# Installation and service instructions

**for contractors**

**Vitotrol 100**
**Type UTDB-RF2**
Room temperature controller with digital time switch and wireless receiver
For the Vitodens 100-W

***For applicability, see the last page***

# VITOTROL 100


5601 636 GB 12/2014

**Please keep safe.**

## 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 authorised contractors.
- Work on gas installations must only be carried out by a registered gas fitter.
- Work on electrical equipment must 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 the protection of the environment
- Codes of Practice of the relevant trade associations
- All current safety regulations as defined by DIN, EN, DVGW, TRGI, TRF, VDE and all locally applicable standards
  - (A) ÖNORM, EN, ÖVGW-TR Gas, ÖVGW-TRF and ÖVE
  - (CH) SEV, SUVA, SVGW, SVTI, SWKI, VKF and EKAS guideline 1942: LPG, part 2

### 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.

**Danger**
Hot surfaces can cause burns.
- 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 pipework.

**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.

### Repair work

**Please note**
Repairing components that fulfil a safety function can compromise the safe operation of your 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.

### Safety instructions for operating the system

### If you smell gas

**Danger**
Escaping gas can lead to explosions which may result in serious injury.
- Never 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).

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## Safety instructions (cont.)

### 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.

### Flue systems and combustion air

Ensure that flue systems are clear and cannot be sealed, for instance due to accumulation of condensate or other causes. Ensure an adequate supply of combustion air.
Instruct system users that subsequent modifications to the structural conditions are not permissible (e.g. cable/pipework 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. Apertures for supplying combustion air must be non-closable.

### Extractors

Operating appliances that route exhaust air outdoors (cooker hoods, extractors, air conditioning units, etc.) can create negative pressure. If the boiler is operated at the same time, this can lead to reverse flow of the flue gas.

**Danger**
The simultaneous operation of the boiler and appliances that route exhaust air outdoors can result in life threatening poisoning due to reverse flow of the flue gas.
Fit an interlock circuit or take suitable steps to ensure an adequate supply of combustion air.

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## Symbols

| Symbol | Meaning |
|---|---|
|  | Reference to other document containing further information |
|  | Additional information, not safety relevant |
|  | Step:<br>The numbering corresponds to the sequence of work. |

## Function

The Vitotrol 100 type UTDB-RF2 maintains a constant room temperature by means of its integral room temperature sensor in conjunction with the wireless receiver. During the set periods, there is a changeover between operation with standard **"Comfort"** room temperature and operation with reduced **"Eco"** or **"Reduced"** room temperatures. DHW is heated during the set periods.



## Installation location

Vitotrol 100
- Installation in the main living room on an internal wall opposite radiators
- Approx. 1.5 m above floor level
- Not near windows or doors
- Not on shelves or in recesses
- Away from heat sources (radiators, direct sunlight, fireplace, TV set, etc.).
- Wireless reception (good communication with the wireless receiver) must be possible (see page 11).

Never install further control devices in this main living room. If the radiators are equipped with thermostatic valves, these must always be fully opened.

Wireless receiver
- Installation in the boiler
- Wireless reception must be possible (see page 11).
  (Subject to the material used and the thickness of walls and ceilings, the range may be up to 30 m).
  ***Note***
  *Conductive metallic materials have a strong negative effect on reception.*

