Installation and service instructions

for contractors

Vitotrol 100
Type UTDB-RF2

- Room temperature controller with digital time switch and wireless receiver IU302-A20 for Vitodens 100-W
- Room temperature controller with digital time switch and wireless receiver IU302-A30 for Vitodens 050-W

For applicability, see the last page

VITOTROL 100

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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 qualified 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 environmental protection
- 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 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.

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.

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Safety instructions (cont.)

What to do if water escapes from the appliance

⚠ **Danger**
When 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 power distribution).

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 building characteristics 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. Vents for supplying combustion air must be non-closable.

Extractors

Operating appliances that extract air to the outside (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 extract air to the outside 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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Operational reliability

Danger
Wireless signals can interfere with electronic devices, particularly cardiac pacemakers, hearing aids and defibrillators.
If any such equipment is fitted, users should avoid being in the immediate vicinity of operational wireless components.

- Wireless components may interfere with each other's signal transmission. To ensure reliable signal transmission, maintain a minimum clearance of 0.5 m between wireless components.
- Radio frequency of the wireless components: 868 MHz
- Only operate wireless components indoors.
- Avoid impairment through moisture or dust.
- Ensure the wireless components do not come into contact with gases, vapours or solvents and prevent long-lasting direct insolation.
- Do not operate wireless components in conjunction with the following devices:
  - Devices which directly or indirectly serve for health or life-saving purposes.
  - Devices which, when operated, may result in a risk to humans, animals or property.
- Check the status of the wireless components following a power failure or restart.

Liability

The licensor rejects all liability 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.

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Symbols

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 material losses and environmental pollution
	Live electrical area
	Pay particular attention.
	▪ Component must audibly click into place. or ▪ Acoustic signal
	▪ Fit new component. or ▪ In conjunction with a tool: Clean the surface.
	Dispose of component correctly.
	Dispose of component at a suitable collection point. Do **not** dispose of component in domestic waste.

Intended use

Install and operate the appliance as intended, in conjunction with the electronic control units and controllers for the Viessmann heat and power generators designed for this system. Also take account of the relevant installation, service and operating instructions. In particular, observe the current and voltage specifications for connections and hook-ups.

The device is exclusively designed for operation in buildings of a domestic or commercial nature.

Incorrect usage or operation of the appliance (e.g. the appliance being opened by the system user) is prohibited and will result in an exclusion of liability. Incorrect usage also occurs if the components in the heating system are modified from their intended function.

Note

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

Product information

The Vitotrol 100, type UTDB-RF2 is a battery powered room temperature controller with integral wireless transmitter and separate wireless receiver with switching output. The digital time switch provides the option to use time programs for central heating.

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
- Not near heat sources (radiators, direct sunlight, fireplace, TV set, etc.)
- Ensure good wireless connection to the wireless receiver (checking the reception quality, see page 13).

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

Wireless receiver

- Installation in the boiler
- Ensure good wireless connection to the wireless components (see page 13).
  (The range is up to 30 m, subject to the material characteristics and thickness of the walls and ceilings.)
  Note
  Conductive metallic materials significantly hinder wireless reception.

Installation of wireless receiver, Vitodens 050-W

Installing the wireless receiver

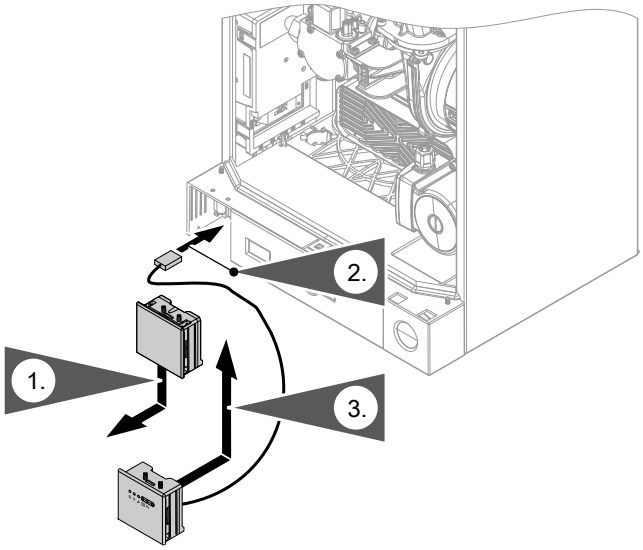

Fig. 1

Connecting the wireless receiver

! **Please note**
Electrostatic discharge damages electronic assemblies.
Prior to commencing any work, touch earthed objects such as heating or water pipes to discharge static loads.

