

## Datasheet

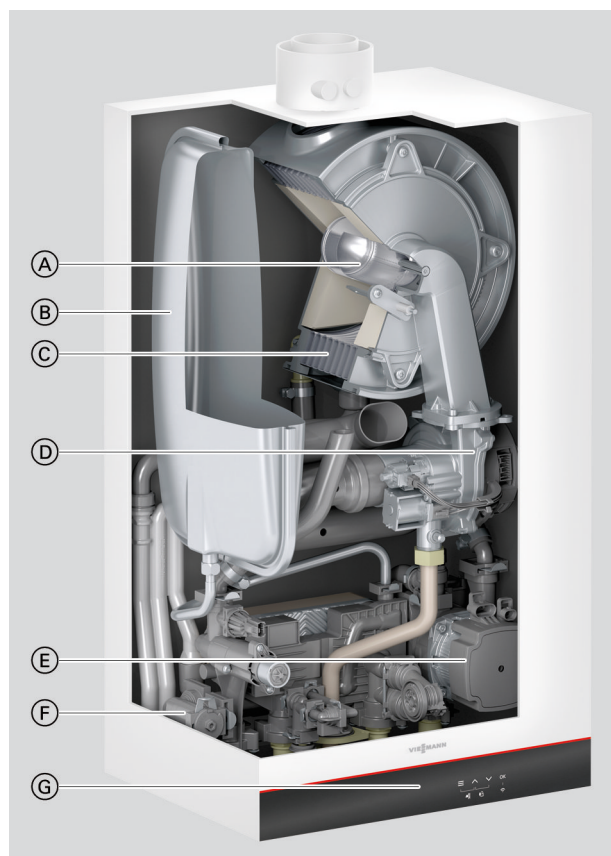
For part no. and prices: see pricelist



### **VITODENS 050-W** Type B0KA, BPKA, B0HA

Wall mounted gas condensing boiler  
3.2 to 25.0 kW  
For natural gas

## Product description



- Ⓐ Modulating MatriX-Plus burner with intelligent Lambda Pro combustion controller for extremely clean combustion and quiet operation
- Ⓑ Integral diaphragm expansion vessel
- Ⓒ Inox-Radial heat exchanger made from stainless steel – for high operational reliability, a long service life and high heating output on a very small footprint
- Ⓓ Variable speed combustion air fan for quiet and economical operation
- Ⓔ Integral, variable speed high efficiency circulation pump
- Ⓕ Hydraulics
- Ⓖ Digital boiler control unit with 7-segment display

The MatriX-Plus burner and the stainless steel Inox-Radial heat exchanger ensure the high energy efficiency of this combination, as well as its long-term high heating convenience.

All sizes of the Vitodens 050-W are equipped with the automatic Lambda Pro combustion controller. Modulation range down to 1:8 (25 kW).

The integral, variable speed high efficiency circulation pump reduces power consumption by up to 70 %.

### Recommended applications

- New build
- Modernisation

### Benefits at a glance

- Seasonal central heating energy efficiency  $\eta_s$  up to 92 % (label A).
- Low cycle frequency, even with low heat demand, due to optimised pauses and a wide modulation range down to 1:8 (25 kW)
- Durable and efficient thanks to Inox-Radial stainless steel heat exchanger
- MatriX-Plus burner with Lambda Pro combustion controller for permanently high efficiency and clean combustion.
- Power saving, high efficiency circulation pump
- Straightforward operation via control unit with LED display and touch buttons
- Web-enabled through integral WiFi interface for operation and service via Viessmann apps, depending on the version

### Delivered condition

Wall mounted gas condensing boiler with Inox-Radial heat exchanger, modulating MatriX-Plus burner for natural gas to DVGW Code of Practice G260 [Germany], hydraulics and variable speed high efficiency circulation pump.

Weather-compensated or constant temperature control unit with integral WiFi interface.

Fully plumbed and wired. Colour of the epoxy-coated casing: Vito-pearlwhite.

Integral diaphragm expansion vessel (8 litre capacity).

Preset for operation with natural gas. Conversion within gas groups E/LL is not required.

