SANYO SCROLL COMPRESSORS

Code : 809 953 88

Model : C-SBN373H8D



DALIAN SANYO COMPRESSOR CO.,LTD.

Rev. 2007-5

SANYO Scroll Compressor

Model	C-SBN373H8D	**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)	14100	17100
Power	(W)	4750	5600
Current	(A)	8.22	8.3
COP	(W/W)	2.97	3.05
Mass Flow	(kg/h)	322	391

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)	10.1	
MCC (A)	14.1	
LRA (A)	63	69
RPM (min^{-1})	2900	3450

Compressor

Maximum Discharge Temp(℃)	130
Displacement (cm^3/rev)	55.7
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 (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-SBN373H8D (809 953 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	8,140	9,830	11,130	14,320	16,900	18,780	20,870	22,500
40.5	7,420	8,990	10,190	13,170	15,580	17,340	19,300	20,830
45.0	6,880	8,340	9,480	12,280	14,560	16,220	18,080	19,530
50.0	6,320	7,680	8,740	11,360	13,500	15,060	16,800	18,170
54.4		7,140	8,130	10,600	12,620	14,100	15,750	17,050
60.0			7,420	9,710	11,590	12,970	14,510	15,720
65.0				8,990	10,740	12,040	13,490	14,630

POWER(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	3,130	3,130	3,130	3,120	3,100	3,090	3,080	3,060
40.5	3,520	3,520	3,510	3,500	3,480	3,470	3,450	3,440
45.0	3,900	3,890	3,890	3,870	3,850	3,830	3,810	3,800
50.0	4,380	4,370	4,360	4,330	4,310	4,290	4,270	4,260
54.4		4,850	4,830	4,790	4,770	4,750	4,730	4,720
60.0			5,500	5,450	5,420	5,400	5,380	5,370
65.0				6,110	6,070	6,050	6,030	6,010

CURRENT(A) @380V

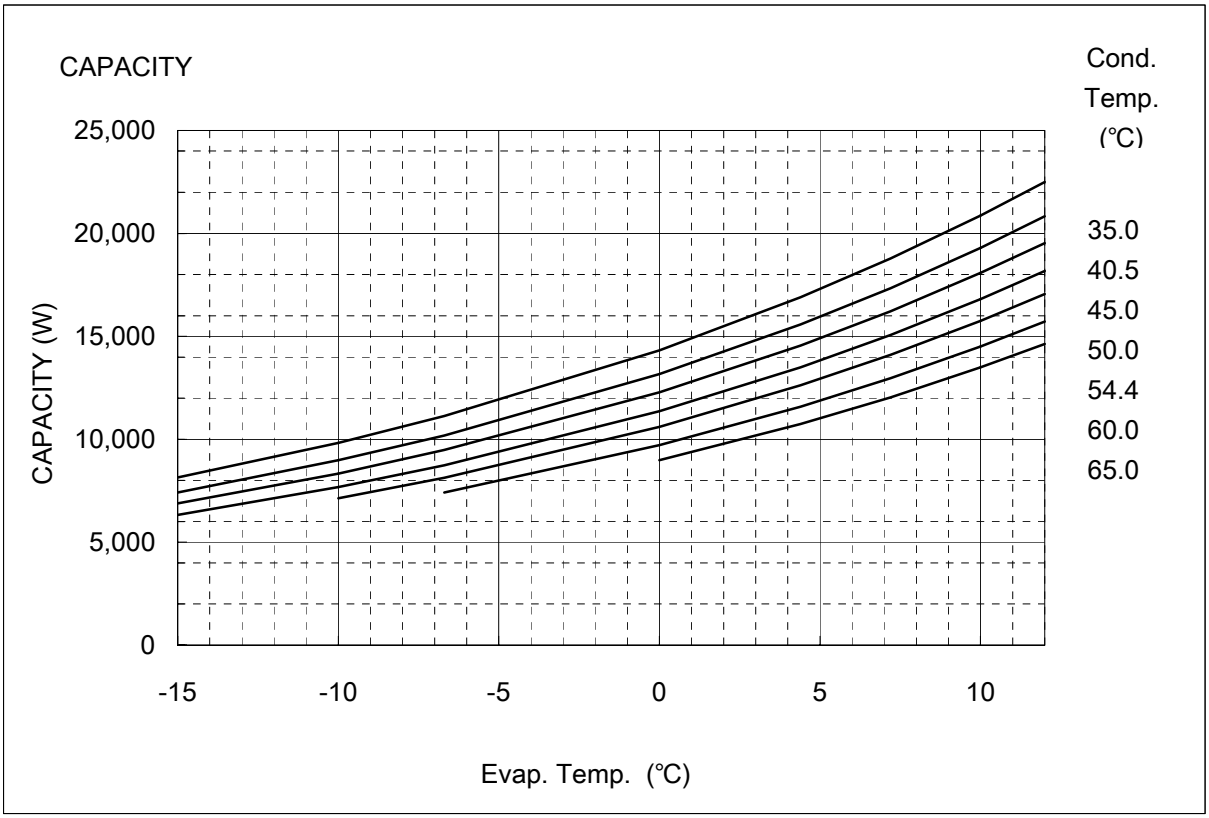
Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	6.0	6.1	6.1	6.0	6.0	6.0	6.0	5.9
40.5	6.6	6.6	6.6	6.6	6.6	6.5	6.5	6.5
45.0	7.1	7.1	7.1	7.1	7.1	7.0	7.0	7.0
50.0	7.7	7.7	7.7	7.7	7.7	7.6	7.6	7.6
54.4		8.3	8.3	8.3	8.2	8.2	8.2	8.2
60.0			9.1	9.1	9.0	9.0	9.0	9.0
65.0				9.8	9.8	9.8	9.8	9.8

