

# SPECIFICATIONS OF COMPRESSOR

Model No: C-SCP435H38B

Output : 13 HP



**Panasonic Appliances Compressor (Dalian) Co.,Ltd.**

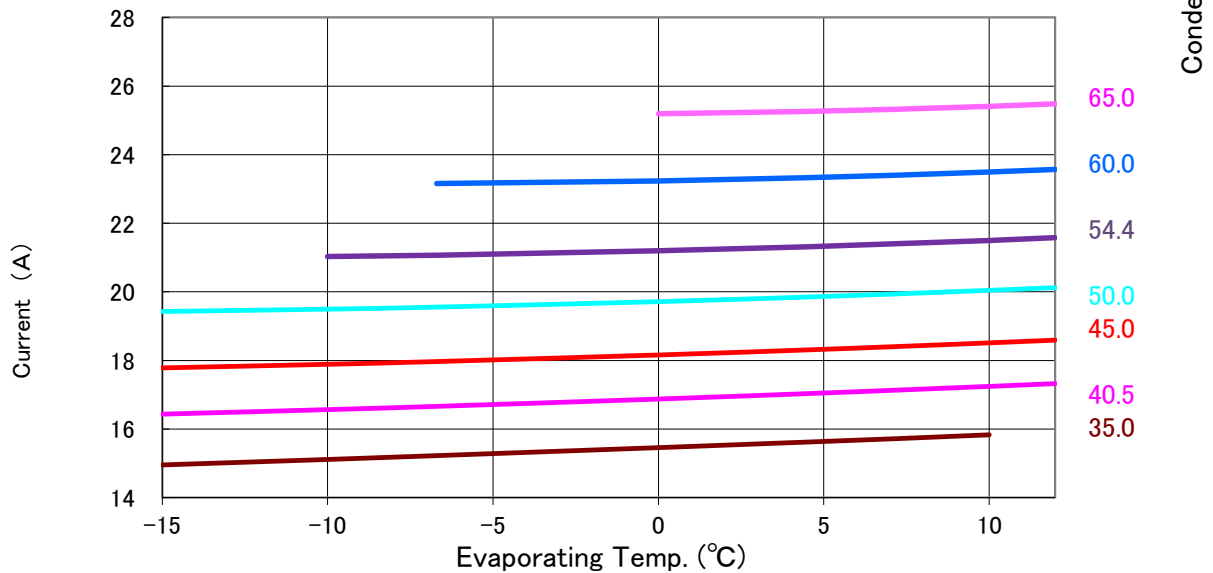
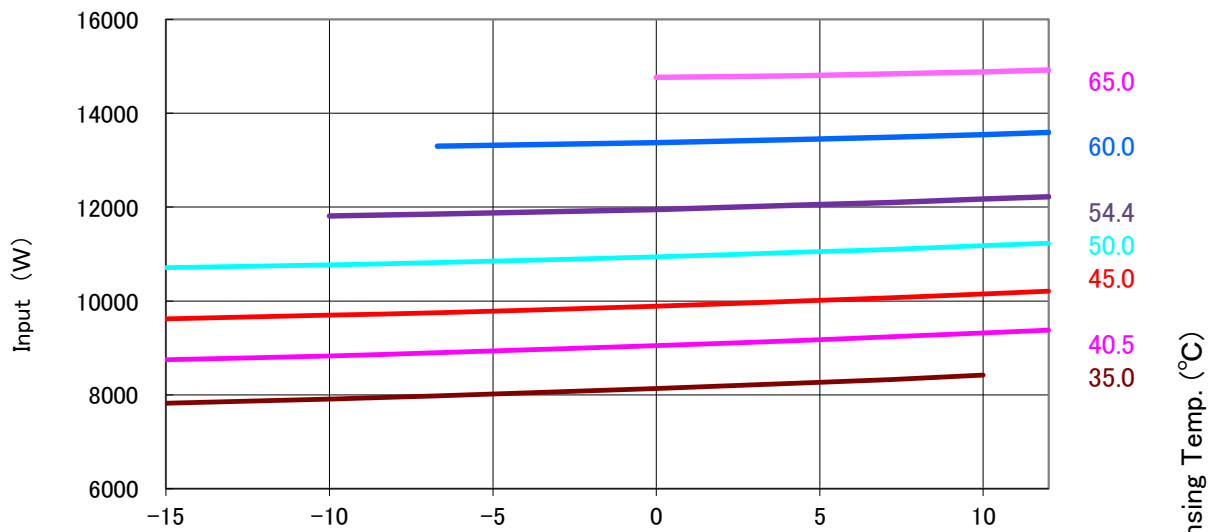
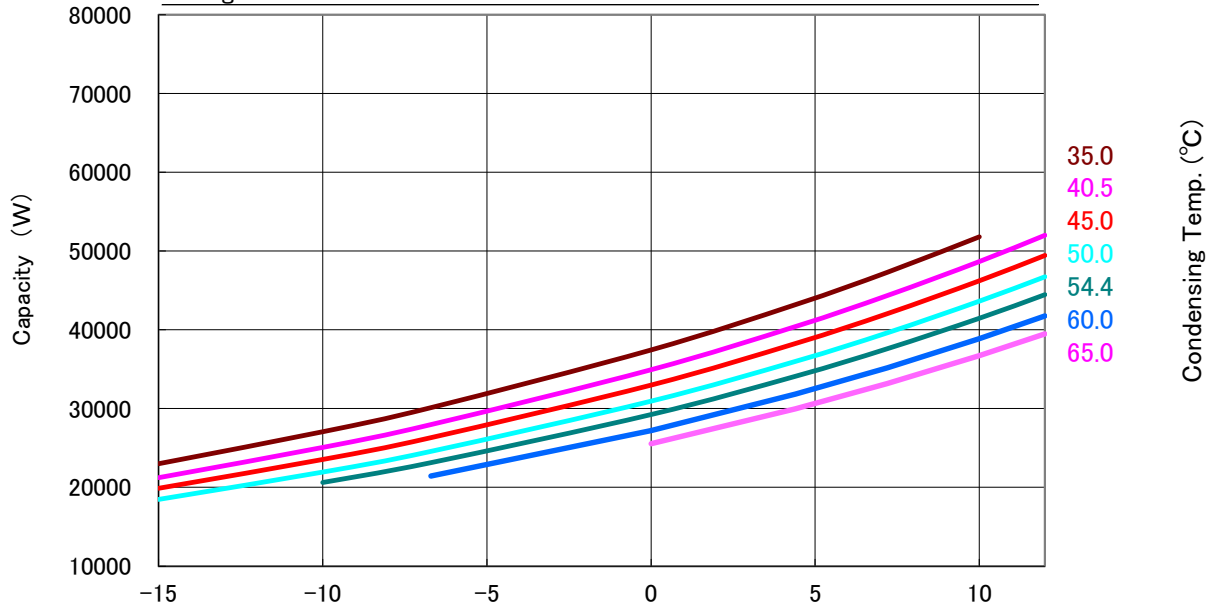
# GENERAL SPECIFICATIONS

