SCROLL COMPRESSORS

Code :

Model : 3CC171SA03

2023

Scroll Compressor

Model	3CC171SA03	**Electrical**	380-415 Volts 3 Phase 50Hz
Refrigerant	R404A		

Nominal Performance

Rating Conditions		**Condition 1**	**Condition 2**	**Condition 1**	**Condition 2**
Power Source		50Hz-380V	50Hz-380V		
Capacity	(W)	13300	5600		
Power	(W)	9000	6150		
Current	(A)	16.3	12.2		
COP	(W/W)	1.48	0.91		

*Remark: Liquid injection capillary Φ1.7×500mm.

Rating Conditions

	Condition 1	**Condition 2**
Condensing Temperature(℃)	50	40
Evaporating Temperature(℃)	-15	-40
Return Gas temperature(℃)	18.3	18.3
Liquid Temperature(℃)	50	40
Ambient Temperature(℃)	32.2	32.2

Motor

	50Hz
Voltage Range(V)	342-456
LRA (A)	105
Protector	Internal Thermastat

Compressor

Maximum Discharge Temp(℃)	125
Displacement (cm3/rev)	171.2
Weight (with oil kg)	-

Oil

Oil Type	FV 32 S
Initial Charge (ml)	2500
Re-charge (ml)	-

Nominal performance values +/-5% with 1 hr run-in.

Ratings with air over compressor.

Specifications subject to change without notice.

PERFORMANCE DATA

Compressor Model(Code)	**3CC171SA03**
Power Source	**3PH 50Hz 380-415V**
Suction Gas Temprature (℃)	**18.3**
Sub Cooling(K)	**0**
Compressor Cooling	**Liquid Injection**
Refrigerant	**R404A**

CAPACITY(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)						
	-45	-40	-30	-20	-15	-10	-5
35.0	4,960	6,090	9,170	13,800	16,940	20,780	25,500
40.0	4,460	5,500	8,350	12,680	15,630	19,260	23,740
45.0	4,020	4,970	7,610	11,650	14,420	17,840	22,080
50.0	3,610	4,490	6,930	10,700	13,300	16,530	20,540
54.4		4,100	6,380	9,930	12,390	15,450	19,270
60.0			5,760	9,040	11,320	14,190	17,780
65.0				8,310	10,460	13,170	16,570

POWER(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)						
	-45	-40	-30	-20	-15	-10	-5
35.0	5,530	5,800	6,290	6,740	6,950	7,150	7,340
40.0	6,160	6,400	6,870	7,340	7,570	7,800	8,030
45.0	6,880	7,080	7,520	8,000	8,250	8,520	8,800
50.0	7,680	7,840	8,220	8,720	9,000	9,310	9,650
54.4		8,570	8,900	9,400	9,710	10,060	10,460
60.0			9,830	10,330	10,680	11,100	11,570
65.0				11,230	11,620	12,090	12,650