## Mounting and connecting the wireless receiver

### Installing the wireless receiver

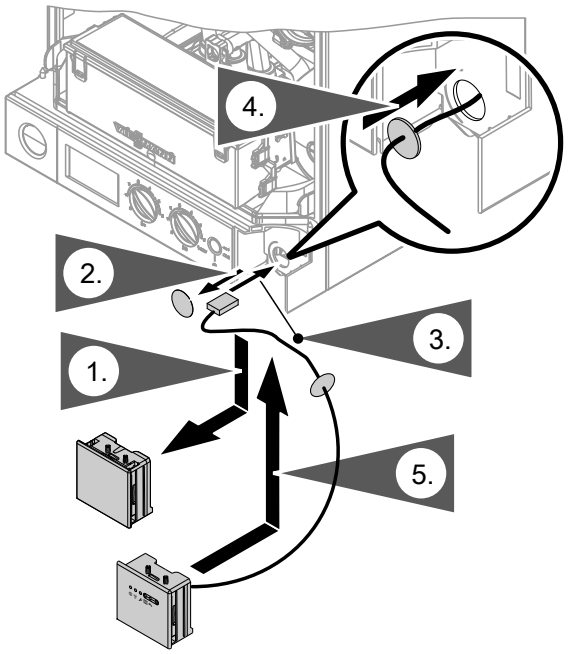


*Fig.1*

**1.** Remove the cover.

**2.** Remove the round label from the aperture.

**3.** Route the lead through the aperture.

**4.** Seal the aperture with a grommet.

**5.** Install the wireless receiver.

### Opening the control unit enclosure

**!** **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.

## Mounting and connecting the wireless receiver (cont.)



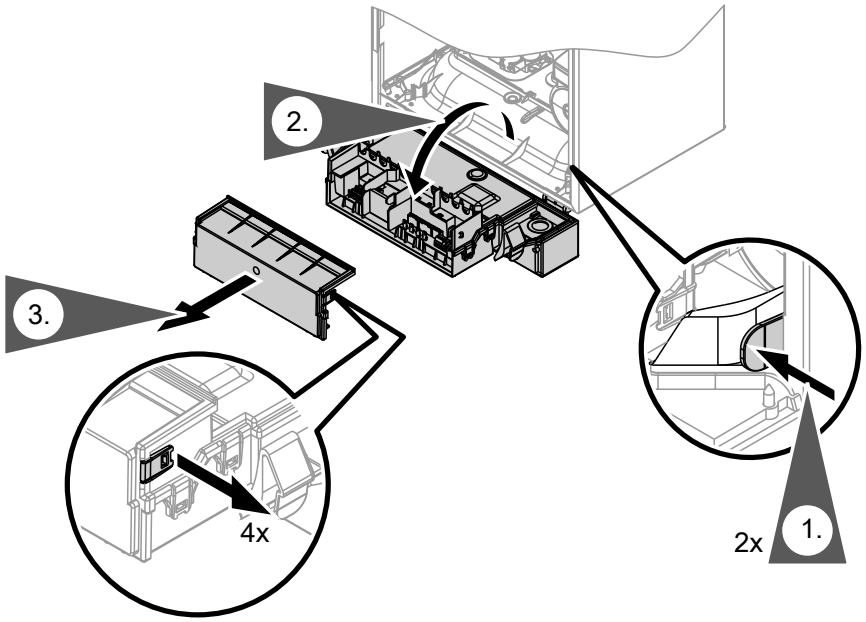


*Fig.2*

## Connecting the wireless receiver

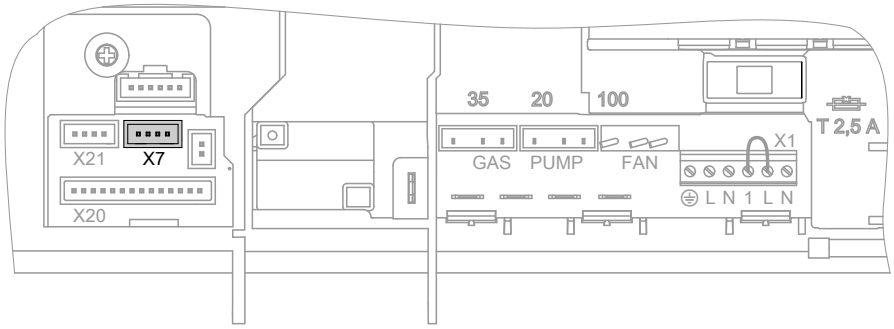


*Fig.3*

1. Insert the wireless receiver cable into the control unit enclosure and push the plug into "X7". The plug must click home.