### Note on multiple connection

*If multiple appliances are to be connected to a common flue system, the **multiple connection** version of the appliance will be required. Using appliances for individual connection, or operating a mix of appliances for individual and multiple connection, on a common flue system is **not permitted**.*

*The multiple connection version is already fitted with an internal back draught safety device. When installing with multiple connections, it is **essential** to order an additional back draught safety device for the boiler flue connection to each appliance.*

### Accessories required (order separately)

#### Vitodens installation directly on a wall

Pre-plumbing jig for surface mounting:

- With fixings
- With valves/fittings
- With boiler drain & fill valve
- With gas shut-off valve with thermally activated safety shut-off valve

Valves/fittings for surface mounting:

- With valves/fittings
- With boiler drain & fill valve
- With gas shut-off valve with thermally activated safety shut-off valve

## Product description (cont.)

Valves/fittings for flush mounting:

- With valves/fittings
- With boiler drain & fill valve
- With gas shut-off valve with thermally activated safety shut-off valve

Mounting frame for surface mounting (installed depth 90 mm):

- With fixings
- With valves/fittings
- With boiler drain & fill valve
- With angle gas valve with thermally activated safety shut-off valve

### Vitodens installation in front of a wall

Plumbing wall mounting frame (installed depth 110 mm):

- With fixings

A pre-plumbing jig or valves/fittings for surface mounting/flush mounting must be ordered separately for the plumbing wall mounting frame.

### Tested quality



CE designation according to current EU Directives

Meets the requirements for the "Blue Angel" ecolabel to RAL UZ 61.

## Specification

### Gas condensing system boiler

| Gas boiler, type B and C, category I <sub>2N</sub> /I <sub>2H</sub>                     |       |                   |                         |
|-----------------------------------------------------------------------------------------|-------|-------------------|-------------------------|
| Type                                                                                    |       | B0HA              |                         |
| <b>Rated heating output range (details to EN 15502)</b>                                 |       |                   |                         |
| T <sub>F</sub> /T <sub>R</sub> = 50/30 °C                                               |       |                   |                         |
| Natural gas                                                                             | kW    | 3.2 to 19.0       | 3.2 to 25.0             |
| T <sub>F</sub> /T <sub>R</sub> = 80/60 °C                                               |       |                   |                         |
| Natural gas                                                                             | kW    | 2.9 to 17.0       | 2.9 to 22.5             |
| <b>Rated heating output for DHW heating</b>                                             |       |                   |                         |
| Natural gas                                                                             | kW    | 2.9 to 17.3       | 2.9 to 22.8             |
| <b>Rated heat input (Q<sub>n</sub>)</b>                                                 |       |                   |                         |
| Natural gas                                                                             | kW    | 3.0 to 18.0       | 3.0 to 23.6             |
| <b>Rated heat input for DHW heating (Q<sub>nw</sub>)</b>                                |       |                   |                         |
| Natural gas                                                                             | kW    | 3.0 to 18.2       | 3.0 to 24.0             |
| <b>Product ID</b>                                                                       |       | CE-0063DL3422     |                         |
| <b>IP rating to EN 60529</b>                                                            |       | IP X4 to EN 60529 |                         |
| NO <sub>x</sub>                                                                         |       | 6                 | 6                       |
| <b>Gas supply pressure</b>                                                              |       |                   |                         |
| Natural gas                                                                             | mbar  | 20                | 20                      |
|                                                                                         | kPa   | 2                 | 2                       |
| <b>Max. permiss. gas supply pressure <sup>*1</sup></b>                                  |       |                   |                         |
| Natural gas                                                                             | mbar  | 25.0              | 25.0                    |
|                                                                                         | kPa   | 2.5               | 2.5                     |
| <b>Sound power level</b><br>(to EN ISO 15036-1)                                         |       |                   |                         |
| – At partial load                                                                       | dB(A) | 33                | 33                      |
| – At rated heating output (DHW heating)                                                 | dB(A) | 47                | 49                      |
| <b>Power consumption</b><br>(in the delivered condition)                                |       | 45                | 64                      |
| <b>Rated voltage</b>                                                                    |       | V                 | 230                     |
| Rated frequency                                                                         |       | Hz                | 50                      |
| Appliance fuse protection                                                               |       | A                 | 4.0                     |
| Backup fuse (power supply)                                                              |       | A                 | 16                      |
| <b>Communication module (integral)</b>                                                  |       |                   |                         |
| WiFi frequency band                                                                     | MHz   | 2400 to 2483.5    |                         |
| Max. transmission power                                                                 | dBm   | 20                |                         |
| Low power radio frequency band                                                          | MHz   | 2400 to 2483.5    |                         |
| Max. transmission power                                                                 | dBm   | 10                |                         |
| Supply voltage                                                                          | V ~   | 24                |                         |
| Power consumption                                                                       | W     | 4                 |                         |
| <b>Electronic temperature limiter setting (TN)</b>                                      |       | °C                | 91                      |
| <b>Electronic temperature limiter setting</b>                                           |       | °C                | 110                     |
| <b>Permissible ambient temperature</b>                                                  |       |                   |                         |
| – During operation                                                                      | °C    | +5 to +40         |                         |
| – During storage and transport                                                          | °C    | -5 to +60         |                         |
| <b>Weight</b>                                                                           |       |                   |                         |
| – Excl. heating water and packaging                                                     | kg    | 32                | 32                      |
| – Incl. heating water                                                                   | kg    | 37.6              | 37.6                    |
| <b>Water capacity (excl. diaphragm expansion vessel)</b>                                |       | l                 | 3.0                     |
| <b>Max. flow temperature</b>                                                            |       | °C                | 82                      |
| <b>Max. flow rate</b><br>(Limit for the use of hydraulic separation)                    |       | l/h               | See residual head graph |
| <b>Nominal circulating water volume</b><br>At T <sub>F</sub> /T <sub>R</sub> = 80/60 °C |       | l/h               | 752                     |
| <b>Diaphragm expansion vessel</b>                                                       |       |                   |                         |
| – Capacity                                                                              | l     | 8                 | 8                       |
| – Pre-charge pressure                                                                   | bar   | 0.75              | 0.75                    |
|                                                                                         | kPa   | 75                | 75                      |
| <b>Permiss. operating pressure</b>                                                      |       | bar               | 3                       |
|                                                                                         | MPa   | 0.3               | 0.3                     |
| <b>Connections (with connection accessories)</b>                                        |       |                   |                         |
| – Boiler flow and return                                                                | G     | ¾                 | ¾                       |
| – Cold water and DHW                                                                    | G     | ¾                 | ¾                       |

