### Installation and service instructions for contractors



Vitocell 100-E/100-W Type SVWA Heating water buffer cylinder

# VITOCELL 100-E/100-W



### Safety instructions

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Please follow these safety instructions closely to prevent accidents and material losses.

### Safety instructions explained

- - Danger

This symbol warns against the risk of injury.

#### **Please note**

This symbol warns against the risk of material losses and environmental pollution.

### Target group

These instructions are exclusively intended for qualified contractors.

Note

Details identified by the word "Note" contain additional information.

- Work on electrical equipment may only be carried out by a qualified electrician.
- The system must be commissioned by the system installer or a qualified person authorised by the installer.

### Regulations to be observed

- National installation regulations
- Statutory regulations for the prevention of accidents
- Statutory regulations for environmental protection
- Working on the system

- Codes of practice of the relevant trade associations
- Relevant country-specific safety regulations
- Isolate the system from the power supply (e.g. by removing the separate fuse or by means of a mains isolator) and check that it is no longer live.
- Safeguard the system against reconnection.

### **Please note**

Electronic assemblies can be damaged by electrostatic discharge. Prior to commencing any work, touch earthed objects such as heating or water pipes to discharge static loads.



### Danger

- Hot surfaces can cause burns.
- Before maintenance and service work, switch OFF the appliance and let it cool down.
- Never touch the hot surfaces of uninsulated pipes and fittings.

### Safety instructions (cont.)



### Danger

Floors that are wet or damp with water or glycol based liquids can cause injury due to slipping and fallina.

- Keep the floor clean and dry during installation and maintenance work.
- Wear non-slip shoes.

### **Repair work**

- **Please note**

Repairing components that fulfil a safety function can compromise the safe operation of the system. Replace faulty components only with genuine Viessmann spare parts.

### Auxiliary components, spare and wearing parts

#### Please note

Spare and wearing parts that have not been tested together with the system can compromise its function. Installing non-authorised components and making non-approved modifications or conversions can compromise safety and may invalidate our warranty. For replacements, use only original

spare parts supplied or approved by Viessmann.



### Danger

Broken-off fragments of insulation material can cause death by suffocation if inhaled or swallowed.

- Do not let children play in the installation room.
- Keep the installation room clean after installation and maintenance work.

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### **Disposal of packaging**

Please dispose of packaging waste in line with statutory regulations.

#### **Symbols**

Symbol	Meaning
	Reference to other document containing further information
1	Step in a diagram: The numbers correspond to the order in which the steps are carried out.
!	Warning of material losses and environ- mental pollution
4	Live electrical area
٢	Pay particular attention.
) <b>D</b>	<ul> <li>Component must audibly click into place. or</li> <li>Acoustic signal</li> </ul>
$\downarrow$	<ul> <li>Fit new component. or</li> <li>In conjunction with a tool: Clean the surface.</li> </ul>
	Dispose of component correctly.
X	Dispose of component at a suitable collec- tion point. Do <b>not</b> dispose of component in domestic waste.

The steps in connection with commissioning, inspection and maintenance are found in the "Commissioning, inspection and maintenance" section and identified as follows:

SymbolMeaningImage: Steps required during commissioningImage: Steps required during commissioningImage: Steps required during inspectionImage: Steps required during inspectionImage: Steps required during inspectionImage: Steps required during maintenanceImage: Steps required during maintenanceImage: Steps required during maintenance		
<ul> <li>Steps required during commissioning</li> <li>Not required during commissioning</li> <li>Steps required during inspection</li> <li>Not required during inspection</li> <li>Steps required during maintenance</li> <li>Not required during maintenance</li> </ul>	Symbol	Meaning
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Steps required during maintenance           Not required during maintenance		Not required during inspection
Not required during maintenance	سکر	Steps required during maintenance
	Je .	Not required during maintenance

#### Intended use

The appliance is only intended to be installed and operated in sealed unvented systems that comply with EN 12828 / DIN 1988, or solar thermal systems that comply with EN 12977, with due attention paid to the associated installation, service and operating instructions. DHW cylinders are only designed to store and heat water of potable water quality. Heating water buffer cylinders are only designed to hold fill water of potable water quality. Only operate solar collectors with the heat transfer medium approved by the manufacturer. Intended use presupposes that a fixed installation in conjunction with permissible, system-specific components has been carried out.

Commercial or industrial usage for a purpose other than heating the building or DHW shall be deemed inappropriate.

Any usage beyond this must be approved by the manufacturer for the individual case.

#### Information

#### Intended use (cont.)

Incorrect usage or operation of the appliance (e.g. the appliance being opened by the system user) is prohibited and results in an exclusion of liability.

Incorrect usage also occurs if the components in the system are modified from their intended use (e.g. through direct DHW heating in the collector).

Adhere to statutory regulations, especially concerning the hygiene of potable water.

### **Product information**

#### Vitocell 100-E/100-W, type SVWA

Steel cylinder for storing heating water in combination with heat pumps and solid fuel boilers, with optional electric heating (immersion heater) Capacity: 200 I Suitable for systems to EN 12828 and DIN 4753. Vitocell 100-E: Vitosilver Vitocell 100-W: White

#### System examples

Available system examples: See **www.viessmann-schemes.com**.

