参考資料

COSEL

TEST DATA OF PAA600F-48

(100V INPUT)

Regulated DC Power Supply

Date : Mar.13. 1998

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Design Engineer

コーセル株式会社

COSEL CO.,LTD.

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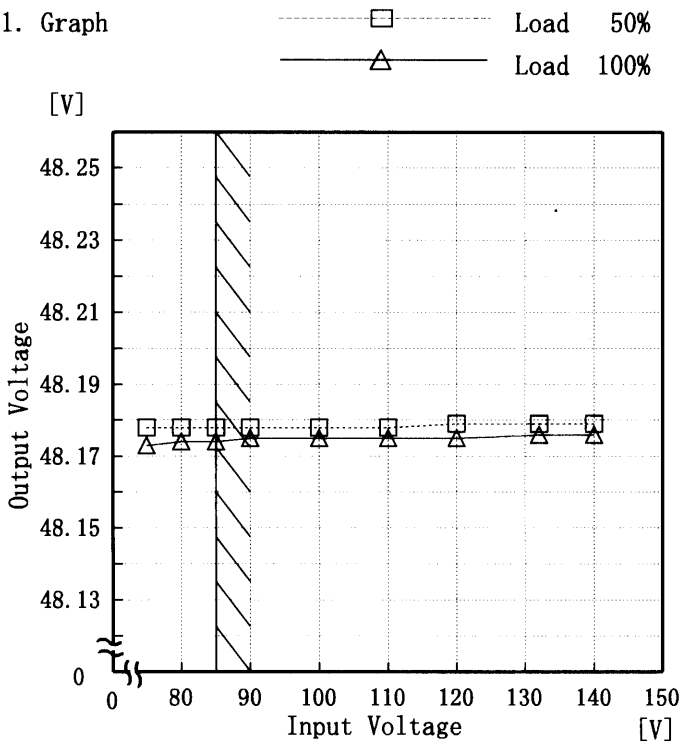
Object	+48V13A

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]	Load 50% Output Volt. [V]	Load 100% Output Volt. [V]
75	48.178	48.173
80	48.178	48.174
85	48.178	48.174
90	48.178	48.175
100	48.178	48.175
110	48.178	48.175
120	48.179	48.175
132	48.179	48.176
140	48.179	48.176

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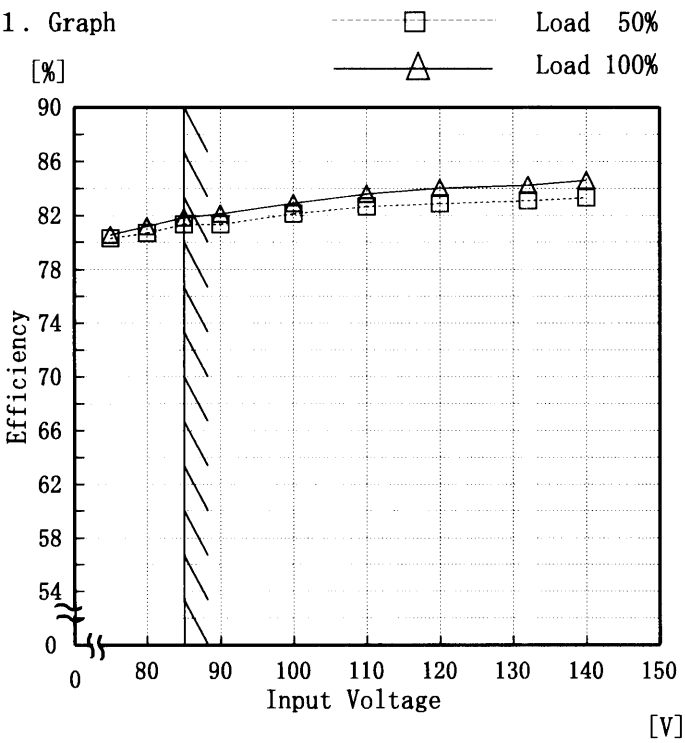
Model	PAA600F-48
Item	Efficiency (by Input Voltage) 効率 (入力電圧特性)
Object	———————————

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]	Load 50% Efficiency [%]	Load 100% Efficiency [%]
75	80.31	80.55
80	80.69	81.21
85	81.34	81.83
90	81.32	82.14
100	82.15	82.91
110	82.66	83.59
120	82.88	84.02
132	83.11	84.25
140	83.30	84.61

