



# TEST DATA OF PAA100F-3 (200V INPUT)

Regulated DC Power Supply

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Design Engineer

**コーセル株式会社**  
**COSEL CO.,LTD.**

CONTENTS

1. Line Regulation . . . . .	1
<small>静的入力変動</small>	
2. Efficiency . . . . .	2
<small>効率</small>	
3. Power Factor . . . . .	3
<small>力率</small>	
4. Hold-Up Time . . . . .	4
<small>出力保持時間</small>	
5. Instantaneous Interruption Compensation . . . . .	5
<small>瞬時停電保障</small>	
6. Load Regulation . . . . .	6
<small>静的負荷変動</small>	
7. Ripple Voltage (by Load Current) . . . . .	7
<small>リップル電圧(負荷電流特性)</small>	
8. Ripple-Noise . . . . .	8
<small>リップルノイズ</small>	
9. Overcurrent Protection . . . . .	9
<small>過電流保護</small>	
10. Overvoltage Protection . . . . .	10
<small>過電圧保護</small>	
11. Inrush Current . . . . .	11
<small>突入電流</small>	
12. Dynamic Load Responce . . . . .	12
<small>動的負荷変動</small>	
13. Rise and Fall Time . . . . .	13
<small>立上り、立下がり時間</small>	
14. Ambient Temperature Drift . . . . .	14
<small>周囲温度変動</small>	
15. Minimum Input Voltage for Regulated Output Voltage . . . . .	15
<small>最低レギュレーション電圧</small>	
16. Ripple Voltage (by Ambient Temperature) . . . . .	16
<small>リップル電圧(周囲温度特性)</small>	
17. Time Lapse Drift . . . . .	17
<small>経時ドリフト</small>	
18. Output Voltage Accuracy . . . . .	18
<small>定電圧精度</small>	
19. Harmonic Current . . . . .	19
<small>高調波電流</small>	
20. Condensation . . . . .	21
<small>結露特性</small>	
21. Leakage Current . . . . .	22
<small>漏洩電流</small>	
22. Line Noise Tolerance . . . . .	23
<small>入力雑音耐量</small>	
23. Conducted Emission . . . . .	24
<small>雑音端子電圧</small>	
24. Figure of Testing Circuitry . . . . .	25
<small>測定回路図</small>	

(Final Page 26 )



Model		PAA100F-3		Temperature		25°C																																	
Item		Line Regulation 静的入力変動		Testing Circuitry		Figure A																																	
Object		+3V20.0A		2. Values																																			
1. Graph		-----□----- Load 50% -----△----- Load 100%																																					
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Input Voltage [V]	Load 50%	Load 100%																																					
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Note: Slanted line shows the range of the rated input voltage. (注)斜線は定格入力電圧範囲を示す。																																							

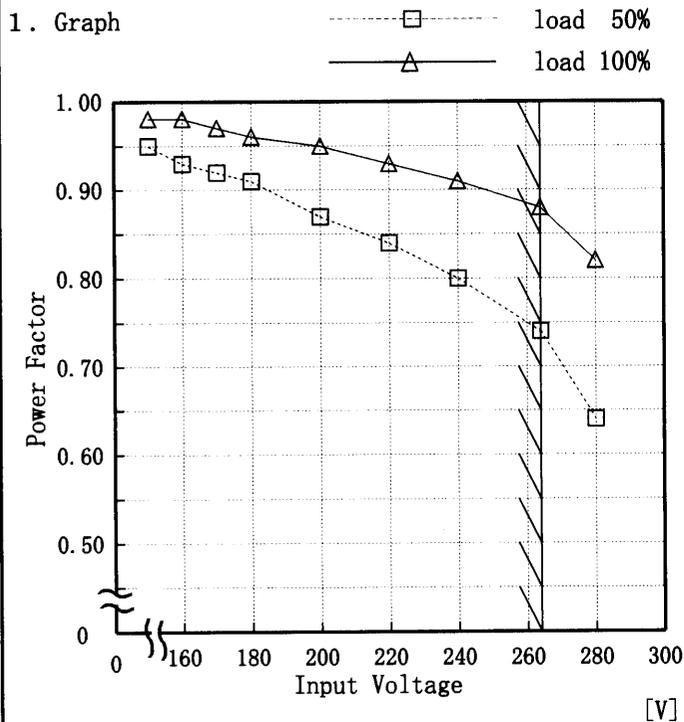


Model		PAA100F-3		Temperature	25°C																														
Item		Efficiency 効率		Testing Circuitry	Figure A																														
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Model	PAA100F-3
Item	Power Factor 力率
Object	

Temperature 25°C  
Testing Circuitry Figure A



2. Values

Input Voltage [V]	load 50%	load 100%
	Power Factor	Power Factor
150	0.95	0.98
160	0.93	0.98
170	0.92	0.97
180	0.91	0.96
200	0.87	0.95
220	0.84	0.93
240.0	0.80	0.91
264.0	0.74	0.88
280.0	0.64	0.82

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

(注)斜線は定格入力電圧範囲を示す。



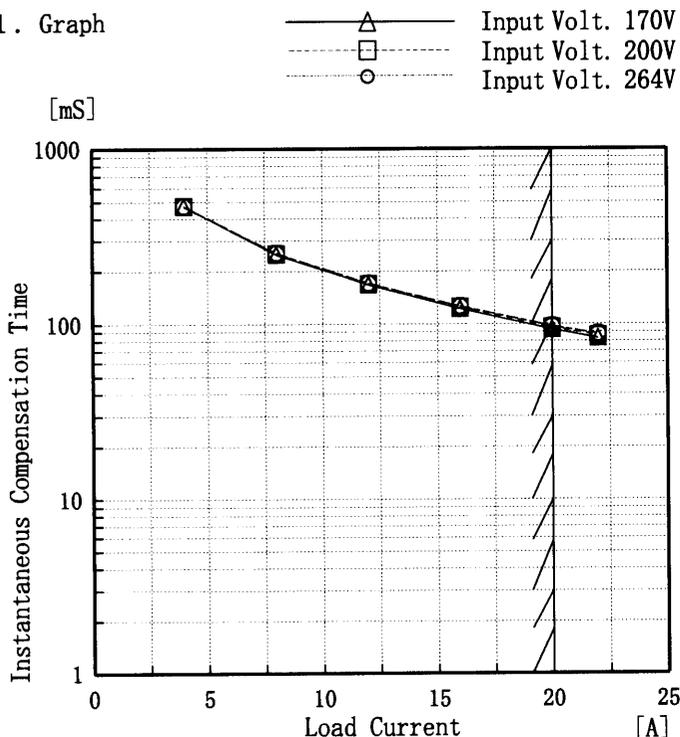
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Item		Hold-Up Time 出力保持時間		Testing Circuitry		Figure A																																	
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<p> <span style="display: inline-block; width: 100px; border-bottom: 1px solid black; margin-right: 5px;"></span>△ Load 50%  <span style="display: inline-block; width: 100px; border-bottom: 1px dashed black; margin-right: 5px;"></span>□ Load 100%                 </p> <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> <p>                     出力保持時間とは、入力電圧断から出力電圧が、定電圧精度の規格範囲を保持しているところまでの時間。                      (注)斜線は定格入力電圧範囲を示す。                 </p>				<table border="1"> <thead> <tr> <th rowspan="2">Input Voltage [V]</th> <th>Load 50%</th> <th>Load 100%</th> </tr> <tr> <th>Hold-Up Time [mS]</th> <th>Hold-Up Time [mS]</th> </tr> </thead> <tbody> <tr><td>150</td><td>206</td><td>100</td></tr> <tr><td>160</td><td>207</td><td>101</td></tr> <tr><td>170</td><td>207</td><td>102</td></tr> <tr><td>180</td><td>207</td><td>102</td></tr> <tr><td>200</td><td>208</td><td>102</td></tr> <tr><td>220</td><td>208</td><td>103</td></tr> <tr><td>240</td><td>209</td><td>103</td></tr> <tr><td>264</td><td>209</td><td>103</td></tr> <tr><td>280</td><td>209</td><td>103</td></tr> </tbody> </table>				Input Voltage [V]	Load 50%	Load 100%	Hold-Up Time [mS]	Hold-Up Time [mS]	150	206	100	160	207	101	170	207	102	180	207	102	200	208	102	220	208	103	240	209	103	264	209	103	280	209	103
Input Voltage [V]	Load 50%	Load 100%																																					
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240	209	103																																					
264	209	103																																					
280	209	103																																					



Model	PAA100F-3
Item	Instantaneous Interruption Compensation 瞬時停電保障
Object	+3V20.0A

Testing Circuitry Figure A

1. Graph



This duration covers from Shut-off of input voltage to the moment when output voltage descends to its 95% of the rated.

