

# SPECIFICATIONS OF COMPRESSOR

Model No: C-SCN673H8H

Output : 9 HP



Temporary

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

29/May/18

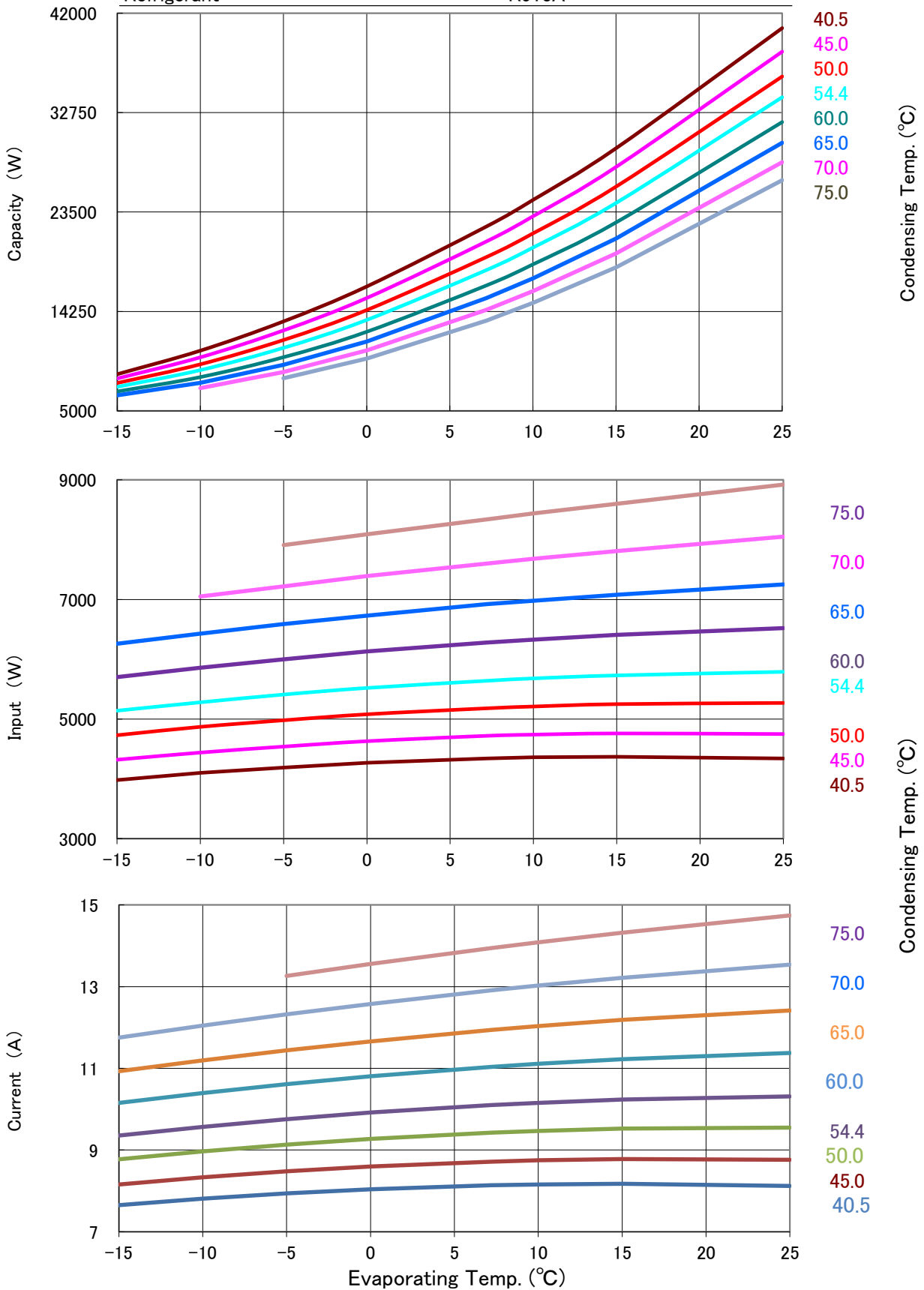
# GENERAL SPECIFICATIONS

Model No:	C-SCN673H8H	
<b>Application</b>		
Evaporating Temp Range	(°C)	-15 ~ 25
Refrigerant		R513A
Compressor Cooling		Natural Cooling
<b>Rated Performance</b>		
Capacity	(W)	18100 / 21200
Input	(W)	5640 / 6860
Current	(A)	10.1 / 10.3
Revolution	(min <sup>-1</sup> )	2950 / 3450
Sound Level	(dB(A))	72max / 74max
<b>Rating Conditions</b>		
Power Source		3-PH 50Hz 380-415V / 60Hz 440-460V
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)	69.5
<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
Starting Current	(A)	-

