

Performance/Capacity Table: HISA - R290 Range

Model: HR290-012-1PH (Single Phase)

Flow Temp: 35° Data

$\Delta t = 3^{\circ}\text{C} - 8^{\circ}\text{C}$ Test Standard: EN14511 Ambient Temperature: 7°C/6°C (DB/WB)

	Ambient temperature	-25	-20	-15	-10	-7	-2	2	7	12	20	27
12kW -R290	Water Outlet(°C)	35°C	35°C	35°C	35°C	35°C	35°C	35°C	35°C	35°C	35°C	35°C
MAX	Heating Capacity(kW)	7.08	8.15	9.37	10.49	11.33	12.24	13.22	15.20	15.81	16.44	17.10
	Input Power(kW)	4.31	4.40	4.49	4.53	4.31	4.09	3.89	3.73	3.51	3.16	2.84
	COP	1.64	1.85	2.09	2.32	2.63	2.99	3.40	4.08	4.51	5.21	6.02
RATED	Heating Capacity(kW)	5.61	6.46	7.42	8.31	8.98	9.70	10.47	12.05	12.53	13.28	14.08
	Input Power(kW)	3.02	3.08	3.14	3.18	3.02	2.87	2.72	2.61	2.46	2.21	1.99
	COP	1.86	2.09	2.36	2.62	2.98	3.38	3.85	4.61	5.10	6.00	7.07
MIN	Heating Capacity(kW)	2.86	3.03	3.21	3.41	3.61	3.83	4.06	4.30	4.47	4.65	4.84
	Input Power(kW)	1.16	1.11	1.07	1.02	0.98	0.94	0.91	0.87	0.82	0.74	0.66
	COP	2.47	2.73	3.01	3.33	3.67	4.05	4.48	4.94	5.47	6.32	7.30

Flow Temp: 45° Data

$\Delta t = 3^{\circ}\text{C} - 8^{\circ}\text{C}$ Test Standard: EN14511 Ambient Temperature: 7°C/6°C (DB/WB)

	Ambient temperature	-25	-20	-15	-10	-7	-2	2	7	12	20	27
12kW -R290	Water Outlet(°C)	45°C	45°C	45°C	45°C	45°C	45°C	45°C	45°C	45°C	45°C	45°C
MAX	Heating Capacity(kW)	6.93	7.97	9.17	10.27	11.09	11.98	12.93	14.88	15.47	16.09	16.73
	Input Power(kW)	4.92	5.02	5.12	5.17	4.91	4.67	4.43	4.26	4.00	3.60	3.24
	COP	1.41	1.59	1.79	1.99	2.26	2.57	2.92	3.50	3.87	4.47	5.16
RATED	Heating Capacity(kW)	5.65	6.49	7.47	8.36	9.03	9.75	10.53	12.11	12.60	13.35	14.16
	Input Power(kW)	3.85	3.92	4.00	4.04	3.84	3.65	3.47	3.33	3.13	2.82	2.53
	COP	1.47	1.65	1.86	2.07	2.35	2.67	3.04	3.64	4.03	4.74	5.59
MIN	Heating Capacity(kW)	2.84	3.01	3.19	3.39	3.59	3.80	4.03	4.28	4.45	4.62	4.81
	Input Power(kW)	1.54	1.48	1.42	1.37	1.31	1.26	1.21	1.16	1.09	0.98	0.88
	COP	1.84	2.03	2.25	2.48	2.74	3.02	3.34	3.69	4.08	4.71	5.44

Contd.....

Flow Temp: 55° Data

$\Delta t = 3^{\circ}\text{C} - 8^{\circ}\text{C}$ Test Standard: EN14511 Ambient Temperature: $7^{\circ}\text{C}/6^{\circ}\text{C}$ (DB/WB)

	Ambient temperature	-25	-20	-15	-10	-7	-2	2	7	12	20	27
12kW -R290	Water Outlet (°C)	55°C	55°C	55°C	55°C	55°C	55°C	55°C	55°C	55°C	55°C	55°C
MAX	Heating Capacity(kW)	6.78	7.80	8.97	10.04	10.85	11.71	12.65	14.55	15.13	15.74	16.37
	Input Power(kW)	5.53	5.64	5.75	5.81	5.52	5.24	4.98	4.78	4.49	4.04	3.64
	COP	1.23	1.38	1.56	1.73	1.97	2.24	2.54	3.04	3.37	3.89	4.50
RATED	Heating Capacity(kW)	5.68	6.53	7.51	8.41	9.08	9.81	10.59	12.18	12.67	13.43	14.24
	Input Power(kW)	4.67	4.77	4.86	4.91	4.67	4.43	4.21	4.04	3.80	3.42	3.08
	COP	1.21	1.37	1.54	1.71	1.95	2.21	2.52	3.01	3.33	3.93	4.63
MIN	Heating Capacity(kW)	2.83	3.00	3.18	3.37	3.57	3.78	4.01	4.25	4.42	4.60	4.78
	Input Power(kW)	1.93	1.85	1.78	1.71	1.64	1.57	1.51	1.45	1.36	1.23	1.10
	COP	1.46	1.62	1.79	1.97	2.18	2.40	2.65	2.93	3.24	3.75	4.33