

# TEST DATA OF PCA1500F-15

Regulated DC Power Supply  
February 22, 2021

Approved by : Takashi Yamamine  
Design Manager

Prepared by : Koki Miyazaki  
Design Engineer

**COSEL CO.,LTD.**

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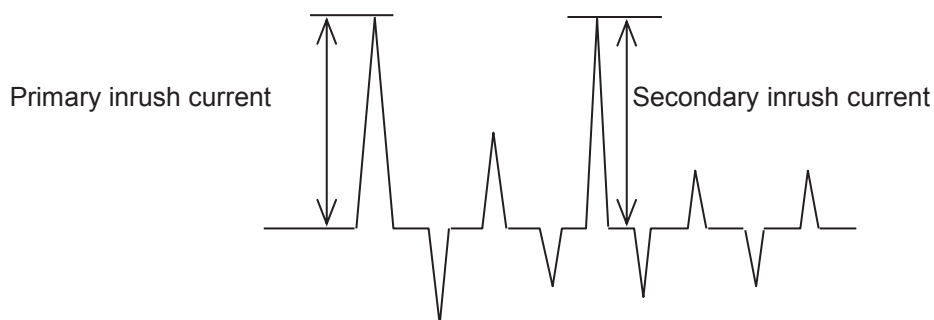
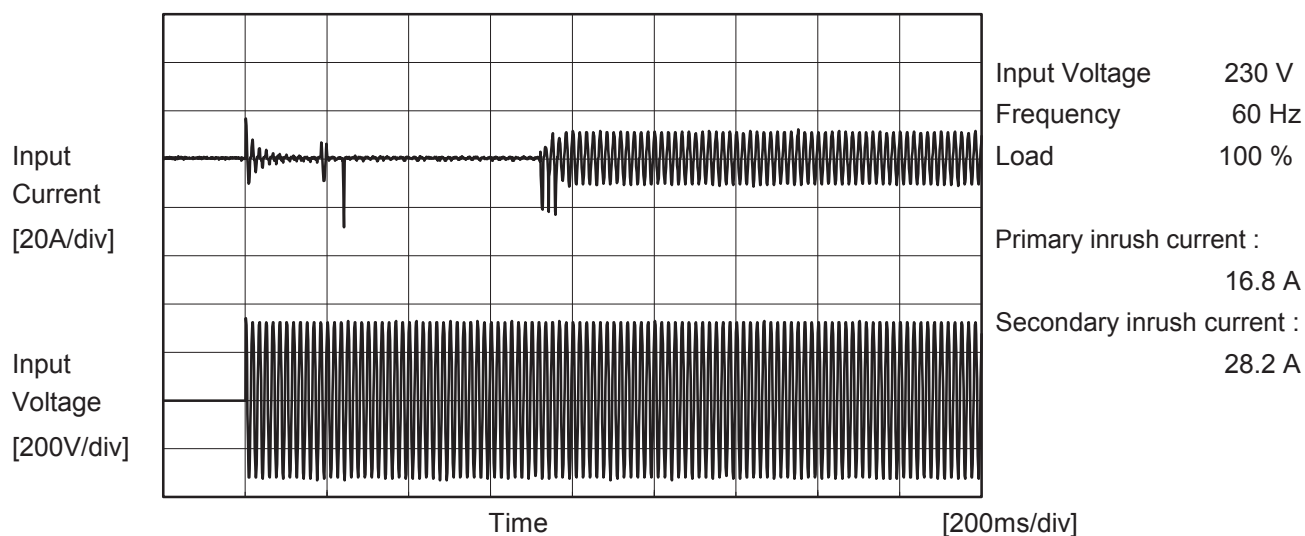
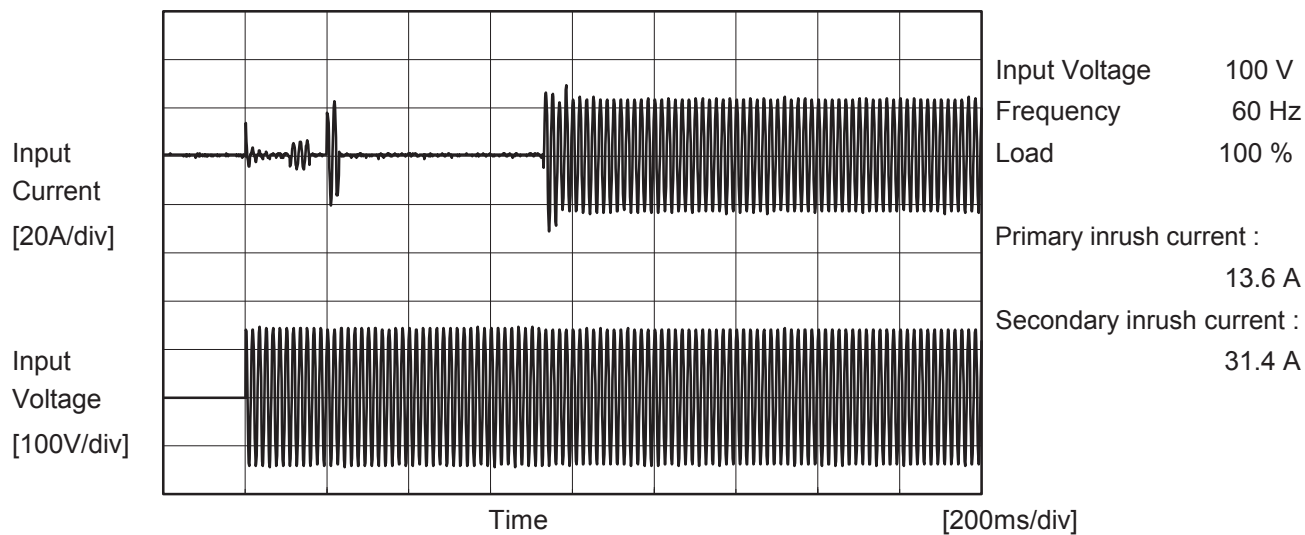
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Model		PCA1500F-15		Temperature Testing Circuitry	25°C Figure A																																																																																																	
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Model	PCA1500F-15	Temperature	25°C
Item	Inrush Current	Testing Circuitry	Figure A
Object	_____		



