SPECIFICATIONS OF COMPRESSOR

Model No: C-SBN373H8A

Output : 5 HP

Temporary

Panasonic Appliances Compressor (Dalian) Co.,Ltd.

27/Dec/19

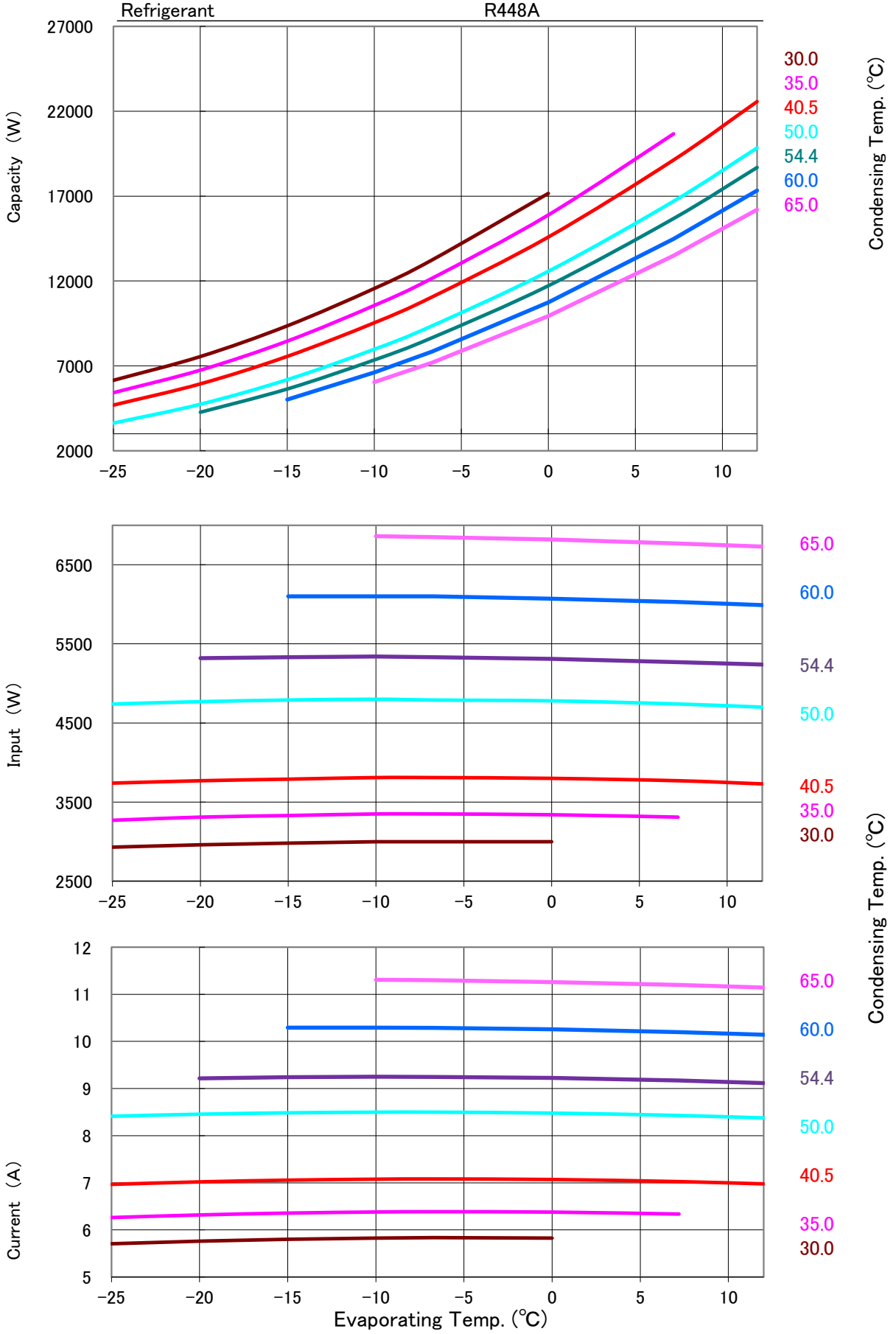
GENERAL SPECIFICATIONS

Model No:		C-SBN373H8A
Application		
Evaporating Temp Range	(℃)	-25 ～ 12
Refrigerant		R448A
Compressor Cooling		Natural Cooling
Rated Performance		
Capacity	(W)	15680 /19240
Input	(W)	5270 / 6260
Current	(A)	9.2/ 9.3
Revolution	(min^{-1})	2950 / 3450
Sound Level	(dB(A))	62max / 67max
Rating Conditions		
Power Source		3-PH 50Hz 380V / 60Hz 440V
Evaporating Temp	(℃)	7.2
Condensing Temp	(℃)	54.4
Suction Gas Temp	(℃)	18.3
Liquid Temp	(℃)	46.1
Ambient Temp	(℃)	35.0
Measuring Point of Sound Level		
Distance from the Compressor	(m)	1.0
Compressor		
Design		Hermetic Scroll
Displacement	(cm3)	83.4
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 / 60Hz 440-460V
Voltage Range	(V)	342～456 / 396～506

Panasonic Appliances Compressor (Dalian) Co.,Ltd.

