SPECIFICATIONS OF COMPRESSOR

Model No: 9CC128LA04

Output : 12 HP

Sonyo Compressor (Dalian) Co., Ltd.

8-Jul-24

GENERAL SPECIFICATIONS

Model No:		9CC128LA04
Application		
Evaporating Temp Range	(℃)	-25.0 ～ 27.0
Refrigerant		R32
Compressor Cooling		Natural Cooling
Rated Performance		
Capacity	(W)	34900/41900
Input	(W)	11100/13350
Current	(A)	20/24.0
Revolution	(min^{-1})	2900/3450
Sound Level	(dB(A))	72Max./
Rating Conditions		
Power Source		3-PH 50Hz 380V/3-PH 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)	128.1
Suction Line Connection	(Φmm 0D)	34.93
Discharge Line Connection	(Φmm 0D)	22.22
Oil	(ml)	2700 (FW68S)
Mass(Incl.Oil)	(kg)	73.6
Motor		
Type		3-PH Induction Motor(3IR)
Pole		2
Rated Power Source		3-PH 50Hz 380-415V/3PH 60Hz 440-460V
Voltage Range	(V)	342～456 /396～506
Starting Current	(A)	-

Sonyo Compressor (Dalian) Co., Ltd.

PERFORMANCE DATA

Compressor Model	**9CC128LA04**
Power Source	**3PH 50Hz 380-415V**
Suction Gas Superheat(℃)	**11.1**
Sub Cooling(℃)	**8.3**
Compressor Cooling	**Natural Cooling**
Refrigerant	**R32**

CAPACITY(W)

Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	12	15
35.0	18,810	23,230	26,500	34,010	39,570	43,370	50,350	55,010
40.5	18,360	22,180	25,090	31,970	37,190	40,800	47,510	52,040
45.0	18,000	21,360	23,990	30,380	35,330	38,790	45,290	49,710
50.0	17,610	20,480	22,830	28,700	33,370	36,670	42,940	47,240
54.4		19,740	21,850	27,300	31,730	34,900	40,970	45,170
60.0			20,670	25,610	29,760	32,770	38,600	42,670
65.0				24,210	28,110	30,990	36,610	40,570

POWER(W)

Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	12	15
35.0	7,240	7,310	7,330	7,320	7,280	7,250	7,160	7,080
40.5	8,020	8,110	8,160	8,190	8,170	8,140	8,070	8,010
45.0	8,740	8,870	8,930	9,000	9,010	8,990	8,940	8,890
50.0	9,620	9,790	9,880	10,010	10,050	10,060	10,040	10,000
54.4		10,690	10,810	11,000	11,070	11,100	11,110	11,100
60.0			12,110	12,380	12,510	12,570	12,640	12,650
65.0				13,740	13,920	14,020	14,140	14,190

