



SPECIFICATIONS OF COMPRESSOR

Model No: C-SBS145H15Q

Output : 4HP



Temporary

DALIAN SANYO COMPRESSOR Co.,Ltd.

06-May-09

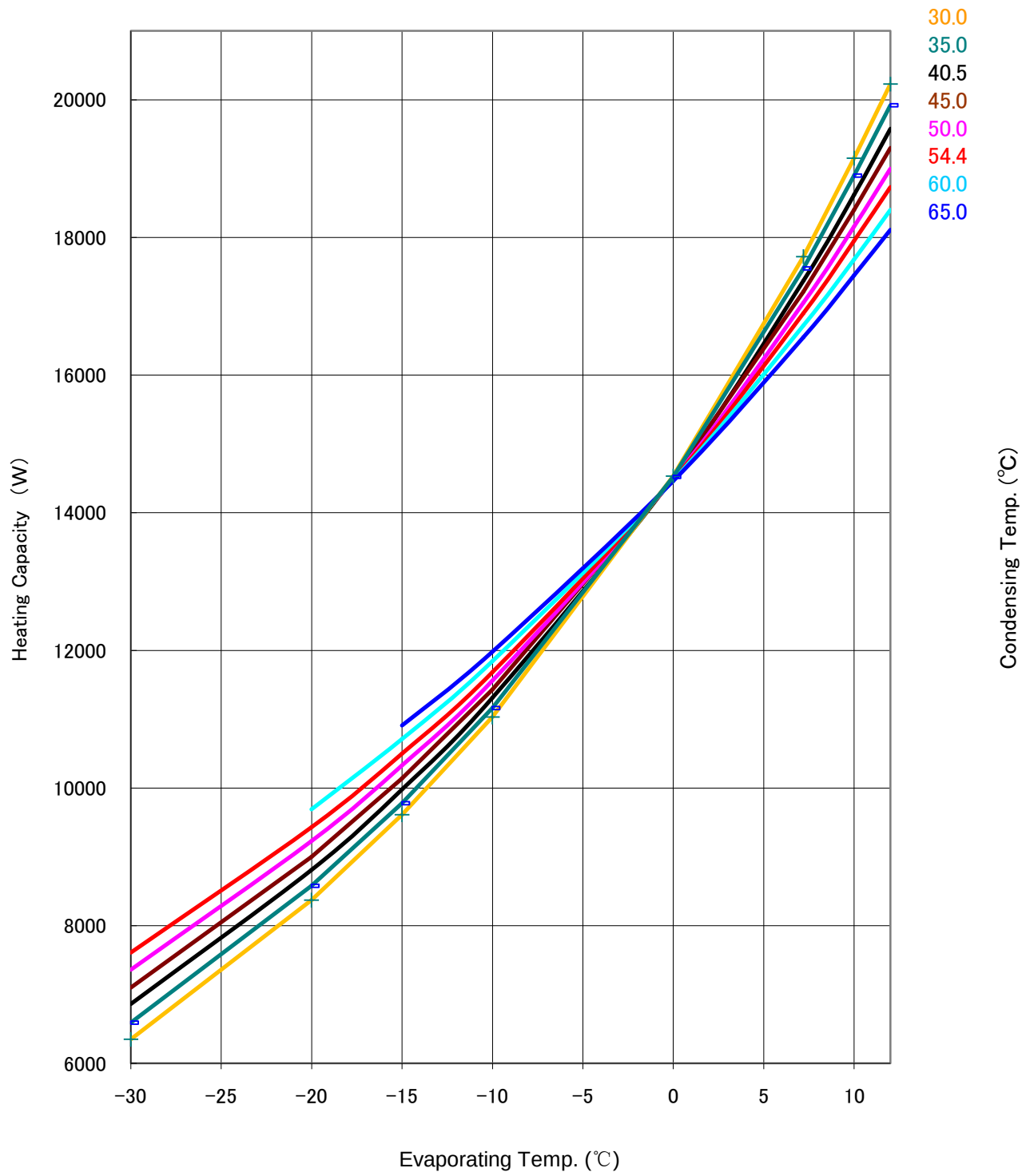
GENERAL SPECIFICATIONS

Model No:		C-SBS145H15Q
Application		
Evaporating Temp Range	(°C)	-30.0 ~ 15.0
Refrigerant		R407C
Compressor Cooling		Gas Injection
Rated Performance		
Heating Capacity	(W)	16900
Input	(W)	4200
Current	(A)	19.5
Revolution	(min ⁻¹)	2910
Sound Level	(dB(A))	
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)	50.4
Ambient Temp	(°C)	35.0
