

# TEST DATA OF PCA600F-24-P2

Regulated DC Power Supply  
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**COSEL CO.,LTD.**

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Model		PCA600F-24-P2		Temperature 25°C																																																				
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Object		_____																																																						
1.Graph		<div><div><div>—△—</div><div>---□---</div><div>-·-○-·-</div></div><div><div>Input Volt. 100V</div><div>Input Volt. 200V</div><div>Input Volt. 230V</div></div></div>		2.Values																																																				
<div><div>Input Current [A]</div><div><div>Load Current [A]</div></div><div>Note: Slanted line shows the range of the rated load current.</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. 200[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.0</td><td>0.194</td><td>0.153</td><td>0.158</td></tr><tr><td>4.0</td><td>1.173</td><td>0.633</td><td>0.570</td></tr><tr><td>8.0</td><td>2.175</td><td>1.114</td><td>0.987</td></tr><tr><td>12.0</td><td>3.215</td><td>1.620</td><td>1.427</td></tr><tr><td>16.0</td><td>4.250</td><td>2.124</td><td>1.862</td></tr><tr><td>20.0</td><td>5.310</td><td>2.638</td><td>2.331</td></tr><tr><td>24.0</td><td>6.380</td><td>3.172</td><td>2.777</td></tr><tr><td>27.0</td><td>7.190</td><td>3.560</td><td>3.111</td></tr><tr><td>29.7</td><td>7.930</td><td>3.910</td><td>3.414</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. 200[V]	Input Volt. 230[V]	0.0	0.194	0.153	0.158	4.0	1.173	0.633	0.570	8.0	2.175	1.114	0.987	12.0	3.215	1.620	1.427	16.0	4.250	2.124	1.862	20.0	5.310	2.638	2.331	24.0	6.380	3.172	2.777	27.0	7.190	3.560	3.111	29.7	7.930	3.910	3.414	--	-	-	-	--	-	-	-
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Item		Power Factor (by Input Voltage)		Testing Circuitry Figure A	
Object					
1.Graph				2.Values	
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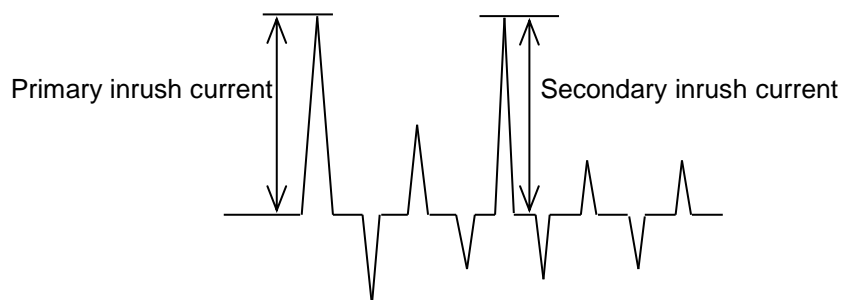
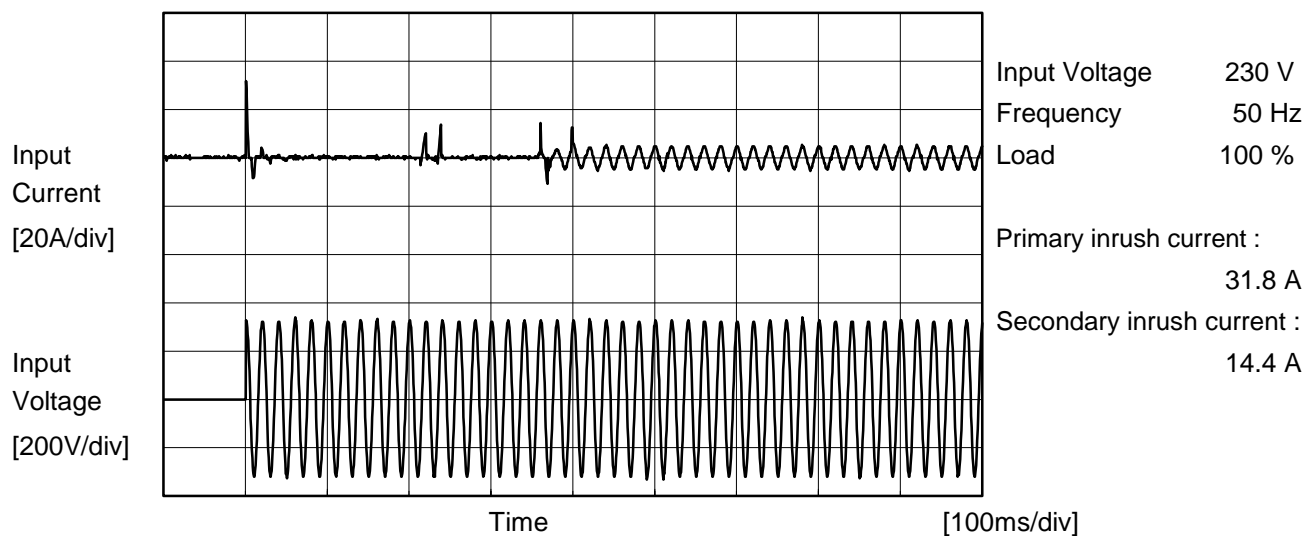
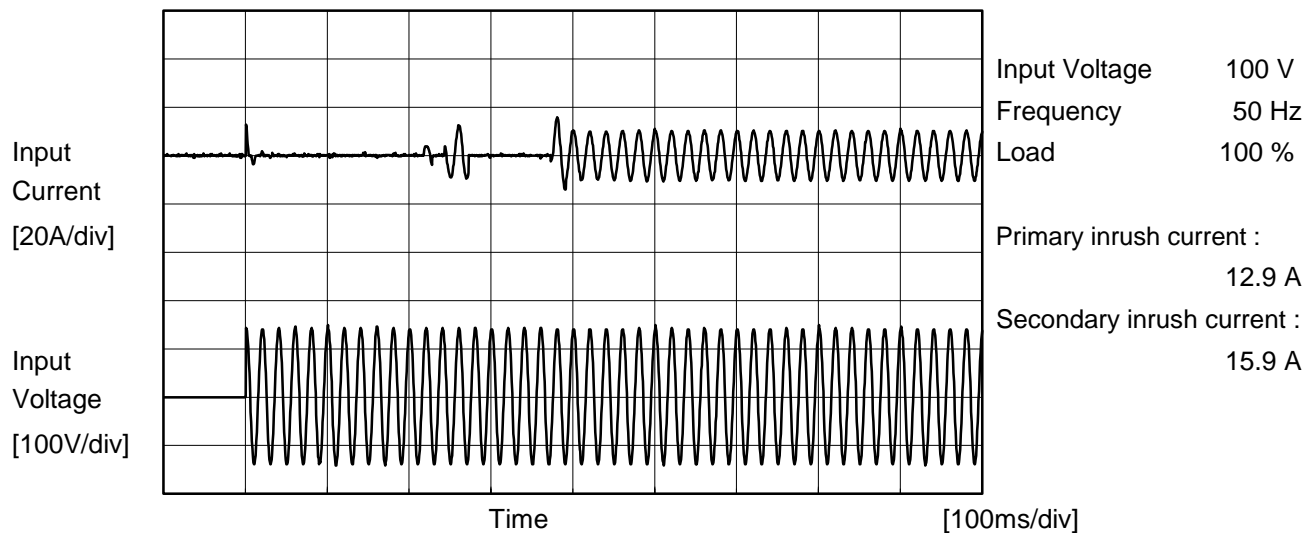
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BC-11161



