

Installation instructions

for contractors

VIESSMANN

Vitotrol 100
Type UTDB-RF

Room thermostat with digital time switch and wireless receiver

VITOTROL 100



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.

Note

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



Please note

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

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.

Safety instructions (cont.)

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

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.
-  **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 pipework.

Safety instructions (cont.)

- ! **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 the system.
Replace faulty components only with genuine Viessmann spare parts.

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Before installation

Function

The Vitotrol UTDB-RF controls the room temperature via the wireless receiver, by starting and stopping a heating circuit pump, for example.

Installation location

Vitotrol 100

- On an internal wall in the main living room, approx. 1.5 m above the floor
- Not next to windows or doors
- Not above radiators
- Not between shelves, in recesses, etc.
- Not near heat sources (direct sunlight, fireplace, TV set, etc.)
- Wireless reception (good communication with the wireless receiver) must be available (see page 18).

Do not install further control devices in the main living room. If the radiators are equipped with thermostatic valves, these must always be fully opened.

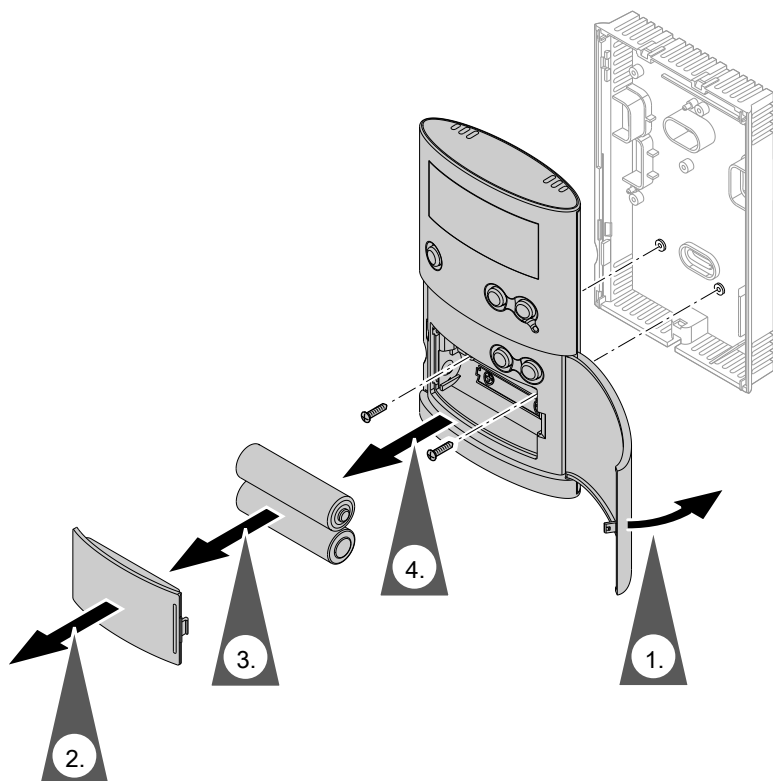
Wireless receiver

- Immediately next to the component to be switched (heat generator, heating circuit pump)
- A power supply must be available.
- Wireless reception must be available (see page 18).
(Subject to the material and the thickness of walls and ceilings, the range may be 10 to 30 m).

Note

Conductive metallic materials have a strong negative effect on reception.

Opening the Vitotrol 100

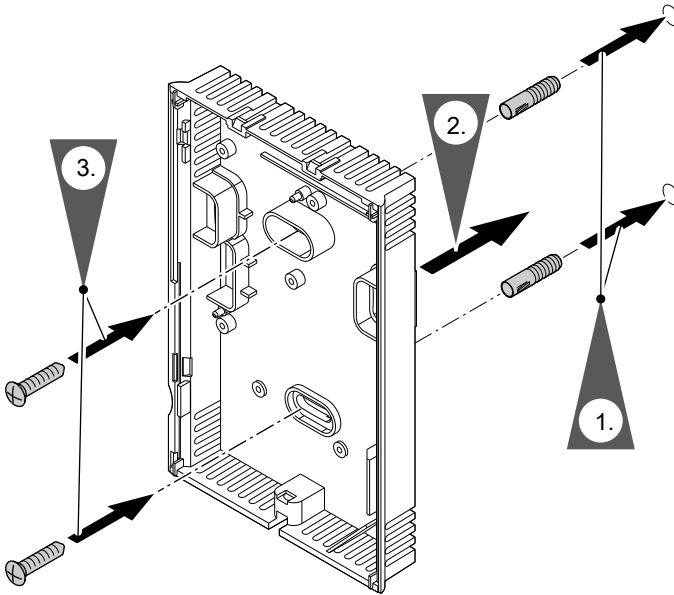


Fitting the wall mounting base

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

Always check reception quality prior to fitting to the wall (see page 18).