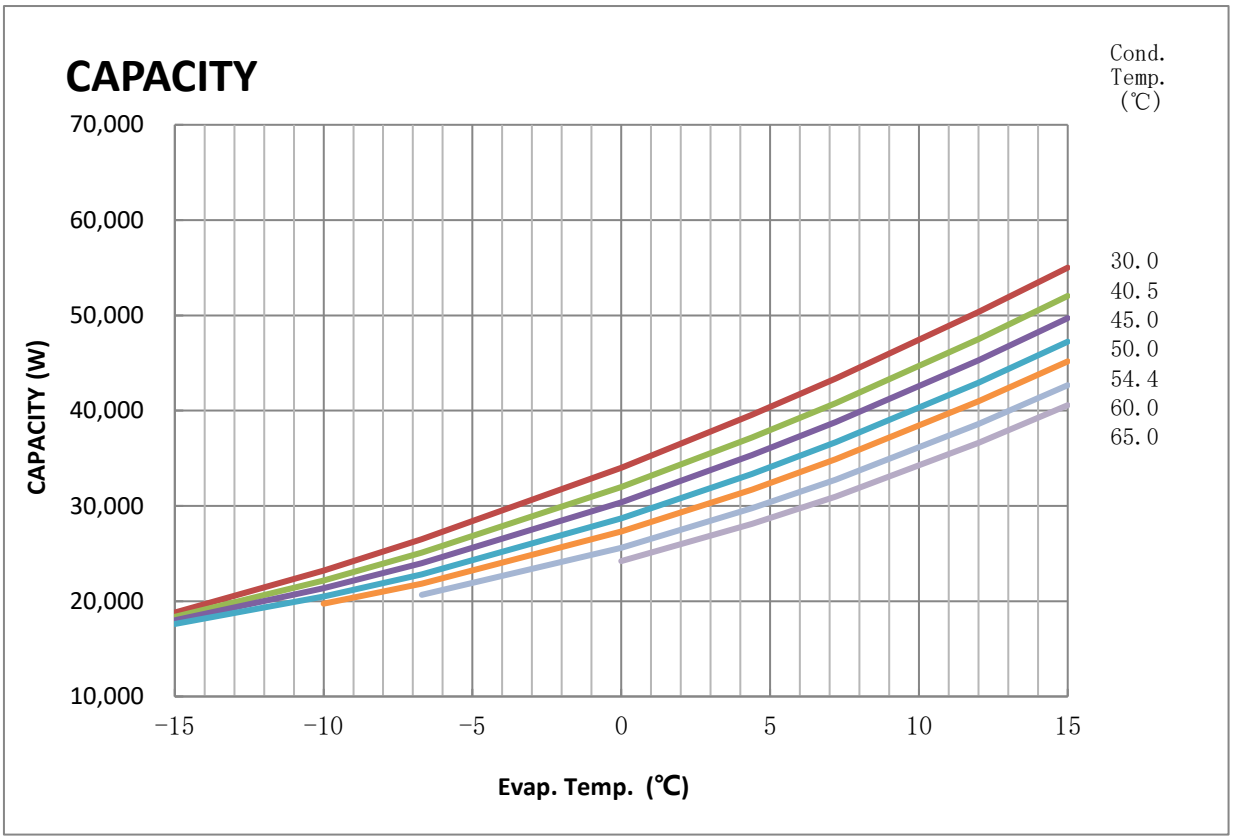
CURRENT(A) @380V

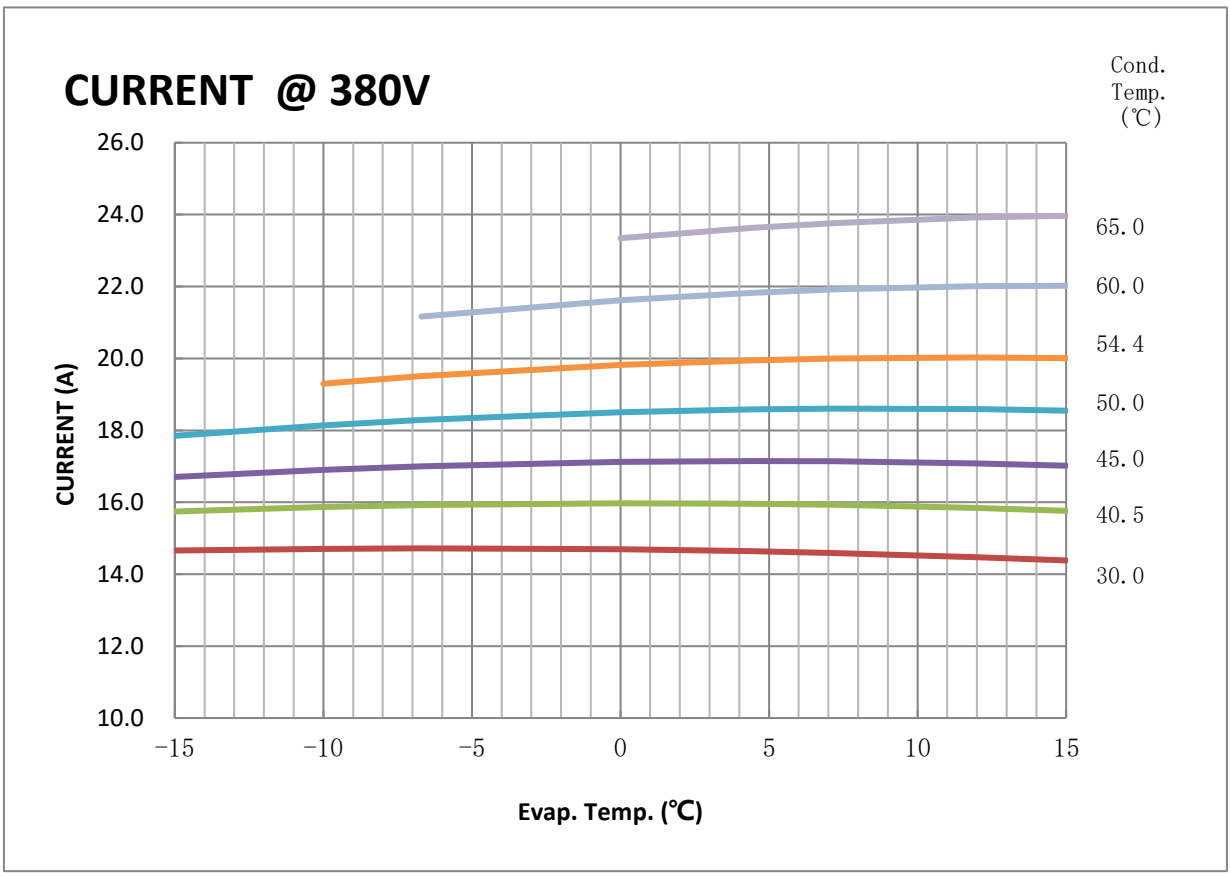
Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	12	15
35.0	14.7	14.7	14.7	14.7	14.6	14.6	14.5	14.4
40.5	15.7	15.9	15.9	16.0	16.0	15.9	15.8	15.8
45.0	16.7	16.9	17.0	17.1	17.1	17.1	17.1	17.0
50.0	17.8	18.1	18.3	18.5	18.6	18.6	18.6	18.5
54.4		19.3	19.5	19.8	19.9	20.0	20.0	20.0
60.0			21.2	21.6	21.8	21.9	22.0	22.0
65.0				23.3	23.6	23.8	23.9	24.0

FLOW (kg/h) @380V

Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	12	15
35.0	244.0	299.0	340.3	436.1	507.8	557.0	648.0	709.0
40.5	251.4	300.5	338.5	429.2	498.6	546.9	637.1	698.3
45.0	257.5	301.7	337.0	423.6	491.2	538.8	628.4	689.6
50.0	264.4	303.2	335.5	417.4	483.1	529.8	618.8	680.2
54.4		304.5	334.2	412.0	476.0	522.0	610.5	672.0
60.0			332.6	405.3	467.0	512.2	600.1	661.8
65.0				399.3	459.2	503.5	590.9	652.8

Compressor Model(Code)	**9CC128LA04**
Power Source	**3PH 50Hz 380-415V**





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	9CC128LA04
Power Source	3PH 50Hz 380-415V
Suction Gas Superheat (K)	11.1
Sub Cooling (K)	8.3
Compressor Cooling	Natural Cooling
Refrigerant	R32

X=C1+C2*(S)+C3*D+C4*(S2)+C5*(S*D)+C6*(D2)+C7*(S3)+C8*(D*S2)+C9*(S*D2) +C10*(D3)

X——CAPACITY(W) OR POWER(W) OR CURRENT(A) OR FLOW(kg/h)

