



## SPECIFICATIONS OF COMPRESSOR

Model No: C-SCP510H38B

Output : 15HP

**DALIAN SANYO COMPRESSOR Co.,Ltd.**

01-Mar-11

# GENERAL SPECIFICATIONS

Model No:	C-SCP510H38B	
Application		
Evaporating Temp Range	(°C)	-15.0 ~ 12.0
Refrigerant	R410A	
Compressor Cooling	Natural Cooling	
Rated Performance		
Capacity	(W)	43900
Input	(W)	13800
Current	(A)	24.4
Revolution	(min <sup>-1</sup> )	2870
Sound Level	(dB(A))	71
Rating Conditions		
Power Source	3-PH 50Hz 380V	
Evaporating Temp	(°C)	7.2
Condensing Temp	(°C)	54.4
Suction Gas Temp	(°C)	18.3
Liquid Temp	(°C)	46.1
Ambient Temp	(°C)	35.0
Measuring Point of Sound Level		
Distance from the Compressor	(m)	1.0
Compressor		
Design	Hermetic Scroll	
Displacement	(cm <sup>3</sup> )	171.2
Suction Line Connection	(Φ mm OD)	34.9
Discharge Line Connection	(Φ mm OD)	22.3
Oil	(ml)	3500 ( FV68S )
Mass(Incl.Oil)	(kg)	76
Motor		
Type	3-PH Induction Motor (3 I R)	
Pole	2	
Rated Power Source	3-PH 50Hz 380-415V	
Voltage Range	(V)	380-415
Starting Current	(A)	158.73
Running Capacitor	(μ F)	-

DALIAN SANYO COMPRESSOR Co.,Ltd.

**PERFORMANCE DATA**

Compressor Model	<b>C-SCP510H38B</b>
Power Source	<b>3PH 50Hz 380-415V</b>
Suction Gas Superheat(°C)	<b>11.1</b>
Sub Cooling(°C)	<b>8.3</b>
Compressor Cooling	<b>Natural Cooling</b>
Refrigerant	<b>R410A</b>

**CAPACITY(W)**

Condensing Temperature(°C)	Evaporating Temperature(°C)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	29,650	34,230	38,030	47,640	55,320	60,790	66,690	71,180
40.5	25,380	30,130	33,910	43,180	50,420	55,500	60,960	65,080
45.0	22,240	27,080	30,830	39,800	46,680	51,470	56,580	60,430
50.0	19,140	24,010	27,690	36,310	42,820	47,300	52,060	55,620
54.4		21,580	25,180	33,490	39,670	43,900	48,360	51,690
60.0			22,350	30,220	36,000	39,930	44,060	47,120
65.0				27,620	33,050	36,730	40,580	43,440

**POWER(W)**

Condensing Temperature(°C)	Evaporating Temperature(°C)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	9,120	9,210	9,270	9,380	9,440	9,480	9,510	9,540
40.5	10,040	10,170	10,240	10,380	10,460	10,510	10,560	10,590
45.0	10,890	11,040	11,140	11,310	11,410	11,470	11,530	11,560
50.0	11,920	12,110	12,240	12,460	12,580	12,660	12,720	12,770
54.4		13,150	13,290	13,560	13,710	13,800	13,880	13,930
60.0			14,760	15,090	15,290	15,390	15,500	15,560
65.0				16,590	16,820	16,950	17,070	17,150

