

TEST DATA OF PLA50F-15

Regulated DC Power Supply
June 24, 2014

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Yoshiaki Shimizu Design Manager

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Yuhei Sugimori Design Engineer

COSEL CO.,LTD.

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Item		Input Current (by Load Current)																																																				
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<div><div>Input Current [A]</div><div><div>0.01.02.03.04.0</div><div>0.00.20.40.60.81.0</div><div>Load Current [A]</div></div></div>		<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>0.042</td><td>0.042</td><td>0.034</td></tr><tr><td>0.60</td><td>0.150</td><td>0.137</td><td>0.096</td></tr><tr><td>1.20</td><td>0.254</td><td>0.230</td><td>0.144</td></tr><tr><td>1.80</td><td>0.356</td><td>0.312</td><td>0.188</td></tr><tr><td>2.40</td><td>0.460</td><td>0.402</td><td>0.238</td></tr><tr><td>3.00</td><td>0.572</td><td>0.498</td><td>0.286</td></tr><tr><td>3.50</td><td>0.659</td><td>0.570</td><td>0.326</td></tr><tr><td>3.85</td><td>-</td><td>0.626</td><td>0.350</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>		Load Current [A]	Input Current [A]			Input Volt. 100[V]	Input Volt. 115[V]	Input Volt. 230[V]	0.00	0.042	0.042	0.034	0.60	0.150	0.137	0.096	1.20	0.254	0.230	0.144	1.80	0.356	0.312	0.188	2.40	0.460	0.402	0.238	3.00	0.572	0.498	0.286	3.50	0.659	0.570	0.326	3.85	-	0.626	0.350	--	-	-	-	--	-	-	-	--	-	-	-
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Note: Slanted line shows the range of the rated load current.																																																						

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Model

PLA50F-15

Item

Input Power (by Load Current)

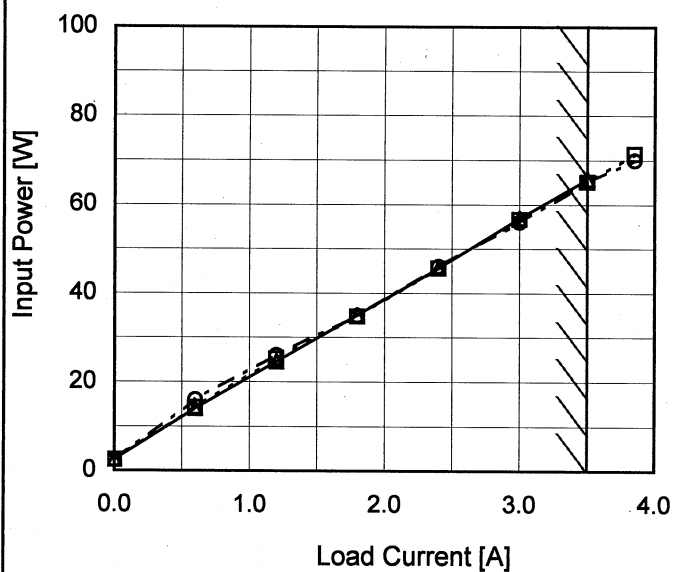
Object

Temperature
Testing Circuitry

25°C
Figure A

1. Graph

—△— Input Volt. 100V
 ---□--- Input Volt. 115V
 ---○--- Input Volt. 230V



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

2. Values

Load Current [A]	Input Power [W]		
	Input Volt. 100[V]	Input Volt. 115[V]	Input Volt. 230[V]
0.00	2.50	2.50	2.40
0.60	14.10	14.30	16.00
1.20	24.60	25.20	26.00
1.80	35.10	34.80	35.00
2.40	45.60	45.60	46.00
3.00	57.00	56.70	56.00
3.50	65.70	65.10	65.00
3.85	-	71.40	70.00
--	-	-	-
--	-	-	-
--	-	-	-

COSEL

Model		PLA50F-15		Temperature Testing Circuitry	25°C Figure A
Item		Efficiency (by Input Voltage)			
Object					
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><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><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><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><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><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></d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Item		Efficiency (by Load Current)																																																				
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1.Graph		<div><div>—△—</div>Input Volt. 100V</div> <div><div>---□---</div>Input Volt. 115V</div> <div><div>-○-</div>Input Volt. 230V</div> <div>Efficiency [%]</div> <div>Load Current [A]</div>		2.Values																																																		
		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Efficiency [%]</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>0.60</td><td>65.5</td><td>64.8</td><td>58.0</td></tr><tr><td>1.20</td><td>74.2</td><td>72.3</td><td>70.2</td></tr><tr><td>1.80</td><td>77.5</td><td>78.1</td><td>77.7</td></tr><tr><td>2.40</td><td>79.3</td><td>79.3</td><td>80.0</td></tr><tr><td>3.00</td><td>80.2</td><td>80.3</td><td>81.6</td></tr><tr><td>3.50</td><td>80.4</td><td>80.8</td><td>82.2</td></tr><tr><td>3.85</td><td>-</td><td>81.0</td><td>82.6</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>		Load Current [A]	Efficiency [%]			Input Volt. 100[V]	Input Volt. 115[V]	Input Volt. 230[V]	0.00	-	-	-	0.60	65.5	64.8	58.0	1.20	74.2	72.3	70.2	1.80	77.5	78.1	77.7	2.40	79.3	79.3	80.0	3.00	80.2	80.3	81.6	3.50	80.4	80.8	82.2	3.85	-	81.0	82.6	--	-	-	-	--	-	-	-	--	-	-	-
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Note: Slanted line shows the range of the rated load current.																																																						



Model		PLA50F-15	
Item		Power Factor (by Input Voltage)	
Object			

1.Graph

Load 50%

Load 100%

1.0

0.9

0.8

0.7

0.6

0.5

0.4

50

100

150

200

250

300

Input Voltage [V]