   ***Note***
   *Route the cable in such a way that it does not become trapped as the control unit enclosure is closed.*

2. Close the control unit enclosure and pivot up the control unit.

## Installing the Vitotrol 100

### Opening the Vitotrol 100

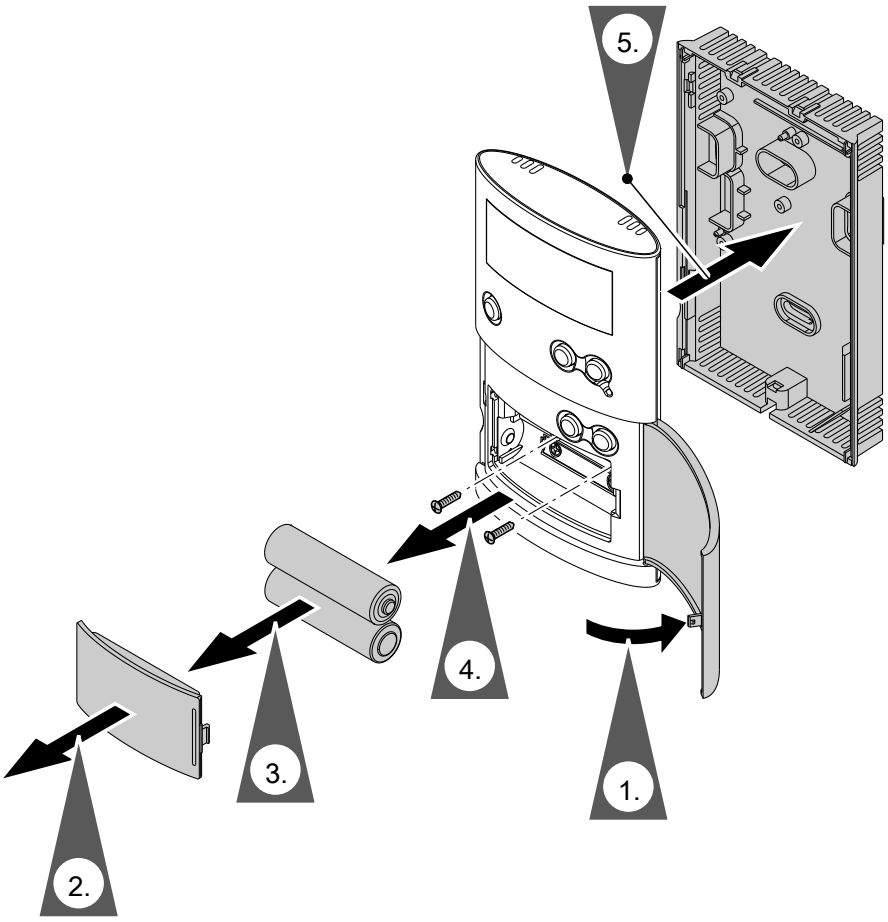


*Fig.4*

### Fitting the wall mounting base

Always **check reception** prior to fitting to the wall (see page 11).

Power is supplied by batteries (see chapter "Specification").

