

Karnot Energy Solutions Inc



iHEAT COMMERCIAL HEAT PUMPS

HEATING

COOLING

HOT WATER



RoHS



iHEAT Series

Commercial Heat Pumps



HOTELS

RESORTS

LARGE BUILDINGS

Factories

FEATURES OF COMMERCIAL MONOBLOCK HEAT PUMP



Heating + Cooling
Hot Water



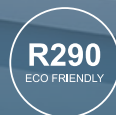
Heat Capacity
50kW/100kW



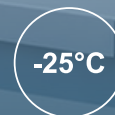
High Energy
Efficiency



Full DC Inverter
Technology



ECO R290
Refrigerant



Stable Running
Ambient



Intelligent
Defrosting



5-inch Color
Touchscreen



IoT Cloud
Platform

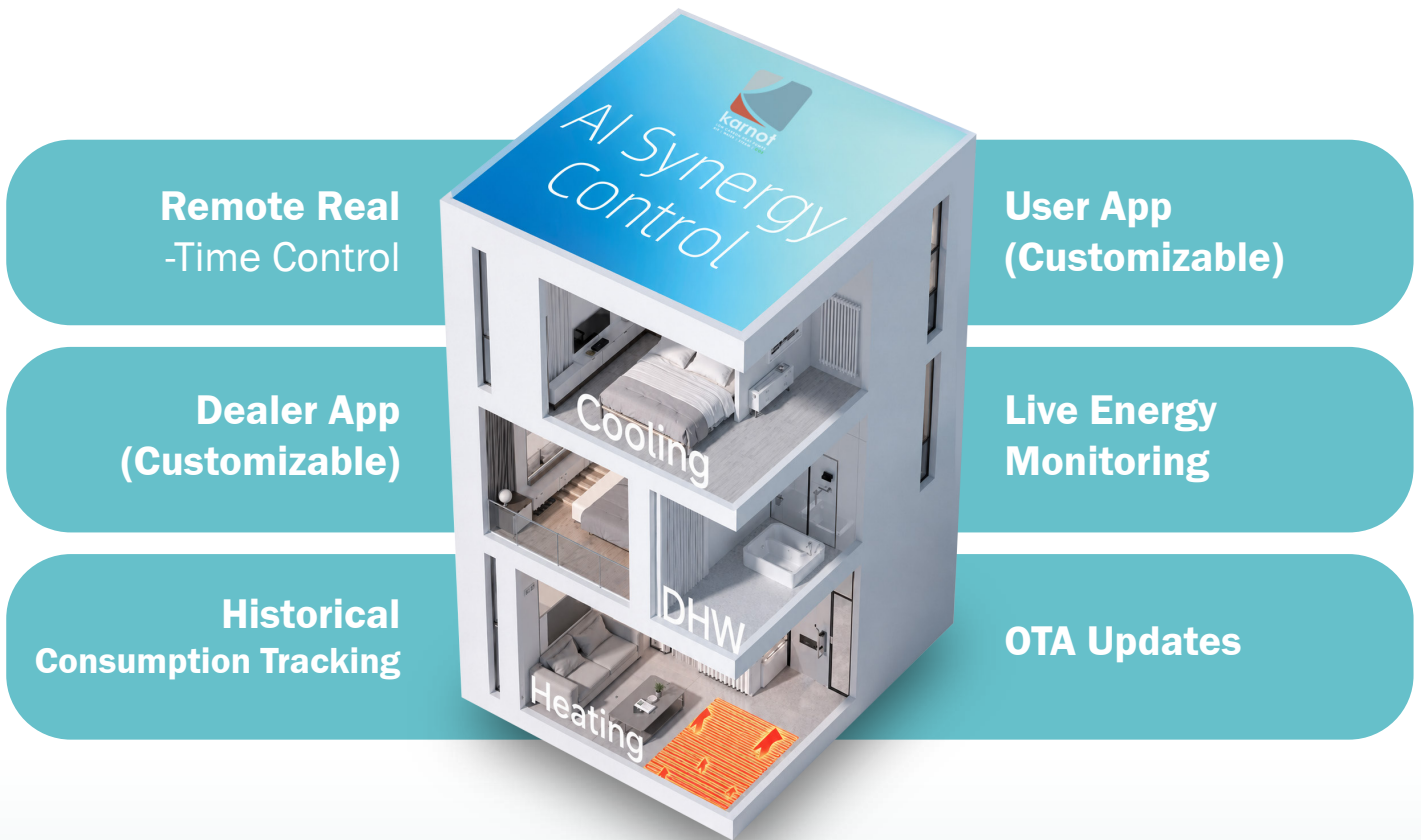


Quiet
Operation



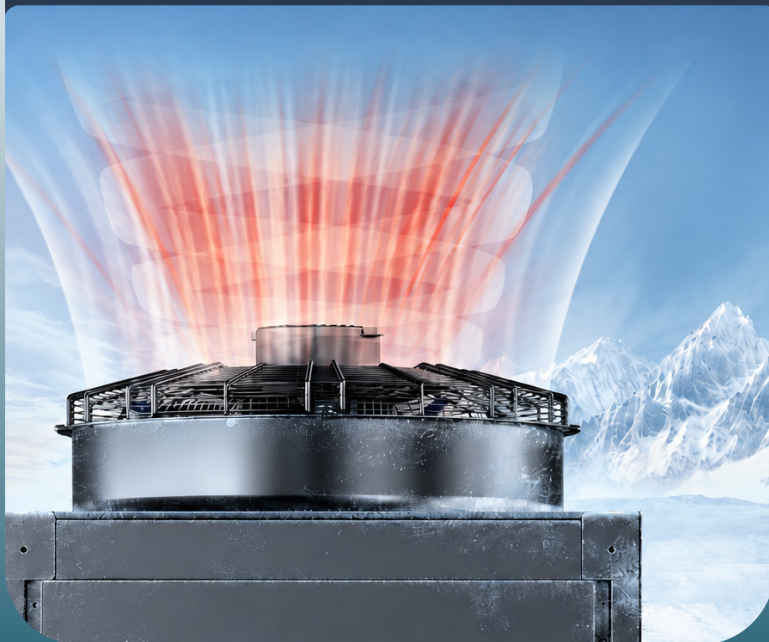
Built In
Wifi Module

ONE SYSTEM FOR LARGE BUILDINGS



ULTRA-LOW TEMPERATURE UNINTERRUPTED OPERATION

- Wide Operating Range: -25 °C to 45 °C
- Intelligent Defrost

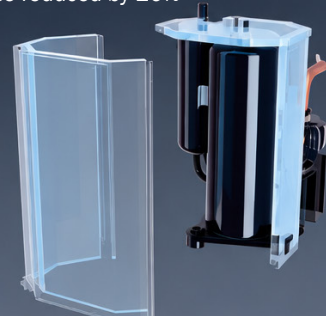


75 °C MAX OUTLET WATER TEMP.