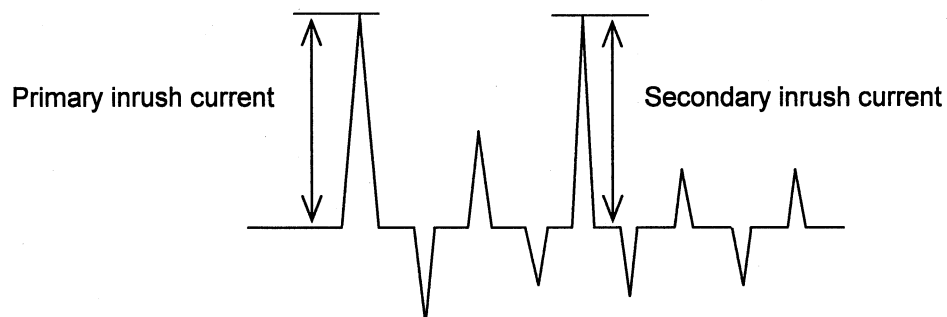
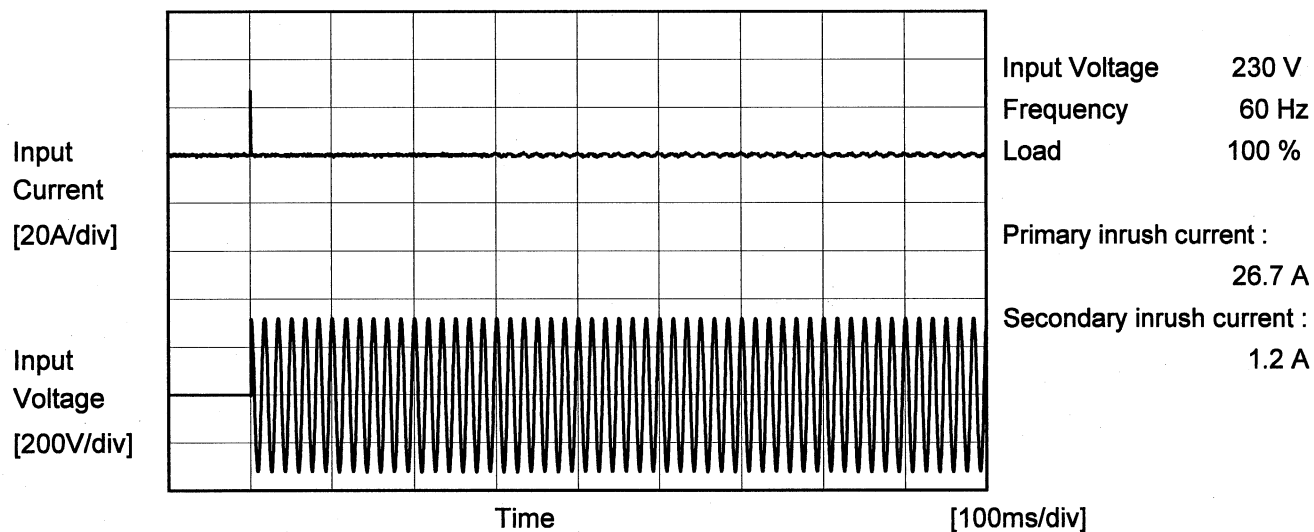
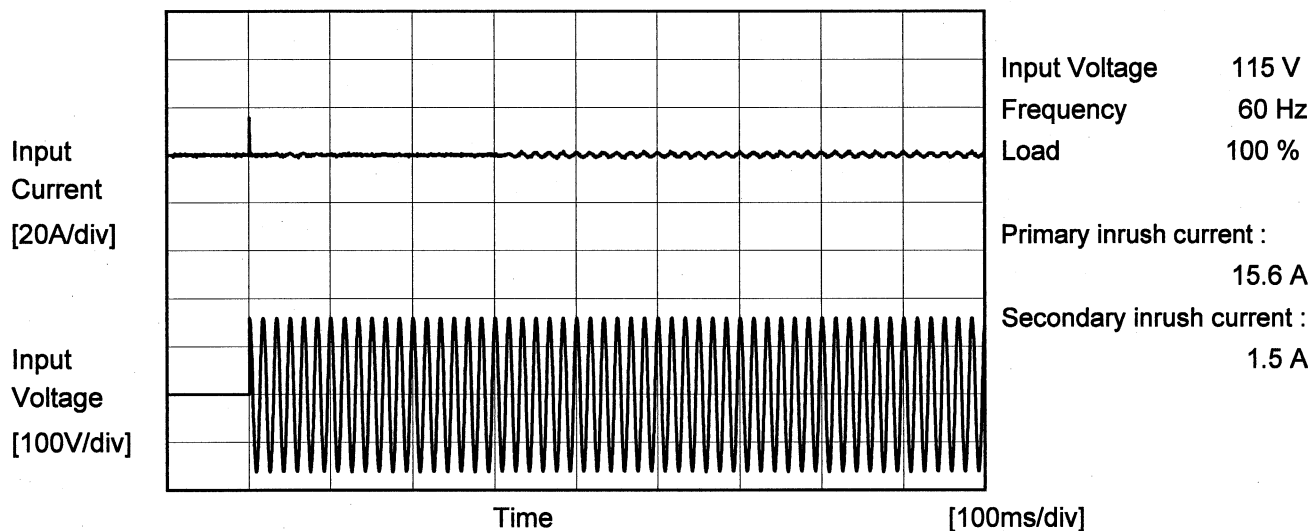
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Model		PLA50F-15																																																				
Item		Power Factor (by Load Current)																																																				
Object																																																						
1.Graph		2.Values																																																				
<div><div><div>—△—</div><div>Input Volt.</div><div>100V</div></div><div><div>---□---</div><div>Input Volt.</div><div>115V</div></div><div><div>---○---</div><div>Input Volt.</div><div>230V</div></div></div> <div><p>Note: Slanted line shows the range of the rated load current.</p></div>		<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>0.857</td><td>0.708</td><td>0.435</td></tr><tr><td>0.60</td><td>0.940</td><td>0.905</td><td>0.727</td></tr><tr><td>1.20</td><td>0.969</td><td>0.951</td><td>0.788</td></tr><tr><td>1.80</td><td>0.986</td><td>0.969</td><td>0.830</td></tr><tr><td>2.40</td><td>0.991</td><td>0.987</td><td>0.851</td></tr><tr><td>3.00</td><td>0.997</td><td>0.991</td><td>0.867</td></tr><tr><td>3.50</td><td>0.998</td><td>0.994</td><td>0.877</td></tr><tr><td>3.85</td><td>-</td><td>0.993</td><td>0.875</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>		Load Current [A]	Power Factor			Input Volt. 100[V]	Input Volt. 115[V]	Input Volt. 230[V]	0.00	0.857	0.708	0.435	0.60	0.940	0.905	0.727	1.20	0.969	0.951	0.788	1.80	0.986	0.969	0.830	2.40	0.991	0.987	0.851	3.00	0.997	0.991	0.867	3.50	0.998	0.994	0.877	3.85	-	0.993	0.875	--	-	-	-	--	-	-	-	--	-	-	-
Load Current [A]	Power Factor																																																					
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COSEL

