

SPECIFICATIONS OF COMPRESSOR

Model No: C-SBN453H8A

Output : 6 HP



Temporary

Panasonic Appliances Compressor (Dalian) Co.,Ltd.

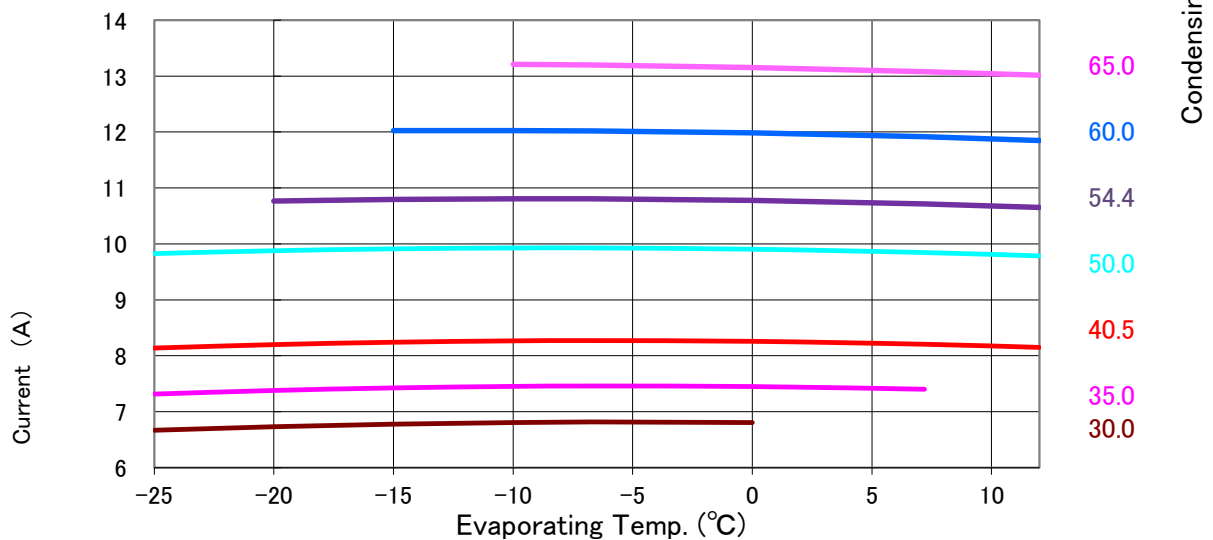
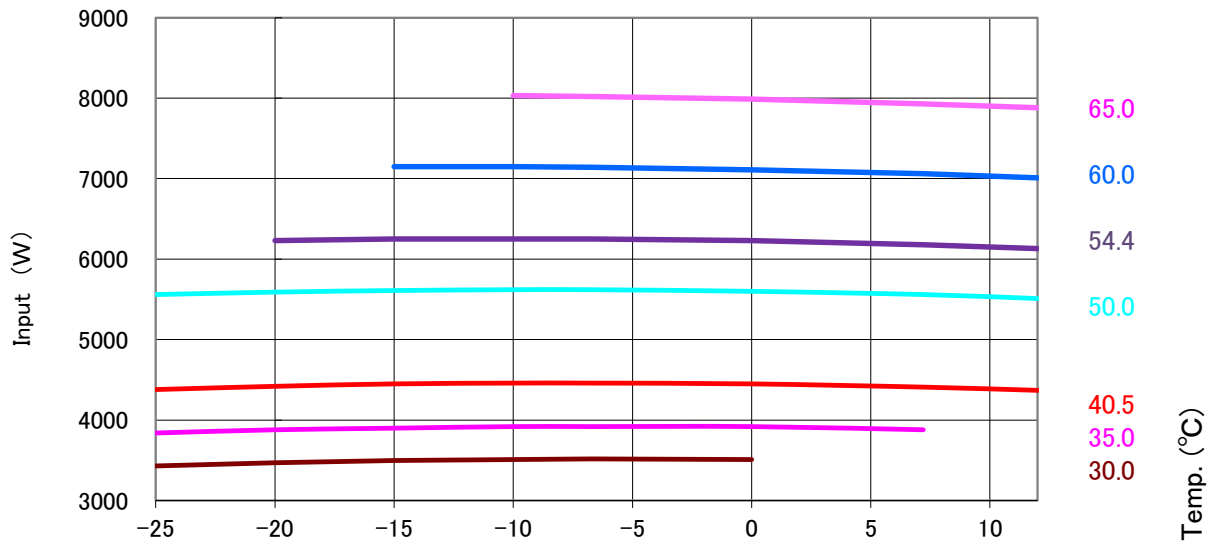
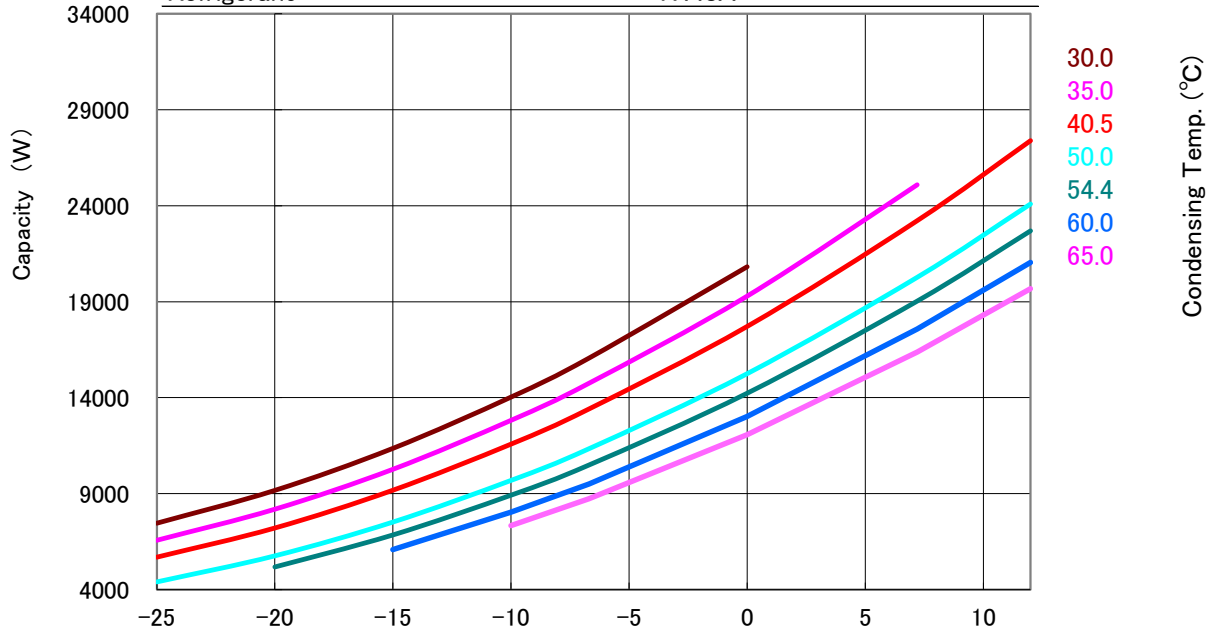
GENERAL SPECIFICATIONS

