

SPECIFICATIONS OF COMPRESSOR

Model No: C-SBS180H15A

Output : 5 HP



Temporary

Panasonic Appliances Compressor (Dalian) Co.,Ltd.

19/Jul/19

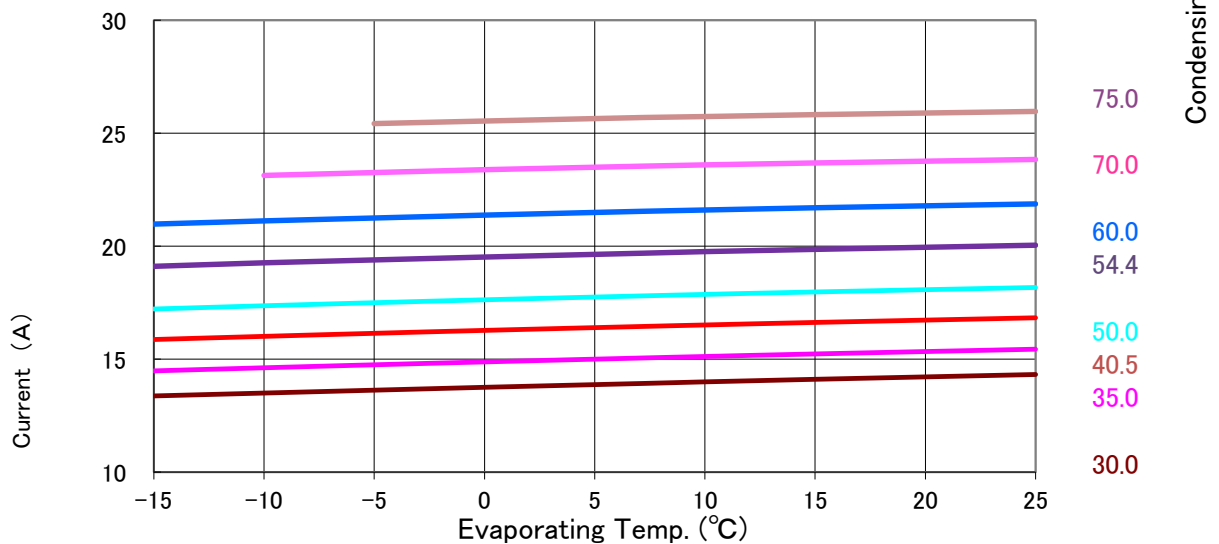
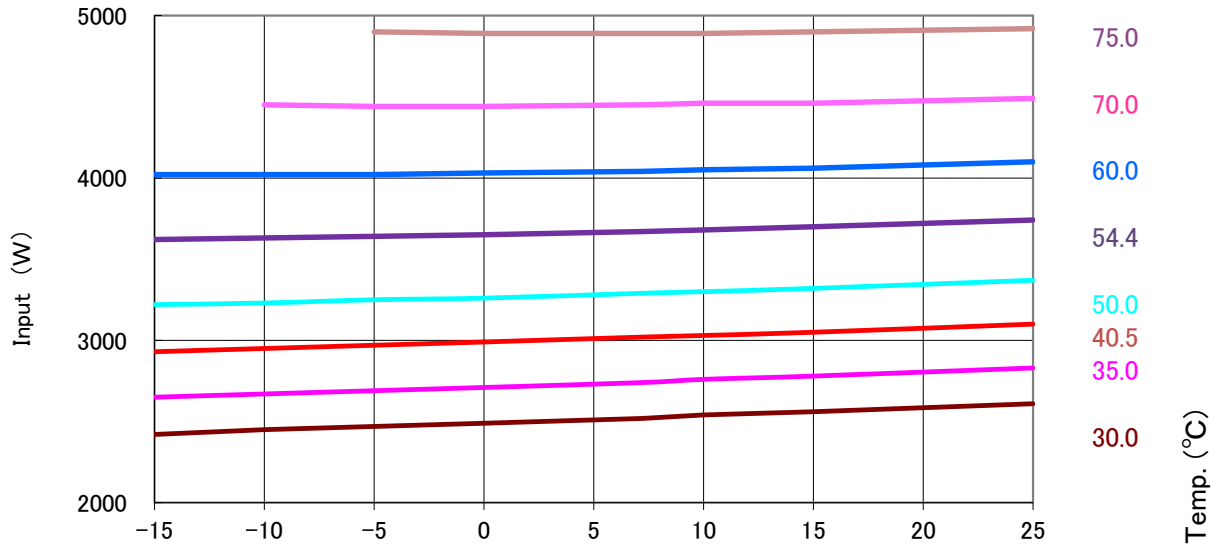
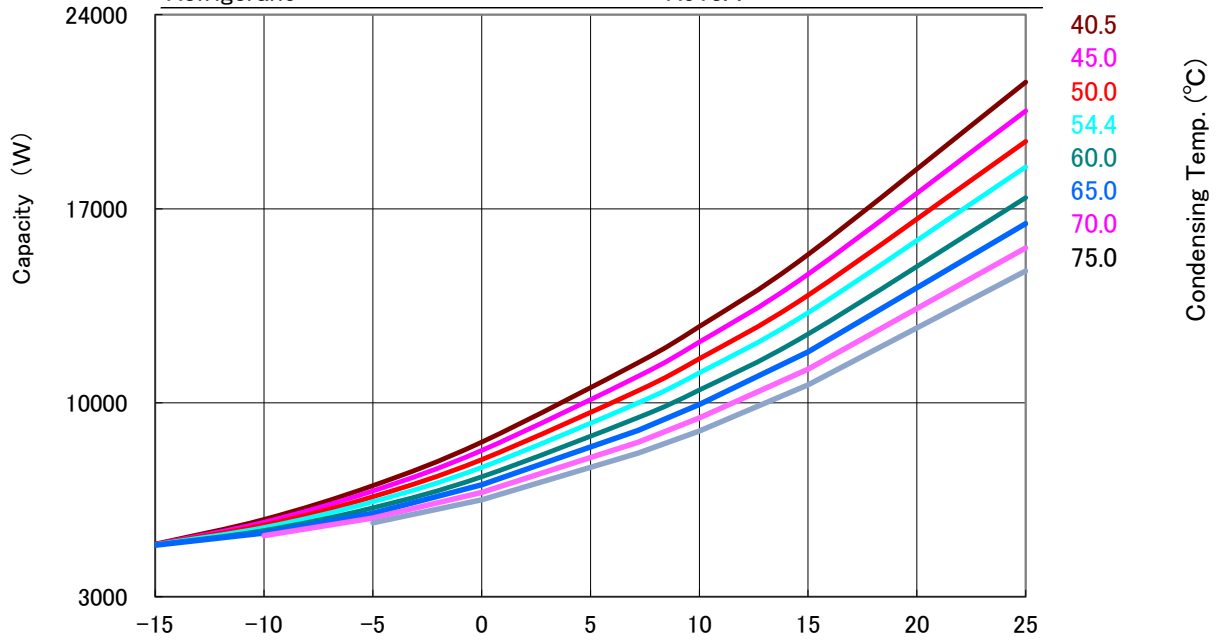
GENERAL SPECIFICATIONS

