

SPECIFICATIONS OF COMPRESSOR

Model No: C-SBS205H38Q

Output : 6 HP



Temporary

DALIAN SANYO COMPRESSOR Co.,Ltd.

06-May-09

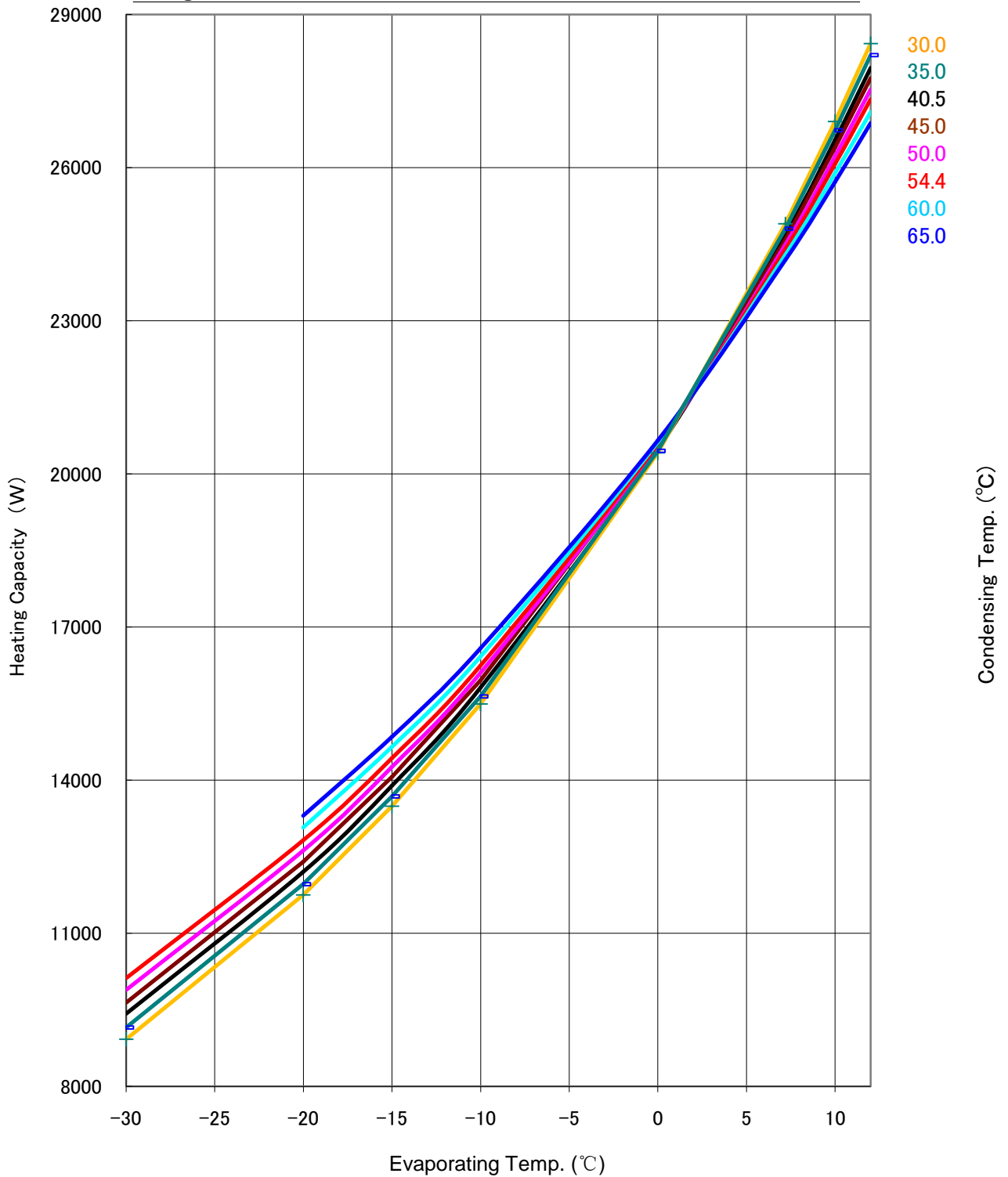
GENERAL SPECIFICATIONS

Model No:		C-SBS205H38Q
Application		
Evaporating Temp Range	(°C)	-30.0 ~ 15.0
Refrigerant		R407C
Compressor Cooling		Gas Injection
Rated Performance		
Heating Capacity	(W)	17300
Input	(W)	5350
Current	(A)	9.8
Revolution	(min ⁻¹)	2900
Sound Level	(dB(A))	
Rating Conditions		Mid-point
Power Source		3-PH 50Hz 380V
Evaporating Temp	(°C)	-7
Condensing Temp	(°C)	50
