

COSEL

TEST DATA OF LEA100F-15
(100V INPUT)

Regulated DC Power Supply

Date : Feb. 9. 1999

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Design Manager

Prepared by : T. Miura
Design Engineer

コーセル株式会社
COSEL CO.,LTD.



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(Final Page 30)

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Model	LEA100F-15	Temperature Testing Circuitry	25°C Figure A																																
Item	Line Regulation 静的入力変動																																		
Object	+15V 6.7A																																		
1. Graph		2. Values																																	
<p style="text-align: center;">—□— Load 50%</p> <p style="text-align: center;">—△— Load 100%</p>		<table border="1"> <thead> <tr> <th rowspan="2">Input Voltage [V]</th> <th>Load 50%</th> <th>Load 100%</th> </tr> <tr> <th>Output Volt. [V]</th> <th>Output Volt. [V]</th> </tr> </thead> <tbody> <tr><td>75</td><td>15.133</td><td>15.129</td></tr> <tr><td>80</td><td>15.133</td><td>15.129</td></tr> <tr><td>85</td><td>15.133</td><td>15.129</td></tr> <tr><td>90</td><td>15.133</td><td>15.129</td></tr> <tr><td>100</td><td>15.133</td><td>15.129</td></tr> <tr><td>110</td><td>15.133</td><td>15.129</td></tr> <tr><td>120</td><td>15.133</td><td>15.129</td></tr> <tr><td>132</td><td>15.133</td><td>15.129</td></tr> <tr><td>140</td><td>15.133</td><td>15.129</td></tr> </tbody> </table>		Input Voltage [V]	Load 50%	Load 100%	Output Volt. [V]	Output Volt. [V]	75	15.133	15.129	80	15.133	15.129	85	15.133	15.129	90	15.133	15.129	100	15.133	15.129	110	15.133	15.129	120	15.133	15.129	132	15.133	15.129	140	15.133	15.129
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Note: Slanted line shows the range of the rated input voltage.

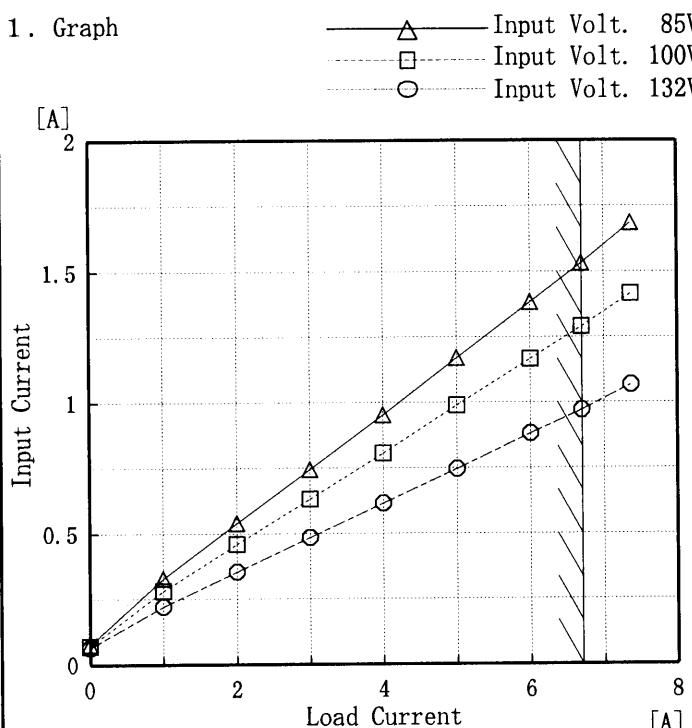
(注)斜線は定格入力電圧範囲を示す。

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Model	LEA100F-15
Item	Input Current (by Load Current) 入力電流（負荷特性）
Output	—

Temperature 25°C
Testing Circuitry Figure A

1. Graph



2. Values

Load Current [A]	Input Current [A]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.00	0.076	0.071	0.064
1.00	0.329	0.282	0.222
2.00	0.540	0.459	0.354
3.00	0.745	0.633	0.485
4.00	0.954	0.808	0.616
5.00	1.170	0.989	0.748
6.00	1.382	1.166	0.881
6.70	1.531	1.290	0.971
7.37	1.685	1.416	1.067
—	—	—	—
—	—	—	—
—	—	—	—

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

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Model	LEA100F-15																																																									
Item	Input Power (by Load Current) 入力電力 (負荷特性)	Temperature Testing Circuitry Figure A	25°C																																																							
Output	_____																																																									
1. Graph	<p>Legend:</p> <ul style="list-style-type: none"> Input Volt. 85V (solid line with open triangle markers) Input Volt. 100V (dashed line with open square markers) Input Volt. 132V (dotted line with open circle markers) <table border="1"> <thead> <tr> <th>Load Current [A]</th> <th>Input Power [W] (85V)</th> <th>Input Power [W] (100V)</th> <th>Input Power [W] (132V)</th> </tr> </thead> <tbody> <tr><td>0.00</td><td>4.90</td><td>5.03</td><td>5.10</td></tr> <tr><td>1.00</td><td>25.74</td><td>25.53</td><td>25.30</td></tr> <tr><td>2.00</td><td>43.73</td><td>43.29</td><td>42.70</td></tr> <tr><td>3.00</td><td>61.40</td><td>60.82</td><td>60.10</td></tr> <tr><td>4.00</td><td>79.20</td><td>78.50</td><td>77.60</td></tr> <tr><td>5.00</td><td>97.60</td><td>96.70</td><td>95.30</td></tr> <tr><td>6.00</td><td>115.70</td><td>114.50</td><td>113.00</td></tr> <tr><td>6.70</td><td>128.40</td><td>127.00</td><td>125.10</td></tr> <tr><td>7.37</td><td>141.60</td><td>139.70</td><td>137.80</td></tr> </tbody> </table>			Load Current [A]	Input Power [W] (85V)	Input Power [W] (100V)	Input Power [W] (132V)	0.00	4.90	5.03	5.10	1.00	25.74	25.53	25.30	2.00	43.73	43.29	42.70	3.00	61.40	60.82	60.10	4.00	79.20	78.50	77.60	5.00	97.60	96.70	95.30	6.00	115.70	114.50	113.00	6.70	128.40	127.00	125.10	7.37	141.60	139.70	137.80															
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[%]	<p>The graph plots Efficiency [%] on the y-axis (62 to 86) against Input Voltage [V] on the x-axis (0 to 150). Two data series are shown: Load 50% (squares) and Load 100% (triangles). Both series show efficiency increasing slightly with input voltage. Two slanted lines indicate the rated input voltage range.</p> <table border="1"> <thead> <tr> <th>Input Voltage [V]</th> <th>Load 50% Efficiency [%]</th> <th>Load 100% Efficiency [%]</th> </tr> </thead> <tbody> <tr><td>75</td><td>75.3</td><td>77.8</td></tr> <tr><td>80</td><td>75.8</td><td>78.4</td></tr> <tr><td>85</td><td>76.0</td><td>78.9</td></tr> <tr><td>90</td><td>76.3</td><td>79.4</td></tr> <tr><td>100</td><td>76.6</td><td>80.0</td></tr> <tr><td>110</td><td>76.9</td><td>80.5</td></tr> <tr><td>120</td><td>77.1</td><td>80.9</td></tr> <tr><td>132</td><td>77.3</td><td>81.2</td></tr> <tr><td>140</td><td>77.5</td><td>81.4</td></tr> </tbody> </table>		Input Voltage [V]	Load 50% Efficiency [%]	Load 100% Efficiency [%]	75	75.3	77.8	80	75.8	78.4	85	76.0	78.9	90	76.3	79.4	100	76.6	80.0	110	76.9	80.5	120	77.1	80.9	132	77.3	81.2	140	77.5	81.4		
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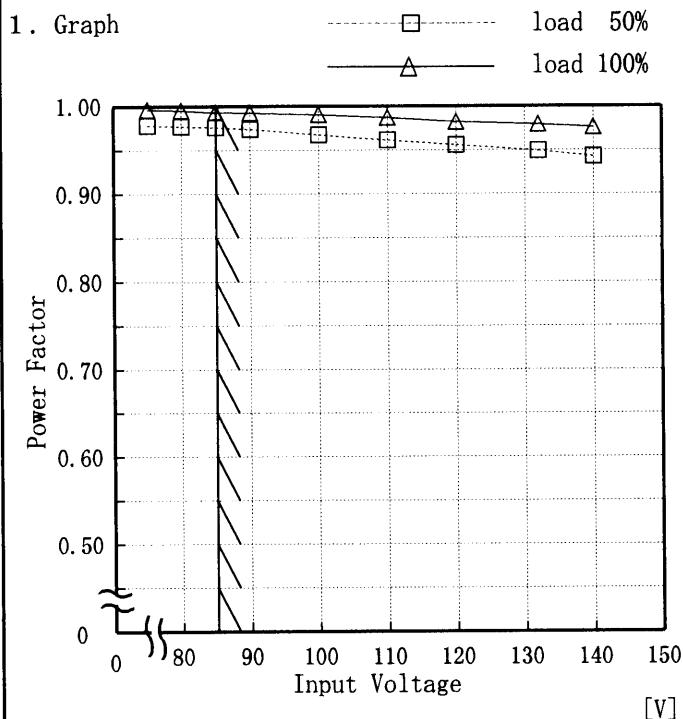
Model

