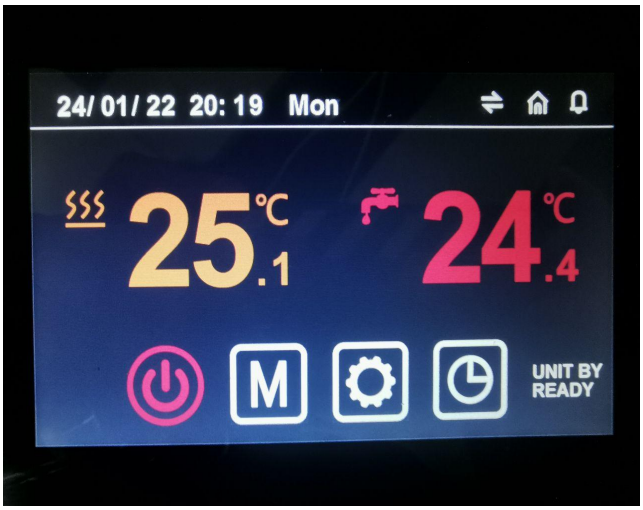
# DC Inverter Air Source Heat Pumps (Monoblock Type)

1. Working source temperature range: -25℃ to 45℃
2. Control Object: water tank temperature
(Setting range: Heating: 30℃～55℃; Cooling: 32℃～12℃)
3. Control Way: wire controller
4. Water Pump: start/stop according to water tank temp
5. Working Modes: hot water/heating/cooling/hot water+cooling/hot water+heating




**CGK015V3L-B**

**CGK025V3L-B，CGK-025V3L-B**
**CGK030V3L-B，CGK-030V3L-B**

**CGK040V3L-B，CGK-040V3L-B**

**CGK050V3L-B，CGK-050V3L-B**
**CGK060V3L-B，CGK-060V3L-B**

**CGK-080V3L-B**

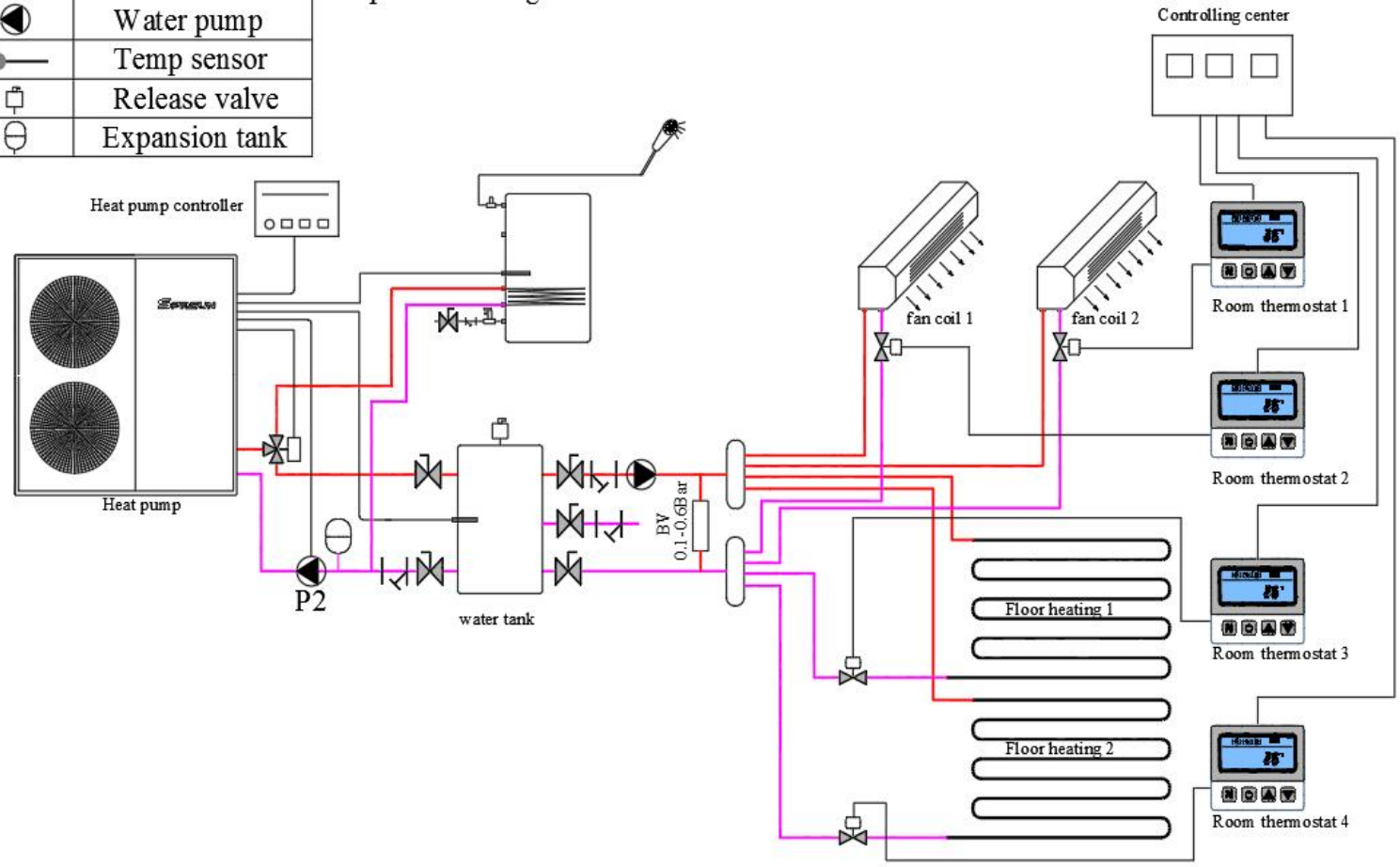
**Guangzhou Sprsun New Energy Technology Development Co., Ltd.**

