

# TEST DATA OF PDA100F-24

Regulated DC Power Supply  
December 12, 2024

Approved by : Tetsukazu Okamoto  
Design Manager

Prepared by : Karki Shankar  
Design Engineer

**COSEL CO.,LTD.**

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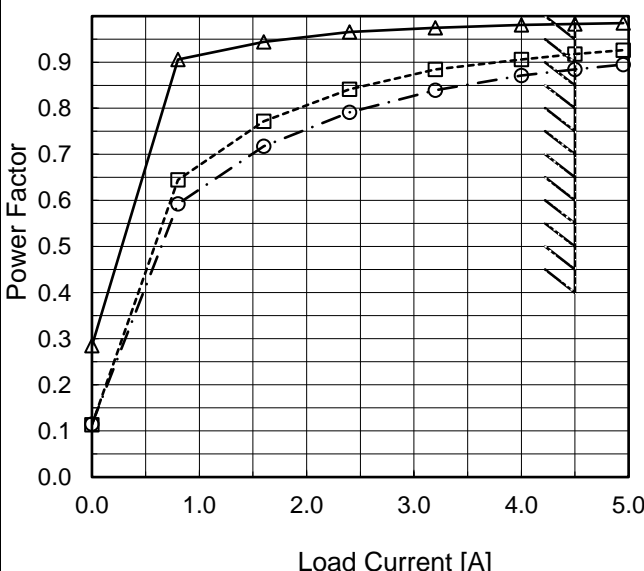
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Model		PDA100F-24																																																				