LEA100F-15

Item

Power Factor (by Input Voltage)
力率(入力電圧特性)

Object

Temperature 25°C
Testing Circuitry Figure A

2. Values

Input Voltage [V]	load 50%	load 100%
	Power Factor	Power Factor
75	0.98	1.00
80	0.98	1.00
85	0.98	0.99
90	0.97	0.99
100	0.97	0.99
110	0.96	0.99
120	0.96	0.98
132	0.95	0.98
140	0.94	0.98

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

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Output	——																																																									
1. Graph	<p>Legend: Input Volt. 85V (solid line with triangle), Input Volt. 100V (dashed line with square), Input Volt. 132V (dotted line with circle). The graph shows power factor increasing from ~0.76 at 0A to ~0.99 at 7.37A. A slanted line marks the rated load current range from approximately 6.70A to 7.37A.</p>																																																									
2. Values	<table border="1"> <thead> <tr> <th rowspan="2">Load Current [A]</th> <th colspan="3">Power Factor</th> </tr> <tr> <th>Input Volt. 85[V]</th> <th>Input Volt. 100[V]</th> <th>Input Volt. 132[V]</th> </tr> </thead> <tbody> <tr><td>0.00</td><td>0.76</td><td>0.71</td><td>0.60</td></tr> <tr><td>1.00</td><td>0.92</td><td>0.90</td><td>0.86</td></tr> <tr><td>2.00</td><td>0.95</td><td>0.94</td><td>0.91</td></tr> <tr><td>3.00</td><td>0.97</td><td>0.96</td><td>0.94</td></tr> <tr><td>4.00</td><td>0.98</td><td>0.97</td><td>0.95</td></tr> <tr><td>5.00</td><td>0.98</td><td>0.98</td><td>0.97</td></tr> <tr><td>6.00</td><td>0.99</td><td>0.98</td><td>0.97</td></tr> <tr><td>6.70</td><td>0.99</td><td>0.99</td><td>0.98</td></tr> <tr><td>7.37</td><td>0.99</td><td>0.99</td><td>0.98</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]	Power Factor			Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]	0.00	0.76	0.71	0.60	1.00	0.92	0.90	0.86	2.00	0.95	0.94	0.91	3.00	0.97	0.96	0.94	4.00	0.98	0.97	0.95	5.00	0.98	0.98	0.97	6.00	0.99	0.98	0.97	6.70	0.99	0.99	0.98	7.37	0.99	0.99	0.98	—	—	—	—	—	—	—	—	—	—	—	—
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(注)	斜線は定格負荷電流範囲を示す。																																																									

COSEL

Model	LEA100F-15	Temperature Testing Circuitry	25°C Figure A																																
Item	Hold-Up Time 出力保持時間																																		
Object	+15V 6.7A																																		
1. Graph	<p>—△— Load 50%</p> <p>-□- Load 100%</p>																																		
2. Values	<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>75</td><td>—</td><td>—</td></tr> <tr><td>80</td><td>67</td><td>27</td></tr> <tr><td>85</td><td>69</td><td>29</td></tr> <tr><td>90</td><td>70</td><td>30</td></tr> <tr><td>100</td><td>72</td><td>32</td></tr> <tr><td>110</td><td>74</td><td>34</td></tr> <tr><td>120</td><td>75</td><td>35</td></tr> <tr><td>132</td><td>77</td><td>36</td></tr> <tr><td>140</td><td>77</td><td>36</td></tr> </tbody> </table>			Input Voltage [V]	Load 50%	Load 100%	Hold-Up Time [ms]	Hold-Up Time [ms]	75	—	—	80	67	27	85	69	29	90	70	30	100	72	32	110	74	34	120	75	35	132	77	36	140	77	36
Input Voltage [V]	Load 50%	Load 100%																																	
	Hold-Up Time [ms]	Hold-Up Time [ms]																																	
75	—	—																																	
80	67	27																																	
85	69	29																																	
90	70	30																																	
100	72	32																																	
110	74	34																																	
120	75	35																																	
132	77	36																																	
140	77	36																																	

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.

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。

COSSEL

Model	LEA100F-15	Temperature	25°C		
Item	Instantaneous Interruption Compensation 瞬時停電保障	Testing Circuitry	Figure A		
Object	+15V 6.7A	2. Values			
1. Graph					
	<p style="text-align: center;"> Input Volt. 85 V Input Volt. 100 V Input Volt. 132 V </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.</p> <p>Note: Slanted line shows the range of the rated load current.</p> <p>瞬時停電保障時間とは、出力電圧が定電圧精度の規格範囲を保持している瞬時停電時間をいう。</p> <p>(注)斜線は定格負荷電流範囲を示す。</p>	Load Current [A]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
			Time [mS]		
0.00	—	—	—	—	—
1.00	203	212	221		
2.00	103	110	118		
3.00	63	69	77		
4.00	45	51	57		
5.00	37	42	47		
6.00	31	35	40		
6.70	27	31	35		
7.37	23	28	31		
—	—	—	—	—	—
—	—	—	—	—	—

COSEL

Model	LEA100F-15	Temperature 25°C Testing Circuitry Figure A																																										
Item	Load Regulation 静的負荷変動																																											
Object	+15V 6.7A																																											
1. Graph	<p>—△— Input Volt. 85V -□- Input Volt. 100V -○- Input Volt. 132V</p> <table border="1"> <caption>Data points from Figure A graph</caption> <thead> <tr> <th>Load Current [A]</th> <th>Output Volt. 85V [V]</th> <th>Output Volt. 100V [V]</th> <th>Output Volt. 132V [V]</th> </tr> </thead> <tbody> <tr><td>0.00</td><td>15.137</td><td>15.137</td><td>15.136</td></tr> <tr><td>1.00</td><td>15.135</td><td>15.135</td><td>15.135</td></tr> <tr><td>2.00</td><td>15.134</td><td>15.134</td><td>15.134</td></tr> <tr><td>3.00</td><td>15.133</td><td>15.133</td><td>15.133</td></tr> <tr><td>4.00</td><td>15.133</td><td>15.132</td><td>15.132</td></tr> <tr><td>5.00</td><td>15.132</td><td>15.131</td><td>15.131</td></tr> <tr><td>6.00</td><td>15.131</td><td>15.131</td><td>15.130</td></tr> <tr><td>6.70</td><td>15.130</td><td>15.130</td><td>15.130</td></tr> <tr><td>7.37</td><td>15.129</td><td>15.129</td><td>15.129</td></tr> </tbody> </table>				Load Current [A]	Output Volt. 85V [V]	Output Volt. 100V [V]	Output Volt. 132V [V]	0.00	15.137	15.137	15.136	1.00	15.135	15.135	15.135	2.00	15.134	15.134	15.134	3.00	15.133	15.133	15.133	4.00	15.133	15.132	15.132	5.00	15.132	15.131	15.131	6.00	15.131	15.131	15.130	6.70	15.130	15.130	15.130	7.37	15.129	15.129	15.129
Load Current [A]	Output Volt. 85V [V]	Output Volt. 100V [V]	Output Volt. 132V [V]																																									
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7.37	15.129	15.129	15.129																																									
2. Values	Load Current [A]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]																																								
	Output [V]	Output Volt. [V]	Output Volt. [V]	Output Volt. [V]																																								
0.00	15.137	15.137	15.136																																									
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7.37	15.129	15.129	15.129																																									
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Note: Slanted line shows the range of the rated load. current.

