SANYO SCROLL COMPRESSORS

Code : 809 960 88

Model : C-SBN453H8A

DALIAN SANYO COMPRESSOR CO.,LTD.

Rev.2007-5

SANYO Scroll Compressor

Model	C-SBN453H8A	**Electrical**	380-415 Volts 3 Phase 50Hz
Refrigerant	R407C		440-460 Volts 3 Phase 60Hz

Nominal Performance at ARI

		50Hz-380V	60Hz-440V
Power Source			
Capacity	(W)	17600	21300
Power	(W)	5800	7000
Current	(A)	9.93	10.2
COP	(W/W)	3.03	3.04
Mass Flow	(kg/h)	424	513

Rating Conditions (MID Point)

Condensing Temperature(℃)	54.4
Evaporating Temperature(℃)	7.2
Return Gas temperature(℃)	18.3
Liquid Temperature(℃)	43.8
Ambient Temperature(℃)	35

Motor

	50Hz	60Hz
Voltage Range(V)	342-456	396-506
RLA (A)	10.4	
MCC (A)	14.5	
LRA (A)	66	72
RPM (min^{-1})	2900	3450

Compressor

Maximum Discharge Temp(℃)	130
Displacement (cm^3/rev)	100
Weight (with oil kg)	39.5
VDE File Number	40010537

Oil

Oil Type	FV68S
Initial Charge (ml)	1700
Re-charge (ml)	1600

Electrical Components

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

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-SBN453H8A (809 960 88)**
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(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	10,120	12,260	13,920	18,000	21,300	23,720	26,410	28,510
40.5	9,170	11,140	12,680	16,470	19,560	21,820	24,340	26,320
45.0	8,440	10,290	11,730	15,310	18,220	20,360	22,750	24,630
50.0	7,700	9,420	10,760	14,100	16,830	18,850	21,100	22,870
54.4		8,710	9,970	13,110	15,700	17,600	19,730	21,420
60.0			9,050	11,960	14,360	16,140	18,130	19,710
65.0				11,030	13,280	14,950	16,830	18,320

POWER(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	3,580	3,610	3,620	3,650	3,670	3,680	3,690	3,690
40.5	4,070	4,090	4,110	4,140	4,150	4,160	4,170	4,170
45.0	4,530	4,560	4,580	4,610	4,620	4,630	4,630	4,640
50.0	5,130	5,160	5,180	5,200	5,210	5,220	5,220	5,220
54.4		5,750	5,770	5,790	5,800	5,800	5,800	5,800
60.0			6,600	6,630	6,630	6,630	6,620	6,610
65.0				7,450	7,450	7,440	7,430	7,420

CURRENT(A)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	6.5	6.5	6.6	6.6	6.7	6.7	6.7	6.7
40.5	7.3	7.3	7.4	7.4	7.4	7.5	7.5	7.5
45.0	8.0	8.1	8.1	8.1	8.2	8.2	8.2	8.2
50.0	9.0	9.0	9.0	9.0	9.1	9.1	9.1	9.1
54.4		9.9	9.9	9.9	9.9	9.9	9.9	9.9
60.0			11.2	11.1	11.1	11.1	11.1	11.1
65.0				12.4	12.3	12.3	12.3	12.3

NOTE:

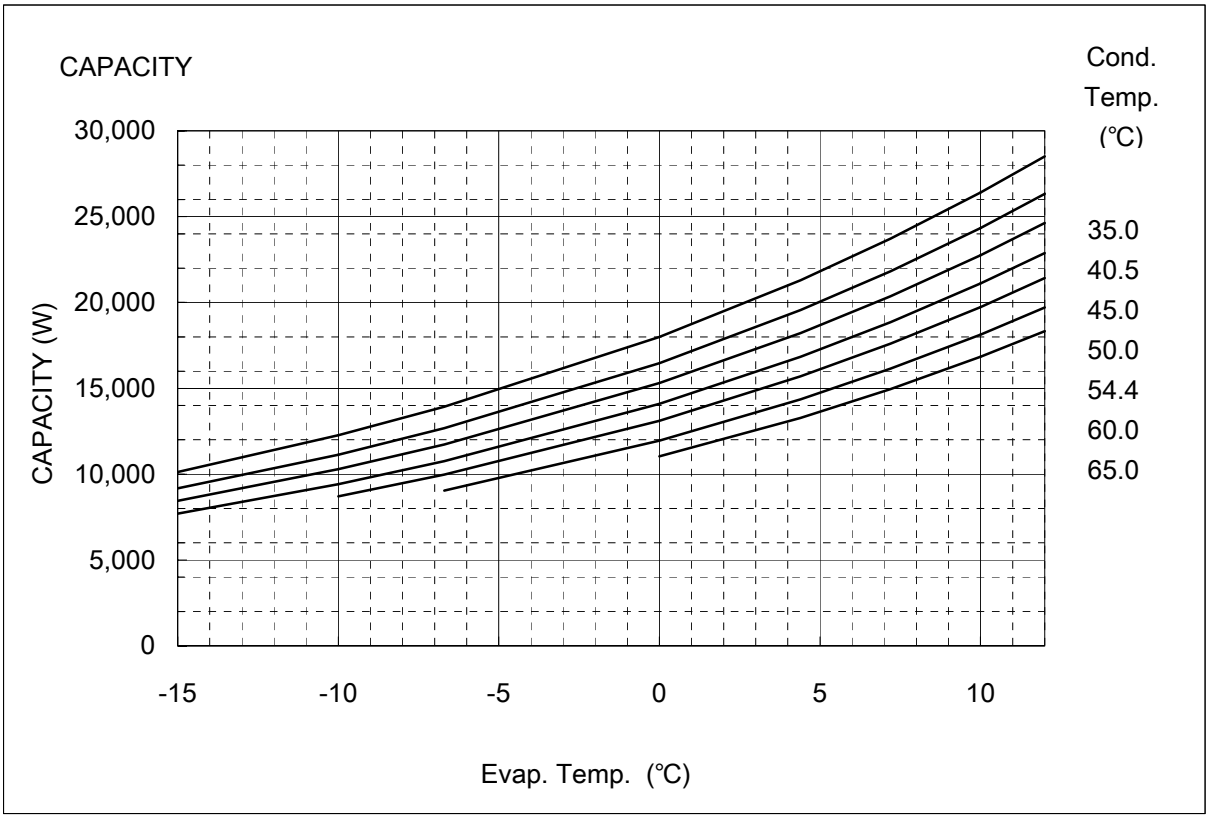
*** The performance values subject to change without notice.**