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

# PERFORMANCE CURVE

Code No.	C-SCN673H8H
Power Source	3-PH 50Hz 380-415V
Condensing Temp.(°C)	40.5、45、50、54.4、60、65、70、75
Super Heating (K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R513A



# PERFORMANCE DATA

Code No.	C-SCN673H8H
Power Source	3-PH 50Hz 380-415V
Condensing Temp.(°C)	40.5、45、50、54.4、60、65、70、75
Super Heating (K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R513A

Capacity (W)

		Evaporating Temp. (°C)							
		-15	-10	-5	0	7.2	10	15	25
Condensing Temp. (°C)	40.5	8,420	10,610	13,330	16,570	22,150	24,620	29,430	40,610
	45.0	8,020	9,990	12,490	15,500	20,760	23,100	27,690	38,420
	50.0	7,600	9,340	11,600	14,380	19,310	21,510	25,860	36,110
	54.4	7,240	8,800	10,870	13,460	18,100	20,190	24,340	34,180
	60.0	6,810	8,150	10,000	12,360	16,670	18,630	22,530	31,870
	65.0	6,450	7,620	9,290	11,460	15,490	17,330	21,030	29,930
	70.0		7,120	8,630	10,630	14,400	16,140	19,640	28,130
	75.0			8,030	9,880	13,400	15,050	18,360	26,460

Input (W)

		Evaporating Temp. (°C)							
		-15	-10	-5	0	7.2	10	15	25
Condensing Temp. (°C)	40.5	3,980	4,100	4,190	4,270	4,340	4,360	4,370	4,340
	45.0	4,320	4,440	4,540	4,630	4,720	4,740	4,760	4,750
	50.0	4,730	4,870	4,980	5,080	5,180	5,210	5,250	5,270
	54.4	5,140	5,280	5,410	5,520	5,640	5,680	5,730	5,790
	60.0	5,700	5,860	6,000	6,130	6,280	6,330	6,410	6,520
	65.0	6,260	6,430	6,590	6,730	6,920	6,980	7,080	7,250
	70.0		7,050	7,220	7,390	7,600	7,680	7,810	8,050
	75.0			7,910	8,090	8,340	8,440	8,600	8,920

Current (A)

		Evaporating Temp. (°C)							
		-15	-10	-5	0	7.2	10	15	25
Condensing Temp. (°C)	40.5	7.7	7.8	7.9	8.0	8.1	8.2	8.2	8.1
	45.0	8.2	8.3	8.5	8.6	8.7	8.7	8.8	8.8
	50.0	8.8	9.0	9.1	9.3	9.4	9.5	9.5	9.5
	54.4	9.4	9.6	9.8	9.9	10.1	10.2	10.2	10.3
	60.0	10.2	10.4	10.6	10.8	11.0	11.1	11.2	11.4
	65.0	10.9	11.2	11.4	11.7	11.9	12.0	12.2	12.4
	70.0	11.8	12.0	12.3	12.6	12.9	13.0	13.2	13.5
	75.0			13.3	13.6	13.9	14.1	14.3	14.7

Coefficients of Polynomial Formula

380V-50Hz	Capacity(W)	Input (W)	Current (A)
C1	2.862330E+04	2.962003E+03	5.295334E+00
C2	1.210129E+03	1.276465E+01	1.251807E-02
C3	-3.536068E+02	-1.015157E+01	1.809018E-02
C4	1.116059E+01	-6.685356E-01	-7.941999E-04
C5	-1.497787E+01	-3.532354E-01	-4.261069E-04
C6	1.378464E+00	1.048592E+00	1.228320E-03
C7	-1.947425E-03	3.989642E-04	5.602106E-07
C8	-1.595075E-02	6.056084E-03	5.072919E-06
C9	5.910775E-02	8.856713E-03	1.348783E-05
C10	2.541969E-09	4.006947E-09	5.033087E-12

Note: The polynomial coefficients subject to change without notice.

