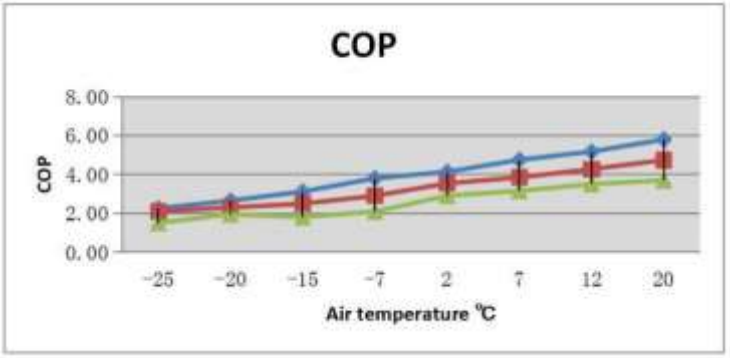
Unit Name		DC Inverter Air Source Heat Pumps (ambient working :-25C to 45C)																	
Setting range:		(Heating: 30℃～55℃; Cooling: 32℃～12℃)																	
Model			CGK030V3L			CGK050V3L			CGK060V3L			CGK-030V3L			CGK-050V3L			CGK-060V3L		
Power Supply / Refrigerant		V/Hz/P	220-240/50/1 - R32									380-420/50/3 - R32								
Max. Heating Capacity (1)		kW	12			20			22			12			20			22		
C.O.P (1)		W/W	4.45			4.75			4.62			4.45			4.76			4.65		
Heating Capacity Min./Max.(1)		kW	5.52	/	12	9.2	/	20	10.12	/	22	5.52	/	12	9.2	/	20	10.12	/	22
Heating Power Input Min./Max.(1)		W	992	/	2697	1549	/	4211	1752	/	4762	992	/	2697	1546	/	4202	1741	/	4731
C.O.P Min./Max.(1)		W/W	4.45	/	5.56	4.75	/	5.94	4.62	/	5.78	4.45	/	5.56	4.76	/	5.95	4.65	/	5.81
Max. Heating Capacity(2)		kW	11.5			19.2			21.1			11.5			19.2			21.1		
C.O.P (2)		W/W	3.60			3.85			3.70			3.60			3.81			3.60		
Heating Capacity Min./Max.(2)		kW	5.30	/	11.52	8.83	/	19.20	9.72	/	21.12	5.30	/	11.52	8.83	/	19.20	9.72	/	21.12
Heating power input Min./Max.(2)		W	1254	/	3236	1957	/	5053	2214	/	5714	1254	/	3236	1953	/	5042	2199	/	5677
C.O.P Min./Max.(2)		W/W	3.56	/	4.23	3.80	/	4.51	3.70	/	4.39	3.56	/	4.23	3.81	/	4.52	3.72	/	4.42
Max. Cooling Capacity(3)		kW	10.9			18.2			20.1			10.9			18.2			20.1		
E.E.R (3)		W/W	3.50			3.73			3.59			3.50			3.69			3.50		
Cooling Capacity Min./Max.(3)		kW	5.03	/	10.94	8.39	/	18.24	9.23	/	20.06	5.03	/	10.94	8.39	/	18.24	9.23	/	20.06
Cooling Power Input Min./Max.(3)		W	1215	/	3704	1897	/	5783	2146	/	6540	1215	/	3704	1893	/	5771	2132	/	6498
E.E.R Min./Max.(3)		W/W	2.95	/	4.14	3.15	/	4.42	3.07	/	4.30	2.95	/	4.14	3.16	/	4.43	3.09	/	4.33
Max. Cooling Capacity(4)		kW	8.6			14.4			15.8			8.6			14.4			15.8		
E.E.R(4)		W/W	2.62			2.80			2.69			2.62			2.77			2.62		
Cooling Capacity Min./Max.(4)		kW	3.97	/	8.64	6.62	/	14.40	7.29	/	15.84	3.97	/	8.64	6.62	/	14.40	7.29	/	15.84
Cooling Power Input Min./Max.(4)		W	1090	/	3440	1702	/	5371	1925	/	6075	1090	/	3440	1699	/	5360	1913	/	6036
E.E.R Min./Max.(4)		W/W	2.51	/	3.65	2.68	/	3.89	2.61	/	3.79	2.51	/	3.65	2.69	/	3.90	2.62	/	3.81
Rated Current		A	12.9			20.1			22.8			5.7			8.9			10.0		
Max Power Input		kW	3.9			6.1			6.9			3.9			6.1			6.9		
Max Current		A	18.71			29.21			33.04			8.25			12.86			14.48		
Compressor	Type - Quantity/System		Twin Rotary - 1			Twin Rotary - 1			Twin Rotary - 1			Twin Rotary - 1			Twin Rotary - 1			Twin Rotary - 1		
Fan	Quantity		1			2			2			1			2			2		
	Airflow	m3/h	3000			5000			5500			3000			5000			5500		
	Rated power	W	100			200			210			100			200			210		
Water Side Heat Exchanger	Type		Plate Heat Exchanger																	
	Water Pressure Drop	kPa	20			23			25			20			23			25		
	Piping Connection	Inch	G1"			G1"			G1"			G1"			G1"			G1"		
Allowable Water Flow	Min./Rated./Max.	L/S	0.36	0.57	0.96	0.60	0.96	1.59	0.66	1.05	1.75	0.36	0.57	0.96	0.60	0.96	1.59	0.66	1.05	1.75
Noise Level		dB(A)	59			61			62			59			61			62		
Net Dimension(L×D×H)		mm	1110*475*810			1110*475*1355			1110*475*1355			1110*475*810			1110*475*1355			1110*475*1355		
Packing Dimension(L×D×H)		mm	1220*540*970			1220*540*1400			1220*540*1400			1220*540*970			1220*540*1400			1220*540*1400		
Net Weight/ Gross weight		Kg	88/116			124/161			124/161			88/116			124/161			124/161		

