SANYO SCROLL COMPRESSORS

Model : C-SBP205H38B

DALIAN SANYO COMPRESSOR CO.,LTD.

Rev. 2012-05

SANYO Scroll Compressor

Model C-SBP205H38B

Refrigerant R410A

Electrical 380-415 Volts 3 Phase 50Hz
440-460 Volts 3 Phase 60Hz

Nominal Performance at ARI

Power Source		50Hz-380V	60Hz-440V
Capacity	(W)	16800	20600
Power	(W)	5600	6650
Current	(A)	10.3	9.94
COP	(W/W)	3.00	3.10
Mass Flow	(kg/h)	385	469

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)	12.43	
MCC (A)	17.4	
LRA (A)	73	
RPM (min^{-1})	2900	3450

Compressor

Maximum Discharge Temp(℃)	130
Displacement (cm^3/rev)	66.8
Weight (with oil kg)	40

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	**C-SBP205H38B**
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	9,630	11,680	13,260	17,160	20,330	22,650	25,230	27,250
40.5	8,940	10,820	12,270	15,830	18,720	20,830	23,170	25,010
45.0	8,410	10,160	11,500	14,810	17,490	19,430	21,600	23,290
50.0	7,850	9,460	10,700	13,750	16,200	17,990	19,970	21,520
54.4		8,890	10,050	12,870	15,150	16,800	18,630	20,060
60.0			9,270	11,840	13,910	15,410	17,070	18,360
65.0				11,000	12,900	14,270	15,790	16,980

POWER(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	3,550	3,600	3,620	3,640	3,630	3,620	3,600	3,590
40.5	4,020	4,060	4,080	4,100	4,090	4,080	4,060	4,050
45.0	4,470	4,500	4,520	4,530	4,520	4,510	4,500	4,480
50.0	5,040	5,070	5,080	5,080	5,070	5,060	5,050	5,040
54.4		5,620	5,620	5,620	5,610	5,600	5,590	5,580
60.0			6,400	6,380	6,370	6,360	6,350	6,350
65.0				7,130	7,120	7,110	7,110	7,100