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

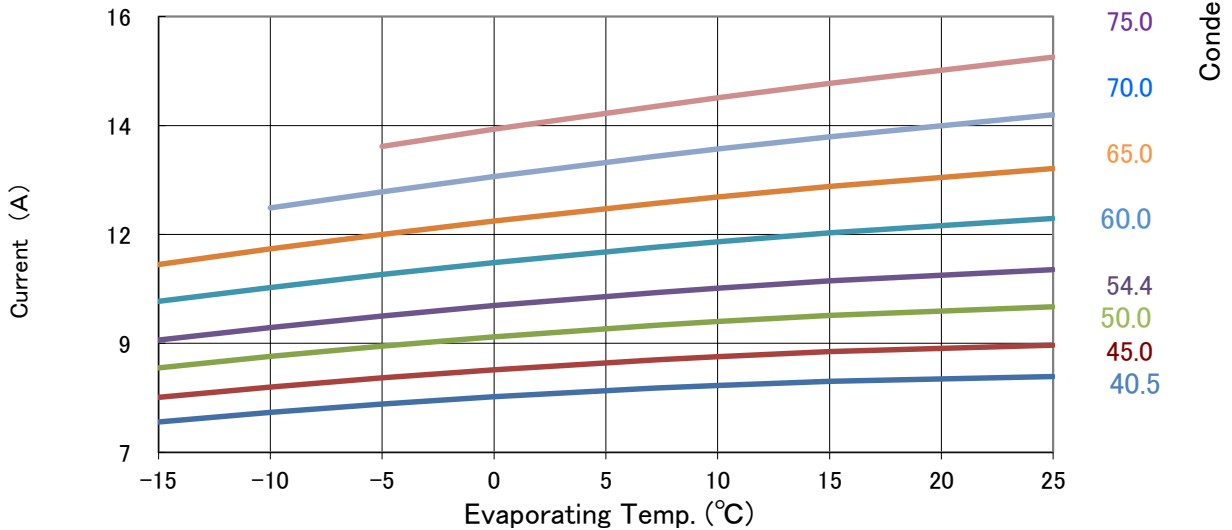
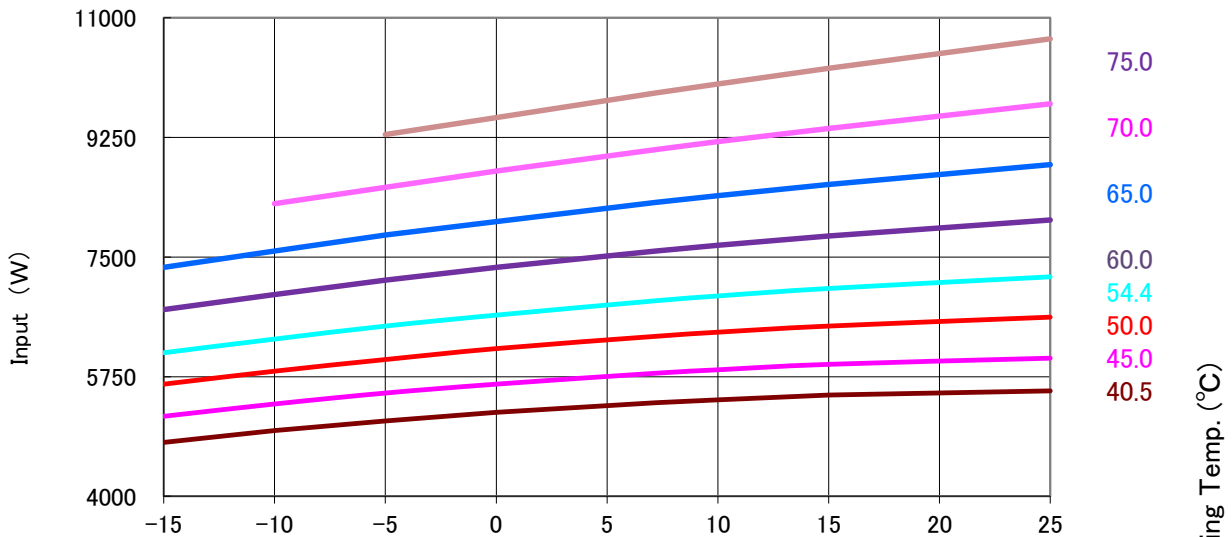
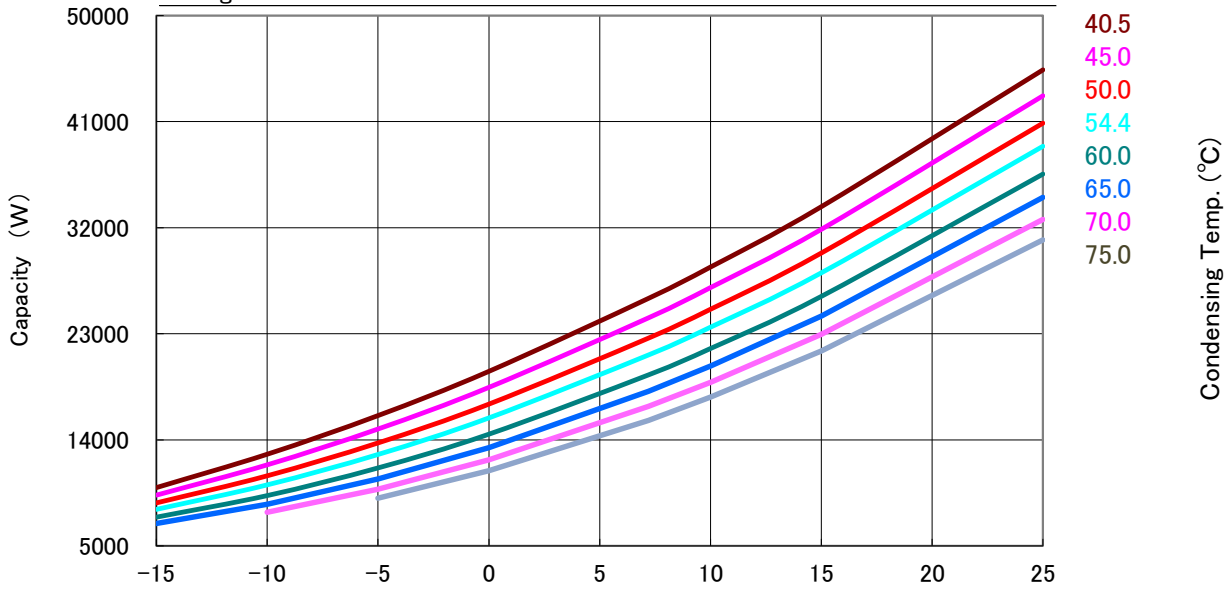
X—CAPACITY(W) OR POWER(W) OR CURRENT(A)

