

TEST DATA OF FETA3000BA-48

Regulated DC Power Supply
August 22, 2019

Approved by : Koji Todo
Koji Todo Design Manager

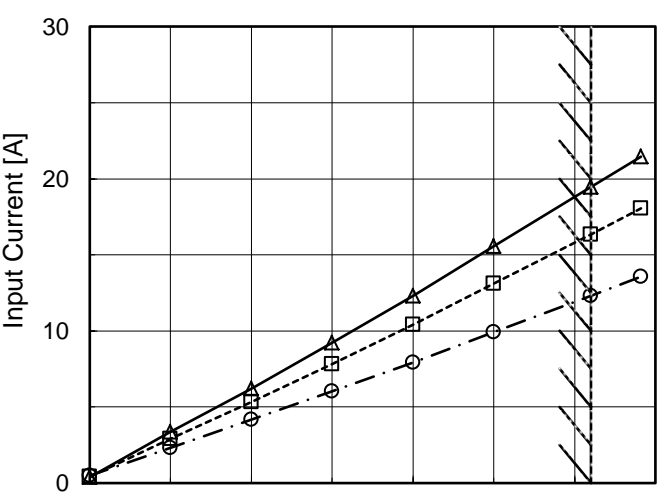
Prepared by : Yuta Usui
Yuta Usui Design Engineer

COSEL CO.,LTD.

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Model		FETA3000BA-48		Temperature 25°C																																																				
Item		Input Current (by Load Current)		Testing Circuitry Figure A																																																				
Object		_____																																																						
1.Graph		<div><div><div>—△—</div><div>Input Volt.</div><div>170V</div></div><div><div>---□---</div><div>Input Volt.</div><div>200V</div></div><div><div>---○---</div><div>Input Volt.</div><div>264V</div></div></div>  <p>Note: Slanted line shows the range of the rated load current.</p>		2.Values																																																				
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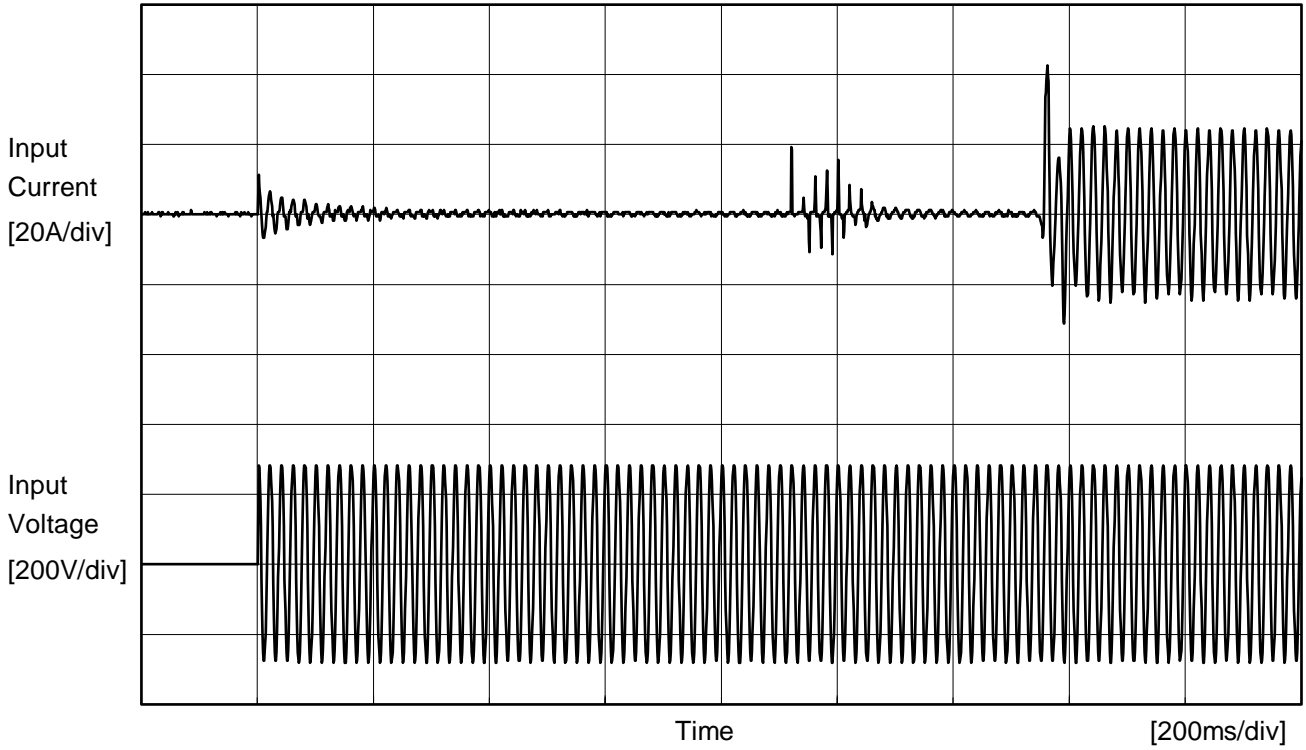


