

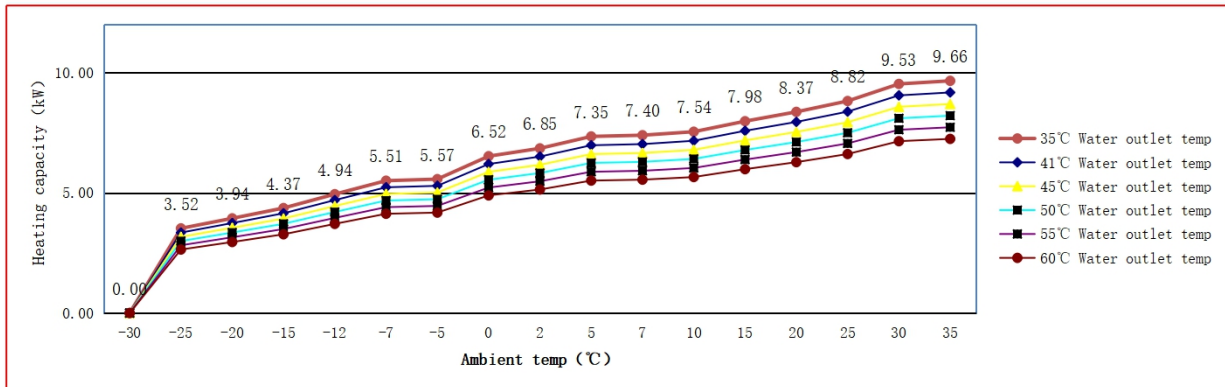
CH-HP23UIMPRM-P 30Hz

Heating Capacity kW																	
Water outlet		Ambient Temperature (°C)															
Water outlet (°C)	-30	-25	-20	-15	-12	-7	-5	0	2	5	7	10	15	20	25	30	35
35	-	3.52	3.94	4.37	4.94	5.51	5.57	6.52	6.85	7.35	7.40	7.54	7.98	8.37	8.82	9.53	9.66
41	-	3.35	3.74	4.15	4.70	5.23	5.29	6.20	6.51	6.98	7.03	7.17	7.58	7.95	8.38	9.05	9.18
45	-	3.17	3.55	3.93	4.45	4.96	5.01	5.87	6.17	6.61	6.66	6.79	7.18	7.53	7.94	8.58	8.69
50	-	2.99	3.35	3.71	4.20	4.68	4.73	5.55	5.82	6.24	6.29	6.41	6.78	7.11	7.50	8.10	8.21
55	-	2.82	3.15	3.49	3.96	4.40	4.46	5.22	5.48	5.88	5.92	6.03	6.38	6.69	7.06	7.62	7.73
60	-	2.64	2.95	3.28	3.71	4.13	4.18	4.89	5.14	5.51	5.55	5.66	5.98	6.28	6.61	7.15	7.24

