SPECIFICATIONS OF COMPRESSOR

Model No: C-SBS195H38A

Output : 5.5 HP

Temporary

Panasonic Appliances Compressor (Dalian) Co.,Ltd.

19/Jul/19

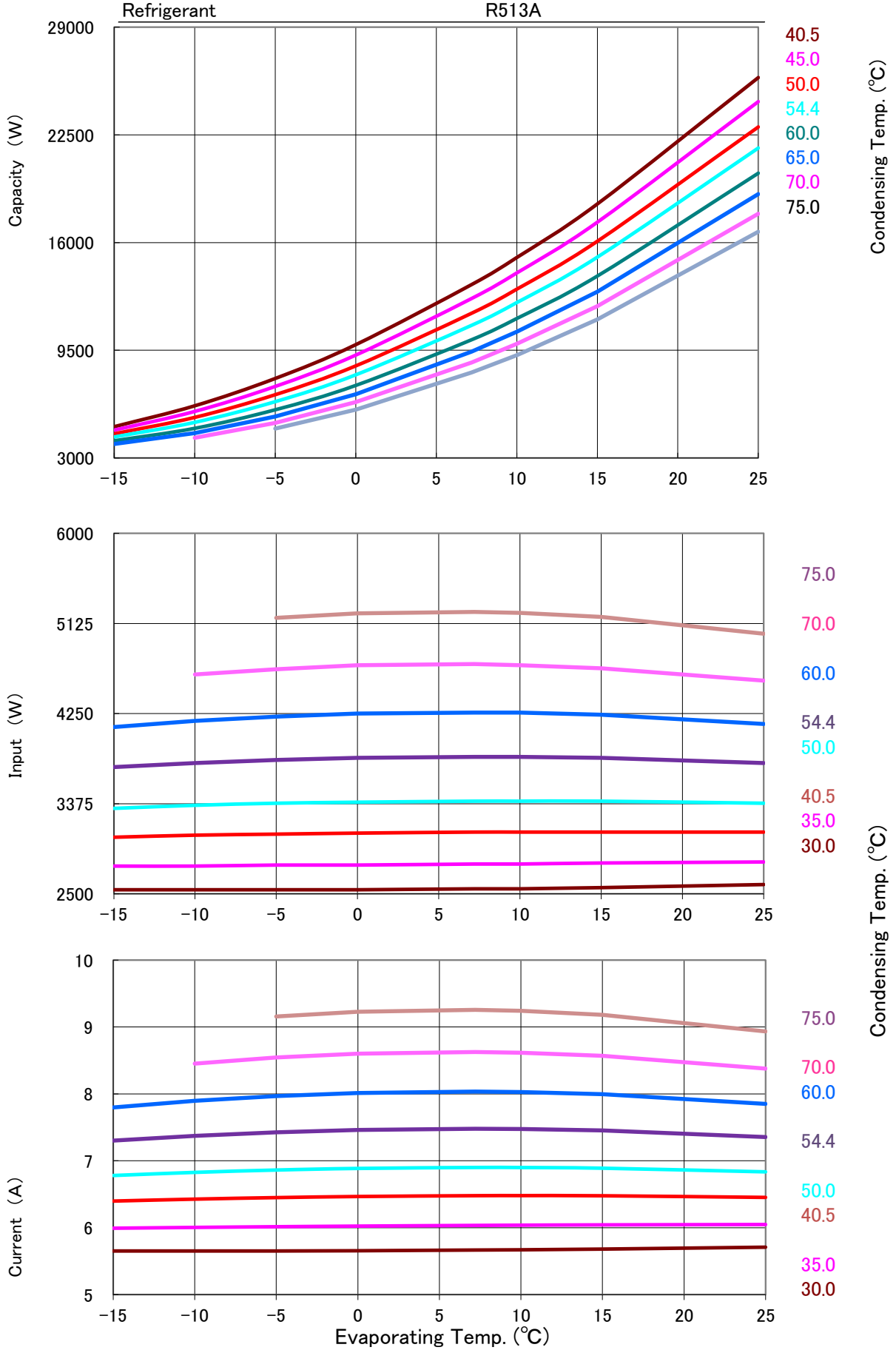
GENERAL SPECIFICATIONS

Model No:		C-SBS195H38A
Application		
Evaporating Temp Range	(℃)	-15 ～ 25
Refrigerant		R513A
Compressor Cooling		Natural Cooling
Rated Performance		
Capacity	(W)	11010/13770
Input	(W)	3400/4160
Current	(A)	6.9/6.9
Revolution	(min^{-1})	2950 / 3450
Sound Level	(dB(A))	62max / 67max
Rating Conditions		
Power Source		3-PH 50Hz 380V / 60Hz 440V
Evaporating Temp	(℃)	7.2
Condensing Temp	(℃)	54.4
Suction Gas Temp	(℃)	18.3
Liquid Temp	(℃)	46.1
Ambient Temp	(℃)	35.0
Measuring Point of Sound Level		
Distance from the Compressor	(m)	1.0
Compressor		
Design		Hermetic Scroll
Displacement	(cm3)	90.6
Suction Line Connection	(Φmm 0D)	22.22
Discharge Line Connection	(Φmm 0D)	12.7
Oil	(ml)	1700 (FV68S)
Mass(Incl.Oil)	(kg)	39
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)	-

Panasonic Appliances Compressor (Dalian) Co.,Ltd.

