

**ViCare Smart Climate**


Individual room control with ViCare Smart Climate




**ViCare Smart Climate**




## Safety instructions

-  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 instructions are exclusively intended for qualified contractors.

- Work on gas installations may only be carried out by a registered gas fitter.
- 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
- Codes of practice of the relevant trade associations
- Relevant country-specific safety regulations

### Safety instructions for working on the system

#### Working on the system

- Where gas is used as the fuel, close the main gas shut-off valve and safeguard it against unintentional reopening.
- 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.
- Wear suitable personal protective equipment when carrying out any work.

**Safety instructions** (cont.)**Danger**

Hot surfaces and fluids can lead to burns or scalding.

- Before maintenance and service work, switch OFF the appliance and let it cool down.
- Never touch hot surfaces on the boiler, burner, flue system or pipe-work.

**Please note**

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

**Auxiliary components, spare and wearing parts****Please note**


Auxiliary components, spare parts 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 installation and replacements, use only Viessmann original parts or parts approved by Viessmann.

**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.

## Safety instructions for operating the system


### If you smell gas


-  **Danger**  
Escaping gas can lead to explosions which may result in serious injury.
- Do not smoke. Prevent naked flames and sparks. Never switch lights or electrical appliances on or off.
  - Close the gas shut-off valve.
  - Open windows and doors.
  - Evacuate any people from the danger zone.
  - Notify your gas or electricity supply utility from outside the building.
  - Have the power supply to the building shut off from a safe place (outside the building).

### If you smell flue gas


-  **Danger**  
Flue gas can lead to life threatening poisoning.
- Shut down the heating system.
  - Ventilate the installation site.
  - Close doors to living spaces to prevent flue gases from spreading.

### What to do if water escapes from the appliance

-  **Danger**  
If water escapes from the appliance there is a risk of electrocution. Switch OFF the heating system at the external isolator (e.g. fuse box, domestic distribution board).


-  **Danger**  
If water escapes from the appliance there is a risk of scalding. Never touch hot heating water.

### Condensate

-  **Danger**  
Contact with condensate can be harmful to health. Never let condensate touch your skin or eyes and do not swallow it.

### Flue systems and combustion air

Ensure that flue systems are clear and cannot be sealed, for instance due to accumulation of condensate or other external causes. Ensure an adequate supply of combustion air. Inform system users that subsequent modifications to the building characteristics are not permissible (e.g. cable/pipe-work routing, cladding or partitions).

-  **Danger**  
Leaking or blocked flue systems, or an inadequate supply of combustion air can cause life threatening poisoning from carbon monoxide in the flue gas. Ensure the flue system is in good working order. Vents for supplying combustion air must be non-sealable.

### Extractors

Operating appliances that extract air to the outside (extractor hoods, extractors, air conditioning units, central vacuum cleaning systems, etc.) can create negative pressure. If the boiler is operated at the same time, this can lead to a reverse flow of flue gas.

**Safety instructions** (cont.)**Danger**











The simultaneous operation of the boiler and appliances that exhausts air to the outside can result in life threatening poisoning due to a reverse flow of flue gas.

Fit an interlock circuit or take suitable steps to ensure an adequate supply of combustion air.

<b>1. Information</b>	Symbols .....	7
	Intended use .....	7
	Liability .....	8
	■ Exclusion of liability .....	8
	Operation via app .....	8
	■ ViCare app .....	8
	■ ViGuide .....	8
<b>2. Introduction</b>	Scope of functions .....	9
	■ Further documents .....	9
	ViCare Smart Climate components .....	9
	■ ViCare climate sensor .....	9
	■ ViCare CO2 sensor .....	10
	■ ViCare thermostatic radiator valve .....	10
	■ ViCare floor thermostat .....	10
	■ ViCare wireless repeater .....	10
	■ Vitoconnect OPTO .....	10
	Data connections .....	10
	■ Compatible appliances with Viessmann One Base .....	10
	■ Compatible Viessmann appliances without Viessmann One Base ....	11
	■ ViCare installations without a connection to the heat generator/venti- lation unit .....	12
<b>3. Function description</b>	Individual room control .....	14
	■ Combining rooms with and without individual room control .....	14
	■ Time programs .....	15
<b>4. System configuration</b>	Setting individual room control .....	16
	ViCare thermostatic radiator valve .....	16
	■ Type of connection adaptor .....	16
	■ Checking the connection adaptor in heating mode .....	16
	■ Automatic calibration (opening point detection) .....	16
	Range of the wireless signal .....	17
	■ Checking the signal strength .....	17
	■ Increasing the wireless range .....	17
<b>5. Parameters</b>	.....	19
<b>6. Messages</b>	Notes on messages .....	21
	Fault messages .....	21
	■ F.77 Data memory inconsistent .....	21
	■ F.728 Faulty temperature sensor .....	21
	■ F.729 Hardware fault .....	22
	■ F.730 Motor fault .....	22
	■ F.732 Battery charge level low .....	22
	■ F.733 Faulty flow temperature contact sensor .....	23
	■ F.734 Faulty return temperature contact sensor .....	23
	■ F.736 Faulty temperature, humidity or CO2 sensor .....	23
	■ F.1310 Faulty CO2 sensor .....	23
	Warning messages .....	24
	■ A.27 Battery charge level low .....	24
<b>7. Certificates</b>	Declarations of Conformity .....	25
<b>8. Keyword index</b>	.....	26

## Symbols

### Symbols in these instructions

Symbol	Meaning
	Reference to other document containing further information
	Step in a diagram: The numbers correspond to the order in which the steps are carried out.
	Warning of personal injury
	Warning of material losses and environmental pollution
	Live electrical area
	Pay particular attention.
	<ul style="list-style-type: none"> <li>▪ Component must audibly click into place.</li> <li>or</li> <li>▪ Acoustic signal</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Fit new component.</li> <li>or</li> <li>▪ In conjunction with a tool: Clean the surface.</li> </ul>
	Dispose of component correctly.
	Dispose of component at a suitable collection point. Do <b>not</b> dispose of component in domestic waste.

