



TEST DATA OF LFA75F-3R3-Y

Regulated DC Power Supply
August 10, 2009

Approved by : Yoshiaki Shimizu
Yoshiaki Shimizu Design Manager

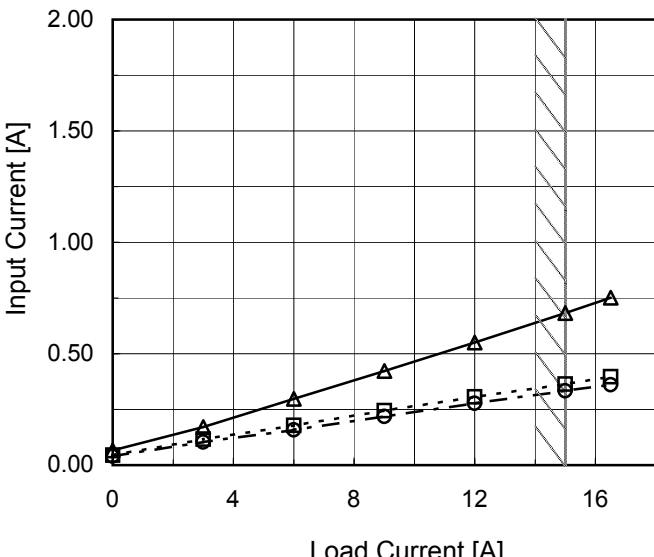
Prepared by : Koji Takahashi
Koji Takahashi Design Engineer

COSEL CO.,LTD.

CONTENTS

1.Input Current (by Load Current)	1
2.Input Power (by Load Current)	2
3.Efficiency (by Input Voltage)	3
4.Efficiency (by Load Current)	4
5.Power Factor (by Input Voltage)	5
6.Power Factor (by Load Current)	6
7.Inrush Current	7
8.Leakage Current	8
9.Line Regulation	9
10.Load Regulation	10
11.Dynamic Load Response	11
12.Ripple Voltage (by Load Current)	12
13.Ripple-Noise	13
14.Ripple Voltage (by Ambient Temperature)	14
15.Ambient Temperature Drift	15
16.Output Voltage Accuracy	16
17.Time Lapse Drift	17
18.Rise and Fall Time	18
19.Hold-Up Time	19
20.Instantaneous Interruption Compensation	20
21.Minimum Input Voltage for Regulated Output Voltage	21
22.Overcurrent Protection	22
23.Overvoltage Protection	23
24.Figure of Testing Circuitry	24

(Final Page 25)

Model	LFA75F-3R3-Y																																																					
Item	Input Current (by Load Current)	Temperature	25°C																																																			
Object	_____	Testing Circuitry	Figure A																																																			
1.Graph		2.Values																																																				
<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>  <p>Note: Slanted line shows the range of the rated load current.</p>		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">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>0.066</td><td>0.045</td><td>0.040</td></tr><tr><td>3.0</td><td>0.171</td><td>0.116</td><td>0.103</td></tr><tr><td>6.0</td><td>0.298</td><td>0.178</td><td>0.159</td></tr><tr><td>9.0</td><td>0.422</td><td>0.244</td><td>0.218</td></tr><tr><td>12.0</td><td>0.550</td><td>0.306</td><td>0.277</td></tr><tr><td>15.0</td><td>0.683</td><td>0.363</td><td>0.334</td></tr><tr><td>16.5</td><td>0.752</td><td>0.396</td><td>0.361</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 [A]	Input Current [A]			Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]	0.0	0.066	0.045	0.040	3.0	0.171	0.116	0.103	6.0	0.298	0.178	0.159	9.0	0.422	0.244	0.218	12.0	0.550	0.306	0.277	15.0	0.683	0.363	0.334	16.5	0.752	0.396	0.361	--	-	-	-	--	-	-	-	--	-	-	-	--	-	-	-
Load Current [A]	Input Current [A]																																																					
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]																																																			
0.0	0.066	0.045	0.040																																																			
3.0	0.171	0.116	0.103																																																			
6.0	0.298	0.178	0.159																																																			
9.0	0.422	0.244	0.218																																																			
12.0	0.550	0.306	0.277																																																			
15.0	0.683	0.363	0.334																																																			
16.5	0.752	0.396	0.361																																																			
--	-	-	-																																																			
--	-	-	-																																																			
--	-	-	-																																																			
--	-	-	-																																																			

Model	LFA75F-3R3-Y																																																					
Item	Input Power (by Load Current)	Temperature	25°C																																																			
		Testing Circuitry	Figure A																																																			
Object	_____																																																					
1.Graph		2.Values																																																				
<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>Note: Slanted line shows the range of the rated load current.</p>		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Input Power [W]</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>3.20</td><td>4.30</td><td>3.70</td></tr><tr><td>3.0</td><td>15.60</td><td>16.00</td><td>16.30</td></tr><tr><td>6.0</td><td>28.20</td><td>28.30</td><td>28.30</td></tr><tr><td>9.0</td><td>40.70</td><td>40.60</td><td>40.40</td></tr><tr><td>12.0</td><td>53.60</td><td>53.10</td><td>52.90</td></tr><tr><td>15.0</td><td>66.60</td><td>65.20</td><td>65.40</td></tr><tr><td>16.5</td><td>73.70</td><td>72.10</td><td>72.10</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 [A]	Input Power [W]			Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]	0.0	3.20	4.30	3.70	3.0	15.60	16.00	16.30	6.0	28.20	28.30	28.30	9.0	40.70	40.60	40.40	12.0	53.60	53.10	52.90	15.0	66.60	65.20	65.40	16.5	73.70	72.10	72.10	--	-	-	-	--	-	-	-	--	-	-	-	--	-	-	-
Load Current [A]	Input Power [W]																																																					
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]																																																			
0.0	3.20	4.30	3.70																																																			
3.0	15.60	16.00	16.30																																																			
6.0	28.20	28.30	28.30																																																			
9.0	40.70	40.60	40.40																																																			
12.0	53.60	53.10	52.90																																																			
15.0	66.60	65.20	65.40																																																			
16.5	73.70	72.10	72.10																																																			
--	-	-	-																																																			
--	-	-	-																																																			
--	-	-	-																																																			
--	-	-	-																																																			