# Installation Diagram

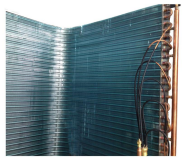
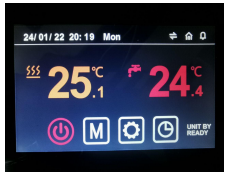
| Symbol | Name |
|---|---|
| | 3-way valve |
| | 2-way valve |
| | Ball valve |
| | Non-return valve |
| | Filter |
| | Water pump |
| | Temp sensor |
| | Release valve |
| | Expansion tank |

Notice:

1. Pls select the right modes according to your demand then install it according to the installation diagram. If only hot water function required, pls select heating+hot water mode , and then put the hot water sensor into the hot water tank.
2. Two-way valve and BV valve are optional for installation. Only If you need to control the temperature by different zone, then pls install both.
3. Fan coil can be controlled by linkage with the secondary circulation pump . Meanwhile, a passive linkage thermostat shall be installed.




SPRSUN DC inverter air source heat pump

| Standard Materials | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Name** | **Description** | **Picture** | **Name** | **Description** | **Picture** | **Name** | **Description** | **Picture** |
| Condenser | Plate Heat Exchanger |  | Evaporator | Hydropilic Aluminium foil and internal thread copper pipe heat exchanger |  | High Pressure Sensor | Manqiwei 0-4.5MPa |  |
| Compressor | Panasonic Rotary Compressor |  | Expansion Valve | Danfoss Electronic expansion valve |  | Low Pressure Sensor | Manqiwei 0-3.45MPa |  |
| 4-way valve | SANHUA |  | DC Fan | NIDEC DC Fan |  | Package | corrugated board case / plywood case |  |
| Controller | Touch screen Controller |  | | | | | | |

# Functions

**1. Defrost operation**

**Heating or hot water into the defrosting conditions:**

When heating or hot water, the cumulative running time of the compressor is ≥45MIN (parameter P10), and the continuous running time of the compressor is ≥5min;
Outer coil temperature <-3°C (parameter P11);
① (ambient temperature - outer coil temperature) ≥ 5°C (parameter P14), and -7°C ≤ ambient temperature ≤ parameter P16 for 30 seconds;
②(ambient temperature - outer coil temperature) ≥ 5°C (parameter P15), and the ambient temperature <-7°C for 30 seconds;
When the above conditions are met at the same time, it will enter defrosting; (Note: ① and ② only need to meet any one of the conditions)
When the temperature of the outer coil fails, if the ambient temperature is ≤20°C, the defrosting will be changed to timing defrosting, and the defrosting time is 10MIN;
λEnter defrosting conditions when starting:
When the shutdown/standby/compressor power-off time is ≥30min;
-7°C ≤ ambient temperature ≤ 3°C, and coil temperature < -3°C (parameter P11);
When the start-up condition of the compressor is met (the water temperature is lower than the hysteresis/the machine is turned on, but it is not started), when the above conditions are met, enter
Defrost is running.

**Exit defrosting conditions:**

After 2 minutes of defrosting, when the temperature of the outer coil is ≥ 20°C (parameter P13) or the defrosting time reaches 10 MIN (parameter P12), the system will exit defrosting;

**Defrosting action:** (The compressor is not turned off during defrosting, but the frequency is reduced to the lowest 30Hz)
When the defrosting conditions are met, the following actions will be taken:
1) The compressor drops to 30HZ, and the fan turns off after 15 seconds;
2) At 55S, the four-way valve is powered on;
3) At 60S, the compressor rises to a defrosting frequency of 60Hz (parameter P09);
4) The water pump keeps running;
When exiting defrosting conditions are met, the following actions will be taken:
1) Press down to 30HZ;
2) The four-way valve is de-energized at 55S;
3) The fan is turned on at 60 seconds, and after 5 seconds, the compressor returns to the normal control frequency and resumes normal operation;

**Abnormal end of defrosting:**

1) When a failsafe shutdown occurs during defrosting, the system immediately exits defrosting and stops running;
2) Low pressure protection is not detected during defrosting;
Forced defrosting: When the temperature of the outer coil is lower than the exiting defrosting temperature, long press the "Function" + "-" button for 3 seconds to enter the forced defrosting

**2. Heating electric heating**

The control logic is as follows:

**Start conditions:**

1) In heating mode;
2) Ambient temperature < 10°C (F59) or ambient temperature sensor failure
3) There is a demand for heating, that is, when the inlet water temperature ≤ the heating set temperature - the return temperature of the air conditioner (parameter P01);
4) The water pump is running
5) 5 minutes after the press starts (F57);
When the above conditions are met at the same time, the electric auxiliary heating will be turned on.

