SPECIFICATIONS OF COMPRESSOR

Model No: C-SBN303L8A

Output : 4 HP

Temporary

Panasonic Appliances Compressor Co.,Ltd.

02-Apr-20

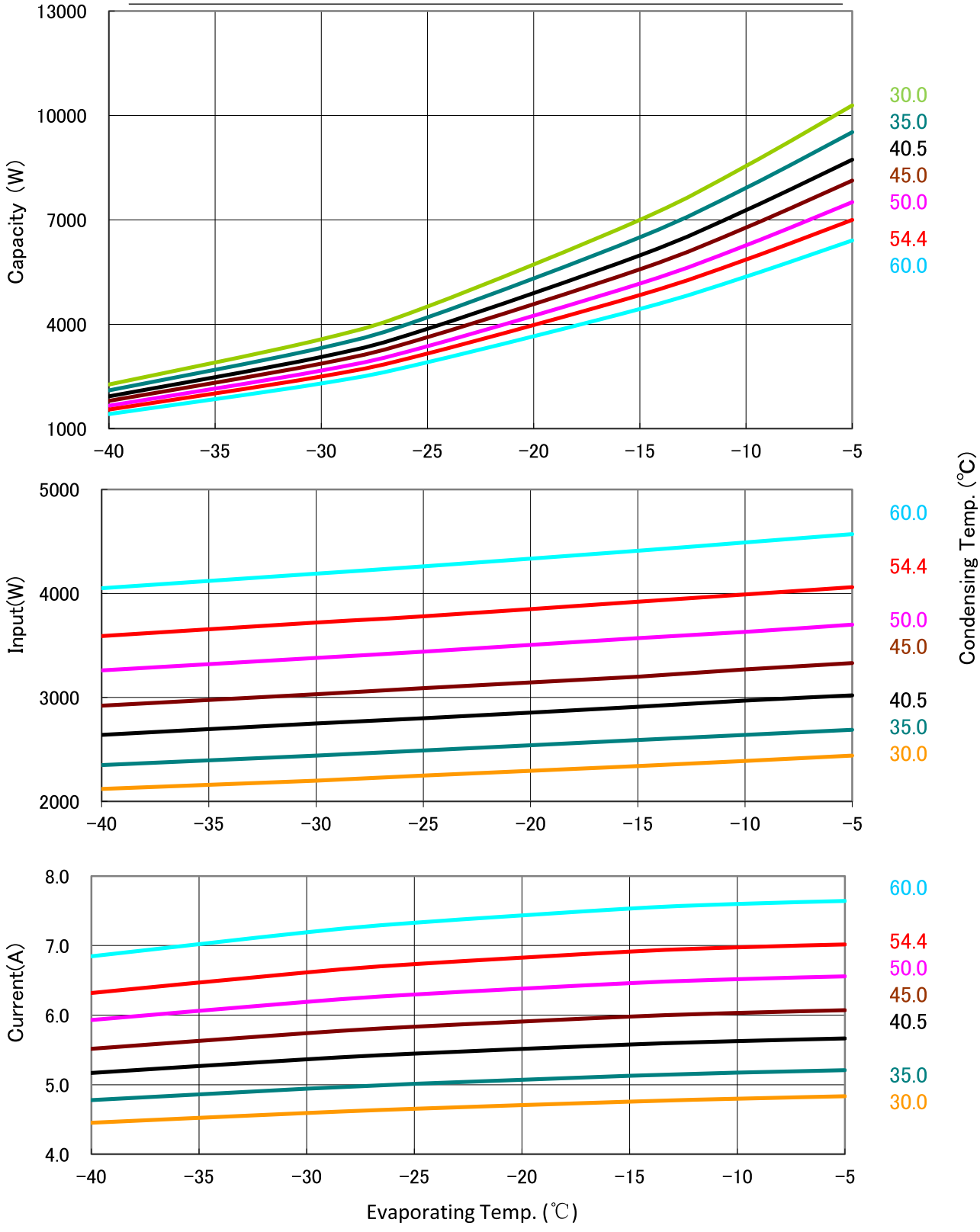
GENERAL SPECIFICATIONS

Model No:		C-SBN303L8A
Application		
Evaporating Temp Range	(℃)	-40 ～ -5
Refrigerant		R448A
Compressor Cooling		Liquid Injection
Rated Performance		
Capacity	(W)	5170/6480
Input	(W)	3570/4180
Current	(A)	6.5/6.4
Revolution	(min^{-1})	2900/3500
Sound Level	(dB(A))	60max/64max
Rating Conditions		
Power Source		3-PH 50Hz 380-415V / 60Hz 440-460V
Evaporating Temp	(℃)	-15
Condensing Temp	(℃)	50
Suction Gas Temp	(℃)	18.3
Liquid Temp	(℃)	50
Ambient Temp	(℃)	35.0
Measuring Point of Sound Level		
Distance from the Compressor	(m)	1.0
Compressor		
Design		Hermetic Scroll
Displacement	(cm3)	66.8
Suction Line Connection	(Φmm 0D)	22.22
Discharge Line Connection	(Φmm 0D)	12.7
Oil	(ml)	1700 (FV32S)
Mass(Incl.Oil)	(kg)	37
Motor		
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
Starting Current	(A)	72A

Panasonic Appliances Compressor Co.,Ltd.

PERFORMANCE CURVE

Code No.	C-SBN303L8A
Power Source	3-PH 50Hz 380V
Condensing Temp.(℃)	30、35、40.5、45、50、54.4、60
Suction Gas Temp(℃)	18.3
Sub Cooled(K)	0
Compressor Cooling	Liquid Injection
Refrigerant	R448A



PERFORMANCE DATA

Code No.	C-SBN303L8A
Power Source	3-PH 50Hz 380V
Condensing Temp.(℃)	30、35、40.5、45、50、54.4、60
Suction Gas Temp(℃)	18.3
Sub Cooled(K)	0
Compressor Cooling	Liquid Injection
Refrigerant	R448A

Capacity (W)

Condensing Temp.(℃) \ Evaporating Temp. (℃)	-40	-30	-25	-15	-10	-5
