



TEST DATA OF AEA600F-48

Regulated DC Power Supply
January 25, 2021

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Design Manager

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Design Engineer

COSEL CO.,LTD.



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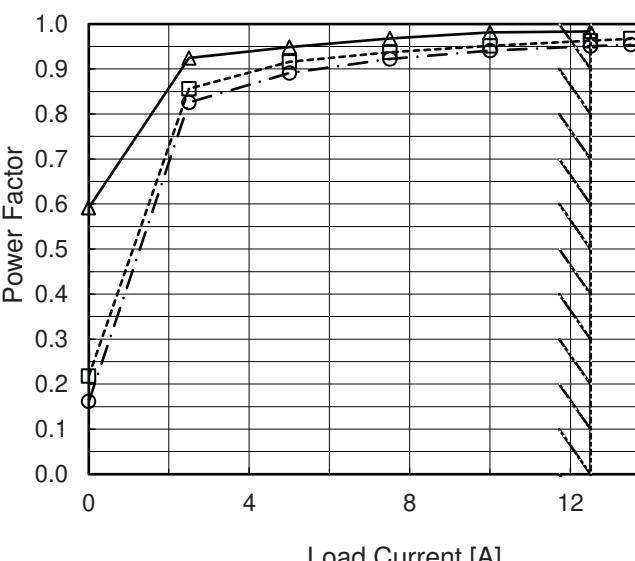
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Model	AEA600F-48																																																					