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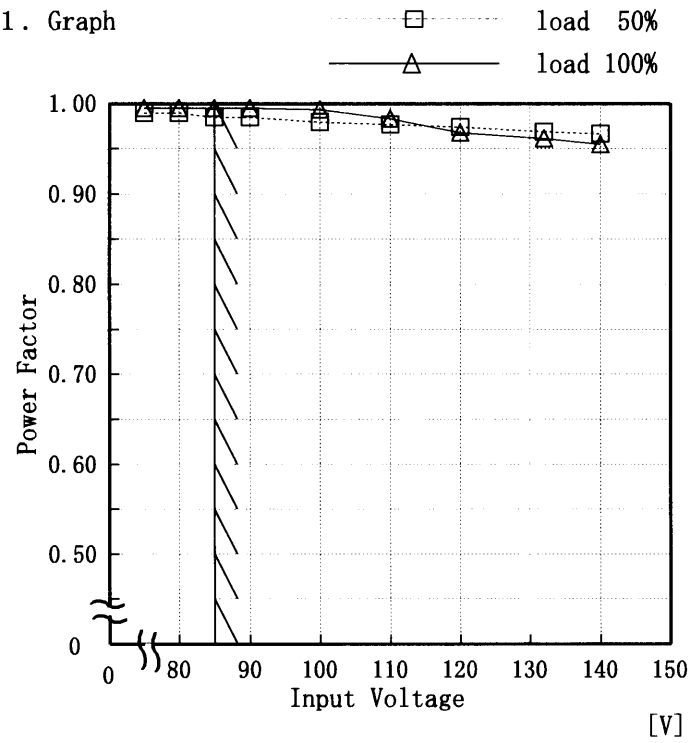
Model	PAA600F-48
Item	Power Factor (by Input Voltage) 力率(入力電圧特性)
Object	———————————

Temperature 25℃
Humidity 40%RH
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]	load 50% Power Factor	load 100% Power Factor
75	0.99	0.99
80	0.99	0.99
85	0.98	0.99
90	0.98	0.99
100	0.98	0.99
110	0.98	0.98
120	0.97	0.97
132	0.97	0.96
140	0.97	0.95

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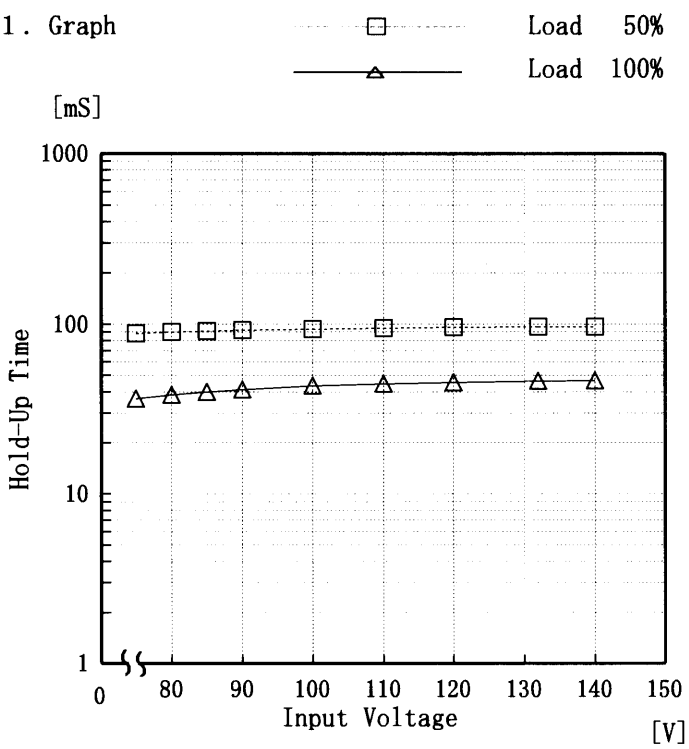
Model	PAA600F-48
Item	Hold-Up Time　出力保持時間
Object	+48V13A

Temperature　25℃
Testing Circuitry　Figure A

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 input voltage.

出力保持時間とは、ＡＣ入力断から出力電圧が、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]	Load 50% Hold-Up Time [mS]	Load 100% Hold-Up Time [mS]
75	88	36
80	90	38
85	91	40
90	92	41
100	94	43
110	95	45
120	96	45
132	97	47
140	97	47

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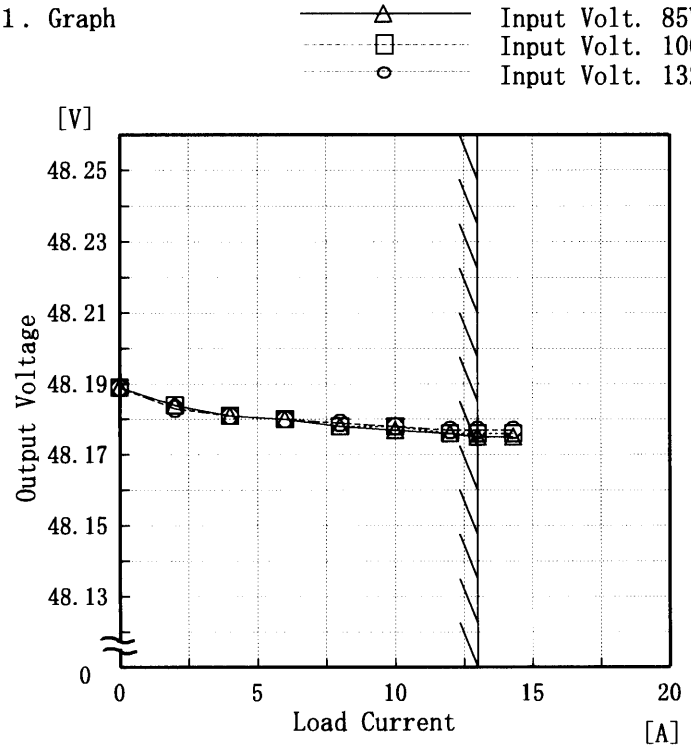
Model	PAA600F-48
Item	Load Regulation 静的負荷変動
Object	+48V13A

