参考資料

COSEL

TEST DATA OF R25A-9

(100V INPUT)

Regulated DC Power Supply

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COSEL CO., LTD.

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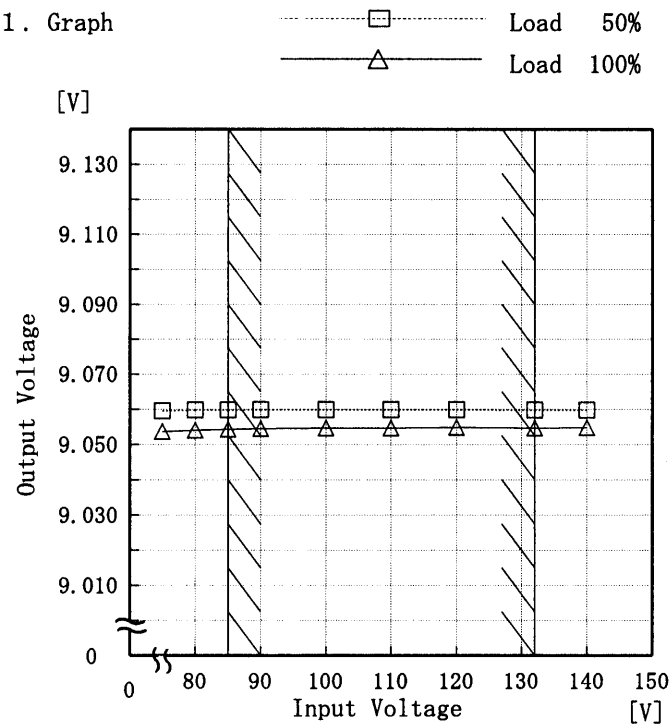


Note: Slanted line shows the range of the rated input voltage.

(注)斜線は定格入力電圧範囲を示す。

2. Values

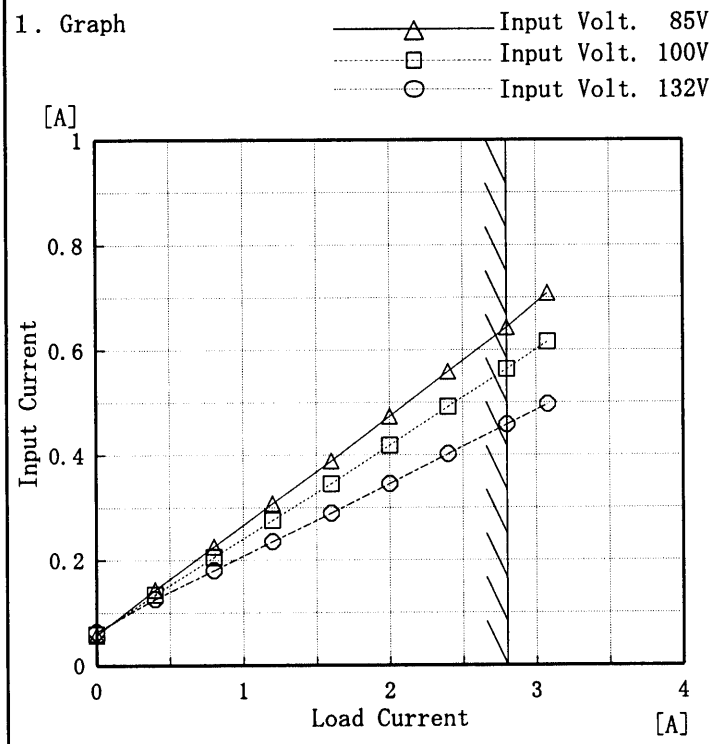
Input Voltage [V]	Output Voltage [V]	
	Load 50%	Load 100%
75	9.060	9.054
80	9.060	9.054
85	9.060	9.054
90	9.060	9.055
100	9.060	9.055
110	9.060	9.055
120	9.060	9.055
132	9.060	9.055
140	9.060	9.055

COSEL

Model	R25A-9
Item	Input Current (by Load Current) 入力電流 (負荷特性)
Object	————

Temperature 25℃
Testing Circuitry Figure A

1. Graph



Note: Slanted line shows the range of the rated load current

(注)斜線は定格負荷電流範囲を示す。

2. Values

Load Current [A]	Input Current [A]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.00	0.058	0.060	0.064
0.40	0.144	0.135	0.126
0.80	0.226	0.206	0.181
1.20	0.308	0.276	0.236
1.60	0.389	0.346	0.289
2.00	0.473	0.418	0.346
2.40	0.559	0.492	0.402
2.80	0.643	0.564	0.458
3.08	0.709	0.616	0.497
—	—	—	—
—	—	—	—
—	—	—	—

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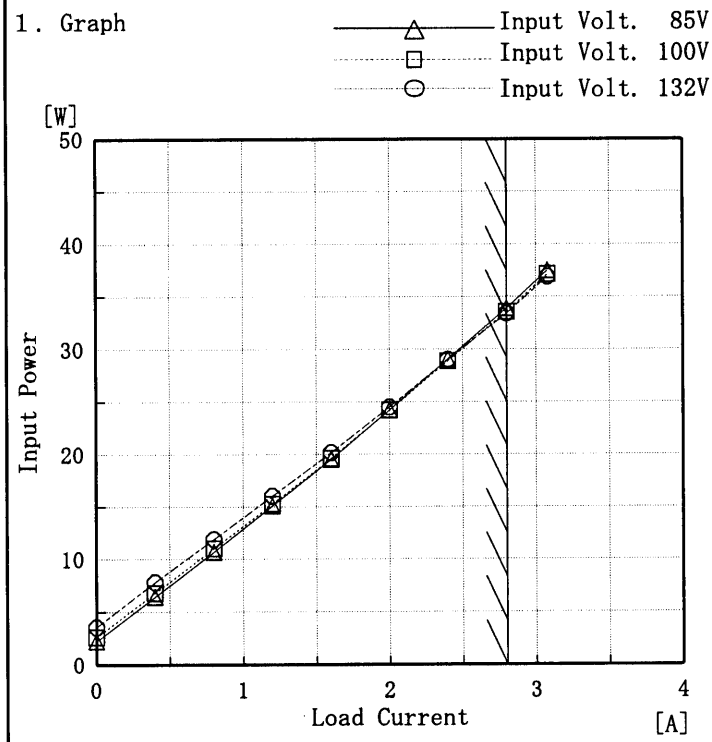
COSEL