Suction Gas Temp	(°C)	4.1
Liquid Temp	(°C)	46
Ambient Temp	(°C)	35.0
Measuring Point of Sound Level		
Distance from the Compressor	(m)	1.0
Compressor		
Design		Hermetic Scroll
Displacement	(cm ³)	96.2
Suction Line Connection	(Φ mm OD)	22.22
Discharge Line Connection	(Φ mm OD)	12.7
Oil	(ml)	1700 (FV68S)
Mass(Incl.Oil)	(kg)	38
Motor		
Type		3-PH Induction Motor(3IR)
Pole		2
Rated Power Source		3-PH 50Hz 380-415V
Voltage Range	(V)	342~456
Starting Current	(A)	73

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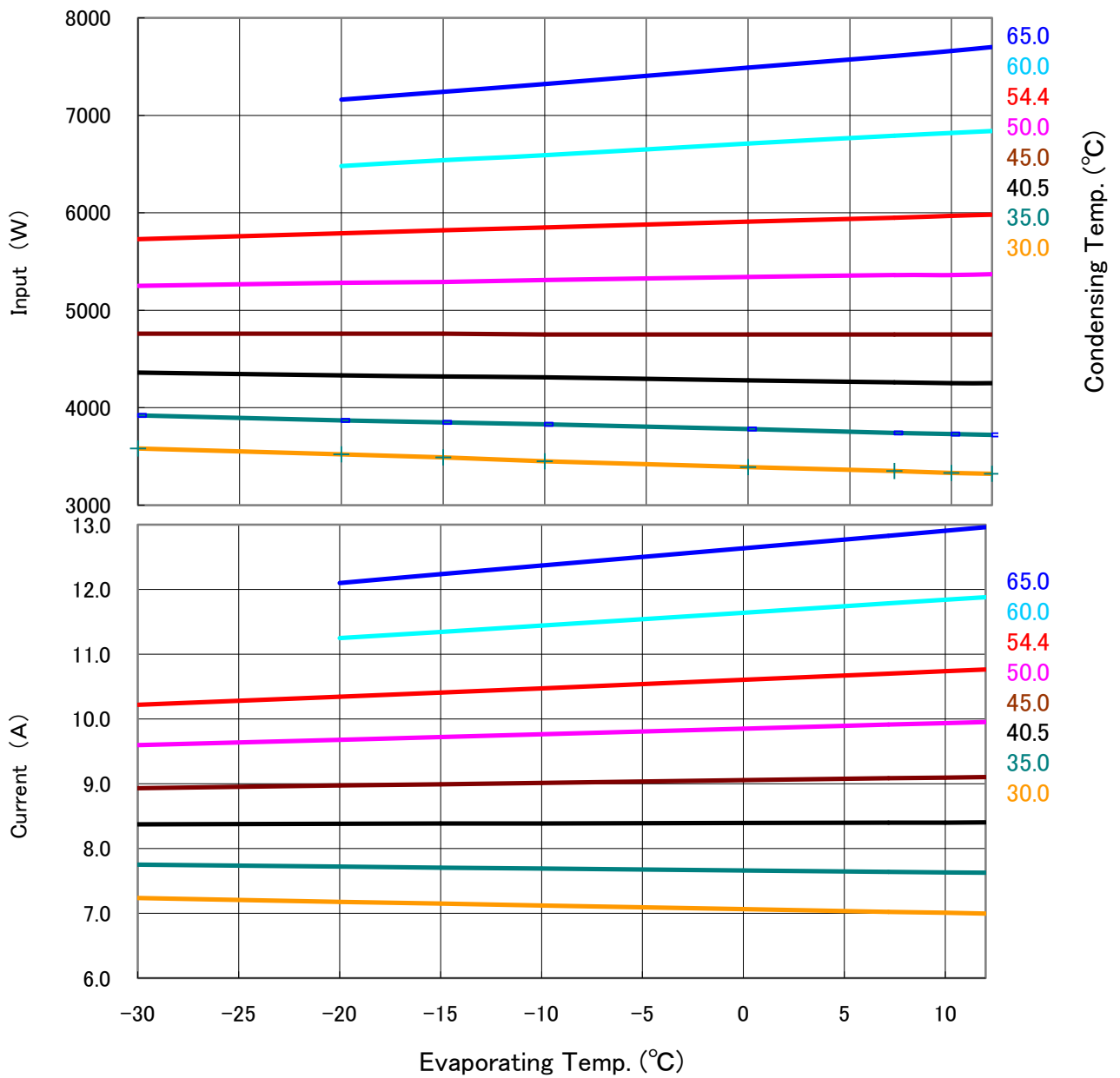
PERFORMANCE CURVE

