

**SANYO**

# SANYO SCROLL COMPRESSORS

Code : 809 977 88

Model : C-SBN523H8H



DALIAN SANYO COMPRESSOR CO.,LTD.

Rev. 2007-5

## **SANYO Scroll Compressor**



**Model** C-SBN523H8H

**Electrical** 380-415 Volts 3 Phase 50Hz

**Refrigerant** R410A

### **Nominal Performance at ARI**

Power Source 50Hz-380V

Capacity (W) 19200

Power (W) 6750

Current (A) 11.6

COP (W/W) 2.84

Mass Flow (kg/h) 440

### **Rating Conditions**

Condensing Temperature(°C) 54.4

Evaporating Temperature(°C) 7.2

Return Gas temperature(°C) 18.3

Liquid Temperature(°C) 46.1

Ambient Temperature(°C) 35

### **Motor**

**50Hz**

Voltage Range(V) 342-456

RLA (A) 14.1

MCC (A) 19.7

LRA (A) 73

RPM (min<sup>-1</sup>) 2900

### **Compressor**

Maximum Discharge Temp(°C) 130

Displacement (cm<sup>3</sup>/rev) 77.4

Weight (with oil kg) 39

### **Oil**

Oil Type FV68S

Initial Charge (ml) 1700

Re-charge (ml) 1600

### **Electrical Components**

Motor Protector Type Internal

Run Capacitor Rating n/a  
(MFD/Volts)

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**

Compressor Model(Code)	<b>C-SBN523H8H (809 977 88)</b>
Power Source	<b>3PH 50Hz 380-415V</b>
Suction Gas Superheat(K)	<b>11.1</b>
Sub Cooling(K)	<b>8.3</b>
Compressor Cooling	<b>Natural Cooling</b>
Refrigerant	<b>R410A</b>

**CAPACITY(W)**

Condensing Temperature(°C)	Evaporating Temperature(°C)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	11,230	13,560	15,350	19,760	23,320	25,910	28,790	31,050
40.5	10,200	12,350	14,010	18,100	21,420	23,840	26,530	28,640
45.0	9,420	11,430	12,990	16,830	19,960	22,240	24,780	26,770
50.0	8,620	10,490	11,930	15,520	18,430	20,570	22,960	24,830
54.4		9,720	11,070	14,440	17,180	19,200	21,450	23,220
60.0			10,070	13,170	15,720	17,590	19,680	21,320
65.0				12,140	14,520	16,270	18,230	19,770

**POWER(W)**

Condensing Temperature(°C)	Evaporating Temperature(°C)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	4,360	4,370	4,370	4,350	4,340	4,320	4,310	4,290
40.5	4,930	4,930	4,920	4,900	4,880	4,870	4,850	4,830
45.0	5,490	5,480	5,470	5,440	5,410	5,400	5,370	5,360
50.0	6,220	6,190	6,170	6,130	6,100	6,070	6,050	6,030
54.4		6,900	6,870	6,810	6,780	6,750	6,720	6,710
60.0			7,880	7,800	7,750	7,720	7,690	7,670
65.0				8,780	8,710	8,680	8,650	8,630