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 Volt. 85[V] Output Volt. [V]	Input Volt. 100[V] Output Volt. [V]	Input Volt. 132[V] Output Volt. [V]
0.0	48.189	48.189	48.189
2.0	48.184	48.184	48.183
4.0	48.181	48.181	48.181
6.0	48.180	48.180	48.180
8.0	48.178	48.178	48.179
10.0	48.177	48.178	48.178
12.0	48.176	48.176	48.177
13.0	48.175	48.176	48.177
14.3	48.175	48.176	48.177
—	—	—	—

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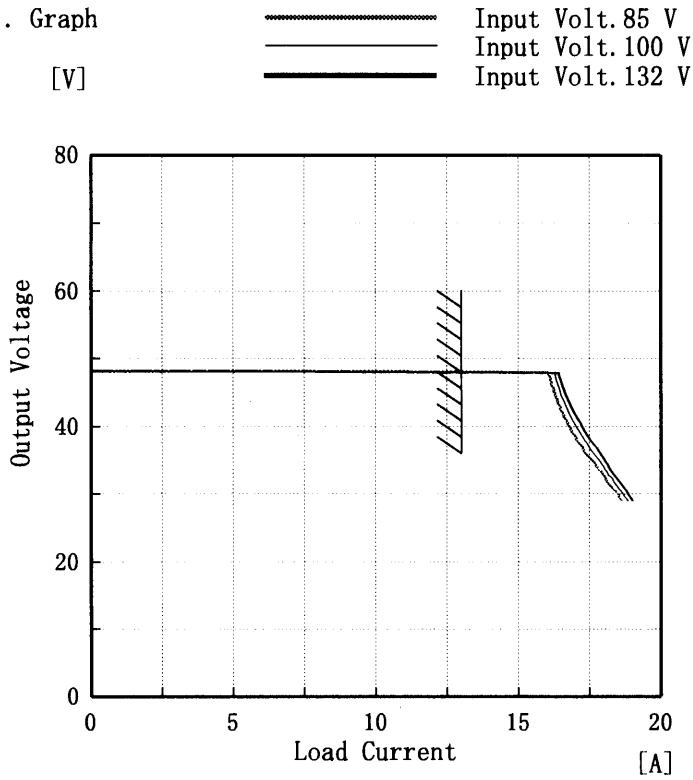
Model	PAA600F-48
Item	Overcurrent Protection 過電流保護
Object	+48V13A

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。

28.8V以下は間欠モードにはいる。

2. Values

Output Voltage [V]	Input Volt. 85[V] Load Current [A]	Input Volt. 100[V] Load Current [A]	Input Volt. 132[V] Load Current [A]
48.00	16.09	16.30	16.43
45.60	16.22	16.43	16.59
43.20	16.42	16.64	16.81
38.40	17.01	17.25	17.45
33.60	17.85	18.06	18.25
28.80	18.72	18.87	19.07