Model	LFA75F-3R3-Y																																		
Item	Efficiency (by Input Voltage)	Temperature	25°C																																
		Testing Circuitry	Figure A																																
Object	_____																																		
1.Graph		2.Values																																	
<div><div><div>---</div><div>□</div><div>---</div></div><div>Load 50%</div></div> <div><div>—</div><div>△</div><div>—</div></div> <div>Load 100%</div> <table><thead><tr><th rowspan="2">Input Voltage [V]</th><th colspan="2">Efficiency [%]</th></tr><tr><th>Load 50%</th><th>Load 100%</th></tr></thead><tbody><tr><td>75</td><td>71.0</td><td>71.6</td></tr><tr><td>85</td><td>71.6</td><td>72.6</td></tr><tr><td>100</td><td>72.0</td><td>73.5</td></tr><tr><td>120</td><td>72.2</td><td>74.1</td></tr><tr><td>200</td><td>71.8</td><td>75.1</td></tr><tr><td>230</td><td>71.8</td><td>74.8</td></tr><tr><td>264</td><td>70.0</td><td>74.8</td></tr><tr><td>280</td><td>74.2</td><td>75.4</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></tbody></table> <p>Note: Slanted line shows the range of the rated input voltage.</p>		Input Voltage [V]	Efficiency [%]		Load 50%	Load 100%	75	71.0	71.6	85	71.6	72.6	100	72.0	73.5	120	72.2	74.1	200	71.8	75.1	230	71.8	74.8	264	70.0	74.8	280	74.2	75.4	--	-	-		
Input Voltage [V]	Efficiency [%]																																		
	Load 50%	Load 100%																																	
75	71.0	71.6																																	
85	71.6	72.6																																	
100	72.0	73.5																																	
120	72.2	74.1																																	
200	71.8	75.1																																	
230	71.8	74.8																																	
264	70.0	74.8																																	
280	74.2	75.4																																	
--	-	-																																	

Model	LFA75F-3R3-Y																																																					
Item	Efficiency (by Load Current)	Temperature	25°C																																																			
		Testing Circuitry	Figure A																																																			
Object	_____																																																					
1.Graph		2.Values																																																				
<div><div>—△— Input Volt. 100V</div><div>---□--- Input Volt. 200V</div><div>-·-○-·- Input Volt. 230V</div></div> <p>Efficiency [%]</p> <p>Load Current [A]</p> <p>Note: Slanted line shows the range of the rated load current.</p>		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Efficiency [%]</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>3.0</td><td>63.5</td><td>61.9</td><td>60.8</td></tr><tr><td>6.0</td><td>70.0</td><td>69.8</td><td>69.8</td></tr><tr><td>9.0</td><td>72.6</td><td>72.8</td><td>73.1</td></tr><tr><td>12.0</td><td>73.3</td><td>73.9</td><td>74.2</td></tr><tr><td>15.0</td><td>73.5</td><td>75.1</td><td>74.8</td></tr><tr><td>16.5</td><td>72.9</td><td>74.6</td><td>74.5</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 [A]	Efficiency [%]			Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]	0.0	-	-	-	3.0	63.5	61.9	60.8	6.0	70.0	69.8	69.8	9.0	72.6	72.8	73.1	12.0	73.3	73.9	74.2	15.0	73.5	75.1	74.8	16.5	72.9	74.6	74.5	--	-	-	-	--	-	-	-	--	-	-	-	--	-	-	-
Load Current [A]	Efficiency [%]																																																					
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]																																																			
0.0	-	-	-																																																			
3.0	63.5	61.9	60.8																																																			
6.0	70.0	69.8	69.8																																																			
9.0	72.6	72.8	73.1																																																			
12.0	73.3	73.9	74.2																																																			
15.0	73.5	75.1	74.8																																																			
16.5	72.9	74.6	74.5																																																			
--	-	-	-																																																			
--	-	-	-																																																			
--	-	-	-																																																			
--	-	-	-																																																			

COSEL

Model	LFA75F-3R3-Y																																
Item	Power Factor (by Input Voltage)	Temperature	25°C																														
		Testing Circuitry	Figure A																														
Object																																	
1.Graph		2.Values																															
<div><div><div>---</div><div>□</div><div>---</div></div><div>Load 50%</div></div> <div><div>—</div><div>△</div><div>—</div></div> <div>Load 100%</div> <table><thead><tr><th>Input Voltage [V]</th><th>Load 50%</th><th>Load 100%</th></tr></thead><tbody><tr><td>75</td><td>0.977</td><td>0.993</td></tr><tr><td>85</td><td>0.969</td><td>0.987</td></tr><tr><td>100</td><td>0.957</td><td>0.979</td></tr><tr><td>120</td><td>0.939</td><td>0.968</td></tr><tr><td>200</td><td>0.815</td><td>0.902</td></tr><tr><td>230</td><td>0.794</td><td>0.855</td></tr><tr><td>264</td><td>0.735</td><td>0.808</td></tr><tr><td>280</td><td>0.462</td><td>0.572</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></tbody></table>		Input Voltage [V]	Load 50%	Load 100%	75	0.977	0.993	85	0.969	0.987	100	0.957	0.979	120	0.939	0.968	200	0.815	0.902	230	0.794	0.855	264	0.735	0.808	280	0.462	0.572	--	-	-		
Input Voltage [V]	Load 50%	Load 100%																															
75	0.977	0.993																															
85	0.969	0.987																															
100	0.957	0.979																															
120	0.939	0.968																															
200	0.815	0.902																															
230	0.794	0.855																															
264	0.735	0.808																															
280	0.462	0.572																															
--	-	-																															
Note: Slanted line shows the range of the rated input voltage.																																	

Model	LFA75F-3R3-Y																																																					
Item	Power Factor (by Load Current)	Temperature	25°C																																																			
		Testing Circuitry	Figure A																																																			
Object	_____																																																					
1.Graph		2.Values																																																				
<div><div><div>—△—</div><div>---□---</div><div>-·○-</div></div><div><div>Input Volt.</div><div>Input Volt.</div><div>Input Volt.</div></div><div><div>100V</div><div>200V</div><div>230V</div></div></div> <p>Power Factor</p> <p>Load Current [A]</p>		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Power Factor</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 200[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.0</td><td>0.483</td><td>0.478</td><td>0.407</td></tr><tr><td>3.0</td><td>0.912</td><td>0.690</td><td>0.691</td></tr><tr><td>6.0</td><td>0.948</td><td>0.795</td><td>0.775</td></tr><tr><td>9.0</td><td>0.964</td><td>0.832</td><td>0.806</td></tr><tr><td>12.0</td><td>0.975</td><td>0.868</td><td>0.830</td></tr><tr><td>15.0</td><td>0.980</td><td>0.902</td><td>0.855</td></tr><tr><td>16.5</td><td>0.980</td><td>0.912</td><td>0.868</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 [A]	Power Factor			Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]	0.0	0.483	0.478	0.407	3.0	0.912	0.690	0.691	6.0	0.948	0.795	0.775	9.0	0.964	0.832	0.806	12.0	0.975	0.868	0.830	15.0	0.980	0.902	0.855	16.5	0.980	0.912	0.868	--	-	-	-	--	-	-	-	--	-	-	-	--	-	-	-
Load Current [A]	Power Factor																																																					
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]																																																			
0.0	0.483	0.478	0.407																																																			
3.0	0.912	0.690	0.691																																																			
6.0	0.948	0.795	0.775																																																			
9.0	0.964	0.832	0.806																																																			
12.0	0.975	0.868	0.830																																																			
15.0	0.980	0.902	0.855																																																			
16.5	0.980	0.912	0.868																																																			
--	-	-	-																																																			
--	-	-	-																																																			
--	-	-	-																																																			
--	-	-	-																																																			
Note: Slanted line shows the range of the rated load current.																																																						