\*1 If the gas supply pressure is higher than the maximum permissible value, install a separate gas pressure governor upstream of the system.

## Specification (cont.)

| Gas boiler, type B and C, category I <sub>2N</sub> /I <sub>2H</sub> |      |                                       |             |
|---------------------------------------------------------------------|------|---------------------------------------|-------------|
| Type                                                                |      | B0HA                                  |             |
| Rated heating output range (details to EN 15502)                    |      |                                       |             |
| T <sub>F</sub> /T <sub>R</sub> = 50/30 °C                           |      |                                       |             |
| Natural gas                                                         | kW   | 3.2 to 19.0                           | 3.2 to 25.0 |
| T <sub>F</sub> /T <sub>R</sub> = 80/60 °C                           |      |                                       |             |
| Natural gas                                                         | kW   | 2.9 to 17.0                           | 2.9 to 22.5 |
| Dimensions                                                          |      |                                       |             |
| – Length                                                            | mm   | 300                                   | 300         |
| – Width                                                             | mm   | 400                                   | 400         |
| – Height                                                            | mm   | 700                                   | 700         |
| Gas connection                                                      | R    | ¾                                     | ¾           |
| Supply values                                                       |      |                                       |             |
| Relative to the max. load and 1013 mbar/15 °C                       |      |                                       |             |
| With gas                                                            |      |                                       |             |
| Natural gas E                                                       | m³/h | 1.88                                  | 2.48        |
| Natural gas LL                                                      | m³/h | 2.19                                  | 2.88        |
| Flue gas parameters                                                 |      |                                       |             |
| Temperature (at a return temperature of 30 °C)                      |      |                                       |             |
| – At rated heating output                                           | °C   | 41                                    | 46          |
| – At partial load                                                   | °C   | 38                                    | 38          |
| Temperature (at a return temperature of 60 °C, for DHW heating)     | °C   | 65                                    | 67          |
| Available draught                                                   | Pa   | 250                                   | 250         |
|                                                                     | mbar | 2.5                                   | 2.5         |
| Available draught for B23P                                          | Pa   | 527                                   | 698         |
|                                                                     | mbar | 5.27                                  | 6.98        |
| Max. amount of condensate                                           | l/h  | 2.5                                   | 3.3         |
| To DWA-A 251                                                        |      |                                       |             |
| Condensate connection (hose nozzle)                                 | Ø mm | 20 to 24                              | 20 to 24    |
| Flue gas connection                                                 | Ø mm | 60                                    | 60          |
| Ventilation air connection                                          | Ø mm | 100                                   | 100         |
| Standard seasonal efficiency [to DIN] at                            |      |                                       |             |
| T <sub>F</sub> /T <sub>R</sub> = 40/30 °C                           | %    | Up to 98 (H <sub>s</sub> ) [gross cv] |             |
| Energy efficiency class                                             |      | A                                     | A           |

### Note

The supply values are only for reference (e.g. in the gas contract application) or for a supplementary, rough estimate to check the volumetric settings. Due to factory settings, the gas pressure must not be altered from these values. Reference: 15 °C, 1013 mbar (101.3 kPa).

