



# TEST DATA OF LFP300F-30-TY

Regulated DC Power Supply  
November 8, 2011

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Yoshiaki Shimizu Design Manager

Prepared by : *Tomoyuki Mukaiyama*  
Tomoyuki Mukaiyama Design Engineer

**COSEL CO.,LTD.**

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Model		LFP300F-30-TY	
Item		Input Current (by Load Current)	
Object			

1.Graph

—△—

Input Volt. 100V

---□---

Input Volt. 200V

---○---

Input Volt. 230V

Input Current [A]

Load Current [A]

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

2.Values

Load Current [A]	Input Current [A]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
0.0	0.136	0.194	0.218
2.2	0.967	0.547	0.508
4.4	1.713	0.904	0.814
6.6	2.442	1.278	1.118
8.8	3.188	1.646	1.457
10.0	3.593	1.844	1.631
12.0	4.274	2.151	1.908
13.2	4.720	2.378	2.116
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# COSEL

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Item		Efficiency (by Input Voltage)																																	
Object																																			
1.Graph		2.Values																																	
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Model		LFP300F-30-TY		Temperature 25°C																																																				
Item		Efficiency (by Load Current)		Testing Circuitry Figure A																																																				
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# COSEL

Model		LFP300F-30-TY	
Item		Power Factor (by Input Voltage)	
Object			

1.Graph

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Load 50%

---

Load 100%

Power Factor

1.0

0.9

0.8

0.7

0.6

0.5

0.4

50

100

150

200

250

300

Input Voltage [V]