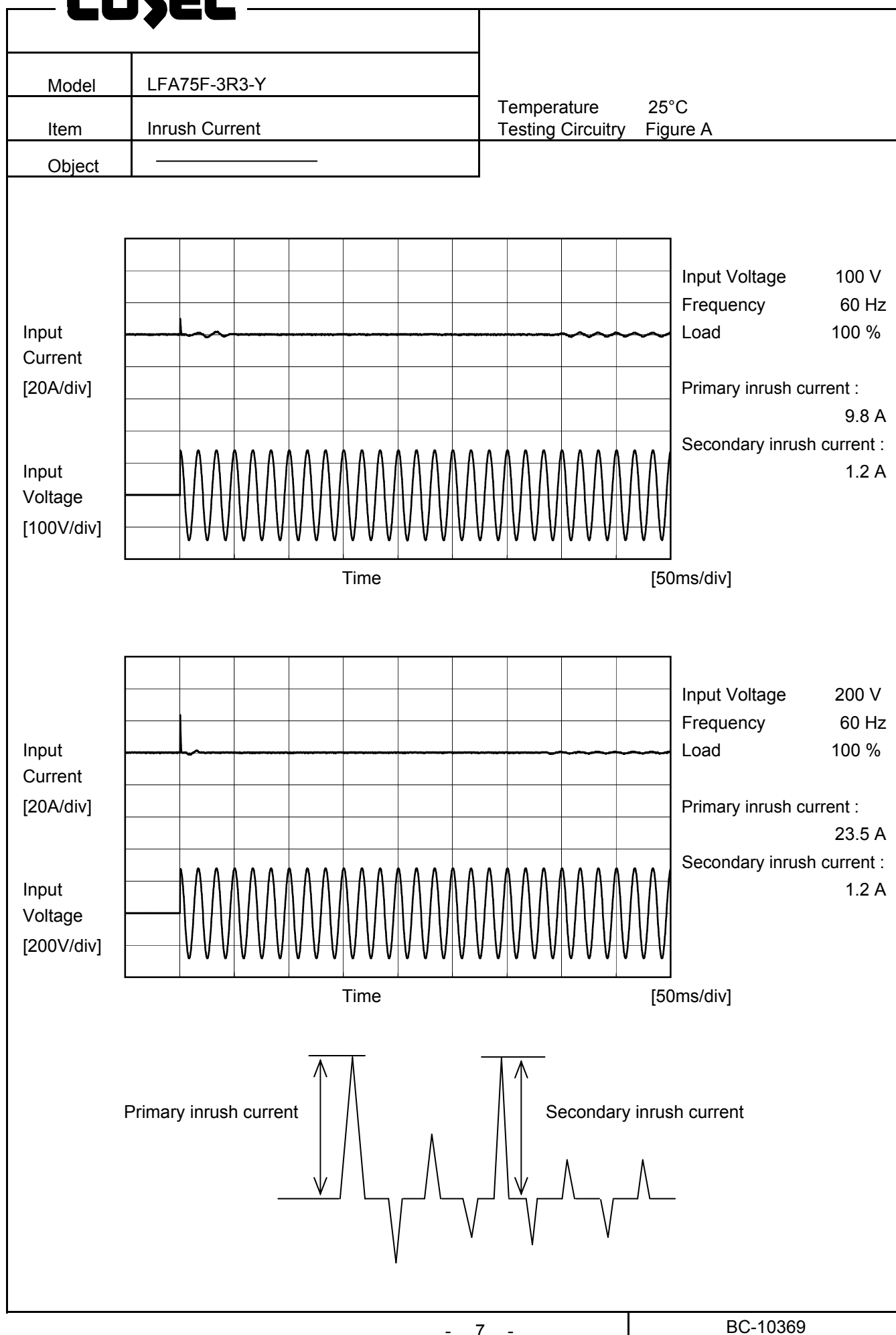
-

6

-

BC-10369

COSEL





		Temperature 25°C Testing Circuitry Figure B
Model	LFA75F-3R3-Y	
Item	Leakage Current	
Object	_____	

1.Results

[mA]

Standards		Input Volt.			Note
		100 [V]	200 [V]	240 [V]	
DEN-AN	Both phases	0.13	0.26	0.32	Operation
	One of phases	0.22	0.45	0.57	Stand by
IEC60950	Both phases	0.14	0.30	0.38	Operation
	One of phases	0.22	0.44	0.54	Stand by

