Panasonic

SCROLL COMPRESSORS

Code : 809 183 88

Model : C-SCN603H8K

PANASONIC APPLIANCES COMPRESSOR (DALIAN) CO., LTD.

Rev.2020-3

Scroll Compressor

Model: C-SCN603H8K **Electrical:** 380-415 Volts 3 Phase 50Hz **R134a**

Nominal Performance at ARI and 50Hz-380V

Capacity	(W)	16700
Power	(W)	5100
Current	(A)	9.4
COP	(W/W)	3.27
Mass Flow	(kg/h)	408

Rating Conditions at ARI

Condensing Temperature(℃)	54.4
Evaporating Temperature(℃)	7.2
Return Gas temperature(℃)	18.3
Liquid Temperature(℃)	46.1
Ambient Temperature(℃)	35

Motor

	50Hz
Operating Voltage Range(V)	342-456
Locked Rotor Amps(A)	80
Maximum Continuous Current(A)	20
RPM(min^{-1})	2900

Compressor

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

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

PERFORMANCE DATA

Compressor Model(Code)	**C-SCN603H8K**
Power Source	**3PH 50Hz 380-415V**
Suction Gas Superheat(K)	**11.1**
Sub Cooling(K)	**8.3**
Compressor Cooling	**Natural Cooling**
Refrigerant	**R134a**

CAPACITY(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
40.5	8,500	10,290	11,680	15,100	17,880	19,910	22,160	23,930
45.0	7,950	9,660	10,970	14,230	16,880	18,810	20,970	22,660
50.0	7,390	8,990	10,230	13,310	15,820	17,660	19,710	21,320
54.4	6,920	8,440	9,620	12,550	14,940	16,700	18,660	20,200
60.0		7,790	8,890	11,650	13,900	15,560	17,410	18,870
65.0			8,300	10,900	13,040	14,610	16,370	17,760
70.0				10,210	12,240	13,730	15,410	16,730

POWER(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
40.5	3,720	3,780	3,800	3,820	3,810	3,800	3,770	3,750
45.0	4,090	4,140	4,170	4,190	4,190	4,170	4,150	4,130
50.0	4,550	4,600	4,630	4,650	4,650	4,640	4,630	4,610
54.4	5,000	5,050	5,070	5,100	5,100	5,100	5,090	5,080
60.0		5,670	5,690	5,730	5,740	5,740	5,750	5,740
65.0			6,310	6,340	6,360	6,380	6,390	6,400
70.0				7,010	7,040	7,060	7,090	7,110