#### Spare parts lists

Information about spare parts can be found at **www.viessmann.com/etapp** or in the Viessmann spare part app.





Service

# Unpacking and handling



Fig. 1

#### Preparing for installation

#### Connections



Fig. 2 Front

- (A) Thermometer sensor retainer
- (B) Female connection for immersion heater (EHE)



Fig. 3 Back cover

- Air vent valve (EL)
- (B) Heating water flow 1 (HV1) to the heating circuits
- © Clamping device 1 (SPR1) for cylinder temperature sensor
- (D) Heating water flow 2 (HV2) from the heat generator
- (E) Clamping device 2 (SPR2) for cylinder temperature sensor
- (F) Heating water return 2 (HR2) from the heating circuits
- Injection process plug (do not open, do not insert anything)
- (H) Heating water return 1 (HR1) to the heat generator
- (K) Drain outlet (E)

### **Cylinder installation**

#### Please note

The thermal insulation must not come into contact with naked flames. Exercise caution when welding and brazing

#### Please note

To prevent material damage, install the buffer cylinder in a draught-free room free from the risk of frost. Otherwise the buffer cylinder will have to be

drained if there is a risk of frost and it is not in use.

- Provide adequate clearance from the wall so that the thermostat can be operated (if supplied).
- Placing the cylinder on a plinth will make the room easier to clean.
- Level the buffer cylinder with its adjustable feet.

#### Cylinder incl. immersion heater



Fig. 5

#### Connecting the equipotential bonding

Connect the equipotential bonding in accordance with the requirements stipulated by your local power supply utility and VDE [or local] regulations. **CH**: Connect the equipotential bonding in accordance with the requirements stipulated by your local power supply utility and current SEV [or local] regulations.

#### Note

Only use one or two of the adjustable feet to level the cylinder. At least one of the adjustable feet must remain fully screwed in.



**Never** extend the adjustable feet beyond a total length of 35 mm.



Installation instructions, immersion heater

### Note

Maintain the minimum clearance.

#### Note

The unheated length of any threaded immersion heater installed on site must be at least 100 mm.

Cylinder capacity: 200 l. Immersion heater output: 6 kW.

#### Fitting the cylinder temperature sensor and thermometer sensor (if supplied)



#### Fig. 6

(A) Recess for thermometer cable

#### Note

The cylinder temperature sensor is supplied in the control unit pack.

- **1.** Insert the cylinder temperature sensor as far as it will go into the opening of the clamping device.
- **2.** Hand-tighten the cylinder temperature sensor with the screw provided.

#### Note

Hold the cylinder temperature sensor in place in the sensor terminal until the screw is screwed in.

#### Please note

- Overtightening the fixing screw may damage the cylinder temperature sensor. Torque: Max. 2 Nm
- 3. Remove the top cover.

- 4. Clamp the thermometer sensor in the clamping bracket.
- **5.** Guide the thermometer cable through the groove in the thermal insulation and the hole in the sheet steel casing.
- 6. Secure the thermometer (accessory) to the wall.

Installation instructions for wall thermometer

7. Refit the top cover.

#### Note

The recess A in the top cover is intended for the thermometer cable.

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### Fitting the cylinder temperature sensor and... (cont.)

- **8.** At heating water flow temperatures above 95 °C, remove the pipe collars from the pipe outlets (collars have l.h. threads).
- **9.** If no immersion heater is being installed, seal the front female connection with the plug supplied and fit the cover.
- **10.** Affix supplied type plate to the back of the cylinder.

## Commissioning/service reports

	Commissioning	Maintenance/service	Maintenance/service
Date:			
By:			

	Maintenance/service	Maintenance/service	Maintenance/service
Date:			
By:			

	Maintenance/service	Maintenance/service	Maintenance/service
Date:			
By:			

	Maintenance/service	Maintenance/service	Maintenance/service
Date:			
By:			

	Maintenance/service	Maintenance/service	Maintenance/service
Date:			
By:			

### Product characteristics

### Vitocell 100-E/100-W, type SVWA

Cylinder capacity	I	200
Standby heat loss	kWh/24 h	1.39
q <sub>B,S</sub> with 45 K temperature differential		

### Accessories

### Specification for immersion heater

Rated output in standard mode	k/W	2	1	6
Rated voltage		3/N		U H7
Rated current	A	8.7	8.7	8.7
Heat-up time from 10 to 60 °C	h	4.7	2.4	1.6
Content that can be heated with an immersion heater			163	

### Final decommissioning and disposal

Viessmann products can be recycled. Components and substances from the system are not part of ordinary domestic waste. For decommissioning, isolate the system from the power supply and allow components to cool down where appropriate.

All components must be disposed of correctly.

### **Declaration of conformity**

We, Viessmann Werke GmbH & Co. KG, D-35107 Allendorf, declare as sole responsible body that the named product complies with the European directives and supplementary national requirements in terms of its design and operational characteristics. Using the serial number, the full Declaration of Conformity can be found on the following website: www.viessmann.co.uk/eu-conformity



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