参考資料

COSEL

TEST DATA OF PAA600F-48

(200V 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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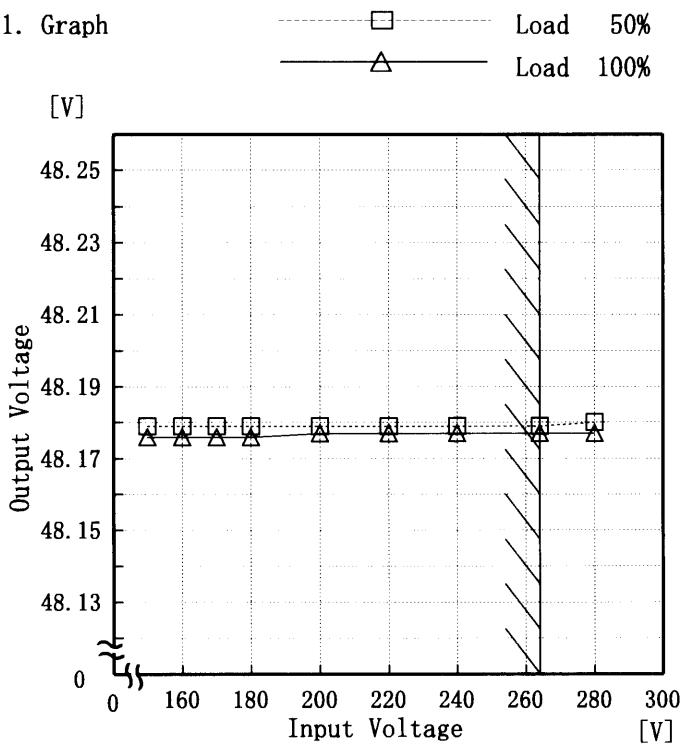
Object	+48V13A

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]
150	48.179	48.176
160	48.179	48.176
170	48.179	48.176
180	48.179	48.176
200	48.179	48.177
220	48.179	48.177
240	48.179	48.177
264	48.179	48.177
280	48.180	48.177

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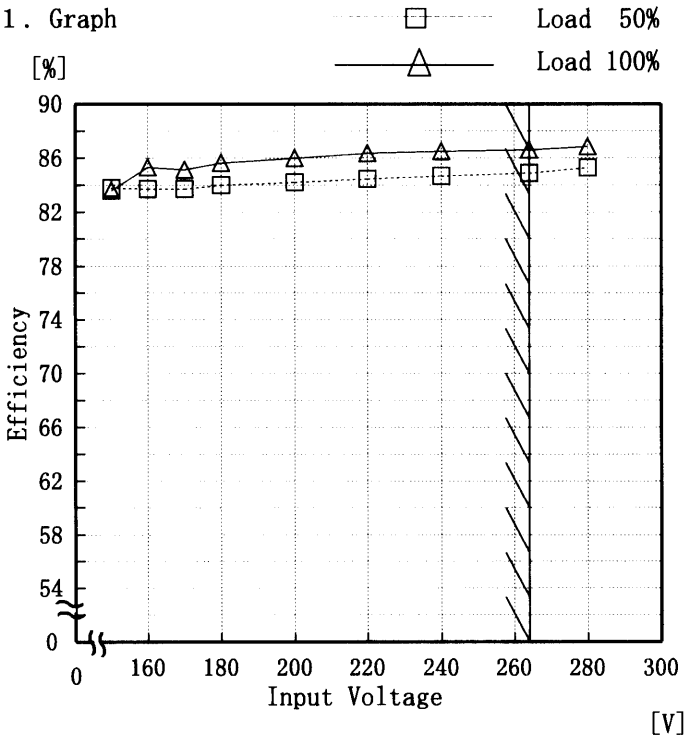
Model	PAA600F-48
Item	Efficiency (by Input Voltage) 効率（入力電圧特性）
Object	――――――――――

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 [%]
150	83.78	83.58
160	83.72	85.30
170	83.72	85.14
180	84.01	85.65
200	84.20	86.00
220	84.45	86.35
240	84.67	86.47
264	84.87	86.61
280	85.29	86.85

