SPECIFICATIONS OF COMPRESSOR

Model No: 3CC149LA0M

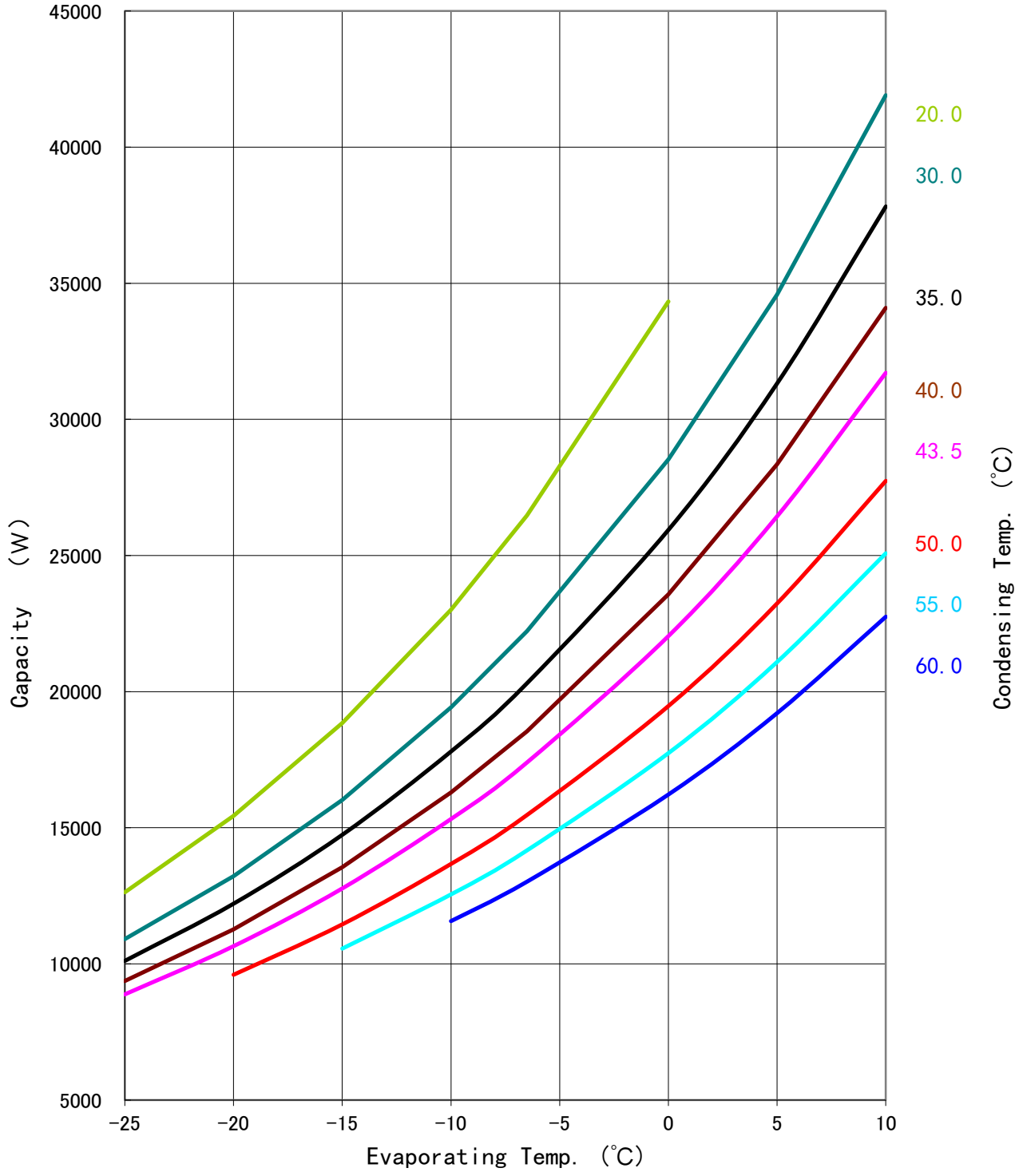
Output : 9 HP

GENERAL SPECIFICATIONS

Model No:		3CC149LA0M
Application		
Evaporating Temp Range	(℃)	-25.0 ～ 10.0
Refrigerant		R404A
Compressor Cooling		Natural Cooling
Rated Performance		
Capacity	(W)	17,400
Input	(W)	7,200
Current	(A)	12.6
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)	148.8
Suction Line Connection	(Φmm OD)	25.4
Discharge Line Connection	(Φmm OD)	19.05
Oil	(ml)	2800 (FV68S)
Mass(Incl.Oil)	(kg)	69.5
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