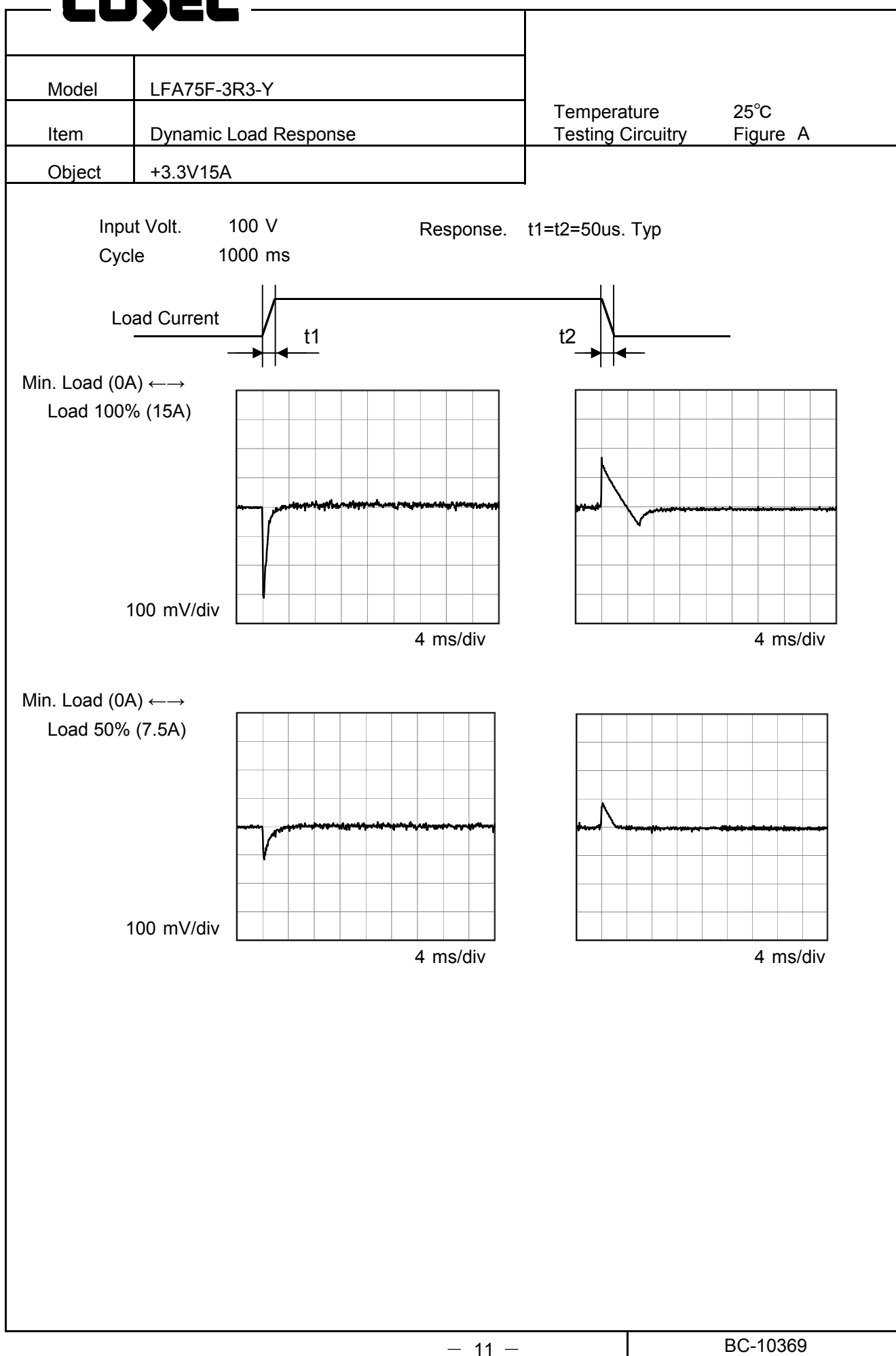
The value for "One of phases" is the reference value only.

2.Condition

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

Model	LFA75F-3R3-Y																																		
Item	Line Regulation	Temperature	25°C																																
		Testing Circuitry	Figure A																																
Object	+3.3V15A																																		
1.Graph		2.Values																																	
<div><div><div>---□---</div><div>Load 50%</div></div><div><div>—△—</div><div>Load 100%</div></div></div> <table><thead><tr><th rowspan="2">Input Voltage [V]</th><th colspan="2">Output Voltage [V]</th></tr><tr><th>Load 50%</th><th>Load 100%</th></tr></thead><tbody><tr><td>75</td><td>3.326</td><td>3.313</td></tr><tr><td>85</td><td>3.326</td><td>3.313</td></tr><tr><td>100</td><td>3.326</td><td>3.313</td></tr><tr><td>120</td><td>3.326</td><td>3.313</td></tr><tr><td>200</td><td>3.326</td><td>3.313</td></tr><tr><td>230</td><td>3.326</td><td>3.313</td></tr><tr><td>264</td><td>3.326</td><td>3.313</td></tr><tr><td>280</td><td>3.326</td><td>3.312</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></tbody></table> <p>Note: Slanted line shows the range of the rated input voltage.</p>		Input Voltage [V]	Output Voltage [V]		Load 50%	Load 100%	75	3.326	3.313	85	3.326	3.313	100	3.326	3.313	120	3.326	3.313	200	3.326	3.313	230	3.326	3.313	264	3.326	3.313	280	3.326	3.312	--	-	-		
Input Voltage [V]	Output Voltage [V]																																		
	Load 50%	Load 100%																																	
75	3.326	3.313																																	
85	3.326	3.313																																	
100	3.326	3.313																																	
120	3.326	3.313																																	
200	3.326	3.313																																	
230	3.326	3.313																																	
264	3.326	3.313																																	
280	3.326	3.312																																	
--	-	-																																	

Model	LFA75F-3R3-Y																																																					
Item	Load Regulation	Temperature	25°C																																																			
Object	+3.3V15A	Testing Circuitry	Figure A																																																			
1.Graph		2.Values																																																				
<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>Note: Slanted line shows the range of the rated load current.</p>		<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>3.340</td><td>3.341</td><td>3.341</td></tr><tr><td>3.0</td><td>3.337</td><td>3.337</td><td>3.337</td></tr><tr><td>6.0</td><td>3.333</td><td>3.333</td><td>3.333</td></tr><tr><td>9.0</td><td>3.330</td><td>3.330</td><td>3.330</td></tr><tr><td>12.0</td><td>3.325</td><td>3.325</td><td>3.325</td></tr><tr><td>15.0</td><td>3.322</td><td>3.322</td><td>3.322</td></tr><tr><td>16.5</td><td>3.320</td><td>3.320</td><td>3.319</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 [A]	Output Voltage [V]			Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]	0.0	3.340	3.341	3.341	3.0	3.337	3.337	3.337	6.0	3.333	3.333	3.333	9.0	3.330	3.330	3.330	12.0	3.325	3.325	3.325	15.0	3.322	3.322	3.322	16.5	3.320	3.320	3.319	--	-	-	-	--	-	-	-	--	-	-	-	--	-	-	-
Load Current [A]	Output Voltage [V]																																																					
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]																																																			
0.0	3.340	3.341	3.341																																																			
3.0	3.337	3.337	3.337																																																			
6.0	3.333	3.333	3.333																																																			
9.0	3.330	3.330	3.330																																																			
12.0	3.325	3.325	3.325																																																			
15.0	3.322	3.322	3.322																																																			
16.5	3.320	3.320	3.319																																																			
--	-	-	-																																																			
--	-	-	-																																																			
--	-	-	-																																																			
--	-	-	-																																																			



Model	LFA75F-3R3-Y	Temperature Testing Circuitry	25°C Figure C	
Item	Ripple Voltage (by Load Current)			
Object	+3.3V15A			
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></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></</div></div>				

