SPECIFICATIONS OF COMPRESSOR

Model No: 3CC137LA0M

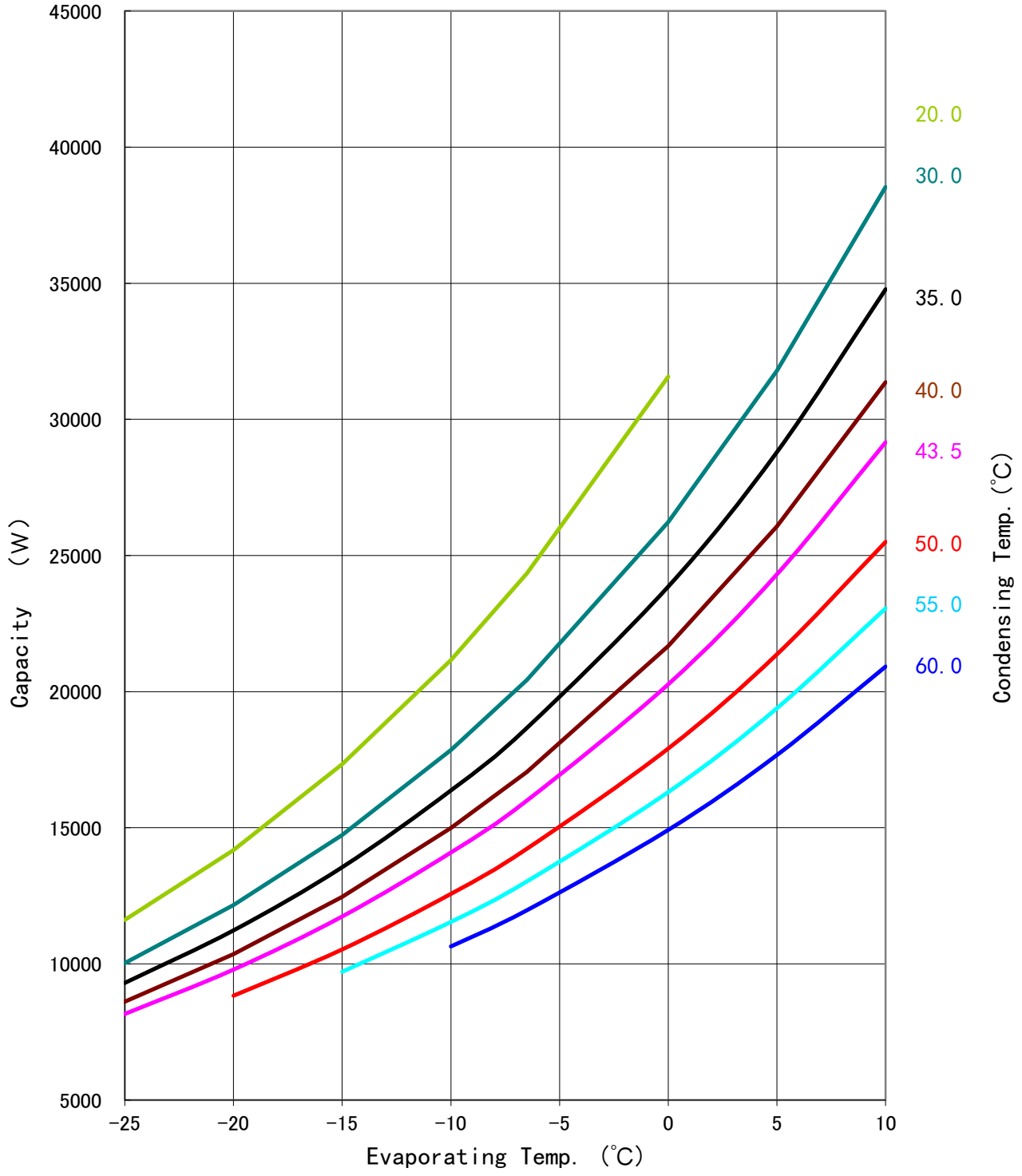
Output : 8 HP

GENERAL SPECIFICATIONS

Model No:		3CC137LA0M
Application		
Evaporating Temp Range	(℃)	-25.0 ～ 10.0
Refrigerant		R404A
Compressor Cooling		Natural Cooling
Rated Performance		
Capacity	(W)	16,000
Input	(W)	6,670
Current	(A)	11.9
Revolution	(min^{-1})	2,900
Sound Level	(dB(A))	—
Rating Conditions		
Power Source		3-PH 50Hz 380V
Evaporating Temp	(℃)	-6.5
Condensing Temp	(℃)	43.5
Suction Gas Temp	(℃)	18.5
Liquid Temp	(℃)	43.5
Ambient Temp	(℃)	35.0
Measuring Point of Sound Level		
Distance from the Compressor	(m)	1.0
Compressor		
Design		Hermetic Scroll
Displacement	(cm3)	137.0
Suction Line Connection	(Φmm OD)	25.4
Discharge Line Connection	(Φmm OD)	19.05
Oil	(ml)	2800 (FV68S)
Mass(Incl.Oil)	(kg)	66.0
Motor		
Type		3-PH Induction Motor(3IR)
Pole		2
Rated Power Source		3-PH 50Hz 380～415V/60Hz 440～460V
Voltage Range	(V)	342～456/396～506
Starting Current	(A)	80

PERFORMANCE CURVE

Code No.	3CC137LA0M
Power Source	3-PH 50Hz 380V
Condensing Temp.(℃)	20, 30, 35, 40, 43.5, 50, 55, 60
Suction Gas Superheat(K)	18.5
Sub Cooled(K)	0
Compressor Cooling	Natural Cooling
Refrigerant	R404A



