SPECIFICATIONS OF COMPRESSOR

Model No: 3CB100SA0M

Output : 6 HP

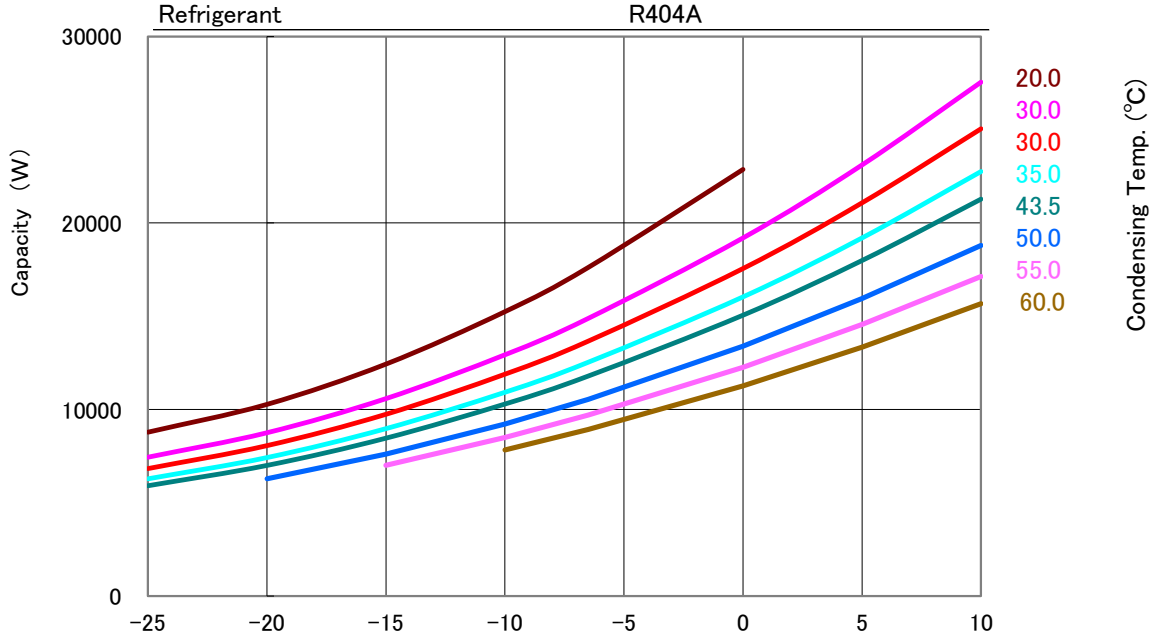
02/Sep/19

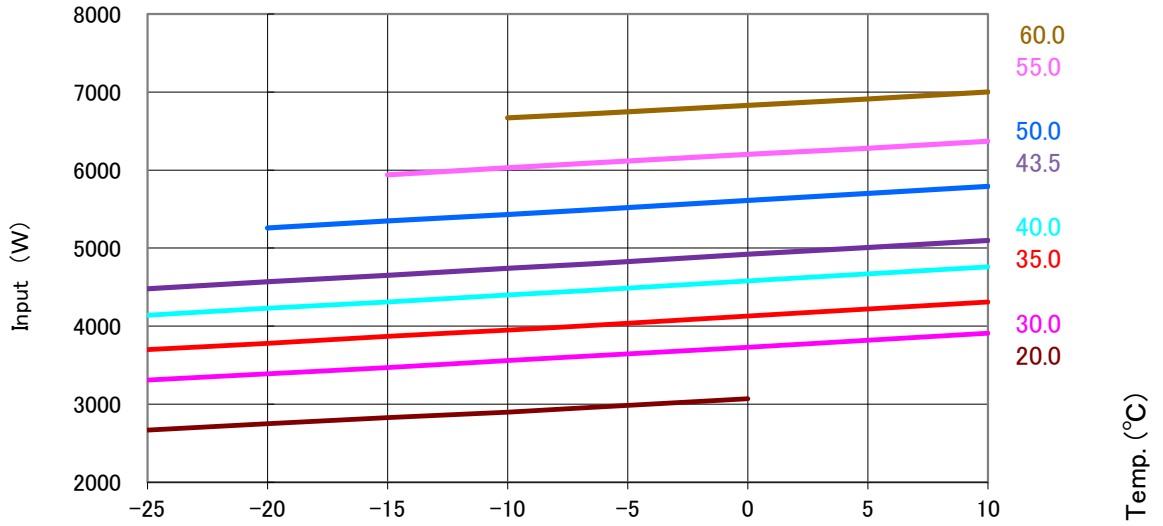
GENERAL SPECIFICATIONS

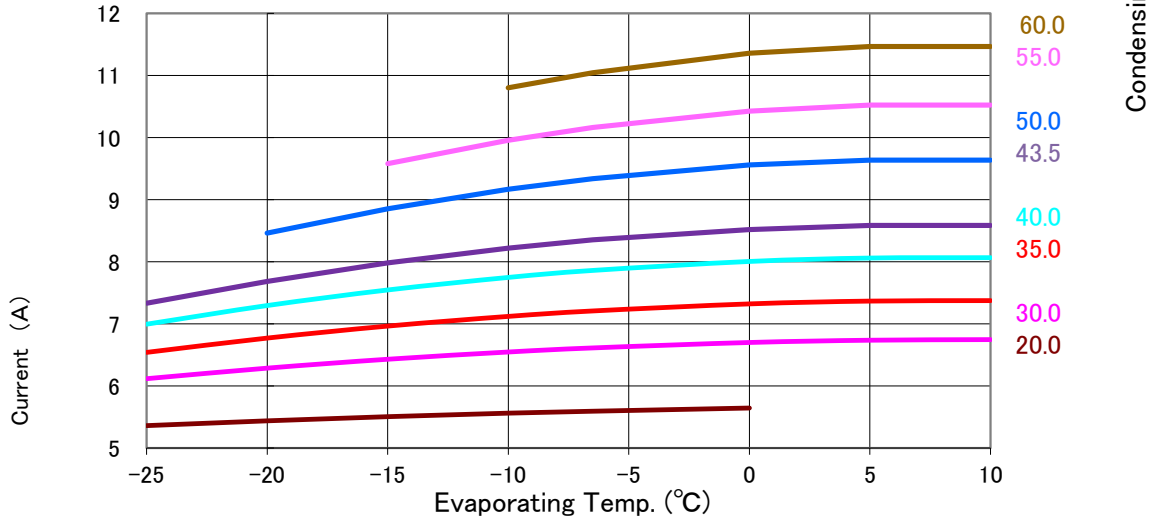
Model No:		3CB100SA0M
Application		
Evaporating Temp Range	(℃)	−25 ～ 10
Refrigerant		R404A
Compressor Cooling		Natural Cooling
Rated Performance		
Capacity	(W)	11800
Input	(W)	4,800
Current	(A)	8.4
Revolution	(min^{-1})	2950
Sound Level	(dB(A))	65max
Rating Conditions		
Power Source		3-PH 50Hz 380-415V
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)	100.0
Suction Line Connection	(Φmm 0D)	22.22
Discharge Line Connection	(Φmm 0D)	12.7
Oil	(ml)	1700 (FV68S)
Mass(Incl.Oil)	(kg)	38
Motor		
Type		3-PH Induction Motor(3IR)
Pole		2
Rated Power Source		3-PH 50Hz 380-415V
Voltage Range	(V)	342～456
Starting Current	(A)	−

PERFORMANCE CURVE

Code No.	3CB100SA0M
Power Source	3-PH 50Hz 380-415V
Condensing Temp.(℃)	20、30、35、40、43.5、50、55、60
Suction Gas Temp.(℃)	18.5
Sub Cooled(K)	0
Compressor Cooling	Natural Cooling
Refrigerant	R404A







