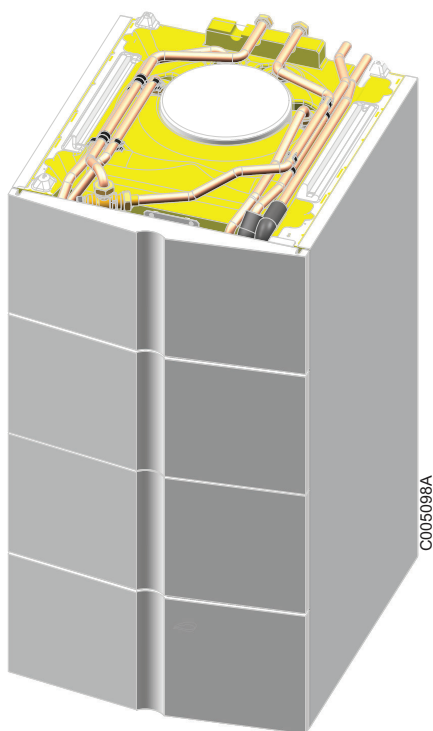


Solar domestic hot water calorifier

E200 SHL



User Guide

Contents

1	Safety instructions and recommendations	4
	1.1 Safety instructions	4
	1.2 Recommendations	6
2	About this manual	7
	2.1 Symbols used	7
	2.1.1 Symbols used in the manual	7
	2.1.2 Symbols used on the equipment	7
	2.2 Abbreviations	7
	2.3 Liabilities	8
	2.3.1 Manufacturer's liability	8
	2.3.2 Installer's liability	8
	2.3.3 User's liability	8
3	Technical specifications	10
	3.1 Homologations	10
	3.1.1 Certifications	10
	3.1.2 Factory test	10
	3.1.3 Directive 97/23/EC	10
	3.2 Technical specifications	10
	3.2.1 Characteristics of the DHW calorifier	10

4	Description	12
	4.1 General description	12
	4.2 Main parts	13
5	Operating the appliance	14
	5.1 Commissioning procedure	14
	5.2 Antifreeze protection	14
	5.3 Shutting down the solar control system	14
6	Checking and maintenance	15
	6.1 General instructions	15
	6.2 Safety valve or safety unit (Domestic hot water circuit)	15
	6.3 Cleaning the casing material	15
	6.4 Sacrificial anode	15
	6.5 Inspection and maintenance of the solar circuit	15
	6.6 solar regulator	16
	6.7 Maintenance of the thermostatic mixing valve	16
7	Warranty	17
	7.1 General	17
	7.2 Warranty terms	17
8	Appendix – Information on the Ecodesign and Energy Labelling Directives	19

1 Safety instructions and recommendations

1.1 Safety instructions



DANGER

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.



CAUTION

1. Turn off the domestic cold water inlet.
2. Open a hot water tap on the installation.
3. Open a safety unit valve.
4. When the water stops flowing, the appliance has been drained.

**CAUTION****Pressure limiter device**

- ▶ The pressure limiter device (safety valve or safety unit) must be operated regularly in order to clear out any limescale deposits and ensure that it is not blocked.
- ▶ The pressure limiter device must be connected to a discharge pipe.
- ▶ As water may flow from the discharge pipe, it must be kept open to the air, in a frost-free environment, in a continuous downward gradient.

For the type, characteristics and connection of the pressure limiter device, please refer to the section entitled Connecting the domestic hot water tank to the drinking water network in the installation and service manual for the domestic hot water tank.



The user guide and the installation manual can also be found on our internet site.

**CAUTION**

Allowance must be made for a means of disconnection in the fixed pipes in accordance with the regulations on installations.

**CAUTION**

If a power cord is provided with the appliance and it turns out to be damaged, it must be replaced by the manufacturer, its after sales service or persons with similar qualifications in order to obviate any danger.

**CAUTION**

Respect the maximum water inlet pressure to ensure correct operation of the appliance, referring to the chapter "Technical Specifications".

**CAUTION**

Before any work, switch off the mains supply to the appliance.

**CAUTION**

In order to limit the risk of being scalded, the installation of a thermostatic mixing valve on the domestic hot water flow piping is compulsory.

1.2 Recommendations

Have the installation regularly serviced to guarantee that it operates correctly over time.

It is essential to check the magnesium anode in the DHW tank and the installation and heat transporting fluid pressure every two years.

**CAUTION**

Never cut the power to the solar control system, even during extended absences. The control system protects the installation against overheating in summer when it is running.

During extended absences, we recommend lowering the set point temperature in the solar DHW calorifier to 45°C. When the user is present, the set point must be set to 60°C.

