SPECIFICATIONS OF COMPRESSOR

Model No: C-SBN263H8A

Output : 3.5 HP

DALIAN SANYO COMPRESSOR Co.,Ltd.

12-Nov-13

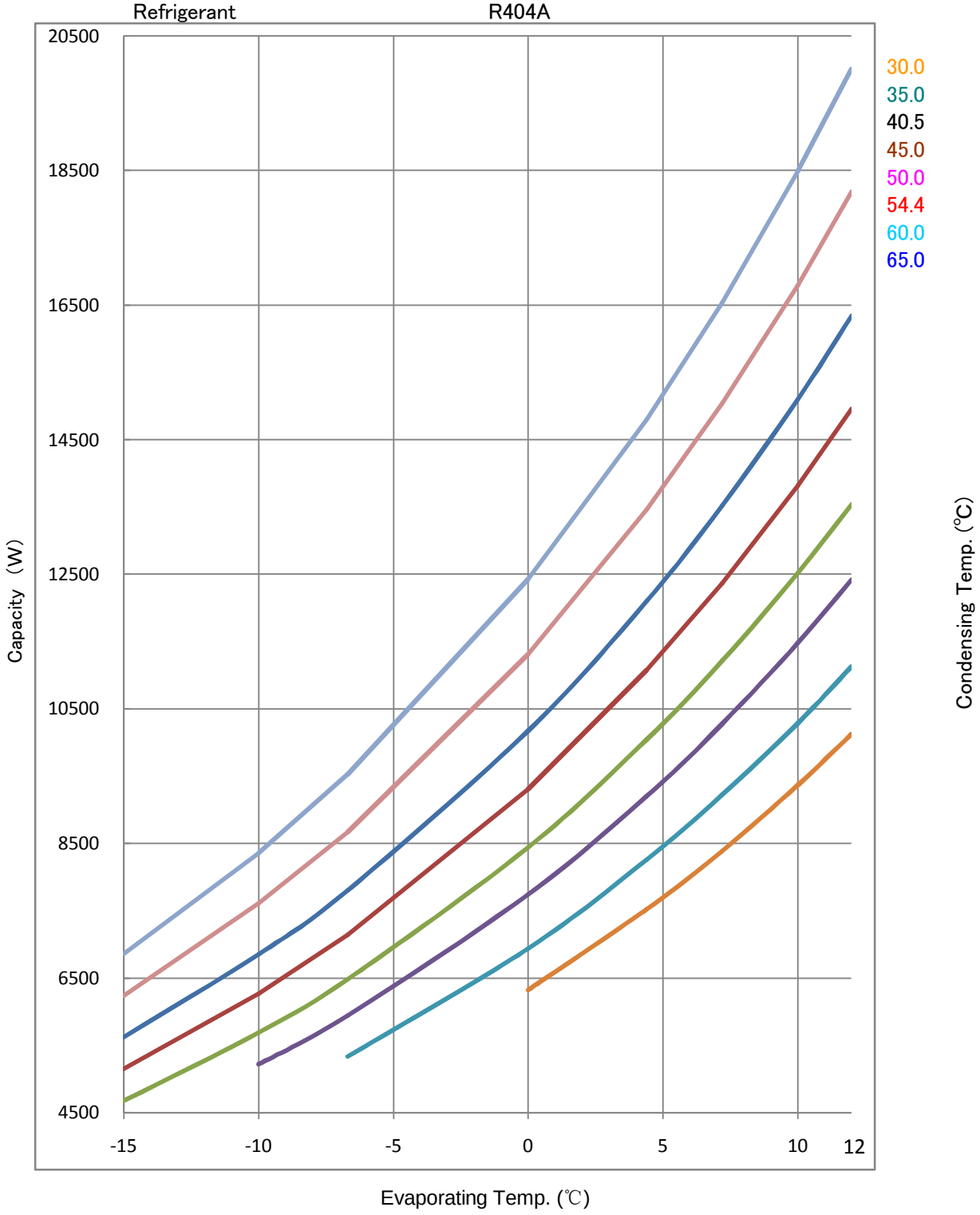
GENERAL SPECIFICATIONS

Model No:		C-SBN263H8A
Application		
Evaporating Temp Range	(℃)	-15.0 ～ 12.0
Refrigerant		R404A
Compressor Cooling		Natural Cooling
Rated Performance		50Hz-380V / 60Hz-440V
Capacity	(W)	10280 / 12120
Input	(W)	3560 / 4360
Current	(A)	6.2 / 6.5
Revolution	(min^{-1})	2900 / 3450
Sound Level	(dB(A))	62 / 65
Rating Conditions		
Power Source		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)	55.7
Suction Line Connection	(Φmm 0D)	22.22
Discharge Line Connection	(Φmm 0D)	12.7
Oil	(ml)	1700(FV68S)