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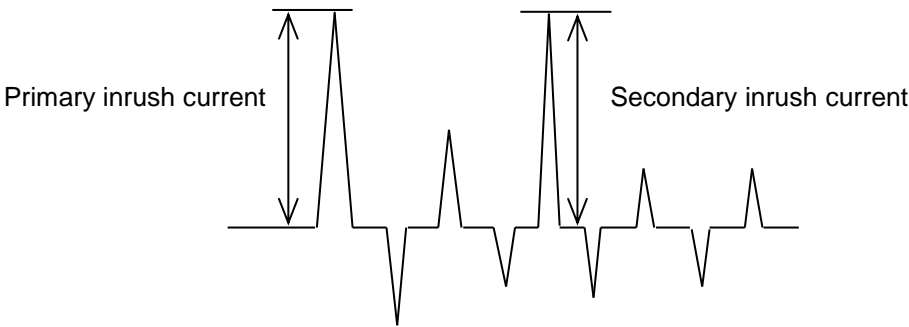
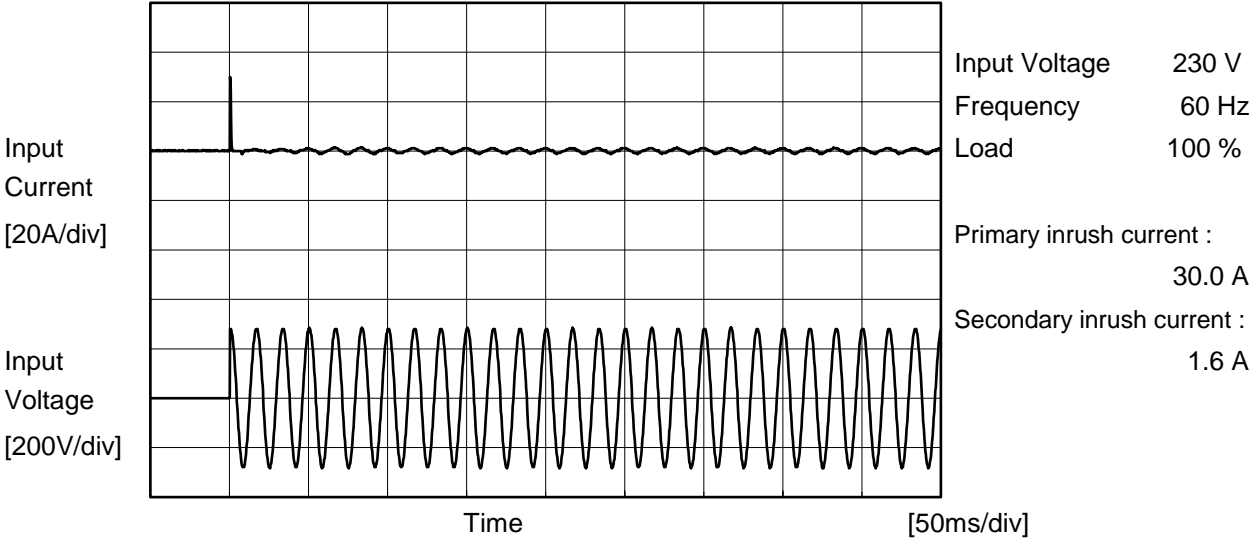
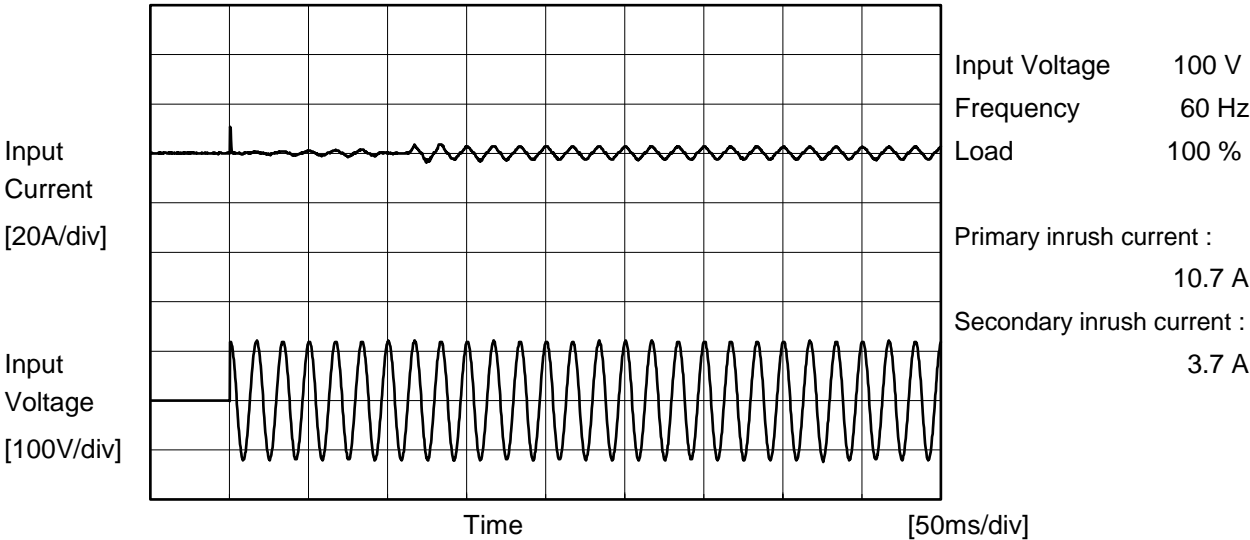
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Model		PDA100F-24	Temperature     25°C Testing Circuitry   Figure A
Item		Inrush Current	
Object		_____	