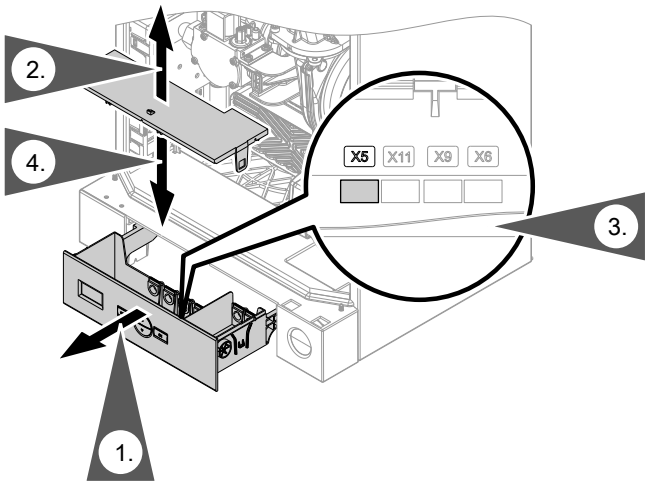

Fig. 2

3. Insert the wireless receiver cable into the control unit enclosure and insert the plug into "X5".

4. Close the control unit enclosure; when doing so, ensure that the cable does **not** become trapped.

Installation of wireless receiver, Vitodens 100-W

Opening the control unit enclosure

! **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.

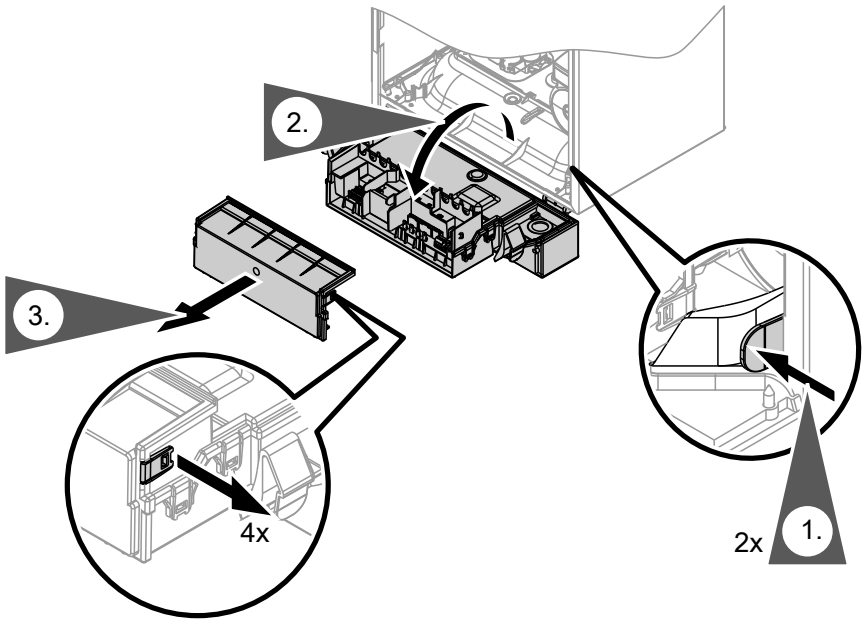

Fig. 3

Installing the wireless receiver

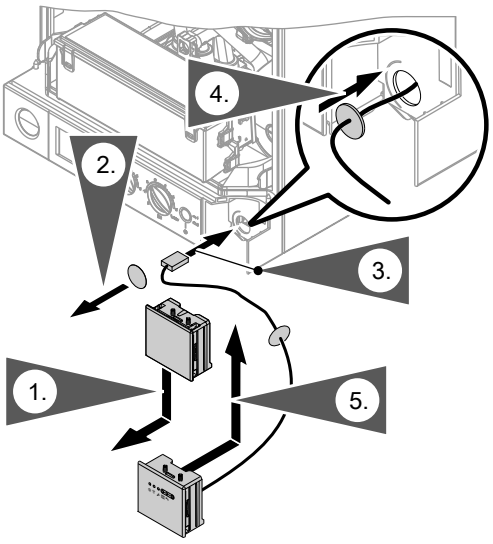

Fig. 4

Installation of wireless receiver, Vitodens… (cont.)