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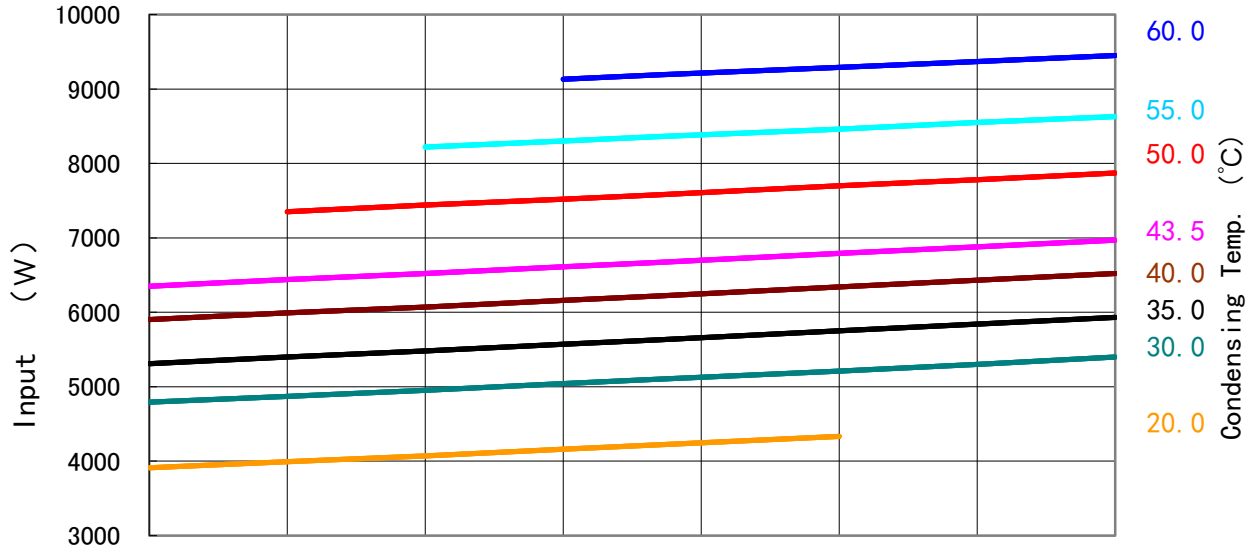
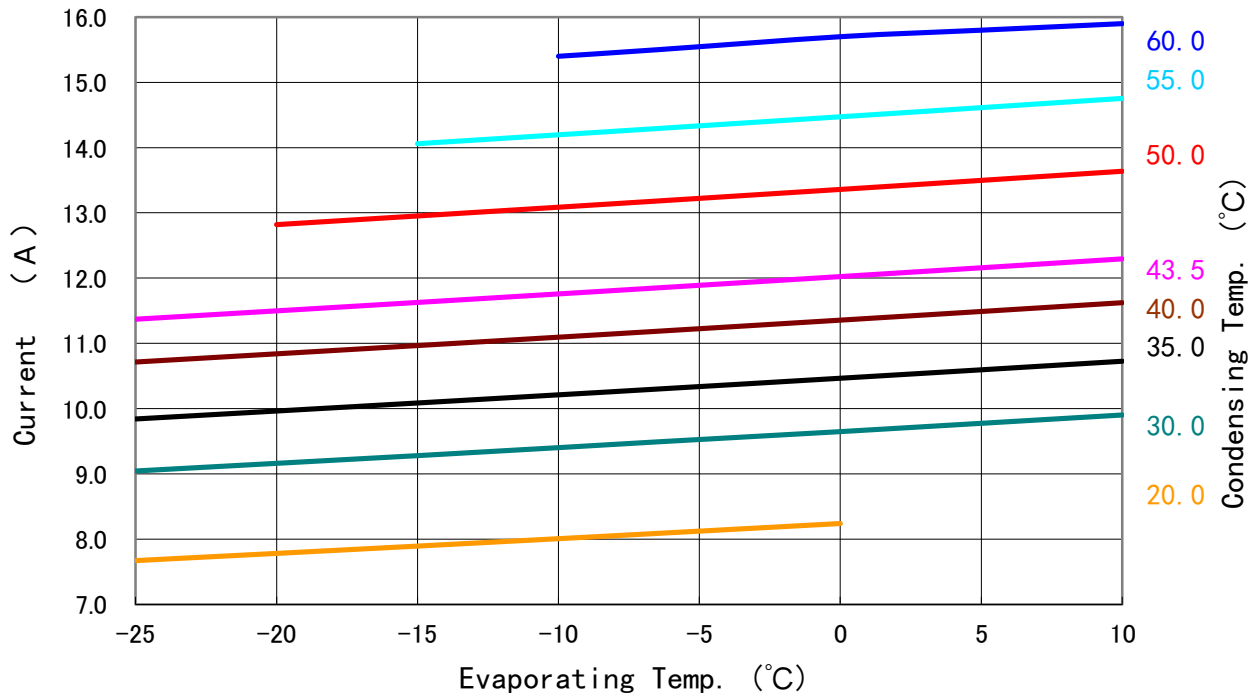




PERFORMANCE DATA

Code No.	3CC137LA0M
Power Source	3-PH 50Hz 380V
Condensing Temp.(℃)	20, 30, 35, 40, 43.5, 50, 55, 60
Suction Gas Superheat(K)	18.5
Sub Cooled(K)	0
Compressor Cooling	Natural Cooling
Refrigerant	R404A

Capacity (W)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.5	0	5	10
20.0	11,610	14,180	17,330	21,160	24,340	31,570		
30.0	10,030	12,160	14,730	17,860	20,430	26,230	31,790	38,540
35.0	9,300	11,230	13,550	16,370	18,670	23,860	28,800	34,780
40.0	8,610	10,360	12,460	14,990	17,050	21,680	26,070	31,360
43.5	8,160	9,790	11,740	14,090	16,000	20,270	24,310	29,160
50.0		8,830	10,530	12,570	14,230	17,910	21,370	25,500
55.0			9,710	11,540	13,030	16,310	19,390	23,060
60.0				10,640	11,970	14,920	17,670	20,920