**Close condition:**

1) Cooling mode, hot water mode;
2) When there is no demand for heating or constant temperature control;
3) Inlet water temperature sensor failure alarm;
4) Ambient temperature > 10°C (F59)
5) Water flow failure
6) Water pump off
When any of the above conditions are met, the electric auxiliary heating stops

When the electric auxiliary heating is turned on, the water pump is turned on 30s in advance; when the auxiliary electric heating is turned off, the water pump is turned off after a delay of 30s.
During defrosting, forced defrosting, and secondary antifreeze, the electric heating is forced to be turned on;
When high pressure fault, low pressure fault, exhaust temperature sense fault, exhaust high protection shut down, if the compressor is locked and cannot be started, after 5 minutes, the electric heating will be started instead of the compressor.

**3. Hot water electric heating**

The control logic is as follows:

**Start conditions:**

1) In hot water mode;
2) Ambient temperature < 10°C (F58) or ambient temperature sensor failure
3) There is demand for hot water, that is, when the temperature of the water tank ≤ the set temperature of hot water - the differential temperature of hot water (parameter P02);
4) 5 minutes after the press starts (F56);
When the above conditions are met at the same time, the electric auxiliary heating will be turned on.

**Close condition:**

1) Cooling mode, heating mode;
2) When there is no demand for hot water or constant temperature control;
3) The temperature sensor of the water tank has a failure alarm;
4) Ambient temperature > 10°C (F58)
When any of the above conditions are met, the electric auxiliary heating stops

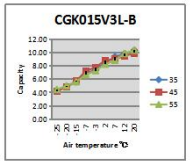
During defrosting, forced defrosting, and secondary antifreeze, the electric heating is forced to be turned on;
High pressure failure, low pressure failure, exhaust temperature failure, exhaust overheating protection shutdown, if the compressor is locked and cannot be started, after 5 minutes, the electric heating will be started instead of the compressor.