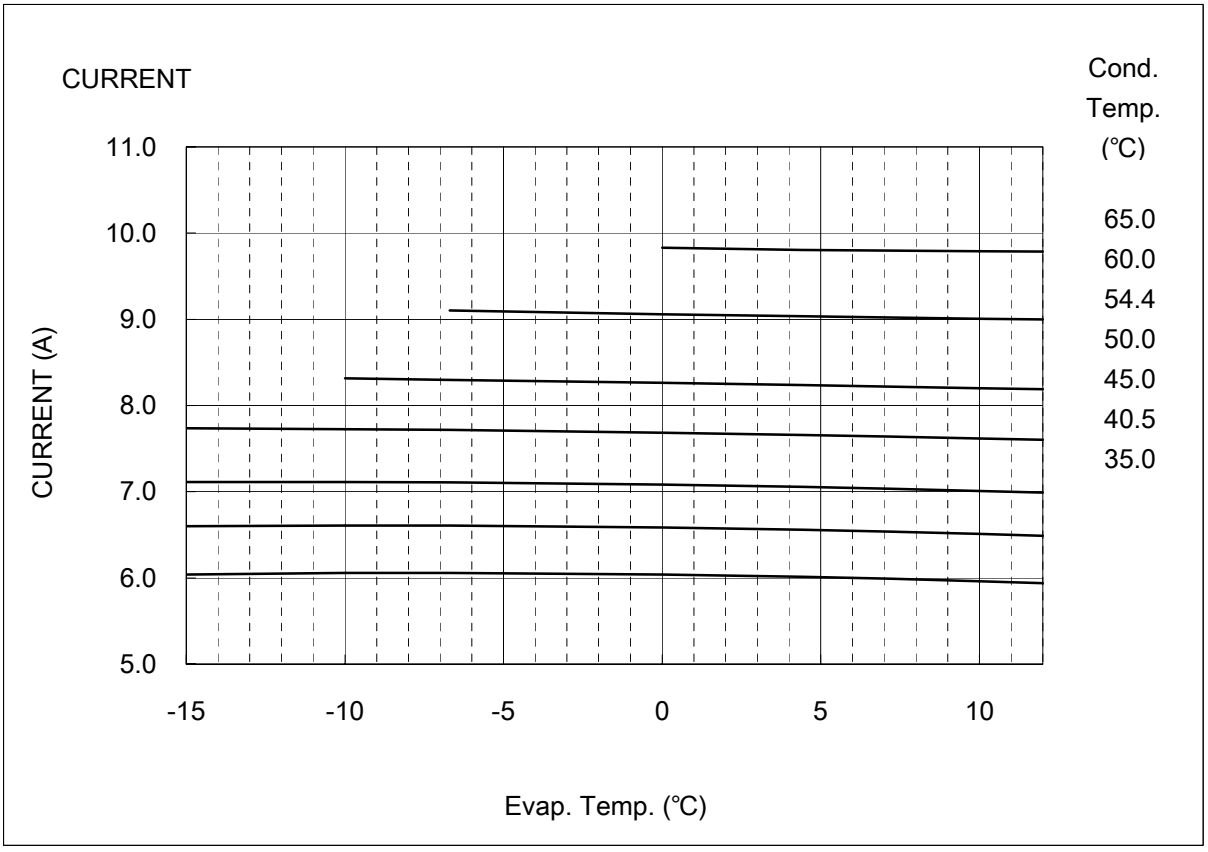
NOTE:

