



TEST DATA OF LEA50F-15 (100V INPUT)

Regulated DC Power Supply

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コーセル株式会社
COSEL CO., LTD.

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Model	LEA50F-15																																		
Item	Line Regulation 静的入力変動		Temperature 25℃ Testing Circuitry Figure A																																
Object	+15V3.5A																																		
1. Graph		2. Values																																	
<div><div><div>-----□----- Load 50%</div><div>-----△----- Load 100%</div></div><div><div>Output Voltage [V]</div><div><div>Input Voltage [V]</div></div><div>Note: Slanted line shows the range of the rated input voltage.</div><div>(注)斜線は定格入力電圧範囲を示す。</div></div></div>		<table><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><tr><td>75</td><td>15.180</td><td>15.176</td></tr><tr><td>80</td><td>15.180</td><td>15.176</td></tr><tr><td>85</td><td>15.180</td><td>15.176</td></tr><tr><td>90</td><td>15.180</td><td>15.176</td></tr><tr><td>100</td><td>15.180</td><td>15.176</td></tr><tr><td>110</td><td>15.180</td><td>15.176</td></tr><tr><td>120</td><td>15.180</td><td>15.176</td></tr><tr><td>132</td><td>15.180</td><td>15.176</td></tr><tr><td>140</td><td>15.180</td><td>15.176</td></tr></table>		Input Voltage [V]	Load 50%	Load 100%	Output Volt. [V]	Output Volt. [V]	75	15.180	15.176	80	15.180	15.176	85	15.180	15.176	90	15.180	15.176	100	15.180	15.176	110	15.180	15.176	120	15.180	15.176	132	15.180	15.176	140	15.180	15.176
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Model		LEA50F-15	
Item		Input Current (by Load Current) 入力電流 (負荷特性)	
Output		_____	

1. Graph

—△— Input Volt. 85V

---□--- Input Volt. 100V

---○--- Input Volt. 132V

[A]

1

0.8

0.6

0.4

0.2

0

0

1

2

3

4

5

[A]

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。

2. Values

Load Current [A]	Input Current [A]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.00	0.053	0.050	0.046
0.60	0.187	0.161	0.130
1.20	0.317	0.271	0.211
1.80	0.438	0.373	0.287
2.40	0.565	0.479	0.365
3.00	0.693	0.585	0.445
3.50	0.802	0.678	0.512
3.85	0.881	0.739	0.559
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

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Model		LEA50F-15		Temperature Testing Circuitry	25℃ Figure A
Item		Input Power (by Load Current) 入力電力 (負荷特性)			
Output		_____			

1. Graph

—△—

Input Volt. 85V

---□---

Input Volt. 100V

---○---

Input Volt. 132V

[W]

100

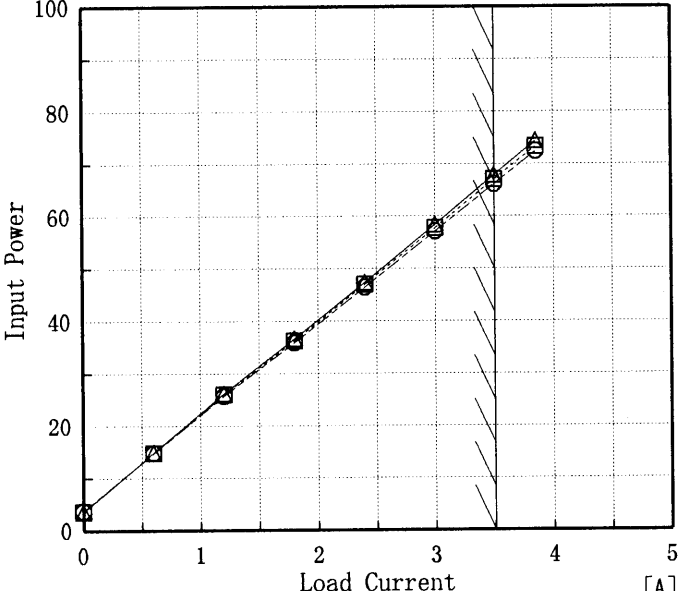
80

60

40

20

0



Load Current

[A]

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。

2. Values

Load Current	Input Power [W]		
	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]
0.00	3.54	3.62	3.72
0.60	14.91	14.83	14.82
1.20	26.13	25.95	25.76
1.80	36.59	36.32	35.95
2.40	47.40	47.00	46.50
3.00	58.35	57.78	57.10
3.50	67.80	67.05	66.10
3.85	74.40	73.30	72.40
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

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Model		LEA50F-15		Temperature		25℃																															
Item		Efficiency (by Input Voltage) 効率 (入力電圧特性)		Testing Circuitry		Figure A																															
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<div><div><div>□</div><div>Load 50%</div></div><div><div>△</div><div>Load 100%</div></div></div> <p>Efficiency [%]</p> <p>Input Voltage [V]</p> <p>Note: Slanted line shows the range of the rated input voltage.</p> <p>(注)斜線は定格入力電圧範囲を示す。</p>				<table><tr><th>Input Voltage [V]</th><th>Load 50% Efficiency [%]</th><th>Load 100% Efficiency [%]</th></tr><tr><td>75</td><td>74.1</td><td>77.2</td></tr><tr><td>80</td><td>74.5</td><td>78.0</td></tr><tr><td>85</td><td>74.7</td><td>78.7</td></tr><tr><td>90</td><td>74.9</td><td>79.1</td></tr><tr><td>100</td><td>75.3</td><td>79.7</td></tr><tr><td>110</td><td>75.6</td><td>80.2</td></tr><tr><td>120</td><td>75.7</td><td>80.5</td></tr><tr><td>132</td><td>75.9</td><td>80.7</td></tr><tr><td>140</td><td>75.9</td><td>80.9</td></tr></table>				Input Voltage [V]	Load 50% Efficiency [%]	Load 100% Efficiency [%]	75	74.1	77.2	80	74.5	78.0	85	74.7	78.7	90	74.9	79.1	100	75.3	79.7	110	75.6	80.2	120	75.7	80.5	132	75.9	80.7	140	75.9	80.9
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Model		LEA50F-15		Temperature		25℃																																																								
Item		Efficiency (by Load Current) 効率 (負荷電流特性)		Testing Circuitry		Figure A																																																								
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<div><div><div>—△—</div><div>Input Volt. 85V</div></div><div><div>---□---</div><div>Input Volt. 100V</div></div><div><div>---○---</div><div>Input Volt. 132V</div></div></div> <div><div><div>Efficiency</div><div>[%]</div></div><div><div>0</div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div><div>Load Current</div><div>[A]</div></div>				<table><tr><th rowspan="2">Load Current</th><th colspan="3">Efficiency [%]</th></tr><tr><th>Input Volt. 85[V]</th><th>Input Volt. 100[V]</th><th>Input Volt. 132[V]</th></tr><tr><td>0.60</td><td>61.3</td><td>61.7</td><td>61.8</td></tr><tr><td>1.20</td><td>70.1</td><td>70.7</td><td>71.2</td></tr><tr><td>1.80</td><td>74.7</td><td>75.3</td><td>76.1</td></tr><tr><td>2.40</td><td>77.1</td><td>77.7</td><td>78.6</td></tr><tr><td>3.00</td><td>78.3</td><td>79.1</td><td>80.1</td></tr><tr><td>3.50</td><td>78.7</td><td>79.7</td><td>80.7</td></tr><tr><td>3.85</td><td>78.8</td><td>80.0</td><td>81.0</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><tr><td>—</td><td>—</td><td>—</td><td>—</td></tr><tr><td>—</td><td>—</td><td>—</td><td>—</td></tr></table>				Load Current	Efficiency [%]			Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]	0.60	61.3	61.7	61.8	1.20	70.1	70.7	71.2	1.80	74.7	75.3	76.1	2.40	77.1	77.7	78.6	3.00	78.3	79.1	80.1	3.50	78.7	79.7	80.7	3.85	78.8	80.0	81.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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Item		Power Factor (by Input Voltage) 力率 (入力電圧特性)																																
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<table><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><tr><td>75</td><td>—</td><td>—</td></tr><tr><td>80</td><td>69</td><td>28</td></tr><tr><td>85</td><td>71</td><td>29</td></tr><tr><td>90</td><td>72</td><td>31</td></tr><tr><td>100</td><td>74</td><td>33</td></tr><tr><td>110</td><td>76</td><td>34</td></tr><tr><td>120</td><td>77</td><td>35</td></tr><tr><td>132</td><td>79</td><td>36</td></tr><tr><td>140</td><td>79</td><td>37</td></tr></table>					Input Voltage [V]	Load 50%	Load 100%	Hold-Up Time [mS]	Hold-Up Time [mS]	75	—	—	80	69	28	85	71	29	90	72	31	100	74	33	110	76	34	120	77	35	132	79	36	140	79	37															
Input Voltage [V]	Load 50%	Load 100%																																																	
	Hold-Up Time [mS]	Hold-Up Time [mS]																																																	
75	—	—																																																	
80	69	28																																																	
85	71	29																																																	
90	72	31																																																	
100	74	33																																																	
110	76	34																																																	
120	77	35																																																	
132	79	36																																																	
140	79	37																																																	
<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> <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。</p> <p>(注) 斜線は定格入力電圧範囲を示す。</p>																																																			