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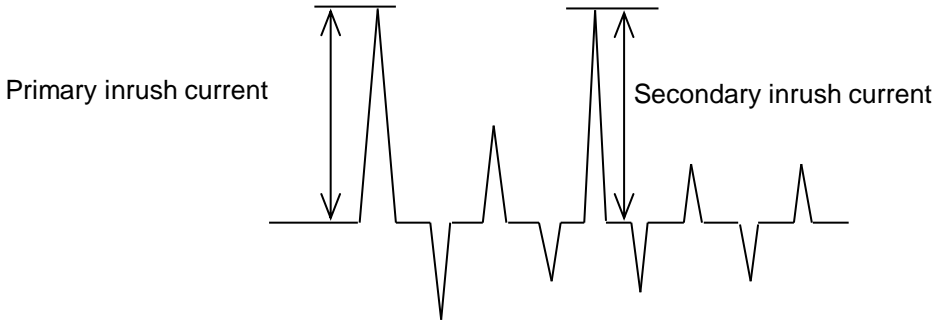


Model	FETA3000BA-48		
Item	Inrush Current	Temperature	25°C
Object		Testing Circuitry	Figure A



Input Voltage 200 V
Frequency 50 Hz
Load 100 %

Primary inrush current 11.4 A
Secondary inrush current 42.6 A





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Model	FETA3000BA-48		
Item	Leakage Current	Temperature	25°C
Object	_____	Testing Circuitry	Figure B

1.Results

Standards	Testing Circuitry	Measuring Method	Input Volt.			Note
			170 [V]	200 [V]	264 [V]	
IEC62368-1	Figure B-1	Both phases	0.40	0.54	0.68	Operation
		One of phases	0.65	0.89	1.14	Stand by
	Figure B-2	Both phases	0.40	0.54	0.68	Operation
		One of phases	0.65	0.92	1.15	Stand by

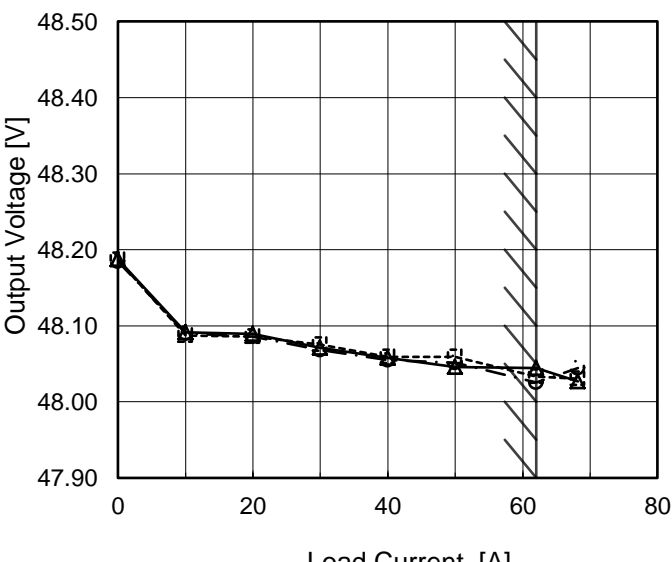
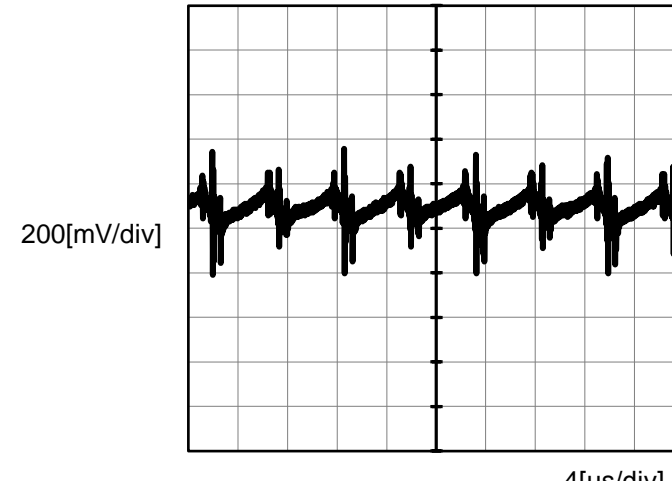
The value for "One of phases" is the reference value only.

