

# SPECIFICATIONS OF COMPRESSOR

Model No: 7CB110SA01

Output : 7 HP

Temporary

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

11-Oct-22

# GENERAL SPECIFICATIONS

Model No:	7CB110SA01	
Application		
Evaporating Temp Range	(°C)	-15.0 ~ 12.0
Refrigerant	R290	
Compressor Cooling	Natural Cooling	
Rated Performance		
Capacity	(W)	17120
Input	(W)	5070
Current	(A)	9.5
Revolution	(min <sup>-1</sup> )	
Sound Level	(dB(A))	
Rating Conditions		
Power Source	3-PH 380V 50Hz	
Evaporating Temp	(°C)	7.2
Condensing Temp	(°C)	54.4
Suction Gas Temp	(°C)	18.3
Liquid Temp	(°C)	43.8
Ambient Temp	(°C)	35.0
Measuring Point of Sound Level		
Distance from the Compressor	(m)	1.0
Compressor		
Design	Hermetic Scroll	
Displacement	(cm <sup>3</sup> )	110.0
Suction Line Connection	(Φ mm OD)	22.22
Discharge Line Connection	(Φ mm OD)	12.7
Oil	(ml)	1700 ( PZ68S )
Mass(Incl.Oil)	(kg)	
Motor		
Type	3-PH Induction Motor(3IR)	
Pole	2	
Rated Power Source	3-PH 50Hz 380-415V	
Voltage Range	(V)	342~456
Starting Current	(A)	73

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**PERFORMANCE DATA**

Compressor Model	<b>7CB110SA01</b>
Power Source	<b>3PH 50Hz 380-415V</b>
Suction Gas Superheat(K)	<b>11.1</b>
Sub Cooling(K)	<b>8.3</b>
Compressor Cooling	<b>Natural Cooling</b>
Refrigerant	<b>R290</b>

**CAPACITY(W)**

Condensing Temperature(°C)	Evaporating Temperature(°C)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	8,220	10,210	11,780	15,760	19,070	21,530	24,310	26,510
40.5	7,750	9,620	11,090	14,800	17,890	20,180	22,770	24,820
45.0	7,390	9,160	10,550	14,060	16,970	19,140	21,580	23,510
50.0	7,000	8,670	9,980	13,270	16,010	18,040	20,320	22,130
54.4		8,260	9,500	12,620	15,200	17,120	19,280	20,980
60.0			8,920	11,830	14,240	16,020	18,030	19,610
65.0				11,170	13,430	15,110	16,980	18,470

**POWER(W)**

Condensing Temperature(°C)	Evaporating Temperature(°C)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	3,280	3,350	3,390	3,450	3,460	3,470	3,470	3,470
40.5	3,640	3,710	3,760	3,820	3,840	3,850	3,860	3,860
45.0	3,970	4,050	4,100	4,170	4,200	4,210	4,210	4,220
50.0	4,380	4,470	4,520	4,590	4,630	4,650	4,660	4,660
54.4		4,870	4,920	5,010	5,050	5,070	5,090	5,090
60.0			5,480	5,580	5,630	5,660	5,680	5,700
65.0				6,140	6,200	6,240	6,270	6,290