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

瞬時停電保障時間とは、出力電圧が定格値の95%になる時の瞬時停電時間をいう。

(注)斜線は定格負荷電流範囲を示す。

2. Values

Load Current [A]	Input Volt. 170[V]	Input Volt. 200[V]	Input Volt. 264[V]
	Time [mS]		
0.0	—	—	—
4.0	472	473	474
8.0	250	254	255
12.0	168	170	171
16.0	122	125	126
20.0	93	96	97
22.0	83	86	88
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—



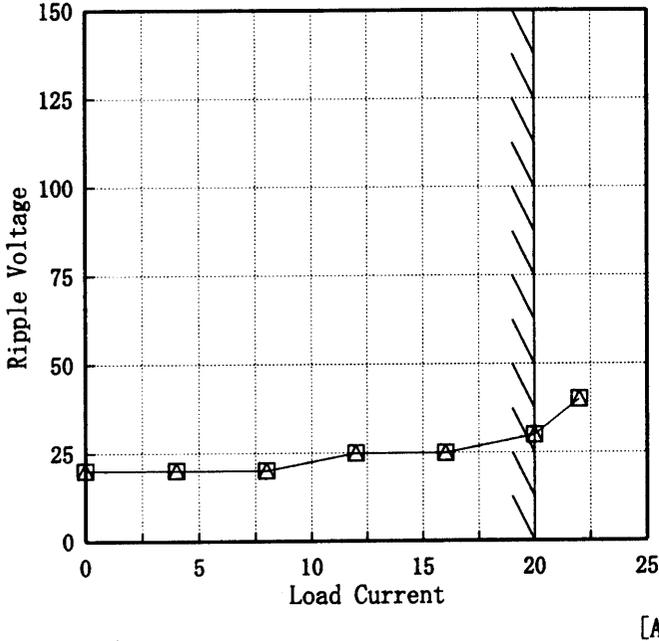
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<p> <span style="border-bottom: 1px solid black; margin-right: 5px;">—△—</span> Input Volt. 170V  <span style="border-bottom: 1px dashed black; margin-right: 5px;">—□—</span> Input Volt. 200V  <span style="border-bottom: 1px dotted black; margin-right: 5px;">—○—</span> Input Volt. 264V                 </p> <p>Output Voltage [V]</p> <p>Load Current [A]</p> <p>Note: Slanted line shows the range of the rated load current.</p> <p>(注)斜線は定格負荷電流範囲を示す。</p>				<table border="1"> <thead> <tr> <th rowspan="2">Load Current [A]</th> <th>Input Volt. 170[V]</th> <th>Input Volt. 200[V]</th> <th>Input Volt. 264[V]</th> </tr> <tr> <th>Output Volt. [V]</th> <th>Output Volt. [V]</th> <th>Output Volt. [V]</th> </tr> </thead> <tbody> <tr><td>0.0</td><td>3.005</td><td>3.005</td><td>3.005</td></tr> <tr><td>4.0</td><td>3.004</td><td>3.004</td><td>3.004</td></tr> <tr><td>8.0</td><td>3.003</td><td>3.003</td><td>3.003</td></tr> <tr><td>12.0</td><td>3.003</td><td>3.002</td><td>3.002</td></tr> <tr><td>16.0</td><td>3.002</td><td>3.002</td><td>3.002</td></tr> <tr><td>20.0</td><td>3.001</td><td>3.001</td><td>3.001</td></tr> <tr><td>22.0</td><td>3.000</td><td>3.000</td><td>3.000</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> </tbody> </table>				Load Current [A]	Input Volt. 170[V]	Input Volt. 200[V]	Input Volt. 264[V]	Output Volt. [V]	Output Volt. [V]	Output Volt. [V]	0.0	3.005	3.005	3.005	4.0	3.004	3.004	3.004	8.0	3.003	3.003	3.003	12.0	3.003	3.002	3.002	16.0	3.002	3.002	3.002	20.0	3.001	3.001	3.001	22.0	3.000	3.000	3.000	—	—	—	—	—	—	—	—	—	—	—	—
Load Current [A]	Input Volt. 170[V]	Input Volt. 200[V]	Input Volt. 264[V]																																																			
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—	—	—	—																																																			
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Model	PAA100F-3
Item	Ripple Voltage (by Load Current) リップル電圧(負荷電流特性)
Object	+3V 20.0A

Temperature	25°C
Testing Circuitry	Figure A

1. Graph  
 [mV]  
 150  
 125  
 100  
 75  
 50  
 25  
 0  
 0 5 10 15 20 25  
 Load Current [A]  
 -----□----- Input Volt. 170V  
 -----△----- Input Volt. 264V



2. Values

Load Current [A]	Input Volt. 170 [V]	Input Volt. 264 [V]
	Ripple Output Volt. [mV]	Ripple Output Volt. [mV]
0.0	20	20
4.0	20	20
8.0	20	20
12.0	25	25
16.0	25	25
20.0	30	30
22.0	40	40
—	—	—
—	—	—
—	—	—
—	—	—

Ripple Voltage is shown as p-p in the figure below.

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

リップル電圧は、下図 p-p 値で示される。  
 (注) 斜線は定格負荷電流範囲を示す。

T1: Due to AC Input Line  
 入力商用周期  
 T2: Due to Switching  
 スイッチング周期

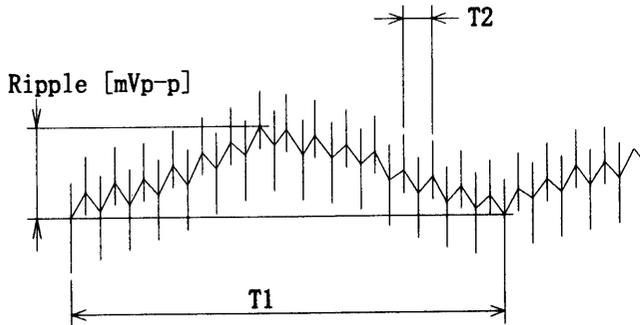


Fig. Complex Ripple Wave Form  
 図 リップル波形詳細図

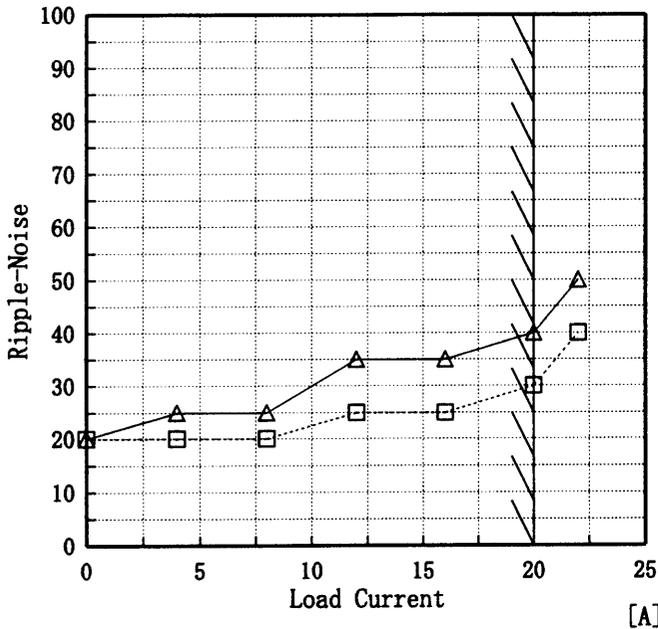


Model	PAA100F-3
Item	Ripple-Noise リップルノイズ
Object	+3V20.0A

Temperature 25°C  
Testing Circuitry Figure A

1. Graph  
[mV]

-----□----- Input Volt. 170V  
———△——— Input Volt. 264V



2. Values

Load current [A]	Input Volt. 170 [V]	Input Volt. 264 [V]
	Ripple-Noise [mV]	Ripple-Noise [mV]
0.0	20	20
4.0	20	25
8.0	20	25
12.0	25	35
16.0	25	35
20.0	30	40
22.0	40	50
—	—	—
—	—	—
—	—	—
—	—	—

Ripple-Noise is shown as p-p in the figure below.  
Note: Slanted line shows the range of the rated load current.