**CURRENT(A)**

@380V

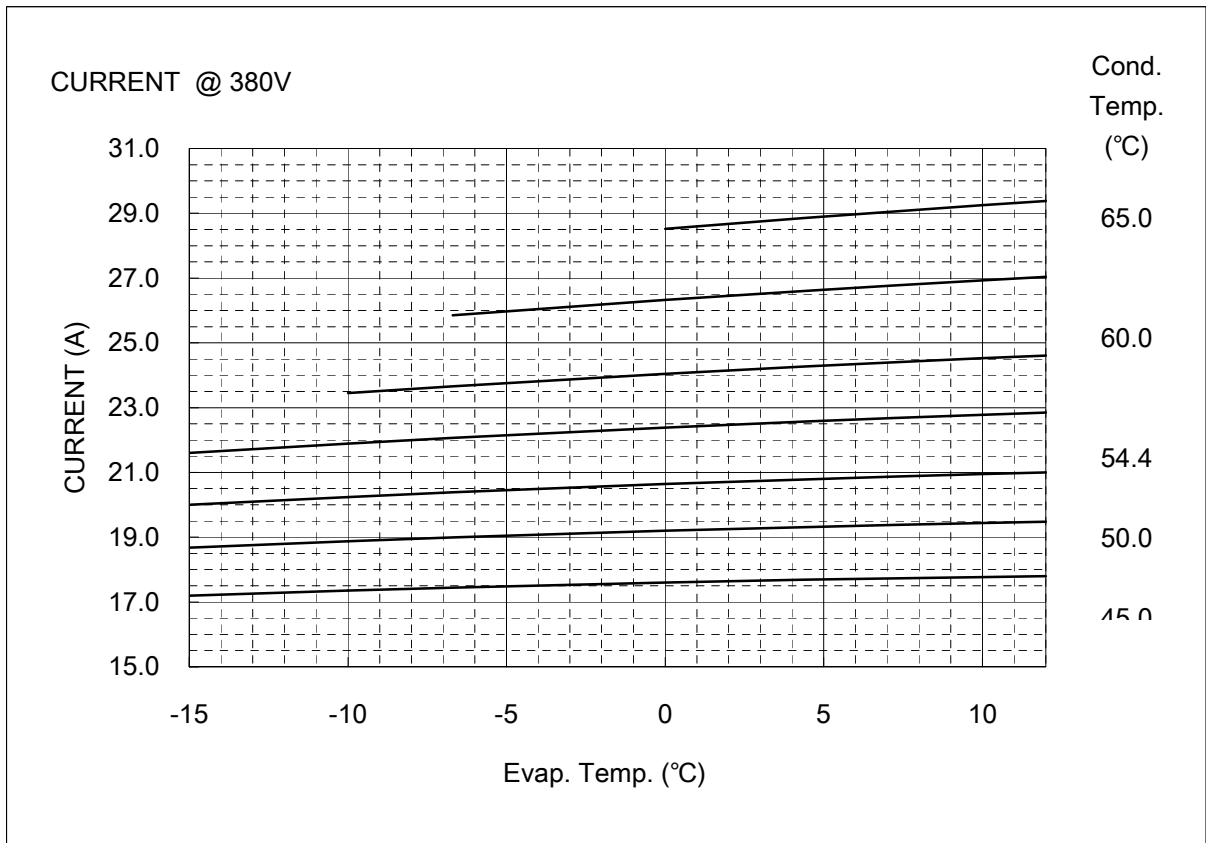
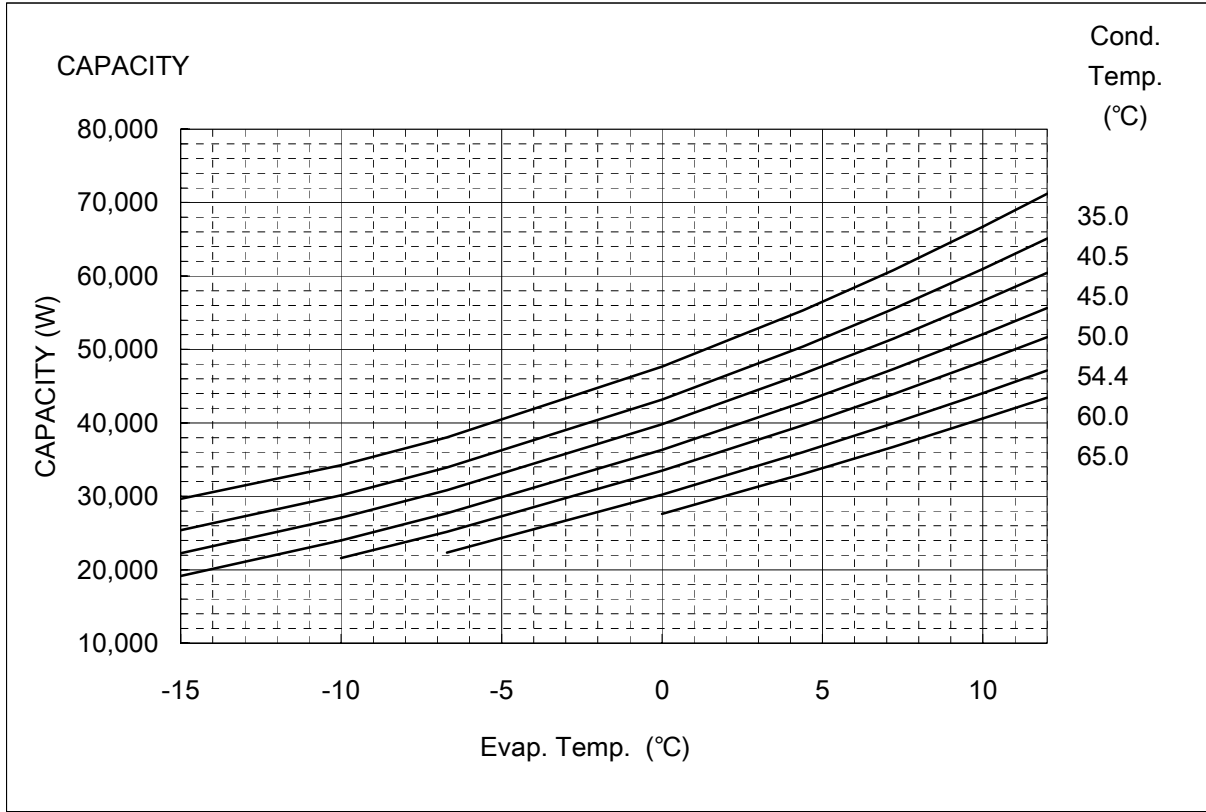
Condensing Temperature(°C)	Evaporating Temperature(°C)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	17.2	17.4	17.4	17.6	17.7	17.7	17.8	17.8
40.5	18.7	18.9	19.0	19.2	19.3	19.4	19.4	19.5
45.0	20.0	20.2	20.4	20.6	20.8	20.9	20.9	21.0
50.0	21.6	21.9	22.1	22.4	22.6	22.7	22.8	22.8
54.4		23.5	23.7	24.0	24.3	24.4	24.5	24.6
60.0			25.9	26.3	26.6	26.8	26.9	27.0
65.0				28.5	28.9	29.1	29.2	29.4