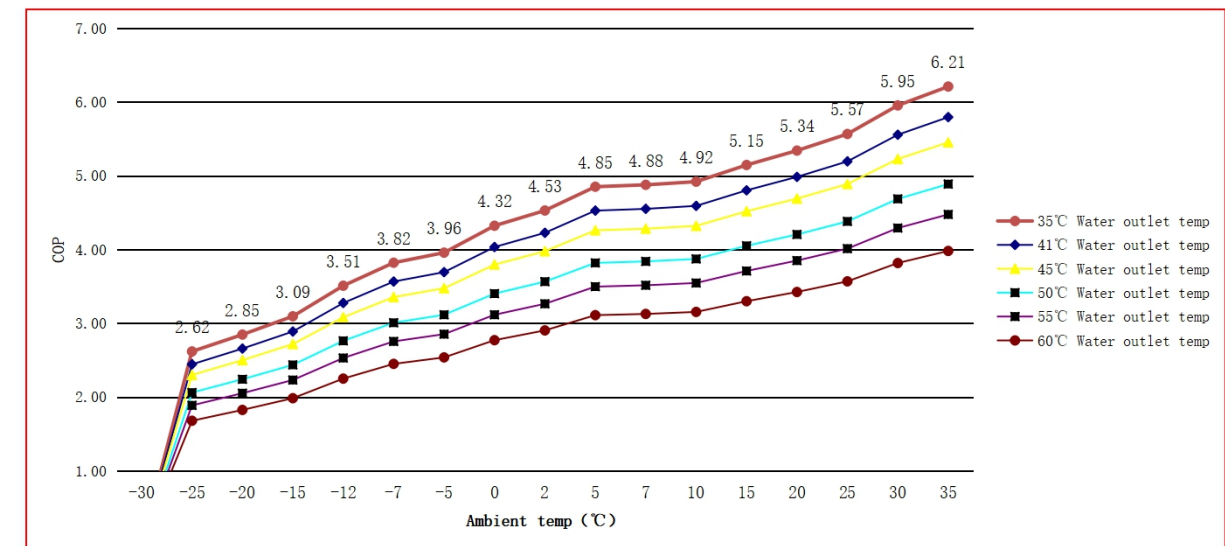
Power Input kW																	
Water outlet		Ambient Temperature (°C)															
Water outlet (°C)	-30	-25	-20	-15	-12	-7	-5	0	2	5	7	10	15	20	25	30	35
35	-	1.35	1.38	1.41	1.41	1.44	1.41	1.51	1.51	1.51	1.52	1.53	1.55	1.57	1.58	1.60	1.56
41	-	1.37	1.41	1.44	1.43	1.47	1.43	1.54	1.54	1.54	1.54	1.56	1.58	1.59	1.61	1.63	1.58
45	-	1.38	1.42	1.45	1.44	1.48	1.44	1.55	1.55	1.55	1.55	1.57	1.59	1.61	1.62	1.64	1.59
50	-	1.45	1.49	1.52	1.52	1.56	1.52	1.63	1.63	1.64	1.64	1.66	1.67	1.69	1.71	1.73	1.68
55	-	1.49	1.54	1.57	1.56	1.60	1.56	1.68	1.68	1.68	1.68	1.70	1.72	1.74	1.76	1.78	1.73
60	-	1.57	1.62	1.65	1.65	1.69	1.65	1.77	1.77	1.77	1.77	1.79	1.81	1.83	1.85	1.87	1.82

COP																	
Water outlet		Ambient Temperature (°C)															
Water outlet (°C)	-30	-25	-20	-15	-12	-7	-5	0	2	5	7	10	15	20	25	30	35
35	-	2.62	2.85	3.09	3.51	3.82	3.96	4.32	4.53	4.85	4.88	4.92	5.15	5.34	5.57	5.95	6.21
41	-	2.44	2.66	2.89	3.27	3.57	3.69	4.03	4.23	4.53	4.55	4.59	4.80	4.98	5.19	5.56	5.79
45	-	2.30	2.50	2.72	3.08	3.35	3.47	3.79	3.98	4.26	4.28	4.32	4.52	4.69	4.89	5.23	5.45
50	-	2.06	2.24	2.44	2.76	3.01	3.11	3.40	3.56	3.82	3.84	3.87	4.05	4.20	4.38	4.69	4.89
55	-	1.89	2.05	2.23	2.53	2.75	2.85	3.11	3.26	3.50	3.51	3.55	3.71	3.85	4.01	4.29	4.48
60	-	1.68	1.82	1.98	2.25	2.45	2.54	2.77	2.90	3.11	3.13	3.15	3.30	3.42	3.57	3.82	3.98