COSEL

Model		LEA50F-15		Temperature		25℃																																																				
Item		Instantaneous Interruption Compensation 瞬時停電保障		Testing Circuitry		Figure A																																																				
Object		+15V3.5A																																																								
1. Graph				2. Values																																																						
<div><div><div>△</div><div>—</div><div>Input Volt. 85 V</div></div><div><div>□</div><div>- - -</div><div>Input Volt. 100 V</div></div><div><div>○</div><div>· · ·</div><div>Input Volt. 132 V</div></div></div> <div><div>Instantaneous Compensation Time [mS]</div><div>1000</div><div>100</div><div>10</div><div>1</div><div>012345</div><div>Load Current [A]</div></div> <div><div>This duration covers from Shut-off of input voltage to the moment when output voltage descends to the rated range of voltage accuracy.</div><div>Note:Slanted line shows the range of the rated load current.</div></div> <div><div>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。</div><div>(注)斜線は定格負荷電流範囲を示す。</div></div>				<table><tr><th rowspan="2">Load Current [A]</th><th>Input Volt. 85[V]</th><th>Input Volt. 100[V]</th><th>Input Volt. 132[V]</th></tr><tr><th colspan="3">Time [mS]</th></tr><tr><td>0.00</td><td>—</td><td>—</td><td>—</td></tr><tr><td>0.60</td><td>186</td><td>188</td><td>202</td></tr><tr><td>1.20</td><td>87</td><td>96</td><td>102</td></tr><tr><td>1.80</td><td>54</td><td>58</td><td>64</td></tr><tr><td>2.40</td><td>37</td><td>42</td><td>48</td></tr><tr><td>3.00</td><td>33</td><td>35</td><td>39</td></tr><tr><td>3.50</td><td>28</td><td>31</td><td>35</td></tr><tr><td>3.85</td><td>24</td><td>28</td><td>32</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]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]	Time [mS]			0.00	—	—	—	0.60	186	188	202	1.20	87	96	102	1.80	54	58	64	2.40	37	42	48	3.00	33	35	39	3.50	28	31	35	3.85	24	28	32	—	—	—	—	—	—	—	—	—	—	—	—
Load Current [A]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]																																																							
	Time [mS]																																																									
0.00	—	—	—																																																							
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3.85	24	28	32																																																							
—	—	—	—																																																							
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COSEL

Model		LEA50F-15		Temperature		25℃																																													
Item		Load Regulation 静的負荷変動		Testing Circuitry		Figure A																																													
Object		+15V3.5A																																																	
1. Graph				2. Values																																															
<div><div><div>—△—</div><div>---□---</div><div>---○---</div></div><div>Input Volt. 85V</div><div>Input Volt. 100V</div><div>Input Volt. 132V</div></div> <div><div><div>Output Voltage</div><div>[V]</div><div>15.32</div><div>15.28</div><div>15.24</div><div>15.20</div><div>15.16</div><div>15.12</div><div>15.08</div><div>0</div></div><div><div>Load Current</div><div>[A]</div><div>0</div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div></div> <div><div>Note: Slanted line shows the range of the rated load current.</div><div>(注)斜線は定格負荷電流範囲を示す。</div></div>				<table><tr><th rowspan="2">Load Current [A]</th><th>Input Volt. 85[V]</th><th>Input Volt. 100[V]</th><th>Input Volt. 132[V]</th></tr><tr><th>Output Volt. [V]</th><th>Output Volt. [V]</th><th>Output Volt. [V]</th></tr><tr><td>0.00</td><td>15.186</td><td>15.186</td><td>15.186</td></tr><tr><td>0.60</td><td>15.184</td><td>15.184</td><td>15.184</td></tr><tr><td>1.20</td><td>15.182</td><td>15.182</td><td>15.182</td></tr><tr><td>1.80</td><td>15.180</td><td>15.180</td><td>15.180</td></tr><tr><td>2.40</td><td>15.179</td><td>15.179</td><td>15.178</td></tr><tr><td>3.00</td><td>15.177</td><td>15.177</td><td>15.177</td></tr><tr><td>3.50</td><td>15.176</td><td>15.176</td><td>15.176</td></tr><tr><td>3.85</td><td>15.175</td><td>15.175</td><td>15.174</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 Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]	Output Volt. [V]	Output Volt. [V]	Output Volt. [V]	0.00	15.186	15.186	15.186	0.60	15.184	15.184	15.184	1.20	15.182	15.182	15.182	1.80	15.180	15.180	15.180	2.40	15.179	15.179	15.178	3.00	15.177	15.177	15.177	3.50	15.176	15.176	15.176	3.85	15.175	15.175	15.174	—	—	—	—	—	—	—	—
Load Current [A]	Input Volt. 85[V]	Input Volt. 100[V]	Input Volt. 132[V]																																																
	Output Volt. [V]	Output Volt. [V]	Output Volt. [V]																																																
0.00	15.186	15.186	15.186																																																
0.60	15.184	15.184	15.184																																																
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3.85	15.175	15.175	15.174																																																
—	—	—	—																																																
—	—	—	—																																																

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

COSEL

Model		LEA50F-15	
Item		Ripple-Noise リップルノイズ	
Object		+15V3.5A	
1. Graph		2. Values	

□

Input Volt. 85V

△

Input Volt. 132V

[mV]

200

175

150

125

100

75

50

25

0

Ripple-Noise

0

1

2

3

4

5

Load Current

[A]

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

T2

Ripple-Noise

[mVp-p]

T1

Fig. Complex Ripple Wave Form

図 リップル波形詳細図

Load current [A]	Input Volt. 85 [V]	Input Volt. 132 [V]
	Ripple-Noise [mV]	Ripple-Noise [mV]
0.00	20	20
0.60	40	40
1.20	45	45
1.80	45	45
2.40	45	45
3.00	45	45
3.50	50	50
3.85	50	50
—	—	—
—	—	—
—	—	—