**NOTE:**

- \* The performance values are based on MID point method.
- \* The performance values subject to change without notice.

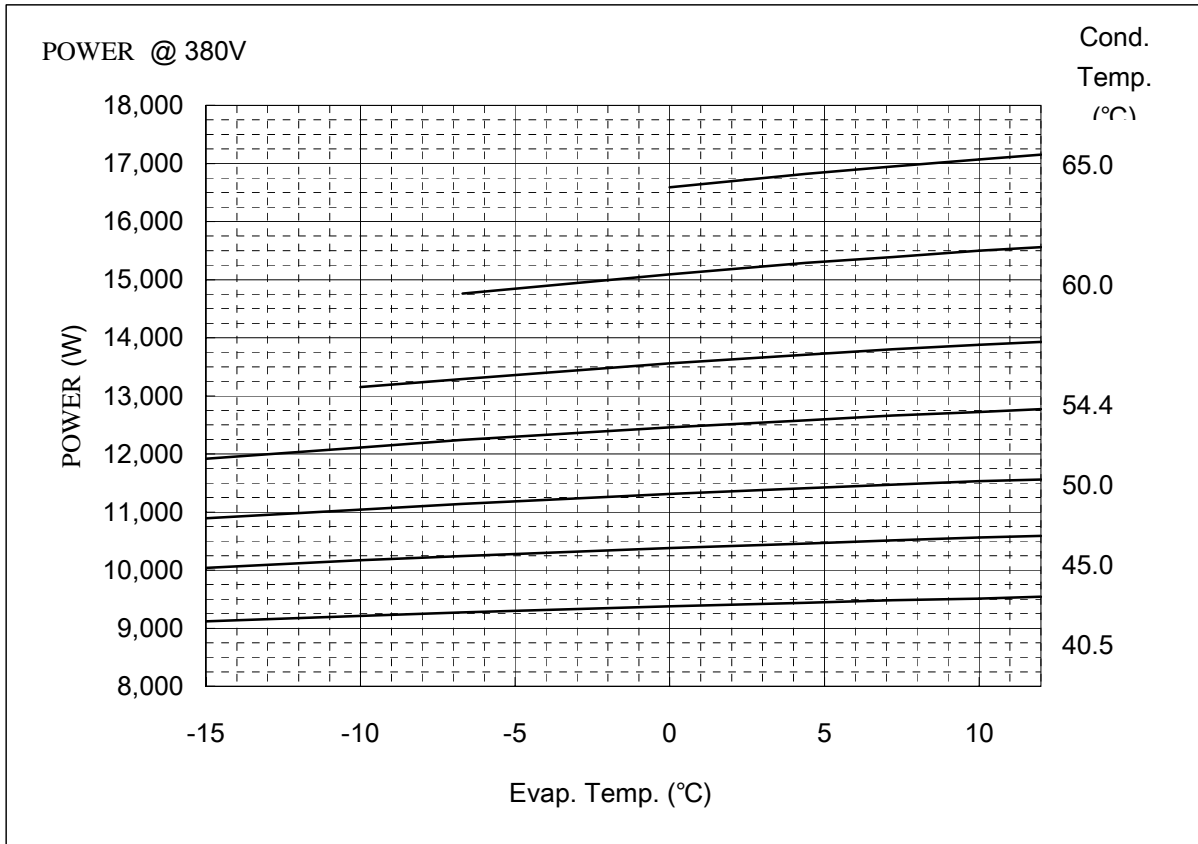
Compressor Model(Code)  
Power Source

**C-SCP510H38B**  
**3PH 50Hz 380-415V**



Compressor Model(Code)  
Power Source

**C-SCP510H38B**  
**3PH 50Hz 380-415V**



## COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model      **C-SCP510H38B**  
 Power Source          **3PH 50Hz 380-415V**  
 Suction Gas Superheat(K) **11.1**  
 Sub Cooling(K)        **8.3**  
 Compressor Cooling    **Natural Cooling**  
 Refrigerant             **R410A**