SILENT CABIN TECH

Noise reduced by 20%



CERTIFIED RELIABLE R290 SYSTEM

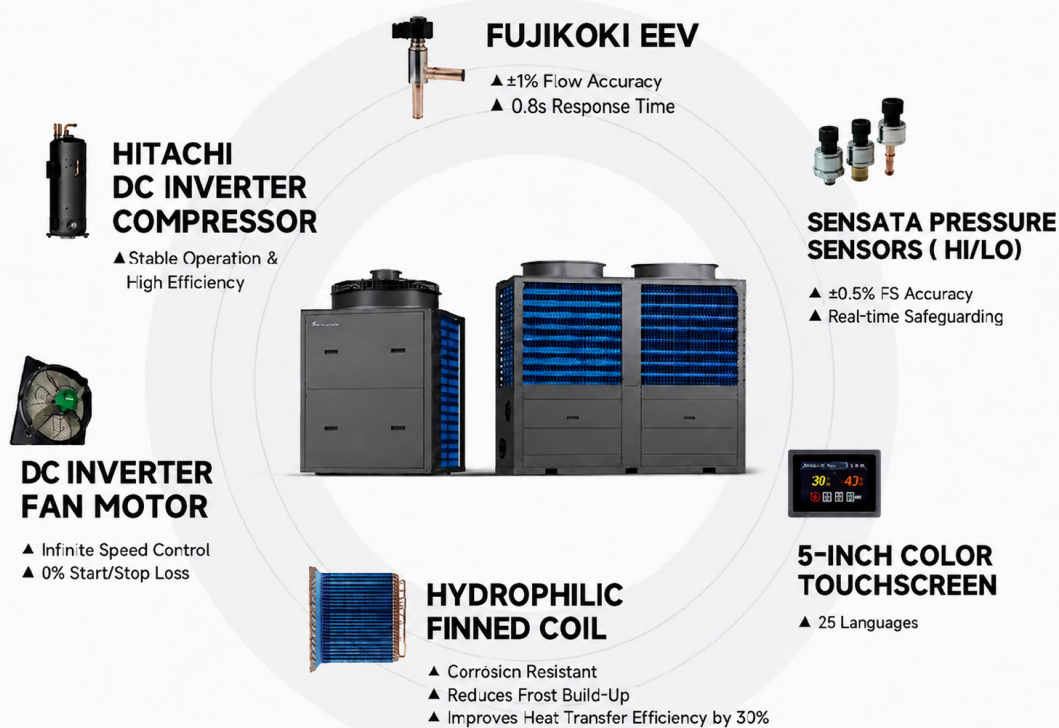


- **Safety Structure:**
Built-in Air Relief Valve,
Pressure Relief Valve
- **Anti-Explosion Parts**
- **Real-Time Leak
Detection (Optional)**

RoHS



HIGH-END COMPONENTS: ASSURED RELIABILITY



5 STRICT QC CONTROL:

Design | Incoming | Production | Tube Joints | Assembly | Final (Full-Process Refrigerant Leak Checks)





50kW

CGK-151V4-B

8-Unit Cascade (400kW Total)

Centralized Control System

Intelligent Defrost

(Zero Energy Waste)



100kW

CGK-300V4-B

16-Unit Cascade (1600kW Total)

Dual Redundant Control

Zero Downtime Defrost

(Dedicated Air Duct Design)

SPECIFICATION

Model		iHEAT 25 kW CGK-080V4-B	iHEAT 30 kW CGK-100V4-B	iHEAT 50 kW CGK-151V4-B	iHEAT 100 kW CGK-300V4-B
Power supply / refrigerant	V/Hz/Ph	380-420 V / 50-60 Hz / 3 Ph · R290			
Max. heating capacity (A7°C/W35°C)	kW	25	30	50	100
COP (A7°C/W35°C)	W/W	3.95	3.85	3.80	3.71
Max. heating capacity (A7°C/W45°C)	kW	24.11	28.05	47.24	92.00
COP (A7°C/W45°C)	W/W	3.42	3.36	3.35	3.15
Max. cooling capacity (A35°C/W18°C)	kW	20.10	23.90	38.50	79.30
EER (A35°C/W18°C)	W/W	3.23	3.28	3.26	3.42
Max. cooling capacity (A35°C/W7°C)	kW	17.00	19.20	31.40	65.00
EER (A35°C/W7°C)	W/W	2.56	2.64	2.64	2.85
Max. outlet water temperature	°C	75			
Max. power input	kW	11.00	13.50	20.50	41.00
Max. current	A	16.70	20.50	31.40	62.80
Fuse / circuit breaker	A	25	32	40	80
Wire diameter	mm ²	6.0	6.0	10.0	16.0
Water flow — min / rated / max	L/s	0.75 / 1.19 / 1.99	0.90 / 1.43 / 2.39	1.49 / 2.39 / 3.98	2.99 / 4.78 / 7.96
Piping connection	inch	G1.2"	G1.2"	G1.5"	G2.5"
Sound power level	dB(A)	63	64	68	78
Compressor / fans	—	DC inverter · 2 fans	DC inverter · 2 fans	DC inverter · 1 fan	DC inverter · 2 fans
Dimensions (L×D×H)	mm	1249×509×1558	1249×509×1558	1187×1087×1680	2200×1100×1966
Net weight	kg	220	231	375	665
Cascade capability	—	Up to 8 units (400 kW) · 16 units (1,600 kW) with centralised control			
Energy class (EU 811/2013)	—	A+++			

