



SPECIFICATIONS OF COMPRESSOR

Model No: C-SCS370H38Q

Output : 10 HP



Temporary

DALIAN SANYO COMPRESSOR Co.,Ltd.

06-May-09

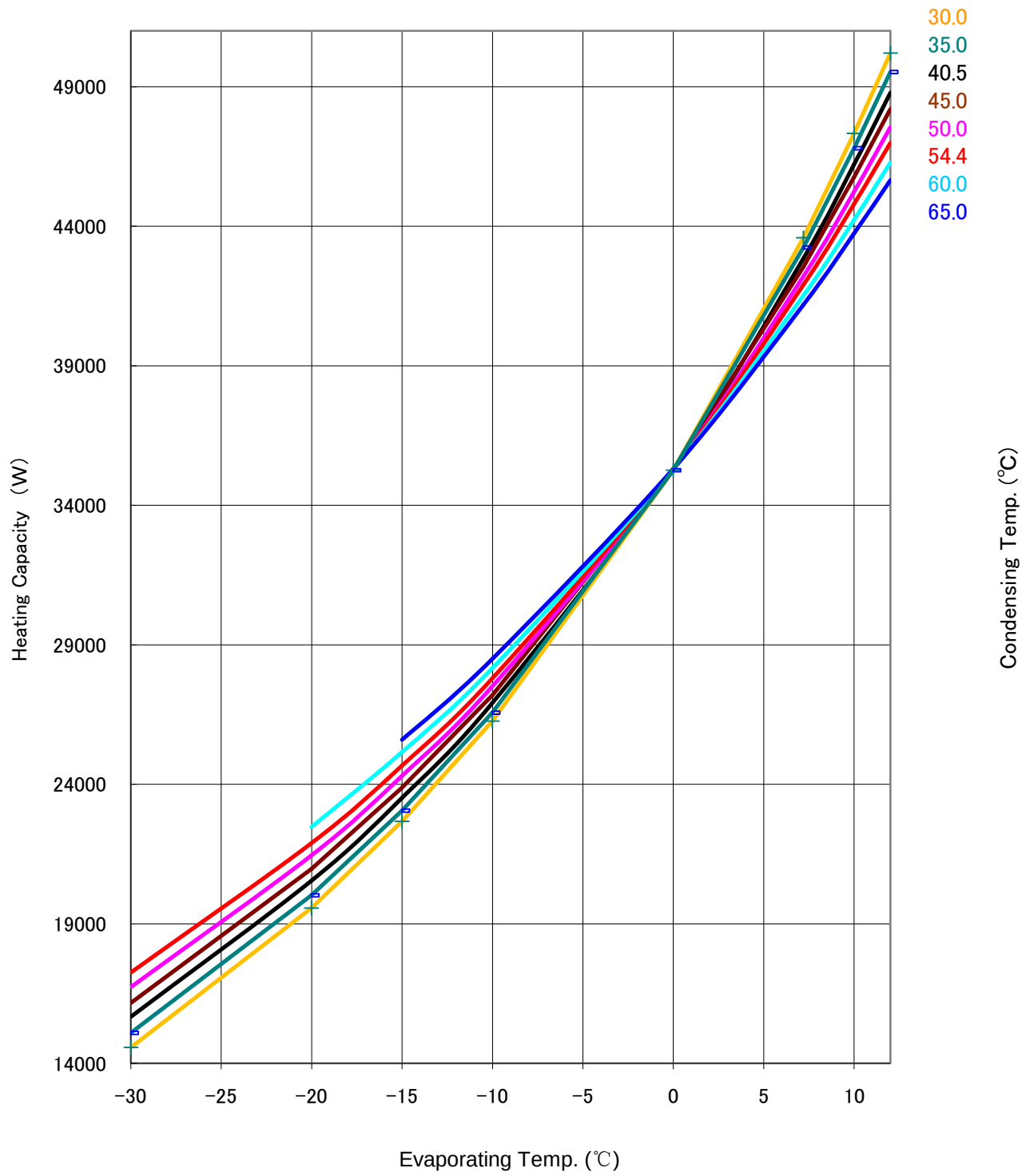
GENERAL SPECIFICATIONS

Model No:		C-SCS370H38Q
Application		
Evaporating Temp Range	(°C)	-30.0 ~ 15.0
Refrigerant	R407C	
Compressor Cooling	Gas Injection	
Rated Performance		
Heating Capacity	(W)	41900
Input	(W)	10600
Current	(A)	17.9
Revolution	(min ⁻¹)	2890
Sound Level	(dB(A))	
Rating Conditions		