Connecting the wireless receiver

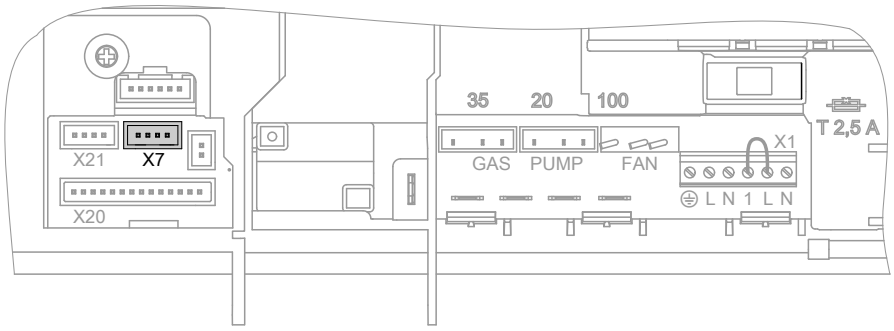

Fig. 5

1. Route the wireless receiver cable into the control unit enclosure and insert the plug at "X7".
2. Close the control unit enclosure and flip up the control unit; when doing so, ensure that the cable does **not** become trapped.

Installing the Vitotrol 100

Opening the Vitotrol 100

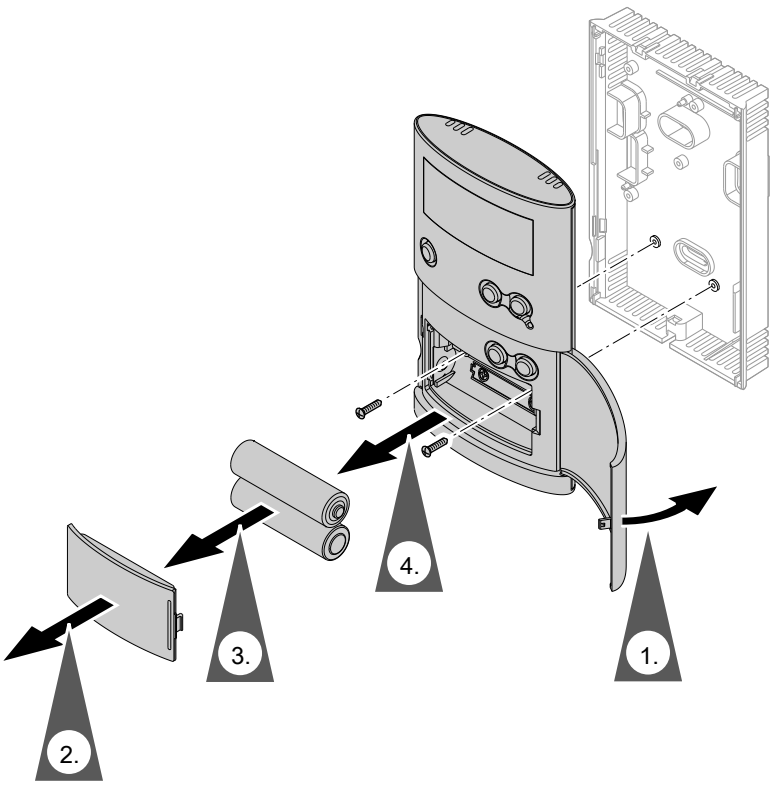

Fig. 6

Installing the wall mounting base

Always **check the reception quality** before fitting the base to the wall (see page 13).

Installing the Vitotrol 100 (cont.)