CURRENT(A) @380V

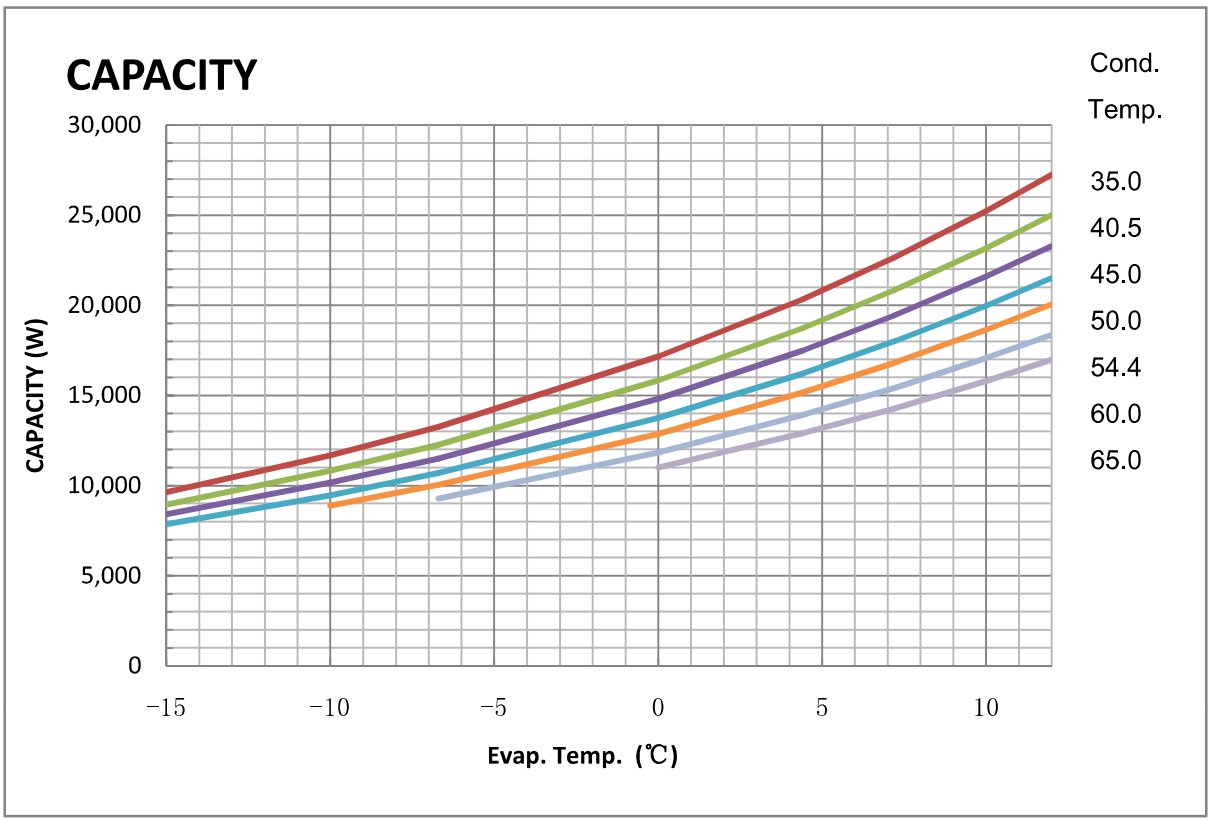
Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	7.0	7.1	7.1	7.1	7.1	7.1	7.1	7.0
40.5	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8
45.0	8.4	8.5	8.5	8.5	8.5	8.5	8.5	8.5
50.0	9.2	9.3	9.3	9.3	9.3	9.3	9.3	9.3
54.4		10.1	10.1	10.1	10.1	10.1	10.1	10.1
60.0			11.2	11.2	11.2	11.2	11.2	11.2
65.0				12.3	12.3	12.3	12.3	12.3

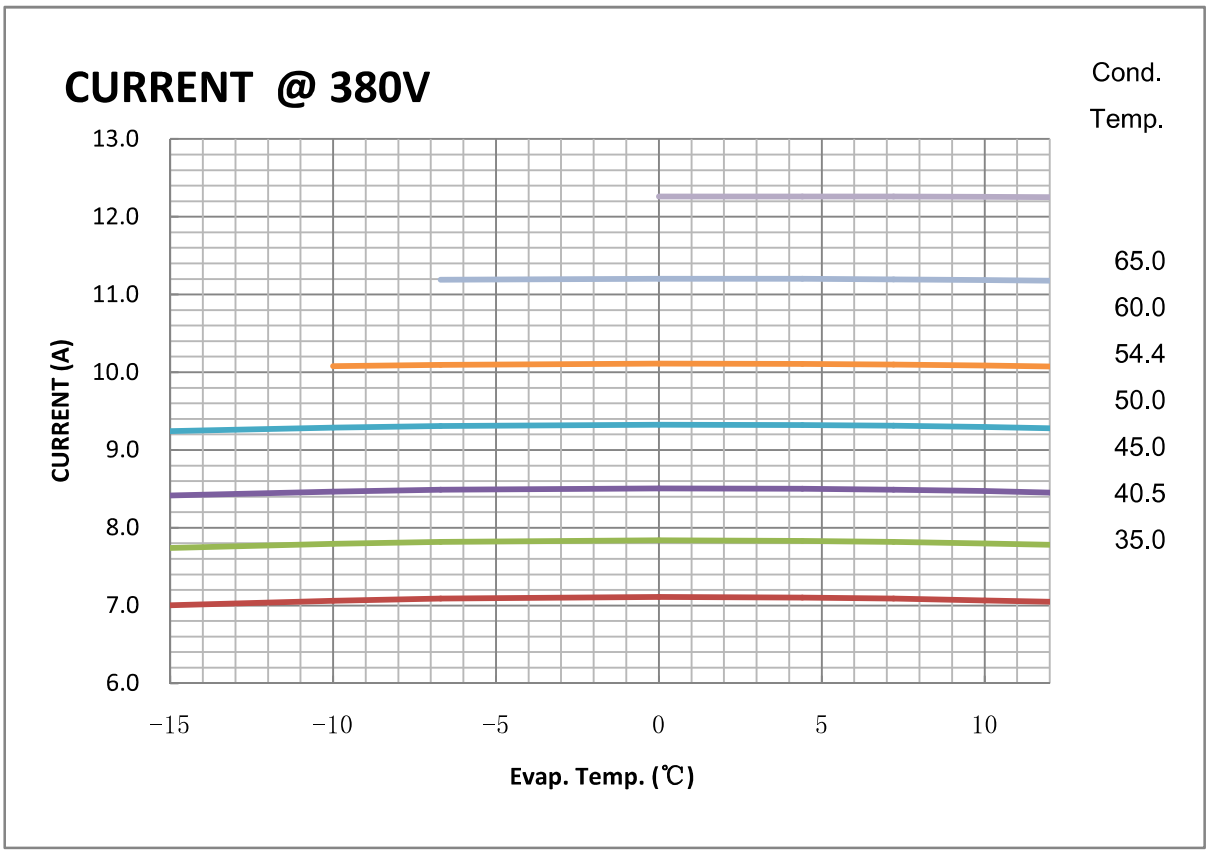
NOTE:

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

Dalian SANYO Compressor Co.,Ltd.

Compressor Model(Code)	**C-SBP205H38B**
Power Source	**3PH 50Hz 380~415V**





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**C-SBP205H38B**
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)	FLOW (kg/h)
C1	2.782771E+04	2.699154E+03	4.765251E+00	3.537807E+02
C2	1.173418E+03	-2.774791E+00	1.429598E-03	1.325504E+01
C3	-3.585620E+02	-2.138455E+01	1.067753E-02	-1.212379E+00
C4	2.003517E+01	-8.660425E-01	-8.231101E-04	1.572849E-01
C5	-1.753523E+01	1.764814E-01	-7.408754E-05	-6.821553E-02
C6	1.536480E+00	1.379203E+00	1.610168E-03	1.752046E-03
C7	1.331543E-01	2.164011E-03	8.301892E-07	-1.230425E-05
C8	-2.044902E-01	1.335891E-02	9.828561E-06	5.626267E-04
C9	8.600804E-02	-2.855266E-03	1.029089E-06	1.100480E-04
C10	-2.498734E-08	-1.170522E-08	-1.084850E-11	9.139212E-11

Note:The polynomial coefficients subject to change without notice.

PERFORMANCE DATA *(Preliminary Data)*

Compressor Model	**C-SBP205H38B**
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	11,810	14,320	16,260	21,040	24,930	27,770	30,930	33,410
40.5	10,960	13,260	15,040	19,410	22,950	25,540	28,410	30,660
45.0	10,310	12,450	14,100	18,160	21,440	23,830	26,490	28,560
50.0	9,630	11,600	13,130	16,860	19,870	22,060	24,490	26,380
54.4		10,900	12,320	15,780	18,570	20,600	22,850	24,600
60.0			11,370	14,520	17,050	18,890	20,930	22,510
65.0				13,490	15,820	17,500	19,360	20,810

POWER(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	4,210	4,270	4,300	4,320	4,310	4,300	4,280	4,260
40.5	4,770	4,820	4,840	4,860	4,860	4,840	4,820	4,810
45.0	5,310	5,350	5,370	5,380	5,370	5,360	5,340	5,330
50.0	5,990	6,020	6,030	6,030	6,020	6,010	5,990	5,980
54.4		6,670	6,680	6,670	6,660	6,650	6,640	6,620
60.0			7,590	7,580	7,560	7,550	7,540	7,530
65.0				8,470	8,450	8,440	8,440	8,430

CURRENT(A) @440V

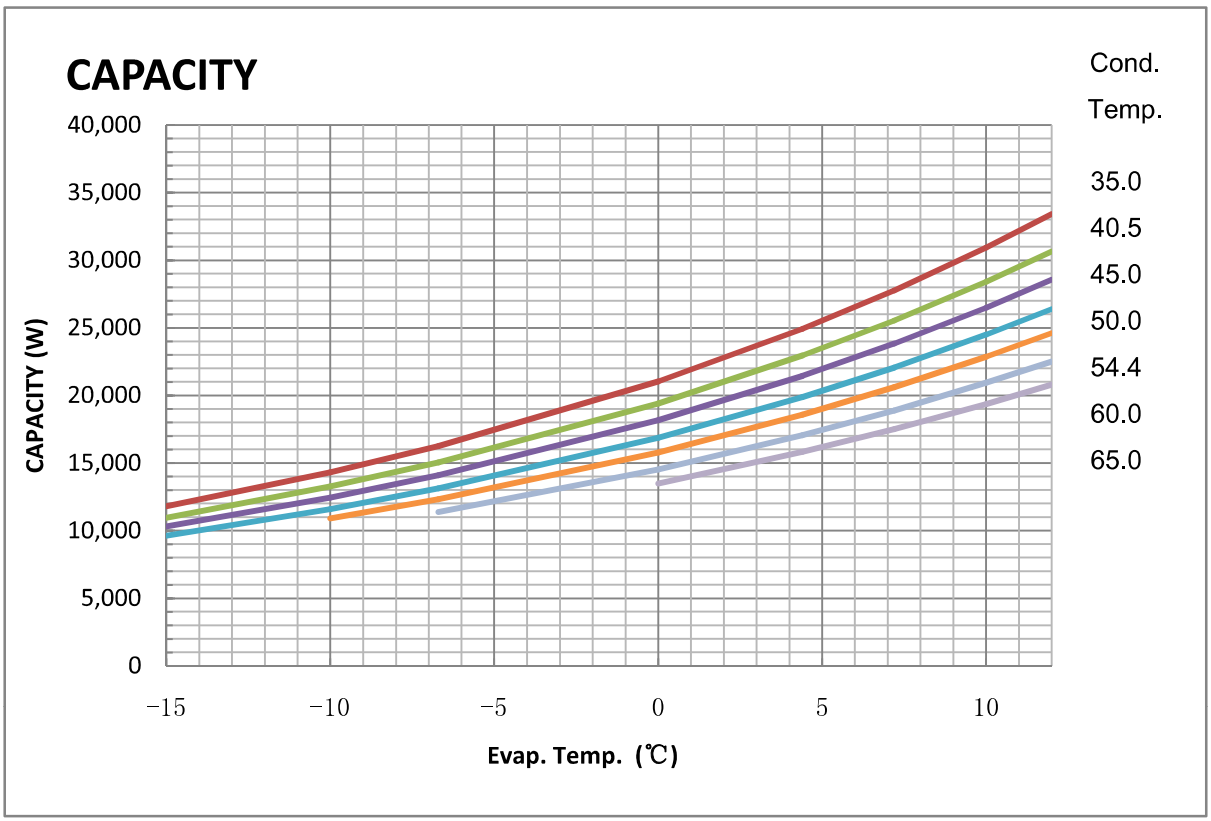
Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	6.9	6.9	7.0	7.0	7.0	7.0	7.0	6.9
40.5	7.6	7.7	7.7	7.7	7.7	7.7	7.7	7.7
45.0	8.3	8.3	8.4	8.4	8.4	8.4	8.3	8.3
50.0	9.1	9.1	9.2	9.2	9.2	9.2	9.1	9.1
54.4		9.9	9.9	10.0	9.9	9.9	9.9	9.9
60.0			11.0	11.0	11.0	11.0	11.0	11.0
65.0				12.1	12.1	12.1	12.1	12.1

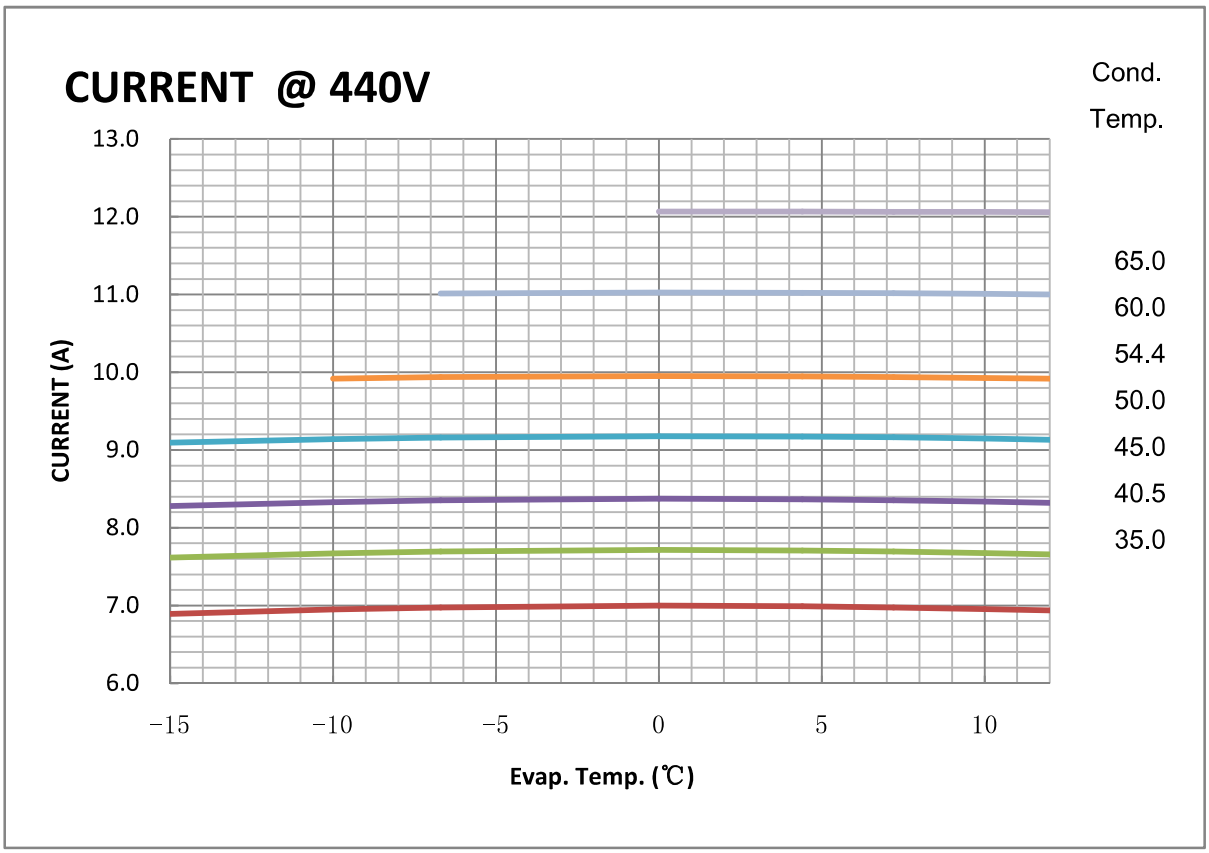
NOTE:

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

Dalian SANYO Compressor Co.,Ltd.