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入力商用周期  
T2: Due to Switching  
スイッチング周期

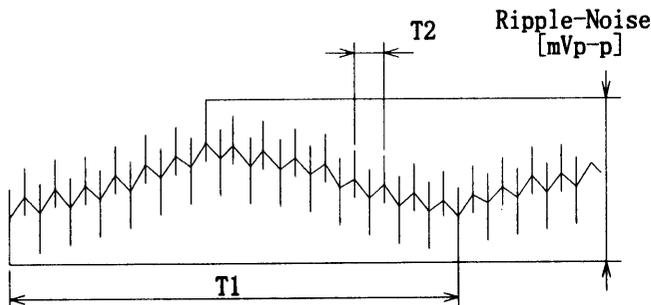


Fig. Complex Ripple Wave Form  
図 リップル波形詳細図



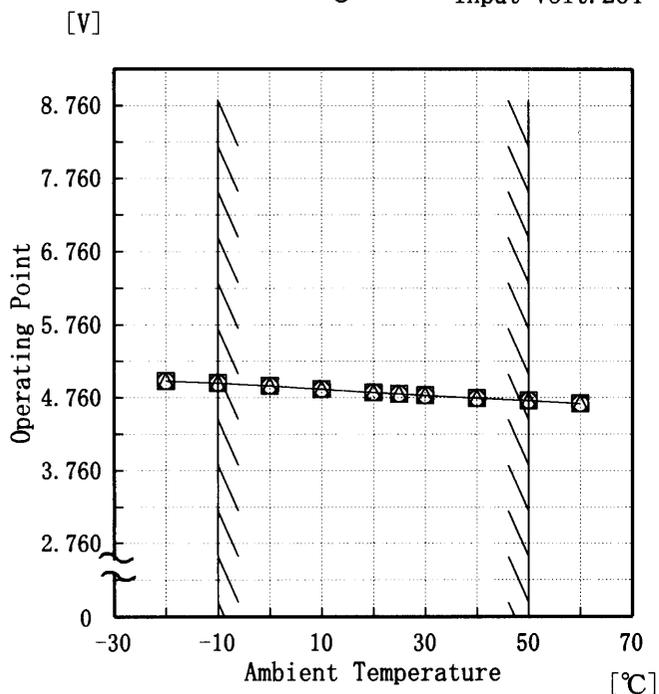
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<p> <span style="border-bottom: 1px solid black; width: 50px; display: inline-block;"></span> Input Volt. 170 V  <span style="border-bottom: 1px solid black; width: 50px; display: inline-block;"></span> Input Volt. 200 V  <span style="border-bottom: 1px solid black; width: 50px; display: inline-block;"></span> Input Volt. 264 V                 </p>			<table border="1"> <thead> <tr> <th rowspan="2">Output Voltage [V]</th> <th>Input Volt. 170[V]</th> <th>Input Volt. 200[V]</th> <th>Input Volt. 264[V]</th> </tr> <tr> <th>Load Current [A]</th> <th>Load Current [A]</th> <th>Load Current [A]</th> </tr> </thead> <tbody> <tr><td>3.00</td><td>—</td><td>—</td><td>—</td></tr> <tr><td>2.85</td><td>23.90</td><td>23.97</td><td>23.98</td></tr> <tr><td>2.70</td><td>23.91</td><td>23.97</td><td>23.99</td></tr> <tr><td>2.40</td><td>23.93</td><td>23.99</td><td>24.00</td></tr> <tr><td>2.10</td><td>24.00</td><td>24.06</td><td>24.07</td></tr> <tr><td>1.80</td><td>24.06</td><td>24.12</td><td>24.13</td></tr> <tr><td>1.50</td><td>24.17</td><td>24.22</td><td>24.23</td></tr> <tr><td>1.20</td><td>24.23</td><td>24.27</td><td>24.28</td></tr> <tr><td>0.90</td><td>24.21</td><td>24.25</td><td>24.25</td></tr> <tr><td>0.60</td><td>24.19</td><td>24.22</td><td>24.24</td></tr> <tr><td>0.30</td><td>24.17</td><td>24.21</td><td>24.21</td></tr> <tr><td>0.00</td><td>24.14</td><td>24.16</td><td>24.17</td></tr> </tbody> </table>			Output Voltage [V]	Input Volt. 170[V]	Input Volt. 200[V]	Input Volt. 264[V]	Load Current [A]	Load Current [A]	Load Current [A]	3.00	—	—	—	2.85	23.90	23.97	23.98	2.70	23.91	23.97	23.99	2.40	23.93	23.99	24.00	2.10	24.00	24.06	24.07	1.80	24.06	24.12	24.13	1.50	24.17	24.22	24.23	1.20	24.23	24.27	24.28	0.90	24.21	24.25	24.25	0.60	24.19	24.22	24.24	0.30	24.17	24.21	24.21	0.00	24.14	24.16	24.17
Output Voltage [V]	Input Volt. 170[V]	Input Volt. 200[V]	Input Volt. 264[V]																																																									
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3.00	—	—	—																																																									
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2.10	24.00	24.06	24.07																																																									
1.80	24.06	24.12	24.13																																																									
1.50	24.17	24.22	24.23																																																									
1.20	24.23	24.27	24.28																																																									
0.90	24.21	24.25	24.25																																																									
0.60	24.19	24.22	24.24																																																									
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Model	PAA100F-3
Item	Overvoltage Protection 過電圧保護
Object	+3V20.0A

Testing Circuitry Figure A

1. Graph
- △— Input Volt. 170 V
  - - -□- - - Input Volt. 200 V
  - - -○- - - Input Volt. 264 V



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

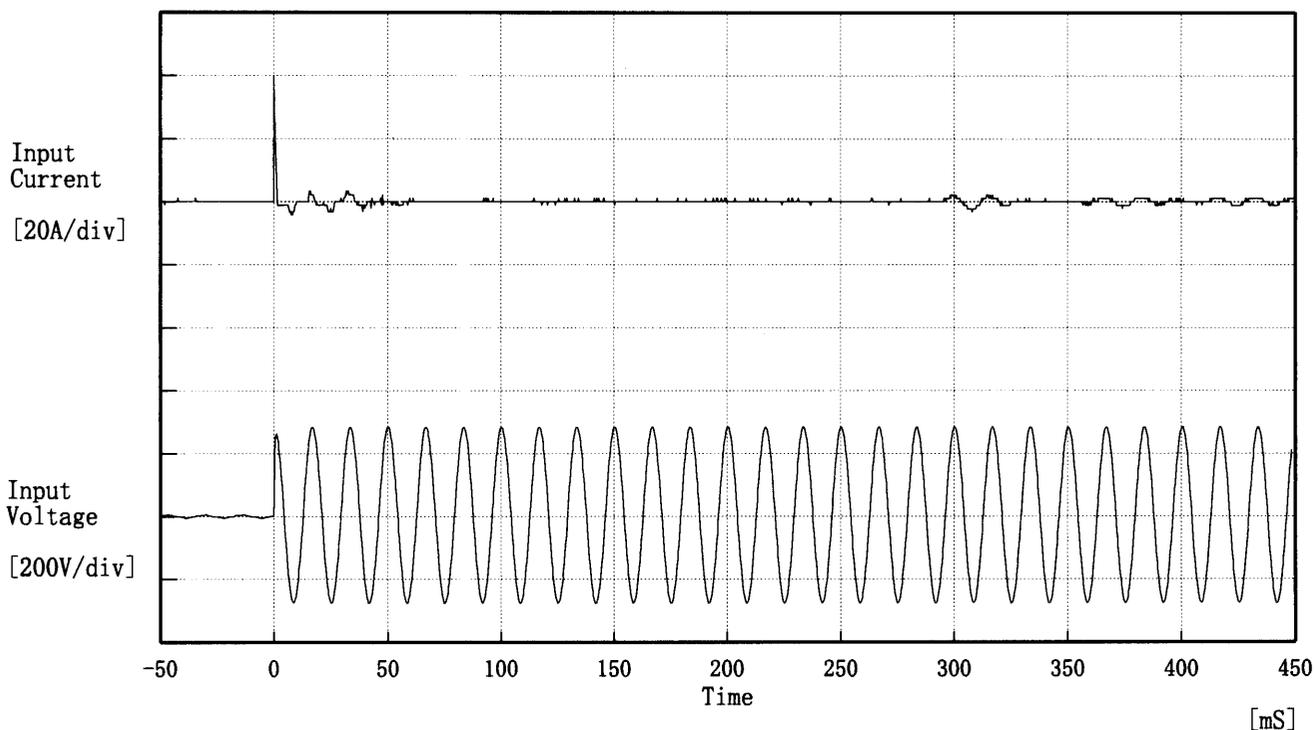
(注)斜線は定格周囲温度範囲を示す。

2. Values

Ambient Temp. [°C]	Input Volt. 170[V]	Input Volt. 200[V]	Input Volt. 264[V]
	Operating Point [V]		
-20	4.99	4.99	4.99
-10	4.96	4.96	4.96
0	4.92	4.92	4.92
10	4.88	4.88	4.88
20	4.83	4.83	4.83
25	4.81	4.81	4.81
30	4.79	4.79	4.79
40	4.75	4.75	4.75
50	4.72	4.72	4.72
60	4.68	4.68	4.68
—	—	—	—