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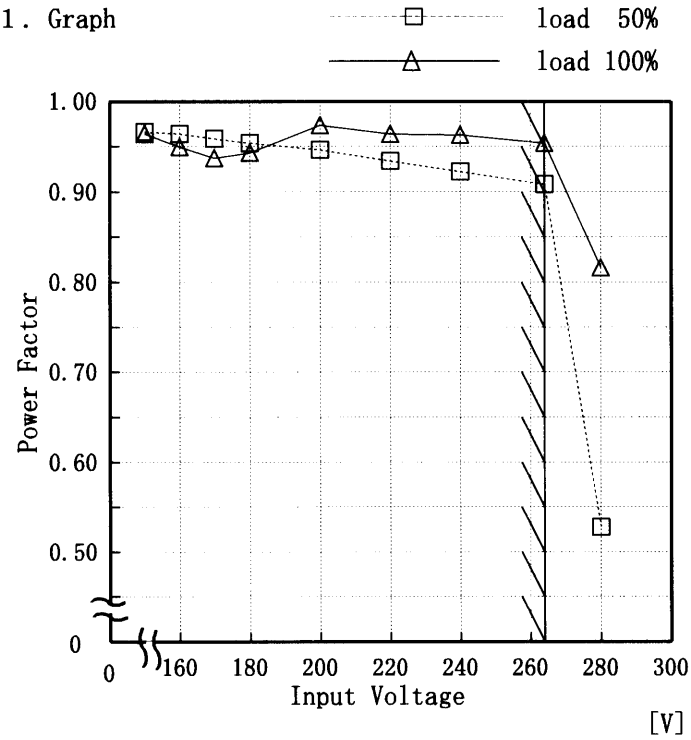
Model	PAA600F-48
Item	Power Factor (by Input Voltage) 力率(入力電圧特性)
Object	———————————

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
150	0.97	0.96
160	0.96	0.95
170	0.96	0.94
180	0.95	0.94
200	0.95	0.97
220	0.93	0.96
240	0.92	0.96
264	0.91	0.95
280	0.53	0.82

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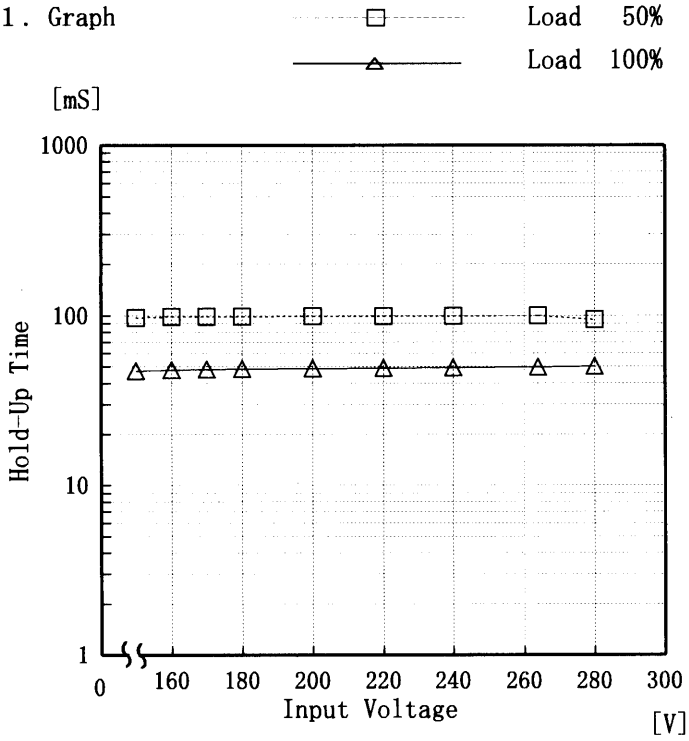
Model	PAA600F-48
Item	Hold-Up Time　出力保持時間
Object	+48V13A

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]
150	98	47
160	98	48
170	98	48
180	99	49
200	99	49
220	99	49
240	99	50
264	100	50
280	95	50

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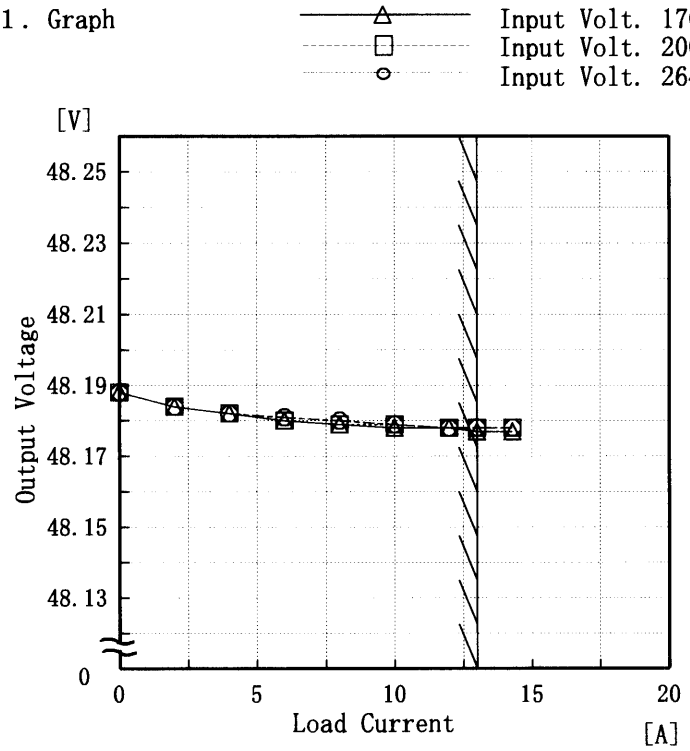
Model	PAA600F-48
Item	Load Regulation 静的負荷変動
Object	+48V13A