Model	R25A-9
Item	Input Power (by Load Current) 入力電力 (負荷特性)
Object	————

Temperature 25℃
Testing Circuitry Figure A

1. Graph



Note: Slanted line shows the range of the rated load current

(注)斜線は定格負荷電流範囲を示す。

2. Values

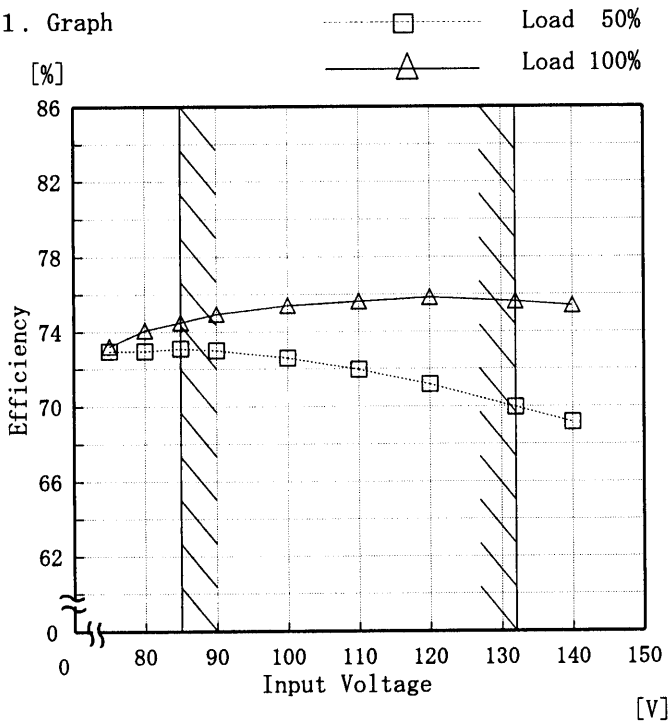
Load Current [A]	Input Power [W]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.00	2.23	2.64	3.58
0.40	6.43	6.80	7.85
0.80	10.69	11.01	11.90
1.20	15.10	15.29	16.04
1.60	19.53	19.61	20.15
2.00	24.24	24.18	24.50
2.40	29.07	28.87	29.00
2.80	33.88	33.54	33.40
3.08	37.50	37.15	36.90
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	R25A-9
Item	Efficiency (by Input Voltage) 効率 (入力電圧特性)
Object	———————

Temperature 25℃
Testing Circuitry Figure A

1. Graph



Note: Slanted line shows the range of the rated input voltage.

(注)斜線は定格入力電圧範囲を示す。

2. Values

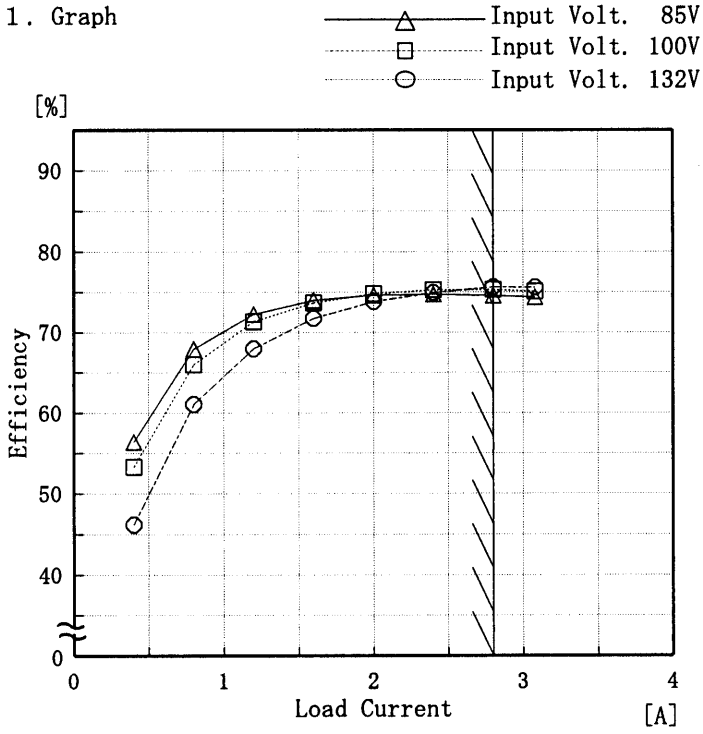
Input Voltage [V]	Efficiency [%]	
	Load 50%	Load 100%
75	73.0	73.2
80	73.0	74.1
85	73.1	74.5
90	73.0	75.0
100	72.6	75.4
110	72.0	75.6
120	71.2	75.9
132	70.0	75.6
140	69.2	75.4