PERFORMANCE CURVE

Code No.	C-SBS195H38A
Power Source	3-PH 50Hz 380-415V
Condensing Temp.(℃)	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

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Condensing Temp.(℃)	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)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-5	0	7.2	10	15	25
40.5	4,890	6,150	7,800	9,840	13,470	15,100	18,330	25,960
45.0	4,680	5,810	7,320	9,210	12,630	14,170	17,230	24,510
50.0	4,460	5,450	6,820	8,560	11,740	13,190	16,080	22,980
54.4	4,270	5,150	6,400	8,020	11,010	12,380	15,120	21,710
60.0	4,040	4,790	5,910	7,380	10,140	11,420	13,980	20,190
65.0	3,850	4,500	5,500	6,850	9,420	10,620	13,030	18,920
70.0		4,220	5,120	6,370	8,760	9,890	12,160	17,740
75.0			4,776	5,921	8,156	9,212	11,358	16,651

Input (W)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-5	0	7.2	10	15	25
40.5	2,540	2,540	2,540	2,540	2,550	2,550	2,560	2,590
45.0	2,770	2,770	2,780	2,780	2,790	2,790	2,800	2,810
50.0	3,050	3,070	3,080	3,090	3,100	3,100	3,100	3,100
54.4	3,330	3,360	3,380	3,390	3,400	3,400	3,400	3,380
60.0	3,730	3,770	3,800	3,820	3,830	3,830	3,820	3,770
65.0	4,120	4,180	4,220	4,250	4,260	4,260	4,240	4,150
70.0		4,630	4,680	4,720	4,730	4,720	4,690	4,570
75.0			5,181	5,224	5,238	5,228	5,188	5,024

Current (A)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-5	0	7.2	10	15	25
40.5	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
45.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
50.0	6.4	6.4	6.4	6.5	6.5	6.5	6.5	6.5
54.4	6.8	6.8	6.9	6.9	6.9	6.9	6.9	6.8
60.0	7.3	7.4	7.4	7.5	7.5	7.5	7.5	7.4
65.0	7.8	7.9	8.0	8.0	8.0	8.0	8.0	7.9
70.0		8.5	8.5	8.6	8.6	8.6	8.6	8.4
75.0			9.2	9.2	9.3	9.2	9.2	8.9

Mass Flow(kg/H)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-5	0	7.2	10	15	25
40.5	133	162	197	239	317	354	430	636
45.0	134	162	197	239	316	352	428	630
50.0	134	163	197	239	315	351	425	623
54.4	135	163	198	239	314	349	422	617
60.0	136	164	198	239	313	347	419	610
65.0	137	165	198	239	312	346	416	604
70.0		165	198	238	311	344	414	597
75.0			199	238	310	343	411	591

COP(W/W)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-5	0	7.2	10	15	25
40.5	1.93	2.42	3.07	3.87	5.28	5.92	7.16	10.02
45.0	1.69	2.10	2.63	3.31	4.53	5.08	6.15	8.72
50.0	1.46	1.78	2.21	2.77	3.79	4.25	5.19	7.41
54.4	1.28	1.53	1.89	2.37	3.24	3.64	4.45	6.42
60.0	1.08	1.27	1.56	1.93	2.65	2.98	3.66	5.36
65.0	0.93	1.08	1.30	1.61	2.21	2.49	3.07	4.56
70.0		0.91	1.09	1.35	1.85	2.10	2.59	3.88
75.0			0.92	1.13	1.56	1.76	2.19	3.31

Coefficients of Polynominal Formula

380V-50Hz	CAPACITY (W)	POWER (W)	CURRENT (A)	FLOW (kg/h)
C1	1.692087E+04	1.756682E+03	3.592315E+00	2.401973E+02
C2	7.870311E+02	-1.299267E+00	-6.475160E-04	1.051634E+01
C3	-2.079533E+02	-1.217350E+01	2.261498E-02	-5.722763E-02
C4	9.245783E+00	6.932346E-01	1.055137E-03	2.356587E-01
C5	-9.998769E+00	-8.856247E-03	-7.592412E-05	-3.209494E-02
C6	8.163134E-01	7.772323E-01	6.983900E-04	4.680260E-04
C7	3.499145E-04	-2.333386E-04	-9.808300E-07	2.680584E-03
C8	-3.366615E-02	-1.544318E-02	-2.422128E-05	-1.032431E-03
C9	4.001404E-02	1.364251E-03	2.900399E-06	7.517372E-05
C10	3.249092E-10	1.487411E-09	1.800810E-12	-1.506653E-10

Note:The polynomial coefficients subject to change without notice.

