



GAS CONDENSING TECHNOLOGY

Fuel cell heating device
VITOTALOR PT2



VITOTALOR PT2

- Heat and power generation for your home
- 220 litre integrated DHW cylinder
- Energy efficiency class:
A++ Heating
A+ DHW

Fuel cell heating device

Fuel cell heating device with peak load boiler and DHW cylinder

0.75 kW_{el}, 0.9 to 30.8 kW_{th}

Innovative technology for electricity and heat generation



10 Year Warranty

on all stainless steel heat exchangers for gas condensing boilers up to 150 kW

With the expansion of its thermal output up to 30.8 kW, the new generation of the Vitovalor PT2 fuel cell heating device offers greater flexibility and more applications, and with its compact design it requires a floor space of just 0.72 square meters.

The front mounted controls along with pre-installed components for the energy manager complete this unit. The new 7-inch colour touchscreen display considerably simplifies operation. The unit also features an integrated 220 litre stainless steel DHW cylinder.

Ideal for detached and semi-detached homes

Up to a heat demand of 35,000 kWh per year and an annual electricity demand of 6200 kWh, the Vitovalor PT2 offers enough power for detached and semi-detached homes. The 18 kWh maximum electrical energy generated during the course of the day is sufficient to cover a household's basic demand. The Vitovalor PT2 generates electricity for up to 45.5 hours without interruption. Following this, the fuel cell renews itself for 2.5 hours and is then again available for electricity generation.

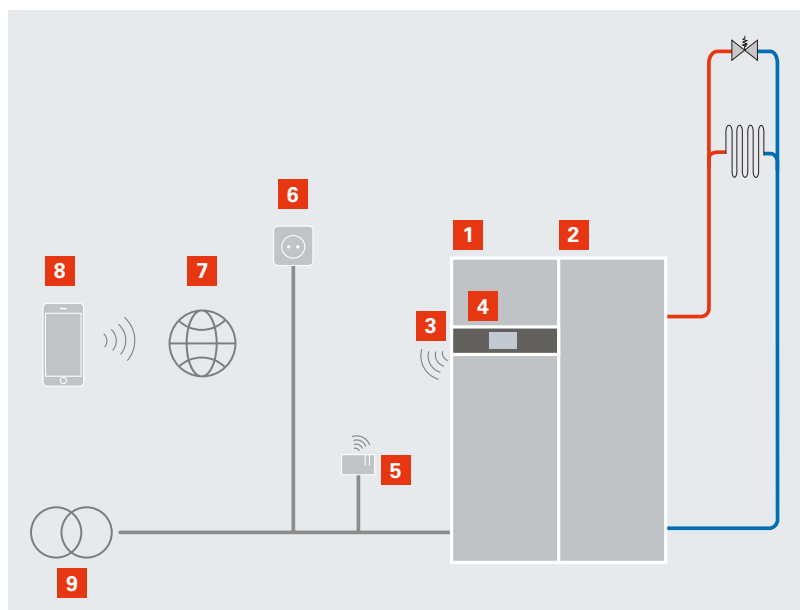
The integrated gas condensing boiler automatically switches on if the heat from the fuel cell module is insufficient, for example during peak times or if there is a high demand for DHW within a short period.

Self-learning energy manager

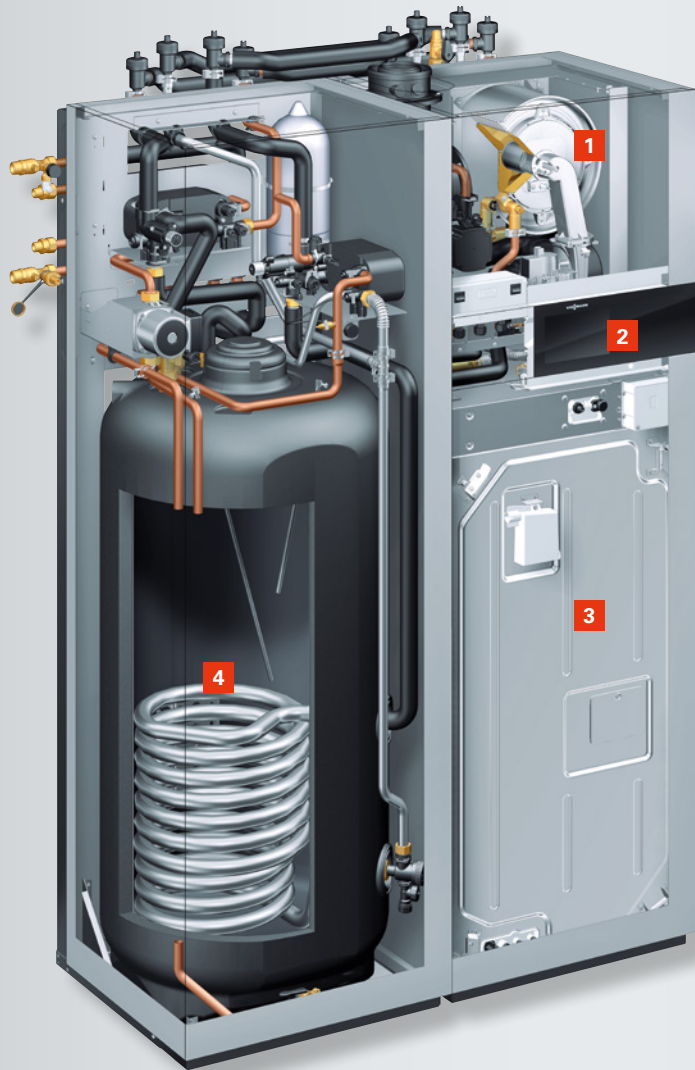
The energy manager can react to your household's personal needs. The fuel cell heater is temperature controlled and optimized for power. This means the fuel cell is only activated when sufficiently long run times are expected, so that electricity generation corresponds to the anticipated use of self generated electricity.