## Gas condensing combi boiler

| Gas boiler, type B and C, category I <sub>2N</sub> /I <sub>2H</sub> |    |                                              |                                  |
|---------------------------------------------------------------------|----|----------------------------------------------|----------------------------------|
| Type                                                                |    | B0KA<br>BPKA                                 |                                  |
| Rated heating output range (details to EN 15502)                    |    |                                              |                                  |
| T <sub>F</sub> /T <sub>R</sub> = 50/30 °C                           |    |                                              |                                  |
| Natural gas                                                         | kW | 3.2 (7.0* <sup>2</sup> ) to 19.0             | 3.2 (7.0* <sup>2</sup> ) to 25.0 |
| T <sub>F</sub> /T <sub>R</sub> = 80/60 °C                           |    |                                              |                                  |
| Natural gas                                                         | kW | 2.9 (6.3* <sup>2</sup> ) to 17.0             | 2.9 (6.3* <sup>2</sup> ) to 22.5 |
| Rated heating output for DHW heating                                |    |                                              |                                  |
| Natural gas                                                         | kW | 2.9 (6.3* <sup>2</sup> ) to 25.4             | 2.9 (6.3* <sup>2</sup> ) to 30.0 |
| Rated heat input (Qn)                                               |    |                                              |                                  |
| Natural gas                                                         | kW | 3.0 (6.5* <sup>2</sup> ) to 18.0             | 3.0 (6.5* <sup>2</sup> ) to 23.6 |
| Rated heat input for DHW heating (Qnw)                              |    |                                              |                                  |
| Natural gas                                                         | kW | 3.0 (6.5* <sup>2</sup> ) to 26.7             | 3.0 (6.5* <sup>2</sup> ) to 31.5 |
| Product ID                                                          |    | CE-0063DL3422                                |                                  |
| IP rating to EN 60529                                               |    | IP X4 to EN 60529<br>B1BA: IP X5 to EN 60529 |                                  |
| NO <sub>x</sub>                                                     |    | 6                                            | 6                                |

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<sup>\*2</sup> Appliances for multiple connection of type B0KA-[kW]-M