## Intended use

ViCare Smart Climate components may be installed and operated as intended in conjunction with the electronic control units of supported Viessmann heat generators, ventilation units, photovoltaic systems and power storage systems or without these appliances. The relevant installation, service and operating instructions must be observed and the specifications regarding current and voltage must be adhered to.

The ViCare Smart Climate components communicate with each other and with the listed appliances that have Viessmann One Base or Vitoconnect via low power radio.

Incorrect usage of the ViCare Smart Climate components is prohibited and results in an exclusion of liability.

### Note

*The system is intended exclusively for domestic or semi-domestic use, i.e. even users who have not had any instruction are able to operate the components safely.*

### Liability

No liability is accepted for loss of profit, unattained savings, or other direct or indirect consequential losses resulting from the use of the wireless components, as well as losses resulting from inappropriate use. The limitation of liability shall not apply if the damage was caused deliberately or through gross negligence, or if mandatory liability applies due to product liability legislation.

The Viessmann General Terms and Conditions apply, which are included in each current Viessmann pricelist. The relevant data protection regulations and terms of use apply to the use of Viessmann apps. Viessmann accepts no liability for push notifications and email services, which are provided by network operators. The terms and conditions of the respective network operators therefore apply.

### Exclusion of liability

The information in this manual is intended to describe the typical properties of a wireless system and should not be interpreted as specified operating characteristics. No liability will be accepted for any omissions or inaccuracies.

## Operation via app

### ViCare app

The system is operated and the ViCare components and ViCare individual room control are commissioned and operated via the internet using an app. For further information, visit [www.vicare.info](http://www.vicare.info) or go to the Apple App Store or Google Play Store:



### ViGuide

The system is commissioned via the ViGuide app. The ViGuide web application ViGuide Pro is used to set the system parameters and call up messages. Heat pump parameters are set via the ViGuide app and ViGuide web application ViGuide Pro.

For further information: Visit [www.viessmann.com/viguide](http://www.viessmann.com/viguide) or go to the Apple App Store or Google Play Store.



## Scope of functions

These instructions contain the following information for individual room control with ViCare Smart Climate:

- ViCare Smart Climate components: See page 9
- For function description: See page 14
- Action to take if messages are displayed, e.g. for troubleshooting: See page 21 onwards.

## Further documents

- Operating and installation instructions for ViCare Smart Climate components
- ViCare Smart Climate technical guide

## ViCare Smart Climate components

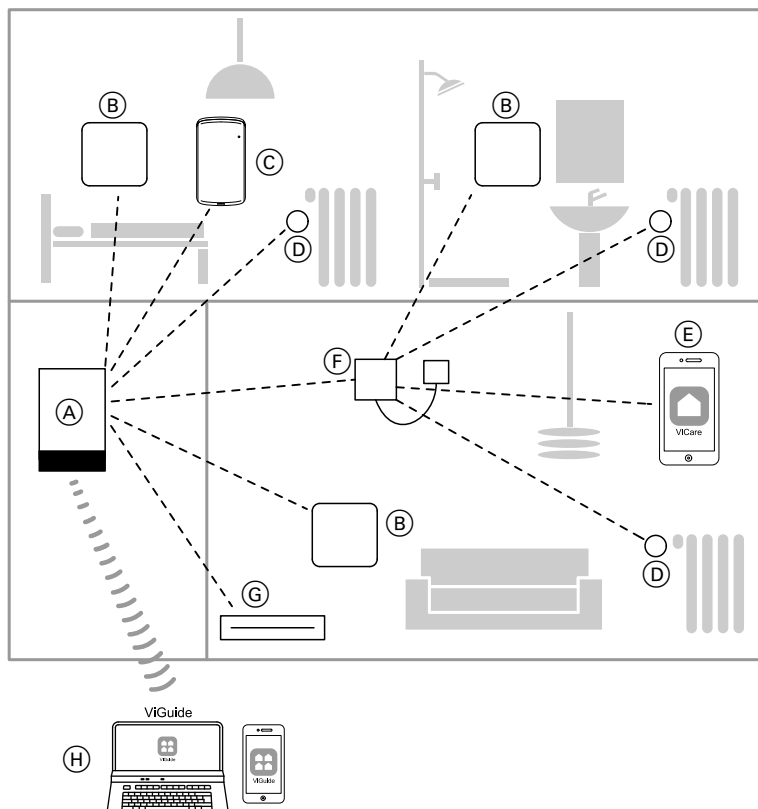


Fig. 1

- |  |                              |
|--|------------------------------|
| (A) Heat generator or ventilation unit with Viessmann One Base or Vitoconnect, type OPTO | (E) ViCare app               |
| (B) ViCare climate sensor  | (F) ViCare wireless repeater |
| (C) ViCare CO <sub>2</sub> sensor  | (G) ViCare floor thermostat  |
| (D) ViCare thermostatic radiator valve   | (H) ViGuide                  |

## ViCare climate sensor

The battery-operated ViCare climate sensor captures the room temperature and humidity.



Installation and operating instructions for the ViCare climate sensor

### ViCare Smart Climate components (cont.)

#### ViCare CO2 sensor

The ViCare CO2 sensor captures the CO<sub>2</sub> concentration, room temperature and humidity. The ViCare CO2 sensor can be operated via battery or a power supply unit.