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. 170[V] Output Volt. [V]	Input Volt. 200[V] Output Volt. [V]	Input Volt. 264[V] Output Volt. [V]
0.0	48.188	48.188	48.188
2.0	48.184	48.184	48.184
4.0	48.182	48.182	48.182
6.0	48.180	48.180	48.181
8.0	48.179	48.179	48.180
10.0	48.178	48.179	48.179
12.0	48.178	48.178	48.178
13.0	48.177	48.178	48.178
14.3	48.177	48.178	48.178
—	—	—	—

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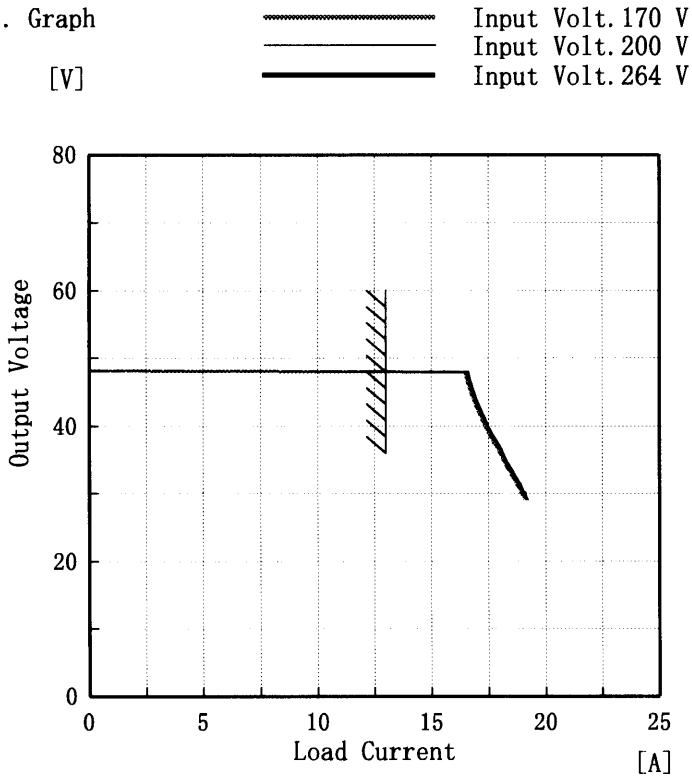
Model	PAA600F-48
Item	Overcurrent Protection 過電流保護
Object	+48V13A

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. 170[V] Load Current [A]	Input Volt. 200[V] Load Current [A]	Input Volt. 264[V] Load Current [A]
48.00	16.47	16.55	16.60
45.60	16.65	16.73	16.78
43.20	16.88	17.00	17.02
38.40	17.55	17.63	17.72
33.60	18.34	18.42	18.51
28.80	19.09	19.16	19.22

