

TEST DATA OF PJA600F-48

Regulated DC Power Supply
December 2, 2016

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Jun Uchida Design Manager

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COSEL CO.,LTD.

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Model		PJA600F-48		Temperature 25°C																																																				
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		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Input Current [A]</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 115[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.00</td><td>0.155</td><td>0.163</td><td>0.286</td></tr><tr><td>2.00</td><td>1.438</td><td>1.263</td><td>0.718</td></tr><tr><td>4.00</td><td>2.494</td><td>2.181</td><td>1.168</td></tr><tr><td>6.00</td><td>3.562</td><td>3.096</td><td>1.619</td></tr><tr><td>8.00</td><td>4.650</td><td>4.040</td><td>2.072</td></tr><tr><td>10.00</td><td>5.760</td><td>4.990</td><td>2.530</td></tr><tr><td>12.00</td><td>6.890</td><td>5.960</td><td>2.992</td></tr><tr><td>12.50</td><td>7.170</td><td>6.200</td><td>3.108</td></tr><tr><td>13.75</td><td>7.890</td><td>6.810</td><td>3.404</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr></table>				Load Current [A]	Input Current [A]			Input Volt. 100[V]	Input Volt. 115[V]	Input Volt. 230[V]	0.00	0.155	0.163	0.286	2.00	1.438	1.263	0.718	4.00	2.494	2.181	1.168	6.00	3.562	3.096	1.619	8.00	4.650	4.040	2.072	10.00	5.760	4.990	2.530	12.00	6.890	5.960	2.992	12.50	7.170	6.200	3.108	13.75	7.890	6.810	3.404	--	-	-	-	--	-	-	-
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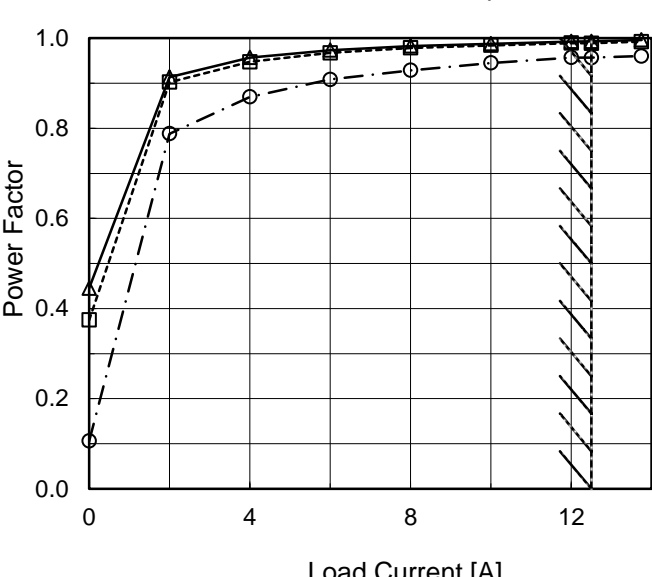
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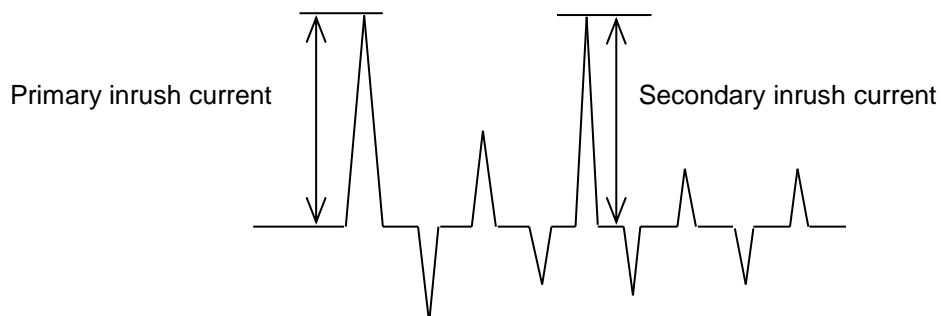
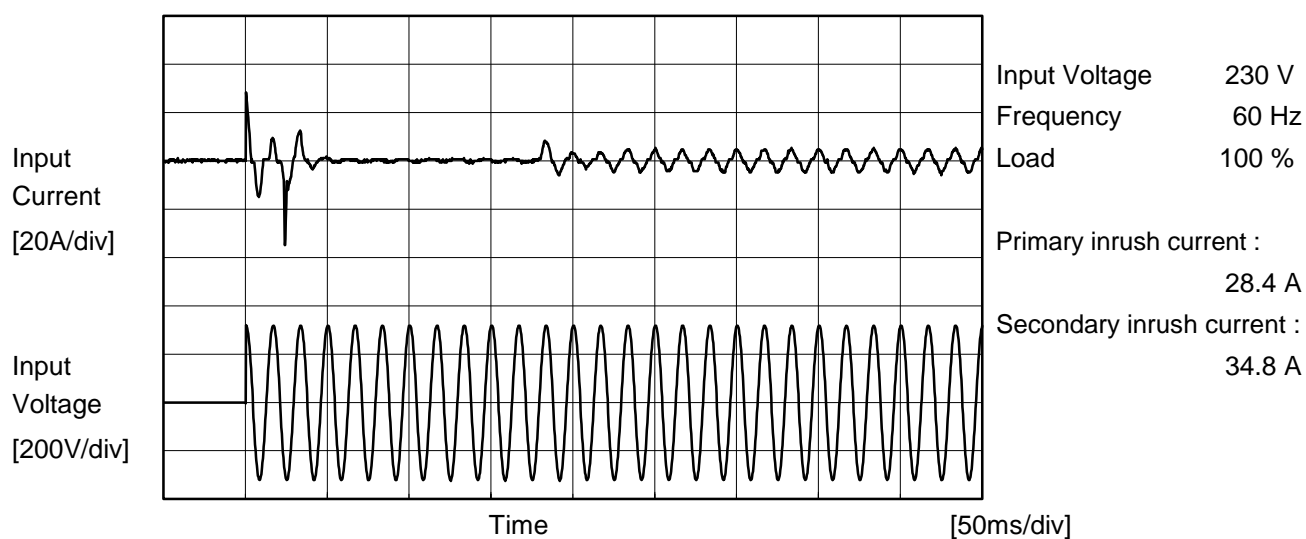