PERFORMANCE CURVE

Code No.	C-SBN373H8A
Power Source	3-PH 50Hz 380V
Condensing Temp.(℃)	30、35、40.5、50、54.4、60、65
Super Heating (K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R448A



PERFORMANCE DATA

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Condensing Temp.(℃)	30、35、40.5、50、54.4、60、65
Super Heating (K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R448A

Capacity （W）

Condensing Temp.(℃) \ Evaporating Temp.(℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	6,150	7,550	9,360	11,560	13,230	17,160		
35.0	5,420	6,750	8,460	10,560	12,150	15,890	20,670	
40.5	4,690	5,940	7,560	9,540	11,050	14,590	19,130	22,570
50.0	3,630	4,740	6,190	7,980	9,350	12,570	16,700	19,840
54.4		4,270	5,640	7,350	8,650	11,720	15,680	18,690
60.0			5,020	6,610	7,840	10,740	14,480	17,330
65.0				6,040	7,190	9,940	13,500	16,210

Input （W）

Condensing Temp.(℃) \ Evaporating Temp.(℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	2,930	2,960	2,980	3,000	3,000	3,000		
35.0	3,270	3,310	3,330	3,350	3,350	3,340	3,310	
40.5	3,740	3,770	3,790	3,810	3,810	3,800	3,770	3,730
50.0	4,740	4,770	4,790	4,800	4,790	4,780	4,740	4,700
54.4		5,320	5,330	5,340	5,330	5,310	5,270	5,240
60.0			6,100	6,100	6,100	6,070	6,030	5,990
65.0				6,860	6,850	6,820	6,770	6,730

Current （A）

Condensing Temp.(℃) \ Evaporating Temp.(℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	5.7	5.8	5.8	5.8	5.8	5.8		
35.0	6.3	6.3	6.4	6.4	6.4	6.4	6.3	
40.5	7.0	7.0	7.1	7.1	7.1	7.1	7.0	7.0
50.0	8.4	8.5	8.5	8.5	8.5	8.5	8.4	8.4
54.4		9.2	9.2	9.3	9.2	9.2	9.2	9.1
60.0			10.3	10.3	10.3	10.3	10.2	10.1
65.0				11.3	11.3	11.3	11.2	11.1

Coefficients of Polynominal Formula

	Capacity （W）	Input （W）	Current （A）
C1	2.643558E+04	2.354148E+03	4.134217E+00
C2	8.309388E+02	-2.781019E+00	-3.604138E-03
C3	-3.568873E+02	-1.909505E+01	1.089885E-02
C4	9.626407E+00	-2.233314E-01	-3.651491E-04
C5	-6.890357E+00	6.050867E-02	7.232311E-05
C6	1.588948E+00	1.351243E+00	1.519504E-03
C7	-4.648907E-05	2.181234E-04	2.997000E-07
C8	-5.751834E-02	4.808834E-04	1.471445E-06
C9	1.586497E-02	-1.583051E-03	-1.948106E-06
C10	-2.760215E-08	-1.518719E-09	-1.017295E-11

Note:The polynomial coefficients subject to change without notice.