Test Conditions are Mid point.		
Measuring Point of Sound Level		
Distance from the Compressor	(m)	1.0
Compressor		
Design		Hermetic Scroll
Displacement	(cm3)	66.8
Suction Line Connection	(Φmm OD)	22.22
Discharge Line Connection	(Φmm OD)	12.7
Oil	(ml)	1700 (FV68S)
Mass(Incl.Oil)	(kg)	40
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)	112
Accessories(not included with compressor)		
Running capacitor	(μ F/V)	60/440

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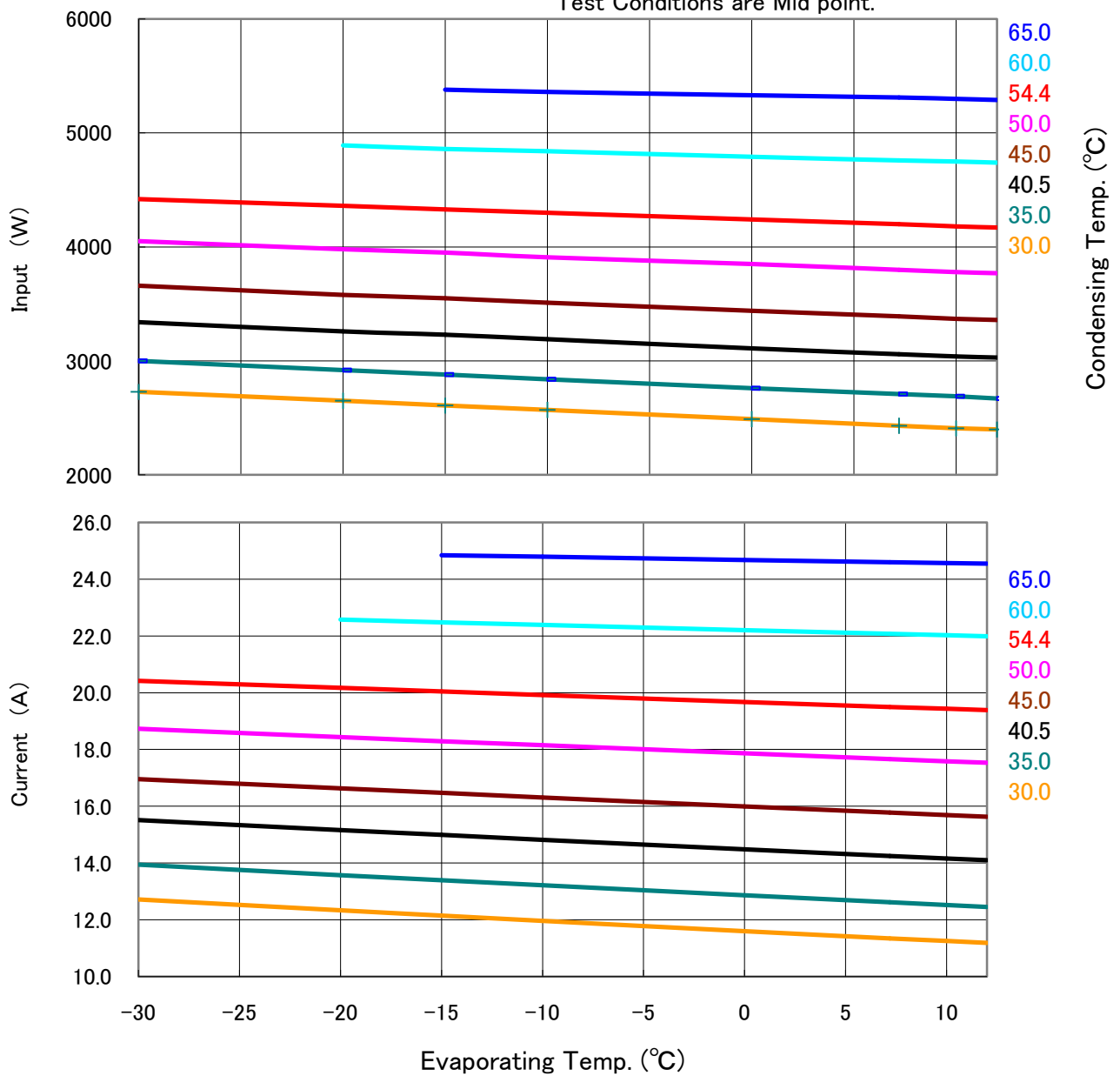
PERFORMANCE CURVE

