and permanently frost-free position.
❗	The product shall be placed on a floor or wall suitable for the total weight of the product when in operation. See table in page 5. Wall bracket is supplied (not A200).
❗	The product must have a clearance for servicing of 40 cm in front of the unit / 10 cm over the top connection.
❗	The product shall be easily accessible for servicing and maintenance.



3.4.1 Temperature sensor installation

The product is equipped with a temperature sensor bracket which allows installation of a 6 or 8 mm. temperature sensor. To install the temperature sensor follow the instructions below.

1. Remove temperature sensor bracket (A) from tank body by gripping it and pulling straight out.
2. Insert temperature sensor (B) firmly into the appropriate grooves in the sensor bracket and place the temperature sensor cable in the cable slot (D).
An 8 mm. sensor (shown) fits in the upper grooves (C) while a 6 mm. sensor fits in the lower groove (E).
3. Refit the sensor bracket into the tank body, ensuring the bracket is inserted fully to establish proper contact between the sensor and the stainless steel inner tank surface. Make sure the sensor cable is positioned properly in the cable slot (D) to avoid potential damage to the cable.



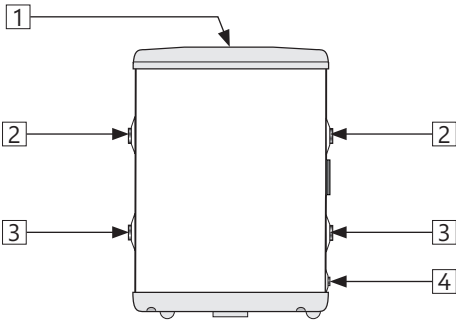
3.5 Pipe installation

The product is designed to be permanently connected to the heating system, max. pressure 3 bar / 0,3 MPa. Approved pipes of the correct size should be used for installation. The relevant standards and regulations must be followed.

No.	Dimension	Connection description
1	G 1/2" F (A60-100)	Venting (plugged)
1	G 3/4" F (A200)	Venting (plugged)
2	G 1" F	Flow/ret. connection upper
3	G 1" F	Flow/ret. connection lower
4	G 1/4" F (A60-100)	Drain (plugged)
4	G 3/4" F (A200)	Drain (plugged)

3.5.1 Pipe and plug fitting

- A) Run pipes of suitable size to the connections shown (2 and 3), and affix with suitable sealant.
- B) Unused connections must be plugged securely. Use 1" brass plugs (not supplied).
- C) The venting connection (1) must be plugged when the product is filled with water, see pt. 4.1.



3.5.2 Torque settings

Component	Torque
Air vent - 1/2" (A60-100)	5 Nm (+/- 1 - hand force)
Drain - 1/4" (A60-100)	5 Nm (+/- 1 - hand force)
Air vent - 3/4" (A200)	30 Nm (+/- 3)
Drain - 3/4" (A200)	30 Nm (+/- 3)
Brass plug - 1"	40 Nm (+/- 5)

3.5.3 Fitting instructions

⚠ CAUTION	
❗	The product shall be placed in a room with a drain to prevent any damages in case of water escaping from the product. The product shall be placed in a permanently frost-free environment.
❗	The product shall be properly aligned vertically and horizontally, on a floor or wall suitable for the total weight of the product when in operation. See type plate.
❗	The product must have a clearance for servicing of 40 cm in front of the unit / 10 cm over the top connection.

4. INITIAL COMMISSIONING

4.1 Filling with water


First check that all pipes are connected correctly.
Then do the following:

- A) Vent the system, preferably at its highest point.
- B) Open water supply to the product. When water flows out of the vent the system is full.

4.2 Control points

- A) Check that all pipe connections to/from the product are tight and not leaking.
- B) Check that the product is standing/hanging level vertically and horizontally.

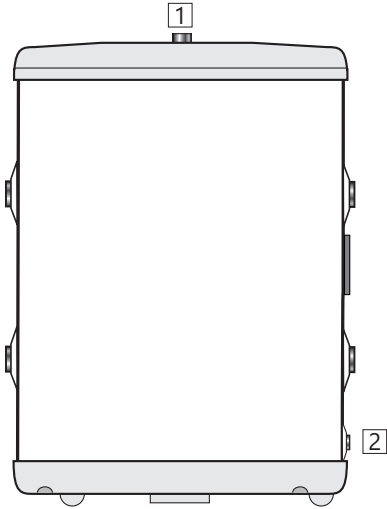
4.3 Draining

 WARNING
The water temperature in the product is high and could cause scalding. Special care should therefore be taken when emptying the product.

- A) Disconnect the power supply.
- B) Shut off incoming water supply.
- C) Open the air vent connection (1). Leave open while emptying (prevents vacuum).
- D) The product is emptied via the drain (2).
- E) Close air vent connection (1).

