



ZEME/UNDERTHE MARKETS

Advanced inverter technology for high efficiency:  
**"VITOCAL 300-G"**



**Vitocal ground/water  
source heat pumps**

Make the best use of  
renewable energy

Thanks to its advanced inverter technology, the Vitocal 300-G ground/water source heat pump is the most efficient solution for new buildings and the best choice for replacement.



Heat pump "Vitocal 300-G" with hot water tank "Vitocell 100-W"



Advanced inverter technology ensures that in the ground source/water source segment, the new Vitocal heat pump 300-G" is the most efficient solution for new builds and the best choice for replacing older ground/water source heat pumps. The power-controlled cooling circuit adapts the heating capacity of the heat pump to the respective heat demand of the building. This results in fewer start-up/shut-down cycles at half load and higher annual efficiency. "Vitocal 300-G is in two power ranges: with a modulation range 1.7 to 8.6 kW, 2.4 to 11.4 kW and 4.2 to 16.5 kW. It thus covers a wide range of applications for new buildings and existing building stock.

#### **High efficiency - low energy costs**

In addition to power control, the RCD (Refrigerant Cycle Diagnostic System) provides extremely precise and fast control of the refrigerant circuit by adjusting the electronic expansion valve. Energy-saving, high-efficiency pumps for the primary and heating circuits reduce energy consumption and costs.

#### **With a ventilation unit for great home comfort**

The combination of a heat pump with a Vitovent ventilation unit provides special home and control comfort. Both units can be conveniently controlled via the integrated heat pump control unit or the optional remote control. On hot summer days, the heat pump can be used for space cooling. This is provided by the optional "natural cooling" unit.

#### **Easy to install, space-saving and quiet**

The small installation area of less than 0.5 square metres and access to all maintenance-related components from the front save space.

Due to the low operating noise of 41 dB(A) (sound power according to ErP at B0/W55), the heat pump also be installed close to living rooms, e.g. in the utility room.

## "VITOCAL 300-G"

Salt water / farm water: 1,7 lpy 11,4 k

W Water / farm water: 2,3 lpy  
14,5 k W



VIESSMANN  
VISHARE

DIGITAL  
ENERGY  
SOLUTIONS



"Vitocal 300-G is KEYMARK  
certified."

Simple navigation and a clear menu structure  
ensure that the Vitotronic adjustment is easy to  
manage.

### Online management via the ViCare app

Through the optional web interface "Vitoconnect", the  
heat pump can be controlled online from anywhere in  
the world using the free "ViCare" app for the most  
common mobile devices. The Vitotronic 200 control unit  
itself, equipped with a simple text and graphic display,  
provides intuitive control via a set of menus.

## "VITOCAL300-G" PREVENTION

- + Very low running costs thanks to a power-controlled  
cooling circuit with innovative inverter technology  
for the highest SCOP (seasonal coefficient of  
performance) efficiency; SCOP value according to  
EN 14825: up to 5.3 in average climatic conditions  
and low temperature operation (W35)
- + The new soundproofing concept ensures that it is  
barely audible, even when installed close to living  
rooms
- + Compact dimensions and small footprint leave more  
space in the building
- + Very easy control of heating, cooling, hot water and  
ventilation via the integrated Vitotronic control unit  
with simple text and graphic display
- + High modulation of the heat pump power ensures  
increased use of the electricity generated by the farm's  
own photovoltaic installations
- + "Vitoconnect (optional) provides internet  
connectivity for management and  
maintenance the free "ViCare" app



## "VITOCAL 300-G"

- 1 Control unit "Vitotronic 200" (type WO1C)
- 2 Hydraulic plug connectors
- 3 Capacitor
- 4 Primary and secondary pump (high recirculation pumps)
- 5 Variable speed scroll-type compressor
- 6 Electrical components

## Ground source/water source heat pumps "VITOCAL 300-G"

| "Vitocal 300-G salt/water"   | Type  | BWC 301.C06     | BWC 301.C12 |
|--|-------|-----------------|-------------|
| <b>Operational data</b><br>(according to EN 14511, B0/W35, temperature difference 5 K) |       |                 |             |
| Rated thermal input  | kW    | 4               | 5,3         |
| Power range min./max.  | kW    | 1,7 - 8,6       | 2,4 - 11,4  |
| Coefficient of performance $\epsilon$ (COP) in heating mode                            |       | 4,7             | 4,8         |
| Maximum flow temperature   | °C    | 65              | 65          |
| Seasonal coefficient of performance (SCOP) <sup>1)</sup>                               |       | 5,3             | 5,3         |
| <b>Cooling circuit</b>   |       |                 |             |
| Refrigerant  |       | R410A           | R410A       |
| – Filling volume   | kg    | 1,40            | 1,95        |
| – Global warming potential (GWP) <sup>2)</sup>   |       | 1924            | 1924        |
| – CO <sub>2</sub> -equivalent  | t     | 2,7             | 3,8         |
| <b>Dimensions</b>  |       |                 |             |
| Length (depth) x width x height  | mm    | 680 x 600 x 975 |             |
| Weight   | kg    | 149             | 154         |
| Acoustic noise emissions according to ErP (B0/W55)                                     | dB(A) | 40              | 41          |
| Energy efficiency class <sup>3)</sup>  | III   | A+++ / A A++    | +++ / A+++  |
| <b>Vitocal 300-G</b>   |       |                 |             |
| <b>With water/water conversion kit</b>   |       |                 |             |
| <b>Operational data</b><br>(according to EN 14511, B0/W35, temperature difference 5 K) |       |                 |             |
| Rated thermal input  | kW    | 11,1            | 14,5        |
| Coefficient of performance $\epsilon$ (COP) in heating mode                            |       | 5,4             | 5,0         |
| Maximum flow temperature   | °C    | 65              | 65          |

1) Seasonal coefficient of performance (SCOP) under average climatic conditions, low temperature operation (W35) according to EN 14825

2) With reference to the IPCC AR5

3) Energy efficiency class according to EU Regulation No 813/2013 "Heating, average climate - low temperature operation (W35) / medium temperature operation (W55)"

### PRODUCTION

- + Ground source/water source heat pumps installed on the floor, cooling circuit with modulating heating capacity: 1.7 to 16.5 kW (at B0/W35)
- + Heating power in water/water configuration: 2.3 to 20.1 kW (at W10/ W35)
- + Monovalent operation for space heating and hot water
- + Flow temperature: up to 65 °C for excellent hot water comfort
- + Easy relocation by quick removal of the compressor module via plug-in connections
- + Integrated electrical component
- + Viessmann ventilation can be adjusted.
- + Small and light modules for easy handling

Your trading partner