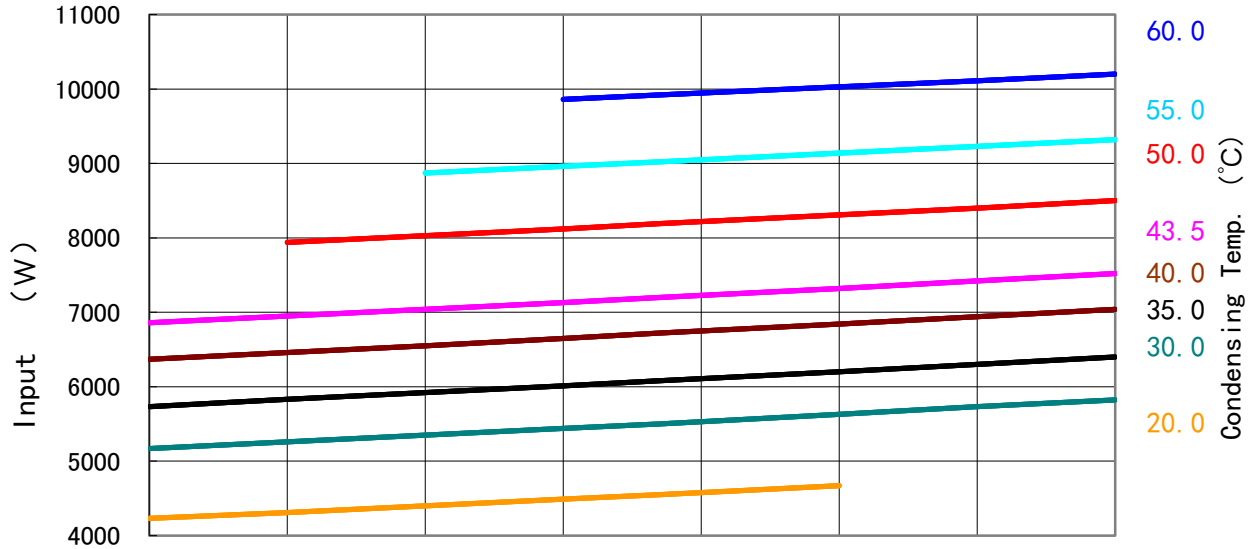
PERFORMANCE CURVE

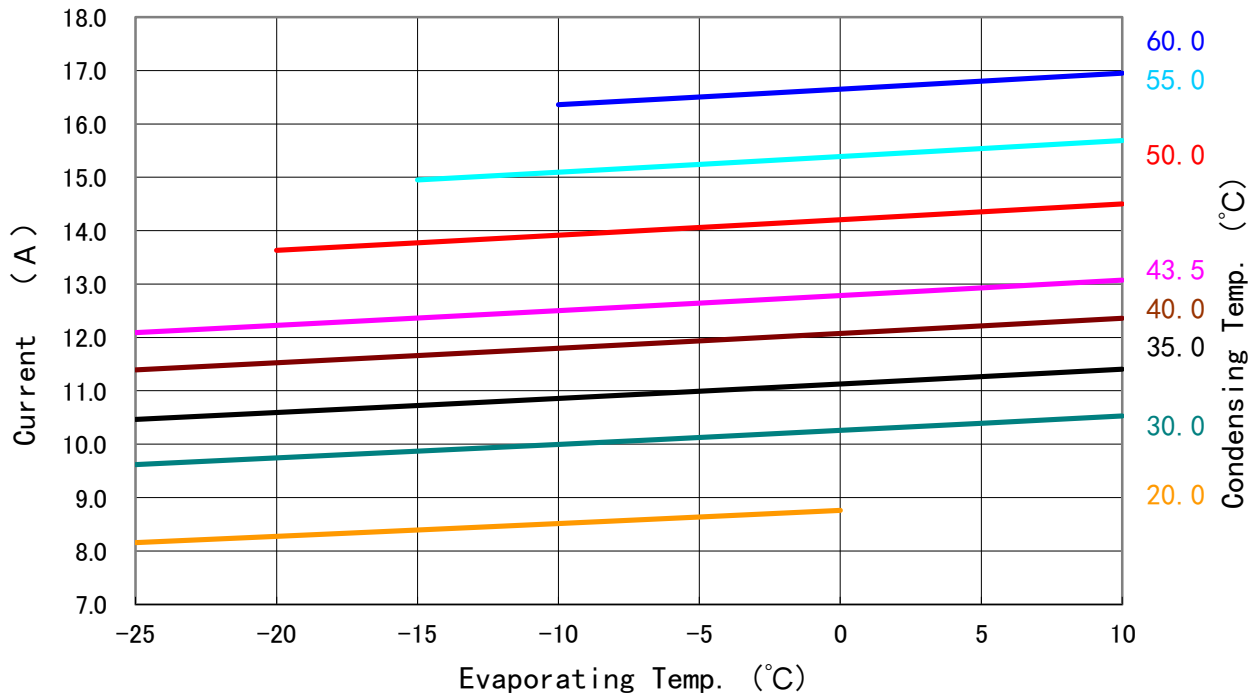
Code No.	3CC149LA0M
Power Source	3-PH 50Hz 380V
Condensing Temp.(℃)	20, 30, 35, 40, 43.5, 50, 55, 60
Suction Gas Superheat(K)	18.5
Sub Cooled(K)	0
Compressor Cooling	Natural Cooling
Refrigerant	R404A



