

SANYO

SANYO SCROLL COMPRESSORS

Model : C-SBS235H38A



DALIAN SANYO COMPRESSOR CO.,LTD.

Rev. 2008-5

SANYO Scroll Compressor



Model C-SBS235H38A

Refrigerant R407C

Electrical 380-415 Volts 3 Phase 50Hz

440 Volts 3 Phase 60Hz

Nominal Performance at ARI

Power Source	<u>50Hz-380V</u>	<u>60Hz-440V</u>
Capacity (W)	<u>19500</u>	<u>23400</u>
Power (W)	<u>6300</u>	<u>7550</u>
Current (A)	<u>11.2</u>	<u>11.3</u>
COP (W/W)	<u>3.10</u>	<u>3.10</u>
Mass Flow (kg/h)	<u>470</u>	<u>565</u>

Rating Conditions (R407C MID Point)

Condensing Temperature(°C)	<u>54.4</u>
Evaporating Temperature(°C)	<u>7.2</u>
Return Gas temperature(°C)	<u>18.3</u>
Liquid Temperature(°C)	<u>43.8</u>
Ambient Temperature(°C)	<u>35</u>

Motor

	50Hz	60Hz
Voltage Range(V)	<u>342-456</u>	<u>396-484</u>
RLA (A)	<u>12.5</u>	
MCC (A)	<u>17.5</u>	
LRA (A)	<u>73</u>	<u>76</u>
RPM (min ⁻¹)	<u>2900</u>	<u>3450</u>

Compressor

Maximum Discharge Temp(°C)	<u>130</u>
Displacement (cm ³ /rev)	<u>110.2</u>
Weight (with oil kg)	<u>40</u>

Oil

Oil Type	<u>FV68S</u>
Initial Charge (ml)	<u>1700</u>
Re-charge (ml)	<u>1600</u>

Electrical Components

Motor Protector Type	<u>Internal</u>
Run Capacitor Rating (MFD/Volts)	<u>n/a</u>

Nominal performance values +/-5% with 1 hr run-in.

Ratings with air over compressor.

Specifications subject to change without notice.



Made by: Dalian **SANYO** Compressor Co., Ltd.

PERFORMANCE DATA (PRELIMINARY DATA)

Compressor Model	C-SBS235H38A
Power Source	3PH 50Hz 380-415V
Suction Gas Superheat(K)	9
Sub Cooling(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R407C

CAPACITY(W)

Condensing Temperature(°C)	Evaporating Temperature(°C)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	10,890	13,070	14,750	18,840	22,130	24,520	27,160	29,220
40.5	10,220	12,270	13,840	17,670	20,750	22,990	25,460	27,390
45.0	9,700	11,640	13,130	16,760	19,680	21,800	24,140	25,970
50.0	9,150	10,980	12,380	15,800	18,550	20,540	22,750	24,470
54.4		10,420	11,750	15,000	17,610	19,500	21,590	23,220
60.0			11,010	14,040	16,480	18,250	20,210	21,730
65.0				13,250	15,540	17,210	19,050	20,490

POWER(W)

Condensing Temperature(°C)	Evaporating Temperature(°C)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	3,930	3,970	4,010	4,100	4,180	4,230	4,290	4,330
40.5	4,340	4,410	4,460	4,580	4,660	4,720	4,780	4,820
45.0	4,710	4,820	4,880	5,020	5,120	5,180	5,240	5,280
50.0	5,170	5,310	5,400	5,580	5,680	5,750	5,810	5,850
54.4		5,800	5,910	6,110	6,230	6,300	6,360	6,400
60.0			6,620	6,870	7,000	7,070	7,140	7,180
65.0				7,610	7,760	7,830	7,900	7,930

CURRENT(A)