Model No:		C-SBS180H15A
Application		
Evaporating Temp Range	(°C)	-15 ~ 25
Refrigerant		R513A
Compressor Cooling		Natural Cooling
Rated Performance		
Capacity	(W)	10000
Input	(W)	3290
Current	(A)	17.8
Revolution	(min ⁻¹)	2900
Sound Level	(dB(A))	61max
Rating Conditions		
Power Source		1-PH 50Hz 220V
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)	83.2
Suction Line Connection	(Φ mm OD)	22.22
Discharge Line Connection	(Φ mm OD)	12.7
Oil	(ml)	1700 (FV68S)
Mass(Incl.Oil)	(kg)	40.7
Motor		
Type		1-PH Induction Motor(PSC)
Pole		2
Rated Power Source		1-PH 50Hz 220-240V
Voltage Range	(V)	198~264
Starting Current	(A)	-

Panasonic Appliances Compressor (Dalian) Co.,Ltd.

PERFORMANCE CURVE

Code No.	C-SBS180H15A
Power Source	1-PH 50Hz 220V
Condensing Temp.(°C)	40.5、45、50、54.4、60、65、70、75
Super Heating (K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R513A



PERFORMANCE DATA

Code No.	C-SBS180H15A
Power Source	1-PH 50Hz 220V
Condensing Temp.(°C)	40.5、45、50、54.4、60、65、70、75
Super Heating (K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R513A

Capacity (W)

		Evaporating Temp. (°C)							
		-15	-10	-5	0	7.2	10	15	25
Condensing Temp. (°C)	40.5	4,900	5,790	7,010	8,580	11,450	12,750	15,350	21,570
	45.0	4,890	5,690	6,820	8,280	10,960	12,190	14,640	20,530
	50.0	4,890	5,590	6,610	7,950	10,440	11,590	13,880	19,430
	54.4	4,880	5,500	6,430	7,670	10,000	11,080	13,250	18,510
	60.0	4,870	5,390	6,210	7,330	9,470	10,460	12,480	17,400
	65.0	4,860	5,300	6,020	7,040	9,010	9,940	11,830	16,470
	70.0		5,210	5,840	6,760	8,580	9,450	11,210	15,590
	75.0			5,670	6,500	8,180	8,980	10,640	14,760

