SANYO SCROLL COMPRESSORS

Code : 809 943 88

Model : C-SBN303H8D



DALIAN SANYO COMPRESSOR CO.,LTD.

Rev. 2007-5

SANYO Scroll Compressor

Model	C-SBN303H8D	**Electrical**	380-415 Volts 3 Phase 50Hz
Refrigerant	R410A		440-460 Volts 3 Phase 60Hz

Nominal Performance at ARI

Power Source		50Hz-380V	60Hz-440V
Capacity	(W)	9800	12200
Power	(W)	3650	4250
Current	(A)	6.58	6.52
COP	(W/W)	2.68	2.87
Mass Flow	(kg/h)	225	280

Rating Conditions

Condensing Temperature(℃)	54.4
Evaporating Temperature(℃)	7.2
Return Gas temperature(℃)	18.3
Liquid Temperature(℃)	46.1
Ambient Temperature(℃)	35

Motor

	50Hz	60Hz
Voltage Range(V)	342-456	396-506
RLA (A)	7.9	
MCC (A)	11.1	
LRA (A)	48	52
RPM (min^{-1})	2900	3450

Compressor

Maximum Discharge Temp(℃)	130
Displacement (cm^3/rev)	39.9
Weight (with oil kg)	38

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-SBN303H8D (809 943 88)**
Power Source	**3PH 50Hz 380-415V**
Suction Gas Superheat(K)	**11.1**
Sub Cooling(K)	**8.3**
Compressor Cooling	**Natural Cooling**
Refrigerant	**R410A**

CAPACITY(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	5,260	6,450	7,380	9,700	11,610	13,010	14,590	15,830
40.5	4,870	5,960	6,820	8,960	10,720	12,020	13,470	14,620
45.0	4,560	5,590	6,400	8,400	10,050	11,260	12,610	13,680
50.0	4,250	5,200	5,950	7,810	9,340	10,460	11,720	12,710
54.4		4,880	5,580	7,320	8,750	9,800	10,980	11,900
60.0			5,150	6,740	8,060	9,020	10,100	10,950
65.0				6,270	7,490	8,380	9,380	10,170

POWER(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	2,460	2,470	2,470	2,440	2,410	2,380	2,350	2,320
40.5	2,750	2,760	2,760	2,730	2,700	2,670	2,630	2,600
45.0	3,040	3,050	3,050	3,010	2,980	2,950	2,910	2,880
50.0	3,410	3,410	3,400	3,370	3,330	3,300	3,260	3,240
54.4		3,770	3,760	3,720	3,680	3,650	3,610	3,590
60.0			4,260	4,220	4,180	4,150	4,110	4,090
65.0				4,710	4,670	4,640	4,610	4,580

CURRENT(A) @380V

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	5.0	5.0	5.1	5.1	5.0	5.0	4.9	4.9
40.5	5.4	5.5	5.5	5.5	5.4	5.4	5.3	5.3
45.0	5.8	5.8	5.8	5.8	5.8	5.7	5.7	5.6
50.0	6.2	6.3	6.3	6.3	6.2	6.2	6.1	6.1
54.4		6.7	6.7	6.7	6.6	6.6	6.5	6.5
60.0			7.3	7.2	7.2	7.1	7.1	7.1
65.0				7.7	7.7	7.7	7.6	7.6