**COSEL**

Model	PCA600F-24-P2	Temperature	25°C
Item	Inrush Current	Testing Circuitry	Figure A
Object	_____		





		Temperature 25°C Testing Circuitry Figure B
Model	PCA600F-24-P2	
Item	Leakage Current	
Object	_____	

## 1.Results

[mA]

Standards	Testing Circuitry	Measuring Method	Input Volt.			Note
			100 [V]	230 [V]	240 [V]	
DEN-AN	Figure B-1	Both phases	0.13	0.30	0.31	Operation
		One of phases	0.25	0.56	0.58	Stand by
IEC62368-1	Figure B-2	Both phases	0.12	0.29	0.30	Operation
		One of phases	0.25	0.54	0.56	Stand by
	Figure B-3	Both phases	0.12	0.29	0.30	Operation
		One of phases	0.25	0.54	0.57	Stand by
IEC60601-1	Figure B-4	Both phases	0.12	0.29	0.30	Operation
		One of phases	0.24	0.53	0.55	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		PCA600F-24-P2	
Item		Line Regulation	
Object		+24V27A	
1.Graph		2.Values	

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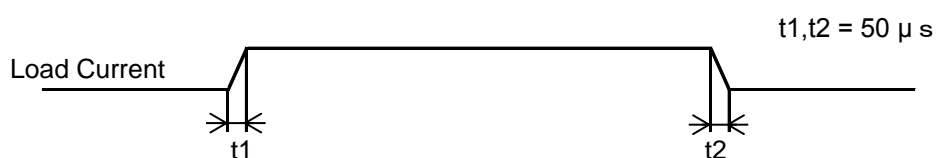