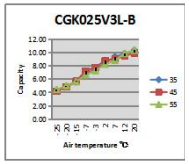
| Unit Name | | DC Inverter Air Source Heat Pumps (Monoblock Type) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model | | CGK015V3L-B | CGK025V3L-B | CGK030V3L-B | CGK040V3L-B | CGK050V3L-B | CGK060V3L-B | CGK-025V3L-B | CGK-030V3L-B | CGK-040V3L-B | CGK-050V3L-B | CGK-060V3L-B | CGK-080V3L-B |
| Power Supply / Refrigerant | V/Hz/P | 220-240/50/1 - R32 | 220-240/50/1 - R32 | 220-240/50/1 - R32 | 220-240/50/1 - R32 | 220-240/50/1 - R32 | 220-240/50/1 - R32 | 380-420/50/3 - R32 | 380-420/50/3 - R32 | 380-420/50/3 - R32 | 380-420/50/3 - R32 | 380-420/50/3 - R32 | 380-420/50/3 - R32 |
| Max. Heating Capacity (A7℃/W35℃) | kW | 6 | 9.4 | 11.6 | 15.8 | 19.8 | 21.8 | 9.4 | 11.6 | 15.8 | 19.8 | 21.8 | 28 |
| C.O.P (A7℃/W35℃) | W/W | 4.45 | 4.56 | 4.41 | 4.61 | 4.71 | 4.61 | 4.56 | 4.42 | 4.62 | 4.72 | 4.62 | 4.62 |
| Heating Capacity Min./Max.(A7℃/W35℃) | kW | 2.76 / 6 | 4.32 / 9.40 | 5.34 / 11.60 | 7.27 / 15.80 | 9.11 / 19.80 | 10.03 / 21.80 | 4.32 / 9.40 | 5.34 / 11.60 | 7.27 / 15.80 | 9.11 / 19.80 | 10.03 / 21.80 | 12.88 / 28.00 |
| Heating Power Input Min./Max.(A7℃/W35℃) | W | 564 / 1348 | 759 / 2061 | 968 / 2630 | 1261 / 3427 | 1547 / 4204 | 1740 / 4729 | 759 / 2061 | 966 / 2624 | 1259 / 3420 | 1544 / 4195 | 1736 / 4719 | 2230 / 6061 |
| C.O.P Min./Max.(A7℃/W35℃) | W/W | 4.45 / 4.90 | 4.56 / 5.70 | 4.41 / 5.51 | 4.61 / 5.76 | 4.71 / 5.89 | 4.61 / 5.76 | 4.56 / 5.70 | 4.42 / 5.53 | 4.62 / 5.78 | 4.72 / 5.90 | 4.62 / 5.78 | 4.62 / 5.78 |
| Max. Heating Capacity(A7℃/W45℃) | kW | 5.8 | 9.0 | 11.1 | 15.2 | 19.0 | 20.9 | 9.0 | 11.1 | 15.2 | 19.0 | 20.9 | 26.9 |
| C.O.P (A7℃/W45℃) | W/W | 3.56 | 3.65 | 3.53 | 3.69 | 3.77 | 3.69 | 3.65 | 3.54 | 3.70 | 3.78 | 3.70 | 3.70 |
| Heating Capacity Min./Max.(A7℃/W45℃) | kW | 2.65 / 5.76 | 4.15 / 9.02 | 5.12 / 11.14 | 6.98 / 15.17 | 8.74 / 19.01 | 9.63 / 20.93 | 4.15 / 9.02 | 5.12 / 11.14 | 6.98 / 15.17 | 8.74 / 19.01 | 9.63 / 20.93 | 12.36 / 26.88 |
| Heating power input Min./Max.(A7℃/W45℃) | W | 677 / 1618 | 958 / 2474 | 1223 / 3156 | 1593 / 4113 | 1954 / 5045 | 2198 / 5675 | 958 / 2474 | 1220 / 3149 | 1590 / 4104 | 1950 / 5034 | 2193 / 5662 | 2817 / 7273 |
| C.O.P Min./Max.(A7℃/W45℃) | W/W | 3.56 / 3.92 | 3.65 / 4.33 | 3.53 / 4.19 | 3.69 / 4.38 | 3.77 / 4.47 | 3.69 / 4.38 | 3.65 / 4.33 | 3.54 / 4.20 | 3.70 / 4.39 | 3.78 / 4.48 | 3.70 / 4.39 | 3.70 / 4.39 |
| Max. Cooling Capacity(A35℃/W18℃) | kW | 5.5 | 8.6 | 10.6 | 14.4 | 18.1 | 19.9 | 8.6 | 10.6 | 14.4 | 18.1 | 19.9 | 25.5 |
