SPECIFICATIONS OF COMPRESSOR

Model No: 3CC171LA0M

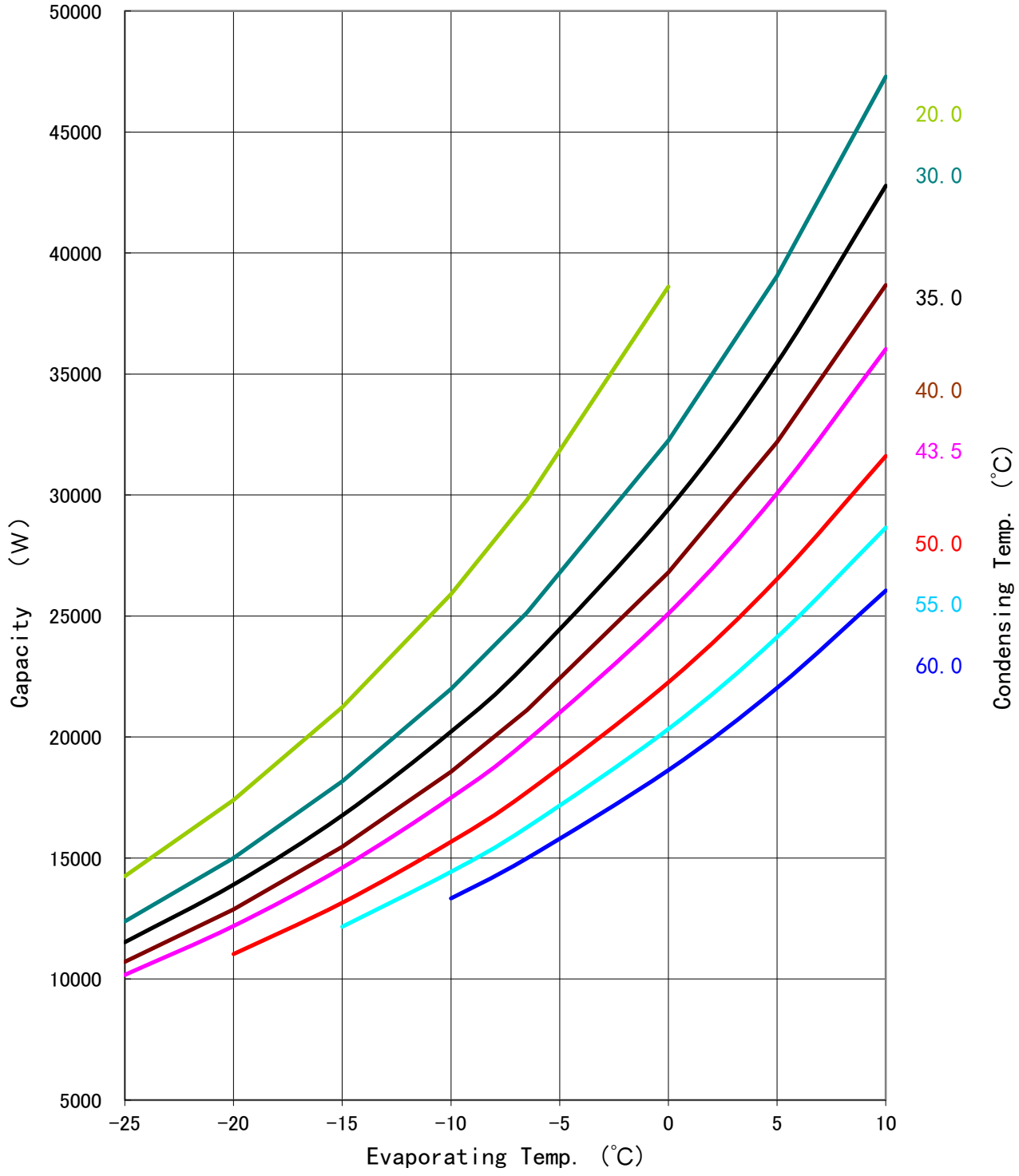
Output : 10 HP

GENERAL SPECIFICATIONS

Model No:		3CC171LA0M
Application		
Evaporating Temp Range	(℃)	-25.0 ～ 10.0
Refrigerant		R404A
Compressor Cooling		Natural Cooling
Rated Performance		
Capacity	(W)	19,850
Input	(W)	8,100
Current	(A)	14.2
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)	171.2
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)	96

