SANYO SCROLL COMPRESSORS

Code : 809 942 88

Model : C-SBN353H8A

DALIAN SANYO COMPRESSOR CO.,LTD.

Rev.2007-5

SANYO Scroll Compressor

Model	C-SBN353H8A	**Electrical**	380-415 Volts 3 Phase 50Hz
Refrigerant	R407C		440-460 Volts 3 Phase 60Hz

Nominal Performance at ARI

Power Source		50Hz-380V	60Hz-440V
Capacity	(W)	13400	16500
Power	(W)	4600	5600
Current	(A)	8.1	8.4
COP	(W/W)	2.91	2.95
Mass Flow	(kg/h)	323	398

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)	9.6	
MCC (A)	13.4	
LRA (A)	48	52
RPM (min^{-1})	2900	3450

Compressor

Maximum Discharge Temp(℃)	130
Displacement (cm^3/rev)	77.4
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-SBN353H8A (809 942 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	7,420	9,040	10,300	13,430	15,980	17,860	19,950	21,590
40.5	6,780	8,280	9,450	12,350	14,730	16,480	18,430	19,970
45.0	6,290	7,700	8,790	11,530	13,770	15,420	17,260	18,710
50.0	5,780	7,090	8,110	10,670	12,760	14,310	16,040	17,410
54.4		6,600	7,560	9,960	11,940	13,400	15,040	16,330
60.0			6,910	9,130	10,970	12,330	13,850	15,060
65.0				8,460	10,180	11,460	12,890	14,020

POWER(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	2,880	2,910	2,920	2,940	2,950	2,950	2,940	2,940
40.5	3,280	3,300	3,310	3,330	3,330	3,330	3,320	3,320
45.0	3,660	3,680	3,690	3,690	3,690	3,690	3,680	3,680
50.0	4,150	4,160	4,160	4,160	4,150	4,150	4,140	4,130
54.4		4,630	4,630	4,620	4,610	4,600	4,590	4,580
60.0			5,300	5,270	5,250	5,240	5,230	5,220
65.0				5,920	5,890	5,870	5,850	5,840

CURRENT(A)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	5.4	5.4	5.5	5.5	5.5	5.5	5.5	5.5
40.5	6.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1
45.0	6.6	6.7	6.7	6.7	6.7	6.7	6.7	6.7
50.0	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
54.4		8.2	8.2	8.1	8.1	8.1	8.1	8.1
60.0			9.2	9.1	9.1	9.1	9.0	9.0
65.0				10.0	10.0	10.0	10.0	9.9

NOTE:

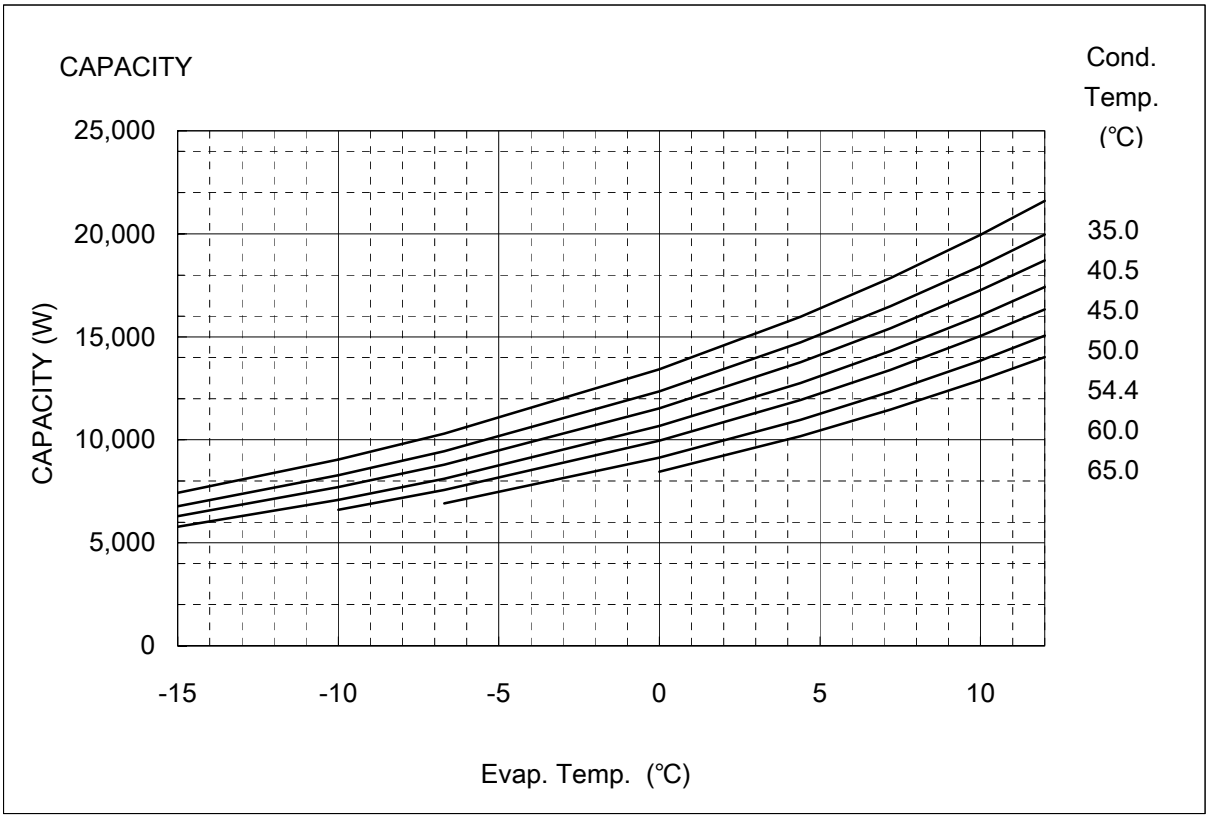
*** The performance values subject to change without notice.**

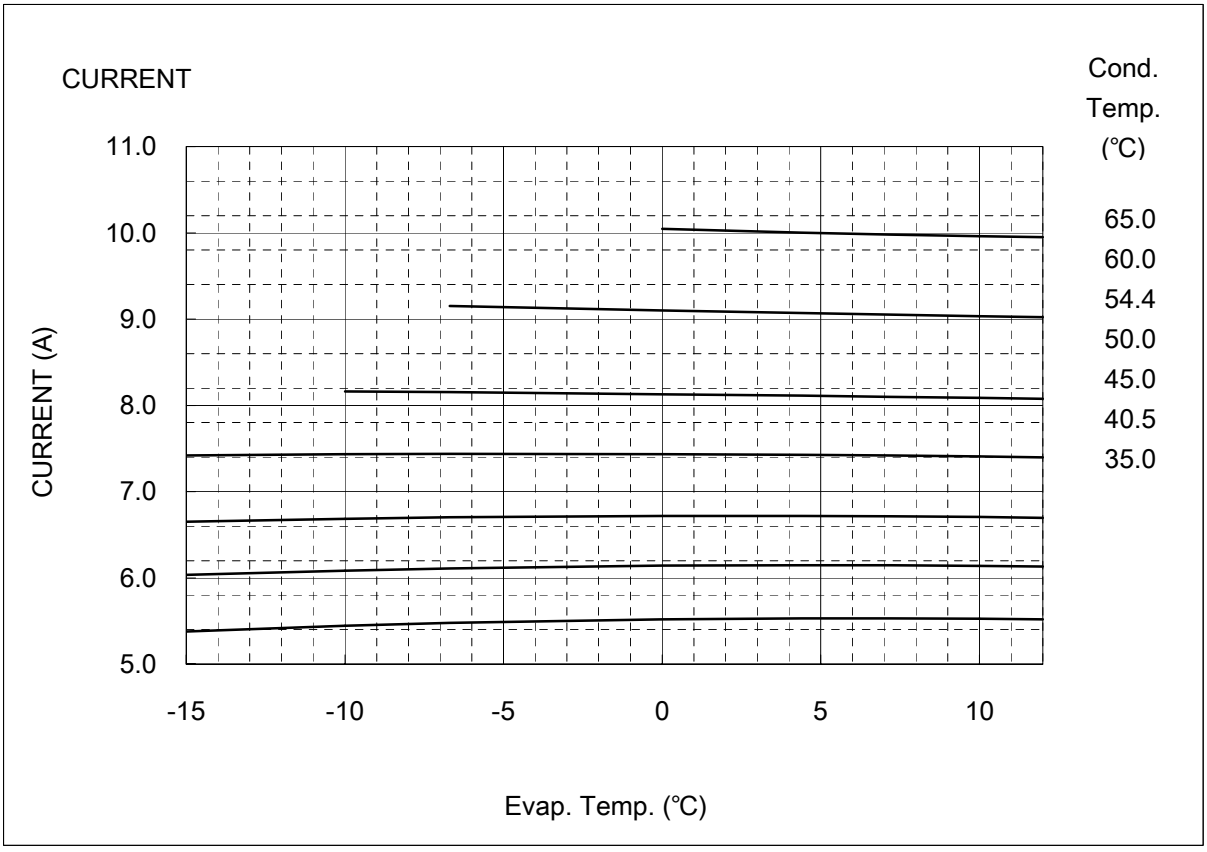
*** The performance values are based on MID point method.**

