

SANYO

SANYO SCROLL COMPRESSORS

Code : 809 940 45

Model : C-SBN301H5A



DALIAN SANYO COMPRESSOR CO.,LTD.

Rev. 2007-5

SANYO Scroll Compressor



Model C-SBN301H5A
Refrigerant R407C

Electrical 220-240 Volts 1 Phase 50Hz

Nominal Performance at ARI

Power Source	<u>50Hz-220V</u>	<u>50Hz-240V</u>
Capacity (W)	<u>11800</u>	<u>11600</u>
Power (W)	<u>4000</u>	<u>4150</u>
Current (A)	<u>19.4</u>	<u>20.3</u>
COP (W/W)	<u>2.95</u>	<u>2.80</u>
Mass Flow (kg/h)	<u>282</u>	<u>277</u>

Rating Conditions (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>35.0</u>

Motor

	<u>50Hz</u>
Voltage Range(V)	<u>198-264</u>
RLA (A)	<u>23.2</u>
MCC (A)	<u>32.5</u>
LRA (A)	<u>122</u>
RPM (min ⁻¹)	<u>2900</u>
Motor Type	<u>CSR</u>

Oil

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

Compressor

Maximum Discharge Temp(°C)	<u>130</u>
Displacement (cm ³ /rev)	<u>66.8</u>
Weight (with oil kg)	<u>39</u>

Electrical Components

Motor Protector Type	<u>Internal</u>
Run Capacitor Rating (MFD/Volts)	<u>60/440</u>
Starting Capacitor Rating (MFD/Volts)	<u>100~140/330</u>
Starting Relay P.U. Volts	<u>180~195</u>
D.O. Volts	<u>40~105</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

Compressor Model(Code)	C-SBN301H5A (809 940 45)
Power Source	1PH 50Hz 220-240V
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	5,960	7,290	8,330	10,920	13,050	14,610	16,360	17,730
40.5	5,680	6,930	7,900	10,320	12,300	13,750	15,370	16,650
45.0	5,460	6,650	7,570	9,850	11,720	13,090	14,610	15,810
50.0	5,220	6,340	7,210	9,360	11,110	12,390	13,810	14,930
54.4		6,090	6,910	8,950	10,600	11,800	13,140	14,190
60.0			6,550	8,450	9,980	11,100	12,340	13,310
65.0				8,030	9,470	10,510	11,670	12,580

POWER(W)

Condensing Temperature(°C)	Evaporating Temperature(°C)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	2,720	2,720	2,720	2,720	2,730	2,730	2,730	2,730
40.5	3,020	3,020	3,020	3,030	3,040	3,040	3,040	3,040
45.0	3,290	3,300	3,300	3,310	3,320	3,320	3,330	3,330
50.0	3,620	3,630	3,640	3,650	3,660	3,670	3,670	3,680
54.4		3,960	3,960	3,980	3,990	4,000	4,010	4,010
60.0			4,410	4,430	4,450	4,460	4,470	4,470
65.0				4,870	4,890	4,900	4,910	4,920

CURRENT(A)

@220V

Condensing Temperature(°C)	Evaporating Temperature(°C)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	13.8	13.8	13.8	13.8	13.8	13.9	13.9	13.9
40.5	15.1	15.1	15.2	15.2	15.2	15.2	15.3	15.3
45.0	16.3	16.3	16.4	16.4	16.5	16.5	16.5	16.5
50.0	17.7	17.8	17.8	17.9	17.9	18.0	18.0	18.0
54.4		19.1	19.2	19.3	19.4	19.4	19.4	19.5
60.0			21.1	21.2	21.3	21.4	21.4	21.5
65.0				23.0	23.2	23.2	23.3	23.4

NOTE:

- * The performance values subject to change without notice.
- * The performance values are based on MID point method.