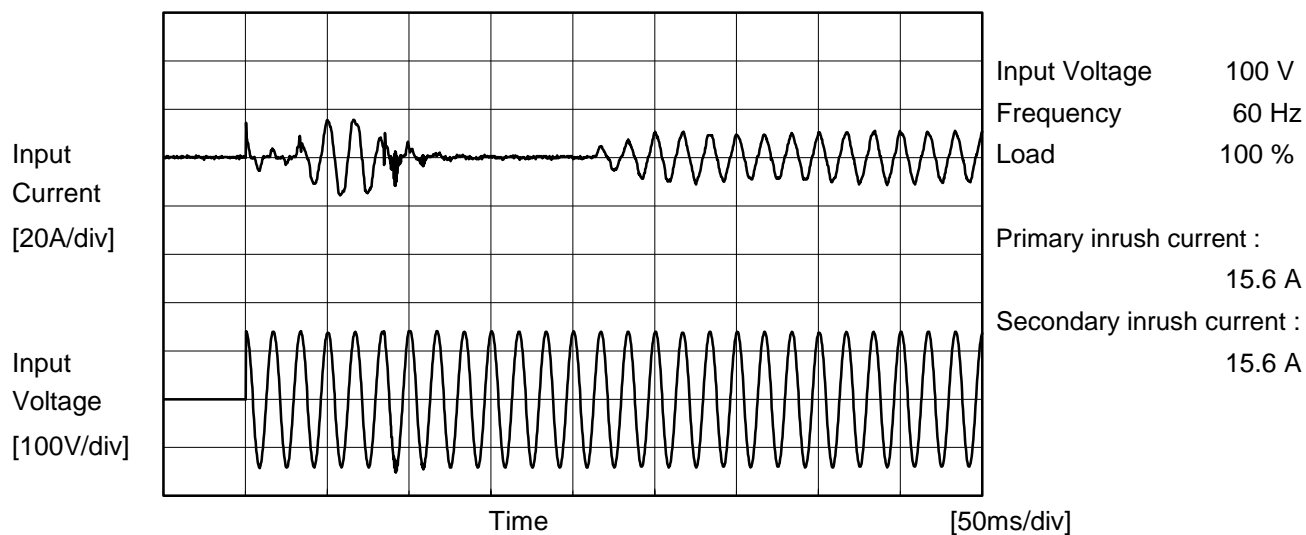
Model		PJA600F-48	Temperature 25°C																																																				
Item		Power Factor (by Load Current)	Testing Circuitry Figure A																																																				
Object		_____																																																					
1.Graph		<div><div>—△—</div><div>Input Volt. 100V</div></div> <div><div>---□---</div><div>Input Volt. 115V</div></div> <div><div>---○---</div><div>Input Volt. 230V</div></div>  <p>Note: Slanted line shows the range of the rated load current.</p>	2.Values																																																				
		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Power Factor</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 115[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.00</td><td>0.445</td><td>0.374</td><td>0.106</td></tr><tr><td>2.00</td><td>0.914</td><td>0.902</td><td>0.788</td></tr><tr><td>4.00</td><td>0.957</td><td>0.948</td><td>0.870</td></tr><tr><td>6.00</td><td>0.974</td><td>0.967</td><td>0.909</td></tr><tr><td>8.00</td><td>0.983</td><td>0.978</td><td>0.929</td></tr><tr><td>10.00</td><td>0.988</td><td>0.984</td><td>0.945</td></tr><tr><td>12.00</td><td>0.993</td><td>0.989</td><td>0.957</td></tr><tr><td>12.50</td><td>0.993</td><td>0.989</td><td>0.957</td></tr><tr><td>13.75</td><td>0.996</td><td>0.992</td><td>0.960</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr></table>			Load Current [A]	Power Factor			Input Volt. 100[V]	Input Volt. 115[V]	Input Volt. 230[V]	0.00	0.445	0.374	0.106	2.00	0.914	0.902	0.788	4.00	0.957	0.948	0.870	6.00	0.974	0.967	0.909	8.00	0.983	0.978	0.929	10.00	0.988	0.984	0.945	12.00	0.993	0.989	0.957	12.50	0.993	0.989	0.957	13.75	0.996	0.992	0.960	--	-	-	-	--	-	-	-
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BC-11155



Model	PJA600F-48	Temperature 25°C Testing Circuitry Figure A	
Item	Inrush Current		
Object	_____		





COSEL		Temperature 25°C Testing Circuitry Figure C
Model	PJA600F-48	
Item	Leakage Current	
Object	_____	

1.Results

Standards	Testing Circuitry	Measuring Method	Input Volt.			Note
			100 [V]	115 [V]	240 [V]	
DEN-AN	Figure C-1	Both phases	0.17	0.19	0.42	Operation
		One of phases	0.28	0.33	0.73	Stand by
IEC62368-1	Figure C-2	Both phases	0.16	0.18	0.39	Operation
		One of phases	0.28	0.32	0.71	Stand by
	Figure C-3	Both phases	0.16	0.18	0.39	Operation
		One of phases	0.28	0.32	0.68	Stand by

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

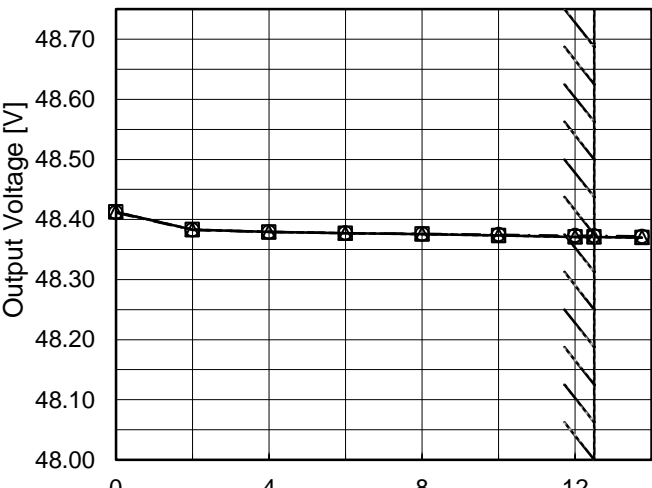
2.Condition

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



Model		PJA600F-48	Temperature		25°C																																
Item		Line Regulation	Testing Circuitry		Figure A																																
Object		+48V12.5A																																			
1.Graph			2.Values																																		
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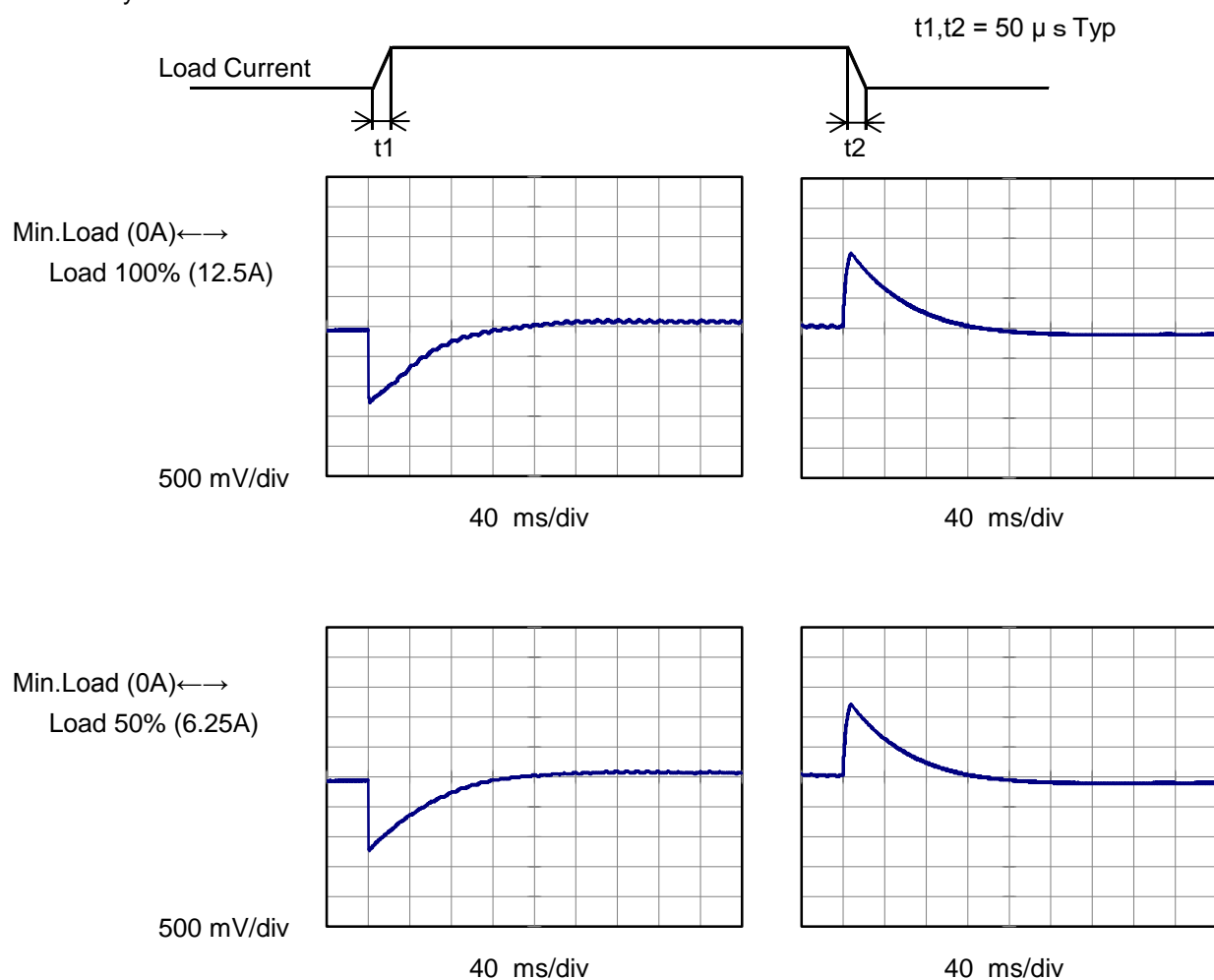


Model		PJA600F-48		Temperature Testing Circuitry	25°C Figure A																																																	
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Object		+48V12.5A																																																				
1.Graph		<div><div><div>—△—</div><div>---□---</div><div>---○---</div></div><div><div>Input Volt. 100V</div><div>Input Volt. 115V</div><div>Input Volt. 230V</div></div></div>  <div>Output Voltage [V]</div> <div>Load Current [A]</div>		2.Values																																																		
		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Output Voltage [V]</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 115[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.00</td><td>48.413</td><td>48.413</td><td>48.411</td></tr><tr><td>2.00</td><td>48.383</td><td>48.383</td><td>48.383</td></tr><tr><td>4.00</td><td>48.379</td><td>48.379</td><td>48.379</td></tr><tr><td>6.00</td><td>48.377</td><td>48.377</td><td>48.377</td></tr><tr><td>8.00</td><td>48.376</td><td>48.376</td><td>48.376</td></tr><tr><td>10.00</td><td>48.373</td><td>48.373</td><td>48.375</td></tr><tr><td>12.00</td><td>48.371</td><td>48.371</td><td>48.373</td></tr><tr><td>12.50</td><td>48.371</td><td>48.371</td><td>48.373</td></tr><tr><td>13.75</td><td>48.370</td><td>48.370</td><td>48.372</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr></table>		Load Current [A]	Output Voltage [V]			Input Volt. 100[V]	Input Volt. 115[V]	Input Volt. 230[V]	0.00	48.413	48.413	48.411	2.00	48.383	48.383	48.383	4.00	48.379	48.379	48.379	6.00	48.377	48.377	48.377	8.00	48.376	48.376	48.376	10.00	48.373	48.373	48.375	12.00	48.371	48.371	48.373	12.50	48.371	48.371	48.373	13.75	48.370	48.370	48.372	--	-	-	-	--	-	-	-
Load Current [A]	Output Voltage [V]																																																					
	Input Volt. 100[V]	Input Volt. 115[V]	Input Volt. 230[V]																																																			
0.00	48.413	48.413	48.411																																																			
2.00	48.383	48.383	48.383																																																			
4.00	48.379	48.379	48.379																																																			
6.00	48.377	48.377	48.377																																																			
8.00	48.376	48.376	48.376																																																			
10.00	48.373	48.373	48.375																																																			
12.00	48.371	48.371	48.373																																																			
12.50	48.371	48.371	48.373																																																			
13.75	48.370	48.370	48.372																																																			
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Note: Slanted line shows the range of the rated load current.																																																						