Dalian SANYO Compressor Co.,Ltd.

Compressor Model(Code) **C-SBN353H8A (809 942 88)**

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





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**C-SBN353H8A (809 942 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	2.206914E+04	2.216486E+03	3.809748E+00
C2	8.359800E+02	-2.498057E+00	3.776437E-04
C3	-2.908877E+02	-2.146167E+01	-6.001040E-03
C4	1.448598E+01	-3.372559E-01	-9.786664E-04
C5	-1.010332E+01	3.291710E-01	4.150412E-04
C6	1.254364E+00	1.206351E+00	1.569609E-03
C7	1.228422E-01	-2.070757E-04	1.389682E-06
C8	-1.074940E-01	4.771702E-03	1.704089E-05
C9	4.170774E-02	-5.934733E-03	-9.006904E-06
C10	-4.393238E-10	-2.774535E-09	-9.931590E-12

Note:The polynomial coefficients subject to change without notice.

PERFORMANCE DATA

Compressor Model(Code)	**C-SBN353H8A (809 942 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	9,150	11,120	12,640	16,420	19,490	21,740	24,240	26,210
40.5	8,400	10,220	11,640	15,160	18,020	20,120	22,460	24,300
45.0	7,820	9,540	10,870	14,190	16,890	18,870	21,090	22,830
50.0	7,230	8,830	10,080	13,170	15,710	17,570	19,660	21,290
54.4		8,250	9,420	12,340	14,740	16,500	18,470	20,020
60.0			8,650	11,360	13,590	15,230	17,070	18,520
65.0				10,560	12,650	14,190	15,920	17,280

POWER(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	3,590	3,620	3,640	3,670	3,690	3,700	3,700	3,710
40.5	4,010	4,050	4,080	4,120	4,130	4,140	4,150	4,150
45.0	4,410	4,460	4,490	4,540	4,550	4,560	4,570	4,570
50.0	4,900	4,970	5,010	5,060	5,080	5,090	5,090	5,090
54.4		5,470	5,510	5,570	5,590	5,600	5,600	5,590
60.0			6,220	6,300	6,320	6,320	6,320	6,310
65.0				7,010	7,030	7,030	7,020	7,000