Power Source	3-PH 50Hz 380V	
Evaporating Temp	(°C)	7.2
Condensing Temp	(°C)	54.4
Suction Gas Temp	(°C)	18.3
Liquid Temp	(°C)	52.4
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)	171.2
Suction Line Connection	(Φ mm OD)	25.4
Discharge Line Connection	(Φ mm OD)	19.05
Oil	(ml)	2800 (FV68S)
Mass(Incl.Oil)	(kg)	70
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)	96

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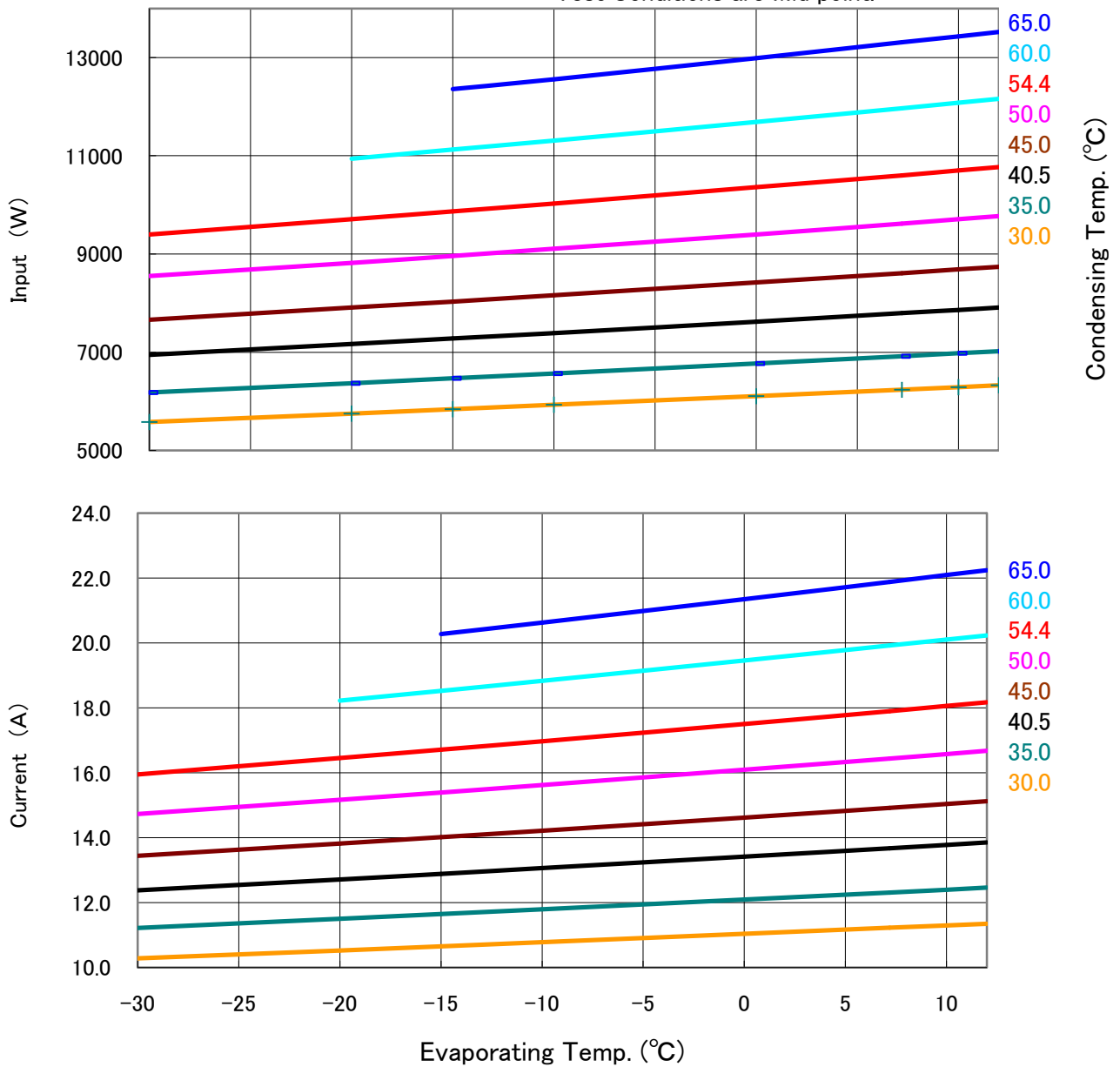
PERFORMANCE CURVE