Model	PLA50F-15	Temperature	25°C
Item	Inrush Current	Testing Circuitry	Figure A
Object	_____		





		Temperature 25°C Testing Circuitry Figure B
Model	PLA50F-15	
Item	Leakage Current	
Object	_____	

1.Results

[mA]

Standards		Input Volt.			Note
		100 [V]	115 [V]	240 [V]	
DEN-AN	Both phases	0.11	0.13	0.25	Operation
	One of phases	0.18	0.20	0.46	Stand by
IEC60950-1	Both phases	0.11	0.13	0.28	Operation
	One of phases	0.17	0.19	0.43	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.

COSEL

Model		PLA50F-15	
Item		Line Regulation	
Object		+15V3.5A	
1.Graph		2.Values	

-----□-----

Load 50%

-----△-----

Load 100%

Output Voltage [V]

16.00

15.75

15.50

15.25

15.00

14.75

14.50

14.25

14.00

13.75

50

100

150

200

250

300

Input Voltage [V]

Note: Slanted line shows the range of the rated input voltage.

Input Voltage [V]	Output Voltage [V]	
	Load 50%	Load 100%
85	15.028	15.026 ※1
100	15.028	15.026 ※2
115	15.028	15.026
200	15.028	15.026
230	15.028	15.026
264	15.028	15.026
280	15.028	15.025
--	-	-
--	-	-

※1:Load 80%

※2:Load 90%

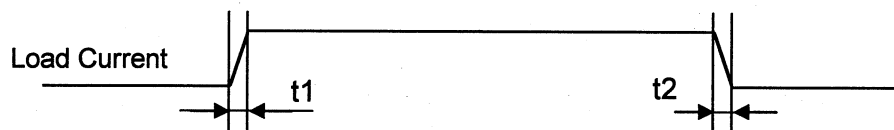
BC-10835

COSEL

Model	PLA50F-15	Temperature 25°C Testing Circuitry Figure A
Item	Dynamic Load Response	
Object	+15V3.5A	

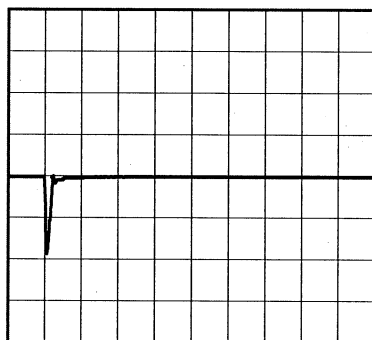
Input Volt. 115 V
Cycle 1000 ms

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

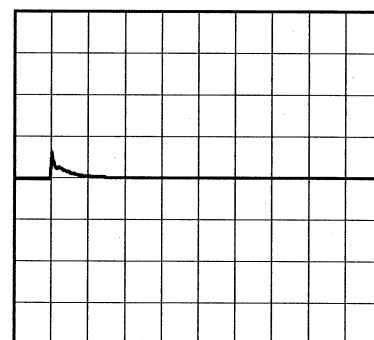


Min. Load (0A) \longleftrightarrow
Load 100% (3.5A)

200 mV/div



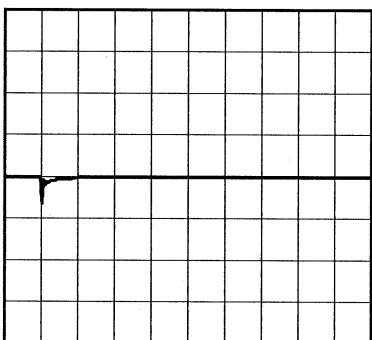
4 ms/div



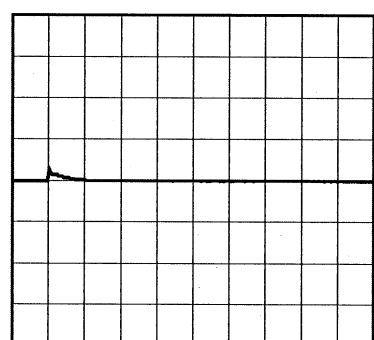
4 ms/div

Min. Load (0A) \longleftrightarrow
Load 50% (1.75A)