COSEL

Model	R25A-9
Item	Efficiency (by Load Current) 効率 (負荷特性)
Object	————

Temperature 25℃
Testing Circuitry Figure A

1. Graph



Note: Slanted line shows the range of the rated load current

(注)斜線は定格負荷電流範囲を示す。

2. Values

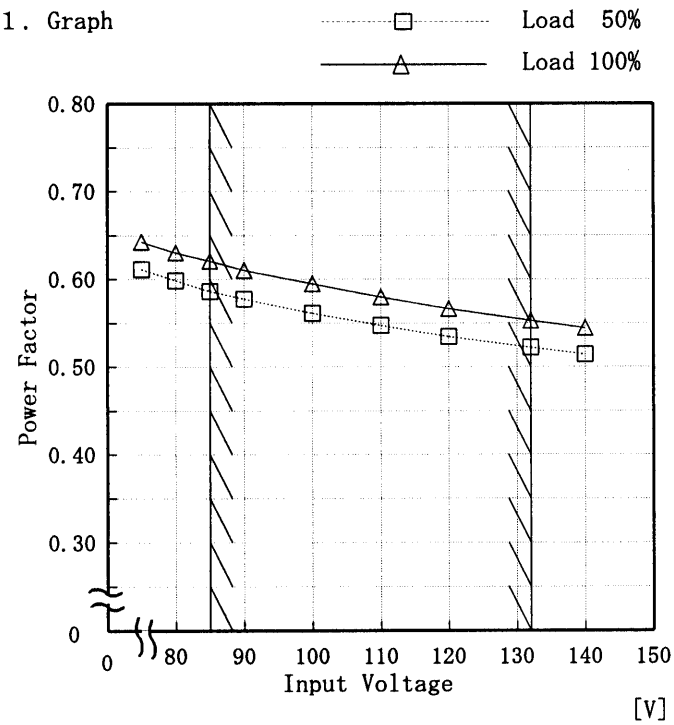
Load Current [A]	Efficiency [%] Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.40	56.4	53.3	46.2
0.80	68.0	66.0	61.1
1.20	72.2	71.3	68.0
1.60	74.0	73.7	71.7
2.00	74.6	74.8	73.8
2.40	74.7	75.3	74.9
2.80	74.6	75.3	75.6
3.08	74.4	75.1	75.6
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	R25A-9
Item	Power Factor (by Input Voltage) 力率（入力電圧特性）
Object	———

Temperature 25℃
Testing Circuitry Figure A

1. Graph



Note: Slanted line shows the range of the rated input voltage.

(注)斜線は定格入力電圧範囲を示す。

2. Values

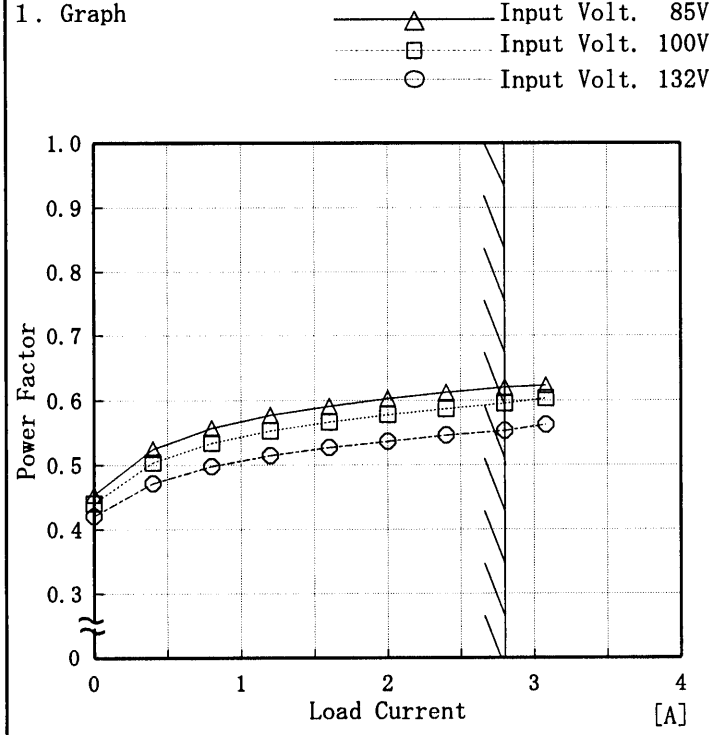
Input Voltage [V]	Power Factor	
	Load 50%	Load 100%
75	0.61	0.64
80	0.60	0.63
85	0.59	0.62
90	0.58	0.61
100	0.56	0.60
110	0.55	0.58
120	0.53	0.57
132	0.52	0.55
140	0.51	0.54

COSEL

Model	R25A-9
Item	Power Factor (by Load Current) 力率（負荷特性）
Object	————

Temperature 25℃
Testing Circuitry Figure A

1. Graph



Note: Slanted line shows the range of the rated load current

(注)斜線は定格負荷電流範囲を示す。

2. Values

Load Current [A]	Power Factor		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.00	0.45	0.44	0.42
0.40	0.52	0.50	0.47
0.80	0.56	0.53	0.50
1.20	0.58	0.55	0.52
1.60	0.59	0.57	0.53
2.00	0.60	0.58	0.54
2.40	0.61	0.59	0.55
2.80	0.62	0.59	0.55
3.08	0.62	0.60	0.56
—	—	—	—
—	—	—	—
—	—	—	—

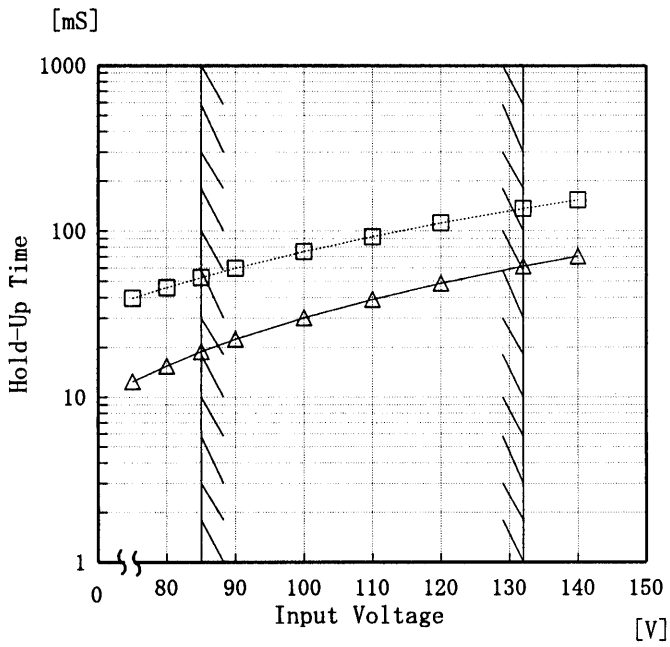
COSEL

Model	R25A-9	
Item	Hold-Up Time　出力保持時間	Temperature　25℃ Testing Circuitry　Figure A
Object	+9.0V2.8A	