$$X=C1+C2*(S)+C3*D+C4*(S^2)+C5*(S*D)+C6*(D^2)+C7*(S^3)+C8*(D*S^2)+C9*(S*D^2) +C10*(D^3)$$

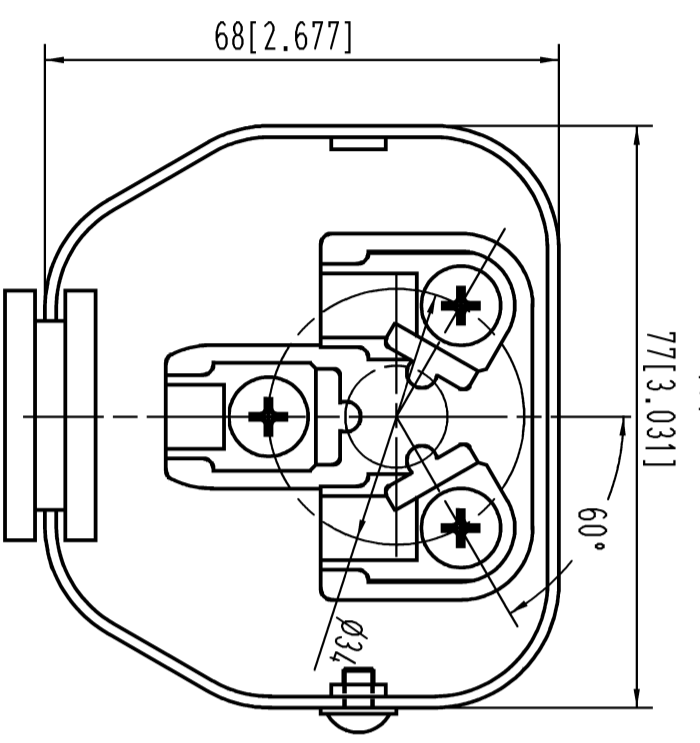