## Specification (cont.)

| Gas boiler, type B and C, category I <sub>2N</sub> /I <sub>2H</sub>                                  |       |                                  |                                  |
|------------------------------------------------------------------------------------------------------|-------|----------------------------------|----------------------------------|
| Type                                                                                                 |       | B0KA<br>BPKA                     |                                  |
| <b>Rated heating output range (details to EN 15502)</b><br>T <sub>F</sub> /T <sub>R</sub> = 50/30 °C |       |                                  |                                  |
| Natural gas                                                                                          | kW    | 3.2 (7.0 <sup>*2</sup> ) to 19.0 | 3.2 (7.0 <sup>*2</sup> ) to 25.0 |
| T <sub>F</sub> /T <sub>R</sub> = 80/60 °C                                                            |       |                                  |                                  |
| Natural gas                                                                                          | kW    | 2.9 (6.3 <sup>*2</sup> ) to 17.0 | 2.9 (6.3 <sup>*2</sup> ) to 22.5 |
| <b>Gas supply pressure</b>                                                                           |       |                                  |                                  |
| Natural gas                                                                                          | mbar  | 20                               | 20                               |
|                                                                                                      | kPa   | 2                                | 2                                |
| <b>Max. permiss. gas supply pressure<sup>*3</sup></b>                                                |       |                                  |                                  |
| Natural gas                                                                                          | mbar  | 25                               | 25                               |
|                                                                                                      | kPa   | 2.5                              | 2.5                              |
| <b>Sound power level</b><br>(to EN ISO 15036-1)                                                      |       |                                  |                                  |
| – At partial load                                                                                    | dB(A) | 33                               | 33                               |
| – At rated heating output (DHW heating)                                                              | dB(A) | 52                               | 53                               |
| <b>Power consumption</b><br>(in the delivered condition)                                             | W     | 45                               | 64                               |
| <b>Rated voltage</b>                                                                                 | V     | 230                              |                                  |
| Rated frequency                                                                                      | Hz    | 50                               |                                  |
| Appliance fuse protection                                                                            | A     | 4                                |                                  |
| Backup fuse (power supply)                                                                           | A     | 16                               |                                  |
| <b>Communication module</b> (integral)                                                               |       |                                  |                                  |
| WiFi frequency band                                                                                  | MHz   | 2400 to 2483.5                   |                                  |
| Max. transmission power                                                                              | dBm   | 20                               |                                  |
| Low power radio frequency band                                                                       | MHz   | 2400 to 2483.5                   |                                  |
| Max. transmission power                                                                              | dBm   | 10                               |                                  |
| Supply voltage                                                                                       | V ~   | 24                               |                                  |
| Power consumption                                                                                    | W     | 4                                |                                  |
| <b>Electronic temperature limiter setting (TN)</b>                                                   | °C    | 91                               |                                  |
| <b>Electronic temperature limiter setting</b>                                                        | °C    | 110                              |                                  |
| <b>Permissible ambient temperature</b>                                                               |       |                                  |                                  |
| – During operation                                                                                   | °C    | +5 to +40                        |                                  |
| – During storage and transport                                                                       | °C    | -5 to +60                        |                                  |
| <b>Weight</b>                                                                                        |       |                                  |                                  |
| – Excl. heating water and packaging                                                                  | kg    | 35                               | 35                               |
| – Incl. heating water                                                                                | kg    | 41                               | 41                               |
| <b>Water capacity</b> (excl. diaphragm expansion vessel)                                             | l     | 3.0                              | 3.0                              |
| <b>Max. flow temperature</b>                                                                         | °C    | 82                               | 82                               |
| <b>Max. flow rate</b><br>(Limit for the use of hydraulic separation)                                 | l/h   | See residual head graphs         |                                  |
| <b>Nominal circulating water volume</b><br>At T <sub>F</sub> /T <sub>R</sub> = 80/60 °C              | l/h   | 752                              | 988                              |
| <b>Diaphragm expansion vessel</b>                                                                    |       |                                  |                                  |
| – Capacity                                                                                           | l     | 8                                | 8                                |
| – Pre-charge pressure                                                                                | bar   | 0.75                             | 0.75                             |
|                                                                                                      | kPa   | 75                               | 75                               |
| <b>Permiss. operating pressure</b>                                                                   |       |                                  |                                  |
|                                                                                                      | bar   | 3                                | 3                                |
|                                                                                                      | MPa   | 0.3                              | 0.3                              |
| <b>Connections (with connection accessories)</b>                                                     |       |                                  |                                  |
| – Boiler flow and return                                                                             | G     | ¾                                | ¾                                |
| – Cold water and DHW                                                                                 | G     | ½                                | ½                                |
| <b>Dimensions</b>                                                                                    |       |                                  |                                  |
| – Length                                                                                             | mm    | 300                              | 300                              |
| – Width                                                                                              | mm    | 400                              | 400                              |
| – Height                                                                                             | mm    | 700                              | 700                              |
| <b>Gas connection</b>                                                                                | R     | ¾                                | ¾                                |
| <b>Supply values</b><br>Relative to the max. load and 1013 mbar/15 °C                                |       |                                  |                                  |
| Natural gas E                                                                                        | m³/h  | 1.88                             | 2.48                             |
| Natural gas LL                                                                                       | m³/h  | 2.19                             | 2.88                             |

<sup>\*2</sup> Appliances for multiple connection of type B0KA-[kW]-M

<sup>\*3</sup> If the gas supply pressure is higher than the maximum permissible value, install a separate gas pressure governor upstream of the system.



## Specification (cont.)

| Gas boiler, type B and C, category I <sub>2N</sub> /I <sub>2H</sub>    |      |                                       |                                  |
|------------------------------------------------------------------------|------|---------------------------------------|----------------------------------|
| Type                                                                   |      | B0KA<br>BPKA                          |                                  |
| <b>Rated heating output range (details to EN 15502)</b>                |      |                                       |                                  |
| <b>T<sub>F</sub>/T<sub>R</sub> = 50/30 °C</b>                          |      |                                       |                                  |
| Natural gas                                                            | kW   | 3.2 (7.0 <sup>*2</sup> ) to 19.0      | 3.2 (7.0 <sup>*2</sup> ) to 25.0 |
| <b>T<sub>F</sub>/T<sub>R</sub> = 80/60 °C</b>                          |      |                                       |                                  |
| Natural gas                                                            | kW   | 2.9 (6.3 <sup>*2</sup> ) to 17.0      | 2.9 (6.3 <sup>*2</sup> ) to 22.5 |
| <b>Flue gas parameters</b>                                             |      |                                       |                                  |
| <b>Temperature</b> (at a return temperature of 30 °C)                  |      |                                       |                                  |
| – At rated heating output                                              | °C   | 41                                    | 46                               |
| – At partial load                                                      | °C   | 38                                    | 38                               |
| <b>Temperature</b> (at a return temperature of 60 °C, for DHW heating) |      | 65                                    | 67                               |
| <b>Mass flow rate</b> (for DHW heating)                                |      |                                       |                                  |
| Natural gas                                                            |      |                                       |                                  |
| – At rated heating output                                              | kg/h | 31.7                                  | 41.6                             |
| – At partial load                                                      | kg/h | 5.6 (9.8)                             | 5.6 (9.8)                        |
| <b>Available draught</b>                                               |      | 250                                   | 250                              |
|                                                                        |      | mbar                                  | 2.5                              |
| <b>Max. amount of condensate</b>                                       | l/h  | 3.8                                   | 4.4                              |
| To DWA-A 251                                                           |      |                                       |                                  |
| <b>Condensate connection (hose nozzle)</b>                             | Ø mm | 20 to 24                              | 20 to 24                         |
| <b>Flue gas connection</b>                                             | Ø mm | 60                                    | 60                               |
| <b>Ventilation air connection</b>                                      | Ø mm | 100                                   | 100                              |
| <b>Standard seasonal efficiency [to DIN] at</b>                        |      |                                       |                                  |
| T <sub>F</sub> /T <sub>R</sub> = 40/30 °C                              |      | Up to 98 (H <sub>s</sub> ) [gross cv] |                                  |
| <b>Energy efficiency class</b>                                         |      | A                                     | A                                |