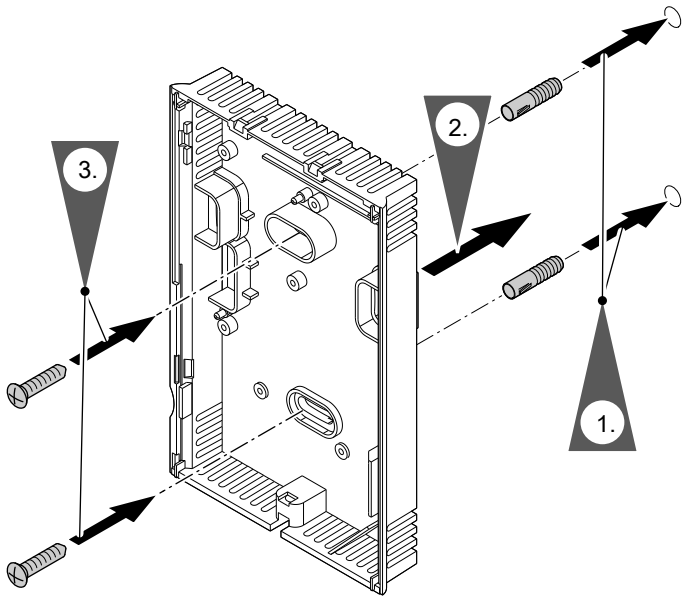

Fig. 7

Assembling the Vitotrol 100

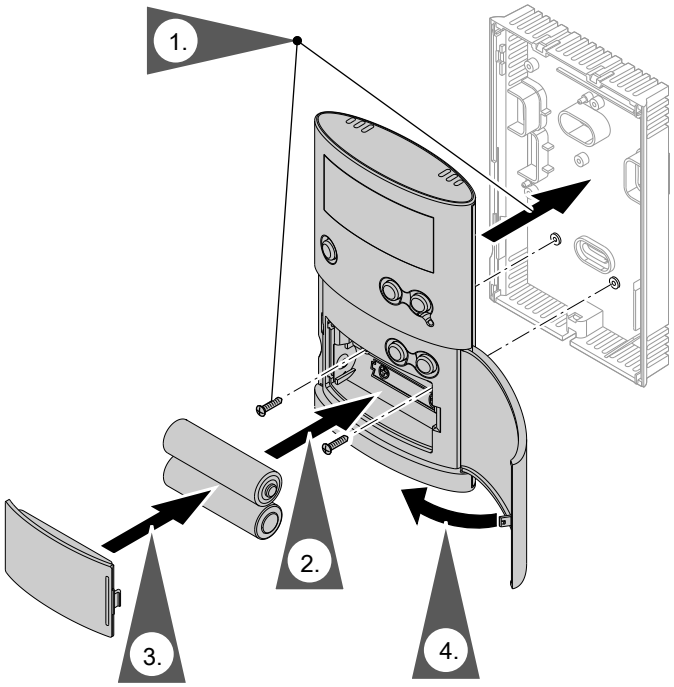

Fig. 8

Commissioning the Vitotrol 100

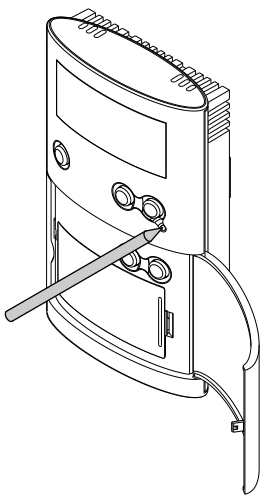

Fig. 9

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

Commissioning the wireless receiver

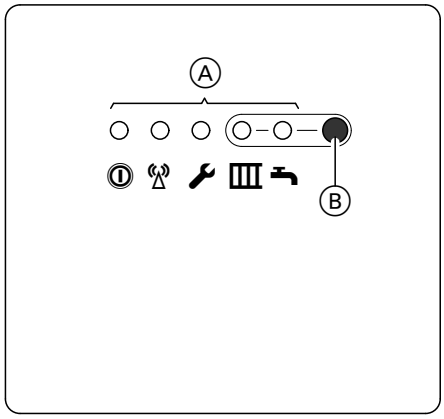

Fig. 10

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

Ⓑ Service button

Several Vitotrol 100 devices with wireless receivers can be installed in one building. Each Vitotrol 100 can only communicate with its allocated wireless receiver.

