SPECIFICATIONS OF COMPRESSOR

Model No: C-SBN453H8A

Output : 6 HP

Temporary

Panasonic Appliances Compressor (Dalian) Co.,Ltd.

08/Nov/17

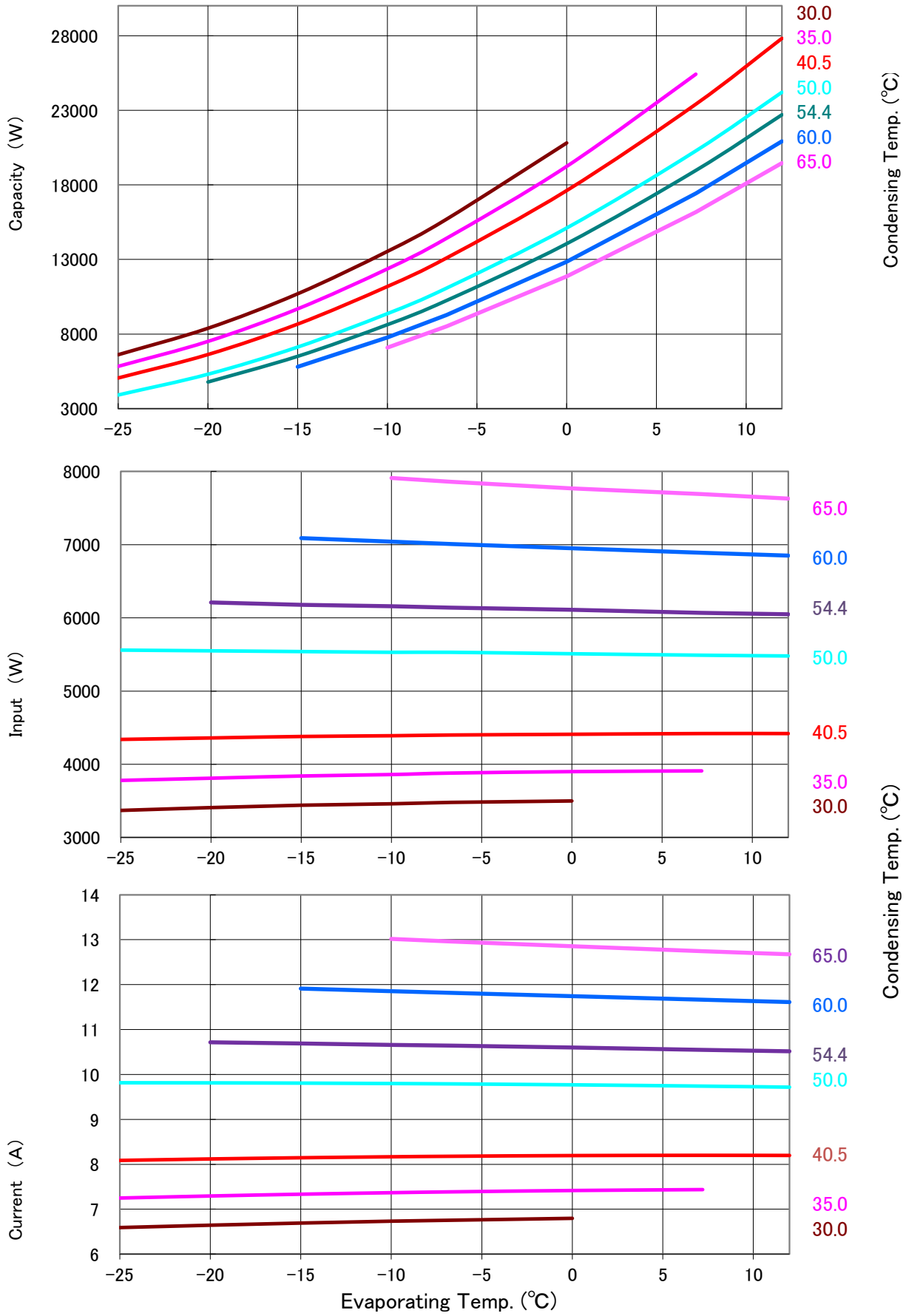
GENERAL SPECIFICATIONS

Model No:		C-SBN453H8A
Application		
Evaporating Temp Range	(℃)	-25 ～ 12
Refrigerant		R449A
Compressor Cooling		Natural Cooling
Rated Performance		
Capacity	(W)	18970 / 22920
Input	(W)	6070 / 7270
Current	(A)	10.5 / 10.7
Revolution	(min^{-1})	2950 / 3450
Sound Level	(dB(A))	64max / 68max
Rating Conditions		
Power Source		3-PH 50Hz 380-415V / 60Hz 440-460V
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)	100.0
Suction Line Connection	(Φmm 0D)	22.22
Discharge Line Connection	(Φmm 0D)	12.7
Oil	(ml)	1700 (FV68S)
Mass(Incl.Oil)	(kg)	39
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)	-

Panasonic Appliances Compressor (Dalian) Co.,Ltd.