PERFORMANCE CURVE

Code No.	3CC149LA0M
Power Source	3-PH 50Hz 380V
Condensing Temp. (°C)	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





PERFORMANCE DATA

Code No.	3CC149LA0M
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	12,630	15,430	18,840	23,010	26,470	34,330		
30.0	10,910	13,220	16,020	19,420	22,220	28,530	34,580	41,910
35.0	10,110	12,210	14,740	17,800	20,310	25,940	31,320	37,820
40.0	9,370	11,270	13,550	16,300	18,540	23,570	28,350	34,100
43.5	8,880	10,650	12,770	15,320	17,400	22,040	26,440	31,710
50.0		9,600	11,450	13,670	15,470	19,470	23,240	27,740
55.0			10,560	12,550	14,170	17,740	21,090	25,080
60.0				11,570	13,020	16,220	19,210	22,750

Input (W)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.5	0	5	10
20.0	4,230	4,310	4,400	4,490	4,550	4,670		
30.0	5,170	5,260	5,350	5,440	5,500	5,630	5,730	5,820
35.0	5,730	5,830	5,920	6,010	6,080	6,200	6,300	6,400
40.0	6,370	6,460	6,550	6,650	6,720	6,840	6,940	7,040
43.5	6,860	6,950	7,040	7,130	7,200	7,320	7,420	7,520
50.0		7,940	8,030	8,120	8,190	8,310	8,400	8,500
55.0			8,870	8,960	9,020	9,140	9,230	9,320
60.0				9,860	9,920	10,030	10,110	10,200

Current (A)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.5	0	5	10
20.0	8.2	8.3	8.4	8.5	8.6	8.8		
30.0	9.6	9.7	9.9	10.0	10.1	10.3	10.4	10.5
35.0	10.5	10.6	10.7	10.9	11.0	11.1	11.3	11.4
40.0	11.4	11.5	11.7	11.8	11.9	12.1	12.2	12.4
43.5	12.1	12.2	12.4	12.5	12.6	12.8	12.9	13.1
50.0		13.6	13.8	13.9	14.0	14.2	14.4	14.5
55.0			14.9	15.1	15.2	15.4	15.5	15.7
60.0				16.4	16.5	16.7	16.8	17.0

Massflow(kg/H)

Condensing Temp. (°C) \ Evaporating Temp. (°C)	-25	-20	-15	-10	-6.5	0	5	10
20.0	222	290	373	471	548	712		
30.0	246	301	373	463	536	694	836	995
35.0	258	307	374	459	530	686	826	986
40.0	271	313	375	456	524	677	817	977
43.5	281	318	375	453	520	671	810	971
50.0		327	376	449	512	659	798	959
55.0			378	445	506	651	789	951
60.0				442	500	642	780	943

COP(W/W)

Condensing Temp. (°C) \ Evaporating Temp. (°C)	-25	-20	-15	-10	-6.5	0	5	10
20.0	2.99	3.58	4.28	5.12	5.82	7.35		
30.0	2.11	2.51	2.99	3.57	4.04	5.07	6.03	7.20
35.0	1.76	2.09	2.49	2.96	3.34	4.18	4.97	5.91
40.0	1.47	1.74	2.07	2.45	2.76	3.45	4.09	4.84
43.5	1.29	1.53	1.81	2.15	2.42	3.01	3.56	4.22
50.0		1.21	1.43	1.68	1.89	2.34	2.77	3.26
55.0			1.19	1.40	1.57	1.94	2.28	2.69
60.0				1.17	1.31	1.62	1.90	2.23