Mass(Incl.Oil)	(kg)	37.5
Motor		
Type		3-PH Induction Motor(3IR)
Pole		2
Rated Power Source		3Ph 50Hz 380-415V/ 3Ph 60Hz 440-460V
Voltage Range	(V)	342～456/396～506
Starting Current	(A)	48 / 51

DALIAN SANYO COMPRESSOR Co.,Ltd.

PERFORMANCE CURVE

Code No.	C-SBN263H8A
Power Source	3Ph 50Hz 380V
Condensing Temp.(℃)	30, 35, 40.5, 45, 50, 54.4, 60, 65
Suction Gas Superheat(K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R404A



PERFORMANCE CURVE

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Power Source	3Ph 50Hz 380V
Condensing Temp.(℃)	30, 35, 40.5, 45, 50, 54.4, 60, 65
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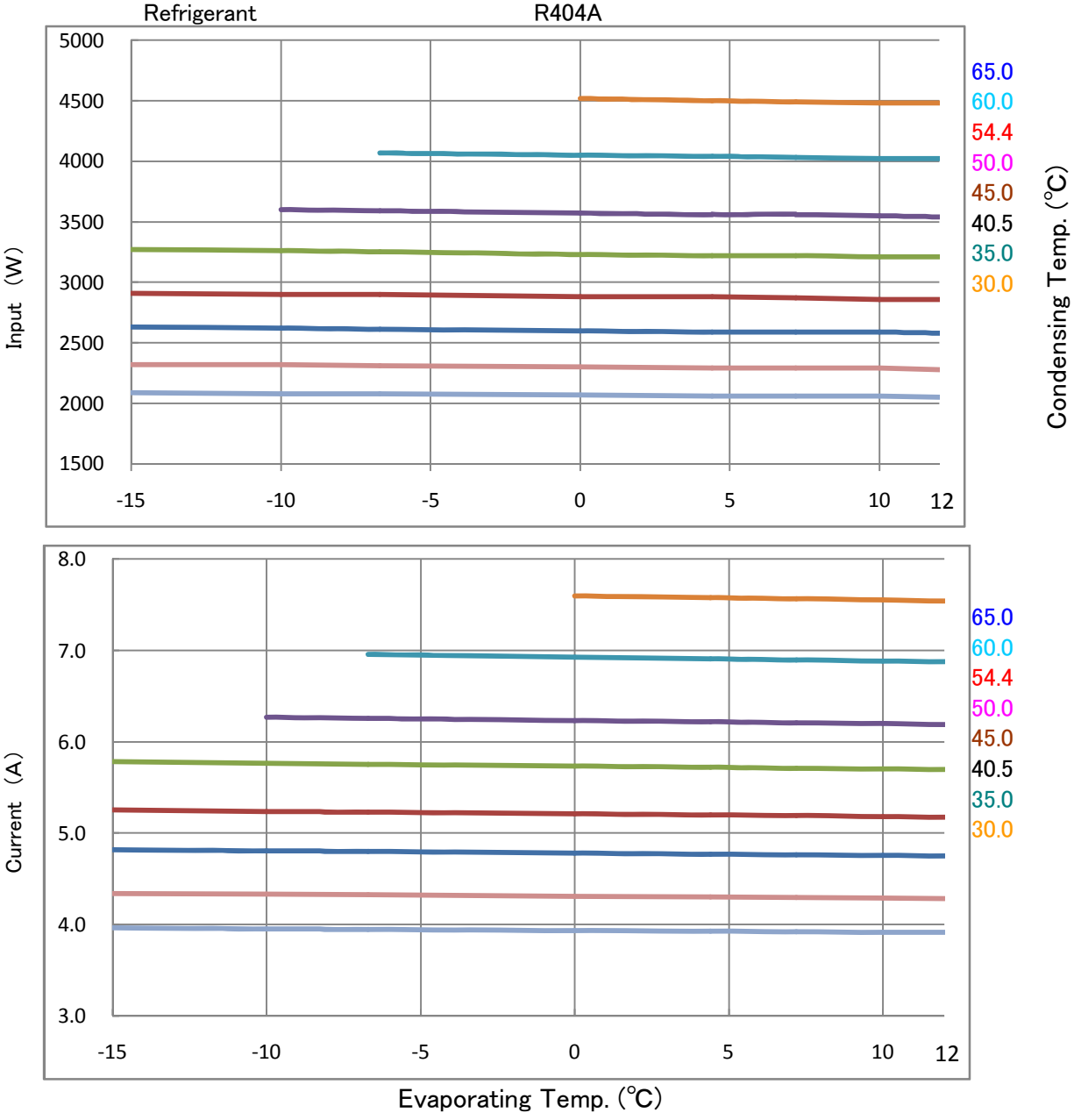