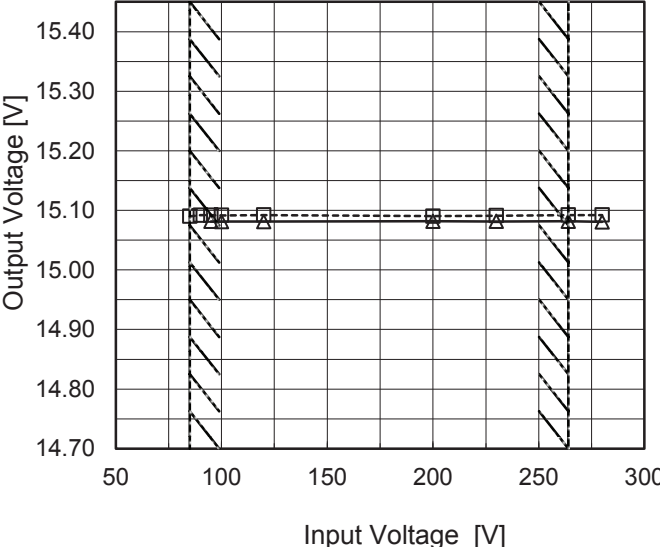
Model		PCA1500F-15	Temperature 25°C Testing Circuitry Figure B
Item		Leakage Current	
Object			

Standards	Testing Circuitry	Measuring Method	Input Volt.			Note
			100 [V]	230 [V]	240 [V]	
DEN-AN	Figure B-1	Both phases	0.23	0.28	0.29	Operation
		One of phases	0.23	0.55	0.58	Stand by
IEC62368-1	Figure B-2	Both phases	0.15	0.27	0.29	Operation
		One of phases	0.22	0.53	0.56	Stand by
	Figure B-3	Both phases	0.22	0.30	0.32	Operation
		One of phases	0.23	0.56	0.58	Stand by
IEC60601-1	Figure B-4	Both phases	0.18	0.28	0.30	Operation
		One of phases	0.22	0.57	0.62	Stand by

Note:

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

The above value is the larger one of each phase of AC input.