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

Compressor Model(Code) **C-SBN373H8D (809 953 88)**

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





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**C-SBN373H8D (809 953 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	2.354166E+04	2.498193E+03	4.177193E+00
C2	8.263569E+02	-3.713576E+00	-1.507840E-03
C3	-3.097891E+02	-2.631897E+01	1.400488E-02
C4	1.364960E+01	-3.480457E-01	-8.696072E-04
C5	-9.357483E+00	1.316946E-01	-1.330550E-04
C6	1.321054E+00	1.259463E+00	1.122924E-03
C7	1.134214E-01	2.752273E-04	1.015386E-06
C8	-9.474550E-02	5.343033E-03	1.507434E-05
C9	3.451120E-02	-3.088744E-03	1.062066E-06
C10	7.338276E-09	1.655876E-09	-1.957214E-12

Note:The polynomial coefficients subject to change without notice.

PERFORMANCE DATA

Compressor Model(Code)	**C-SBN373H8D (809 953 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	9,990	12,040	13,610	17,480	20,600	22,870	25,380	27,350
40.5	9,160	11,050	12,510	16,090	18,980	21,080	23,420	25,250
45.0	8,530	10,300	11,670	15,020	17,740	19,710	21,910	23,630
50.0	7,870	9,510	10,780	13,910	16,440	18,280	20,330	21,930
54.4		8,870	10,060	12,990	15,370	17,100	19,030	20,540
60.0			9,210	11,910	14,110	15,710	17,490	18,890
65.0				11,030	13,080	14,570	16,230	17,530

POWER(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	3,760	3,730	3,710	3,690	3,670	3,670	3,660	3,660
40.5	4,190	4,170	4,150	4,130	4,120	4,110	4,100	4,100
45.0	4,600	4,590	4,580	4,560	4,540	4,530	4,520	4,510
50.0	5,120	5,120	5,120	5,100	5,080	5,070	5,050	5,040
54.4		5,640	5,650	5,640	5,620	5,600	5,580	5,550
60.0			6,410	6,410	6,380	6,360	6,320	6,290
65.0				7,170	7,140	7,100	7,060	7,020