2.Condition

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

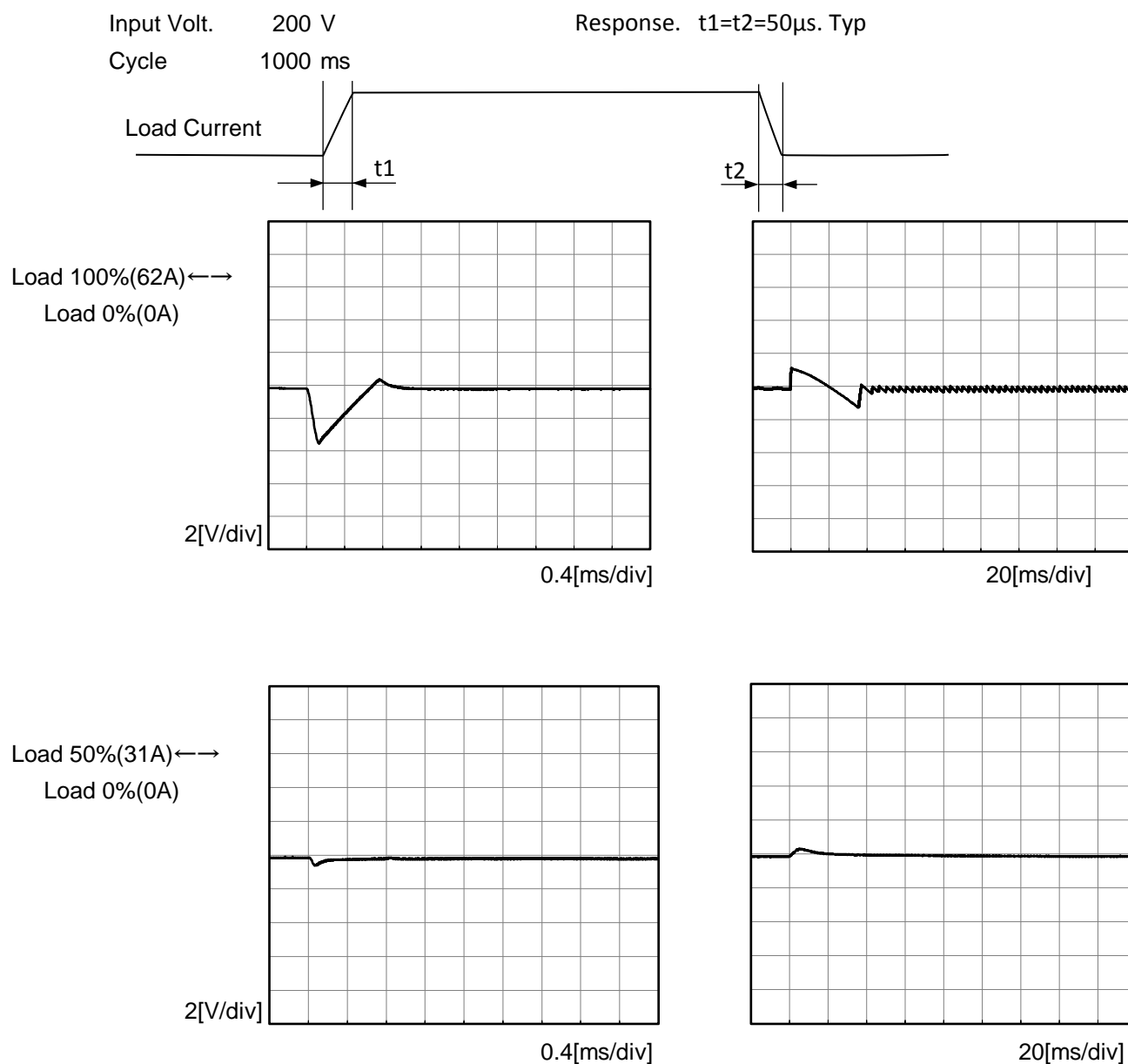
Model		FETA3000BA-48	Temperature		25°C																																
Item		Line Regulation	Testing Circuitry		Figure A																																