Model	LFA75F-3R3-Y																																								
Item	Ripple-Noise	Temperature	25°C																																						
Object	+3.3V15A	Testing Circuitry	Figure C																																						
1.Graph		2.Values																																							
<div><div><div><div></div><div>—△—</div><div>Input Volt. 100V</div></div><div><div></div><div>-·-○-·-</div><div>Input Volt. 200V</div></div></div><div><p>Ripple-Noise [mV]</p><p>Load Current [A]</p></div></div>		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="2">Ripple-Noise [mV]</th></tr><tr><th>Input Volt. 100 [V]</th><th>Input Volt. 200 [V]</th></tr><tr><td>0.0</td><td>45</td><td>45</td></tr><tr><td>3.0</td><td>45</td><td>45</td></tr><tr><td>6.0</td><td>55</td><td>55</td></tr><tr><td>9.0</td><td>65</td><td>65</td></tr><tr><td>12.0</td><td>65</td><td>65</td></tr><tr><td>15.0</td><td>75</td><td>75</td></tr><tr><td>16.5</td><td>75</td><td>75</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table>		Load Current [A]	Ripple-Noise [mV]		Input Volt. 100 [V]	Input Volt. 200 [V]	0.0	45	45	3.0	45	45	6.0	55	55	9.0	65	65	12.0	65	65	15.0	75	75	16.5	75	75	--	-	-	--	-	-	--	-	-	--	-	-
Load Current [A]	Ripple-Noise [mV]																																								
	Input Volt. 100 [V]	Input Volt. 200 [V]																																							
0.0	45	45																																							
3.0	45	45																																							
6.0	55	55																																							
9.0	65	65																																							
12.0	65	65																																							
15.0	75	75																																							
16.5	75	75																																							
--	-	-																																							
--	-	-																																							
--	-	-																																							
--	-	-																																							
<p>Measured by 20 MHz Oscilloscope.</p> <p>Ripple-Noise is shown as p-p in the figure below.</p> <p>Note: Slanted line shows the range of the rated load current.</p>																																									
<div><div><div>T1: Due to AC Input Line</div><div>T2: Due to Switching</div></div><div><p>Ripple-Noise [mVp-p]</p></div></div>																																									
Fig. Complex Ripple Wave Form																																									

Model	LFA75F-3R3-Y																																									
Item	Ripple Voltage (by Ambient Temp.)	Testing Circuitry Figure C																																								
Object	+3.3V15A																																									
1.Graph		2.Values																																								
<div><div><div>---□---</div><div>Input Volt. 100V</div></div><div><div>—△—</div><div>Input Volt. 200V</div></div></div> <table><thead><tr><th>Ambient Temperature [°C]</th><th>100V [mV]</th><th>200V [mV]</th></tr></thead><tbody><tr><td>-30</td><td>95</td><td>90</td></tr><tr><td>-10</td><td>30</td><td>30</td></tr><tr><td>0</td><td>25</td><td>25</td></tr><tr><td>25</td><td>15</td><td>15</td></tr><tr><td>50</td><td>15</td><td>15</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></tbody></table> <p>Measured by 20 MHz Oscilloscope. Note: Slanted line shows the range of the rated ambient temperature.</p>		Ambient Temperature [°C]	100V [mV]	200V [mV]	-30	95	90	-10	30	30	0	25	25	25	15	15	50	15	15	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-		
Ambient Temperature [°C]	100V [mV]	200V [mV]																																								
-30	95	90																																								
-10	30	30																																								
0	25	25																																								
25	15	15																																								
50	15	15																																								
--	-	-																																								
--	-	-																																								
--	-	-																																								
--	-	-																																								
--	-	-																																								
--	-	-																																								
--	-	-																																								

Model	LFA75F-3R3-Y																																																					
Item	Ambient Temperature Drift	Testing Circuitry Figure A																																																				
Object	+3.3V15A																																																					
1.Graph		2.Values																																																				
<div><div><div>—△—</div><div>Input Volt. 100V</div></div><div><div>---□---</div><div>Input Volt. 200V</div></div><div><div>---○---</div><div>Input Volt. 230V</div></div></div> <p>Output Voltage [V]</p> <p>Ambient Temperature [°C]</p> <p>Load 100%</p> <p>Note: Slanted line shows the range of the rated ambient temperature.</p>		<table><tr><th rowspan="2">Ambient Temperature [°C]</th><th colspan="3">Output Voltage [V]</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 200[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>-20</td><td>3.342</td><td>3.342</td><td>3.342</td></tr><tr><td>-10</td><td>3.339</td><td>3.339</td><td>3.339</td></tr><tr><td>0</td><td>3.336</td><td>3.336</td><td>3.336</td></tr><tr><td>10</td><td>3.332</td><td>3.332</td><td>3.332</td></tr><tr><td>20</td><td>3.328</td><td>3.327</td><td>3.327</td></tr><tr><td>25</td><td>3.325</td><td>3.325</td><td>3.325</td></tr><tr><td>30</td><td>3.323</td><td>3.323</td><td>3.323</td></tr><tr><td>40</td><td>3.320</td><td>3.320</td><td>3.320</td></tr><tr><td>50</td><td>3.315</td><td>3.315</td><td>3.315</td></tr><tr><td>60</td><td>3.310</td><td>3.310</td><td>3.310</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr></table>		Ambient Temperature [°C]	Output Voltage [V]			Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]	-20	3.342	3.342	3.342	-10	3.339	3.339	3.339	0	3.336	3.336	3.336	10	3.332	3.332	3.332	20	3.328	3.327	3.327	25	3.325	3.325	3.325	30	3.323	3.323	3.323	40	3.320	3.320	3.320	50	3.315	3.315	3.315	60	3.310	3.310	3.310	--	-	-	-
Ambient Temperature [°C]	Output Voltage [V]																																																					
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]																																																			
-20	3.342	3.342	3.342																																																			
-10	3.339	3.339	3.339																																																			
0	3.336	3.336	3.336																																																			
10	3.332	3.332	3.332																																																			
20	3.328	3.327	3.327																																																			
25	3.325	3.325	3.325																																																			
30	3.323	3.323	3.323																																																			
40	3.320	3.320	3.320																																																			
50	3.315	3.315	3.315																																																			
60	3.310	3.310	3.310																																																			
--	-	-	-																																																			

- 15 -

BC-10369



		Testing Circuitry Figure A
Model	LFA75F-3R3-Y	
Item	Output Voltage Accuracy	
Object	+3.3V15A	

1. Output Voltage Accuracy

This is defined as the value of the output voltage, regulation load, ambient temperature and input voltage varied at random in the range as specified below.

Temperature : -10 - 50°C

Input Voltage : 85 - 264V

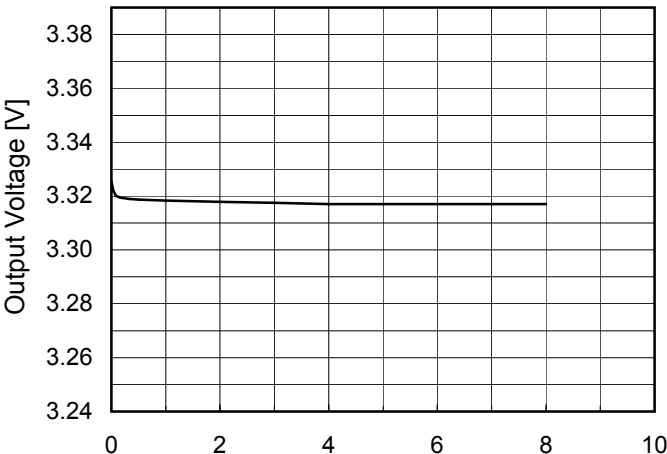
Load Current : 0 - 15A

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

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

2. Values

Item	Temperature [°C]	Input Voltage[V]	Output		Output Voltage Accuracy	
			Current[A]	Voltage[V]	Value [mV]	Ration [%]
Maximum Voltage	-10	85	0	3.342	±16	±0.5
Minimum Voltage	50	264	15	3.310		