COEFFICIENTS OF PERFORMANCE CURVES



Compressor Model **C-SBN301H5A (809 940 45)**
 Power Source **1PH 50Hz 220-240V**
 Suction Gas Superheat (K) **9**
 Sub Cooling (K) **8.3**
 Compressor Cooling **Natural Cooling**
 Refrigerant **R407C**

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

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

S—EVAPORATING TEMP, °C

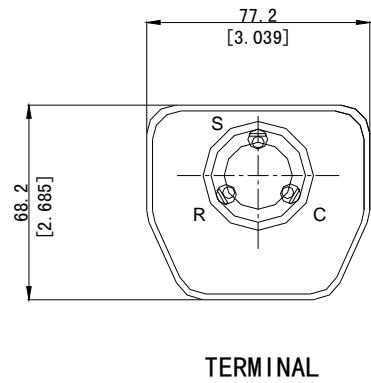
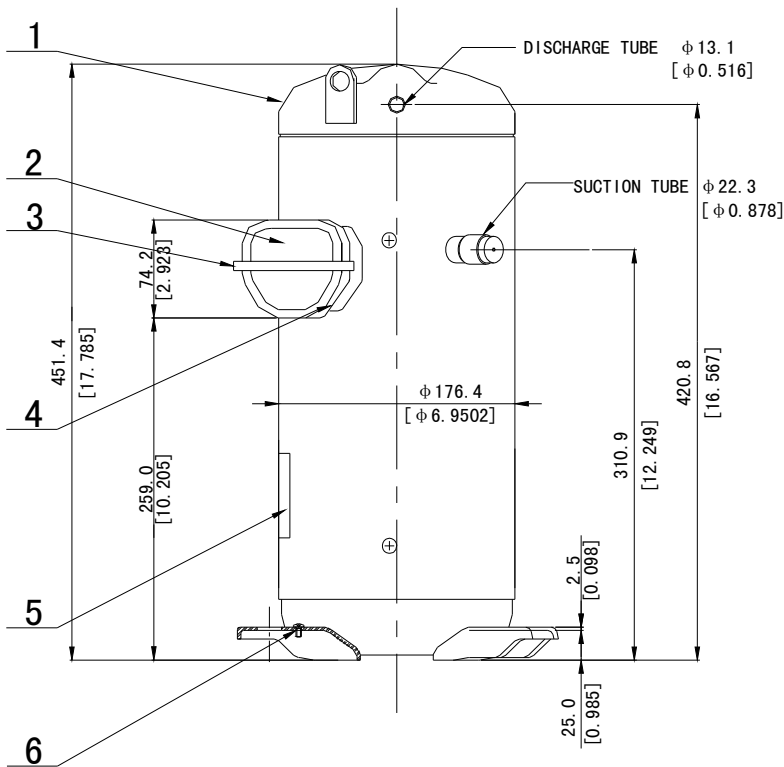
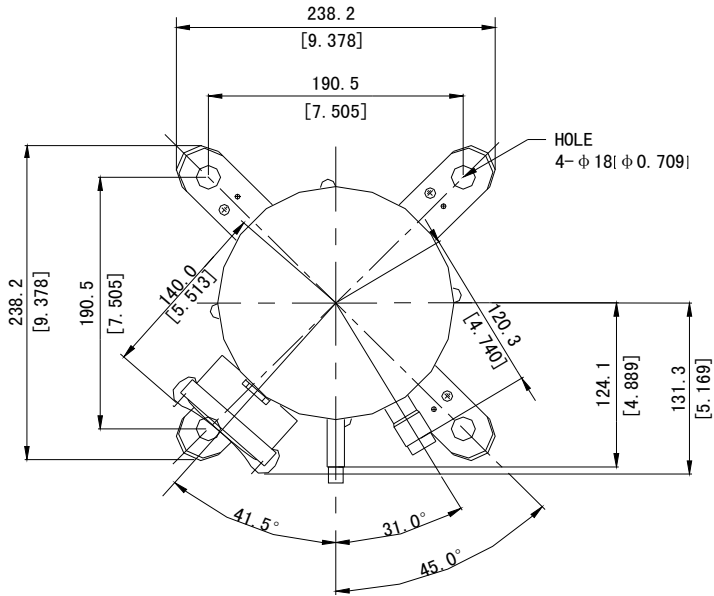
D—CONDENSING TEMP, °C