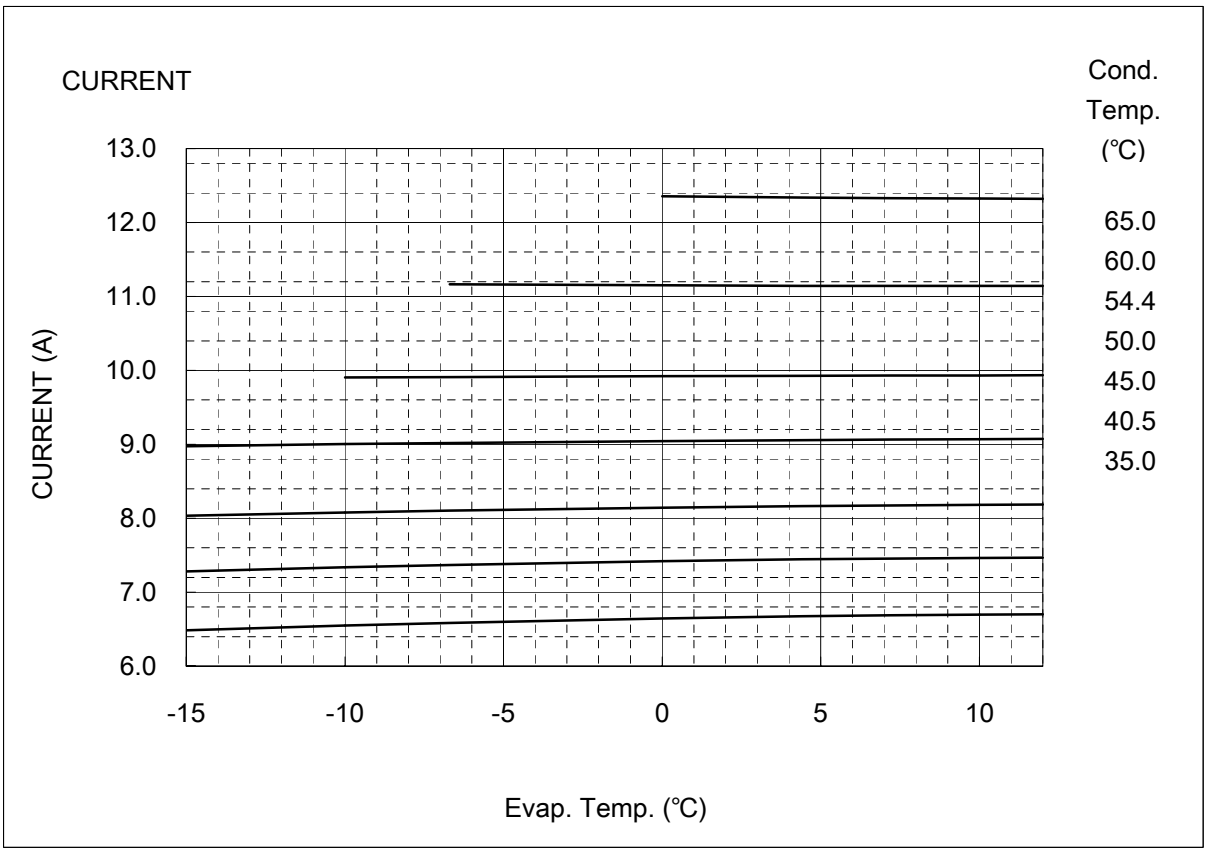
*** The performance values are based on MID point method.**

Dalian SANYO Compressor Co.,Ltd.

Compressor Model(Code) **C-SBN453H8A (809 960 88)**

Power Source **3PH 50Hz 380-415V**





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**C-SBN453H8A (809 960 88)**
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*(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

380V-50Hz	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	3.034880E+04	2.721748E+03	4.617993E+00
C2	1.060532E+03	-6.974613E-02	1.557206E-03
C3	-4.182717E+02	-2.743618E+01	-1.328039E-02
C4	1.754255E+01	2.007315E-01	-6.459148E-04
C5	-1.211605E+01	2.468342E-01	4.574345E-04
C6	1.861968E+00	1.541522E+00	2.035840E-03
C7	1.539044E-01	-8.299031E-04	9.746187E-07
C8	-1.161028E-01	-6.813749E-03	1.149685E-05
C9	4.543848E-02	-3.655849E-03	-8.462249E-06
C10	4.773682E-09	-1.035467E-08	-6.685040E-12

Note:The polynomial coefficients subject to change without notice.

PERFORMANCE DATA

Compressor Model(Code)	**C-SBN453H8A (809 960 88)**
Power Source	**3PH 60Hz 440-460V**
Suction Gas Superheat(K)	**9**
Sub Cooling(K)	**8.3**
Compressor Cooling	**Natural Cooling**
Refrigerant	**R407C**

CAPACITY(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	12,180	14,730	16,690	21,530	25,450	28,300	31,480	33,960
40.5	11,140	13,500	15,330	19,820	23,470	26,140	29,100	31,430
45.0	10,360	12,570	14,280	18,510	21,950	24,470	27,270	29,470
50.0	9,540	11,600	13,200	17,150	20,370	22,730	25,360	27,420
54.4		10,810	12,310	16,040	19,070	21,300	23,790	25,740
60.0			11,270	14,720	17,540	19,610	21,930	23,750
65.0				13,650	16,300	18,240	20,410	22,120