CURRENT(A) @380V

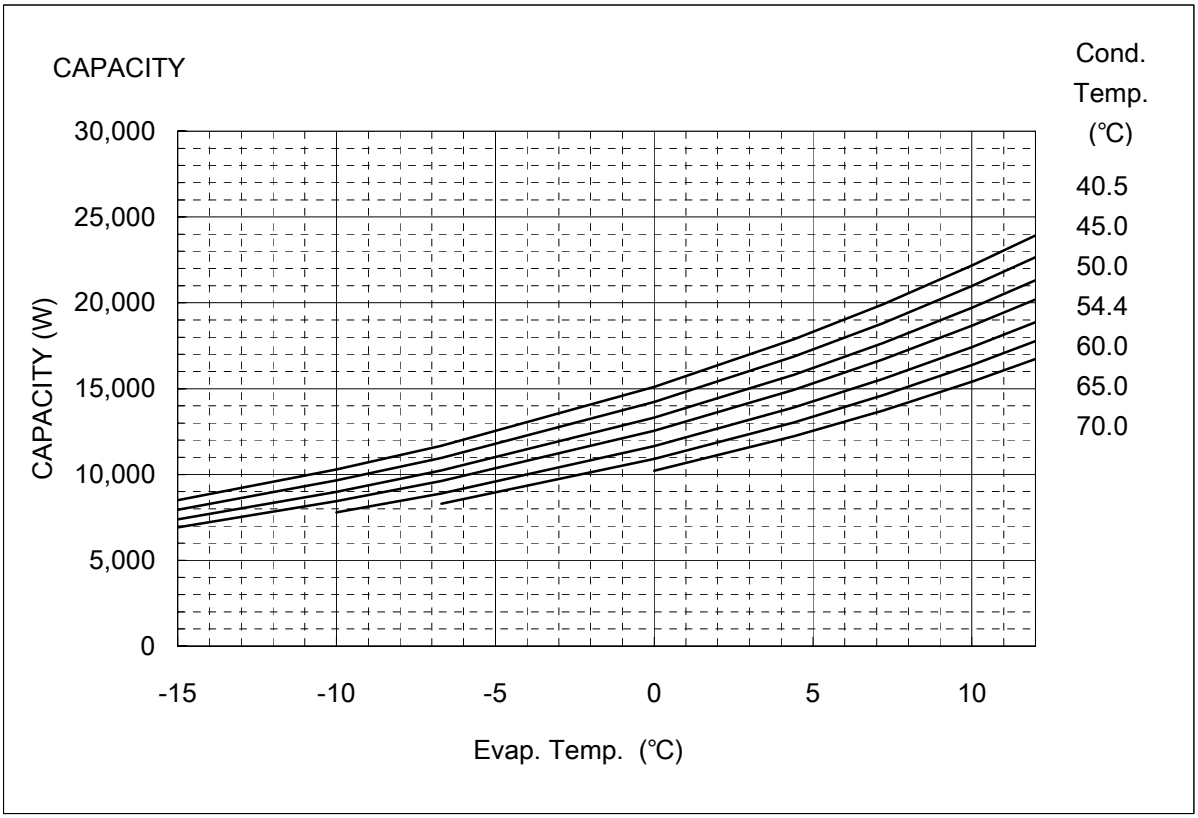
Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
40.5	7.5	7.6	7.6	7.6	7.6	7.6	7.6	7.5
45.0	8.0	8.1	8.1	8.2	8.2	8.1	8.1	8.1
50.0	8.6	8.7	8.7	8.8	8.8	8.8	8.8	8.7
54.4	9.2	9.3	9.3	9.4	9.4	9.4	9.4	9.4
60.0		10.1	10.1	10.2	10.2	10.2	10.2	10.2
65.0			10.9	11.0	11.0	11.1	11.1	11.1
70.0				11.8	11.9	11.9	11.9	12.0

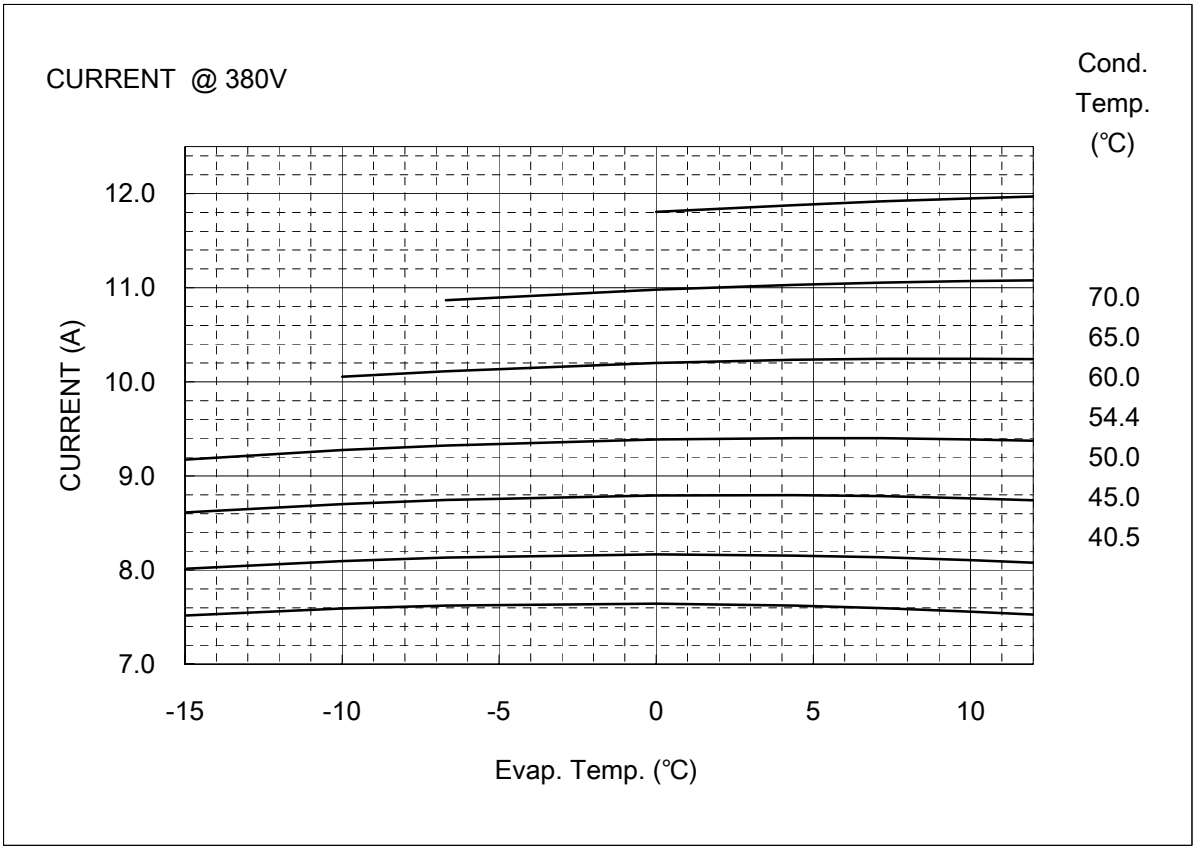
NOTE:

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

Compressor Model(Code) **C-SCN603H8K**

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





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**C-SCN603H8K**
Power Source	**3PH 50Hz 380-415V**
Suction Gas Superheat (K)	**11.1**
Sub Cooling (K)	**8.3**
Compressor Cooling	**Natural Cooling**
Refrigerant	**R134a**

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

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

S——EVAPORATING TEMP, °C

D——CONDENSING TEMP, °C

380V-50Hz	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	2.552950E+04	2.535028E+03	4.978349E+00
C2	8.102031E+02	-9.800001E+00	-1.953364E-02
C3	-3.102361E+02	-1.214661E+01	2.204173E-02
C4	1.389885E+01	-1.402966E+00	-1.714161E-03
C5	-5.694849E+00	2.267359E-01	4.743715E-04
C6	1.310369E+00	1.088019E+00	1.081433E-03
C7	1.224509E-01	-6.703037E-04	-5.645262E-06
C8	-6.715807E-02	2.131064E-02	2.336420E-05
C9	-1.916382E-06	-2.828558E-07	-6.661152E-10
C10	-3.632456E-06	-6.150040E-07	-3.713149E-10

Note:The polynomial coefficients subject to change without notice.

PERFORMANCE DATA (TEMP)

Compressor Model(Code)	**C-SCN603H8K**
Power Source	**3PH 60Hz 440-460V**
Suction Gas Superheat(K)	**11.1**
Sub Cooling(K)	**8.3**
Compressor Cooling	**Natural Cooling**
Refrigerant	**R134a**

CAPACITY(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
40.5	10,210	12,340	13,980	18,000	21,260	23,640	26,280	28,340
45.0	9,670	11,690	13,240	17,060	20,150	22,400	24,900	26,860
50.0	9,110	11,000	12,460	16,060	18,970	21,090	23,450	25,290
54.4	8,630	10,430	11,820	15,230	17,990	20,000	22,240	23,980
60.0		9,750	11,050	14,240	16,820	18,700	20,790	22,420
65.0			10,400	13,410	15,840	17,610	19,580	21,120
70.0				12,640	14,930	16,600	18,460	19,910

POWER(W)

Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
40.5	4,350	4,440	4,500	4,630	4,720	4,780	4,830	4,870
45.0	4,720	4,820	4,880	5,020	5,110	5,170	5,230	5,270
50.0	5,180	5,280	5,350	5,500	5,590	5,660	5,720	5,760
54.4	5,620	5,730	5,800	5,950	6,060	6,120	6,190	6,230
60.0		6,360	6,430	6,590	6,700	6,760	6,830	6,880
65.0			7,040	7,210	7,320	7,390	7,460	7,510
70.0				7,870	7,980	8,060	8,130	8,190