BC-3188

COSEL

Model		LEA50F-15	
Item		Overvoltage Protection 過電圧保護	
Object		+15V3.5A	

1. Graph

△

Input Volt. 85 V

□

Input Volt. 100 V

○

Input Volt. 132 V

[V]

Operating Point

22.22

21.22

20.22

19.22

18.22

17.22

16.22

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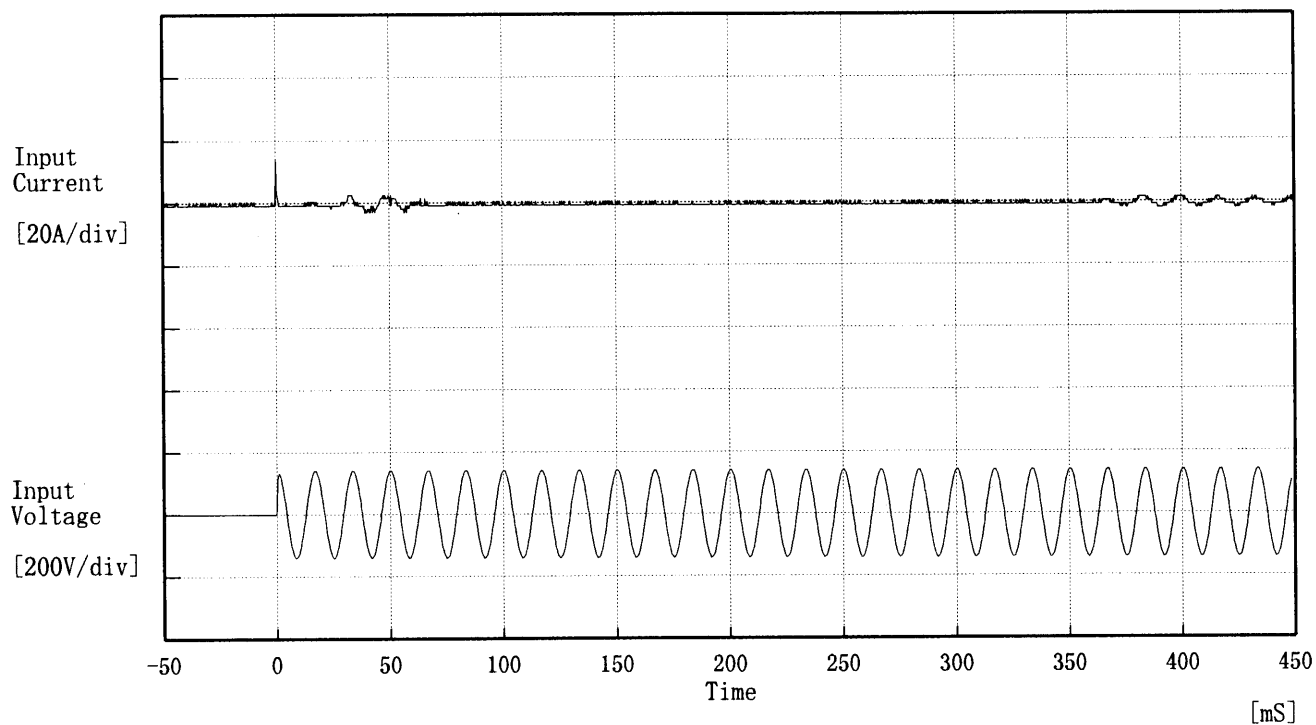
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COSEL

Model	LEA50F-15	Temperature 25°C Testing Circuitry Figure A
Item	Inrush Current 突入電流	
Object		



Input Voltage 100 V

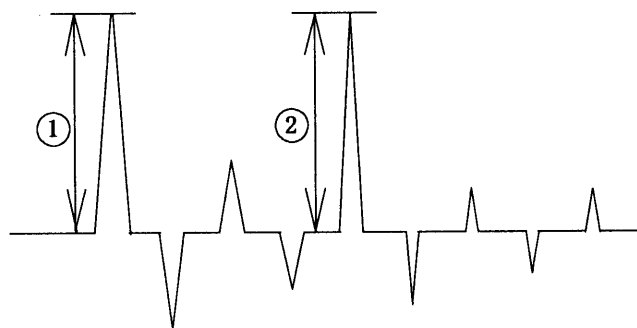
Frequency 60 Hz

Load 100 %

Inrush Current

① 13.76 [A]

② 3.06 [A]



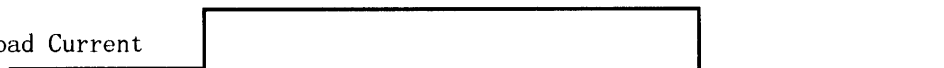
COSEL

Model	LEA50F-15	Temperature 25°C Testing Circuitry Figure A
Item	Dynamic Load Responce 動的負荷変動	
Object	+ 1 5 V 3 . 5 A	

Input Volt. 100 V

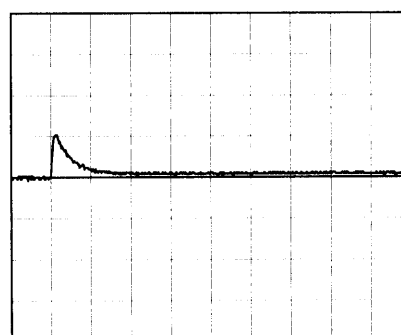
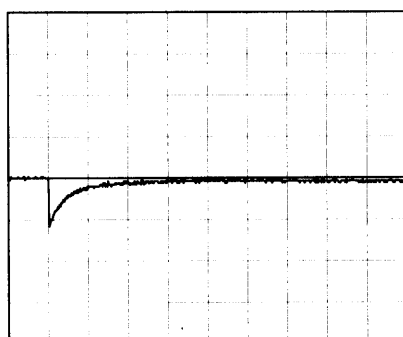
Cycle 1000 mS

Load Current



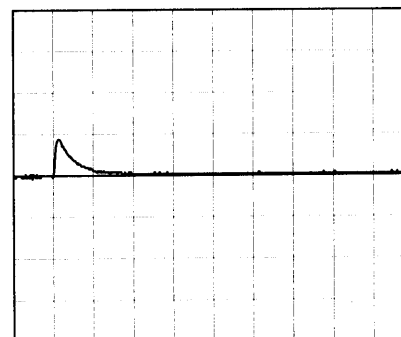
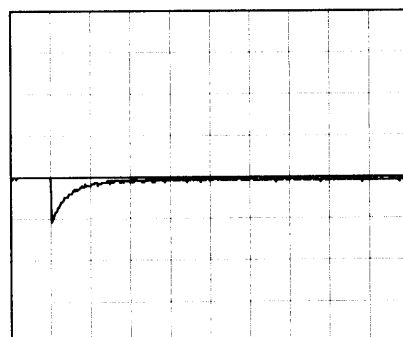
Min. Load ↔