30.0	2,270	3,570	4,510	7,000	8,550	10,290
35.0	2,100	3,320	4,200	6,500	7,920	9,520
40.5	1,930	3,060	3,870	5,980	7,280	8,730
45.0	1,800	2,870	3,630	5,580	6,780	8,130
50.0	1,660	2,670	3,370	5,170	6,270	7,510
54.4	1,550	2,500	3,160	4,840	5,860	7,000
60.0	1,420	2,300	2,910	4,440	5,370	6,410

Input(W)

Condensing Temp.(℃) \ Evaporating Temp. (℃)	-40	-30	-25	-15	-10	-5
30.0	2,120	2,200	2,250	2,340	2,390	2,440
35.0	2,350	2,440	2,490	2,590	2,640	2,690
40.5	2,640	2,750	2,800	2,910	2,970	3,020
45.0	2,920	3,030	3,090	3,200	3,270	3,330
50.0	3,260	3,380	3,440	3,570	3,630	3,700
54.4	3,590	3,720	3,780	3,920	3,990	4,060
60.0	4,050	4,190	4,260	4,410	4,490	4,570

Current(A)

Condensing Temp.(℃) \ Evaporating Temp. (℃)	-40	-30	-25	-15	-10	-5
30.0	4.5	4.6	4.7	4.8	4.8	4.8
35.0	4.8	4.9	5.0	5.1	5.2	5.2
40.5	5.2	5.4	5.4	5.6	5.6	5.7
45.0	5.5	5.7	5.8	6.0	6.0	6.1
50.0	5.9	6.2	6.3	6.5	6.5	6.6
54.4	6.3	6.6	6.7	6.9	7.0	7.0
60.0	6.8	7.2	7.3	7.5	7.6	7.6

Coefficients of Polynominal Formula

380V-50Hz	Capacity (W)	Input(W)	Current(A)
C1	1.867567E+04	1.747975E+03	3.490445E+00
C2	6.132439E+02	7.004398E+00	1.764285E-02
C3	-2.441998E+02	1.063223E+00	2.213253E-02
C4	5.869740E+00	3.725585E-02	2.106459E-04
C5	-7.432784E+00	7.403317E-02	-5.477281E-04
C6	9.732710E-01	7.884319E-01	7.916581E-04
C7	9.125744E-04	4.995689E-04	-2.157862E-07
C8	-6.200115E-02	4.496965E-04	-1.127671E-05
C9	1.944275E-02	1.488158E-03	4.854528E-06
C10	2.007987E-10	3.675338E-09	4.481656E-12

Note:The polynomial coefficients subject to change without notice.