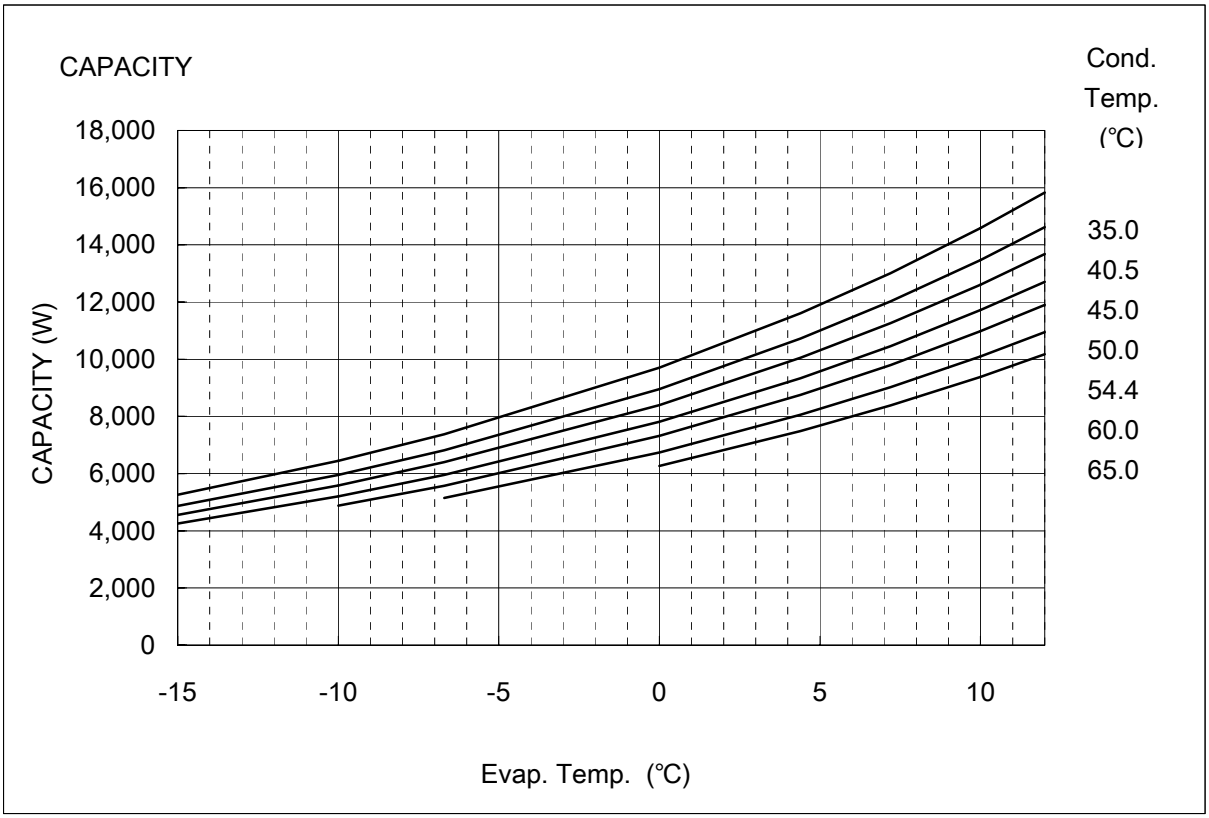
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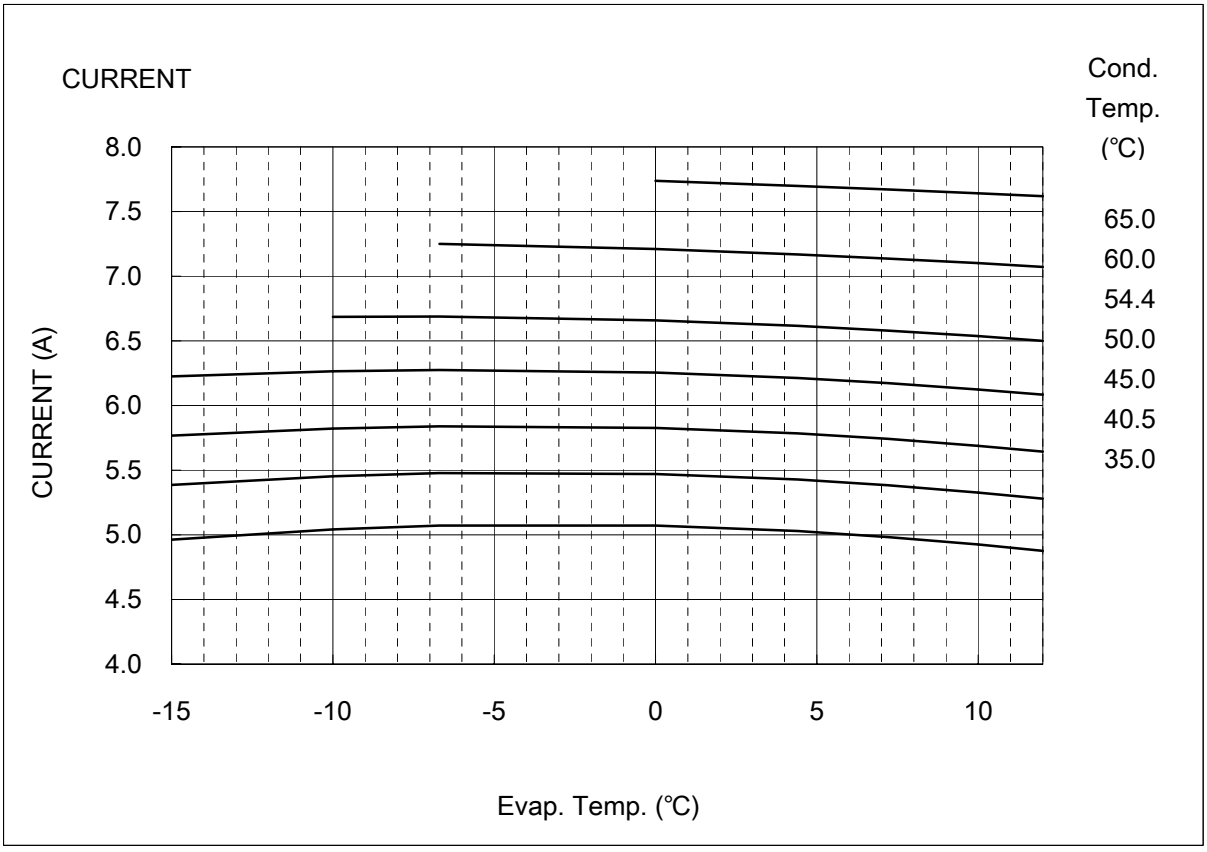
*** The performance values subject to change without notice.**