S——EVAPORATING TEMP, °C

D——CONDENSING TEMP, °C

380V-50Hz	CAPACITY (W)	POWER (W)	CURRENT (A)	FLOW (kg/h)
C1	4.927809E+04	5.084168E+03	9.717620E+00	4.827893E+02
C2	1.828328E+03	1.233737E+01	-1.899338E-02	1.947876E+01
C3	-4.959058E+02	-1.678765E+01	6.324763E-02	-1.390431E+00
C4	5.264106E+00	-2.503832E-01	8.103627E-04	2.735471E-02
C5	-1.993730E+01	-1.707628E+00	-1.033928E-03	-1.166533E-01
C6	1.691881E+00	2.306678E+00	2.251914E-03	1.637974E-03
C7	-7.251481E-03	-2.296937E-04	-1.066666E-06	2.025138E-05
C8	2.236152E-01	-1.292466E-02	-4.408787E-05	4.337189E-03
C9	6.299704E-02	3.436886E-02	3.768169E-05	8.382113E-05
C10	5.712681E-08	4.458348E-09	7.765248E-12	-1.903165E-10

Note:The polynomial coefficients subject to change without notice.

PERFORMANCE DATA

Compressor Model	**9CC128LA04**
Power Source	**3PH 60Hz 440-460V**
Suction Gas Superheat(℃)	**11.1**
Sub Cooling(℃)	**8.3**
Compressor Cooling	**Natural Cooling**
Refrigerant	**R32**

CAPACITY(W)

Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	12	15
35.0	22,580	27,890	31,820	40,830	47,510	52,060	60,450	66,050
40.5	22,050	26,630	30,130	38,380	44,650	48,980	57,030	62,470
45.0	21,620	25,640	28,810	36,480	42,420	46,570	54,370	59,680
50.0	21,140	24,590	27,410	34,460	40,060	44,030	51,550	56,720
54.4		23,700	26,230	32,780	38,090	41,900	49,190	54,230
60.0			24,810	30,750	35,730	39,340	46,340	51,230
65.0				29,060	33,750	37,200	43,950	48,710

POWER(W)

Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	12	15
35.0	8,710	8,790	8,810	8,810	8,760	8,720	8,610	8,520
40.5	9,650	9,760	9,810	9,850	9,830	9,790	9,710	9,630
45.0	10,510	10,660	10,740	10,820	10,830	10,820	10,750	10,690
50.0	11,570	11,780	11,890	12,040	12,090	12,100	12,070	12,030
54.4		12,860	13,000	13,230	13,320	13,350	13,370	13,350
60.0			14,570	14,890	15,050	15,120	15,200	15,220
65.0				16,530	16,750	16,860	17,010	17,070

