

Model: YS11E3G-100

Power supply	1Ph/208-230V/60Hz	Total Dimension: Length(L)(mm)	240
Refrigerant	R448A	Total Dimension: Width(W)(mm)	240
Nominal Horse Power(HP)	1.5	Total Dimension: Height(H)(mm)	392
Rated Cooling Capacity(W)	3223	Grommet Hole (Diameter)	190.5*190.5(11)
Rated Input Power(W)	1590	Oil Type	POE
Rated COP(W)	2.03	Initial filling amount of lubricating oil(L)	0.85
RLA(A)	6.97	Refilling amount of lubricating oil(L)	0.7
LRA(A)	53.8	Maximum working pressure: discharge side(MPa)	3.2
MOC(A)	9.4	Maximum working pressure: suction side(MPa)	2
Crankcase Heater Power(W)	45	Weight(Kg)	24.2
Discharge connection pipe size OD	1/2	Displacement(m³/h)	5.25
Suction connection pipe size OD	3/4	Displacement(cc/rev)	25

Working conditions

Refrigerant:	R448A		
Evaporating dew point temperature:	5.0 °C	Condensing dew point temperature:	50.0 °C
Evaporating Pressure:	0.609 MPa	Condensing Pressure:	2.145 MPa
Useful superheat:	10.0 K	Subcooling:	0.0 K
Additional superheat:	0.0 K	Additional Subcooling:	0.0 K
Return Gas Temperature:	15.0 °C	Total Subcooling:	0.0 K
		Liquid temperature:	50.0 °C
Rating Conditions:	Custom		
Required cooling capacity:	20.00 kW		

Calculation

Setting Conditions	5.0 / 50.0 °C
Compressor model	YS11E3G-100
Cooling Capacity(kW)	4.884
Cooling EER(W/W)	2.925
Heating capacity(kW)	6.553
Heating COP(W/W)	3.925
Power(kW)	1.670
Current(A)	7.439
Mass flow(kg/h)	123.355

Cooling Capacity(kW)

Tc\Te dew	-30	-25	-20	-15	-10	-5	0	5
60	-	-	-	-	2.199	2.748	3.388	4.131
55	-	-	-	1.934	2.437	3.029	3.719	4.518
50	-	-	1.667	2.124	2.664	3.297	4.033	4.884
45	-	1.407	1.818	2.305	2.879	3.550	4.331	5.231
40	1.162	1.528	1.962	2.477	3.083	3.791	4.612	5.559
35	1.258	1.643	2.100	2.641	3.277	4.019	4.879	5.870
30	1.350	1.753	2.231	2.796	3.460	4.234	5.131	6.163
25	1.441	1.859	2.357	2.944	3.634	4.438	5.369	6.441
20	1.529	1.963	2.477	3.085	3.798	4.630	5.594	-
15	1.618	2.064	2.594	3.220	3.955	4.813	-	-
10	1.707	2.164	2.708	3.351	4.106	4.987	-	-
5	1.799	2.265	2.821	3.478	4.251	-	-	-

Heating capacity(kW)

Tc\Te dew	-30	-25	-20	-15	-10	-5	0	5
60	-	-	-	-	4.028	4.645	5.353	6.162
55	-	-	-	3.527	4.095	4.749	5.500	6.356
50	-	-	3.057	3.575	4.174	4.863	5.653	6.553
45	-	2.622	3.091	3.634	4.262	4.983	5.809	6.750
40	2.223	2.645	3.135	3.701	4.355	5.106	5.966	6.944
35	2.238	2.677	3.185	3.773	4.450	5.229	6.119	7.132
30	2.259	2.713	3.238	3.845	4.544	5.347	6.266	7.311
25	2.284	2.751	3.291	3.914	4.633	5.459	6.403	7.478
20	2.309	2.788	3.340	3.979	4.715	5.561	6.528	-
15	2.333	2.821	3.384	4.035	4.786	5.649	-	-
10	2.353	2.848	3.420	4.081	4.845	5.723	-	-
5	2.367	2.866	3.444	4.114	4.887	-	-	-

Input power(kW)

Tc\Te dew	-30	-25	-20	-15	-10	-5	0	5
60	-	-	-	-	1.828	1.897	1.965	2.031
55	-	-	-	1.593	1.657	1.720	1.781	1.839
50	-	-	1.391	1.451	1.510	1.567	1.620	1.670
45	-	1.215	1.273	1.329	1.383	1.433	1.479	1.520
40	1.061	1.118	1.172	1.224	1.272	1.315	1.353	1.385
35	0.980	1.034	1.085	1.132	1.174	1.210	1.240	1.262
30	0.908	0.960	1.007	1.048	1.084	1.113	1.135	1.148
25	0.843	0.891	0.934	0.970	1.000	1.021	1.034	1.037
20	0.780	0.825	0.863	0.894	0.916	0.930	0.934	-
15	0.716	0.757	0.790	0.815	0.831	0.836	-	-
10	0.646	0.684	0.712	0.731	0.739	0.736	-	-
5	0.568	0.601	0.624	0.636	0.637	-	-	-