Model		PCA1500F-15	Temperature 25°C Testing Circuitry Figure A																															
Item		Line Regulation																																
Object		+15V100A																																
1.Graph			2.Values																															
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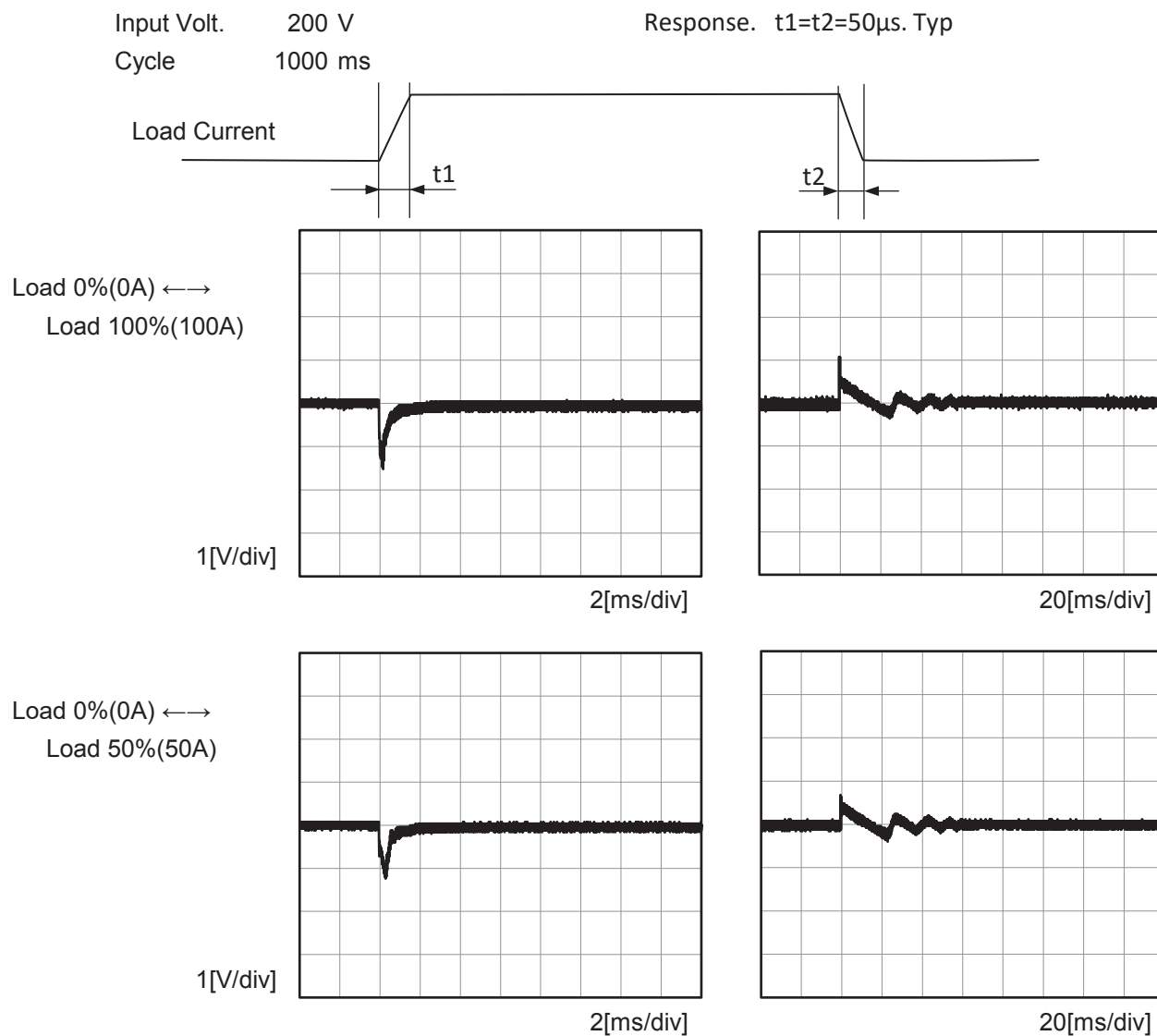


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Item	Load Regulation	Temperature	25°C																																																			
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Item	Ripple-Noise	Temperature	25°C																																																			
Object	+15V100A	Testing Circuitry	Figure C																																																			
1.Graph <div><div><div>Input Voltage200V</div><div>Load100%</div></div><div><p>20[mV/div]</p><p>4[μs/div]</p></div></div>																																																						