S—EVAPORATING TEMP, °C

D—CONDENSING TEMP, °C

# PERFORMANCE CURVE

Code No.	C-SCN673H8H
Power Source	3-PH 50Hz 440-460V
Condensing Temp.(°C)	40.5、45、50、54.4、60、65、70、75
Super Heating (K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R513A



# PERFORMANCE DATA

Code No.	C-SCN673H8H
Power Source	3-PH 50Hz 380-415V
Condensing Temp.(°C)	40.5、45、50、54.4、60、65、70、75
Super Heating (K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R513A

Capacity (W)

		Evaporating Temp. (°C)							
		-15	-10	-5	0	7.2	10	15	25
Condensing Temp. (°C)	40.5	9,950	12,780	16,060	19,810	26,000	28,660	33,780	45,390
	45.0	9,310	11,880	14,920	18,450	24,350	26,920	31,860	43,190
	50.0	8,650	10,950	13,740	17,030	22,630	25,080	29,850	40,870
	54.4	8,100	10,180	12,760	15,860	21,200	23,560	28,170	38,910
	60.0	7,440	9,270	11,620	14,480	19,510	21,750	26,170	36,550
	65.0	6,910	8,530	10,680	13,350	18,120	20,260	24,510	34,570
	70.0		7,860	9,820	12,310	16,830	18,890	22,960	32,700
	75.0			9,050	11,380	15,660	17,620	21,540	30,950