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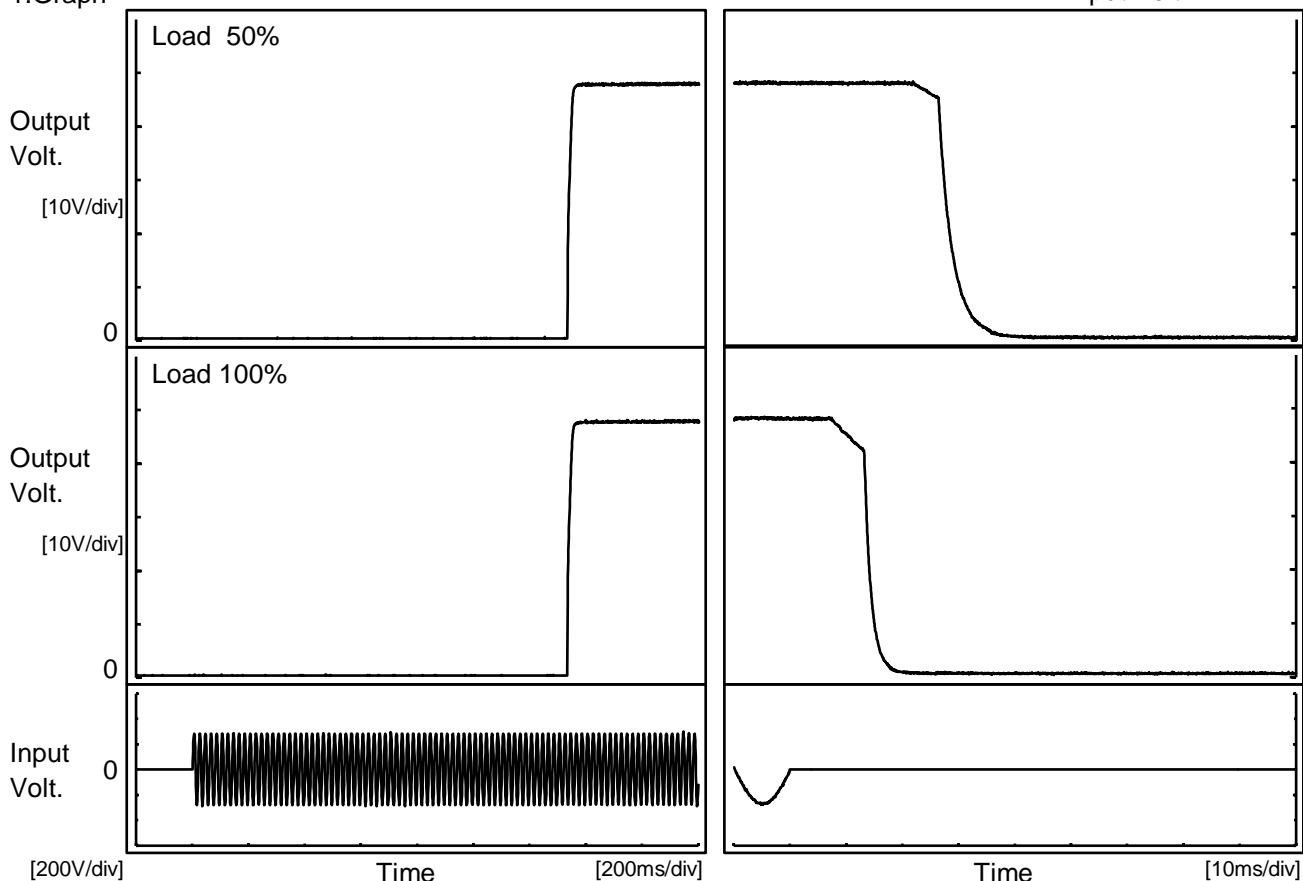
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Model	FETA3000BA-48		
Item	Dynamic Load Response	Temperature	25°C
Object	+48V62A	Testing Circuitry	Figure A