CURRENT(A)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	5.7	5.7	5.7	5.8	5.8	5.8	5.8	5.8
40.5	6.3	6.3	6.3	6.4	6.4	6.4	6.4	6.4
45.0	6.8	6.9	6.9	7.0	7.0	7.0	7.0	7.0
50.0	7.5	7.5	7.6	7.7	7.7	7.7	7.7	7.7
54.4		8.2	8.3	8.4	8.4	8.4	8.4	8.4
60.0			9.2	9.3	9.3	9.4	9.4	9.3
65.0				10.2	10.3	10.3	10.3	10.3

NOTE:

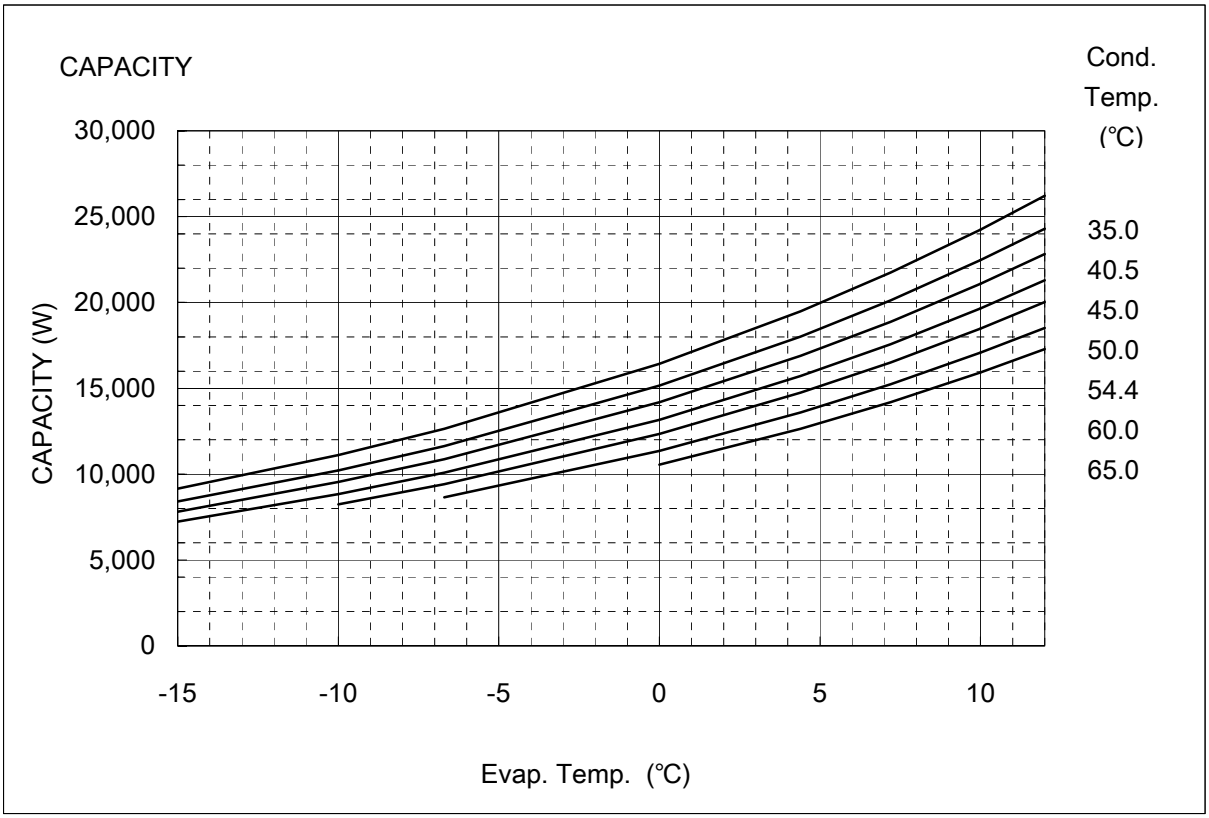
*** The performance values subject to change without notice.**