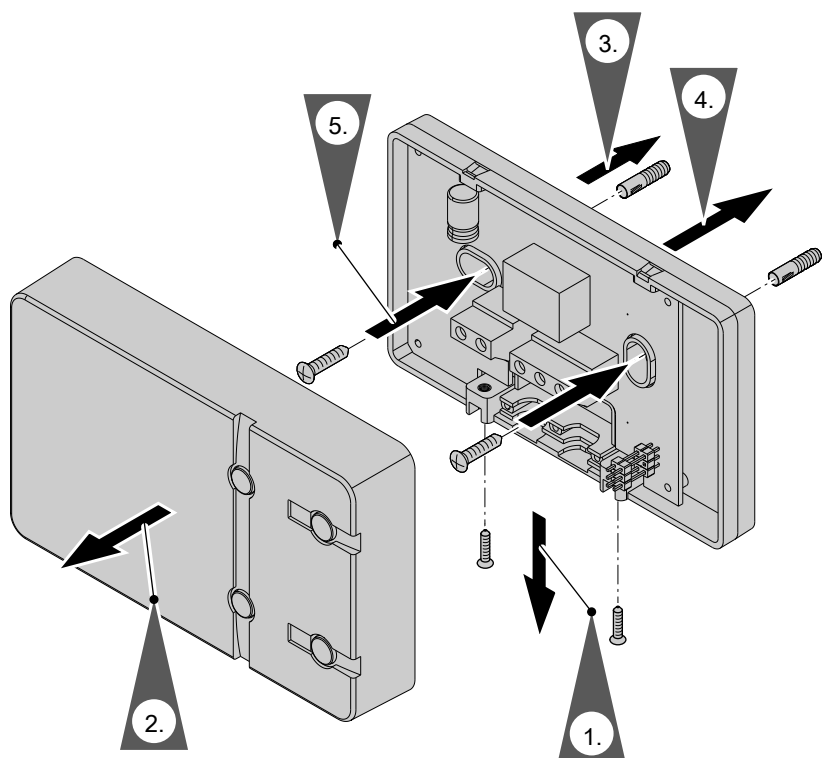
Fitting the wall mounting base (cont.)



Fitting the wireless receiver

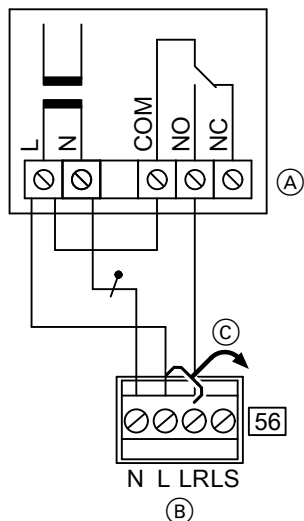
Always check reception quality prior to installation (see page 18).

Fitting the wireless receiver (cont.)



Electrical connection to the control unit

Connection to the control unit with plug **56**



Insert the jumper across terminals L and COM in the wireless receiver.

Recommended connecting cable

- Cable with a cross-section of 1.5 mm² for 230 V~

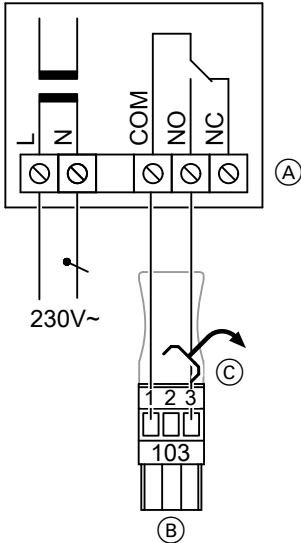
Note

Leave terminal NC in the wireless receiver free.

- (A) Terminals inside the wireless receiver
- (B) Plug **56** to the control unit
- (C) Jumper; remove when making this connection

Electrical connection to the control unit (cont.)

Connection to the control unit with plug 103



1. Remove jumper (C) across terminals 1 and 3 in plug 103.
2. Route 230 V cables and extra low voltage (ELV) leads **separately**.

Recommended connecting cable to the control unit

- 2-core cable with a cross-section of 0.75 mm² for extra low voltage (ELV)

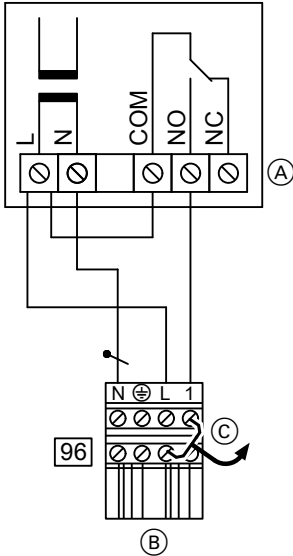
Note

Leave terminal NC in the wireless receiver free.

- (A) Terminals inside the wireless receiver
- (B) Plug 103 to the control unit

Electrical connection to the control unit (cont.)