<u>220V-50Hz</u>	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	1.548228E+04	1.686475E+03	8.644960E+00
C2	6.982396E+02	-1.952402E+00	-1.871089E-04
C3	-1.489618E+02	7.072906E+00	6.321151E-02
C4	1.329735E+01	3.411759E-03	-2.270360E-05
C5	-8.578110E+00	5.242794E-02	-3.279081E-04
C6	5.290973E-01	6.449352E-01	2.434503E-03
C7	9.688113E-02	-1.491473E-03	7.473732E-08
C8	-1.212843E-01	1.208341E-05	5.785545E-07
C9	3.766628E-02	6.433757E-04	1.133067E-05
C10	-1.326888E-08	-3.630497E-09	8.037393E-13

Note:The polynomial coefficients subject to change without notice.

DIMENSIONAL SKETCH

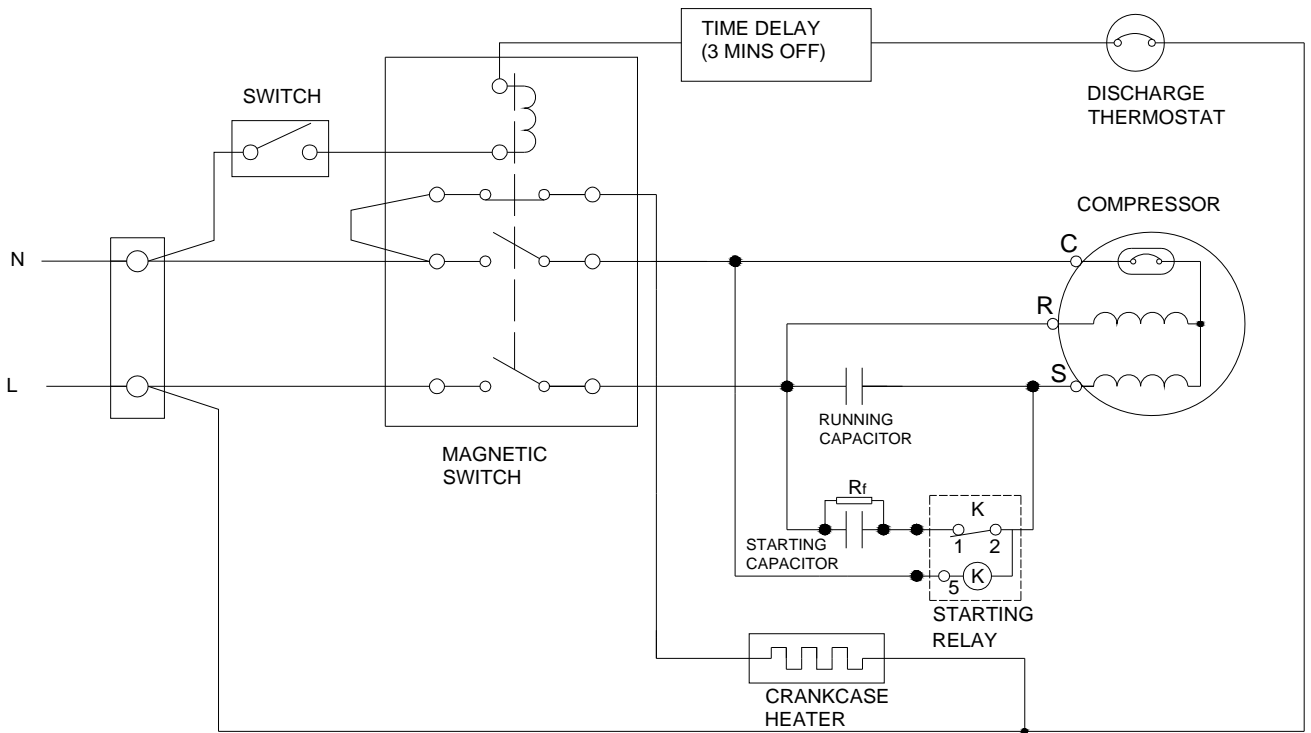
C-SB Series



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 1phase (CSR)



MOUNTING SKETCH

