

Model: YS07E3G-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	Total Dimension: Height(H)(mm)	392
Rated Cooling Capacity(W)	2051	Grommet Hole (Diameter)	190.5*190.5(11)
Rated Input Power(W)	1080	Oil Type	POE
Rated COP(W)	1.9	Initial filling amount of lubricating oil(L)	0.85
RLA(A)	4.74	Refilling amount of lubricating oil(L)	0.7
LRA(A)	47.5	Maximum working pressure: discharge side(MPa)	3.2
MOC(A)	6.2	Maximum working pressure: suction side(MPa)	2
Crankcase Heater Power(W)	45	Weight(Kg)	23.5
Discharge connection pipe size OD	1/2	Displacement(m³/h)	3.57
Suction connection pipe size OD	3/4	Displacement(cc/rev)	17

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	YS07E3G-100
Cooling Capacity(kW)	3.240
Cooling EER(W/W)	2.835
Heating capacity(kW)	4.383
Heating COP(W/W)	3.835
Power(kW)	1.143
Current(A)	5.094
Mass flow(kg/h)	81.842

Cooling Capacity(kW)

Tc\Te dew	-20	-15	-10	-5	0	5
60	-	-	1.459	1.823	2.248	2.741
55	-	1.283	1.617	2.010	2.468	2.997
50	1.106	1.409	1.767	2.187	2.676	3.240
45	1.206	1.529	1.910	2.356	2.873	3.470
40	1.302	1.644	2.045	2.515	3.060	3.688
35	1.393	1.752	2.174	2.666	3.237	3.894
30	1.480	1.855	2.295	2.809	3.404	4.089
25	1.564	1.953	2.411	2.944	3.562	4.273
20	1.644	2.047	2.520	3.072	3.711	-
15	1.721	2.136	2.624	3.193	-	-
10	1.797	2.223	2.724	-	-	-

Heating capacity(kW)

Tc\Te dew	-20	-15	-10	-5	0	5
60	-	-	2.711	3.122	3.593	4.131
55	-	2.374	2.752	3.188	3.687	4.256
50	2.058	2.403	2.801	3.260	3.785	4.383
45	2.078	2.439	2.857	3.337	3.886	4.511
40	2.105	2.482	2.916	3.416	3.987	4.637
35	2.136	2.527	2.977	3.495	4.086	4.759
30	2.170	2.573	3.038	3.571	4.181	4.875
25	2.203	2.618	3.095	3.643	4.270	4.983
20	2.235	2.659	3.148	3.709	4.351	-
15	2.262	2.695	3.193	3.766	-	-
10	2.284	2.723	3.230	-	-	-

Input power(kW)

Tc\Te dew	-20	-15	-10	-5	0	5
60	-	-	1.252	1.299	1.345	1.390
55	-	1.091	1.135	1.178	1.219	1.259
50	0.952	0.994	1.034	1.073	1.109	1.143
45	0.872	0.910	0.947	0.981	1.013	1.040
40	0.803	0.838	0.871	0.901	0.927	0.948
35	0.743	0.775	0.804	0.828	0.849	0.864
30	0.689	0.718	0.742	0.762	0.777	0.786
25	0.639	0.664	0.684	0.699	0.708	0.710
20	0.591	0.612	0.627	0.637	0.639	-
15	0.541	0.558	0.569	0.573	-	-
10	0.487	0.500	0.506	-	-	-

Current(A)

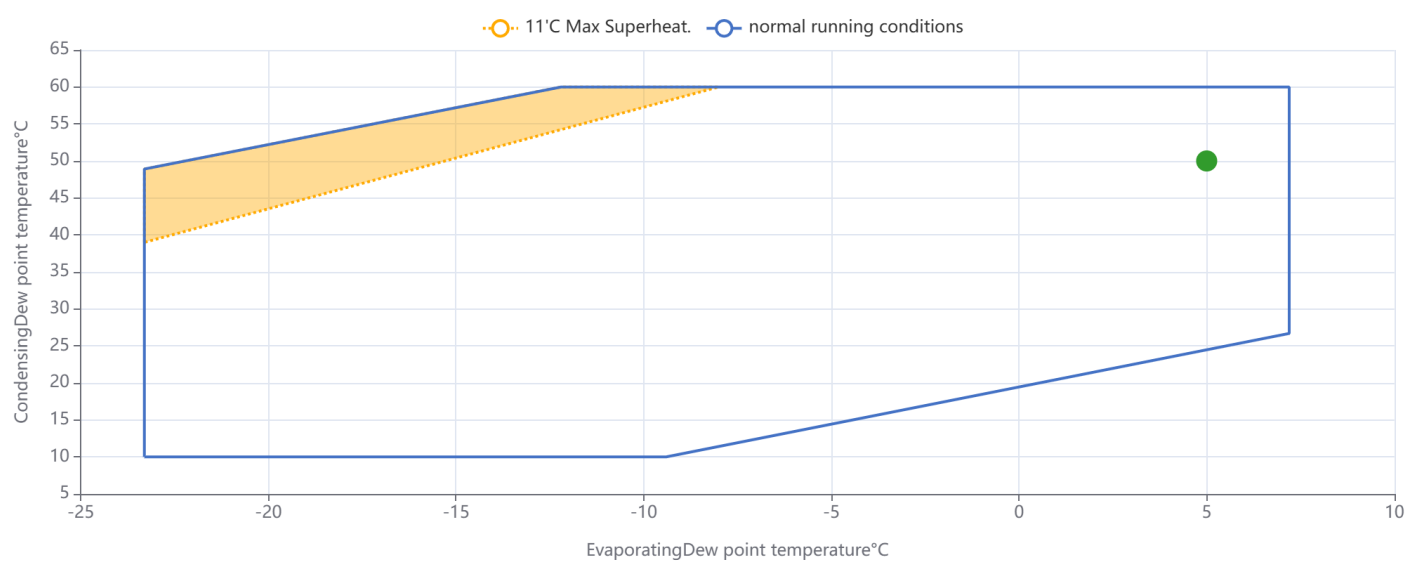
Tc\Te dew	-20	-15	-10	-5	0	5
60	-	-	5.553	5.781	6.002	6.211
55	-	4.841	5.050	5.251	5.443	5.619
50	4.234	4.425	4.611	4.787	4.949	5.094
45	3.891	4.063	4.226	4.377	4.511	4.624
40	3.591	3.744	3.886	4.012	4.118	4.200
35	3.323	3.459	3.580	3.682	3.761	3.812
30	3.078	3.197	3.298	3.376	3.428	3.450
25	2.845	2.948	3.029	3.084	3.111	3.103
20	2.615	2.702	2.764	2.797	2.798	-
15	2.377	2.448	2.492	2.504	-	-
10	2.121	2.178	2.203	-	-	-

Mass flow(kg/h)

Tc\Te dew	-20	-15	-10	-5	0	5
60	-	-	45.462	55.449	66.840	79.757
55	-	37.754	46.501	56.529	67.959	80.915
50	30.959	38.575	47.350	57.404	68.861	81.842
45	31.607	39.238	48.027	58.095	69.563	82.555
40	32.129	39.761	48.550	58.616	70.083	83.072
35	32.541	40.161	48.936	58.987	70.439	83.411
30	32.862	40.455	49.202	59.225	70.647	83.589
25	33.108	40.660	49.366	59.348	70.726	83.624
20	33.297	40.795	49.446	59.372	70.693	-
15	33.447	40.878	49.460	59.315	-	-
10	33.576	40.924	49.423	-	-	-

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