Heating Performance Curve



COP Curve



CH-HP23UIMPRM-P 57.5Hz

Heating Capacity kW

Water outlet		Ambient Temperature (°C)															
Water outlet (°C)	-30	-25	-20	-15	-12	-7	-5	0	2	5	7	10	15	20	25	30	35
35	5.01	6.00	6.97	8.78	9.35	10.33	10.85	12.26	13.22	14.17	15.40	16.14	16.89	17.59	18.19	19.14	19.27
41	4.76	5.70	6.62	8.34	8.89	9.81	10.31	11.65	12.56	13.46	14.63	15.34	16.05	16.71	17.28	18.18	18.30
45	4.51	5.40	6.27	7.90	8.42	9.30	9.77	11.03	11.90	12.75	13.86	14.53	15.20	15.83	16.37	17.22	17.34
50	4.26	5.10	5.93	7.46	7.95	8.78	9.23	10.42	11.24	12.05	13.09	13.72	14.36	14.95	15.47	16.26	16.38
55	4.01	4.80	5.58	7.02	7.48	8.26	8.68	9.81	10.58	11.34	12.32	12.92	13.51	14.07	14.56	15.31	15.41
60	3.76	4.50	5.23	6.58	7.01	7.75	8.14	9.20	9.91	10.63	11.55	12.11	12.67	13.19	13.65	14.35	14.45

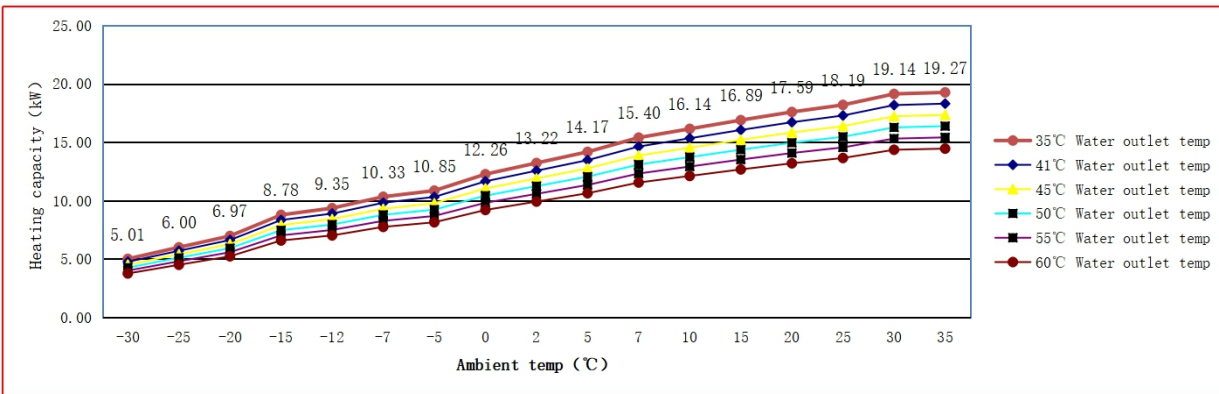
Power Input kW

Water outlet		Ambient Temperature (°C)															
Water outlet (°C)	-30	-25	-20	-15	-12	-7	-5	0	2	5	7	10	15	20	25	30	35
35	1.99	2.27	2.51	2.82	2.80	2.86	2.78	2.98	3.00	3.00	3.02	3.11	3.17	3.23	3.29	3.37	3.30
41	2.03	2.32	2.56	2.87	2.85	2.92	2.83	3.03	3.05	3.05	3.08	3.16	3.22	3.29	3.35	3.43	3.36
45	2.04	2.33	2.57	2.89	2.87	2.94	2.84	3.05	3.07	3.07	3.10	3.18	3.24	3.31	3.38	3.45	3.38
50	2.15	2.46	2.71	3.04	3.03	3.09	3.00	3.22	3.24	3.24	3.26	3.35	3.42	3.49	3.56	3.64	3.56
55	2.21	2.52	2.79	3.13	3.11	3.18	3.08	3.30	3.33	3.33	3.35	3.45	3.51	3.58	3.66	3.74	3.66
60	2.33	2.66	2.94	3.30	3.28	3.35	3.25	3.48	3.51	3.51	3.54	3.63	3.70	3.78	3.85	3.94	3.86