Model No:	C-SBN453H8A	
Application		
Evaporating Temp Range	(°C)	-25 ~ 12
Refrigerant	R448A	
Compressor Cooling	Natural Cooling	
Rated Performance		
Capacity	(W)	19030/23020
Input	(W)	6180/7360
Current	(A)	10.7/10.8
Revolution	(min ⁻¹)	2950 / 3450
Sound Level	(dB(A))	62max / 67max
Rating Conditions		
Power Source	3-PH 50Hz 380-415V / 60Hz 440-460V	
Evaporating Temp	(°C)	7.2
Condensing Temp	(°C)	54.4
Suction Gas Temp	(°C)	18.3
Liquid Temp	(°C)	46.1
Ambient Temp	(°C)	35.0
Measuring Point of Sound Level		
Distance from the Compressor	(m)	1.0
Compressor		
Design	Hermetic Scroll	
Displacement	(cm ³)	83.4
Suction Line Connection	(Φ mm OD)	22.22
Discharge Line Connection	(Φ mm OD)	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

Panasonic Appliances Compressor (Dalian) Co.,Ltd.

PERFORMANCE CURVE

Code No.	C-SBN453H8A
Power Source	3-PH 50Hz 380-415V
Condensing Temp.(°C)	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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Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R448A

Capacity (W)

		Evaporating Temp. (°C)							
		-25	-20	-15	-10	-6.7	0	7.2	12
Condensing Temp. (°C)	30.0	7,460	9,170	11,360	14,030	16,060	20,820		
	35.0	6,570	8,190	10,270	12,820	14,750	19,290	25,090	
	40.5	5,690	7,210	9,180	11,580	13,410	17,710	23,220	27,390
	50.0	4,400	5,760	7,520	9,690	11,340	15,250	20,270	24,090
	54.4		5,180	6,850	8,920	10,490	14,230	19,030	22,690
	60.0			6,090	8,030	9,510	13,030	17,570	21,040
	65.0				7,330	8,730	12,070	16,380	19,680

Input (W)