(注)斜線は定格負荷電流範囲を示す。

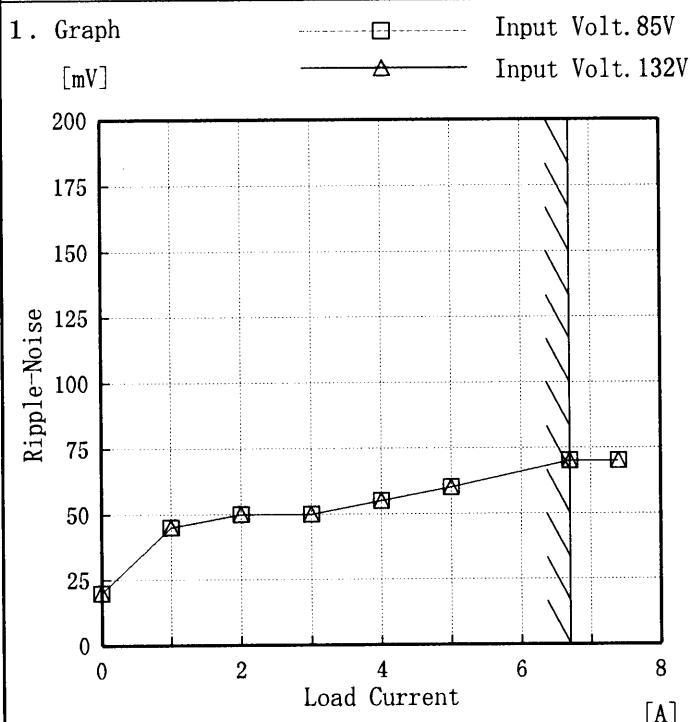
COSEL

Model	LEA100F-15	Temperature Testing Circuitry	25°C Figure A																																						
Item	Ripple Voltage(by Load Current) リップル電圧(負荷電流特性)																																								
Object	+15V 6.7A	2. Values																																							
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Load Current [A]	Ripple Output Volt. 85 [mV] (85V Input)	Ripple Output Volt. 132 [mV] (132V Input)																																							
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Load Current [A]	Input Volt. 85 [V]	Input Volt. 132 [V]																																							
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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。	<p>T1: Due to AC Input Line 入力商用周期</p> <p>T2: Due to Switching スイッチング周期</p>																																								
Fig. Complex Ripple Wave Form 図 リップル波形詳細図																																									

COSEL

Model	LEA100F-15
Item	Ripple-Noise リップルノイズ
Object	+15V 6.7A

Temperature 25°C
Testing Circuitry Figure A



2. Values

Load current [A]	Input Volt. 85 [V]	Input Volt. 132 [V]
	Ripple-Noise [mV]	Ripple-Noise [mV]
0.0	20	20
1.0	45	45
2.0	50	50
3.0	50	50
4.0	55	55
5.0	60	60
6.7	70	70
7.4	70	70
—	—	—
—	—	—
—	—	—

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

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

リップルノイズは、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

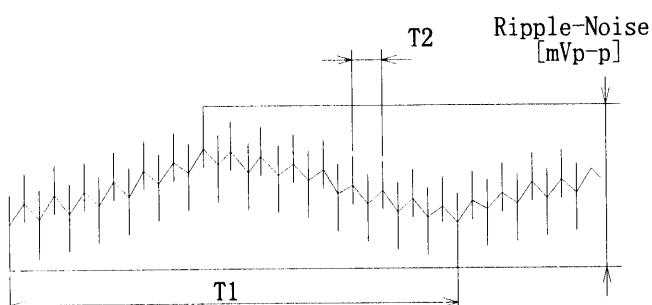


Fig. Complex Ripple Wave Form

図 リップル波形詳細図

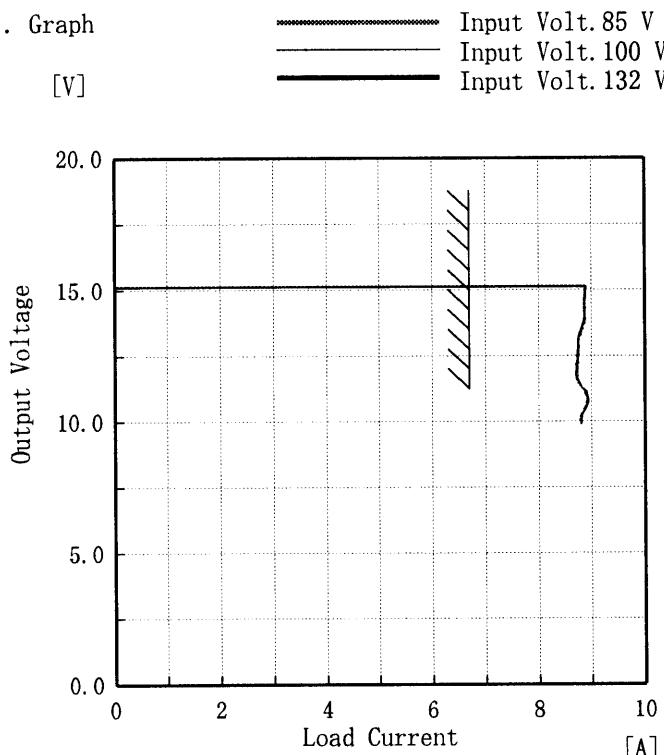
COSSEL

Model LEA100F-15

Item Overcurrent Protection
過電流保護

Object +15V 6.7A

1. Graph



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

(注)斜線は定格負荷電流範囲を示す。

10.5V以下は間欠状態。

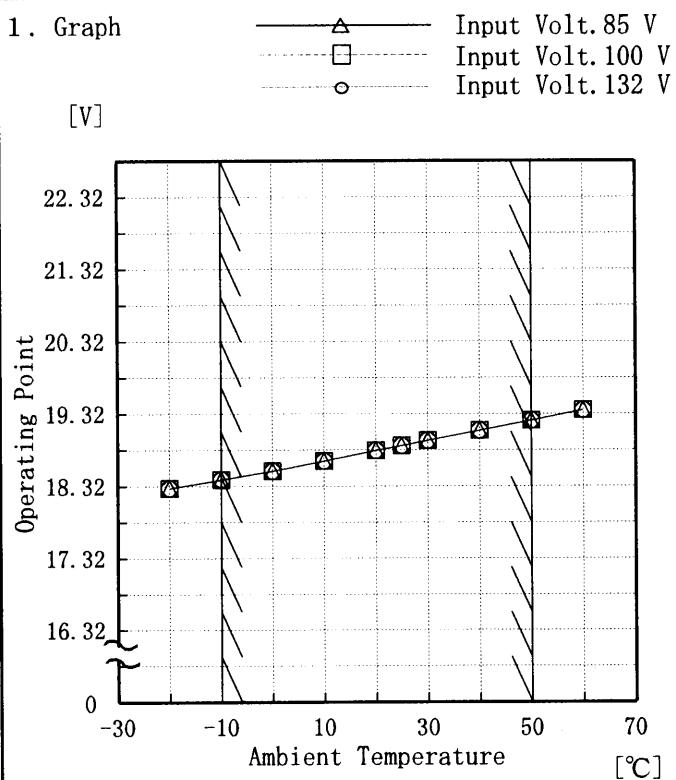
Temperature 25°C
Testing Circuitry Figure A

2. Values

Output Voltage [V]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
	Load Current [A]	Load Current [A]	Load Current [A]
15.00	8.89	8.88	8.86
14.25	8.89	8.88	8.86
13.50	8.87	8.88	8.84
12.00	8.77	8.77	8.73
10.50	8.87	8.83	8.87
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

COSEL

Model	LEA100F-15
Item	Overvoltage Protection 過電圧保護
Object	+15V 6.7A



(注) 斜線は定格周囲温度範囲を示す。

Testing Circuitry Figure A

2. Values

Ambient Temp. [°C]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
	Operating Point [V]		
-20	18.3	18.3	18.3
-10	18.4	18.4	18.4
0	18.5	18.5	18.5
10	18.7	18.7	18.7
20	18.8	18.8	18.8
25	18.9	18.9	18.9
30	19.0	19.0	19.0
40	19.1	19.1	19.1
50	19.2	19.2	19.2
60	19.4	19.4	19.4
—	—	—	—

COSEL

Model LEA100F-15

Item Inrush Current 突入電流

Object

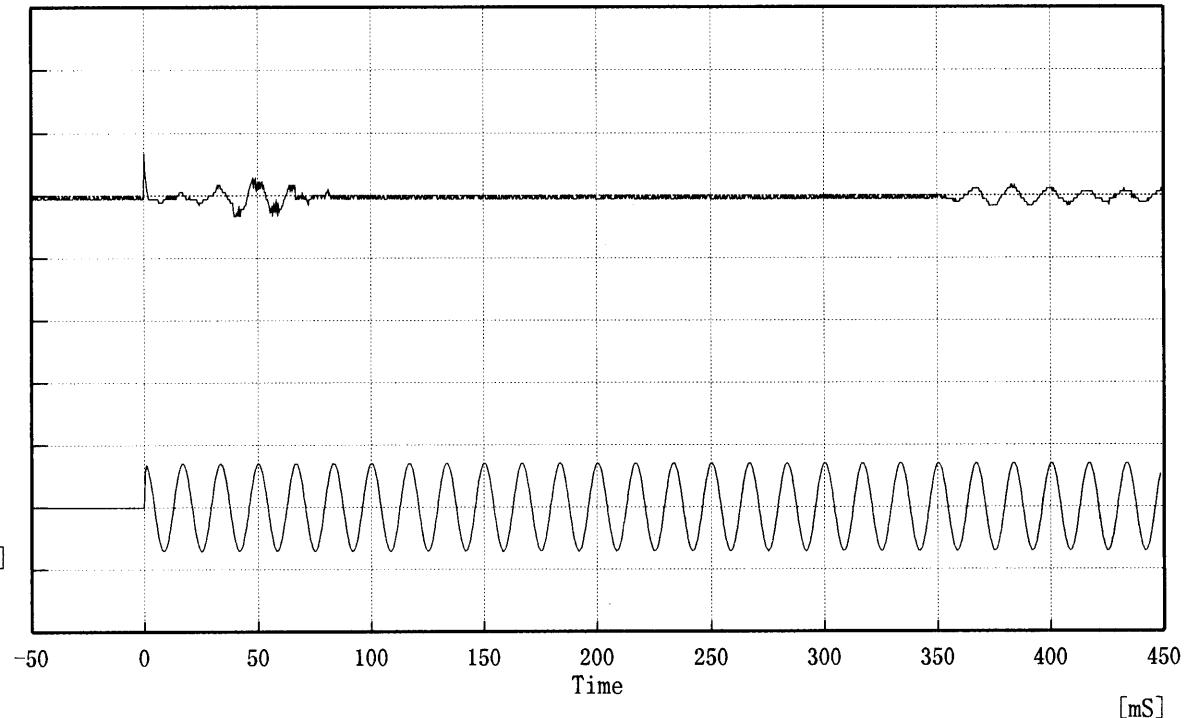
Temperature 25°C
Testing Circuitry Figure A