PERFORMANCE DATA

Code No.	C-SBN263H8A
Power Source	3Ph 50Hz 380V
Condensing Temp.(℃)	30, 35, 40.5, 45, 50, 54.4, 60, 65
Suction Gas Superheat(K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R404A

Capacity (W)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-6.7	0	4.4	7.2	10	12
30	6,860	8,360	9,530	12,430	14,800	16,540	18,490	20,010
35	6,240	7,610	8,670	11,310	13,460	15,040	16,800	18,190
40.5	5,620	6,850	7,800	10,170	12,100	13,520	15,100	16,340
45.0	5,150	6,270	7,140	9,310	11,080	12,370	13,820	14,960
50.0	4,670	5,690	6,480	8,440	10,040	11,210	12,520	13,540
54.4		5,220	5,940	7,740	9,200	10,280	11,480	12,420
60.0			5,330	6,940	8,260	9,220	10,290	11,130
65.0				6,320	7,520	8,390	9,370	10,130

Input (W)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-6.7	0	4.4	7.2	10	12
30	2,090	2,080	2,080	2,070	2,060	2,060	2,060	2,050
35	2,320	2,320	2,310	2,300	2,290	2,290	2,290	2,280
40.5	2,630	2,620	2,610	2,600	2,590	2,590	2,590	2,580
45.0	2,910	2,900	2,900	2,880	2,880	2,870	2,860	2,860
50.0	3,270	3,260	3,250	3,230	3,220	3,220	3,210	3,210
54.4		3,600	3,590	3,570	3,560	3,560	3,550	3,540
60.0			4,070	4,050	4,040	4,030	4,020	4,020
65.0				4,520	4,500	4,490	4,480	4,480

Current (A)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-6.7	0	4.4	7.2	10	12
30	4.0	4.0	3.9	3.9	3.9	3.9	3.9	3.9
35	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
40.5	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
45.0	5.3	5.2	5.2	5.2	5.2	5.2	5.2	5.2
50.0	5.8	5.8	5.8	5.7	5.7	5.7	5.7	5.7
54.4		6.3	6.3	6.2	6.2	6.2	6.2	6.2
60.0			7.0	6.9	6.9	6.9	6.9	6.9
65.0				7.6	7.6	7.6	7.6	7.5

MassFlow (kg/H)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-6.7	0	4.4	7.2	10	12
30	180	210	230	290	340	370	400	430
35	170	200	230	290	330	360	400	420
40.5	160	200	220	280	320	360	390	410
45.0	150	190	220	270	320	350	380	400
50.0	150	180	210	270	310	340	370	400
54.4		180	200	260	310	340	370	390
60.0			200	260	300	330	360	380
65.0				250	290	320	350	380