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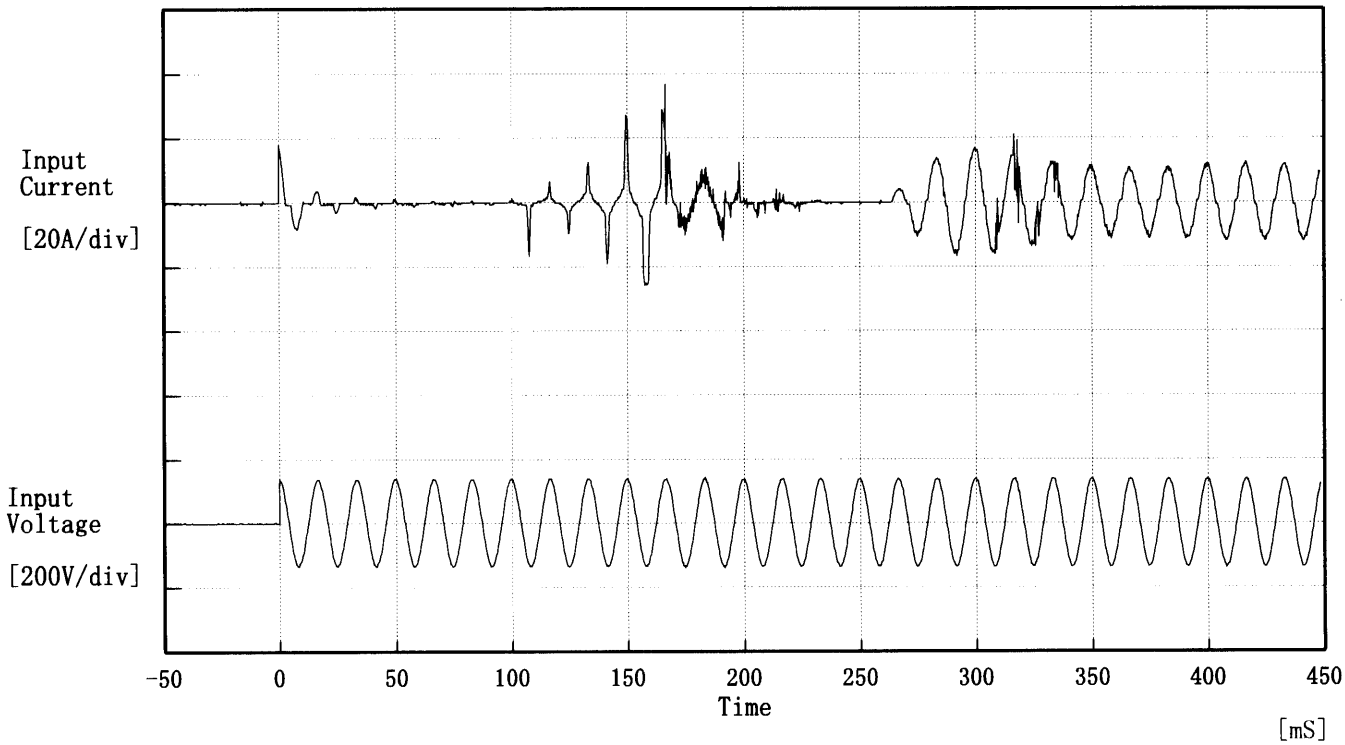
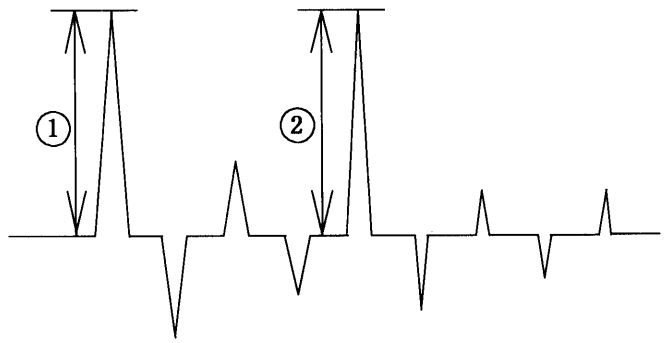
Model	PAA600F-48		
Item	Inrush Current 突入電流	Temperature	25℃
		Testing Circuitry	Figure A
Object	――――――――		



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



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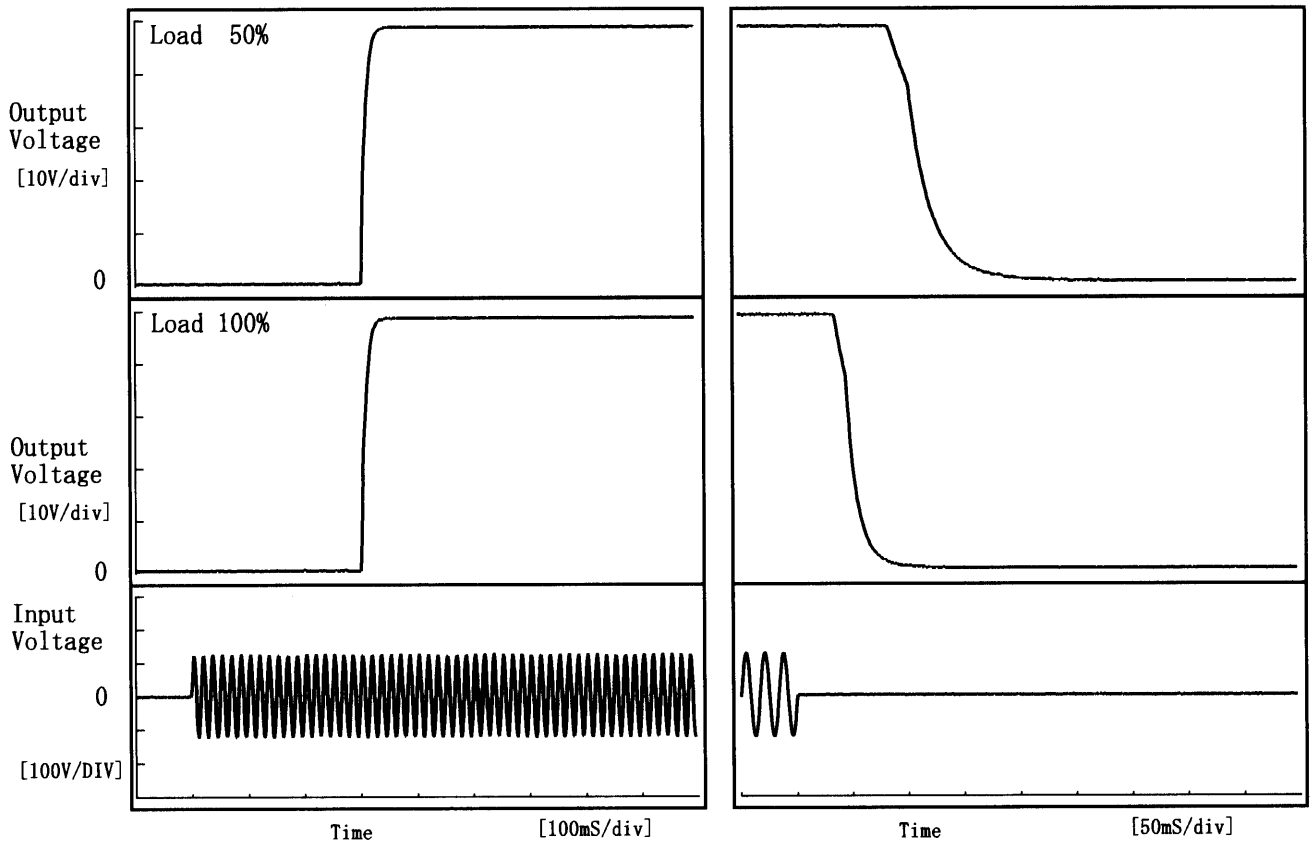
Model	PAA600F-48		
Item	Rise and Fall Time 立上り、立下り時間	Temperature	25℃
		Testing Circuitry	Figure A
Object	+48V13A		