CURRENT(A) @380V

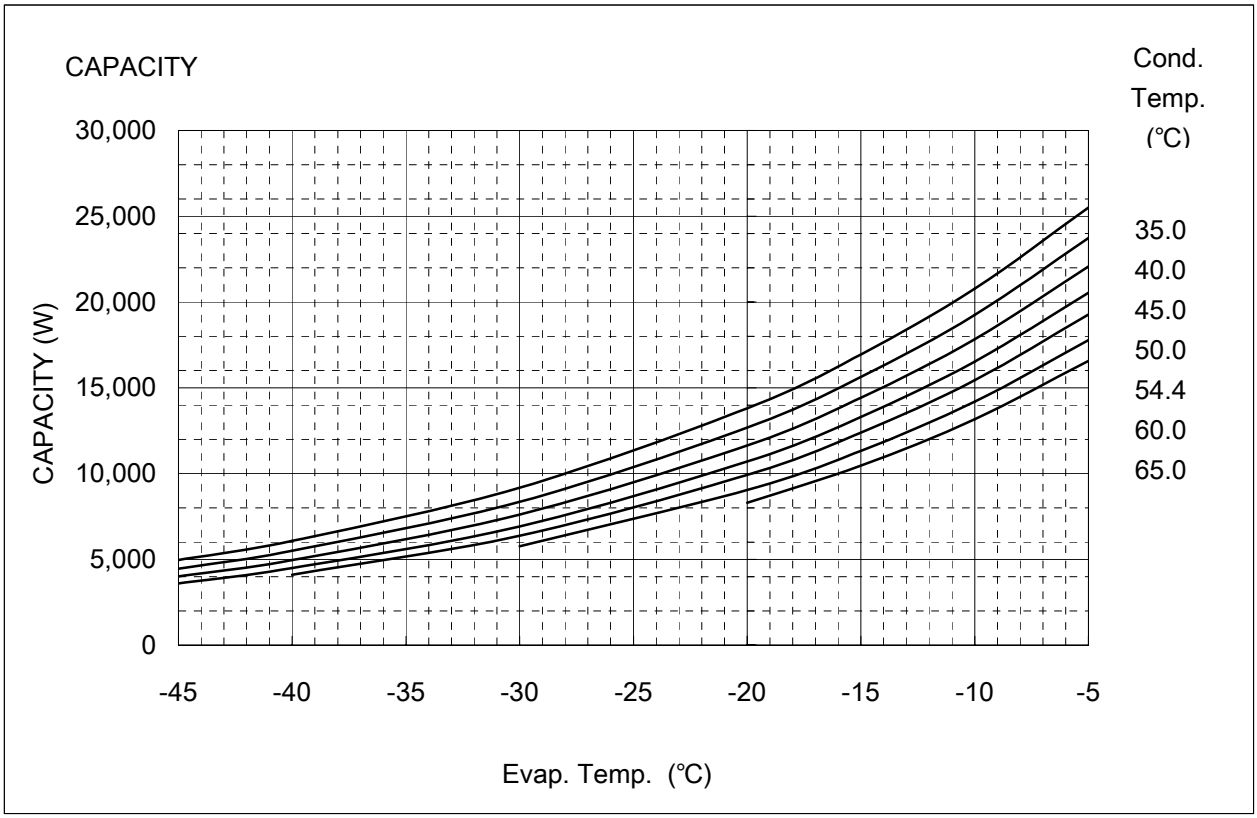
Condensing Temperature(℃)	Evaporating Temperature(℃)						
	-45	-40	-30	-20	-15	-10	-5
35.0	11.4	11.8	12.5	13.1	13.4	13.7	13.9
40.0	12.3	12.6	13.3	13.9	14.3	14.6	15.0