Input (W)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.5	0	5	10
20.0	3,910	3,990	4,070	4,160	4,220	4,330		
30.0	4,790	4,870	4,950	5,040	5,100	5,210	5,300	5,400
35.0	5,310	5,400	5,480	5,570	5,630	5,750	5,840	5,930
40.0	5,900	5,990	6,070	6,160	6,220	6,340	6,430	6,520
43.5	6,350	6,440	6,520	6,610	6,670	6,790	6,880	6,970
50.0		7,350	7,440	7,520	7,580	7,700	7,780	7,870
55.0			8,220	8,300	8,360	8,460	8,550	8,630
60.0				9,130	9,190	9,290	9,370	9,450

Current (A)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.5	0	5	10
20.0	7.7	7.8	7.9	8.0	8.1	8.2		
30.0	9.0	9.2	9.3	9.4	9.5	9.6	9.8	9.9
35.0	9.8	10.0	10.1	10.2	10.3	10.5	10.6	10.7
40.0	10.7	10.8	11.0	11.1	11.2	11.4	11.5	11.6
43.5	11.4	11.5	11.6	11.8	11.9	12.0	12.2	12.3
50.0		12.8	13.0	13.1	13.2	13.4	13.5	13.6
55.0			14.1	14.2	14.3	14.5	14.6	14.8
60.0				15.4	15.5	15.7	15.8	15.9

Massflow(kg/H)

Condensing Temp. (°C) \ Evaporating Temp. (°C)	-25	-20	-15	-10	-6.5	0	5	10
20.0	205	267	344	434	506	657		
30.0	227	278	345	427	495	641	772	918
35.0	238	283	345	424	489	633	763	910
40.0	251	289	346	421	484	625	754	902
43.5	259	293	346	418	480	619	748	896
50.0		302	348	414	473	609	737	886
55.0			349	411	467	601	728	878
60.0				408	462	593	720	870

COP(W/W)

Condensing Temp. (°C) \ Evaporating Temp. (°C)	-25	-20	-15	-10	-6.5	0	5	10
20.0	2.97	3.55	4.26	5.09	5.77	7.29		
30.0	2.09	2.50	2.98	3.54	4.01	5.03	6.00	7.14
35.0	1.75	2.08	2.47	2.94	3.32	4.15	4.93	5.87
40.0	1.46	1.73	2.05	2.43	2.74	3.42	4.05	4.81
43.5	1.29	1.52	1.80	2.13	2.40	2.99	3.53	4.18
50.0		1.20	1.42	1.67	1.88	2.33	2.75	3.24
55.0			1.18	1.39	1.56	1.93	2.27	2.67
60.0				1.17	1.30	1.61	1.89	2.21

Coefficients of Polynominal Formula

	Capacity (W)	Input (W)	Current (A)	Massflow (kg/H)
C1	4.478522E+04	3.267977E+03	6.308873E+00	6.886968E+02
C2	1.819284E+03	1.540708E+01	1.998107E-02	2.568932E+01
C3	-7.368026E+02	2.942000E+01	6.680902E-02	-1.589494E+00
C4	2.854267E+01	6.236230E-02	4.260963E-05	1.846959E-01
C5	-3.154232E+01	1.634951E-01	1.979635E-04	-3.184386E-02
C6	3.971442E+00	1.183111E+00	1.484071E-03	-1.642050E-04
C7	1.561306E-01	1.266763E-04	9.825468E-08	-1.270074E-05
C8	-3.324927E-01	-9.471881E-04	-2.770102E-07	4.482764E-03
C9	1.555405E-01	-2.489516E-03	-9.471329E-07	-2.140046E-04
C10	1.492646E-07	3.291373E-08	1.367547E-11	-6.372713E-10