iHEAT Series

For Light Commercial Heating Cooling & Hot Water



Multiple Modes for
Comfortable Use



ERP A+++
Performance



-25°C
to 45°C
Stable Running
Ambient



5-inch Color
Touchscreen



Reduced
Noise



Wifi
Control



KEYMARK



SG
Ready

**COP
UP TO 5.0**

**KARNOT AI
SYNERGY CONTROL**

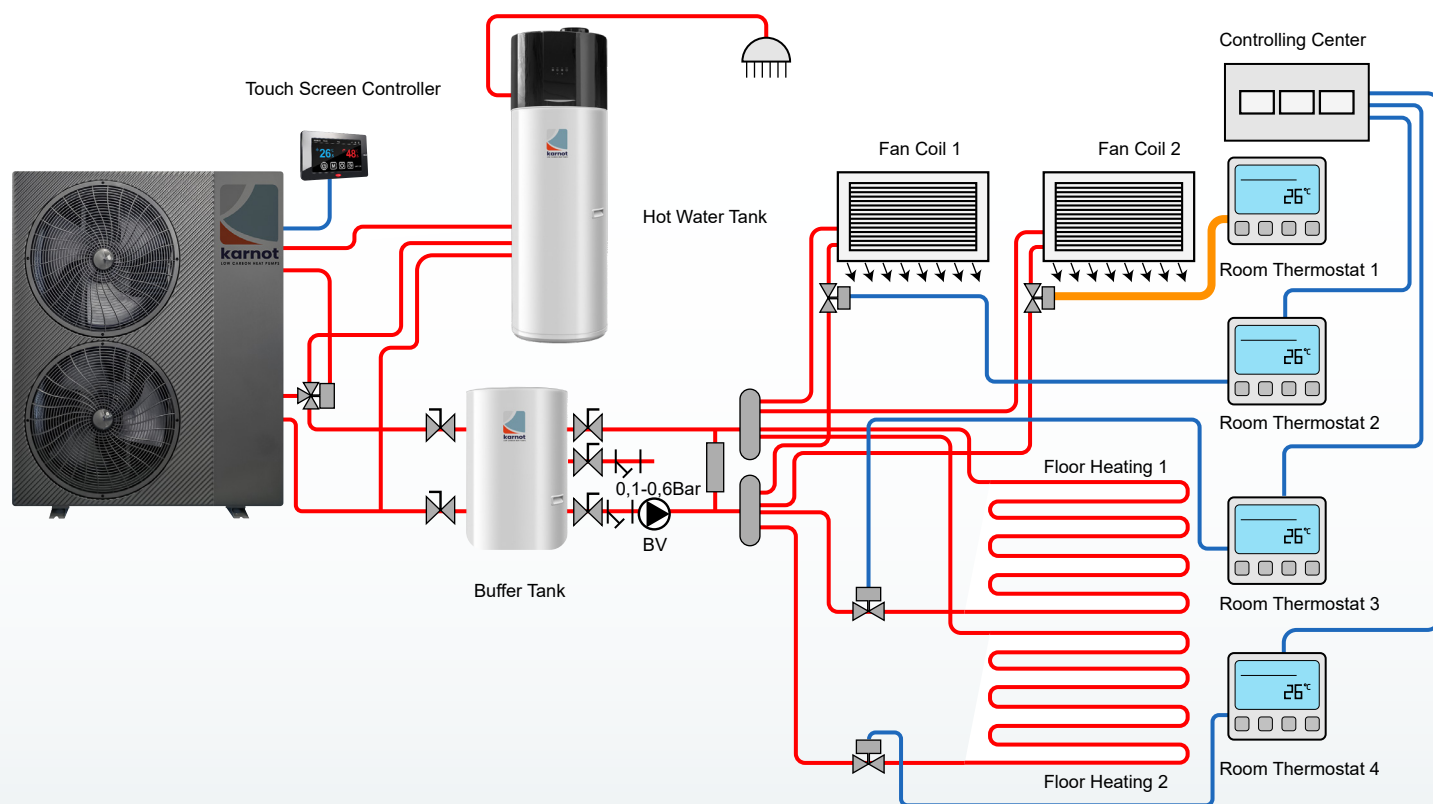


SMART DC INVERTER TECH.

Quick start-up and Less energy consumption



INSTALLATION DIAGRAM





karnot

LOW CARBON HEAT PUMPS
AIR | WATER | STEAM | CO₂

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RoHS



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