CURRENT(A) @440V

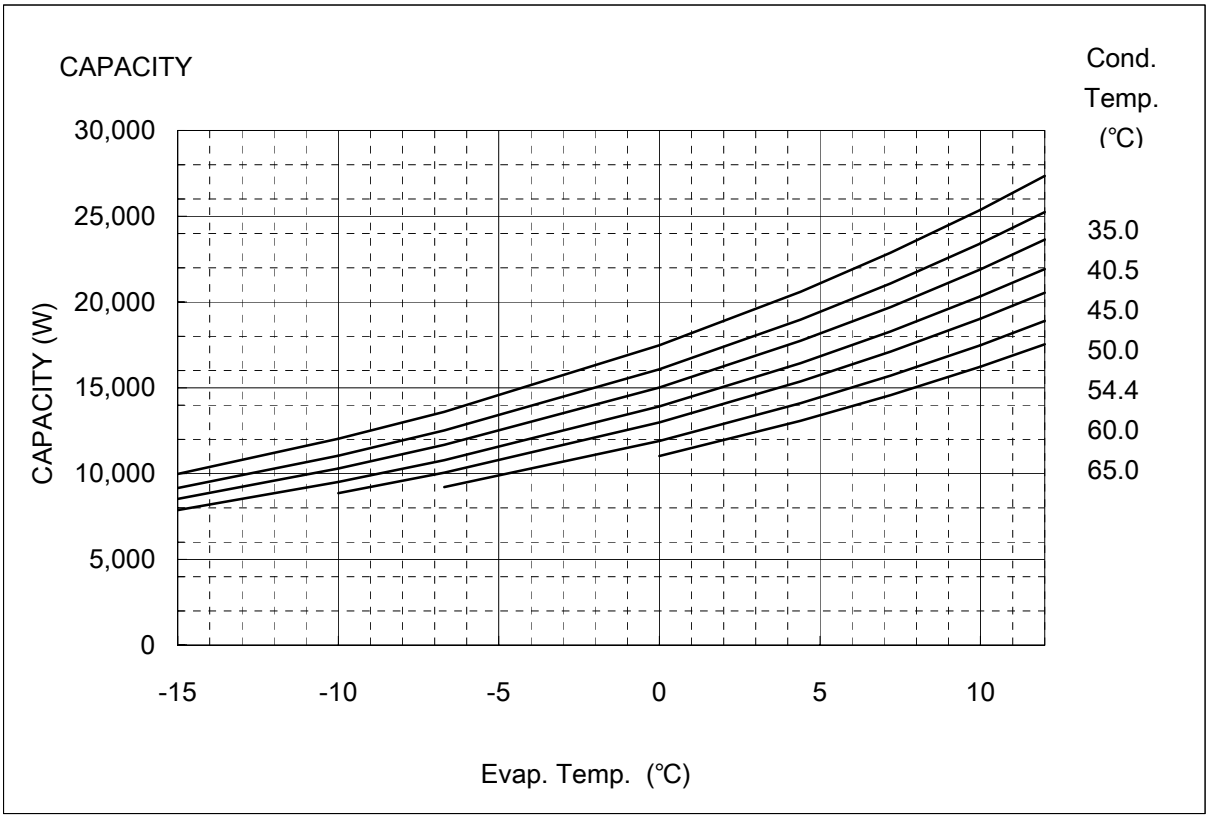
Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	5.8	5.7	5.7	5.6	5.6	5.6	5.6	5.6
40.5	6.4	6.3	6.3	6.3	6.2	6.2	6.2	6.2
45.0	7.0	6.9	6.9	6.9	6.8	6.8	6.8	6.8
50.0	7.7	7.7	7.6	7.6	7.6	7.6	7.6	7.5
54.4		8.4	8.4	8.3	8.3	8.3	8.3	8.3
60.0			9.4	9.4	9.4	9.3	9.3	9.3
65.0				10.4	10.4	10.3	10.3	10.3

