

SPECIFICATIONS OF COMPRESSOR

Model No: C-SBP170H38Q

Output : 5 HP



Temporary

DALIAN SANYO COMPRESSOR Co.,Ltd.

15-Mar-11

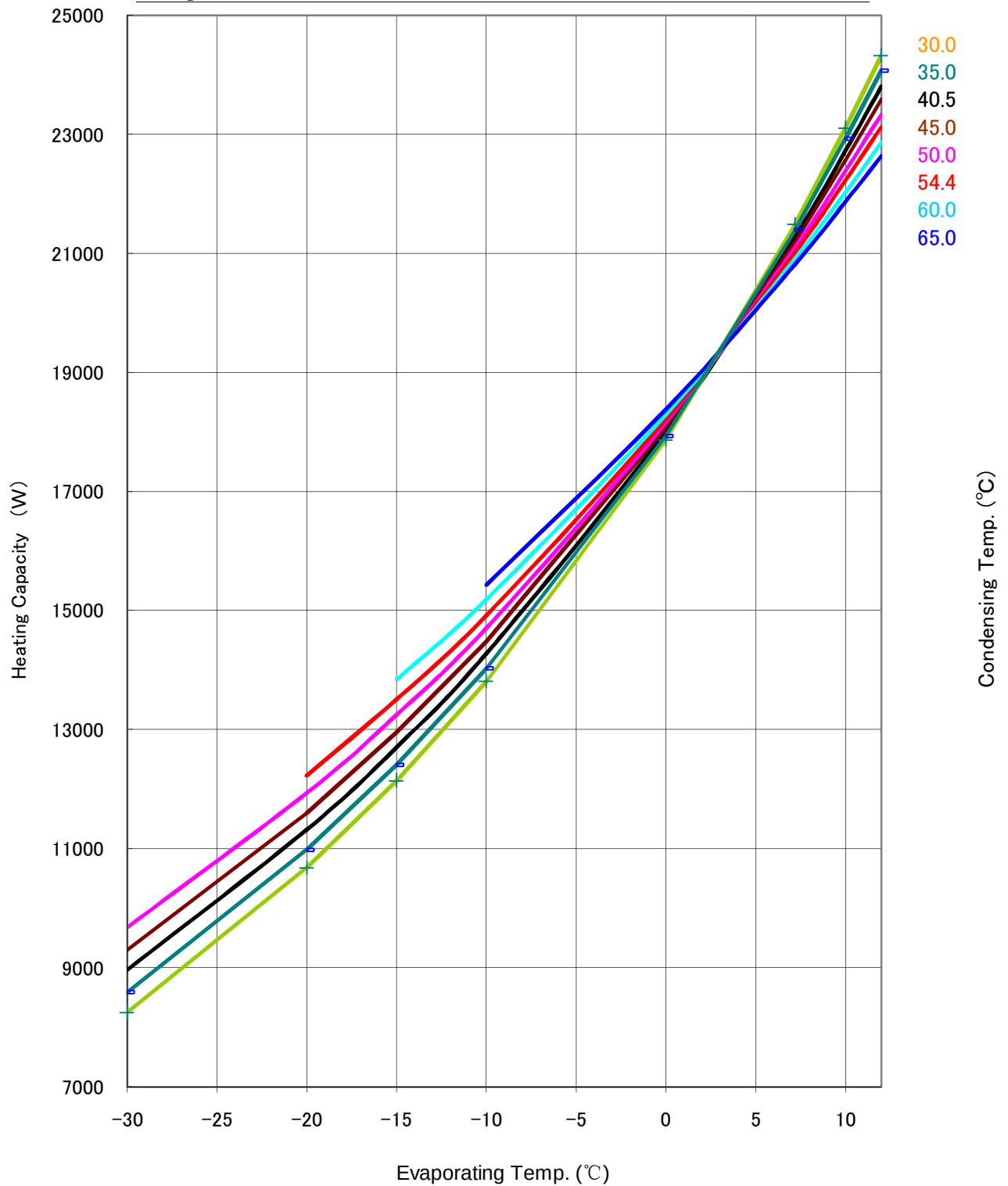
GENERAL SPECIFICATIONS

Model No:		C-SBP170H38Q		
Application				
Evaporating Temp Range		(°C)	-30.0 ~ 15.0	
Refrigerant		R410A		
Compressor Cooling		Gas Injection		
Rated Performance				
Heating Capacity		(W)	15660	
Input		(W)	5010	
Current		(A)	8.8	
Revolution		(min ⁻¹)	2900	
Sound Level		(dB(A))		
Rating Conditions				
Power Source			3-PH	50Hz 380V
Evaporating Temp		(°C)	-7	
Condensing Temp		(°C)	50	
Suction Gas Temp		(°C)	4.1	
Liquid Temp		(°C)	48.0	
Ambient Temp		(°C)	35.0	
Measuring Point of Sound Level				
Distance from the Compressor		(m)	1.0	
Compressor				
Design			Hermetic Scroll	
Displacement		(cm3)	55.7	
Suction Line Connection		(Φ mm OD)	22.22	
Discharge Line Connection		(Φ mm OD)	12.7	
Oil		(ml)	1700 (FV68S)	
Mass(Incl.Oil)		(kg)	38.0	
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)	68.9	

DALIAN SANYO COMPRESSOR Co.,Ltd.