Load 100 %



Min. Load ↔

Load 50 %



100 mV/div

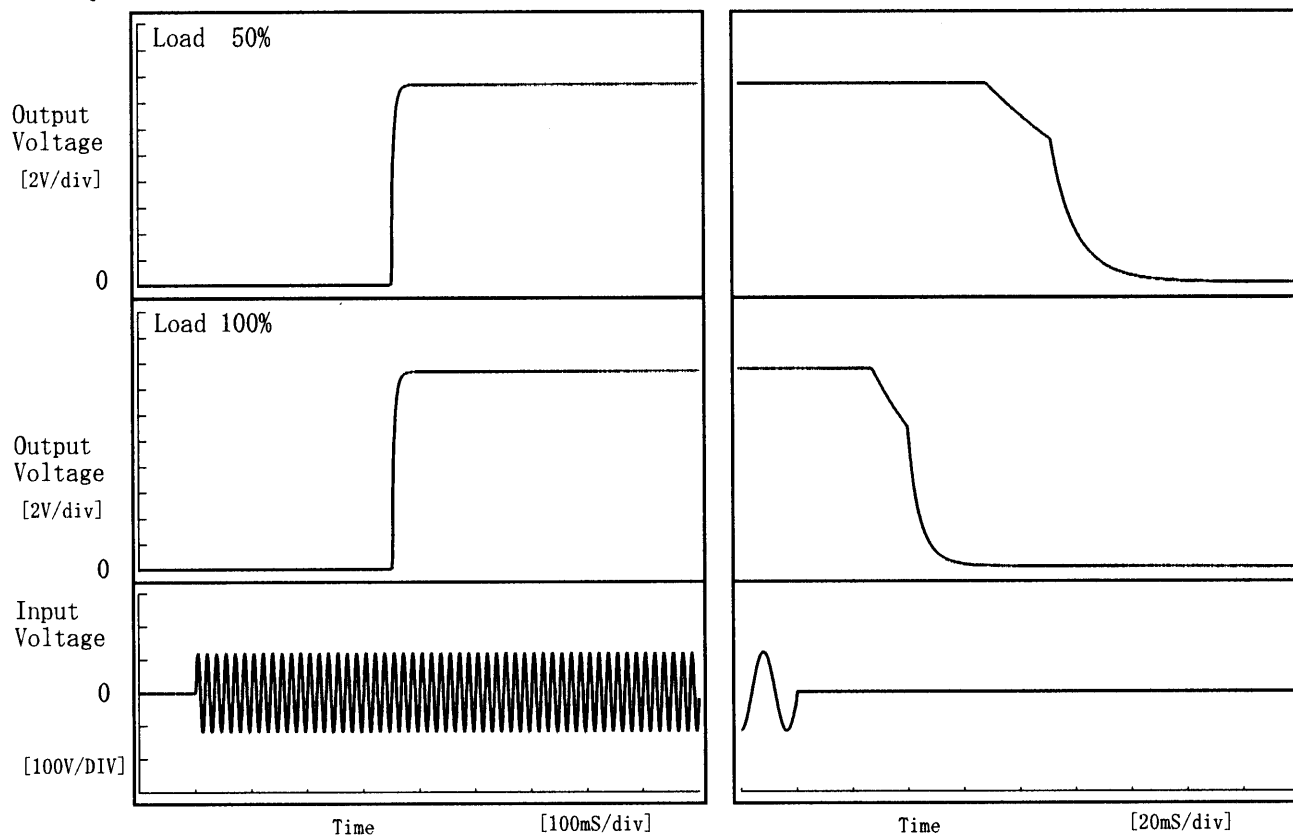
10 ms/div

COSEL

Model	LEA50F-15	Temperature	25°C
Item	Rise and Fall Time 立上り、立下り時間	Testing Circuitry	Figure A
Object	+15V3.5A		

1. Graph

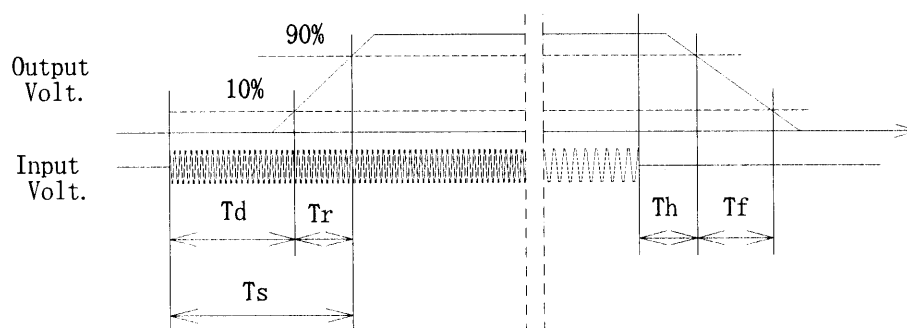
Input Volt. 85 V



2. Values

[mS]

Load \ Time	T d	T r	T s	T h	T f
50 %	351.5	10.0	361.5	77.9	33.5
100 %	352.0	9.5	361.5	32.4	17.4



COSEL

COSEL	
Model	LEA50F-15
Item	Ambient Temperature Drift 周囲温度変動
Object	+15V3.5A

1. Graph

△

Input Volt. 85V

□

Input Volt. 100V

○

Input Volt. 132V

[V]

15.31

15.27

15.23

15.19

15.15

15.11

15.07

0

Output Voltage

-30

-10

10

30

50

70

Ambient Temperature

[°C]

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。

2. Values

Temperature	Input Volt.	Input Volt.	Input Volt.
	85[V]	100[V]	132[V]
[°C]	Output Volt. [V]	Output Volt. [V]	Output Volt. [V]
-20	15.170	15.170	15.170
-10	15.171	15.170	15.171
0	15.171	15.171	15.171
10	15.172	15.172	15.172
20	15.173	15.173	15.173
25	15.173	15.173	15.173
30	15.175	15.175	15.175
40	15.171	15.171	15.171
50	15.165	15.164	15.164
60	15.156	15.155	15.155
—	—	—	—