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

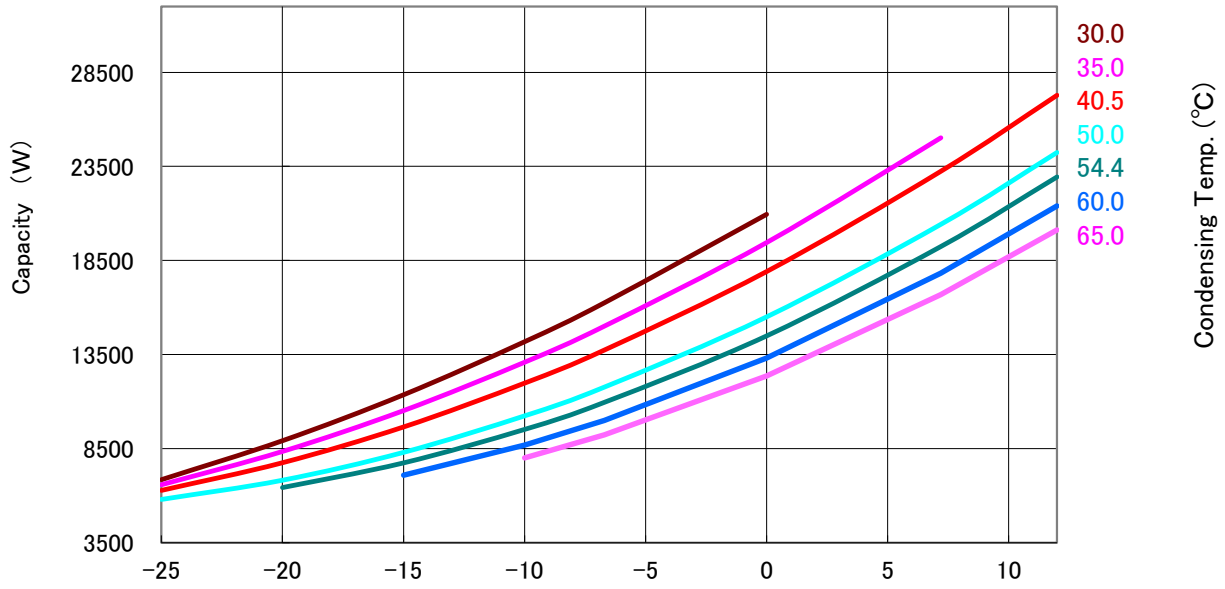
X——CAPACITY(W) OR POWER(W) OR CURRENT(A)