Connector and plug 96 (4-pole)



Insert the jumper between terminals L and COM in the wireless receiver.

Recommended connecting cable/lead

- Cable with a cross-section of 1.5 mm² for 230 V~

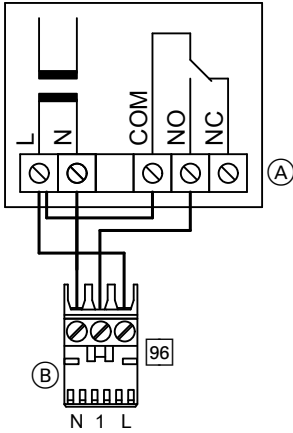
Note

Leave terminal NC in the wireless receiver free.

- (A) Terminals inside the wireless receiver
- (B) Plug 96 to the control unit
- (C) Jumper; remove when making this connection.

Electrical connection to the control unit (cont.)

Connector and plug 96 (3-pole)



Insert the jumper across terminals L and COM in the wireless receiver. Further information on connecting to the control unit

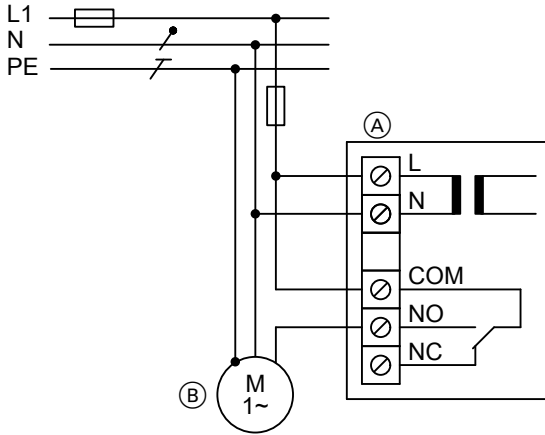


Heat generator installation and service instructions

- (A) Terminals inside the wireless receiver
- (B) Plug 96

Electrical connection to the control unit (cont.)

General connection



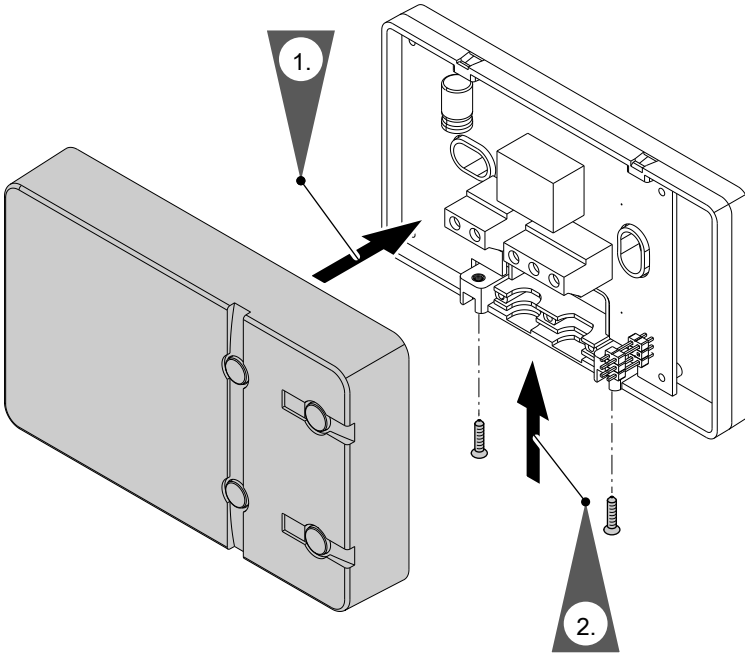
Ⓐ Terminals inside the wireless receiver