Installation and operating instructions for the ViCare CO2 sensor

#### ViCare thermostatic radiator valve

The ViCare thermostatic radiator valve is a battery-operated radiator actuator for individual room control. An integral temperature sensor records the room temperature.



Installation and operating instructions for the ViCare thermostatic radiator valve

#### ViCare floor thermostat

The ViCare floor thermostat enables intelligent control of the underfloor heating system with up to 6 heating zones and 18 thermal actuators.



Installation and operating instructions for the ViCare floor thermostat

#### ViCare wireless repeater

The ViCare wireless repeater extends the range of the low power wireless network via a cable to improve the connection of ViCare components.



Installation and operating instructions for the ViCare wireless repeater

#### Vitoconnect OPTO

Vitoconnect OPTO is the interface between low power radio and the home WiFi. This makes it possible to connect ViCare components to the Viessmann server even without Viessmann appliances with Viessmann One Base. The entire system can then be operated via the ViCare app and ViGuide.



Installation and operating instructions for Vitoconnect OPTO

#### Note

*For ventilation units without Viessmann One Base, the data connection is established with Vitoconnect V: See installation & service instructions and operating instructions for Vitoconnect V*

Data connections with Vitoconnect OPTO:

- Appliances without Viessmann One Base
- ViCare installations without a direct connection to a heat generator

### Data connections

The system is connected to the internet to use ViCare Smart Climate. Settings and checks are made via the ViCare app by the system user or via ViGuide by the contractor.

#### Note

*The compatibility of iOS and Android mobile devices changes over time. Updates must be installed on mobile devices to keep them up to date and they may even need replacing.*

*Further information: See [www.vicare.info](http://www.vicare.info) and [www.viessmann.com/viguide](http://www.viessmann.com/viguide).*

#### Compatible appliances with Viessmann One Base

Viessmann appliances with Viessmann One Base are directly compatible with the ViCare Smart Climate components. A Vitoconnect is **not** required.

## Data connections (cont.)

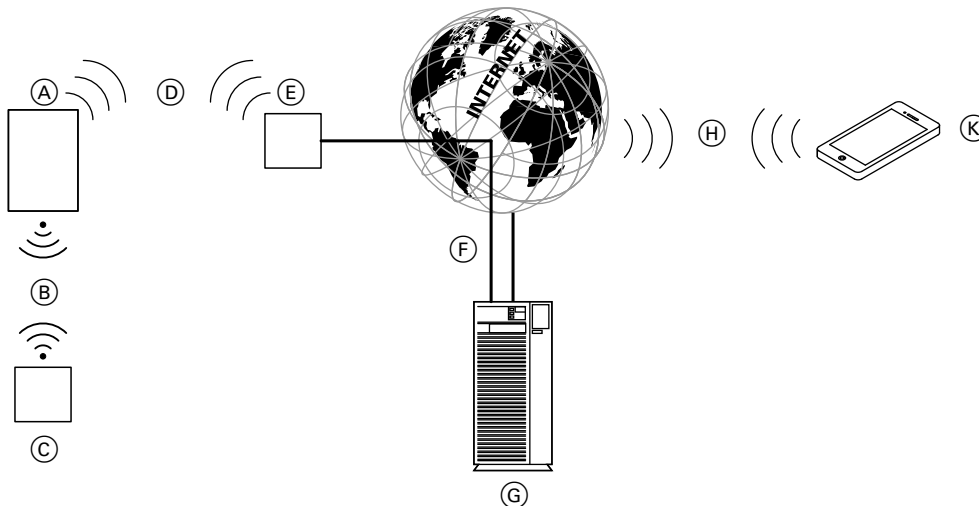


Fig. 2

- (A) Appliance with Viessmann One Base
- (B) Low power radio
- (C) ViCare Smart Climate components
- (D) WiFi
- (E) WiFi router (on site)
- (F) Secure internet connection to the Viessmann server
- (G) Viessmann server
- (H) Mobile network  
or  
WiFi connection
- (K) Mobile device

## Heat generator with Viessmann One Base

The TCU communication module is installed in the heat generator for communication with the ViCare Smart Climate components via low power radio.

## Ventilation units with Viessmann One Base

The TCU communication module is installed in the ventilation unit for communication with the ViCare Smart Climate components via low power radio.

- Vitoair FS
- Vitoair FSI

## Compatible Viessmann appliances without Viessmann One Base

Communication takes place via the Vitoconnect communication interface. This communication interface is connected to the Optolink interface of the control unit.

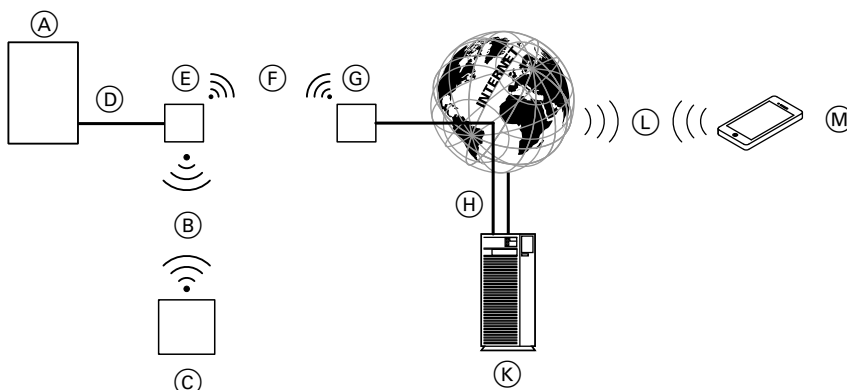


Fig. 3

- (A) Viessmann appliance with control unit
- (B) Low power radio
- (C) ViCare Smart Climate components
- (D) Optolink connecting cable
- (E) Vitoconnect
- (F) WiFi
- (G) WiFi router (on site)

