SANYO SCROLL COMPRESSORS

Code : **809 950 88**

Model : **C-SBN373H8A**

DALIAN SANYO COMPRESSOR CO.,LTD.

SANYO Scroll Compressor

Made by: Dalian *SANYO* Compressor Co., Ltd.

Model: C-SBN373H8A **Electrical:** 380-415 Volts 3 Phase 50Hz **R134a**
440-460 Volts 3 Phase 60Hz

Nominal Performance at ARI and 50Hz-380V/60Hz-440V

Capacity	(W)	10000/12000
Power	(W)	3140/3750
Current	(A)	5.9/6.9
COP	(W/W)	3.18/3.20
Mass Flow	(kg/h)	245/294

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/60Hz
Operating Voltage Range(V)	342-456/396-506
Locked Rotor Amps(A)	48/52
Maximum Continuous Current(A)	-
RPM(min^{-1})	2900/3450

Compressor

Maximum Discharge Temp(℃)	130
Displacement (cm^3/rev)	83.2
Weight (with oil kg)	38
CCC File Number	2002020704000230

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

PERFORMANCE DATA

Compressor Model(Code)	**C-SBN373H8A (809 950 88)**
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	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	10	12
40.5	5,090	6,160	7,000	9,040	10,710	11,920	13,270	14,330
45.0	4,760	5,780	6,570	8,520	10,110	11,260	12,560	13,570
50.0	4,420	5,380	6,130	7,970	9,470	10,570	11,800	12,770
54.4	4,140	5,050	5,760	7,510	8,950	10,000	11,180	12,100
60.0		4,660	5,330	6,970	8,320	9,320	10,430	11,300
65.0			4,970	6,530	7,810	8,750	9,800	10,640
70.0				6,110	7,330	8,220	9,230	10,020

POWER(W)

Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	10	12
40.5	2,290	2,330	2,340	2,350	2,350	2,340	2,320	2,310
45.0	2,520	2,550	2,570	2,580	2,580	2,570	2,560	2,550
50.0	2,800	2,830	2,850	2,860	2,860	2,860	2,850	2,840
54.4	3,080	3,110	3,120	3,140	3,140	3,140	3,130	3,130
60.0		3,490	3,510	3,530	3,530	3,540	3,540	3,540
65.0			3,880	3,900	3,920	3,930	3,930	3,940
70.0				4,320	4,340	4,350	4,360	4,380

