SPECIFICATIONS OF COMPRESSOR

Model No: C-SBN353H8A

Output : 4.5 HP

Temporary

Panasonic Appliances Compressor (Dalian) Co.,Ltd.

08/Nov/17

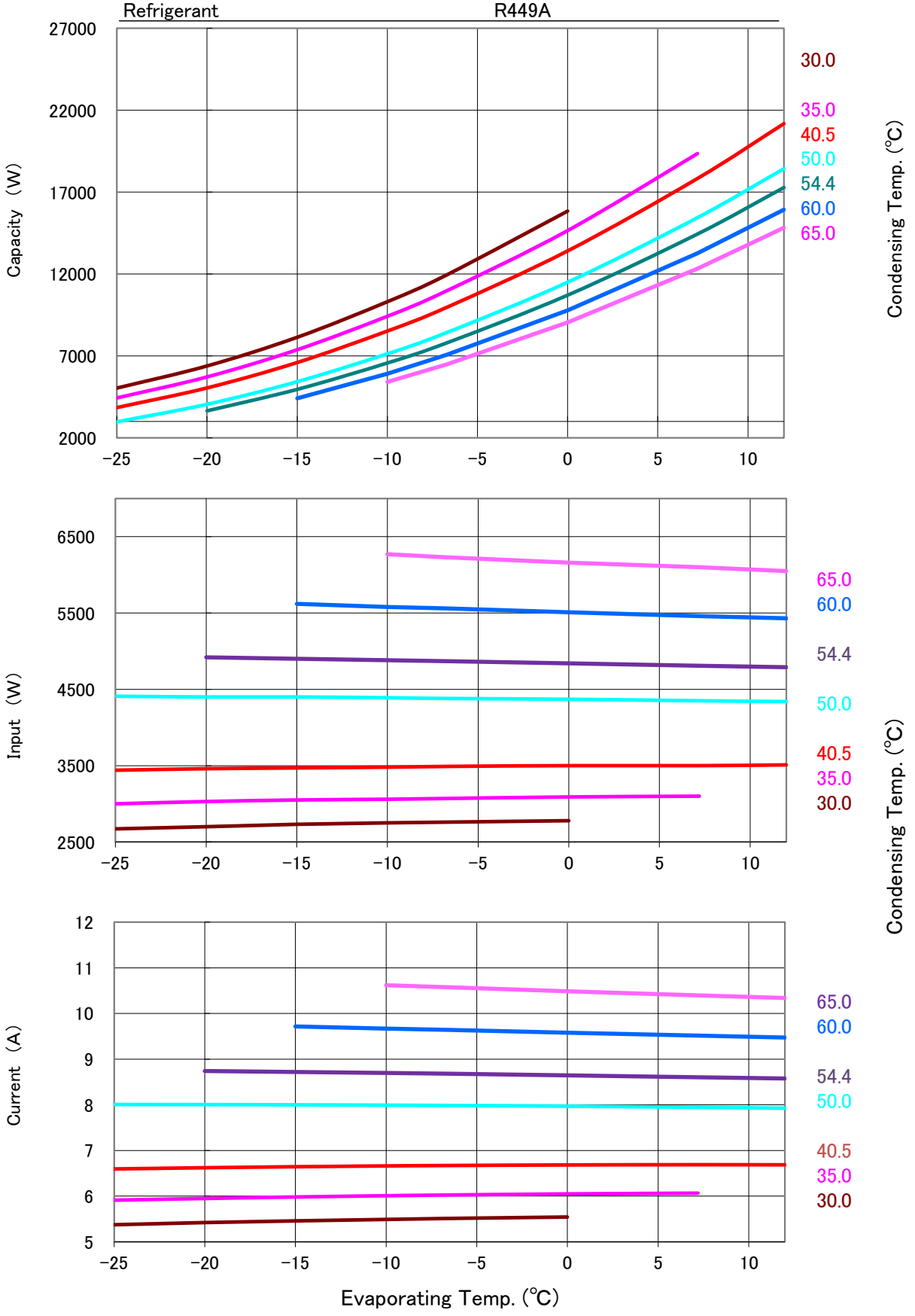
GENERAL SPECIFICATIONS

Model No:		C-SBN353H8A
Application		
Evaporating Temp Range	(℃)	-25 ～ 12
Refrigerant		R449A
Compressor Cooling		Natural Cooling
Rated Performance		
Capacity	(W)	14440 / 17750
Input	(W)	4810 / 5810
Current	(A)	8.6 / 8.8
Revolution	(min^{-1})	2950 / 3450
Sound Level	(dB(A))	62max / 65max
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)	77.4
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
Starting Current	(A)	-

Panasonic Appliances Compressor (Dalian) Co.,Ltd.