- Ⓜ Secure internet connection to the Viessmann server
- Ⓚ Viessmann server
- Ⓛ Mobile network  
Or  
WiFi connection
- Ⓜ Mobile device

#### Heat generators

Heat generators with the following control units are compatible:

- Control units for wall mounted gas boilers and gas storage combi boilers
  - Vitotronic 200, type HO1, HO1A, HO1B, HO1D, HO2B, HO2C
  - Vitotronic 200-RF, type HO1C
  - Vitotronic 200-RF, type HO1E, in conjunction with Vitovalor
- Control units for floorstanding boilers
  - Vitotronic 200, type KO1B, KO2B, KW6, KW6A, KW6B, KW1, KW2, KW4, KW5
  - Vitotronic 300, type KW3
- Control units for heat pumps and hybrid appliances
  - Vitotronic 200, types WO1A, WO1B and WO1C
- Control units for solid fuel boilers
  - Ecotronic, type VL2A in conjunction with Vitoligno 200-S with software version 2.03 or higher
  - Ecotronic, type VL2B in conjunction with Vitoligno 200-S
  - Ecotronic in conjunction with Vitoligno 250-S with software version 2.00 or higher
  - Ecotronic in conjunction with Vitoligno 300-C with software version 2.12 or higher
  - Ecotronic, type FO1 in conjunction with Vitoligno 300-P
  - Ecotronic in conjunction with Vitoligno 300-S

#### Ventilation units

The TCU communication module is installed in the Vitoconnect V for communication with the ViCare Smart Climate components via low power radio.

- Vitovent 300-W

#### ViCare installations without a connection to the heat generator/ventilation unit

The ViCare Smart Climate components can also be operated without a direct connection to the heat generator/ventilation unit, e.g. in a rented flat. The Vitoconnect is used for the connection of the components via low power radio and the connection via the home WiFi and the internet to the ViCare app or ViGuide.

Further information:  
See [www.vitoconnect.info](http://www.vitoconnect.info).

## Data connections (cont.)

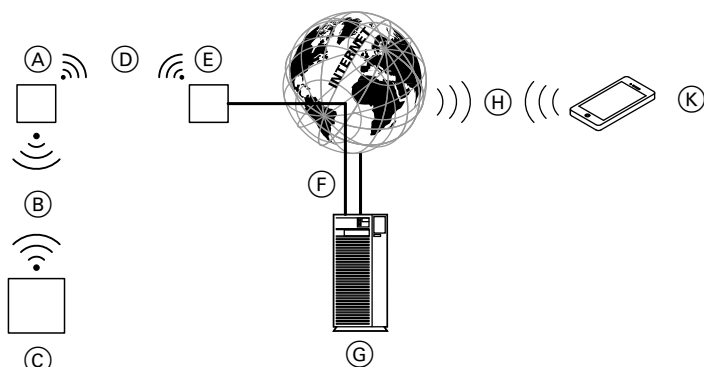


Fig. 4

- |  |                      |
|--|----------------------|
| (A) Vitoconnect, type OPTO                             | (G) Viessmann server |
| (B) Low power radio                                    | (H) Mobile network   |
| (C) ViCare Smart Climate components                    | Or                   |
| (D) WiFi   | WiFi connection      |
| (E) WiFi router (on site)                              | (K) Mobile device    |
| (F) Secure internet connection to the Viessmann server |                      |

## Individual room control

With the ViCare Smart Climate components, the room climate can be controlled separately for individual rooms.

The ViCare Smart Climate components record the following room climate data for this purpose:

- ViCare climate sensor: Room temperatures and room air humidity
- ViCare CO<sub>2</sub> sensors: Room temperature, CO<sub>2</sub> concentration, room air humidity
- ViCare thermostatic radiator valve: Room temperature

Heating and cooling in the rooms is regulated via the separate controls of the individual ViCare floor thermostats and ViCare thermostatic radiator valves. The temperature has to be measured in every room. With mechanical ventilation, all rooms are ventilated. Mechanical ventilation is dependent on the room air humidity or CO<sub>2</sub> concentration.

The ViCare Smart Climate system can be operated and monitored remotely using the ViCare app and ViGuide. This requires an interface for connecting the components via low power radio and the home WiFi. Viessmann appliances with Viessmann One Base already have an integrated TCU communication module for this connection. For heat generators and ventilation units without Viessmann One Base, the connection can be established via Vitoconnect. Heating and cooling is generated by the heat generator depending on the heat and cooling demand of the rooms. With a Vitoconnect, individual room control is also possible without a direct connection to a heat generator or ventilation unit. Heating and cooling in the rooms is regulated depending on the heat and cooling demand of the rooms.

## Combining rooms with and without individual room control

Rooms with and without individual room control can be combined within a heating system.

### Note

We recommend equipping all rooms with ViCare components including ViCare floor thermostats, and not using any previously installed Vitotrol 200-A/300-A remote control units.