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Model	PJA600F-48	Temperature 25°C Testing Circuitry Figure A
Item	Dynamic Load Response	
Object	+48V12.5A	

Input Volt. 100 V
Cycle 1000 ms



Model		PJA600F-48																																							
Item		Ripple Voltage (by Load Current)																																							
Object		+48V12.5A																																							
1.Graph		2.Values																																							
<div><div><div>—△— Input Volt. 100V</div><div>-·-○-·- Input Volt. 230V</div></div><div>Ripple Voltage [mV]</div><div>Load Current [A]</div></div> <div>Measured by 20 MHz Oscilloscope. Ripple Voltage is shown as p-p in the figure below. Note: Slanted line shows the range of the rated load current.</div>		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="2">Ripple Voltage [mV]</th></tr><tr><th>Input Volt. 100 [V]</th><th>Input Volt. 230 [V]</th></tr><tr><td>0.0</td><td>10</td><td>10</td></tr><tr><td>2.0</td><td>25</td><td>25</td></tr><tr><td>4.0</td><td>25</td><td>25</td></tr><tr><td>6.0</td><td>30</td><td>30</td></tr><tr><td>8.0</td><td>35</td><td>35</td></tr><tr><td>10.0</td><td>40</td><td>40</td></tr><tr><td>12.0</td><td>45</td><td>45</td></tr><tr><td>12.5</td><td>45</td><td>45</td></tr><tr><td>13.8</td><td>50</td><td>50</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table>		Load Current [A]	Ripple Voltage [mV]		Input Volt. 100 [V]	Input Volt. 230 [V]	0.0	10	10	2.0	25	25	4.0	25	25	6.0	30	30	8.0	35	35	10.0	40	40	12.0	45	45	12.5	45	45	13.8	50	50	--	-	-	--	-	-
Load Current [A]	Ripple Voltage [mV]																																								
	Input Volt. 100 [V]	Input Volt. 230 [V]																																							
0.0	10	10																																							
2.0	25	25																																							
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12.0	45	45																																							
12.5	45	45																																							
13.8	50	50																																							
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<div><div>T1: Due to AC Input Line</div><div>T2: Due to Switching</div><div>Ripple [mVp-p]</div><div>T1</div><div>T2</div></div> <div>Fig. Complex Ripple Wave Form</div>																																									

Model		PJA600F-48	Temperature		25°C
Item		Ripple-Noise	Testing Circuitry		Figure B
Object		+48V12.5A			
1.Graph			2.Values		
<div><div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div></div><div></div></div><div><div></div><div></div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> 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Model		PJA600F-48
Item		Ripple Voltage (by Ambient Temp.)
Object		+48V12.5A
1.Graph		
<div><div><div><div><div></div><div></div></div><div></div><div>Input Volt. 100V</div></div><div><div><div></div><div></div></div><div></div><div>Input Volt. 230V</div></div></div><div><p>Ripple Voltage [mV]</p><p>Ambient Temperature [°C]</p><p>Load 100 %</p></div></div>		
Measured by 20 MHz Oscilloscope. Note: Slanted line shows the range of the rated ambient temperature.		

Testing Circuitry Figure B		
2.Values		
Ambient Temperature [°C]	Ripple Voltage [mV]	
	Input Volt. 100 [V]	Input Volt. 230 [V]
-30	110	110
-20	85	85
-10	70	70
0	55	55
10	50	50
25	45	45
30	45	45
40	40	40
50	40	40
60	40	40
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Model		PJA600F-48																																																				
Item		Ambient Temperature Drift																																																				
Object		+48V12.5A																																																				
1.Graph		<div><div><div>—△—</div><div>Input Volt. 100V</div></div><div><div>---□---</div><div>Input Volt. 115V</div></div><div><div>---○---</div><div>Input Volt. 230V</div></div></div>																																																				
<div><div><div>Output Voltage [V]</div><div><div>Ambient Temperature [°C]</div><div>Load 100%</div></div></div></div>		2.Values																																																				
		<table><tr><th rowspan="2">Ambient Temperature [°C]</th><th colspan="3">Output Voltage [V]</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 115[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>-30</td><td>48.143</td><td>48.143</td><td>48.142</td></tr><tr><td>-20</td><td>48.198</td><td>48.199</td><td>48.200</td></tr><tr><td>-10</td><td>48.257</td><td>48.257</td><td>48.259</td></tr><tr><td>0</td><td>48.304</td><td>48.304</td><td>48.305</td></tr><tr><td>10</td><td>48.335</td><td>48.336</td><td>48.337</td></tr><tr><td>25</td><td>48.371</td><td>48.371</td><td>48.373</td></tr><tr><td>30</td><td>48.384</td><td>48.384</td><td>48.385</td></tr><tr><td>40</td><td>48.398</td><td>48.399</td><td>48.400</td></tr><tr><td>50</td><td>48.411</td><td>48.411</td><td>48.411</td></tr><tr><td>60</td><td>48.427</td><td>48.426</td><td>48.423</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr></table>		Ambient Temperature [°C]	Output Voltage [V]			Input Volt. 100[V]	Input Volt. 115[V]	Input Volt. 230[V]	-30	48.143	48.143	48.142	-20	48.198	48.199	48.200	-10	48.257	48.257	48.259	0	48.304	48.304	48.305	10	48.335	48.336	48.337	25	48.371	48.371	48.373	30	48.384	48.384	48.385	40	48.398	48.399	48.400	50	48.411	48.411	48.411	60	48.427	48.426	48.423	--	-	-	-
Ambient Temperature [°C]	Output Voltage [V]																																																					
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25	48.371	48.371	48.373																																																			
30	48.384	48.384	48.385																																																			
40	48.398	48.399	48.400																																																			
50	48.411	48.411	48.411																																																			
60	48.427	48.426	48.423																																																			
--	-	-	-																																																			
Note: Slanted line shows the range of the rated ambient temperature.																																																						



Model		PJA600F-48	Testing Circuitry Figure A
Item		Output Voltage Accuracy	
Object		+48V12.5A	

