



Hiseer DC Inverter Geothermal Heat Pump

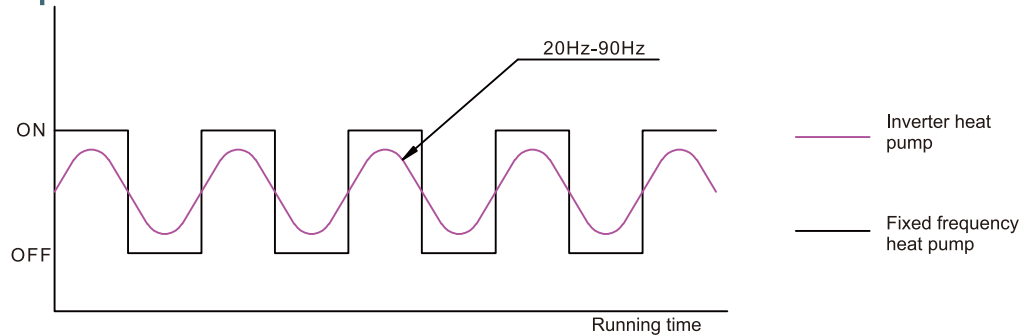
High efficiency
More comfortable
Energy saving
Environment friendly



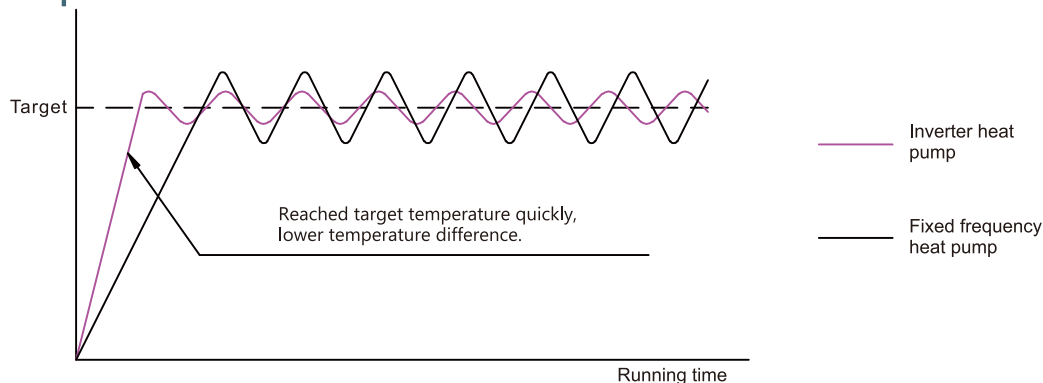
Hiseer DC inverter heat pump offers a wide heat output . It could adjust heat output automatically according to your house heating requirement . In winter , the inverter compressor will runs on high speed to provide more heating when ambient temperature is very low ; If your house need less heating , it will drop running frequency down to 20Hz in which condition the heat pump will consume less electric power .

Heat pump is not just a heating system for new buildings , it can also be integrated into existing buildings that already have heating systems easily . Irrespective of whether you have a gas , oil boiler or solar panels , the heat pump switches on the 2nd heat generator according to demand for keeping lowest heating costs.

Compressor Control



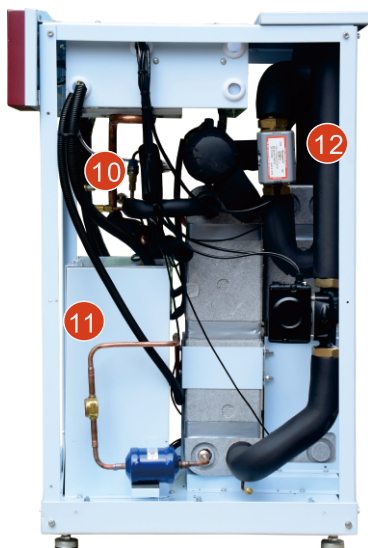
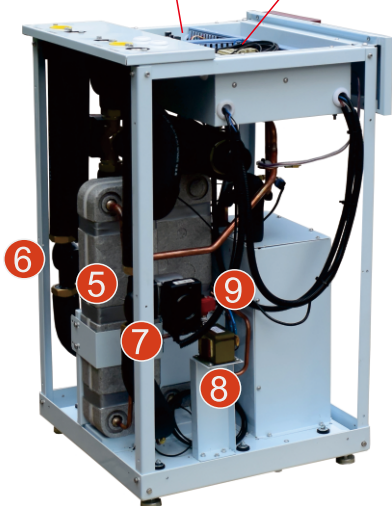
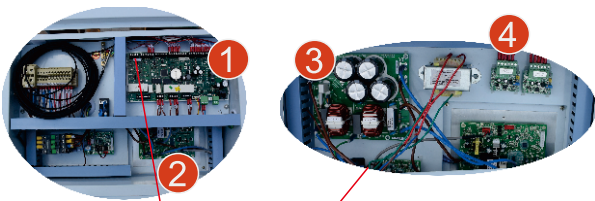
Temperature Control