1. Graph

Load 50%

Load 100%



This duration covers from Shut-off of input voltage to the moment when output voltage descends to the rated range of voltage accuracy.

Note: Slanted line shows the range of the rated input voltage.

出力保持時間とは、入力電圧断から出力電圧が、定電圧精度の規格範囲を保持しているところまでの時間。

(注)斜線は定格入力電圧範囲を示す。

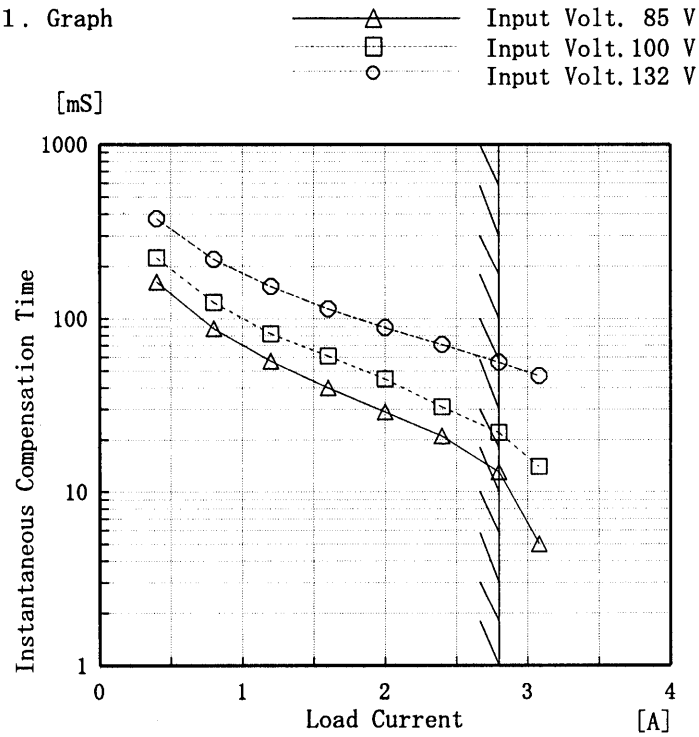
2. Values

Input Voltage [V]	Hold-Up Time [mS]	
	Load 50%	Load 100%
75	40	12
80	46	15
85	53	19
90	60	22
100	75	30
110	93	39
120	111	48
132	136	61
140	154	71

COSEL

Model	R25A-9	
Item	Instantaneous Interruption Compensation 瞬時停電保障	Temperature 25℃ Testing Circuitry Figure A
Object	+9.0V2.8A	

1. Graph



This duration covers from Shut-off of input voltage to the moment when output voltage descends to the rated range of voltage accuracy.
Note:Slanted line shows the range of the rated load current.

瞬時停電保障時間とは、出力電圧が定電圧精度の規格範囲を保持している瞬時停電時間をいう。
(注)斜線は定格負荷電流範囲を示す。

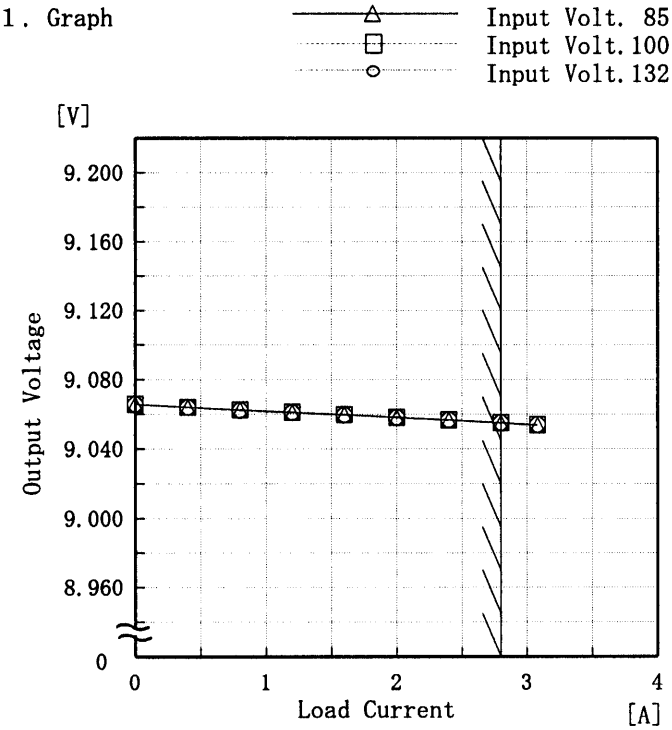
2. Values

Load Current [A]	Time [mS]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.00	—	—	—
0.40	163	224	376
0.80	88	124	220
1.20	57	82	153
1.60	40	61	114
2.00	29	45	89
2.40	21	31	71
2.80	13	22	56
3.08	5	14	47
—	—	—	—
—	—	—	—

COSEL

Model	R25A-9	
Item	Load Regulation 静的負荷変動	Temperature 25℃ Testing Circuitry Figure A
Object	+9.0V2.8A	

1. Graph



Note: Slanted line shows the range of the rated load current.