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

2.Values

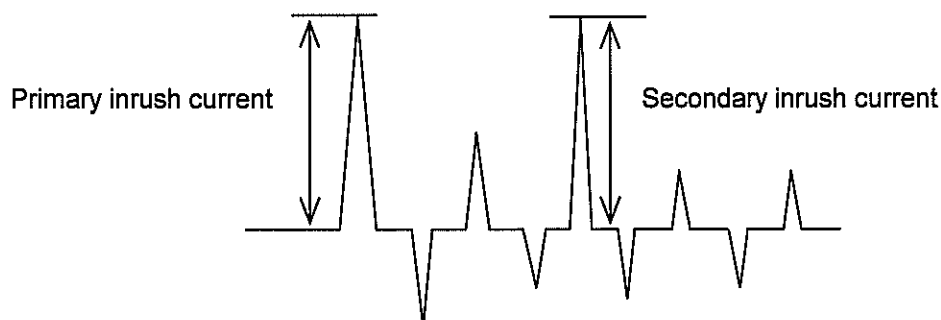
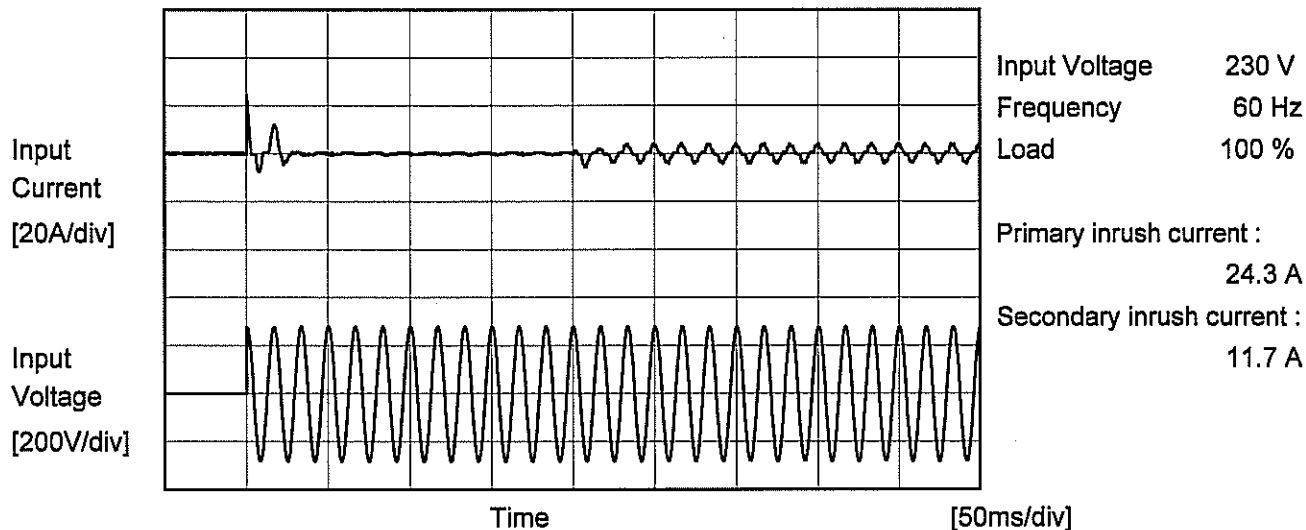
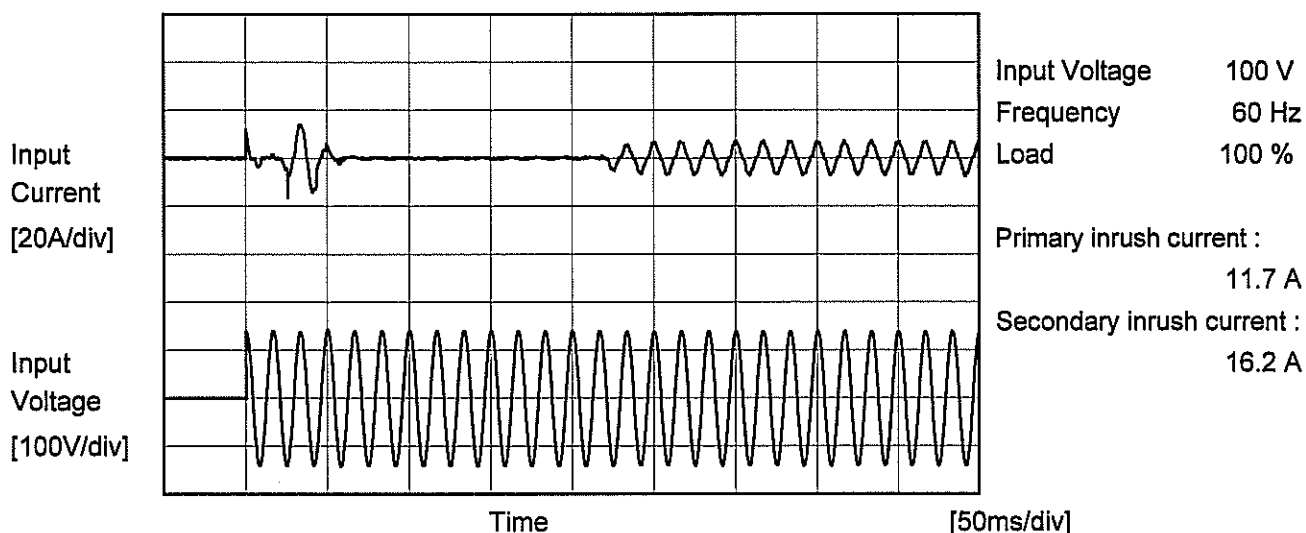
Input Voltage [V]	Power Factor	
	Load 50%	Load 100%
75	0.984	0.996
85	0.981	0.993
100	0.972	0.991
120	0.955	0.986
200	0.903	0.950
230	0.883	0.929
264	0.857	0.896
280	0.790	0.841
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Model	LFP300F-30-TY																																																					
Item	Power Factor (by Load Current)	Temperature	25°C																																																			
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<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>Power Factor</p> <p>Load Current [A]</p> <p>Note: Slanted line shows the range of the rated load current.</p>		<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. 200[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.0</td><td>0.640</td><td>0.231</td><td>0.180</td></tr><tr><td>2.2</td><td>0.922</td><td>0.807</td><td>0.752</td></tr><tr><td>4.4</td><td>0.960</td><td>0.884</td><td>0.856</td></tr><tr><td>6.6</td><td>0.977</td><td>0.906</td><td>0.895</td></tr><tr><td>8.8</td><td>0.986</td><td>0.927</td><td>0.904</td></tr><tr><td>10.0</td><td>0.987</td><td>0.932</td><td>0.912</td></tr><tr><td>12.0</td><td>0.991</td><td>0.950</td><td>0.929</td></tr><tr><td>13.2</td><td>0.992</td><td>0.945</td><td>0.920</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. 200[V]	Input Volt. 230[V]	0.0	0.640	0.231	0.180	2.2	0.922	0.807	0.752	4.4	0.960	0.884	0.856	6.6	0.977	0.906	0.895	8.8	0.986	0.927	0.904	10.0	0.987	0.932	0.912	12.0	0.991	0.950	0.929	13.2	0.992	0.945	0.920	--	-	-	-	--	-	-	-	--	-	-	-
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# COSEL

Model	LFP300F-30-TY	Temperature 25°C Testing Circuitry Figure A	
Item	Inrush Current		
Object			





		Temperature 25°C Testing Circuitry Figure B
Model	LFP300F-30-TY	
Item	Leakage Current	
Object		

## 1.Results

[mA]