200 mV/div



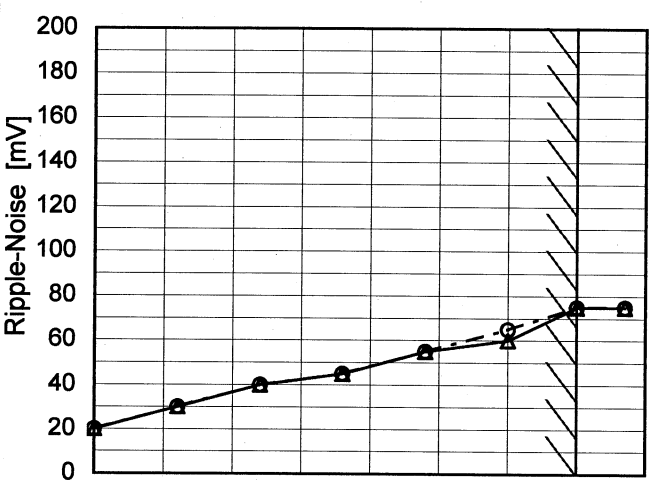
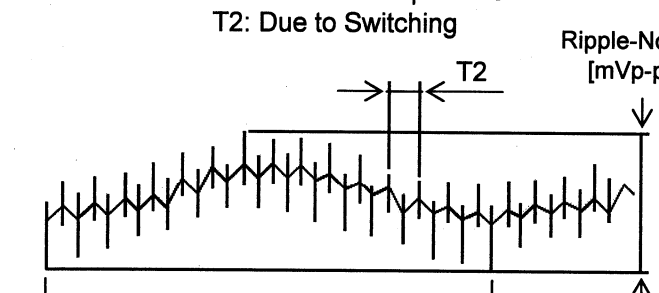
4 ms/div



4 ms/div

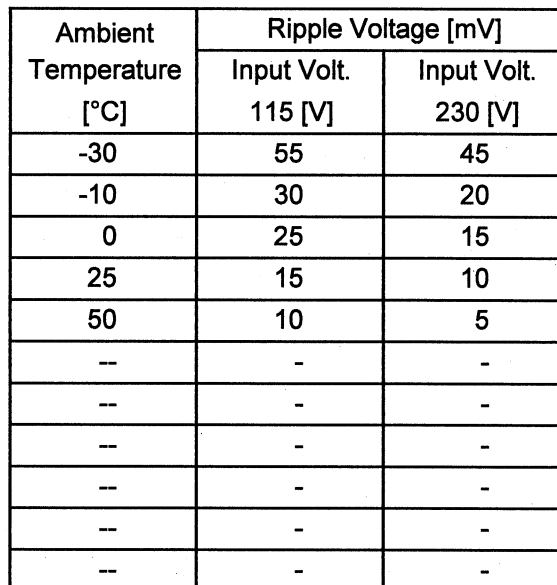
Model		PLA50F-15		Temperature 25°C																																							
Item		Ripple Voltage (by Load Current)		Testing Circuitry Figure C																																							
Object		+15V3.5A																																									
1.Graph				2.Values																																							
<div><div><div>—△—</div><div>Input Volt. 115V</div></div><div><div>-○-</div><div>Input Volt. 230V</div></div></div> <p>Ripple Voltage [mV]</p> <p>Load Current [A]</p>				<table><tr><th rowspan="2">Load Current [A]</th><th colspan="2">Ripple Voltage [mV]</th></tr><tr><th>Input Volt. 115 [V]</th><th>Input Volt. 230 [V]</th></tr><tr><td>0.00</td><td>10</td><td>10</td></tr><tr><td>0.60</td><td>10</td><td>10</td></tr><tr><td>1.20</td><td>10</td><td>10</td></tr><tr><td>1.80</td><td>10</td><td>10</td></tr><tr><td>2.40</td><td>15</td><td>10</td></tr><tr><td>3.00</td><td>15</td><td>10</td></tr><tr><td>3.50</td><td>15</td><td>10</td></tr><tr><td>3.85</td><td>15</td><td>15</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>		Load Current [A]	Ripple Voltage [mV]		Input Volt. 115 [V]	Input Volt. 230 [V]	0.00	10	10	0.60	10	10	1.20	10	10	1.80	10	10	2.40	15	10	3.00	15	10	3.50	15	10	3.85	15	15	--	-	-	--	-	-	--	-	-
Load Current [A]	Ripple Voltage [mV]																																										
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<div><div><div>T1: Due to AC Input Line</div><div>T2: Due to Switching</div></div><p>Ripple [mVp-p]</p><p>T1</p><p>T2</p></div> <p>Fig. Complex Ripple Wave Form</p>																																											

COSEL

COSEL																																									
Model	PLA50F-15	Temperature	25°C																																						
Item	Ripple-Noise	Testing Circuitry	Figure C																																						
Object	+15V3.5A																																								
1.Graph		2.Values																																							
<div><div><div>—△— Input Volt. 115V</div><div>-·-○-·- Input Volt. 230V</div></div></div>		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="2">Ripple-Noise [mV]</th></tr><tr><th>Input Volt. 115 [V]</th><th>Input Volt. 230 [V]</th></tr><tr><td>0.00</td><td>20</td><td>20</td></tr><tr><td>0.60</td><td>30</td><td>30</td></tr><tr><td>1.20</td><td>40</td><td>40</td></tr><tr><td>1.80</td><td>45</td><td>45</td></tr><tr><td>2.40</td><td>55</td><td>55</td></tr><tr><td>3.00</td><td>60</td><td>65</td></tr><tr><td>3.50</td><td>75</td><td>75</td></tr><tr><td>3.85</td><td>75</td><td>75</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>		Load Current [A]	Ripple-Noise [mV]		Input Volt. 115 [V]	Input Volt. 230 [V]	0.00	20	20	0.60	30	30	1.20	40	40	1.80	45	45	2.40	55	55	3.00	60	65	3.50	75	75	3.85	75	75	--	-	-	--	-	-	--	-	-
Load Current [A]	Ripple-Noise [mV]																																								
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Fig. Complex Ripple Wave Form																																									