COSEL

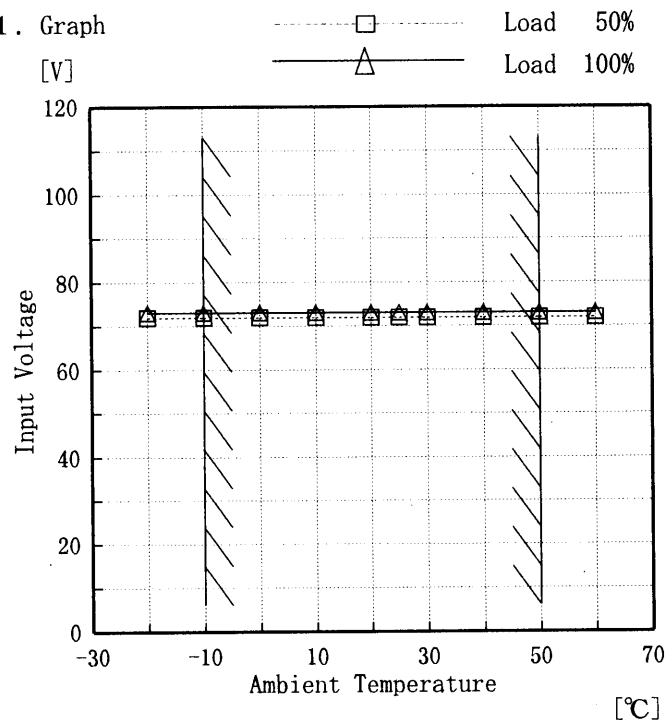
Model LEA50F-15

Item Minimum Input Voltage for Regulated Output Voltage
最低レギュレーション電圧

Object +15V3.5A

Testing Circuitry Figure A

1. Graph



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

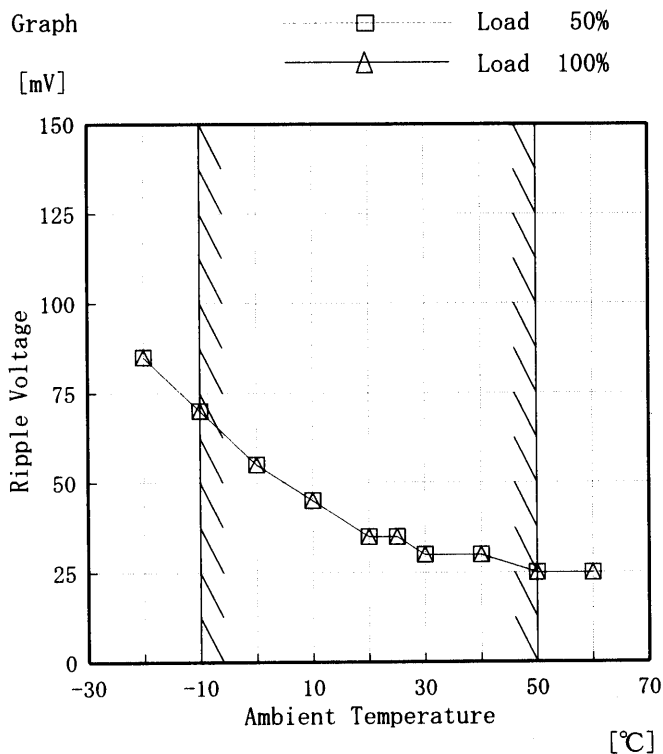
Model LEA50F-15

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

Object +15V3.5A

Testing Circuitry Figure A

1. Graph



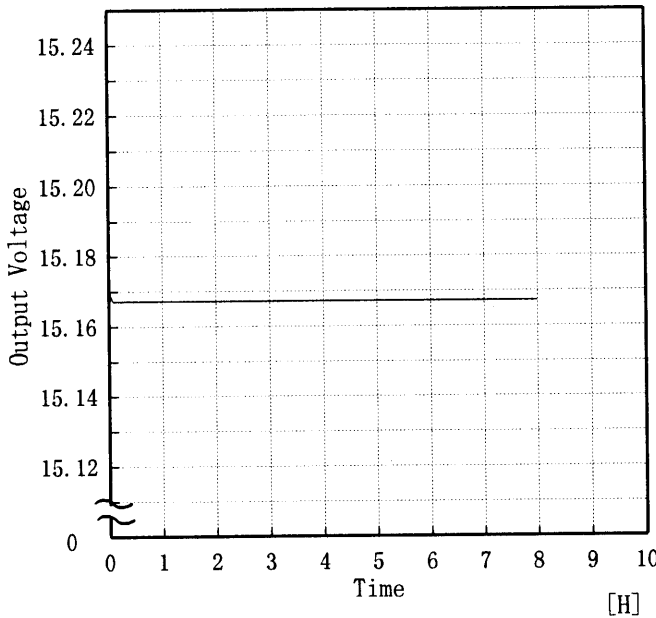
Note: Slanted line shows the range of the rated ambient temperature.

(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	85	85
-10	70	70
0	55	55
10	45	45
20	35	35
25	35	35
30	30	30
40	30	30
50	25	25
60	25	25
—	—	—

COSEL

COSEL																									
Model	LEA50F-15																								
Item	Time Lapse Drift 経時ドリフト	Temperature	25 ℃																						
		Testing Circuitry	Figure A																						
Object	+15V3.5A																								
1. Graph		2.Values																							
<div>[V]</div> <div></div> <div>Output Voltage</div> <div>Time</div> <div>[H]</div> <div>Input Volt. 100V</div> <div>Load 100%</div>		<table><tr><th>Time since start [H]</th><th>Output Voltage [V]</th></tr><tr><td>0.0</td><td>15.175</td></tr><tr><td>0.5</td><td>15.167</td></tr><tr><td>1.0</td><td>15.167</td></tr><tr><td>2.0</td><td>15.167</td></tr><tr><td>3.0</td><td>15.167</td></tr><tr><td>4.0</td><td>15.167</td></tr><tr><td>5.0</td><td>15.167</td></tr><tr><td>6.0</td><td>15.167</td></tr><tr><td>7.0</td><td>15.167</td></tr><tr><td>8.0</td><td>15.167</td></tr></table>		Time since start [H]	Output Voltage [V]	0.0	15.175	0.5	15.167	1.0	15.167	2.0	15.167	3.0	15.167	4.0	15.167	5.0	15.167	6.0	15.167	7.0	15.167	8.0	15.167
Time since start [H]	Output Voltage [V]																								
0.0	15.175																								
0.5	15.167																								
1.0	15.167																								
2.0	15.167																								
3.0	15.167																								
4.0	15.167																								
5.0	15.167																								
6.0	15.167																								
7.0	15.167																								
8.0	15.167																								

COSEL

Model	LEA50F-15	Testing Circuitry Figure A
Item	Output Voltage Accuracy 定電圧精度	
Object	+15V3.5A	

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 : 0.00~3.5 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 : 85~132 V

負荷電流 : 0.00~3.5 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	25	132	0.00	15.187	±13	±0.1
Minimum Voltage	50	132	3.50	15.162		

COSEL

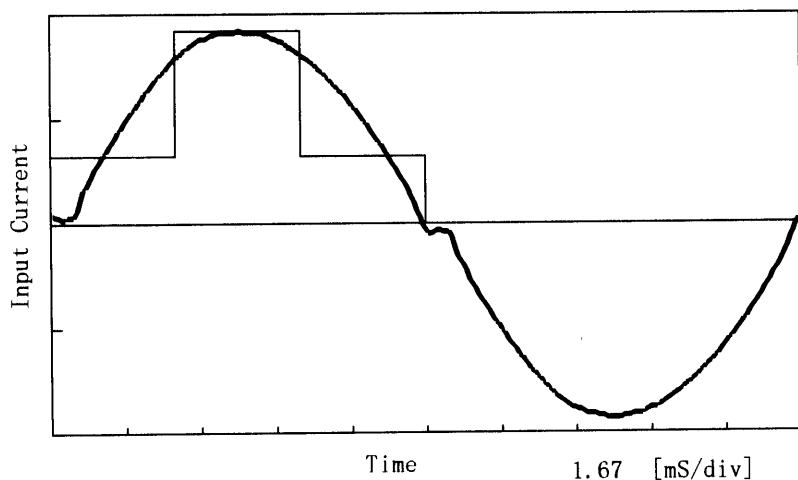
Model LEA50F-15
 Item Harmonic Current
 高調波電流
 Object

Temperature 25°C
 Testing Circuitry Figure E

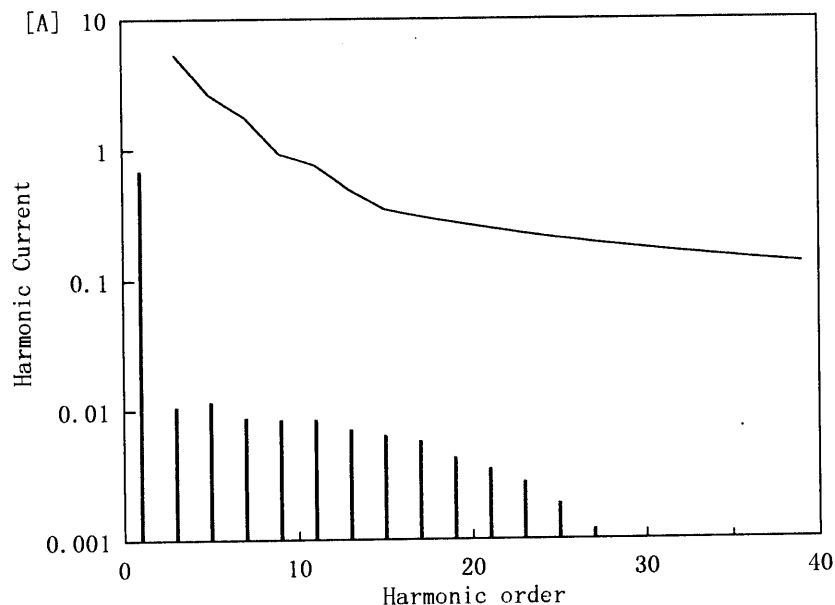
1. Input Current Waveform

— Input Current
 — Envelope of the input current to
 classify equipment as Class D
 クラスDの機器を決定するための入力電流包絡線

