SANYO SCROLL COMPRESSORS

Code : 809 183 88

Model : C-SCN603H8K

DALIAN SANYO COMPRESSOR CO.,LTD.

Rev.2009-12

SANYO Scroll Compressor

Model	C-SCN603H8K	**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)	24500	29100
Power	(W)	7750	9450
Current	(A)	13.2	13.9
COP	(W/W)	3.16	3.08
Mass Flow	(kg/h)	589	700

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)	15.9	
MCC (A)	22.2	
LRA (A)	80	84
RPM (min^{-1})	2900	3450

Compressor

Maximum Discharge Temp(℃)	135
Displacement (cm^3/rev)	137
Weight (with oil kg)	66.5
VDE File Number	40010537

Oil

Oil Type	FV68S
Initial Charge (ml)	2800
Re-charge (ml)	2600

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-SCN603H8K (809 183 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	13,210	16,230	18,590	24,490	29,350	32,930	36,960	40,130
40.5	12,180	14,950	17,130	22,550	27,020	30,310	34,010	36,920
45.0	11,380	13,980	16,000	21,070	25,230	28,310	31,750	34,470
50.0	10,560	12,960	14,830	19,520	23,370	26,220	29,400	31,910
54.4		12,120	13,870	18,250	21,850	24,500	27,470	29,820
60.0			12,750	16,760	20,060	22,480	25,210	27,350
65.0				15,540	18,590	20,840	23,360	25,350

POWER(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	5,020	5,090	5,120	5,160	5,160	5,160	5,140	5,120
40.5	5,600	5,680	5,720	5,770	5,770	5,770	5,750	5,740
45.0	6,140	6,230	6,270	6,330	6,340	6,340	6,330	6,320
50.0	6,810	6,910	6,960	7,030	7,050	7,050	7,050	7,040
54.4		7,570	7,630	7,710	7,740	7,750	7,750	7,740
60.0			8,570	8,670	8,710	8,730	8,740	8,740
65.0				9,610	9,660	9,690	9,700	9,710

CURRENT(A) @380V

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
40.5	10.1	10.2	10.2	10.2	10.2	10.2	10.2	10.2
45.0	10.9	11.0	11.0	11.1	11.1	11.1	11.1	11.1
50.0	11.8	11.9	12.0	12.1	12.2	12.2	12.2	12.2
54.4		12.9	13.0	13.1	13.2	13.2	13.2	13.2
60.0			14.3	14.5	14.6	14.6	14.6	14.6
65.0				15.9	16.0	16.0	16.0	16.0

NOTE:

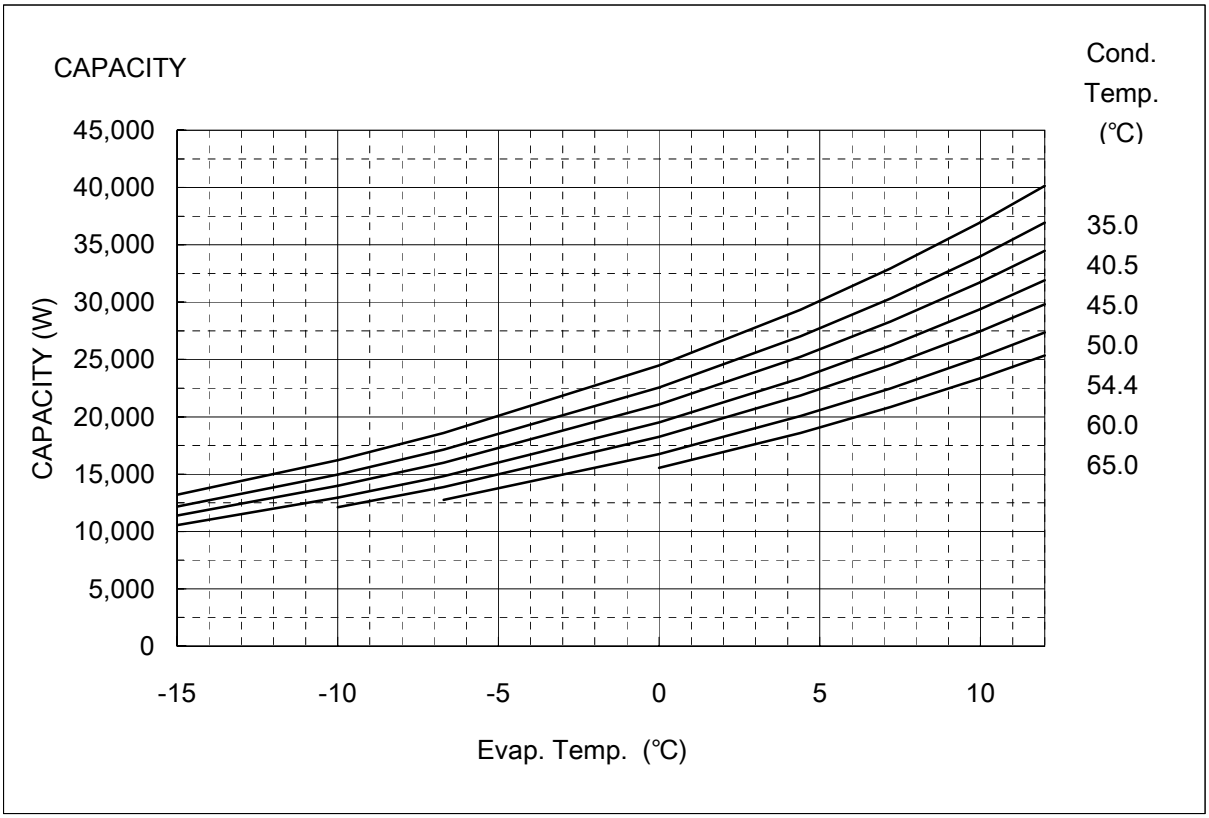
*** The performance values are based on MID point method.**

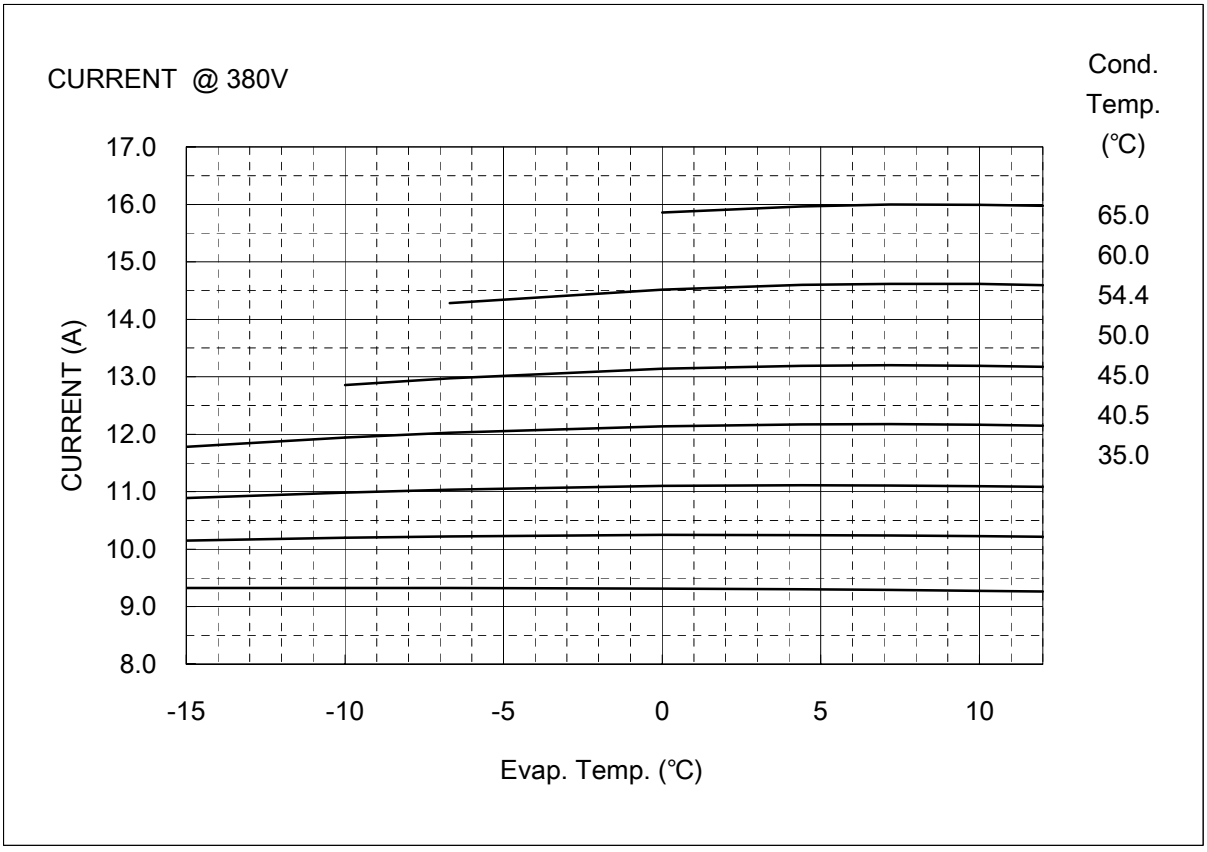
*** The performance values subject to change without notice.**

Dalian SANYO Compressor Co.,Ltd.

Compressor Model(Code) **C-SCN603H8K (809 183 88)**

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





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**C-SCN603H8K (809 183 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	4.004642E+04	3.569299E+03	6.084165E+00
C2	1.707960E+03	5.038327E+00	-4.586390E-03
C3	-5.239410E+02	-9.795056E+00	2.441731E-02
C4	3.105100E+01	-4.003621E-01	1.879734E-03
C5	-2.365733E+01	-3.377715E-01	-5.175950E-04
C6	2.263373E+00	1.580085E+00	1.935642E-03
C7	2.389230E-01	1.053029E-04	-2.682842E-06
C8	-2.845702E-01	-2.093382E-03	-5.562160E-05
C9	1.090986E-01	7.518378E-03	1.672233E-05
C10	-3.152917E-08	5.700804E-09	6.634405E-12

Note:The polynomial coefficients subject to change without notice.

PERFORMANCE DATA

Compressor Model(Code)	**C-SCN603H8K (809 183 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	16,340	19,980	22,820	29,900	35,690	39,950	44,720	48,480
40.5	14,900	18,240	20,840	27,330	32,650	36,560	40,950	44,400
45.0	13,810	16,910	19,330	25,370	30,330	33,970	38,060	41,280
50.0	12,680	15,540	17,770	23,340	27,920	31,290	35,070	38,040
54.4		14,420	16,500	21,690	25,960	29,100	32,620	35,400
60.0			15,020	19,760	23,660	26,540	29,770	32,310
65.0				18,200	21,810	24,480	27,460	29,820

POWER(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	5,940	6,090	6,170	6,270	6,290	6,290	6,270	6,240
40.5	6,660	6,820	6,900	7,000	7,030	7,030	7,020	7,000
45.0	7,340	7,500	7,580	7,690	7,720	7,730	7,720	7,710
50.0	8,190	8,340	8,420	8,540	8,590	8,600	8,610	8,600
54.4		9,160	9,240	9,370	9,430	9,450	9,470	9,470
60.0			10,400	10,530	10,600	10,640	10,680	10,700
65.0				11,670	11,760	11,810	11,860	11,900