Testing Circuitry Figure C

2.Values



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

COSEL

Model		PLA50F-15																																																				
Item		Ambient Temperature Drift																																																				
Object		+15V3.5A																																																				
1.Graph		2.Values																																																				
<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> <p>Output Voltage [V]</p> <p>Ambient Temperature [°C]</p> <p>Note: Slanted line shows the range of the rated ambient temperature.</p>		<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>-20</td><td>15.044</td><td>15.043</td><td>15.043</td></tr><tr><td>-10</td><td>15.043</td><td>15.042</td><td>15.042</td></tr><tr><td>0</td><td>15.039</td><td>15.038</td><td>15.038</td></tr><tr><td>10</td><td>15.034</td><td>15.033</td><td>15.033</td></tr><tr><td>20</td><td>15.028</td><td>15.028</td><td>15.028</td></tr><tr><td>25</td><td>15.026</td><td>15.026</td><td>15.026</td></tr><tr><td>35</td><td>15.022</td><td>15.021</td><td>15.021</td></tr><tr><td>45</td><td>15.020</td><td>15.019</td><td>15.019</td></tr><tr><td>55</td><td>15.012</td><td>15.012</td><td>15.012</td></tr><tr><td>60</td><td>15.009</td><td>15.009</td><td>15.009</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr></table> <p>Note: In case of Input Volt. 100V, Load 90%. Other case Load 100%.</p>		Ambient Temperature [°C]	Output Voltage [V]			Input Volt. 100[V]	Input Volt. 115[V]	Input Volt. 230[V]	-20	15.044	15.043	15.043	-10	15.043	15.042	15.042	0	15.039	15.038	15.038	10	15.034	15.033	15.033	20	15.028	15.028	15.028	25	15.026	15.026	15.026	35	15.022	15.021	15.021	45	15.020	15.019	15.019	55	15.012	15.012	15.012	60	15.009	15.009	15.009	--	-	-	-
Ambient Temperature [°C]	Output Voltage [V]																																																					
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55	15.012	15.012	15.012																																																			
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--	-	-	-																																																			



Model		PLA50F-15	Testing Circuitry Figure A
Item		Output Voltage Accuracy	
Object		+15V3.5A	

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 : -10 - 45°C

Input Voltage : 115 - 264V

Load Current : 0 - 3.5A

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

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

2. Values

Item	Temperature [°C]	Input Voltage[V]	Output		Output Voltage Accuracy	
			Current[A]	Voltage[V]	Value [mV]	Ratio [%]
Maximum Voltage	-10	230	0	15.049	±16	±0.1
Minimum Voltage	45	264	3.5	15.018		