| E.E.R (A35℃/W18℃) | W/W | 3.45 | 3.54 | 3.42 | 3.58 | 3.65 | 3.58 | 3.54 | 3.43 | 3.59 | 3.66 | 3.59 | 3.59 |
| Cooling Capacity Min./Max.(A35℃/W18℃) | kW | 2.52 / 5.47 | 3.94 / 8.57 | 4.87 / 10.58 | 6.63 / 14.41 | 8.31 / 18.06 | 9.15 / 19.88 | 3.94 / 8.57 | 4.87 / 10.58 | 6.63 / 14.41 | 8.31 / 18.06 | 9.15 / 19.88 | 11.75 / 25.54 |
| Cooling Power Input Min./Max.(A35℃/W18℃) | W | 656 / 1852 | 929 / 2423 | 1185 / 3091 | 1544 / 4028 | 1894 / 4941 | 2131 / 5558 | 929 / 2423 | 1183 / 3084 | 1541 / 4019 | 1890 / 4930 | 2126 / 5546 | 2731 / 7123 |
| E.E.R Min./Max.(A35℃/W18℃) | W/W | 2.95 / 3.84 | 3.54 / 4.25 | 3.42 / 4.11 | 3.58 / 4.29 | 3.65 / 4.39 | 3.58 / 4.29 | 3.54 / 4.25 | 3.43 / 4.12 | 3.59 / 4.30 | 3.66 / 4.39 | 3.59 / 4.30 | 3.59 / 4.30 |
| Max. Cooling Capacity(A35℃/W7℃) | kW | 4.3 | 6.0 | 7.5 | 10.2 | 12.7 | 14.0 | 6.0 | 7.5 | 10.2 | 12.7 | 14.0 | 18.0 |
| E.E.R(A35℃/W7℃) | W/W | 2.59 | 2.48 | 2.40 | 2.50 | 2.56 | 2.50 | 2.48 | 2.40 | 2.51 | 2.56 | 2.51 | 2.51 |
| Cooling Capacity Min./Max.(A35℃/W7℃) | kW | 1.99 / 4.32 | 2.78 / 6.05 | 3.43 / 7.46 | 4.67 / 10.16 | 5.86 / 12.74 | 6.45 / 14.02 | 2.78 / 6.05 | 3.43 / 7.46 | 4.67 / 10.16 | 5.86 / 12.74 | 6.45 / 14.02 | 8.28 / 18.01 |
| Cooling Power Input Min./Max.(A35℃/W7℃) | W | 575 / 1720 | 744 / 2441 | 950 / 3115 | 1238 / 4058 | 1518 / 4978 | 1708 / 5599 | 744 / 2441 | 948 / 3108 | 1235 / 4049 | 1515 / 4967 | 1704 / 5587 | 2189 / 7176 |
| E.E.R Min./Max.(A35℃/W7℃) | W/W | 2.51 / 3.45 | 2.48 / 3.74 | 2.40 / 3.61 | 2.50 / 3.78 | 2.56 / 3.86 | 2.50 / 3.78 | 2.48 / 3.74 | 2.40 / 3.62 | 2.51 / 3.79 | 2.56 / 3.87 | 2.51 / 3.79 | 2.51 / 3.79 |
| Max Power Input | kW | 2.02 | 3.09 | 3.95 | 5.14 | 6.31 | 7.09 | 3.09 | 3.94 | 5.13 | 6.29 | 7.08 | 9.09 |
| Max Current | A | 9.68 | 14.79 | 18.88 | 24.60 | 30.17 | 33.94 | 6.53 | 8.31 | 10.83 | 13.28 | 14.94 | 19.18 |
| Wire diameter | mm² | 2.5 | 4.0 | 4.0 | 6.0 | 6.0 | 6.0 | 2.5 | 2.5 | 2.5 | 4.0 | 4.0 | 4.0 |
| Fuse or circuitbreakerer | A | 13A | 20A | 25A | 32A | 40A | 40A | 13A | 13A | 16A | 20A | 20A | 25A |
| Compressor | Type - Quantity/System | Twin Rotary - 1 | Twin Rotary - 1 | Twin Rotary - 1 | Twin Rotary - 1 | Twin Rotary - 1 | Twin Rotary - 1 | Twin Rotary - 1 | Twin Rotary - 1 | Twin Rotary - 1 | Twin Rotary - 1 | Twin Rotary - 1 | Twin Rotary - 1 |
| Fan | Quantity | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 |
| | Airflow m3/h | 1500 | 2500 | 3000 | 3500 | 5000 | 5500 | 2500 | 3000 | 3500 | 5000 | 5500 | 7500 |