CURRENT(A) @440V

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	8.3	8.7	9.0	9.3	9.3	9.3	9.3	9.2
40.5	9.5	9.9	10.1	10.3	10.4	10.4	10.4	10.3
45.0	10.6	11.0	11.1	11.4	11.4	11.4	11.4	11.4
50.0	12.2	12.4	12.5	12.6	12.7	12.7	12.7	12.7
54.4		13.7	13.8	13.8	13.9	13.9	13.9	14.0
60.0			15.6	15.5	15.6	15.6	15.7	15.8
65.0				17.2	17.2	17.3	17.4	17.6

NOTE:

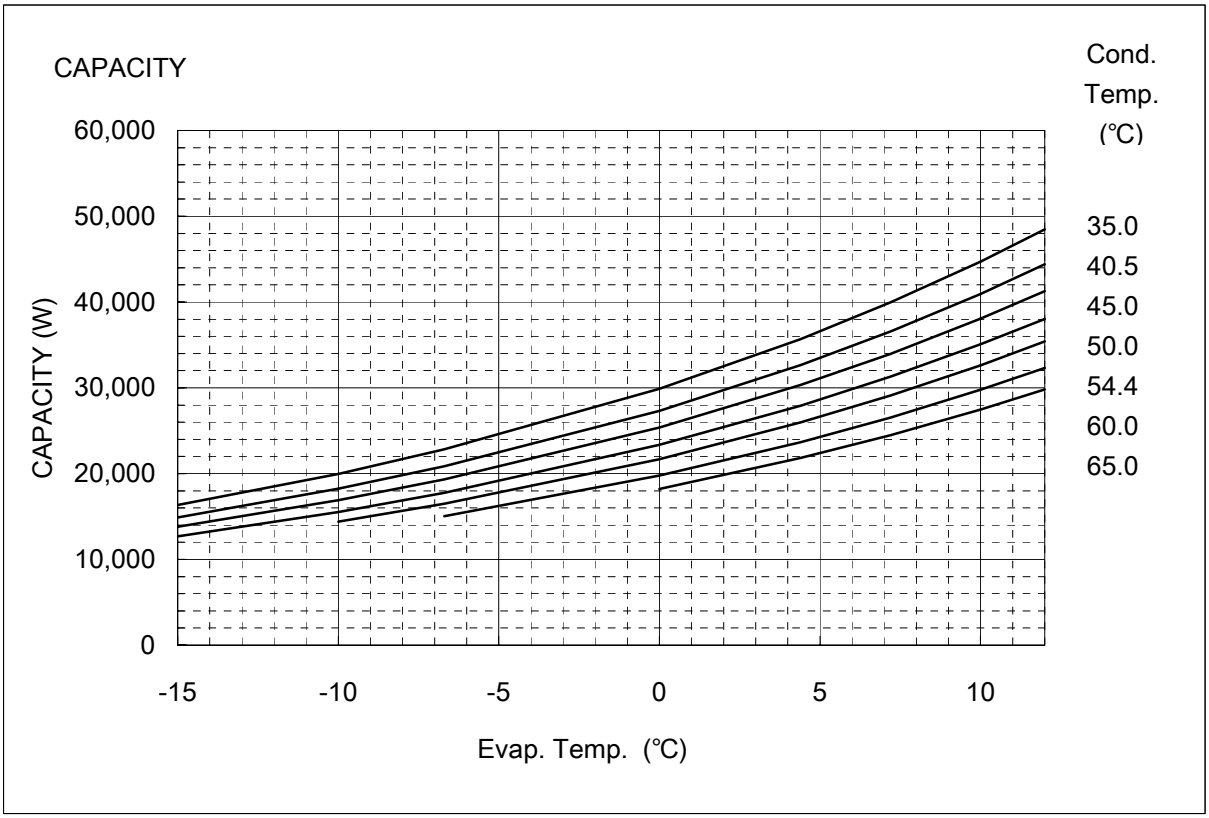
*** The performance values are based on MID point method.**

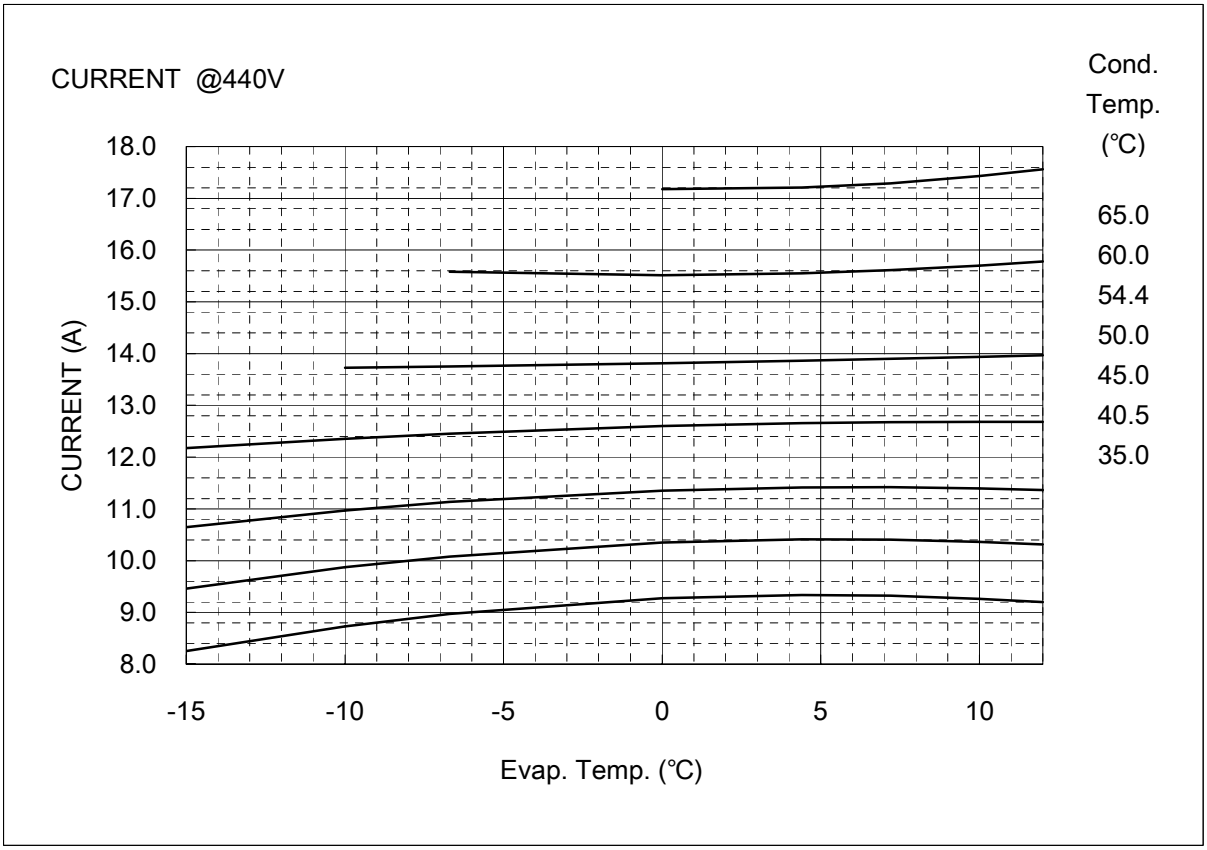
*** The performance values subject to change without notice.**

Dalian SANYO Compressor Co.,Ltd.

Compressor Model(Code) **C-SCN603H8K (809 183 88)**

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





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**C-SCN603H8K (809 183 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