Reliable and durable

As with all innovations from Viessmann, reliability and durability are the highest priority for the new Vitovalor PT2. Maintenance of the fuel cell is only required every five years, whilst the stack is designed for a lifespan of twelve years.



- 1 Base unit with fuel cell module and gas condensing boiler
- 2 Storage tower
- 3 Communications interface
- 4 Integrated net electricity meter
- 5 Router
- 6 Domestic power grid
- 7 Internet
- 8 ViCare app
- 9 Public power grid



Vitovalor PT2

- 1** Gas condensing boiler to cover peak loads
- 2** Energy management control with large colour touchscreen display
- 3** Fuel cell module
- 4** Stainless steel DHW cylinder with 220 litre capacity

Vitovalor PT2 fuel cell heating device



Large colour touchscreen display for a central source of information

Benefit from these advantages

- Fuel cell: 0.75 kW_{el}, 1.1 kW_{th}
- Peak load boiler: 11.4/19.0/24.5/30.8 kW_{th}
- Innovative future-proof technology
- Environmentally friendly – up to 30% CO₂ savings compared to separate electricity and heat generation
- Ideally suited for use in new buildings and existing detached and semi-detached homes
- Parallel generation of electricity and heat to minimize electricity costs
- Simple installation and short assembly times through completely integrated hydraulics (similar to gas condensing boilers), only an exhaust system is required
- Integrated system separation with plate-type heat exchanger and coiled tube ensures safe and robust operation
- Integrated electricity, gas and heat quantity determination (for settling government electricity subsidies and the energy tax refund)



"This project has received funding from the Fuel Cells and Hydrogen 2 Joint Undertaking under grant agreement No 700339. This Joint Undertaking receives support from the European Union's Horizon 2020 research and innovation programme and Hydrogen Europe and N.ERGHY."

Viessmann Limited
 Hortonwood 30, Telford
 Shropshire, TF1 7YP
 Tel: 01952 675000
 Fax: 01952 675040
www.viessmann.co.uk

Specifications Vitovalor PT2



Type		E11T	E19T	E25T	E32T
Rated heat output (60/40 °C)	kW_{th}	0.9 – 11.4	0.9 – 19.0	0.9 – 24.5	0.9 – 30.8
Electrical output of fuel cell	W_{el}^*	750	750	750	750
Thermal output of fuel cell	kW_{th}	1.1	1.1	1.1	1.1
Frequency	Hz				50
Sound emission	dB(A)	48	49	50	51
Electrical degree of efficiency of fuel cell	%				37
Overall efficiency of fuel cell	%				up to 92 (H ₂)
Thermal degree of efficiency of peak load boiler	%				up to 98 (H _s)
Stainless steel DHW cylinder	l				220
Fuel				Natural gas E(H)/LL(L)	
Dimensions					
Length (depth) x width x height					
– Complete unit	mm		595	1200	1800
– Basic device	mm		595	600	1800
– Storage tower	mm		595	600	1800
Minimum room height required (with exhaust system package)					
	mm				1800
Weight					
– Complete unit	kg				326
– Basic device	kg				197
– Storage tower	kg				129
Space required	m ²				0.72
Energy efficiency category					
– Heating					A++
– DHW generation, tap profile XL					A+

* Output information: Rated values according to DIN EN 50465

Your trade partner: