



TEST DATA OF PBW50F-15

Regulated DC Power Supply
Sep 29, 2005

Approved by : *Kuniaki Nagahara*
Kuniaki Nagahara Design Manager

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COSEL CO.,LTD.



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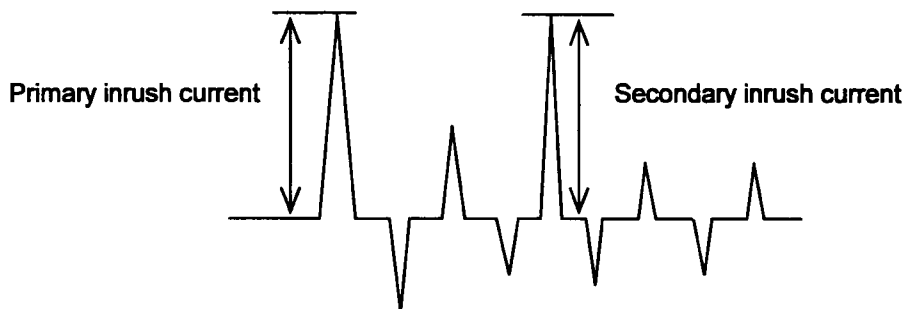
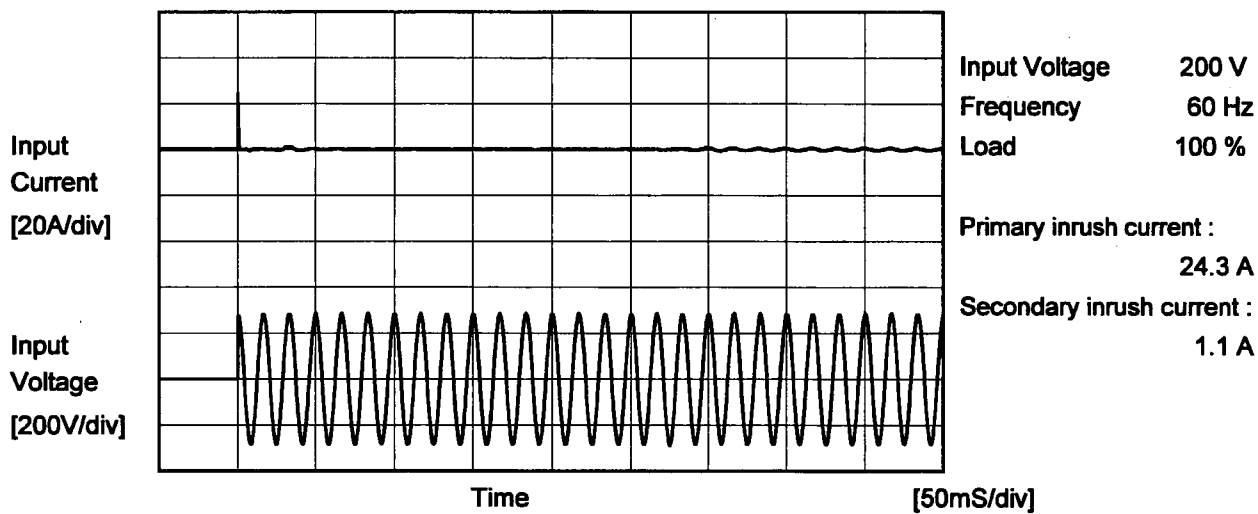
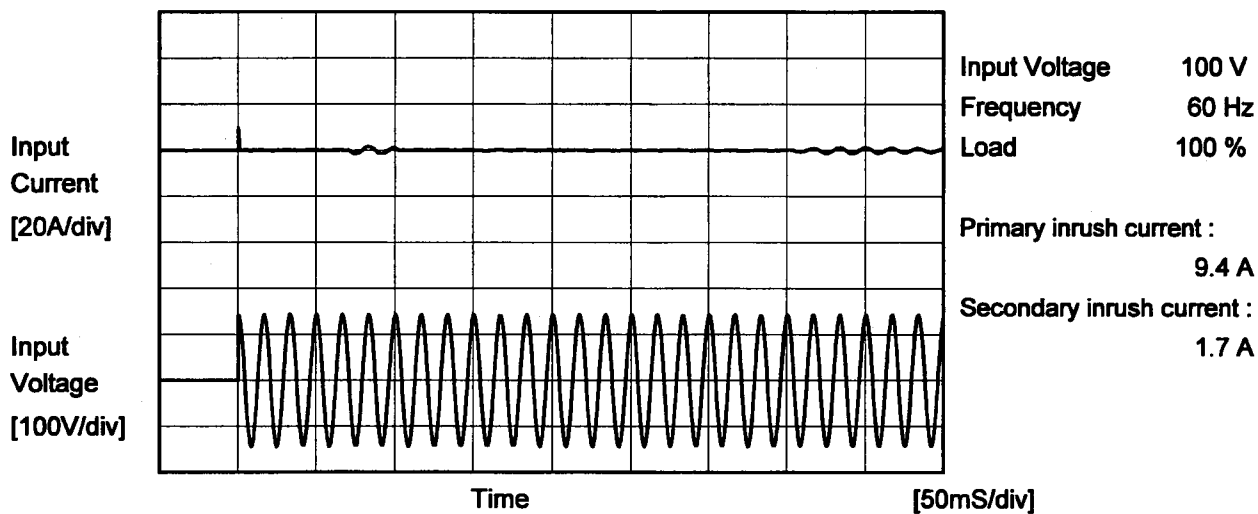
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Item		Inrush Current	
Object		_____	
		Temperature	25°C
		Testing Circuitry	Figure A





Model		PBW50F-15	Temperature 25°C Testing Circuitry Figure B
Item		Leakage Current	
Object		_____	

1.Results

Standards		Input Volt.			Note
		100 [V]	200 [V]	240 [V]	
DEN-AN	Both phases	0.18	0.40	0.54	Operation
	One of phase	0.27	0.54	0.63	stand by
IEC60950	Both phases	0.18	0.40	0.54	Operation
	One of phase	0.27	0.54	0.63	stand by

The value for "One of phase" 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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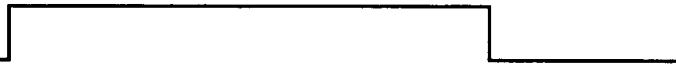
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Model		PBW50F-15	
Item		Temperature	25°C
Object		Testing Circuitry	Figure A
		+15V1.7A	

Input Volt. 100 V
Cycle 1000 ms

Load Current

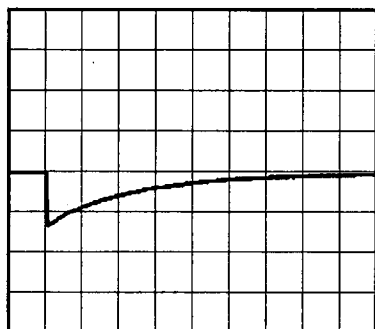


Min. Load (0A) ←→

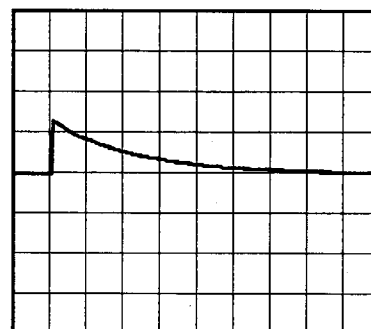
Output current 2 (2.4A)

*-15V : 1.0A

200 mV/div



100 ms/div



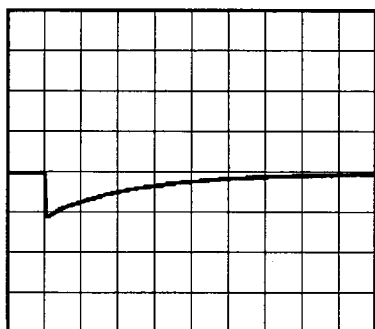
100 ms/div

Min. Load (0A) ←→

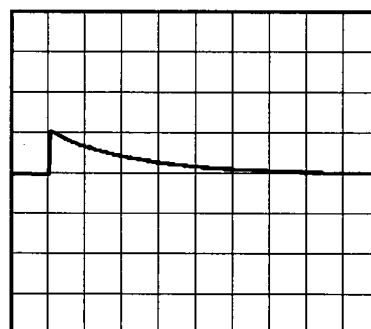
Output current 1 (1.7A)

*-15V : 1.7A

200 mV/div



100 ms/div



100 ms/div

*The characteristic of AC200V is equal.



Model		PBW50F-15	
Item		Dynamic Load Response	
Object		-15V1.7A	
		Temperature	25°C
		Testing Circuitry	Figure A

Input Volt. 100 V
Cycle 1000 ms

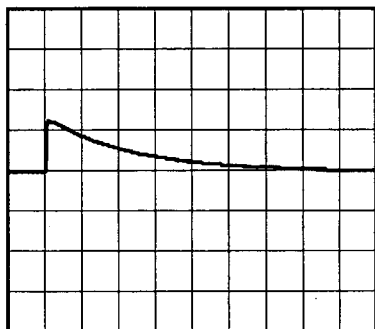


Min. Load (0A) ←→

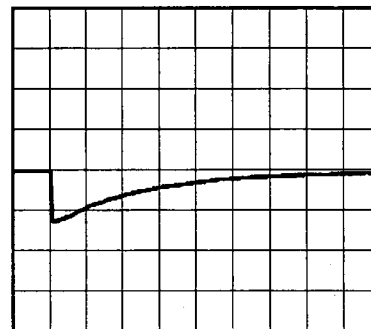
Output current 2 (2.4A)

*+15V : 1.0A

200 mV/div



100 ms/div



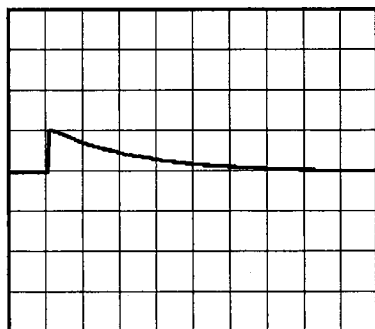
100 ms/div

Min. Load (0A) ←→

Output current 1 (1.7A)

*+15V : 1.7A

200 mV/div



100 ms/div



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Model PBW50F-15		Temperature 25°C Testing Circuitry Figure A																																						
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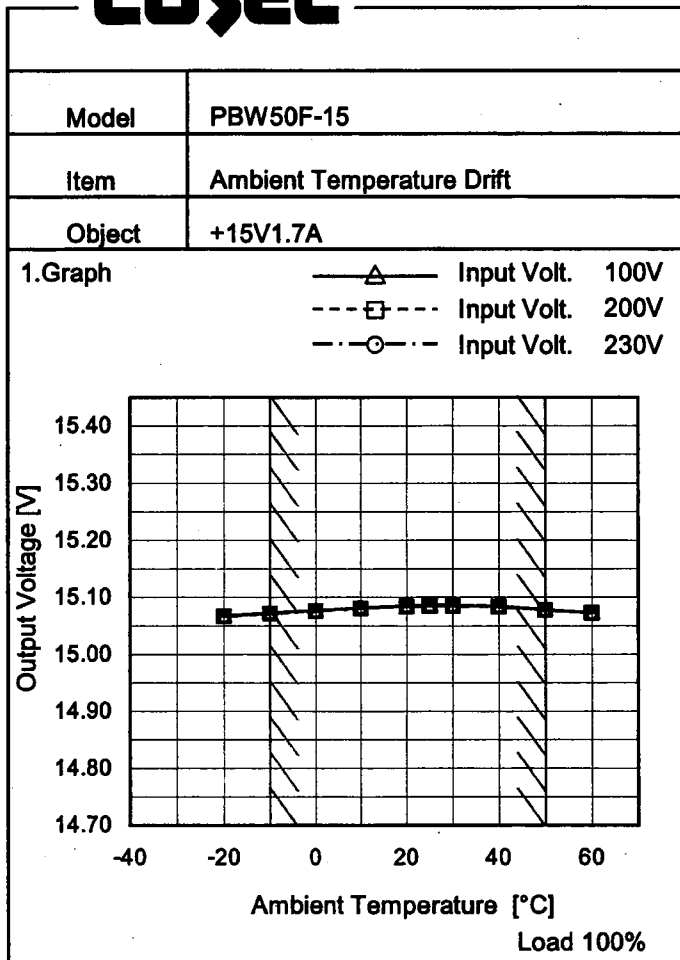
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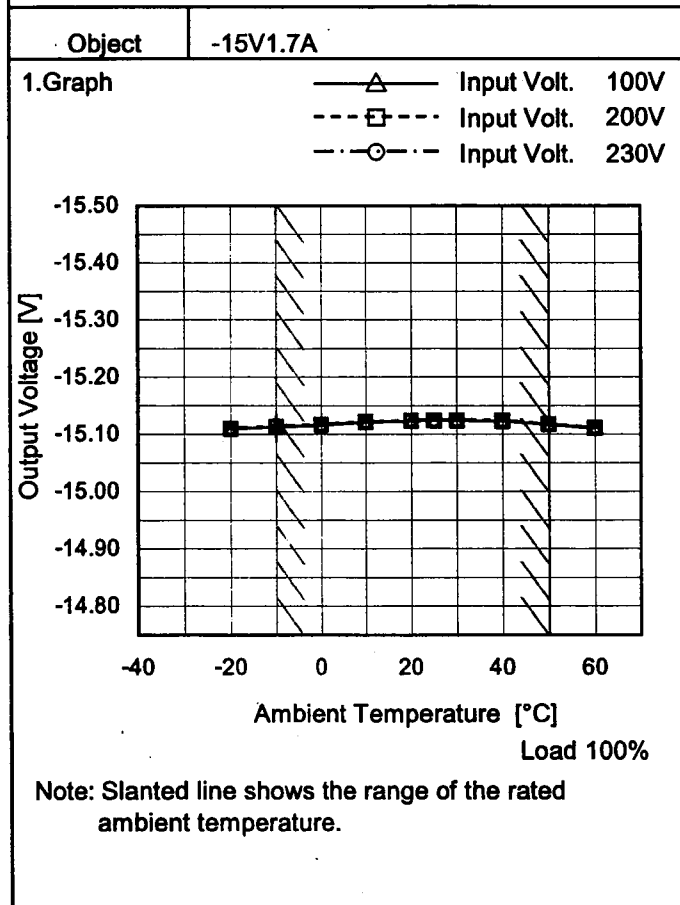
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Testing Circuitry Figure A

2.Values

Ambient Temperature [°C]	Output Voltage [V]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
-20	15.068	15.067	15.067
-10	15.073	15.072	15.072
0	15.077	15.076	15.076
10	15.082	15.081	15.082
20	15.085	15.084	15.084
25	15.086	15.085	15.085
30	15.086	15.085	15.085
40	15.084	15.084	15.084
50	15.079	15.078	15.078
60	15.073	15.073	15.073
--	-	-	-



2.Values

Ambient Temperature [°C]	Output Voltage [V]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
-20	-15.109	-15.110	-15.111
-10	-15.113	-15.114	-15.115
0	-15.116	-15.117	-15.117
10	-15.121	-15.122	-15.122
20	-15.123	-15.124	-15.124
25	-15.124	-15.125	-15.125
30	-15.124	-15.125	-15.125
40	-15.123	-15.124	-15.124
50	-15.117	-15.118	-15.117
60	-15.111	-15.112	-15.112
--	-	-	-



COSEL		Testing Circuitry Figure A
Model	PBW50F-15	
Item	Output Voltage Accuracy	

1. Output Voltage Accuracy

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

Temperature : -10 - 50°C

Input Voltage : 85 - 264V

Load Current (AVR 1) : 0 - 1.7A (AVR 2) : 0 - 1.7A

* Output Voltage Accuracy = $\pm(\text{Maximum of Output Voltage} - \text{Minimum of Output Voltage}) / 2$

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

2. Values

Object		+15V1.7A		Output		Output Voltage Accuracy	
Item	Temperature [°C]	Input Voltage[V]	Current[A]	Voltage[V]	Value [mV]	Ration [%]	
Maximum Voltage	50	264	0	15.328	±123	±0.9	
Minimum Voltage	-10	200	1.7	15.083			

Object		-15V1.7A		Output		Output Voltage Accuracy	
Item	Temperature [°C]	Input Voltage[V]	Current[A]	Voltage[V]	Value [mV]	Ration [%]	
Maximum Voltage	50	264	0	-15.330	±118	±0.8	
Minimum Voltage	-10	85	1.7	-15.094			

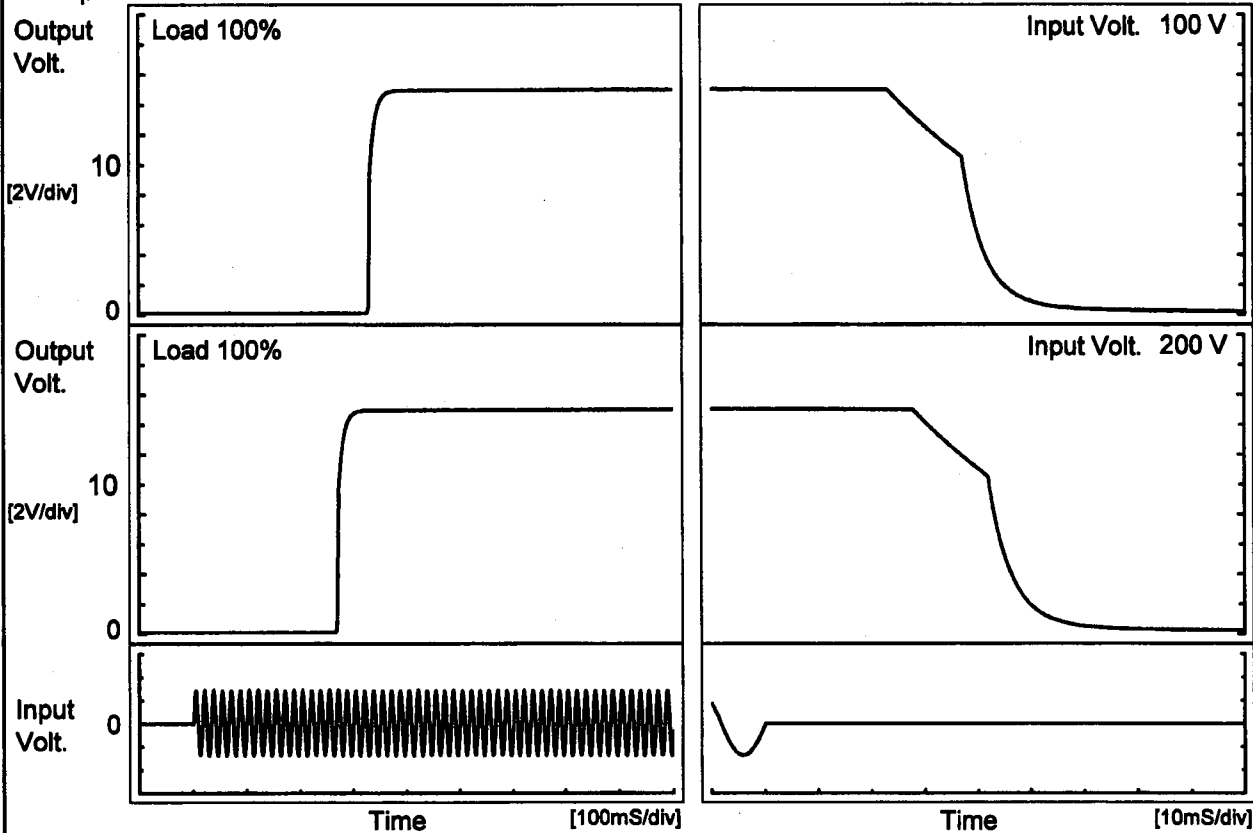


COSEL																									
Model	PBW50F-15	Temperature	25°C																						
Item	Time Lapse Drift	Testing Circuitry	Figure A																						
Object	+15V1.7A																								
<p>1.Graph</p> <p style="text-align: center;">Time [H]</p> <p style="text-align: center;">Input Volt. 100V Load 100%</p>		<p>2.Values</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Time since start [H]</th> <th>Output Voltage [V]</th> </tr> </thead> <tbody> <tr><td>0.0</td><td>15.065</td></tr> <tr><td>0.5</td><td>15.068</td></tr> <tr><td>1.0</td><td>15.069</td></tr> <tr><td>2.0</td><td>15.069</td></tr> <tr><td>3.0</td><td>15.069</td></tr> <tr><td>4.0</td><td>15.069</td></tr> <tr><td>5.0</td><td>15.069</td></tr> <tr><td>6.0</td><td>15.069</td></tr> <tr><td>7.0</td><td>15.069</td></tr> <tr><td>8.0</td><td>15.069</td></tr> </tbody> </table>		Time since start [H]	Output Voltage [V]	0.0	15.065	0.5	15.068	1.0	15.069	2.0	15.069	3.0	15.069	4.0	15.069	5.0	15.069	6.0	15.069	7.0	15.069	8.0	15.069
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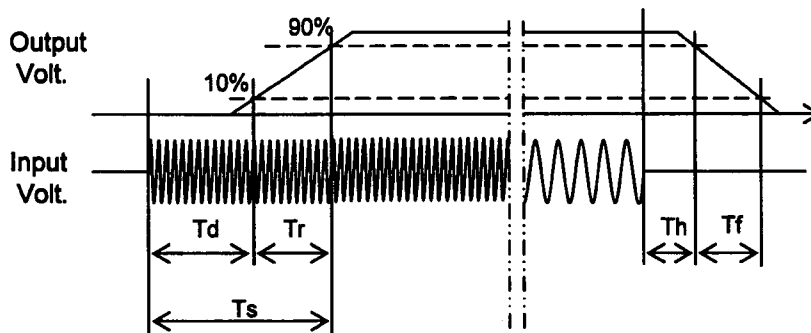
Model	PBW50F-15	Temperature	25°C
Item	Rise and Fall Time	Testing Circuitry	Figure A
Object	+15V1.7A		

1. Graph



2. Values

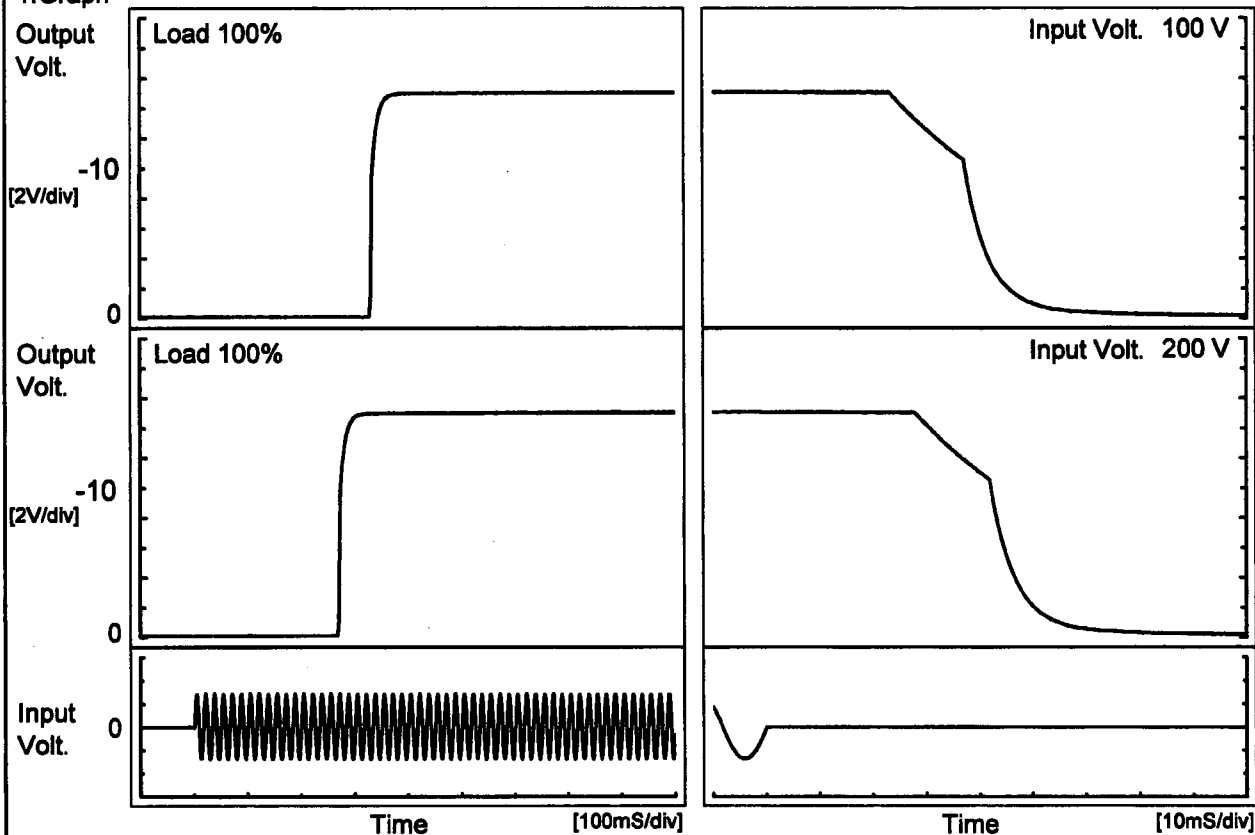
Input Volt.	Time	Td	Tr	Ts	Th	Tf
100 V		330.5	15.5	346.0	27.0	19.3
200 V		269.5	16.0	285.5	31.8	19.5





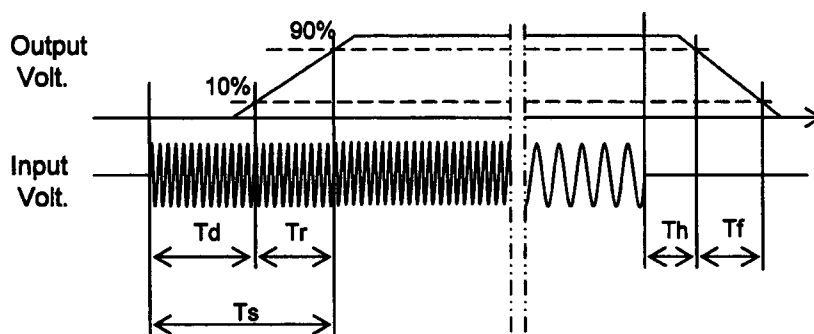
Model PBW50F-15		Temperature 25°C Testing Circuitry Figure A
Item	Rise and Fall Time	
Object	-15V1.7A	

1. Graph



2. Values

		[mS]				
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<p>Model PBW50F-15</p> <p>Item Minimum Input Voltage for Regulated Output Voltage</p> <p>Object +15V1.7A</p>		<p>Testing Circuitry Figure A</p>																																						
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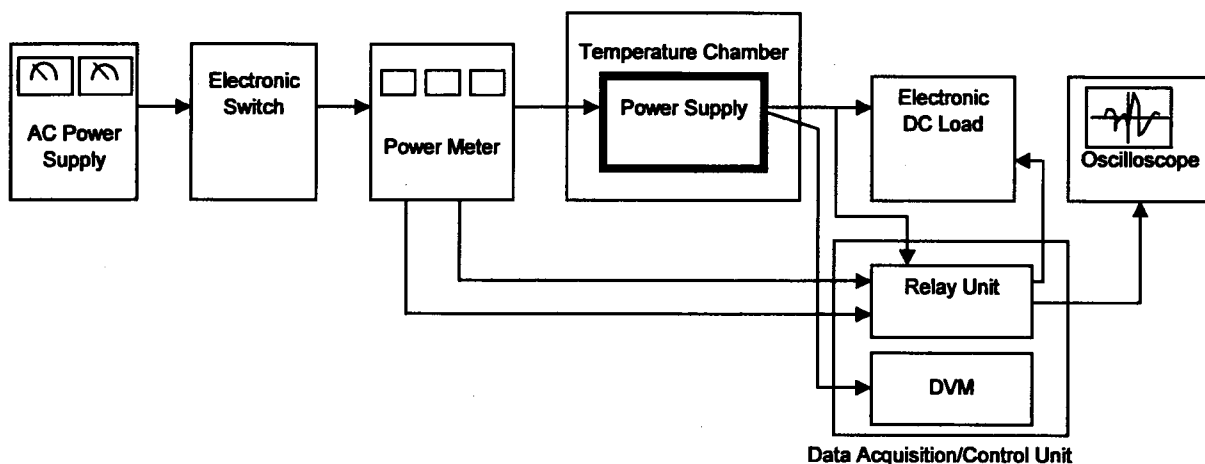