EER

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-6.7	0	4.4	7.2	10	12
30	3.28	4.02	4.58	6.00	7.18	8.03	8.98	9.76
35	2.69	3.28	3.75	4.92	5.88	6.57	7.34	7.98
40.5	2.14	2.61	2.99	3.91	4.67	5.22	5.83	6.33
45.0	1.77	2.16	2.46	3.23	3.85	4.31	4.83	5.23
50.0	1.43	1.75	1.99	2.61	3.12	3.48	3.90	4.22
54.4		1.45	1.65	2.17	2.58	2.89	3.23	3.51
60.0			1.31	1.71	2.04	2.29	2.56	2.77
65.0				1.40	1.67	1.87	2.09	2.26

Coefficients of Polynominal Formula

	Capacity （W）	Input （W）	Current （A）	MassFlow (kg/h)
C1	2.115619E+04	1.496328E+03	2.716336E+00	3.244546E+02
C2	8.357878E+02	-1.076060E+00	-1.392188E-03	9.064490E+00
C3	-3.432757E+02	-4.470245E+00	1.123936E-02	-1.020962E+00
C4	1.334824E+01	2.842606E-02	-9.369467E-07	1.973829E-01
C5	-1.323797E+01	1.606229E-02	2.050869E-05	3.135170E-02
C6	1.771808E+00	7.836456E-01	9.827325E-04	-1.926247E-03
C7	8.617055E-02	1.492169E-03	4.391166E-09	3.574713E-04
C8	-1.289880E-01	-5.822295E-05	3.973937E-08	-1.914036E-03
C9	6.387789E-02	-8.258094E-04	-1.133339E-06	-4.307635E-04
C10	-6.886341E-10	-1.042675E-08	2.985623E-12	-1.224555E-09

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) OR MassFlow(kg/H)

S——EVAPORATING TEMP, °C

D——CONDENSING TEMP, °C

PERFORMANCE CURVE

Code No.	C-SBN263H8A
Power Source	3Ph 60Hz 440V
Condensing Temp.(℃)	30, 35, 40.5, 45, 50, 54.4, 60, 65
Suction Gas Superheat(K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
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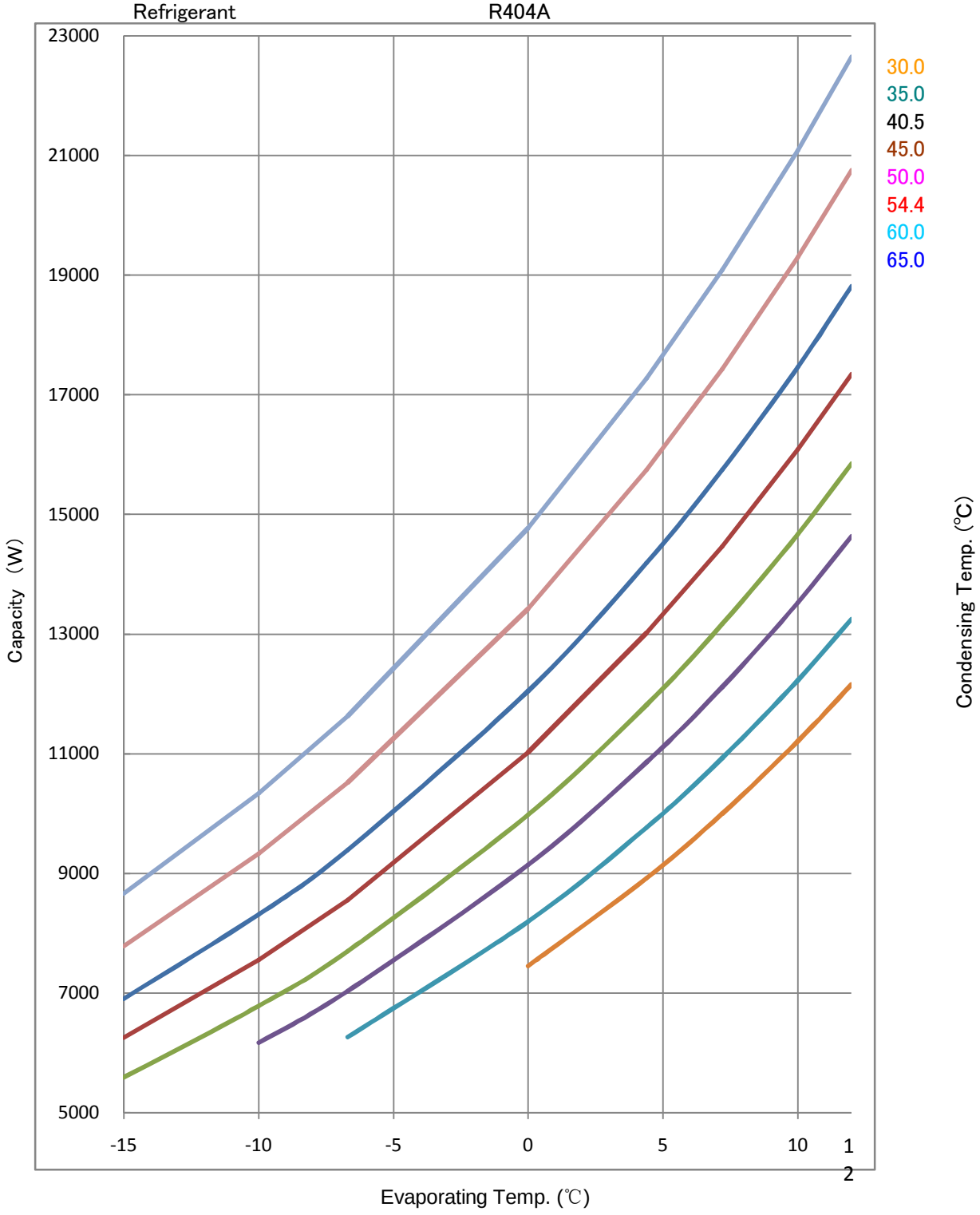