Input Current

[20A/div]

Input Voltage

[200V/div]



Input Voltage 100 V

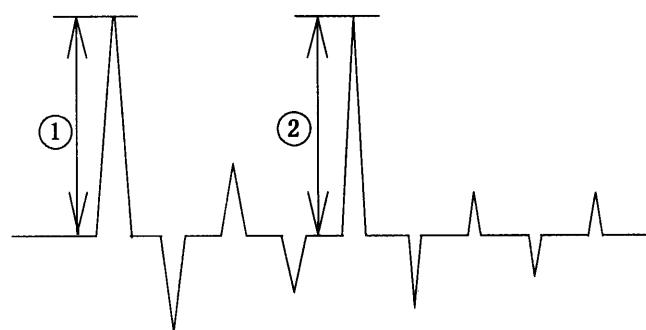
Frequency 60 Hz

Load 100 %

Inrush Current

① 13.48 [A]

② 6.70 [A]



COSEL

Model LEA100F-15

Item Dynamic Load Response
動的負荷變動

Object +15V 6.7A

Temperature 25°C
Testing Circuitry Figure A

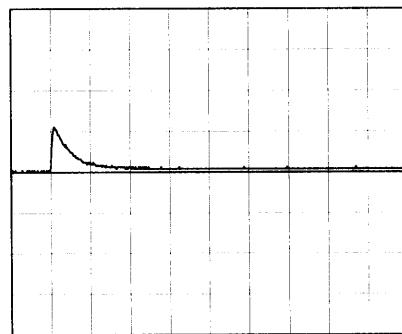
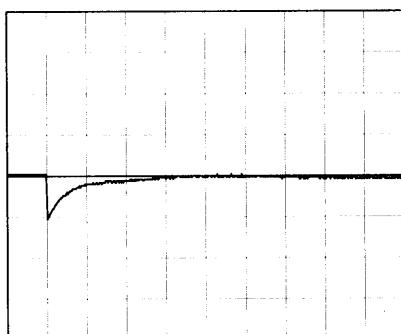
Input Volt. 100 V

Cycle 1000 mS

Load Current

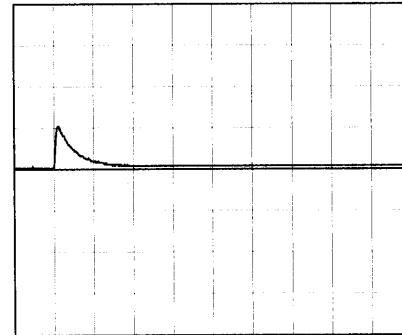
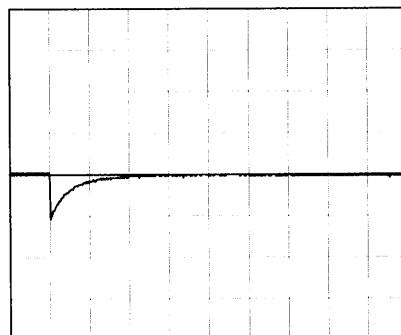
Min. Load ↔

Load 100 %



Min. Load ↔

Load 50 %



100 mV/div

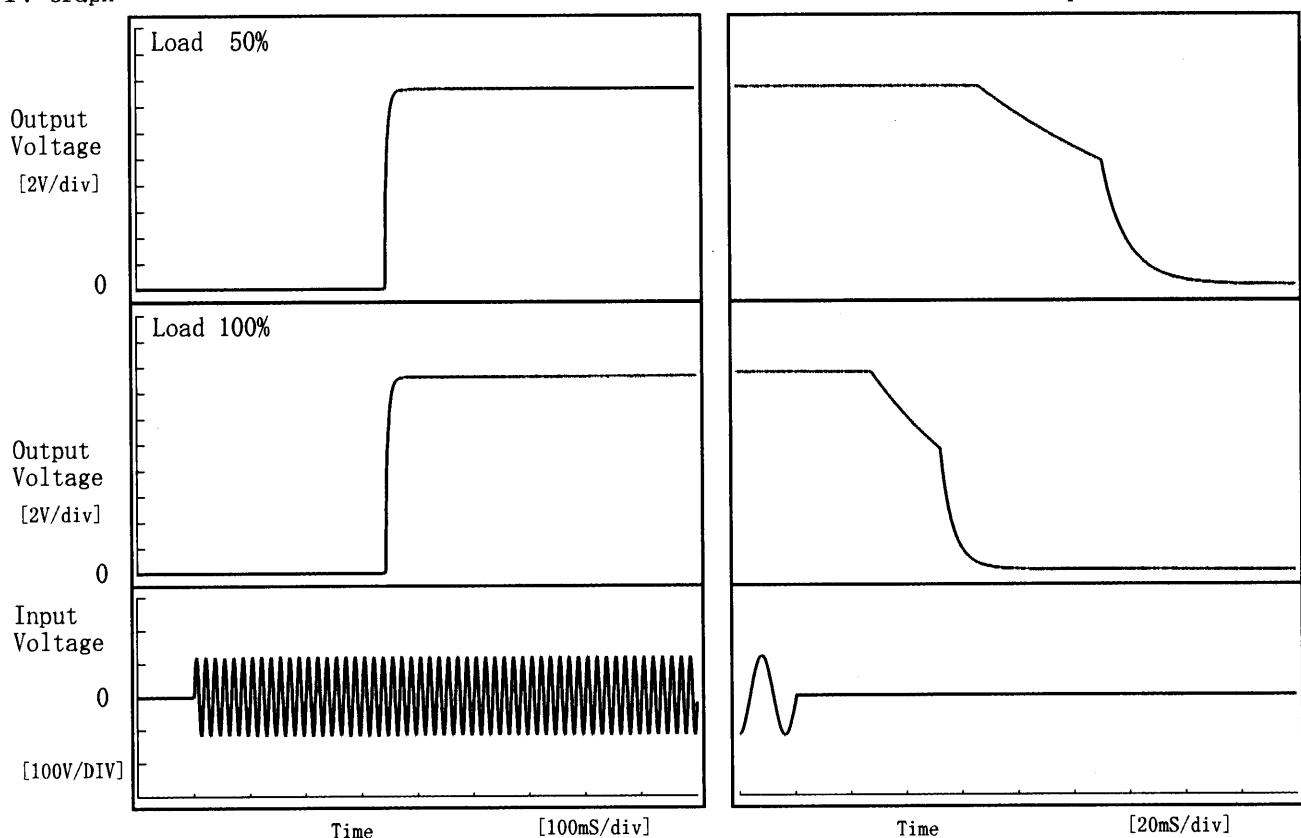
10 ms/div

COSEL

Model	LEA100F-15
Item	Rise and Fall Time 立上り、立下り時間
Object	+15V 6.7 A

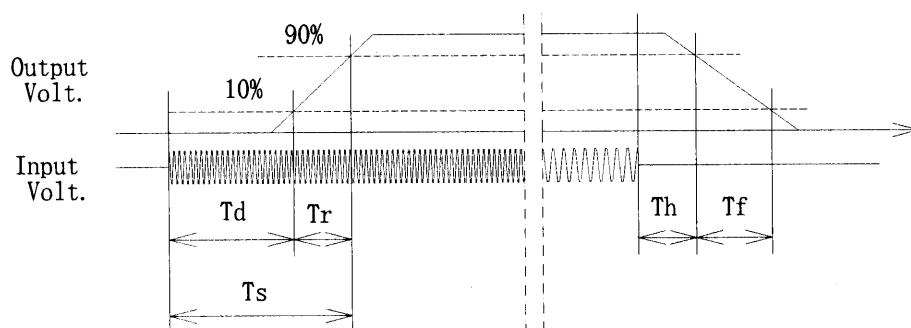
Temperature 25°C
Testing Circuitry Figure A

1. Graph



2. Values

Load	Time	T _d	T _r	T _s	T _h	T _f	[mS]
50 %		343.5	9.5	353.0	79.2	49.8	
100 %		343.5	10.0	353.5	34.7	26.9	