**CAUTION**

Never drain the installation. Do not replace or add water or solar fluid to the installation. These actions must be carried out by a qualified technician.

**CAUTION**

Do not modify the control system parameters unless fully conversant with them.

2 About this manual

2.1 Symbols used

2.1.1. Symbols used in the manual

In these instructions, various danger levels are employed to draw the user's attention to particular information. In so doing, we wish to safeguard the user's safety, highlight hazards and guarantee correct operation of the appliance.

**DANGER**

Risk of a dangerous situation causing serious physical injury.

**WARNING**

Risk of a dangerous situation causing slight physical injury.

**CAUTION**

Risk of material damage.



Signals important information.



Signals a referral to other instructions or other pages in the instructions.

2.1.2. Symbols used on the equipment



Before installing and commissioning the device, read carefully the instruction manuals provided.



Dispose of the used products in an appropriate recovery and recycling structure.



2.2 Abbreviations

- ▶ **CFC:** Chlorofluorocarbon
- ▶ **DHW:** Domestic hot water
- ▶ **PCU:** Primary Control Unit - PCB for managing burner operation

- ▶ **SCU:** Secondary Control Unit - control panel PCB

2.3 Liabilities

2.3.1. Manufacturer's liability

Our products are manufactured in compliance with the requirements of the various applicable European Directives. They are therefore delivered with **CE** marking and all relevant documentation.

In the interest of customers, we are continuously endeavouring to make improvements in product quality. All the specifications stated in this document are therefore subject to change without notice.

Our liability as the manufacturer may not be invoked in the following cases:

- ▶ Failure to abide by the instructions on using the appliance.
- ▶ Faulty or insufficient maintenance of the appliance.
- ▶ Failure to abide by the instructions on installing the appliance.

2.3.2. Installer's liability

The installer is responsible for the installation and commissioning of the appliance. The installer must respect the following instructions:

- ▶ Read and follow the instructions given in the manuals provided with the appliance.
- ▶ Carry out installation in compliance with the prevailing legislation and standards.
- ▶ Perform the initial start up and carry out any checks necessary.
- ▶ Explain the installation to the user.
- ▶ If a maintenance is necessary, warn the user of the obligation to check the appliance and maintain it in good working order.
- ▶ Give all the instruction manuals to the user.

2.3.3. User's liability

To guarantee optimum operation of the appliance, the user must respect the following instructions:

- ▶ Read and follow the instructions given in the manuals provided with the appliance.
- ▶ Call on qualified professionals to carry out installation and initial start up.
- ▶ Get your installer to explain your installation to you.
- ▶ Ensure the Appliance is serviced in accordance with the manufacturer's instructions by a suitable qualified person.

- ▶ Keep the instruction manuals in good condition close to the appliance.

3 Technical specifications

3.1 Homologations

3.1.1. Certifications

This product complies to the requirements to the european directives and following standards:

- ▶ Low voltage directive 2014/35/EU.
Reference Standard: EN 60.335.1.
Reference Standard: EN 60.335.2.21.
- ▶ Electromagnetic compatibility directive 2014/30/EU.
Reference Standards: EN 50.081.1, EN 50.082.1, EN 55.014

3.1.2. Factory test

Before leaving the factory, each appliance is tested for the following:

- ▶ Water tightness
- ▶ Air tightness
- ▶ Electrical safety.

3.1.3. Directive 97/23/EC

This product conforms to the requirements of european directive 97 / 23 / EC, article 3, paragraph 3, on pressure equipment.

3.2 Technical specifications

3.2.1. Characteristics of the DHW calorifier

DHW tank E200 SHL		
Primary circuit (Heating water)		
Maximum operating temperature	°C	95
Maximum operating pressure	bar (MPa)	3 (0.3)
Primary circuit (Solar circuit fluid)		
Maximum operating temperature	°C	135
Maximum operating pressure	bar (MPa)	6 (0.6)
Exchanger capacity	l	8.4

DHW tank E200 SHL		
Exchange surface	m ²	1.25
Secondary circuit (domestic water)		
Maximum operating temperature	°C	95
Maximum operating pressure	bar (MPa)	10 (1.0)
Water content	l	220
Top up volume	l	54
Solar volume	l	166
Weight		
Shipping weight (Foam coated domestic hot water tank)	kg	109