Figure A

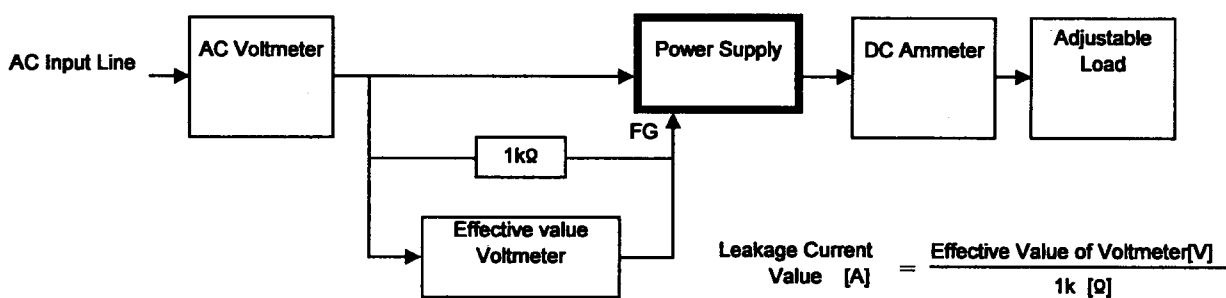


Figure B (DEN-AN)

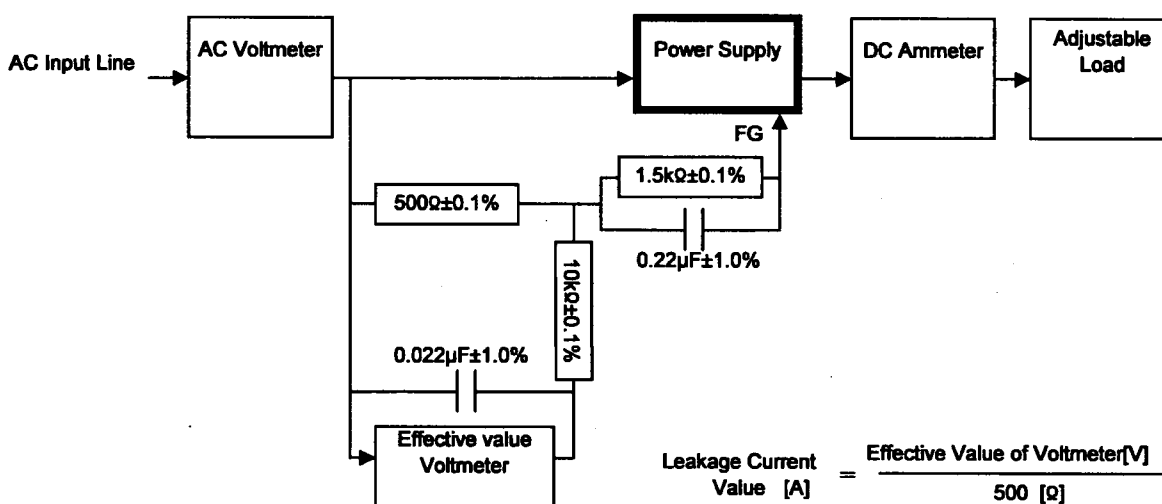


Figure B (IEC60950)