1. Graph

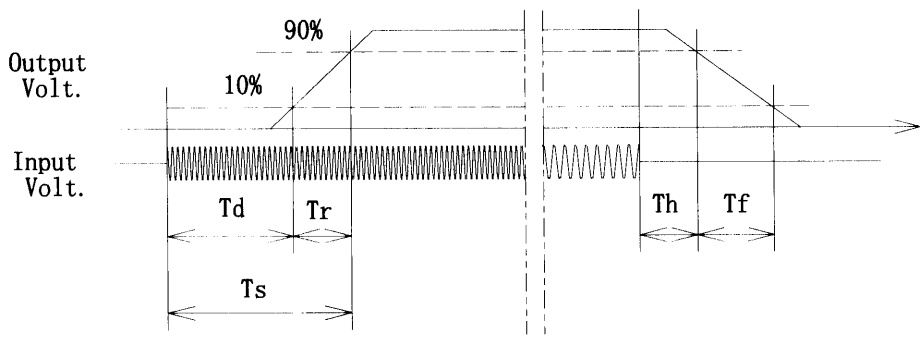
Input Volt. 85 V



2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	302.0	16.0	318.0	92.0	55.0
100 %	302.0	16.0	318.0	40.0	28.3



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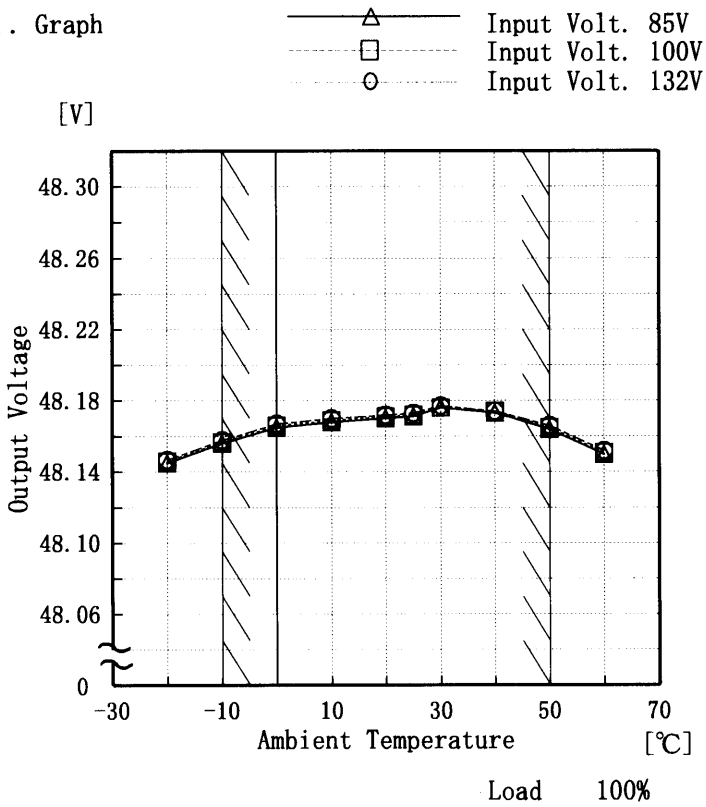
Model	PAA600F-48
Item	Ambient Temperature Drift 周囲温度変動
Object	+48V13A