CURRENT(A) @440V

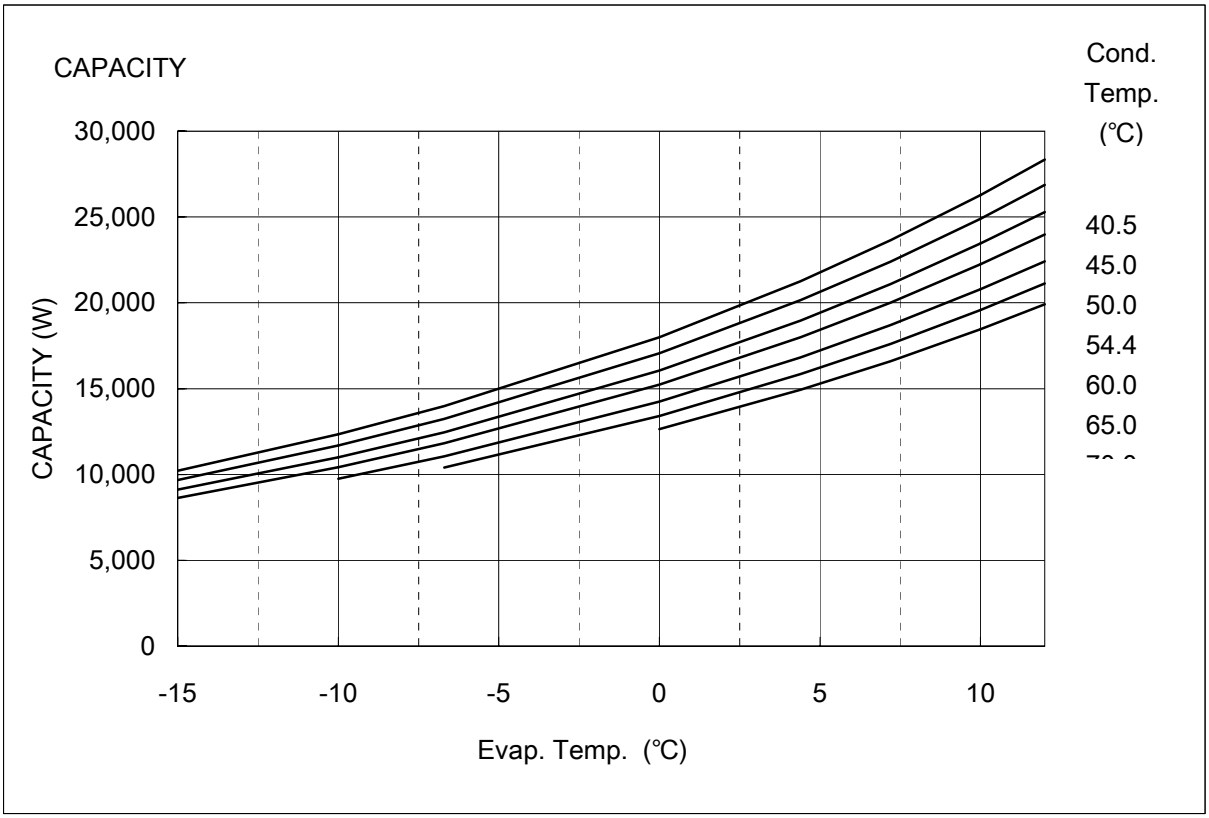
Condensing Temperature(℃)	Evaporating Temperature(℃)							
	-15	-10	-6.7	0	4.4	7.2	10	12
40.5	7.3	7.4	7.5	7.7	7.8	7.8	7.9	8.0
45.0	7.8	7.9	8.0	8.2	8.3	8.4	8.4	8.5
50.0	8.4	8.5	8.6	8.8	8.9	9.0	9.1	9.1
54.4	9.0	9.1	9.2	9.4	9.5	9.6	9.7	9.7
60.0		9.9	10.0	10.2	10.3	10.4	10.5	10.6
65.0			10.7	11.0	11.1	11.2	11.3	11.4
70.0				11.8	11.9	12.0	12.1	12.2