PERFORMANCE DATA

Code No.	3CB100SA0M
Power Source	3-PH 50Hz 380-415V
Condensing Temp.(℃)	20、30、35、40、43.5、50、55、60
Suction Gas Temp.(℃)	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	8,790	10,280	12,440	15,250	17,620	22,870		
30.0	7,450	8,760	10,590	12,940	14,890	19,200	23,110	27,550
35.0	6,840	8,070	9,750	11,900	13,670	17,560	21,080	25,050
40.0	6,290	7,430	8,980	10,930	12,540	16,040	19,200	22,760
43.5	5,920	7,010	8,470	10,300	11,800	15,060	17,990	21,280
50.0		6,300	7,610	9,230	10,550	13,400	15,950	18,800
55.0			7,020	8,500	9,700	12,270	14,570	17,130
60.0				7,840	8,940	11,270	13,350	15,670

Input （W）

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.5	0	5	10
20.0	2,670	2,750	2,830	2,900	2,960	3,070		
30.0	3,310	3,390	3,470	3,560	3,620	3,730	3,820	3,910
35.0	3,700	3,780	3,870	3,950	4,010	4,130	4,220	4,310
40.0	4,140	4,230	4,310	4,400	4,460	4,580	4,670	4,760
43.5	4,480	4,570	4,650	4,740	4,800	4,920	5,010	5,100
50.0		5,260	5,350	5,430	5,490	5,610	5,700	5,790
55.0			5,940	6,030	6,090	6,200	6,280	6,370
60.0				6,670	6,720	6,830	6,910	7,000