Dalian SANYO Compressor Co.,Ltd.

Compressor Model(Code) **C-SBN303H8D (809 943 88)**

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





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**C-SBN303H8D (809 943 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

380V-50Hz	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	1.551990E+04	1.931658E+03	3.531709E+00
C2	6.549597E+02	-3.349551E+00	-1.931810E-03
C3	-1.946523E+02	-1.823041E+01	1.990035E-02
C4	1.201521E+01	-5.194613E-01	-1.682269E-03
C5	-8.650372E+00	-8.676998E-02	-1.493872E-04
C6	8.068469E-01	9.390165E-01	6.902934E-04
C7	9.114321E-02	1.901521E-04	1.429803E-06
C8	-1.084267E-01	4.362113E-03	2.223744E-05
C9	3.761816E-02	1.584020E-04	8.824887E-07
C10	-1.591214E-08	-1.436010E-08	-6.609937E-12

Note:The polynomial coefficients subject to change without notice.

PERFORMANCE DATA

Compressor Model(Code)	**C-SBN303H8D (809 943 88)**
Power Source	**3PH 60Hz 440-460V**
Suction Gas Superheat(K)	**11.1**
Sub Cooling(K)	**8.3**
Compressor Cooling	**Natural Cooling**
Refrigerant	**R410A**

CAPACITY(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	6,820	8,270	9,390	12,150	14,390	16,030	17,850	19,280
40.5	6,310	7,650	8,690	11,250	13,330	14,850	16,540	17,870
45.0	5,920	7,180	8,150	10,560	12,510	13,940	15,530	16,780
50.0	5,500	6,680	7,590	9,830	11,650	12,990	14,470	15,640
54.4		6,270	7,120	9,230	10,950	12,200	13,600	14,690
60.0			6,570	8,520	10,110	11,270	12,560	13,570
65.0				7,940	9,420	10,500	11,700	12,650

POWER(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	2,890	2,900	2,890	2,870	2,840	2,810	2,790	2,760
40.5	3,230	3,230	3,230	3,200	3,170	3,140	3,110	3,090
45.0	3,540	3,550	3,540	3,520	3,490	3,460	3,430	3,400
50.0	3,940	3,950	3,940	3,920	3,880	3,860	3,820	3,800
54.4		4,340	4,340	4,310	4,280	4,250	4,220	4,190
60.0			4,890	4,870	4,840	4,810	4,770	4,740
65.0				5,420	5,390	5,360	5,320	5,290