COSEL

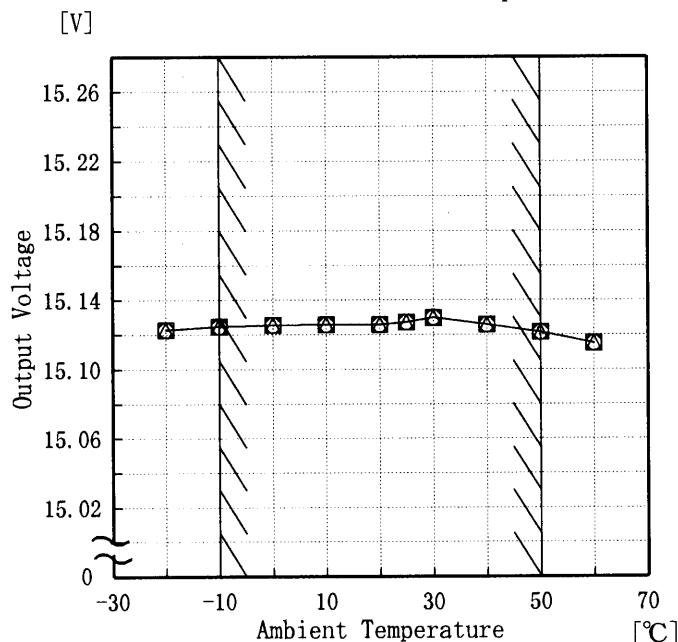
Model LEA100F-15

Item Ambient Temperature Drift
周囲温度変動

Object +15V 6.7A

1. Graph

△ Input Volt. 85V
□ Input Volt. 100V
○ Input Volt. 132V



Load 100%

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。

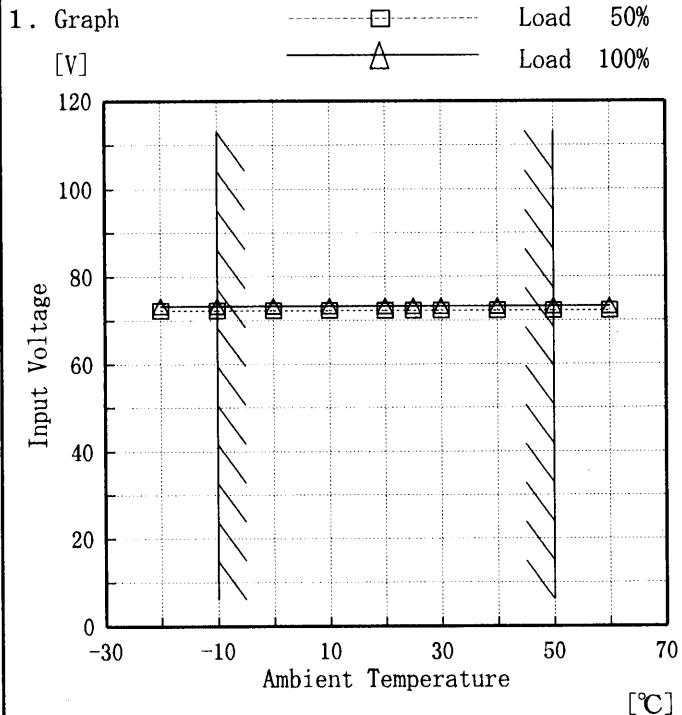
Testing Circuitry Figure A

2. Values

Temperature [°C]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
	Output Volt. [V]	Output Volt. [V]	Output Volt. [V]
-20	15.123	15.123	15.123
-10	15.125	15.125	15.125
0	15.126	15.126	15.126
10	15.126	15.126	15.126
20	15.126	15.126	15.126
25	15.127	15.127	15.127
30	15.130	15.130	15.130
40	15.126	15.126	15.126
50	15.121	15.121	15.121
60	15.115	15.115	15.115
—	—	—	—

COSEL

Model	LEA100F-15
Item	Minimum Input Voltage for Regulated Output Voltage 最低レギュレーション電圧
Object	+15V 6.7A



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。

Testing Circuitry Figure A

2. Values

Ambient Temp. [°C]	Load 50%	Load 100%
	Input Volt. [V]	Input Volt. [V]
-20	72	73
-10	72	73
0	72	73
10	72	73
20	72	73
25	72	73
30	72	73
40	72	73
50	72	73
60	72	73
—	—	—

COSEL

Model

LEA100F-15

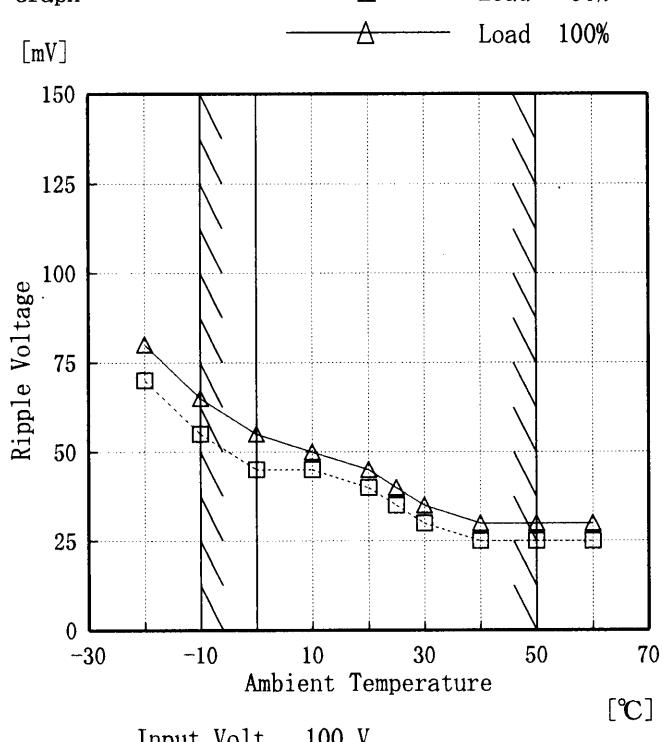
Item

Ripple Voltage (by Ambient Temp.)
リップル電圧 (周囲温度特性)

Object

+15V 6.7A

1. Graph



Input Volt. 100 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。

Testing Circuitry Figure A

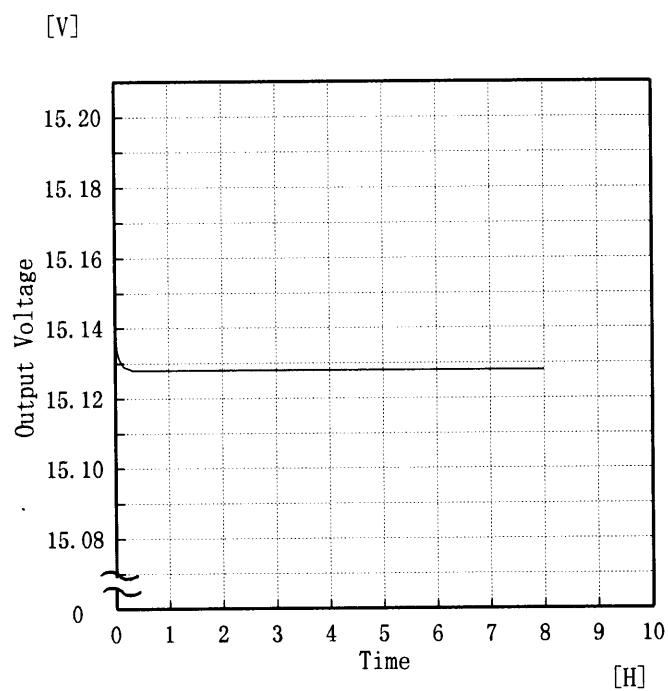
2. Values

Ambient Temp. [°C]	Load 50%	Load 100%
	Ripple Output Volt. [mV]	Ripple Output Volt. [mV]
-20	70	80
-10	55	65
0	45	55
10	45	50
20	40	45
25	35	40
30	30	35
40	25	30
50	25	30
60	25	30
—	—	—

COSEL

Model	LEA100F-15
Item	Time Lapse Drift 経時ドリフト
Object	+15V 6.7A

1. Graph



Temperature 25 °C
Testing Circuitry Figure A

2. Values

Time since start [H]	Output Voltage [V]
0.0	15.140
0.5	15.128
1.0	15.128
2.0	15.128
3.0	15.128
4.0	15.128
5.0	15.128
6.0	15.128
7.0	15.128
8.0	15.128



Model	LEA100F-15	Testing Circuitry Figure A
Item	Output Voltage Accuracy 定電圧精度	
Object	+15V 6.7A	

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 : 85~132 V

Load Current : 0.00~6.70 A

* Output Voltage Accuracy = ±(Maximum of Output Voltage — Minimum of Output Voltage) / 2