## Installing the Vitotrol 100 (cont.)



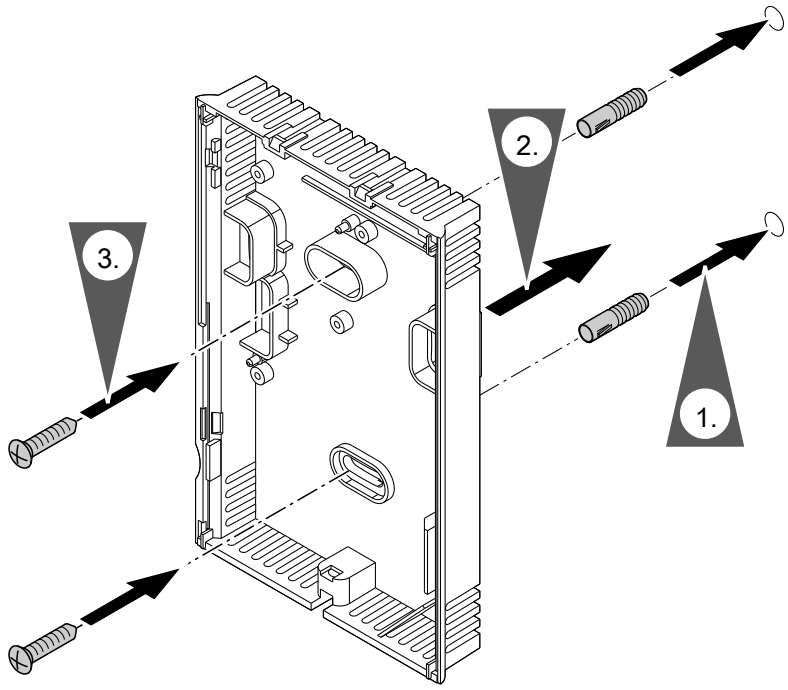


*Fig.5*

## Assembling the Vitotrol 100

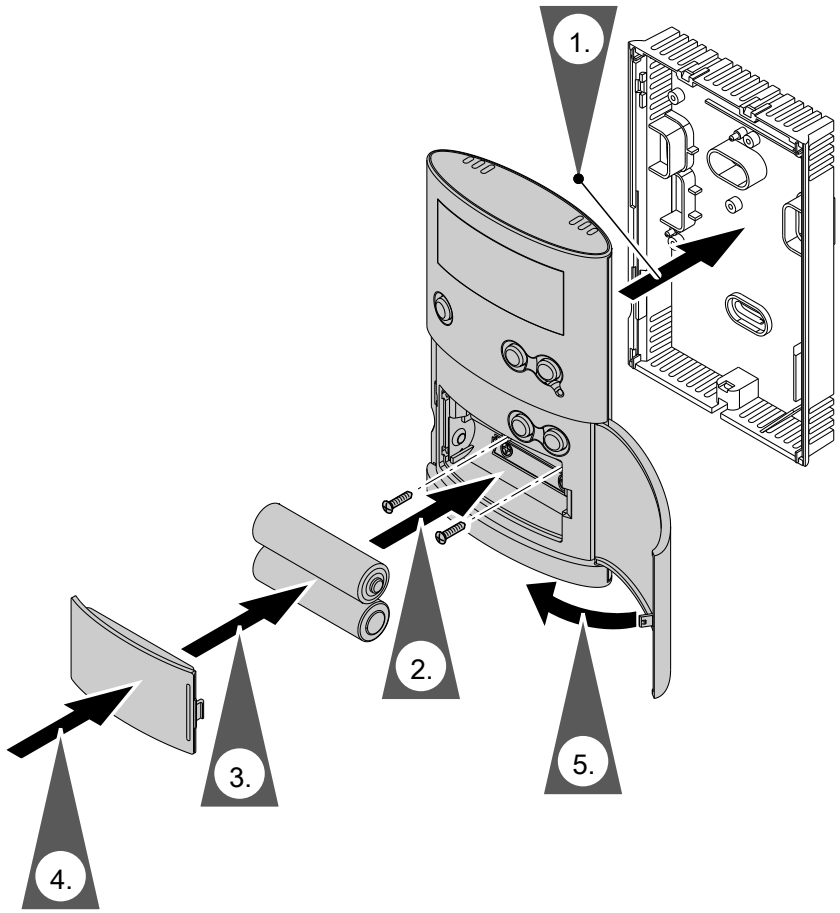


*Fig.6*

## Commissioning the Vitotrol 100

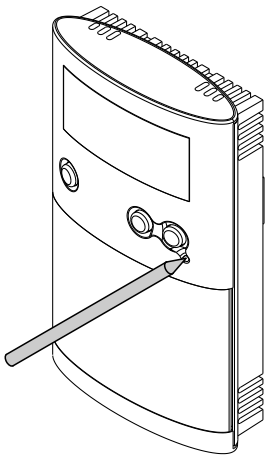

*Fig.7*

1. Open the hinged flap.
2. Use a pointed object to press "reset".
3. Select language with ▼/▲.
4. Confirm with **OK**.
5. Set current date and time with ▼/▲.
6. Confirm with **OK**.

## Commissioning the wireless receiver

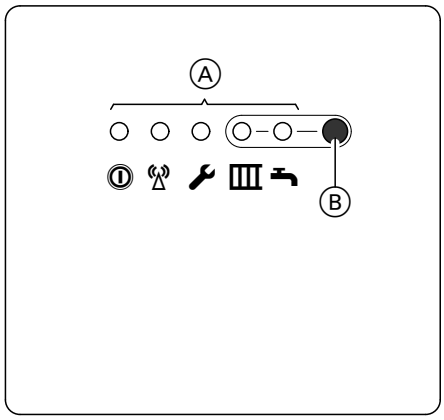


*Fig.8*

Several Vitotrol 100 and the wireless receiver can be installed in a single building. Each pair is matched in the factory. Each Vitotrol 100 can only communicate with its assigned wireless receiver.