@380V

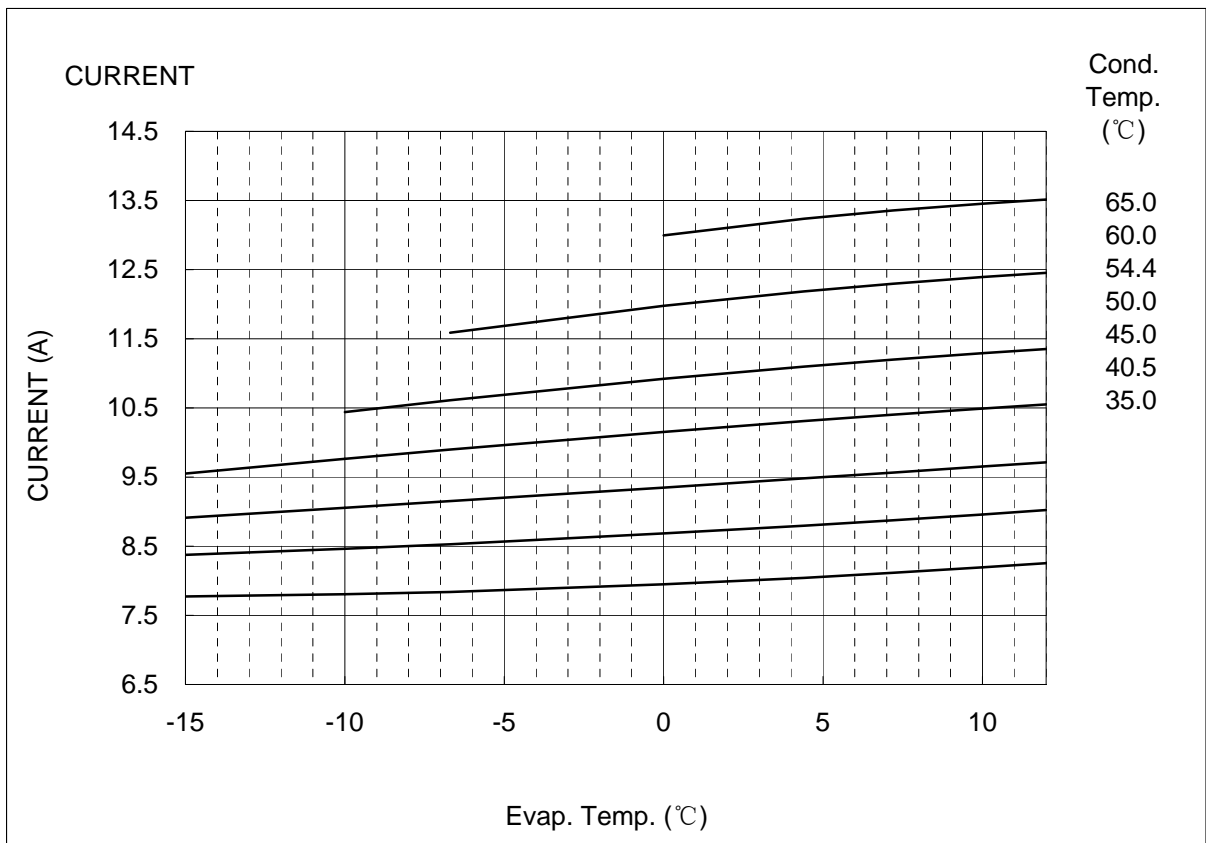
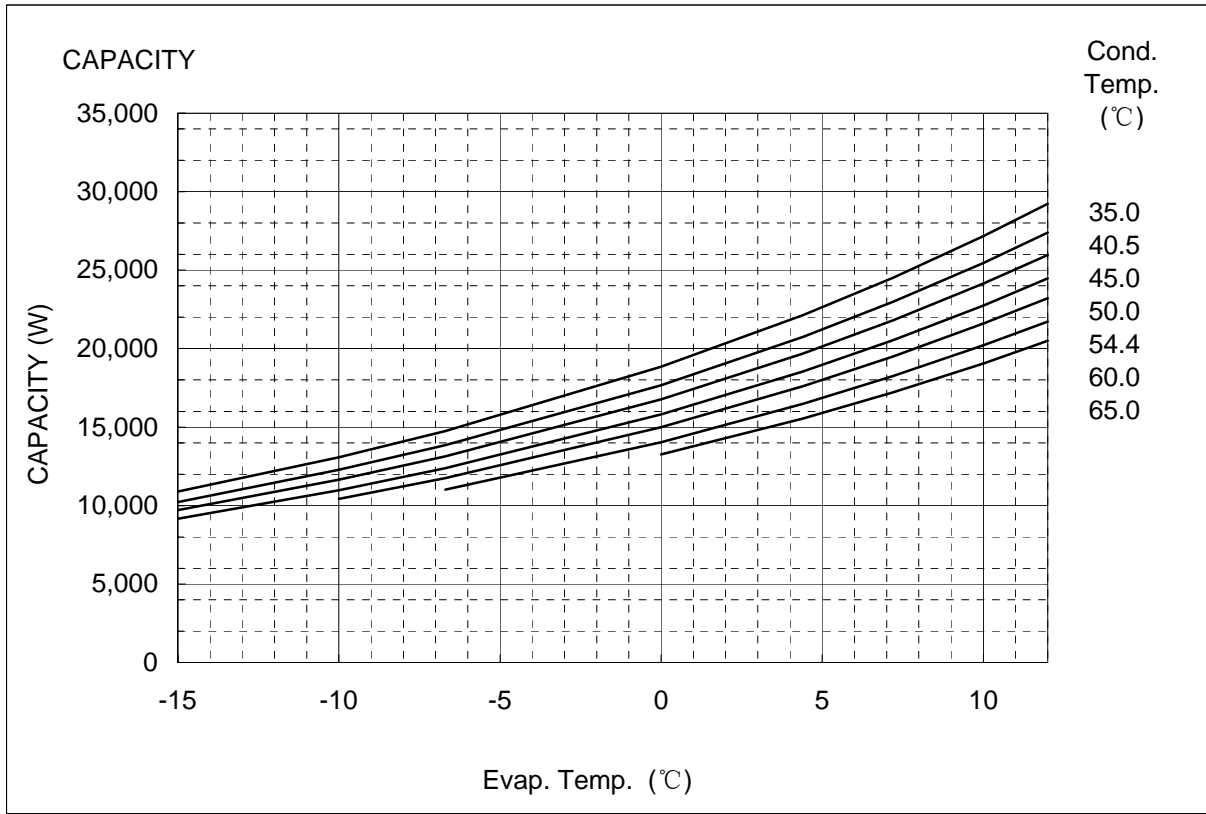
Condensing Temperature(°C)	Evaporating Temperature(°C)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	7.8	7.8	7.8	7.9	8.0	8.1	8.2	8.3
40.5	8.4	8.5	8.5	8.7	8.8	8.9	9.0	9.0
45.0	8.9	9.1	9.2	9.3	9.5	9.6	9.7	9.7
50.0	9.6	9.8	9.9	10.2	10.3	10.4	10.5	10.6
54.4		10.4	10.6	10.9	11.1	11.2	11.3	11.4
60.0			11.6	12.0	12.2	12.3	12.4	12.5
65.0				13.0	13.2	13.4	13.5	13.5