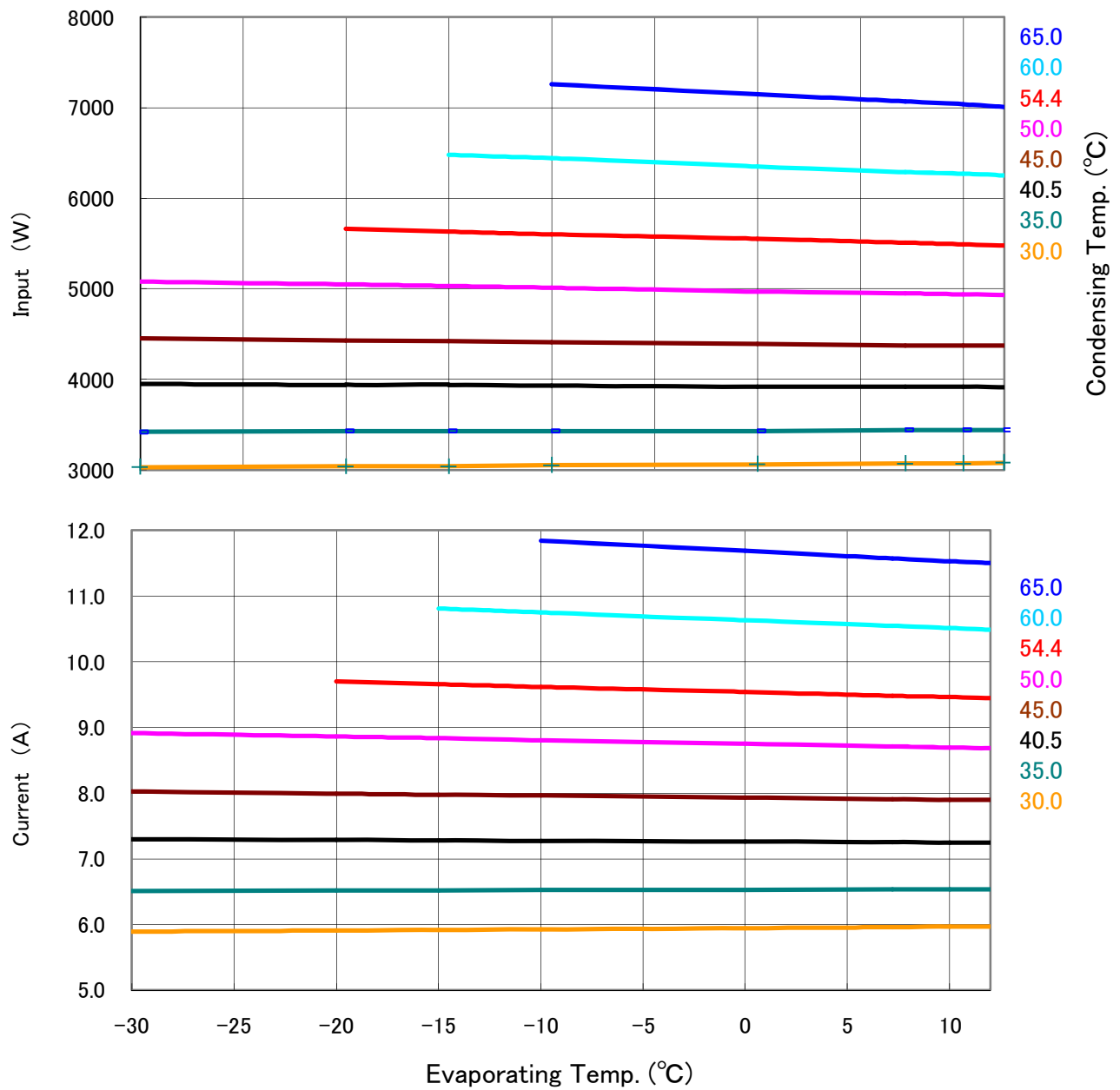
PERFORMANCE CURVE

Code No.	C-SBP170H38Q
Power Source	3-PH 50Hz 380V
Condensing Temp.(°C)	30, 35, 40.5, 45, 50, 54.4, 60, 65
Suction Gas Superheat(K)	11.1
Sub Cooled(K)	2
Compressor Cooling	Gas Injection
Refrigerant	R410A



PERFORMANCE CURVE

Code No.	C-SBP170H38Q
Power Source	3-PH 50Hz 380V
Condensing Temp.(°C)	30, 35, 40.5, 45, 50, 54.4, 60, 65
Suction Gas Superheat(K)	11.1
Sub Cooled(K)	2
Compressor Cooling	Gas Injection
Refrigerant	R410A