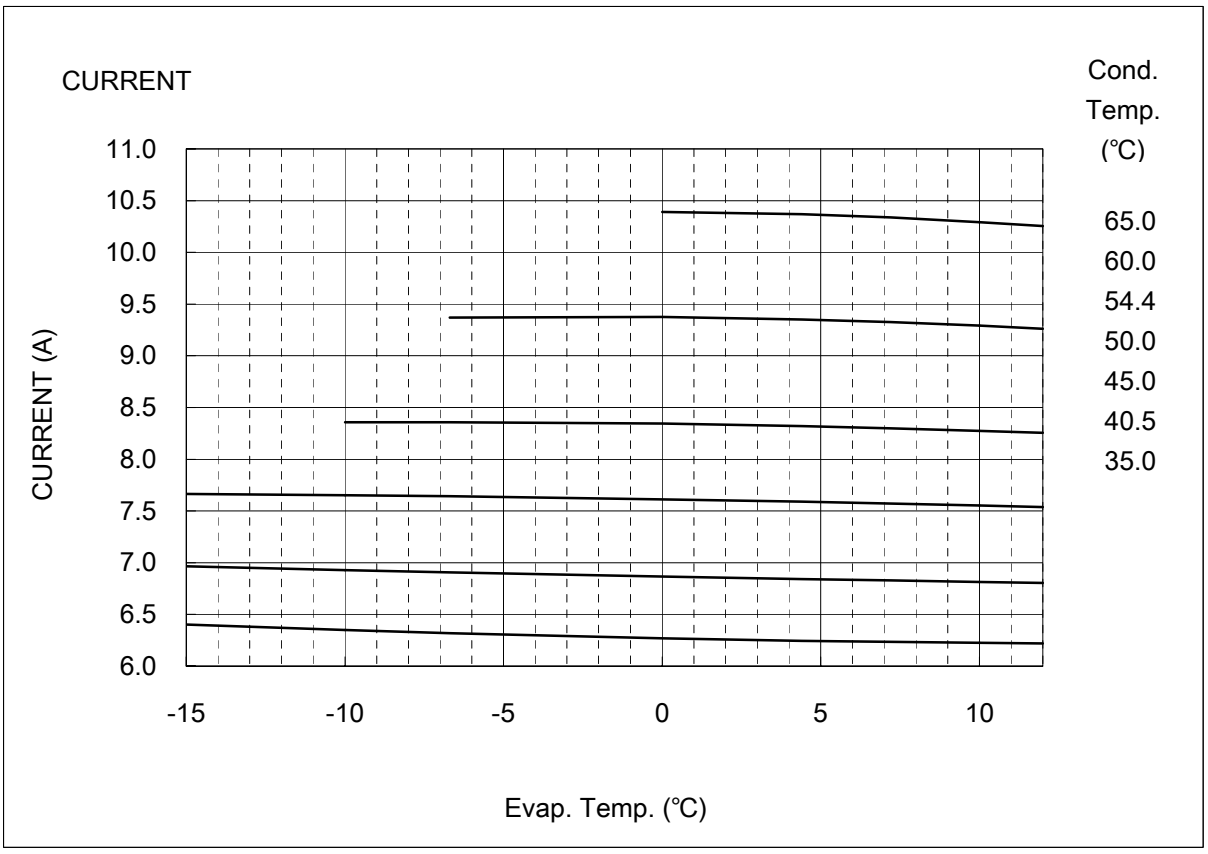
NOTE:

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

Compressor Model(Code) **C-SBN373H8D (809 953 88)**

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





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**C-SBN373H8D (809 953 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