PERFORMANCE CURVE

Code No.	3CC171LA0M
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.	3CC171LA0M
Power Source	3-PH 50Hz 380V
Condensing Temp. (℃)	20, 30, 35, 40, 43.5, 50, 55, 60
Suction Gas Superheat(K)	18.5
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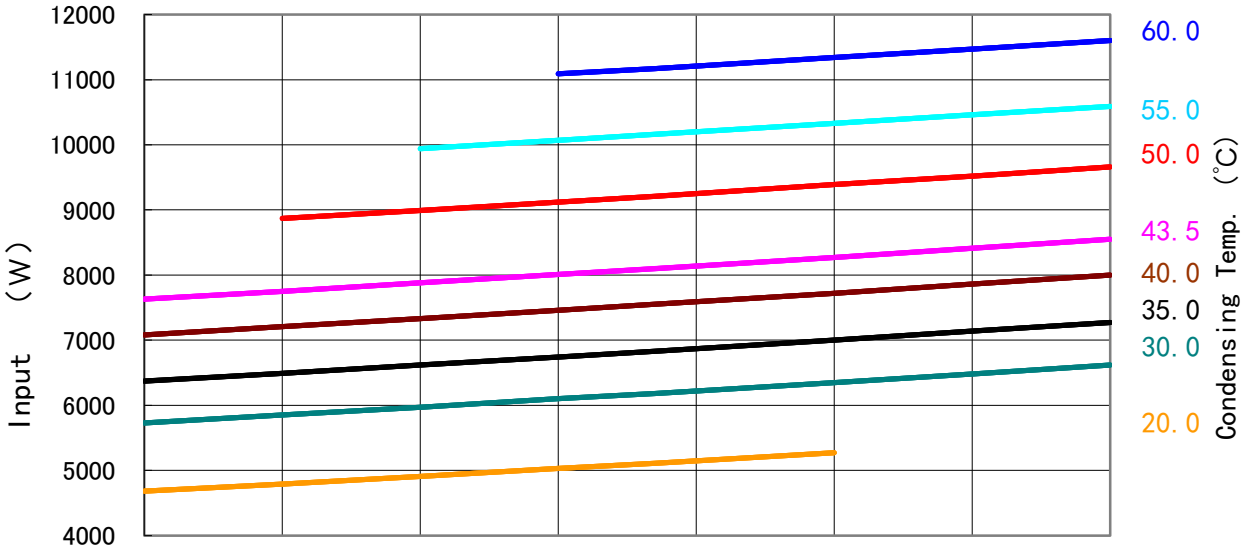
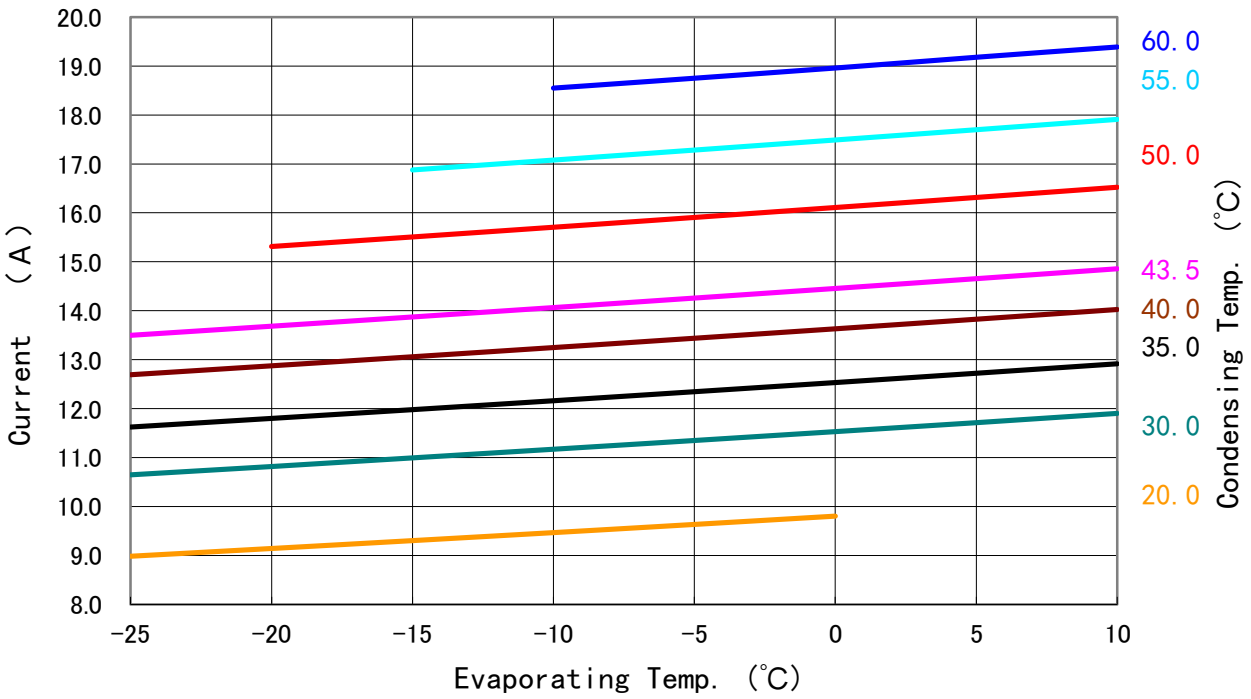
Compressor Cooling	Natural Cooling
Refrigerant	R404A