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

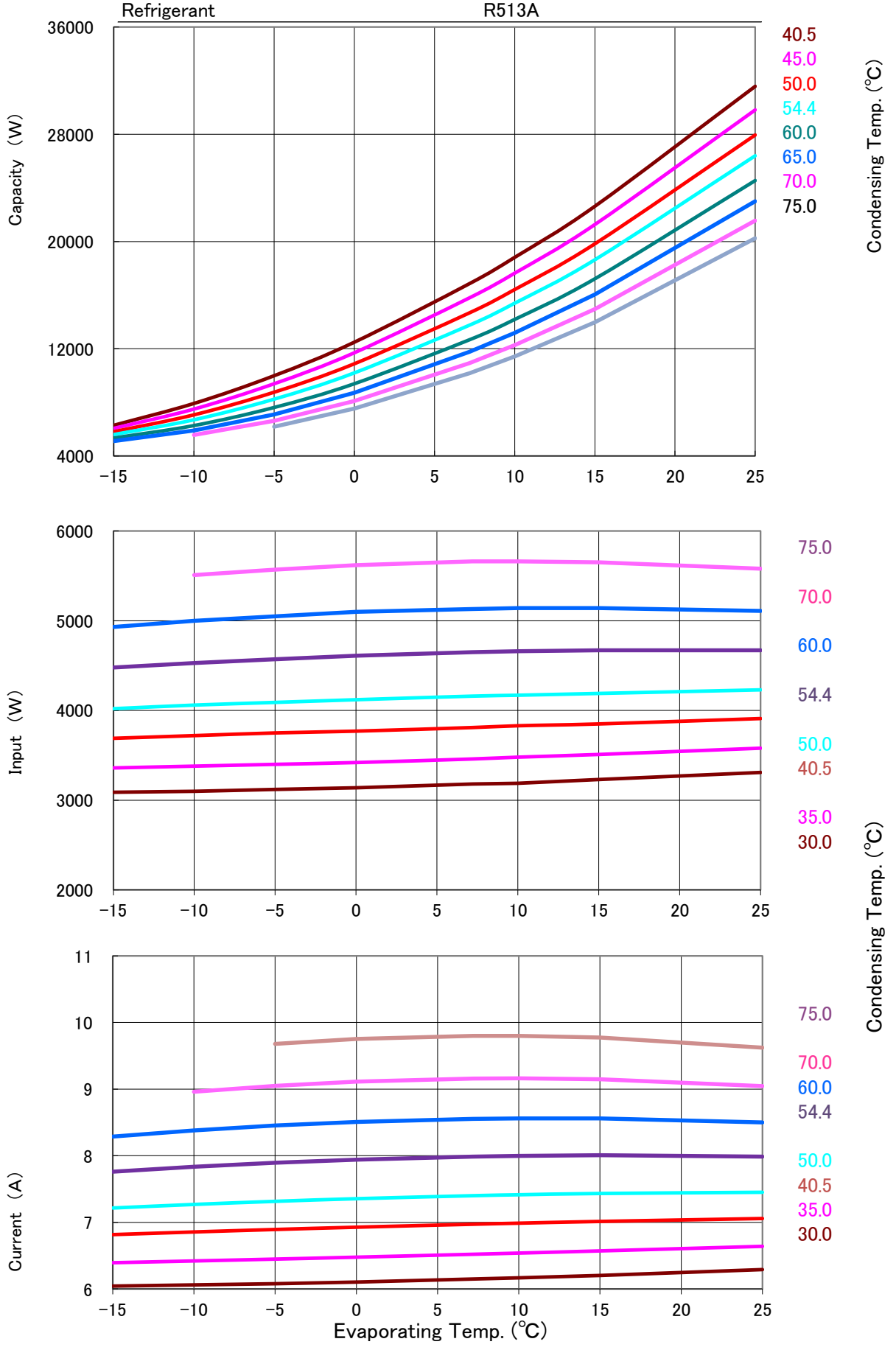
X——CAPACITY(W) OR POWER(W) OR CURRENT(A)