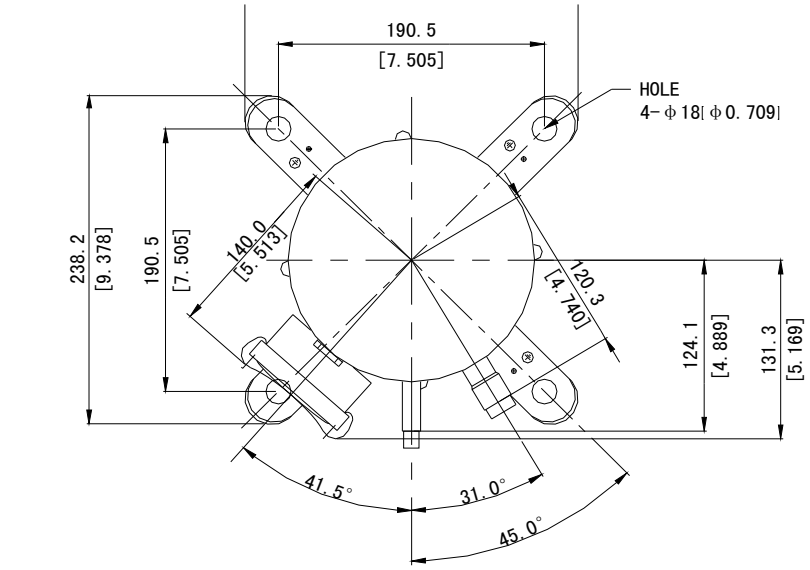
D——CONDENSING TEMP, °C

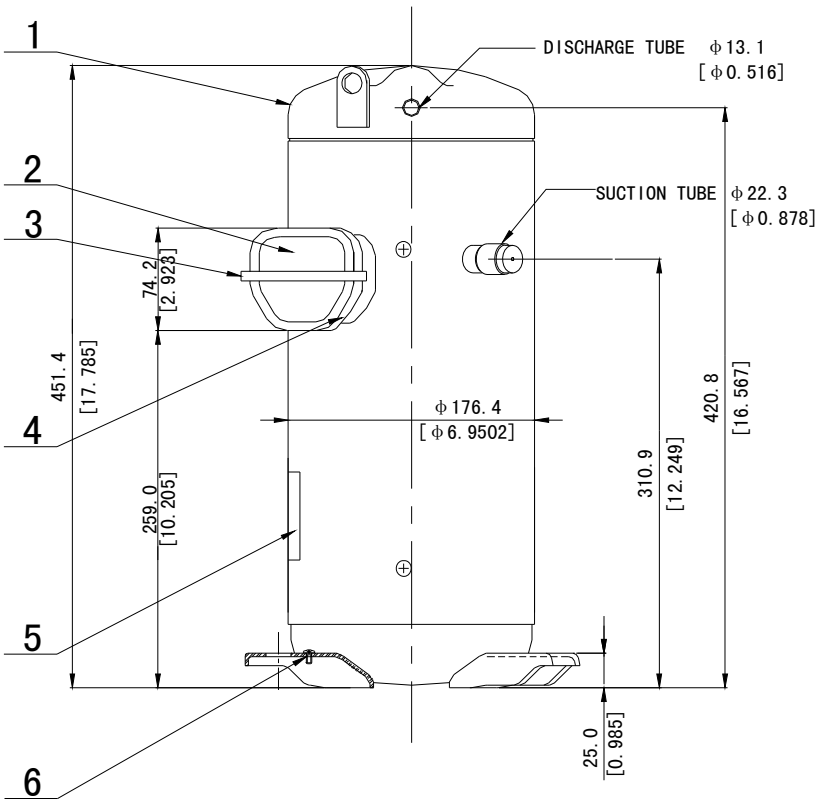
440V-60Hz	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	2.855252E+04	2.837985E+03	4.061056E+00
C2	1.047005E+03	-6.360431E+00	-4.716481E-03
C3	-3.713430E+02	-2.536107E+01	-1.607307E-02
C4	1.727480E+01	9.725248E-01	1.434216E-03
C5	-1.311611E+01	1.770763E-01	-1.296393E-04
C6	1.567016E+00	1.414027E+00	1.743596E-03
C7	1.299814E-01	-2.588601E-03	-2.396602E-06
C8	-1.406911E-01	-2.347427E-02	-3.165750E-05
C9	5.460546E-02	-2.285470E-03	2.569023E-06
C10	-9.268498E-09	1.429778E-08	9.552248E-12

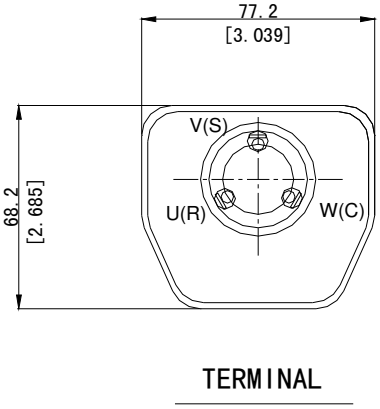
Note:The polynomial coefficients subject to change without notice.