Code No.	C-SBS145H15Q
Power Source	1-PH 50Hz 220V
Condensing Temp.(°C)	30, 35, 40.5, 45, 50, 54.4, 60, 65
Suction Gas Superheat(K)	11.1
Sub Cooled(K)	4
Compressor Cooling	Gas Injection
Refrigerant	R407C
Test Conditions are Mid point.	



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PERFORMANCE DATA

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Refrigerant	R407C

Test Conditions are Mid point.

Heating Capacity (W)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	6,350	8,370	9,610	11,030	14,530	17,720	19,150	20,230
	35	6,590	8,580	9,780	11,160	14,520	17,550	18,900	19,920
	40.5	6,860	8,810	9,980	11,310	14,510	17,370	18,620	19,580
	45.0	7,100	9,000	10,140	11,430	14,500	17,210	18,400	19,300
	50.0	7,360	9,230	10,330	11,560	14,490	17,050	18,160	19,000
	54.4	7,610	9,430	10,500	11,680	14,480	16,900	17,950	18,730
	60.0		9,690	10,710	11,840	14,470	16,720	17,680	18,400
	65.0			10,910	11,980	14,460	16,550	17,450	18,110

Input (W)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	2,730	2,650	2,610	2,570	2,490	2,430	2,410	2,400
	35	3,000	2,920	2,880	2,840	2,760	2,710	2,690	2,670
	40.5	3,340	3,260	3,230	3,190	3,110	3,060	3,040	3,030
	45.0	3,660	3,580	3,550	3,510	3,440	3,390	3,370	3,360
	50.0	4,050	3,980	3,950	3,910	3,850	3,800	3,780	3,770
	54.4	4,420	4,360	4,330	4,300	4,240	4,200	4,180	4,170
	60.0		4,890	4,860	4,840	4,790	4,760	4,750	4,740
	65.0			5,380	5,360	5,330	5,310	5,300	5,290

Current (A)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	12.7	12.3	12.1	12.0	11.6	11.3	11.3	11.2
	35	13.9	13.6	13.4	13.2	12.9	12.6	12.5	12.5
	40.5	15.5	15.2	15.0	14.8	14.5	14.3	14.2	14.1
	45.0	17.0	16.6	16.5	16.3	16.0	15.8	15.7	15.6
	50.0	18.7	18.4	18.3	18.1	17.9	17.7	17.6	17.5
	54.4	20.4	20.2	20.0	19.9	19.7	19.5	19.4	19.4
	60.0		22.6	22.5	22.4	22.2	22.1	22.0	22.0
	65.0			24.8	24.8	24.7	24.6	24.6	24.5

MassFlow(kg/h)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	127.1	156.9	179.4	231.8	271.2	298.3	327.0	348.5
	35	124.3	153.8	176.1	228.2	267.4	294.4	323.1	344.5
	40.5	121.3	150.5	172.6	224.4	263.4	290.3	318.8	340.1
	45.0	118.8	147.8	169.8	221.3	260.1	286.9	315.3	336.6
	50.0	116.1	144.9	166.7	217.9	256.6	283.2	311.5	332.7
	54.4	113.9	142.4	164.1	215.0	253.4	280.0	308.2	329.3
	60.0		139.3	160.8	211.3	249.6	276.0	304.0	325.0
	65.0			157.9	208.1	246.1	272.4	300.3	321.2