CURRENT(A) @380V

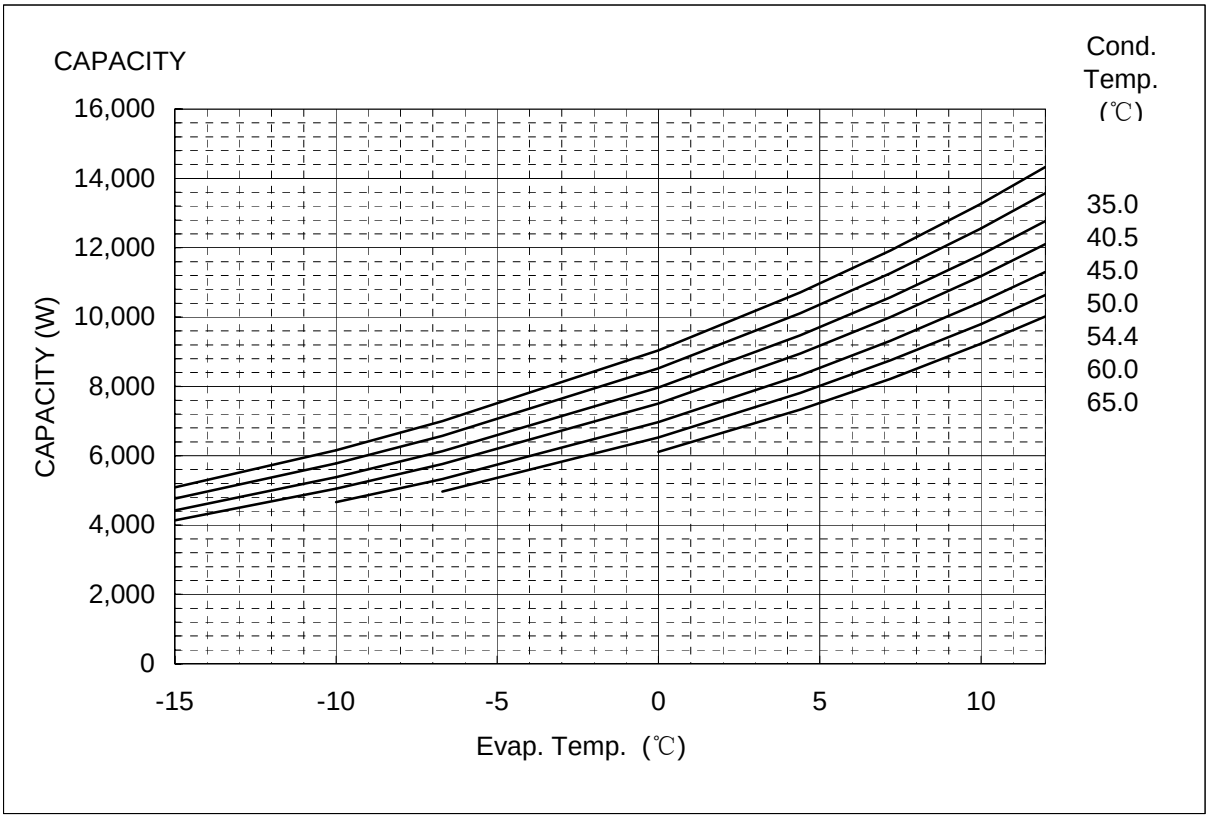
Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	10	12
40.5	4.7	4.8	4.8	4.8	4.8	4.8	4.7	4.7
45.0	5.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1
50.0	5.4	5.5	5.5	5.5	5.5	5.5	5.5	5.5
54.4	5.8	5.8	5.9	5.9	5.9	5.9	5.9	5.9
60.0		6.3	6.3	6.4	6.4	6.4	6.4	6.4
65.0			6.8	6.9	6.9	6.9	6.9	7.0
70.0				7.4	7.5	7.5	7.5	7.5