CURRENT(A) @440V

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	4.6	4.6	4.6	4.6	4.5	4.5	4.5	4.5
40.5	5.1	5.1	5.1	5.1	5.0	5.0	5.0	4.9
45.0	5.5	5.5	5.5	5.5	5.5	5.4	5.4	5.4
50.0	6.1	6.1	6.1	6.1	6.0	6.0	5.9	5.9
54.4		6.6	6.6	6.6	6.6	6.5	6.5	6.4
60.0			7.4	7.3	7.3	7.3	7.2	7.2
65.0				8.1	8.0	8.0	8.0	7.9

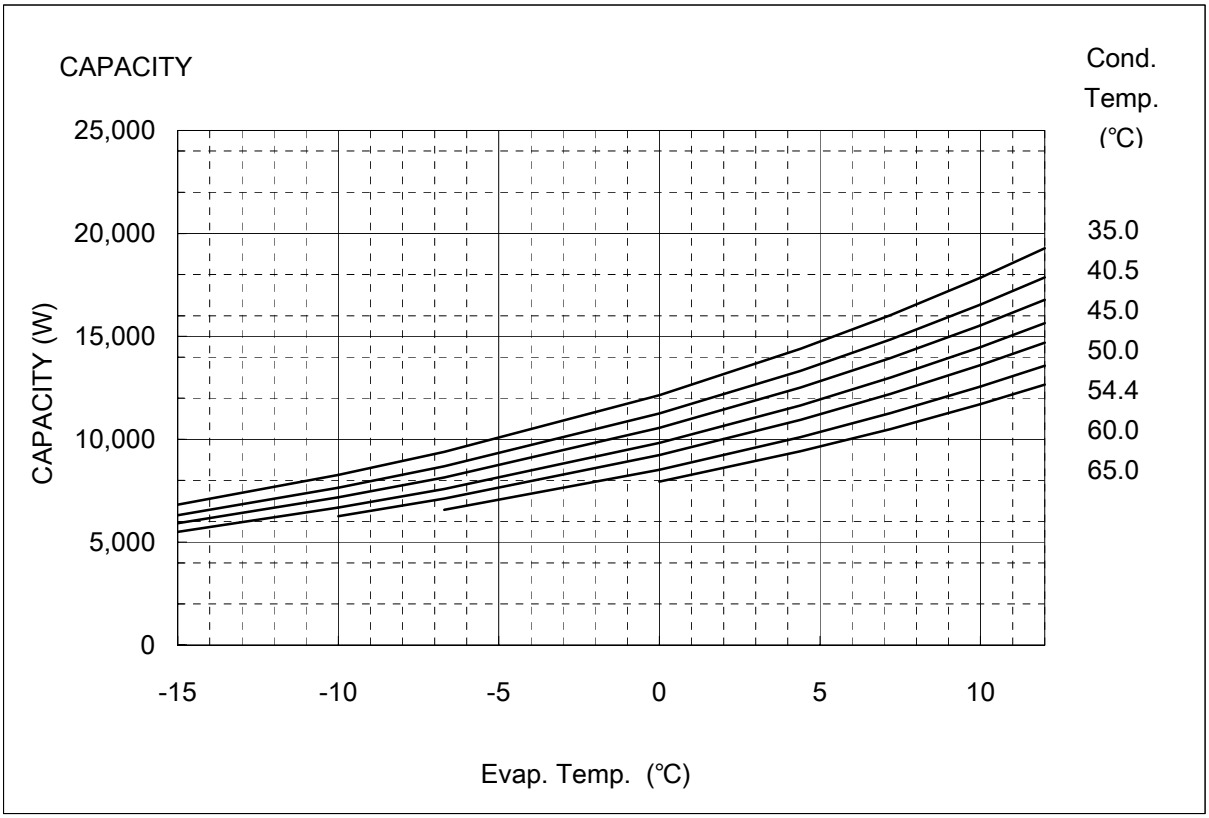
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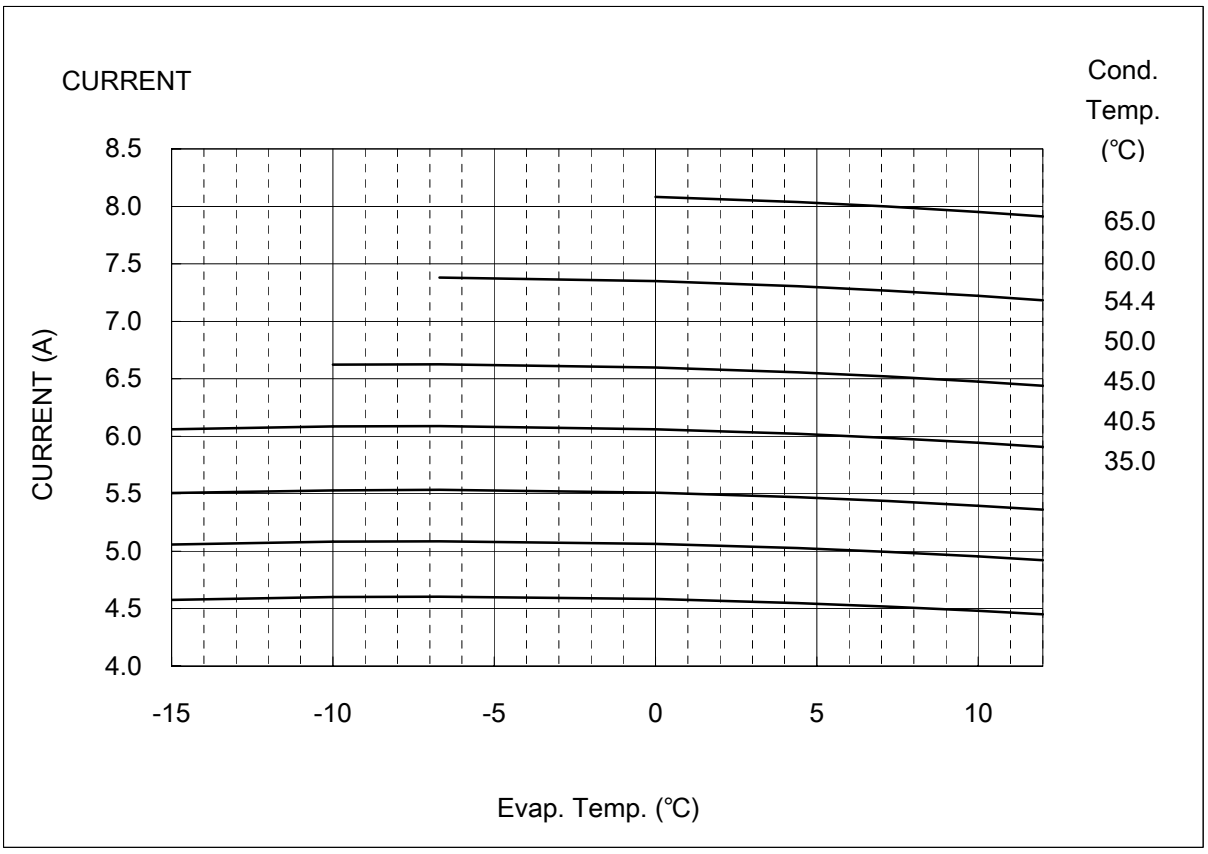
*** The performance values subject to change without notice.**

Dalian SANYO Compressor Co.,Ltd.