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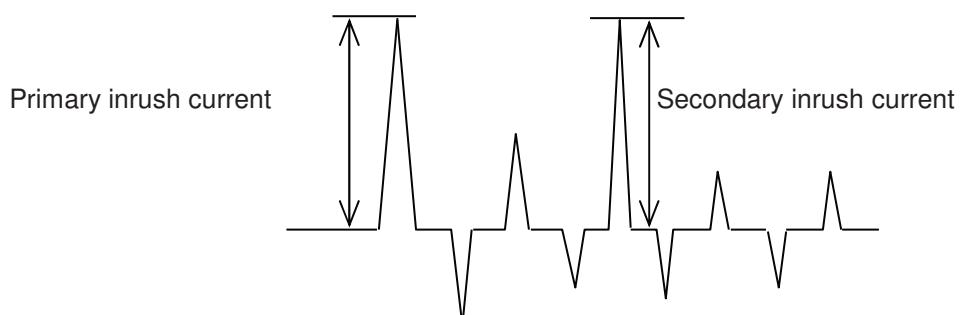
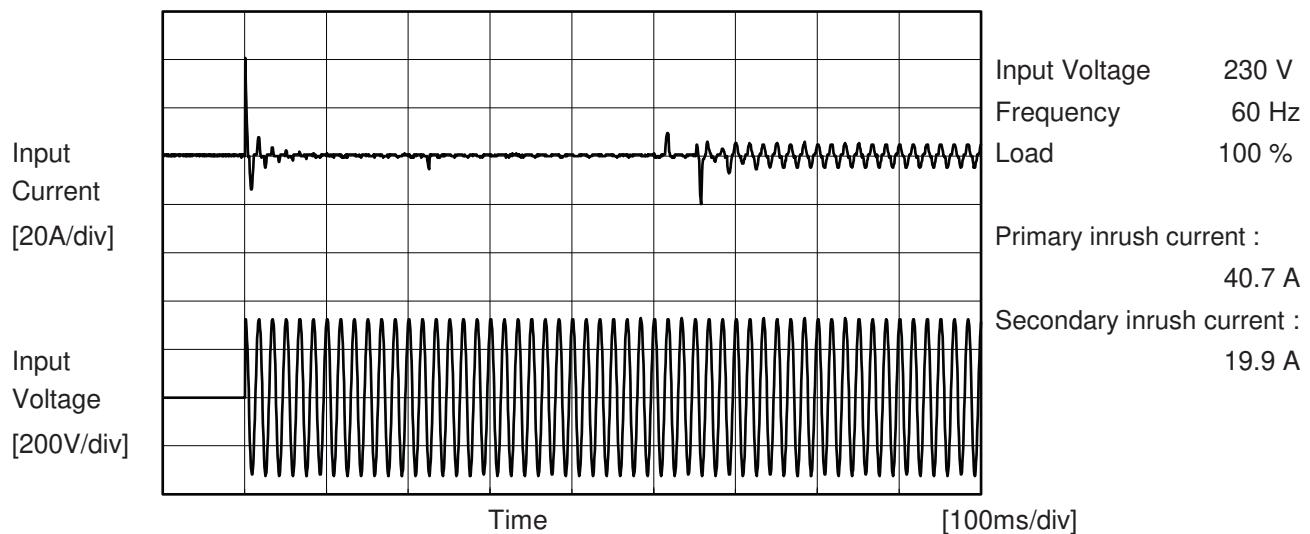
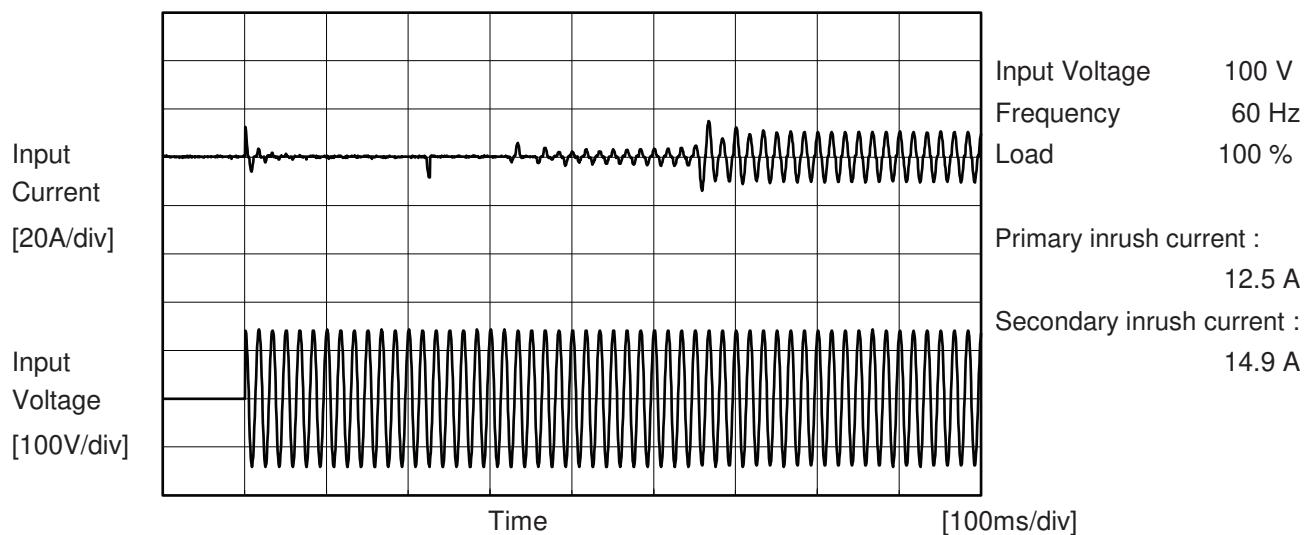
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Model	AEA600F-48	Temperature Testing Circuitry Figure A	25°C
Item	Inrush Current		
Object	_____		