Standards		Input Volt.			Note
		100 [V]	200 [V]	240 [V]	
DEN-AN	Both phases	0.33	0.53	0.60	Operation
	One of phases	0.34	0.70	0.83	Stand by
IEC60950-1	Both phases	0.24	0.50	0.57	Operation
	One of phases	0.32	0.68	0.74	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		LFP300F-30-TY																																	
Item		Line Regulation																																	
Object		+30V12A																																	
1.Graph		Temperature 25°C Testing Circuitry Figure A																																	
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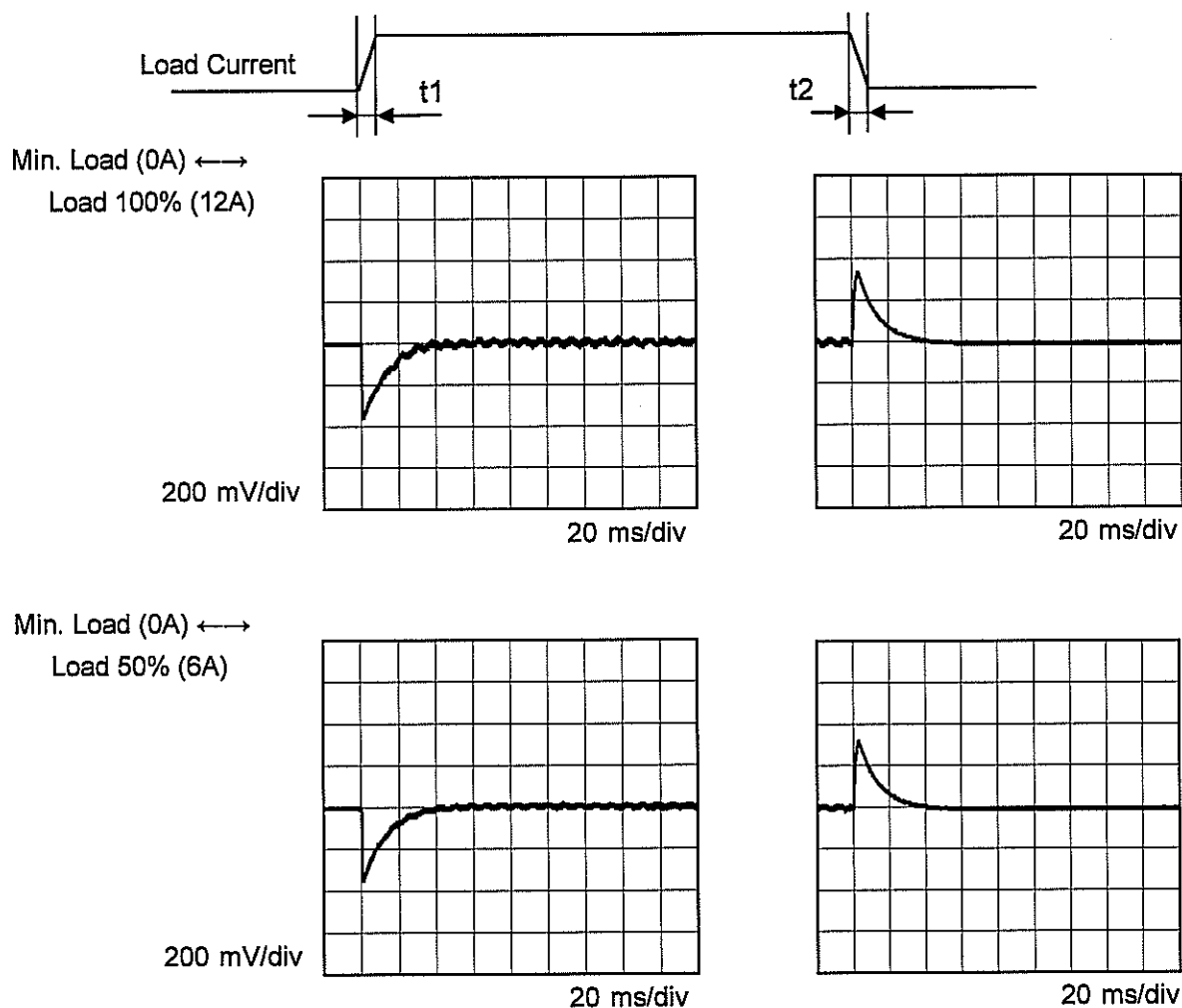
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2.2	30.078	30.078	30.079																																																			
4.4	30.077	30.077	30.078																																																			
6.6	30.076	30.076	30.077																																																			
8.8	30.075	30.076	30.076																																																			
10.0	30.075	30.075	30.075																																																			
12.0	30.074	30.074	30.074																																																			
13.2	30.073	30.074	30.074																																																			
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# COSEL

Model	LFP300F-30-TY	Temperature Testing Circuitry	25° C Figure A
Item	Dynamic Load Response		
Object	+30V12A		

Input Volt. 100 V  
Cycle 1000 ms

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



# COSEL

Model		LFP300F-30-TY	
Item		Ripple Voltage (by Load Current)	
Object		+30V12A	
1.Graph		2.Values	

—△—

Input Volt. 100V

-·-○-·-

Input Volt. 230V

Load Current [A]	Ripple Voltage [mV]	
	Input Volt. 100 [V]	Input Volt. 230 [V]
0.0	10	10
2.2	35	35
4.4	40	40
6.6	45	45
8.8	50	50
10.0	55	55
12.0	60	60
13.2	65	65
--	-	-
--	-	-
--	-	-

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.