Ⓑ Components to be switched, e.g. heating circuit pump

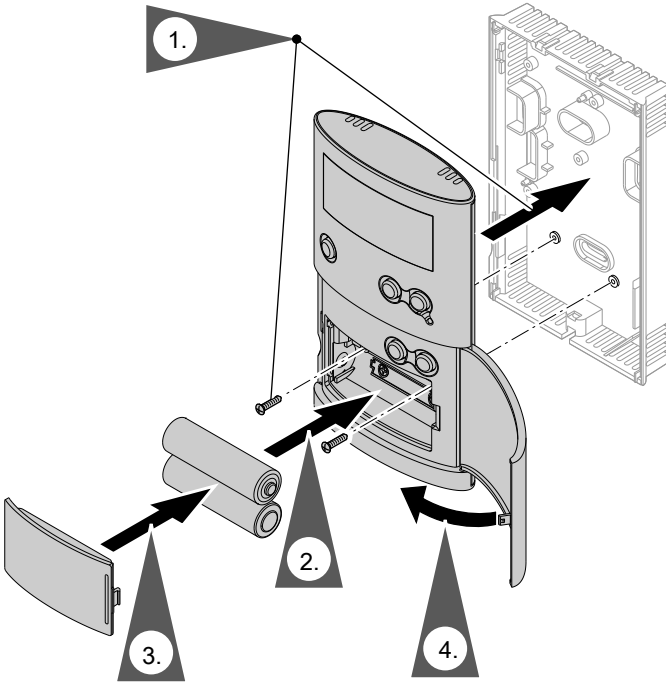
Recommended connecting cable/lead

- Cable with a cross-section of 1.5 mm² for 230 V~

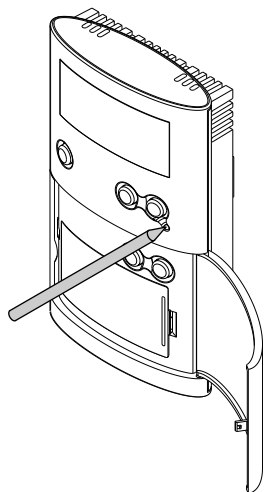
Assembling the wireless receiver



Assembling the Vitotrol 100



Commissioning the Vitotrol 100




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

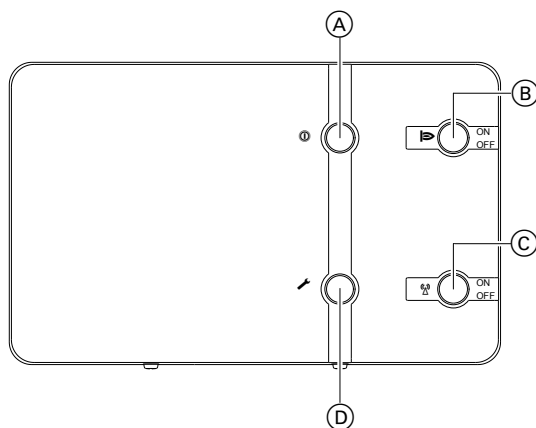
Commissioning the wireless receiver

Several Vitotrol 100 devices with wireless receiver can be installed in one building. Each pair is matched in the factory. If several Vitotrol 100 devices with wireless receiver are fitted inside a single building complex, never interchange the respective Vitotrol 100 devices and their dedicated wireless receivers. Each Vitotrol 100 device is matched to its assigned wireless receiver.








Note

If display  flashes, the wireless receiver has not recognised the signal from the Vitotrol 100. Change the address code (see page 19).

Testing reception quality





- (A) ON indicator
- (B) Indicator/pushbutton for switching contact
- (C) Address recognition indicator/confirmation of service function
- (D) Service function indicator













1. Press  on the wireless receiver for approx. 5 s until  flashes.
2. Open the flap on the Vitotrol 100.
3. Press  twice.
4. Use / to select **"Settings"**.
5. Confirm with **OK**.
6. Use / to select **"Service"**.

Commissioning the wireless receiver (cont.)

7. Press **OK** four times to confirm. **"Transmitting"** appears on the display. The transfer takes 30 s.



If the reception quality is adequate, LED  shows green. If the reception quality is not adequate, LED  shows red.

Changing the address code

1. Press  on the wireless receiver for approx. 10 s until  flashes.
2. Open the flap on the Vitotrol 100.
3. Press  twice.
4. Use / to select **"Settings"**.
5. Confirm with **OK**.
6. Use / to select **"Service"**.
7. Press **OK** three times to confirm.
8. Use / to select **"Address code"**.
9. Confirm with **OK**. **"Transmitting"** appears on the display. The transmission takes 30 s, during which time  flashes. If the receiver recognises the address code,  and  extinguish. If the address code is not recognised, repeat the procedure.

Checking the floating contact (switching output)

Press  on the wireless receiver.

- LED  illuminates: Output "ON"
- LED  is off: Output "OFF"

The function ends automatically at the next changeover. This function also ends when the signal from the Vitotrol 100 is reset (every 20 min).

Specification

Vitotrol 100

Rated voltage

3 V-

2 batteries LR 6/AA

Ambient temperature

■ Operation

0 to 40 °C

■ Storage and transport

-25 to 65 °C

IP rating

IP 20 to EN 60529

Wireless receiver

Reception frequency

868 MHz

Rated voltage

230 V~ +/- 10 %

Rated breaking capacity of the floating contact

6(1) A, 230 V~

Ambient temperature

0 to 40 °C

IP rating

IP 20 to EN 60529

Protection class

II to EN 60730-1

Terminals suitable for the following cables

■ Solid, single core cables

Max. 2.5 mm²

■ Flexible cables

Max. 2.5 mm²

■ With each heat demand and draw-off as well as cyclically every 20 min, the Vitotrol 100 transmits its data.

■ All control information is saved in case of power failure.

No heat demand is executed during power failure.



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