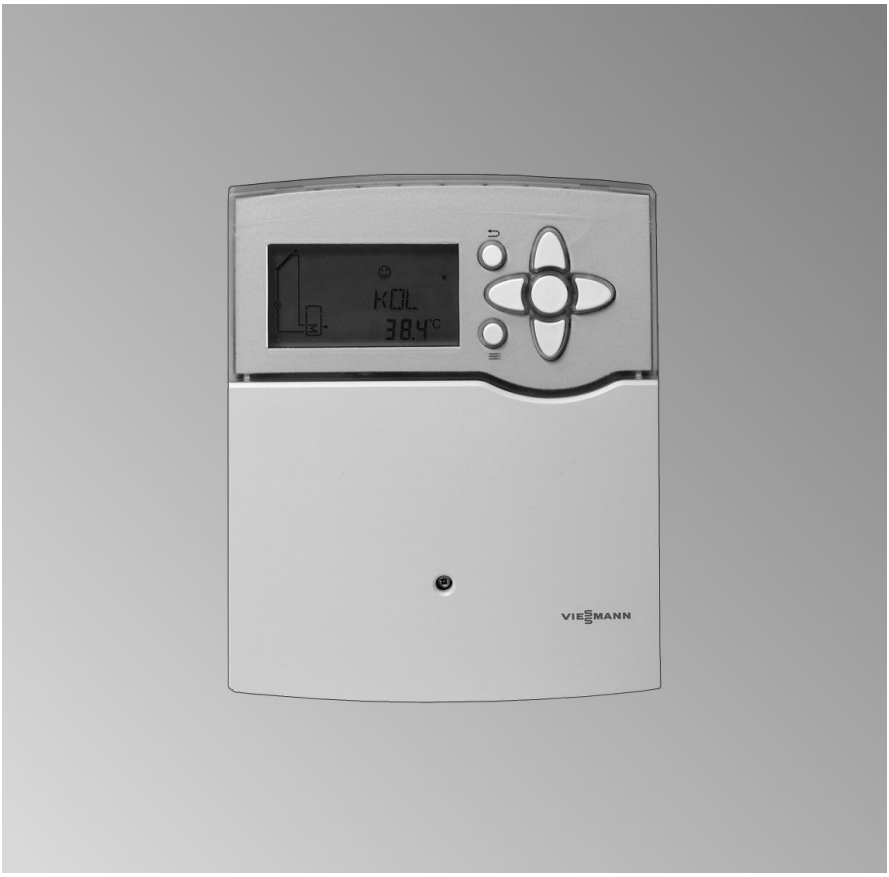
Operating instructions

for the system user

Control unit for solar thermal systems

VITOSOLIC 100



5592 640 GB 4/2014

Please keep safe.

For your safety

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.

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

Target group

These operating instructions are intended for system users.
This appliance can also be operated by children of 8 years and older, as well as by individuals with reduced physical, sensory or mental faculties or those lacking in experience and knowledge, provided such individuals are being supervised or have been instructed in the safe use of this appliance as well as in any risks arising from it.

Please note
Supervise children in the proximity of the appliance.
- Never permit children to play with the appliance.
- Cleaning and maintenance must not be carried out by unsupervised children.

Appliance connection

- The appliance may only be connected and commissioned by authorised contractors.
- Observe the specified electrical connection requirements.
- Modifications to the existing installation may only be carried out by authorised contractors.

Danger
Incorrectly executed work on the system can lead to life-threatening accidents.
Work on electrical equipment must only be carried out by a qualified electrician.

Work on the appliance

- All settings and work on the appliance must be carried out as specified in these operating instructions.
  Further work on the appliance may only be carried out by authorised contractors.
- Never open the appliance.
- Never change or remove fitted accessories.

In case of fire

Danger
Fire presents a risk of burns and explosion.
- Switch the system OFF.
- Use a tested fire extinguisher, class ABC.

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For your safety (cont.)

Auxiliary components, spare and wearing parts

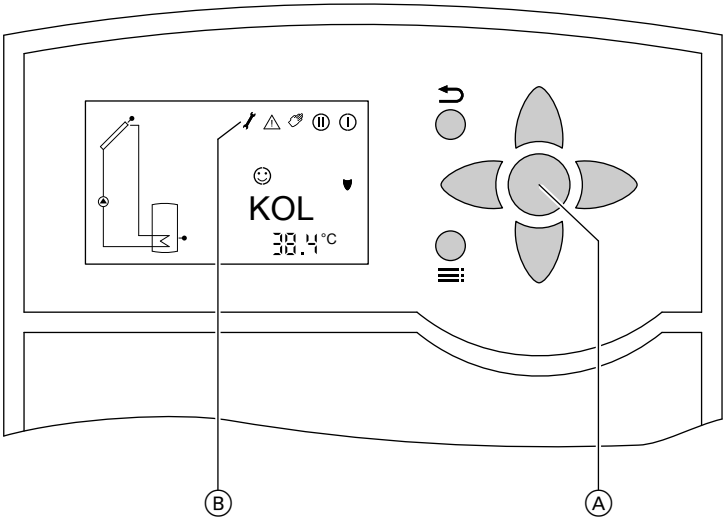
Please note
Components that were not tested with the system may cause system damage, or may affect its functions.
Have all installation or replacement work carried out by qualified contractors.

Commissioning

The commissioning and adjusting of the control unit to local conditions and to building characteristics, plus the instruction of the user in operating the system, must be carried out by your heating contractor.