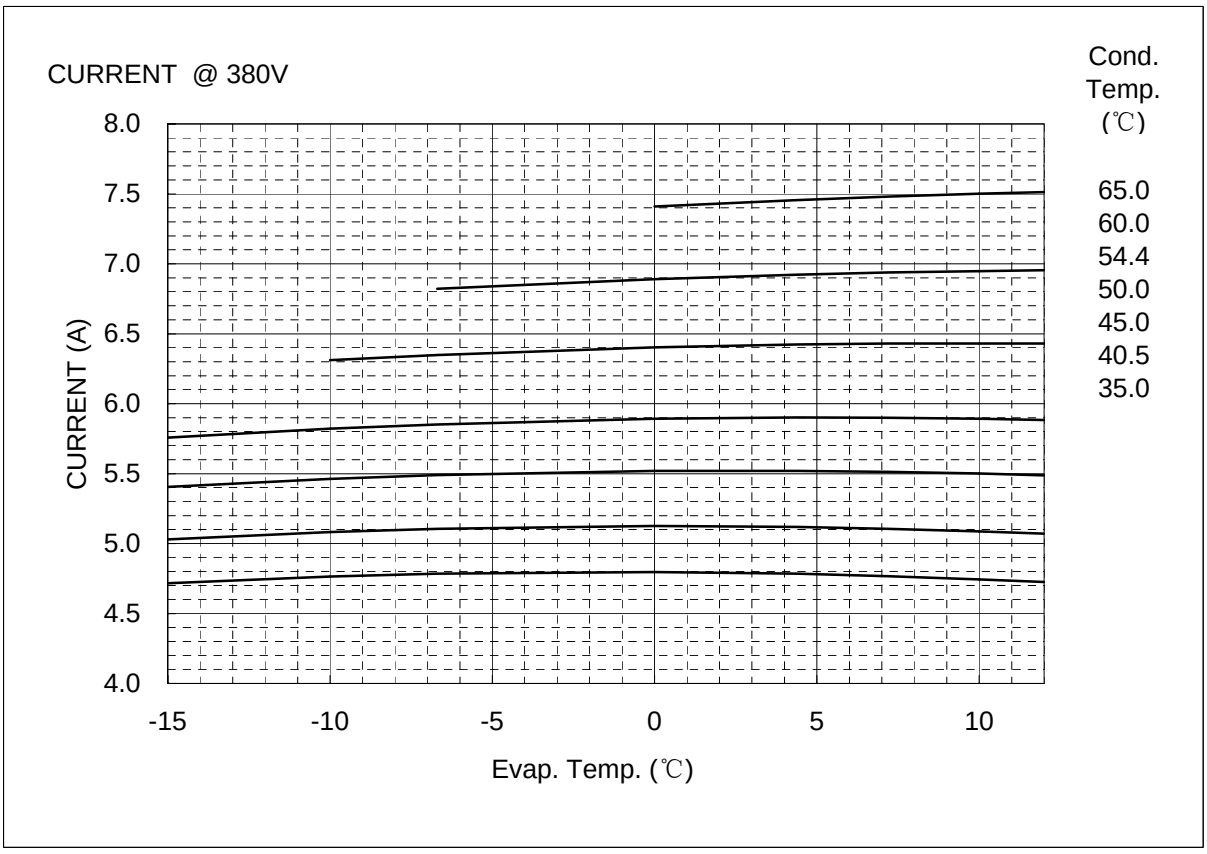
NOTE:

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

Compressor Model(Code) **C-SBN373H8A (809 950 88)**

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





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**C-SBN373H8A (809 950 88)**
Power Source	**3PH 50Hz 380-415V**
Suction 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

380V-50Hz	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	1.502686E+04	1.522265E+03	3.001006E+00
C2	5.311528E+02	2.278965E+00	-1.912795E-03
C3	-1.759427E+02	-6.076272E+00	1.873648E-02
C4	8.930694E+00	-6.986591E-01	-6.550125E-04
C5	-5.266143E+00	-1.906846E-01	-2.103503E-04
C6	6.944738E-01	6.576214E-01	6.324550E-04
C7	7.909250E-02	7.334965E-04	3.736145E-07
C8	-5.276202E-02	9.886093E-03	5.633889E-06
C9	1.810065E-02	3.185685E-03	5.719783E-06
C10	-2.556876E-09	6.968813E-10	-2.449529E-12

Note:The polynomial coefficients subject to change without notice.

PERFORMANCE DATA

Compressor Model(Code)	**C-SBN373H8A (809 950 88)**
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	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	10	12
40.5	6,350	7,620	8,590	10,970	12,880	14,260	15,800	16,990
45.0	5,960	7,160	8,090	10,350	12,170	13,490	14,960	16,100
50.0	5,550	6,680	7,560	9,700	11,420	12,680	14,070	15,160
54.4	5,210	6,290	7,120	9,160	10,800	12,000	13,330	14,370
60.0		5,820	6,600	8,510	10,060	11,190	12,450	13,430
65.0			6,170	7,980	9,450	10,520	11,720	12,650
70.0				7,480	8,880	9,900	11,030	11,930

POWER(W)

Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	10	12
40.5	2,700	2,760	2,790	2,820	2,830	2,830	2,820	2,810
45.0	2,970	3,020	3,050	3,090	3,090	3,090	3,090	3,080
50.0	3,300	3,350	3,380	3,410	3,420	3,430	3,420	3,420
54.4	3,630	3,670	3,700	3,730	3,740	3,750	3,750	3,750
60.0		4,120	4,140	4,180	4,190	4,200	4,210	4,220
65.0			4,580	4,610	4,630	4,650	4,660	4,670
70.0				5,080	5,110	5,130	5,150	5,170