### Note

The supply values are only for reference (e.g. in the gas contract application) or for a supplementary, rough estimate to check the volumetric settings. Due to factory settings, the gas pressure must not be altered from these values. Reference: 15 °C, 1013 mbar (101.3 kPa).

## Specification

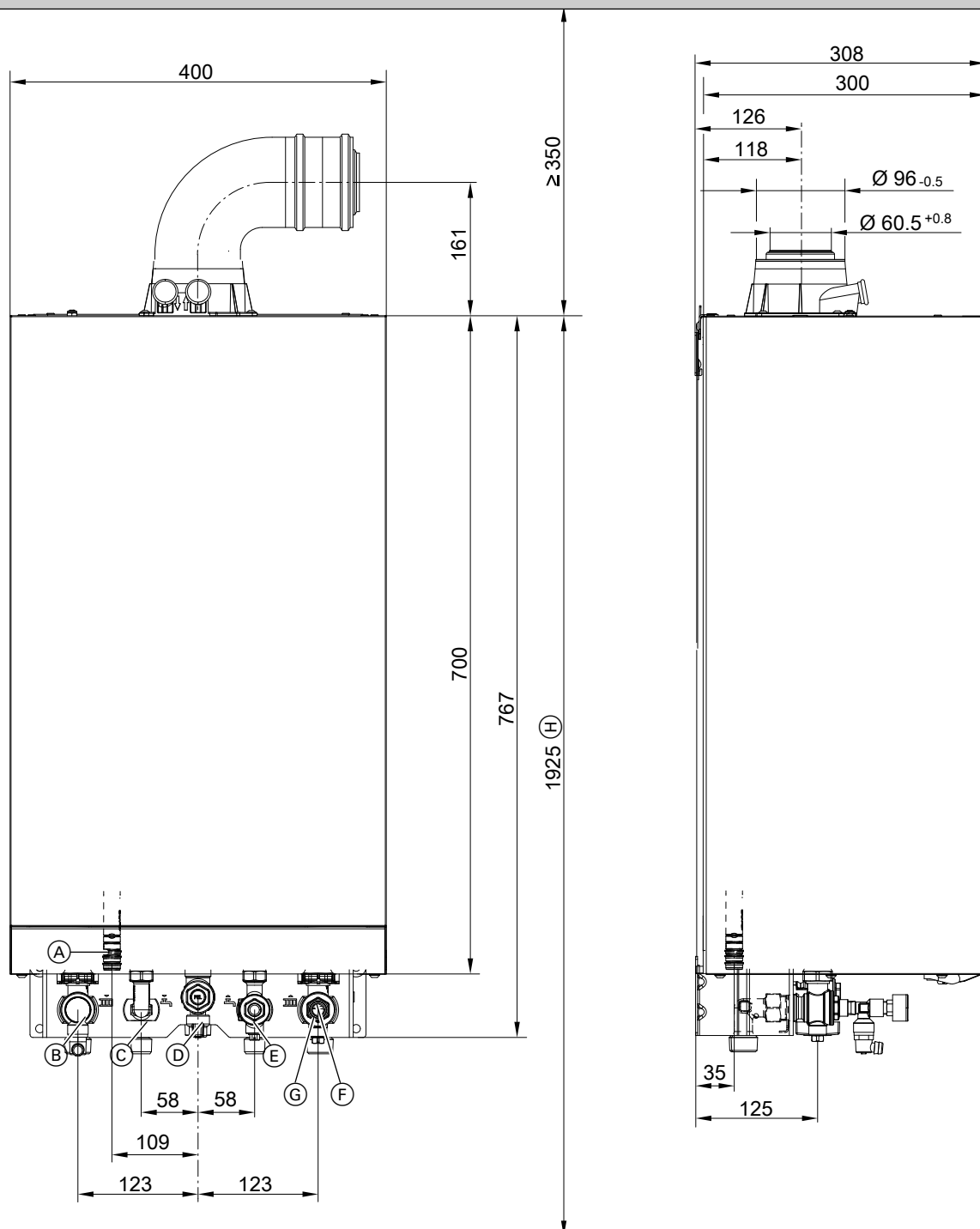


Illustration shows a gas condensing combi boiler

- |                                              |                                                             |
|----------------------------------------------|-------------------------------------------------------------|
| (A) Condensate drain                         | (E) Cold water (gas condensing combi boiler)                |
| (B) Heating flow                             | Cylinder return (gas condensing system boiler)              |
| (C) DHW (gas condensing combi boiler)        | (F) Heating return                                          |
| Cylinder flow (gas condensing system boiler) | (G) Filling/draining                                        |
| (D) Gas connection                           | (H) Dimension for siting with DHW cylinder below the boiler |

## Specification (cont.)

### Note

This boiler (IP rating: IP X4) is approved for installation in wet rooms inside safety zone 1, to DIN VDE 0100. Exposure to jets of water must be prevented.

For open flue operation, the boiler may only be operated with a splash cover.

Observe the requirements of DIN VDE 0100.