Operation

Controls



Ⓐ OK to confirm your selection or setting.
Ⓑ Symbols line
⮌ To terminate a value adjustment in progress.
▲ / ▼ Cursor keys
To scroll through the menu.
▶ / ◀ Cursor keys
To adjust values.
☰ To change from the scanning level to the setting level

To the right, underneath the symbol line on the display, you will see which keys you can operate to make adjustments and scans.

Symbols on the display

These symbols are not always displayed, but appear subject to the system operating condition.

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Operation (cont.)

Symbol	Permanent display	Flashing
☺	The system is operational.	—
ⓘ	Relay 1 is on. The solar circuit pump is running.	—
ⓘⓘ	Relay 2 is on.	—
☼	The set DHW temperature has been reached.	Collector cooling function, return cooling function enabled
❄	The frost protection function is enabled.	Failed to reach minimum collector temperature
⚠	—	Emergency collector shutdown (collector limit temperature reached) or cylinder emergency stop active
⚠+🔧	Sensor fault: 🔧	⚠
⚠+✋	Manual mode: ✋	⚠
SET	You can change the relevant parameters.	Change parameters with ▲ / ▼.

Displaying actual values

Use ▲ / ▼ to scan the following actual values subject to the system equipment level:

- ***Note***
  The flashing sensor symbol in the system scheme shows the position of the actual temperature.

  KOL – Collector temperature in °C (standard display)
- **TSPU** – DHW temperature in °C
- **S3** – Thermostat temperature in °C, temperature at any additional connected sensor that may be connected
- **n1%** – Solar circuit pump speed
- **n2%** – Operating condition of the actuator at relay output R2
- **hP1** – Hours run of the equipment at relay output 1
- **hP2** – Hours run of the equipment at relay output 2
- **KWh** – Amount of heat in kWh, if the heat meter is enabled
- **MWh** – Amount of heat in MWh, if the heat meter is enabled

  Note
  Add the values for MWh and kWh together.

Resetting hours run and amount of heat

Whilst the value is displayed, press the following keys:

1. **OK** **"SET"** flashes. Value 0 appears.

2. **OK** to confirm

The solar thermal system does not start

Cause	Remedy
The solar control unit MCB has responded.	Inform your local heating contractor.
Power failure	The solar control unit automatically returns to operation once the power supply has been restored.
The power distribution MCB (main domestic MCB) has responded.	Check the MCB and inform your heating contractor if necessary.
The collector limit temperature or maximum cylinder temperature has been reached.	Wait until the relevant temperature has fallen below its respective limit.
The solar control unit is in manual mode. The display shows "☞" and "⚠" flashes.	Select **"Auto"**: 1. Press ☰ until "**ANL**" is displayed. 2. Press ▼ until **"HND 1"** or **"HND 2"** is displayed. 3. Press **OK**, **"SET"** flashes. 4. Press ◀ until **"Auto"** is displayed. 5. Press **OK** to confirm. 6. Press ☰. The collector temperature is displayed.

There is no DHW available

Cause	Remedy
The solar control unit is faulty.	Inform your local heating contractor.
The collector temperature is too high, safety shutdown by the solar control unit.	Wait until the collector temperature has dropped.
The set cylinder temperature (set DHW temperature) is set too low.	Inform your local heating contractor.
The solar circuit pump is faulty.	Inform your local heating contractor.
The DHW cylinder is not being reheated: The operating and time programs on the boiler control unit are incorrectly set.	Enable DHW heating.  Operating instructions of the boiler control unit

The display is flashing

Cause	Remedy
Example, sensor fault  The sensor symbol in the system scheme flashes quickly. ⚠ flashes.	Read off the fault code. Inform your local heating contractor. In the example, the collector temperature sensor has a short circuit. –88.8 Sensor short circuit 888.8 Sensor lead break ***Note*** *Check other sensors with ▲ / ▼.*

Inspection and maintenance

DHW cylinder (if installed)

Standards DIN 1988-8 and EN 806 specify that maintenance and cleaning should be carried out no later than 2 years after commissioning and as required thereafter.
Only a qualified heating contractor should clean the inside of a DHW cylinder and the DHW connections.
If any water treatment equipment (e.g. a sluice or injection system) is installed in the cold water supply of the DHW cylinder, ensure this is refilled in good time. In this connection, observe the manufacturer's instructions.

In addition for Vitocell 100:
We recommend that the correct function of the sacrificial anode is checked annually by your heating contractor.
The function of the sacrificial anode can be checked without interrupting the system operation. The heating contractor will check the earth current with an anode tester.

Safety valve (DHW cylinder)

The function of the safety valve must be checked every six months by the user or a contractor through venting (see valve manufacturer's instructions). The valve seat may become contaminated.

Water may drip from the safety valve during a heat-up process. The outlet is open to the atmosphere and must not be closed off.

Potable water filter (if installed)

To maintain high hygienic standards, proceed as follows:
- Replace filter element on non-back flushing filters every six months (visual inspection every two months).
- On back flushing filters, back flush every two months.

Damaged cables / lines

If there is damage to the connecting cables or lines of the appliance or externally installed accessories, these must be replaced with special cables or lines. Only use Viessmann cables / lines as replacement. For this, notify your qualified contractor.

Your contact

Contact your local contractor if you have any questions regarding the maintenance and repair of your system. You may, for example, find local contractors on the internet under www.viessmann.com.

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5592 640 GB Subject to technical modifications.