Example:

- Heating circuit 1: Radiators with ViCare thermostatic radiator valves for individual room control
- Heating circuit 2: Underfloor heating without ViCare floor thermostat

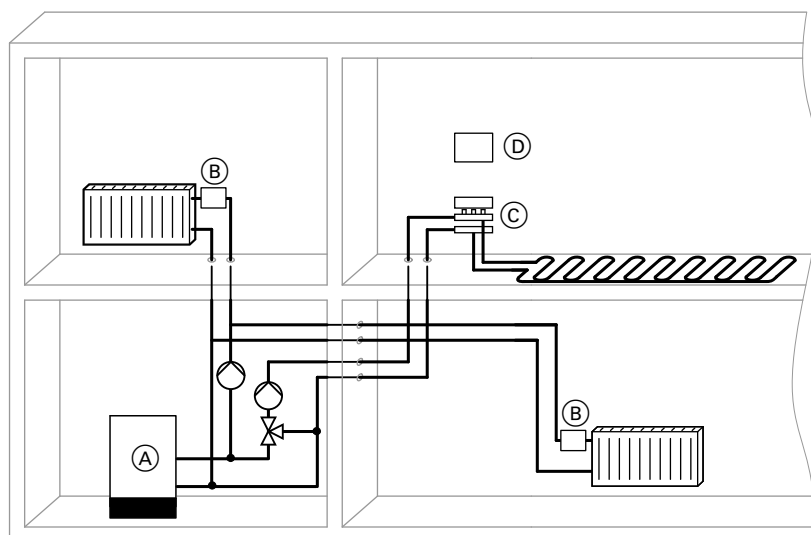


Fig. 5

- |  |                      |
|--|----------------------|
| (A) Heat generator   | (C) Floor thermostat |
| (B) ViCare thermostatic radiator valve for individual room control | (D) Vitotrol         |

Individual room control is only possible for rooms in which one or more ViCare Smart Climate components are installed.

For heating circuits without ViCare Smart Climate components, the "room hook-up with room influence" function can only be activated using the Vitotrol remote control.

**Individual room control** (cont.)**Viessmann appliances without Viessmann One Base (Vitoconnect)**

Rooms with individual room control can be operated via the ViCare app and ViGuide.

Rooms without individual room control can be operated using the Vitotrol 200-A/300-A remote control. To activate rooms without individual room control via the ViCare app and ViGuide, individual room control must be temporarily deactivated.

**Viessmann appliances with Viessmann One Base**

All rooms can be operated via the ViCare app, ViGuide and the Vitotrol 300-E remote control.

**Time programs**

Time programs specify what the system should do and when.

Individual time programs can be created for each room.

Up to 4 time phases are possible for each time program.

For each time phase, levels (temperature, ventilation level) can be specified for different conditions, e.g. heating with reduced room temperature during user absence.

In conjunction with appliances with Viessmann One Base, 3 temperature levels are possible:

- Reduced
- Standard
- Comfort

In conjunction with Vitoconnect, 2 temperature levels are possible:

- Reduced
- Standard

## System configuration

### Setting individual room control

Individual room control is set via the ViCare app and ViGuide.

Requirements:

- The system has been commissioned.
- "Low power radio" on Vitoconnect or Viessmann appliance with Viessmann One Base is activated.

1. Create the room.
2. Assign ViCare components to the room.
3. Set temperatures and time programs.

### ViCare thermostatic radiator valve



Installation and operating instructions for the ViCare thermostatic radiator valve

The ViCare thermostatic radiator valves must be installed in a position where they can measure the room temperature correctly.

If the ViCare thermostatic radiator valve is covered by furniture or curtains, the measured room temperature may not be correct. An additional ViCare climate sensor or ViCare CO2 sensor is then required in the room.

### Type of connection adaptor

Before installing a ViCare thermostatic radiator valve, check that the type of connection adaptor has been selected correctly.

### Checking the connection adaptor in heating mode

Conditions:

- ViCare thermostatic radiator valve mounted on connection adaptor
- Radiators in heating mode
- Sufficient flow temperature available

1. Press the operating button on the ViCare thermostatic radiator valve for at least 3 s to open the thermostatic valve manually.  
Shown on display: "--"
2. Activate a heat demand at the heat generator.  
Heating water enters the radiator.

3. Press the operating button on the ViCare thermostatic radiator valve for at least 3 s to close the thermostatic valve manually.  
Shown on display: Set room temperature.  
Heating water no longer enters the radiator.  
If heating water continues to enter, the connection adaptor is not working properly or the wrong connection adaptor has been fitted.

### Automatic calibration (opening point detection)

To achieve the required room temperature, the valve positions of all radiators are set in stages via the ViCare thermostatic radiator valves.

Calibration starts automatically after a ViCare thermostatic radiator valve has been commissioned. During calibration, the opening point or the minimum setting step is recognised and saved. The ViCare thermostatic radiator valve opens slowly for this. An integral temperature sensor continuously records the opening point at which heating water flows through the thermostatic valve.

The room temperatures are measured either by the second integral temperature sensor, ViCare climate sensors or ViCare CO2 sensors. If the room temperature is high or the difference between the actual room temperature value and the set room temperature is low, the flow temperature is low or the heating circuit is switched off. In this case, no opening point can be recognised and opening point detection is repeated at a later time. With frequent repetitions and a large number of ViCare components, the calibration of all ViCare thermostatic radiator valves can take several days.



## ViCare thermostatic radiator valve (cont.)

Once the opening point of the valve has been successfully set, the ViCare thermostatic radiator valve switches to normal mode. The system specifically navigates to the set valve position. This saves setting time and battery capacity.

### Note

*In a single-pipe system, the ViCare thermostatic radiator valve may be heated by the bypass, which means that the ViCare thermostatic radiator valve and calibration may not work.*

## Range of the wireless signal

The ViCare components communicate via low power radio.

The range of wireless signals may be reduced by walls, ceilings and interior fixtures. These weaken the wireless signal.