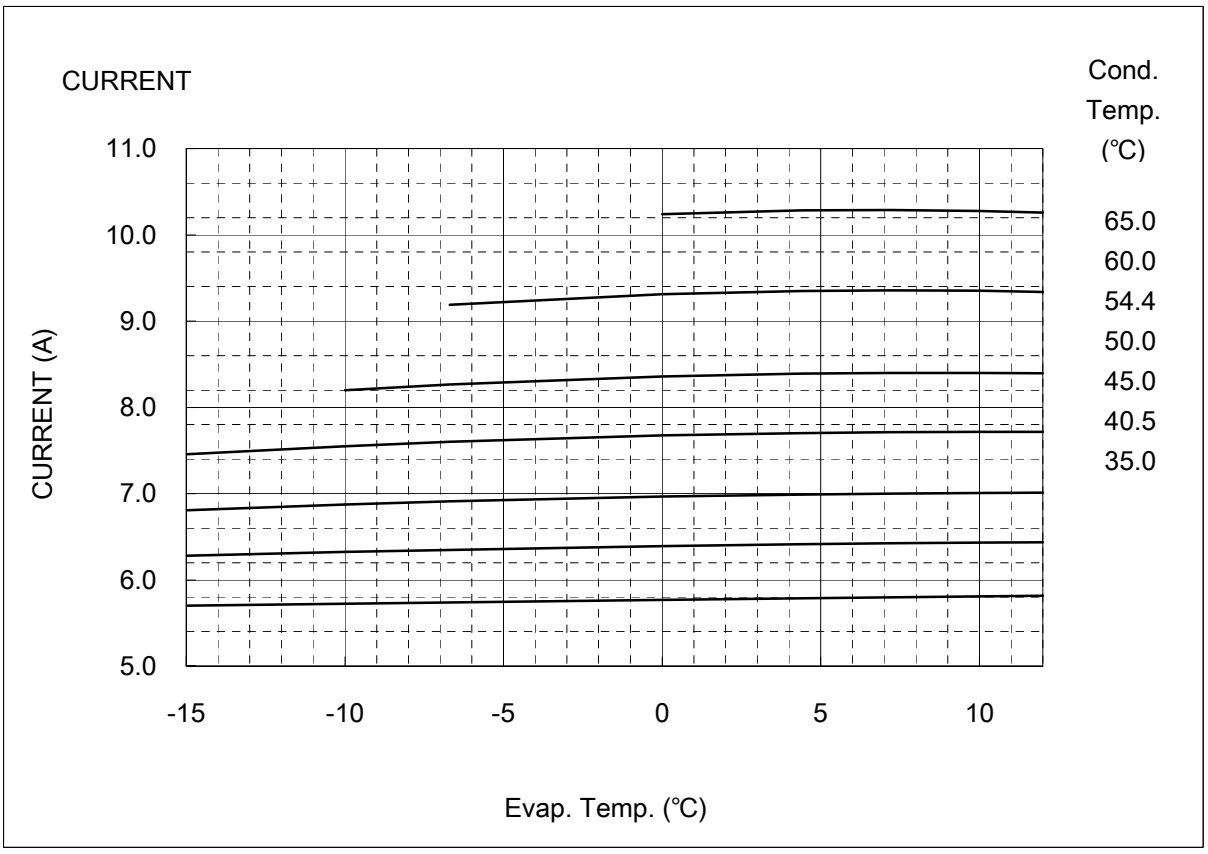
*** The performance values are based on MID point method.**

Dalian SANYO Compressor Co.,Ltd.

Compressor Model(Code) **C-SBN353H8A (809 942 88)**

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





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**C-SBN353H8A (809 942 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