Current(A)

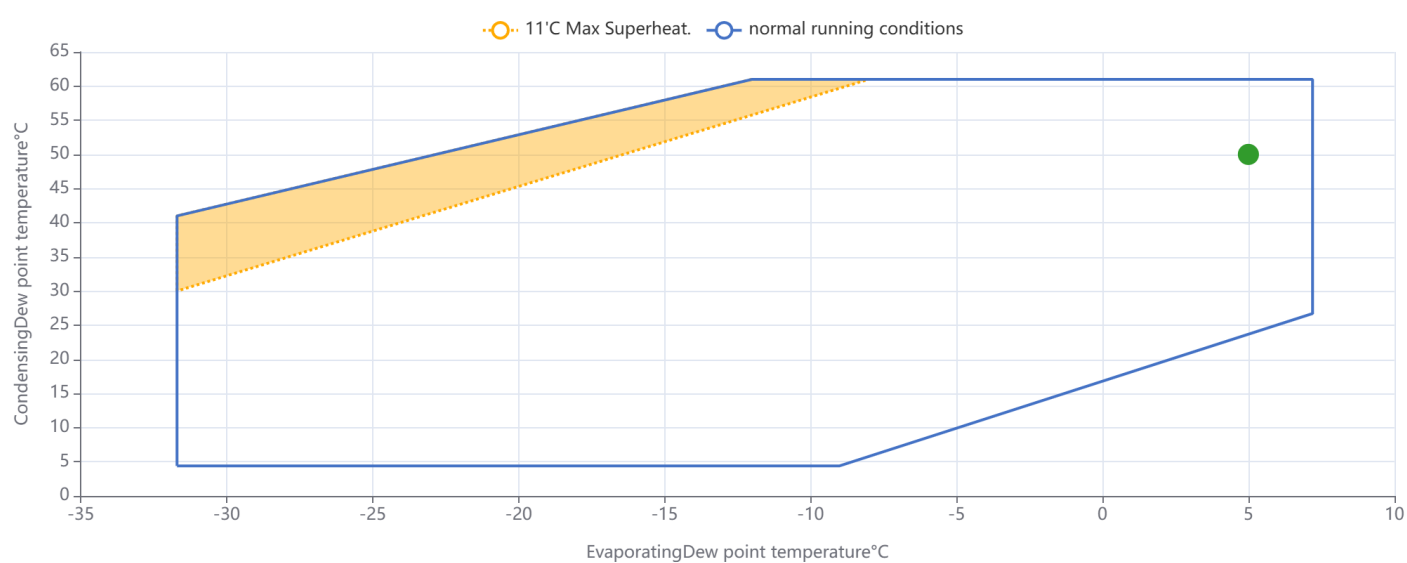
Tc\Te dew	-30	-25	-20	-15	-10	-5	0	5
60	-	-	-	-	8.110	8.443	8.766	9.072
55	-	-	-	7.071	7.375	7.670	7.949	8.207
50	-	-	6.184	6.463	6.734	6.991	7.228	7.439
45	-	5.425	5.683	5.934	6.173	6.393	6.588	6.753
40	4.767	5.008	5.244	5.469	5.676	5.860	6.015	6.134
35	4.414	4.639	4.853	5.052	5.229	5.377	5.492	5.568
30	4.092	4.301	4.495	4.669	4.816	4.931	5.007	5.039
25	3.787	3.981	4.156	4.305	4.424	4.505	4.543	4.532
20	3.483	3.664	3.820	3.946	4.036	4.085	4.086	-
15	3.167	3.334	3.472	3.576	3.640	3.657	-	-
10	2.822	2.977	3.098	3.181	3.218	3.205	-	-
5	2.434	2.578	2.683	2.745	2.758	-	-	-

Mass flow(kg/h)

Tc\Te dew	-30	-25	-20	-15	-10	-5	0	5
60	-	-	-	-	68.522	83.576	100.745	120.214
55	-	-	-	56.904	70.088	85.203	102.431	121.959
50	-	-	46.662	58.142	71.368	86.523	103.790	123.355
45	-	37.699	47.640	59.142	72.389	87.563	104.849	124.430
40	29.916	38.483	48.426	59.930	73.176	88.349	105.632	125.210
35	30.572	39.122	49.048	60.532	73.758	88.909	106.168	125.721
30	31.132	39.644	49.531	60.975	74.159	89.267	106.482	125.990
25	31.620	40.075	49.902	61.285	74.407	89.451	106.602	126.042
20	32.065	40.440	50.187	61.489	74.528	89.487	106.552	-
15	32.492	40.767	50.413	61.613	74.548	89.402	-	-
10	32.927	41.083	50.607	61.683	74.493	89.222	-	-
5	33.398	41.412	50.794	61.726	74.391	-	-	-

The above performance parameters are obtained through limited compressor tests and data fitting, for reference of compress or selection only. The performance data of the user's unit shall be subject to the test results of the standard laboratory.

Operating Envelope



Website: <https://www.invotechselector.cn>

SoftwareVersion: v2.0.0