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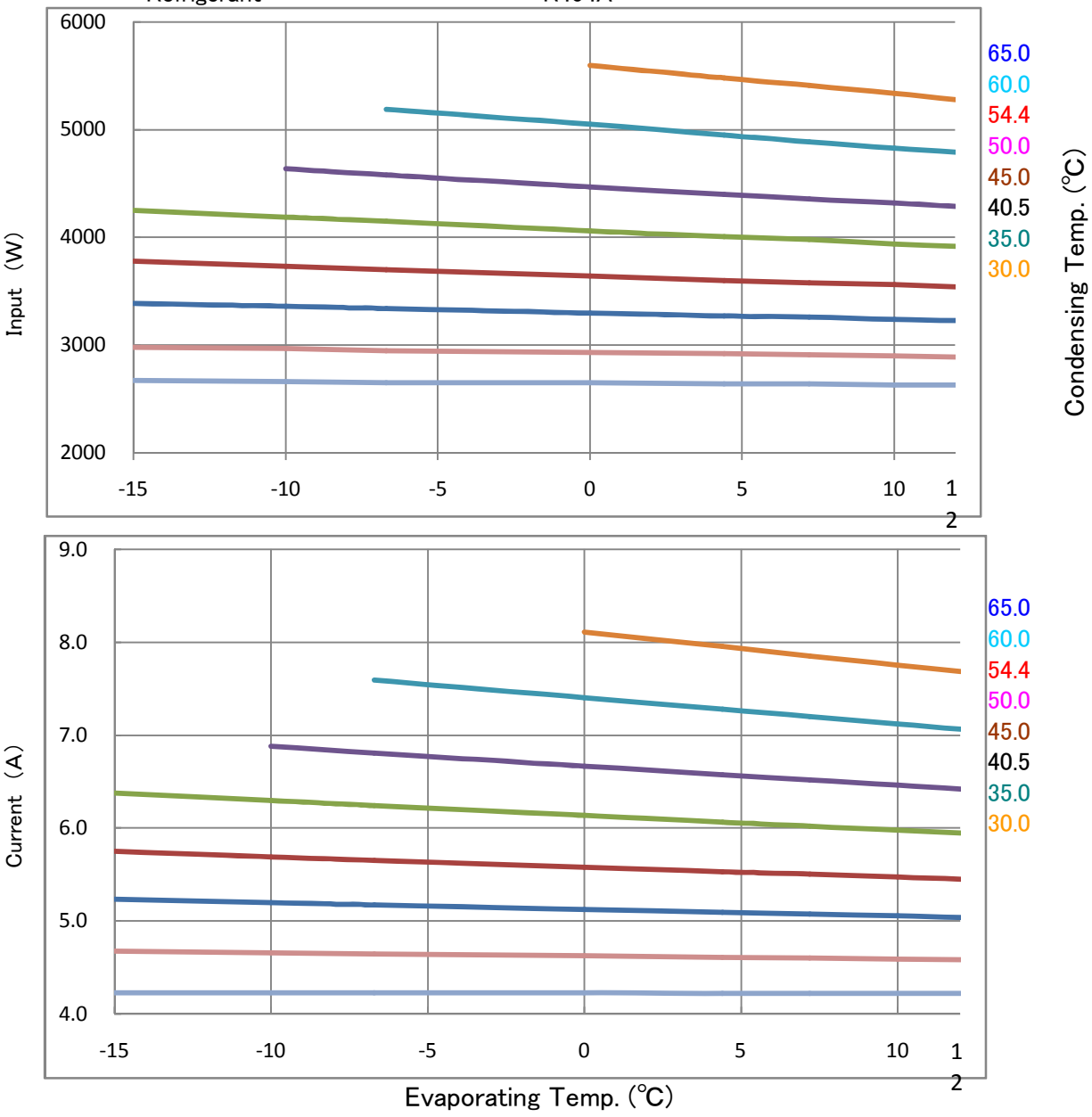

