SPECIFICATIONS OF COMPRESSOR

Model No: 9CE069LA04

Output : 6 HP

Temporary

Sonyo Compressor (Dalian) Co., Ltd.

19-Jun-24

GENERAL SPECIFICATIONS

Model No:		9CE069LA04
Application		
Evaporating Temp Range	(℃)	-25.0 ～ 27.0
Refrigerant		R32
Compressor Cooling		Natural Cooling
Rated Performance		
Capacity	(W)	19000/22800
Input	(W)	6100/7130
Current	(A)	10.3/12.5
Revolution	(min^{-1})	2900/3450
Sound Level	(dB(A))	
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)	69.0
Suction Line Connection	(Φmm 0D)	22.22
Discharge Line Connection	(Φmm 0D)	12.7
Oil	(ml)	1600 (FW68S)
Mass(Incl.Oil)	(kg)	
Motor		
Type		3-PH Induction Motor(3IR)
Pole		2
Rated Power Source		3-PH 50Hz 380-400V/ 3PH 60Hz 440-460V
Voltage Range	(V)	342～440V/ 396V～506V
Starting Current	(A)	

Sonyo Compressor (Dalian) Co., Ltd.

PERFORMANCE DATA

Compressor Model	**9CE069LSA04**
Power Source	**3PH 50Hz 380-400V**
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	10	15
35.0	9,820	12,010	13,720	17,980	21,470	24,040	26,910	32,920
40.5	9,420	11,460	13,050	16,960	20,160	22,500	25,110	30,540
45.0	9,110	11,030	12,510	16,170	19,140	21,300	23,710	28,710
50.0	8,770	10,560	11,940	15,330	18,060	20,050	22,250	26,800
54.4		10,170	11,460	14,620	17,160	19,000	21,040	25,230
60.0			10,880	13,780	16,080	17,750	19,590	23,360
65.0				13,060	15,180	16,710	18,390	21,810

POWER(W)

Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	10	15
35.0	3,850	3,880	3,890	3,880	3,850	3,820	3,780	3,700
40.5	4,360	4,390	4,400	4,390	4,360	4,340	4,300	4,230
45.0	4,850	4,880	4,890	4,880	4,860	4,840	4,810	4,750
50.0	5,480	5,500	5,510	5,500	5,490	5,470	5,450	5,410
54.4		6,110	6,110	6,110	6,110	6,100	6,090	6,070
60.0			6,980	6,980	6,990	6,990	7,000	7,010
65.0				7,840	7,860	7,880	7,910	7,960