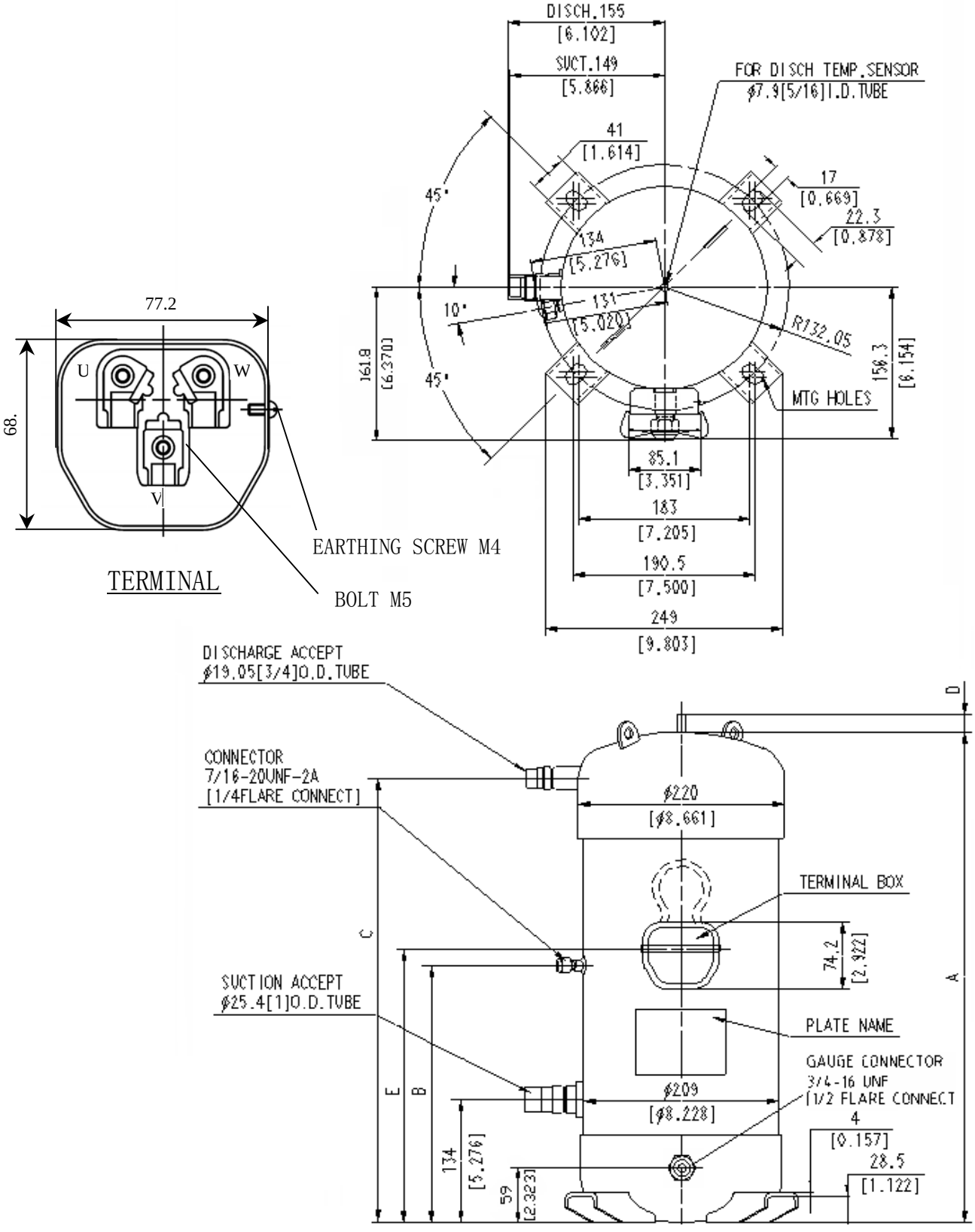
D——CONDENSING TEMP, °C

440V-60Hz	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	5.079741E+04	4.383964E+03	6.908819E+00
C2	2.055610E+03	1.235758E+01	1.760747E-02
C3	-7.097991E+02	-1.385735E+01	-3.705640E-02
C4	3.586250E+01	-1.684597E+00	-9.046854E-03
C5	-2.879854E+01	-4.162538E-01	7.744920E-04
C6	3.208373E+00	1.938782E+00	3.009590E-03
C7	2.766718E-01	1.809265E-03	1.504425E-05
C8	-3.199017E-01	2.093213E-02	1.702135E-04
C9	1.330703E-01	8.630991E-03	-1.647913E-05
C10	-1.647169E-08	-1.231354E-08	-7.266176E-11

Note:The polynomial coefficients subject to change without notice.