Model	AEA600F-48	Temperature	25°C
Item	Leakage Current	Testing Circuitry	Figure B
Object	_____		

1. Results

[mA]

Standards	Testing Circuitry	Measuring Method	Input Volt.			Note
			100 [V]	230 [V]	240 [V]	
DEN-AN	Figure B-1	Both phases	0.07	0.19	0.20	Operation
		One of phases	0.14	0.36	0.39	Stand by
IEC62368-1	Figure B-2	Both phases	0.07	0.19	0.20	Operation
		One of phases	0.14	0.36	0.39	Stand by
IEC60601-1	Figure B-3	Both phases	0.07	0.19	0.20	Operation
		One of phases	0.14	0.36	0.39	Stand by
	Figure B-4	Both phases	0.07	0.19	0.20	Operation
		One of phases	0.14	0.36	0.39	Stand by

The value for "One of phases" is the reference value only.

2. Condition

Leakage current value is concluded after measuring both phases of AC input and by choosing the larger one.

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Model	AEA600F-48																																	
Item	Line Regulation	Temperature Testing Circuitry 25°C Figure A																																
Object	+48V12.5A																																	
1.Graph																																		
<p>Output Voltage [V]</p> <p>Input Voltage [V]</p> <p>Legend: Load 50% (dashed line), Load 100% (solid line)</p>																																		
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<p>*1 : Load 60% *2 : Load 80%</p>																																		

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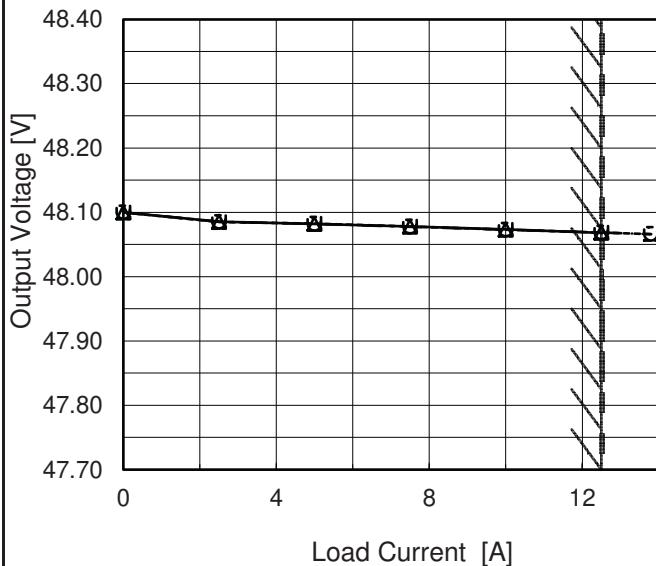
Model AEA600F-48

Item Load Regulation

Object +48V12.5A

1.Graph

—△— Input Volt. 100V
 - - □ - - Input Volt. 200V
 - - ○ - - Input Volt. 230V



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

 Temperature 25°C
 Testing Circuitry Figure A

2.Values

Load Current [A]	Output Voltage [V]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
0.0	48.100	48.100	48.100
2.5	48.085	48.085	48.086
5.0	48.082	48.083	48.082
7.5	48.078	48.078	48.078
10.0	48.073	48.073	48.073
12.5	48.068	48.068	48.068
13.8	-	48.066	48.066
--	-	-	-
--	-	-	-
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--	-	-	-

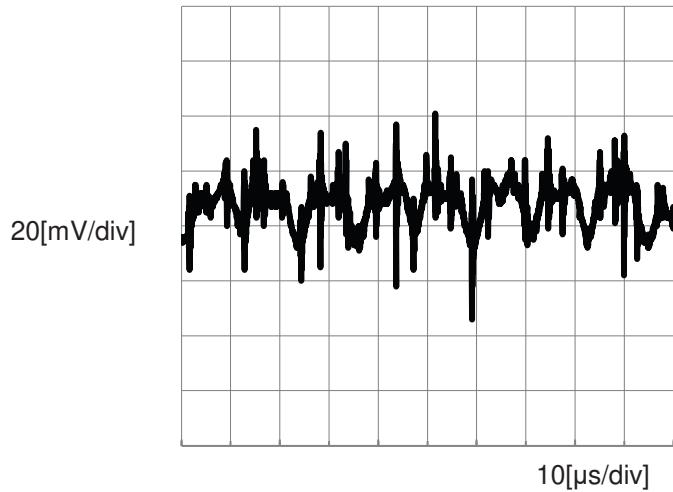
Item Ripple-Noise

 Temperature 25°C
 Testing Circuitry Figure C

Object +48V12.5A

1.Graph

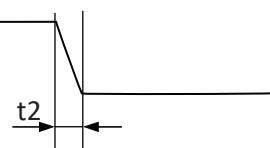
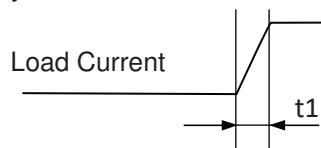
Input Voltage 200V
 Load 100%



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Model	AEA600F-48	Temperature	25°C
Item	Dynamic Load Response	Testing Circuitry	Figure A
Object	+48V12.5A		

Input Volt. 200 V
Cycle 1000 ms

Response. $t_1=t_2=50\mu\text{s}$. Typ

Load 0%(0A) \longleftrightarrow
Load 100%(12.5A)

200[mV/div]

10[ms/div]

10[ms/div]

Load 50%(6.25A) \longleftrightarrow
Load 100%(12.5A)

200[mV/div]