Current （A）

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.5	0	5	10
20.0	5.4	5.4	5.5	5.6	5.6	5.6		
30.0	6.1	6.3	6.4	6.5	6.6	6.7	6.7	6.7
35.0	6.5	6.8	7.0	7.1	7.2	7.3	7.4	7.4
40.0	7.0	7.3	7.5	7.7	7.9	8.0	8.1	8.1
43.5	7.3	7.7	8.0	8.2	8.4	8.5	8.6	8.6
50.0		8.5	8.9	9.2	9.3	9.6	9.6	9.6
55.0			9.6	10.0	10.2	10.4	10.5	10.5
60.0				10.8	11.0	11.4	11.5	11.5

Coefficients of Polynominal Formula

	Capacity （W）	Input （W）	Current （A）
C1	3.169732E+04	2.308059E+03	4.289258E+00
C2	1.239230E+03	1.339731E+01	1.923126E-02
C3	-4.939793E+02	1.940208E+01	4.316197E-02
C4	1.718048E+01	5.997209E-02	8.855067E-04
C5	-1.957053E+01	2.318891E-01	-9.077871E-04
C6	2.565437E+00	9.330741E-01	1.242477E-03
C7	-2.012599E-03	-5.392548E-06	4.196604E-07
C8	-2.259415E-01	-9.077429E-04	-4.729153E-05
C9	8.619154E-02	-2.912073E-03	2.017987E-05
C10	-7.364922E-08	3.472528E-08	3.135631E-11

Note:The polynomial coefficients subject to change without notice.

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

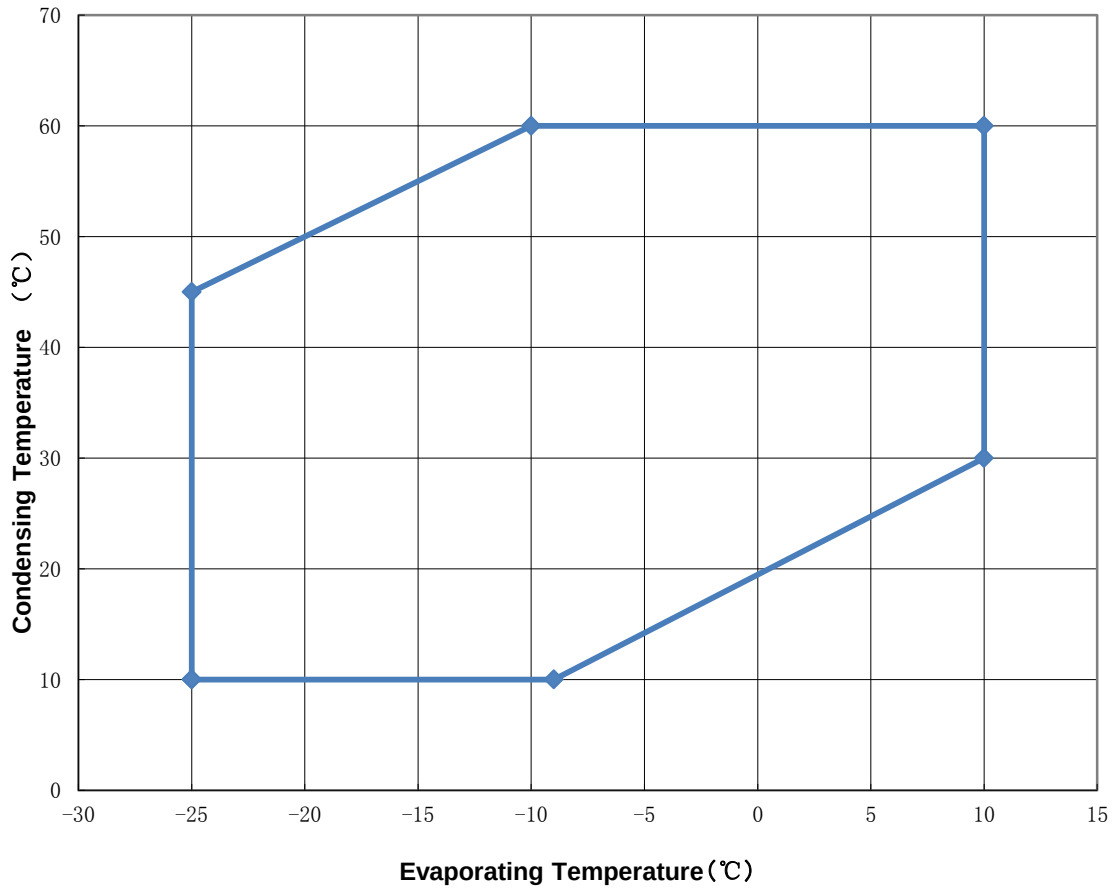
X——CAPACITY(W) OR POWER(W) OR CURRENT(A)

S——EVAPORATING TEMP, °C

D——CONDENSING TEMP, °C

Operating Envelope

Refrigerant : R404A

Suction Gas Temp:18.5℃

Sub Cooled: 0 K