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

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 85~132 V

負荷電流 0.00~6.70 A

* 定電圧精度(変動値) = ±(出力電圧の最高値—出力電圧の最低値) / 2

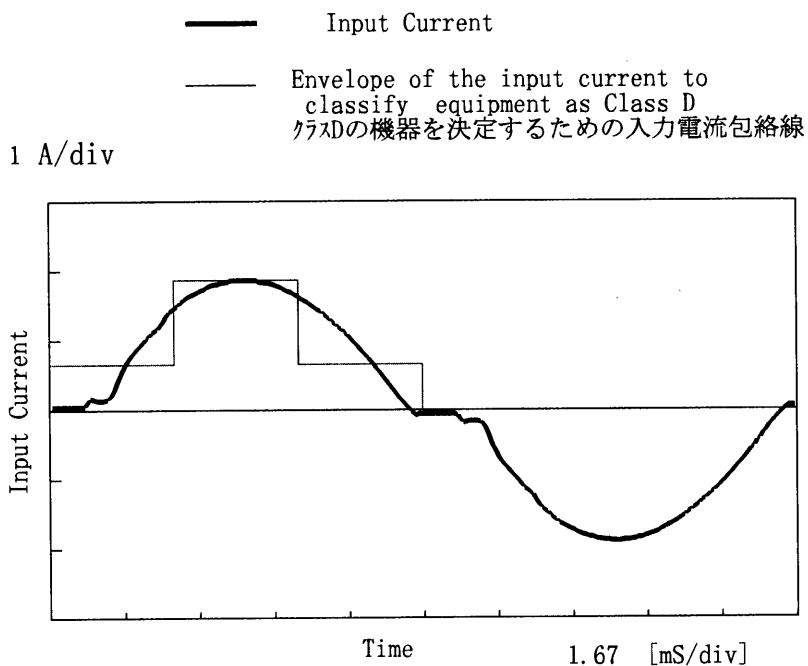
$$* \text{ 定電圧精度(変動率)} = \frac{\text{変動値}}{\text{定格出力電圧}} \times 100$$

Item	Temperature [°C]	Input Voltage [V]	Output Current [A]	Output Voltage [V]	Output Voltage Accuracy [mV]	Output Voltage Accuracy(Ration) [%]
Maximum Voltage	25	85	0.00	15.137	±9	±0.1
Minimum Voltage	50	132	6.70	15.121		

COSEL

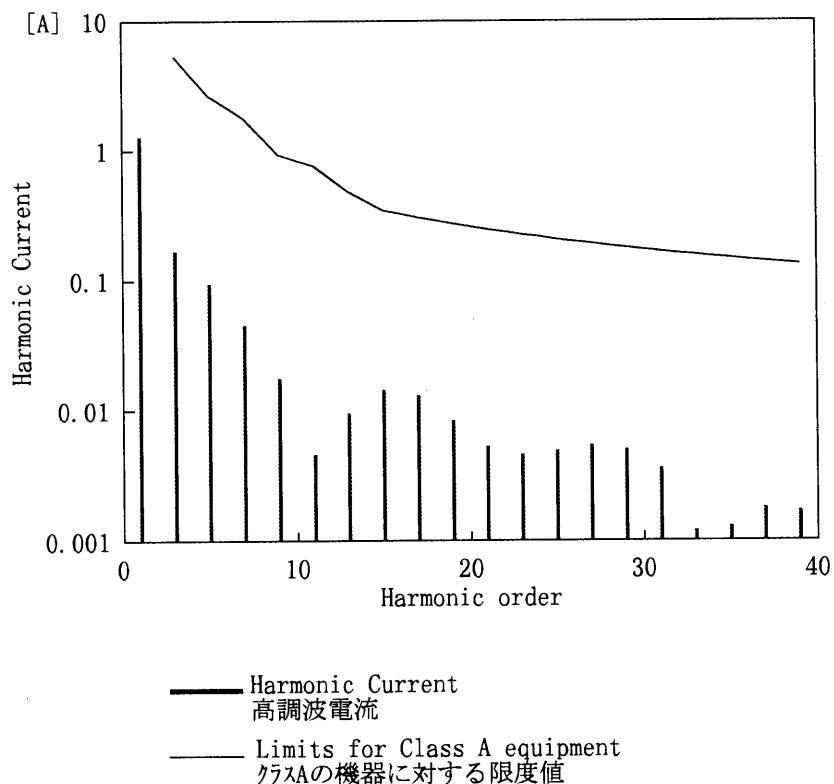
Model	LEA100F-15	Temperature	25°C
Item	Harmonic Current 高調波電流	Testing Circuitry	Figure E
Object	—		

1. Input Current Waveform



Conditions	Values
Input Voltage [V]	99.9
Input Current [A]	1.303
Active Power [W]	128.6
Apparent Power [VA]	130.3
Frequency [Hz]	60
Power Factor	0.987
Output Power [W]	100.5

2. Harmonic Current

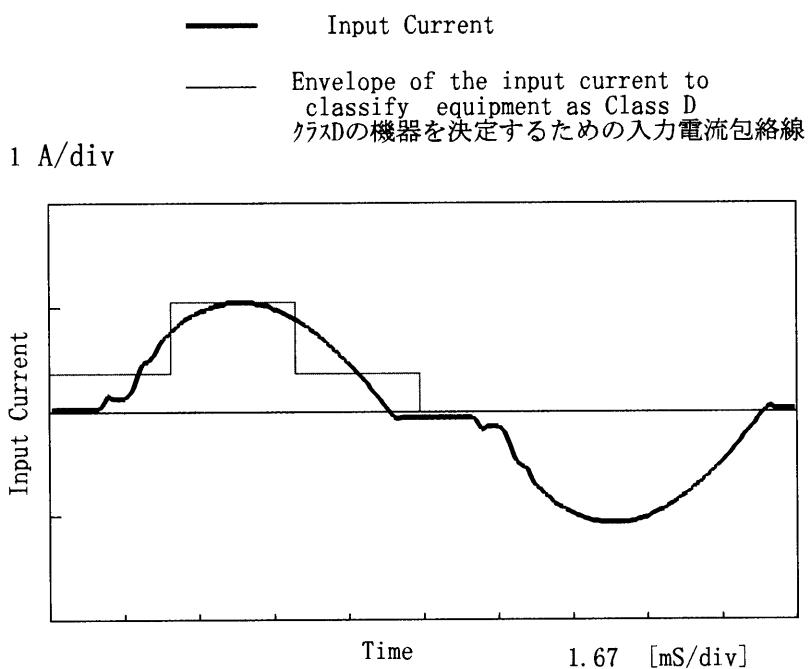


Harmonics order	Limits 限度値 [A]	Values 測定値 [A]
1	—	1.28760
2	—	0.00060
3	5.29530	0.17060
4	—	0.00030
5	2.62462	0.09510
6	—	0.00010
7	1.77277	0.04550
8	—	0.00010
9	0.92092	0.01760
10	—	0.00010
11	0.75976	0.00460
12	—	0.00000
13	0.48348	0.00950
14	—	0.00010
15	0.34535	0.01440
16	—	0.00000
17	0.30472	0.01310
18	—	0.00000
19	0.27264	0.00840
20	—	0.00000
21	0.24668	0.00530
22	—	0.00010
23	0.22523	0.00460
24	—	0.00010
25	0.20721	0.00490
26	—	0.00000
27	0.19186	0.00540
28	—	0.00000
29	0.17863	0.00500
30	—	0.00010
31	0.16710	0.00360
32	—	0.00000
33	0.15698	0.00120
34	—	0.00000
35	0.14801	0.00130
36	—	0.00010
37	0.14000	0.00180
38	—	0.00010
39	0.13283	0.00170
40	—	0.00000

COSEL

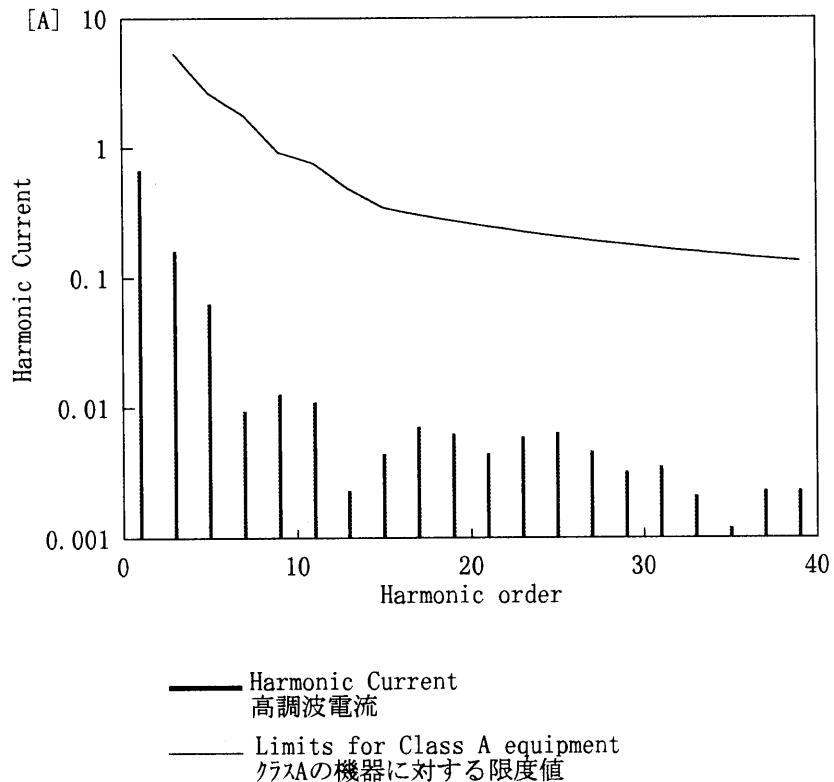
Model	LEA100F-15	Temperature Testing Circuitry	25°C Figure E
Item	Harmonic Current 高調波電流		
Object	<hr/>		