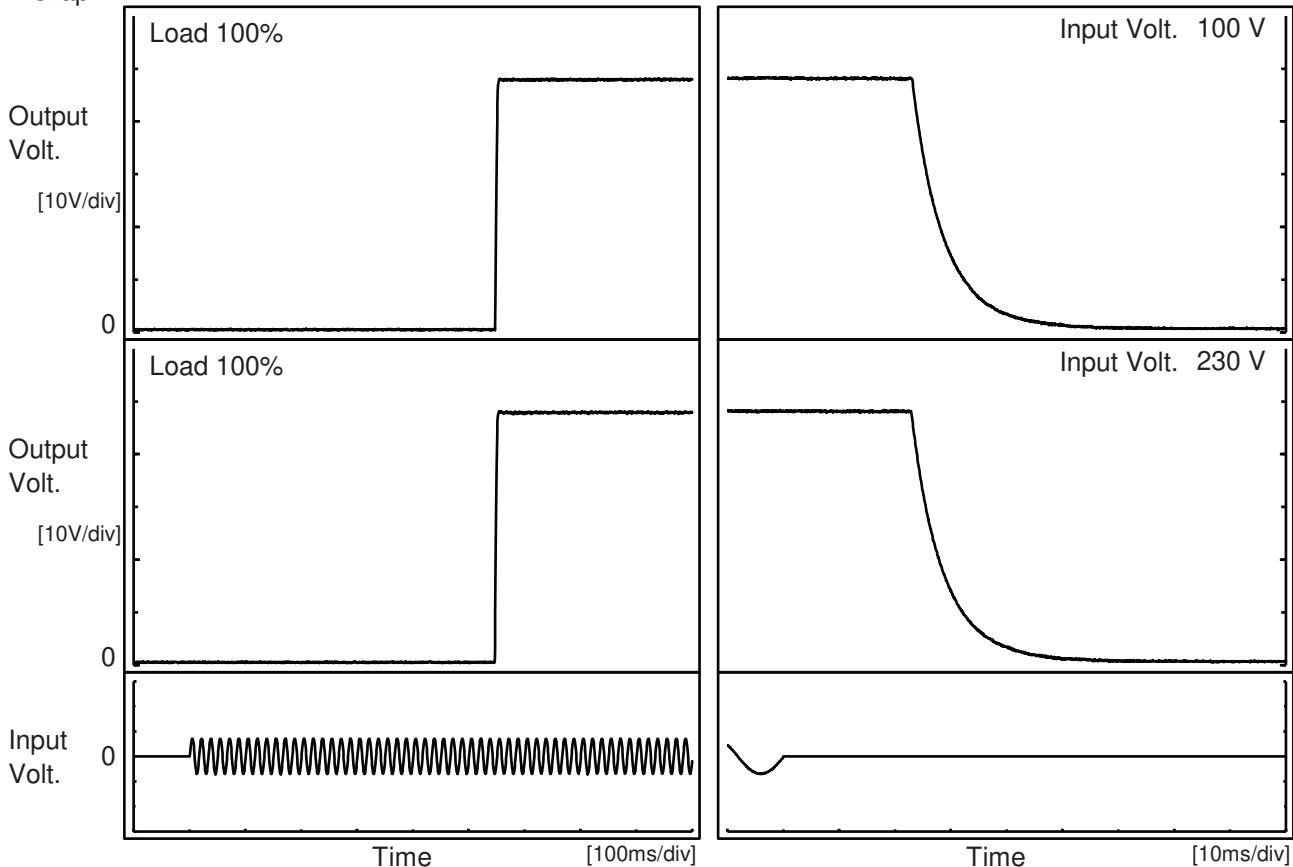
10[ms/div]

10[ms/div]

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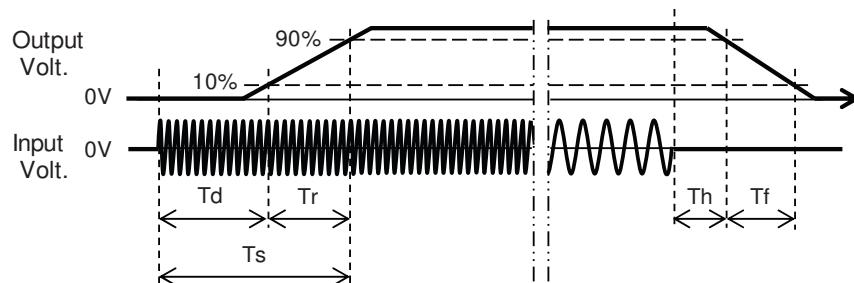
Model	AEA600F-48	Temperature	25°C
Item	Rise and Fall Time	Testing Circuitry	Figure A
Object	+48V12.5A		