| | Rated power W | 30 | 80 | 100 | 120 | 200 | 210 | 80 | 100 | 120 | 200 | 210 | 250 |
| Water Side Heat Exchanger | Type | Plate Heat Exchanger | Plate Heat Exchanger | Plate Heat Exchanger | Plate Heat Exchanger | Plate Heat Exchanger | Plate Heat Exchanger | Plate Heat Exchanger | Plate Heat Exchanger | Plate Heat Exchanger | Plate Heat Exchanger | Plate Heat Exchanger | Plate Heat Exchanger |
| | Water Pressure Drop kPa | 15 | 18 | 20 | 21 | 23 | 25 | 18 | 20 | 21 | 23 | 25 | 25 |
| | Piping Connection Inch | G3/4" | G1" | G1" | G1" | G1" | G1" | G1" | G1" | G1" | G1" | G1" | G1" |
| Allowable Water Flow | Min./Rated./Max. L/S | 0.18 / 0.29 / 0.48 | 0.28 / 0.45 / 0.75 | 0.35 / 0.55 / 0.92 | 0.47 / 0.75 / 1.26 | 0.59 / 0.95 / 1.58 | 0.65 / 1.04 / 1.74 | 0.28 / 0.45 / 0.75 | 0.35 / 0.55 / 0.92 | 0.47 / 0.75 / 1.26 | 0.59 / 0.95 / 1.58 | 0.65 / 1.04 / 1.74 | 0.84 / 1.34 / 2.23 |
| Noise Level | dB(A) | 49 | 56 | 59 | 60 | 61 | 62 | 56 | 59 | 60 | 61 | 62 | 65 |
| Net Dimension(L×D×H) | mm | 990*375*655 | 1110*475*810 | 1110*475*810 | 1110*475*960 | 1110*475*1355 | 1110*475*1355 | 1110*475*810 | 1110*475*810 | 1110*475*960 | 1110*475*1355 | 1110*475*1355 | 1110*475*1455 |
| （Carton)Packing Dimension(L×D×H) | mm | 1100*460*725 | 1165*490*960 | 1165*490*960 | 1165*490*1100 | 1165*490*1520 | 1165*490*1520 | 1165*490*960 | 1165*490*960 | 1165*490*1100 | 1165*490*1520 | 1165*490*1520 | 1165*490*1590 |
| (Plywood case)Packing Dimension(L×D×H) | mm | 1070*405*800 | 1200*540*970 | 1200*540*970 | 1200*540*1120 | 1200*540*1510 | 1200*540*1510 | 1200*540*970 | 1220*540*970 | 1200*540*1120 | 1200*540*1510 | 1200*540*1510 | 1200*540*1610 |
| Net Weight | kg | 59 | 78 | 88 | 105 | 124 | 124 | 78 | 88 | 105 | 124 | 124 | 150 |
| （Carton) Gross Weight | kg | 70 | 101 | 105 | 120 | 150 | 150 | 101 | 105 | 120 | 150 | 150 | 183 |
| (Plywood case)Gross Weight | kg | 80 | 106 | 116 | 126 | 161 | 161 | 106 | 116 | 126 | 161 | 161 | 188 |
| Note: (1) Heating condition: water inlet/outlet temperature: 30℃/35℃, Ambient temperature: DB 7℃/WB 6℃; | | | | | | | | | | | | | |
| (2) Heating condition: water inlet/outlet temperature: 40℃/45℃, Ambient temperature: DB 7℃/WB 6℃; | | | | | | | | | | | | | |
| (3) Cooling condition: water inlet/outlet temperature: 23℃/18℃, Ambient temperature: DB35℃/WB24℃; | | | | | | | | | | | | | |
| (4) Cooling condition: water inlet/outlet temperature: 12℃/7℃, Ambient temperature: DB35℃/WB24℃; | | | | | | | | | | | | | |