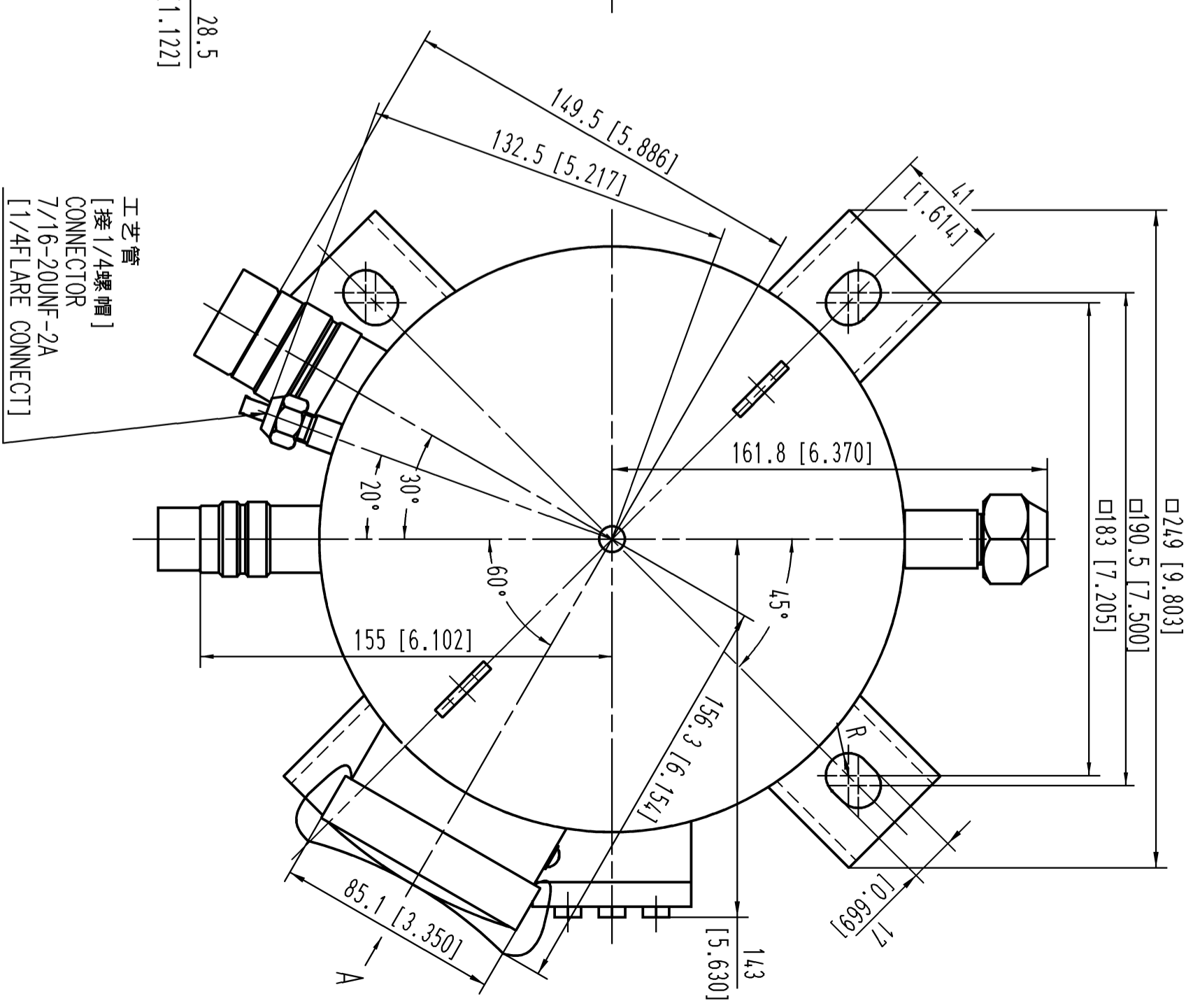
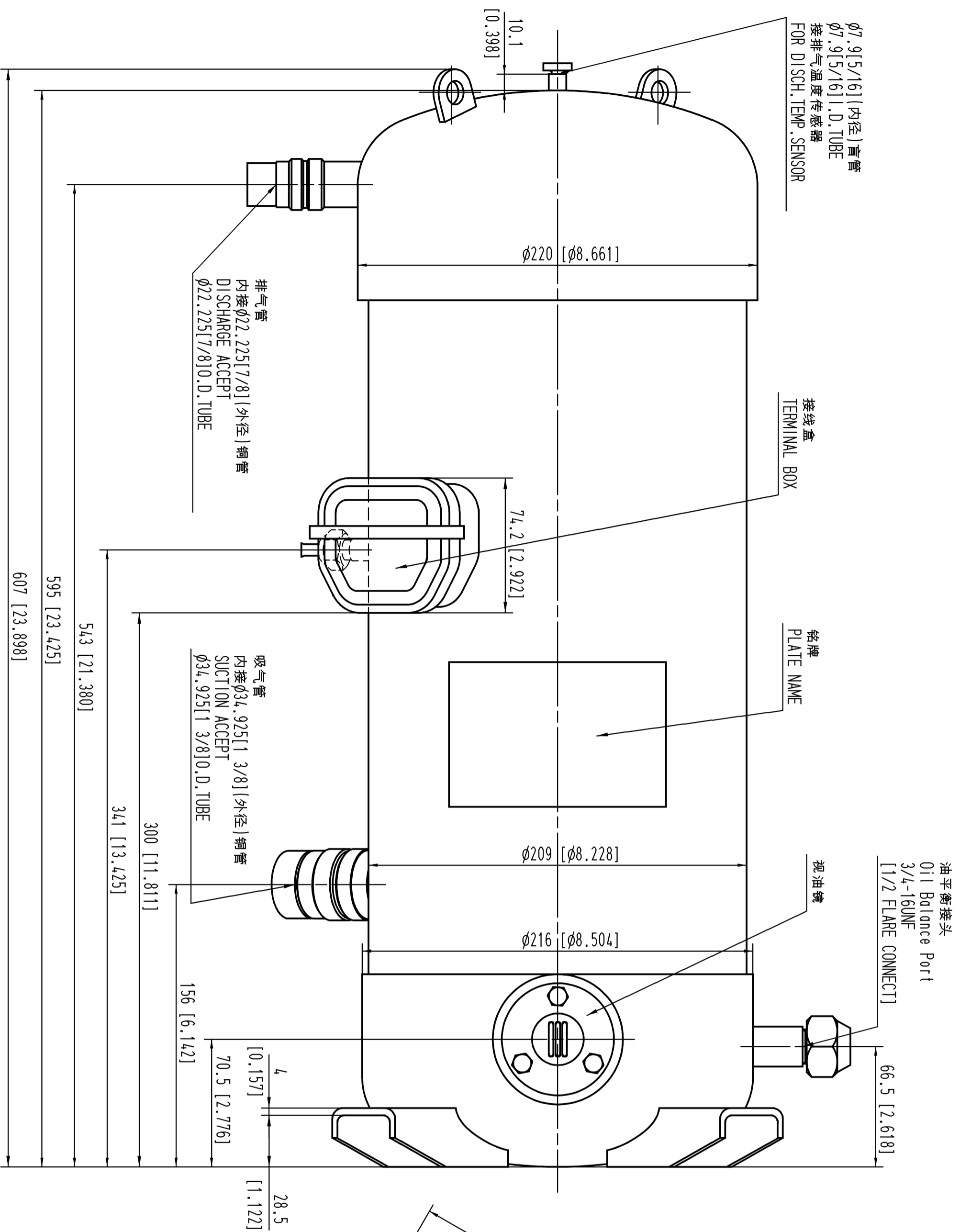
X—CAPACITY(W) OR POWER(W) OR CURRENT(A) OR FLOW(kg/h)