DIMENSIONAL SKETCH

C-SB Series







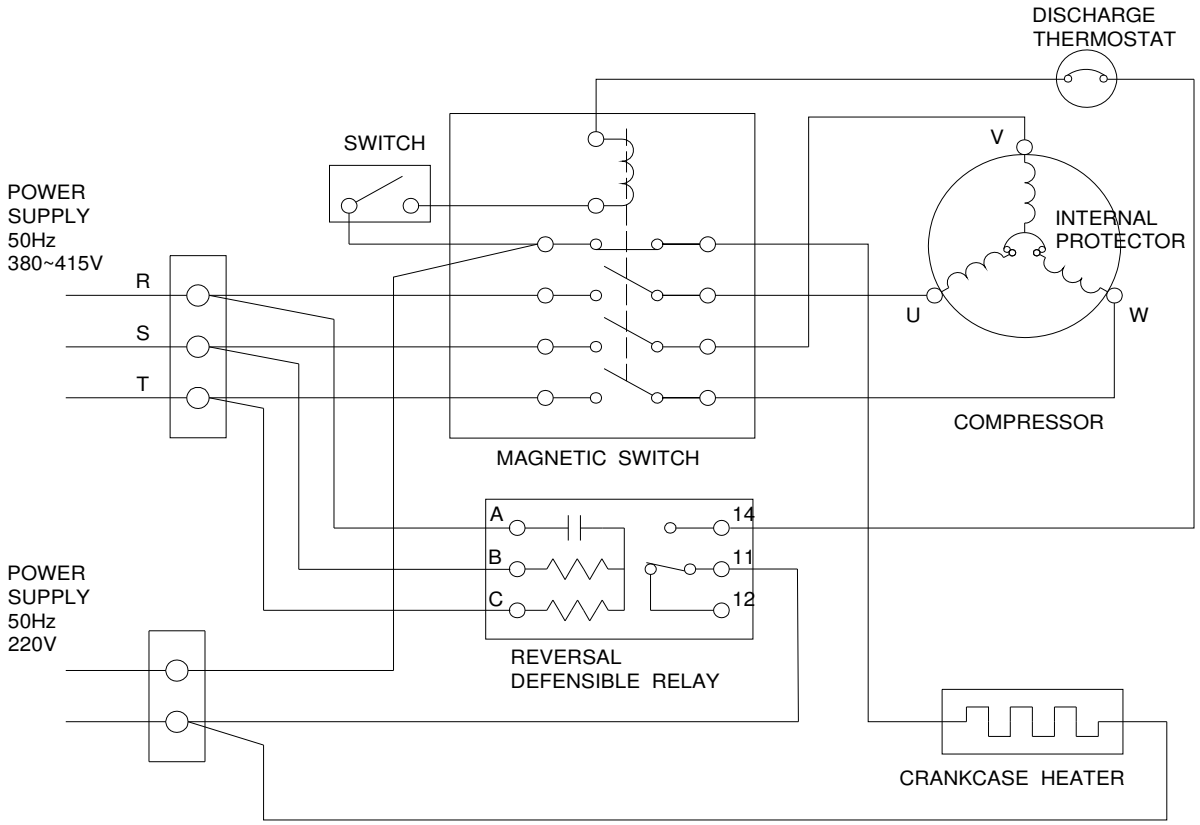
TERMINAL

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

