Gebwell GEMINI Inverter heat pump – smart and evolving inverter heat pump for large properties

With two compressors, the Gemini Inverter represents the most advanced heat pump technology. The Gemini Inverter is a highefficiency heating solution for apartment buildings, warehouses and industrial buildings.

The Gebwell Gemini Inverter heat pump consumes less energy on start-up than on/off heat pumps, and the power output is automatically adapted to the building's heating demand.

The Gemini Inverter combines an inverter-controlled compressor and an on/off compressor, which makes it possible to provide both heating and hot water simultaneously.

Gemini Inverter heat pumps are linked to the manufacturer's cloud service, which means that they can be monitored and controlled remotely via the browser-based Gebwell Smart hub. The cloud service also makes it possible to update the software on the heat pumps remotely. The data stored in the cloud service helps the manufacturer to constantly improve the technology. A number of new features that will increase the user-friendliness of the Gemini Inverter and help to cut costs are in the pipeline at the moment. The Gemini Inverter has a built-in port for a cooling module, and it can therefore also be used for environmentally friendly and cost-effective ground source cooling. Gebwell Gemini Inverter heat pumps are designed to be used in combination with custombuilt Gebwell G-Energy water tanks.

The Gebwell Gemini Inverter can be connected to the property's monitoring system using an optional Modbus RTU card. Compared to a mechanical valve, an electronic expansion valve adapts better to inverter-control, optimising the efficiency of the heat pump.

- Manufactured in Finland
- Fully adjustable heating output
- · Electronic expansion valve
- Controller with IoT features
- · Learning and evolving system
- Monitoring and control also remotely from Gebwell Smart hub

		Gemini Inverter
GTIN		6415853626446
Power values (according to EN 14511)		
Heating output	kW	9.5 - 57.1 and 9.1-52.1
Cooling output (0°/35° and 0°/55°)	kW	7.6 - 45.0 and 6.3 - 34.6
Electrical power (0°/35° 0°/55°)	kW	2.1 - 12.9 and 3.0 - 18.2
Rated heating output (0°/35° 0°/55°)	kW	47.2 and 41.9
Rated electrical power (0°/35° and 0°/55°)	kW	9.7 and 14.3
COP (0°/35° and 0°/55°)		4.5 and 2.9
SCOP (0°/35° and 0°/55°. according to EN14825)		5.1 and 4.2
The system's energy efficiency class. intermediate climate. underfloor heating		A+++
Heating circuit rated flow	l/s	1.6
Brine		Denaturated ethanol 25-30 p-%
Brine flow	l/s	0.45 - 2.7
Maximum allowed external pressure loss at the brine rated flow	kPa	120 (2.2 l/s)
Heating system / brine circuit maximum operating pressure (consider network pressure)	bar	6 / 6
Heating water maximum output and return temperature	°C	58-65 / 51-56
Operational temperature. collector	°C	-5 +20
Compressor		Scroll and Twin rotary (frequency controlled)
Number of compressors		2 (1 Scroll. 1 Twin rotary)
Soft starter		yes (Scroll). inverter (Twin rotary)
Frequency converter		yes
Built-in heating pump		yes (frequency controlled)
Built-in source pump		no (Scroll). yes (Twin rotary)
Electrical connection		400 VAC. 50 Hz. 3-phase
Contains fluorinated greenhouse gases		yes
Hermetically sealed		yes
Refrigerant		R410A
GWP (Global Warming Potential)		2088
Refrigerant amount	kg	2.1 ja 3.4
CO ₂ equivalence - tonnes CO ₂ e	ton CO ₂ e	4.385 ja 7.099
Recommended fuse size	A	3 x 63
Sound power level (L _{WA})	dB	37-56
Dimensions		
External dimensions (dept x width x height)	mm	790 x 640 x 1840
Weight	kg	402.5