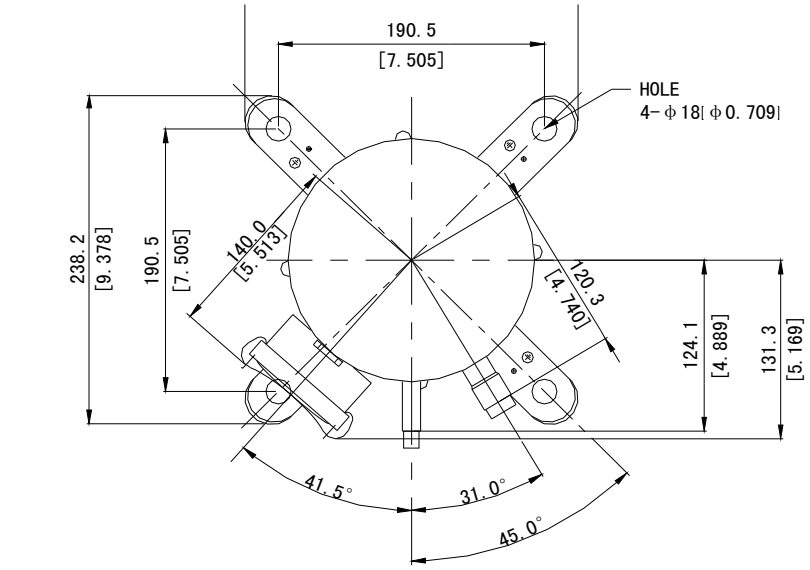
D——CONDENSING TEMP, °C

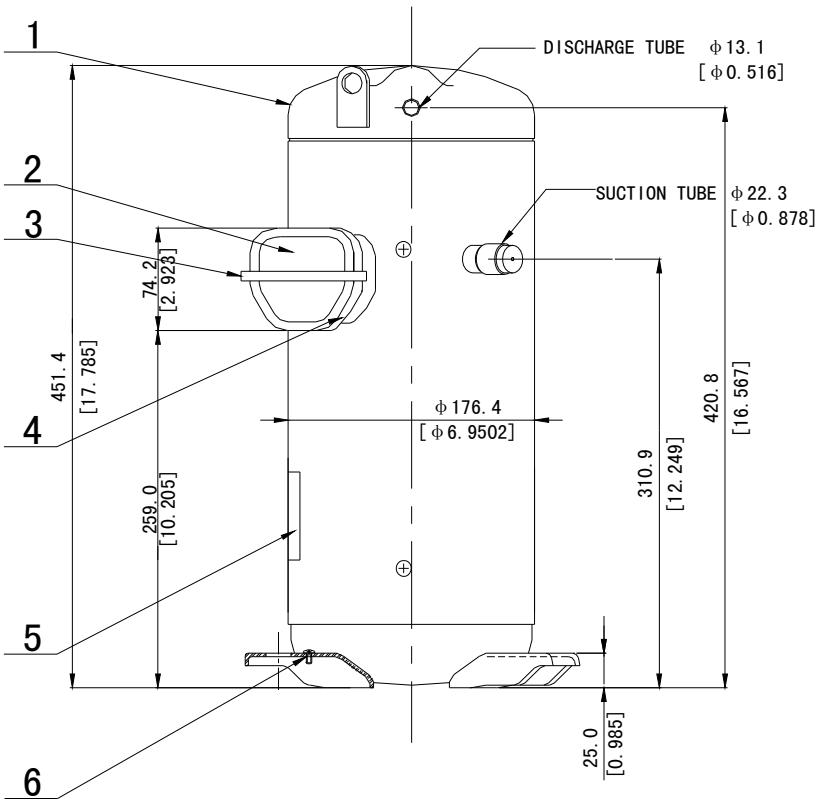
440V-60Hz	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	2.648128E+04	2.559350E+03	3.809022E+00
C2	9.935064E+02	-7.816925E-01	9.120815E-04
C3	-3.375487E+02	-1.109406E+01	5.731188E-03
C4	1.707297E+01	5.689654E-01	1.163382E-03
C5	-1.165959E+01	1.623227E-01	-1.593674E-05
C6	1.425288E+00	1.222972E+00	1.432511E-03
C7	1.422622E-01	-8.295958E-04	-1.832556E-06
C8	-1.253941E-01	-1.793491E-02	-3.227987E-05
C9	4.654166E-02	-5.228811E-04	3.358738E-06
C10	-1.434920E-08	3.416994E-09	8.147951E-12