### Variable speed heating circuit pump

The integral circulation pump is a highly efficient pump with substantially lower power consumption than conventional pumps.

The pump speed and consequently the pump rate are controlled subject to the outside temperature and the switching times for heating mode or reduced mode. The control unit transmits the currently specified speeds to the circulation pump via a PWM signal.

The min. and max. speeds and the speed for reduced mode can be matched to the existing heating system via parameters at the control unit.

Setting (%) in group heating circuit 1:

- Min. speed: Parameter 1102.0
- Max. speed: Parameter 1102.1

- In the delivered condition, the minimum pump rate and the maximum pump rate are set to the following values:

| Rated heating output in kW | Speed settings in the delivered condition in % |                |
|----------------------------|------------------------------------------------|----------------|
|                            | Min. pump rate                                 | Max. pump rate |
| 19                         | 40                                             | 100            |
| 25                         | 40                                             | 100            |

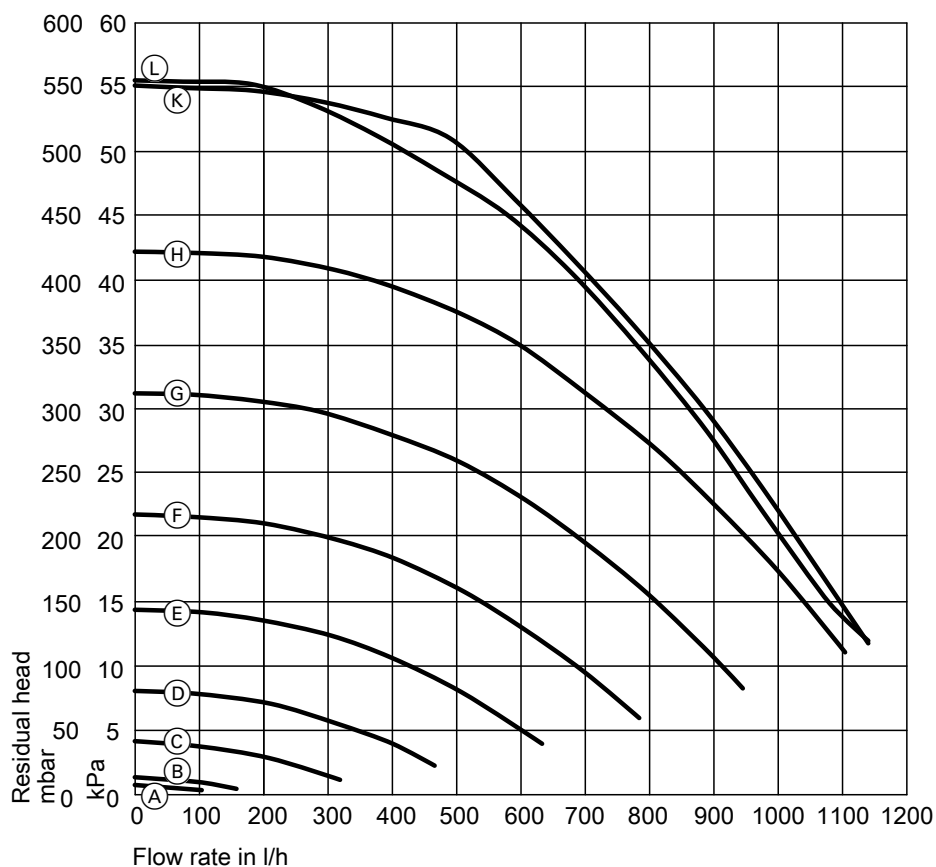
- In conjunction with a low loss header, heating water buffer cylinder and heating circuits with mixer, the internal circulation pump runs at a constant speed.