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 : -20 - 50°C

Input Voltage : 100 - 230V

Load Current : 0 - 12.5A

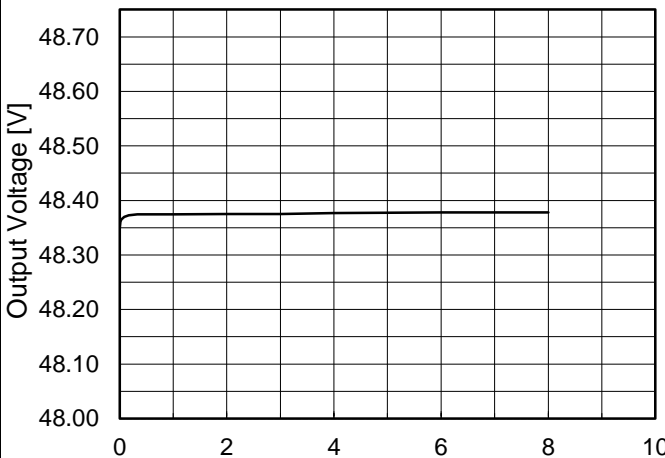
* Output Voltage Accuracy = $\pm(\text{Maximum of Output Voltage} - \text{Minimum of Output Voltage}) / 2$

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

2. Values

Item	Temperature [°C]	Input Voltage[V]	Output		Output Voltage Accuracy	
			Current[A]	Voltage[V]	Value [mV]	Ration [%]
Maximum Voltage	50	230	0	48.443	±123	±0.3
Minimum Voltage	-20	100	12.5	48.198		

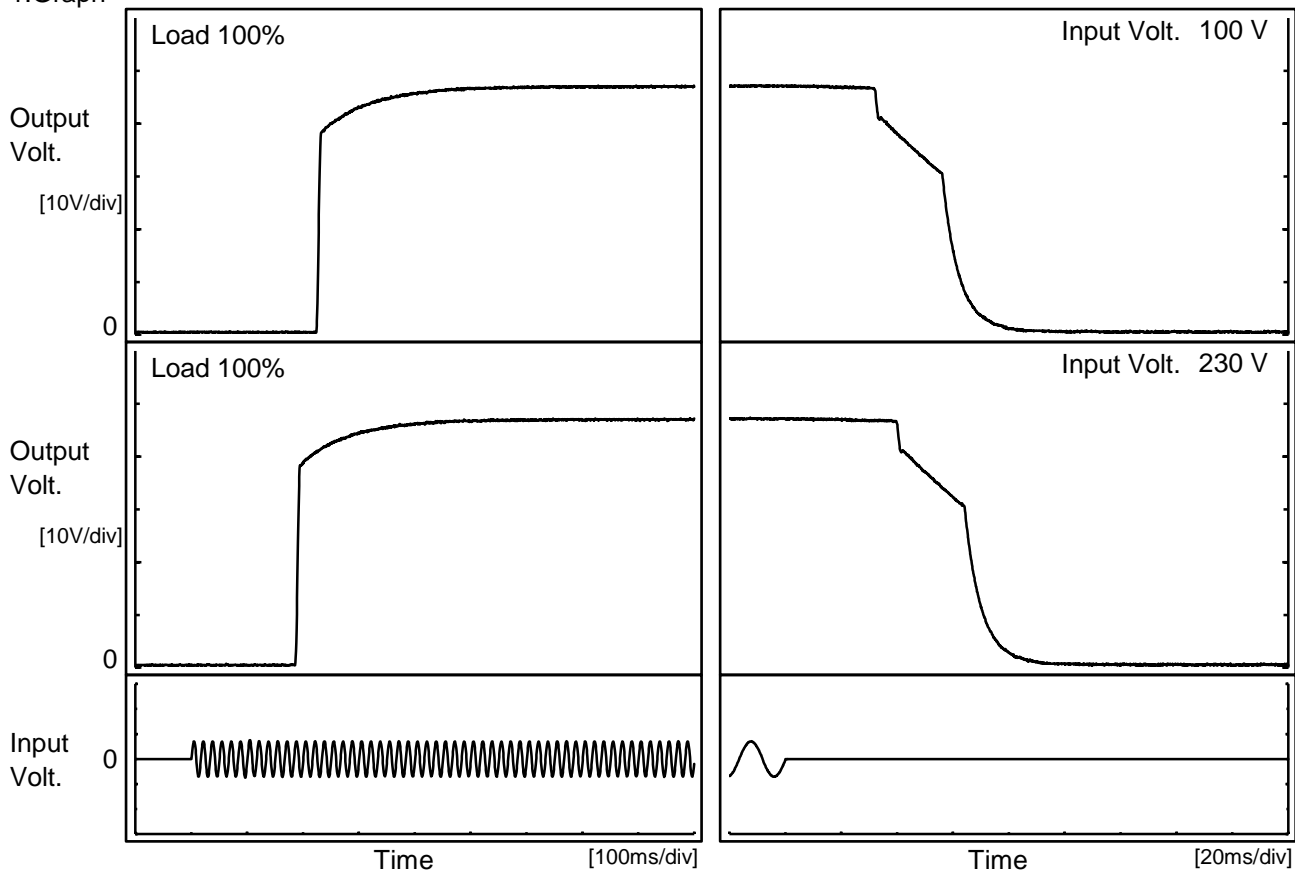


COSEL																								
Model	PJA600F-48	Temperature 25°C Testing Circuitry Figure A																						
Item	Time Lapse Drift																							
Object	+48V12.5A																							
1.Graph		2.Values																						
<div></div> <div>Output Voltage [V]</div> <div>Time [H]</div> <div>Input Volt. 230V</div> <div>Load 100%</div>		<table><tr><th>Time since start [H]</th><th>Output Voltage [V]</th></tr><tr><td>0.0</td><td>48.350</td></tr><tr><td>0.5</td><td>48.375</td></tr><tr><td>1.0</td><td>48.375</td></tr><tr><td>2.0</td><td>48.375</td></tr><tr><td>3.0</td><td>48.375</td></tr><tr><td>4.0</td><td>48.377</td></tr><tr><td>5.0</td><td>48.378</td></tr><tr><td>6.0</td><td>48.378</td></tr><tr><td>7.0</td><td>48.378</td></tr><tr><td>8.0</td><td>48.378</td></tr></table>		Time since start [H]	Output Voltage [V]	0.0	48.350	0.5	48.375	1.0	48.375	2.0	48.375	3.0	48.375	4.0	48.377	5.0	48.378	6.0	48.378	7.0	48.378	8.0
Time since start [H]	Output Voltage [V]																							
0.0	48.350																							
0.5	48.375																							
1.0	48.375																							
2.0	48.375																							
3.0	48.375																							
4.0	48.377																							
5.0	48.378																							
6.0	48.378																							
7.0	48.378																							
8.0	48.378																							
*The characteristic of AC100V is equal.																								