(注)斜線は定格負荷電流範囲を示す。

2. Values

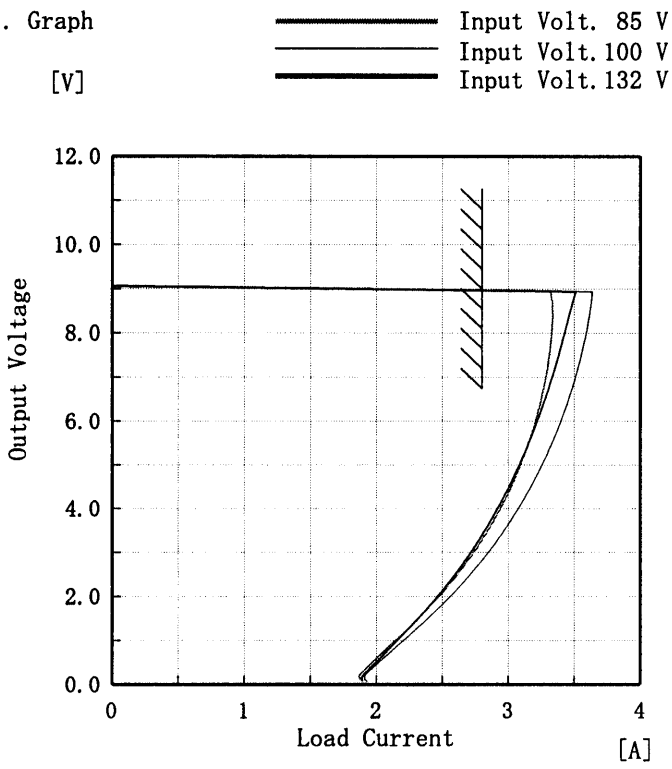
Load Current [A]	Output Voltage [V]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.00	9.066	9.066	9.066
0.40	9.064	9.064	9.064
0.80	9.063	9.063	9.062
1.20	9.061	9.061	9.061
1.60	9.060	9.060	9.060
2.00	9.058	9.058	9.058
2.40	9.057	9.057	9.057
2.80	9.055	9.055	9.055
3.08	9.054	9.054	9.054
—	—	—	—

COSEL

Model	R25A-9
Item	Overcurrent Protection 過電流保護
Object	+9.0V2.8A

Temperature 25℃
Testing Circuitry Figure A

1. Graph



Note: Slanted line shows the range of the rated load current.

(注)斜線は定格負荷電流範囲を示す。

2. Values

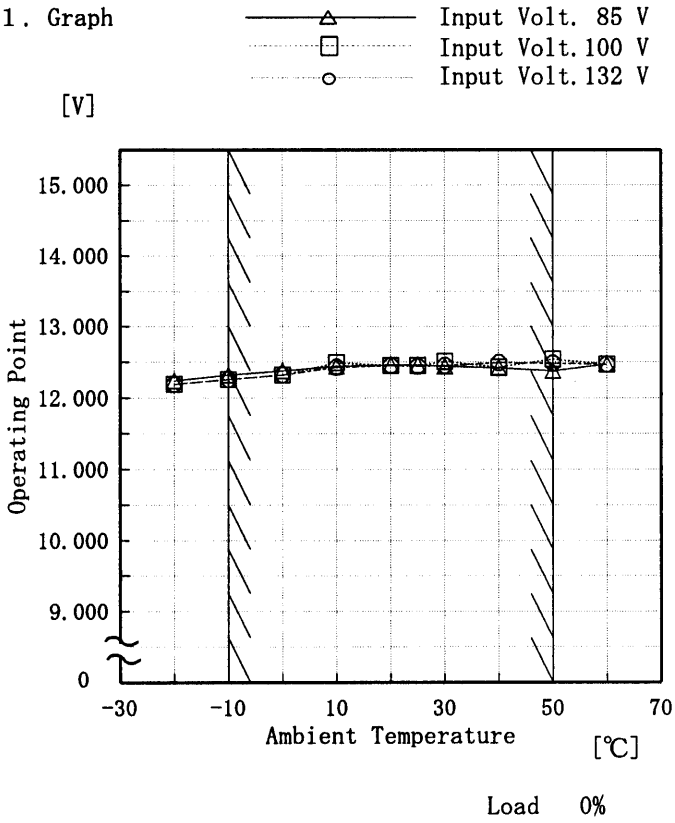
Output Voltage [V]	Load Current [A]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
9.00	3.317	3.633	3.513
8.55	3.335	3.622	3.475
8.10	3.331	3.596	3.435
7.20	3.299	3.530	3.355
6.30	3.240	3.442	3.264
5.40	3.149	3.322	3.146
4.50	3.029	3.176	3.010
3.60	2.872	2.995	2.846
2.70	2.676	2.776	2.653
1.80	2.423	2.499	2.412
0.90	2.114	2.169	2.127
0.00	1.897	1.935	1.899

COSEL

Model	R25A-9
Item	Overvoltage Protection 過電圧保護
Object	+9.0V2.8A

Testing Circuitry Figure A

1. Graph



Load 0%

Note: Slanted line shows the range of the rated ambient temperature.