COSEL		Temperature 25°C Testing Circuitry Figure C
Model	PDA100F-24	
Item	Leakage Current	
Object	_____	

## 1.Results

[mA]

Standards	Testing Circuitry	Measuring Method	Input Volt.			Note
			100 [V]	230 [V]	240 [V]	
DEN-AN	Figure C-1	Both phases	0.14	0.37	0.38	Operation
		One of phases	0.28	0.70	0.73	Stand by
IEC62368-1	Figure C-2	Both phases	0.14	0.36	0.37	Operation
		One of phases	0.27	0.69	0.72	Stand by
	Figure C-3	Both phases	0.14	0.35	0.37	Operation
		One of phases	0.27	0.67	0.71	Stand by

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

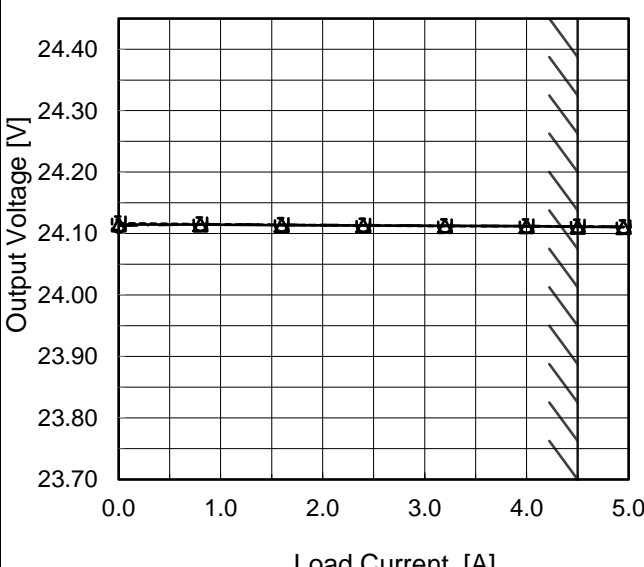
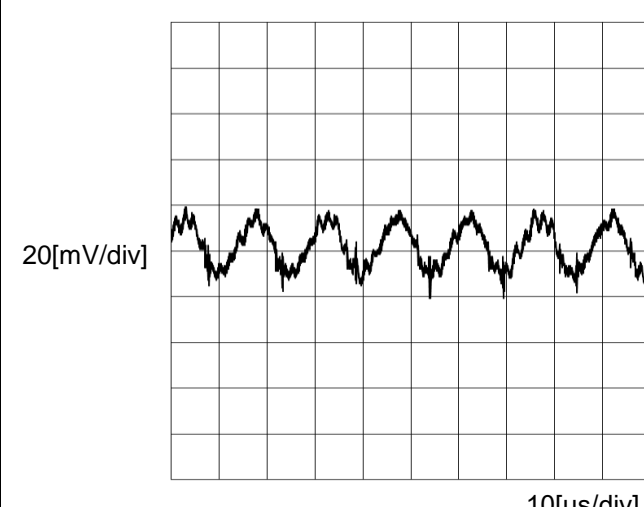
## 2.Condition

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

[illegible]



**COSEL**

Model	PDA100F-24																																																					
Item	Load Regulation	Temperature	25°C																																																			
Object	+24V4.5A	Testing Circuitry	Figure A																																																			
1.Graph <div><div><div>—△—</div><div>Input Volt.</div><div>100V</div></div><div><div>---□---</div><div>Input Volt.</div><div>200V</div></div><div><div>-·-○-·-</div><div>Input Volt.</div><div>230V</div></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">Output Voltage [V]</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 200[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.00</td><td>24.115</td><td>24.117</td><td>24.113</td></tr><tr><td>0.80</td><td>24.115</td><td>24.115</td><td>24.115</td></tr><tr><td>1.60</td><td>24.114</td><td>24.114</td><td>24.114</td></tr><tr><td>2.40</td><td>24.113</td><td>24.113</td><td>24.114</td></tr><tr><td>3.20</td><td>24.113</td><td>24.112</td><td>24.113</td></tr><tr><td>4.00</td><td>24.112</td><td>24.112</td><td>24.112</td></tr><tr><td>4.50</td><td>24.111</td><td>24.112</td><td>24.112</td></tr><tr><td>4.95</td><td>24.111</td><td>24.111</td><td>24.111</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]	Output Voltage [V]			Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]	0.00	24.115	24.117	24.113	0.80	24.115	24.115	24.115	1.60	24.114	24.114	24.114	2.40	24.113	24.113	24.114	3.20	24.113	24.112	24.113	4.00	24.112	24.112	24.112	4.50	24.111	24.112	24.112	4.95	24.111	24.111	24.111	--	--	--	--	--	--	--	--	--	--	--	--
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Object	+24V4.5A	Testing Circuitry	Figure B																																																			
1.Graph <div><div>Input Voltage</div><div>230V</div><div>Load</div><div>100%</div></div> 																																																						

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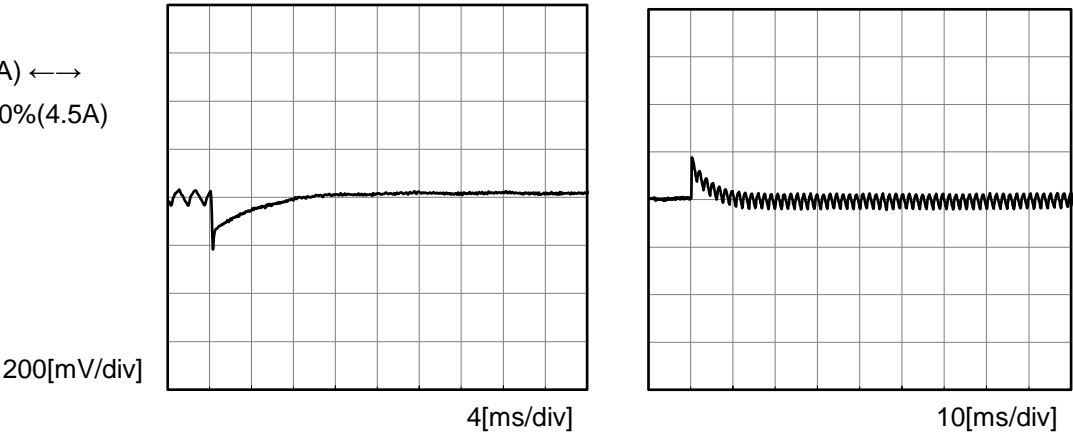