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<div><div>Output Voltage [V]</div><div>Load Current [A]</div></div>		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Output Voltage [V]</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 200[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.0</td><td>24.273</td><td>24.273</td><td>24.273</td></tr><tr><td>4.0</td><td>24.273</td><td>24.273</td><td>24.273</td></tr><tr><td>8.0</td><td>24.273</td><td>24.273</td><td>24.273</td></tr><tr><td>12.0</td><td>24.272</td><td>24.273</td><td>24.273</td></tr><tr><td>16.0</td><td>24.272</td><td>24.272</td><td>24.272</td></tr><tr><td>20.0</td><td>24.271</td><td>24.272</td><td>24.272</td></tr><tr><td>24.0</td><td>24.270</td><td>24.271</td><td>24.271</td></tr><tr><td>27.0</td><td>24.270</td><td>24.270</td><td>24.270</td></tr><tr><td>29.7</td><td>24.270</td><td>24.269</td><td>24.269</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]	0.0	24.273	24.273	24.273	4.0	24.273	24.273	24.273	8.0	24.273	24.273	24.273	12.0	24.272	24.273	24.273	16.0	24.272	24.272	24.272	20.0	24.271	24.272	24.272	24.0	24.270	24.271	24.271	27.0	24.270	24.270	24.270	29.7	24.270	24.269	24.269	--	-	-	-	--	-	-	-
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Note: Slanted line shows the range of the rated load current.																																																						



Model	PCA600F-24-P2	Temperature 25°C Testing Circuitry Figure A
Item	Dynamic Load Response	
Object	+24V27A	

Input Volt. 100 V  
Cycle 1000 ms



Min.Load (0A) ←→  
Load 100% (27A)

1 V/div

2 ms/div

10 ms/div

Min.Load (0A) ←→  
Load 50% (13.5A)

1 V/div

2 ms/div

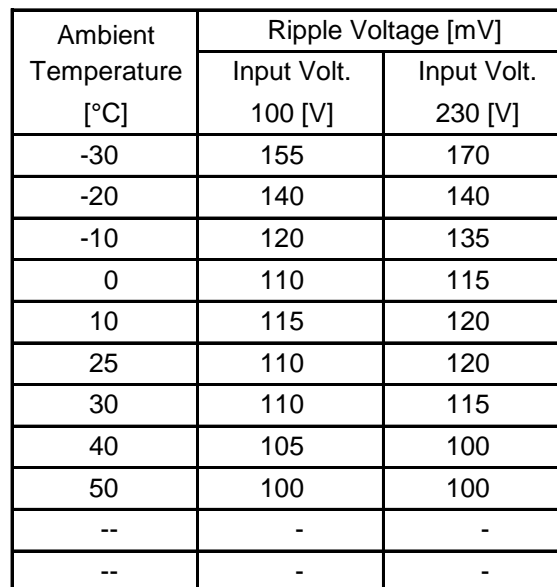
10 ms/div

Model		PCA600F-24-P2		Temperature 25°C	
Item		Ripple Voltage (by Load Current)		Testing Circuitry Figure A	
Object		+24V27A			
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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Model		PCA600F-24-P2																																							
Item		Ripple-Noise																																							
Object		+24V27A																																							
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>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.</p>		<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>65</td><td>60</td></tr><tr><td>4.0</td><td>60</td><td>65</td></tr><tr><td>7.3</td><td>190</td><td>70</td></tr><tr><td>8.0</td><td>60</td><td>165</td></tr><tr><td>12.0</td><td>110</td><td>120</td></tr><tr><td>16.0</td><td>115</td><td>110</td></tr><tr><td>20.0</td><td>115</td><td>120</td></tr><tr><td>24.0</td><td>140</td><td>140</td></tr><tr><td>27.0</td><td>140</td><td>140</td></tr><tr><td>29.7</td><td>140</td><td>140</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	65	60	4.0	60	65	7.3	190	70	8.0	60	165	12.0	110	120	16.0	115	110	20.0	115	120	24.0	140	140	27.0	140	140	29.7	140	140	--	-	-
Load Current [A]	Ripple-Noise [mV]																																								
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0.0	65	60																																							
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<div><div>T1: Due to AC Input Line</div><div>T2: Due to Switching</div><div>Ripple-Noise [mVp-p]</div></div> <p>Fig. Complex Ripple Wave Form</p>																																									