45.0	13.3	13.5	14.2	14.9	15.3	15.7	16.1
50.0	14.3	14.5	15.1	15.9	16.3	16.8	17.3
54.4		15.4	16.0	16.8	17.3	17.8	18.4
60.0			17.2	18.0	18.6	19.2	19.9
65.0				19.2	19.8	20.6	21.4

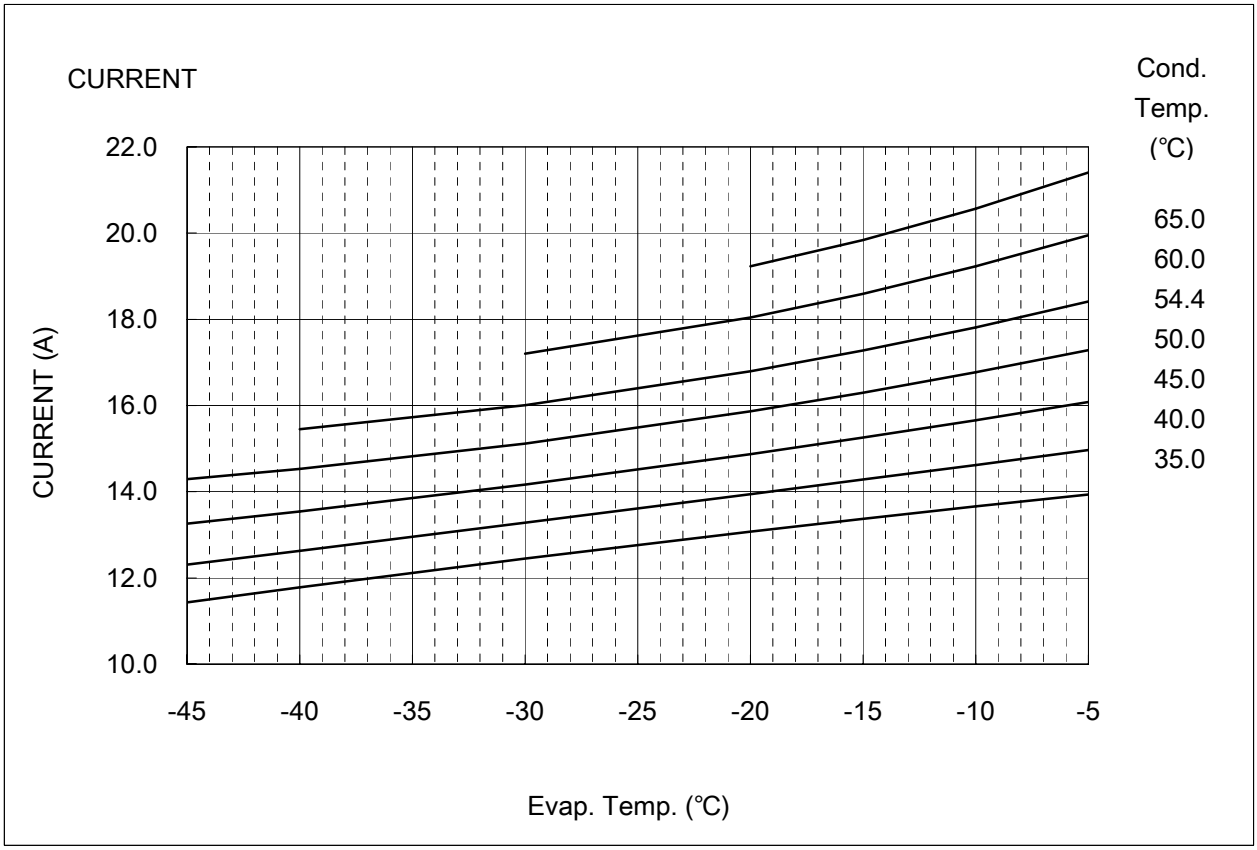
NOTE:

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

Compressor Model(Code) **3CC171SA03**

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





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**3CC171SA03**
Power Source	**3PH 50Hz 380-415V**
Suction Gas Temprature (℃)	**18.3**
Sub Cooling (K)	**0**
Compressor Cooling	**Liquid Injection**
Refrigerant	**R404A**

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)

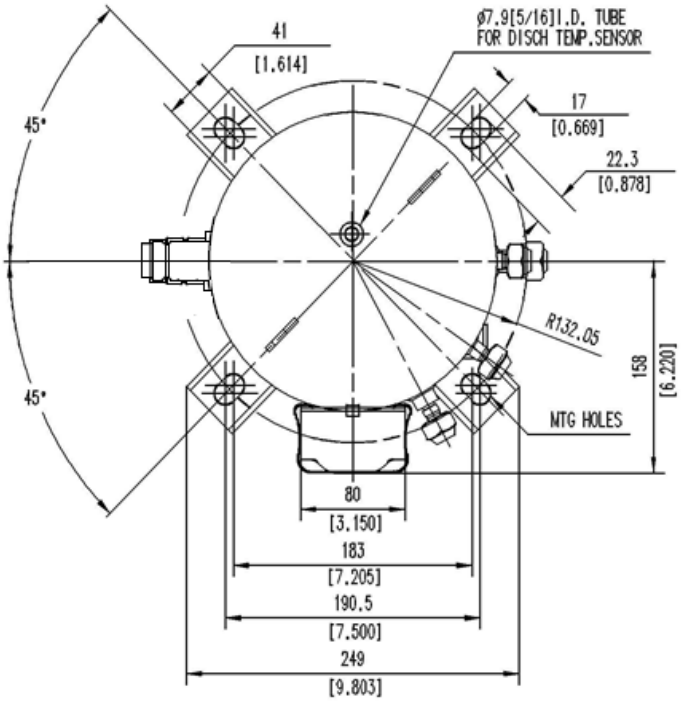
S——EVAPORATING TEMP, °C

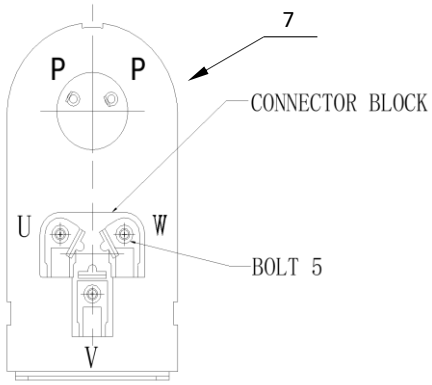
D——CONDENSING TEMP, °C

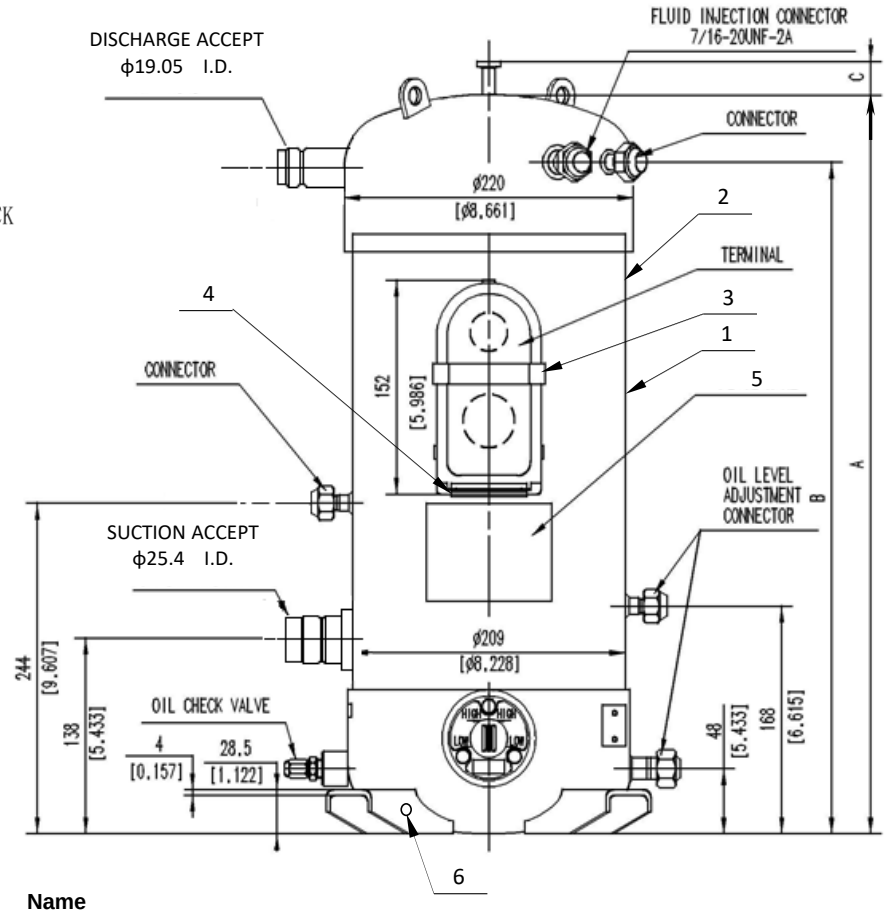
380V-50Hz	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	4.841742E+04	3.974847E+03	8.446626E+00
C2	1.634245E+03	-7.099342E+01	-8.571514E-02
C3	-5.792567E+02	5.182016E+01	1.065304E-01
C4	2.293862E+01	-2.152738E+00	-2.771922E-03
C5	-1.351440E+01	2.876344E+00	3.452654E-03
C6	2.350423E+00	1.395404E+00	1.640459E-03
C7	1.304842E-01	2.601327E-03	2.036635E-06
C8	-8.990772E-02	5.830236E-02	7.510780E-05
C9	3.631367E-02	3.545200E-03	1.312724E-05
C10	2.161772E-08	-2.904248E-08	-2.309463E-11

Note: The polynomial coefficients subject to change without notice.

Compressor Model	A	B	C
3CC216SA03	565.5 [22.264]	513.5 [20.217]	16 [0.630]
3CC171SA03	543.5 [21.399]	491.5 [19.352]	14 [0.551]
3CC137SA03	526.5 [20.730]	474.5 [16.683]	14 [0.551]
3CC120SA03	533.0 [20.993]	481.0 [18.938]	10 [0.394]