0.5 A/div



2. Harmonic Current



— Harmonic Current
 高調波電流
 — Limits for Class A equipment
 クラスAの機器に対する限度値

Conditions	Values
Input Voltage [V]	100.1
Input Current [A]	0.685
Active Power [W]	68.5
Apparent Power [VA]	68.6
Frequency [Hz]	60
Power Factor	0.999
Output Power [W]	52.5

Harmonics order 高調波次数	Limits 限度値 [A]	Values 測定値 [A]
1	—	0.68530
2	—	0.00030
3	5.28472	0.01070
4	—	0.00020
5	2.61938	0.01160
6	—	0.00010
7	1.76923	0.00880
8	—	0.00010
9	0.91908	0.00850
10	—	0.00010
11	0.75824	0.00850
12	—	0.00010
13	0.48252	0.00710
14	—	0.00010
15	0.34466	0.00640
16	—	0.00010
17	0.30411	0.00580
18	—	0.00010
19	0.27210	0.00430
20	—	0.00010
21	0.24618	0.00350
22	—	0.00010
23	0.22478	0.00280
24	—	0.00010
25	0.20679	0.00190
26	—	0.00010
27	0.19148	0.00120
28	—	0.00010
29	0.17827	0.00090
30	—	0.00010
31	0.16677	0.00040
32	—	0.00010
33	0.15666	0.00000
34	—	0.00010
35	0.14771	0.00010
36	—	0.00010
37	0.13973	0.00050
38	—	0.00000
39	0.13256	0.00060
40	—	0.00000

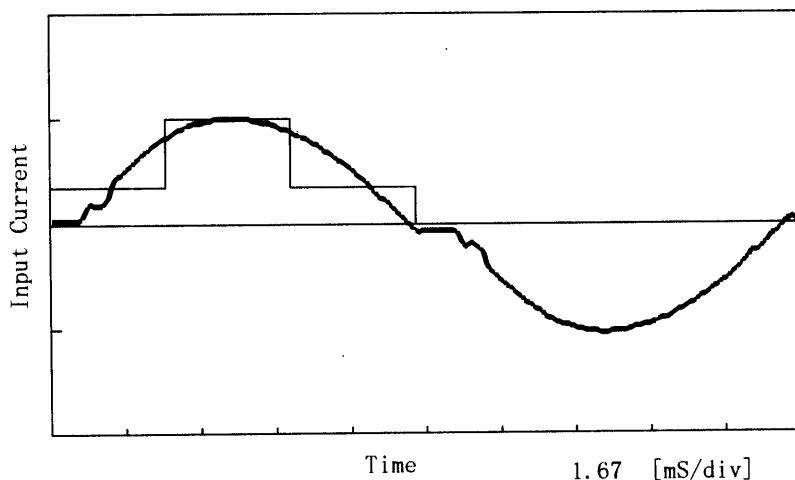
COSEL

Model	LEA50F-15	Temperature	25°C
Item	Harmonic Current 高調波電流	Testing Circuitry	Figure E
Object			

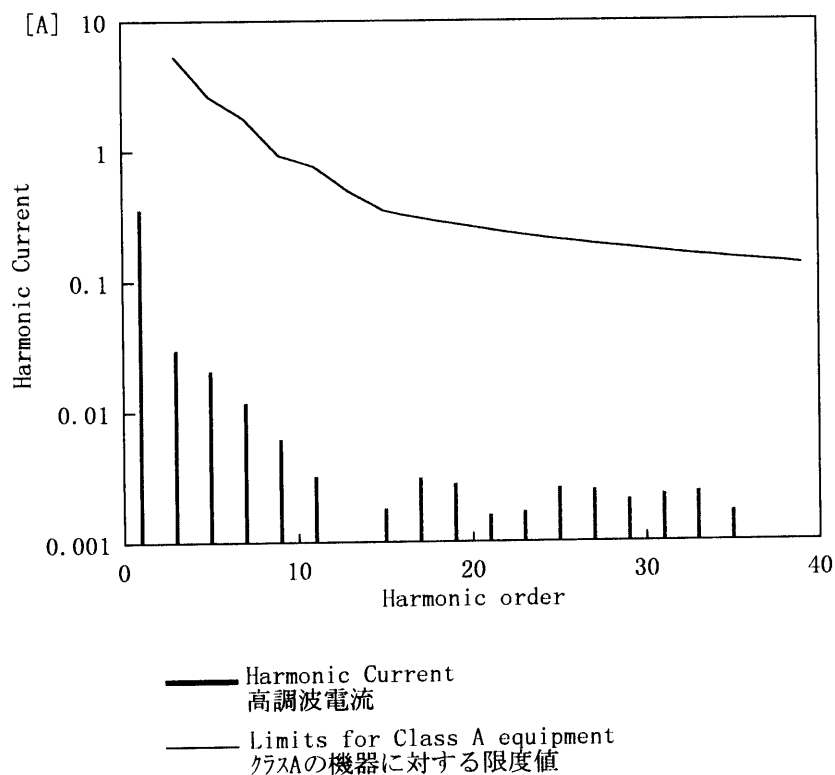
1. Input Current Waveform

— Input Current
— Envelope of the input current to classify equipment as Class D
クラスDの機器を決定するための入力電流包絡線

0.5 A/div



2. Harmonic Current



Conditions	Values
Input Voltage [V]	100.2
Input Current [A]	0.362
Active Power [W]	35.9
Apparent Power [VA]	36.3
Frequency [Hz]	60
Power Factor	0.989
Output Power [W]	26.25

Harmonics order 高調波次数	Limits 限度値 [A]	Values 測定値 [A]
1	—	0.36000
2	—	0.00030
3	5.27944	0.03010
4	—	0.00010
5	2.61677	0.02080
6	—	0.00010
7	1.76747	0.01180
8	—	0.00000
9	0.91816	0.00620
10	—	0.00010
11	0.75749	0.00320
12	—	0.00010
13	0.48204	0.00090
14	—	0.00010
15	0.34431	0.00180
16	—	0.00000
17	0.30380	0.00310
18	—	0.00000
19	0.27182	0.00280
20	—	0.00010
21	0.24594	0.00160
22	—	0.00000
23	0.22455	0.00170
24	—	0.00010
25	0.20659	0.00260
26	—	0.00000
27	0.19128	0.00250
28	—	0.00010
29	0.17809	0.00210
30	—	0.00000
31	0.16660	0.00230
32	—	0.00000
33	0.15651	0.00240
34	—	0.00000
35	0.14756	0.00170
36	—	0.00000
37	0.13959	0.00070
38	—	0.00010
39	0.13243	0.00080
40	—	0.00000

COSEL

Model		LEA50F-15	Testing Circuitry	Figure A
Item		Condensation 結露特性		
Object		+15V3.5A		
1. Condensation test				
Testing procedure is as follows.				
① Keeping and cooling the unit in a tank at -10℃ 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℃ 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℃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行い、異常のないことを確認する。				
2. Values				
Item		Data	Testing Conditions	
Output Voltage [V]		15.325	Input Volt.: 100V, Load Current:3.5A	
Line Regulation [mV]		1	Input Volt.: 85~132V, Load Current:3.5A	
Load Regulation [mV]		10	Input Volt.: 100V, Load Current:0.0~3.5A	

COSEL

Model	LEA50F-15	Temperature	25°C
Item	Leakage Current 漏洩電流	Testing Circuitry	Figure B
Object	_____		

1. Results

Standards	Leakage Current [mA]		
	Input Volt. 85 [V]	Input Volt. 100 [V]	Input Volt. 132 [V]
(A) DENTORI	0.16	0.18	0.24
(B) IEC60950	0.16	0.18	0.24