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℃;

Heating Capacity at Different Conditions																		
Model	CGK030V3L			CGK050V3L			CGK060V3L			CGK-030V3L			CGK-050V3L			CGK-060V3L		
Air temp ℃	Heating capacity (KW)			Heating capacity (KW)			Heating capacity (KW)			Heating capacity (KW)			Heating capacity (KW)			Heating capacity (KW)		
-25	4.56	4.35	4.95	7.34	6.99	8.25	8.37	7.97	9.08	4.56	4.35	4.95	7.61	7.25	8.25	8.37	7.97	9.08
-20	7.89	6.69	6.97	12.69	10.75	11.62	14.47	12.26	12.79	7.89	6.69	6.97	13.15	11.15	11.62	14.47	12.26	12.79
-15	9.62	8.16	8.30	15.48	13.11	13.84	17.65	14.95	15.22	9.62	8.16	8.30	16.04	13.59	13.84	17.65	14.95	15.22
-7	9.88	9.60	9.77	16.47	15.99	16.28	18.12	17.59	17.91	9.88	9.60	9.77	16.47	15.99	16.28	18.12	17.59	17.91
2	11.63	11.29	11.49	19.00	18.82	19.15	21.32	20.70	21.07	11.63	11.29	11.49	19.38	18.82	19.15	21.32	20.70	21.07
7	12.00	11.52	12.10	20.00	19.20	20.16	22.00	21.12	22.18	12.00	11.52	12.10	20.00	19.20	20.16	22.00	21.12	22.18
12	12.60	12.10	12.70	21.00	20.16	21.17	23.10	22.18	23.28	12.60	12.10	12.70	21.00	20.16	21.17	23.10	22.18	23.28
20	13.23	12.70	13.34	22.05	21.17	22.23	24.26	23.28	24.45	13.23	12.70	13.34	22.05	21.17	22.23	24.26	23.28	24.45
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



Air temp ℃	COP kW/kW		
-25	2.25	2.09	1.50
-20	2.65	2.30	1.95
-15	3.12	2.50	1.80
-7	3.80	2.90	2.09
2	4.13	3.54	2.90
7	4.75	3.85	3.15
12	5.18	4.27	3.50
20	5.80	4.74	3.70
Hot water temp ℃	35	45	55