**CURRENT(A)**

@380V

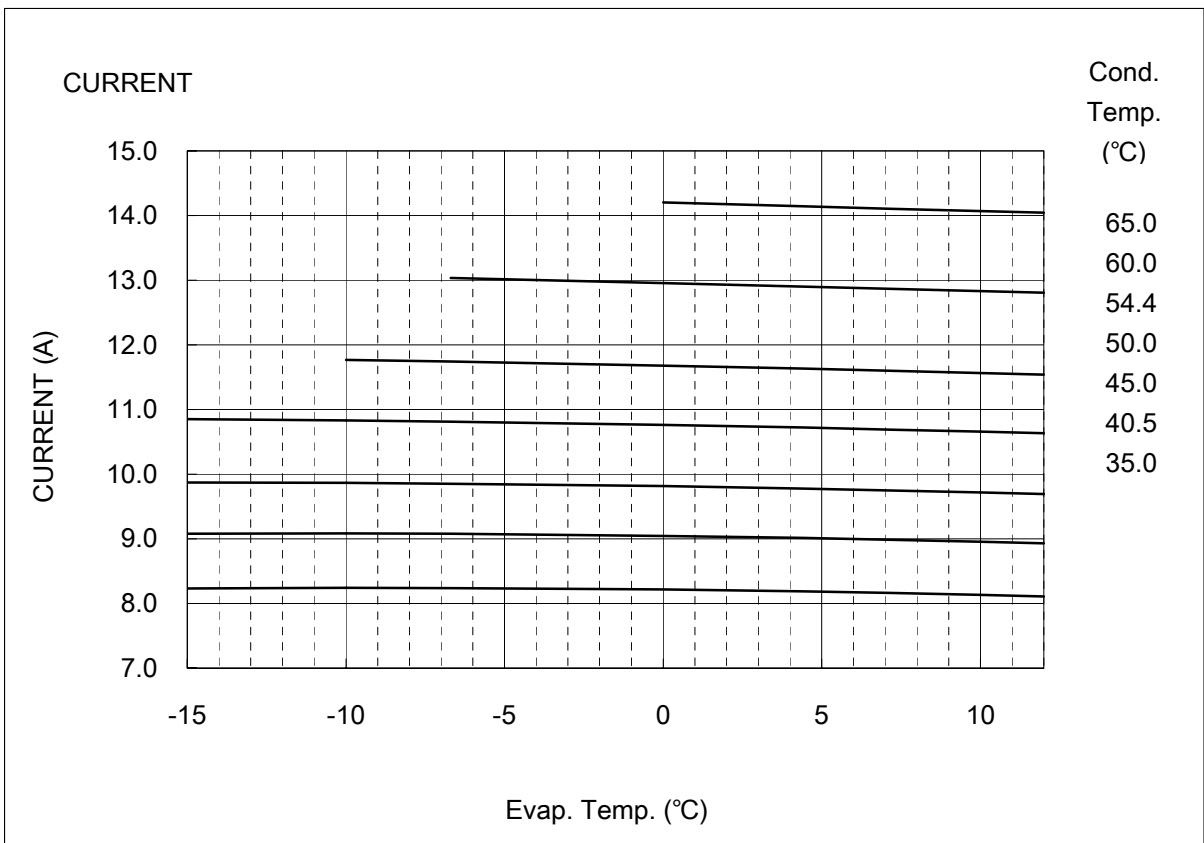
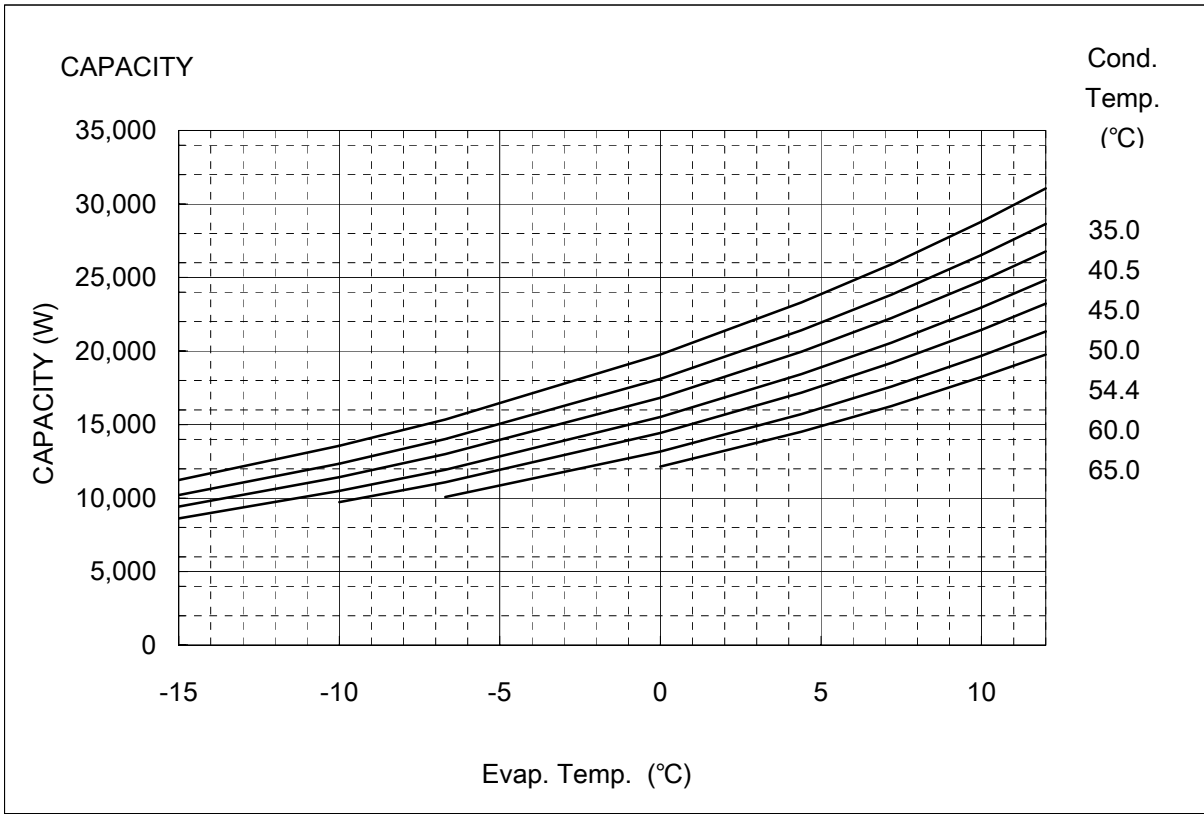
Condensing Temperature(°C)	Evaporating Temperature(°C)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	8.2	8.2	8.2	8.2	8.2	8.2	8.1	8.1
40.5	9.1	9.1	9.1	9.0	9.0	9.0	9.0	8.9
45.0	9.9	9.9	9.9	9.8	9.8	9.7	9.7	9.7
50.0	10.9	10.8	10.8	10.8	10.7	10.7	10.7	10.6
54.4		11.8	11.7	11.7	11.6	11.6	11.6	11.5
60.0			13.0	13.0	12.9	12.9	12.8	12.8
65.0				14.2	14.1	14.1	14.1	14.0