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

2. Condition

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

交流入力の高相について測定し、その大きい方を漏洩電流測定値とする。

COSEL

Model	LEA50F-15	Temperature Testing Circuitry	25°C Figure C
Item	Line Noise Tolerance 入力雑音耐量		
Object	+15V3.5A		

1. Results

Pulse Width [n S]	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	LEA50F-15	Temperature	25°C
Item	Conducted Emission 雑音端子電圧	Testing Circuitry	Figure D
Object			

1. Graph

Remarks

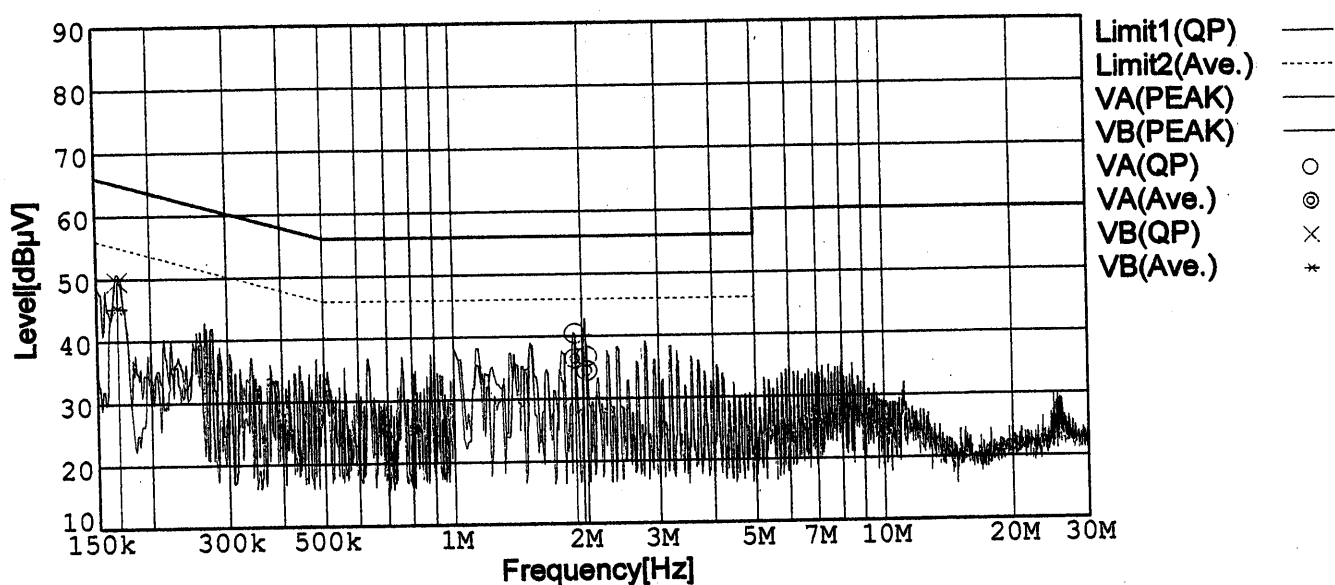
Input Volt. 100V (VCCI Class B)

120V (FCC Class B)

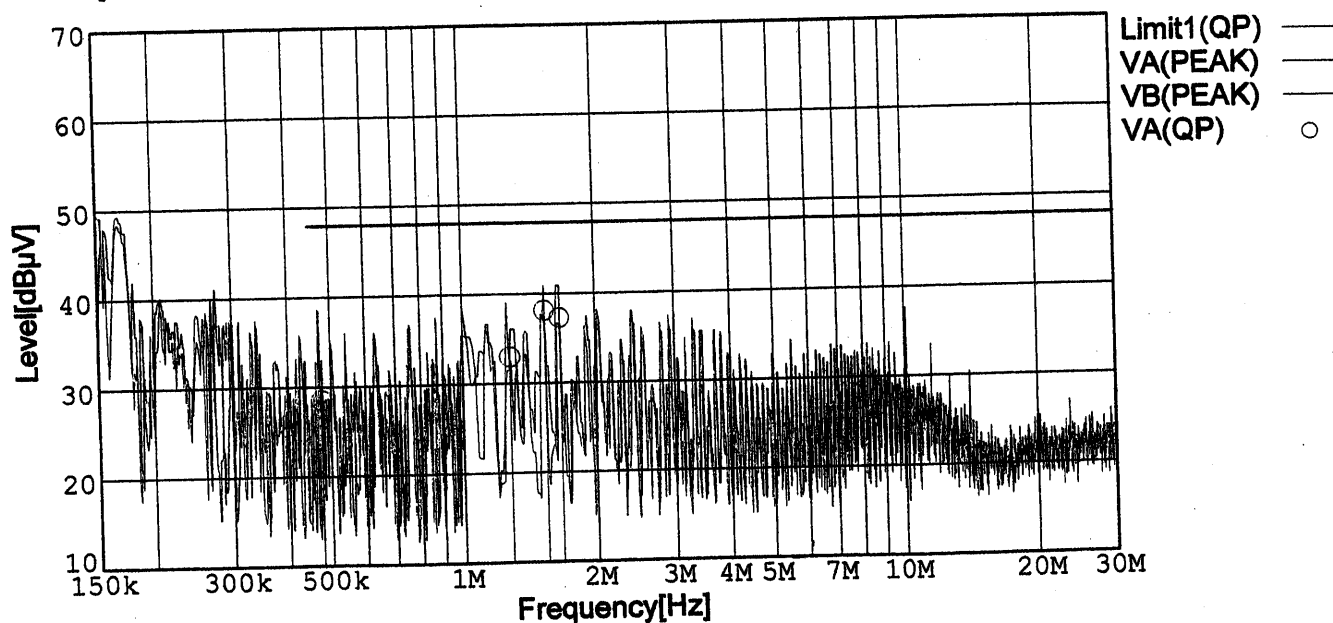
Load 100 %

Limit1: [VCCI] Class B(QP)

Limit2: [VCCI] Class B(Ave.)