Standard Materials

Controller
CAREL Controller

Carel PCB

Expansion Valve
CAREL Electronic
Expansion Valve

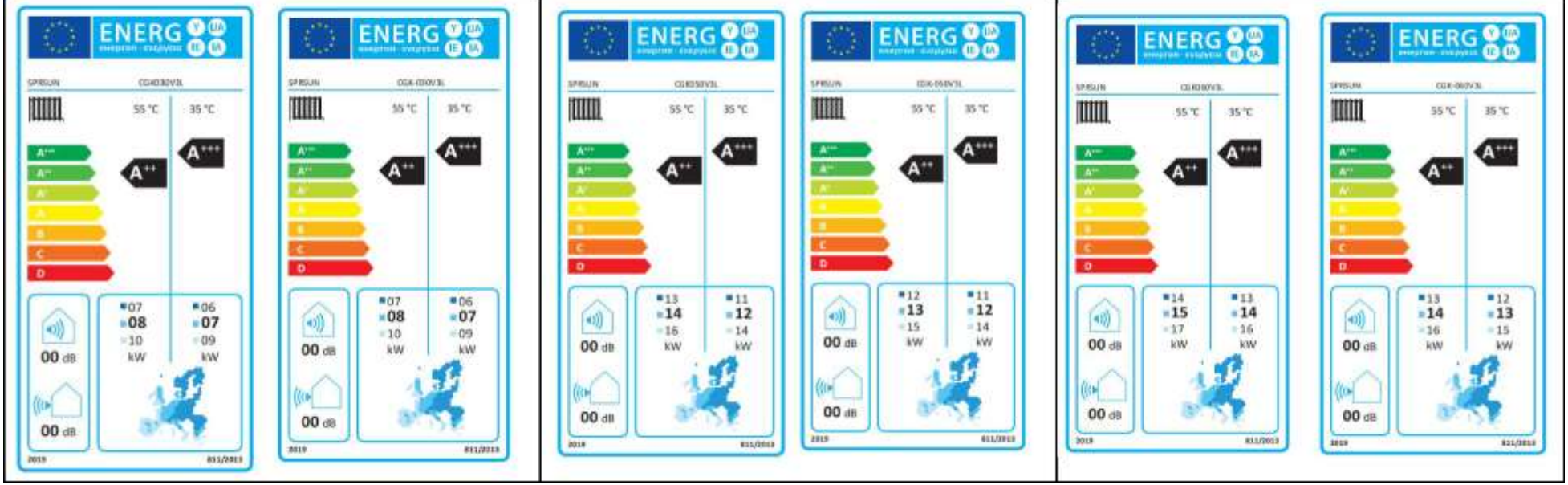
Pressure Sensor
CAREL Pressure Sensor

High /low
pressure
sensor

Panasonic
Compressor
Panasonic Rotary
Compressor

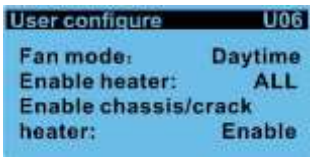
Schneider Electric
AC Contactor and Thermal Relay
Schneider (Former Brand is EATON)

Plate heat exchanger

CGK030V3L/CGK-030V3L	CGK050V3L/CGK-050V3L	CGK060V3L/CGK-060V3L
		

Functions

U06 Fan mode(Night mode ,low speed , daytime , pressure) :



Carel controller

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•Pressure mode : test mode, the heat pumpoutputs according to the test capacity.

•Daytime mode : the compressor outputs according to the maximum capacity;

•Night mode: the heat pump has low output capacity from 8 pm to 8 am, and high output at other times; (Lower noise and energy saving)

•Low speed mode : economic mode, the heat pump can automatically output capacity as required according to the ambient temperature; (Energy saving) , setting is as below :

	Ambient temp	Compressor maximum frequency (rps)
Heating/Hot water	9<AmbTemp	50
	4<AmbTemp<=9	60
	-3< AmbTemp <=4	60
	-9<AmbTemp<=-3	65
	-15<AmbTemp<=-9	65
	AmbTemp<=-15	70
Cooling	38<AmbTemp	65
	33<AmbTemp<=38	65
	30<AmbTemp<=33	60
	26<AmbTemp<=30	60
	AmbTemp<=26	55

		Ambient temp		Water temperature set point
Heating	X1	-10	Y1	45
	X2	0	Y2	40
	X3	10	Y3	35
	X4	20	Y4	30
Cooling	X1	20	Y1	15
	X2	25	Y2	15
	X3	30	Y3	12
	X4	35	Y4	12
Hot water	X1	0	Y1	50
	X2	10	Y2	50
	X3	20	Y3	45
	X4	30	Y4	40

Auto heating cooling -Ambtemp switch

Carel controller

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Enable this function, the unit will automatically switch to heating or hot water + heating if the ambient temperature is lower than the set value,and automatically switch to cooling or hot water + cooling if the ambient temperature is higher than the set value.

Modbus/RS485

Our heat pump can support modbus controlling , and We can send you if you need the file

Wifi app

With this wifi app on the cellphone, you and your customer can monitor heat pump 's working and we can diagnose the problem if there is any errors , and we can make adjustment directly on the wifi app . All of your customer can be listed in the app .