COSEL

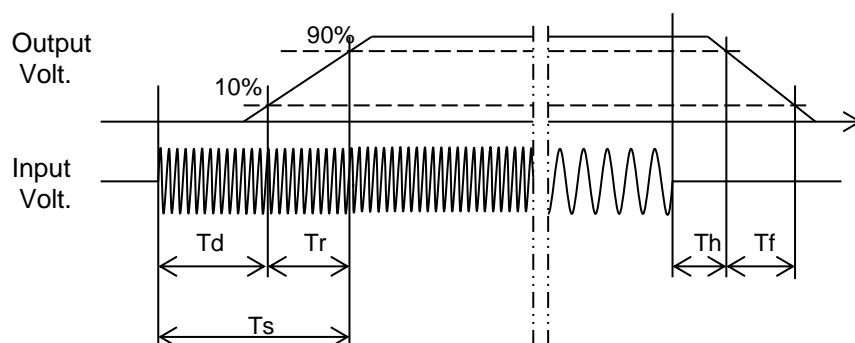
Model	PJA600F-48	Temperature	25°C
Item	Rise and Fall Time	Testing Circuitry	Figure A
Object	+48V12.5A		

1.Graph



2.Values

Input Volt.	Time	Td	Tr	Ts	Th	Tf
100 V		216.0	82.5	298.5	32.6	34.7
230 V		188.5	89.5	278.0	40.5	34.9



Model		PJA600F-48	Temperature25°C Testing CircuitryFigure A																															
Item		Hold-Up Time																																
Object		+48V12.5A																																
1.Graph			2.Values																															
<div><div><div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div><div><div>---</div><div>□</div><div>---</div></div><div>Load 50%</div></div><div><div>—</div><div>△</div><div>—</div></div><div>Load 100%</div></div> <div><div>Hold-Up Time [ms]</div><div><div>1000</div><div>100</div><div>10</div><div>1</div></div><div><div>50</div><div>100</div><div>150</div><div>200</div><div>250</div><div>300</div></div><div>Input Voltage [V]</div></div> <div><div><div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div><div><div>---</div><div>□</div><div>---</div></div><div>Load 50%</div></div><div><div>—</div><div>△</div><div>—</div></div><div>Load 100%</div></div> <div><div>This duration covers from Shut-off of input voltage to the moment when output voltage descends to the rated range of voltage accuracy.</div><div>Note: Slanted line shows the range of the rated input voltage.</div></div>																																		
<table><tr><th rowspan="2">Input Voltage [V]</th><th colspan="2">Hold-Up Time [ms]</th></tr><tr><th>Load 50%</th><th>Load 100%</th></tr><tr><td>85</td><td>63</td><td>28</td></tr><tr><td>100</td><td>66</td><td>29</td></tr><tr><td>115</td><td>68</td><td>31</td></tr><tr><td>200</td><td>78</td><td>36</td></tr><tr><td>230</td><td>80</td><td>37</td></tr><tr><td>264</td><td>83</td><td>39</td></tr><tr><td>280</td><td>84</td><td>40</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table>			Input Voltage [V]	Hold-Up Time [ms]		Load 50%	Load 100%	85	63	28	100	66	29	115	68	31	200	78	36	230	80	37	264	83	39	280	84	40	--	-	-	--	-	-
Input Voltage [V]	Hold-Up Time [ms]																																	
	Load 50%	Load 100%																																
85	63	28																																
100	66	29																																
115	68	31																																
200	78	36																																
230	80	37																																
264	83	39																																
280	84	40																																
--	-	-																																
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Model		PJA600F-48	Temperature 25°C Testing Circuitry Figure A																																																				
Item		Instantaneous Interruption Compensation																																																					
Object		+48V12.5A																																																					
1.Graph		<div><div>—△—</div>Input Volt. 100V</div> <div><div>---□---</div>Input Volt. 115V</div> <div><div>---○---</div>Input Volt. 230V</div> <p>Instantaneous Compensation Time [ms]</p> <p>Load Current [A]</p> <p>Note: Slanted line shows the range of the rated load current.</p>	2.Values																																																				
			<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Time [ms]</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 115[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.00</td><td>-</td><td>-</td><td>-</td></tr><tr><td>2.00</td><td>221</td><td>226</td><td>247</td></tr><tr><td>4.00</td><td>109</td><td>112</td><td>128</td></tr><tr><td>6.00</td><td>70</td><td>72</td><td>85</td></tr><tr><td>8.00</td><td>51</td><td>52</td><td>63</td></tr><tr><td>10.00</td><td>38</td><td>39</td><td>49</td></tr><tr><td>12.00</td><td>30</td><td>31</td><td>40</td></tr><tr><td>12.50</td><td>29</td><td>30</td><td>38</td></tr><tr><td>13.75</td><td>24</td><td>27</td><td>34</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr></table>		Load Current [A]	Time [ms]			Input Volt. 100[V]	Input Volt. 115[V]	Input Volt. 230[V]	0.00	-	-	-	2.00	221	226	247	4.00	109	112	128	6.00	70	72	85	8.00	51	52	63	10.00	38	39	49	12.00	30	31	40	12.50	29	30	38	13.75	24	27	34	--	-	-	-	--	-	-	-
Load Current [A]	Time [ms]																																																						
	Input Volt. 100[V]	Input Volt. 115[V]	Input Volt. 230[V]																																																				
0.00	-	-	-																																																				
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8.00	51	52	63																																																				
10.00	38	39	49																																																				
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13.75	24	27	34																																																				
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Model		PJA600F-48	Testing Circuitry Figure A																																						
Item		Minimum Input Voltage for Regulated Output Voltage																																							
Object		+48V12.5A																																							
1.Graph			2.Values																																						
<div><div><div>---□---</div><div>Load 50%</div></div><div><div>—△—</div><div>Load 100%</div></div></div> <p>Note: Slanted line shows the range of the rated ambient temperature.</p>			<table><tr><th rowspan="2">Ambient Temperature [°C]</th><th colspan="2">Input Voltage [V]</th></tr><tr><th>Load 50%</th><th>Load 100%</th></tr><tr><td>-30</td><td>44</td><td>61</td></tr><tr><td>-20</td><td>44</td><td>61</td></tr><tr><td>-10</td><td>44</td><td>61</td></tr><tr><td>0</td><td>44</td><td>61</td></tr><tr><td>10</td><td>44</td><td>61</td></tr><tr><td>25</td><td>44</td><td>61</td></tr><tr><td>30</td><td>44</td><td>62</td></tr><tr><td>40</td><td>44</td><td>62</td></tr><tr><td>50</td><td>44</td><td>62</td></tr><tr><td>60</td><td>44</td><td>62</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table>	Ambient Temperature [°C]	Input Voltage [V]		Load 50%	Load 100%	-30	44	61	-20	44	61	-10	44	61	0	44	61	10	44	61	25	44	61	30	44	62	40	44	62	50	44	62	60	44	62	--	-	-
Ambient Temperature [°C]	Input Voltage [V]																																								
	Load 50%	Load 100%																																							
-30	44	61																																							
-20	44	61																																							
-10	44	61																																							
0	44	61																																							
10	44	61																																							
25	44	61																																							
30	44	62																																							
40	44	62																																							
50	44	62																																							
60	44	62																																							
--	-	-																																							

