SPECIFICATIONS OF COMPRESSOR

Model No: 3CB110SA0M

Output : 7 HP

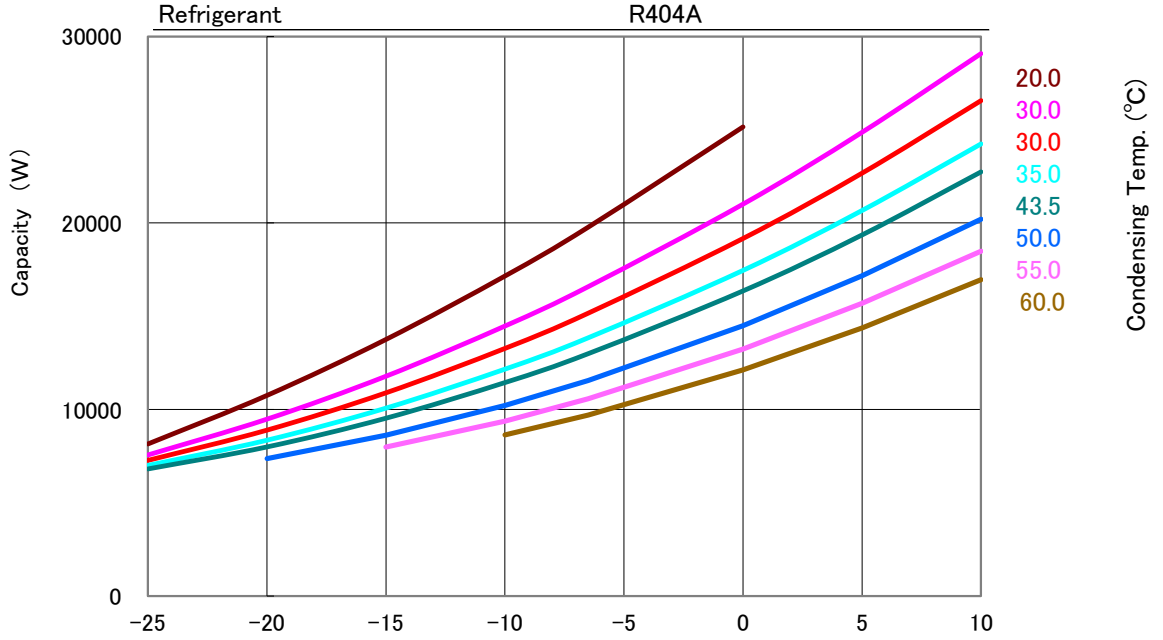
02/Sep/19

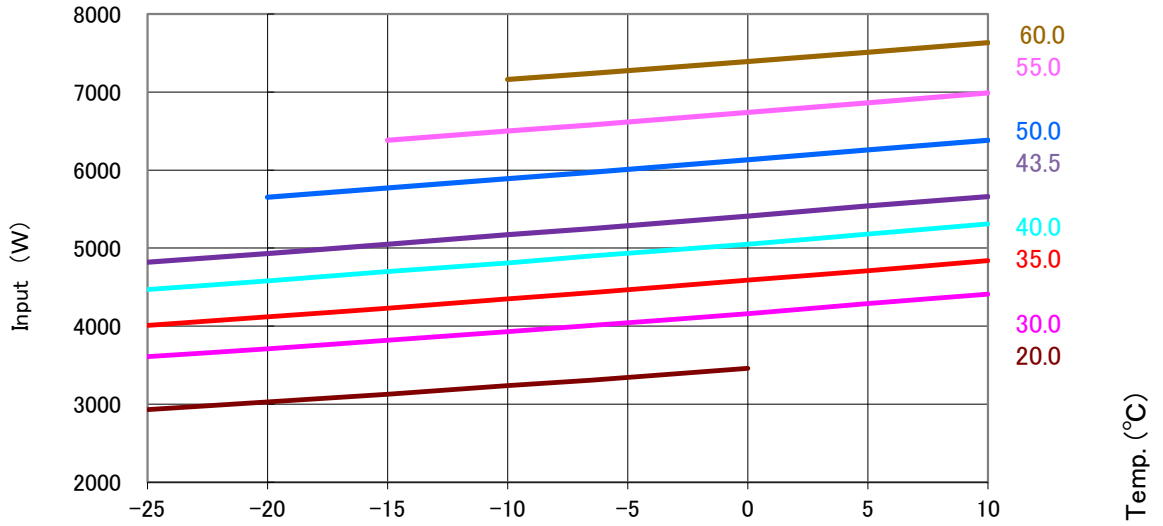
GENERAL SPECIFICATIONS

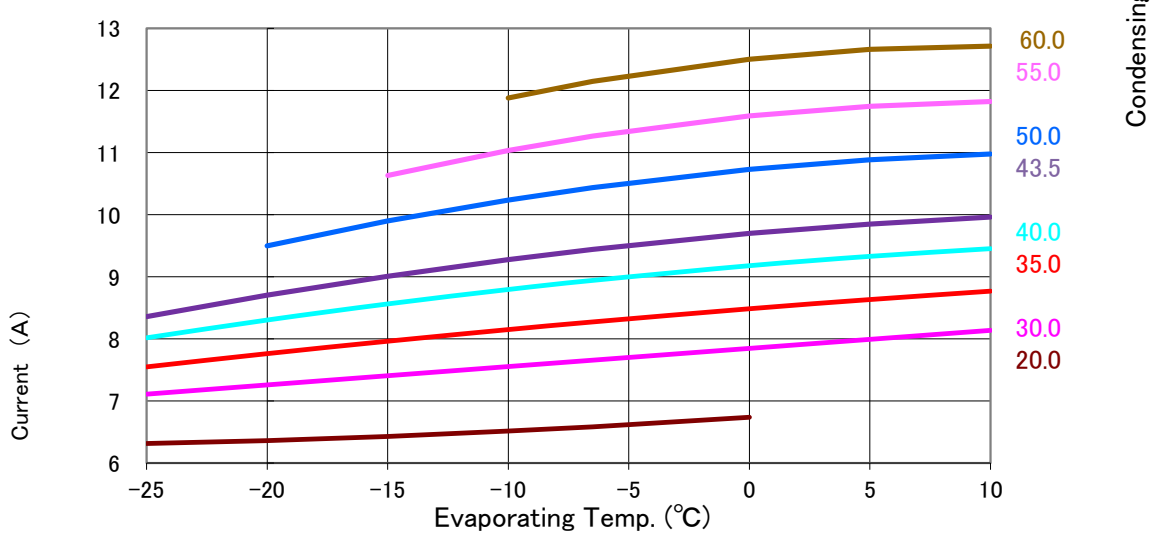
Model No:		3CB110SA0M
Application		
Evaporating Temp Range	(℃)	−25 ～ 10
Refrigerant		R404A
Compressor Cooling		Natural Cooling
Rated Performance		
Capacity	(W)	13,000
Input	(W)	5,250
Current	(A)	9.4
Revolution	(min^{-1})	2950
Sound Level	(dB(A))	65max
Rating Conditions		
Power Source		3-PH 50Hz 380-415V
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)	110.2
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.	3CB110SA0M
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.	3CB110SA0M
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	8,160	10,760	13,760	17,160	19,780	25,150		
30.0	7,570	9,490	11,790	14,480	16,590	21,010	24,860	29,080
35.0	7,280	8,900	10,900	13,280	15,170	19,170	22,670	26,560
40.0	7,010	8,360	10,080	12,170	13,850	17,460	20,670	24,240