Model No:		C-SCP435H38B
<b>Application</b>		
Evaporating Temp Range	(°C)	-15 ~ 12
Refrigerant		R410A
Compressor Cooling		Natural Cooling
<b>Rated Performance</b>		
Capacity	(W)	37600/45100
Input	(W)	12100/14600
Current	(A)	21.4 / 21.9
Revolution	(min <sup>-1</sup> )	
Sound Level	(dB(A))	
<b>Rating Conditions</b>		
Power Source		3-PH 50Hz 380V / 60Hz 440V
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
<b>Measuring Point of Sound Level</b>		
Distance from the Compressor	(m)	1.0
<b>Compressor</b>		
Design		Hermetic Scroll
Displacement	(cm <sup>3</sup> )	148.8
Suction Line Connection	(Φ mm OD)	25.4
Discharge Line Connection	(Φ mm OD)	19.05
Oil	(ml)	2800(FV68S)
Mass(Incl.Oil)	(kg)	
<b>Motor</b>		
Type		3-PH Induction Motor(3IR)
Pole		2
Rated Power Source		3-PH 50Hz 380-415V / 60Hz 440-460V
Voltage Range	(V)	342 ~ 456 / 396 ~ 506

**Panasonic Appliances Compressor (Dalian) Co.,Ltd.**

# PERFORMANCE CURVE

Code No.	C-SCP435H38B
Power Source	3-PH 50Hz 380V
Condensing Temp.(°C)	35、40.5、45、50、54.4、60、65
Super Heating (K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R410A



# PERFORMANCE DATA

Code No.	C-SCP435H38B
Power Source	3-PH 50Hz 380V
Condensing Temp.(°C)	35、40.5、45、50、54.4、60、65
Super Heating (K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R410A

Capacity (W)

		Evaporating Temp. (°C)							
		-15	-10	-6.7	0	4.4	7.2	10	12
Condensing Temp. (°C)	35.0	23,000	27,060	30,120	37,440	43,190	47,300	51,800	
	40.5	21,230	25,070	27,970	34,930	40,410	44,350	48,660	52,000
	45.0	19,880	23,540	26,310	32,980	38,260	42,050	46,220	49,440
	50.0	18,470	21,940	24,570	30,940	35,990	39,620	43,630	46,730
	54.4		20,620	23,140	29,240	34,100	37,600	41,460	44,460
	60.0			21,440	27,220	31,840	35,180	38,870	41,740
	65.0				25,550	29,970	33,170	36,710	39,470

Input (W)

		Evaporating Temp. (°C)							
		-15	-10	-6.7	0	4.4	7.2	10	12
Condensing Temp. (°C)	35.0	7,820	7,910	7,980	8,140	8,250	8,330	8,420	
	40.5	8,750	8,830	8,900	9,050	9,160	9,240	9,320	9,380
	45.0	9,620	9,700	9,750	9,890	10,000	10,070	10,150	10,210
	50.0	10,710	10,770	10,820	10,940	11,040	11,100	11,180	11,230
	54.4		11,810	11,850	11,950	12,040	12,100	12,170	12,220
	60.0			13,300	13,370	13,440	13,490	13,540	13,590
	65.0				14,760	14,800	14,840	14,880	14,920

Current (A)

		Evaporating Temp. (°C)							
		-15	-10	-6.7	0	4.4	7.2	10	12
Condensing Temp. (°C)	35.0	15.0	15.1	15.2	15.5	15.6	15.7	15.8	
	40.5	16.4	16.6	16.7	16.9	17.0	17.1	17.2	17.3
	45.0	17.8	17.9	18.0	18.2	18.3	18.4	18.5	18.6
	50.0	19.4	19.5	19.6	19.7	19.8	19.9	20.0	20.1
	54.4		21.0	21.1	21.2	21.3	21.4	21.5	21.6
	60.0			23.2	23.2	23.3	23.4	23.5	23.6
	65.0				25.2	25.3	25.3	25.4	25.5

## Coefficients of Polynomial Formula

	Capacity(W)	Input (W)	Current (A)
C1	5.693875E+04	5.546778E+03	1.029612E+01
C2	1.631378E+03	9.284011E+00	2.695806E-02
C3	-6.440833E+02	-4.945140E+00	5.205227E-02
C4	2.353096E+01	1.106823E-01	-8.332299E-04
C5	-1.299406E+01	1.000388E+00	8.330037E-04
C6	2.478399E+00	2.255952E+00	2.725664E-03
C7	2.053252E-01	-1.186844E-04	1.497083E-06
C8	-9.922367E-02	4.551231E-03	2.832590E-05
C9	3.280983E-02	-1.554063E-02	-1.652246E-05
C10	1.336511E-08	-1.082980E-09	-1.393921E-11

Note: The polynomial coefficients subject to change without notice.