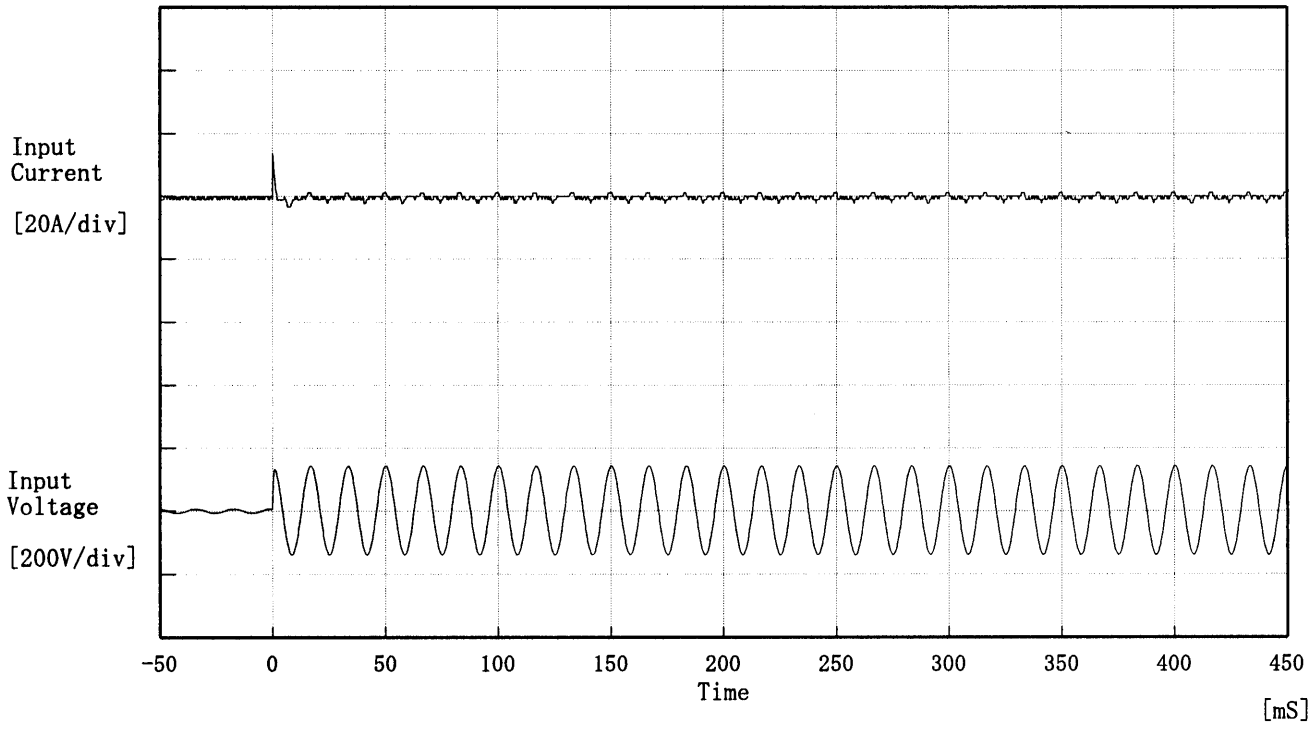
(注)斜線は定格周囲温度範囲を示す。

2. Values

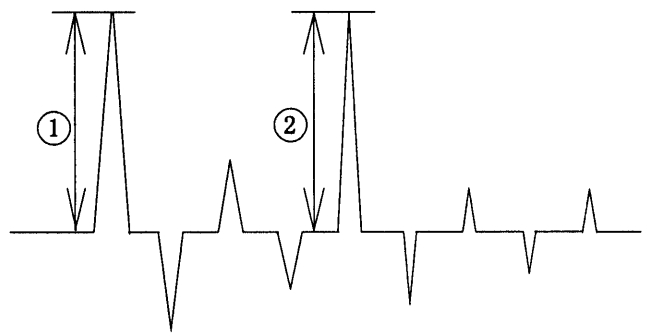
Ambient Temperature [℃]	Operating Point [V]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
-20	12.24	12.19	12.19
-10	12.32	12.26	12.26
0	12.38	12.32	12.32
10	12.44	12.49	12.43
20	12.46	12.45	12.45
25	12.46	12.45	12.44
30	12.44	12.51	12.45
40	12.42	12.43	12.49
50	12.38	12.54	12.48
60	12.47	12.47	12.47
—	—	—	—

COSEL

Model	R25A-9		
Item	Inrush Current　突入電流	Temperature	25℃
		Testing Circuitry	Figure A
Object	――――――――		



Input Voltage　100 V
Frequency　60 Hz
Load　100 %
Inrush Current
① 13.48 [A]
② 2.22 [A]