PERFORMANCE DATA

Code No.	C-SBP170H38Q
Power Source	3-PH 50Hz 380V
Condensing Temp.(°C)	30, 35, 40.5, 45, 50, 54.4, 60, 65
Suction Gas Superheat(K)	11.1
Sub Cooled(K)	2
Compressor Cooling	Gas Injection
Refrigerant	R410A

Heating Capacity (W)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	8,250	10,680	12,140	13,810	17,860	21,490	23,100	24,320
	35	8,590	10,980	12,410	14,030	17,930	21,390	22,920	24,070
	40.5	8,970	11,320	12,710	14,280	18,010	21,290	22,720	23,800
	45.0	9,300	11,600	12,960	14,480	18,070	21,200	22,560	23,580
	50.0	9,680	11,930	13,250	14,710	18,150	21,100	22,380	23,330
	54.4		12,230	13,510	14,920	18,210	21,020	22,220	23,120
	60.0			13,840	15,190	18,290	20,910	22,020	22,860
	65.0				15,430	18,370	20,820	21,860	22,630

Input (W)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	3,030	3,040	3,040	3,050	3,060	3,070	3,070	3,080
	35	3,420	3,430	3,430	3,430	3,430	3,440	3,440	3,440
	40.5	3,950	3,940	3,940	3,930	3,920	3,920	3,920	3,910
	45.0	4,450	4,430	4,420	4,410	4,390	4,370	4,370	4,370
	50.0	5,080	5,050	5,030	5,010	4,970	4,950	4,940	4,930
	54.4		5,660	5,630	5,600	5,550	5,510	5,490	5,480
	60.0			6,480	6,440	6,350	6,290	6,270	6,250
	65.0				7,260	7,150	7,070	7,040	7,010

Current (A)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	5.9	5.9	5.9	5.9	5.9	6.0	6.0	6.0
	35	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	40.5	7.3	7.3	7.3	7.3	7.3	7.2	7.2	7.2
	45.0	8.0	8.0	8.0	8.0	7.9	7.9	7.9	7.9
	50.0	8.9	8.9	8.8	8.8	8.7	8.7	8.7	8.7
	54.4		9.7	9.7	9.6	9.5	9.5	9.5	9.4
	60.0			10.8	10.7	10.6	10.5	10.5	10.5
	65.0				11.8	11.7	11.6	11.5	11.5

MassFlow(kg/H)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	83.1	125.3	153.7	187.0	268.1	338.6	368.8	391.2
	35	82.9	123.2	150.9	183.7	264.4	334.9	365.2	387.8
	40.5	82.6	121.0	148.0	180.2	260.3	330.9	361.3	384.0
	45.0	82.5	119.2	145.6	177.4	257.0	327.7	358.2	381.0
	50.0	82.2	117.2	143.0	174.3	253.4	324.1	354.7	377.6
	54.4		115.5	140.7	171.6	250.3	321.0	351.7	374.7
	60.0			137.9	168.2	246.4	317.1	347.9	371.0
	65.0				165.3	242.9	313.6	344.5	367.7

EER

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	2.72	3.51	3.99	4.53	5.84	7.00	7.52	7.90
	35	2.51	3.20	3.62	4.09	5.23	6.22	6.66	7.00
	40.5	2.27	2.87	3.23	3.63	4.59	5.43	5.80	6.09
	45.0	2.09	2.62	2.93	3.28	4.12	4.85	5.16	5.40
	50.0	1.91	2.36	2.63	2.94	3.65	4.26	4.53	4.73
	54.4		2.16	2.40	2.66	3.28	3.81	4.05	4.22
	60.0			2.14	2.36	2.88	3.32	3.51	3.66
	65.0				2.13	2.57	2.94	3.11	3.23

Coefficients of Polynomial Formula

	Heating Capacity (W)	Input (W)	Current (A)	MassFlow (kg/h)
C1	1.765296E+04	2.204688E+03	3.973711E+00	2.920305E+02
C2	5.750660E+02	-2.674257E+00	7.777620E-04	9.239613E+00
C3	6.291782E+00	-1.176822E+01	2.108047E-02	-8.367040E-01
C4	7.545053E+00	2.413944E-02	-1.657785E-05	7.848758E-02
C5	-3.695746E+00	3.462164E-01	2.655739E-04	-5.484818E-03
C6	6.540167E-02	1.346415E+00	1.494546E-03	1.267601E-03
C7	2.909090E-02	5.424254E-04	-1.210931E-07	-8.308892E-07
C8	-6.717166E-02	-1.217540E-04	3.069211E-07	6.388072E-04
C9	-3.715899E-03	-7.352195E-03	-7.853498E-06	2.143894E-05
C10	2.123712E-08	1.530276E-07	2.219386E-10	-7.272031E-10

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