Compressor Model(Code)	**C-SBP205H38B**
Power Source	**3PH 60Hz 440~460V**





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**C-SBP205H38B**
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

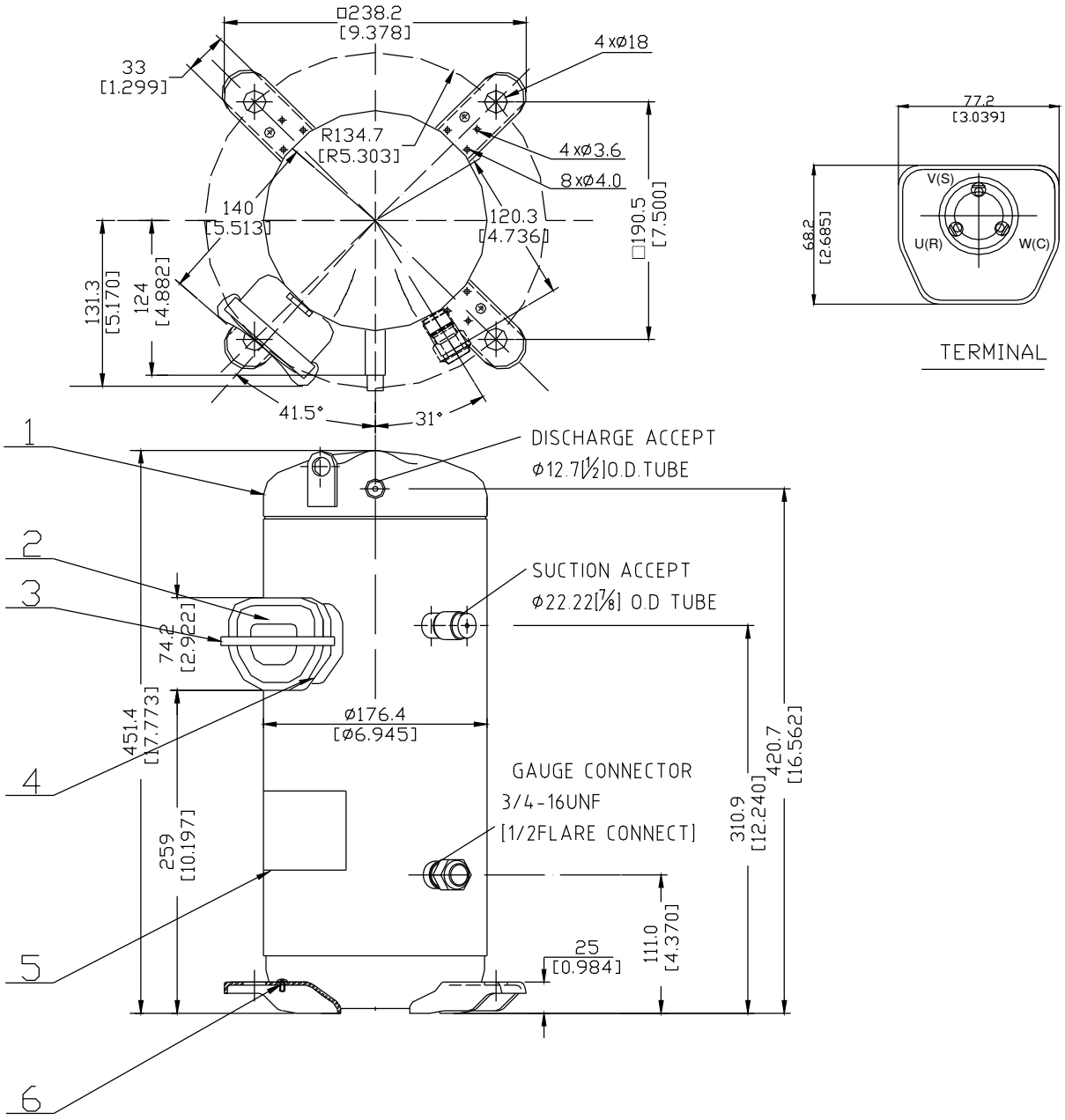
D——CONDENSING TEMP, °C

440V-60Hz	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	3.413762E+04	3.178781E+03	4.689926E+00
C2	1.432582E+03	8.523029E-01	1.448390E-03
C3	-4.404389E+02	-2.430959E+01	1.050231E-02
C4	2.448053E+01	-9.929954E-01	-8.101884E-04
C5	-2.120842E+01	4.700383E-02	-7.465050E-05
C6	1.892843E+00	1.626698E+00	1.584713E-03
C7	1.612108E-01	1.901259E-03	8.155100E-07
C8	-2.488943E-01	1.501913E-02	9.674831E-06
C9	1.022323E-01	-1.818839E-03	1.030453E-06
C10	-4.206526E-08	-9.183927E-09	-9.137696E-12

Note:The polynomial coefficients subject to change without notice.