		Evaporating Temp. (°C)							
		-25	-20	-15	-10	-6.7	0	7.2	12
Condensing Temp. (°C)	30.0	3,430	3,470	3,500	3,510	3,520	3,510		
	35.0	3,840	3,880	3,900	3,920	3,920	3,920	3,880	
	40.5	4,380	4,420	4,450	4,460	4,460	4,450	4,410	4,370
	50.0	5,560	5,590	5,610	5,620	5,620	5,600	5,560	5,510
	54.4		6,230	6,250	6,250	6,250	6,230	6,180	6,130
	60.0			7,150	7,150	7,140	7,110	7,060	7,010
	65.0				8,030	8,020	7,990	7,930	7,880

Current (A)

		Evaporating Temp. (°C)							
		-25	-20	-15	-10	-6.7	0	7.2	12
Condensing Temp. (°C)	30.0	6.7	6.7	6.8	6.8	6.8	6.8		
	35.0	7.3	7.4	7.4	7.5	7.5	7.5	7.4	
	40.5	8.1	8.2	8.2	8.3	8.3	8.3	8.2	8.2
	50.0	9.8	9.9	9.9	9.9	9.9	9.9	9.8	9.8
	54.4		10.8	10.8	10.8	10.8	10.8	10.7	10.7
	60.0			12.0	12.0	12.0	12.0	11.9	11.9
	65.0				13.2	13.2	13.2	13.1	13.0

Coefficients of Polynomial Formula

	Capacity (W)	Input (W)	Current (A)
C1	3.209220E+04	2.742241E+03	4.830055E+00
C2	1.008950E+03	-2.368368E+00	-4.213821E-03
C3	-4.335110E+02	-2.159399E+01	1.271883E-02
C4	1.171538E+01	-2.453472E-01	-4.268581E-04
C5	-8.390440E+00	3.700905E-02	8.461949E-05
C6	1.931850E+00	1.574391E+00	1.775275E-03
C7	1.783860E-03	-1.404678E-04	3.492309E-07
C8	-6.973279E-02	5.129512E-05	1.725308E-06
C9	1.956134E-02	-1.553532E-03	-2.277012E-06
C10	-2.450577E-08	-2.477186E-08	-5.103400E-12

Note: The polynomial coefficients subject to change without notice.

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

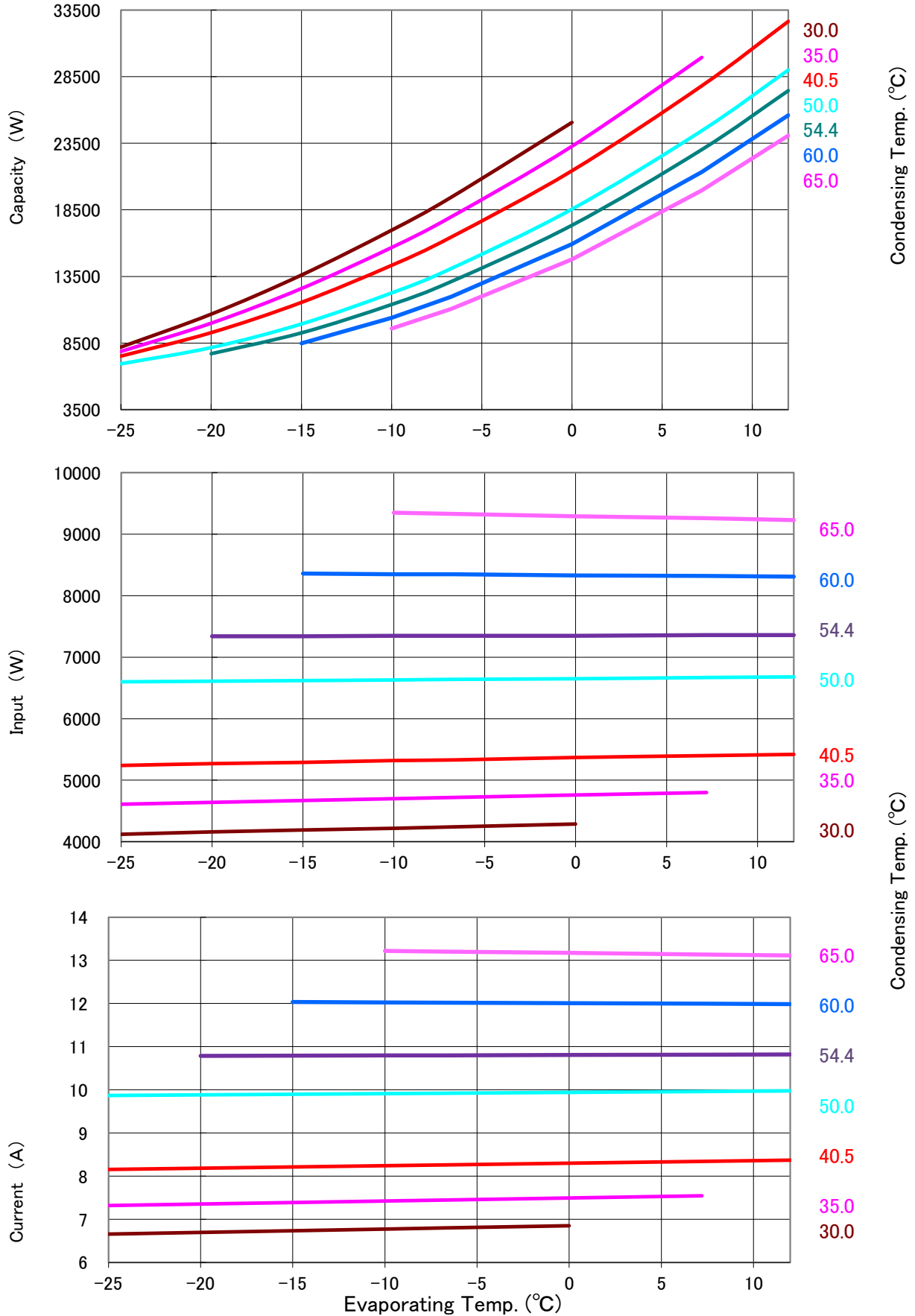
X—CAPACITY(W) OR POWER(W) OR CURRENT(A)