$X=C1+C2*(S)+C3*D+C4*(S^2)+C5*(S*D)+C6*(D^2)+C7*(S^3)+C8*(D*S^2)+C9*(S*D^2)+C10*(D^3)$

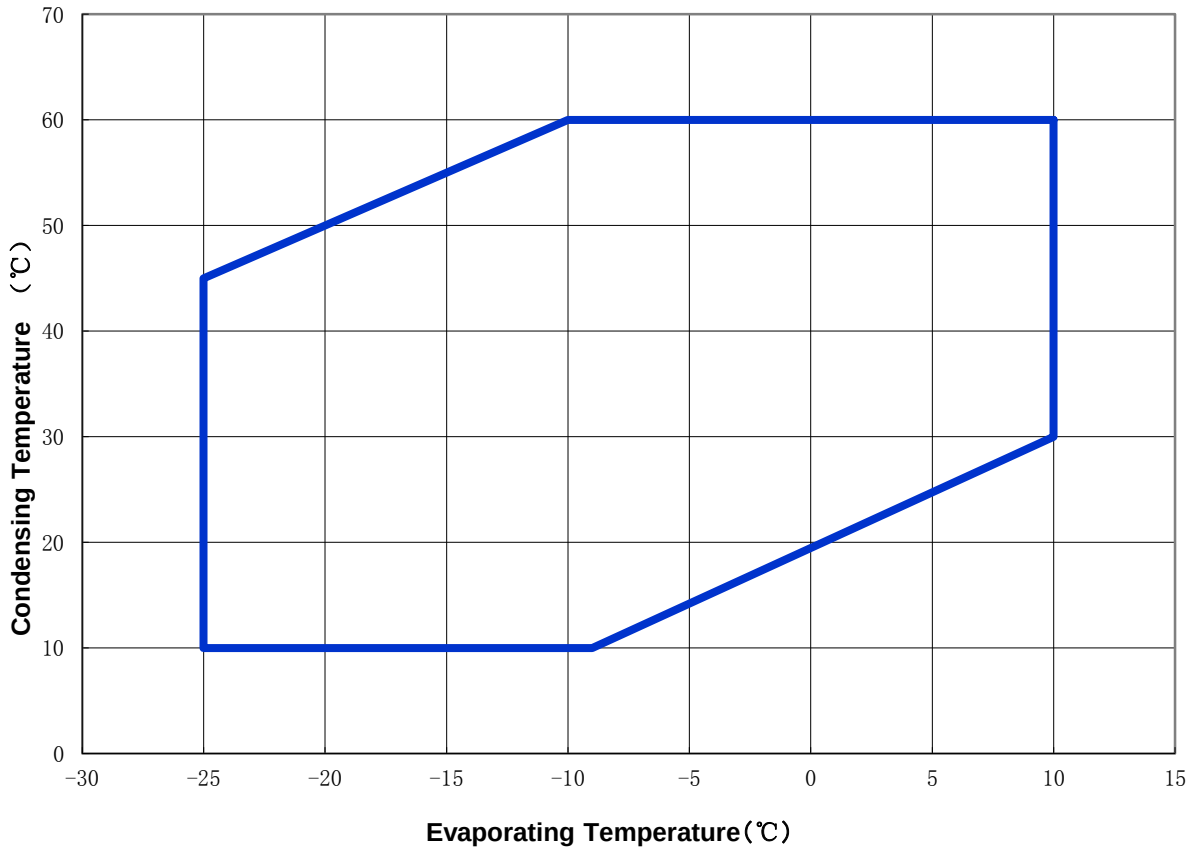
X——CAPACITY(W) OR POWER(W) OR CURRENT(A)

S——EVAPORATING TEMP, ° C

D——CONDENSING TEMP, ° C

Operating Envelope

Refrigerant : R404A

Suction Gas Temp:18.5℃

Sub Cooled: 0 K