The following circumstances can cause poor reception:

- On their way between transmitter and receiver, wireless signals are **damped**, e.g. by air or when penetrating walls.
- Wireless signals are **reflected** by metallic objects, e.g. reinforcements embedded in walls, metal foil of thermal insulation and thermal glazing with metalised thermal vapour deposit.
- Wireless signals are **isolated** by service ducts and lift shafts.
- Wireless signals are **disrupted** by devices that also operate with high frequency signals. Maintain a distance of **at least 2 m** from these devices:
  - Computers
  - Audio and video systems
  - Devices with active WiFi connection
  - Electronic transformers
  - Time & temperature controllers

## Checking the signal strength

The signal strength of the ViCare components can be checked in the ViCare app or ViGuide. Min. signal strength: 30 %.

## Increasing the wireless range

ViCare wireless repeaters can be used to increase the range. Typical installations contain up to 3 ViCare wireless repeaters.

### Note

*For larger buildings we recommend radio field planning.*

Use of 1 wireless repeater

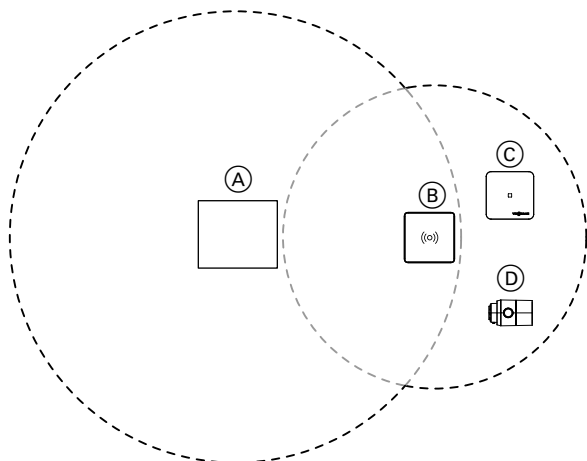


Fig. 6

- Ⓐ Heat generator with Viessmann One Base or Vitoconnect
- Ⓑ ViCare wireless repeater
- Ⓒ ViCare climate sensor and/or ViCare CO2 sensor
- Ⓓ ViCare thermostatic radiator valve and/or ViCare floor thermostat

Use of multiple wireless repeaters

Up to 3 wireless repeaters may be connected in series. The following example shows the series connection of 2 wireless repeaters.

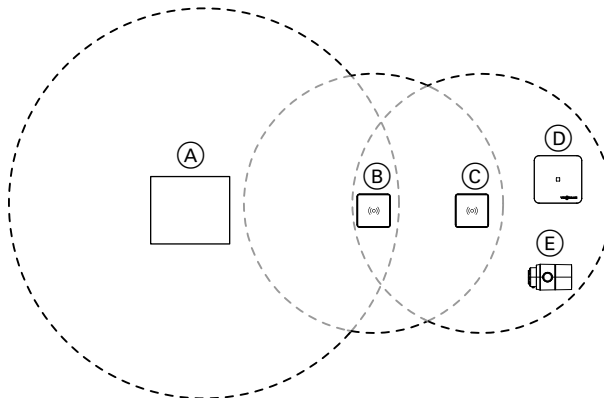


Fig. 7

- Ⓐ Heat generator with Viessmann One Base or Vitoconnect
- Ⓑ ViCare wireless repeater 1
- Ⓒ ViCare wireless repeater 2
- Ⓓ ViCare climate sensor and/or ViCare CO2 sensor
- Ⓔ ViCare thermostatic radiator valve and/or ViCare floor thermostat

## Parameters

No parameter settings are required for individual room control. Settings are made at the Viessmann appliance if necessary.

If individual room control is active, the following parameters cannot be adjusted manually on appliances with Viessmann One Base. The ViCare Smart Climate system overrides these parameters.

---

### 424.3 Set flow temperature increase from reduced room temperature of heating circuit 1

Set flow temperature increased when switching from operation with reduced room temperature to operation with normal room temperature, heating circuit 1.

---

### 424.4 Duration for set flow temperature increase of heating circuit 1

Duration for set flow temperature increase, heating circuit 1.

---

### 426.3 Set flow temperature increase from reduced room temperature of heating circuit 2

Set flow temperature increased when switching from operation with reduced room temperature to operation with normal room temperature, heating circuit 2.

---

### 426.4 Duration for set flow temperature increase of heating circuit 2

Duration for set flow temperature increase, heating circuit 2.

---

### 428.3 Set flow temperature increase from reduced room temperature of heating circuit 3

Set flow temperature increased when switching from operation with reduced room temperature to operation with normal room temperature, heating circuit 3.

---

### 428.4 Duration for set flow temperature increase of heating circuit 3

Duration for set flow temperature increase, heating circuit 3.

---

### 430.3 Set flow temperature increase from reduced room temperature of heating circuit 4

Set flow temperature increased when switching from operation with reduced room temperature to operation with normal room temperature, heating circuit 4.

---

### 430.4 Duration for set flow temperature increase of heating circuit 4

Duration for set flow temperature increase, heating circuit 4.

**Parameters** (cont.)**933.6 Operating mode, heating circuit 1**

Value	Meaning
4	Weather-compensated <b>without</b> room temperature hook-up
7	Weather-compensated <b>with</b> room temperature hook-up

**934.6 Operating mode, heating circuit 2**

Value	Meaning
4	Weather-compensated <b>without</b> room temperature hook-up
7	Weather-compensated <b>with</b> room temperature hook-up

**935.6 Operating mode, heating circuit 3**

Value	Meaning
4	Weather-compensated <b>without</b> room temperature hook-up
7	Weather-compensated <b>with</b> room temperature hook-up

**936.6 Operating mode, heating circuit 4**

Value	Meaning
4	Weather-compensated <b>without</b> room temperature hook-up
7	Weather-compensated <b>with</b> room temperature hook-up

## Notes on messages

- Messages are displayed on the following user interfaces:
  - Remote control of the control unit for the heat generator/ventilation unit
  - ViGuide
  - ViCare app
- Remedy the faults and then acknowledge on one of the user interfaces.