Model		PAA100F-3	Temperature 25°C Testing Circuitry Figure A
Item		Inrush Current 突入電流	
Object		_____	



Input Voltage 200 V

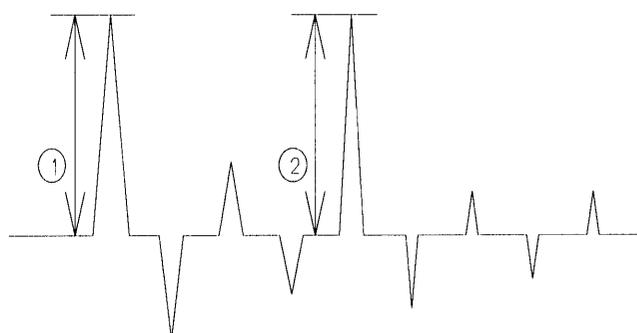
Frequency 60 Hz

Load 100 %

Inrush Current

① 39.28 [A]

② 3.34 [A]



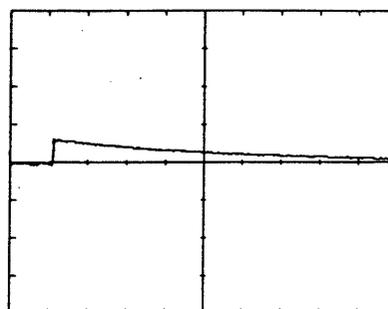
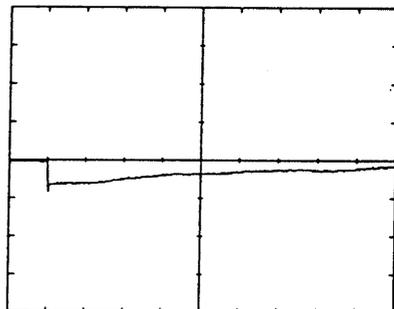


Model	PAA100F-3	Temperature 25°C Testing Circuitry Figure A
Item	Dynamic Load Responce 動的負荷変動	
Object	+3V20.0A	

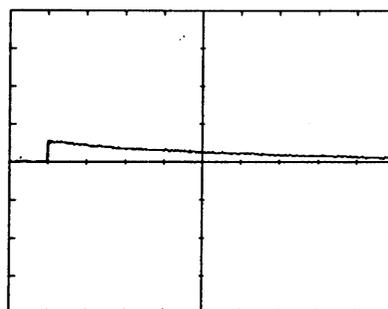
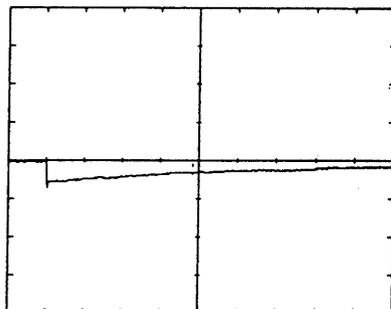
Input Volt. 200 V  
Cycle 1000 mS



Load 0% ↔  
Load 100 %



Load 0% ↔  
Load 50 %



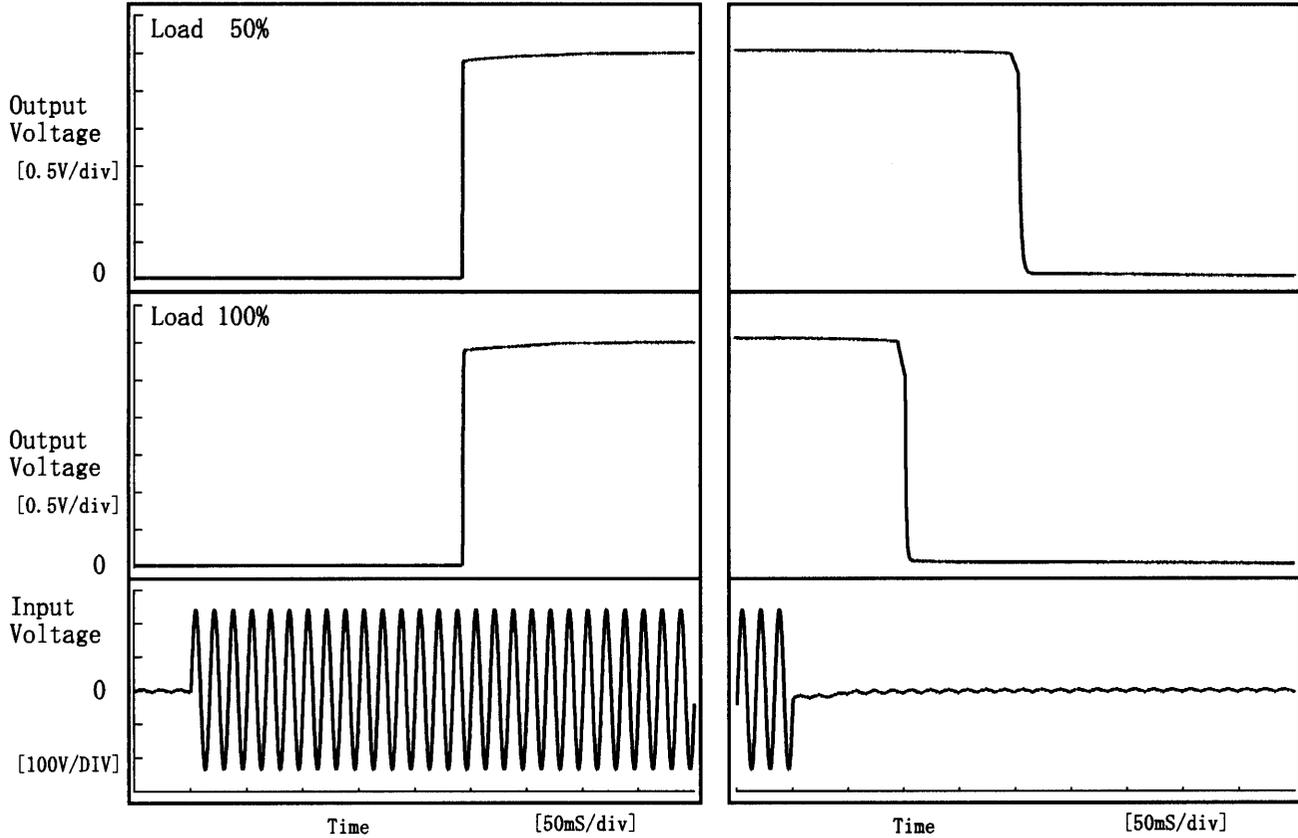
50 mV/div

10 mS/div

Model	PAA100F-3		Temperature	25°C
Item	Rise and Fall Time 立上り、立下り時間	Testing Circuitry	Figure A	
Object	+3V20.0A			

1. Graph

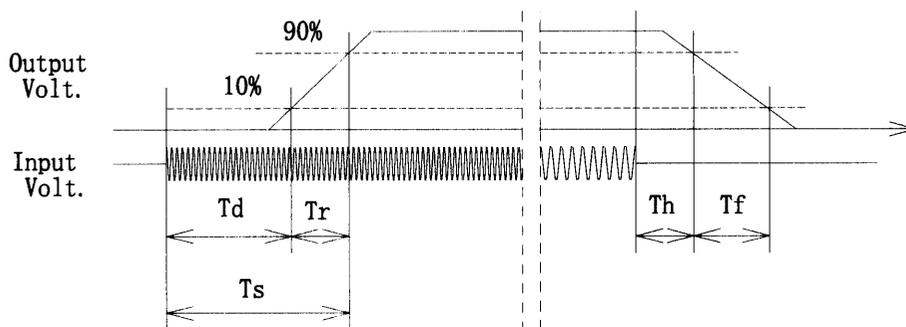
Input Volt. 170 V



2. Values

[mS]