T1: Due to AC Input Line

T2: Due to Switching

Fig. Complex Ripple Wave Form

# COSEL

Model	LFP300F-30-TY	Temperature Testing Circuitry	25°C Figure C																																						
Item	Ripple-Noise																																								
Object	+30V12A																																								
1.Graph		2.Values																																							
<div><div><div><div></div><div>—△—</div><div>Input Volt. 100V</div></div><div><div></div><div>--○--</div><div>Input Volt. 230V</div></div></div><div><p>Y-axis: Ripple-Noise [mV] (0 to 200) X-axis: Load Current [A] (0 to 12)</p></div></div> <table><tr><th rowspan="2">Load Current [A]</th><th colspan="2">Ripple-Noise [mV]</th></tr><tr><th>Input Volt. 100 [V]</th><th>Input Volt. 230 [V]</th></tr><tr><td>0.0</td><td>30</td><td>30</td></tr><tr><td>2.2</td><td>45</td><td>45</td></tr><tr><td>4.4</td><td>60</td><td>55</td></tr><tr><td>6.6</td><td>65</td><td>65</td></tr><tr><td>8.8</td><td>75</td><td>75</td></tr><tr><td>10.0</td><td>80</td><td>80</td></tr><tr><td>12.0</td><td>85</td><td>85</td></tr><tr><td>13.2</td><td>110</td><td>110</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. 100 [V]	Input Volt. 230 [V]	0.0	30	30	2.2	45	45	4.4	60	55	6.6	65	65	8.8	75	75	10.0	80	80	12.0	85	85	13.2	110	110	--	-	-	--	-	-	--	-	-	
Load Current [A]	Ripple-Noise [mV]																																								
	Input Volt. 100 [V]	Input Volt. 230 [V]																																							
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10.0	80	80																																							
12.0	85	85																																							
13.2	110	110																																							
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--	-	-																																							
<div><div>Measured by 20 MHz Oscilloscope. Ripple-Noise is shown as p-p in the figure below. Note: Slanted line shows the range of the rated load current.</div><div><div><div>T1: Due to AC Input Line</div><div>T2: Due to Switching</div></div><div><p>Y-axis: Ripple-Noise [mVp-p] X-axis: Time (T1, T2)</p></div></div></div> <p>Fig. Complex Ripple Wave Form</p>																																									

Model		LFP300F-30-TY	
Item		Ripple Voltage (by Ambient Temp.)	
Object		+30V12A	
1.Graph		2.Values	



Model	LFP300F-30-TY																																																					
Item	Ambient Temperature Drift		Testing Circuitry    Figure A																																																			
Object	+30V12A																																																					
1.Graph		2.Values																																																				
<div><div><div>—△—</div><div>Input Volt. 100V</div></div><div><div>---□---</div><div>Input Volt. 200V</div></div><div><div>---○---</div><div>Input Volt. 230V</div></div></div> <div><div>Output Voltage [V]</div><div><div>30.40</div><div>30.30</div><div>30.20</div><div>30.10</div><div>30.00</div><div>29.90</div><div>29.80</div><div>29.70</div></div><div><div>-40</div><div>-20</div><div>0</div><div>20</div><div>40</div><div>60</div><div>80</div></div><div>Ambient Temperature [°C]</div><div>Load 100%</div></div>		<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. 200[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>-20</td><td>30.019</td><td>30.019</td><td>30.019</td></tr><tr><td>-10</td><td>30.029</td><td>30.030</td><td>30.030</td></tr><tr><td>0</td><td>30.039</td><td>30.039</td><td>30.040</td></tr><tr><td>10</td><td>30.050</td><td>30.050</td><td>30.051</td></tr><tr><td>20</td><td>30.064</td><td>30.064</td><td>30.064</td></tr><tr><td>25</td><td>30.074</td><td>30.074</td><td>30.074</td></tr><tr><td>30</td><td>30.077</td><td>30.078</td><td>30.078</td></tr><tr><td>40</td><td>30.088</td><td>30.088</td><td>30.088</td></tr><tr><td>50</td><td>30.091</td><td>30.091</td><td>30.092</td></tr><tr><td>60</td><td>30.090</td><td>30.091</td><td>30.090</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. 200[V]	Input Volt. 230[V]	-20	30.019	30.019	30.019	-10	30.029	30.030	30.030	0	30.039	30.039	30.040	10	30.050	30.050	30.051	20	30.064	30.064	30.064	25	30.074	30.074	30.074	30	30.077	30.078	30.078	40	30.088	30.088	30.088	50	30.091	30.091	30.092	60	30.090	30.091	30.090	--	-	-	-
Ambient Temperature [°C]	Output Voltage [V]																																																					
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]																																																			
-20	30.019	30.019	30.019																																																			
-10	30.029	30.030	30.030																																																			
0	30.039	30.039	30.040																																																			
10	30.050	30.050	30.051																																																			
20	30.064	30.064	30.064																																																			
25	30.074	30.074	30.074																																																			
30	30.077	30.078	30.078																																																			
40	30.088	30.088	30.088																																																			
50	30.091	30.091	30.092																																																			
60	30.090	30.091	30.090																																																			
--	-	-	-																																																			
Note: Slanted line shows the range of the rated ambient temperature.																																																						

