

SPECIFICATIONS OF COMPRESSOR

Model No: LCC205LA04

Output : 12HP

Temporary

Sonyo Compressor (Dalian) Co.,Ltd.

05/Jan/24

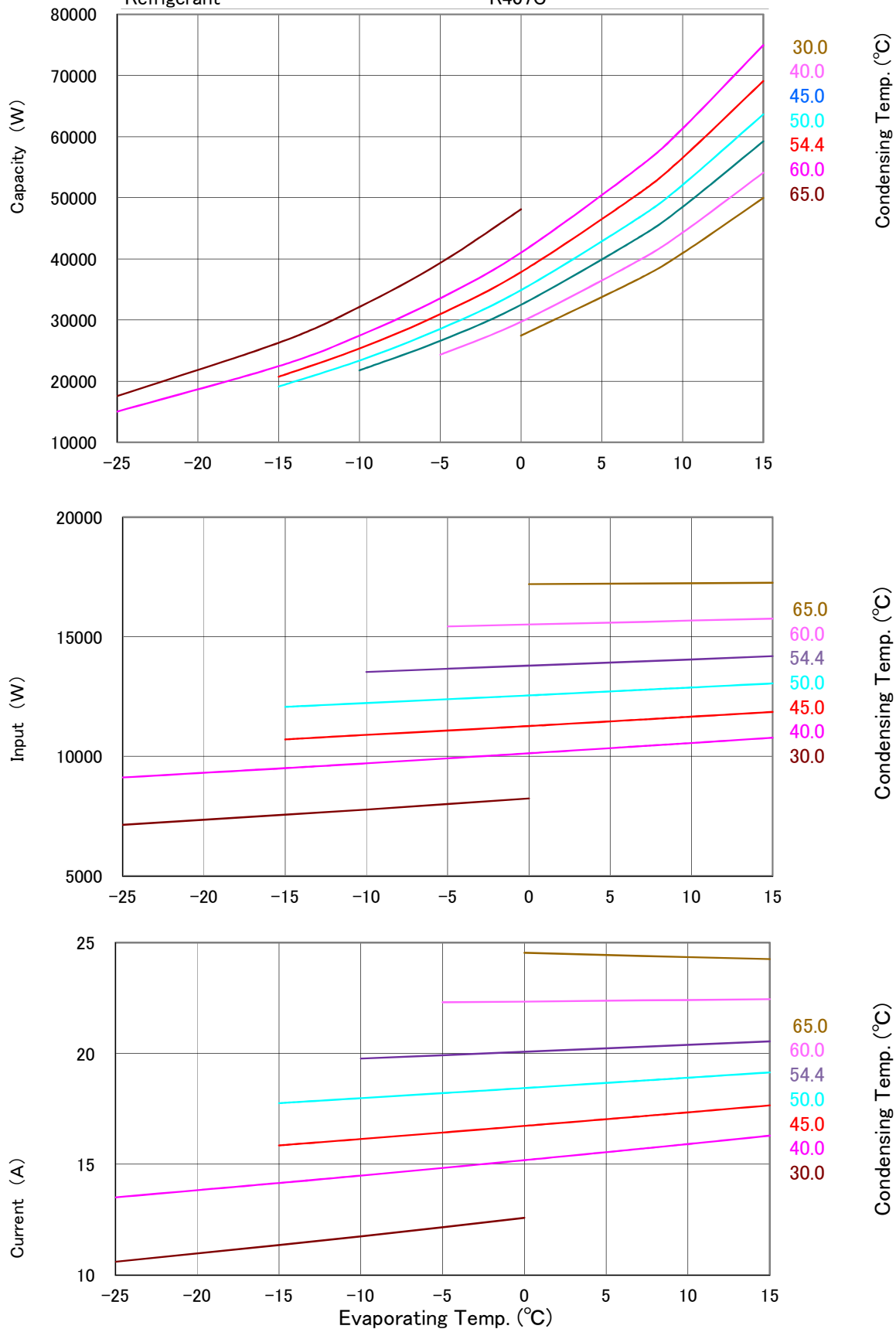
GENERAL SPECIFICATIONS

Model No:		LCC205LA04	
Application			
Evaporating Temp Range	(°C)	-25 ~ 15	
Refrigerant		R407C	
Compressor Cooling		Natural Cooling	
Rated Performance			
Capacity	(W)	36250/43350	
Input	(W)	11560/13980	
Current	(A)	19.5/20.3	
Revolution	(min-1)	2900	
Sound Level	(dB(A))	-	
Rating Conditions			
Power Source		3-PH 50/60Hz	380,415/440,460V
Evaporating Temp	(°C)	7.2	
Condensing Temp	(°C)	54.4	
Suction Gas Temp	(°C)	18.5	
Liquid Temp	(°C)	46	
Ambient Temp	(°C)	35.0	
Measuring Point of Sound Level			
Distance from the Compressor	(m)	1.0	
Compressor			
Design		Hermetic Scroll	
Displacement	(cm3)	205.0	
Suction Line Connection	(Φ mm 0D)	25.4	
Discharge Line Connection	(Φ mm 0D)	19.05	
Oil	(mL)	2800 (FV68S)	
Mass(Incl.Oil)	(kg)	70	
Motor			
Type		3-PH Induction Motor(3IR)	
Pole		2	
Rated Power Source		3-PH 50/60Hz	380,415/440,460V
Voltage Range	(V)	342~506	
Starting Current	(A)	-	