Limit1: [FCC Part15] Class B



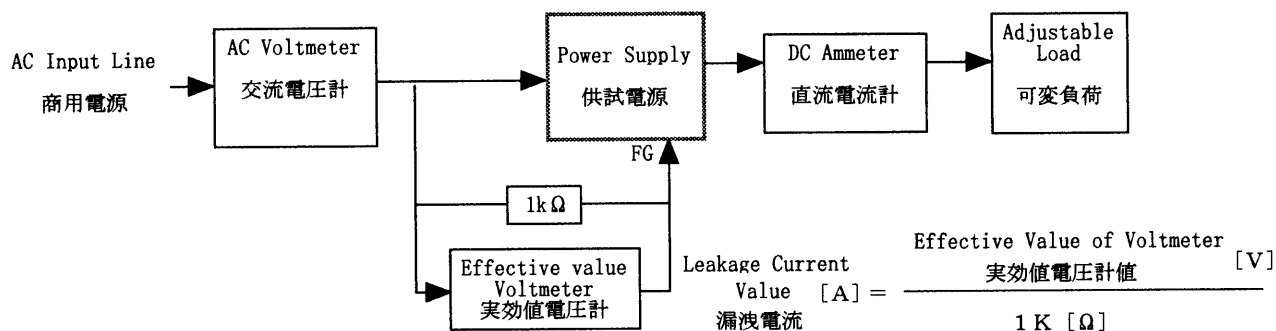
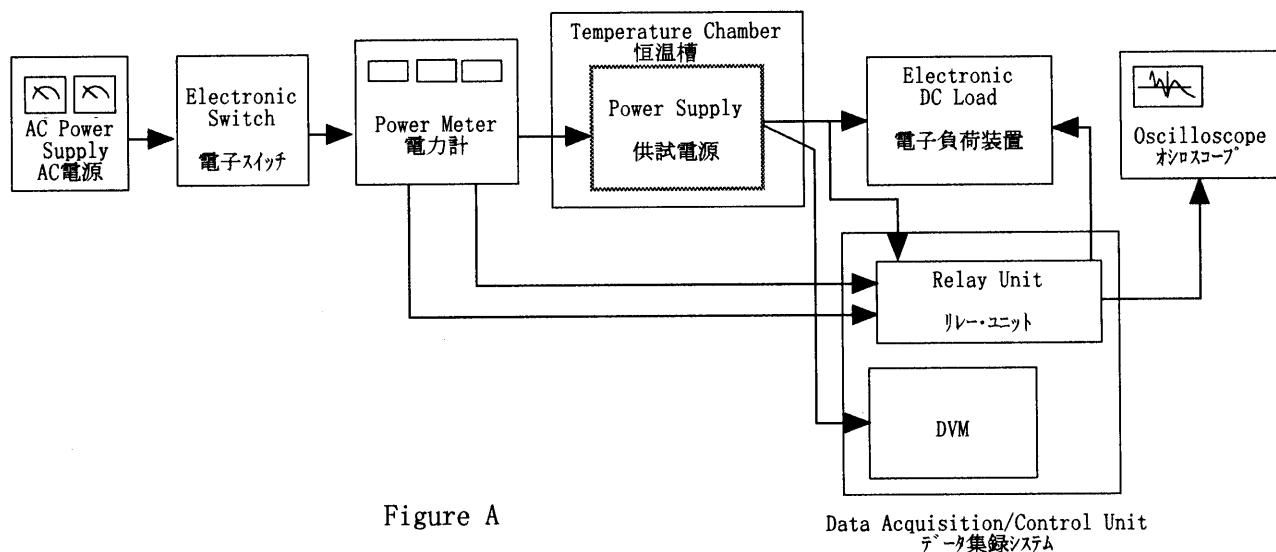


Figure B (DENTORI)

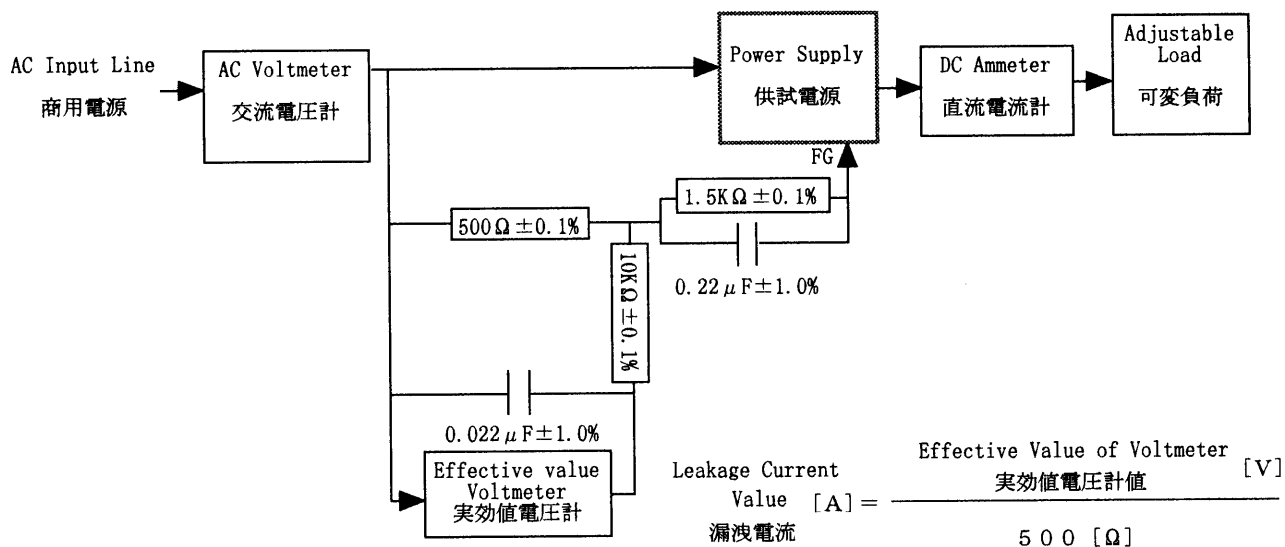


Figure B (IEC60950)

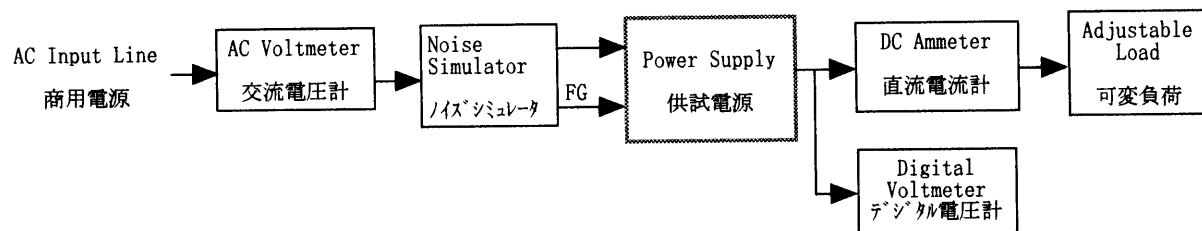


Figure C

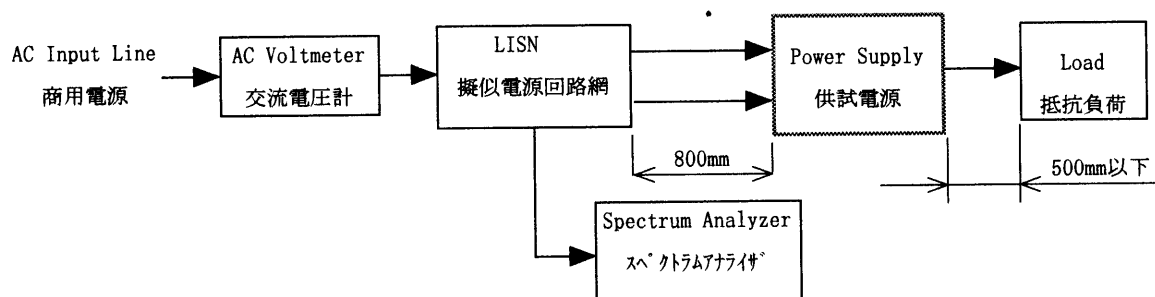


Figure D

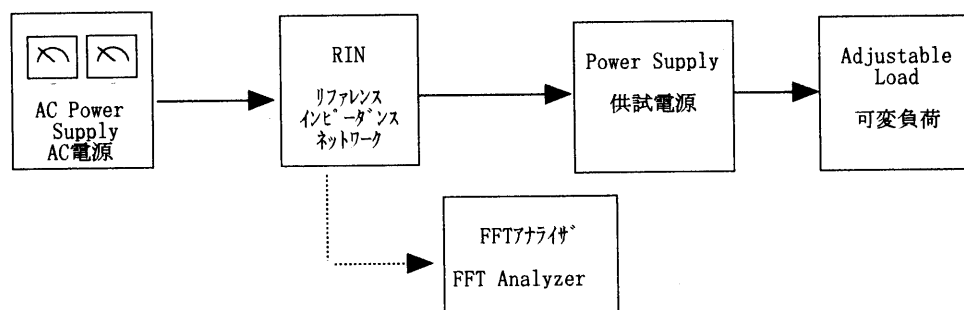


Figure E