NOTE:

* The performance values subject to change without notice.

Compressor Model
Power Source

C-SBS235H38A
3PH 50Hz 380-415V



COEFFICIENTS OF PERFORMANCE CURVES



Compressor Model **C-SBS235H38A**
 Power Source **3PH 50Hz 380-415V**
 Suction Gas Superheat (K) **9**
 Sub Cooling (K) **8.3**
 Compressor Cooling **Natural Cooling**
 Refrigerant **R407C**

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

X—CAPACITY(W) OR POWER(W) OR CURRENT(A) OR FLOW(kg/h)

S—EVAPORATING TEMP, °C

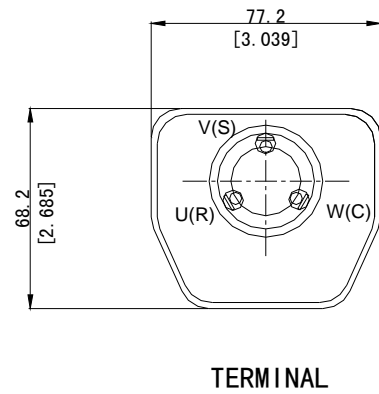
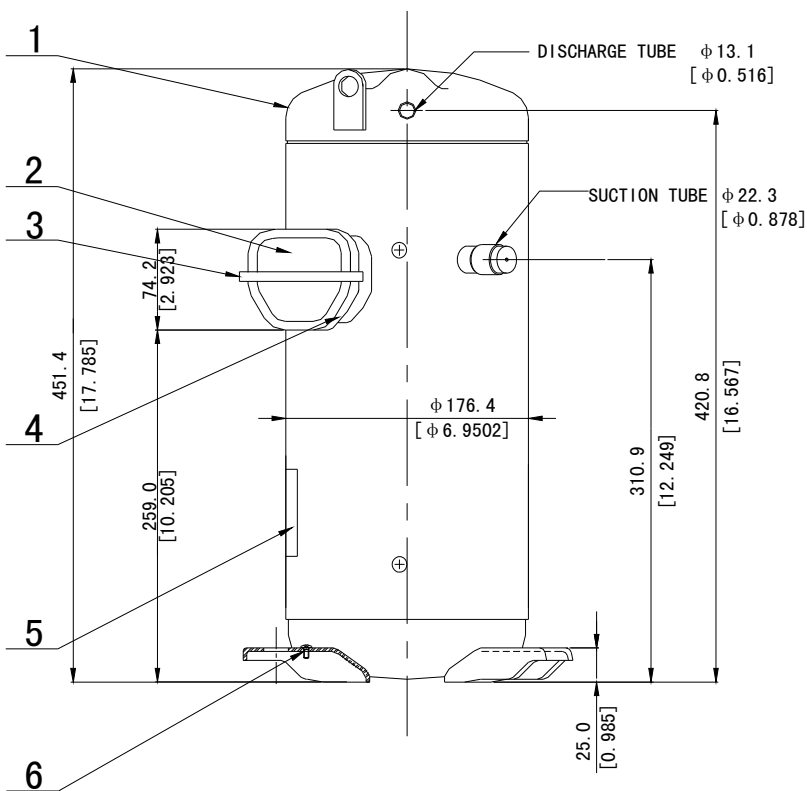
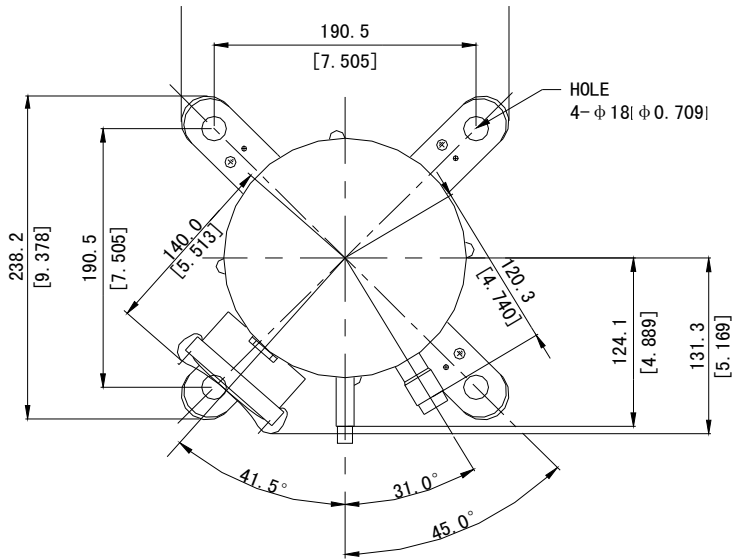
D—CONDENSING TEMP, °C

380V-50Hz	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	2.785714E+04	2.760579E+03	5.150769E+00
C2	1.047761E+03	7.714436E+00	6.212155E-03
C3	-2.961493E+02	-4.054090E+00	3.211921E-02
C4	1.761241E+01	1.533474E+00	2.690169E-03
C5	-1.186673E+01	-4.897943E-03	-1.037790E-04
C6	1.098713E+00	1.208405E+00	1.360911E-03
C7	1.327423E-01	-3.056640E-03	-2.925073E-06
C8	-1.378937E-01	-3.450038E-02	-6.008830E-05
C9	4.829365E-02	7.012657E-03	1.419595E-05
C10	5.986822E-09	1.371784E-08	1.013548E-11

Note:The polynomial coefficients subject to change without notice.