Model		PDA100F-24	Temperature 25°C Testing Circuitry Figure A
Item		Dynamic Load Response	
Object		+24V4.5A	

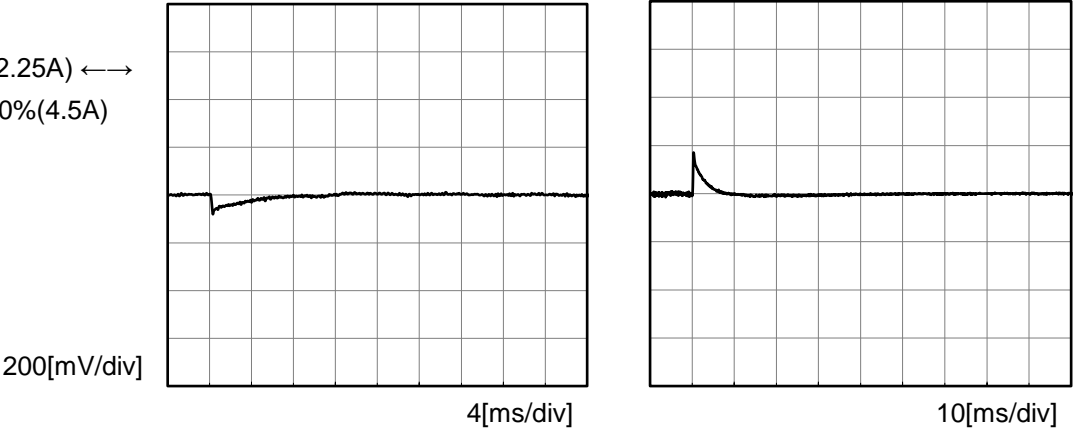
Input Volt. 230 V                      Response. t1=t2=50μs. Typ  
Cycle 1000 ms



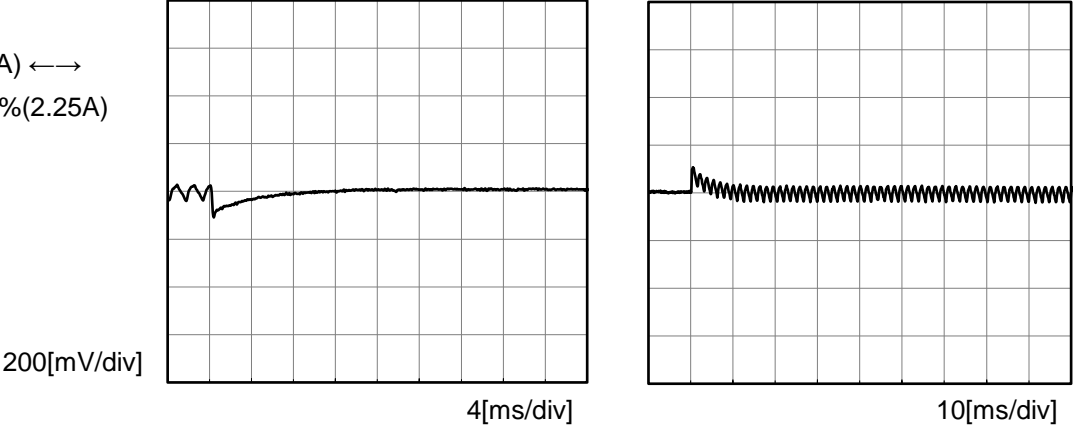
Load 0%(0A) ←→  
Load 100%(4.5A)



Load 50%(2.25A) ←→  
Load 100%(4.5A)