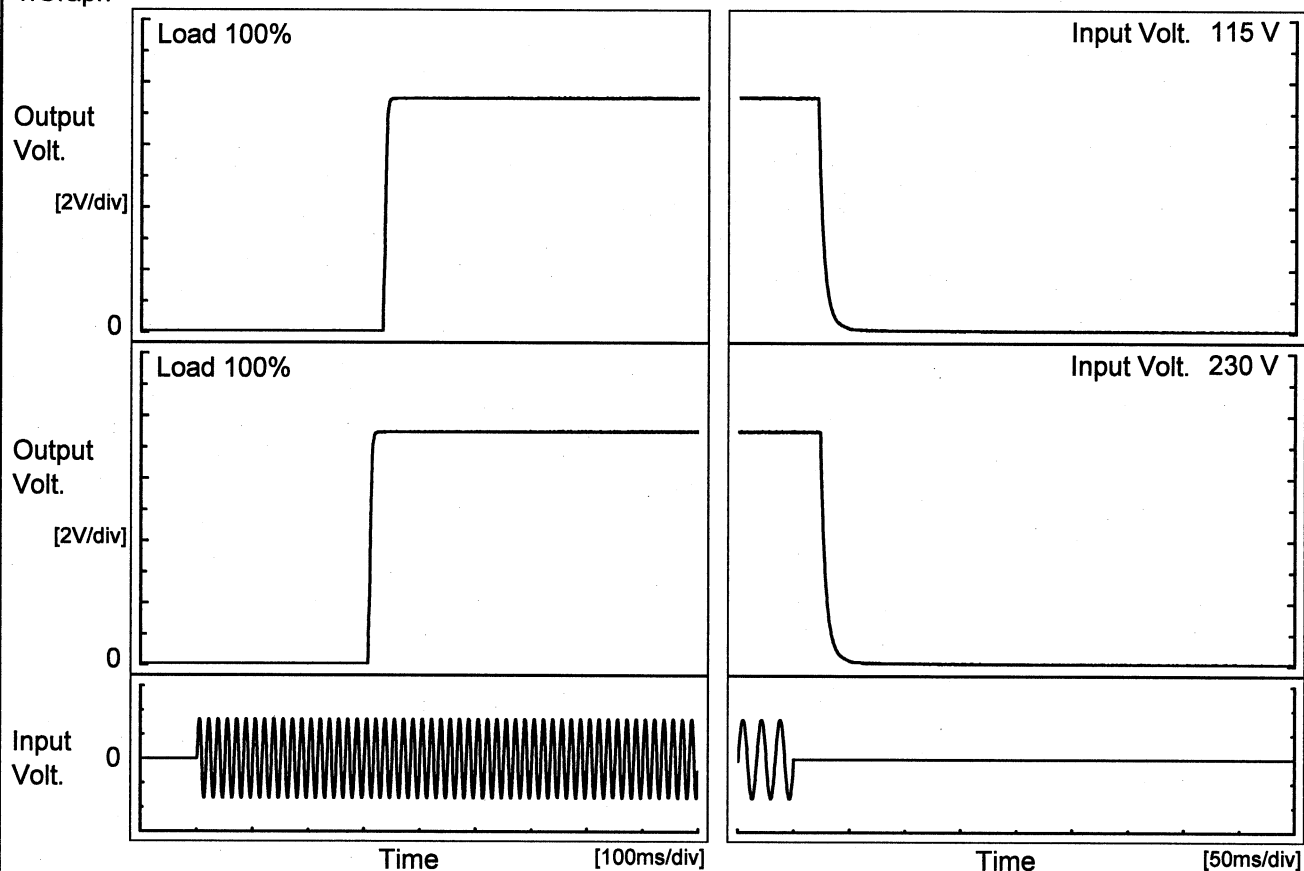


Model		PLA50F-15																							
Item		Time Lapse Drift																							
Object		+15V3.5A																							
1.Graph		2.Values																							
<div><div><div>16.00</div><div>15.75</div><div>15.50</div><div>15.25</div><div>15.00</div><div>14.75</div><div>14.50</div><div>14.25</div><div>14.00</div><div>13.75</div></div><div><div>0</div><div>2</div><div>4</div><div>6</div><div>8</div><div>10</div></div><div><div>Output Voltage [V]</div><div>Time [H]</div></div><div><div>Input Volt.</div><div>230V</div></div><div><div>Load</div><div>100%</div></div></div>		<table><tr><th>Time since start [H]</th><th>Output Voltage [V]</th></tr><tr><td>0.0</td><td>15.026</td></tr><tr><td>0.5</td><td>15.018</td></tr><tr><td>1.0</td><td>15.018</td></tr><tr><td>2.0</td><td>15.018</td></tr><tr><td>3.0</td><td>15.018</td></tr><tr><td>4.0</td><td>15.018</td></tr><tr><td>5.0</td><td>15.018</td></tr><tr><td>6.0</td><td>15.018</td></tr><tr><td>7.0</td><td>15.018</td></tr><tr><td>8.0</td><td>15.018</td></tr></table>		Time since start [H]	Output Voltage [V]	0.0	15.026	0.5	15.018	1.0	15.018	2.0	15.018	3.0	15.018	4.0	15.018	5.0	15.018	6.0	15.018	7.0	15.018	8.0	15.018
Time since start [H]	Output Voltage [V]																								
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4.0	15.018																								
5.0	15.018																								
6.0	15.018																								
7.0	15.018																								
8.0	15.018																								
* The characteristic of AC115V is equal.																									

COSEL

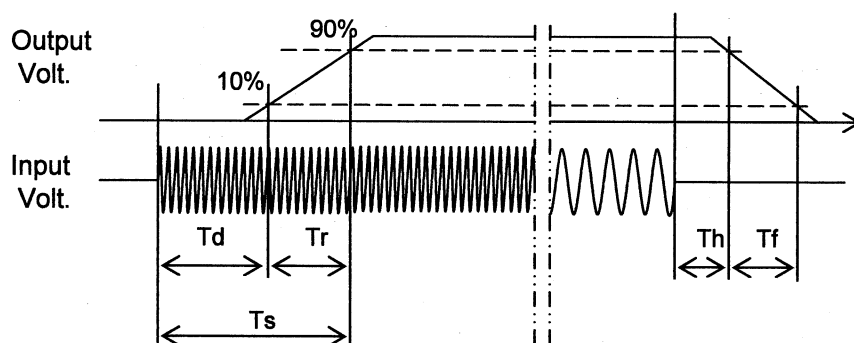
Model	PLA50F-15	Temperature 25°C Testing Circuitry Figure A
Item	Rise and Fall Time	
Object	+15V3.5A	

1.Graph



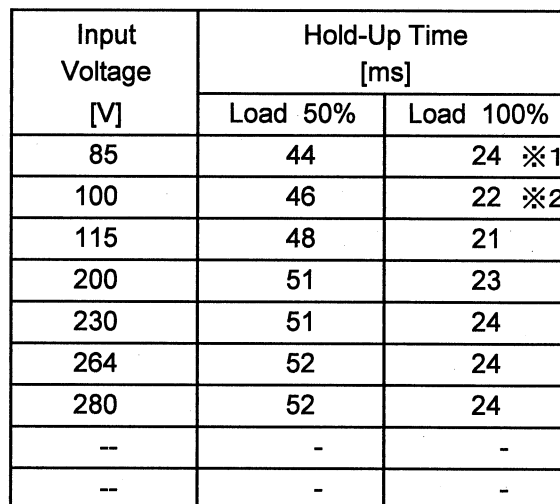
2.Values

		[ms]				
Input Volt.	Time	Td	Tr	Ts	Th	Tf
115 V		333.5	7.0	340.5	21.0	11.3
230 V		307.5	7.0	314.5	24.0	11.0



Temperature 25°C
Testing Circuitry Figure A

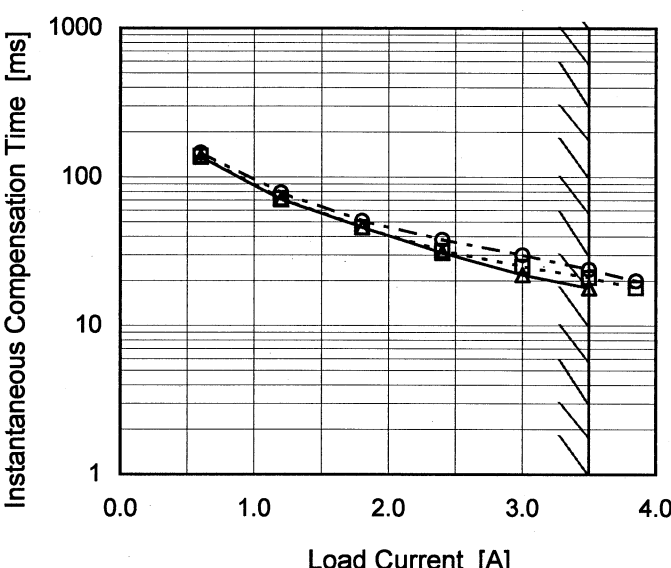
2.Values



※2: Load 90%

This duration covers from Shut-off of input voltage to the moment when output voltage descends to the rated range of voltage accuracy.
Note: Slanted line shows the range of the rated input voltage.