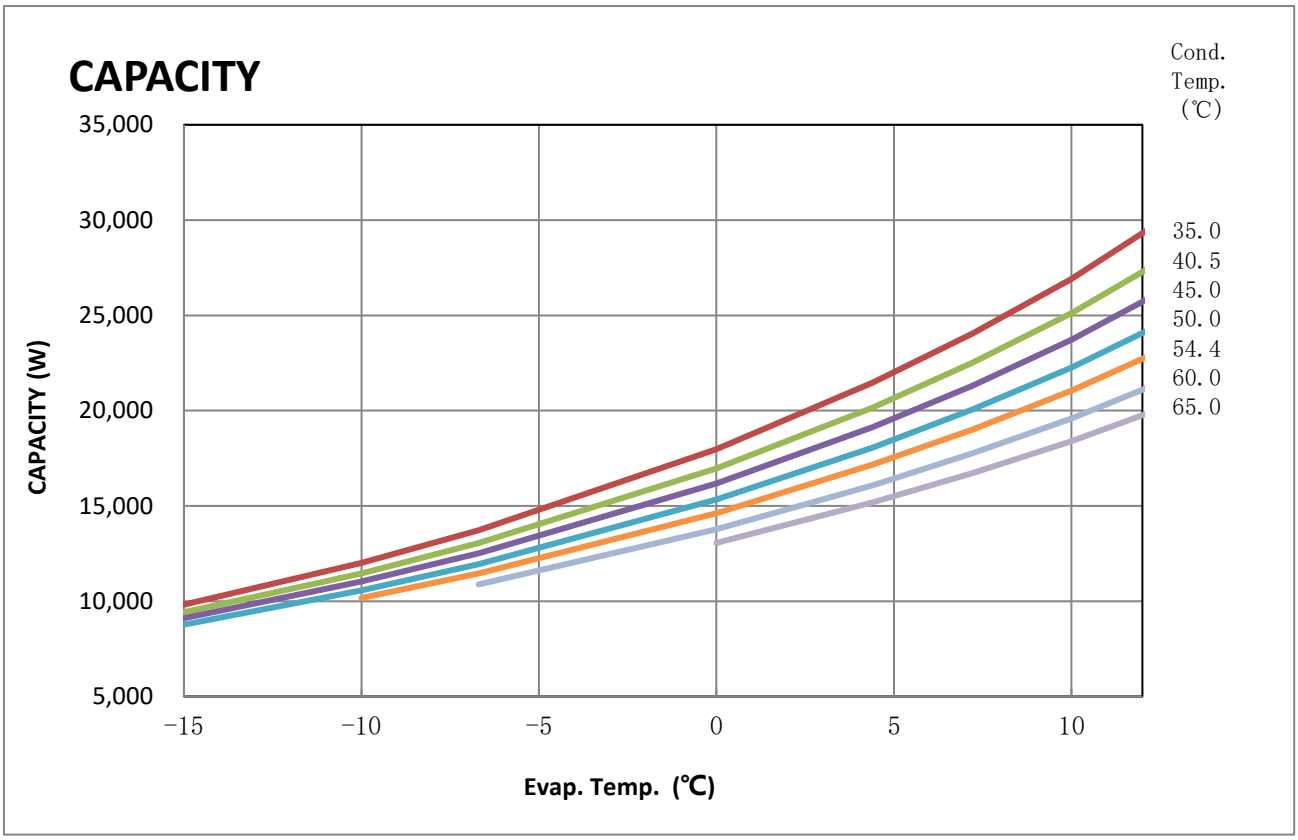
CURRENT(A) @380V

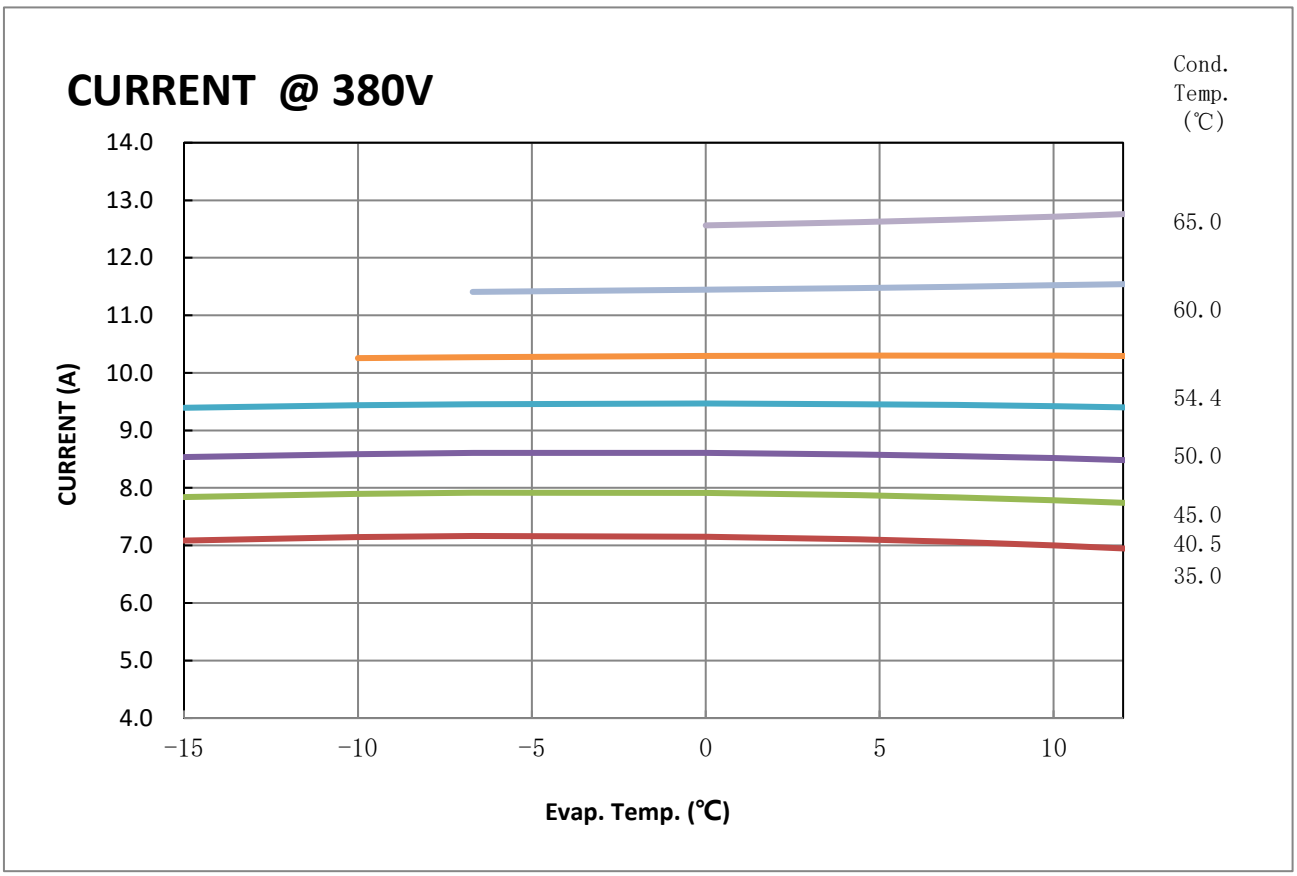
Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	10	15
35.0	7.1	7.1	7.2	7.2	7.1	7.1	7.0	6.9
40.5	7.8	7.9	7.9	7.9	7.9	7.8	7.8	7.7
45.0	8.5	8.6	8.6	8.6	8.6	8.6	8.5	8.4
50.0	9.4	9.4	9.5	9.5	9.5	9.4	9.4	9.4
54.4		10.3	10.3	10.3	10.3	10.3	10.3	10.3
60.0			11.4	11.4	11.5	11.5	11.5	11.6
65.0				12.6	12.6	12.7	12.7	12.8

FLOW (kg/h) @380V

Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	10	15
35.0	101.1	142.2	171.1	234.3	279.1	308.9	339.8	397.4