1. Input Current Waveform



Conditions	Values
Input Voltage [V]	100.1
Input Current [A]	0.699
Active Power [W]	67.6
Apparent Power [VA]	70
Frequency [Hz]	60
Power Factor	0.966
Output Power [W]	50.25

2. Harmonic Current



Harmonics order 高調波次数	Limits 限度値 [A]	Values 測定値 [A]
1	—	0.67660
2	—	0.00080
3	5.28472	0.16090
4	—	0.00010
5	2.61938	0.06350
6	—	0.00000
7	1.76923	0.00940
8	—	0.00000
9	0.91908	0.01280
10	—	0.00000
11	0.75824	0.01110
12	—	0.00000
13	0.48252	0.00230
14	—	0.00010
15	0.34466	0.00440
16	—	0.00010
17	0.30411	0.00710
18	—	0.00010
19	0.27210	0.00630
20	—	0.00010
21	0.24618	0.00440
22	—	0.00010
23	0.22478	0.00590
24	—	0.00010
25	0.20679	0.00640
26	—	0.00000
27	0.19148	0.00460
28	—	0.00010
29	0.17827	0.00320
30	—	0.00010
31	0.16677	0.00350
32	—	0.00000
33	0.15666	0.00210
34	—	0.00000
35	0.14771	0.00120
36	—	0.00000
37	0.13973	0.00230
38	—	0.00010
39	0.13256	0.00230
40	—	0.00000



Model	LEA100F-15	
Item	Condensation 結露特性	Testing Circuitry Figure A
Object	+15V 6.7A	

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.

1. 結露特性試験

入力を切った状態で、恒温槽で-10°C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°C、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行い、異常のないことを確認する。

2. Values

Item	Data	Testing Conditions
Output Voltage [V]	15.132	Input Volt.: 100V, Load Current: 6.7A
Line Regulation [mV]	1	Input Volt.: 85~132V, Load Current: 6.7A
Load Regulation [mV]	8	Input Volt.: 100V, Load Current: 0.0~6.7A



Model	LEA100F-15	Temperature	25°C
Item	Leakage Current 漏洩電流	Testing Circuitry	Figure B
Object	<hr/>		

1. Results

Standards	Leakage Current [mA]		
	Input Volt.	Input Volt.	Input Volt.
(A) DENTORI	85 [V]	100 [V]	132 [V]
(B) IEC60950	0.15	0.18	0.24

2. Condition

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

交流入力の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。

Standards	Leakage Current [mA]		
	Input Volt.	Input Volt.	Input Volt.
(A) DENTORI	170 [V]	230 [V]	264 [V]
(B) IEC60950	—	—	—



Model	LEA100F-15	Temperature	25°C
Item	Line Noise Tolerance 入力雑音耐量	Testing Circuitry	Figure C
Object	+15V 6.7A		

1. Results

Pulse Width [nS]	MODE	No protection failure should occur 保護回路の誤動作がない	DC-like Regulation of Output Voltage 出力電圧の直流的変動
50	COMMON	OK	no fluctuation
	NORMAL	OK	no fluctuation
1000	COMMON	OK	no fluctuation
	NORMAL	OK	no fluctuation

Conditions

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

COSEL

Model	LEA100F-15	Temperature Testing Circuitry Figure D	25°C
Item	Conducted Emission 雜音端子電壓		
Object	_____		

1. Graph

Remarks

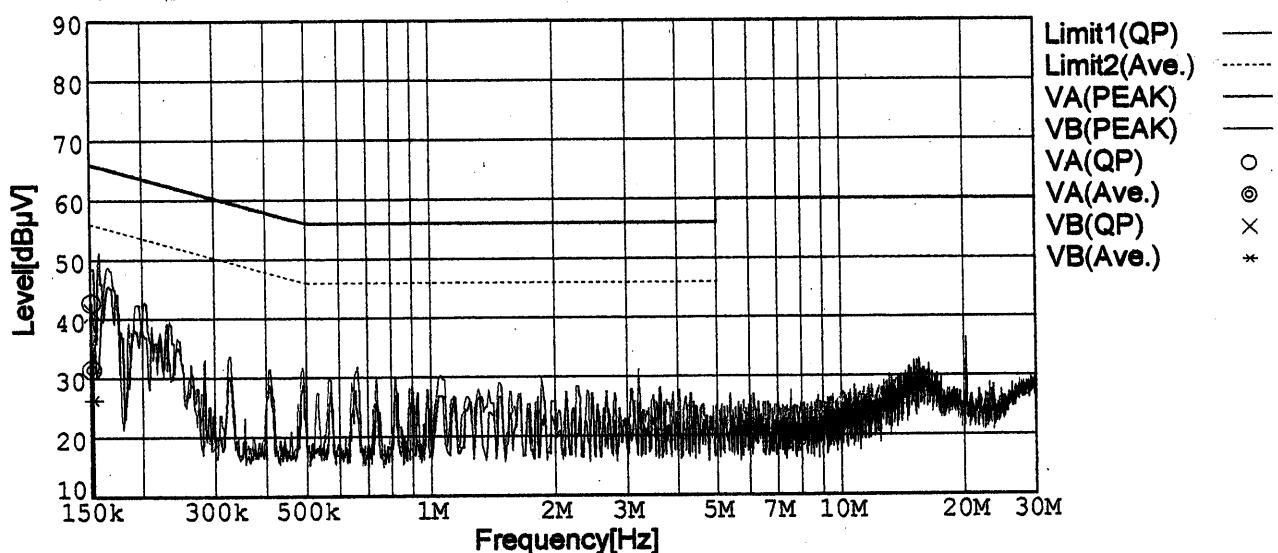
Input Volt. 100V (VCCI Class B)

120V (FCC Class B)

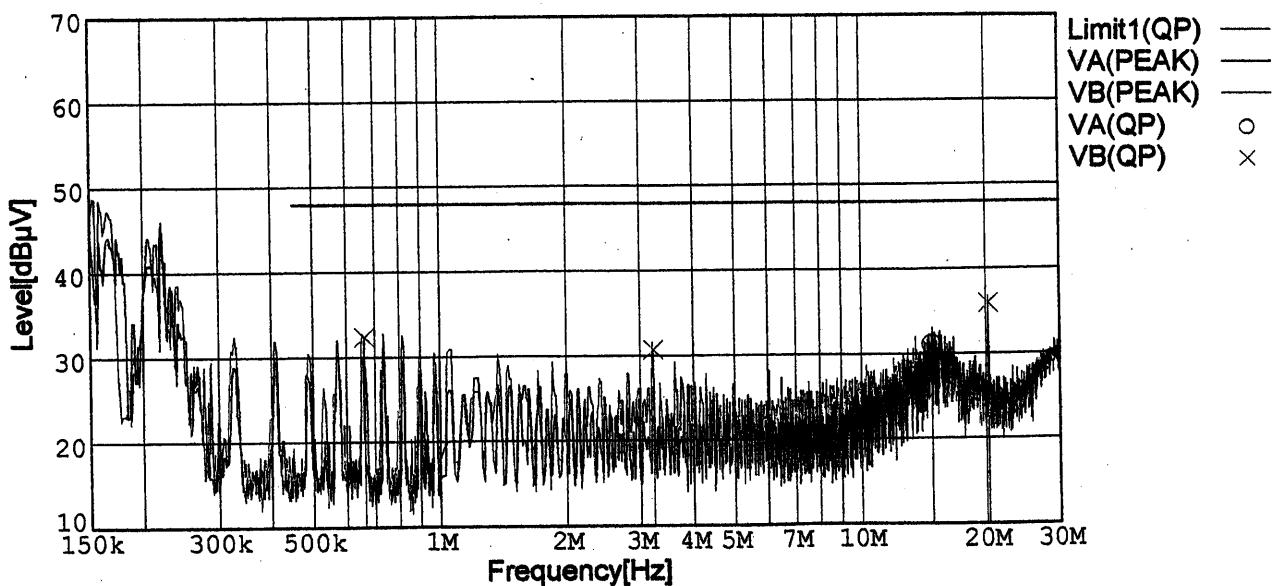
Load 100 %

Limit1: [VCCI] Class B(QP)

Limit2: [VCCI] Class B(Ave.)