**COSEL**

		Testing Circuitry Figure A
Model	LFP300F-30-TY	
Item	Output Voltage Accuracy	
Object	+30V12A	

### 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 : 0 - 12A

\* 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	50	264	0	30.103	±36	±0.1
Minimum Voltage	-10	85	12	30.031		

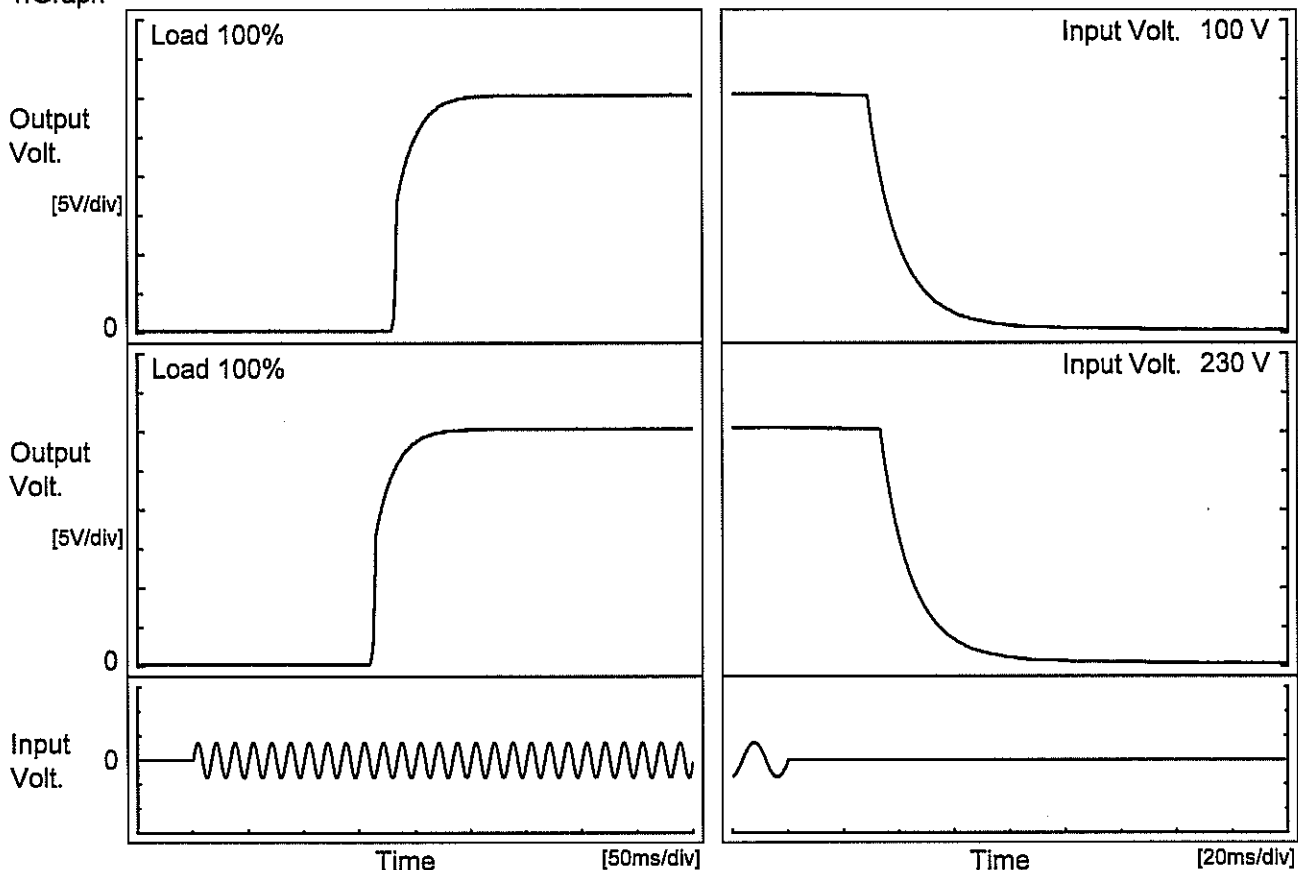
# COSEL

Model		LFP300F-30-TY	
Item		Time Lapse Drift	
Object		+30V12A	
1.Graph		2.Values	
<div><div><div>Output 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><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></di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# COSEL