S—EVAPORATING TEMP, °C

D—CONDENSING TEMP, °C

PERFORMANCE CURVE

Code No.	C-SBN453H8A
Power Source	3-PH 60Hz 440-460V
Condensing Temp.(°C)	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-SBN453H8A
Power Source	3-PH 60Hz 440-460V
Condensing Temp.(°C)	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)

		Evaporating Temp. (°C)							
		-25	-20	-15	-10	-6.7	0	7.2	12
Condensing Temp. (°C)	30.0	8,200	10,670	13,600	16,970	19,440	25,060		
	35.0	7,870	9,990	12,590	15,670	17,970	23,270	29,940	
	40.5	7,520	9,280	11,550	14,330	16,450	21,430	27,810	32,650
	50.0	6,940	8,160	9,930	12,260	14,090	18,550	24,440	29,000
	54.4		7,700	9,260	11,390	13,110	17,340	23,020	27,450
	60.0			8,480	10,390	11,970	15,930	21,340	25,600
	65.0				9,580	11,050	14,780	19,960	24,070

Input (W)

		Evaporating Temp. (°C)							
		-25	-20	-15	-10	-6.7	0	7.2	12
Condensing Temp. (°C)	30.0	4,120	4,160	4,190	4,220	4,240	4,290		
	35.0	4,610	4,640	4,670	4,700	4,720	4,760	4,800	
	40.5	5,240	5,270	5,290	5,320	5,330	5,370	5,400	5,420
	50.0	6,600	6,610	6,620	6,630	6,640	6,650	6,670	6,680
	54.4		7,340	7,340	7,350	7,350	7,350	7,360	7,360
	60.0			8,360	8,350	8,350	8,330	8,320	8,310
	65.0				9,350	9,330	9,290	9,260	9,230

Current (A)

		Evaporating Temp. (°C)							
		-25	-20	-15	-10	-6.7	0	7.2	12
Condensing Temp. (°C)	30.0	6.7	6.7	6.7	6.8	6.8	6.9		
	35.0	7.3	7.4	7.4	7.4	7.4	7.5	7.5	
	40.5	8.2	8.2	8.2	8.2	8.3	8.3	8.3	8.4
	50.0	9.9	9.9	9.9	9.9	9.9	9.9	10.0	10.0
	54.4		10.8	10.8	10.8	10.8	10.8	10.8	10.8
	60.0			12.0	12.0	12.0	12.0	12.0	12.0
	65.0				13.2	13.2	13.2	13.1	13.1

Coefficients of Polynomial Formula

	Capacity (W)	Input (W)	Current (A)
C1	3.774654E+04	3.208822E+03	4.833103E+00
C2	1.210772E+03	2.240722E+00	5.278857E-03
C3	-4.823186E+02	-1.344082E+01	1.498852E-02
C4	6.517736E+00	1.095758E-02	1.866377E-05
C5	-1.157192E+01	3.570228E-01	2.915987E-04
C6	1.975111E+00	1.647197E+00	1.743061E-03
C7	-5.345184E-03	1.629582E-04	2.988864E-08
C8	8.512302E-02	-2.400169E-04	-3.943737E-07
C9	4.239352E-02	-7.176440E-03	-6.818933E-06
C10	1.359414E-07	1.229123E-08	6.297679E-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**