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

Temperature [℃]	Input Volt. 85[V] Output Volt. [V]	Input Volt. 100[V] Output Volt. [V]	Input Volt. 132[V] Output Volt. [V]
-20	48.145	48.146	48.147
-10	48.156	48.157	48.158
0	48.165	48.166	48.167
10	48.168	48.169	48.170
20	48.170	48.171	48.172
25	48.171	48.172	48.173
30	48.176	48.176	48.177
40	48.173	48.174	48.174
50	48.164	48.165	48.166
60	48.150	48.151	48.152
—	—	—	—

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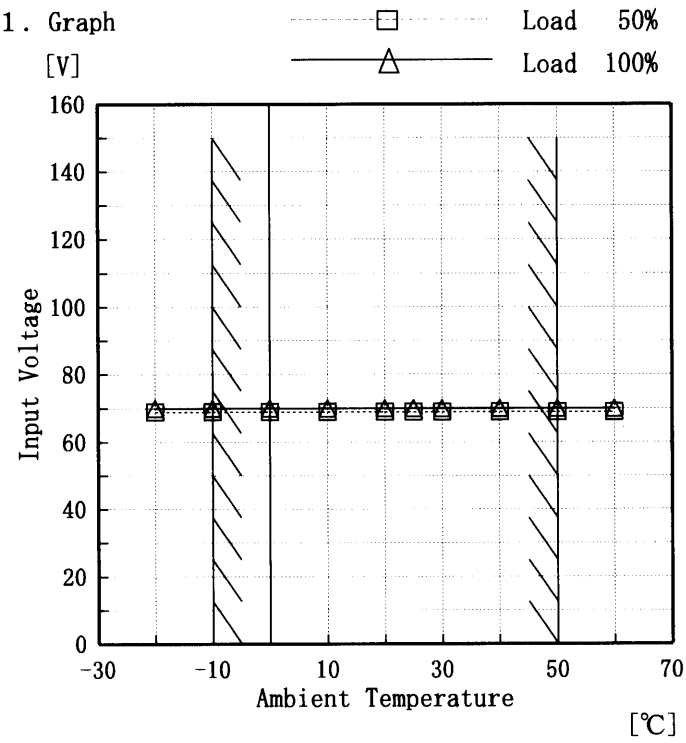
Model	PAA600F-48
Item	Minimum Input Voltage for Regulated Output Voltage 最低レギュレーション電圧
Object	+48V13A

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 Temp. [℃]	Load 50% Input Volt. [V]	Load 100% Input Volt. [V]
-20	69	70
-10	69	70
0	69	70
10	69	70
20	69	70
25	69	70
30	69	70
40	69	70
50	69	70
60	69	70
—	—	—

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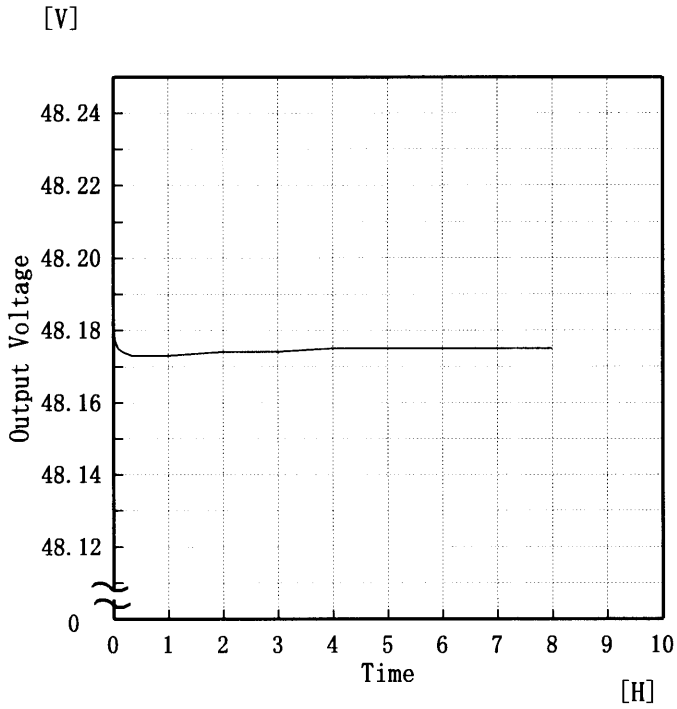
Model	PAA600F-48
Item	Time Lapse Drift 経時ドリフト
Object	+48V13A

Temperature 25 ℃
Testing Circuitry Figure A

1. Graph



Input Volt. 100V
Load 100%

2. Values

Time since start [H]	Output Voltage [V]
0.0	48.177
0.5	48.173
1.0	48.173
2.0	48.174
3.0	48.174
4.0	48.175
5.0	48.175
6.0	48.175
7.0	48.175
8.0	48.175

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Model	PAA600F-48	
Item	Output Voltage Accuracy 定電圧精度	Testing Circuitry Figure A
Object	+48V13A	