Load \ Time	T <sub>d</sub>	T <sub>r</sub>	T <sub>s</sub>	T <sub>h</sub>	T <sub>f</sub>
50 %	241.8	1.0	242.8	203.5	4.8
100 %	242.3	1.3	243.5	99.5	5.5





Model		PAA100F-3		Testing Circuitry Figure A																																																				
Item		Ambient Temperature Drift 周囲温度変動																																																						
Object		+3V20.0A																																																						
1. Graph		<p>                 —△— Input Volt. 170V                  - - -□- - - Input Volt. 200V                  - - -○- - - Input Volt. 264V             </p>		2. Values																																																				
<p>Output Voltage [V]</p> <p>Ambient Temperature [°C]</p> <p>Load 100%</p>		<table border="1"> <thead> <tr> <th rowspan="2">Temperature [°C]</th> <th>Input Volt. 170[V]</th> <th>Input Volt. 200[V]</th> <th>Input Volt. 264[V]</th> </tr> <tr> <th>Output Volt. [V]</th> <th>Output Volt. [V]</th> <th>Output Volt. [V]</th> </tr> </thead> <tbody> <tr><td>-20</td><td>3.025</td><td>3.025</td><td>3.025</td></tr> <tr><td>-10</td><td>3.020</td><td>3.020</td><td>3.020</td></tr> <tr><td>0</td><td>3.015</td><td>3.015</td><td>3.015</td></tr> <tr><td>10</td><td>3.010</td><td>3.010</td><td>3.010</td></tr> <tr><td>20</td><td>3.005</td><td>3.005</td><td>3.005</td></tr> <tr><td>25</td><td>3.003</td><td>3.003</td><td>3.003</td></tr> <tr><td>30</td><td>3.000</td><td>3.000</td><td>3.000</td></tr> <tr><td>40</td><td>2.995</td><td>2.995</td><td>2.994</td></tr> <tr><td>50</td><td>2.990</td><td>2.989</td><td>2.989</td></tr> <tr><td>60</td><td>2.985</td><td>2.985</td><td>2.985</td></tr> <tr><td>—</td><td>—</td><td>—</td><td>—</td></tr> </tbody> </table>		Temperature [°C]	Input Volt. 170[V]	Input Volt. 200[V]	Input Volt. 264[V]	Output Volt. [V]	Output Volt. [V]	Output Volt. [V]	-20	3.025	3.025	3.025	-10	3.020	3.020	3.020	0	3.015	3.015	3.015	10	3.010	3.010	3.010	20	3.005	3.005	3.005	25	3.003	3.003	3.003	30	3.000	3.000	3.000	40	2.995	2.995	2.994	50	2.990	2.989	2.989	60	2.985	2.985	2.985	—	—	—	—		
Temperature [°C]	Input Volt. 170[V]	Input Volt. 200[V]	Input Volt. 264[V]																																																					
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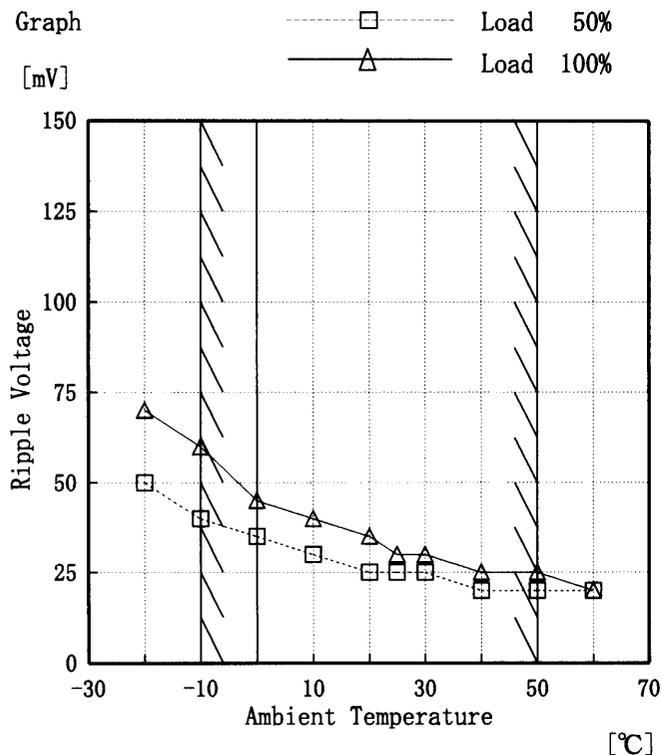
Model		PAA100F-3		Testing Circuitry Figure A																																					
Item		Minimum Input Voltage for Regulated Output Voltage 最低レギュレーション電圧																																							
Object		+3V20.0A																																							
1. Graph		-----□----- Load 50% -----△----- Load 100%		2. Values																																					
[V] 		<table border="1"> <thead> <tr> <th>Ambient Temp. [°C]</th> <th>Load 50% Input Volt. [V]</th> <th>Load 100% Input Volt. [V]</th> </tr> </thead> <tbody> <tr><td>-20</td><td>69</td><td>69</td></tr> <tr><td>-10</td><td>68</td><td>69</td></tr> <tr><td>0</td><td>67</td><td>67</td></tr> <tr><td>10</td><td>65</td><td>66</td></tr> <tr><td>20</td><td>64</td><td>64</td></tr> <tr><td>25</td><td>63</td><td>63</td></tr> <tr><td>30</td><td>63</td><td>63</td></tr> <tr><td>40</td><td>62</td><td>62</td></tr> <tr><td>50</td><td>60</td><td>60</td></tr> <tr><td>60</td><td>59</td><td>59</td></tr> <tr><td>—</td><td>—</td><td>—</td></tr> </tbody> </table>		Ambient Temp. [°C]	Load 50% Input Volt. [V]	Load 100% Input Volt. [V]	-20	69	69	-10	68	69	0	67	67	10	65	66	20	64	64	25	63	63	30	63	63	40	62	62	50	60	60	60	59	59	—	—	—		
Ambient Temp. [°C]	Load 50% Input Volt. [V]	Load 100% Input Volt. [V]																																							
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—	—	—																																							
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Model	PAA100F-3
Item	Ripple Voltage (by Ambient Temp.) リップル電圧 (周囲温度特性)
Object	+3V20.0A

Testing Circuitry Figure A

1. Graph



Input Volt. 200 V

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

(注)斜線は定格周囲温度範囲を示す。

2. Values

Ambient Temp. [°C]	Load 50%	Load 100%
	Ripple Output Volt. [mV]	Ripple Output Volt. [mV]
-20	50	70
-10	40	60
0	35	45
10	30	40
20	25	35
25	25	30
30	25	30
40	20	25
50	20	25
60	20	20
—	—	—



<p><b>Model</b> PAA100F-3</p>		<p>Temperature 25 °C Testing Circuitry Figure A</p>																						
<p><b>Item</b> Time Lapse Drift 経時ドリフト</p>																								
<p><b>Object</b> +3V20.0A</p>																								
<p>1. Graph</p> <p>[V]</p> <p>Output Voltage [V]</p> <p>Time [H]</p> <p>Input Volt. 200V Load 100%</p>		<p>2. Values</p> <table border="1"> <thead> <tr> <th>Time since start [H]</th> <th>Output Voltage [V]</th> </tr> </thead> <tbody> <tr><td>0.0</td><td>3.007</td></tr> <tr><td>0.5</td><td>3.001</td></tr> <tr><td>1.0</td><td>3.001</td></tr> <tr><td>2.0</td><td>3.001</td></tr> <tr><td>3.0</td><td>3.001</td></tr> <tr><td>4.0</td><td>3.001</td></tr> <tr><td>5.0</td><td>3.001</td></tr> <tr><td>6.0</td><td>3.001</td></tr> <tr><td>7.0</td><td>3.001</td></tr> <tr><td>8.0</td><td>3.001</td></tr> </tbody> </table>	Time since start [H]	Output Voltage [V]	0.0	3.007	0.5	3.001	1.0	3.001	2.0	3.001	3.0	3.001	4.0	3.001	5.0	3.001	6.0	3.001	7.0	3.001	8.0	3.001
Time since start [H]	Output Voltage [V]																							
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6.0	3.001																							
7.0	3.001																							
8.0	3.001																							