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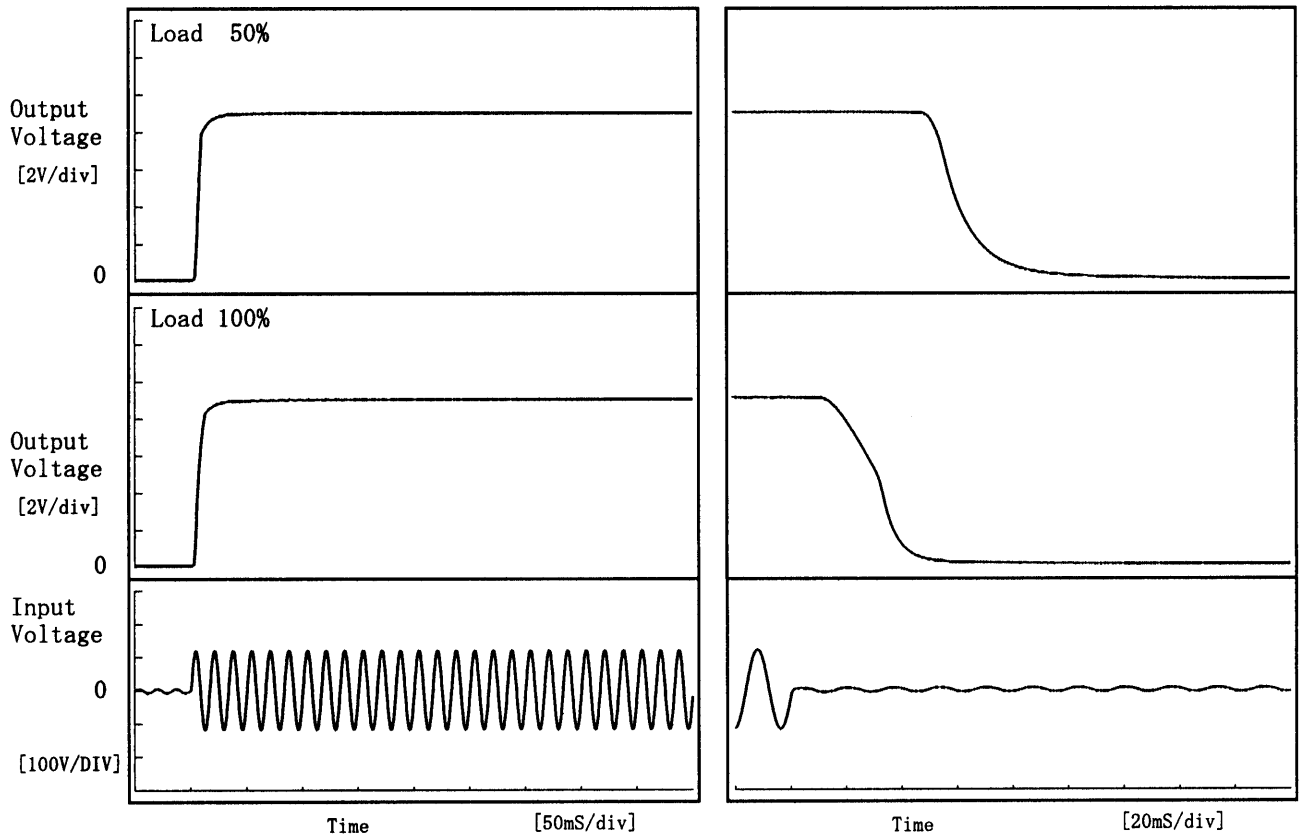
Model	R25A-9		
Item	Rise and Fall Time 立上り、立下り時間	Temperature Testing Circuitry	25℃ Figure A
Object	+9.0V2.8A		

1. Graph

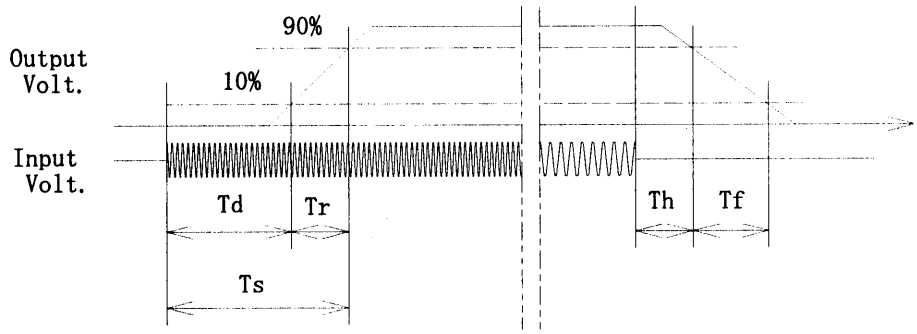
Input Volt. 85 V



2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	3.8	8.0	11.8	52.5	26.0
100 %	3.8	8.8	12.5	18.6	23.4

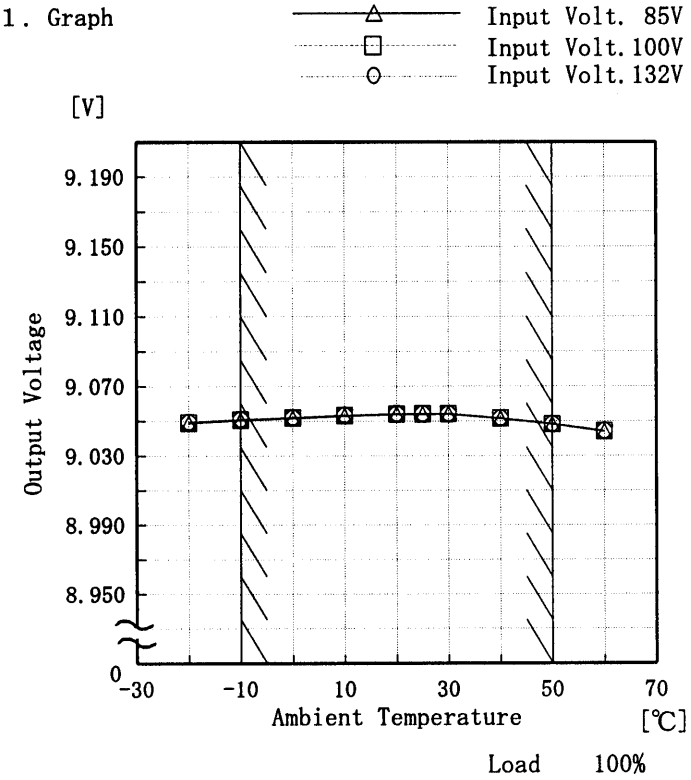


COSEL

Model	R25A-9
Item	Ambient Temperature Drift 周囲温度変動
Object	+9.0V2.8A

Testing Circuitry Figure A

1. Graph



Load 100%

Note: Slanted line shows the range of the rated ambient temperature.