CURRENT(A) @440V

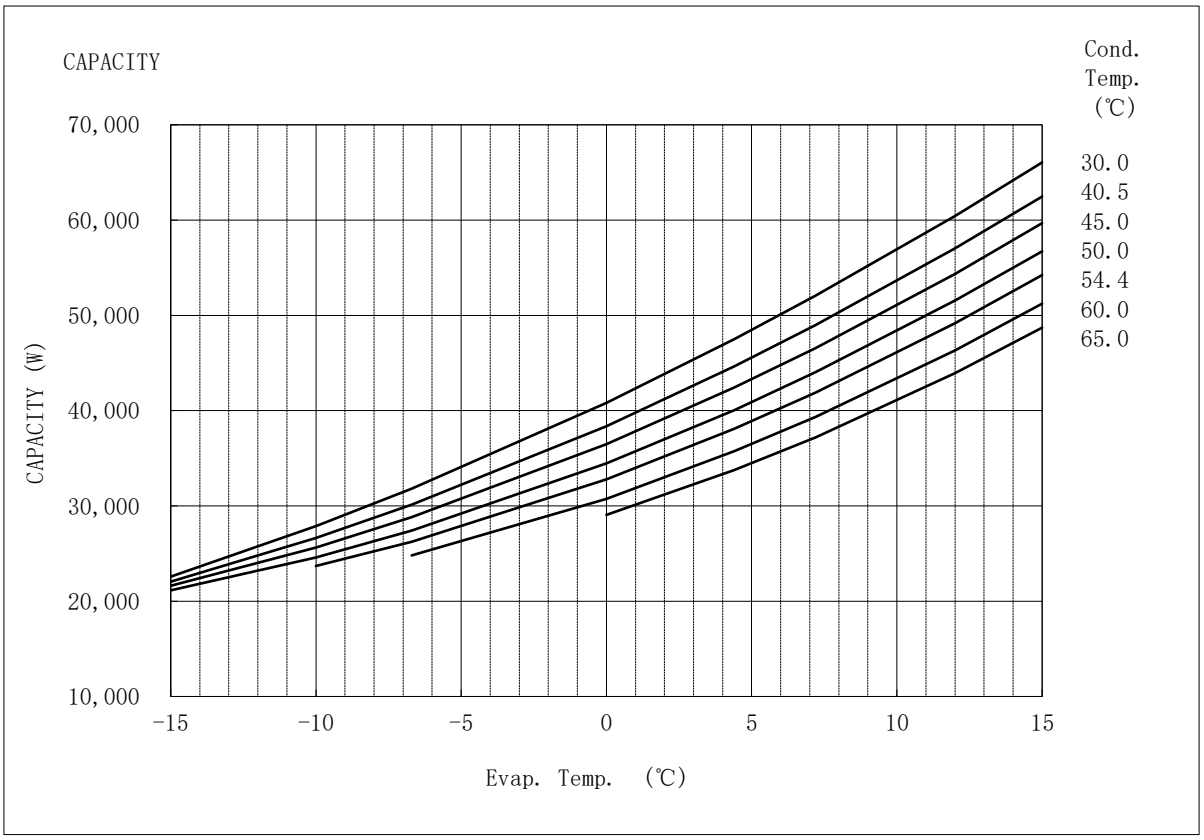
Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	12	15
35.0	17.6	17.6	17.7	17.6	17.6	17.5	17.4	17.3
40.5	18.9	19.0	19.1	19.2	19.1	19.1	19.0	18.9
45.0	20.0	20.3	20.4	20.5	20.6	20.6	20.5	20.4
50.0	21.4	21.8	21.9	22.2	22.3	22.3	22.3	22.3
54.4		23.2	23.4	23.8	23.9	24.0	24.0	24.0
60.0			25.4	25.9	26.2	26.3	26.4	26.4
65.0				28.0	28.4	28.5	28.7	28.8