PERFORMANCE CURVE

Code No.	C-SBN353H8A
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

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Super Heating (K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
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Capacity (W)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	5,040	6,390	8,140	10,310	11,950	15,840		
35.0	4,440	5,720	7,380	9,420	10,980	14,650	19,350	
40.5	3,850	5,050	6,600	8,520	9,970	13,410	17,830	21,180
50.0	2,980	4,050	5,430	7,130	8,430	11,500	15,440	18,430
54.4		3,650	4,960	6,570	7,800	10,710	14,440	17,280
60.0			4,420	5,920	7,070	9,780	13,270	15,930
65.0				5,410	6,490	9,040	12,320	14,820

Input (W)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	2,670	2,700	2,730	2,750	2,760	2,780		
35.0	3,000	3,030	3,050	3,060	3,070	3,090	3,100	
40.5	3,440	3,460	3,470	3,480	3,490	3,500	3,500	3,510
50.0	4,410	4,400	4,400	4,390	4,380	4,370	4,350	4,340
54.4		4,920	4,900	4,880	4,870	4,840	4,810	4,790
60.0			5,620	5,580	5,560	5,510	5,460	5,430
65.0				6,270	6,230	6,160	6,100	6,050

Current (A)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	5.4	5.4	5.5	5.5	5.5	5.5		
35.0	5.9	5.9	6.0	6.0	6.0	6.0	6.1	
40.5	6.6	6.6	6.6	6.7	6.7	6.7	6.7	6.7
50.0	8.0	8.0	8.0	8.0	8.0	8.0	7.9	7.9
54.4		8.7	8.7	8.7	8.7	8.6	8.6	8.6
60.0			9.7	9.7	9.6	9.6	9.5	9.5
65.0				10.6	10.6	10.5	10.4	10.3

Coefficients of Polynominal Formula

	Capacity(W)	Input (W)	Current (A)
C1	2.472332E+04	2.142058E+03	3.913127E+00
C2	8.762374E+02	-3.671137E+00	-1.576000E-05
C3	-3.427939E+02	-1.354094E+01	1.416318E-02
C4	1.049373E+01	-1.486942E-01	-2.063772E-04
C5	-8.923624E+00	4.678763E-01	4.130772E-04
C6	1.564285E+00	1.160620E+00	1.338538E-03
C7	1.768812E-03	6.702966E-04	3.087293E-07
C8	-8.043782E-02	2.926255E-03	3.278618E-06
C9	2.840478E-02	-8.734515E-03	-9.387061E-06
C10	-3.090399E-08	-1.370623E-08	-4.235761E-12

Note:The polynomial coefficients subject to change without notice.

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

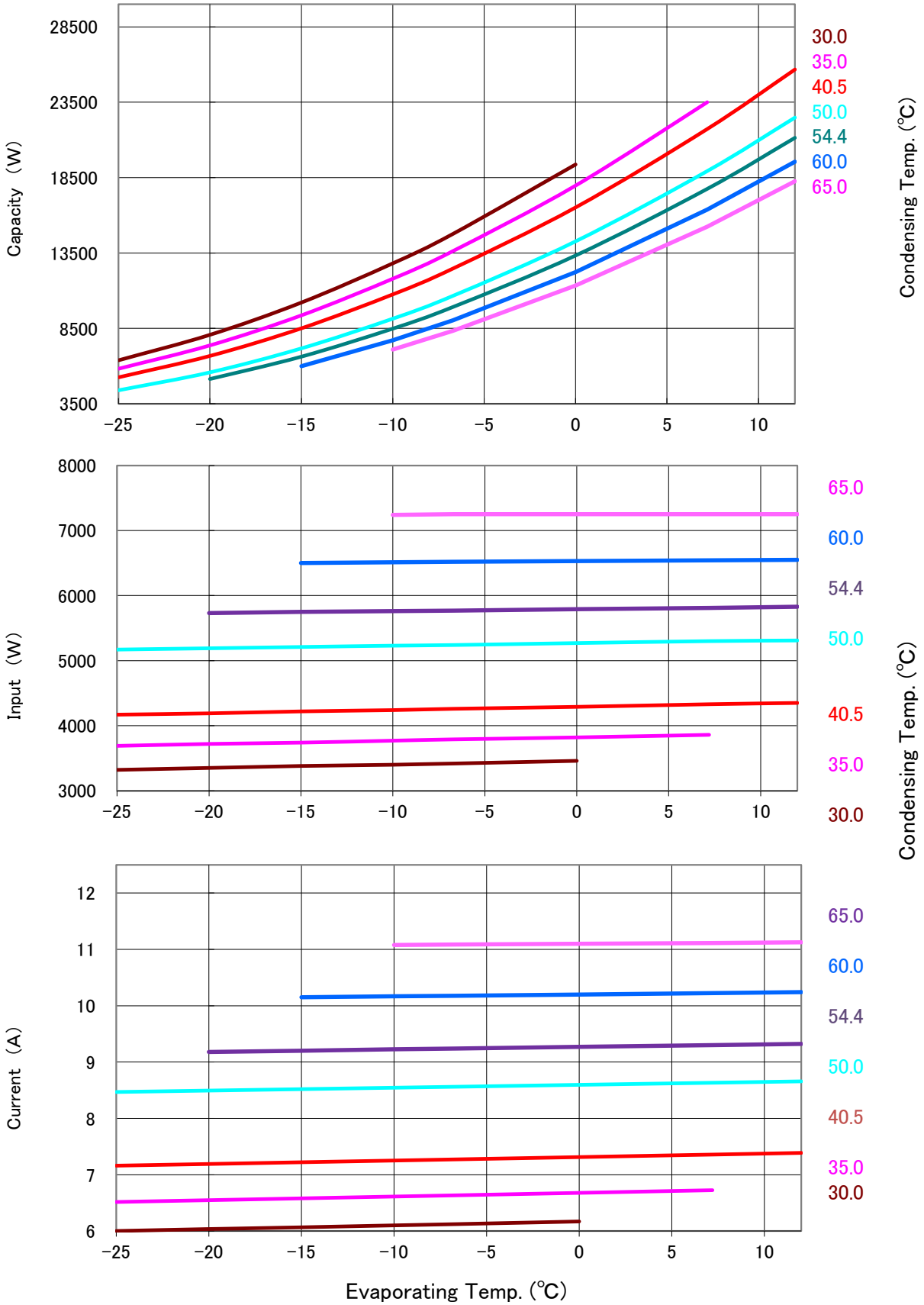
X——CAPACITY(W) OR POWER(W) OR CURRENT(A)