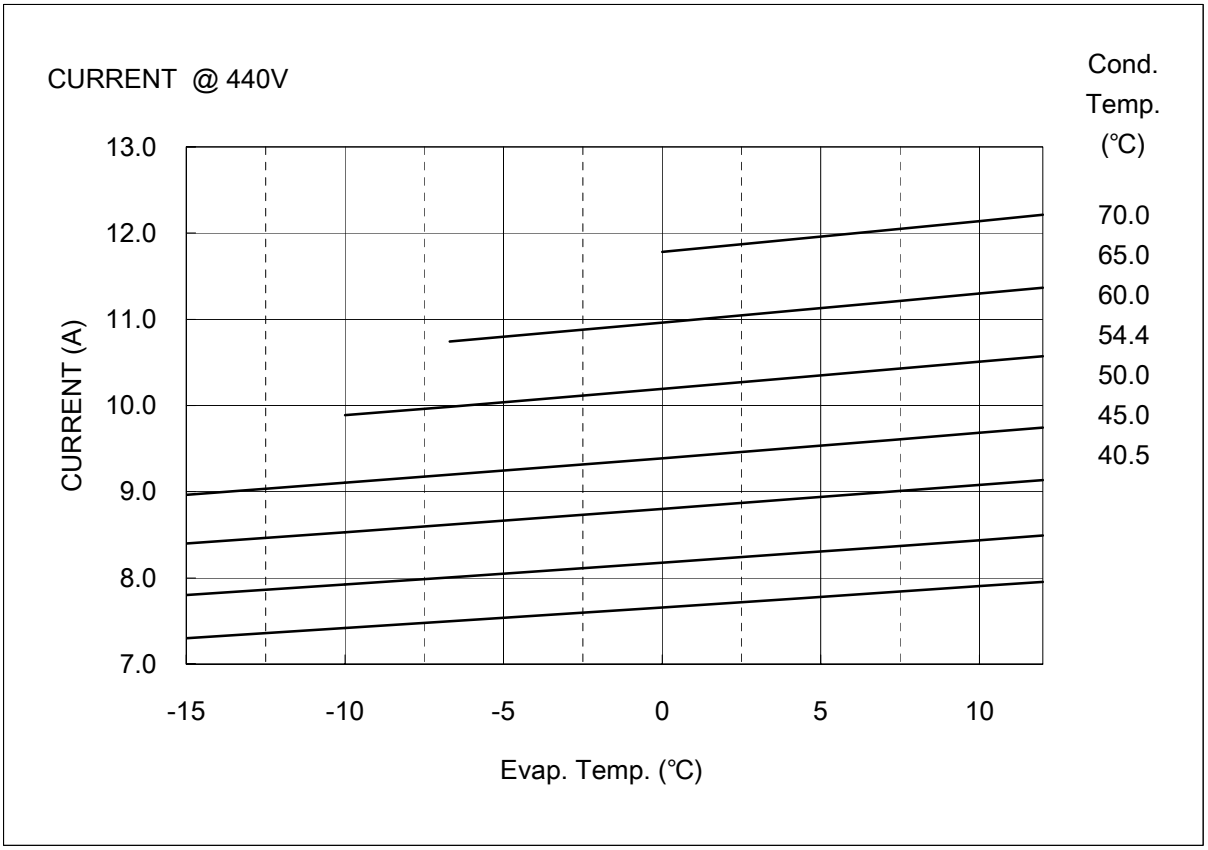
NOTE:

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

Compressor Model(Code) **C-SCN603H8K**

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





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**C-SCN603H8K**
Power Source	**3PH 60Hz 440-460V**
Suction Gas Superheat (K)	**11.1**
Sub Cooling (K)	**8.3**
Compressor Cooling	**Natural Cooling**
Refrigerant	**R134a**

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)

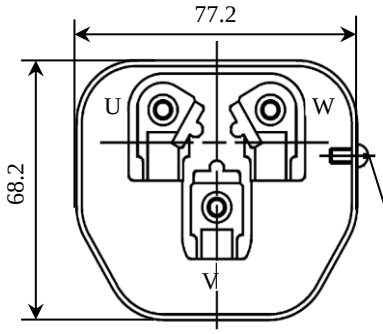
S——EVAPORATING TEMP, °C

D——CONDENSING TEMP, °C

440V-60Hz	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	2.861462E+04	2.853289E+03	4.767659E+00
C2	1.105144E+03	7.055089E+00	1.565492E-02
C3	-3.087227E+02	5.815173E+00	3.177889E-02
C4	1.878689E+01	2.534799E-03	2.205361E-05
C5	-1.240941E+01	3.743385E-01	1.222673E-04
C6	1.150734E+00	9.409275E-01	9.774619E-04
C7	1.419336E-01	-2.017521E-03	2.191559E-08
C8	-1.406188E-01	5.946679E-04	4.091300E-07
C9	4.925364E-02	-1.491591E-03	2.252223E-06
C10	-1.596740E-10	-1.965083E-09	3.142145E-12