Compressor Model(Code) **C-SBN303H8D (809 943 88)**

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





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**C-SBN303H8D (809 943 88)**
Power Source	**3PH 60Hz 440-460V**
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

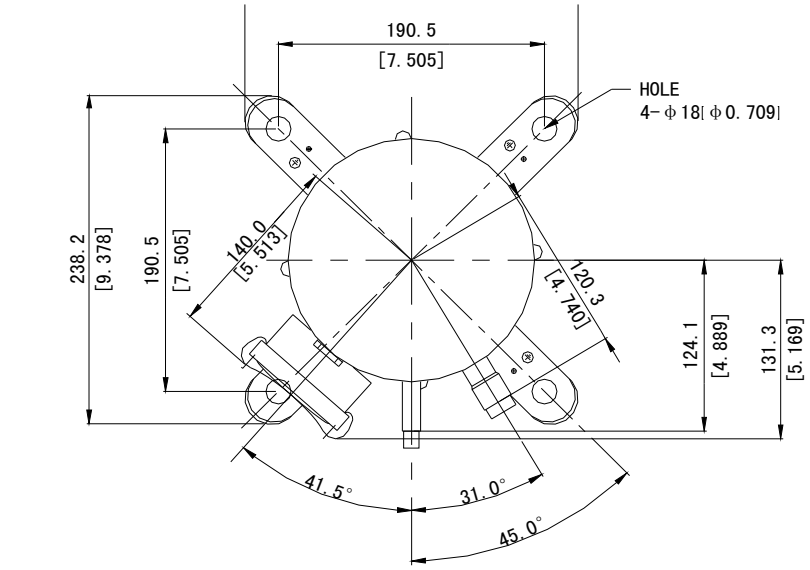
D——CONDENSING TEMP, °C

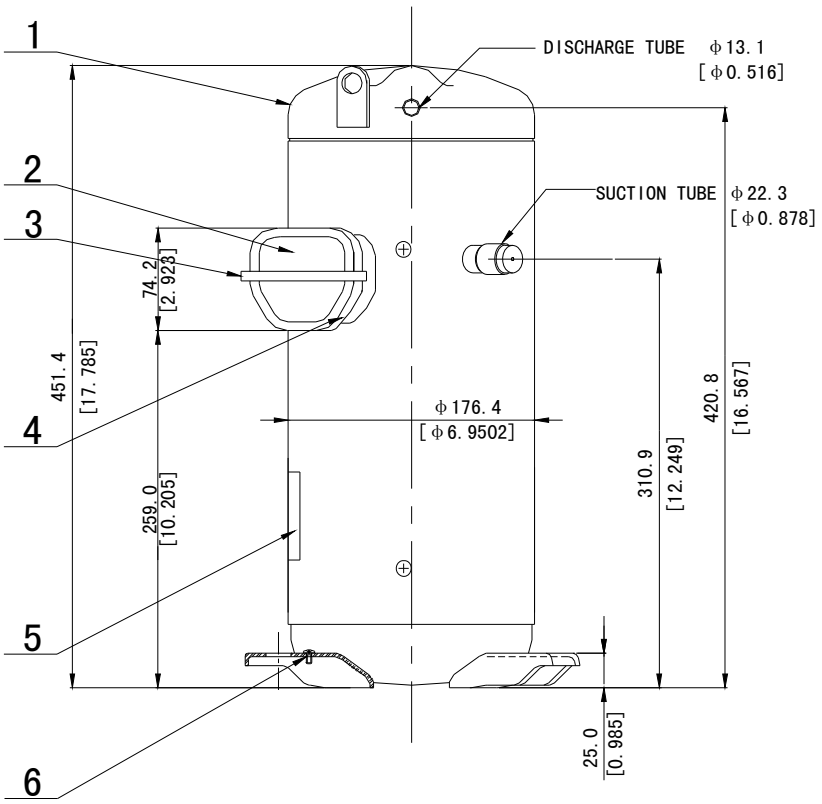
440V-60Hz	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	1.922970E+04	2.163032E+03	3.257035E+00
C2	7.489841E+02	-9.381720E-01	-3.267878E-03
C3	-2.359483E+02	-1.486127E+01	-4.446345E-03
C4	1.296237E+01	-1.077057E-01	-3.418212E-04
C5	-9.372396E+00	-1.906434E-01	-8.133473E-05
C6	9.582807E-01	9.996588E-01	1.210782E-03
C7	9.951214E-02	-1.534118E-03	1.680396E-07
C8	-1.089494E-01	-4.490470E-03	-2.602822E-06
C9	3.968702E-02	1.799227E-03	9.599632E-08
C10	-7.086227E-10	-1.486596E-09	-2.125790E-13