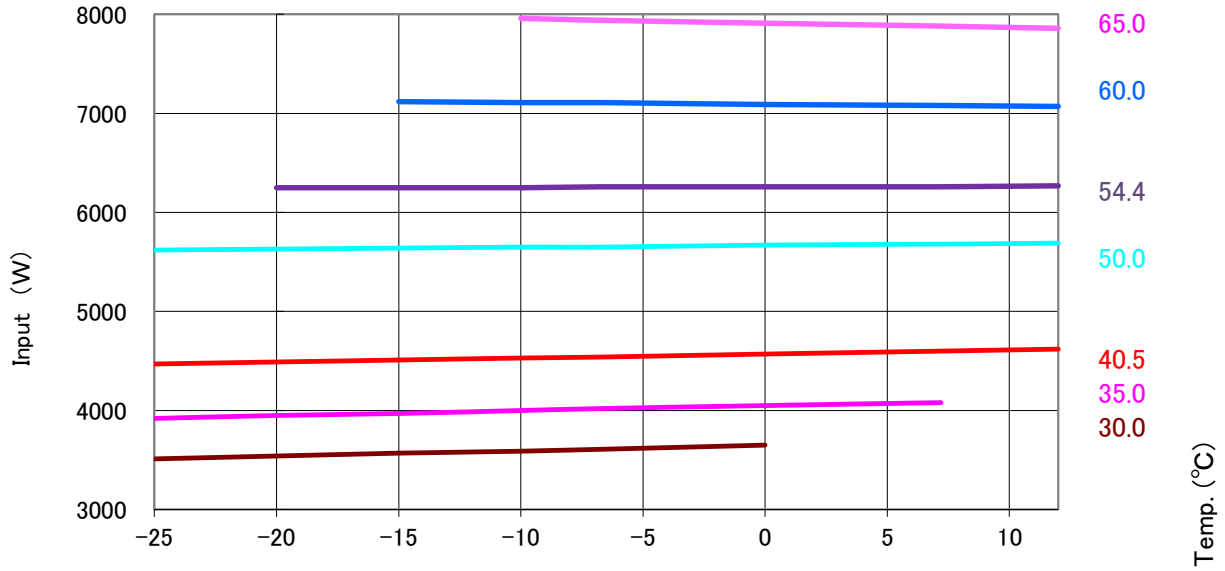
S——EVAPORATING TEMP, °C

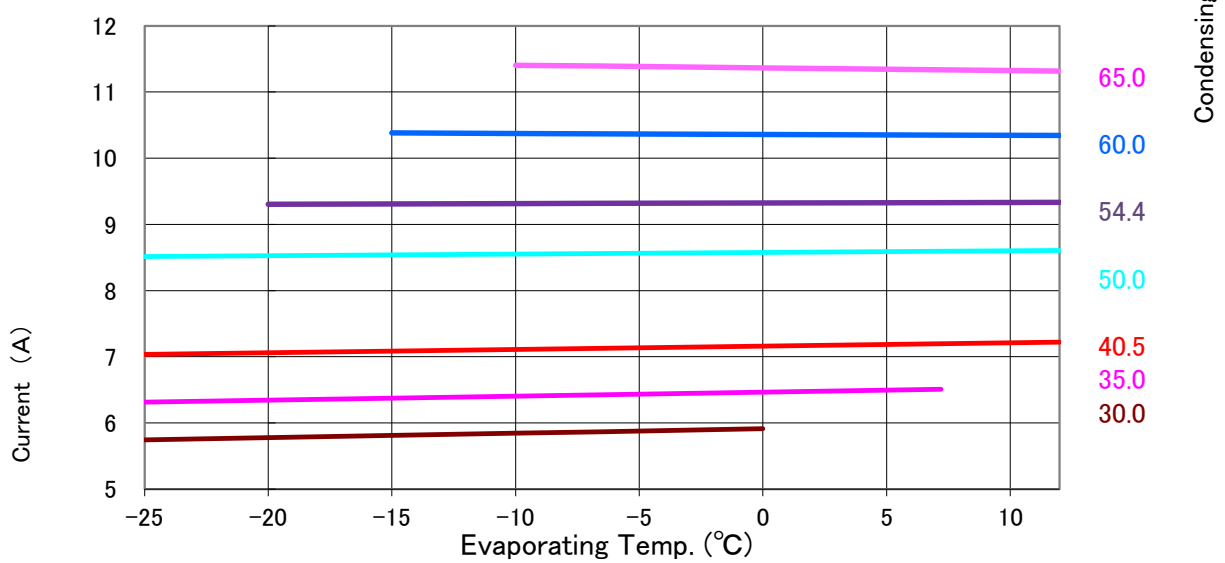
D——CONDENSING TEMP, °C

PERFORMANCE CURVE

Code No.	C-SBN373H8A
Power Source	3-PH 60Hz 440V
Condensing Temp.(℃)	30、35、40.5、50、54.4、60、65
Super Heating (K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R448A







PERFORMANCE DATA

Code No.	C-SBN373H8A
Power Source	3-PH 60Hz 440V
Condensing Temp.(℃)	30、35、40.5、50、54.4、60、65
Super Heating (K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R448A

Capacity （W）

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	6,850	8,920	11,360	14,180	16,250	20,950		
35.0	6,580	8,350	10,520	13,090	15,010	19,450	25,020	
40.5	6,280	7,750	9,650	11,980	13,740	17,910	23,240	27,280
50.0	5,800	6,820	8,300	10,240	11,770	15,500	20,420	24,240
54.4		6,430	7,740	9,520	10,960	14,490	19,240	22,940
60.0			7,090	8,680	10,000	13,310	17,830	21,400
65.0				8,010	9,230	12,360	16,680	20,120

Input （W）

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	3,510	3,540	3,570	3,590	3,610	3,650		
35.0	3,920	3,950	3,970	4,000	4,020	4,050	4,080	
40.5	4,470	4,490	4,510	4,530	4,540	4,570	4,600	4,620
50.0	5,620	5,630	5,640	5,650	5,650	5,670	5,680	5,690
54.4		6,250	6,250	6,250	6,260	6,260	6,260	6,270
60.0			7,120	7,110	7,110	7,090	7,080	7,070
65.0				7,960	7,940	7,910	7,880	7,860

Current （A）

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	5.7	5.8	5.8	5.8	5.9	5.9		
35.0	6.3	6.3	6.4	6.4	6.4	6.5	6.5	
40.5	7.0	7.1	7.1	7.1	7.1	7.2	7.2	7.2
50.0	8.5	8.5	8.5	8.6	8.6	8.6	8.6	8.6
54.4		9.3	9.3	9.3	9.3	9.3	9.3	9.3
60.0			10.4	10.4	10.4	10.4	10.3	10.3
65.0				11.4	11.4	11.4	11.3	11.3

Coefficients of Polynominal Formula

	Capacity （W）	Input （W）	Current （A）
C1	3.156831E+04	2.712660E+03	4.169771E+00
C2	1.011983E+03	2.157390E+00	4.564883E-03
C3	-4.041650E+02	-1.060211E+01	1.292955E-02
C4	5.434799E+00	2.322611E-02	1.617613E-05
C5	-9.673250E+00	2.938351E-01	2.510867E-04
C6	1.662159E+00	1.393480E+00	1.503837E-03
C7	-4.514409E-03	3.950720E-04	2.627949E-08
C8	7.151151E-02	-3.338244E-04	-3.420497E-07
C9	3.546304E-02	-6.029577E-03	-5.877778E-06
C10	1.120648E-07	1.224962E-08	4.273364E-12

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

Suction Gas Superheat： **11.1K**
Sub cooled: **8.3 k**
Refrigerant： **R448A**