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

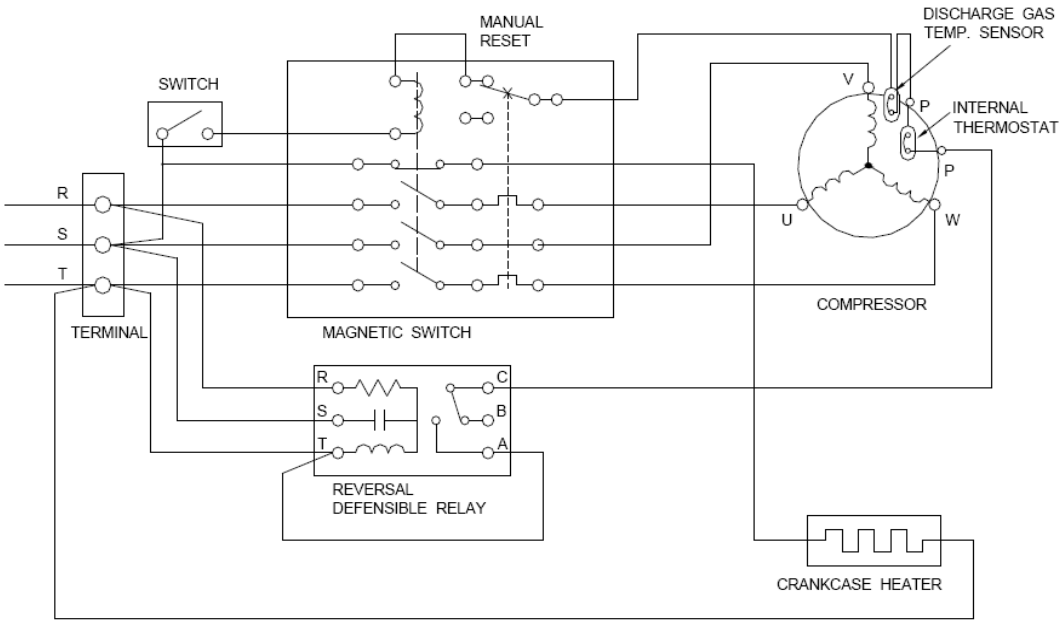
X——CAPACITY(W) OR POWER(W) OR CURRENT(A)