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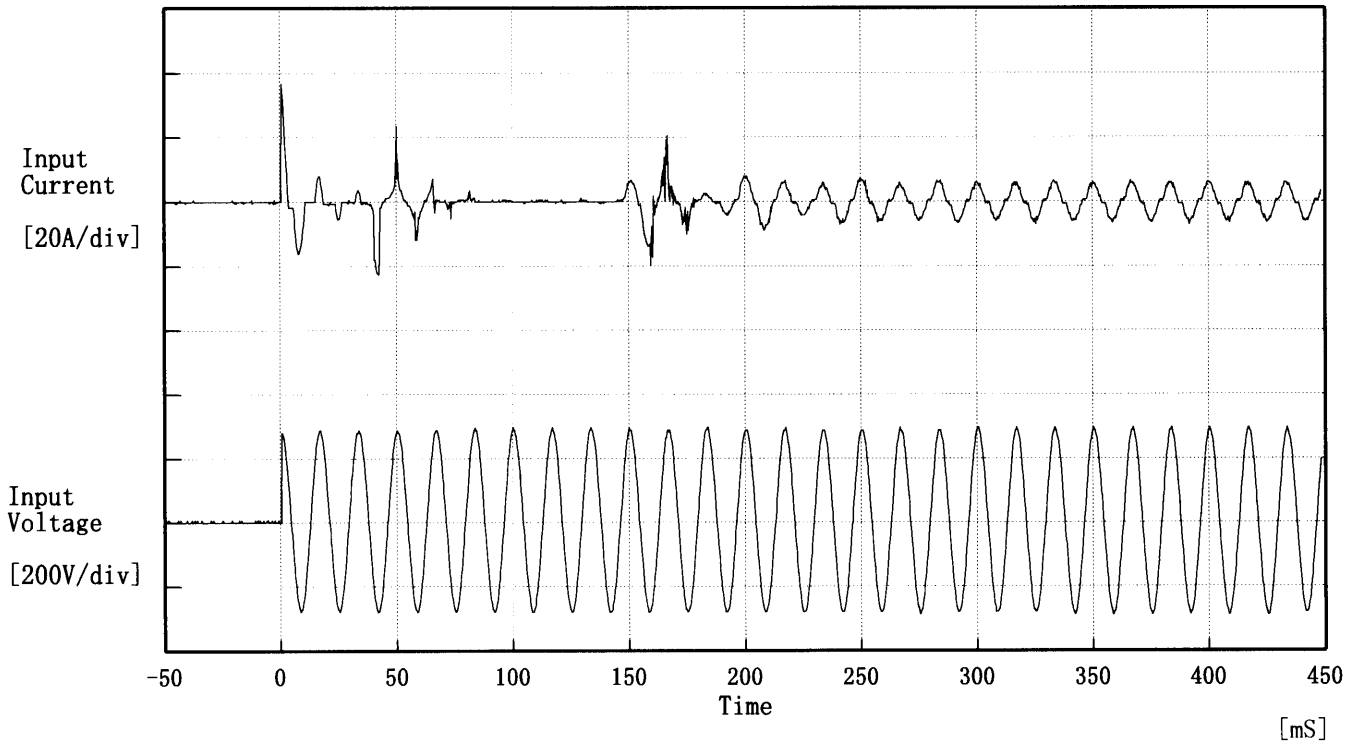
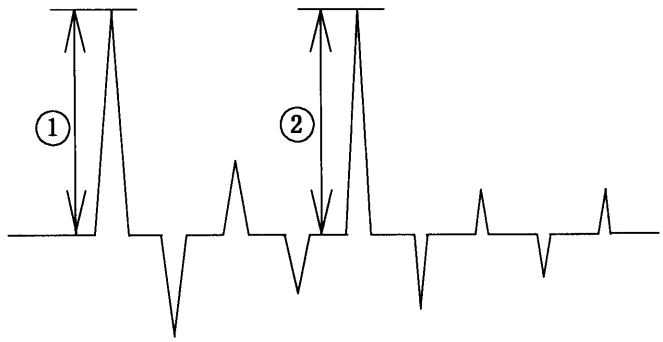
Model	PAA600F-48
Item	Inrush Current 突入電流
Object	————————

Temperature 25℃
Testing Circuitry Figure A



Input Voltage 200 V
Frequency 60 Hz
Load 100 %
Inrush Current
① 36.60 [A]
② 23.40 [A]



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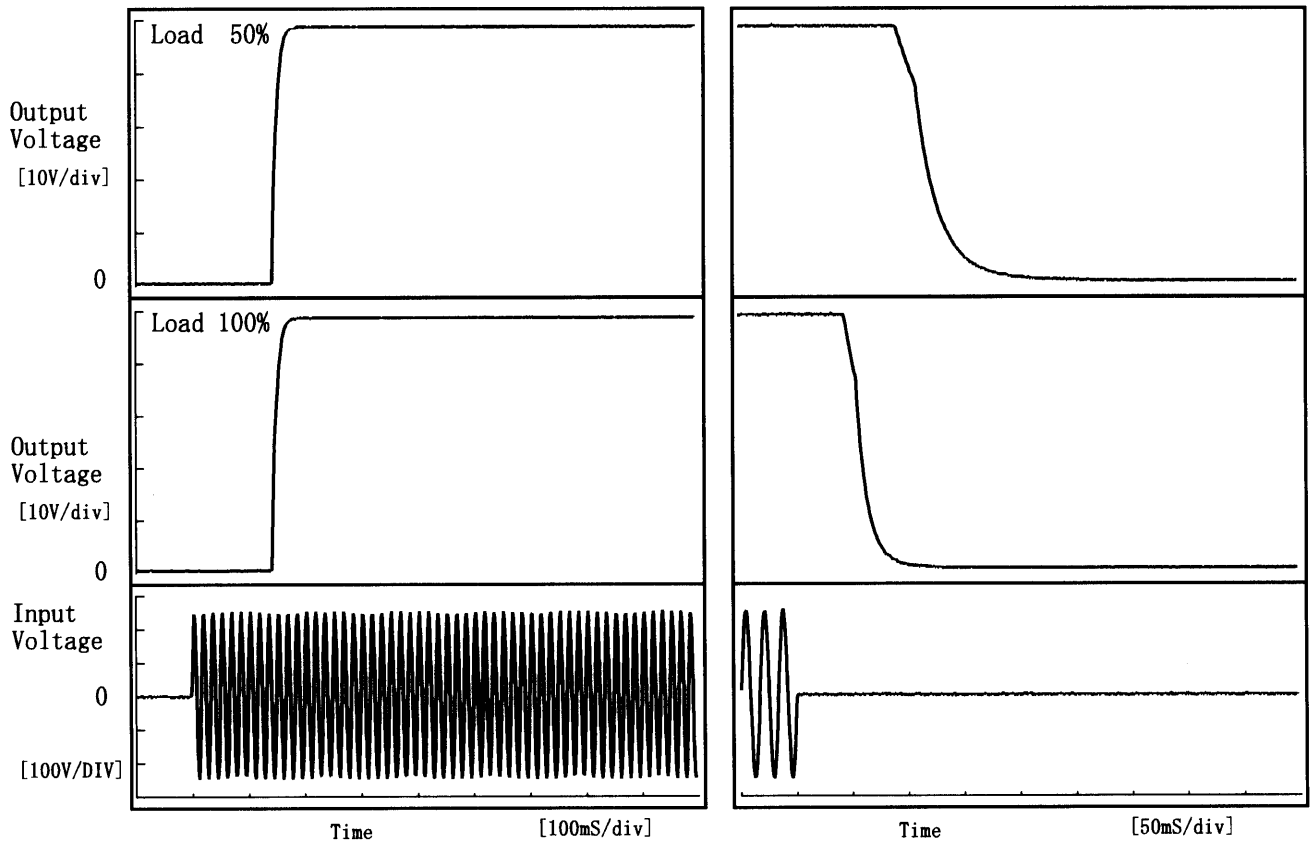
Model	PAA600F-48		
Item	Rise and Fall Time 立上り、立下り時間	Temperature	25℃
		Testing Circuitry	Figure A
Object	+48V13A		