S——EVAPORATING TEMP, °C

D——CONDENSING TEMP, °C

PERFORMANCE CURVE

Code No.	C-SBN353H8A
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-SBN353H8A
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

Capacity （W）

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	6,380	8,070	10,210	12,810	14,770	19,370		
35.0	5,820	7,370	9,360	11,790	13,630	17,970	23,500	
40.5	5,250	6,670	8,500	10,750	12,470	16,520	21,720	25,670
50.0	4,390	5,580	7,170	9,140	10,660	14,270	18,930	22,480
54.4		5,140	6,620	8,480	9,920	13,330	17,750	21,140
60.0			5,990	7,710	9,040	12,230	16,370	19,550
65.0				7,100	8,340	11,340	15,250	18,250

Input （W）

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	3,320	3,350	3,380	3,400	3,420	3,460		
35.0	3,690	3,720	3,740	3,770	3,790	3,820	3,860	
40.5	4,170	4,190	4,220	4,240	4,260	4,290	4,330	4,350
50.0	5,170	5,190	5,210	5,230	5,240	5,270	5,300	5,310
54.4		5,730	5,750	5,760	5,770	5,790	5,810	5,830
60.0			6,500	6,510	6,520	6,530	6,540	6,550
65.0				7,240	7,250	7,250	7,250	7,250

Current （A）

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-25	-20	-15	-10	-6.7	0	7.2	12
30.0	5.5	5.5	5.6	5.6	5.6	5.7		
35.0	6.0	6.0	6.1	6.1	6.1	6.2	6.2	
40.5	6.7	6.7	6.7	6.8	6.8	6.8	6.9	6.9
50.0	8.0	8.0	8.0	8.0	8.1	8.1	8.1	8.2
54.4		8.7	8.7	8.7	8.7	8.8	8.8	8.8
60.0			9.6	9.7	9.7	9.7	9.7	9.7
65.0				10.6	10.6	10.6	10.6	10.6

Coefficients of Polynominal Formula

	Capacity（W）	Input （W）	Current （A）
C1	2.961360E+04	2.527936E+03	3.978262E+00
C2	1.040560E+03	3.713252E+00	4.688339E-03
C3	-3.930403E+02	-4.614753E+00	1.733849E-02
C4	1.105905E+01	4.649867E-02	1.213336E-05
C5	-1.091815E+01	1.648145E-01	1.632650E-04
C6	1.721951E+00	1.188328E+00	1.300131E-03
C7	5.069436E-04	2.421810E-04	6.521660E-09
C8	-6.454304E-02	-9.877358E-04	-2.312326E-07
C9	3.839818E-02	-3.307629E-03	-3.105531E-06
C10	-7.643150E-09	1.290741E-08	2.684451E-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： **R449A**