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

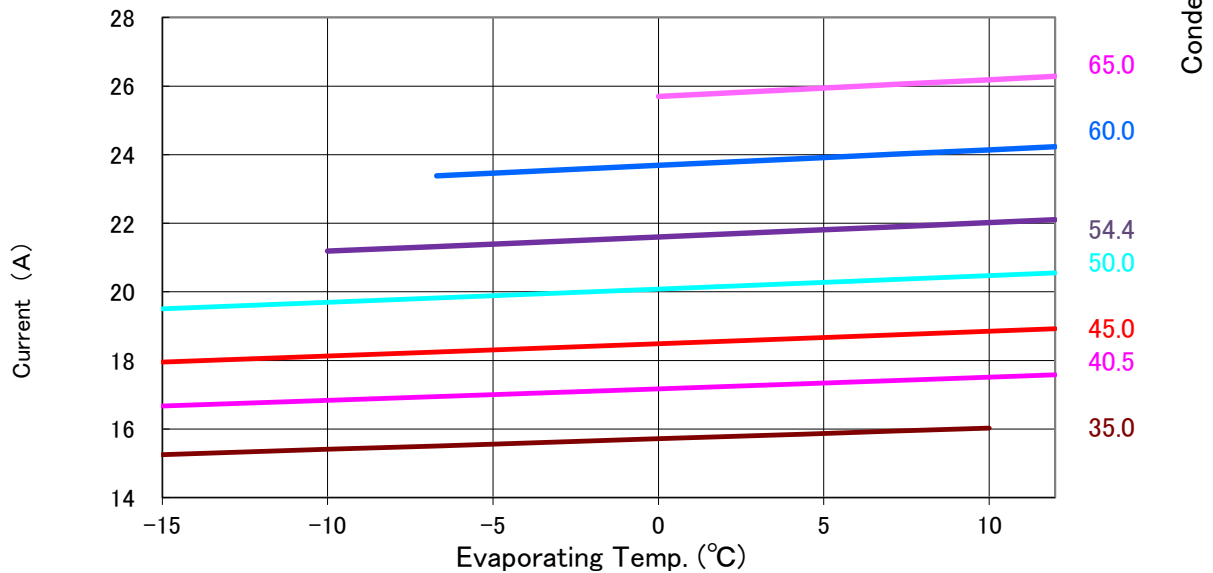
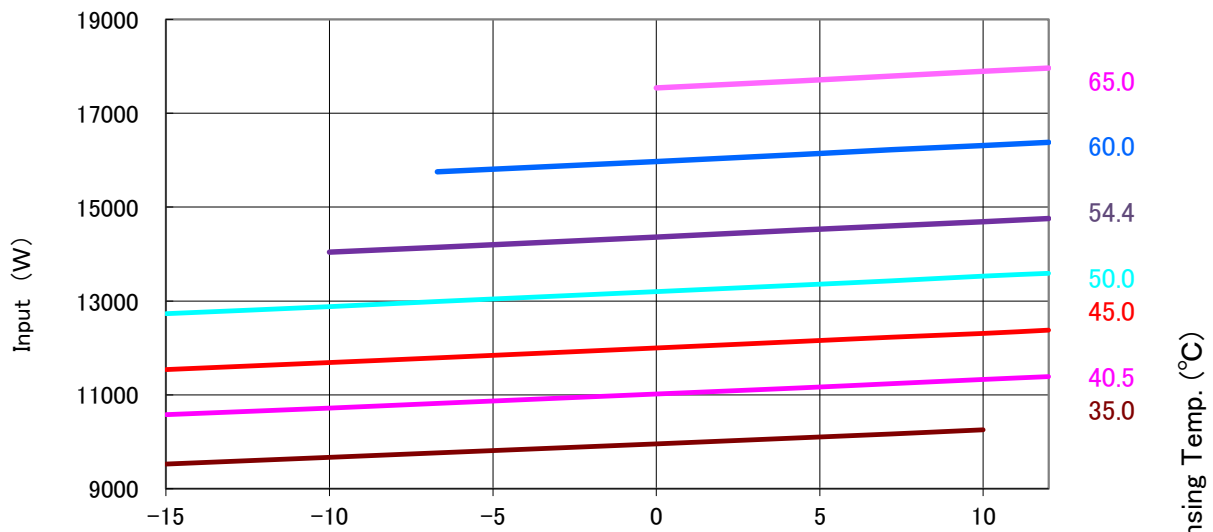
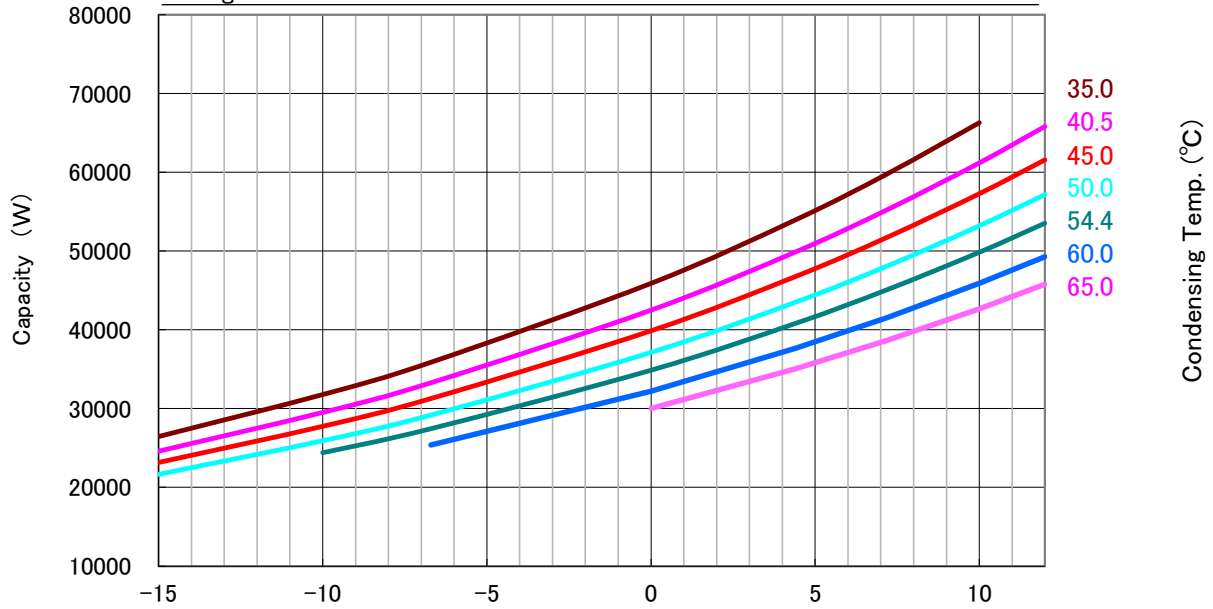
X—CAPACITY(W) OR POWER(W) OR CURRENT(A)