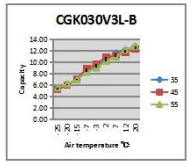
●The information in this document is just for reference. Since the continuous improvement and control in the production process, the information contained in this document may be subject to change. Please refer to the nameplate on the machine for model specifications.

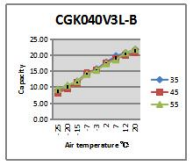
## Heating Capacity at Different Conditions

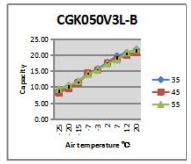
| Model | CGK015V3L-B | | | CGK025V3L-B | | | CGK030V3L-B | | | CGK040V3L-B | | | CGK050V3L-B | | | CGK060V3L-B | | | CGK-025V3L-B | | | CGK-030V3L-B | | | CGK-040V3L-B | | | CGK-050V3L-B | | | CGK-060V3L-B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Air temp ℃ | Heating capacity (KW) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -25 | 2. 71 | 2. 67 | 2. 84 | 4. 25 | 4. 19 | 4. 46 | 5. 25 | 5. 17 | 5. 50 | 7. 15 | 6. 61 | 7. 49 | 8. 96 | 8. 28 | 9. 39 | 9. 86 | 9. 12 | 10. 33 | 4. 25 | 4. 19 | 4. 46 | 5. 25 | 5. 17 | 5. 50 | 7. 15 | 6. 61 | 7. 49 | 8. 96 | 8. 28 | 9. 39 | 9. 86 | 9. 12 | 10. 33 |
| -20 | 3. 12 | 3. 11 | 3. 21 | 4. 89 | 4. 87 | 5. 02 | 6. 03 | 6. 01 | 6. 20 | 8. 22 | 7. 68 | 8. 44 | 10. 30 | 9. 63 | 10. 58 | 11. 34 | 10. 60 | 11. 65 | 4. 89 | 4. 87 | 5. 02 | 6. 03 | 6. 01 | 6. 20 | 8. 22 | 7. 68 | 8. 44 | 10. 30 | 9. 63 | 10. 58 | 11. 34 | 10. 60 | 11. 65 |
| -15 | 3. 59 | 3. 66 | 3. 59 | 5. 62 | 5. 73 | 5. 63 | 6. 93 | 7. 07 | 6. 94 | 9. 44 | 9. 04 | 9. 46 | 11. 84 | 11. 33 | 11. 85 | 13. 03 | 12. 47 | 13. 05 | 5. 62 | 5. 73 | 5. 63 | 6. 93 | 7. 07 | 6. 94 | 9. 44 | 9. 04 | 9. 46 | 11. 84 | 11. 33 | 11. 85 | 13. 03 | 12. 47 | 13. 05 |
| -7 | 4. 37 | 4. 63 | 4. 27 | 6. 85 | 7. 25 | 6. 69 | 8. 46 | 8. 95 | 8. 25 | 11. 52 | 11. 44 | 11. 24 | 14. 43 | 14. 34 | 14. 09 | 15. 89 | 15. 79 | 15. 51 | 6. 85 | 7. 25 | 6. 69 | 8. 46 | 8. 95 | 8. 25 | 11. 52 | 11. 44 | 11. 24 | 14. 43 | 14. 34 | 14. 09 | 15. 89 | 15. 79 | 15. 51 |
| -3 | 4. 76 | 4. 98 | 4. 66 | 7. 46 | 7. 80 | 7. 29 | 9. 21 | 9. 63 | 9. 00 | 12. 54 | 12. 31 | 12. 26 | 15. 72 | 15. 42 | 15. 36 | 17. 30 | 16. 98 | 16. 91 | 7. 46 | 7. 80 | 7. 29 | 9. 21 | 9. 63 | 9. 00 | 12. 54 | 12. 31 | 12. 26 | 15. 72 | 15. 42 | 15. 36 | 17. 30 | 16. 98 | 16. 91 |
| 2 | 5. 40 | 5. 64 | 5. 28 | 8. 46 | 8. 84 | 8. 27 | 10. 44 | 10. 91 | 10. 20 | 14. 22 | 13. 95 | 13. 90 | 17. 82 | 17. 49 | 17. 42 | 19. 62 | 19. 25 | 19. 18 | 8. 46 | 8. 84 | 8. 27 | 10. 44 | 10. 91 | 10. 20 | 14. 22 | 13. 95 | 13. 90 | 17. 82 | 17. 49 | 17. 42 | 19. 62 | 19. 25 | 19. 18 |
| 7 | 6. 00 | 5. 76 | 5. 64 | 9. 40 | 9. 02 | 8. 84 | 11. 60 | 11. 14 | 10. 91 | 15. 80 | 15. 17 | 14. 86 | 19. 80 | 19. 01 | 18. 63 | 21. 80 | 20. 93 | 20. 51 | 9. 40 | 9. 02 | 8. 84 | 11. 60 | 11. 14 | 10. 91 | 15. 80 | 15. 17 | 14. 86 | 19. 80 | 19. 01 | 18. 63 | 21. 80 | 20. 93 | 20. 51 |
| 12 | 6. 30 | 6. 05 | 6. 31 | 9. 87 | 9. 48 | 9. 89 | 12. 18 | 11. 69 | 12. 20 | 16. 59 | 15. 93 | 16. 62 | 20. 79 | 19. 96 | 20. 83 | 22. 89 | 21. 97 | 22. 93 | 9. 87 | 9. 48 | 9. 89 | 12. 18 | 11. 69 | 12. 20 | 16. 59 | 15. 93 | 16. 62 | 20. 79 | 19. 96 | 20. 83 | 22. 89 | 21. 97 | 22. 93 |
| 20 | 6. 62 | 6. 35 | 6. 62 | 10. 36 | 9. 95 | 10. 37 | 12. 79 | 12. 28 | 12. 80 | 17. 42 | 16. 72 | 17. 43 | 21. 83 | 20. 96 | 21. 85 | 24. 03 | 23. 07 | 24. 05 | 10. 36 | 9. 95 | 10. 37 | 12. 79 | 12. 28 | 12. 80 | 17. 42 | 16. 72 | 17. 43 | 21. 83 | 20. 96 | 21. 85 | 24. 03 | 23. 07 | 24. 05 |
| Hot water temp | 30/35 | 40/45 | 50/55 | 30/35 | 40/45 | 50/55 | 30/35 | 40/45 | 50/55 | 30/35 | 40/45 | 50/55 | 30/35 | 40/45 | 50/55 | 30/35 | 40/45 | 50/55 | 30/35 | 40/45 | 50/55 | 30/35 | 40/45 | 50/55 | 30/35 | 40/45 | 50/55 | 30/35 | 40/45 | 50/55 | 30/35 | 40/45 | 50/55 |