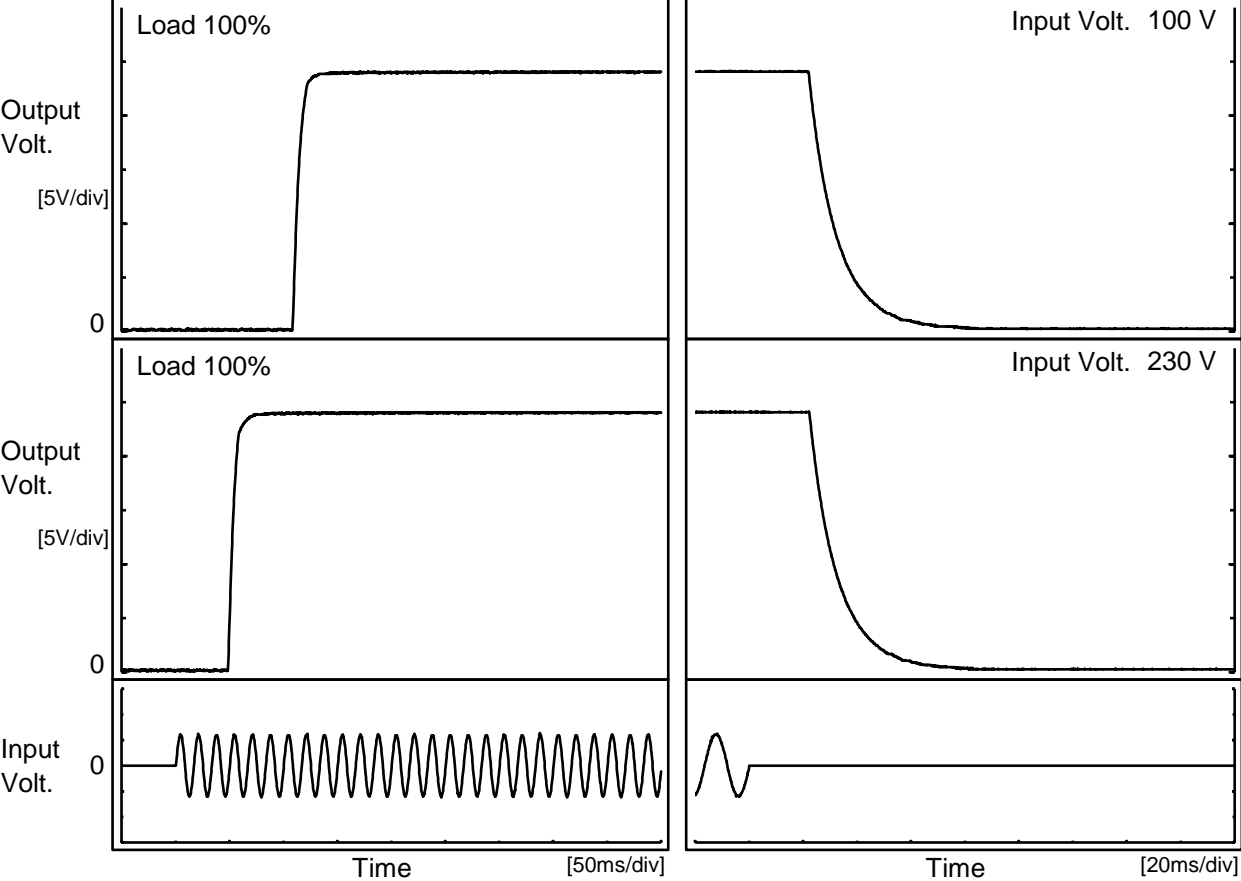


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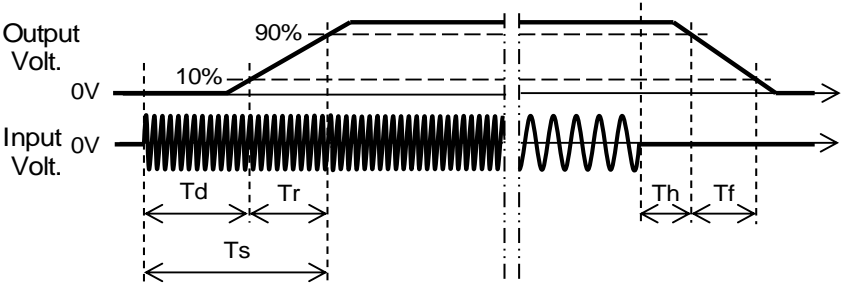
Model		PDA100F-24	Temperature 25°C Testing Circuitry Figure A
Item		Rise and Fall Time	
Object		+24V4.5A	

1.Graph



2.Values

		[ms]				
Input Volt.	Time	Td	Tr	Ts	Th	Tf
100 V		109.5	11.0	120.5	23.0	23.4
230 V		49.5	9.0	58.5	23.2	23.5



[illegible]

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	Input Volt. 100[V]	Input Volt. 230[V]																																												
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2.40	-	-																																												
0.00	-	-																																												
			</																																											