CURRENT(A) @440V

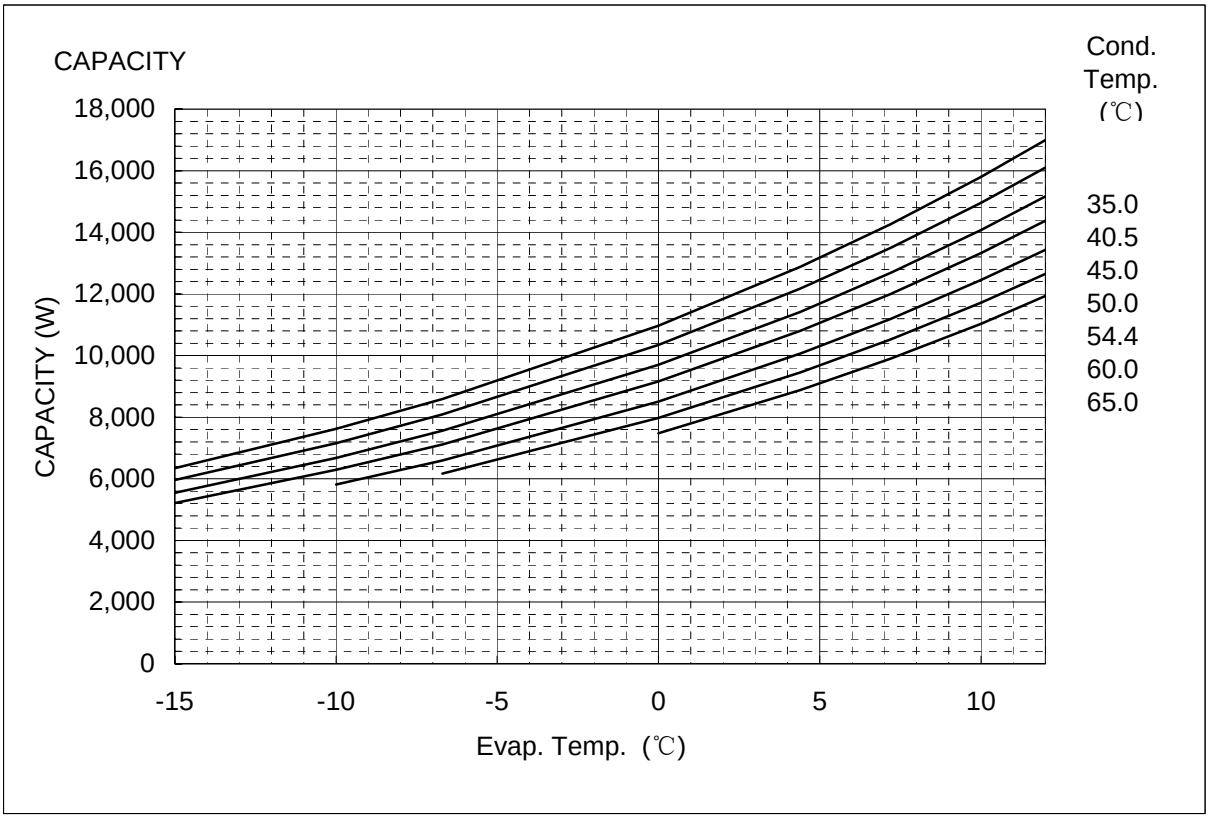
Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	10	12
40.5	4.7	4.7	4.8	4.8	4.8	4.8	4.8	4.8
45.0	5.0	5.1	5.1	5.2	5.2	5.2	5.2	5.2
50.0	5.5	5.5	5.5	5.6	5.6	5.6	5.6	5.6
54.4	5.9	5.9	5.9	6.0	6.0	6.0	6.0	6.0
60.0		6.5	6.5	6.5	6.5	6.6	6.6	6.6
65.0			7.0	7.0	7.1	7.1	7.1	7.1
70.0				7.6	7.6	7.7	7.7	7.7

