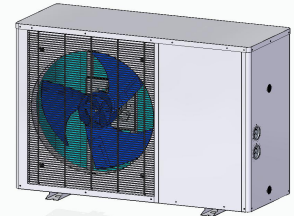


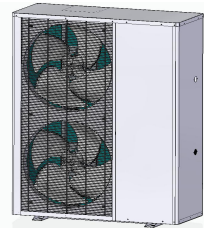
DC Inverter Air Source Heat Pumps (Monoblock Type)

1. Working source temperature range: -25°C to 45°C
2. Control Object: water tank temperature
(Setting range: Heating: $30^{\circ}\text{C} \sim 55^{\circ}\text{C}$; Cooling: $32^{\circ}\text{C} \sim 12^{\circ}\text{C}$)
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

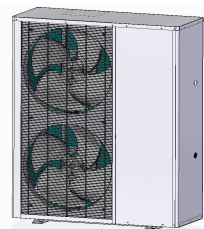
CGK025V3L-B, CGK-025V3L-B
CGK030V3L-B, CGK-030V3L-B
CGK040V3L-B, CGK-040V3L-B



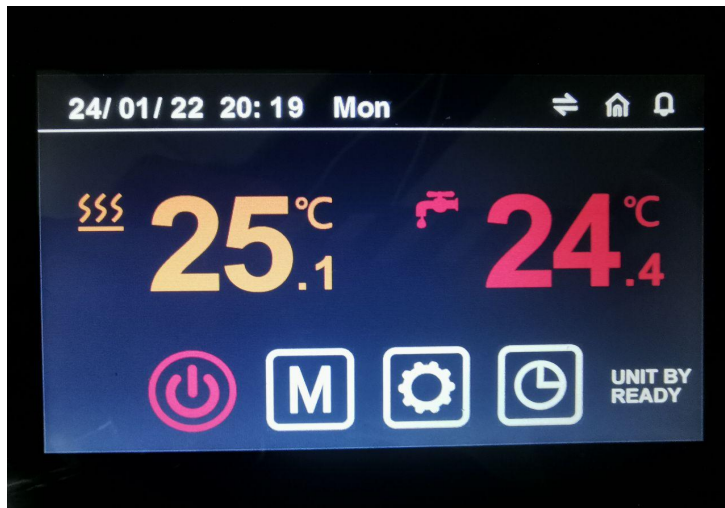
CGK050V3L-B, CGK-050V3L-B



CGK060V3L-B, CGK-060V3L-B



SPRSUN



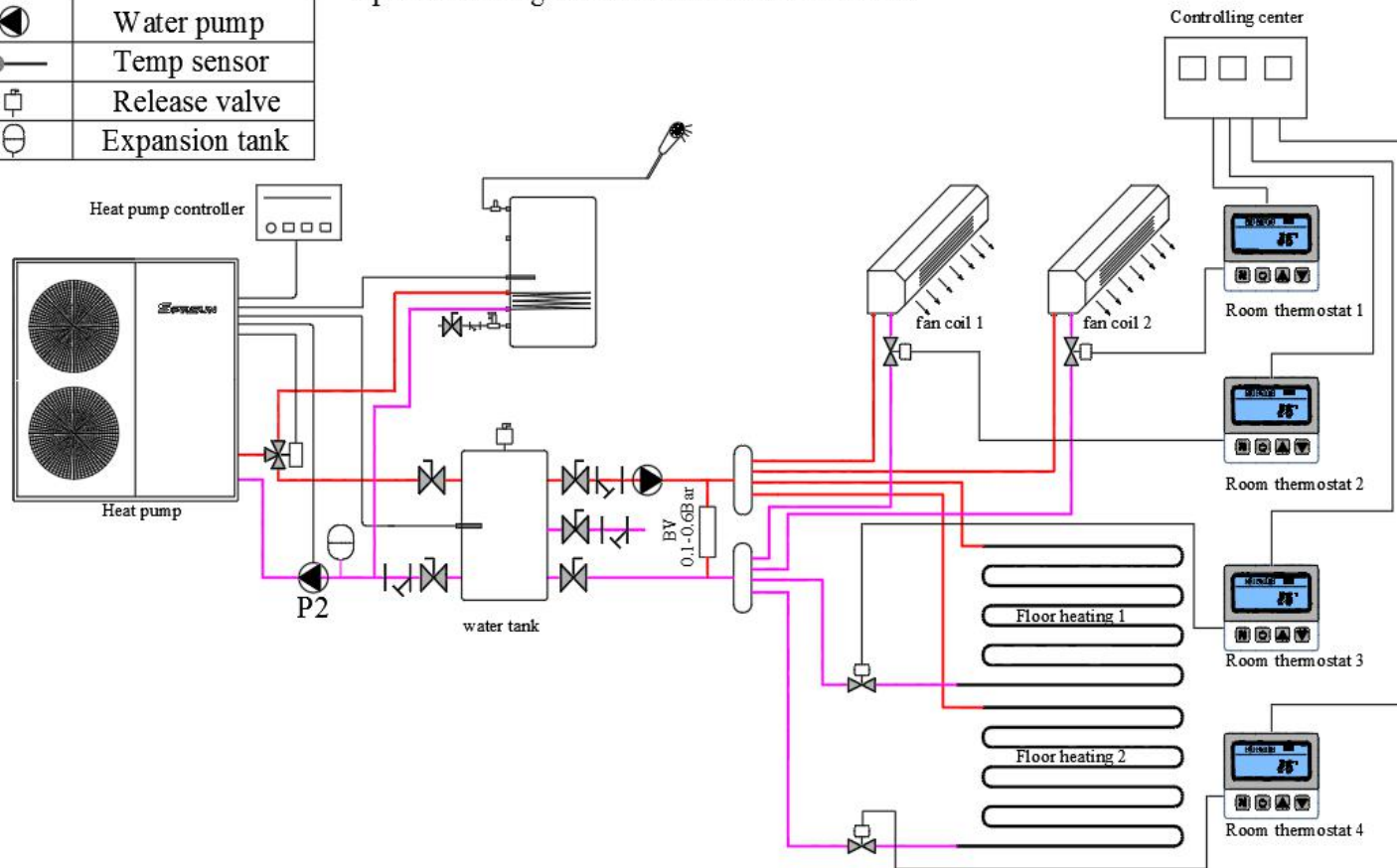
Guangzhou Sprsun New Energy Technology Development Co., Ltd.

Installation Diagram

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


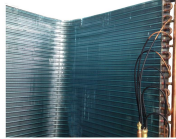








Notice:

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.



