

Gebwell G-Eco® Core heat pump

- inverter heat pump with a natural refrigerant

Gebwell G-Eco Core is a powerful IoT inverter heat pump that uses the eco-friendly R290 refrigerant. R290 has a minimal impact on global warming compared to traditional hydrofluorocarbon (HFC) refrigerants. R290 refrigerant has a GWP of only 0.02 and an ODP of 0.

Gebwell G-Eco Core is capable of adjusting to the building's energy needs year round thanks to its inverter-controlled compressor. Continuously variable inverter control ensures that the heat output matches the network's requirements exactly without over or underheating, minimising your heating bills.

G-Eco Core is connected to the manufacturer's Gebwell Smart cloud service, allowing the heat pump to be controlled remotely through the browser-based Hub. Your maintenance company can view the status of the heating system and adjust heating settings remotely without having to send an engineer on site, saving time and money.

The remote connection also makes updating the heat pump's controller easy. Data stored in the

cloud service helps the manufacturer implement continuous improvements.

Compared to a mechanical valve, an electronic expansion valve is better suited to inverter control, allowing the heat pump to operate at optimal efficiency.

G-Eco Core's compressor unit is completely isolated and produces minimal running noise. The G-Eco Core heat pump is designed specifically for R290 refrigerant.

- Manufactured in Finland
- Continuously adjustable heating output
- Electronic expansion valve
- Controller with IoT features
- Learning and evolving system
- Monitoring and control also possible remotely through the Gebwell Smart Hub



G-Eco Core 40		
GTIN		6430079400762
Power values (EN 14511)*		
Heating output (0°/35° and 0°/55°)	kW	9.6 – 39.0 and 9.3 – 36.1
Cooling output (0°/35° and 0°/55°)	kW	7.5 – 29.7 and 6.0 – 23.2
Electrical power (0°/35° and 0°/55°)	kW	3 – 10.9 and 4.2 – 14.9
Maximum input power	kW	20
Maximum operating current	A	37
COP (0°/35° and 0°/55°, 50 Hz, EN 14511)		4.6 and 3.1
SCOP (0°/35° and 0°/55°, EN 14825)		5.1 and 4.1
The system's energy efficiency class, intermediate climate, underfloor heating		A+++
Charge circuit flow (0/35, 30–110 Hz, delta T 5, water)	l/s	0.5 – 1.9
Collector flow (0/35, 30–110 Hz, delta T 3, ethanol-water 28%)	l/s	0.7 – 2.4
Brine		Denatured ethanol 25–30 wt-%
Maximum allowed external pressure loss, with brine rated flow	kPa	100 (2.5 l/s)
Heating system / brine circuit maximum operating pressure (consider network pressure)	bar	10/10
Heating water maximum output temperature	°C	+75
Operational temperature, collector	°C	-10... +20 (+30)**
Compressor		Scroll (frequency controlled)
Frequency converter, regulation value	Hz	30–110
Built-in heating pump		yes (frequency converter)
Built-in source pump		yes (frequency converter)
Electrical connection		400 VAC, 3L+N+PE, 50 Hz
Hermetically sealed		yes
Refrigerant		R290
GWP (global warming potential)		0.02
Refrigerant charge	kg	1.8
CO2 equivalence - tonnes CO2e	ton CO2e	0.000036
Operating current of the protective device	A	3 x 40
Sound level (measured according to EN 12102 and EN 3741, 0/35, 1800–6600 rpm)	dB(A)	45 – 54
Connections		
Heating network		G1 1/2" it
Collector		G1 1/2" it
Ventilation	mm	80
External dimensions (depth x width x height)	mm	850 x 690 x 1850
Weight	kg	380

* Measured ΔT 2 in the brine circuit. ** temporary exceedance allowed