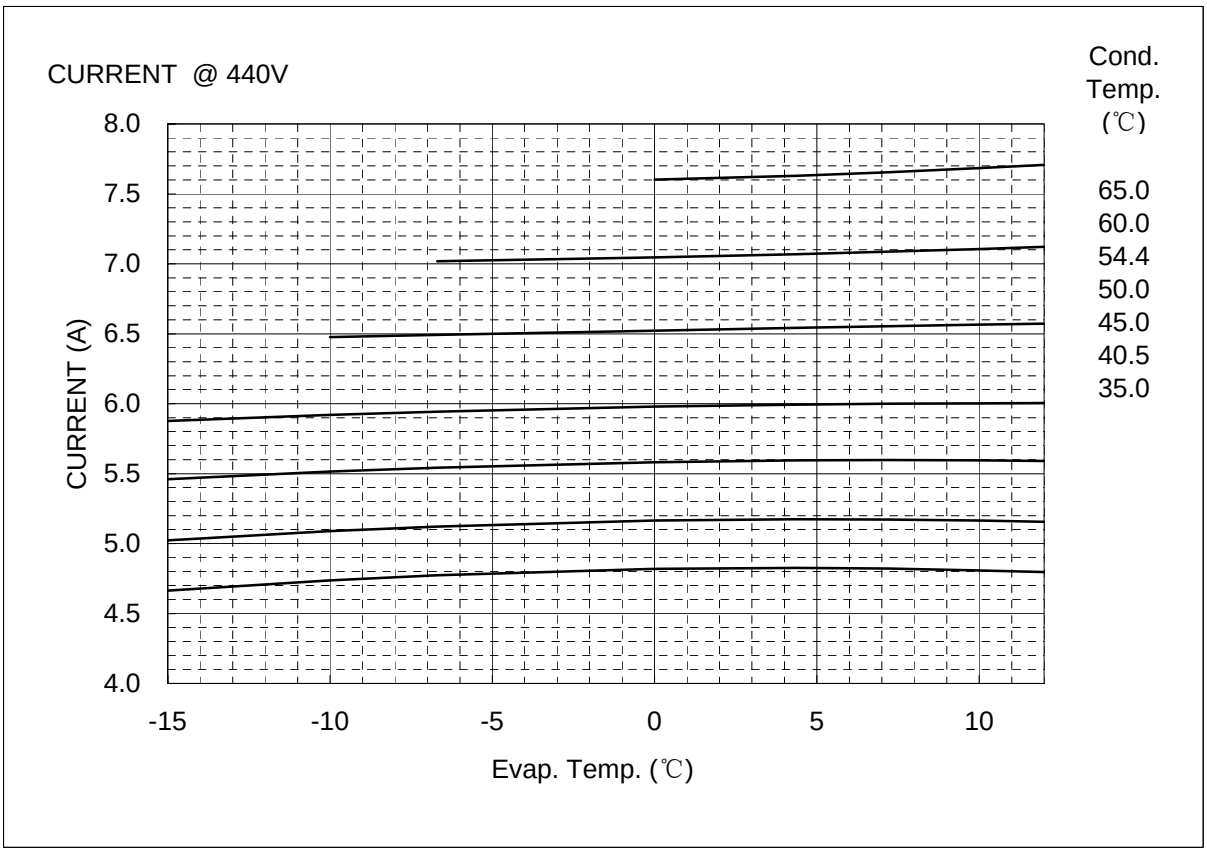
NOTE:

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

Compressor Model(Code) **C-SBN373H8A (809 950 88)**

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





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**C-SBN373H8A (809 950 88)**
Power Source	**3PH 60Hz 440-460V**
Suction 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