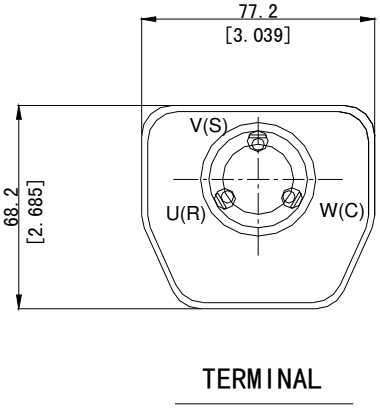
Note:The polynomial coefficients subject to change without notice.

DIMENSIONAL SKETCH

C-SB Series







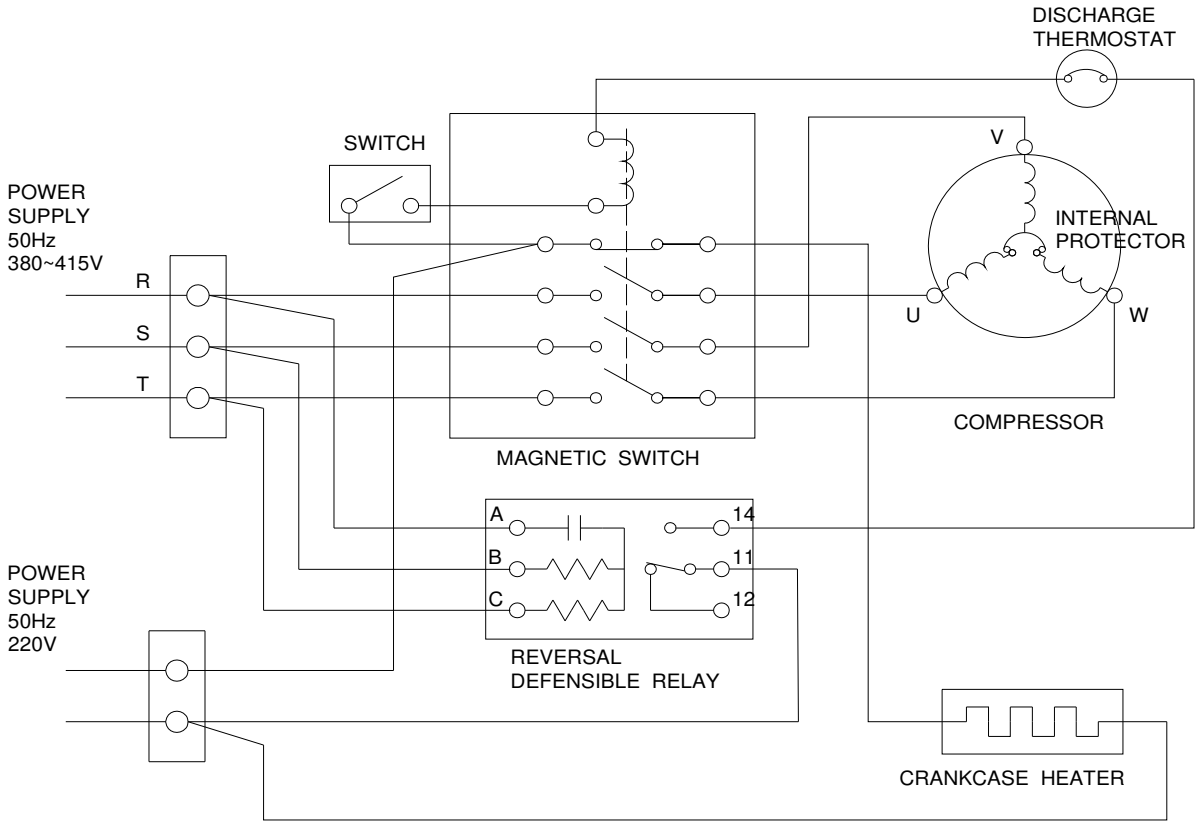
TERMINAL

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