Model	LFA75F-3R3-Y																								
Item	Time Lapse Drift	Temperature	25°C																						
		Testing Circuitry	Figure A																						
Object	+3.3V15A																								
1.Graph		2.Values																							
<div><p>Output Voltage [V]</p><p>Time [H]</p><p>Input Volt. 100V</p><p>Load 100%</p></div>		<table><tr><th>Time since start [H]</th><th>Output Voltage [V]</th></tr><tr><td>0.0</td><td>3.326</td></tr><tr><td>0.5</td><td>3.319</td></tr><tr><td>1.0</td><td>3.318</td></tr><tr><td>2.0</td><td>3.318</td></tr><tr><td>3.0</td><td>3.318</td></tr><tr><td>4.0</td><td>3.317</td></tr><tr><td>5.0</td><td>3.317</td></tr><tr><td>6.0</td><td>3.317</td></tr><tr><td>7.0</td><td>3.317</td></tr><tr><td>8.0</td><td>3.317</td></tr></table>		Time since start [H]	Output Voltage [V]	0.0	3.326	0.5	3.319	1.0	3.318	2.0	3.318	3.0	3.318	4.0	3.317	5.0	3.317	6.0	3.317	7.0	3.317	8.0	3.317
Time since start [H]	Output Voltage [V]																								
0.0	3.326																								
0.5	3.319																								
1.0	3.318																								
2.0	3.318																								
3.0	3.318																								
4.0	3.317																								
5.0	3.317																								
6.0	3.317																								
7.0	3.317																								
8.0	3.317																								
* The characteristic of AC200V is equal.																									

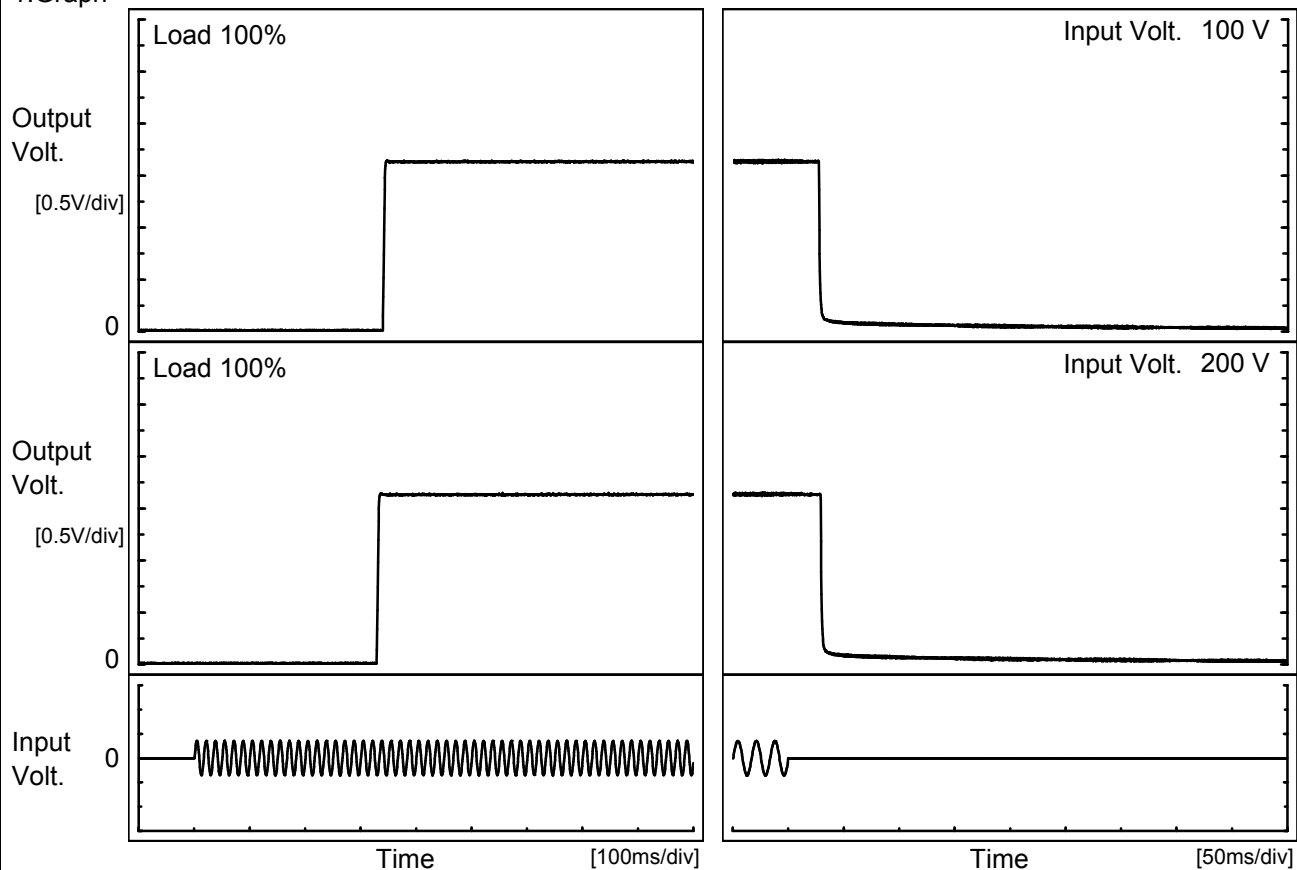
- 17 -

BC-10369

COSEL

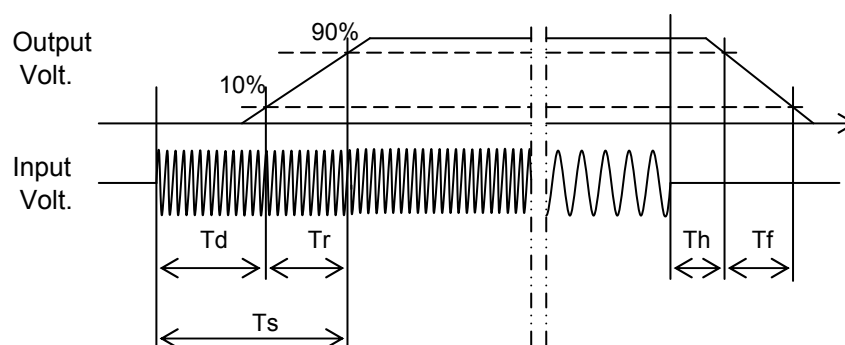
Model	LFA75F-3R3-Y	Temperature	25°C
Item	Rise and Fall Time	Testing Circuitry	Figure A
Object	+3.3V15A		