Model		PJA600F-48	Temperature		25°C																																												
Item		Overcurrent Protection	Testing Circuitry		Figure A																																												
Object		+48V12.5A																																															
1.Graph			2.Values																																														
<div><div><div></div><div>Input Volt. 100V</div></div><div><div></div><div>Input Volt. 230V</div></div></div> <p>Note: Slanted line shows the range of the rated load current.</p> <p>Intermittent operation occurs when the output voltage is from 28.8V to 0V.</p>			<table><tr><th rowspan="2">Output Voltage [V]</th><th colspan="2">Load Current [A]</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>45.6</td><td>15.83</td><td>15.88</td></tr><tr><td>43.2</td><td>15.75</td><td>15.80</td></tr><tr><td>38.4</td><td>16.07</td><td>16.13</td></tr><tr><td>33.6</td><td>16.26</td><td>16.33</td></tr><tr><td>28.8</td><td>16.46</td><td>16.52</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table>			Output Voltage [V]	Load Current [A]		Input Volt. 100[V]	Input Volt. 230[V]	45.6	15.83	15.88	43.2	15.75	15.80	38.4	16.07	16.13	33.6	16.26	16.33	28.8	16.46	16.52	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-
Output Voltage [V]	Load Current [A]																																																
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Model		PJA600F-48
Item		Overvoltage Protection
Object		+48V12.5A

1.Graph

—△—

Input Volt. 100V

---□---

Input Volt. 230V

Operating Point [V]

Ambient Temperature [°C]

Load 0%

Note: Slanted line shows the range of the rated ambient temperature.

2.Values

Ambient Temperature [°C]	Operating Point [V]	
	Input Volt. 100[V]	Input Volt. 230[V]
-30	58.99	58.87
-20	59.28	59.28
-10	59.68	59.68
0	60.12	60.12
10	60.59	60.59
25	61.29	61.29
30	61.52	61.52
40	61.99	61.99
50	62.52	62.52
60	62.99	62.99
--	-	-