Code No.	C-SBS205H38Q
Power Source	3-PH 50Hz 380V
Condensing Temp.(°C)	30, 35, 40.5, 45, 50, 54.4, 60, 65
Suction Gas Superheat(K)	9
Sub Cooled(K)	2
Compressor Cooling	Gas Injection
Refrigerant	R407C



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PERFORMANCE DATA

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Refrigerant	R407C

Heating Capacity (W)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	8,920	11,750	13,490	15,490	20,410	24,900	26,900	28,430
	35	9,150	11,960	13,680	15,640	20,450	24,800	26,730	28,200
	40.5	9,420	12,200	13,890	15,810	20,480	24,680	26,540	27,950
	45.0	9,640	12,400	14,060	15,950	20,510	24,590	26,390	27,750
	50.0	9,890	12,620	14,260	16,100	20,550	24,490	26,220	27,530
	54.4	10,120	12,820	14,430	16,240	20,580	24,400	26,070	27,340
	60.0		13,070	14,650	16,420	20,620	24,290	25,890	27,090
	65.0		13,300	14,850	16,580	20,650	24,190	25,720	26,870

Input (W)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	3,580	3,520	3,490	3,450	3,390	3,350	3,330	3,320
	35	3,920	3,870	3,850	3,830	3,780	3,740	3,730	3,720
	40.5	4,360	4,330	4,320	4,310	4,280	4,260	4,250	4,250
	45.0	4,760	4,760	4,760	4,750	4,750	4,750	4,750	4,750
	50.0	5,250	5,280	5,290	5,310	5,340	5,360	5,360	5,370
	54.4	5,730	5,790	5,820	5,850	5,910	5,950	5,970	5,980
	60.0		6,480	6,540	6,590	6,710	6,790	6,820	6,840
	65.0		7,160	7,240	7,320	7,490	7,610	7,660	7,700

Current (A)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	7.2	7.2	7.1	7.1	7.1	7.0	7.0	7.0
	35	7.7	7.7	7.7	7.7	7.7	7.6	7.6	7.6
	40.5	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
	45.0	8.9	9.0	9.0	9.0	9.1	9.1	9.1	9.1
	50.0	9.6	9.7	9.7	9.8	9.8	9.9	9.9	10.0
	54.4	10.2	10.3	10.4	10.5	10.6	10.7	10.7	10.8
	60.0		11.2	11.3	11.4	11.6	11.8	11.8	11.9
	65.0		12.1	12.2	12.4	12.6	12.8	12.9	13.0

MassFlow(kg/H)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	99.8	146.8	181.9	224.9	334.0	431.7	474.1	505.8
	35	97.7	143.0	177.5	219.9	328.4	426.1	468.5	500.3
	40.5	95.4	138.9	172.7	214.6	322.4	420.0	462.5	494.3
	45.0	93.7	135.6	168.9	210.3	317.6	415.1	457.6	489.5
	50.0	91.7	132.1	164.7	205.6	312.3	409.7	452.2	484.1
	54.4	90.0	129.1	161.2	201.6	307.8	405.0	447.5	479.5
	60.0		125.3	156.7	196.7	302.1	399.1	441.6	473.6
	65.0		122.0	152.9	192.3	297.1	393.9	436.4	468.4