DIMENSIONAL SKETCH

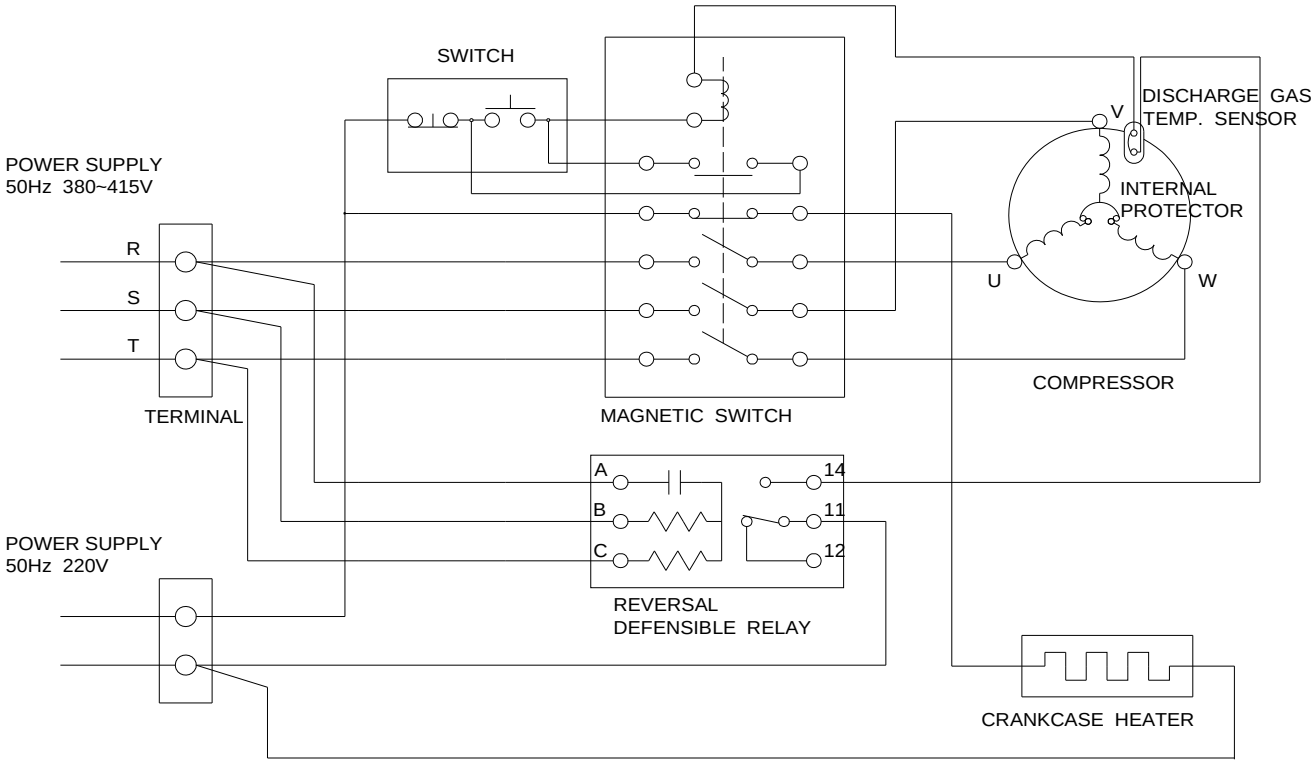
C-SC Series



Compressor Code	A	B	C	D
809 *8* 8*（8HP）	538	284	486	8
809 *9* 8*（9HP）				
809 *0* 8*(10HP)	553	299	501	9
809 *2* 8*(12HP)				

WIRING & MOUNTING SKETCH

WIRING DIAGRAM
C-SC Series 3phase B8



MOUNTING SKETCH