PERFORMANCE CURVE

Code No.	C-SBN453H8A
Power Source	3-PH 50Hz 380-415V
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	R449A



PERFORMANCE DATA

Code No.	C-SBN453H8A
Power Source	3-PH 50Hz 380-415V
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	R449A

Capacity （W）

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	6,620	8,390	10,700	13,540	15,700	20,810		
35.0	5,840	7,510	9,690	12,370	14,420	19,240	25,420	
40.5	5,060	6,630	8,670	11,190	13,100	17,620	23,410	27,820
50.0	3,920	5,310	7,130	9,370	11,080	15,110	20,280	24,210
54.4		4,790	6,510	8,630	10,250	14,060	18,970	22,700
60.0			5,810	7,780	9,280	12,850	17,430	20,920
65.0				7,100	8,520	11,870	16,180	19,470

Input （W）

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	3,370	3,410	3,440	3,460	3,480	3,500		
35.0	3,780	3,810	3,840	3,860	3,880	3,900	3,910	
40.5	4,340	4,360	4,380	4,390	4,400	4,410	4,420	4,420
50.0	5,560	5,550	5,540	5,530	5,530	5,510	5,490	5,480
54.4		6,210	6,180	6,160	6,140	6,110	6,070	6,050
60.0			7,090	7,040	7,010	6,950	6,890	6,850
65.0				7,910	7,860	7,770	7,690	7,630

Current （A）

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	6.6	6.6	6.7	6.7	6.8	6.8		
35.0	7.2	7.3	7.3	7.4	7.4	7.4	7.4	
40.5	8.1	8.1	8.1	8.2	8.2	8.2	8.2	8.2
50.0	9.8	9.8	9.8	9.8	9.8	9.8	9.7	9.7
54.4		10.7	10.7	10.7	10.6	10.6	10.5	10.5
60.0			11.9	11.9	11.8	11.7	11.7	11.6
65.0				13.0	13.0	12.9	12.7	12.7

Coefficients of Polynominal Formula

	Capacity （W）	Input （W）	Current （A）
C1	3.246471E+04	2.688444E+03	4.797505E+00
C2	1.150573E+03	-6.060841E+00	8.084113E-06
C3	-4.497399E+02	-1.653318E+01	1.734958E-02
C4	1.376206E+01	-1.889203E-01	-2.528898E-04
C5	-1.170700E+01	6.687816E-01	5.051685E-04
C6	2.048590E+00	1.458771E+00	1.641089E-03
C7	1.742937E-03	5.540096E-04	3.791369E-07
C8	-1.054078E-01	3.740012E-03	4.016691E-06
C9	3.722534E-02	-1.191224E-02	-1.149486E-05
C10	-6.278442E-08	-3.378205E-08	-1.297795E-11

Note:The polynomial coefficients subject to change without notice.