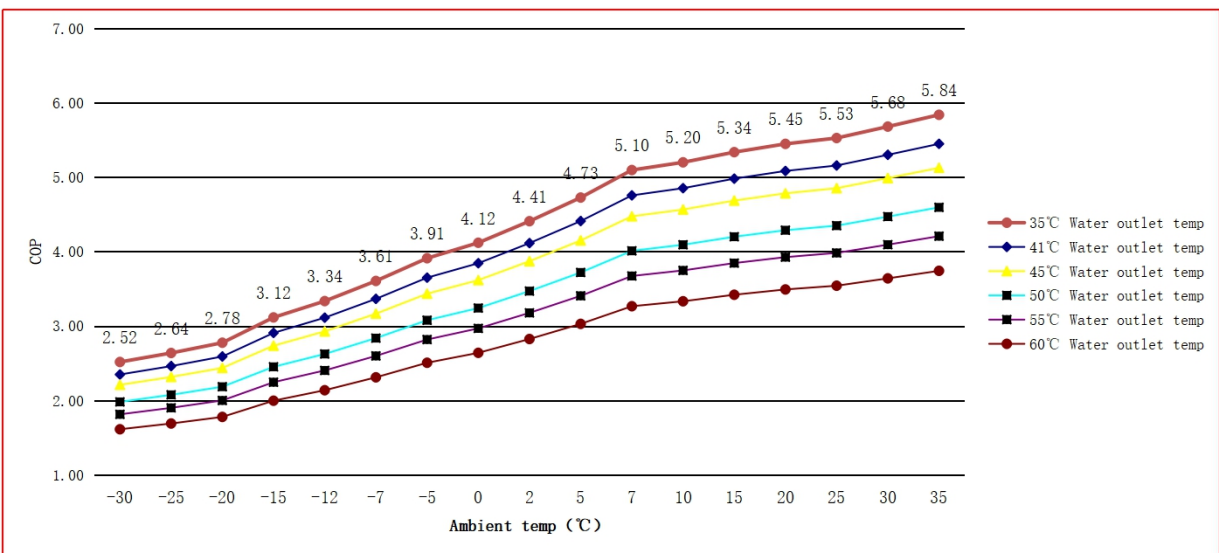
COP

Water outlet		Ambient Temperature (°C)															
Water outlet (°C)	-30	-25	-20	-15	-12	-7	-5	0	2	5	7	10	15	20	25	30	35
35	2.52	2.64	2.78	3.12	3.34	3.61	3.91	4.12	4.41	4.73	5.10	5.20	5.34	5.45	5.53	5.68	5.84
41	2.35	2.46	2.59	2.91	3.11	3.36	3.65	3.84	4.11	4.41	4.76	4.85	4.98	5.08	5.16	5.30	5.45
45	2.21	2.32	2.44	2.74	2.93	3.17	3.43	3.62	3.87	4.15	4.47	4.57	4.69	4.78	4.85	4.99	5.13
50	1.98	2.08	2.18	2.45	2.62	2.84	3.08	3.24	3.47	3.72	4.01	4.09	4.20	4.29	4.35	4.47	4.59
55	1.81	1.90	2.00	2.25	2.40	2.60	2.82	2.97	3.18	3.41	3.67	3.75	3.85	3.93	3.98	4.09	4.21
60	1.61	1.69	1.78	2.00	2.14	2.31	2.51	2.64	2.83	3.03	3.27	3.33	3.42	3.49	3.54	3.64	3.74

Heating Performance Curve



COP Curve



CH-HP23UIMPRM-P 80Hz

Heating Capacity kW

Water outlet		Ambient Temperature (°C)															
Water outlet (°C)	-30	-25	-20	-15	-12	-7	-5	0	2	5	7	10	15	20	25	30	35
35	8.62	8.96	10.03	11.15	13.13	14.05	14.67	17.19	18.18	19.49	20.50	20.87	21.66	22.85	23.42	24.47	25.46
41	8.48	8.82	9.84	10.91	12.79	13.63	13.94	16.33	17.27	18.51	19.48	19.96	20.85	22.15	22.85	24.03	24.19
45	8.03	8.35	9.32	10.33	12.11	12.91	13.20	15.47	16.36	17.54	18.45	18.91	19.76	20.98	21.64	22.76	22.92
50	7.58	7.89	8.80	9.76	11.44	12.19	12.47	14.61	15.45	16.56	17.43	17.86	18.66	19.82	20.44	21.50	21.64
55	7.14	7.42	8.28	9.18	10.77	11.48	11.74	13.75	14.54	15.59	16.40	16.81	17.56	18.65	/	/	/
60	/	/	7.77	8.61	10.09	10.76	11.00	12.89	13.64	14.61	15.38	15.76	16.46	17.49	/	/	/