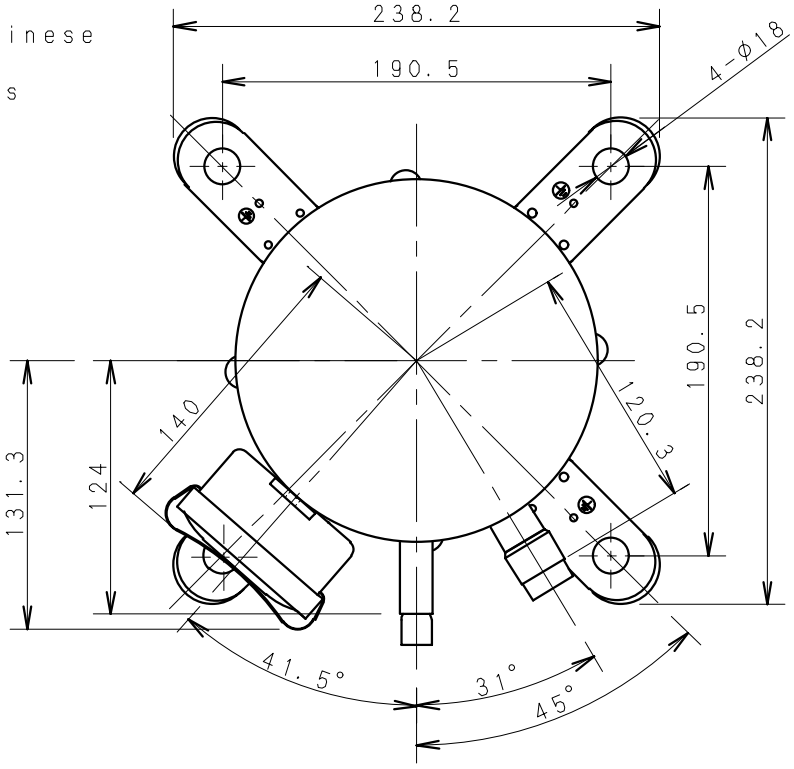
D——CONDENSING TEMP, °C

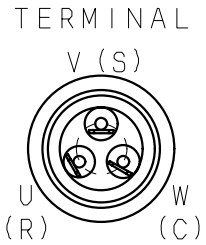
440V-60Hz	CAPACITY (W)	POWER (W)	CURRENT (A)
C1	1.800295E+04	1.829855E+03	3.027102E+00
C2	6.173978E+02	5.044818E+00	4.481832E-03
C3	-2.059706E+02	-5.559522E+00	1.526256E-02
C4	9.855338E+00	-9.225729E-01	-1.418275E-03
C5	-6.268070E+00	-1.495285E-01	-8.286592E-05
C6	7.958205E-01	7.436987E-01	7.163011E-04
C7	8.163135E-02	1.859881E-03	1.166471E-06
C8	-5.984800E-02	1.393692E-02	2.326231E-05
C9	2.278009E-02	2.301231E-03	1.391643E-06
C10	7.130138E-09	-4.401441E-09	-2.648049E-12