40.5	114.2	149.0	174.4	231.8	273.8	302.3	332.1	388.8
45.0	126.1	155.3	177.4	229.7	269.4	296.8	325.9	382.1
50.0	140.7	162.8	181.2	227.4	264.4	290.6	319.0	374.9
54.4		170.1	184.8	225.4	259.9	285.2	313.0	368.9
60.0			189.8	222.8	254.2	278.2	305.4	361.7
65.0				220.4	249.0	271.9	298.6	355.6

Compressor Model(Code)	**9CE069LSA04**
Power Source	**3PH 50Hz 380-400V**





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**9CE069LSA04**
Power Source	**3PH 50Hz 380-400V**
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	2.563221E+04	2.968850E+03	4.890856E+00	2.591995E+02
C2	1.286179E+03	8.419358E+00	8.567321E-03	1.428017E+01
C3	-2.497063E+02	-3.086719E+01	2.583370E-03	-8.175616E-01
C4	2.487155E+01	-1.261621E+00	-2.101357E-03	-1.251006E-01
C5	-1.922466E+01	-7.758126E-01	-1.061429E-03	-1.178005E-01
C6	8.717123E-01	1.629054E+00	1.777399E-03	3.506054E-03
C7	1.588517E-01	1.826934E-03	2.310842E-06	1.865876E-04
C8	-2.803548E-01	2.086857E-02	3.532984E-05	5.275769E-03
C9	9.707881E-02	1.111208E-02	1.733469E-05	-2.436419E-04
C10	-4.374902E-08	-1.032677E-08	-1.917653E-11	-1.519391E-09

Note: The polynomial coefficients subject to change without notice.