**CURRENT(A)**

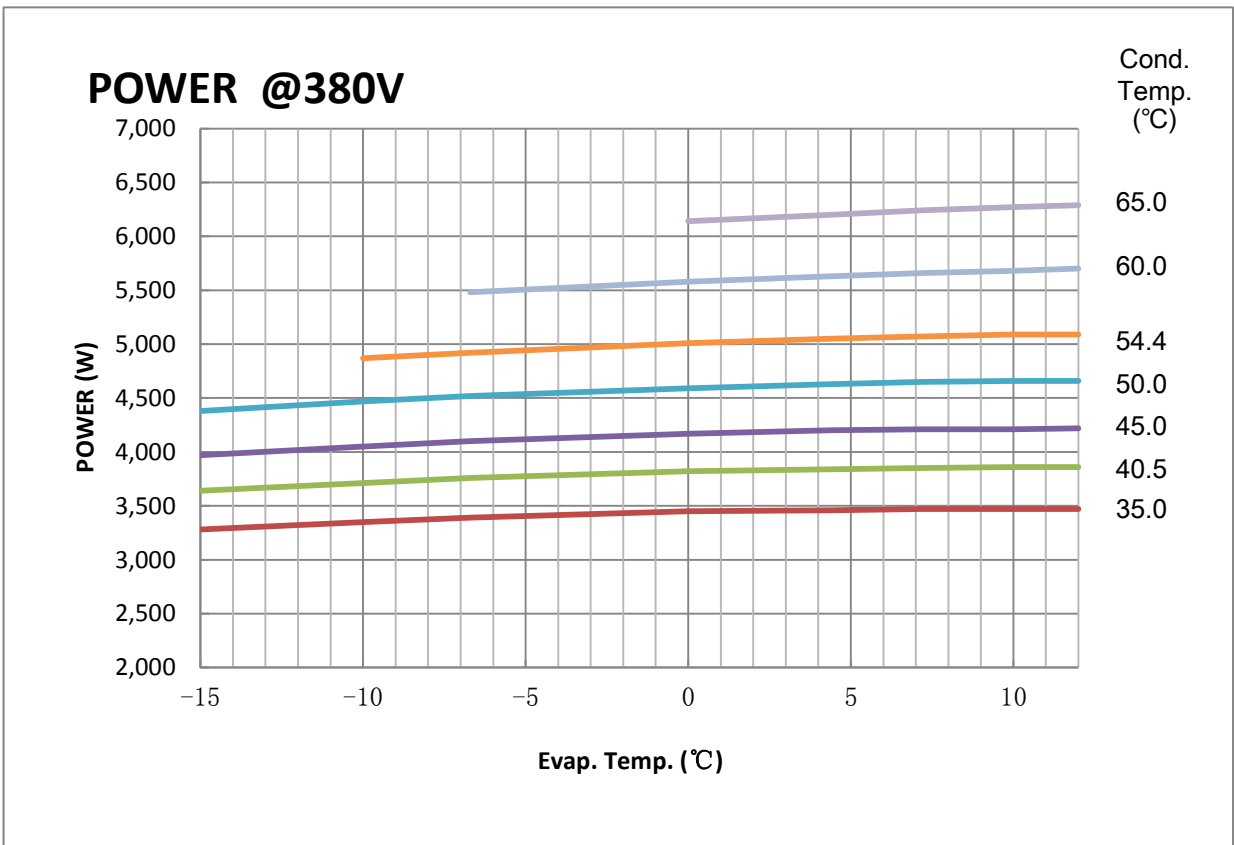
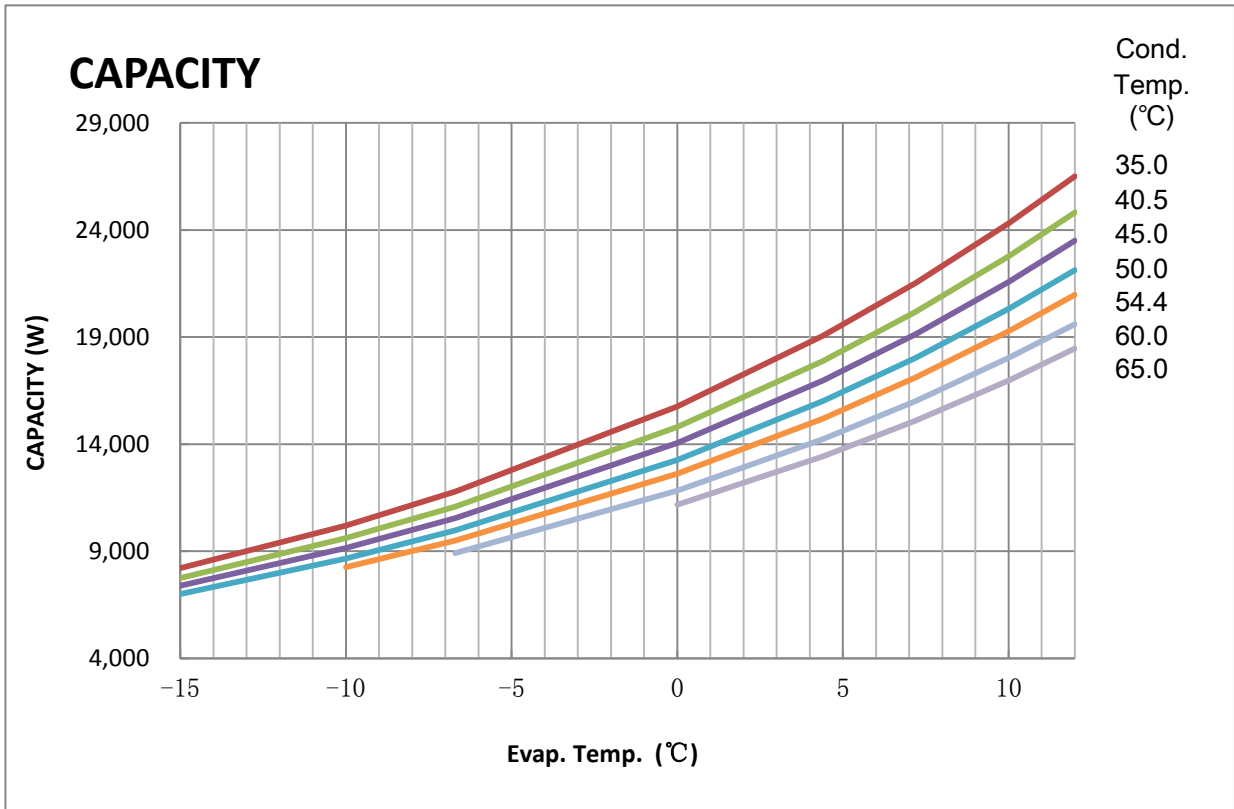
Condensing Temperature(°C)	Evaporating Temperature(°C)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	7.4	7.4	7.5	7.5	7.5	7.5	7.5	7.5
40.5	7.8	7.9	8.0	8.0	8.0	8.1	8.1	8.0
45.0	8.2	8.3	8.4	8.4	8.5	8.5	8.5	8.5
50.0	8.7	8.8	8.9	9.0	9.0	9.0	9.0	9.0
54.4		9.2	9.3	9.4	9.5	9.5	9.5	9.5
60.0			9.9	10.1	10.1	10.2	10.2	10.2
65.0				10.7	10.7	10.8	10.8	10.8