POWER(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	4,440	4,470	4,490	4,540	4,580	4,610	4,640	4,670
40.5	4,970	5,010	5,040	5,100	5,140	5,170	5,200	5,220
45.0	5,470	5,520	5,560	5,630	5,670	5,700	5,730	5,740
50.0	6,090	6,160	6,210	6,290	6,330	6,360	6,380	6,390
54.4		6,790	6,840	6,930	6,980	7,000	7,020	7,030
60.0			7,740	7,840	7,890	7,900	7,920	7,920
65.0				8,740	8,780	8,790	8,800	8,790

CURRENT(A)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	6.8	6.8	6.9	6.9	7.0	7.0	7.0	7.1
40.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.8
45.0	8.2	8.2	8.3	8.4	8.4	8.5	8.5	8.5
50.0	9.0	9.1	9.1	9.3	9.3	9.4	9.4	9.4
54.4		9.9	10.0	10.1	10.2	10.2	10.2	10.2
60.0			11.1	11.3	11.4	11.4	11.4	11.4
65.0				12.4	12.5	12.5	12.5	12.5

NOTE:

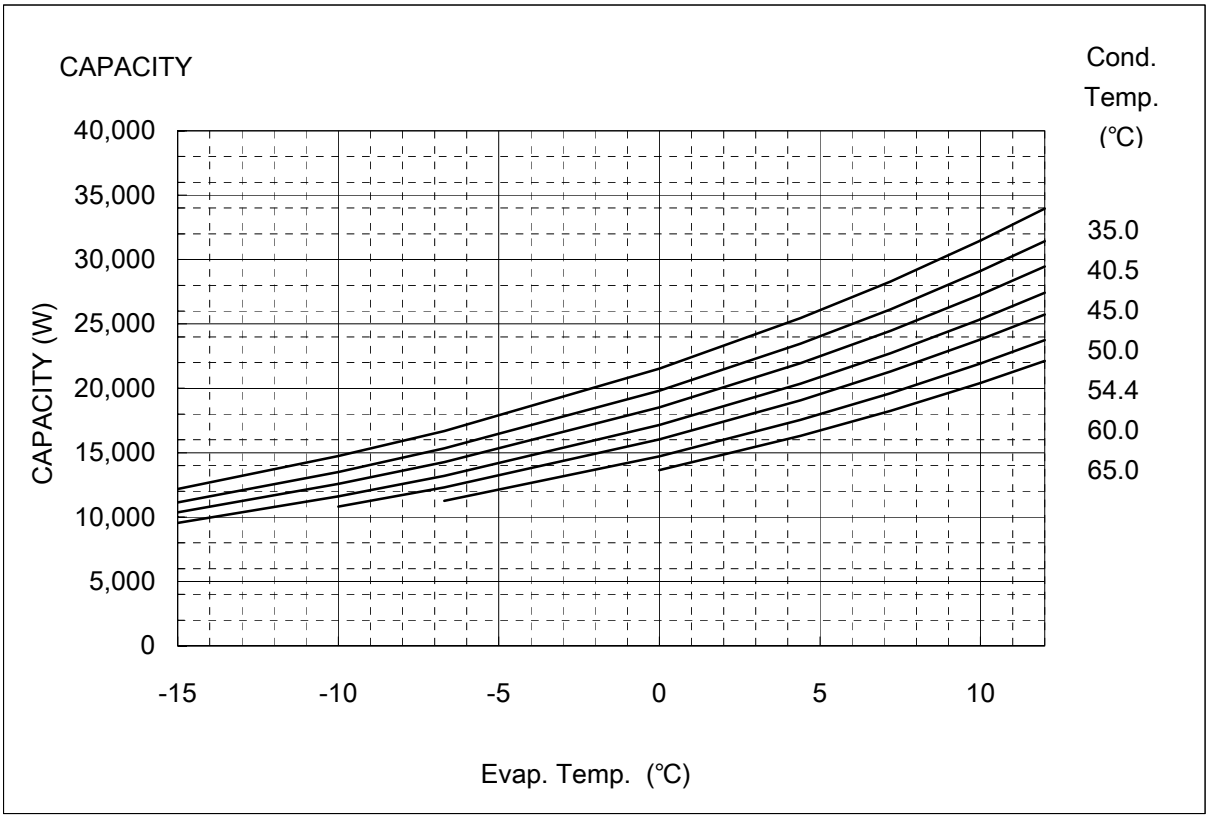
*** The performance values subject to change without notice.**