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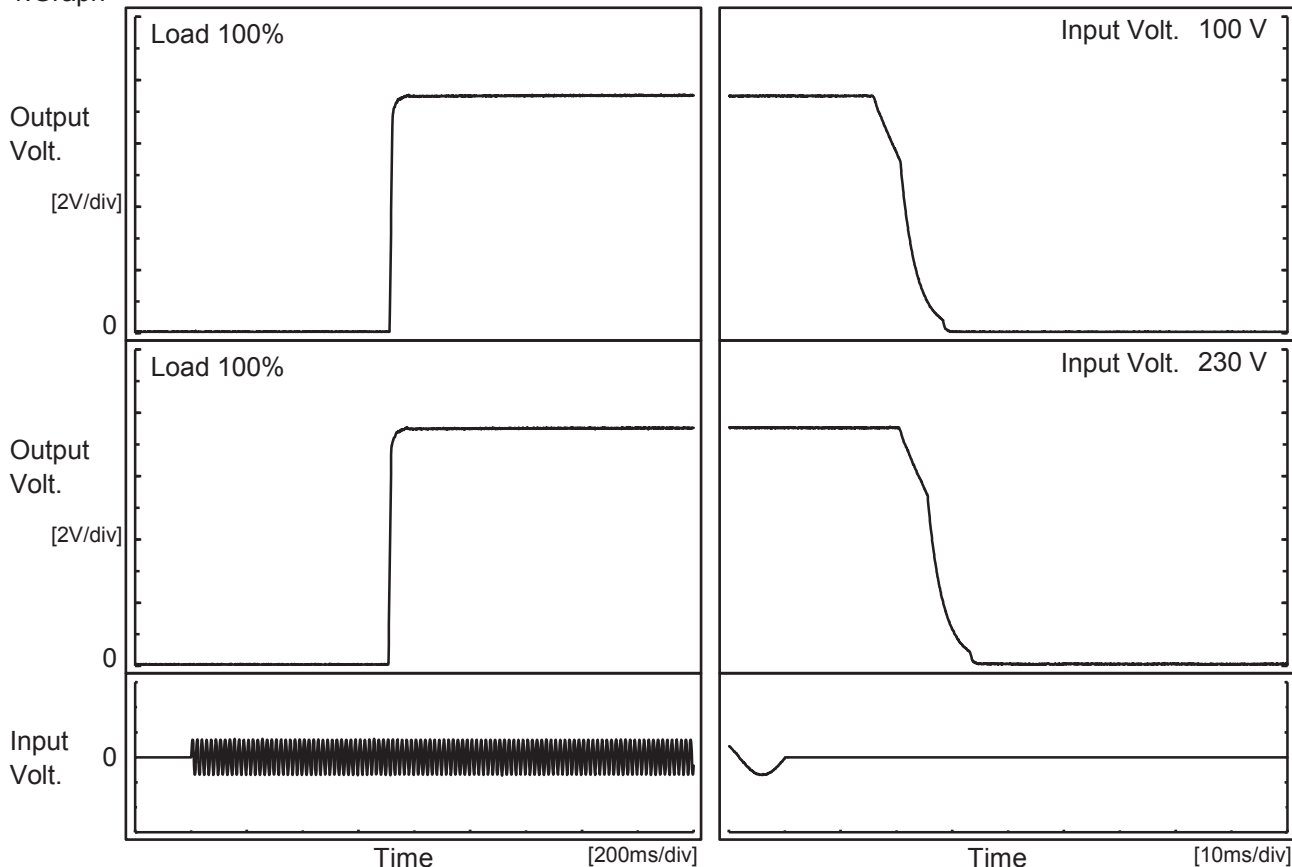
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Model	PCA1500F-15	Temperature 25°C Testing Circuitry Figure A
Item	Dynamic Load Response	
Object	+15V100A	



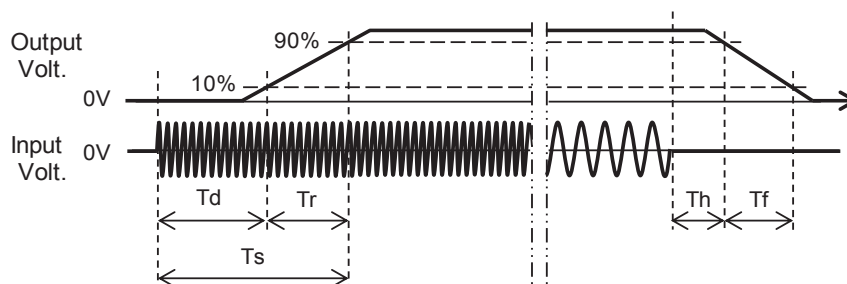
Model	PCA1500F-15	Temperature 25°C Testing Circuitry Figure A
Item	Rise and Fall Time	
Object	+15V100A	