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

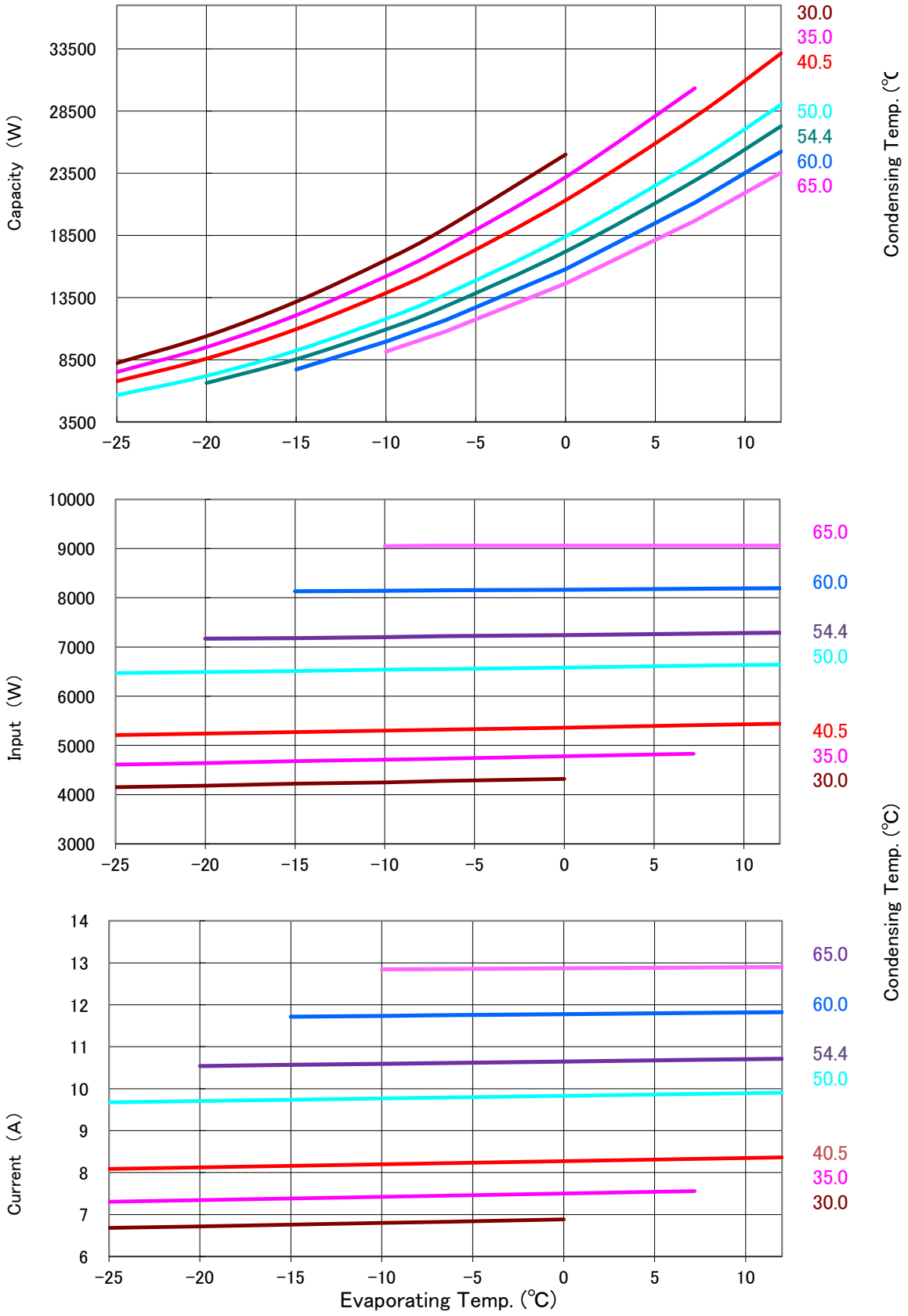
X——CAPACITY(W) OR POWER(W) OR CURRENT(A)

S——EVAPORATING TEMP, °C

D——CONDENSING TEMP, °C

PERFORMANCE CURVE

Code No.	C-SBN453H8A
Power Source	3-PH 60Hz 440-460V
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	R449A



PERFORMANCE DATA

Code No.	C-SBN453H8A
Power Source	3-PH 60Hz 440-460VV
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	R449A

Capacity （W）

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	8,240	10,410	13,180	16,530	19,070	25,010		
35.0	7,520	9,520	12,090	15,220	17,600	23,190	30,340	
40.5	6,780	8,600	10,970	13,880	16,100	21,330	28,040	33,140
50.0	5,660	7,210	9,250	11,800	13,760	18,420	24,430	29,020
54.4		6,640	8,550	10,950	12,800	17,210	22,920	27,290
60.0			7,740	9,960	11,680	15,790	21,140	25,240
65.0				9,160	10,770	14,640	19,680	23,560

Input （W）

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	4,150	4,180	4,220	4,250	4,280	4,320		
35.0	4,610	4,640	4,680	4,710	4,730	4,780	4,830	
40.5	5,210	5,240	5,270	5,300	5,320	5,360	5,410	5,440
50.0	6,470	6,490	6,510	6,540	6,550	6,580	6,620	6,640
54.4		7,170	7,180	7,200	7,220	7,240	7,270	7,290
60.0			8,130	8,140	8,150	8,160	8,180	8,190
65.0				9,050	9,060	9,060	9,060	9,060

Current （A）

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	6.7	6.7	6.8	6.8	6.8	6.9		
35.0	7.3	7.3	7.4	7.4	7.4	7.5	7.6	
40.5	8.1	8.1	8.2	8.2	8.2	8.3	8.3	8.4
50.0	9.7	9.7	9.7	9.8	9.8	9.8	9.9	9.9
54.4		10.5	10.6	10.6	10.6	10.6	10.7	10.7
60.0			11.7	11.7	11.8	11.8	11.8	11.8
65.0				12.8	12.9	12.9	12.9	12.9

Coefficients of Polynominal Formula

	Capacity（W）	Input （W）	Current （A）
C1	3.822807E+04	3.158668E+03	4.830753E+00
C2	1.343189E+03	3.521328E+00	5.692298E-03
C3	-5.073748E+02	-5.644418E+00	2.105353E-02
C4	1.429401E+01	4.203548E-03	1.478166E-05
C5	-1.408314E+01	2.686299E-01	1.983001E-04
C6	2.223446E+00	1.483425E+00	1.578735E-03
C7	6.849397E-04	-3.684298E-04	8.434133E-09
C8	-8.367782E-02	-7.941550E-05	-2.814951E-07
C9	4.937802E-02	-4.843113E-03	-3.771703E-06
C10	-3.178309E-08	-2.971812E-09	2.789465E-14

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: **R449A**