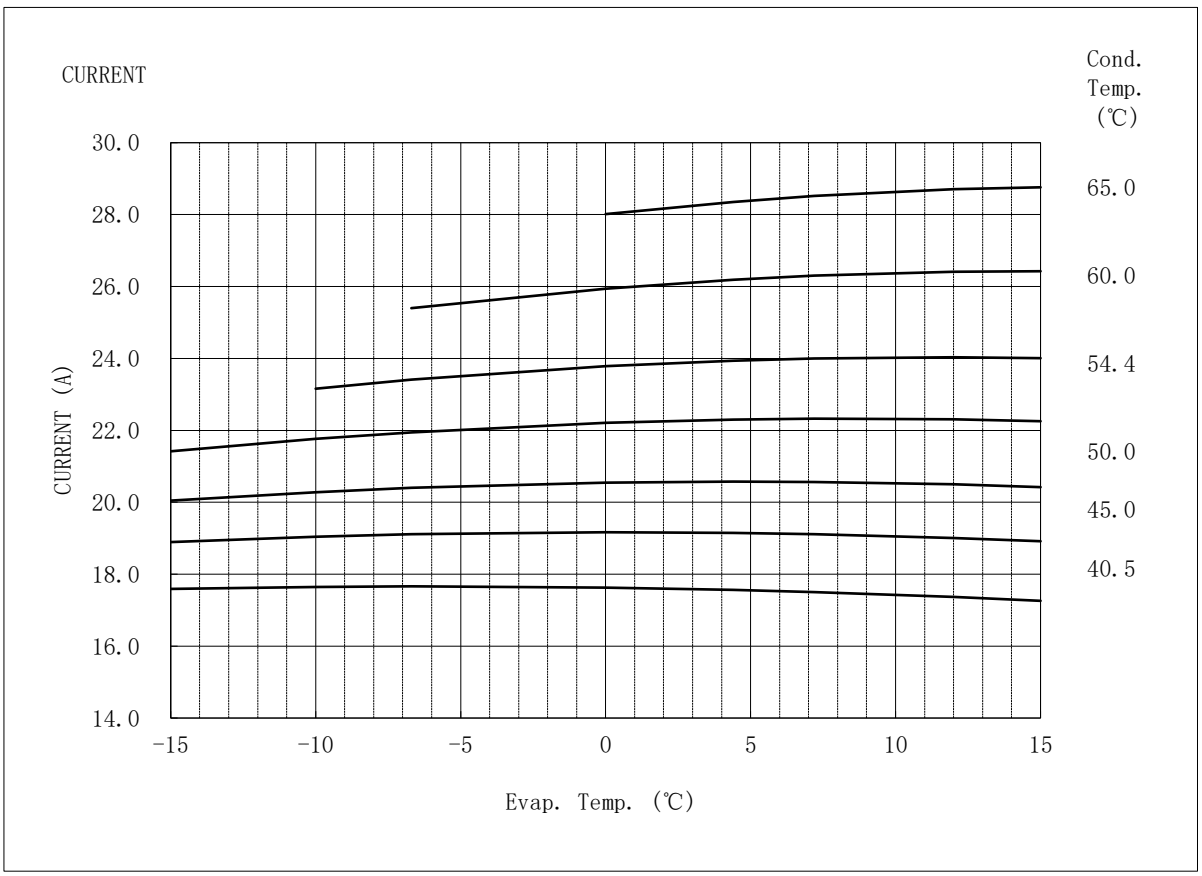
FLOW (kg/h) @440V

Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	12	15
35.0	300.0	360.1	406.3	519.0	609.6	675.2	804.7	898.0
40.5	299.9	358.3	403.0	511.5	598.2	660.9	784.0	872.4
45.0	299.8	356.8	400.2	505.4	589.1	649.4	767.5	852.0
50.0	299.7	355.2	397.3	498.7	579.1	636.8	749.6	829.9
54.4		353.7	394.6	492.9	570.4	626.0	734.1	811.0
60.0			391.3	485.7	559.6	612.5	714.9	787.5
65.0				479.2	550.2	600.7	698.2	767.1

Compressor Model(Code) **9CC128LA04**

Power Source **3PH 60Hz 440-460V**





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**9CC128LA04**
Power Source	**3PH 60Hz 440-460V**
Suction Gas Superheat (K)	**11.1**
Sub Cooling (K)	**8.3**
Compressor Cooling	**Natural Cooling**
Refrigerant	**R32**

X=C1+C2*(S)+C3*D+C4*(S2)+C5*(S*D)+C6*(D2)+C7*(S3)+C8*(D*S2)+C9*(S*D2) +C10*(D3)

X——CAPACITY(W) OR POWER(W) OR CURRENT(A) OR FLOW(kg/h)

S——EVAPORATING TEMP, °C

D——CONDENSING TEMP, °C

440V-60Hz	CAPACITY (W)	POWER (W)	CURRENT (A)	FLOW (kg/h)
C1	5.910535E+04	6.136422E+03	1.166073E+01	5.675696E+02
C2	2.199198E+03	1.488327E+01	-2.284006E-02	2.530996E+01
C3	-5.928657E+02	-2.116625E+01	7.591544E-02	-1.451366E+00
C4	6.387781E+00	-3.164518E-01	9.712625E-04	5.087255E-01
C5	-2.415424E+01	-2.043260E+00	-1.238524E-03	-2.001708E-01
C6	2.004797E+00	2.785281E+00	2.702105E-03	1.476332E-03
C7	-7.142667E-03	-9.316995E-04	-1.288317E-06	3.637115E-03
C8	2.667957E-01	-1.514435E-02	-5.287942E-05	-4.337799E-03
C9	7.818300E-02	4.113395E-02	4.519436E-05	6.335433E-04
C10	6.288155E-08	-7.130287E-10	9.602651E-13	-4.807656E-10

Note:The polynomial coefficients subject to change without notice.