Model		PAA100F-3	Testing Circuitry Figure A
Item		Output Voltage Accuracy 定電圧精度	
Object		+3V20.0A	

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 : 170~264 V
- Load Current : 0.0~20.0 A

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

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

定電圧精度

周囲温度、入力電圧、負荷を下記仕様内で、任意に変動させたときの出力電圧の変動をいう。

- 周囲温度 -10~50 °C
- 入力電圧 170~264 V
- 負荷電流 0.0~20.0 A

\* 定電圧精度(変動値) =  $\pm (\text{出力電圧の最高値} - \text{出力電圧の最低値}) / 2$

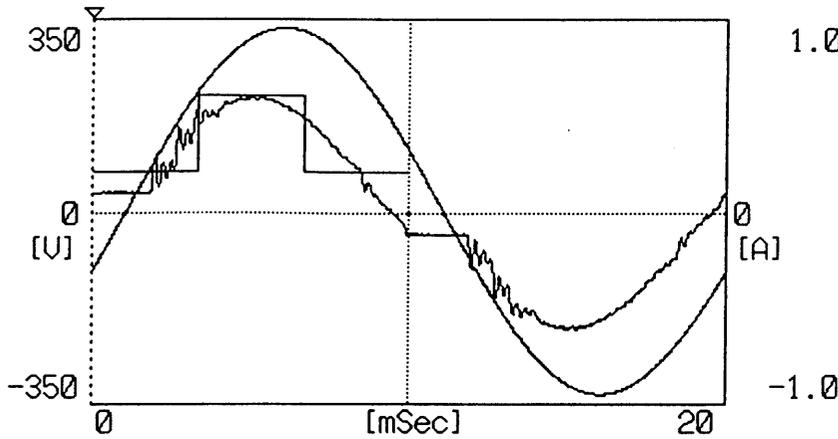
\* 定電圧精度(変動率) =  $\frac{\text{変動値}}{\text{定格出力電圧}} \times 100$

Item	Temperature [°C]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy(Ration) [%]
Maximum Voltage	-10	264	0.0	3.023	±18	±0.6
Minimum Voltage	50	264	20.0	2.988		



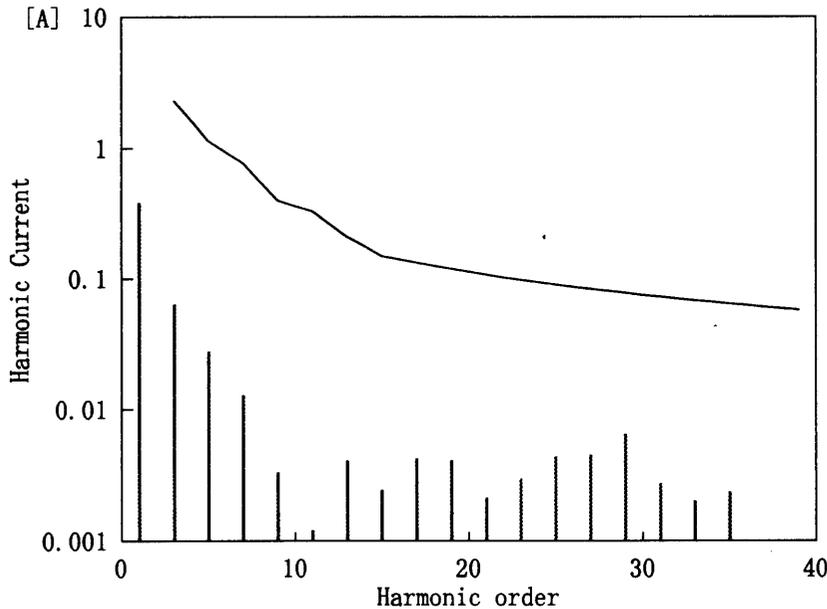
Model		PAA100F-3	Temperature	25°C
Item		Harmonic Current 高調波電流	Testing Circuitry	Figure E
Object				

1. Input Current Waveform



Conditions	Values
Input Voltage [V]	231.8
Input Current [A]	0.39
Active Power [W]	84.8
Apparent Power [VA]	90.7
Frequency [Hz]	50
Power Factor	0.935
Output Power [W]	60

2. Harmonic Current



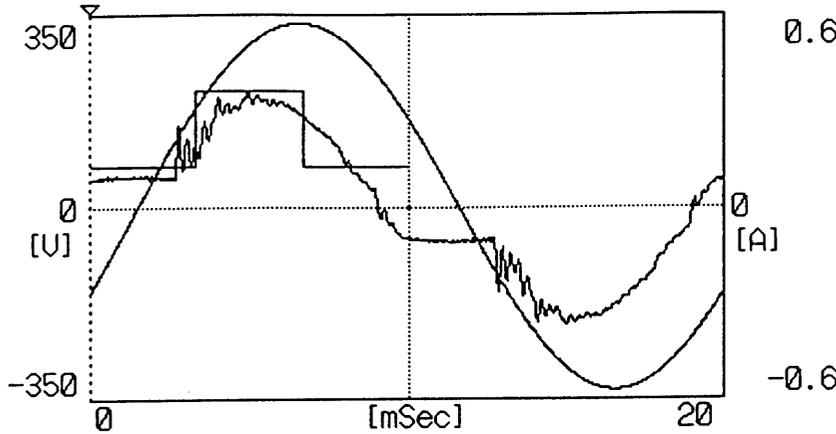
— Harmonic Current  
 高調波電流  
 - - - Limits for Class A equipment of even harmonics  
 クラスAの機器に対する高調波偶数次限度値

Harmonics order 高調波次数	Limits 限度値 [A]	Values 測定値 [A]
1	—	0.38728
2	—	0.00029
3	2.30000	0.06400
4	—	0.00008
5	1.14000	0.02814
6	—	0.00001
7	0.77000	0.01290
8	—	0.00002
9	0.40000	0.00333
10	—	0.00003
11	0.33000	0.00121
12	—	0.00005
13	0.21000	0.00411
14	—	0.00001
15	0.15000	0.00245
16	—	0.00002
17	0.13235	0.00424
18	—	0.00002
19	0.11842	0.00412
20	—	0.00002
21	0.10714	0.00213
22	—	0.00001
23	0.09783	0.00297
24	—	0.00004
25	0.09000	0.00440
26	—	0.00002
27	0.08333	0.00453
28	—	0.00002
29	0.07759	0.00656
30	—	0.00001
31	0.07258	0.00274
32	—	0.00004
33	0.06818	0.00202
34	—	0.00003
35	0.06429	0.00236
36	—	0.00003
37	0.06081	0.00086
38	—	0.00003
39	0.05769	0.00102
40	—	0.00003



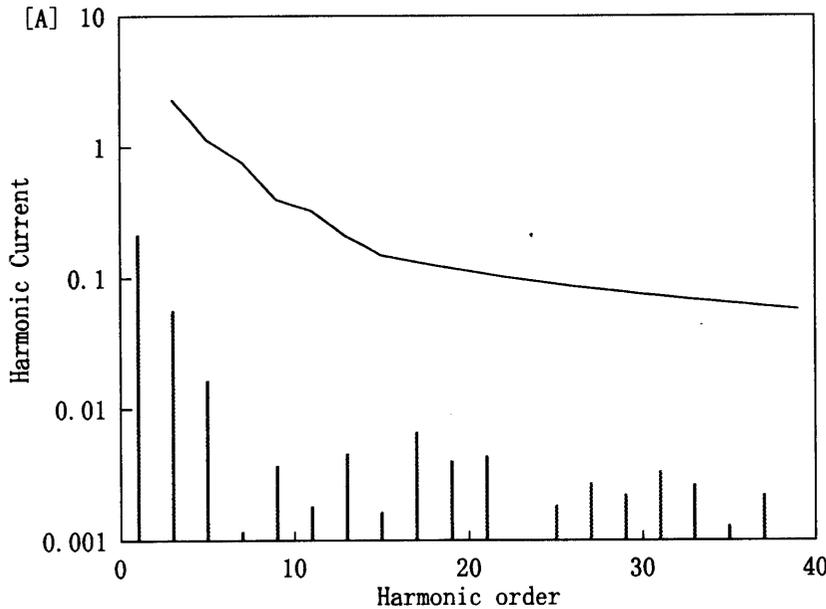
Model		PAA100F-3	Temperature		25°C
Item		Harmonic Current 高調波電流	Testing Circuitry		Figure E
Object					