1. Graph



2. Values

Input Volt.	Time	Td	Tr	Ts	Th	Tf
100 V		341.0	3.5	344.5	27.0	2.8
200 V		330.0	3.0	333.0	29.3	2.8



Model	LFA75F-3R3-Y																																
Item	Hold-Up Time	Temperature	25°C																														
		Testing Circuitry	Figure A																														
Object	+3.3V15A																																
1.Graph		2.Values																															
<div><div>---□--- Load 50%</div><div>—△— Load 100%</div></div> <table><thead><tr><th>Input Voltage [V]</th><th>Load 50% [ms]</th><th>Load 100% [ms]</th></tr></thead><tbody><tr><td>75</td><td>65</td><td>25</td></tr><tr><td>85</td><td>66</td><td>26</td></tr><tr><td>100</td><td>67</td><td>27</td></tr><tr><td>120</td><td>68</td><td>28</td></tr><tr><td>200</td><td>70</td><td>29</td></tr><tr><td>230</td><td>71</td><td>30</td></tr><tr><td>264</td><td>71</td><td>30</td></tr><tr><td>280</td><td>77</td><td>31</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></tbody></table> <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>		Input Voltage [V]	Load 50% [ms]	Load 100% [ms]	75	65	25	85	66	26	100	67	27	120	68	28	200	70	29	230	71	30	264	71	30	280	77	31	--	-	-		
Input Voltage [V]	Load 50% [ms]	Load 100% [ms]																															
75	65	25																															
85	66	26																															
100	67	27																															
120	68	28																															
200	70	29																															
230	71	30																															
264	71	30																															
280	77	31																															
--	-	-																															

Model	LFA75F-3R3-Y																																																					
Item	Instantaneous Interruption Compensation	Temperature	25°C																																																			
Object	+3.3V15A	Testing Circuitry	Figure A																																																			
1.Graph		2.Values																																																				
<div><div>—△— Input Volt. 100V</div><div>---□--- Input Volt. 200V</div><div>-·-○-·- Input Volt. 230V</div></div> <p>Instantaneous Compensation Time [ms]</p> <p>Load Current [A]</p>		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Time [ms]</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 200[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.0</td><td>-</td><td>-</td><td>-</td></tr><tr><td>3.0</td><td>161</td><td>170</td><td>171</td></tr><tr><td>6.0</td><td>80</td><td>87</td><td>88</td></tr><tr><td>9.0</td><td>51</td><td>56</td><td>56</td></tr><tr><td>12.0</td><td>37</td><td>39</td><td>40</td></tr><tr><td>15.0</td><td>26</td><td>29</td><td>29</td></tr><tr><td>16.5</td><td>19</td><td>21</td><td>22</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 [A]	Time [ms]			Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]	0.0	-	-	-	3.0	161	170	171	6.0	80	87	88	9.0	51	56	56	12.0	37	39	40	15.0	26	29	29	16.5	19	21	22	--	-	-	-	--	-	-	-	--	-	-	-	--	-	-	-
Load Current [A]	Time [ms]																																																					
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]																																																			
0.0	-	-	-																																																			
3.0	161	170	171																																																			
6.0	80	87	88																																																			
9.0	51	56	56																																																			
12.0	37	39	40																																																			
15.0	26	29	29																																																			
16.5	19	21	22																																																			
--	-	-	-																																																			
--	-	-	-																																																			
--	-	-	-																																																			
--	-	-	-																																																			
Note: Slanted line shows the range of the rated load current.																																																						

- 20 -

BC-10369

[illegible]

Model	LFA75F-3R3-Y																																											
Item	Overcurrent Protection	Temperature	25°C																																									
Object	+3.3V15A	Testing Circuitry	Figure A																																									
1.Graph		2.Values																																										
<div><div><div>△</div><div>Input Volt. 100V</div></div><div><div>○</div><div>Input Volt. 200V</div></div></div> <p>Note: Slanted line shows the range of the rated load current.</p> <p>Intermittent operation occurs when the output voltage is less than rated output voltage.</p>		<table><tr><th rowspan="2">Output Voltage [V]</th><th colspan="2">Load Current [A]</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 200[V]</th></tr><tr><td>3.300</td><td>18.13</td><td>18.37</td></tr><tr><td>3.135</td><td>-</td><td>-</td></tr><tr><td>2.970</td><td>-</td><td>-</td></tr><tr><td>2.640</td><td>-</td><td>-</td></tr><tr><td>2.310</td><td>-</td><td>-</td></tr><tr><td>1.980</td><td>-</td><td>-</td></tr><tr><td>1.650</td><td>-</td><td>-</td></tr><tr><td>1.320</td><td>-</td><td>-</td></tr><tr><td>0.990</td><td>-</td><td>-</td></tr><tr><td>0.660</td><td>-</td><td>-</td></tr><tr><td>0.330</td><td>-</td><td>-</td></tr><tr><td>0.000</td><td>-</td><td>-</td></tr></table>		Output Voltage [V]	Load Current [A]		Input Volt. 100[V]	Input Volt. 200[V]	3.300	18.13	18.37	3.135	-	-	2.970	-	-	2.640	-	-	2.310	-	-	1.980	-	-	1.650	-	-	1.320	-	-	0.990	-	-	0.660	-	-	0.330	-	-	0.000	-	-
Output Voltage [V]	Load Current [A]																																											
	Input Volt. 100[V]	Input Volt. 200[V]																																										
3.300	18.13	18.37																																										
3.135	-	-																																										
2.970	-	-																																										
2.640	-	-																																										
2.310	-	-																																										
1.980	-	-																																										
1.650	-	-																																										
1.320	-	-																																										
0.990	-	-																																										
0.660	-	-																																										
0.330	-	-																																										
0.000	-	-																																										