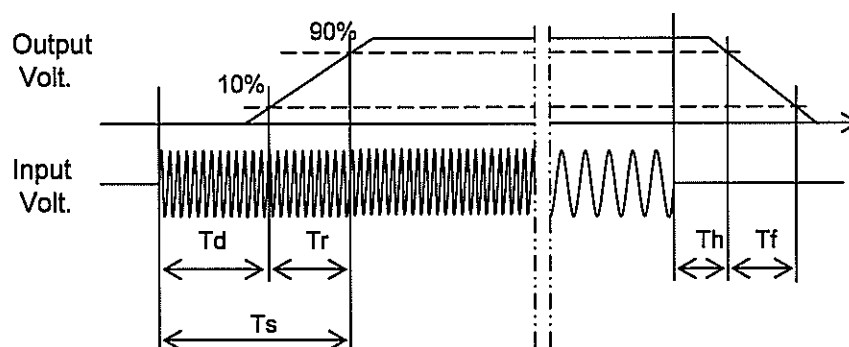
Model	LFP300F-30-TY	Temperature	25°C
Item	Rise and Fall Time	Testing Circuitry	Figure A
Object	+30V12A		

## 1. Graph



## 2. Values

		[ms]				
Input Volt.	Time	Td	Tr	Ts	Th	Tf
100 V		181.8	28.3	210.1	29.9	26.4
230 V		162.5	27.8	190.3	34.5	26.4



# COSEL

Model	LFP300F-30-TY																																
Item	Hold-Up Time	Temperature	25°C																														
Object	+30V12A	Testing Circuitry	Figure A																														
1.Graph		2.Values																															
<div><div><div>---□---</div><div>Load 50%</div></div><div><div>—△—</div><div>Load 100%</div></div></div> <p>The graph shows Hold-Up Time [ms] on a logarithmic y-axis (1 to 1000) versus Input Voltage [V] on a linear x-axis (50 to 300). Two data series are plotted: Load 50% (dashed line with square markers) and Load 100% (solid line with triangle markers). Both series show a slight increase in hold-up time as input voltage increases. A slanted line indicates the range of the rated input voltage, which is approximately between 80V and 280V.</p> <table border="1"><thead><tr><th>Input Voltage [V]</th><th>Load 50% [ms]</th><th>Load 100% [ms]</th></tr></thead><tbody><tr><td>75</td><td>56</td><td>28</td></tr><tr><td>85</td><td>58</td><td>28</td></tr><tr><td>100</td><td>60</td><td>29</td></tr><tr><td>120</td><td>63</td><td>30</td></tr><tr><td>200</td><td>66</td><td>34</td></tr><tr><td>230</td><td>68</td><td>34</td></tr><tr><td>264</td><td>69</td><td>35</td></tr><tr><td>280</td><td>70</td><td>36</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></tbody></table>		Input Voltage [V]	Load 50% [ms]	Load 100% [ms]	75	56	28	85	58	28	100	60	29	120	63	30	200	66	34	230	68	34	264	69	35	280	70	36	--	-	-		
Input Voltage [V]	Load 50% [ms]	Load 100% [ms]																															
75	56	28																															
85	58	28																															
100	60	29																															
120	63	30																															
200	66	34																															
230	68	34																															
264	69	35																															
280	70	36																															
--	-	-																															
<p>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.</p>																																	

Model	LFP300F-30-TY																																																					
Item	Instantaneous Interruption Compensation	Temperature	25°C																																																			
Object	+30V12A	Testing Circuitry	Figure A																																																			
1.Graph		2.Values																																																				
<div><div><div>—△—</div><div>Input Volt. 100V</div></div><div><div>---□---</div><div>Input Volt. 200V</div></div><div><div>---○---</div><div>Input Volt. 230V</div></div></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>		<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. 200[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.0</td><td>-</td><td>-</td><td>-</td></tr><tr><td>2.2</td><td>113</td><td>138</td><td>172</td></tr><tr><td>4.4</td><td>63</td><td>73</td><td>89</td></tr><tr><td>6.6</td><td>38</td><td>52</td><td>54</td></tr><tr><td>8.8</td><td>29</td><td>40</td><td>40</td></tr><tr><td>10.0</td><td>28</td><td>36</td><td>36</td></tr><tr><td>12.0</td><td>27</td><td>31</td><td>30</td></tr><tr><td>13.2</td><td>25</td><td>28</td><td>28</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. 200[V]	Input Volt. 230[V]	0.0	-	-	-	2.2	113	138	172	4.4	63	73	89	6.6	38	52	54	8.8	29	40	40	10.0	28	36	36	12.0	27	31	30	13.2	25	28	28	--	-	-	-	--	-	-	-	--	-	-	-
Load Current [A]	Time [ms]																																																					
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# COSEL