1. Graph

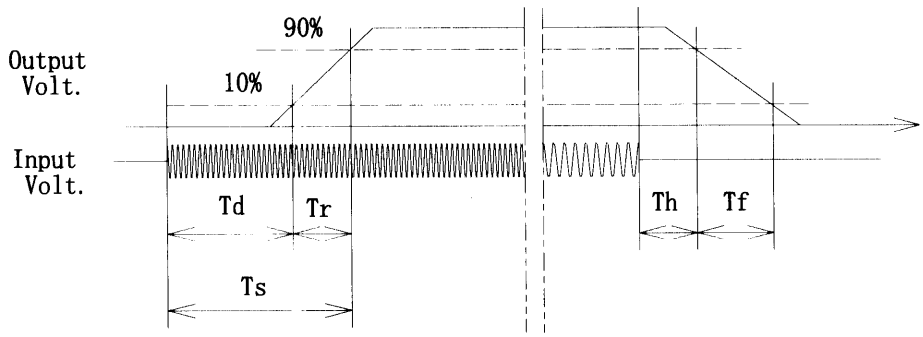
Input Volt. 170 V



2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	142.5	16.0	158.5	98.3	54.8
100 %	142.5	16.0	158.5	48.5	28.3



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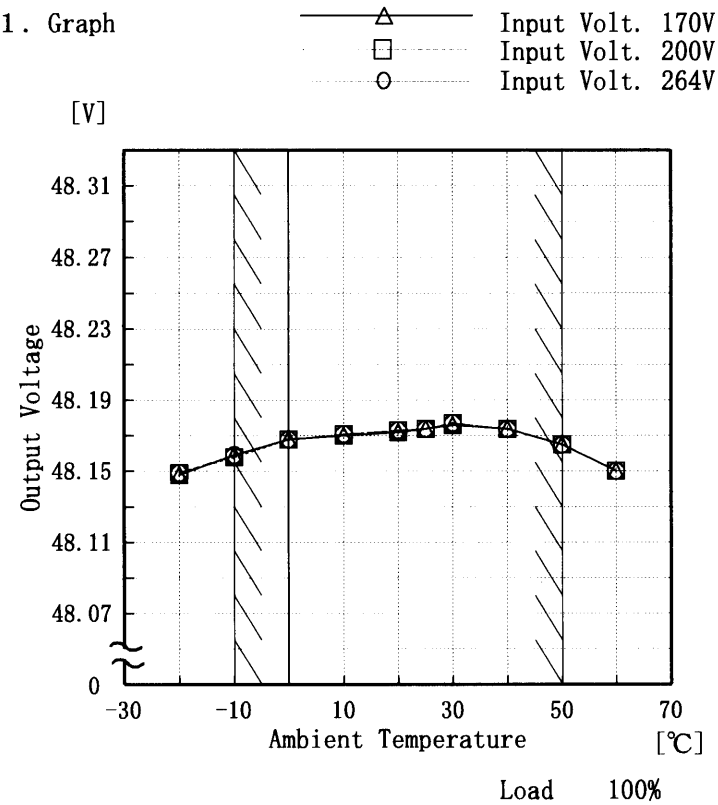
Model	PAA600F-48
Item	Ambient Temperature Drift 周囲温度変動
Object	+48V13A