## Fault messages

### F.77 Data memory inconsistent

#### System characteristics

ViCare climate sensor and ViCare CO<sub>2</sub> sensor:

- Temperature, humidity and CO<sub>2</sub> measurement not possible
- Control of the ViCare floor thermostat zones not possible.  
Control taken over by another ViCare climate sensor or ViCare CO<sub>2</sub> sensor; possible loss of comfort
- Control of ViCare thermostatic radiator valves in the room, possibly with loss of comfort
- Ventilation with humidity control taken over by another ViCare climate sensor or ViCare CO<sub>2</sub> sensor in the system if the "ventilation with humidity control" function is activated.
- Ventilation with CO<sub>2</sub> control taken over by another ViCare CO<sub>2</sub> sensor in the system if the "ventilation with CO<sub>2</sub> control" function is activated.

ViCare thermostatic radiator valve:

- The display of the ViCare thermostatic radiator valve shows **E B**
- ViCare thermostatic radiator valve is not actuated.
- ViCare thermostatic radiator valve is in the last actuated position.

#### Cause

Data memory on the ViCare climate sensor, ViCare CO<sub>2</sub> sensor or ViCare thermostatic radiator valve inconsistent

#### Measures

ViCare climate sensor:

1. Remove the battery from the ViCare climate sensor and reinsert it.
2. If the message is still present, replace the ViCare climate sensor.

ViCare CO<sub>2</sub> sensor:

1. Power supply via batteries: Remove the batteries from the ViCare CO<sub>2</sub> sensor and reinsert them.
2. Power supply via power supply unit: Unplug the power supply unit from the socket and plug it back in.
3. If the message is still present, replace the ViCare CO<sub>2</sub> sensor.

ViCare thermostatic radiator valve:

1. Remove the batteries from the ViCare thermostatic radiator valve and reinsert them.
2. If the message is still present, replace the ViCare thermostatic radiator valve.

### F.728 Faulty temperature sensor

#### System characteristics

- The display of the ViCare thermostatic radiator valve shows **E B**
- ViCare thermostatic radiator valve is not actuated.
- ViCare thermostatic radiator valve is in the last actuated position.

#### Cause

Temperature sensor integrated in the ViCare thermostatic radiator valve faulty

#### Measures

Replace the ViCare thermostatic radiator valve.

**F.729 Hardware fault**

**System characteristics**

- Temperature, humidity and CO<sub>2</sub> measurement not possible
- Control of the ViCare floor thermostat zones not possible.  
Control taken over by another ViCare climate sensor or ViCare CO<sub>2</sub> sensor; possible loss of comfort
- Control of ViCare thermostatic radiator valves in the room, possibly with loss of comfort
- Ventilation with humidity control taken over by another ViCare climate sensor or ViCare CO<sub>2</sub> sensor in the system if the "ventilation with humidity control" function is activated.
- Ventilation with CO<sub>2</sub> control taken over by another ViCare CO<sub>2</sub> sensor in the system if the "ventilation with CO<sub>2</sub> control" function is activated.

**Cause**

Hardware fault of the ViCare climate sensor or ViCare CO<sub>2</sub> sensor

**Measures**

ViCare climate sensor:

1. Remove the battery from the ViCare climate sensor and reinsert it.
2. If the message is still present, replace the ViCare climate sensor.

ViCare CO<sub>2</sub> sensor:

1. Power supply via batteries: Remove the batteries from the ViCare CO<sub>2</sub> sensor and reinsert them.
2. Power supply via power supply unit: Unplug the power supply unit from the socket and plug it back in.
3. If the message is still present, replace the ViCare CO<sub>2</sub> sensor.

**F.730 Motor fault**

**System characteristics**

- The display of the ViCare thermostatic radiator valve shows **E E**
- The motor of the ViCare thermostatic radiator valve is not turning. New attempt to navigate to the new position every 20 minutes.

**Cause**


- Voltage dips, e.g. rechargeable batteries inserted in the ViCare thermostatic radiator valve
- Increased resistance in the ViCare thermostatic radiator valve due to the change from summer to winter mode

**Measures**

1. If rechargeable batteries have been inserted into the ViCare thermostatic radiator valve, remove them and insert non-rechargeable ones.  
If non-rechargeable batteries have been inserted, replace them: 2 x 1.5 V AA/LR6
2. Remove and re-install the ViCare thermostatic radiator valve.
3. If the message is still present, replace the ViCare thermostatic radiator valve.

**F.732 Battery charge level low**

**System characteristics**

- The display of the ViCare thermostatic radiator valve is continuously illuminated 
- ViCare thermostatic radiator valve not working
- ViCare thermostatic radiator valve fully open to prevent frost damage

**Cause**

Batteries have run out.

**Measures**

Replace the batteries in the ViCare thermostatic radiator valve: 2 x 1.5 V AA/LR6

**Note**

*Do not use rechargeable batteries.*

**Fault messages** (cont.)**F.733 Faulty flow temperature contact sensor****System characteristics**

All valves are opened to 10 %.  
Frost protection function is guaranteed.

**Cause**

Contact temperature sensor in the heating flow faulty

**Measures**

Replace the contact temperature sensor.