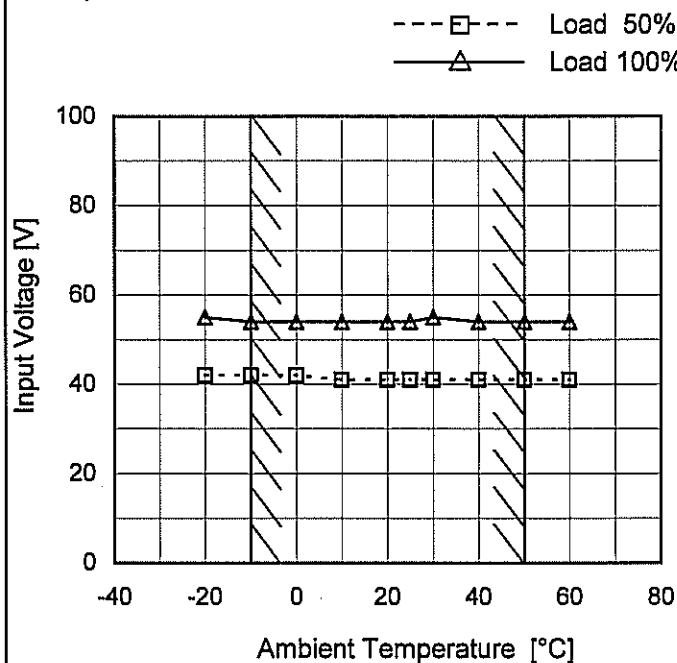
Model LFP300F-30-TY

Item Minimum Input Voltage  
for Regulated Output Voltage

Object +30V12A

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	42	55
-10	42	54
0	42	54
10	41	54
20	41	54
25	41	54
30	41	55
40	41	54
50	41	54
60	41	54
—	-	-

Model	LFP300F-30-TY																																														
Item	Overcurrent Protection	Temperature	25°C																																												
		Testing Circuitry	Figure A																																												
Object	+30V12A																																														
1.Graph		2.Values																																													
<div><div><div></div>Input Volt. 100V</div><div><div></div>Input Volt. 230V</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 18V 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>30.0</td><td>23.18</td><td>23.17</td></tr><tr><td>28.5</td><td>24.51</td><td>24.53</td></tr><tr><td>27.0</td><td>24.61</td><td>24.63</td></tr><tr><td>24.0</td><td>24.84</td><td>24.88</td></tr><tr><td>21.0</td><td>25.15</td><td>25.20</td></tr><tr><td>18.0</td><td>25.34</td><td>25.42</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]	30.0	23.18	23.17	28.5	24.51	24.53	27.0	24.61	24.63	24.0	24.84	24.88	21.0	25.15	25.20	18.0	25.34	25.42	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-
Output Voltage [V]	Load Current [A]																																														
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Model		LFP300F-30-TY
Item		Overvoltage Protection
Object		+30V12A

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]
-20	38.78	38.66
-10	39.13	39.07
0	39.42	39.36
10	39.66	39.66
20	39.95	39.95
25	40.12	40.06
30	40.24	40.24
40	40.65	40.53
50	40.94	40.82
60	41.23	41.11
--	-	-