Performances related to the boiler type		Gas fired floor-standing condensing boiler ⁽¹⁾	
		25 kW	17/29 kW
Power exchanged	kW	28	28
Flow per hour ($\Delta T = 35^{\circ}\text{C}$) ⁽²⁾	l/h	690	690
Specific flow ($\Delta T = 30^{\circ}\text{C}$) ⁽³⁾	l/min	19	19
Draw-off capacity ⁽³⁾	l/10 mm	190	190
Stand-by losses $\Delta T = 45\text{ K } q_{a45}$ (EN 625)	W	117	117
Maintenance consumption Q_{pr} (EN 12897)	kWh/24h	2.26	2.26
Q_p : Primary flow rate	m ³ /h	0.80	0.80
⁽¹⁾ Depending on the country in which the boiler is installed ⁽²⁾ Domestic cold water inlet: 10 °C - Domestic hot water outlet: 45 °C - Domestic hot water set point: 65 °C ⁽³⁾ Domestic cold water inlet: 10 °C - Domestic hot water outlet: 40 °C - Primary circuit (heating water): 80 °C - Calorifier temperature: 60 °C			

4 Description

4.1 General description

Main parts:

- ▶ The tank is made of high quality steel and is lined with food safety quality enamel vitrified at 850°C, which protects the tank from corrosion.
- ▶ The tank is protected against corrosion by a magnesium anode which should be checked every 2 years and replaced if need be.
- ▶ The heat exchanger with plates is a device that allows water/water exchanges.
- ▶ The appliance is insulated by CFC-free polyurethane foam, which reduces heat losses to a minimum.
- ▶ The outside casing is made of painted steel sheeting.
- ▶ The solar control system.
- ▶ The thermostatic mixing valve.

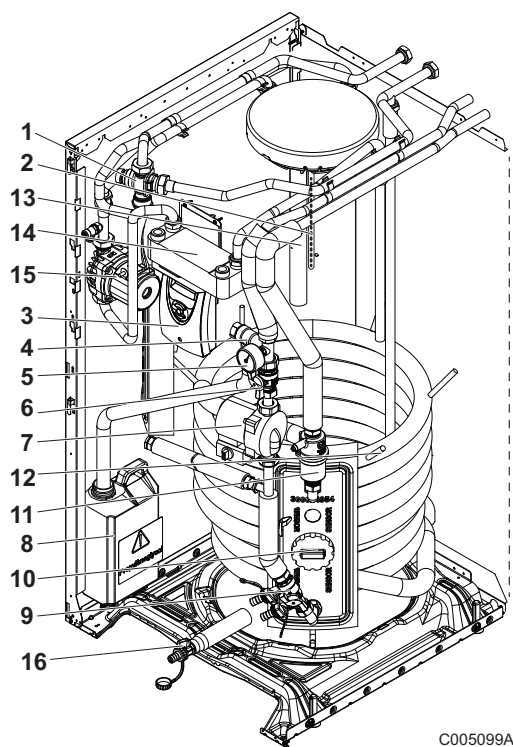
The E200 SHL domestic hot water tank is available exclusively in combination with the boilers listed below. It cannot be used as an independent DHW tank:

- ▶ EGC 25
- ▶ EGC 25 BE
- ▶ EGC 17/29
- ▶ GSCR 25



Energy labels, product data files and technical data on product packages can be found on our internet site.

4.2 Main parts



C005099A

- | | |
|-----------|---|
| 1 | Thermostatic mixing valve for domestic hot water |
| 2 | Domestic hot water sensor |
| 3 | Solar regulator |
| 4 | Safety valve |
| 5 | Needle pressure gauge |
| 6 | Antithermosiphon valve operated by the spherical plug valve |
| 7 | Solar circuit circulating pump |
| 8 | Glycol reservoir |
| 9 | Primary solar circuit filling and draining device |
| 10 | Primary solar coil sensor |
| 11 | Manual bleed degasser |
| 12 | Primary solar coil |
| 13 | Magnesium anode |
| 14 | Plate exchanger on the primary boiler circuit |
| 15 | Domestic hot water circulating pump |
| 16 | Drain cock |

5 Operating the appliance

5.1 Commissioning procedure

**CAUTION**

Initial commissioning must be done by a qualified professional.

5.2 Antifreeze protection

**WARNING**

Do not switch off the mains supply.

- ▶ Antifreeze protection is guaranteed.

5.3 Shutting down the solar control system

**CAUTION**

Do not shut down power to the control system or drain the heat-exchanging fluid.

The system is designed in such a way that no special precautions are necessary during long periods of absence in summer.
The solar control system protects the installation from overheating.

6 Checking and maintenance

6.1 General instructions

**CAUTION**

- ▶ Maintenance operations must be done by a qualified engineer.
- ▶ Only original spare parts must be used.

6.2 Safety valve or safety unit (Domestic hot water circuit)

The valve or safety assembly must be operated at least **once a month** in order to ensure that it is operating correctly and to prevent possible overpressure which would damage the DHW tank.

**WARNING**

Failure to comply with this maintenance rule may cause deterioration of the DHW tank and the cancellation of the guarantee.