## 1.Graph



## 2.Values

		[ms]				
Input Volt.	Time	Td	Tr	Ts	Th	Tf
100 V		713.0	9.0	722.0	17.3	8.9
230 V		709.0	9.0	718.0	22.1	9.2



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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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Model		PCA1500F-15	Testing Circuitry Figure A
Item		Ambient Temperature Drift	
Object		+15V100A	

1.Values

Load 100%

Ambient Temperature[°C]	Output Voltage [V]		
	Input Volt. 100V	Input Volt. 200V	Input Volt. 230V
-20	15.048	15.048	15.048
25	15.086	15.086	15.086
50	15.093	15.093	15.094

Item		Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object		+15V100A	

1.Values

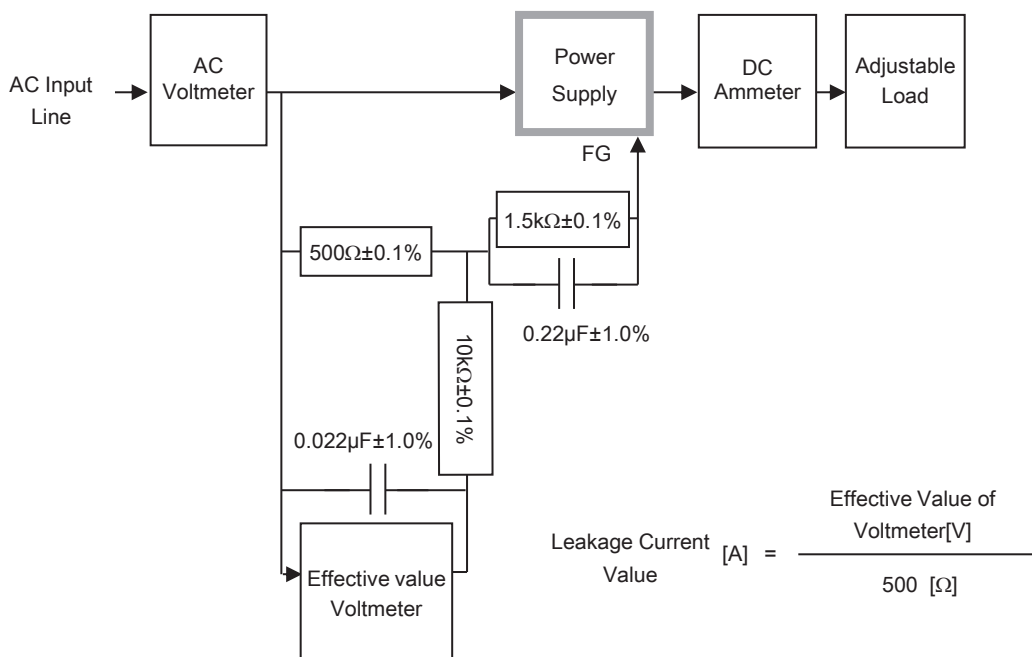
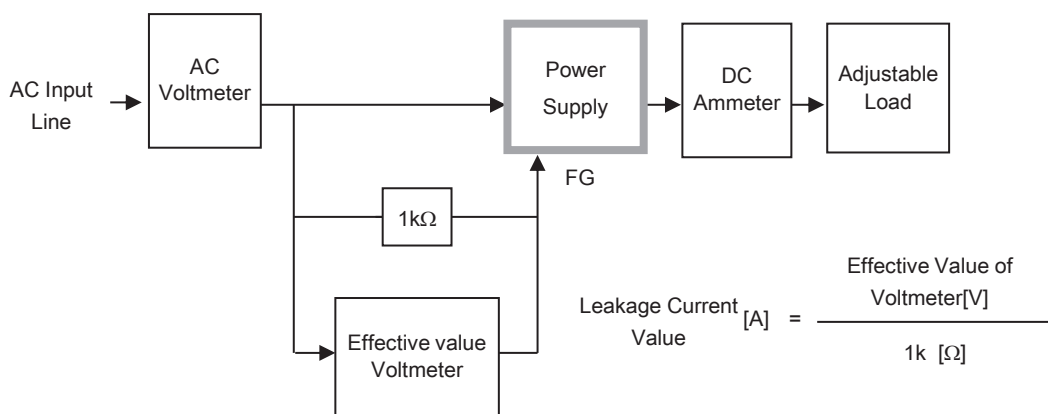
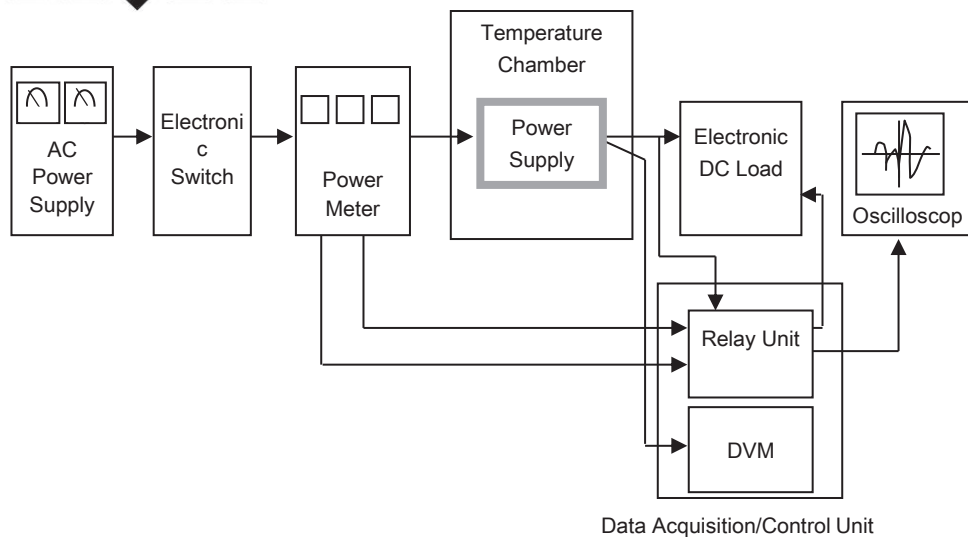
Ambient Temperature[°C]	Input Voltage [V]	
	Load 50%	Load 100%
-20	74	81
25	74	81
50	74	81