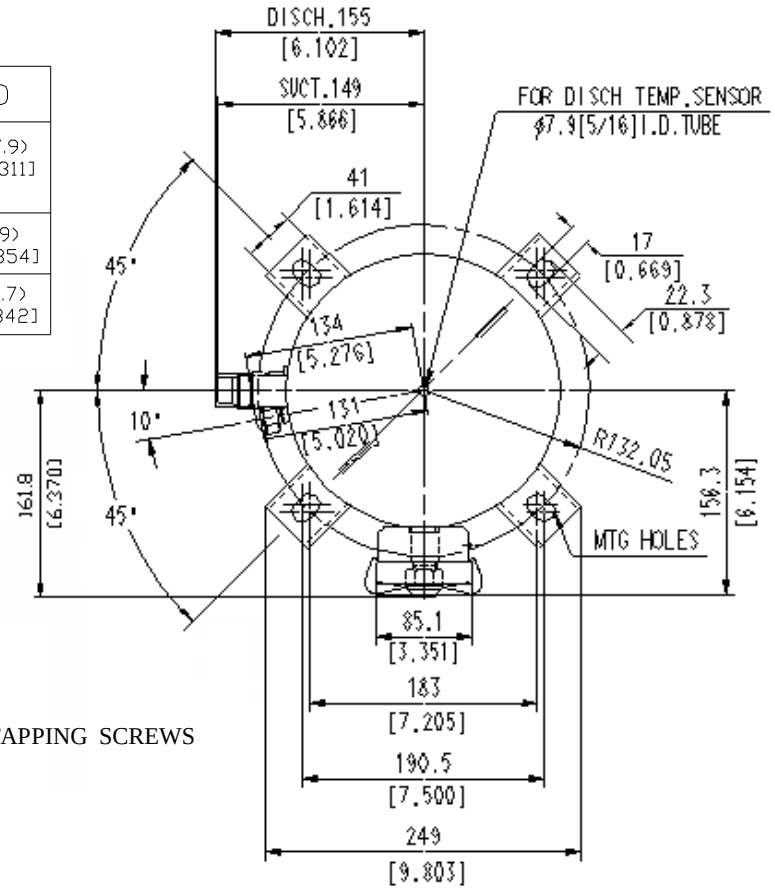
Note:The polynomial coefficients subject to change without notice.

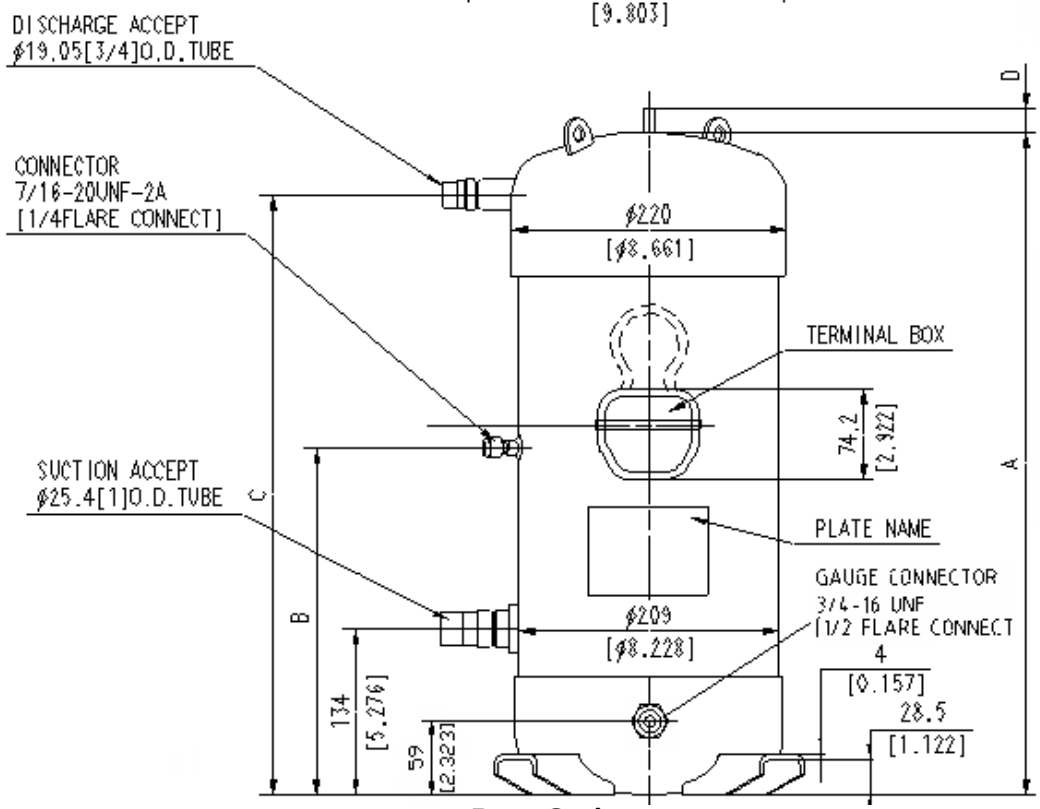
COMPRESSOR CODE	A	B	C	D
80928*8* 80918*8* 80929*8*	538 [21.181]	284 [11.181]	486 [19.134]	(7.9) [0.311]
80920*8* 80910*8*	553 [21.772]	299 [11.772]	501 [19.724]	(9) [0.354]
80922*8* 80912*8*				(8.7) [0.342]