Coefficients of Polynominal Formula

	Capacity (W)	Input (W)	Current (A)	Massflow (kg/H)
C1	4.919743E+04	3.527482E+03	6.707657E+00	7.478105E+02
C2	2.046051E+03	1.555729E+01	2.121410E-02	2.806439E+01
C3	-8.284951E+02	3.161182E+01	7.106607E-02	-1.807243E+00
C4	3.289925E+01	5.439255E-02	4.421131E-05	2.056625E-01
C5	-3.727088E+01	2.154034E-01	2.118217E-04	-4.418798E-02
C6	4.661481E+00	1.280204E+00	1.577635E-03	8.208669E-04
C7	1.920828E-01	6.052014E-06	6.744231E-08	4.745807E-06
C8	-3.931015E-01	-7.325261E-04	-2.999651E-07	4.722455E-03
C9	2.007804E-01	-3.015163E-03	-1.025365E-06	-1.416491E-04
C10	-9.487008E-07	7.173862E-08	2.915754E-11	-4.447120E-09

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

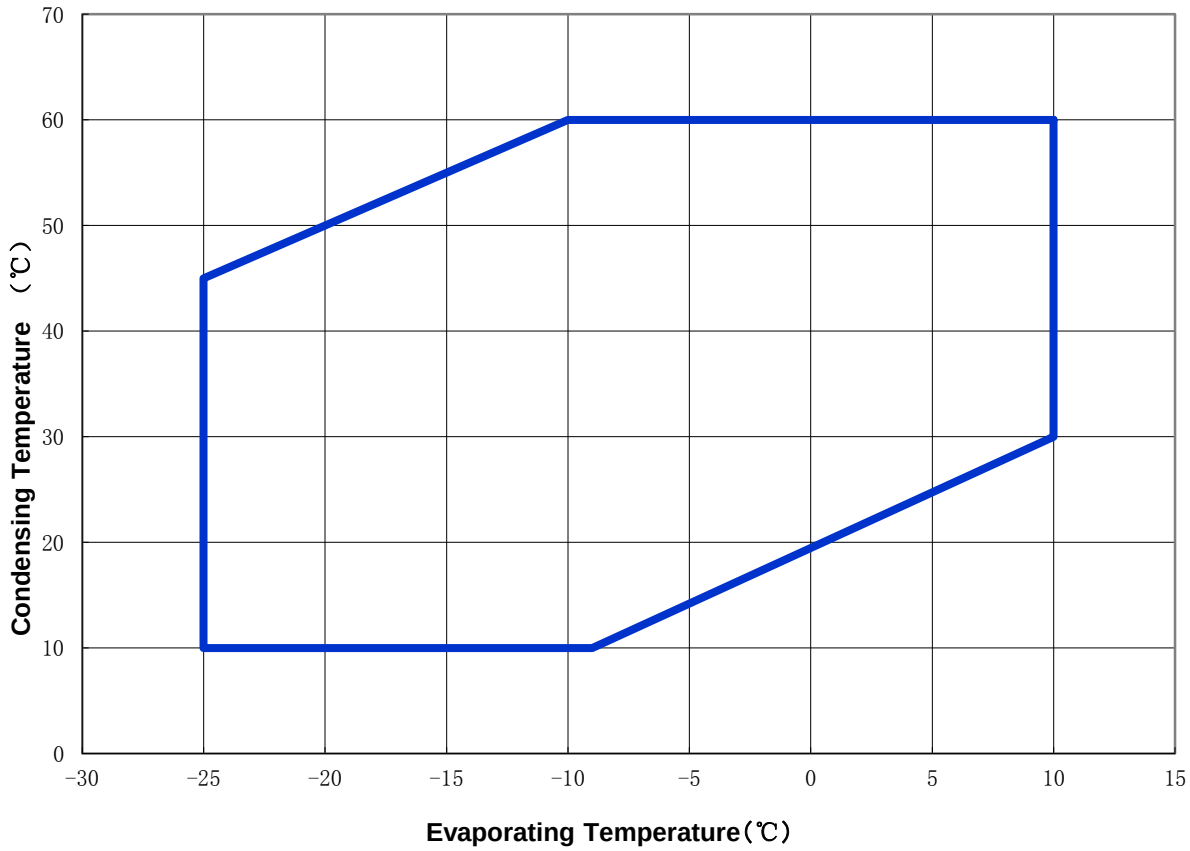
X——CAPACITY(W) OR POWER(W) OR CURRENT(A)

S——EVAPORATING TEMP, ° C

D——CONDENSING TEMP, ° C

Operating Envelope

Refrigerant : R404A

Suction Gas Temp:18.5℃

Sub Cooled: 0 K