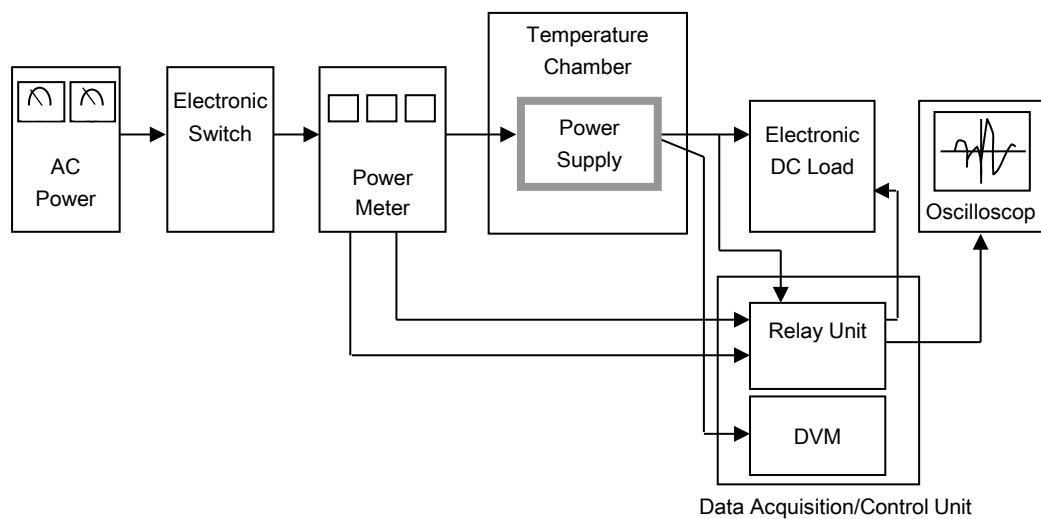


Figure A

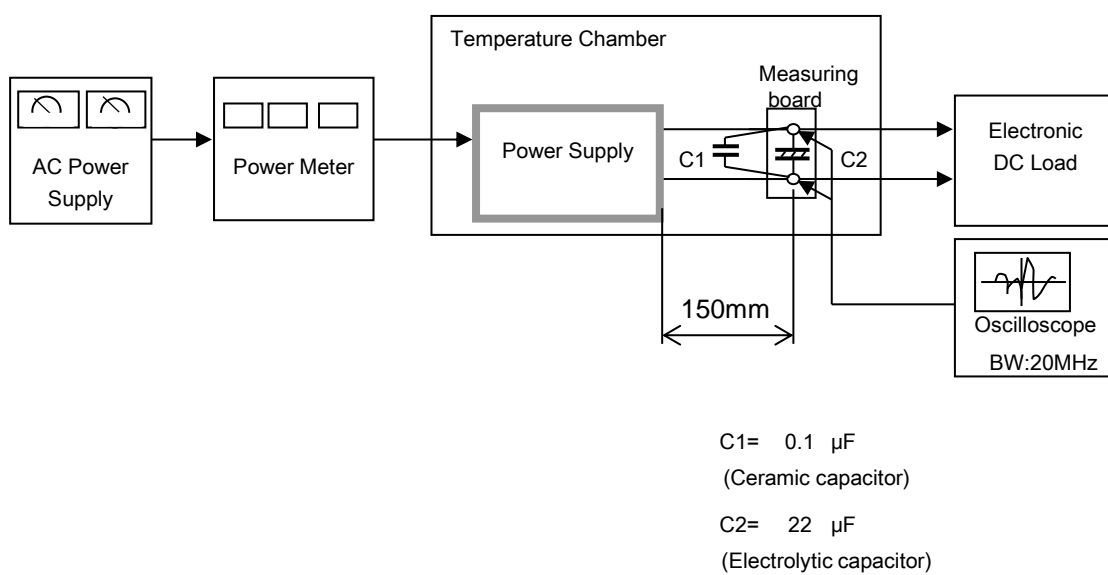


Figure B

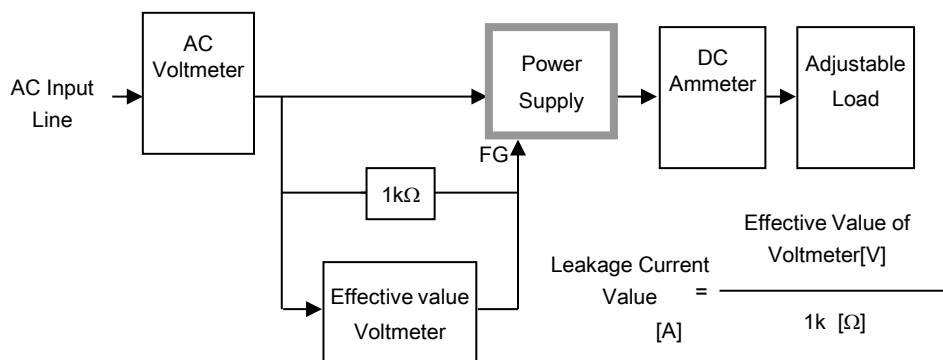


Figure C-1 (DEN-AN)

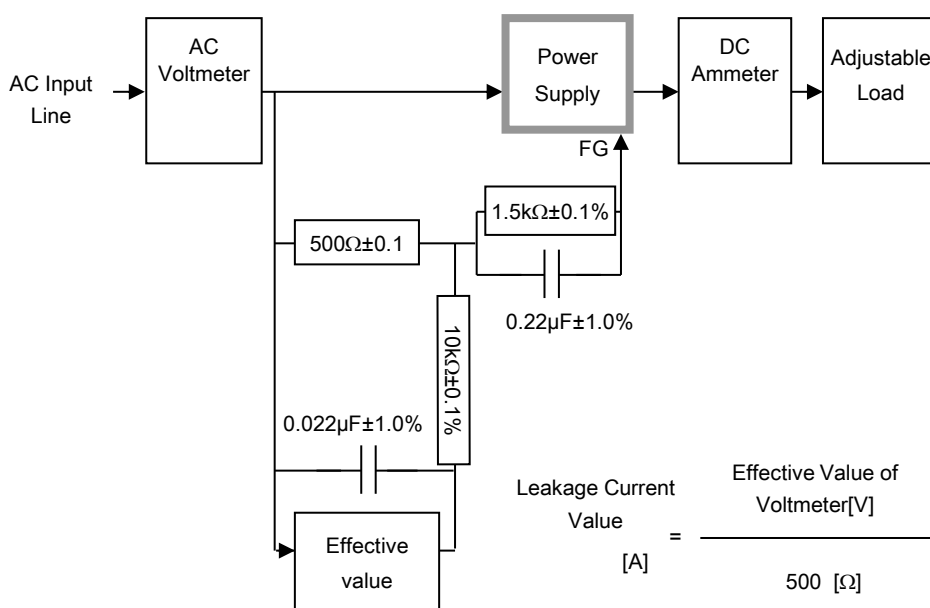


Figure C-2 (IEC62368-1 refer to IEC60990 Fig.4)

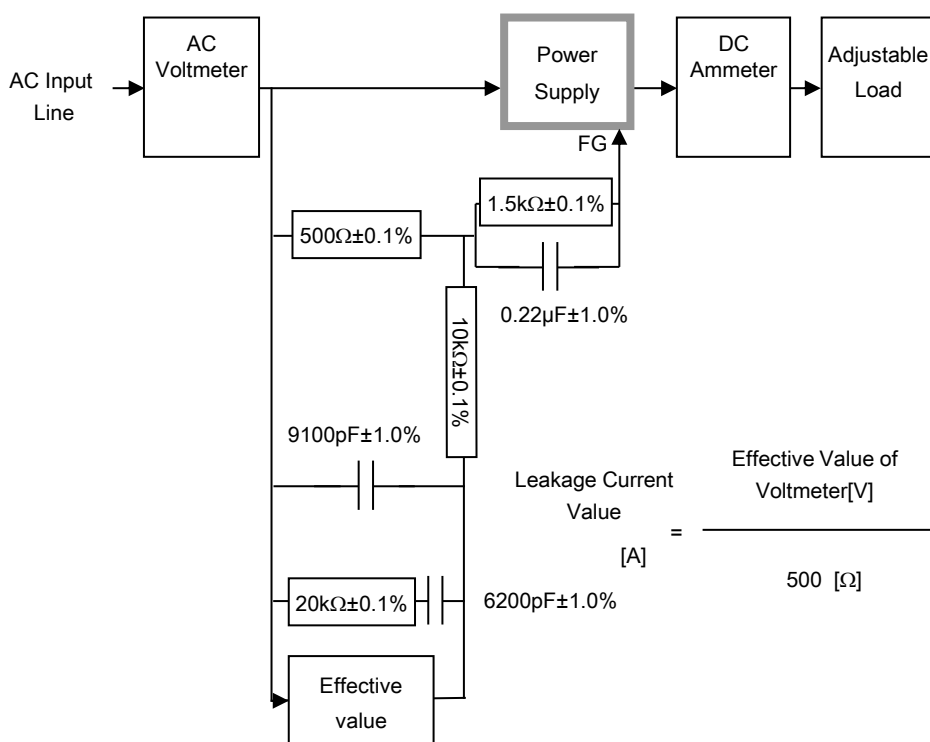


Figure C-3 (IEC62368-1 refer to IEC60990 Fig.5)