Output Voltage Accuracy

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

Temperature : -10～50 ℃
Input Voltage : 85～132 V
Load Current : 0～13 A

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

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

定電圧精度

温度、入力電圧、負荷を下記仕様内で、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
負過電流 0～13 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

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

Item	Temperature [℃]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy (Ration) [%]
Maximum Voltage	25	132	0	48.186	±14	±0.029
Minimum Voltage	-10	85	13	48.158		

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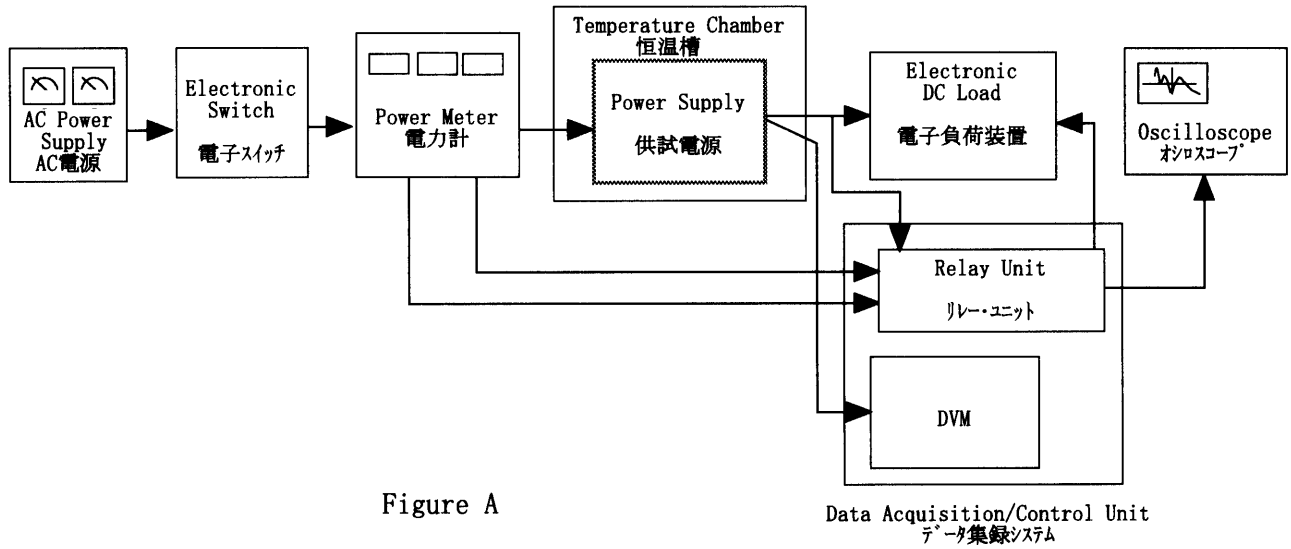

Figure A

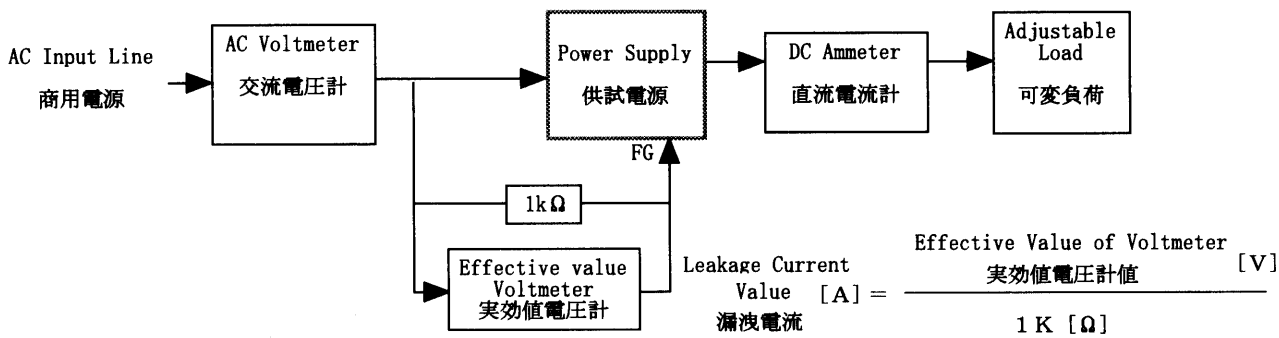

Figure B(DENTORI)