DIMENSIONAL SKETCH

C-SB Tandem Series

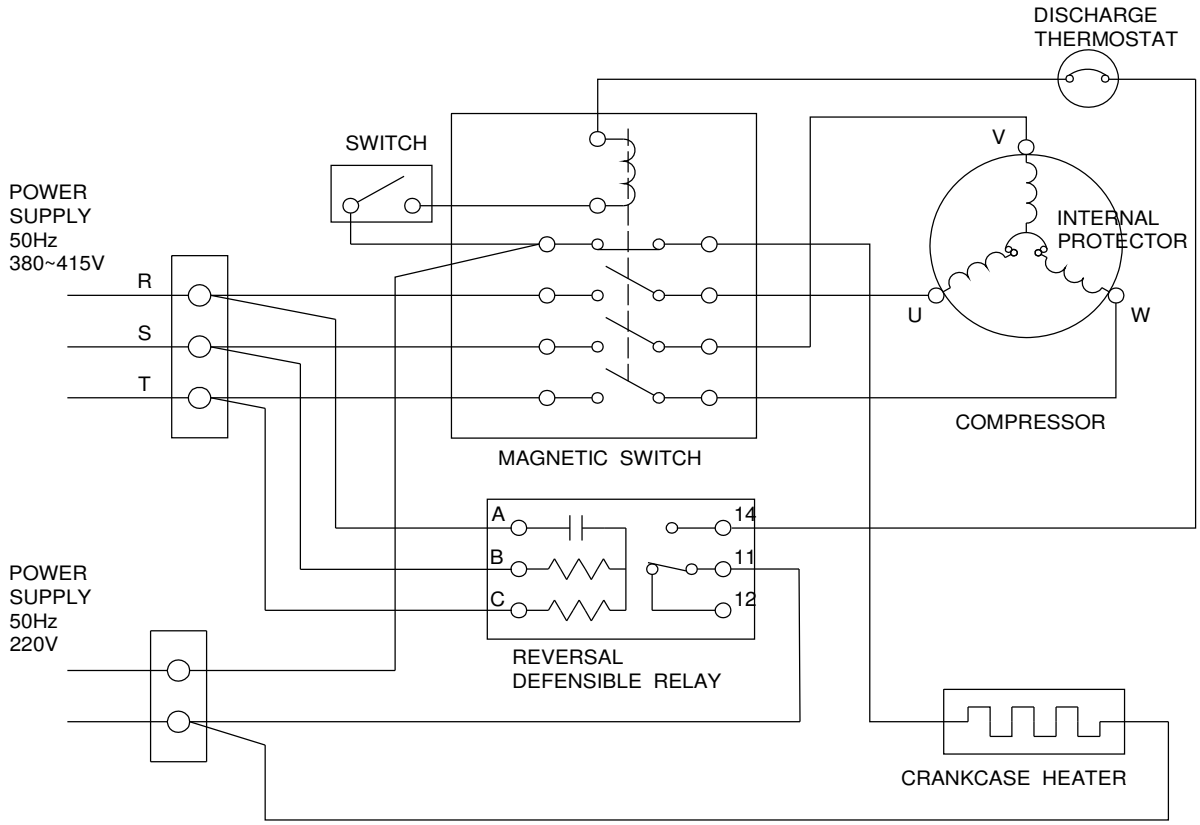


No.	Qty	Name
1	1	Compressor
2	1	Terminal Box Cover
3	1	Terminal Box Clip
4	1	Insulating Grommet
5	1	Nameplate
6	1	Screw Special

WIRING & MOUNTING SKETCH

WIRING DIAGRAM

C-SB Series 3phase B8



MOUNTING SKETCH