Hiseer DC Inverter Heat Pump Advantages:

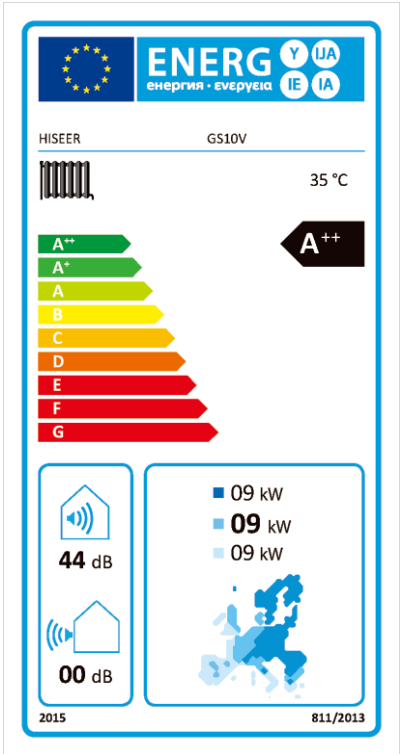
1. Save more than 30% energy than fixed frequency heat pump
2. Soft start to protect your electric network
3. Smooth temperature varies curve
4. Wide heating/cooling output range
5. Can be used in combination with heat generators such as gas ,oil or solar that existing in buildings
6. Easy Controller Operation.
7. Weather compensation function: heating / cooling curve
8. Heating, cooling and domestic hot water
9. SG Ready.
10. Flow feedback Grundfos circulation pump ,saving water flow switch.

Main Components



- 1 Carel Controller CPPB006DM0
- 2 Sanhua Inverter
- 3 Sanhua EMC Filter Board
- 4 Circulation Pump Flow Feedback Board (indoor / outdoor side)
- 5 GEA / SWEP Plate Heat Exchanger (indoor / outdoor side)
- 6 Grundfos Circulation Pump (indoor side)
- 7 Grundfos Circulation Pump (outdoor side)
- 8 Sanhua Harmonic Filter
- 9 Carel Electronic Expansion Valve
- 10 Sanhua High/Low Pressure Transducer
- 11 Mitsubishi Twin Rotary Compressor
- 12 Honeywell Three Way Valve

Energy Labels



Product Fiche

Type	Inverter Geothermal Heat Pump	
Model		GS 10 V
Temperature application		35 °C
Seasonal space heating energy efficiency class, average climate		A ⁺⁺
Rated heat output , average climate	[KW]	9
Seasonal space heating energy efficiency η_h , average climate		157%
Annual energy consumption , average climate*	[KWh]	4427
Sound power level LWA, indoors	[dB(A)]	44
SCOP, average climate		4.13
Refrigerant type		R410A
Global Warming Potential (GWP)		2088
Heating Capacity at standard rating conditions**	[KW]	8.11
Power input at standard rating conditions**	[KW]	2.05
Dimension (H X W X D)	[mm]	1040 X 600 X 640
Weight	[kg]	134
Power source		230V/1ph/50Hz

* The annual energy consumption kWh per year, based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.