1. Graph



2. Values

Input Volt.	Time	Td	Tr	Ts	Th	Tf	[ms]
100 V		548.0	4.0	552.0	23.6	13.1	
230 V		547.5	3.5	551.0	23.4	13.1	



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Model	AEA600F-48	Temperature	25°C																																
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<p>This duration covers from Shut-off of input voltage to the moment when output voltage descends to the rated range of voltage accuracy.</p> <p>Note: Slanted line shows the range of the rated input voltage.</p>																																			

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Item	Instantaneous Interruption Compensation	Temperature Testing Circuitry	25°C Figure A																																																			
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Model	AEA600F-48	
Item	Ambient Temperature Drift	Testing Circuitry Figure A
Object	+48V12.5A	

1.Values

Load 100%

Ambient Temperature[°C]	Output Voltage [V]		
	Input Volt. 100V	Input Volt. 200V	Input Volt. 230V
-20	48.060	48.059	48.060
25	48.104	48.104	48.104
50	48.084	48.084	48.084

Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object	+48V12.5A	

1.Values

Ambient Temperature[°C]	Input Voltage [V]	
	Load 50%	Load 100%
-20	74	81
25	75	82
50	75	82

Item	Overvoltage Protection	Testing Circuitry Figure A
Object	+48V12.5A	

1.Values

Load 0%

Ambient Temperature[°C]	Operating Point [V]	
	Input Volt. 100V	Input Volt. 230V
-20	63.21	63.72
25	65.65	65.36
50	67.34	67.11

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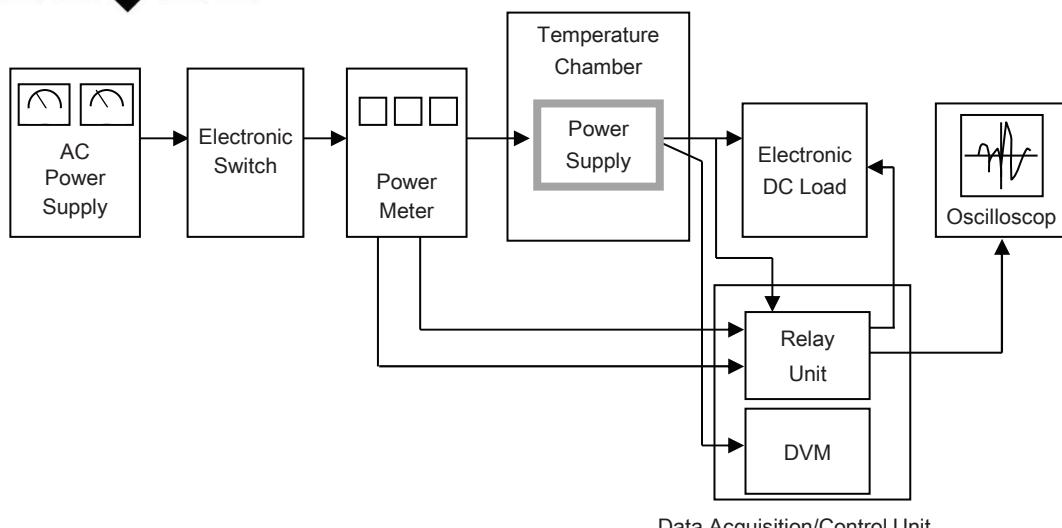


Figure A

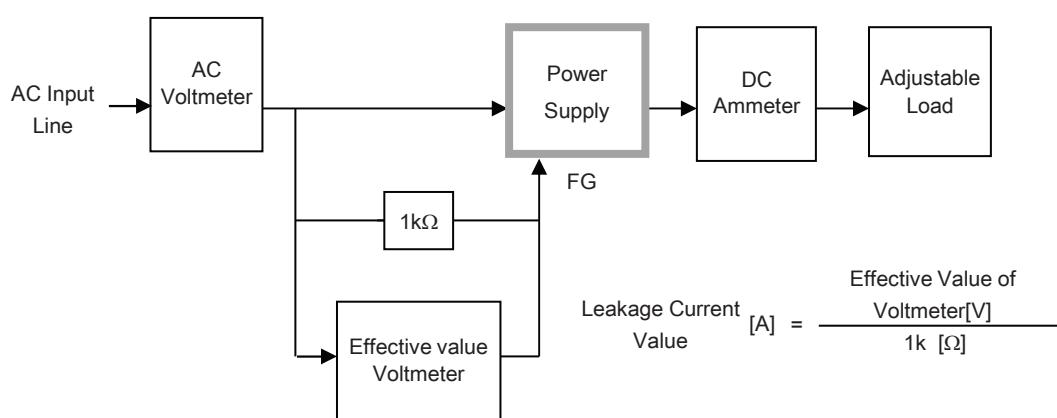


Figure B-1 (DEN-AN)