COSEL

Model		PLA50F-15																																																				
Item		Instantaneous Interruption Compensation																																																				
Object		+15V3.5A																																																				
1.Graph		2.Values																																																				
<div><div><div><div>—△—</div><div>Input Volt.</div><div>100V</div></div><div><div>---□---</div><div>Input Volt.</div><div>115V</div></div><div><div>---○---</div><div>Input Volt.</div><div>230V</div></div></div></div> <div>Note: Slanted line shows the range of the rated load current.</div>		<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>0.60</td><td>137</td><td>139</td><td>146</td></tr><tr><td>1.20</td><td>71</td><td>72</td><td>79</td></tr><tr><td>1.80</td><td>46</td><td>46</td><td>51</td></tr><tr><td>2.40</td><td>31</td><td>32</td><td>38</td></tr><tr><td>3.00</td><td>22</td><td>25</td><td>30</td></tr><tr><td>3.50</td><td>18</td><td>21</td><td>24</td></tr><tr><td>3.85</td><td>-</td><td>18</td><td>20</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>		Load Current [A]	Time [ms]			Input Volt. 100[V]	Input Volt. 115[V]	Input Volt. 230[V]	0.00	-	-	-	0.60	137	139	146	1.20	71	72	79	1.80	46	46	51	2.40	31	32	38	3.00	22	25	30	3.50	18	21	24	3.85	-	18	20	--	-	-	-	--	-	-	-	--	-	-	-
Load Current [A]	Time [ms]																																																					
	Input Volt. 100[V]	Input Volt. 115[V]	Input Volt. 230[V]																																																			
0.00	-	-	-																																																			
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3.85	-	18	20																																																			
--	-	-	-																																																			
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--	-	-	-																																																			

COSEL

Model

PLA50F-15

Item

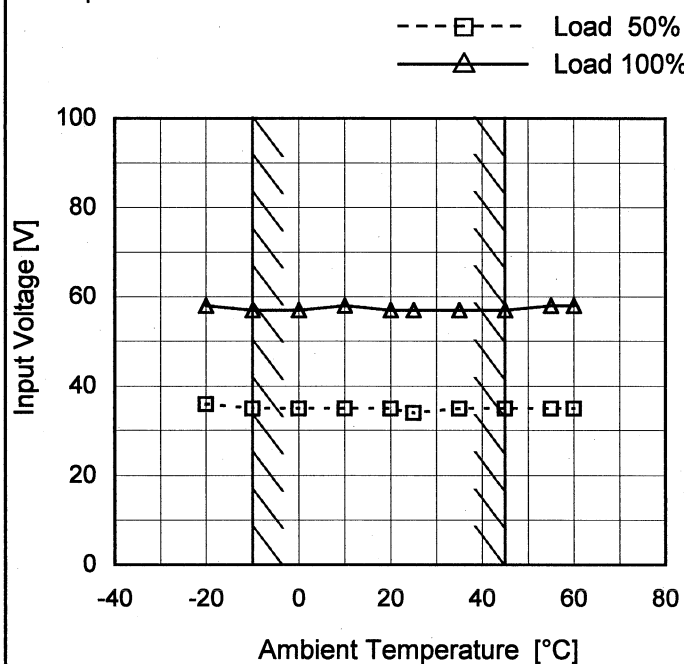
Minimum Input Voltage
for Regulated Output Voltage

Object

+15V3.5A

Testing Circuitry Figure A

1. Graph



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

2. Values

Ambient Temperature [°C]	Input Voltage [V]	
	Load 50%	Load 100%
-20	36	58
-10	35	57
0	35	57
10	35	58
20	35	57
25	34	57
35	35	57
45	35	57
55	35	58
60	35	58
--	-	-



Model		PLA50F-15		Temperature Testing Circuitry	25°C Figure A
Item		Overcurrent Protection			
Object		+15V3.5A			

1.Graph

△

Input Volt. 115V

○

Input Volt. 230V

Output Voltage [V]

20

16

12

8

4

0

0.0

2.0

4.0

6.0



Model		PLA50F-15
Item		Overvoltage Protection
Object		+15V3.5A

1.Graph

—△—

Input Volt. 115V

---□---

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. 115[V]	Input Volt. 230[V]
-20	18.54	18.55
-10	18.77	18.77
0	18.98	18.97
10	19.13	19.12
20	19.33	19.33
25	19.41	19.42
35	19.49	19.49
45	19.69	19.69
55	19.91	19.91
60	20.05	20.04
--	-	-