S—EVAPORATING TEMP, °C

D—CONDENSING TEMP, °C

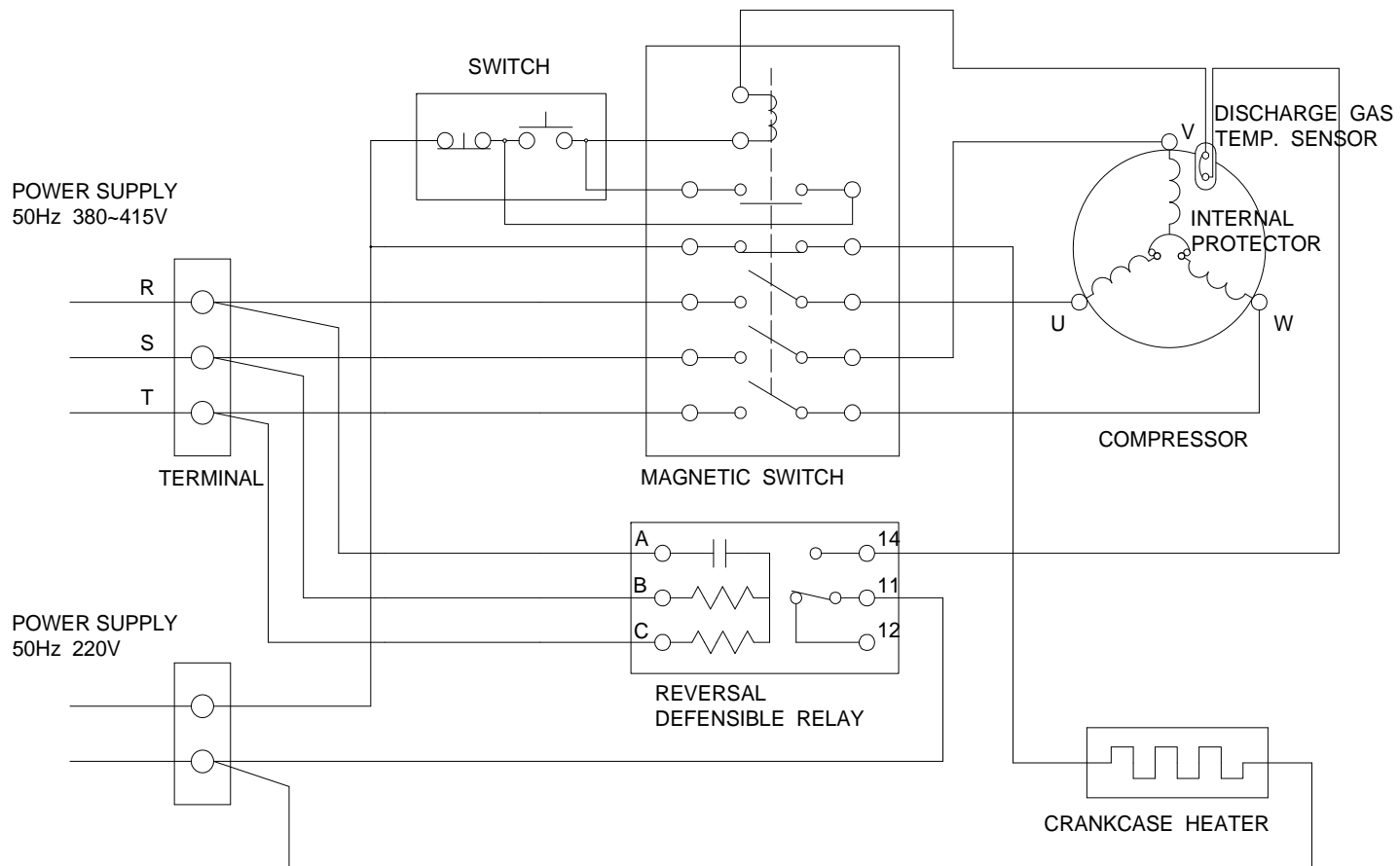
<b>380V-50Hz</b>	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	8.543251E+04	6.264453E+03	1.166631E+01
C2	2.209375E+03	1.600072E+01	1.181247E-02
C3	-1.299962E+03	7.232038E+00	6.479076E-02
C4	5.030378E+01	5.003542E-01	-8.832781E-05
C5	-1.851165E+01	-7.458890E-01	-6.457245E-04
C6	6.333724E+00	2.332098E+00	2.991409E-03
C7	3.232164E-02	-7.287552E-04	-1.392311E-07
C8	-6.507441E-01	-1.751960E-02	-8.469108E-06
C9	4.640627E-02	2.067642E-02	2.594574E-05
C10	-1.621833E-07	-1.065587E-09	1.981788E-12

Note:The polynomial coefficients subject to change without notice.



A [去掉接线盒盖]  
1:1

设计		校核		审核		工艺	
标记	处数	分区	更改文件号	签名	年、月、日	除队标记	
设计			图号审核			S	A
校核			标准化			A	B
审核			批准			共 1 张 第 1 张	
工艺						重量 76.5	
						比例 1:2	
大连三洋压缩机有限公司						外观图	
						COMP DIM SKETCH SCR	
						D01-0-0650-015-00-0	



Part Code  
 E-0910-DSC  
 Name  
 Wiring Diagram