** The standard rating conditions: brine inlet temp. 0 °C, heating flow temp. 35 °C, compressor speed 70Hz.

Technical Data



A++

Heat pump			GS10V		
Dimensions,weights,connection dimensions					
Dimensions		HxWxD	1040x600x640		
Weight		kg	134		
Refrigerant		Type	R410A		
Filling weight		kg	1.5		
Permissible operating pressure		Mpa	3.8		
Pipe connector-hot side		Inch	G1 ¹ / ₄ "		
Pipe connector-cold side		Inch	G1 ¹ / ₄ "		
Evaporator		Type	Brazed plate heat exchanger		
Condenser		Type	Brazed plate heat exchanger		
Compressor			Mitsubishi Electric twin rotary		
Nominal running current at B0/W35		A	7.9		
Performance Heat pump					
Heating performance			Min.	Nominal	Max.
Heat output	at B0/W35	kW	3.15	8.11	10.24
Power consumption		kW	0.74	2.05	2.80
Performance factor			4.24	3.96	3.65
Indoor side volume flow		m3/h	0.56	1.36	1.74
Indoor side pressure drop		kpa	3	18	21
Outdoor side volume flow		m3/h	0.92	1.81	1.91
Outdoor side pressure drop		kpa	7	22.0	27.0
Heat output	at W10/W35	kW	4.09	10.98	14.16
Power consumption		kW	0.68	1.92	2.75
Performance factor			5.99	5.71	5.15
Indoor side volume flow		m3/h	0.69	1.87	2.47
Outdoor side volume flow		m3/h	0.89	2.59	3.07
Power		Type	230V/50Hz		
Sound power level		dB(A)	44		

The above data is tested by EN14511 EN14825

B0/W35 means heating source brine inlet temp. 0°C, heating flow temp. 35°C

W10/W35 means heating source water inlet temp. 10°C, heating flow temp. 35°C

■ Rated Speed Performance Curve

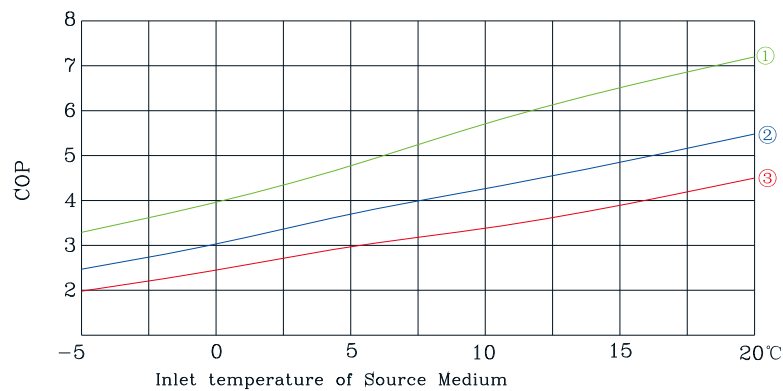
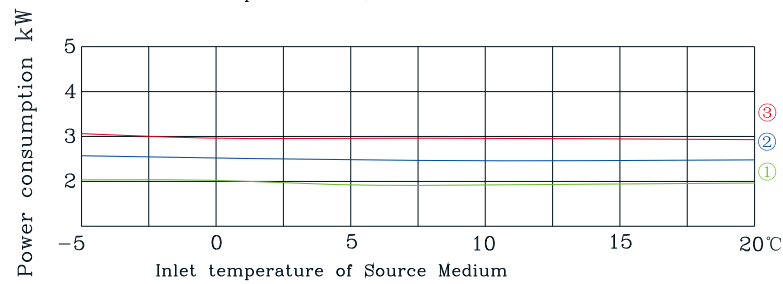
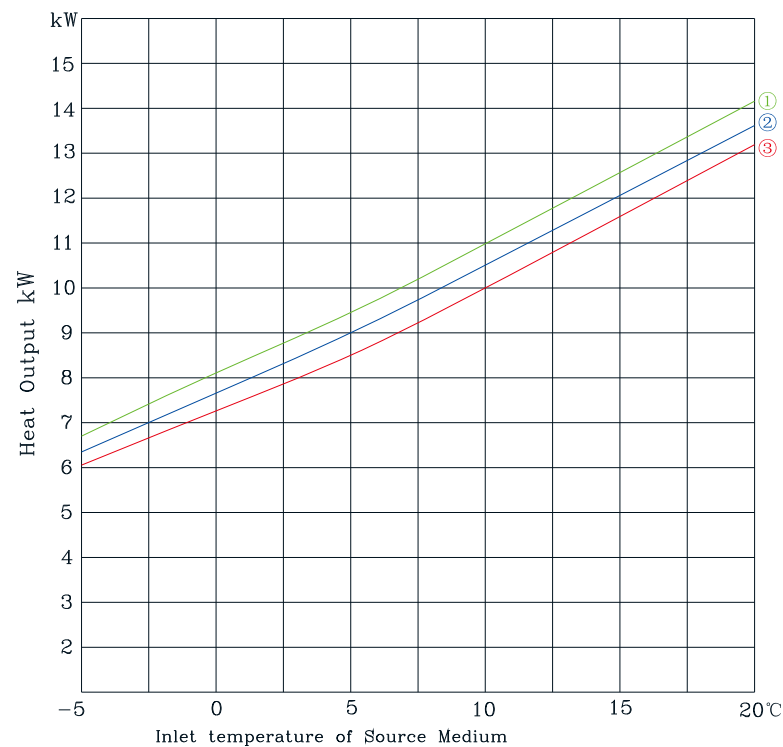
Model:GS10V