**REFRIG FLOW(kg/h)**

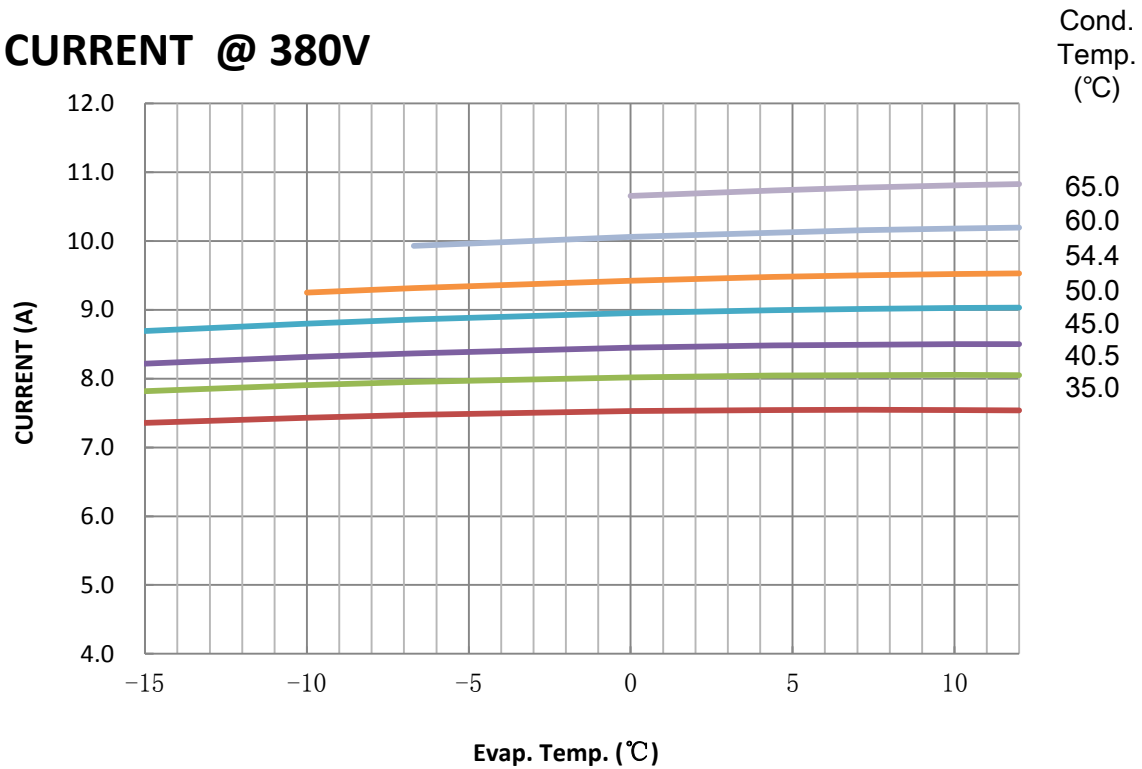
Condensing Temperature(°C)	Evaporating Temperature(°C)							
	-15	-10	-6.7	0	4.4	7.2	10	12
35.0	97.1	118.1	134.3	174.6	207.4	231.4	258.2	279.2
40.5	97.0	117.6	133.6	173.1	205.1	228.5	254.6	275.0
45.0	96.9	117.3	133.0	171.8	203.2	226.2	251.7	271.7
50.0	96.8	116.9	132.4	170.4	201.2	223.6	248.5	268.0
54.4		116.5	131.8	169.2	199.4	221.4	245.8	264.8
60.0			131.1	167.7	197.2	218.6	242.3	260.8
65.0				166.4	195.2	216.1	239.3	257.3