Code No.	C-SCS370H38Q
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)	4
Compressor Cooling	Gas Injection
Refrigerant	R407C
Test Conditions are Mid point.	



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PERFORMANCE DATA

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Test Conditions are Mid point.

Heating Capacity (W)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	14,570	19,560	22,670	26,260	35,260	43,590	47,330	50,210
	35	15,090	20,020	23,060	26,570	35,260	43,240	46,800	49,530
	40.5	15,670	20,540	23,510	26,910	35,270	42,850	46,220	48,790
	45.0	16,160	20,970	23,880	27,190	35,280	42,540	45,760	48,200
	50.0	16,730	21,450	24,300	27,510	35,280	42,200	45,240	47,550
	54.4	17,250	21,890	24,670	27,790	35,290	41,900	44,800	46,990
	60.0		22,470	25,150	28,160	35,290	41,520	44,230	46,280
	65.0			25,590	28,490	35,300	41,190	43,740	45,650

Input (W)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	5,580	5,750	5,840	5,930	6,110	6,240	6,290	6,330
	35	6,180	6,370	6,470	6,570	6,770	6,920	6,980	7,020
	40.5	6,950	7,170	7,280	7,390	7,620	7,800	7,860	7,910
	45.0	7,660	7,910	8,030	8,160	8,420	8,610	8,690	8,740
	50.0	8,550	8,820	8,960	9,110	9,400	9,620	9,710	9,770
	54.4	9,400	9,710	9,870	10,030	10,360	10,600	10,700	10,770
	60.0		10,940	11,130	11,310	11,690	11,970	12,080	12,160
	65.0			12,360	12,560	12,990	13,310	13,430	13,520

Current (A)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	10.3	10.5	10.7	10.8	11.0	11.2	11.3	11.4
	35	11.2	11.5	11.6	11.8	12.1	12.3	12.4	12.5
	40.5	12.4	12.7	12.9	13.1	13.4	13.7	13.8	13.9
	45.0	13.4	13.8	14.0	14.2	14.6	14.9	15.0	15.1
	50.0	14.7	15.2	15.4	15.6	16.1	16.4	16.6	16.7
	54.4	16.0	16.5	16.7	17.0	17.5	17.9	18.1	18.2
	60.0		18.2	18.5	18.8	19.5	19.9	20.1	20.2
	65.0			20.3	20.6	21.3	21.9	22.1	22.2

MassFlow(kg/h)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	160.3	243.7	304.5	378.1	563.5	728.6	800.0	853.4
	35	157.5	239.5	299.0	371.0	552.2	713.4	783.0	835.1
	40.5	154.6	234.9	293.1	363.4	540.0	696.9	764.7	815.4
	45.0	152.2	231.2	288.3	357.2	530.1	683.7	750.0	799.6
	50.0	149.6	227.2	283.1	350.5	519.5	669.4	734.1	782.5
	54.4	147.3	223.7	278.6	344.7	510.2	657.0	720.3	767.7
	60.0		219.4	273.0	337.4	498.7	641.6	703.2	749.3
	65.0			268.1	331.1	488.7	628.1	688.3	733.2