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		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	2.49	3.34	3.87	4.49	6.02	7.43	8.08	8.56
	35	2.33	3.09	3.55	4.08	5.41	6.63	7.17	7.58
	40.5	2.16	2.82	3.22	3.67	4.79	5.79	6.24	6.58
	45.0	2.03	2.61	2.95	3.36	4.32	5.18	5.56	5.84
	50.0	1.88	2.39	2.70	3.03	3.85	4.57	4.89	5.13
	54.4	1.77	2.21	2.48	2.78	3.48	4.10	4.37	4.57
	60.0		2.02	2.24	2.49	3.07	3.58	3.80	3.96
	65.0		1.86	2.05	2.27	2.76	3.18	3.36	3.49

Coefficients of Polynomial Formula

	Heating Capacity (W)	Input (W)	Current (A)	MassFlow (kg/h)
C1	2.041179E+04	2.370289E+03	4.730469E+00	3.697338E+02
C2	6.640333E+02	-1.007923E+00	-8.937516E-03	1.270109E+01
C3	-4.469179E-01	-3.765571E+00	4.096394E-02	-1.264534E+00
C4	9.141990E+00	-1.320274E-02	-2.684349E-05	1.404228E-01
C5	-3.317271E+00	-5.501575E-01	-2.618097E-04	-8.126211E-03
C6	5.753947E-02	1.266138E+00	1.234147E-03	2.299780E-03
C7	4.517385E-02	-1.754615E-04	-1.392311E-07	-9.496143E-07
C8	-5.768660E-02	1.298886E-04	5.823028E-07	5.032055E-04
C9	1.428602E-03	1.255095E-02	1.232469E-05	1.126650E-05
C10	4.310358E-09	1.119467E-07	1.893875E-10	-1.057693E-09

Note: The polynomial coefficients subject to change without notice.

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

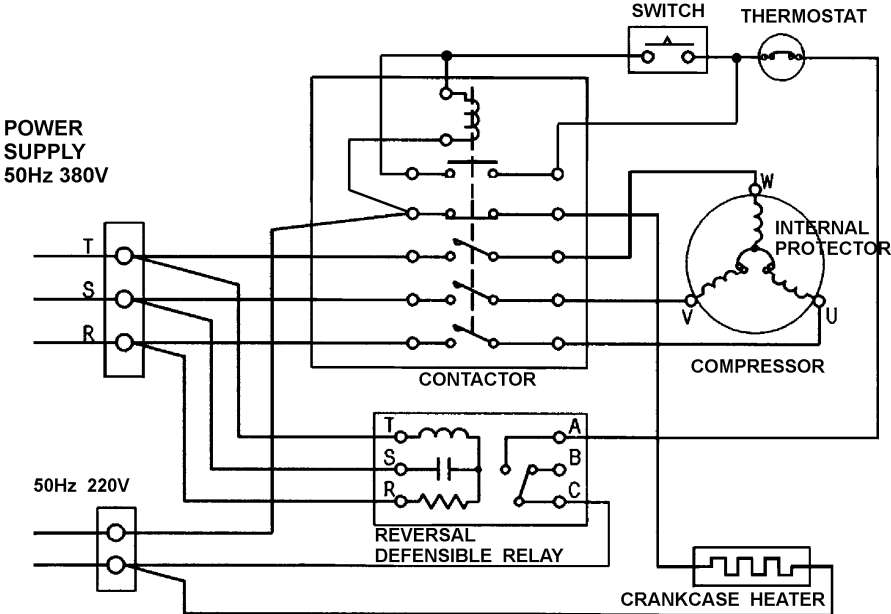
X——CAPACITY(W) OR POWER(W) OR CURRENT(A)

S——EVAPORATING TEMP, °C

D——CONDENSING TEMP, °C

WIRING DIAGRAM

C-SB Series 3 phase
2.6-4.5kw
European & Chinese
power supply
specifications
models



Operating Envelope

Suction Gas Superheat: 9K
Refrigerant: R407C

--- Liquid Injection
— Gas Injection