TAPPING SCREWS

TERMIN

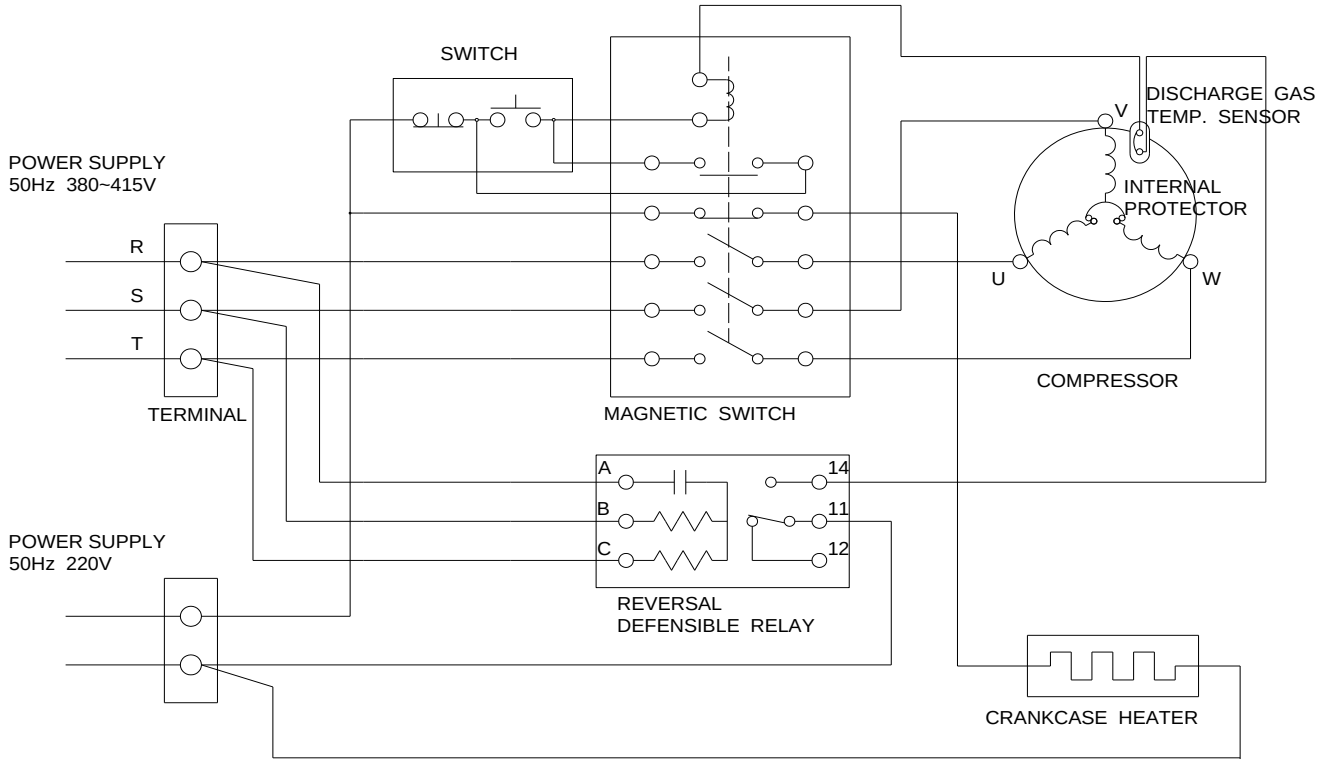




Part Code
D-0104-DSC
Name
Compressor Outline Drawing

WIRING & MOUNTING SKETCH

WIRING DIAGRAM
C-SC Series 3phase B8



MOUNTING SKETCH