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Suction Gas Superheat(K)	11.1
Sub Cooled(K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R404A

Capacity (W)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-6.7	0	4.4	7.2	10	12
30	8,660	10,340	11,630	14,770	17,280	19,090	21,090	22,650
35	7,780	9,330	10,520	13,420	15,750	17,430	19,300	20,760
40.5	6,900	8,310	9,390	12,050	14,190	15,750	17,470	18,820
45.0	6,250	7,550	8,550	11,020	13,020	14,470	16,090	17,350
50.0	5,590	6,780	7,700	9,980	11,820	13,170	14,670	15,850
54.4		6,170	7,030	9,140	10,860	12,120	13,530	14,640
60.0			6,260	8,190	9,770	10,930	12,230	13,250
65.0				7,450	8,920	10,000	11,210	12,160

Input (W)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-6.7	0	4.4	7.2	10	12
30	2,670	2,660	2,650	2,650	2,640	2,640	2,630	2,630
35	2,980	2,970	2,950	2,930	2,920	2,910	2,900	2,890
40.5	3,390	3,360	3,340	3,300	3,270	3,260	3,240	3,230
45.0	3,780	3,730	3,700	3,640	3,600	3,580	3,560	3,540
50.0	4,250	4,190	4,150	4,060	4,010	3,980	3,940	3,920
54.4		4,640	4,580	4,470	4,400	4,360	4,320	4,290
60.0			5,190	5,050	4,950	4,890	4,830	4,790
65.0				5,600	5,480	5,410	5,340	5,280

Current (A)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-6.7	0	4.4	7.2	10	12
30	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
35	4.7	4.7	4.6	4.6	4.6	4.6	4.6	4.6
40.5	5.2	5.2	5.2	5.1	5.1	5.1	5.1	5.0
45.0	5.8	5.7	5.7	5.6	5.5	5.5	5.5	5.5
50.0	6.4	6.3	6.2	6.1	6.1	6.0	6.0	5.9
54.4		6.9	6.8	6.7	6.6	6.5	6.5	6.4
60.0			7.6	7.4	7.3	7.2	7.1	7.1
65.0				8.1	8.0	7.9	7.8	7.7

MassFlow (kg/H)

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-6.7	0	4.4	7.2	10	12
30	280	280	290	340	390	420	460	500
35	250	260	280	330	380	420	460	490
40.5	220	240	270	330	380	410	450	480
45.0	190	230	250	320	370	410	450	470
50.0	170	210	240	310	370	400	440	470
54.4		200	230	310	360	400	440	460
60.0			220	300	360	390	430	460
65.0				300	350	390	420	450