### Specification – circulation pump

| Rated heating output          |      | 19                   | 25                   |
|-------------------------------|------|----------------------|----------------------|
| Type                          |      | B0KA<br>BPKA<br>B0HA | B0KA<br>BPKA<br>B0HA |
| Circulation pump              | Type | UPM3 15-60           | UPM3 15-60           |
| Rated voltage                 | V~   | 230                  | 230                  |
| Power consumption             |      |                      |                      |
| – max.                        | W    | 60                   | 60                   |
| – min.                        | W    | 2                    | 2                    |
| – Delivered condition         | W    | 21.9                 | 34.3                 |
| Energy efficiency class       |      | A                    | A                    |
| Energy efficiency index (EEI) |      | ≤ 0.20               | ≤ 0.20               |

## Specification (cont.)

### Residual head of integral circulation pump



(M) Upper operational limit (integral bypass opens)

| Curve | Pump rate of circulation pump |
|-------|-------------------------------|
| (A)   | 10 %                          |
| (B)   | 20 %                          |
| (C)   | 30 %                          |
| (D)   | 40 %                          |
| (E)   | 50 %                          |
| (F)   | 60 %                          |
| (G)   | 70 %                          |
| (H)   | 80 %                          |
| (K)   | 90 %                          |
| (L)   | 100 %                         |

### Standby instantaneous water heater (gas condensing combi boiler)

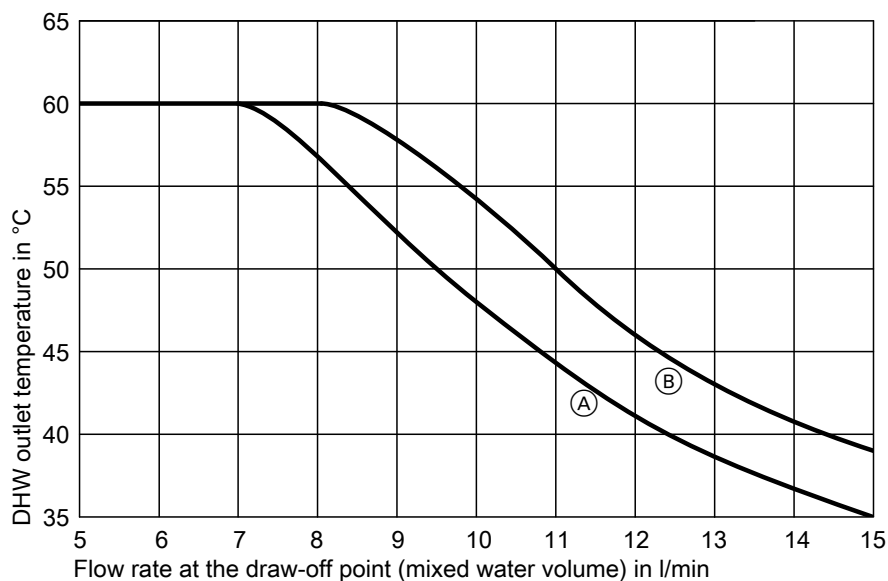
A standby instantaneous water heater is integrated into the Vitodens 050-W, type B0KA BPKA.

#### Output levels

|                                                   |       |          |          |
|---------------------------------------------------|-------|----------|----------|
| Rated heating output, gas condensing combi boiler | kW    | 19.0     | 25.0     |
| Continuous DHW output                             | kW    | 25.4     | 30.0     |
| for DHW heating from 10 to 45 °C                  | l/h   | 666      | 764      |
| Draw-off rate                                     | l/min | 3 to 12  | 3 to 14  |
| Outlet temperature, adjustable                    | °C    | 10 to 60 | 10 to 60 |

## Specification (cont.)

### DHW temperature subject to flow rate



- (A) 19 kW
- (B) 25 kW

The graph illustrates the changes in the outlet temperature, subject to the flow rate at the draw-off point.

If a greater volume of water is required, cold water needs to be admixed, which reduces the outlet temperature.

The illustrated outlet temperature characteristics are based on a cold water inlet temperature of 10 °C.

### Minimum clearances

Maintain a clearance of 700 mm in front of the Vitodens for maintenance purposes.

**No** maintenance clearances are required to the left or right of the Vitodens.

Subject to technical modifications.

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)

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