### Testing Circuitry Figure A

## 2.Values



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



Model		PCA600F-24-P2																																																				
Item		Ambient Temperature Drift																																																				
Object		+24V27A																																																				
1.Graph		<div><div><div>—△—</div><div>---□---</div><div>---○---</div></div><div><div>Input Volt. 100V</div><div>Input Volt. 200V</div><div>Input Volt. 230V</div></div></div> <div><div><div>Output Voltage [V]</div><div>Ambient Temperature [°C]</div><div>Load 100%</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. 200[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>-30</td><td>24.167</td><td>24.168</td><td>24.167</td></tr><tr><td>-20</td><td>24.192</td><td>24.191</td><td>24.191</td></tr><tr><td>-10</td><td>24.214</td><td>24.214</td><td>24.214</td></tr><tr><td>0</td><td>24.232</td><td>24.231</td><td>24.232</td></tr><tr><td>10</td><td>24.243</td><td>24.243</td><td>24.242</td></tr><tr><td>25</td><td>24.270</td><td>24.270</td><td>24.269</td></tr><tr><td>30</td><td>24.277</td><td>24.275</td><td>24.276</td></tr><tr><td>40</td><td>24.282</td><td>24.282</td><td>24.281</td></tr><tr><td>50</td><td>24.295</td><td>24.294</td><td>24.294</td></tr><tr><td>55</td><td>24.296</td><td>24.295</td><td>24.295</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]	-30	24.167	24.168	24.167	-20	24.192	24.191	24.191	-10	24.214	24.214	24.214	0	24.232	24.231	24.232	10	24.243	24.243	24.242	25	24.270	24.270	24.269	30	24.277	24.275	24.276	40	24.282	24.282	24.281	50	24.295	24.294	24.294	55	24.296	24.295	24.295	--	-	-	-
Ambient Temperature [°C]	Output Voltage [V]																																																					
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-10	24.214	24.214	24.214																																																			
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25	24.270	24.270	24.269																																																			
30	24.277	24.275	24.276																																																			
40	24.282	24.282	24.281																																																			
50	24.295	24.294	24.294																																																			
55	24.296	24.295	24.295																																																			
--	-	-	-																																																			
Note: Slanted line shows the range of the rated ambient temperature.																																																						



Model		PCA600F-24-P2
Item		Output Voltage Accuracy
Object		+24V27A

Testing Circuitry Figure A

### 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 : 85 - 264V

Load Current : 0 - 27A

\* 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

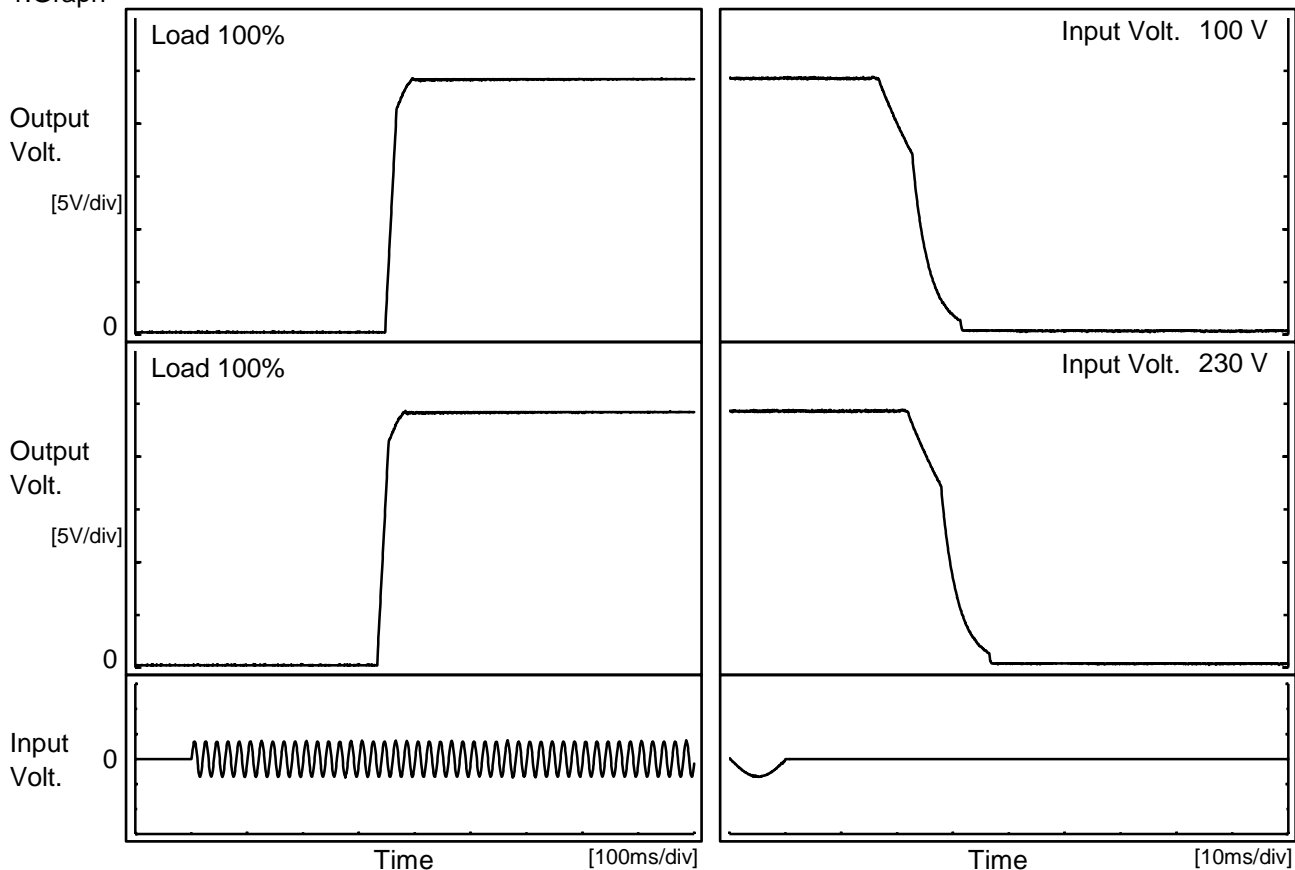
Item	Temperature [°C]	Input Voltage[V]	Output		Output Voltage Accuracy	
			Current[A]	Voltage[V]	Value [mV]	Ratio [%]
Maximum Voltage	50	200	0	24.344	±57	±0.2
Minimum Voltage	-20	85	0	24.231		