S——EVAPORATING TEMP, °C

D——CONDENSING TEMP, °C

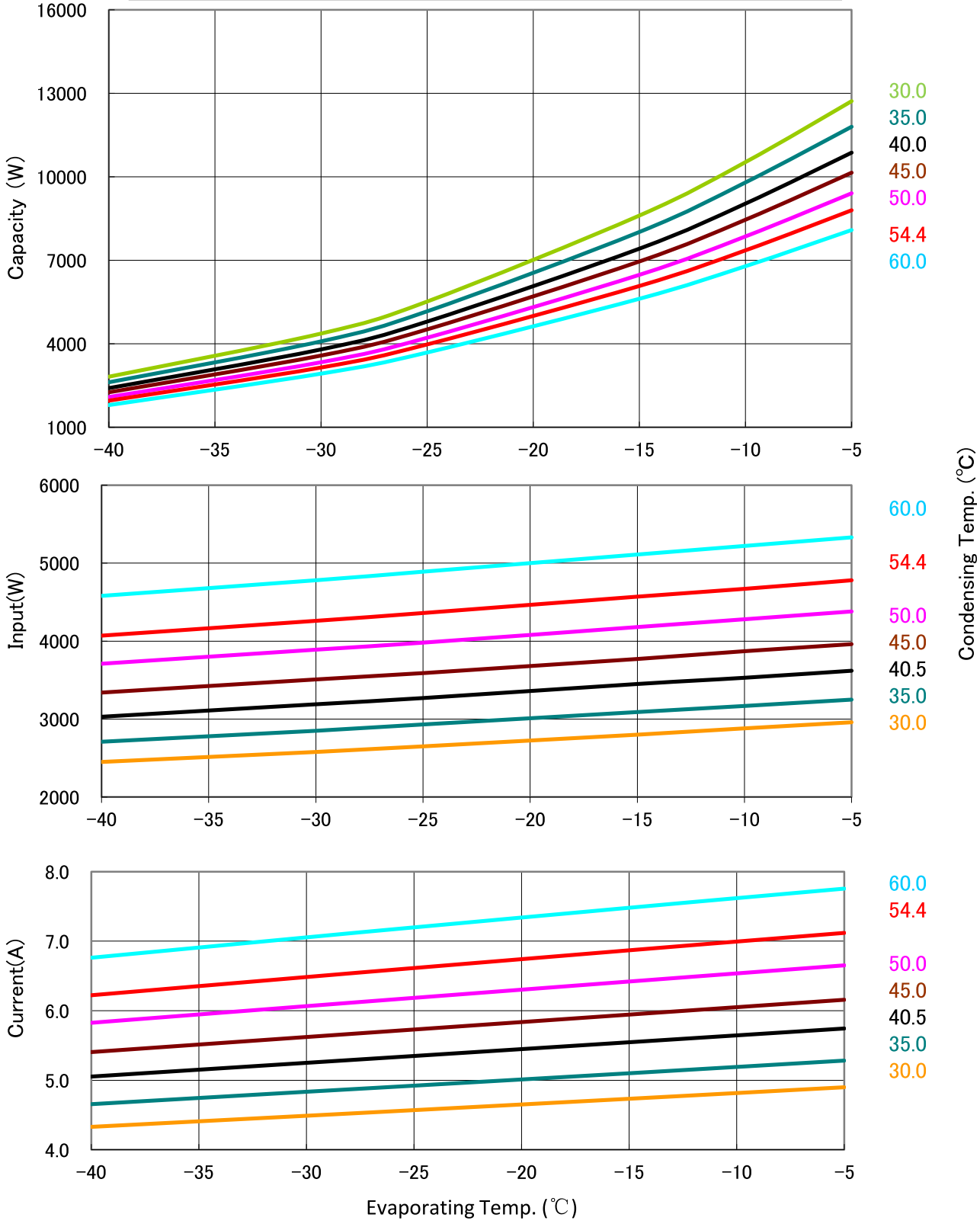
WIRING DIAGRAM

C-SB Series 3 phase
2.6-3.75kw
chinese and Europe
power supply
specifications
models



PERFORMANCE CURVE

Code No.	C-SBN303L8A
Power Source	3-PH 440V 60Hz
Condensing Temp.(℃)	30、35、40.5、45、50、54.4、60
Suction Gas Temp(℃)	18.3
Sub Cooled(K)	0
Compressor Cooling	Liquid Injection
Refrigerant	R448A



PERFORMANCE DATA

Code No.	C-SBN303L8A
Power Source	3-PH 440V 60Hz
Condensing Temp.(℃)	30、35、40.5、45、50、54.4、60
Suction Gas Temp(℃)	18.3
Sub Cooled(K)	0
Compressor Cooling	Liquid Injection
Refrigerant	R448A

Capacity (W)

Condensing Temp.(℃) \ Evaporating Temp. (℃)	-40	-30	-25	-15	-10	-5
30.0	2,820	4,370	5,520	8,610	10,530	12,720
35.0	2,620	4,090	5,170	8,020	9,800	11,800
40.5	2,410	3,800	4,800	7,420	9,040	10,870
45.0	2,260	3,580	4,520	6,960	8,460	10,150
50.0	2,090	3,340	4,220	6,480	7,860	9,410
54.4	1,960	3,150	3,980	6,080	7,360	8,800
60.0	1,800	2,930	3,690	5,620	6,790	8,090

Input(W)