43.5	6,820	8,000	9,540	11,450	13,000	16,360	19,360	22,740
50.0		7,370	8,620	10,220	11,560	14,500	17,170	20,200
55.0			7,990	9,390	10,580	13,240	15,690	18,490
60.0				8,640	9,710	12,130	14,380	16,970

Input （W）

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.5	0	5	10
20.0	2,930	3,030	3,130	3,240	3,310	3,460		
30.0	3,610	3,710	3,820	3,930	4,010	4,160	4,290	4,410
35.0	4,010	4,120	4,230	4,350	4,430	4,590	4,710	4,840
40.0	4,470	4,580	4,700	4,810	4,900	5,050	5,180	5,310
43.5	4,820	4,930	5,050	5,170	5,250	5,410	5,540	5,660
50.0		5,650	5,770	5,890	5,970	6,130	6,260	6,380
55.0			6,380	6,500	6,580	6,740	6,860	6,990
60.0				7,160	7,240	7,390	7,510	7,630

Current （A）

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.5	0	5	10
20.0	6.3	6.4	6.4	6.5	6.6	6.7		
30.0	7.1	7.3	7.4	7.6	7.7	7.8	8.0	8.1
35.0	7.5	7.8	8.0	8.1	8.3	8.5	8.6	8.8
40.0	8.0	8.3	8.6	8.8	8.9	9.2	9.3	9.5
43.5	8.4	8.7	9.0	9.3	9.4	9.7	9.8	10.0
50.0		9.5	9.9	10.2	10.4	10.7	10.9	11.0
55.0			10.6	11.0	11.3	11.6	11.7	11.8
60.0				11.9	12.1	12.5	12.7	12.7