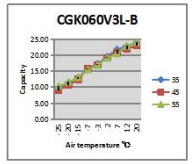


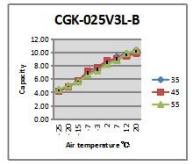


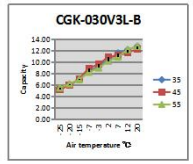


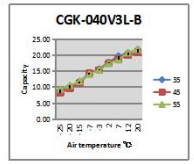


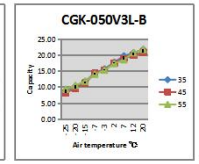


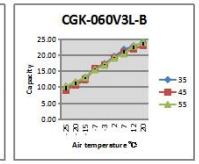




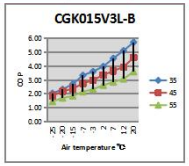


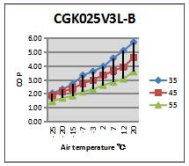


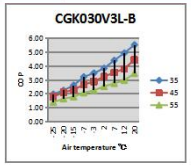


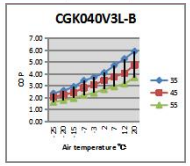


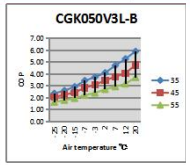

| Model | CGK015V3L-B | | | CGK025V3L-B | | | CGK030V3L-B | | | CGK040V3L-B | | | CGK050V3L-B | | | CGK060V3L-B | | | CGK-025V3L-B | | | CGK-030V3L-B | | | CGK-040V3L-B | | | CGK-050V3L-B | | | CGK-060V3L-B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Air temp ℃ | COP kW/kW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -25 | 1.99 | 1.81 | 1.41 | 2.04 | 1.85 | 1.44 | 1.98 | 1.79 | 1.40 | 2.32 | 2.03 | 1.60 | 2.37 | 2.07 | 1.63 | 2.32 | 2.03 | 1.60 | 2.07 | 1.87 | 1.46 | 1.98 | 1.79 | 1.40 | 2.32 | 2.03 | 1.60 | 2.37 | 2.07 | 1.64 | 2.32 | 2.03 | 1.73 |
| -20 | 2.27 | 2.12 | 1.66 | 2.32 | 2.18 | 1.70 | 2.25 | 2.11 | 1.64 | 2.55 | 2.20 | 1.76 | 2.60 | 2.25 | 1.80 | 2.55 | 2.20 | 1.76 | 2.35 | 2.20 | 1.72 | 2.25 | 2.11 | 1.65 | 2.55 | 2.21 | 1.76 | 2.61 | 2.25 | 1.80 | 2.55 | 2.21 | 1.90 |
| -15 | 2.63 | 2.31 | 1.80 | 2.70 | 2.37 | 1.85 | 2.61 | 2.29 | 1.79 | 2.86 | 2.39 | 1.91 | 2.93 | 2.44 | 1.95 | 2.86 | 2.39 | 1.91 | 2.73 | 2.39 | 1.87 | 2.62 | 2.29 | 1.79 | 2.87 | 2.40 | 1.91 | 2.93 | 2.45 | 1.96 | 2.87 | 2.40 | 2.06 |
| -7 | 3.25 | 2.69 | 2.09 | 3.33 | 2.75 | 2.15 | 3.22 | 2.66 | 2.08 | 3.37 | 2.78 | 2.17 | 3.44 | 2.84 | 2.22 | 3.37 | 2.78 | 2.17 | 3.37 | 2.78 | 2.17 | 3.23 | 2.67 | 2.08 | 3.38 | 2.79 | 2.17 | 3.45 | 2.85 | 2.22 | 3.38 | 2.79 | 2.34 |
| -3 | 3.52 | 2.91 | 2.27 | 3.61 | 2.99 | 2.33 | 3.49 | 2.89 | 2.25 | 3.65 | 3.02 | 2.36 | 3.73 | 3.09 | 2.41 | 3.65 | 3.02 | 2.36 | 3.65 | 3.02 | 2.36 | 3.50 | 2.90 | 2.26 | 3.66 | 3.03 | 2.36 | 3.74 | 3.09 | 2.41 | 3.66 | 3.03 | 2.54 |
| 2 | 3.87 | 3.28 | 2.55 | 3.97 | 3.36 | 2.62 | 3.84 | 3.25 | 2.53 | 4.01 | 3.39 | 2.65 | 4.10 | 3.47 | 2.70 | 4.01 | 3.39 | 2.65 | 4.01 | 3.39 | 2.65 | 3.85 | 3.25 | 2.54 | 4.02 | 3.40 | 2.65 | 4.11 | 3.47 | 2.71 | 4.02 | 3.40 | 2.86 |
| 7 | 4.45 | 3.56 | 2.78 | 4.56 | 3.65 | 2.85 | 4.41 | 3.53 | 2.75 | 4.61 | 3.69 | 2.88 | 4.71 | 3.77 | 2.94 | 4.61 | 3.69 | 2.88 | 4.61 | 3.69 | 2.88 | 4.42 | 3.54 | 2.76 | 4.62 | 3.70 | 2.88 | 4.72 | 3.78 | 2.95 | 4.62 | 3.70 | 3.10 |
| 12 | 4.98 | 3.84 | 3.00 | 5.11 | 3.94 | 3.07 | 4.94 | 3.81 | 2.97 | 5.16 | 3.98 | 3.11 | 5.28 | 4.07 | 3.17 | 5.16 | 3.98 | 3.11 | 5.16 | 3.98 | 3.11 | 4.95 | 3.82 | 2.98 | 5.17 | 3.99 | 3.11 | 5.29 | 4.08 | 3.18 | 5.17 | 3.99 | 3.35 |
| 20 | 5.58 | 4.50 | 3.51 | 5.72 | 4.61 | 3.60 | 5.53 | 4.46 | 3.48 | 5.78 | 4.66 | 3.63 | 5.91 | 4.76 | 3.71 | 5.78 | 4.66 | 3.63 | 5.78 | 4.66 | 3.63 | 5.54 | 4.47 | 3.49 | 5.80 | 4.67 | 3.64 | 5.92 | 4.77 | 3.72 | 5.80 | 4.67 | 3.92 |
| Hot water temp ℃ | 35 | 45 | 55 | 35 | 45 | 55 | 35 | 45 | 55 | 35 | 45 | 55 | 35 | 45 | 55 | 35 | 45 | 55 | 35 | 45 | 55 | 35 | 45 | 55 | 35 | 45 | 55 | 35 | 45 | 55 | 35 | 45 | 55 |

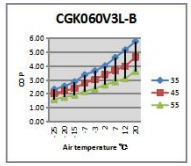


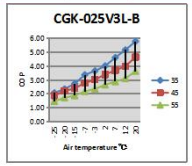


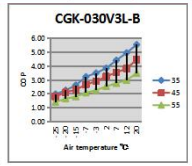


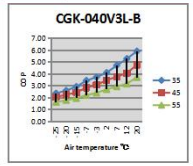


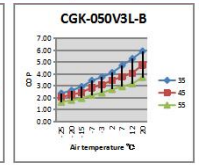


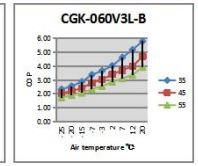













●The information in this document is just for reference. Since the continuous improvement and control in the production process, the information contained in this document may be subject to change. Please refer to the nameplate on the machine for model specifications.