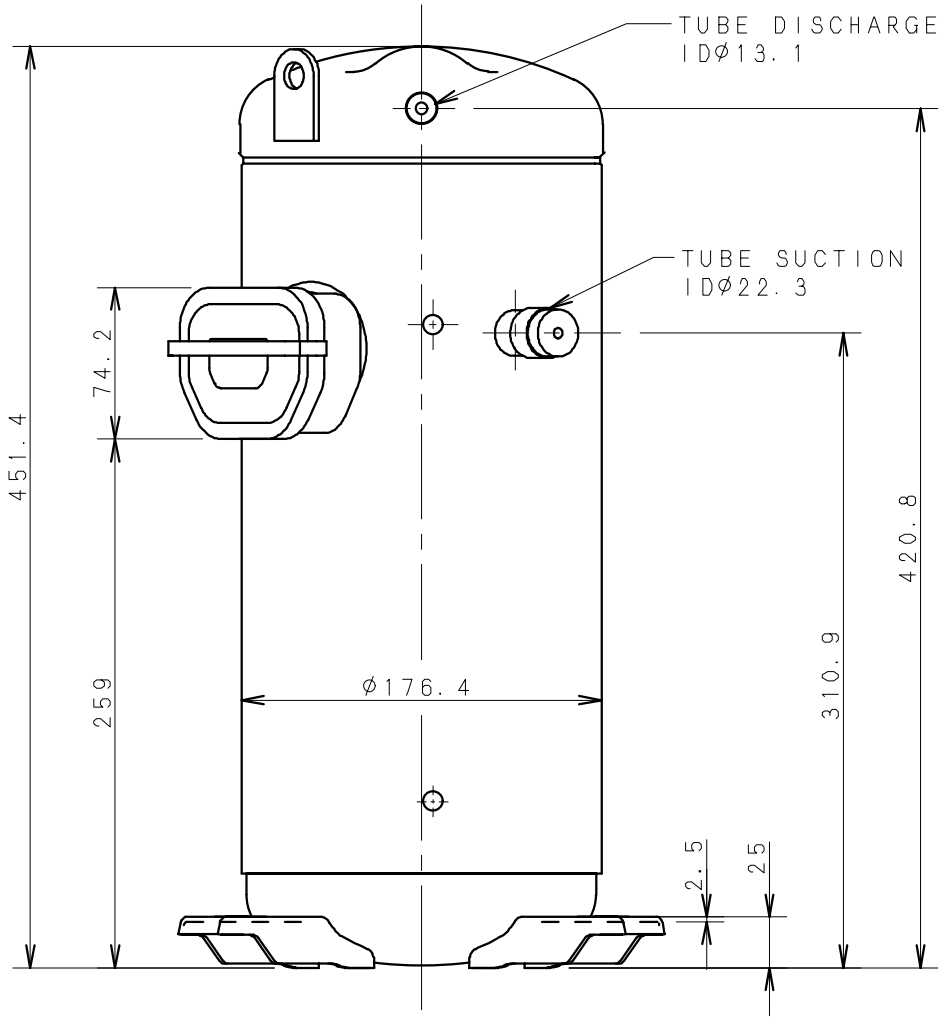
Note:The polynomial coefficients subject to change without notice.