EER

Condensing Temp. (℃) \ Evaporating Temp. (℃)	-15	-10	-6.7	0	4.4	7.2	10	12
30	3.24	3.89	4.39	5.57	6.55	7.23	8.02	8.61
35	2.61	3.14	3.57	4.58	5.39	5.99	6.66	7.18
40.5	2.04	2.47	2.81	3.65	4.34	4.83	5.39	5.83
45.0	1.65	2.02	2.31	3.03	3.62	4.04	4.52	4.90
50.0	1.32	1.62	1.86	2.46	2.95	3.31	3.72	4.04
54.4		1.33	1.53	2.04	2.47	2.78	3.13	3.41
60.0			1.21	1.62	1.97	2.24	2.53	2.77
65.0				1.33	1.63	1.85	2.10	2.30

Coefficients of Polynominal Formula

	Capacity （W）	Input （W）	Current （A）	MassFlow (kg/h)
C1	2.509907E+04	1.887672E+03	2.926355E+00	3.975031E+02
C2	8.100563E+02	-5.606463E+00	-2.455740E-03	1.560719E+00
C3	-4.062878E+02	-2.061160E+00	1.221242E-02	-2.176156E+00
C4	1.192558E+01	-4.171884E-02	-8.015821E-05	5.601081E-01
C5	-1.075304E+01	5.402091E-01	5.664471E-04	3.213274E-01
C6	2.073687E+00	9.111618E-01	1.040268E-03	9.690330E-03
C7	8.814716E-02	9.773257E-04	-1.117090E-07	-1.532762E-03
C8	-8.654668E-02	1.713408E-03	2.208102E-06	-8.524688E-03
C9	4.537460E-02	-1.351126E-02	-1.673511E-05	-2.341807E-03
C10	7.910310E-09	1.698947E-10	5.232131E-12	8.829926E-09

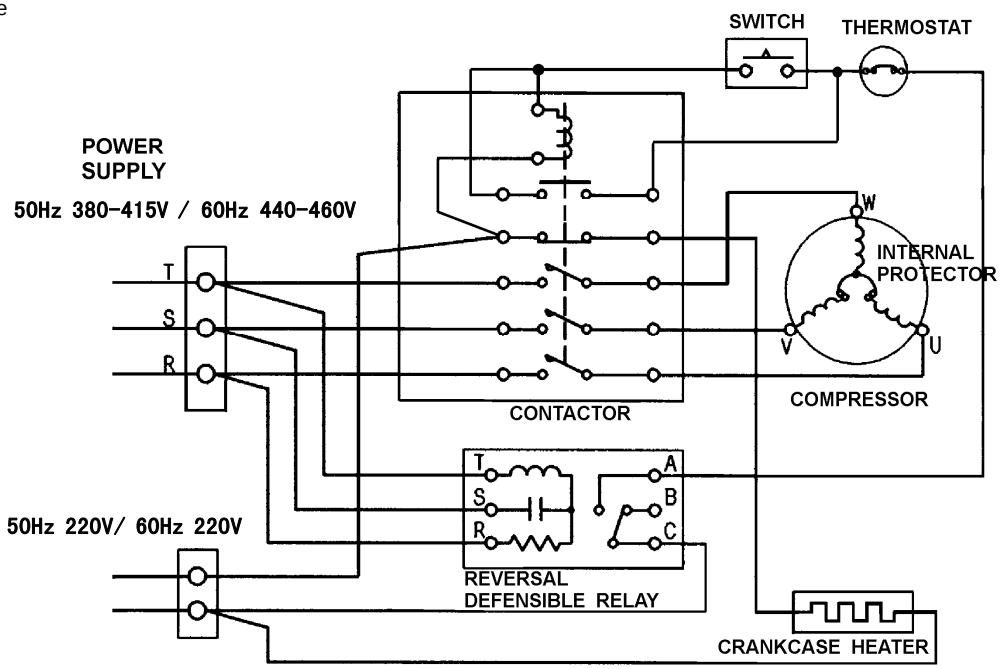
Note:The polynomial coefficients subject to change without notice.

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

X——CAPACITY(W) OR POWER(W) OR CURRENT(A) OR MassFlow(kg/H)

S——EVAPORATING TEMP, °C

D——CONDENSING TEMP, °C

WIRING DIAGRAM

C-SB/C Series 3 phase