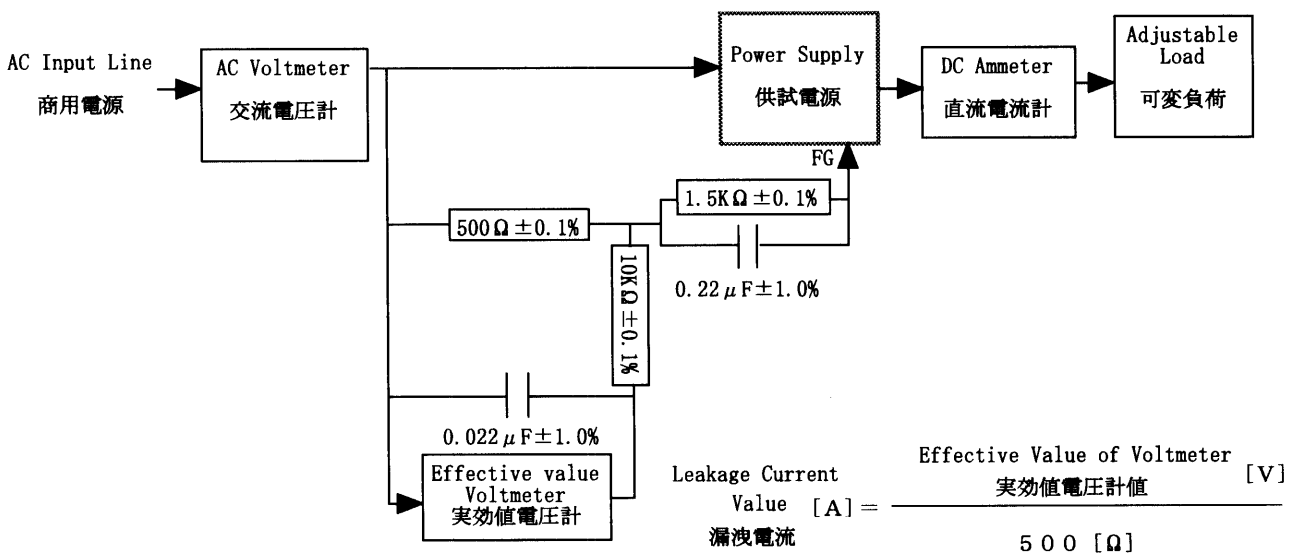

Figure B (UL, CSA, VDE)

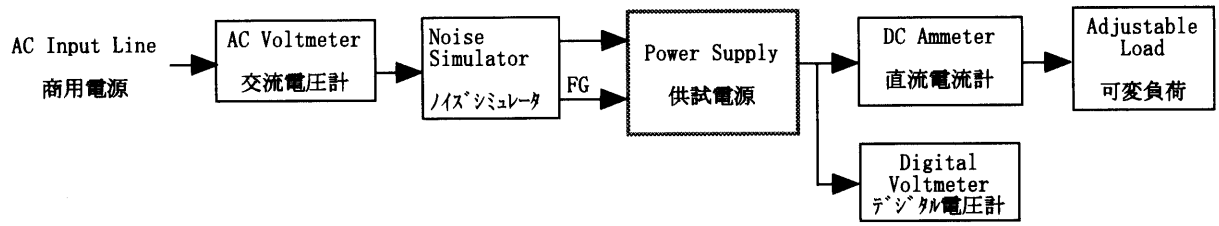

Figure C

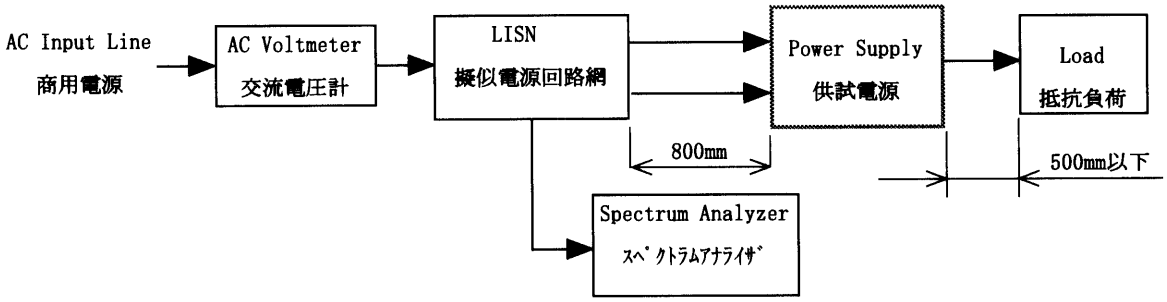

Figure D

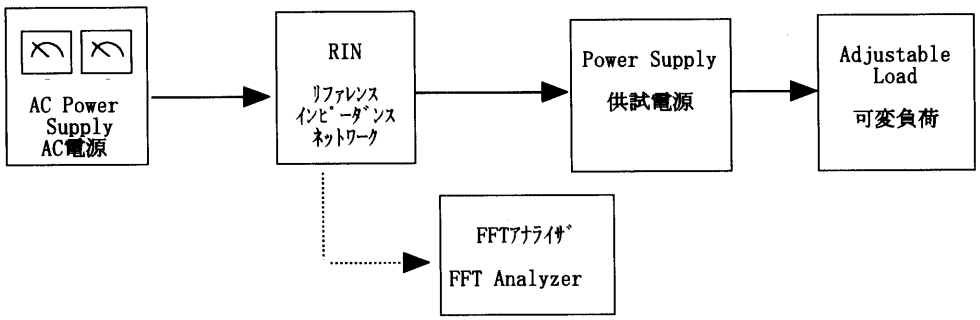

Figure E