Compressor Model(Code)  
Power Source

7CB110SA01  
3PH 50Hz 380-415V



## CURRENT @ 380V



## COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model **7CB110SA01**  
 Power Source **3PH 50Hz 380-415V**  
 Suction Gas Superheat (K) **11.1**  
 Sub Cooling (K) **8.3**  
 Compressor Cooling **Natural Cooling**  
 Refrigerant **R290**

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

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

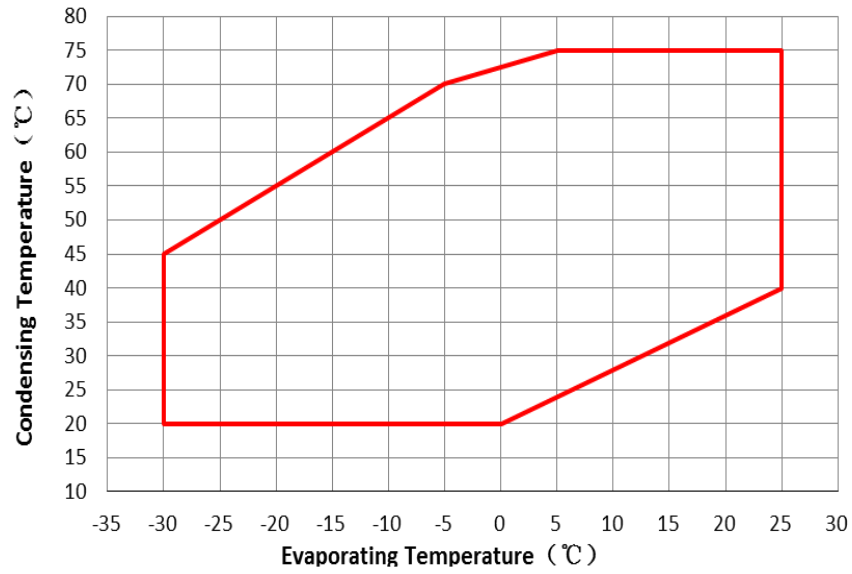
S—EVAPORATING TEMP, °C

D—CONDENSING TEMP, °C

<b>380V-50Hz</b>	<b>CAPACITY (W)</b>	<b>POWER (W)</b>	<b>CURRENT (A)</b>	<b>FLOW (kg/h)</b>
1	2.306975E+04	2.311250E+03	5.278086E+00	1.846662E+02
2	1.073945E+03	7.571942E+00	1.401793E-04	7.981942E+00
3	-2.398232E+02	1.448864E+00	4.274271E-02	-3.003298E-01
4	2.151083E+01	-4.142669E-01	-3.990665E-04	1.660418E-01
5	-1.301191E+01	-2.431034E-01	-9.899288E-06	-3.457996E-02
6	8.749025E-01	8.841505E-01	6.152428E-04	2.900200E-04
7	1.811895E-01	1.047727E-03	8.608803E-08	1.532784E-03
8	-1.828001E-01	2.103189E-03	-1.330956E-07	-8.460159E-04
9	5.635048E-02	5.586786E-03	4.685396E-06	6.952296E-05
10	-1.740718E-08	-4.824843E-09	2.660625E-12	1.068843E-10

# Operating Envelope

Refrigerant : R290



# Compressor Outline Drawing