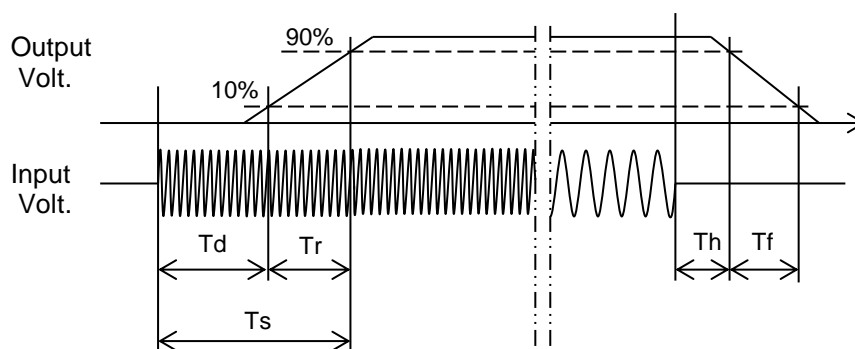
Model	FETA3000BA-48		
Item	Rise and Fall Time	Temperature	25°C
Object	+48V62A	Testing Circuitry	Figure A

1.Graph



2.Values

		[ms]				
Load	Time	Td	Tr	Ts	Th	Tf
50 %		1333.0	16.0	1349.0	26.5	5.4
100 %		1333.0	16.0	1349.0	11.6	4.3



BC-11397

Model		FETA3000BA-48	Temperature		25°C																																																			
Item		Instantaneous Interruption Compensation	Testing Circuitry		Figure A																																																			
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<div><div><div></div><div>Input Volt. 170V</div></div><div><div></div><div>Input Volt. 200V</div></div><div><div></div><div>Input Volt. 264V</div></div></div> <p>Output Voltage [V]</p> <p>Load Current [A]</p> <p>Note: Slanted line shows the range of the rated load current.</p> <p>When the output voltage fell to less than 33.6V , the unit shuts off the output by operating low voltage protection.</p>				<table><tr><th rowspan="2">Output Voltage [V]</th><th colspan="3">Load Current [A]</th></tr><tr><th>Input Volt. 170[V]</th><th>Input Volt. 200[V]</th><th>Input Volt. 264[V]</th></tr><tr><td>45.6</td><td>69.25</td><td>69.61</td><td>69.76</td></tr><tr><td>43.2</td><td>69.36</td><td>69.74</td><td>69.84</td></tr><tr><td>38.4</td><td>69.67</td><td>69.93</td><td>70.02</td></tr><tr><td>33.6</td><td>69.89</td><td>70.12</td><td>70.25</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr></table>				Output Voltage [V]	Load Current [A]			Input Volt. 170[V]	Input Volt. 200[V]	Input Volt. 264[V]	45.6	69.25	69.61	69.76	43.2	69.36	69.74	69.84	38.4	69.67	69.93	70.02	33.6	69.89	70.12	70.25	--	-	-	-	--	-	-	-	--	-	-	-	--	-	-	-	--	-	-	-	--	-	-	-	--	-	-	-	--	-	-	-	--	-	-	-
Output Voltage [V]	Load Current [A]																																																																	
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		Testing Circuitry Figure A	
Model	FETA3000BA-48		
Item	.Ambient Temperature Drift		
Object	+48V62A		
1.Values Load 100%			
Ambient Temperature[°C]	Output Voltage [V]		
	Input Volt. 170V	Input Volt. 200V	Input Volt. 264V
-10	48.048	48.044	48.060
25	48.069	48.076	48.071
50	48.079	48.077	48.076
Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A	
Object	+48V62A		
1.Values			
Ambient Temperature[°C]	Input Voltage [V]		
	Load 50%	Load 100%	
-10	165	166	
25	166	167	
50	166	167	
Item	.Overvoltage Protection	Testing Circuitry Figure A	
Object	+48V62A		
1.Values Load 0%			
Ambient Temperature[°C]	Operating Point [V]		
	Input Volt. 170V	Input Volt. 264V	
-10	58.50	58.50	
25	58.50	58.50	
50	58.70	58.70	