PERFORMANCE DATA

Compressor Model	**9CE069LA01**
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	10	15
35.0	11,780	14,420	16,470	21,580	25,770	28,850	32,300	39,510
40.5	11,310	13,760	15,660	20,360	24,190	27,000	30,130	36,650
45.0	10,930	13,230	15,010	19,400	22,960	25,560	28,450	34,460
50.0	10,520	12,670	14,330	18,400	21,670	24,050	26,700	32,170
54.4		12,200	13,760	17,550	20,590	22,800	25,240	30,270
60.0			13,060	16,530	19,300	21,300	23,510	28,030
65.0				15,680	18,220	20,050	22,060	26,180

POWER(W)

Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	10	15
35.0	4,490	4,540	4,550	4,530	4,500	4,470	4,420	4,330
40.5	5,090	5,130	5,140	5,130	5,100	5,070	5,030	4,940
45.0	5,670	5,700	5,710	5,710	5,680	5,650	5,620	5,550
50.0	6,400	6,430	6,440	6,430	6,410	6,400	6,370	6,320
54.4		7,140	7,150	7,150	7,140	7,130	7,120	7,090
60.0			8,160	8,160	8,170	8,180	8,180	8,200
65.0				9,170	9,190	9,210	9,240	9,300

CURRENT(A) @440V

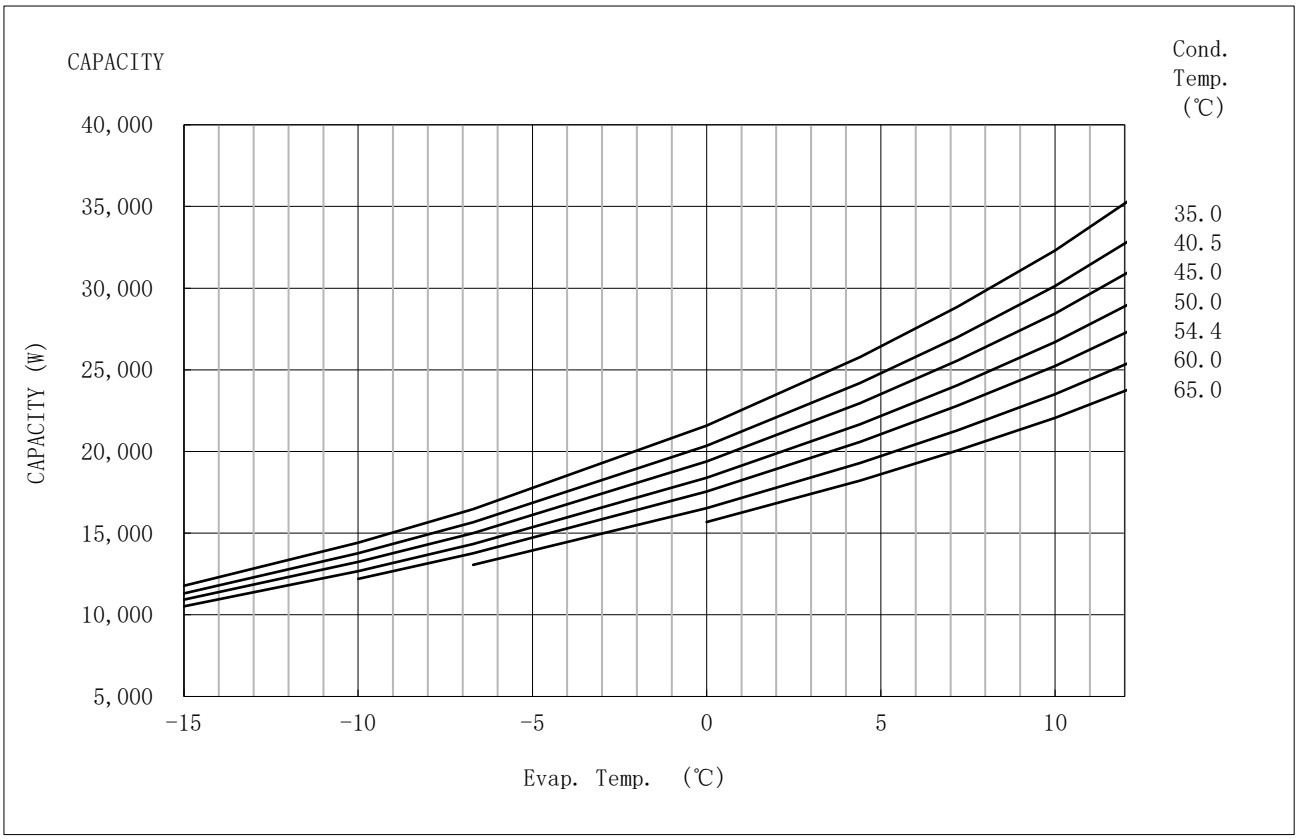
Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	10	15
35.0	8.6	8.7	8.7	8.7	8.6	8.6	8.5	8.3
40.5	9.5	9.6	9.6	9.6	9.6	9.5	9.5	9.3
45.0	10.4	10.4	10.4	10.4	10.4	10.4	10.3	10.2
50.0	11.4	11.5	11.5	11.5	11.5	11.5	11.4	11.4
54.4		12.4	12.5	12.5	12.5	12.5	12.5	12.5
60.0			13.8	13.9	13.9	14.0	14.0	14.0
65.0				15.2	15.3	15.4	15.4	15.6