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. 170[V] Output Volt. [V]	Input Volt. 200[V] Output Volt. [V]	Input Volt. 264[V] Output Volt. [V]
-20	48.148	48.149	48.149
-10	48.159	48.158	48.159
0	48.168	48.168	48.168
10	48.170	48.171	48.171
20	48.172	48.173	48.173
25	48.174	48.174	48.174
30	48.176	48.177	48.177
40	48.174	48.174	48.174
50	48.165	48.165	48.165
60	48.150	48.150	48.150
—	—	—	—

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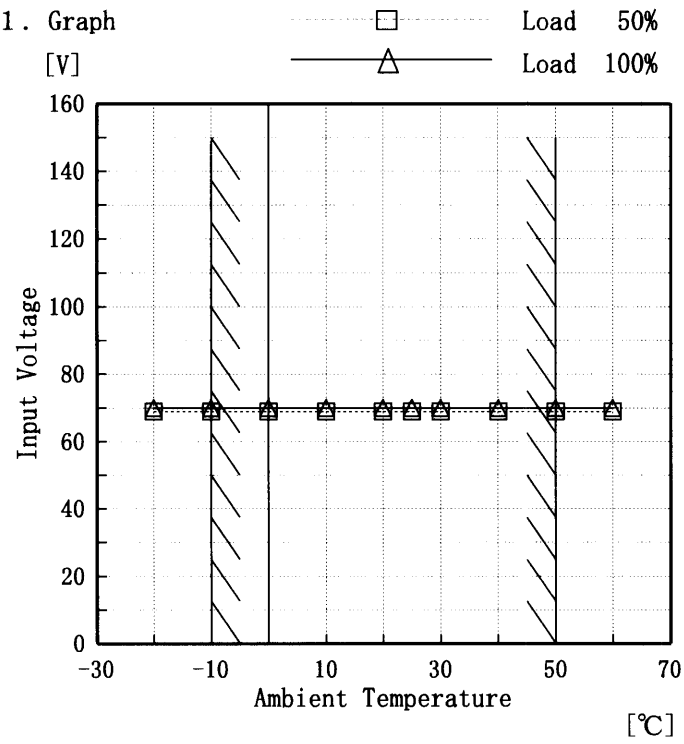
Model	PAA600F-48
Item	Minimum Input Voltage for Regulated Output Voltage 最低レギュレーション電圧
Object	+48V13A

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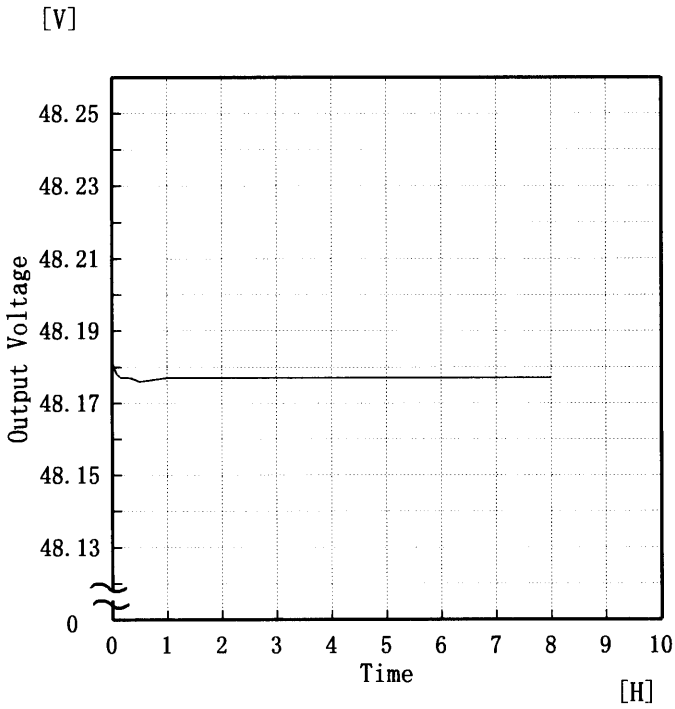
Model	PAA600F-48
Item	Time Lapse Drift 経時ドリフト
Object	+48V13A

Temperature 25 ℃
Testing Circuitry Figure A

1. Graph



Input Volt. 200V
Load 100%

2. Values

Time since start [H]	Output Voltage [V]
0.0	48.180
0.5	48.176
1.0	48.177
2.0	48.177
3.0	48.177
4.0	48.177
5.0	48.177
6.0	48.177
7.0	48.177
8.0	48.177

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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 : 170～264 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　　170～264 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	264	0	48.187	±13	±0.028
Minimum Voltage	50	170	13	48.160		