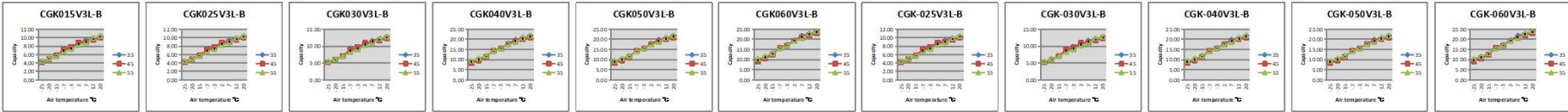
SPRSUN DC inverter air source heat pump

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							

Unit Name		DC Inverter Air Source Heat Pumps (Monoblock Type)													
Model		CGK015V3L-B	CGK025V3L-B	CGK030V3L-B	CGK040V3L-B	CGK050V3L-B	CGK060V3L-B	CGK025V3L-B	CGK030V3L-B	CGK040V3L-B	CGK050V3L-B	CGK060V3L-B	CGK060V3L-B	CGK080V3L-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	380-420/50/3 - R32	
Max. Heating Capacity (A7°C/W35°C)	kW	6	9.4	11.6	15.8	19.8	21.8	9.4	11.6	15.8	19.8	21.8	28	46.2	
C.O.P. (A7°C/W35°C)	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	4.62	
Heating Capacity Min./Max. (A7°C/W35°C)	kW	2.76 / 16	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	12.88 / 28.00	
Heating Power Input Min./Max. (A7°C/W35°C)	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	2230 / 6061	
C.O.P. Min./Max. (A7°C/W35°C)	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	4.62 / 5.78	
Max. Heating Capacity (A7°C/W45°C)	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	26.9	
C.O.P. (A7°C/W45°C)	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	3.70	
Heating Capacity Min./Max. (A7°C/W45°C)	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	12.36 / 26.88	
Heating power input Min./Max. (A7°C/W45°C)	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	2817 / 7273	
C.O.P. Min./Max. (A7°C/W45°C)	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	3.70 / 4.39	
Max. Cooling Capacity (A35°C/W18°C)	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	25.5	
E.E.R. (A35°C/W18°C)	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	3.59	
Cooling Capacity Min./Max. (A35°C/W18°C)	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	11.75 / 25.54	
Cooling Power Input Min./Max. (A35°C/W18°C)	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	2731 / 7123	
E.E.R. Min./Max. (A35°C/W18°C)	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	3.59 / 4.30	
Max. Cooling Capacity (A35°C/W7°C)	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	18.0	
E.E.R. (A35°C/W7°C)	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	2.51	
Cooling Capacity Min./Max. (A35°C/W7°C)	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	8.28 / 18.01	
Cooling Power Input Min./Max. (A35°C/W7°C)	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	2189 / 7176	
E.E.R. Min./Max. (A35°C/W7°C)	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	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	9.09	
Max Current	A	9.68	14.79	18.88	24.60	30.17	33.94	13.28	16.83	21.28	27.31	34.39	43.99	43.99	
Wire diameter	mm²	2.5	4.0	4.0	6.0	6.0	6.0	2.5	2.5	4.0	4.0	4.0	4.0	4.0	
Fuse or circuitbreaker	A	13A	20A	25A	32A	40A	40A	13A	13A	16A	20A	20A	25A	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	Twin Rotary - 1	
Fan	Quantity	1	1	1	1	2	2	1	1	1	1	1	2	2	
	Airflow	1500	2500	3000	3500	5000	5500	2500	3000	3500	5000	5500	7500	7500	
	Rated power	30	80	100	120	200	210	80	100	120	200	210	250	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	Plate Heat Exchanger	
	Water Pressure Drop	kPa	15	18	20	21	23	18	20	21	23	25	25	25	
	Piping Connection	Inch	G3/4"	G1"	G1"	G1"	G1"	G1"	G1"	G1"	G1"	G1"	G1"	G1"	
Allowable Water Flow	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	0.84 1.34 2.23	
Noise Level	dB(A)	49	56	59	60	61	62	56	59	60	61	62	65	65	
Net Dimension (LxDxH)	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*810	1110*475*810	1110*475*1355	1110*475*1355	1110*475*1455	
Carton Packing Dimension (LxDxH)	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*1520	1165*490*1590	
Plywood case Packing Dimension (LxDxH)	mm	1070*405*800	1200*540*970	1200*540*970	1200*540*1120	1200*540*1510	1200*540*1510	1200*540*970	1200*540*970	1200*540*1120	1200*540*1510	1200*540*1510	1200*540*1610	1200*540*1610	
Net Weight	kg	59	78	88	105	124	124	78	88	105	120	124	150	150	
Gross Weight with Carton package	kg	70	101	105	120	150	150	101	105	120	150	150	183	183	
Gross Weight with Plywood case	kg	80	106	116	126	161	161	106	116	126	161	161	188	188	
Note: (1) Heating condition: water inlet/outlet temperature: 30°C/35°C, Ambient temperature: DB 7°C/WB 6°C;															
(2) Heating condition: water inlet/outlet temperature: 40°C/45°C, Ambient temperature: DB 7°C/WB 6°C;															
(3) Cooling condition: water inlet/outlet temperature: 23°C/18°C, Ambient temperature: DB35°C/WB24°C;															
(4) Cooling condition: water inlet/outlet temperature: 12°C/7°C, Ambient temperature: DB35°C/WB24°C;															