**NOTE:**

\* The performance values subject to change without notice.

Compressor Model(Code)  
Power Source

**C-SBN523H8H (809 977 88)**  
**3PH 50Hz 380-415V**



## COEFFICIENTS OF PERFORMANCE CURVES



Compressor Model           **C-SBN523H8H (809 977 88)**  
 Power Source               **3PH 50Hz 380-415V**  
 Suction Gas Superheat (K) **11.1**  
 Sub Cooling (K)           **8.3**  
 Compressor Cooling       **Natural Cooling**  
 Refrigerant                 **R410A**

$$X=C1+C2*(S)+C3*D+C4*(S2)+C5*(S*D)+C6*(D2)+C7*(S3)+C8*(D*S2)+C9*(S*D2) +C10*(D3)$$

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

S—EVAPORATING TEMP, °C

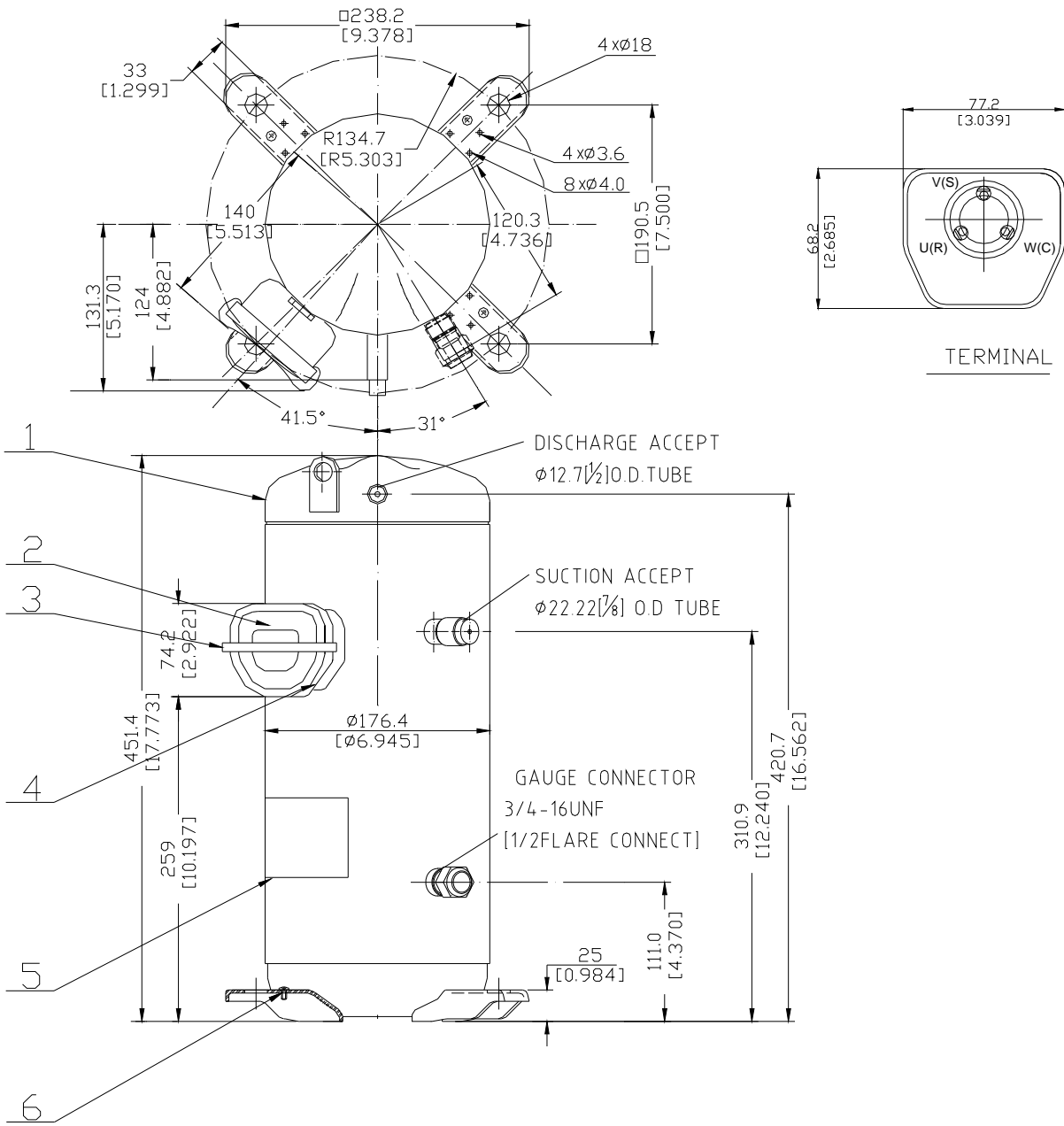
D—CONDENSING TEMP, °C

<b>380V-50Hz</b>	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	3.308011E+04	3.664654E+03	5.787256E+00
C2	1.159027E+03	-7.360696E+00	-3.654000E-03
C3	-4.493486E+02	-4.900286E+01	-5.444423E-04
C4	1.912486E+01	-5.528950E-01	-6.712201E-04
C5	-1.354391E+01	3.813151E-01	6.419956E-05
C6	1.958497E+00	1.964662E+00	2.000646E-03
C7	1.569826E-01	5.063829E-04	8.409157E-07
C8	-1.388949E-01	1.006884E-02	1.002644E-05
C9	5.033706E-02	-7.482899E-03	-3.340507E-06
C10	-6.018582E-09	-9.565104E-09	-3.389541E-12

Note:The polynomial coefficients subject to change without notice.