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BC-11397

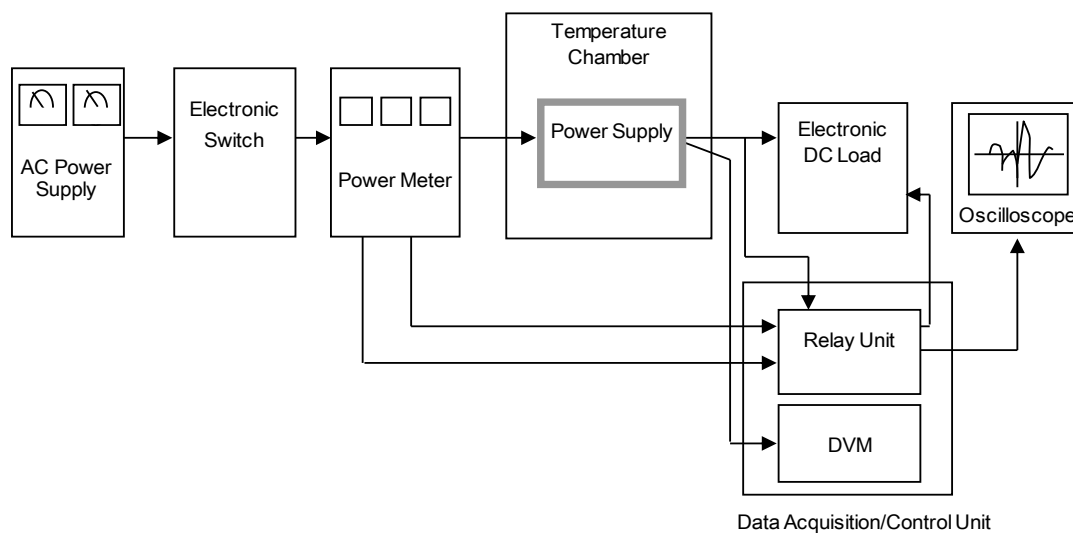


Figure A

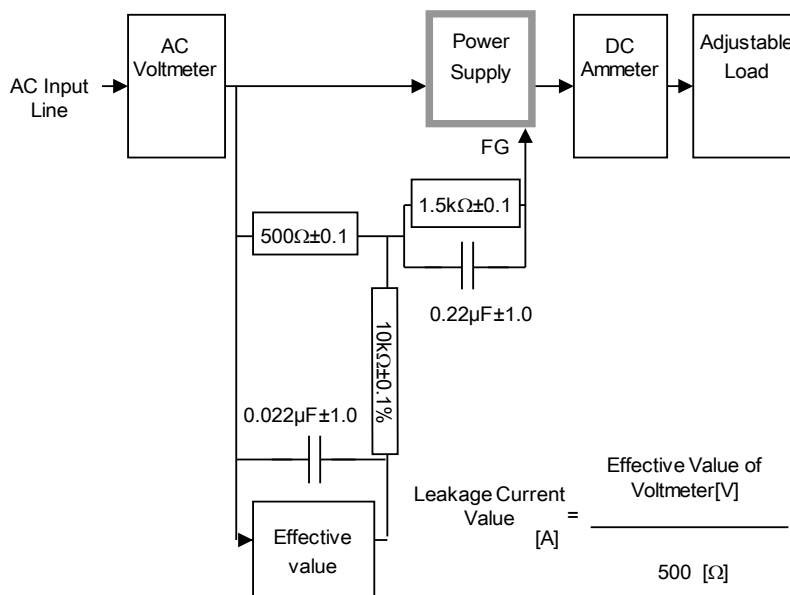


Figure B-1 (IEC62368-1 refer to IEC60990 Fig.4)