PERFORMANCE DATA

Code No.	3CC171LA0M
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	14,250	17,390	21,230	25,910	29,800	38,610		
30.0	12,380	15,000	18,160	21,990	25,140	32,250	39,050	47,290
35.0	11,520	13,900	16,760	20,220	23,050	29,410	35,470	42,780
40.0	10,710	12,870	15,460	18,570	21,110	26,800	32,190	38,670
43.5	10,170	12,190	14,600	17,490	19,850	25,100	30,070	36,030
50.0		11,030	13,150	15,670	17,720	22,260	26,530	31,610
55.0			12,160	14,430	16,270	20,330	24,130	28,650
60.0				13,330	14,990	18,630	22,030	26,050

Input (W)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.5	0	5	10
20.0	4,680	4,790	4,910	5,030	5,110	5,270		
30.0	5,730	5,850	5,970	6,100	6,180	6,350	6,480	6,620
35.0	6,370	6,490	6,620	6,740	6,830	7,000	7,140	7,270
40.0	7,080	7,210	7,330	7,460	7,550	7,720	7,860	8,000
43.5	7,630	7,750	7,880	8,010	8,100	8,270	8,410	8,550
50.0		8,870	8,990	9,120	9,210	9,390	9,520	9,660
55.0			9,940	10,070	10,160	10,330	10,460	10,590
60.0				11,090	11,170	11,340	11,470	11,600

Current (A)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.5	0	5	10
20.0	9.0	9.1	9.3	9.5	9.6	9.8		
30.0	10.6	10.8	11.0	11.2	11.3	11.5	11.7	11.9
35.0	11.6	11.8	12.0	12.2	12.3	12.5	12.7	12.9
40.0	12.7	12.9	13.1	13.2	13.4	13.6	13.8	14.0
43.5	13.5	13.7	13.9	14.1	14.2	14.5	14.7	14.9
50.0		15.3	15.5	15.7	15.8	16.1	16.3	16.5
55.0			16.9	17.1	17.2	17.5	17.7	17.9
60.0				18.6	18.7	19.0	19.2	19.4

Massflow(kg/H)

Condensing Temp. (°C) \ Evaporating Temp. (°C)	-25	-20	-15	-10	-6.5	0	5	10
20.0	272	347	438	543	627	801		
30.0	287	351	433	533	614	787	941	1,114
35.0	294	353	430	527	607	780	936	1,111
40.0	302	355	428	522	601	773	930	1,107
43.5	307	356	426	519	596	768	926	1,105
50.0		359	423	512	588	759	918	1,101
55.0			421	507	581	752	912	1,098
60.0				502	575	745	907	1,095

COP(W/W)

Condensing Temp. (°C) \ Evaporating Temp. (°C)	-25	-20	-15	-10	-6.5	0	5	10
20.0	3.04	3.63	4.32	5.15	5.83	7.33		
30.0	2.16	2.56	3.04	3.60	4.07	5.08	6.03	7.14
35.0	1.81	2.14	2.53	3.00	3.37	4.20	4.97	5.88
40.0	1.51	1.79	2.11	2.49	2.80	3.47	4.10	4.83
43.5	1.33	1.57	1.85	2.18	2.45	3.04	3.58	4.21
50.0		1.24	1.46	1.72	1.92	2.37	2.79	3.27
55.0			1.22	1.43	1.60	1.97	2.31	2.71
60.0				1.20	1.34	1.64	1.92	2.25