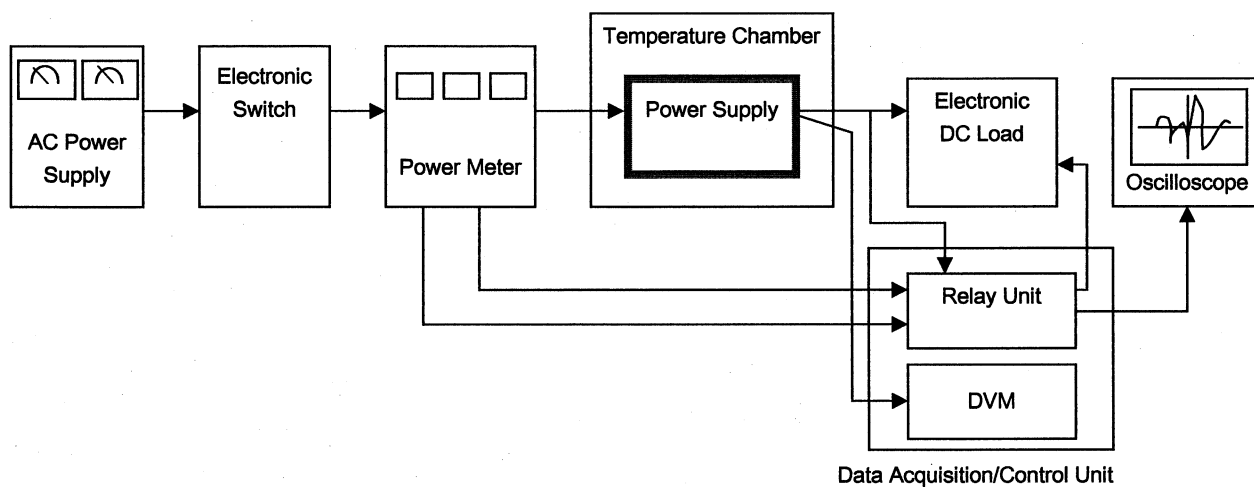


Figure A

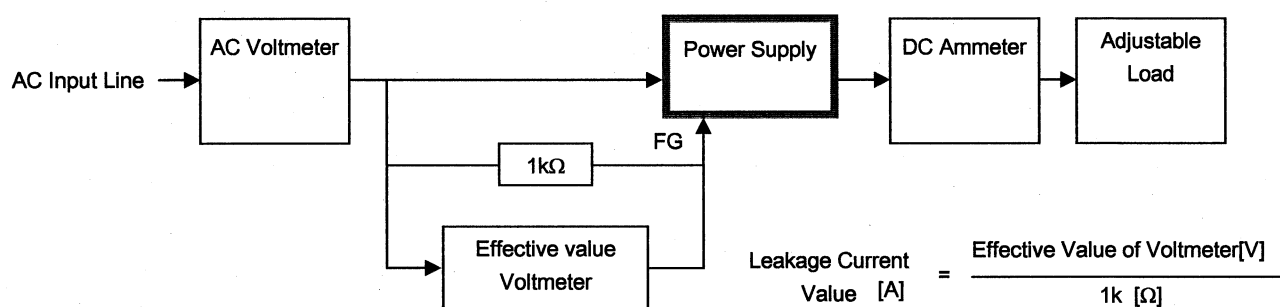


Figure B (DEN-AN)

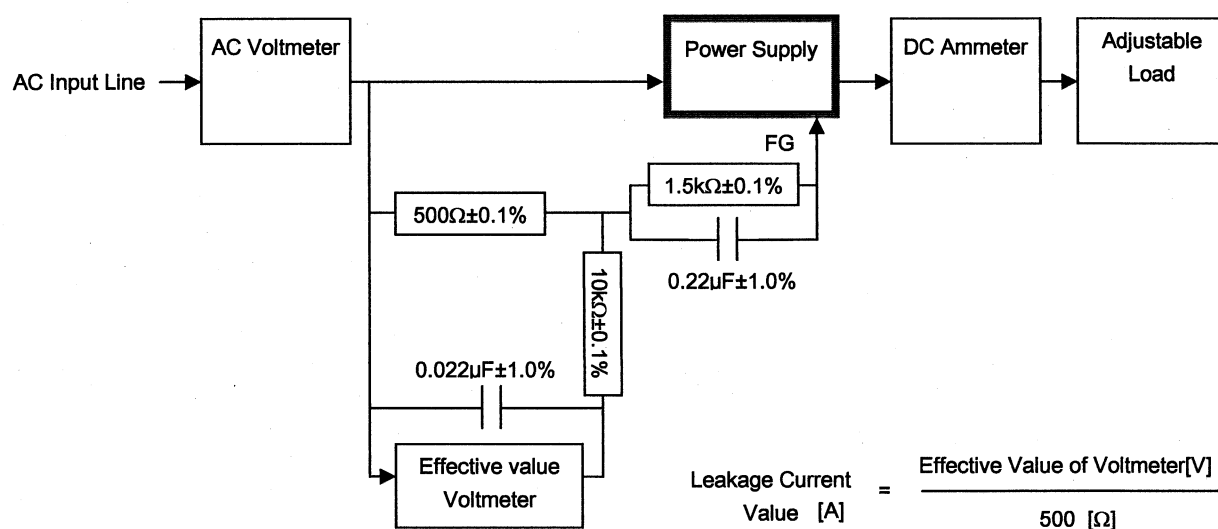


Figure B (IEC60950-1)

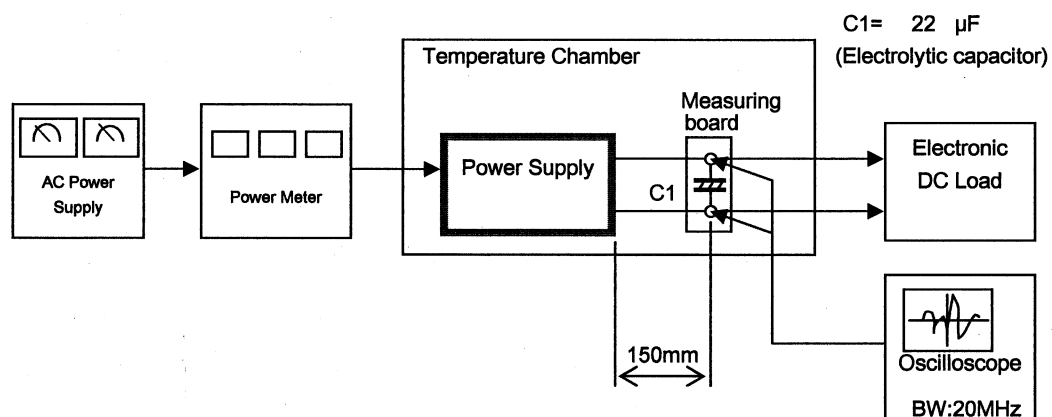


Figure C