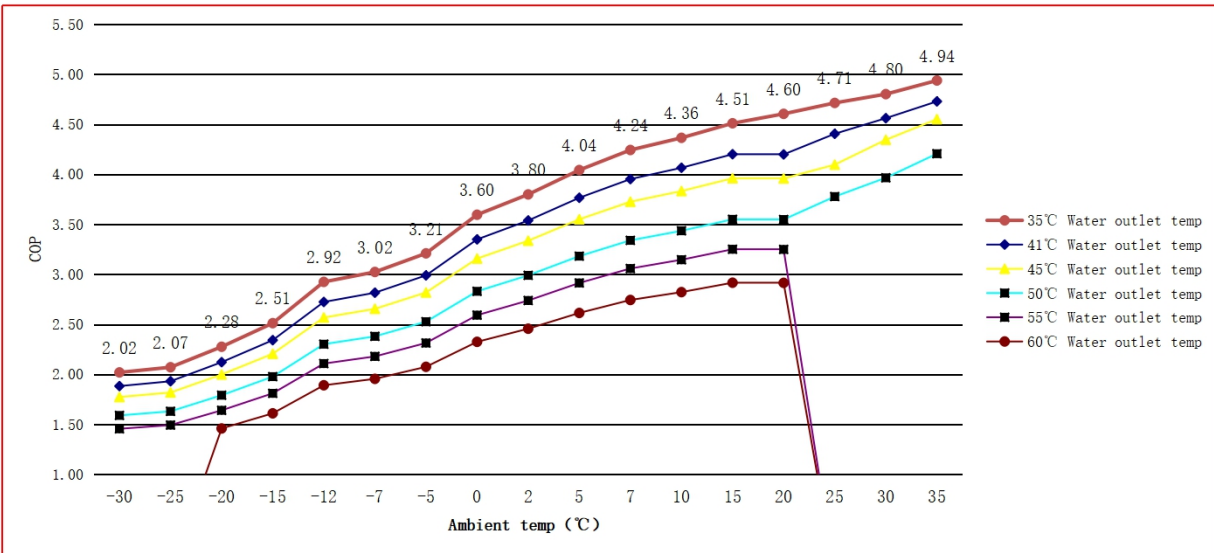
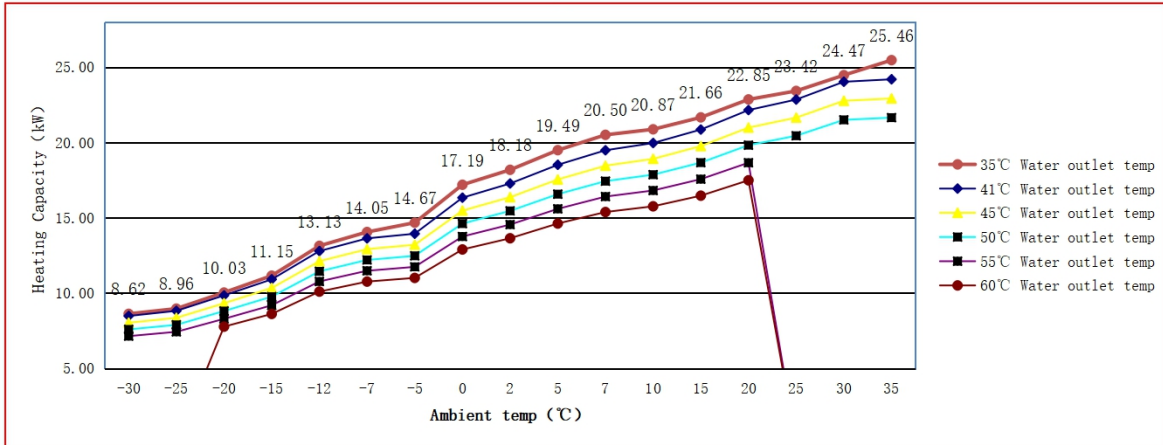
Power Input kW