Model		PCA600F-24-P2	Temperature 25°C Testing Circuitry Figure A																						
Item		Time Lapse Drift																							
Object		+24V27A																							
1.Graph			2.Values																						
<div><div><div>Output Voltage [V]</div><div><div><div>24.30</div><div>24.20</div><div>24.10</div><div>24.00</div><div>23.90</div><div>23.80</div><div>23.70</div><div>23.60</div></div><div><div>0</div><div>2</div><div>4</div><div>6</div><div>8</div><div>10</div></div><div>Time [H]</div></div><div><div>Input Volt. 230V</div><div>Load 100%</div></div></div></div>			<table><tr><th>Time since start [H]</th><th>Output Voltage [V]</th></tr><tr><td>0.0</td><td>24.024</td></tr><tr><td>0.5</td><td>24.044</td></tr><tr><td>1.0</td><td>24.044</td></tr><tr><td>2.0</td><td>24.044</td></tr><tr><td>3.0</td><td>24.044</td></tr><tr><td>4.0</td><td>24.044</td></tr><tr><td>5.0</td><td>24.044</td></tr><tr><td>6.0</td><td>24.044</td></tr><tr><td>7.0</td><td>24.044</td></tr><tr><td>8.0</td><td>24.044</td></tr></table>	Time since start [H]	Output Voltage [V]	0.0	24.024	0.5	24.044	1.0	24.044	2.0	24.044	3.0	24.044	4.0	24.044	5.0	24.044	6.0	24.044	7.0	24.044	8.0	24.044
Time since start [H]	Output Voltage [V]																								
0.0	24.024																								
0.5	24.044																								
1.0	24.044																								
2.0	24.044																								
3.0	24.044																								
4.0	24.044																								
5.0	24.044																								
6.0	24.044																								
7.0	24.044																								
8.0	24.044																								
* The characteristic of AC100V is equal.																									

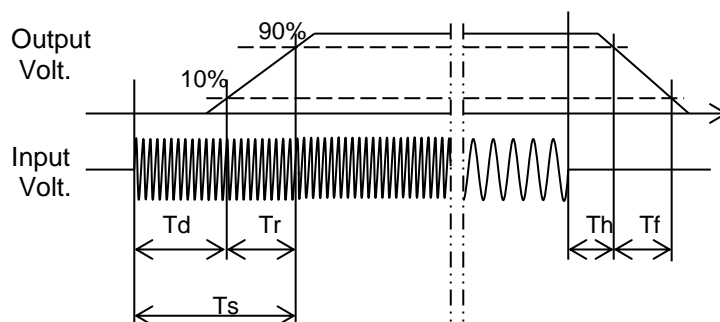
Model	PCA600F-24-P2	Temperature	25°C
Item	Rise and Fall Time	Testing Circuitry	Figure A
Object	+24V27A		

1.Graph



2.Values

Input Volt.	Time	Td	Tr	Ts	Th	Tf
100 V		349.5	21.5	371.0	18.5	10.3
230 V		335.0	22.0	357.0	23.8	10.3



Model		PCA600F-24-P2		Temperature 25°C																																	
Item		Hold-Up Time		Testing Circuitry Figure A																																	
Object		+24V27A																																			
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>Load 50%</div><div>Load 100%</div></div> <table><thead><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></thead><tbody><tr><td>80</td><td>35</td><td>17</td></tr><tr><td>85</td><td>35</td><td>17</td></tr><tr><td>100</td><td>35</td><td>17</td></tr><tr><td>120</td><td>35</td><td>17</td></tr><tr><td>200</td><td>46</td><td>23</td></tr><tr><td>230</td><td>46</td><td>23</td></tr><tr><td>264</td><td>46</td><td>23</td></tr><tr><td>280</td><td>46</td><td>23</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></tbody></table>				Input Voltage [V]	Hold-Up Time [ms]		Load 50%	Load 100%	80	35	17	85	35	17	100	35	17	120	35	17	200	46	23	230	46	23	264	46	23	280	46	23	--	-	-		
Input Voltage [V]	Hold-Up Time [ms]																																				
	Load 50%	Load 100%																																			
80	35	17																																			
85	35	17																																			
100	35	17																																			
120	35	17																																			
200	46	23																																			
230	46	23																																			
264	46	23																																			
280	46	23																																			
--	-	-																																			
<p>This duration covers from Shut-off of input voltage to the moment when output voltage descends to the rated range of voltage accuracy.</p> <p>Note: Slanted line shows the range of the rated input voltage.</p>																																					