Coefficients of Polynominal Formula

	Capacity (W)	Input (W)	Current (A)	Massflow (kg/H)
C1	5.485873E+04	3.976445E+03	7.479969E+00	8.299195E+02
C2	2.282732E+03	1.982443E+01	2.876399E-02	2.841808E+01
C3	-9.036693E+02	3.550681E+01	7.846925E-02	-1.448069E+00
C4	3.676970E+01	5.416573E-02	7.092606E-05	1.996329E-01
C5	-4.109748E+01	3.055398E-01	2.950582E-04	2.257491E-02
C6	5.012994E+00	1.453973E+00	1.882444E-03	6.657112E-04
C7	2.147241E-01	5.247927E-04	1.051360E-07	1.012843E-06
C8	-4.377890E-01	1.954885E-04	-4.046527E-07	5.421434E-03
C9	2.192669E-01	-3.258891E-03	-1.083589E-06	-4.099257E-05
C10	-1.120743E-06	5.901342E-08	2.657553E-11	-5.972162E-10

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

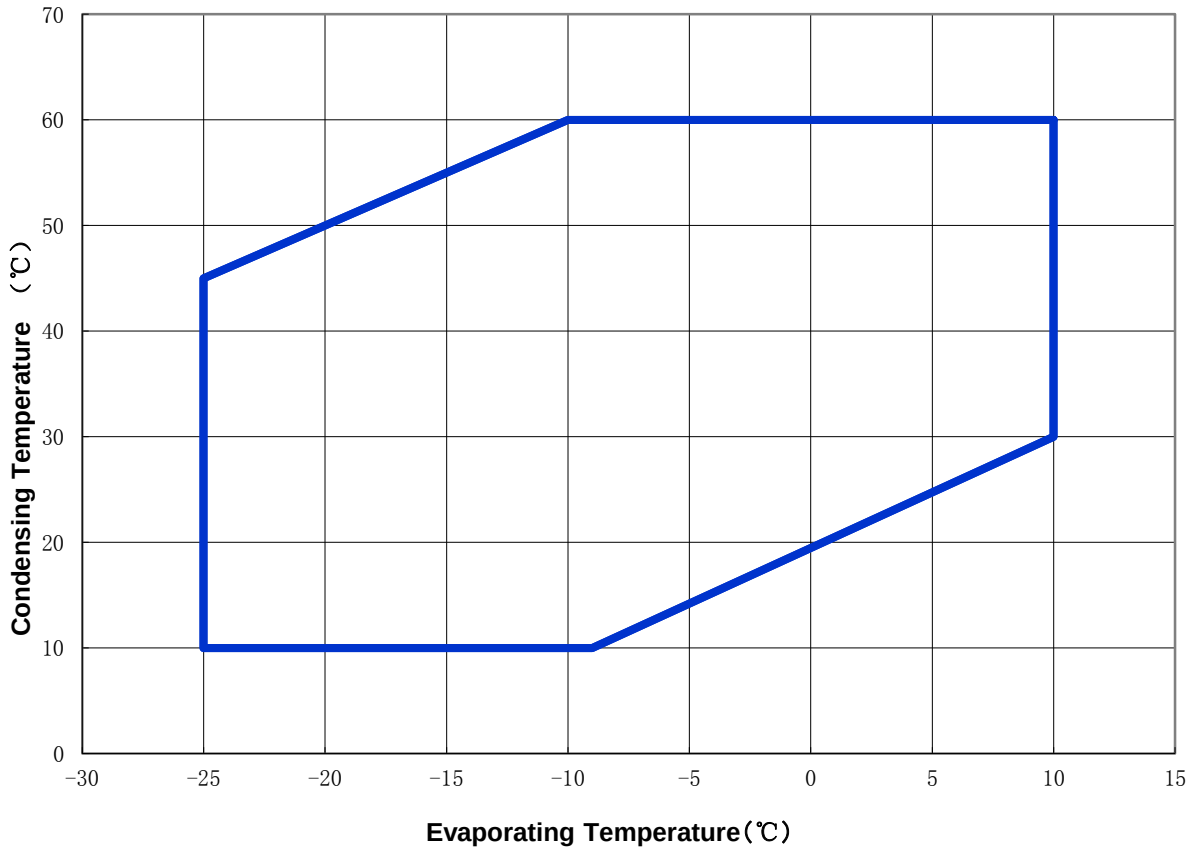
X——CAPACITY(W) OR POWER(W) OR CURRENT(A)

S——EVAPORATING TEMP, ° C

D——CONDENSING TEMP, ° C

Operating Envelope

Refrigerant : R404A

Suction Gas Temp:18.5℃

Sub Cooled: 0 K