Installation Instructions



Power/Pump Module, Part No. 7436 069

for Vitodens 200-W, WB2B series Boilers

Safety and Installation Requirements

Please ensure that these instructions are read and understood before commencing installation. Failure to comply with the instructions listed below can cause product/property damage, severe personal injury, and/or loss of life.

Licensed professional heating contractor

The installation, adjustment, service, and maintenance of this equipment *must be* performed by a licensed professional heating contractor.

Warranty

Information contained in this and related product documentation must be read and followed. *Failure to do so renders warranty null and void.* • Product documentation Read all applicable documentation before commencing installation. Store documentation near equipment in a readily accessible location for future reference by service personnel.

Conformity with local codes

Installation of the boiler must conform with local codes, or in absence of local codes, the Fuel Gas Codes, ANSI Z223.1 (USA) and CAN/CSA B149.1 and 2 (Canada). If an electrical source is utilized, it must be electrically grounded in accordance with local codes, or in absence of local codes, with the Electrical Codes, ANSI/NFPA 70 (USA) and CSA C22.1 (Canada).

- What to do if you smell gas:
 - 1. Do not try to light any appliances.
 - 2. Do not touch electrical switches and do not use any telephone in the building.
 - Immediately call your gas supplier from a neighbor's telephone. Follow the gas supplier's instructions.
 - 4. If you cannot reach your gas supplier, call the fire department.



It is important to refer to all installation literature of the other components.

Installation



Fig. 1 Removing the cover of the Power/Pump module

 Remove cover of power/pump module and mount the module base next to Vitodens 200-W, WB2B boiler (as shown in Fig. 2 on following page), using the four screws supplied.

IMPORTANT

Mount Power/Pump module in vertical or horizontal position only. DO NOT mount module on the ceiling or where it can be exposed to splashing water.

8 x 1¼" screws and plastic wall anchors are intended for mounting Power/Pump module to concrete or brick surface only.

If Power/Pump module is to be mounted to drywall surface, appropriate hardware should be field supplied.





Fig. 2







Fig. 4

2. Run conduit alongside or underneath enclosure panel of the boiler. Secure conduit to the wall using the supplied holding clips.

6 x 1" screws and plastic wall anchors are intended for mounting conduit holding clips only.

IMPORTANT

When installing, note length of plastic conduit and ensure that conduit and cable are not under tension after the installation is complete.

A CAUTION

When running and securing connecting cables on site, ensure that the maximum permissible temperatures of the cables do not exceed 105°C.

3. Route the cables between the control support console and control unit.

See Vitodens 200-W, WB2B Installation Instructions on how to access the boiler control connections.

4. Secure cables behind the control unit with cable ties.

IMPORTANT

Cables in the vicinity of the control unit must not be secured to the control unit bracket.

 Make plug-in connections 40, 20 and 145 as per wiring diagram on following page, and apply strain reliefs to cables. Remove and discard the green plug (A) with the factory test leads (if installed). Connect the Power/Pump module plug 40 (see Fig. 4).

IMPORTANT

Note that connection 145 can alternately be made at plug X3 terminals 6 and 7 (B) on the boiler control board (not polarity sensitive). See in Fig. 4. Connections overview between Power/Pump module and boiler



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*These functions are not used with the Vitotronic 100 / Vitocontrol-S WB2B controls.

Power supply connection

- Install power supply receptacle in range of module power cord. Ensure the installation is in compliance with the regulations of the national and/or local authorities having jurisdiction.
- Connect 120 VAC power supply to receptacle through low water cut-off safety device, if so required by authorities having jurisdiction.
- **3.** Plug Power/Pump module cord into installed receptacle.

IMPORTANT

Viessmann recommends the installation of a disconnect switch to the 120 VAC power supply outside the boiler room.



See boiler wiring diagram on the inside of the boiler enclosure panel.

Technical data

Power	supply
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- Rated frequency: 60 Hz

Pump outputs

- Rated frequency: 60 Hz

Pump connections



Fig. 5

- Remove required number of breakouts from Power/Pump module. Install box connectors designed as strain reliefs for pump connection cables.
- Run cables through box connectors and secure by tightening connector screws.
- **3.** Make connection to plugs 20, 20A*, 21*, 28* and 50 in the Power/Pump module as required (Fig. 5).

■ 20	Boiler pump
■ 20A	Htg. circuit pump*
■ 21	DHW pump*
■ 28	DHW
	Re-circulation
	pump*
■ 50	Fault alarm Output
■ L	Line
■ ⊕	Ground
■ N	Neutral

See boiler wiring diagram on the inside of the boiler enclosure panel.

* These functions are not used with the Vitotronic 100 / Vitocontrol-S WB2B 4 controls.

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External heat demand



Fig. 6 External heat demand connection in the Power/Pump module

* 143 - External blocking terminals 2-3 External demand terminals 1-2 External heating program changeover terminals 1-2 The allocation of the function "external heating program changeover" is set via coding address '91'.



See Start-up/Service Instructions with regard to changing the coding addresses.

* These functions are not used with the Vitotronic 100 / Vitocontrol-S WB2B controls.

Parts List



Fig. 7 Illustrated parts for Power/Pump module 7436 069

Ordering Replacement Parts:

Please provide boiler model no. from the rating plate and serial no. when ordering replacement parts. Order replacement components from your Viessmann distributor.

Parts

410 Power/pump control module including cover
411 Transformer 120/240V-300VA
412 Circuit board
413 Fuse, T3.5A (set of 5)
414 Fuse, T12A (set of 5)
415 Relay 24VDC SPDT
416 Relay 240VAC SPDT

Other Parts (not illustrated) 417 Installation/Service Instructions 418 Parts List

> Vitodens boiler see separate Parts List

> Installation fittings see separate Parts List

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