Model		PCA600F-24-P2		Temperature25°C																																																				
Item		Instantaneous Interruption Compensation		Testing CircuitryFigure A																																																				
Object		+24V27A																																																						
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>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. 200[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.0</td><td>-</td><td>-</td><td>-</td></tr><tr><td>4.0</td><td>105</td><td>139</td><td>141</td></tr><tr><td>8.0</td><td>57</td><td>75</td><td>75</td></tr><tr><td>12.0</td><td>40</td><td>52</td><td>52</td></tr><tr><td>16.0</td><td>30</td><td>39</td><td>39</td></tr><tr><td>20.0</td><td>24</td><td>31</td><td>31</td></tr><tr><td>24.0</td><td>18</td><td>26</td><td>26</td></tr><tr><td>27.0</td><td>16</td><td>21</td><td>23</td></tr><tr><td>29.7</td><td>15</td><td>19</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></table>				Load Current [A]	Time [ms]			Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]	0.0	-	-	-	4.0	105	139	141	8.0	57	75	75	12.0	40	52	52	16.0	30	39	39	20.0	24	31	31	24.0	18	26	26	27.0	16	21	23	29.7	15	19	20	--	-	-	-	--	-	-	-
Load Current [A]	Time [ms]																																																							
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]																																																					
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16.0	30	39	39																																																					
20.0	24	31	31																																																					
24.0	18	26	26																																																					
27.0	16	21	23																																																					
29.7	15	19	20																																																					
--	-	-	-																																																					
--	-	-	-																																																					

Model		PCA600F-24-P2	
Item		Minimum Input Voltage for Regulated Output Voltage	
Object		+24V27A	
1.Graph		2.Values	

<

Model		PCA600F-24-P2	
Item		Overcurrent Protection	
Object		+24V27A	
1.Graph		2.Values	

Input Volt. 100V

Input Volt. 230V

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

Intermittent operation occurs when the output voltage is from 12V to 0V.

Output Voltage [V]	Load Current [A]	
	Input Volt. 100[V]	Input Volt. 230[V]
22.8	30.95	30.78
21.6	31.12	30.73
19.2	31.13	30.82
16.8	31.02	30.71
14.4	30.97	30.99
12.2	31.08	31.09
--	-	-
--	-	-
--	-	-
--	-	-
--	-	-
--	-	-



Model		PCA600F-24-P2
Item		Overvoltage Protection
Object		+24V27A

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	30.81	30.81
-20	30.81	30.81
-10	30.81	30.81
0	30.81	30.86
10	30.87	30.87
25	30.87	30.87
30	30.87	30.87
40	30.93	30.93
50	30.93	30.93
55	30.93	30.93
--	-	-