Input (W)

		Evaporating Temp. (°C)							
		-15	-10	-5	0	7.2	10	15	25
Condensing Temp. (°C)	40.5	2,420	2,450	2,470	2,490	2,520	2,540	2,560	2,610
	45.0	2,650	2,670	2,690	2,710	2,740	2,760	2,780	2,830
	50.0	2,930	2,950	2,970	2,990	3,020	3,030	3,050	3,100
	54.4	3,220	3,230	3,250	3,260	3,290	3,300	3,320	3,370
	60.0	3,620	3,630	3,640	3,650	3,670	3,680	3,700	3,740
	65.0	4,020	4,020	4,020	4,030	4,040	4,050	4,060	4,100
	70.0		4,450	4,440	4,440	4,450	4,460	4,460	4,490
	75.0			4,900	4,890	4,890	4,890	4,900	4,920

Current (A)

		Evaporating Temp. (°C)							
		-15	-10	-5	0	7.2	10	15	25
Condensing Temp. (°C)	40.5	13.4	13.5	13.6	13.8	13.9	14.0	14.1	14.3
	45.0	14.5	14.6	14.8	14.9	15.1	15.1	15.2	15.4
	50.0	15.9	16.0	16.1	16.3	16.4	16.5	16.6	16.8
	54.4	17.2	17.4	17.5	17.6	17.8	17.9	18.0	18.2
	60.0	19.1	19.3	19.4	19.5	19.7	19.8	19.9	20.0
	65.0	21.0	21.1	21.2	21.4	21.5	21.6	21.7	21.9
	70.0		23.1	23.3	23.4	23.5	23.6	23.7	23.8
	75.0			25.4	25.5	25.7	25.7	25.8	26.0

Mass Flow(kg/H)

		Evaporating Temp. (°C)							
		-15	-10	-5	0	7.2	10	15	25
Condensing Temp. (°C)	40.5	135	159	188	221	280	307	361	501
	45.0	138	162	190	223	281	308	362	498
	50.0	141	165	193	226	283	309	362	495
	54.4	144	168	196	228	285	311	362	492
	60.0	148	172	199	232	287	312	363	489
	65.0	151	175	203	234	289	314	363	486
	70.0	155	178	206	237	291	315	363	483
	75.0			209	240	293	317	364	480

COP(W/W)

		Evaporating Temp. (°C)							
		-15	-10	-5	0	7.2	10	15	25
Condensing Temp. (°C)	40.5	2.02	2.36	2.84	3.45	4.54	5.02	6.00	8.26
	45.0	1.85	2.13	2.54	3.06	4.00	4.42	5.27	7.25
	50.0	1.67	1.89	2.23	2.66	3.46	3.83	4.55	6.27
	54.4	1.52	1.70	1.98	2.35	3.04	3.36	3.99	5.49
	60.0	1.35	1.48	1.71	2.01	2.58	2.84	3.37	4.65
	65.0	1.21	1.32	1.50	1.75	2.23	2.45	2.91	4.02
	70.0		1.17	1.32	1.52	1.93	2.12	2.51	3.47
	75.0			1.16	1.33	1.67	1.84	2.17	3.00

Coefficients of Polynomial Formula

	Capacity (W)	Input (W)	Current (A)	Mass Flow(kg/H)
C1	1.191129E+04	1.749823E+03	9.211949E+00	2.004832E+02
C2	6.068373E+02	-7.011684E-01	1.128113E-02	8.025620E+00
C3	-9.383192E+01	-9.420492E+00	-1.175899E-02	4.629531E-01
C4	8.514421E+00	-8.679532E-02	6.581560E-05	1.614846E-01
C5	-7.400023E+00	2.888480E-01	5.442589E-04	-1.928882E-02
C6	2.906581E-01	6.843974E-01	3.059455E-03	8.859281E-04
C7	1.210647E-04	2.478666E-04	-4.106287E-08	1.381370E-03
C8	-4.200664E-02	2.161426E-03	-3.690037E-06	-9.303860E-04
C9	2.519503E-02	-3.933491E-03	-5.321484E-06	-2.772747E-06
C10	-4.863074E-09	-3.883764E-09	1.691229E-13	-9.939092E-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