Item		Overvoltage Protection	Testing Circuitry Figure A
Object		+15V100A	

1.Values

Load 0%

Ambient Temperature[°C]	Operating Point [V]	
	Input Volt. 100V	Input Volt. 230V
-20	19.26	19.26
25	19.38	19.38
50	19.38	19.38





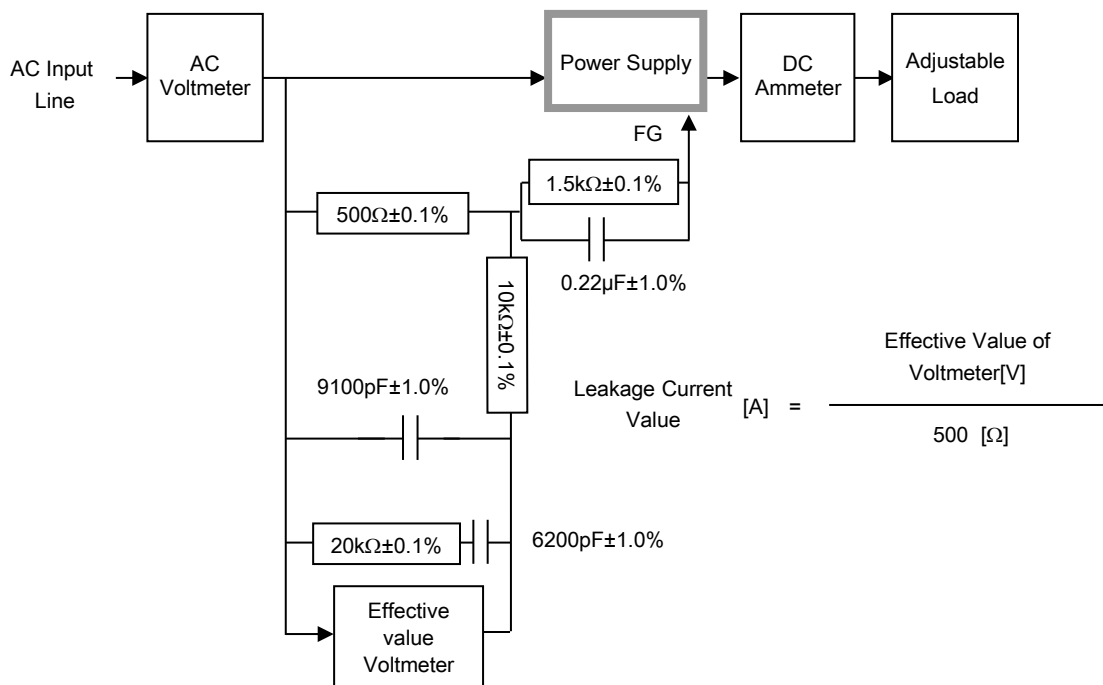


Figure B-3 ( IEC62368-1 refer to IEC60990 Fig.5 )

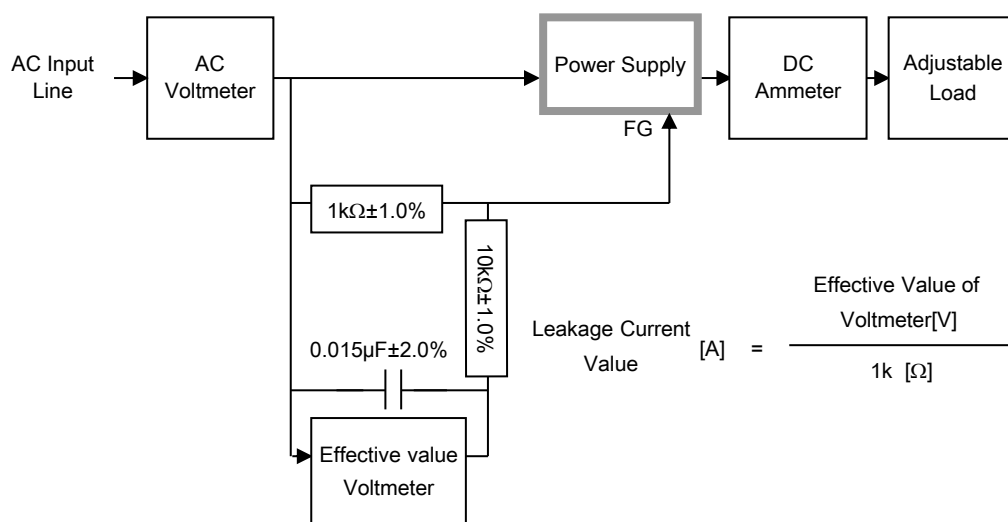


Figure B-4 ( IEC60601-1)

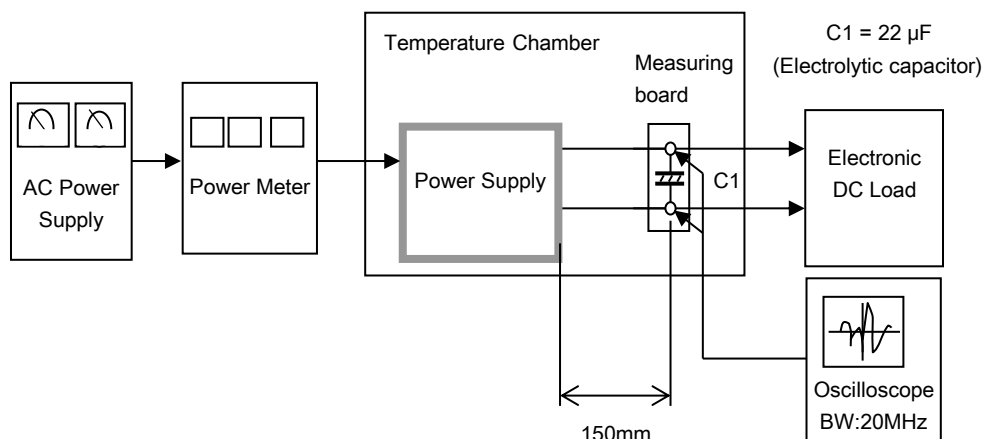


Figure C