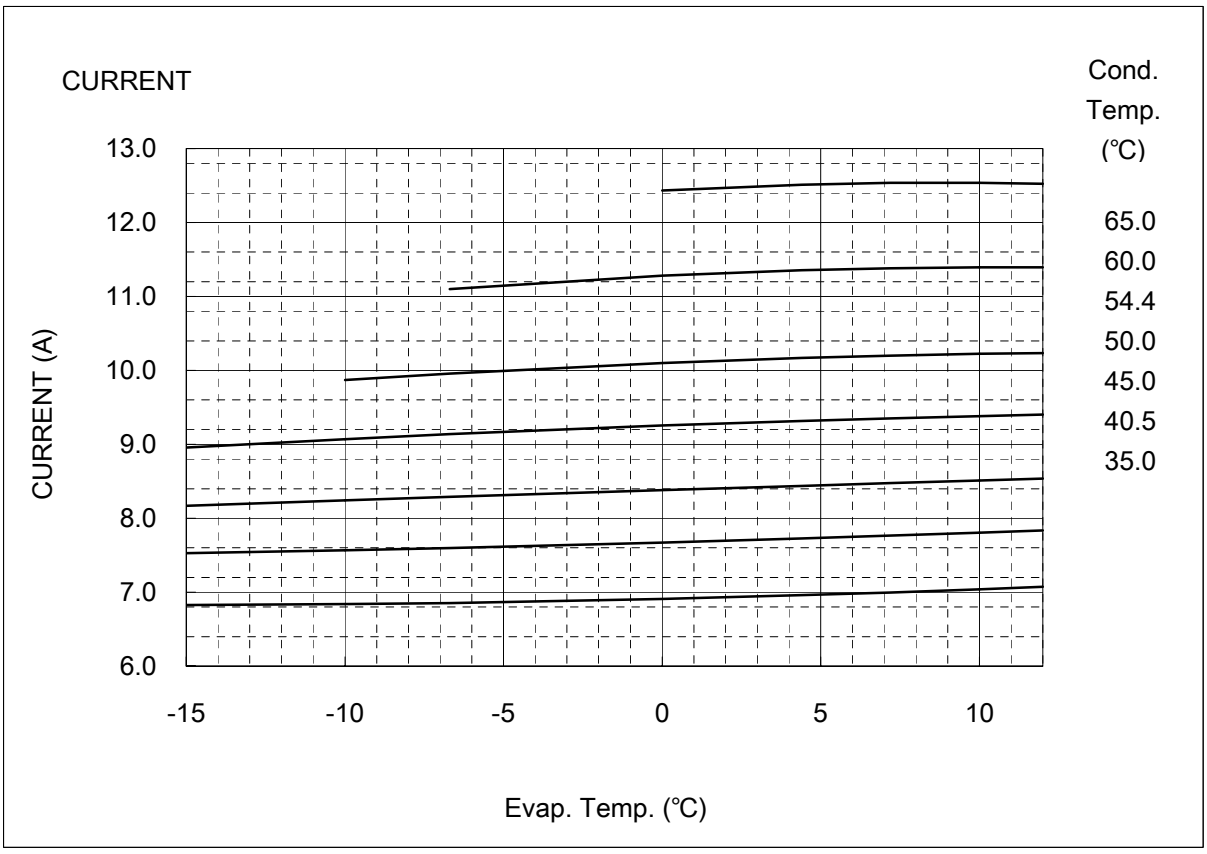
*** The performance values are based on MID point method.**

Dalian SANYO Compressor Co.,Ltd.