(注)斜線は定格周囲温度範囲を示す。

2. Values

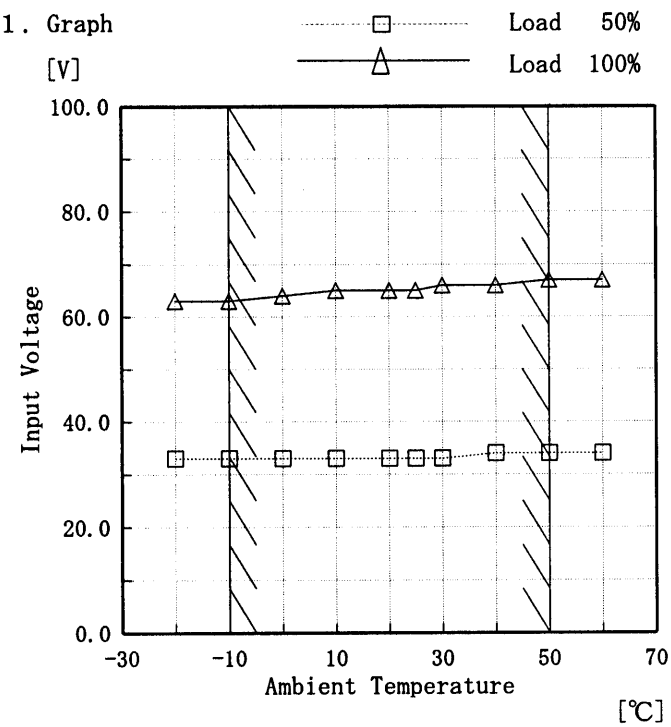
Ambient Temperature [℃]	Output Voltage [V]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
-20	9.049	9.049	9.049
-10	9.051	9.051	9.051
0	9.052	9.052	9.052
10	9.053	9.053	9.053
20	9.054	9.054	9.054
25	9.054	9.054	9.054
30	9.054	9.054	9.054
40	9.052	9.052	9.052
50	9.048	9.048	9.048
60	9.044	9.044	9.044
—	—	—	—

COSEL

Model	R25A-9
Item	Minimum Input Voltage for Regulated Output Voltage 最低レギュレーション電圧
Object	+9.0V2.8A

Testing Circuitry Figure A

1. Graph



Note: Slanted line shows the range of the rated ambient temperature.

(注)斜線は定格周囲温度範囲を示す。

2. Values

Ambient Temperature [℃]	Input Voltage [V]	
	Load 50%	Load 100%
-20	33	63
-10	33	63
0	33	64
10	33	65
20	33	65
25	33	65
30	33	66
40	34	66
50	34	67
60	34	67
—	—	—

COSEL

Model	R25A-9	
Item	Output Voltage Accuracy 定電圧精度	Testing Circuitry Figure A
Object	+9.0V2.8A	

1. Output Voltage Accuracy

This is defined as the value of the output voltage, regulation load, ambient temperature and input voltage varied at random in the range as specified below.

Temperature : -10～50 ℃
Input Voltage : 85～132 V
Load Current : 0～2.8 A

* Output Voltage Accuracy = ±(Maximum of Output Voltage − Minimum of Output Voltage)／2

$$* \text{Output Voltage Accuracy (Ration)} = \frac{\text{Output Voltage Accuracy}}{\text{Rated Output Voltage}} \times 100$$

1. 定電圧精度

周囲温度、入力電圧、負荷電流を下記仕様内で、任意に変動させたときの出力電圧の変動をいう。

周囲温度 -10～50 ℃
入力電圧 85～132 V
負荷電流 0～2.8 A

* 定電圧精度(変動値) ＝ ±(出力電圧の最高値−出力電圧の最低値)／2

$$* \text{定電圧精度(変動率)} = \frac{\text{変動値}}{\text{定格出力電圧}} \times 100$$

2. Values

Item	Temperature [℃]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy (Ration) [%]
Maximum Voltage	25	132	0.0	9.065	±9	±0.1
Minimum Voltage	50	85	2.8	9.048		

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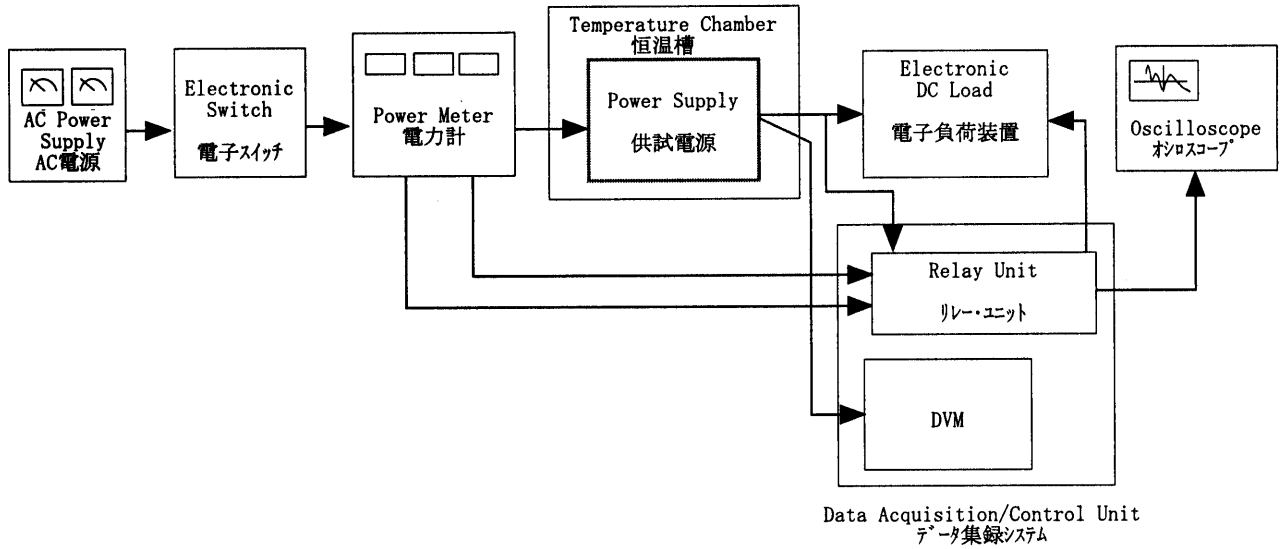

Figure A