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		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	2.33	3.16	3.68	4.29	5.84	7.29	7.95	8.43
	35	2.20	2.94	3.40	3.93	5.26	6.48	7.03	7.46
	40.5	2.05	2.70	3.09	3.55	4.67	5.68	6.13	6.46
	45.0	1.94	2.51	2.86	3.26	4.22	5.08	5.46	5.74
	50.0	1.82	2.32	2.62	2.96	3.76	4.49	4.80	5.04
	54.4	1.72	2.16	2.42	2.72	3.42	4.02	4.29	4.49
	60.0		1.98	2.20	2.45	3.02	3.51	3.72	3.88
	65.0			2.03	2.24	2.71	3.12	3.29	3.42

Coefficients of Polynomial Formula

	Heating Capacity (W)	Input (W)	Current (A)	MassFlow (kg/h)
C1	1.480529E+04	1.723502E+03	7.923830E+00	3.091074E+02
C2	5.197849E+02	-3.649838E+00	-1.600285E-02	7.985049E+00
C3	-1.004102E+01	1.946801E-01	8.308204E-03	-1.421530E+00
C4	7.169376E+00	4.230134E-03	8.538298E-05	6.202797E-03
C5	-3.972486E+00	-2.644135E-01	-1.254235E-03	-9.089812E-02
C6	6.744426E-02	8.480675E-01	3.823927E-03	7.675332E-03
C7	2.997916E-02	4.249351E-05	-6.569678E-07	-1.765447E-03
C8	-6.539335E-02	1.784204E-05	-1.964383E-06	-8.738473E-04
C9	2.425021E-03	4.140009E-03	2.025278E-05	7.389055E-04
C10	-1.358286E-08	9.350162E-08	4.103159E-10	-3.294723E-09

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

WIRING DIAGRAM

C-SB Series 1 phase

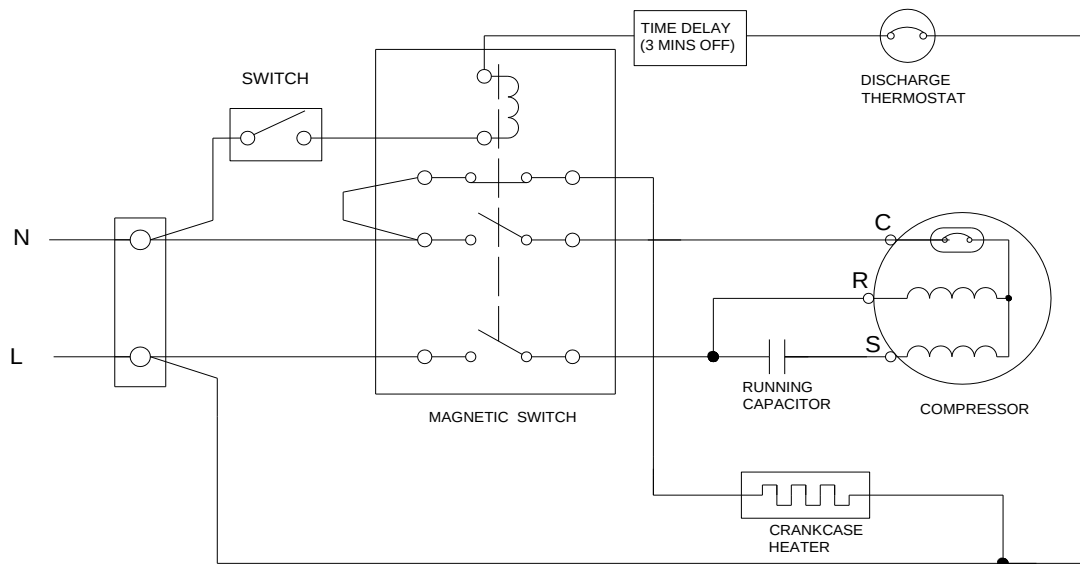
2.6-4.5kw

European & Chinese

power supply

specifications

models



Operating Envelope

Suction Gas Superheat: 11.1K
Refrigerant: R407C