Limit1: [FCC Part15] Class B



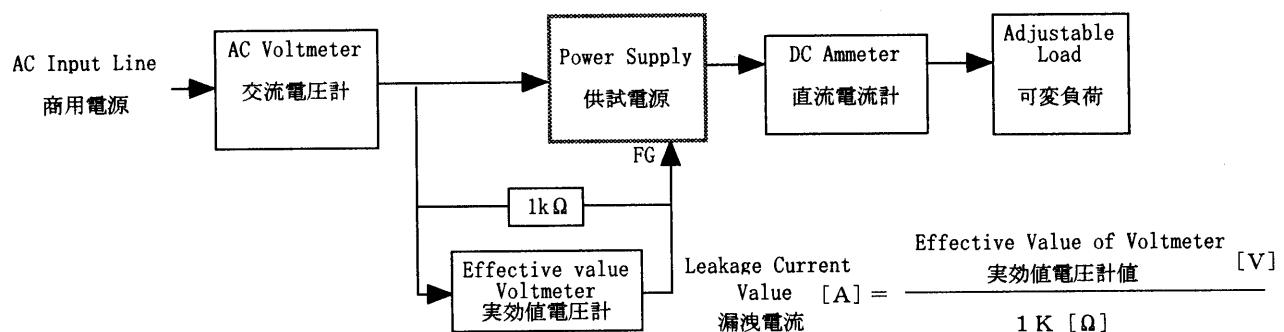
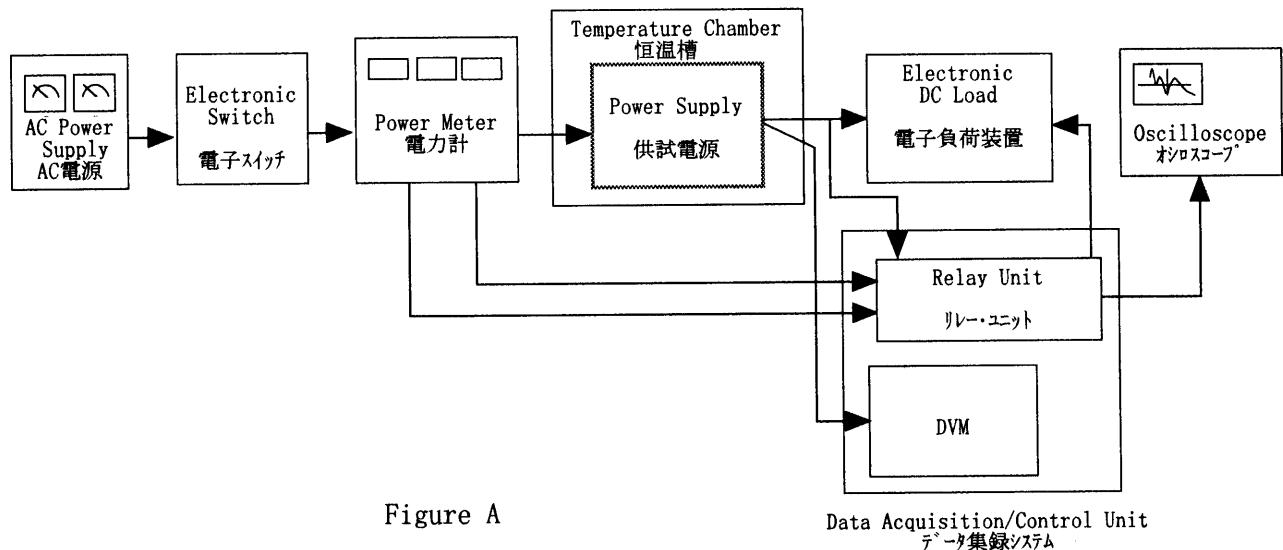


Figure B (DENTORI)

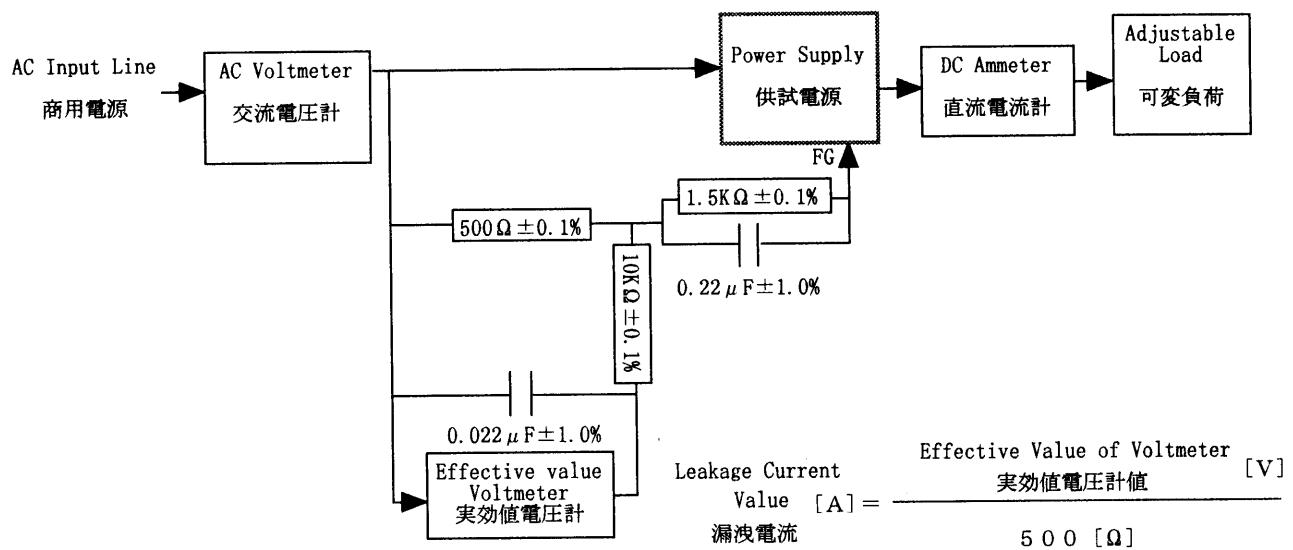


Figure B (IEC60950)

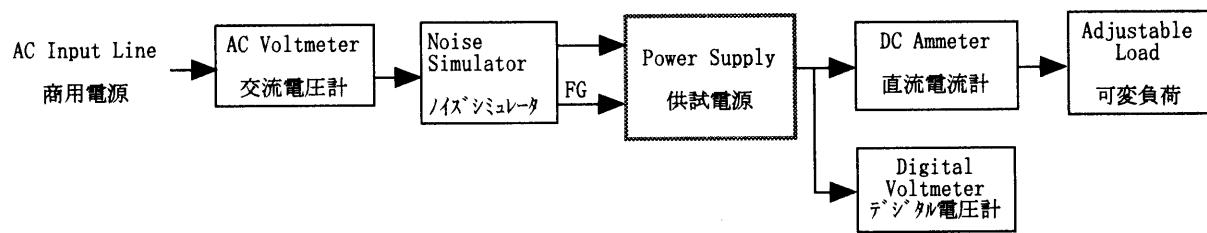


Figure C

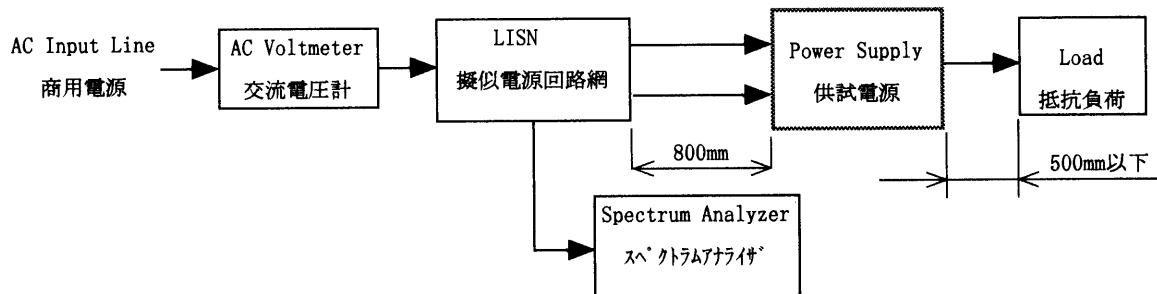


Figure D

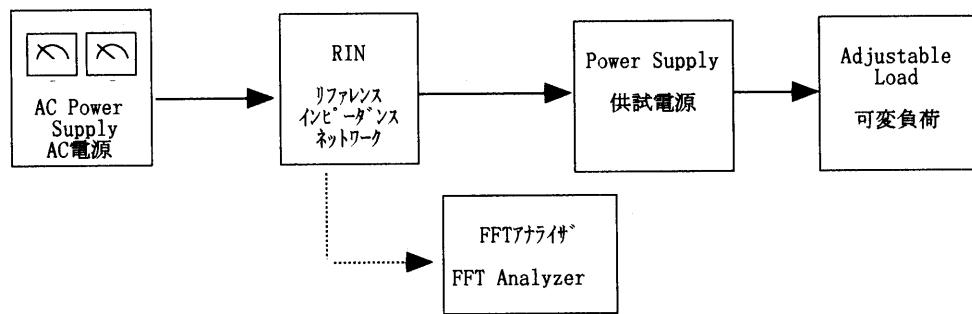


Figure E