# DIMENSIONAL SKETCH

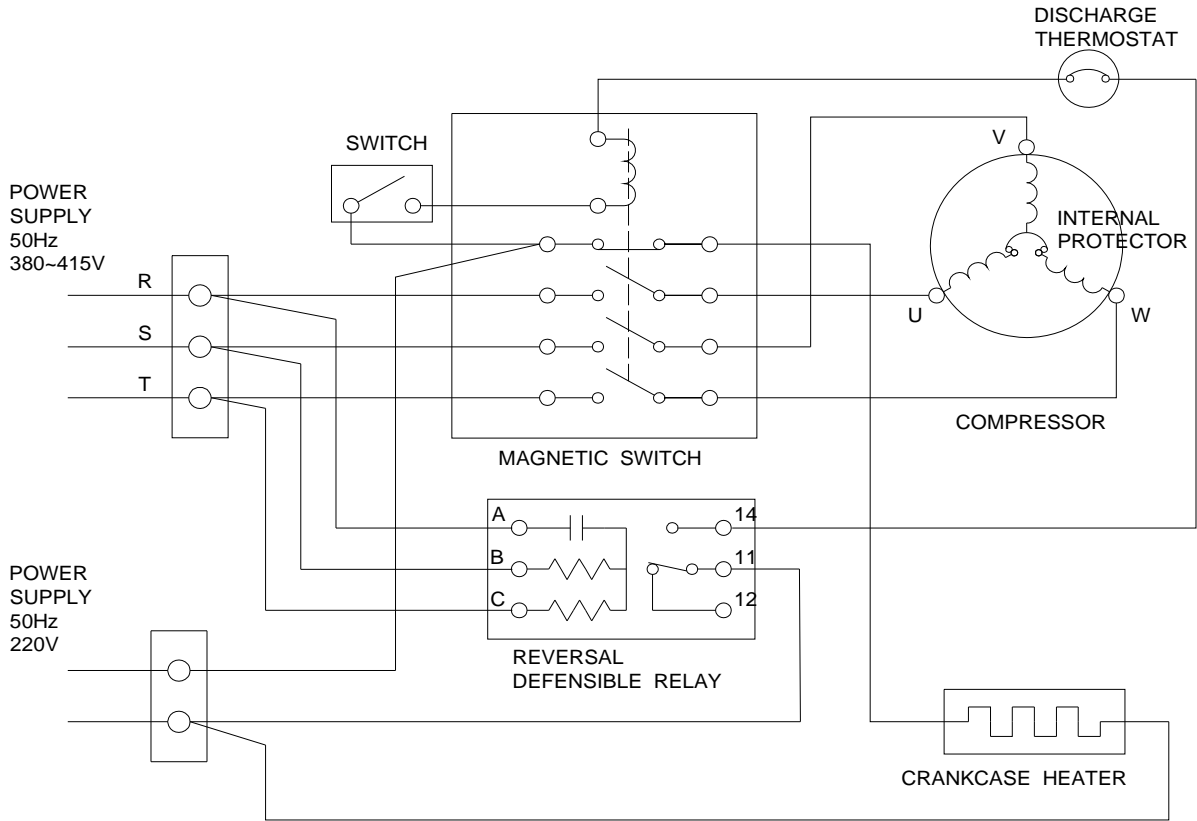
## C-SB Tandem Series



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