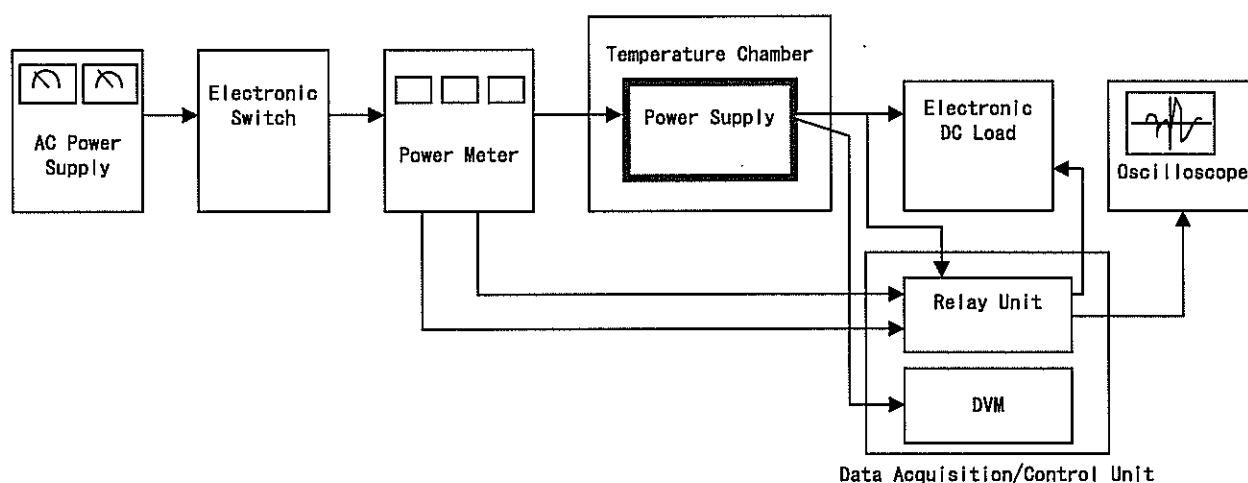


Figure A

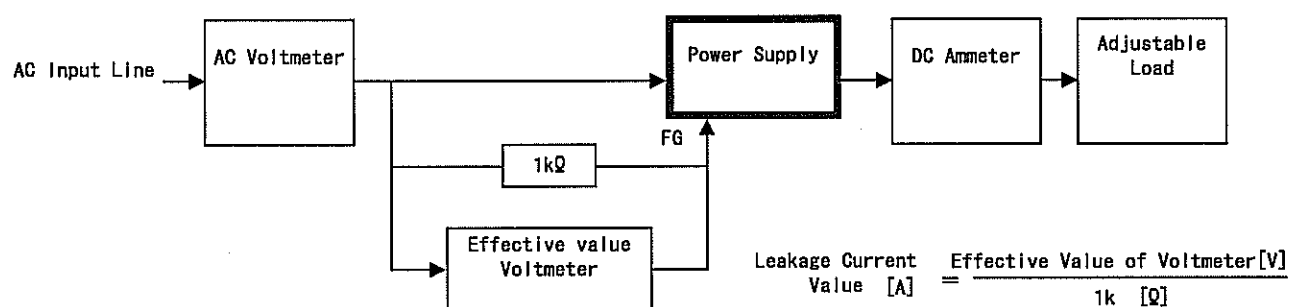


Figure B ( DEN-AN )

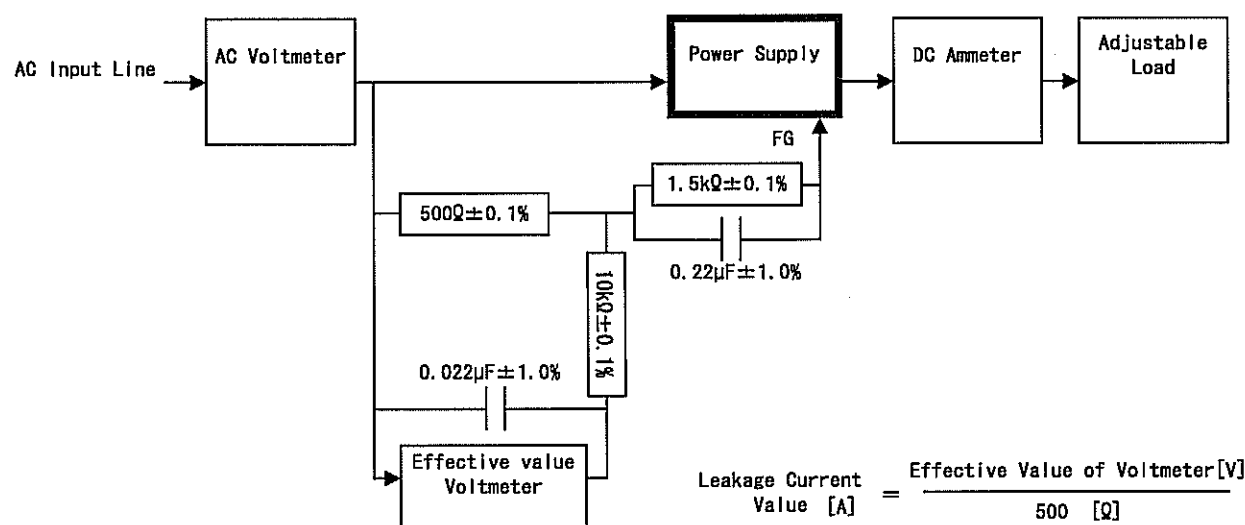


Figure B ( IEC60950-1 )

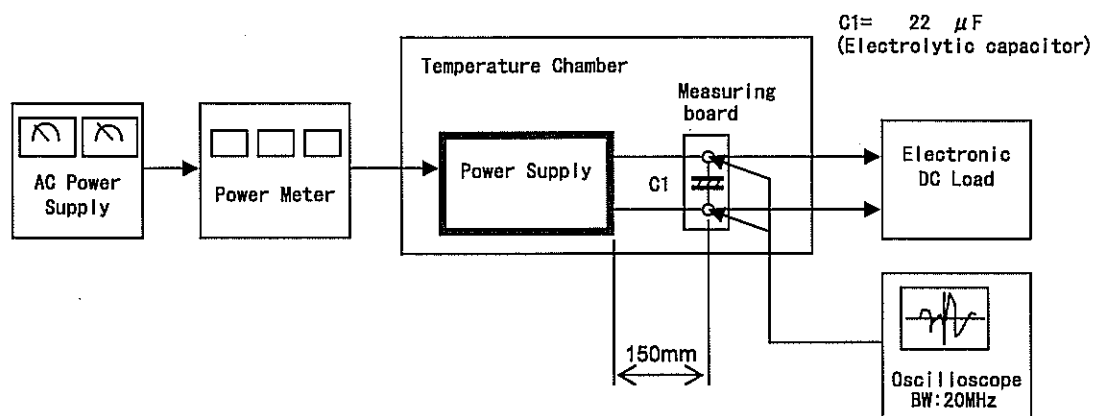


Figure C