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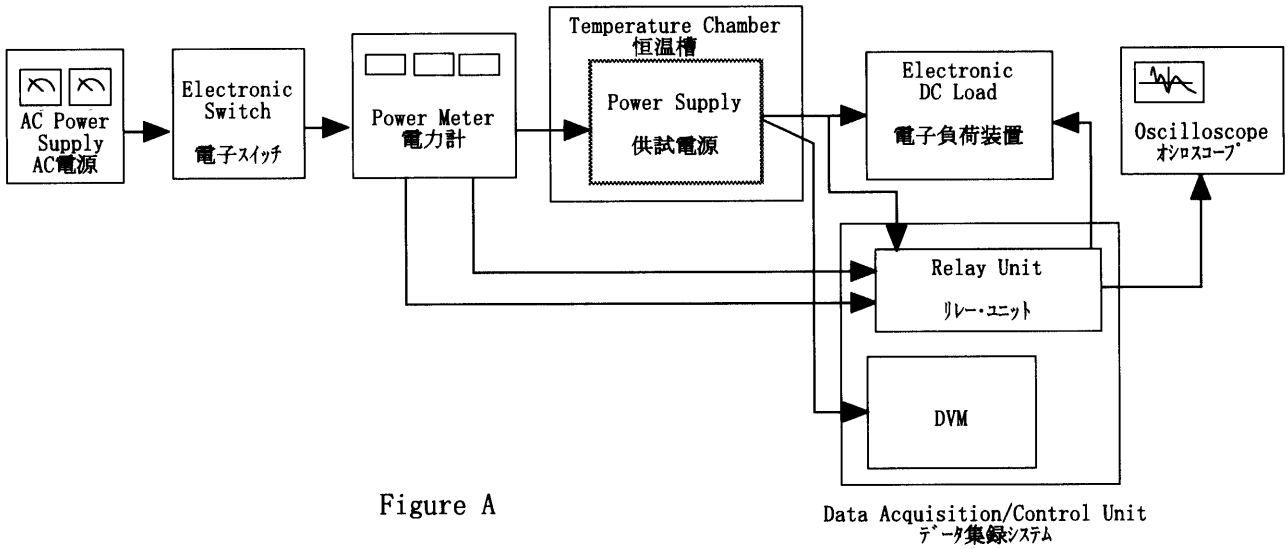

Figure A

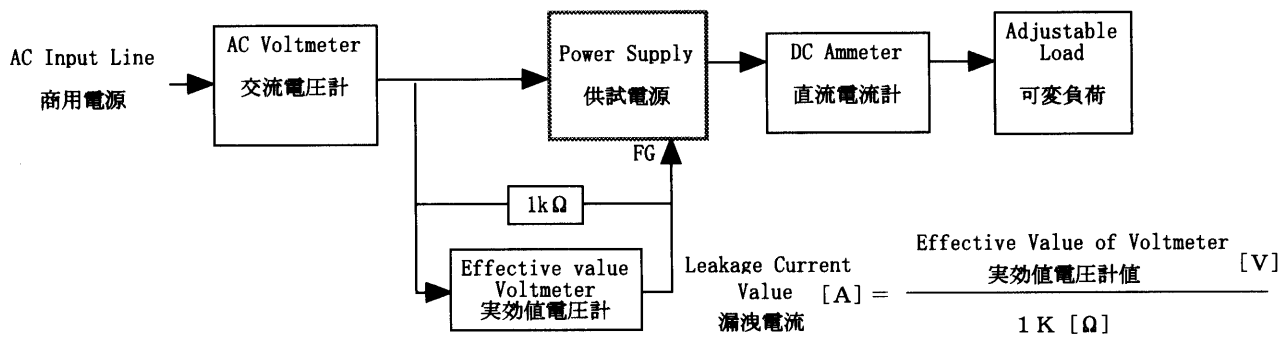

Figure B(DENTORI)