1. Input Current Waveform



Conditions	Values
Input Voltage [V]	231.9
Input Current [A]	0.23
Active Power [W]	43.9
Apparent Power [VA]	52.2
Frequency [Hz]	50
Power Factor	0.841
Output Power [W]	30

2. Harmonic Current



— Harmonic Current  
 高調波電流  
 - - - Limits for Class A equipment of even harmonics  
 クラスAの機器に対する高調波偶数次限度値

Harmonics order 高調波次数	Limits 限度値 [A]	Values 測定値 [A]
1	—	0.21833
2	—	0.00010
3	2.30000	0.05736
4	—	0.00003
5	1.14000	0.01662
6	—	0.00001
7	0.77000	0.00117
8	—	0.00001
9	0.40000	0.00373
10	—	0.00003
11	0.33000	0.00182
12	—	0.00006
13	0.21000	0.00460
14	—	0.00002
15	0.15000	0.00164
16	—	0.00002
17	0.13235	0.00669
18	—	0.00002
19	0.11842	0.00405
20	—	0.00002
21	0.10714	0.00437
22	—	0.00002
23	0.09783	0.00037
24	—	0.00005
25	0.09000	0.00185
26	—	0.00002
27	0.08333	0.00271
28	—	0.00002
29	0.07759	0.00223
30	—	0.00002
31	0.07258	0.00332
32	—	0.00002
33	0.06818	0.00265
34	—	0.00002
35	0.06429	0.00129
36	—	0.00003
37	0.06081	0.00222
38	—	0.00002
39	0.05769	0.00011
40	—	0.00002



<b>COSEL</b>		
Model	PAA100F-3	
Item	Condensation 結露特性	Testing Circuitry Figure A
Object	+3V20.0A	

1. Condensation test

Testing procedure is as follows.

- ① Keeping and cooling the unit in a tank at -10°C for an hour with the input off.
- ② Taking it out of the tank and dewing itself in a room where the temperature is 25°C and the humidity is 40%RH.
- ③ Testing electrical characteristics of the unit to confirm there be no fault.
- ④ Repeating ①, ② and ③ three times.

1. 結露特性試験

入力を切った状態で、恒温槽で-10℃に冷却しておき、約1時間後に恒温槽から取り出し、室温25℃、湿度40%RHの状態におき結露させ、その電気的特性の測定を3度行い、異常のないことを確認する。

2. Values

	Times	Output Voltage [V]	Ripple Voltage [mV]	Ripple Noise [mV]
Load 50 %	1	3.007	25	35
	2	3.005	25	35
	3	3.005	25	35
Load 100 %	1	3.006	40	50
	2	3.004	40	50
	3	3.004	40	50

Input Volt. 200 V



Model		PAA100F-3	Testing Circuitry	Figure B
Item		Leakage Current 漏洩電流		
Object		_____		

1. Results

Standards	Leakage Current [mA]		
	Input Volt. 170 [V]	Input Volt. 200 [V]	Input Volt. 264 [V]
(A) DENTORI	—	—	—
(B) UL	—	—	—
(C) CSA	—	—	—

Standards	Leakage Current [mA]		
	Input Volt. 170 [V]	Input Volt. 220 [V]	Input Volt. 264 [V]
(D) VDE	0.42	0.49	0.68

2. Condition

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

交流入力 of 両相について測定し、その大きい方を漏洩電流測定値とする。

Load 100 %



<b>COSEL</b>		
Model	PAA100F-3	
Item	Line Noise Tolerance 入力雑音耐量	Testing Circuitry Figure C
Object	+3V20.0A	

1. Results

Pulse Width [n S]	MODE	Operating Point of Overvoltage Protection [V] 過電圧保護動作値	DC-like Regulation of Output Voltage 出力電圧の直流的変動
50	COMMON	4.72	no regulation
	NORMAL	4.72	no regulation
1000	COMMON	4.72	no regulation
	NORMAL	4.72	no regulation

Conditions

Input Voltage :200 V  
 Pulse Voltage :2000 V  
 Pulse Cycle :10 mS  
 Pulse Input Duration:1 min. or more  
 Load :100 %

# COSEL

Model	PAA100F-3
Item	Conducted Emission 雑音端子電圧
Object	_____

Testing Circuitry Figure D

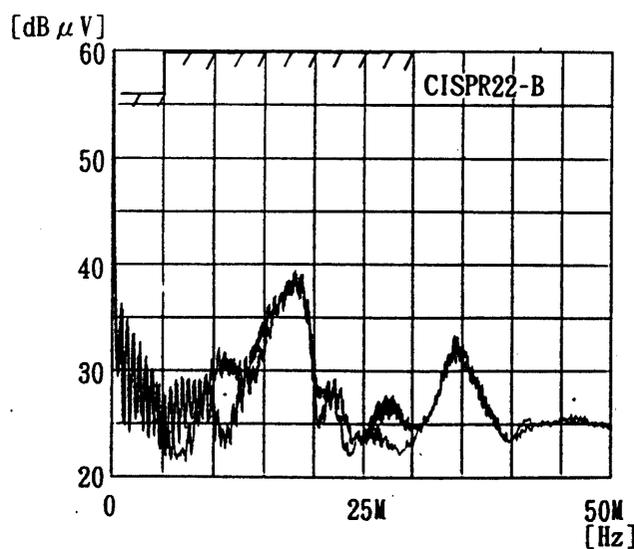
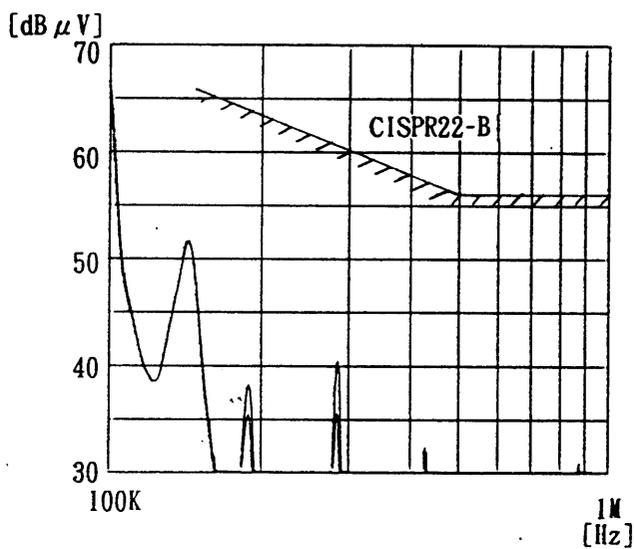
1. Graph

Remarks

Input Volt. 230 V  
Load 100 %

Note: Slanted line shows the range of Tolerance.  
(注)斜線は許容値を示す。

NO	Standards	Standards Complied	Frequency [MHz]	Tolerance [dB/μV]
1	FCC class A		0.45~1.6	60
			1.6~30	69.5
2	FCC class B		0.45~30	48
3	VCCI -1		0.15~0.5	79
			0.5~30	73
4	VCCI -2		0.15~0.5	66-56
			0.5~5	56
			5~30	60
5	VDE class A		0.01~0.15	91-69.5
			0.15~0.5	66
			0.5~30	60
6	CISPR 22 class B	○	0.15~0.5	66-56
			0.5~5	56
			5~30	60