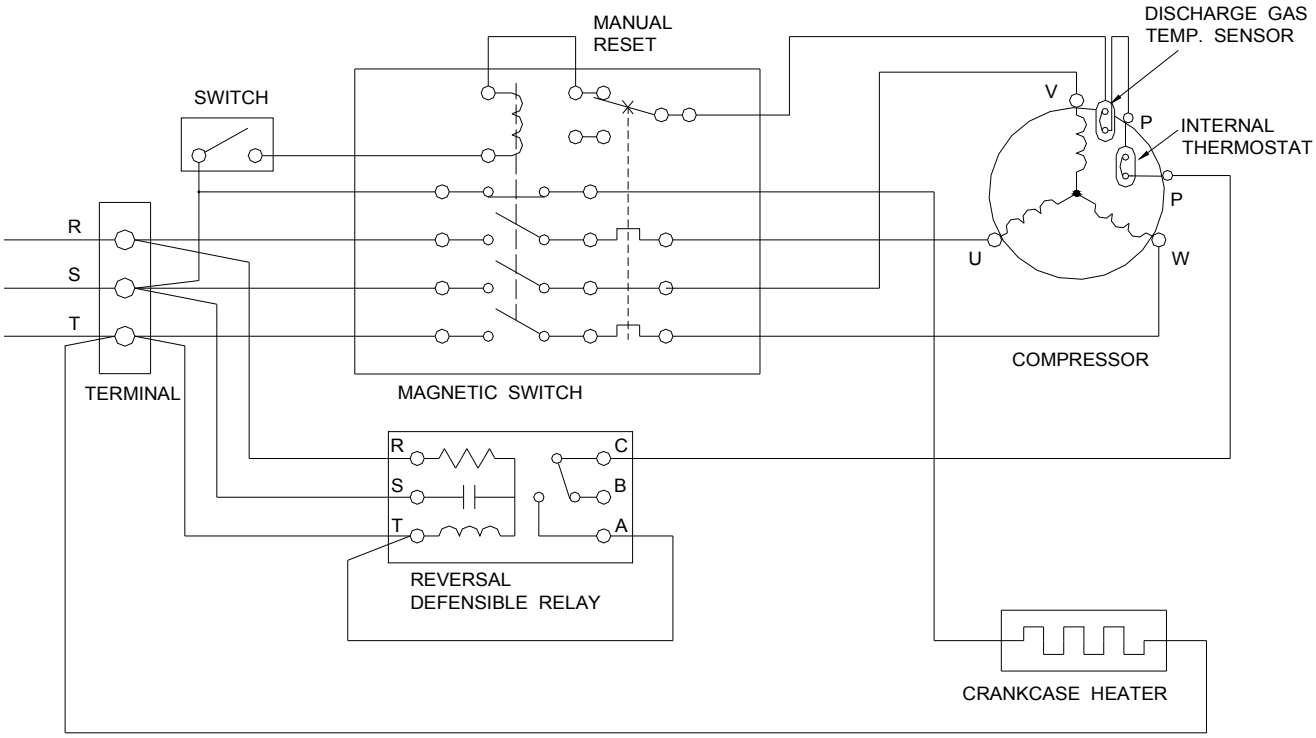
No.	Part Code	Qty	Name
1	3CC171SA03	1	Compressor
2	A-0101-DSC	1	Terminal Box Cover
3	A-0201-DSC	1	Terminal Box Clip
4	A-0301-DSC	1	Insulating Grommet
5		1	Nameplate
6	B-0101-DSC	1	Screw Special
7	A-0401-DSC	1	Terminal Box Gasket

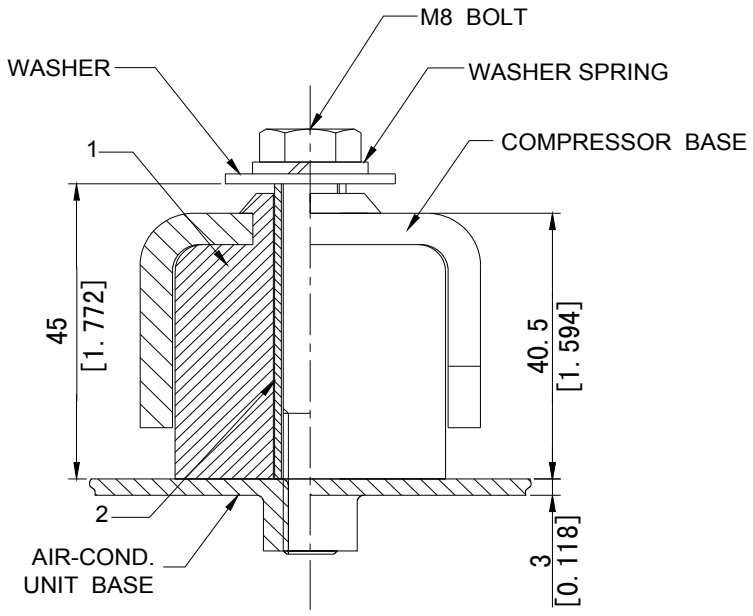
Code
D-0104-DSC
Name
Compressor Outline drawing

WIRING & MOUNTING SKETCH

WIRING DIAGRAM

3CC Low Temperature Series



*Note: Thermal Overload Relay is required and the current setting is 25A .

MOUNTING SKETCH