**WARNING**

Only operate the valve (red head) on the DHW circuit. Do not operate the valve (yellow head) on the solar circuit.

6.3 Cleaning the casing material

Clean the outside of appliances using a damp cloth and a mild detergent.

6.4 Sacrificial anode

Have the condition of the anode checked after the first year. The magnesium anode must be checked by a qualified professional at least every 2 years.


6.5 Inspection and maintenance of the solar circuit



We recommend that you take out a maintenance contract providing for an annual or biannual check of the fluid level, the antifreeze protection, the pressure of the installation and the expansion vessel, its tightness and its general running.

6.6 solar regulator

The solar control system is governed by the boiler control system. All parameters and settings on the solar control system are managed from the boiler control panel.

 Refer to the installation and maintenance instructions of the boiler.

6.7 Maintenance of the thermostatic mixing valve

The thermostatic mixer tap does not require any particular maintenance.

7 Warranty

7.1 General

You have just purchased one of our appliances and we thank you for the trust you have placed in our products.

Please note that your appliance will provide good service for a longer period of time if it is regularly checked and maintained.

Your installer and our customer support network are at your disposal at all times.

7.2 Warranty terms

France: The following provisions are not exclusive of the buyer being able to benefit from the legal warranty stipulated in Articles 1641 to 1648 of the Civil Code.

Belgium: The following provisions regarding the contractual warranty are not exclusive of the buyer being able to benefit from the legal provisions applicable in Belgium regarding hidden defects.

Switzerland: The application of the warranty is subject to the terms and conditions of sale, delivery and warranty of the company marketing products.

Portugal: The following provisions do not adversely affect consumers' rights, as laid down in Decree-Law 67/2003 of 8 April amended by Decree-Law 84/2008 of 21 May, warranties relating to sales of consumer goods and other implementing rules.

Other countries: The following provisions are not exclusive of the buyer being able to benefit from the legal provisions applicable regarding hidden defects in the buyer's country.

Starting from the purchase date shown on the original installer's invoice, your appliance has a contractual guarantee against any manufacturing defect.

The length of the guarantee is mentioned in the price catalogue. The manufacturer is not liable for any improper use of the appliance or failure to maintain or install the unit correctly (the user shall take care to ensure that the system is installed by a qualified engineer).

In particular, the manufacturer shall not be held responsible for any damage, loss or injury caused by installations which do not comply with the following:

- ▶ applicable local laws and regulations,
- ▶ specific requirements relating to the installation, such as national and/or local regulations,
- ▶ the manufacturer's instructions, in particular those relating to the regular maintenance of the unit,
- ▶ the rules of the profession.

The warranty is limited to the exchange or repair of such parts as have been recognised to be faulty by our technical department and does not cover labour, travel and carriage costs.

The warranty shall not apply to the replacement or repair of parts damaged by normal wear and tear, negligence, repairs by unqualified parties, faulty or insufficient monitoring and maintenance, faulty power supply or the use of unsuitable fuel.

Sub-assemblies such as motors, pumps, electric valves etc. are guaranteed only if they have never been dismantled.

The legislation laid down by european directive 99/44/EEC, transposed by legislative decree No. 24 of 2 February 2002 published in O.J. No. 57 of 8 March 2002, continues to apply.

Appendix

Informations relating to the solar device

Contents

1 **Specific information** **3**
1.1 Recommendations 3
1.2 Circulation pump 3
1.3 Disposal and Recycling 3
1.4 Data relating to the solar device 3

1 Specific information

1.1 Recommendations



Note

Only qualified persons are authorised to assemble, install and maintain the installation.

1.2 Circulation pump



Note

The benchmark for the most efficient circulators is $EEI \leq 0.20$.

1.3 Disposal and Recycling



Note

Removal and disposal of the domestic hot water tank must be carried out by a qualified installer in accordance with local and national regulations.

1. Cut the electricity to the domestic hot water tank.
2. Disconnect the cables on the electrical components.
3. Close the domestic water inlet valve.
4. Drain the installation.
5. Dismantle all water connections fitted to the domestic hot water tank outlet.
6. Scrap and recycle the domestic hot water tank in accordance with local and national regulations.

1.4 Data relating to the solar device

Tab.1 Data relating to the solar device

		E 200 SHL
Solar hot water storage tank - Standing loss	W	94
Solar hot water storage tank - Storage volume	l	220
Power consumption - Pump	W	23
Power consumption - Standby	W	0.57
Annual auxiliary energy consumption (Q_{aux})	kWh	51



© Copyright

All technical and technological information contained in these technical instructions, as well as any drawings and technical descriptions supplied, remain our property and shall not be multiplied without our prior consent in writing.

10/05/2016



7654795-001-02