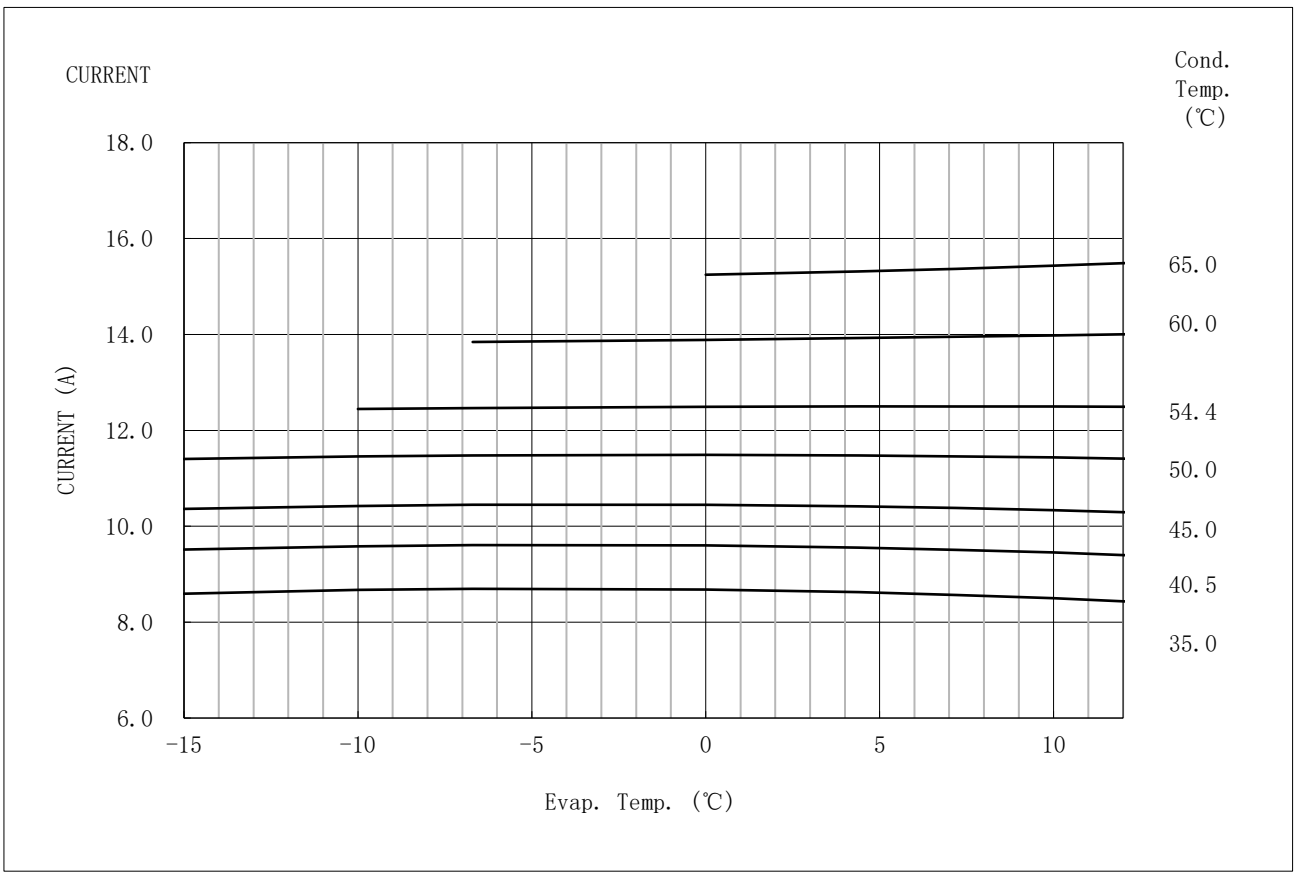
FLOW (kg/h) @440V

Condensing	Evaporating Temperature(℃)							
Temperature(℃)	-15	-10	-6.7	0	4.4	7.2	10	15
35.0	121.3	170.6	205.3	281.2	334.9	370.7	407.7	476.9
40.5	137.0	178.8	209.3	278.2	328.5	362.7	398.5	466.6
45.0	151.4	186.3	212.9	275.7	323.2	356.1	391.1	458.5
50.0	168.8	195.4	217.4	272.9	317.3	348.8	382.8	449.9
54.4		204.1	221.7	270.5	311.9	342.2	375.6	442.7
60.0			227.7	267.3	305.0	333.9	366.5	434.0
65.0				264.5	298.8	326.3	358.4	426.7

Compressor Model(Code) **9CE069LA01**

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





COEFFICIENTS OF PERFORMANCE CURVES

Compressor Model	**9CE069LA01**
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	3.082432E+04	3.478417E+03	5.935781E+00	3.107314E+02
C2	1.541871E+03	1.089835E+01	1.033131E-02	1.716550E+01
C3	-3.023127E+02	-3.648151E+01	3.123804E-03	-9.687222E-01
C4	2.985008E+01	-1.468001E+00	-2.551083E-03	-1.494422E-01
C5	-2.301242E+01	-9.448851E-01	-1.285197E-03	-1.427540E-01
C6	1.072683E+00	1.909395E+00	2.157149E-03	4.085724E-03
C7	1.932617E-01	3.106326E-03	2.799108E-06	2.260011E-04
C8	-3.365181E-01	2.388912E-02	4.289687E-05	6.315137E-03
C9	1.158047E-01	1.326562E-02	2.100555E-05	-2.761498E-04
C10	-6.396626E-08	-2.692464E-08	-1.876763E-11	-1.717947E-09

Note:The polynomial coefficients subject to change without notice.