Heating performance curve

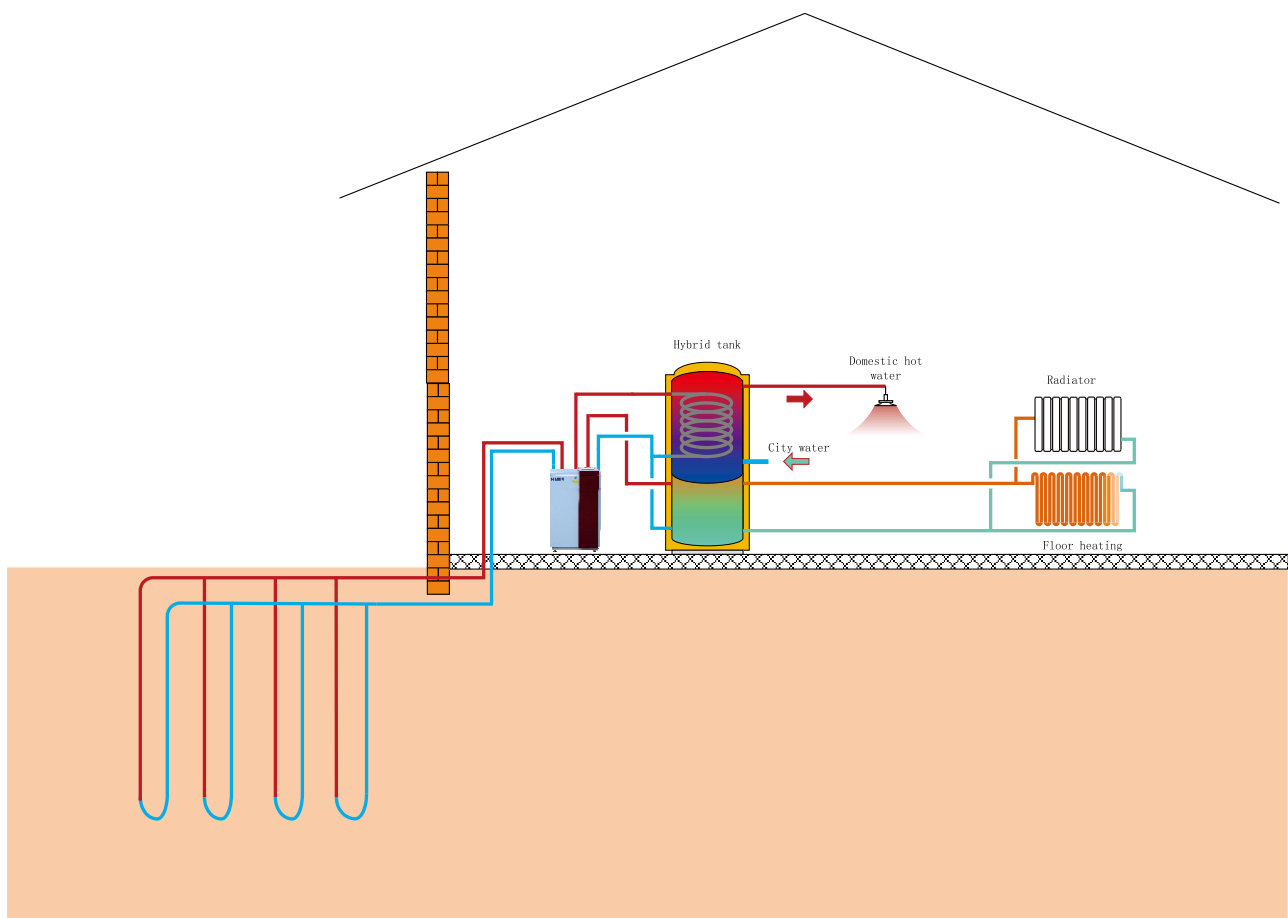
1=Flow temperature 35℃ Full load

2=Flow temperature 45℃ Full load

3=Flow temperature 55℃ Full load

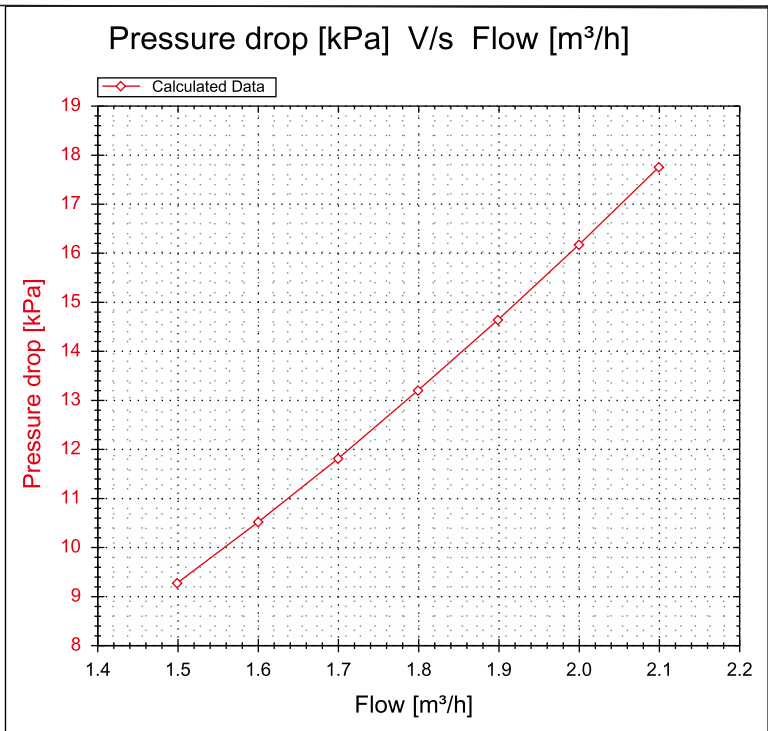