***Note***
*The wireless receiver has not recognised the signal from the Vitotrol 100 if LED flashes. In this case, change the address code (see page 13).*

Ⓐ LED
- Operating display
- Address recognition
- Service function
- Heat demand for central heating
- Heat demand for DHW heating

### Testing the strength of reception

1. Hold down Ⓑ on the wireless receiver for approx. 5 s until LED flashes.
2. **Make the following settings on the Vitotrol 100:** Open the flap of the Vitotrol 100.
3. Press twice.
4. Select **"Settings"** with ▼/▲.
5. Confirm with **OK**.
6. Select **"Service"** with ▼/▲.
7. Press **OK** four times to confirm. **"Transmitting"** appears on the display. The transmission takes approx. 30 s.

If the signal strength is adequate, LED shows green; otherwise it shows red. Then check the installation location of the Vitotrol 100.

## Commissioning the wireless receiver (cont.)

### Testing switching outputs

1. Press Ⓑ on the wireless receiver (see diagram on page 11) repeatedly until the required condition is reached (see following table).
2. Terminate the function: Press Ⓑ.

| Function | LED | LED |
|---|---|---|
| Central heating **and** DHW heating OFF | Off | Off |
| Central heating OFF, DHW heating enabled | Off | ON |
| Central heating enabled, DHW heating OFF | ON | Off |
| Central heating **and** DHW heating enabled | ON | ON |

***Note***
*Both switching outputs are enabled for heat demand if the receiver does not pick up any signal from the Vitotrol 100 for more than 60 min.*

## Changing the address code

Change the address code if the wireless connection between the Vitotrol 100 and the wireless receiver fails.

1. Hold down Ⓑ on the wireless receiver (see diagram on page 11) for approx. 10 s until LED flashes.

2. **Make the following settings on the Vitotrol 100:**
   Open the flap of the Vitotrol 100.

3. Press twice.

4. Select **"Settings"** with ▼/▲.

5. Confirm with **OK**.

6. Select **"Service"** with ▼/▲.

7. Press **OK** three times to confirm.

8. Select **"Address code"** with ▼/▲.

9. Confirm with **OK**.
   After approx. 30 s the display shows **"Transmitting"**.
   The transmission takes approx. 30 s.
   During the transmission, LED flashes briefly.

Once the address code is recognised, the LEDs go out; otherwise repeat the process.

## Specification

**Vitotrol 100**

| | |
|---|---|
| Rated voltage | 3 V–<br>2 batteries LR 6/AA |
| Ambient temperature | |
| ▪ Operation | 0 to 40 °C |
| ▪ Storage and transport | −25 to +60 °C |
| IP rating | IP 20 to EN 60529 |
| Safety category | II to EN 60730-1 |
| Radio frequency | 868 MHz |

**Wireless receiver**

| | |
|---|---|
| Power supply | From the control unit |
| Ambient temperature | 0 to 40 °C |
| IP rating | As for the boiler |

Transmission from the Vitotrol 100:
- With every heat demand and consumption
- With every demand for DHW heating
- Cyclically every 20 min

## Declaration of conformity

We, Viessmann Werke GmbH & Co KG, D-35107 Allendorf, declare as sole responsible body that the product **Vitotrol 100**, **type UTDB-RF** complies with the following standards:

EN 60730-1
EN 60730-2-9
EN 60335-1
EN 55014-1
EN 55014-2
EN 301 489–1

In accordance with the following Directives, this product is designated with CE:
1999/5/EC
2004/108/EC
2006/95/EC
2011/65/EC

Allendorf, 01 November 2014

Viessmann Werke GmbH & Co KG

Authorised signatory Manfred Sommer

## Applicability

**Serial No.:**

| | | |
|---|---|---|
| 7454522 | 7454523 | 7537234 |

CE

*Fig.9*

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