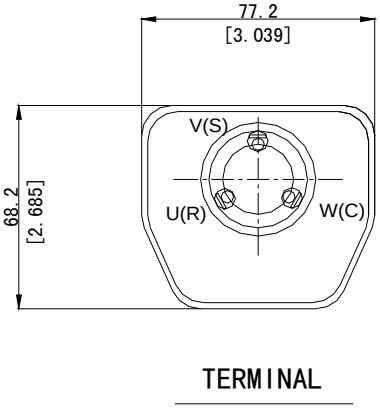
Note:The polynomial coefficients subject to change without notice.

DIMENSIONAL SKETCH

C-SB Series







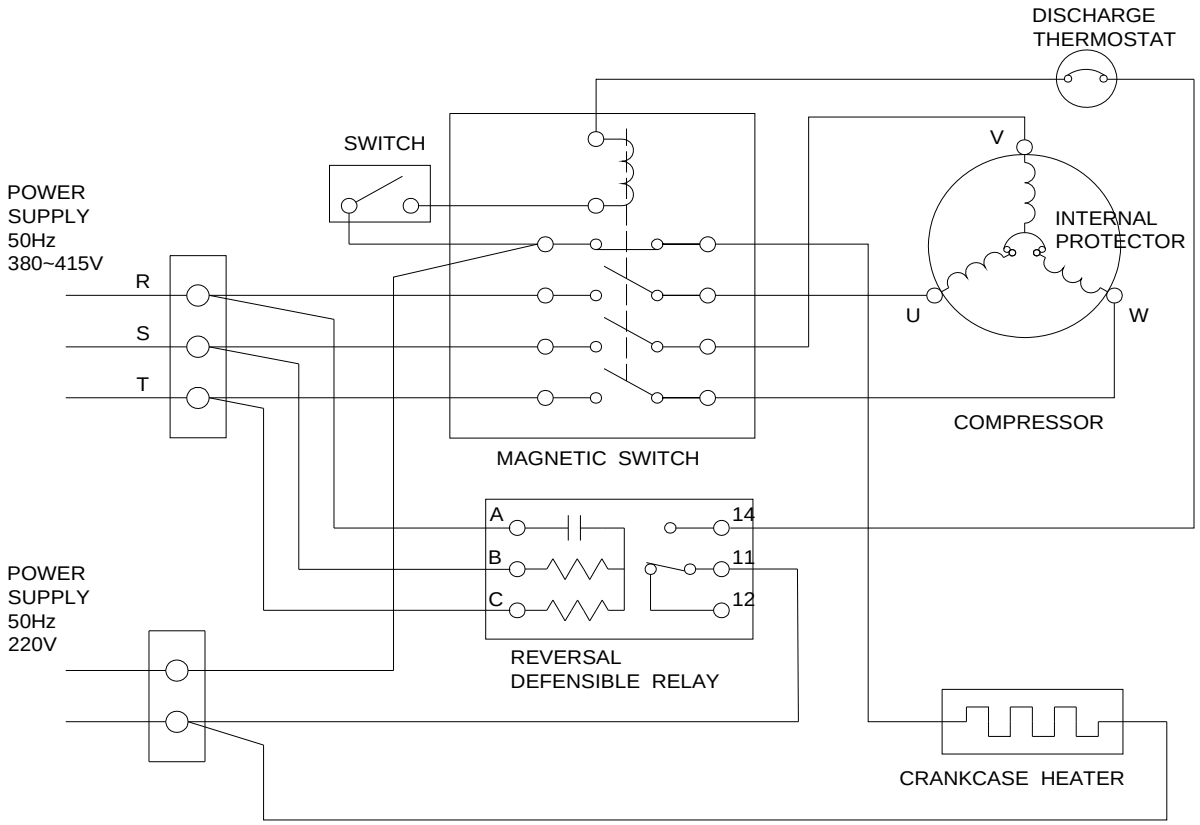
TERMINAL

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