S—EVAPORATING TEMP, °C

D—CONDENSING TEMP, °C

# PERFORMANCE CURVE

Code No.	C-SCP435H38B
Power Source	3-PH 60Hz 440V
Condensing Temp.(°C)	35、40.5、45、50、54.4、60、65
Super Heating (K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R410A



# PERFORMANCE DATA

Code No.	C-SCP435H38B
Power Source	3-PH 60Hz 440V
Condensing Temp.(°C)	35、40.5、45、50、54.4、60、65
Super Heating (K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R410A

Capacity (W)

		Evaporating Temp. (°C)							
		-15	-10	-6.7	0	4.4	7.2	10	12
Condensing Temp. (°C)	35.0	26,450	31,780	35,880	45,890	53,950	59,800	66,280	
	40.5	24,590	29,510	33,280	42,490	49,880	55,250	61,180	65,810
	45.0	23,160	27,750	31,280	39,870	46,760	51,750	57,270	61,570
	50.0	21,650	25,920	29,180	37,130	43,500	48,100	53,200	57,160
	54.4		24,400	27,450	34,870	40,810	45,100	49,840	53,530
	60.0			25,400	32,200	37,640	41,560	45,890	49,260
	65.0				30,020	35,040	38,660	42,660	45,760

Input (W)

		Evaporating Temp. (°C)							
		-15	-10	-6.7	0	4.4	7.2	10	12
Condensing Temp. (°C)	35.0	9,530	9,670	9,770	9,960	10,090	10,170	10,260	
	40.5	10,580	10,720	10,820	11,020	11,150	11,240	11,330	11,390
	45.0	11,540	11,690	11,790	12,000	12,140	12,230	12,310	12,380
	50.0	12,730	12,880	12,990	13,200	13,340	13,430	13,530	13,590
	54.4		14,040	14,140	14,360	14,510	14,600	14,690	14,760
	60.0			15,750	15,970	16,120	16,220	16,310	16,380
	65.0				17,540	17,690	17,790	17,890	17,960

Current (A)

		Evaporating Temp. (°C)							
		-15	-10	-6.7	0	4.4	7.2	10	12
Condensing Temp. (°C)	35.0	15.3	15.4	15.5	15.7	15.9	15.9	16.0	
	40.5	16.7	16.8	16.9	17.2	17.3	17.4	17.5	17.6
	45.0	18.0	18.1	18.2	18.5	18.6	18.7	18.9	18.9
	50.0	19.5	19.7	19.8	20.1	20.3	20.4	20.5	20.6
	54.4		21.2	21.3	21.6	21.8	21.9	22.0	22.1
	60.0			23.4	23.7	23.9	24.0	24.1	24.2
	65.0				25.7	25.9	26.0	26.2	26.3

## Coefficients of Polynomial Formula

	Capacity(W)	Input (W)	Current (A)
C1	7.295563E+04	6.745489E+03	1.050436E+01
C2	2.868182E+03	2.597883E+01	2.606599E-02
C3	-9.052670E+02	5.494478E+00	5.031420E-02
C4	4.717038E+01	8.556638E-02	5.739140E-05
C5	-4.001986E+01	5.881141E-02	-8.246585E-05
C6	3.769949E+00	2.469291E+00	2.820648E-03
C7	3.113387E-01	-1.209713E-03	-1.321612E-06
C8	-4.531507E-01	-9.085775E-04	-5.322528E-07
C9	1.860126E-01	1.265191E-03	6.790876E-06
C10	-7.669543E-08	3.916228E-08	5.267031E-11

Note: The polynomial coefficients subject to change without notice.

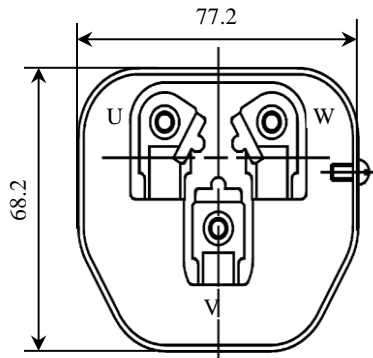
$$X = C1 + C2*(S) + C3*D + C4*(S^2) + C5*(S*D) + C6*(D^2) + C7*(S^3) + C8*(D*S^2) + C9*(S*D^2) + C10*(D^3)$$

X—CAPACITY(W) OR POWER(W) OR CURRENT(A)

S—EVAPORATING TEMP, °C

D—CONDENSING TEMP, °C

COMP.CODE	A	B	C	D
809 28"8"				
809 18"8"	538 [21.18]	284 [11.18]	486 [19.13]	7.9 [0.31]
809 29"8"				
809 19"8"				
809 20"8"				
809 10"8"				
809 22"8"				
809 12"8"	553 [21.77]	299 [11.77]	501 [19.21]	9 [0.35]
C-SCP270H38"				
C-SCP315H38"				
C-SCP360H38"				
C-SCP400H38"				
C-SCP435H38"	568 [22.36]	314 [12.36]	516 [20.31]	11.8 [0.46]