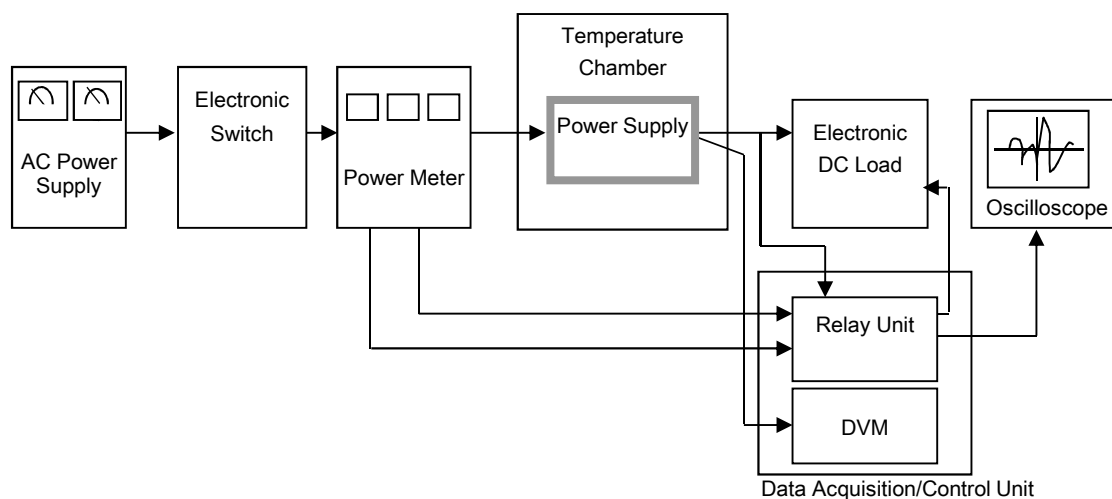


Figure A

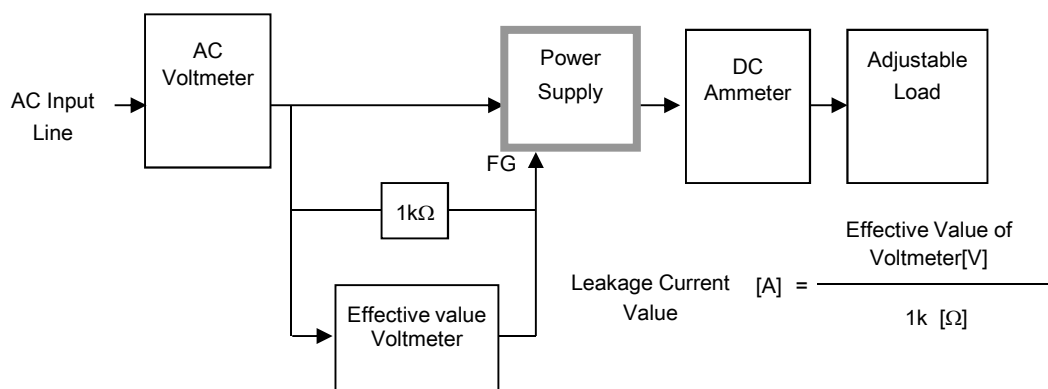


Figure B-1 ( DEN-AN )

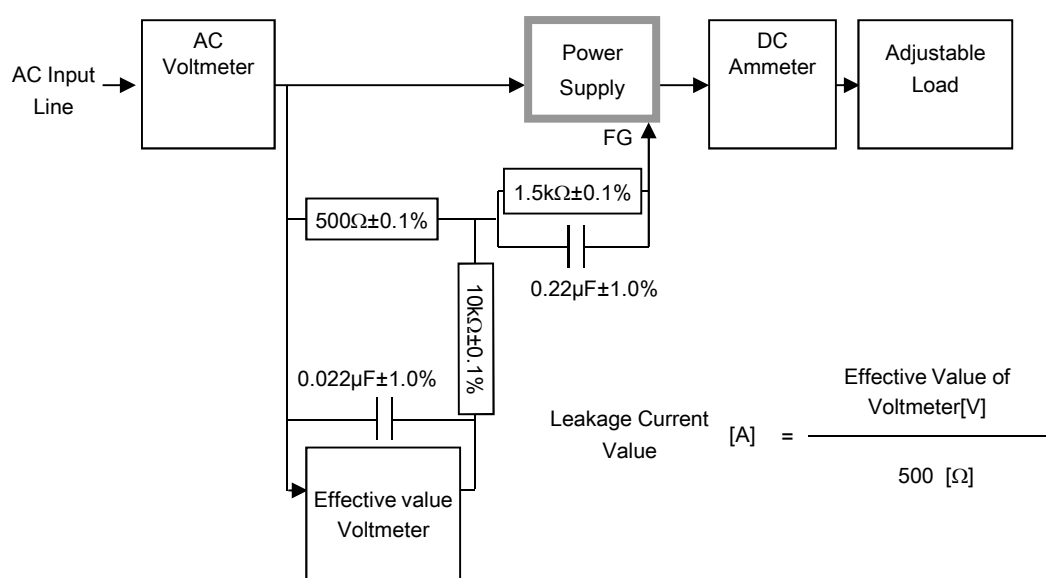


Figure B-2 ( IEC62368-1 refer to IEC60990 Fig.4 )