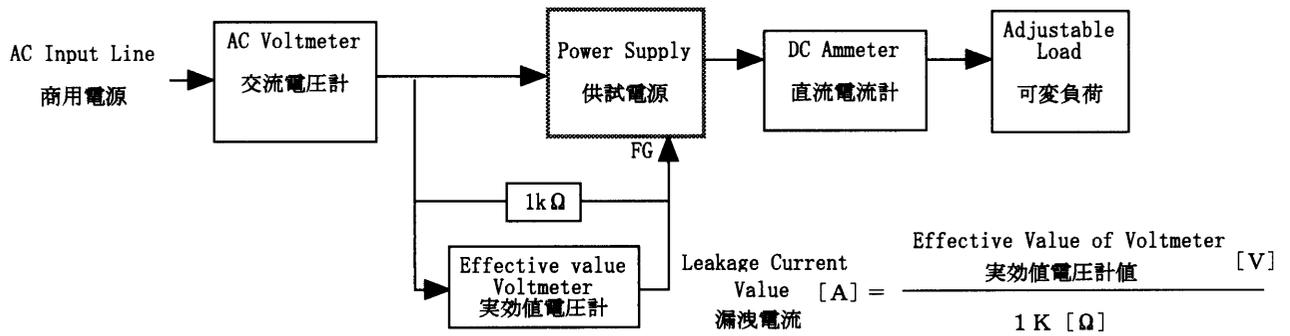
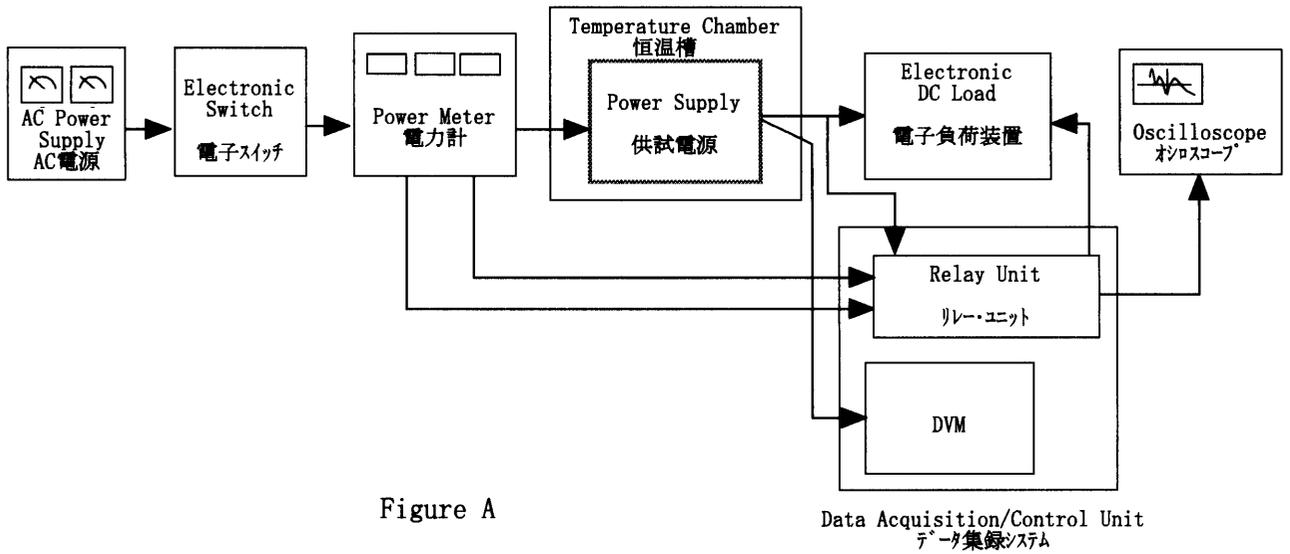


Figure B (DENTORI)

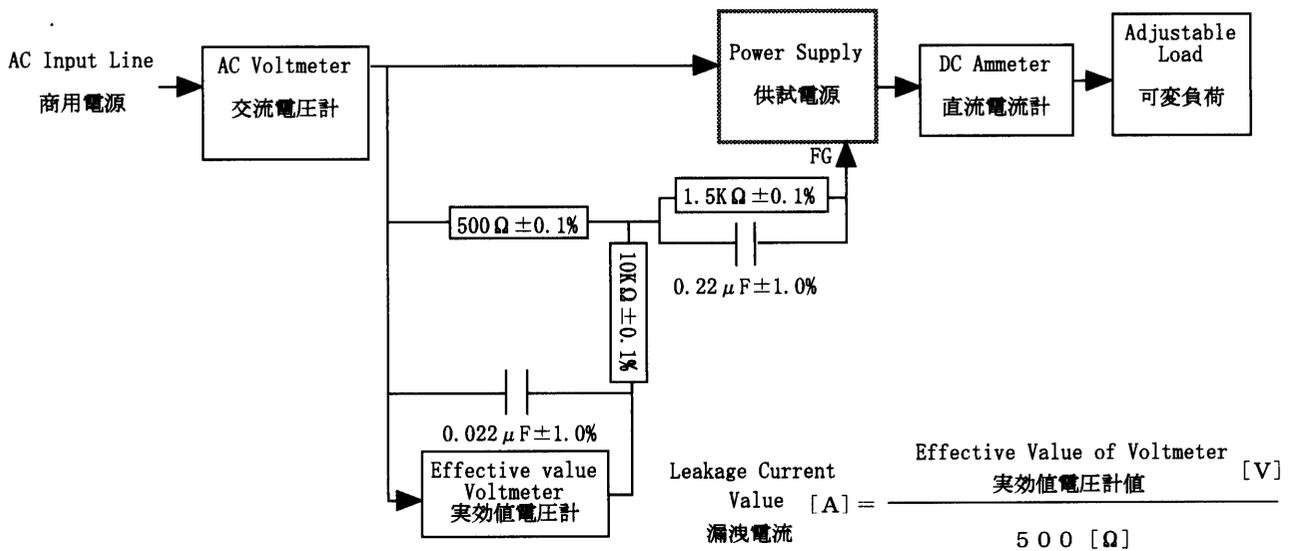


Figure B (UL, CSA, VDE)

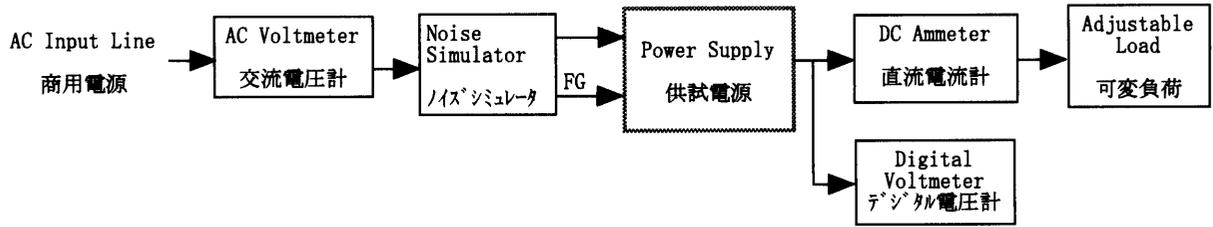


Figure C

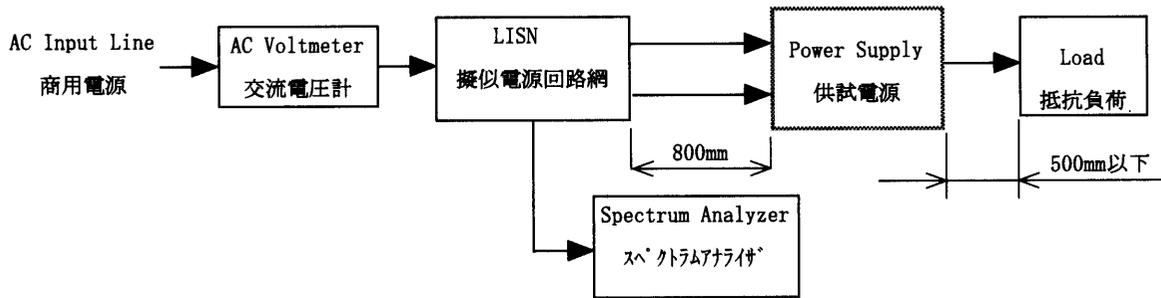


Figure D

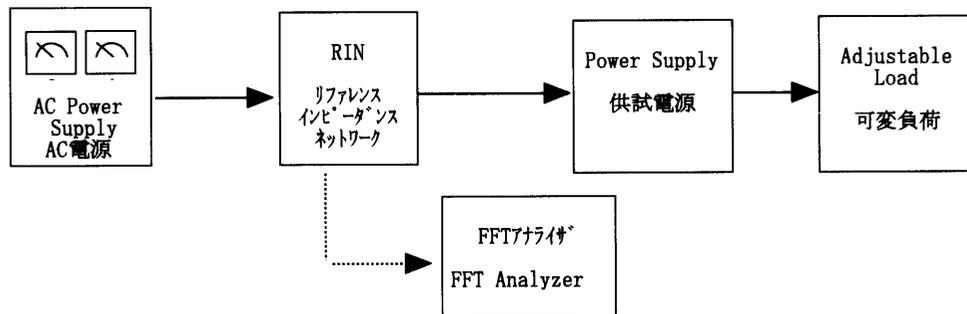


Figure E