Compressor Model(Code) **C-SBN453H8A (809 960 88)**

Power Source **3PH 60Hz 440-460V**





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**C-SBN453H8A (809 960 88)**
Power Source	**3PH 60Hz 440-460V**
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

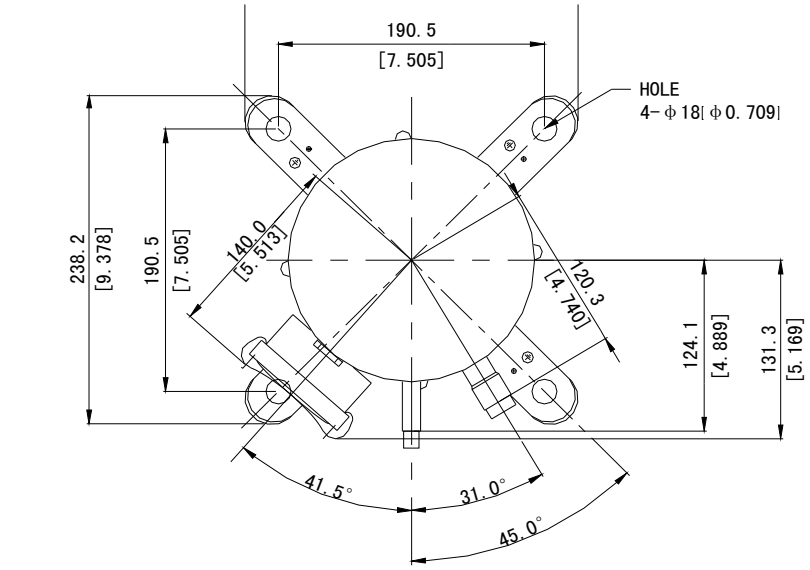
D——CONDENSING TEMP, °C

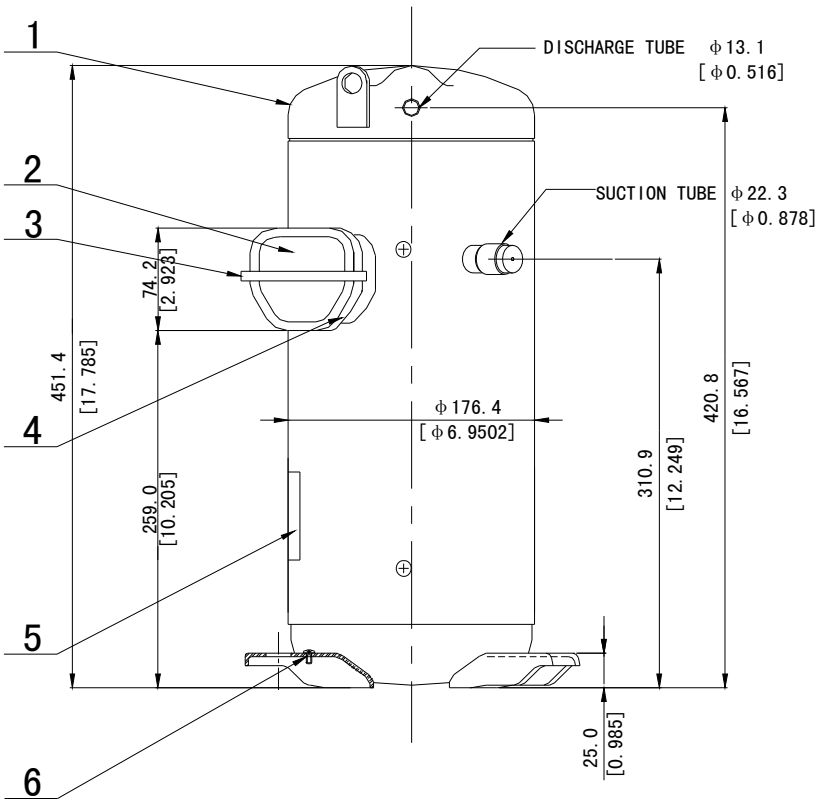
440V-60Hz	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	3.520817E+04	3.139357E+03	4.559524E+00
C2	1.278941E+03	1.164898E+00	2.895240E-03
C3	-4.603243E+02	-1.381666E+01	3.860002E-03
C4	2.137054E+01	1.026872E+00	2.070168E-03
C5	-1.524220E+01	2.799734E-01	1.296189E-04
C6	1.980586E+00	1.536515E+00	1.802690E-03
C7	1.744962E-01	-1.417288E-03	-3.013645E-06
C8	-1.587598E-01	-2.430703E-02	-4.829039E-05
C9	6.140772E-02	-1.690591E-03	2.582662E-06
C10	2.272498E-09	6.056751E-09	1.069223E-11