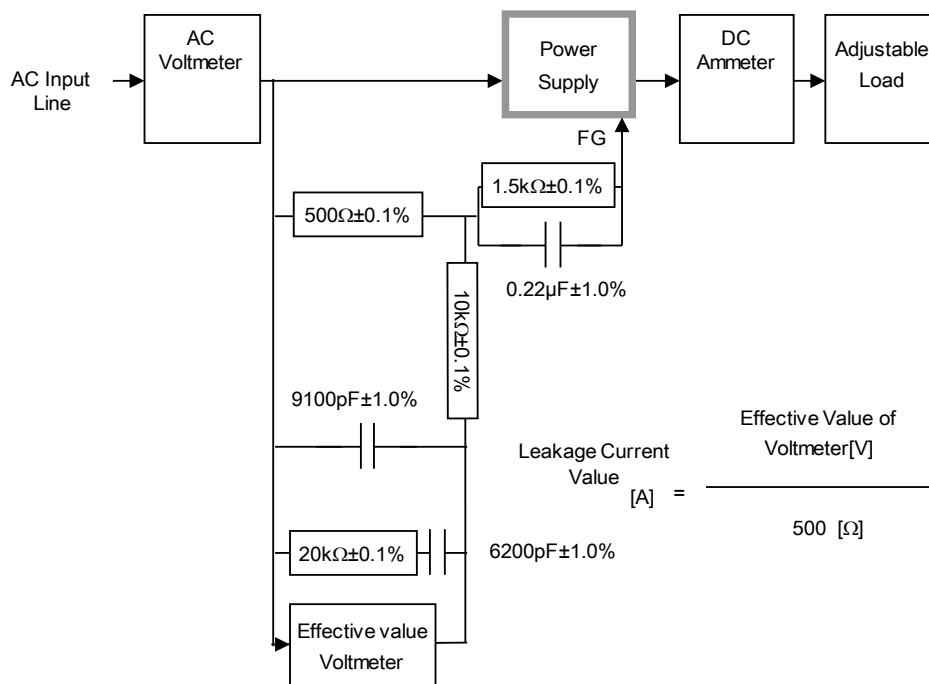


Figure B-2 (IEC62368-1 refer to IEC60990 Fig.5)

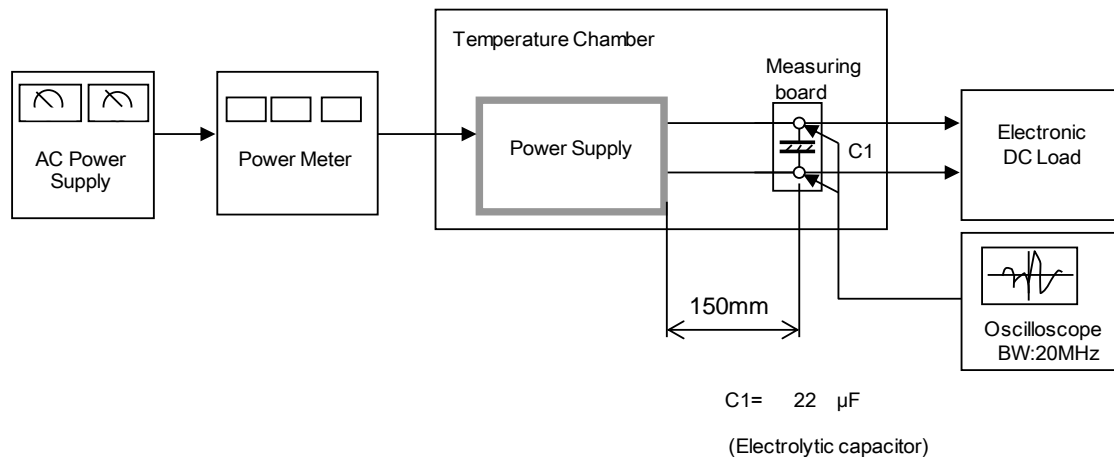


Figure C