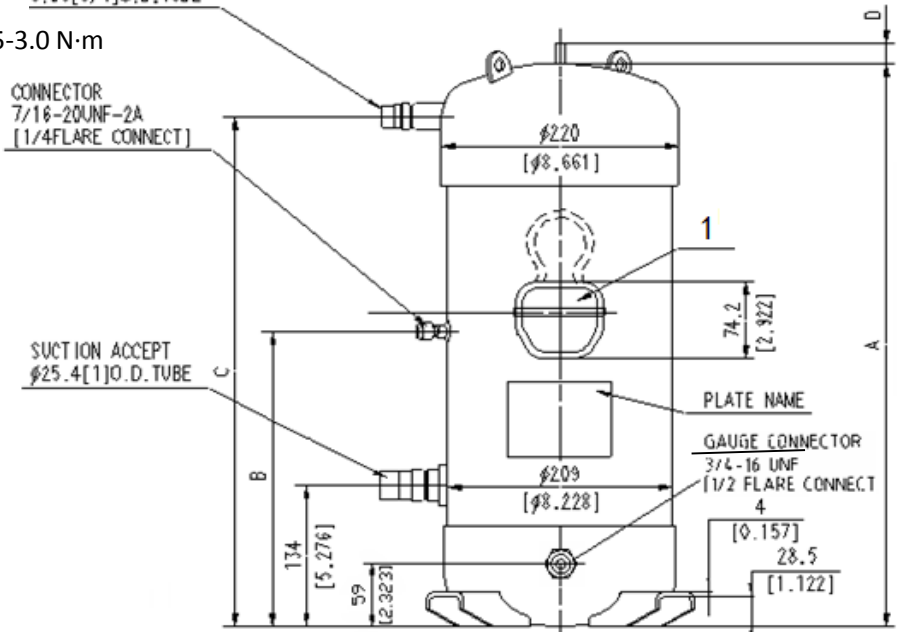
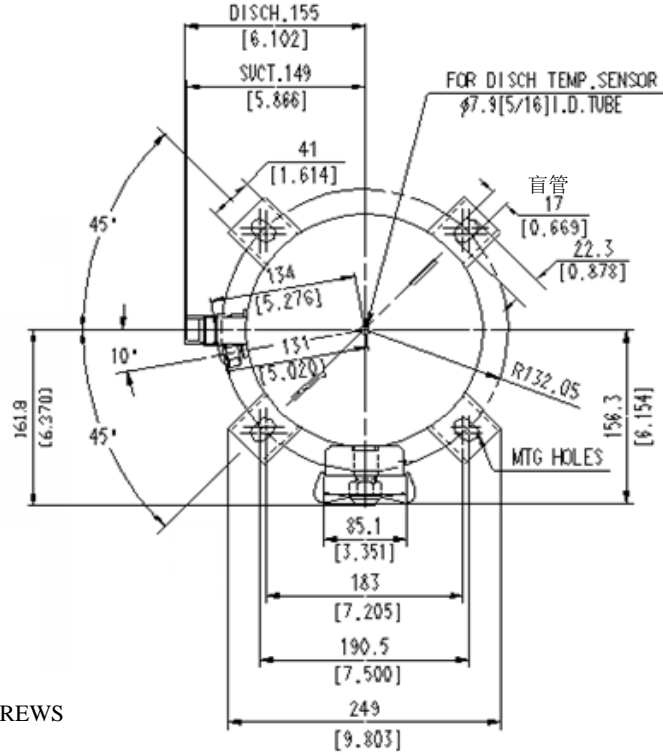
转接头螺钉上紧力矩为2.5-3.0 N·m

**TERMINAL**

TAPPING SCREWS  
CHARGE ACCEPT  
9.05 [3/4] O.D. TUBE

CONNECTOR  
7/16-20UNF-2A  
[1/4 FLARE CONNECT]

SUCTION ACCEPT  
#25.4 [1] O.D. TUBE



No.	Part Code	Qty	Name
1	A-0101-DSB	1	Terminal Box Cover

Part Code  
**D-0104-DSC-0**  
压缩机外观图

## 5. Operating Envelope

Suction Gas Superheat: 11.1K  
Refrigerant: R410A