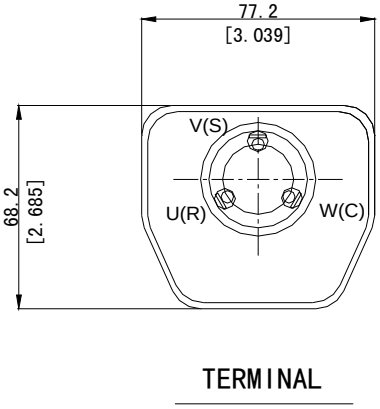
Note:The polynomial coefficients subject to change without notice.

DIMENSIONAL SKETCH

C-SB Series







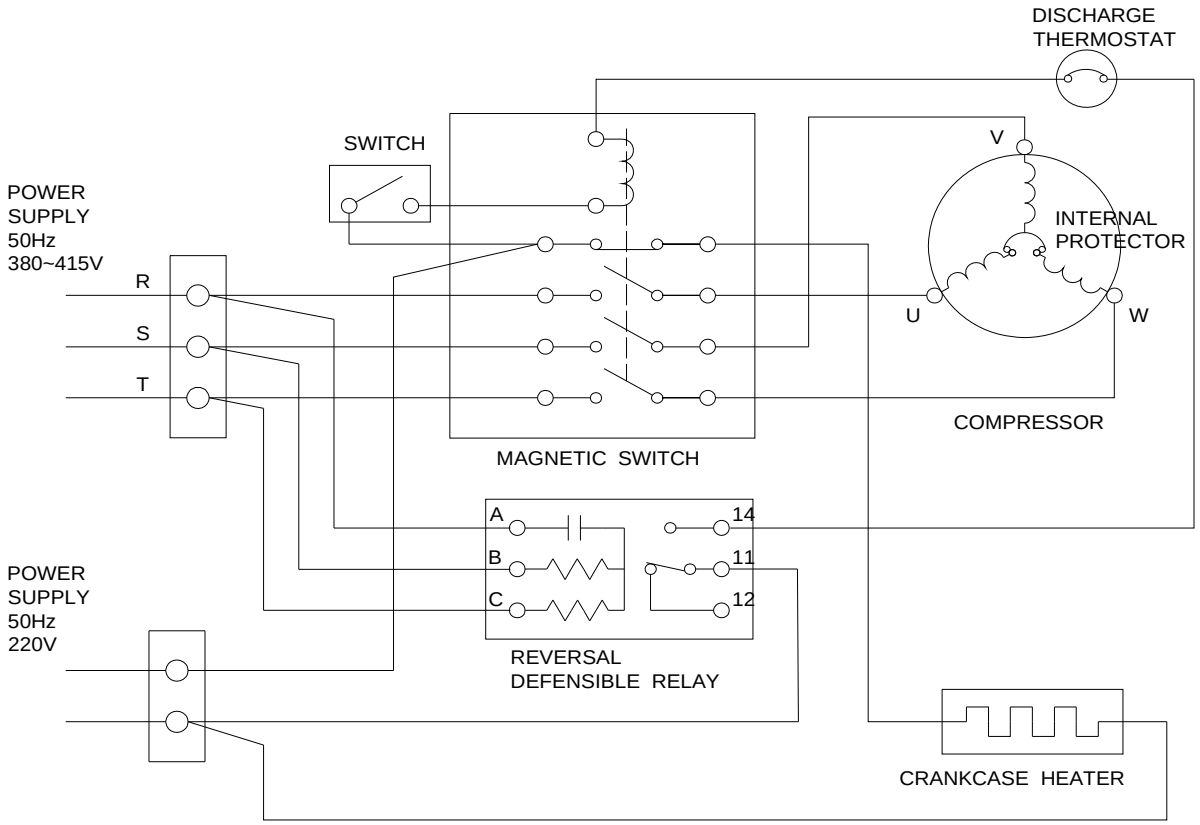
TERMINAL

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