Input (W)

		Evaporating Temp. (°C)							
		-15	-10	-5	0	7.2	10	15	25
Condensing Temp. (°C)	40.5	4,790	4,960	5,100	5,230	5,370	5,410	5,480	5,540
	45.0	5,170	5,350	5,510	5,640	5,800	5,850	5,930	6,020
	50.0	5,640	5,830	6,000	6,160	6,340	6,400	6,490	6,620
	54.4	6,100	6,300	6,490	6,650	6,860	6,930	7,040	7,210
	60.0	6,730	6,950	7,160	7,350	7,590	7,670	7,810	8,040
	65.0	7,350	7,590	7,820	8,020	8,300	8,400	8,560	8,850
	70.0		8,280	8,520	8,760	9,070	9,190	9,380	9,740
	75.0			9,290	9,540	9,900	10,030	10,260	10,690

Current (A)

		Evaporating Temp. (°C)							
		-15	-10	-5	0	7.2	10	15	25
Condensing Temp. (°C)	40.5	7.6	7.8	8.0	8.1	8.3	8.4	8.5	8.6
	45.0	8.1	8.3	8.5	8.7	8.9	9.0	9.1	9.2
	50.0	8.7	9.0	9.2	9.4	9.6	9.7	9.8	10.0
	54.4	9.3	9.6	9.8	10.0	10.3	10.4	10.5	10.8
	60.0	10.1	10.4	10.7	10.9	11.2	11.3	11.5	11.8
	65.0	10.9	11.2	11.5	11.8	12.1	12.3	12.5	12.9
	70.0		12.0	12.4	12.7	13.1	13.3	13.5	14.0
	75.0			13.3	13.7	14.1	14.3	14.6	15.2

Coefficients of Polynomial Formula

440V-60Hz	Capacity (W)	Input (W)	Current (A)
C1	3.513266E+04	3.541263E+03	5.341984E+00
C2	1.265751E+03	1.848077E+01	1.863490E-02
C3	-4.508964E+02	-3.497136E+00	2.023002E-02
C4	7.257477E+00	-6.351970E-01	-5.269250E-04
C5	-1.359967E+01	-2.750128E-01	-2.861083E-04
C6	1.780831E+00	1.115104E+00	1.211950E-03
C7	-3.694753E-03	6.629644E-04	3.085827E-07
C8	4.974320E-02	5.063004E-03	1.762240E-06
C9	4.862357E-02	9.396329E-03	1.267910E-05
C10	2.588211E-09	1.135440E-09	2.152083E-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

FLOW (kg/h) @50Hz

		Evaporating Temp. (°C)							
		-15	-10	-5	0	7, 2	10	15	25
Condensing Temp. (°C)	40, 5	235	287	347	414	525	573	664	868
	45, 0	232	284	343	411	522	570	661	867
	50, 0	229	281	340	407	518	566	658	865
	54, 4	227	278	337	404	515	563	655	863
	60, 0	224	274	333	400	511	559	651	861
	65, 0	221	271	329	396	507	555	648	860
	70, 0	219	268	325	392	504	552	645	858
	75, 0			322	388	500	548	642	856

FLOW (kg/h) @60Hz

		Evaporating Temp. (°C)							
		-15	-10	-5	0	7, 2	10	15	25
Condensing Temp. (°C)	40, 5	294	351	419	500	644	710	847	1. 205
	45, 0	294	351	418	498	640	706	842	1. 195
	50, 0	294	350	417	496	637	702	836	1. 185
	54, 4	294	349	415	494	634	699	831	1. 175
	60, 0	294	349	414	492	630	694	824	1. 163
	65, 0	293	347	413	489	627	690	818	1. 153
	70, 0	293	347	411	488	623	686	813	1. 143
	75, 0			410	486	620	682	807	1. 133

# Operating Envelope

Suction Gas Superheat: **11.1 K**

Sub cooled: **8.3 k**

Refrigerant: **R513A**

