

GROUND SOURCE HEAT PUMP · INVERTER

Gapsal IKS Inverter 40

High-capacity inverter ground source heat pump for apartment buildings, industrial and public buildings, as a single unit or in cascade.

Built to last for decades, giving owners reliability and low running costs.



12–40 kW
Heating capacity

4.85
SCOP, seasonal efficiency

A+++
Energy class at 35 and 55 °C[1]

[1] Regulation (EU) 811/2013

Cascade
Up to 10 units, 400 kW in total

Circulation pumps
Brine and heating side, built in

Cooling
Passive and active, optional

Remote control
From a computer or smartphone

Spot price tracking
Can be connected

Developed and made in Estonia
Built to last in Nordic conditions

Over 20 years of development and manufacturing
We know our products down to the last detail because we designed them ourselves.

5-year warranty
Peace of mind and long-term support

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Ground source heat pump · R454C

Gapsal IKS Inverter 40

DEALER

Applications

For large houses, apartment and terraced buildings, and industrial and public buildings. Also suited to systems with ventilation heat recovery, waste heat recovery and cooling, and works together with other heat sources.

Cascade

Up to 10 units start one after another at 30 % capacity, beginning with the module that has the fewest operating hours. As heat demand rises, the load of all units is increased together in 5–10 % steps.

Inverter compressor

The scroll compressor adjusts the heating output smoothly to demand. Peak efficiency is reached at part load, where the unit runs for most of the year. An electronic expansion valve keeps the evaporator superheat correct, and starting currents are low.

Hot water

The unit has no built-in tank. A separate hot water tank can be connected; its heating coil capacity must match the heat pump output.

GENERAL		
Capacity range	kW	**12–40**
Max heating capacity	kW	**40**
Max flow temperature	°C	**75**
Cascade connection		**up to 10 units**
Total cascade capacity	kW	**up to 400**
Circulation pumps		**brine and heating side**
Domestic hot water		**separate hot water tank**
Passive and active cooling		**optional**

ENERGY EFFICIENCY	
SCOP	**4.85**
Energy class, 35 / 55 °C[1]	**A+++ / A+++**

HEATING CAPACITY / POWER INPUT, B0/W35[2]		
Compressor load 30 %	kW	**12.8 / 2.6**
Compressor load 50 %	kW	**18.5 / 3.9**
Compressor load 90 %	kW	**39 / 9.1**

ELECTRICAL		
Power supply		**3×400 V, 50 Hz**
Circuit breaker	A	**3×32**
Max power input[3]	kW	**15**

REFRIGERANT CIRCUIT		
Refrigerant		**R454C (A2L)**
GWP		**145.5**
Refrigerant charge	kg	**4.0**
CO_2 equivalent	t	**0.58**
Compressor		**Scroll, inverter**
Oil		**POE**
Expansion valve		**electronic**
Low / high pressure limit	MPa	**0.15 / 3.5**

GROUND LOOP		
Brine		**Ethanol 33 %**
Brine flow rate[4]	m³/h	**9.4**

DIMENSIONS AND WEIGHT		
Dimensions H × W × D	mm	**1350 × 800 × 680**
Weight	kg	**280**

CONTROL AND WARRANTY	
Remote control	**computer or smartphone**
Spot price tracking	**connectable**
Protection	**phase failure, phase shift, over- and undervoltage**
Warranty	**5 years**

1 Regulation (EU) 811/2013.
2 EN 14511, heating capacity / power input including circulation pumps.
3 At high flow temperature.
4 At maximum heating capacity, ΔT 3 K, ethanol 33 %.

We reserve the right to make changes without prior notice.