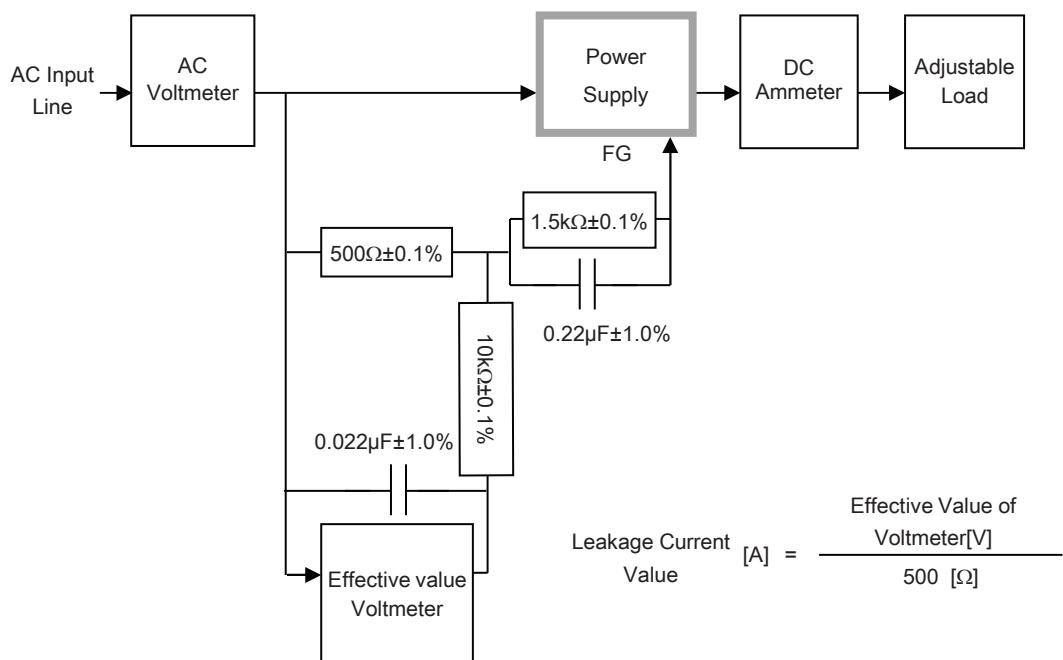


Figure B-2 (IEC62368-1 refer to IEC60990 Fig.4)

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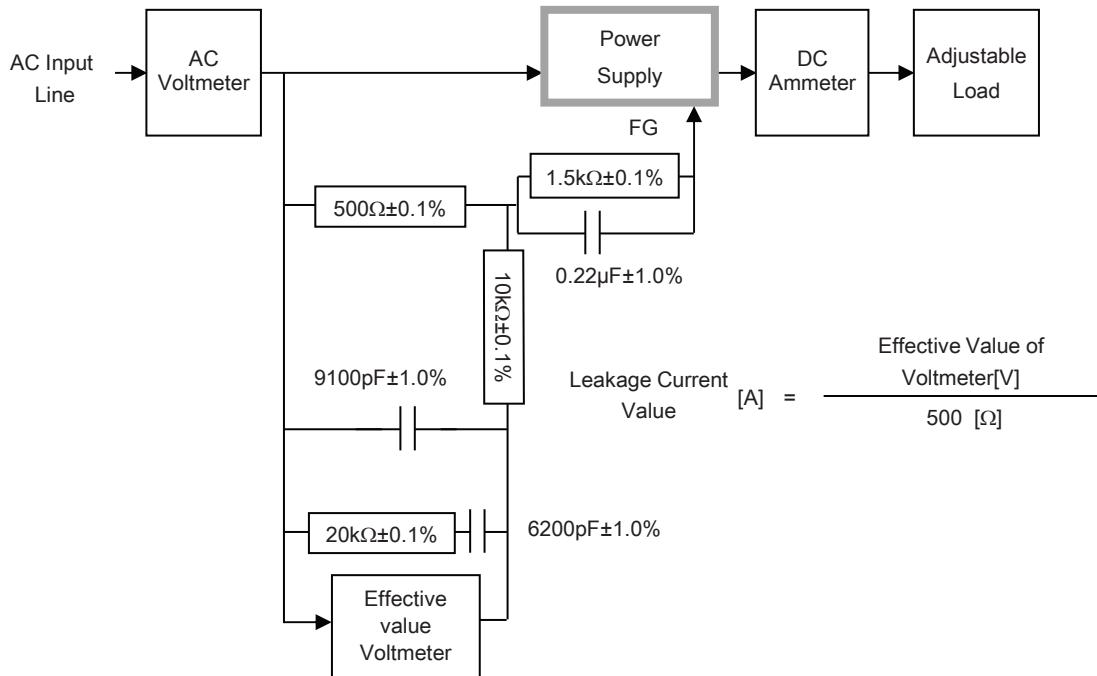