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PERFORMANCE CURVE

Code No.	LCC205LA04
Power Source	3-PH 60Hz 440V
Condensing Temp.(°C)	30、40、45、50、54.4、60、65
Suction Gas Superheat(K)	9
Sub Cooled(K)	8.5
Compressor Cooling	Natural Cooling
Refrigerant	R407C



PERFORMANCE DATA

Code No.	LCC205LA04
Power Source	3-PH 60Hz 440V
Condensing Temp.(°C)	30、40、45、50、54.4、60、65
Suction Gas Temp.(°C)	9
Sub Cooled(K)	8.5
Compressor Cooling	Natural Cooling
Refrigerant	R407C

Capacity (W)

		Evaporating Temp. (°C)							
		-25	-15	-10	-5	0	7.2	10	15
Condensing Temp. (°C)	30.0	17,570	26,290	32,160	39,330	48,110			
	40.0	15,030	22,460	27,460	33,560	41,030	54,790	61,320	74,960
	45.0		20,730	25,340	30,970	37,850	50,520	56,530	69,090
	50.0		19,130	23,380	28,560	34,900	46,570	52,100	63,650
	54.4			21,780	26,600	32,500	43,350	48,490	59,230
	60.0				24,330	29,710	39,610	44,300	54,100
	65.0					27,460	36,610	40,930	49,970

Input (W)

		Evaporating Temp. (°C)							
		-25	-15	-10	-5	0	7.2	10	15
Condensing Temp. (°C)	30.0	7,140	7,560	7,780	8,010	8,240			
	40.0	9,120	9,510	9,710	9,920	10,130	10,440	10,560	10,780
	45.0		10,710	10,900	11,080	11,270	11,550	11,660	11,860
	50.0		12,070	12,230	12,390	12,550	12,790	12,880	13,050
	54.4			13,530	13,660	13,790	13,980	14,050	14,190
	60.0				15,430	15,510	15,630	15,680	15,760
	65.0					17,200	17,230	17,240	17,260

Current (A)

		Evaporating Temp. (°C)							
		-25	-15	-10	-5	0	7.2	10	15
Condensing Temp. (°C)	30.0	10.6	11.4	11.8	12.2	12.6			
	40.0	13.5	14.2	14.5	14.8	15.2	15.7	15.9	16.3
	45.0		15.9	16.1	16.4	16.7	17.2	17.3	17.7
	50.0		17.8	18.0	18.2	18.4	18.8	18.9	19.1
	54.4			19.8	19.9	20.1	20.3	20.4	20.5
	60.0				22.3	22.3	22.4	22.4	22.4
	65.0					24.5	24.4	24.3	24.3

PERFORMANCE DATA

MassFlow(kg/H)		Evaporating Temp. (°C)							
Condensing Temp. (°C)		-25	-15	-10	-5	0	7.2	10	15
	30.0	307	467	578	709	861			
	40.0	350	465	558	675	815	1,058	1,166	1,377
	45.0		464	548	658	792	1,031	1,137	1,348
	50.0		465	539	641	770	1,003	1,110	1,320
	54.4			531	627	751	980	1,085	1,296
	60.0				609	726	951	1,055	1,267
	65.0					705	925	1,029	1,242

Coefficients of Polynomial Formula

	Capacity (W)	Input (W)	Current (A)	MassFlow(kg/H)
C1	7.639652E+04	5.832691E+03	8.748553E+00	1.013547E+03
C2	3.079686E+03	2.583242E+01	5.322966E-02	3.758828E+01
C3	-1.096756E+03	-7.135971E-01	2.944291E-02	-5.371951E+00
C4	5.123376E+01	2.758070E-01	5.887577E-04	1.907611E-01
C5	-4.241472E+01	1.598094E+00	2.942906E-03	-1.673019E-01
C6	5.287013E+00	2.701407E+00	3.285996E-03	9.890602E-03
C7	3.519402E-01	2.199589E-04	7.015911E-07	-2.109260E-05
C8	-4.264405E-01	-4.457884E-03	-1.000653E-05	7.121959E-03
C9	1.785819E-01	-2.930778E-02	-6.179666E-05	-2.671968E-04
C10	-3.823745E-08	2.192791E-08	4.799701E-11	1.156089E-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)

S—EVAPORATING TEMP, °C

D—CONDENSING TEMP, °C