S——EVAPORATING TEMP, °C

D——CONDENSING TEMP, °C

PERFORMANCE CURVE

Code No.	C-SBS195H38A
Power Source	3-PH 60Hz 440-460V
Condensing Temp.(℃)	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-SBS195H38A
Power Source	3-PH 60Hz 440-460V
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Super Heating (K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R513A

Capacity (W)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-5	0	7.2	10	15	25
40.5	6,290	7,920	9,990	12,490	16,870	18,820	22,630	31,580
45.0	6,060	7,500	9,390	11,700	15,810	17,640	21,270	29,820
50.0	5,810	7,070	8,760	10,880	14,690	16,420	19,830	27,950
54.4	5,600	6,700	8,240	10,200	13,770	15,400	18,640	26,400
60.0	5,340	6,270	7,620	9,390	12,680	14,190	17,220	24,550
65.0	5,110	5,900	7,100	8,720	11,770	13,190	16,050	23,010
70.0		5,560	6,630	8,100	10,940	12,270	14,970	21,570
75.0			6,190	7,540	10,180	11,430	13,970	20,240

Input (W)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-5	0	7.2	10	15	25
40.5	3,090	3,100	3,120	3,140	3,180	3,190	3,230	3,310
45.0	3,360	3,380	3,400	3,420	3,460	3,480	3,510	3,580
50.0	3,690	3,720	3,750	3,770	3,810	3,830	3,850	3,910
54.4	4,020	4,060	4,090	4,120	4,160	4,170	4,190	4,230
60.0	4,480	4,530	4,570	4,610	4,650	4,660	4,670	4,670
65.0	4,930	5,000	5,050	5,100	5,130	5,140	5,140	5,110
70.0		5,510	5,570	5,620	5,660	5,660	5,650	5,580
75.0			6,140	6,190	6,230	6,230	6,210	6,080

Current (A)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-5	0	7.2	10	15	25
40.5	5.5	5.6	5.6	5.6	5.6	5.7	5.7	5.8
45.0	5.9	5.9	5.9	6.0	6.0	6.0	6.1	6.1
50.0	6.3	6.4	6.4	6.4	6.5	6.5	6.5	6.6
54.4	6.7	6.8	6.8	6.9	6.9	6.9	6.9	7.0
60.0	7.3	7.3	7.4	7.4	7.5	7.5	7.5	7.5
65.0	7.8	7.9	8.0	8.0	8.1	8.1	8.1	8.0
70.0		8.5	8.5	8.6	8.7	8.7	8.6	8.5
75.0			9.2	9.3	9.3	9.3	9.3	9.1

Mass Flow(kg/H)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-5	0	7.2	10	15	25
40.5	169	204	246	298	390	433	523	762
45.0	167	202	245	296	390	434	526	771
50.0	164	199	242	294	390	435	529	782
54.4	161	197	240	293	390	436	532	791
60.0	158	194	238	291	390	437	535	804
65.0	156	191	235	289	390	438	539	815
70.0		189	233	288	390	439	542	826
75.0			229	284	387	437	541	832

COP(W/W)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-5	0	7.2	10	15	25
40.5	2.04	2.55	3.20	3.98	5.31	5.90	7.01	9.54
45.0	1.80	2.22	2.76	3.42	4.57	5.07	6.06	8.33
50.0	1.57	1.90	2.34	2.89	3.86	4.29	5.15	7.15
54.4	1.39	1.65	2.01	2.48	3.31	3.69	4.45	6.24
60.0	1.19	1.38	1.67	2.04	2.73	3.05	3.69	5.26
65.0	1.04	1.18	1.41	1.71	2.29	2.57	3.12	4.50
70.0		1.01	1.19	1.44	1.93	2.17	2.65	3.87
75.0			1.01	1.22	1.63	1.83	2.25	3.33

Coefficients of Polynominal Formula

440V-60Hz	CAPACITY (W)	POWER (W)	CURRENT (A)	Mass Flow(kg/H)
C1	2.136264E+04	2.105176E+03	3.568661E+00	3.110871E+02
C2	9.823303E+02	4.483856E+00	3.007461E-03	9.513165E+00
C3	-2.597318E+02	-8.414008E+00	2.031466E-02	-3.458016E-01
C4	9.606542E+00	7.426664E-01	9.082846E-04	1.520042E-01
C5	-1.294367E+01	-4.867965E-02	1.088120E-06	3.909807E-02
C6	1.003232E+00	8.369803E-01	7.380538E-04	1.211991E-04
C7	-1.279874E-03	-1.118843E-03	-8.320242E-07	3.279650E-03
C8	-2.036026E-02	-1.548014E-02	-1.976131E-05	1.615122E-03
C9	5.296519E-02	1.388753E-03	1.468137E-06	-8.933463E-06
C10	-4.733238E-10	3.243289E-09	1.240480E-12	6.140088E-11

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