■ Typical application

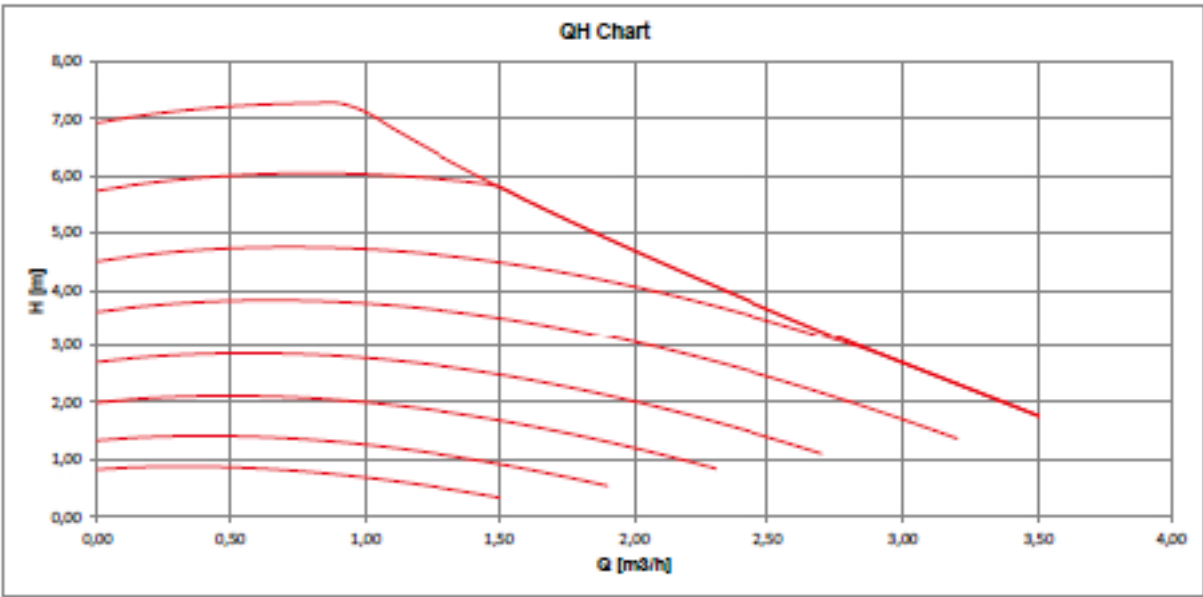


■ Plate Exchanger Pressure Drop Curve

GS10V



■ Internal Pump Grundfos UPM₃K 25-75 Curve



■ Hiseer DC Inverter Ground Source Heat Pump Dimension :

GS10V