Note
If LED flashes, the wireless receiver has not recognised the signal from the Vitotrol 100. In this event, change the address code (see page 15).

Checking the reception quality

1. Hold down service button Ⓑ on the wireless receiver (see fig. 10) for approx. 5 s, until LED flashes.
2. Open the flap of the Vitotrol 100.
3. Press twice.
4. Use ▼/▲ to select **"Settings"**.
5. Confirm with **OK**.
6. Use ▼/▲ to select **"Service"**.
7. Press **OK** 4 times to confirm.
   "Transmitting" appears on the display.
   The transmission takes approx. 30 s.

If the reception quality is sufficient, LED illuminates green. If the LED illuminates red, check the installation location of the Vitotrol 100, change it if required and check the reception quality again.

Commissioning the wireless receiver (cont.)

Checking the switching outputs

1. Repeatedly press service button Ⓑ on the wireless receiver (see fig. 10) until the required function is activated: see the following table.
2. To terminate the function:
   press service button Ⓑ.
   or
   automatically, if the switching output is closed via the setting on the Vitotrol 100.

Function			
Central heating	**DHW heating**	**LED**	**LED**
OFF	OFF	OFF	OFF
OFF	ON	OFF	ON
ON	OFF	ON	OFF
ON	ON	ON	ON

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

Changing the address code

If the wireless connection between the Vitotrol 100 and the wireless receiver is faulty, change the address code.

1. Hold down service button Ⓑ on the wireless receiver (see fig. 10) for approx. 10 s, until LED flashes.
2. Open the flap of the Vitotrol 100.
3. Press twice.
4. Use ▼/▲ to select **"Settings"**.
5. Confirm with **OK**.
6. Use ▼/▲ to select **"Service"**.
7. Press **OK** 3 times to confirm.
8. Use ▼/▲ to select **"Address code"**.
9. Confirm with **OK**.
   After approx. 30 s the display shows **"Transmitting"**.
   The transmission takes approx. 30 s.
   During the transmission, LED flashes briefly.

If the address code is recognised, the LEDs extinguish; otherwise repeat the process.

Specification

Vitotrol 100

Rated voltage	3 V– 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
Protection class	II to EN 60730-1
Radio frequency	868 MHz

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

Radio receiver

Power supply	From the control unit
Ambient temperature	0 to 40 °C
IP rating	Same as heat generator

Declaration of conformity

Vitotrol 100, **type UTDB-RF2 with radio receiver IU302-A20**
Vitotrol 100, **type UTDB-RF2 with wireless receiver IU302-A30**

We, Viessmann Werke GmbH & Co. KG, D-35107 Allendorf, declare as sole responsible body that the listed products comply with the provisions of the following directives and regulations:

1999/5/EC	R&TTE Directive
2004/108/EC	EMC Directive
2006/95/EC	Low Voltage Directive
2011/65/EU	RoHS II

Applied standards:
EN 60730-1: 2011
EN 60730-2-9: 2010
EN 55014-1: 2006+A1: 2009+A2: 2011
EN 55014-2: 1997+A1: 2001+A2: 2008
ETSI EN 301 489-1 (V1.9.2): 2011
ETSI EN 301 489-3 (V1.6.1): 2013
ETSI EN 300220-2 (V2.4.1): 2012
ETSI EN 300220-1 (V2.4.1): 2012
EN 62479: 2010

In accordance with the specified directives, this product is designated with CE.

Allendorf, 01 October 2015

Viessmann Werke GmbH & Co. KG

Authorised signatory Manfred Sommer

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Keyword index

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Applicability

Serial No.:

7454522	7454523	7537234	7537991

Viessmann Werke GmbH & Co. KG
D-35107 Allendorf
Telephone: +49 6452 70-0
Fax: +49 6452 70-2780
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