DIMENSIONAL SKETCH

C-SB Series

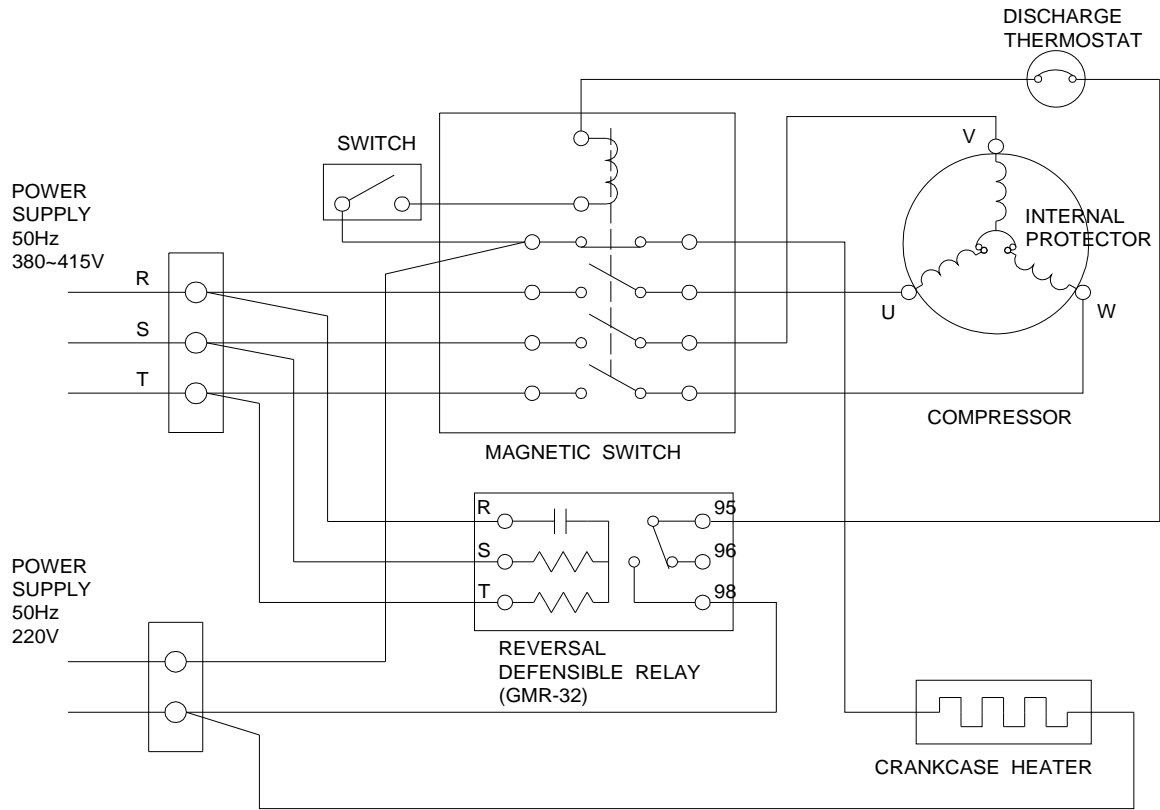


TERMINAL

No.	Qty	Name
1	1	Compressor
2	1	Terminal Box Cover
3	1	Terminal Box Clip
4	1	Insulating Grommet
5	1	Nameplate
6	1	Screw Special

WIRING & MOUNTING SKETCH

WIRING DIAGRAM C-SB Series 3phase B8



MOUNTING SKETCH