4.4 Handover to end-user

THE INSTALLER MUST:
Brief the end-user on safety and maintenance instructions.
Brief the end-user on settings and emptying the product.
Hand this installation manual over to the end-user.
Enter contact details on the type plate on the product.



5. WARRANTY CONDITIONS

1. Scope

OSO Hotwater AS (hereinafter called OSO) warrants for 2 years from the date of purchase, that the Product will: i) conform to OSO specification, ii) be free from defects in materials and workmanship, subject to conditions below. All components carry a 2-year warranty.

The warranty is voluntarily extended by OSO to 5 years for the stainless steel inner tank. This extended warranty only applies to Products purchased by a consumer, that has been installed for private use and that has been distributed by OSO or by a distributor where the Products have been originally sold by OSO. The extended warranty does not apply to Products purchased by commercial entities or for Products that have been installed for commercial use. These shall be subject only to the mandatory provisions of the law. The conditions and limitations set out below shall apply.

2. Coverage

If a defect arises and a valid claim is received within the statutory warranty period, at its option and to the extent permitted by law, OSO shall either: i) repair the defect, or; ii) replace the product with a product that is identical or similar in function, or; iii) refund the purchase price.

If a defect arises and a valid claim is received after the statutory warranty period has expired, but within the extended warranty period, OSO will supply a product that is identical or similar in function. OSO will in such cases not cover any other associated costs.

Any exchanged Product or component will become the legal property of OSO. Any valid claim or service does not extend the original warranty. The replacement Product or part does not carry a new warranty.

3. Conditions

The Product is manufactured to suit most public water supplies. However, there are certain water chemistries (outlined below) that can have a detrimental effect on the Product and its life expectancy. If there are uncertainties regarding water quality, the local water supply authority can supply the necessary data.

The warranty applies only if the conditions set out below are met in full:

- The Product has been installed by a professional installer, in accordance with the instructions in the installation manual and all relevant Codes of Practice and Regulations in force at the time of installation.
- The Product has not been modified in any way, tampered with or subjected to misuse and no factory fitted parts have been removed for unauthorized repair or replacement.
- The Product has only been connected to a domestic mains water supply in compliance with the European Drinking Water Directive EN 98/83 EC, or latest version. The water

should not be aggressive, i.e. the water chemistry shall comply with the following:

- Chloride < 250 mg / L
- Electric Conductivity (EC) @25°C < 750 uS / cm
- Saturation Index (LSI) @80°C > -1,0 / < 0,8
- pH level > 6,0 / < 9,5

- The product has only been fitted in a closed circuit system.
- The immersion heater has not been exposed to hardness levels exceeding 10°dH (180 ppm CaCO₃). A water softener is recommended in such cases.
- Any disinfection has been carried out without affecting the Product in any way whatsoever. The Product shall be isolated from any system chlorination.
- The Product has been in regular use from the date of installation. If the Product is not intended to be used for 60 days or more, it must be drained.
- Service and/or repair shall be done according to the installation manual and all relevant codes of practice. Any replacement parts used shall be original OSO spare parts.
- Any third-party costs associated with any claim has been authorized in advance by OSO in writing.
- The purchase invoice and/or installation invoice, a water sample as well as the defective product is made available to OSO upon request.

Failure to follow these instructions and conditions may result in product failure, and water escaping from the Product.

4. Limitations

The warranty does not cover:

- Any fault or costs arising from incorrect installation, incorrect application, lack of regular maintenance in accordance with the installation manual, neglect, accidental or malicious damage, misuse, any alteration, tampering or repair carried out by a non-professional, any fault arising from the tampering with or removal of any factory fitted safety components or measures.
- Any consequential damage or any indirect loss caused by any failure or malfunction of the Product whatsoever.
- Any pipework or any equipment connected to the Product.
- The effects of frost, lightning, voltage variation, lack of water, dry boiling, excess pressure or chlorination procedures.
- The effects of stagnant (de-aerated) water if the Product has been left unused for more than 60 days consecutively.
- Damage caused during transportation. Buyer shall give the carrier notice of such damage.
- Costs arising if the Product is not immediately accessible for servicing.

These warranties do not affect the Buyer's statutory rights.

- A) The installer who supplied the product.
- B) OSO Hotwater AS: Tel.: +47 32 25 00 00
oso@oso.no / www.oso.no

5.1 Customer service

In case of problems that cannot be resolved with the aid of the troubleshooting guide in this installation manual, contact either:

6. REMOVING THE PRODUCT

6.1 Removal

- A) Disconnect the power supply.
- B) Shut off incoming cold water supply.
- C) Empty the product of water – see section 4.4.
- D) Disconnect all pipes.
- E) The product can now be removed.

6.2 Returns scheme

This product is recyclable and should be taken to the environmental recycling centre. If the product is to be replaced with a new one, the installer can take the old cylinder away for recycling.



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