DIMENSIONAL SKETCH

C-SB Series
2.6-4.5kW
European & Chinese
power supply
specifications
models





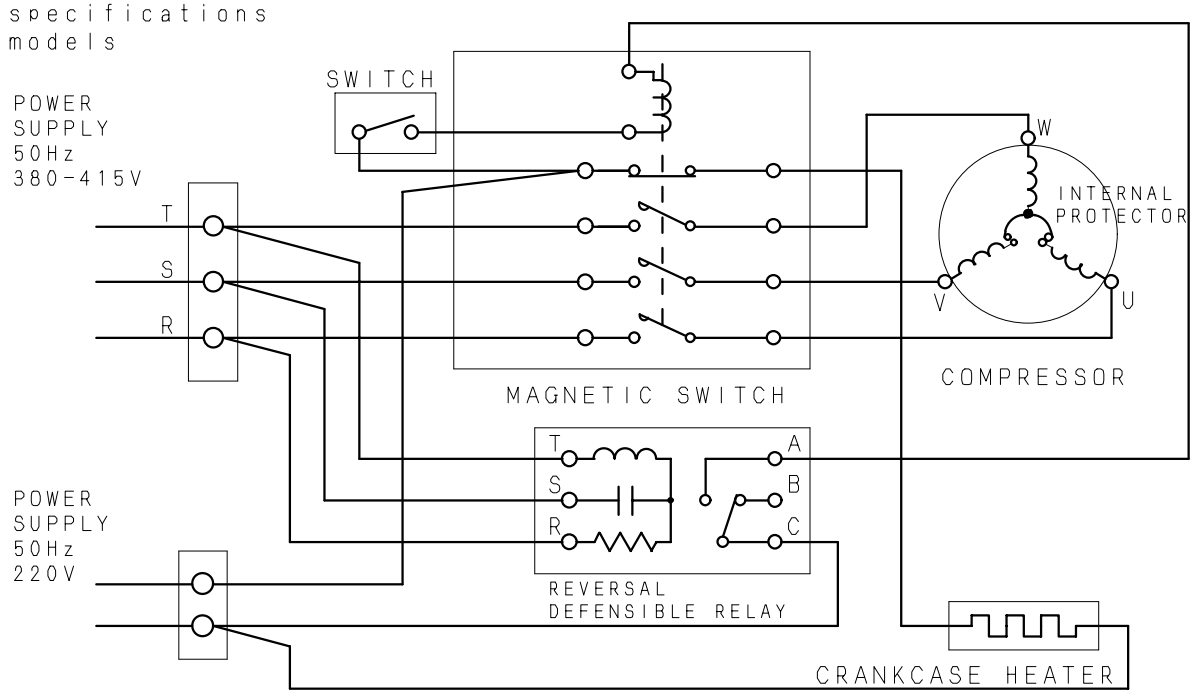


DIM-SB50

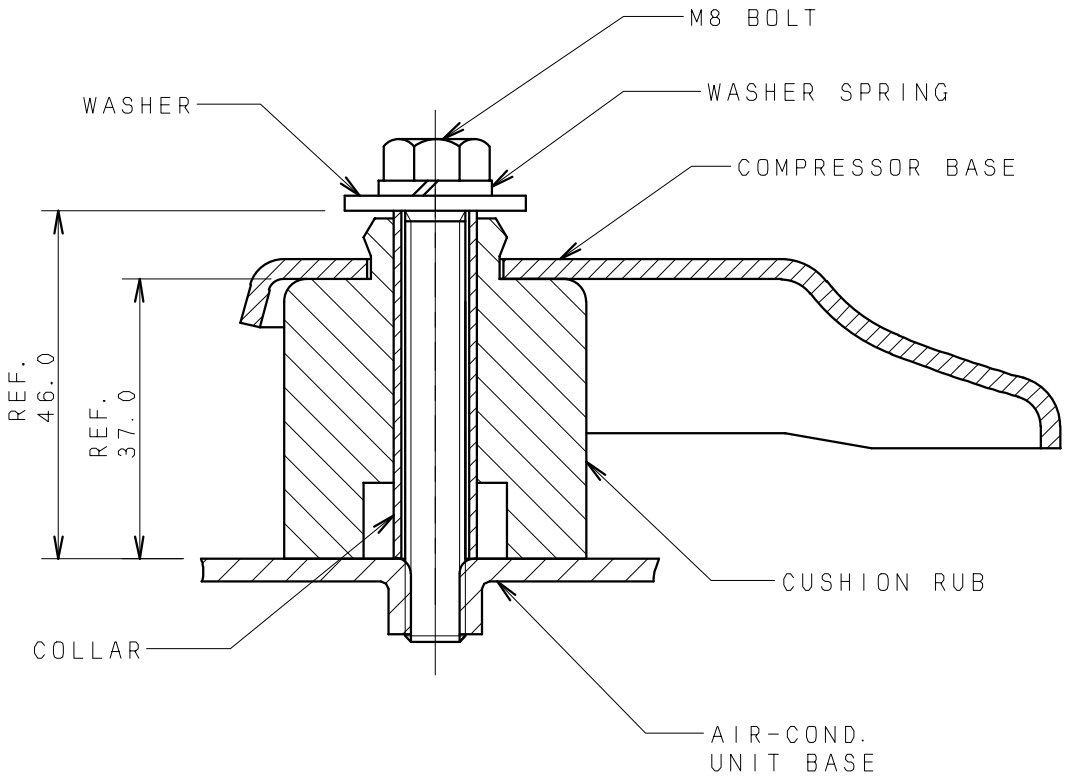
WIRING & MOUNTING SKETCH

WIRING DIAGRAM

C-SB Series 3phase
2.6-4.5kW
European & Chinese
power supply
specifications
models



MOUNTING SKETCH



WIR-SB3B8