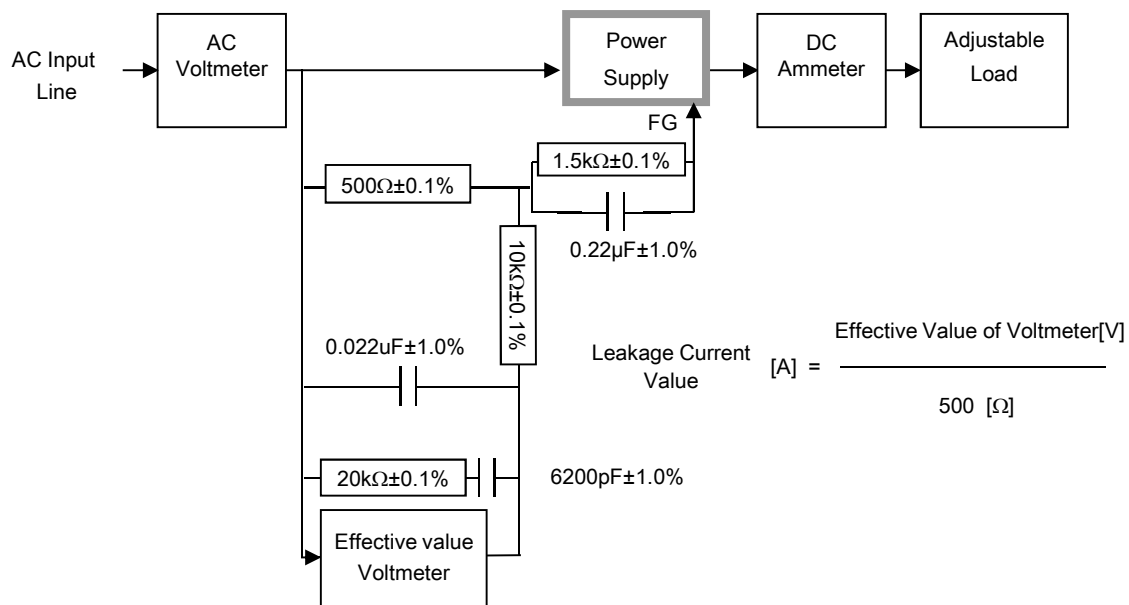


Figure B-3 ( IEC62368-1 refer to IEC60990 Fig.5 )

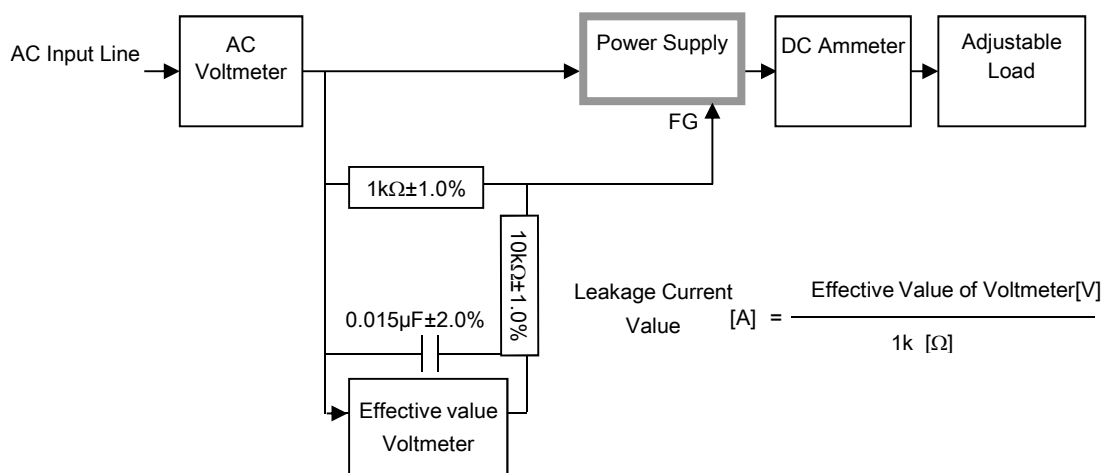


Figure B-4 ( IEC60601-1)

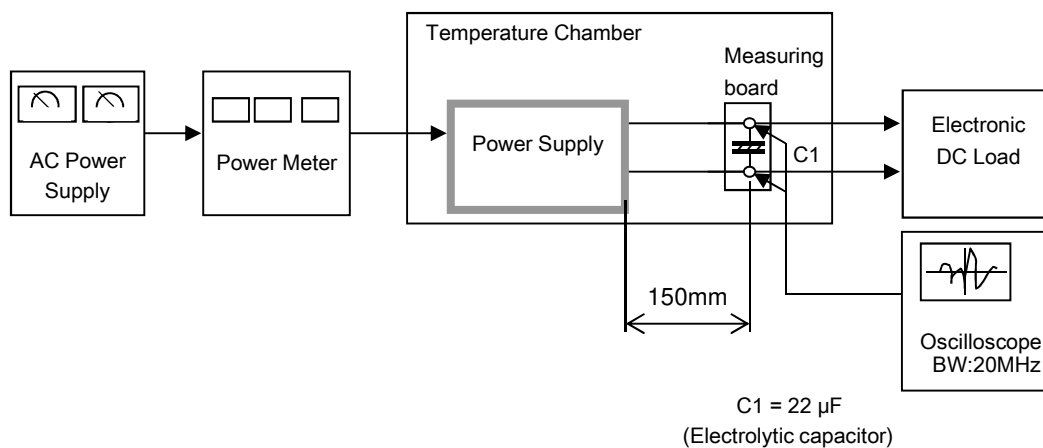


Figure C