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		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	2.61	3.40	3.88	4.43	5.77	6.99	7.52	7.93
	35	2.44	3.14	3.56	4.04	5.21	6.25	6.70	7.06
	40.5	2.25	2.86	3.23	3.64	4.63	5.49	5.88	6.17
	45.0	2.11	2.65	2.97	3.33	4.19	4.94	5.27	5.51
	50.0		2.43	2.71	3.02	3.75	4.39	4.66	4.87
	54.4		2.25	2.50	2.77	3.41	3.95	4.19	4.36
	60.0			2.26	2.49	3.02	3.47	3.66	3.81
	65.0				2.27	2.72	3.09	3.26	3.38

Coefficients of Polynomial Formula

	Heating Capacity (W)	Input (W)	Current (A)	MassFlow (kg/h)
C1	3.571940E+04	4.190566E+03	7.354360E+00	6.393767E+02
C2	1.306229E+03	1.461959E+01	1.858849E-02	2.427904E+01
C3	-1.694641E+01	3.388988E+00	4.459666E-02	-2.718471E+00
C4	1.911213E+01	-2.580592E-02	-4.620886E-05	2.943893E-01
C5	-8.946929E+00	-1.651736E-01	-2.627474E-04	-1.129618E-01
C6	1.461934E-01	2.024439E+00	2.615031E-03	6.287997E-03
C7	9.028887E-02	-2.920645E-04	-4.072316E-07	1.411568E-05
C8	-1.542277E-01	1.086002E-03	1.796600E-06	-1.310269E-03
C9	7.827610E-03	9.404919E-03	1.686755E-05	2.172955E-04
C10	-5.578703E-08	2.118666E-07	3.484306E-10	-3.040531E-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-SC Series 3 phase

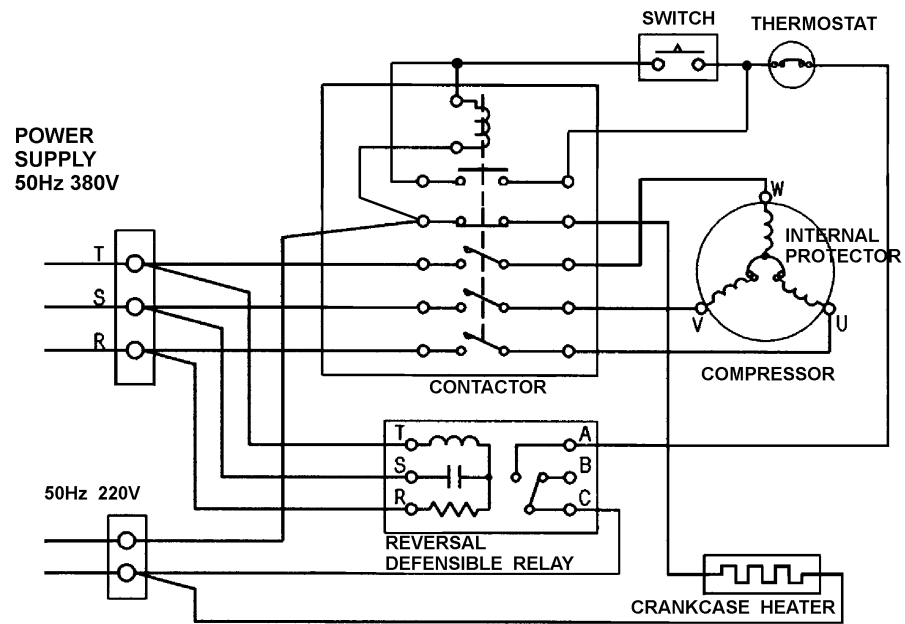
5.8-9kw

European & Chinese

power supply

specifications

models



Operating Envelope

Suction Gas Superheat: 11.1K
Refrigerant: R407C