Coefficients of Polynominal Formula

	Capacity （W）	Input （W）	Current （A）
C1	3.519027E+04	2.606013E+03	5.201334E+00
C2	1.242664E+03	1.978017E+01	4.032098E-02
C3	-5.607124E+02	2.410621E+01	5.496820E-02
C4	8.525532E+00	1.274394E-01	1.673445E-03
C5	-2.039977E+01	2.205943E-01	-8.375288E-04
C6	2.938347E+00	9.281031E-01	1.110531E-03
C7	-8.968153E-05	1.257325E-04	5.140889E-07
C8	-2.792250E-02	-1.868267E-03	-5.622213E-05
C9	1.105023E-01	-2.467437E-03	1.574767E-05
C10	-8.452700E-11	2.351302E-08	3.839134E-11

Note:The polynomial coefficients subject to change without notice.

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

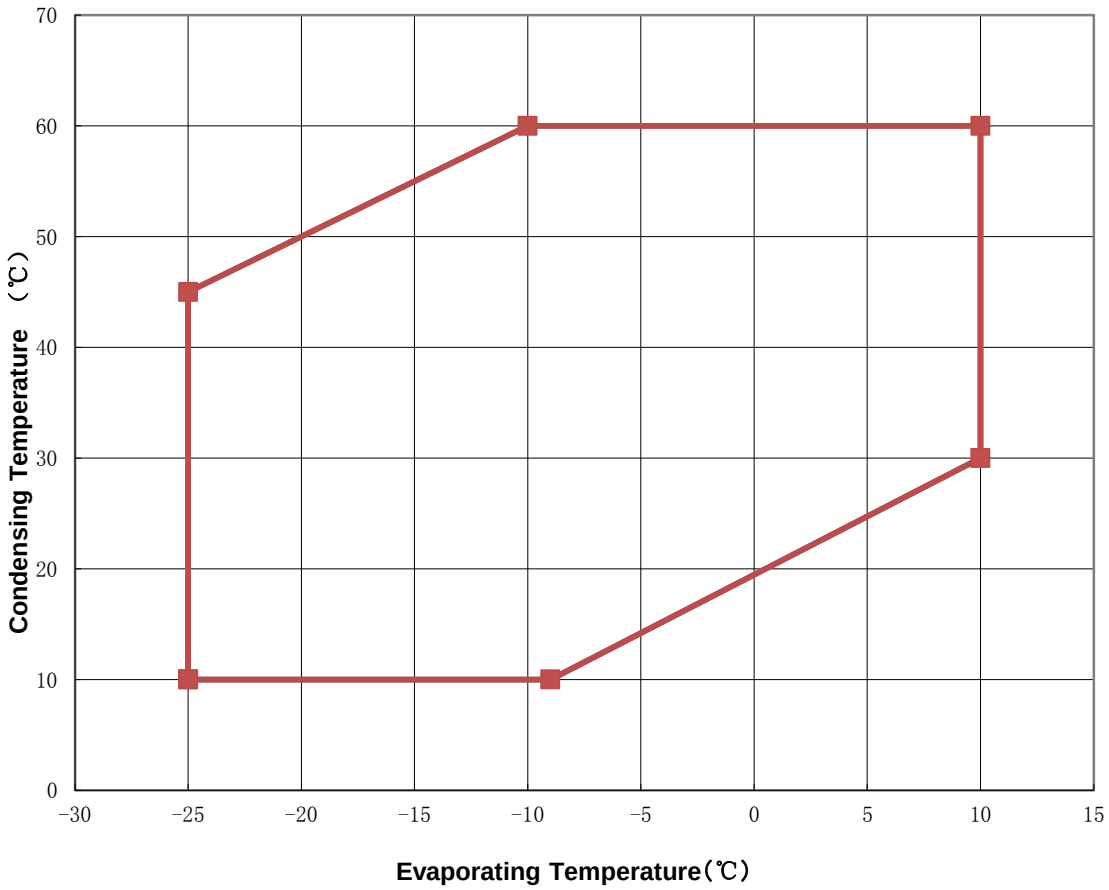
X——CAPACITY(W) OR POWER(W) OR CURRENT(A)

S——EVAPORATING TEMP, °C

D——CONDENSING TEMP, °C

Operating Envelope

Refrigerant : R404A

Suction Gas Temp:18.5℃

Sub Cooled: 0 K