Condensing Temp.(℃) \ Evaporating Temp. (℃)	-40	-30	-25	-15	-10	-5
30.0	2,450	2,580	2,650	2,800	2,880	2,960
35.0	2,710	2,850	2,930	3,090	3,170	3,250
40.5	3,030	3,190	3,270	3,450	3,530	3,620
45.0	3,340	3,510	3,590	3,770	3,870	3,960
50.0	3,710	3,890	3,980	4,180	4,280	4,380
54.4	4,070	4,260	4,360	4,570	4,670	4,780
60.0	4,580	4,780	4,890	5,110	5,220	5,330

Current(A)

Condensing Temp.(℃) \ Evaporating Temp. (℃)	-40	-30	-25	-15	-10	-5
30.0	4.3	4.5	4.6	4.7	4.8	4.9
35.0	4.7	4.8	4.9	5.1	5.2	5.3
40.5	5.1	5.3	5.3	5.5	5.6	5.7
45.0	5.4	5.6	5.7	5.9	6.1	6.2
50.0	5.8	6.1	6.2	6.4	6.5	6.7
54.4	6.2	6.5	6.6	6.9	7.0	7.1
60.0	6.8	7.1	7.2	7.5	7.6	7.8

Coefficients of Polynominal Formula

440V-60Hz	Capacity (W)	Input(W)	Current(A)
C1	2.276039E+04	2.112519E+03	3.481153E+00
C2	7.653987E+02	1.121389E+01	1.385570E-02
C3	-2.871003E+02	6.175275E+00	2.667229E-02
C4	7.599472E+00	1.608404E-02	5.841297E-05
C5	-9.122889E+00	1.259934E-01	-1.587038E-05
C6	1.099781E+00	8.232285E-01	7.805978E-04
C7	1.274789E-03	-4.801485E-04	-3.842500E-08
C8	-8.191671E-02	-1.618783E-04	-1.559704E-06
C9	2.212409E-02	1.115506E-03	3.888078E-06
C10	9.619041E-09	1.429687E-08	3.679841E-12

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)

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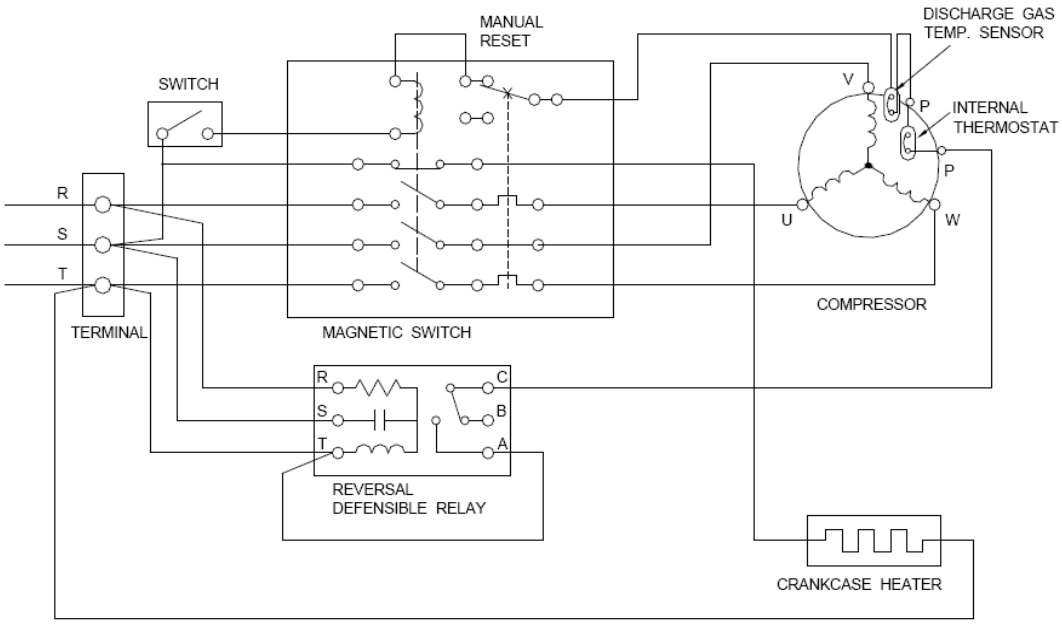

Operating Envelope

Suction Gas Temp(℃)：18.3℃
Liquid Injection
Refrigerant：R448A