Figure B-3 (IEC62368-1 refer to IEC60990 Fig.5)

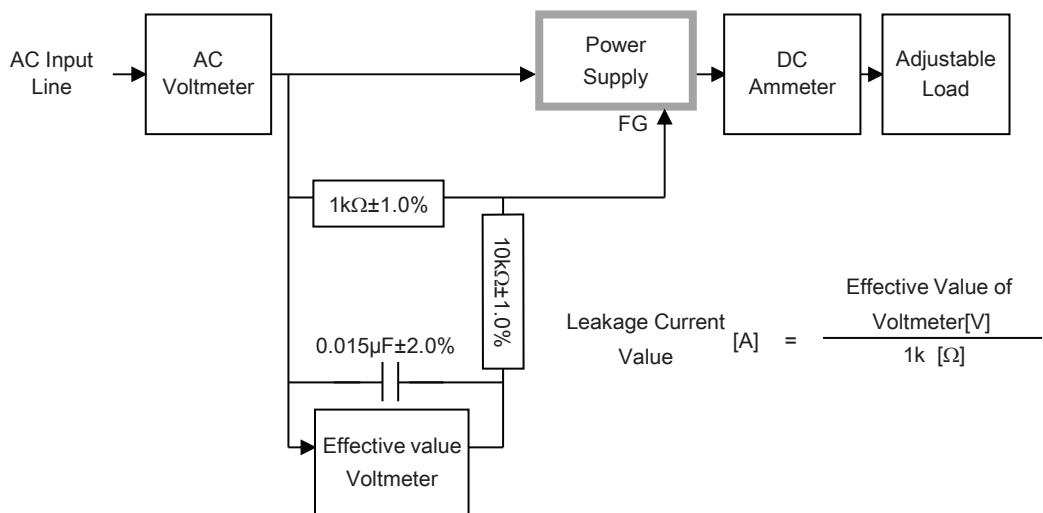


Figure B-4 (IEC60601-1)

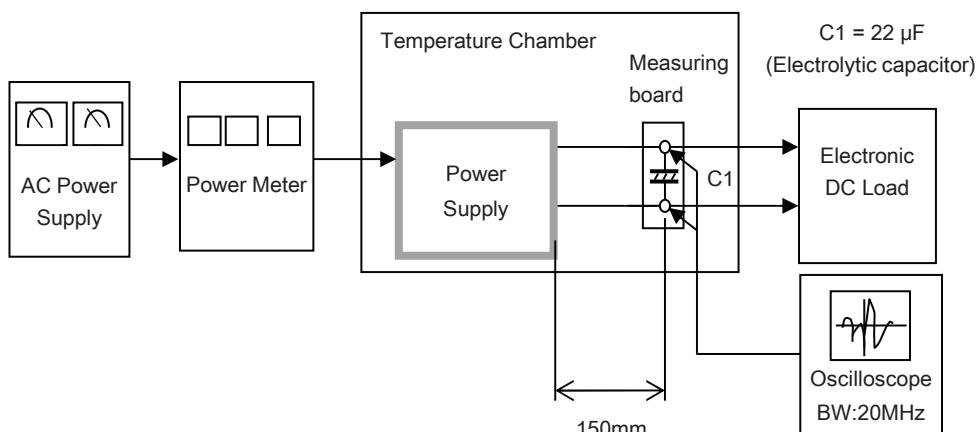


Figure C