		Heating Capacity at Different Conditions																																				
Model	CGK015V3L-B				CGK025V3L-B				CGK030V3L-B				CGK040V3L-B				CGK050V3L-B				CGK060V3L-B																	
Air temp. °C	Heating capacity (kW)				Heating capacity (kW)				Heating capacity (kW)				Heating capacity (kW)				Heating capacity (kW)				Heating capacity (kW)																	
-25	2.11	2.67	2.84	4.25	4.19	4.46	5.25	5.12	5.50	7.15	6.61	7.49	8.96	8.28	9.39	9.86	9.12	10.33	11.54	10.60	11.65	12.45	11.55	12.47	13.05	12.07	13.05	13.85	12.47	13.05	13.85	14.41	13.33	14.41	14.99	15.89	15.79	15.53
-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	9.53	10.58	11.34	10.60	11.65	12.45	11.55	12.47	13.05	12.07	13.05	13.85	12.47	13.05	13.85	14.41	13.33	14.41	14.99	15.89	15.79	15.53			
-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	13.85	12.47	13.05	13.85	12.47	13.05	13.85	12.47	13.05	13.85	14.41	13.33	14.41	14.99	15.89	15.79	15.53			
-7	4.37	4.63	4.27	6.85	7.25	6.69	8.46	8.93	8.25	11.50	11.44	11.24	14.41	14.24	14.09	15.89	15.79	15.53	16.31	16.15	16.00	16.91	16.75	16.60	17.30	17.14	17.00	17.81	17.65	17.50	18.31	18.15	18.00	18.81	18.65	18.50		
-3	4.76	4.98	4.66	7.45	7.80	7.29	9.21	9.63	9.00	12.54	12.31	12.26	15.42	15.22	15.06	17.30	16.98	16.91	17.46	17.46	17.29	18.00	17.84	17.69	18.41	18.25	18.10	18.91	18.75	18.60	19.41	19.25	19.10	19.91	19.75	19.60		
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	20.33	20.00	19.93		
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	18.53	21.80	20.92	20.31	9.40	9.02	8.84	11.60	11.14	10.91	15.80	15.17	14.86	19.80	19.01	18.53	21.80	20.92	20.31	22.97	22.10	21.53		
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	22.53	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	22.53	24.03	23.07	23.65		
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	25.19	24.23	24.81		
Hot water temp. °C	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	30/35	40/45	50/55		



Model	CGK015V3L-B			CGK025V3L-B			CGK030V3L-B			CGK040V3L-B			CGK050V3L-B			CGK060V3L-B																				
Air temp. °C	COP A/W/W			COP A/W/W			COP A/W/W			COP A/W/W			COP A/W/W			COP A/W/W																				
-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	1.63	2.32	2.03	1.60	2.37	2.07	1.63
-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	1.65	2.55	2.21	1.65	2.60	2.25	1.80	2.55	2.21	1.65
-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	1.96	2.93	2.45	1.96
-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	3.25	2.67	2.08	3.38	2.79	2.17	3.45	2.85	2.22	3.38	2.79	2.17	3.45	2.85	2.22
-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	2.36	3.74	3.09	2.41
2	3.87	3.28	2.55	3.97	3.36	2.62	3.84	3.25	2.55	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	2.65	4.11	3.47	2.71
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	3.60	2.88	4.72	3.78	2.95	4.62	3.70	2.95	4.72	3.78	2.95
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	3.13	5.29	4.08	3.18
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	3.64	5.92	4.77	3.72
Hot water temp. °C	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	35	45	55