Water outlet		Ambient Temperature (°C)															
Water outlet (°C)	-30	-25	-20	-15	-12	-7	-5	0	2	5	7	10	15	20	25	30	35
35	4.27	4.33	4.41	4.44	4.49	4.65	4.57	4.78	4.79	4.82	4.83	4.78	4.80	4.96	4.97	5.10	5.16
41	4.50	4.57	4.64	4.66	4.69	4.84	4.66	4.88	4.88	4.92	4.93	4.91	4.97	5.28	5.19	5.27	5.12
45	4.53	4.59	4.67	4.69	4.72	4.86	4.69	4.90	4.91	4.94	4.95	4.93	4.99	5.30	5.28	5.24	5.04
50	4.77	4.84	4.92	4.94	4.97	5.13	4.94	5.16	5.17	5.21	5.22	5.20	5.26	5.59	5.41	5.42	5.15
55	4.91	4.97	5.05	5.07	5.11	5.27	5.07	5.31	5.31	5.35	5.36	5.34	5.40	5.74	/	/	/
60	-	-	5.16	5.20	5.20	5.38	5.42	5.47	5.50	5.56	5.60	5.66	5.73	5.79	/	/	/

COP

Water outlet		Ambient Temperature (°C)															
Water outlet (°C)	-30	-25	-20	-15	-12	-7	-5	0	2	5	7	10	15	20	25	30	35
35	2.02	2.07	2.28	2.51	2.92	3.02	3.21	3.60	3.80	4.04	4.24	4.36	4.51	4.60	4.71	4.80	4.94
41	1.88	1.93	2.12	2.34	2.72	2.82	2.99	3.35	3.54	3.76	3.95	4.06	4.20	4.20	4.40	4.56	4.73
45	1.77	1.82	2.00	2.20	2.57	2.65	2.82	3.16	3.34	3.55	3.72	3.83	3.96	3.96	4.10	4.34	4.55
50	1.59	1.63	1.79	1.98	2.30	2.38	2.53	2.83	2.99	3.18	3.34	3.43	3.55	3.55	3.78	3.96	4.20
55	1.46	1.49	1.64	1.81	2.11	2.18	2.31	2.59	2.74	2.91	3.06	3.15	3.25	3.25	/	/	/
60	/	/	1.46	1.61	1.89	1.95	2.07	2.32	2.46	2.61	2.74	2.82	2.92	2.91	/	/	/