**F.734 Faulty return temperature contact sensor****System characteristics**

ViCare floor thermostat regulates, possibly with loss of comfort.

**Cause**

Contact temperature sensor in the heating return faulty

**Measures**

Replace the contact temperature sensor.

**F.736 Faulty temperature, humidity or CO<sub>2</sub> sensor****System characteristics**

- Temperature, humidity and CO<sub>2</sub> measurement not possible
- Control of the ViCare floor thermostat zones not possible.  
Control taken over by another ViCare climate sensor or ViCare CO<sub>2</sub> sensor; possible loss of comfort
- Control of ViCare thermostatic radiator valves in the room, possibly with loss of comfort
- Ventilation with humidity control taken over by another ViCare climate sensor or ViCare CO<sub>2</sub> sensor in the system if the "ventilation with humidity control" function is activated.

**Cause**

ViCare climate sensor or ViCare CO<sub>2</sub> sensor faulty

**Measures**

Replace the ViCare climate sensor or ViCare CO<sub>2</sub> sensor.

**F.1310 Faulty CO<sub>2</sub> sensor****System characteristics**

- CO<sub>2</sub> measurement not possible
- Ventilation with humidity control taken over by another ViCare climate sensor or ViCare CO<sub>2</sub> sensor in the system if the "ventilation with humidity control" function is activated.

**Cause**

ViCare CO<sub>2</sub> sensor faulty

**Measures**

Replace the ViCare CO<sub>2</sub> sensor.

### Warning messages

#### A.27 Battery charge level low

##### System characteristics


ViCare climate sensor:

- Status LED flashes red once
- Function of the ViCare climate sensor not impaired

ViCare CO2 sensor:

- Status LED flashes red twice every 5 seconds
- Function of the ViCare CO2 sensor not impaired

ViCare thermostatic radiator valve:

- The display of the ViCare thermostatic radiator valve flashes 
- Function of the ViCare thermostatic radiator valve not impaired

##### Cause

Low battery charge in the ViCare climate sensor, ViCare CO2 sensor or ViCare thermostatic radiator valve

##### Measures

ViCare climate sensor:

- Replace the CR2450 battery in the ViCare climate sensor.

ViCare CO2 sensor:

- Replace the batteries in the ViCare CO2 sensor: 4 x 1.5 V AA/LR6

ViCare thermostatic radiator valve:

- Replace the batteries in the ViCare thermostatic radiator valve: 2 x 1.5 V AA/LR6

##### Note

*Do not use rechargeable batteries.*



## Declarations of Conformity

We, Viessmann Climate Solutions SE, D-35108 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. Viessmann Climate Solutions SE, D-35108 Allendorf, hereby declares that the radio equipment type of the named product is in compliance with Directive 2014/53/EU.

Using the serial number, the full Declaration of Conformity can be found on the following website:

**[www.viessmann.co.uk/eu-conformity](http://www.viessmann.co.uk/eu-conformity)**

**Keyword index**

<b>A</b>		<b>R</b>	
App.....	8	Remote control.....	8
Automatic calibration.....	16	Remote monitoring.....	8
<b>C</b>		<b>S</b>	
Climate sensor.....	9	Scope of functions.....	9
CO2 sensor.....	9, 10	Solid fuel boiler.....	12
Compatible appliances.....	10, 11	System configuration.....	16
Components.....	9		
Connecting cable, Optolink.....	11	<b>T</b>	
Connection adaptor.....	16	TCU communication module.....	11
<b>D</b>		Thermostatic radiator valve.....	9, 10
Data connections.....	10	Time programs.....	15
Declarations of Conformity.....	25	Troubleshooting.....	21
<b>F</b>		<b>U</b>	
Fault messages.....	21	Use.....	7
Floor thermostat.....	9, 10	<b>V</b>	
<b>I</b>		ViCare app.....	8, 9
Individual room control.....	14	ViCare climate sensor.....	9
– Time programs.....	15	ViCare CO2 sensor.....	9, 10
Intended use.....	7	ViCare floor thermostat.....	9, 10
Internet connection.....	11, 12, 13	ViCare Smart Climate components.....	11, 13
<b>L</b>		ViCare thermostatic radiator valve.....	9, 10
Liability.....	8	– Automatic calibration.....	16
Low power radio.....	11, 12, 13	– Connection adaptor, checking.....	16
<b>M</b>		– Opening point detection.....	16
Messages		ViCare wireless repeater.....	9, 10, 17
– Fault.....	21	Viessmann server.....	11, 12, 13
– Notes.....	21	ViGuide.....	8, 9
– Warning.....	24	Vitoconnect.....	10, 11, 12, 13
Mobile device.....	11, 12, 13	Vitoconnect V.....	12
Mobile network.....	11, 12, 13	<b>W</b>	
<b>N</b>		Wall mounted gas boiler.....	12
Network.....	8	Warning messages.....	24
Notes on messages.....	21	WiFi.....	11, 13
<b>O</b>		WiFi router.....	11, 13
Opening point detection.....	16	Wireless connection.....	10
Operation.....	8	Wireless range.....	17
Optolink.....	11	Wireless repeater.....	10



Viessmann Climate Solutions SE  
35108 Allendorf / Germany  
Telephone: +49 6452 70-0  
Fax: +49 6452 70-2780  
[www.viessmann.com](http://www.viessmann.com)



Viessmann Limited  
Hortonwood 30, Telford  
Shropshire, TF1 7YP, GB  
Telephone: +44 1952 675000  
Fax: +44 1952 675040  
E-mail: [info-uk@viessmann.com](mailto:info-uk@viessmann.com)

6223769 Subject to technical modifications.