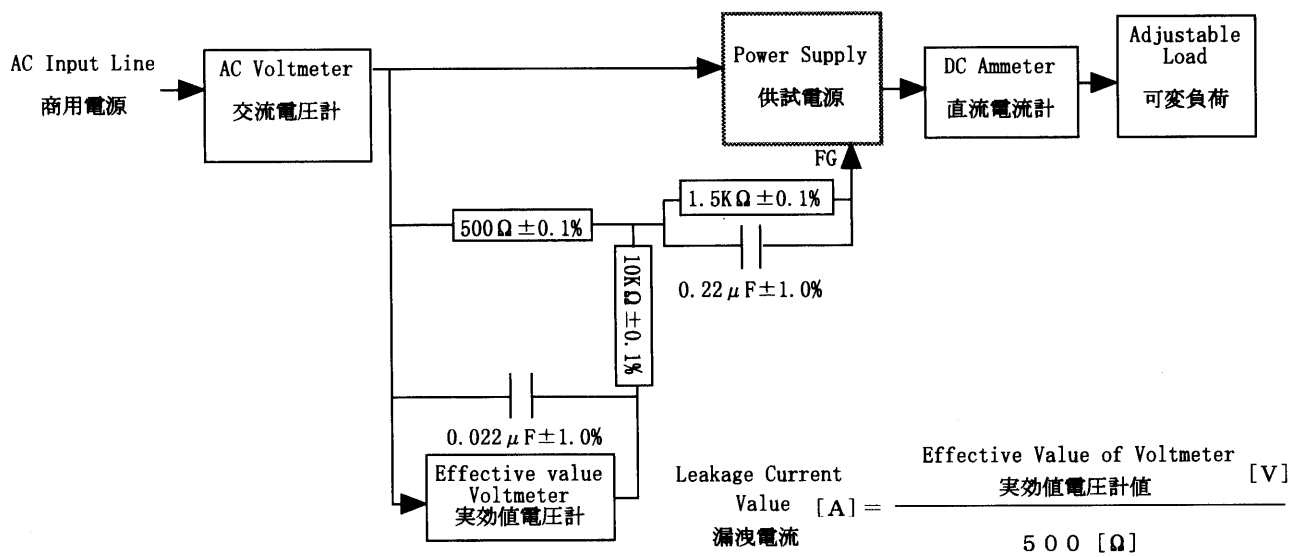

Figure B (UL, CSA, VDE)

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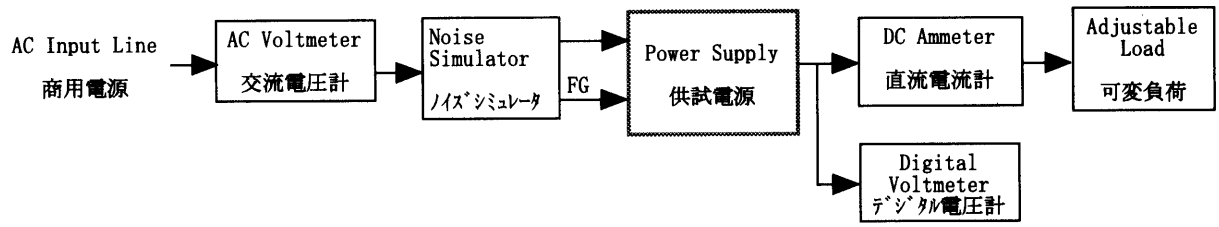

Figure C

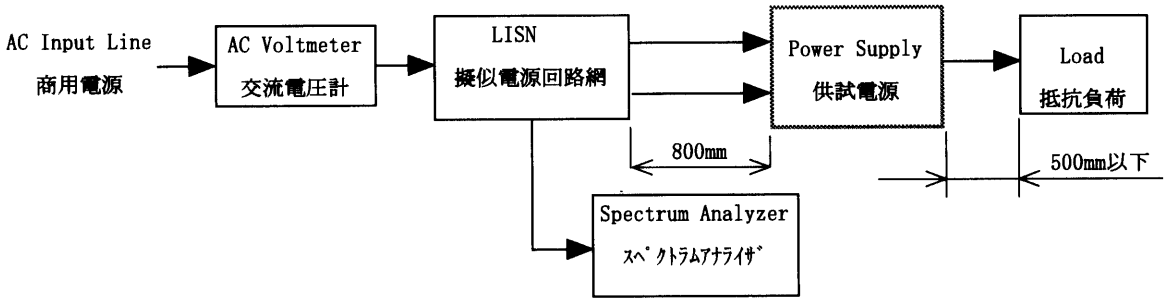

Figure D

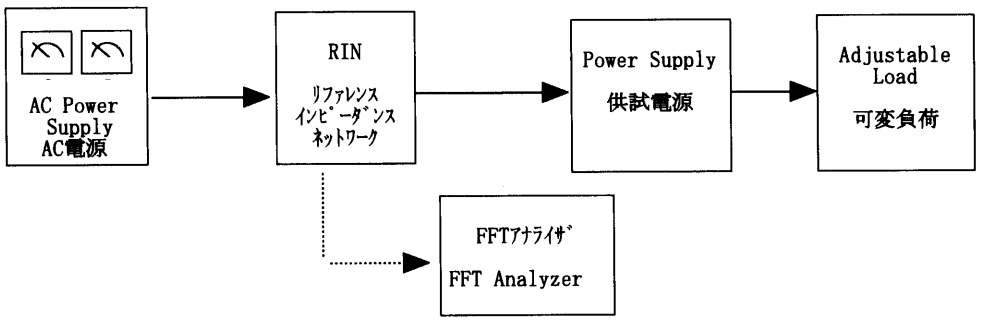

Figure E