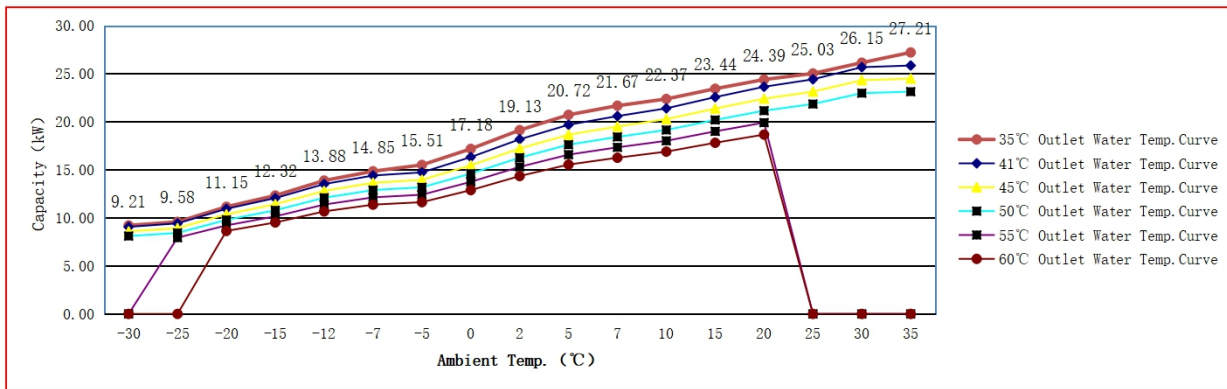
Heating Performance Curve



CH-HP23UIMPRM-P 90Hz

Heating Capacity kW																	
Water outlet	Ambient Temperature (°C)																
Water outlet (°C)	-30	-25	-20	-15	-12	-7	-5	0	2	5	7	10	15	20	25	30	35
35	9.21	9.58	11.15	12.32	13.88	14.85	15.51	17.18	19.13	20.72	21.67	22.37	23.44	24.39	25.03	26.15	27.21
41	9.06	9.42	10.94	12.05	13.51	14.40	14.73	16.32	18.17	19.69	20.59	21.39	22.56	23.64	24.42	25.68	25.85
45	8.58	8.93	10.36	11.42	12.80	13.65	13.96	15.46	17.22	18.65	19.50	20.27	21.38	22.40	23.13	24.33	24.49
50	8.10	8.43	9.79	10.78	12.09	12.89	13.18	14.60	16.26	17.61	18.42	19.14	20.19	21.15	21.85	22.98	23.13
55	/	7.93	9.21	10.15	11.38	12.13	12.40	13.74	15.30	16.58	17.34	18.02	19.00	19.91	/	/	/
60	/	/	8.63	9.52	10.67	11.37	11.63	12.88	14.35	15.54	16.25	16.89	17.81	18.66	/	/	/
Power Input kW																	
Water outlet	Ambient Temperature (°C)																
Water outlet (°C)	-30	-25	-20	-15	-12	-7	-5	0	2	5	7	10	15	20	25	30	35
35	5.25	5.32	5.39	5.47	5.52	5.64	5.54	5.96	5.96	6.00	6.00	5.92	5.94	6.12	6.18	6.33	6.41
41	5.52	5.59	5.65	5.72	5.74	5.84	5.62	6.05	6.05	6.09	6.10	6.06	6.11	6.35	6.45	6.55	6.36
45	5.65	5.73	5.79	5.85	5.88	5.98	5.76	6.20	6.19	6.24	6.24	6.20	6.26	6.45	6.57	6.51	6.26
50	5.87	5.95	6.02	6.08	6.11	6.22	5.98	6.44	6.44	6.48	6.49	6.44	6.50	6.65	6.73	6.74	6.40
55	/	6.13	6.20	6.26	6.29	6.41	6.16	6.63	6.63	6.68	6.68	6.64	6.69	6.89	/	/	/
60	/	/	6.51	6.58	6.61	6.73	6.48	6.97	6.97	7.02	7.02	6.98	7.04	7.15	/	/	/
COP																	
Water outlet	Ambient Temperature (°C)																
Water outlet (°C)	-30	-25	-20	-15	-12	-7	-5	0	2	5	7	10	15	20	25	30	35
35	1.76	1.80	2.07	2.25	2.52	2.63	2.80	2.88	3.21	3.46	3.61	3.78	3.95	3.99	4.05	4.13	4.25
41	1.64	1.68	1.93	2.11	2.35	2.46	2.62	2.70	3.00	3.23	3.38	3.53	3.69	3.72	3.79	3.92	4.07
45	1.52	1.56	1.79	1.95	2.18	2.28	2.42	2.50	2.78	2.99	3.12	3.27	3.42	3.47	3.52	3.74	3.91
50	1.38	1.42	1.63	1.77	1.98	2.07	2.20	2.27	2.53	2.72	2.84	2.97	3.11	3.18	3.25	3.41	3.62
55	/	1.29	1.49	1.62	1.81	1.89	2.01	2.07	2.31	2.48	2.59	2.71	2.84	2.89	/	/	/
60	/	/	1.33	1.45	1.61	1.69	1.80	1.85	2.06	2.21	2.31	2.42	2.53	2.61	/	/	/

Heating Performance Curve



COP Curve