Model		PDA100F-24	Testing Circuitry    Figure A	
Item		Ambient Temperature Drift		
Object		+24V4.5A		
1.Values <span style="float:right">Load 100%</span>				
Ambient Temperature[°C]		Output Voltage [V]		
		Input Volt. 100V	Input Volt. 200V	Input Volt. 230V
-10		24.109	24.108	24.108
25		24.101	24.101	24.101
50		24.115	24.115	24.115
Item		Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry    Figure A	
Object		+24V4.5A		
1.Values				
Ambient Temperature[°C]		Input Voltage [V]		
		Load 50%	Load 100%	
-10		42	57	
25		41	59	
50		43	58	
Item		Overvoltage Protection	Testing Circuitry    Figure A	
Object		+24V4.5A		
1.Values <span style="float:right">Load 0%</span>				
Ambient Temperature[°C]		Operating Point [V]		
		Input Volt. 100V	Input Volt. 230V	
-20		32.37	32.37	
25		33.30	33.30	
50		33.88	33.88	

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BC-12018

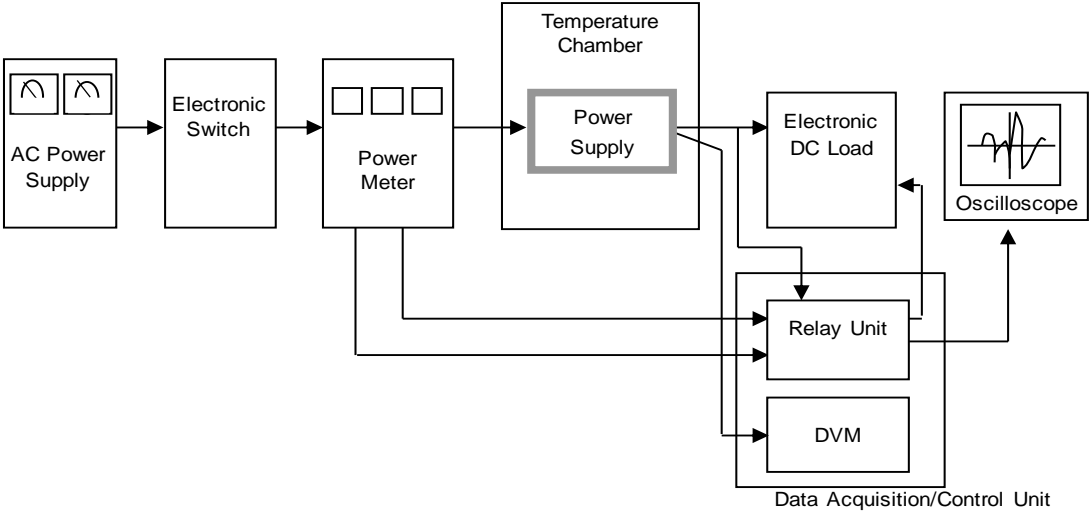


Figure A

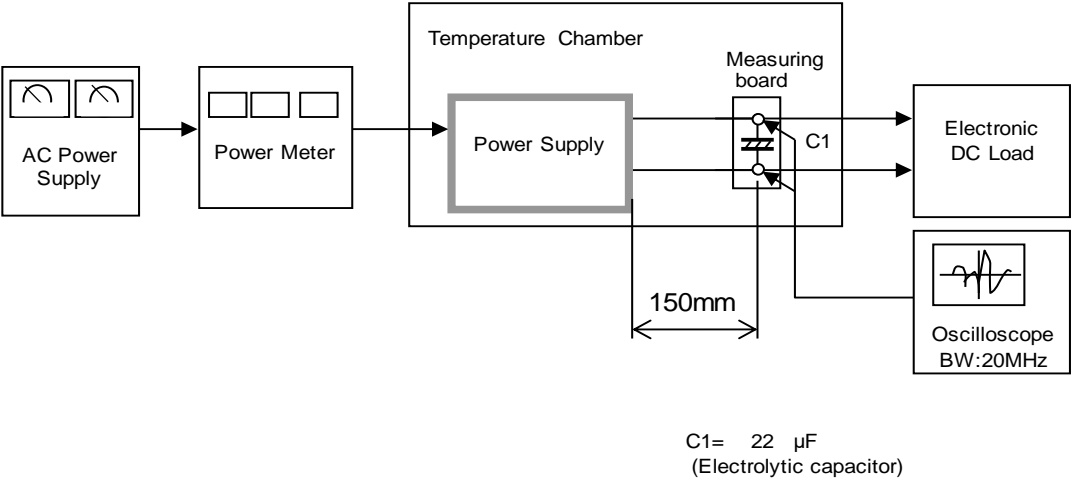


Figure B