Model	LFA75F-3R3-Y																																								
Item	Overvoltage Protection	Testing Circuitry Figure A																																							
Object	+3.3V15A																																								
1.Graph		2.Values																																							
<div><div><div>—△—</div><div>Input Volt. 100V</div></div><div><div>---□---</div><div>Input Volt. 200V</div></div></div> <p>Operating Point [V]</p> <p>Ambient Temperature [°C]</p> <p>Load 0%</p> <p>Note: Slanted line shows the range of the rated ambient temperature.</p>		<table><tr><th rowspan="2">Ambient Temperature [°C]</th><th colspan="2">Operating Point [V]</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 200[V]</th></tr><tr><td>-20</td><td>4.54</td><td>4.54</td></tr><tr><td>-10</td><td>4.53</td><td>4.53</td></tr><tr><td>0</td><td>4.53</td><td>4.53</td></tr><tr><td>10</td><td>4.42</td><td>4.42</td></tr><tr><td>20</td><td>4.42</td><td>4.41</td></tr><tr><td>25</td><td>4.41</td><td>4.41</td></tr><tr><td>30</td><td>4.41</td><td>4.41</td></tr><tr><td>40</td><td>4.36</td><td>4.36</td></tr><tr><td>50</td><td>4.24</td><td>4.36</td></tr><tr><td>60</td><td>4.24</td><td>4.24</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table>		Ambient Temperature [°C]	Operating Point [V]		Input Volt. 100[V]	Input Volt. 200[V]	-20	4.54	4.54	-10	4.53	4.53	0	4.53	4.53	10	4.42	4.42	20	4.42	4.41	25	4.41	4.41	30	4.41	4.41	40	4.36	4.36	50	4.24	4.36	60	4.24	4.24	--	-	-
Ambient Temperature [°C]	Operating Point [V]																																								
	Input Volt. 100[V]	Input Volt. 200[V]																																							
-20	4.54	4.54																																							
-10	4.53	4.53																																							
0	4.53	4.53																																							
10	4.42	4.42																																							
20	4.42	4.41																																							
25	4.41	4.41																																							
30	4.41	4.41																																							
40	4.36	4.36																																							
50	4.24	4.36																																							
60	4.24	4.24																																							
--	-	-																																							

- 23 -

BC-10369

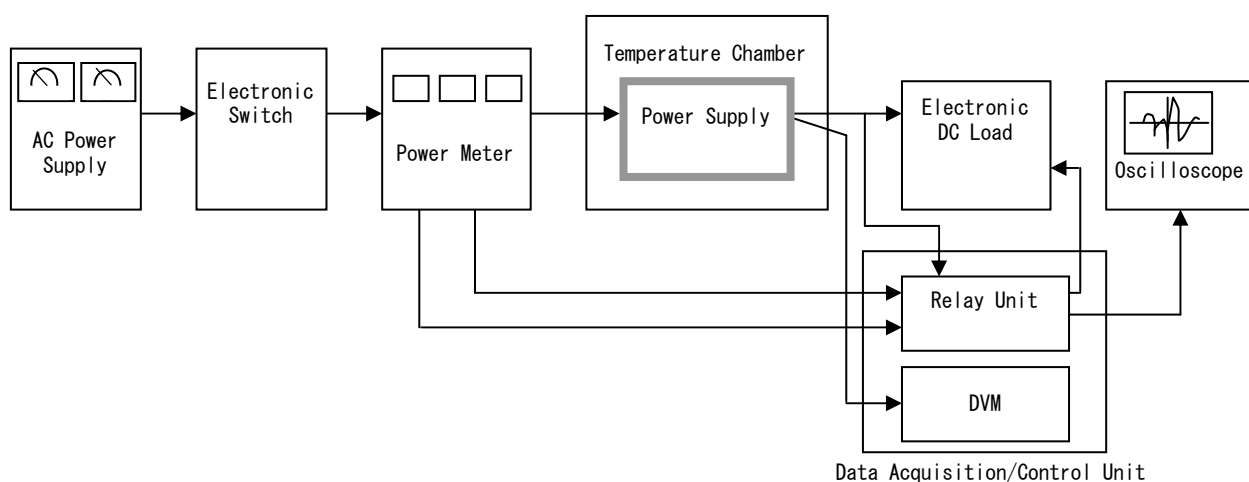


Figure A

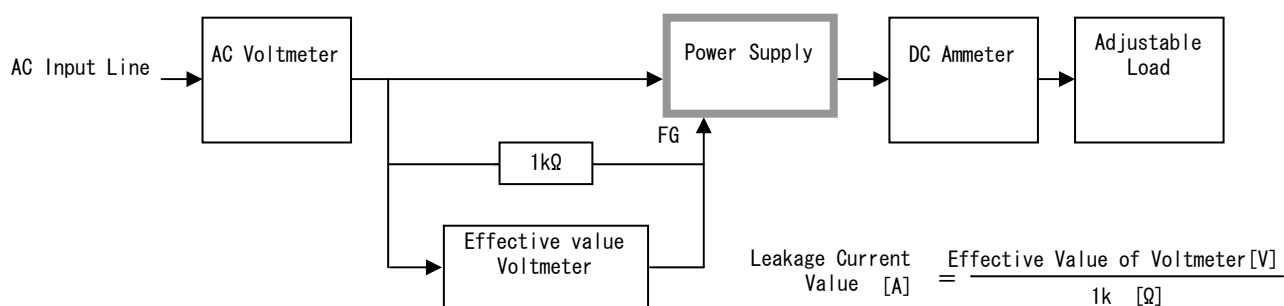


Figure B (DEN-AN)

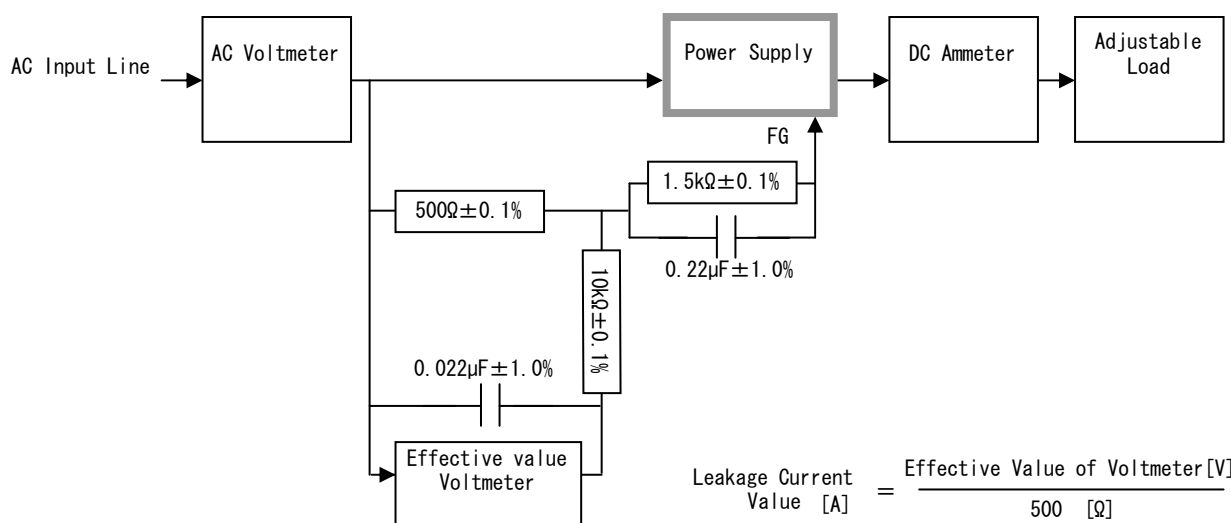


Figure B (IEC60950-1)

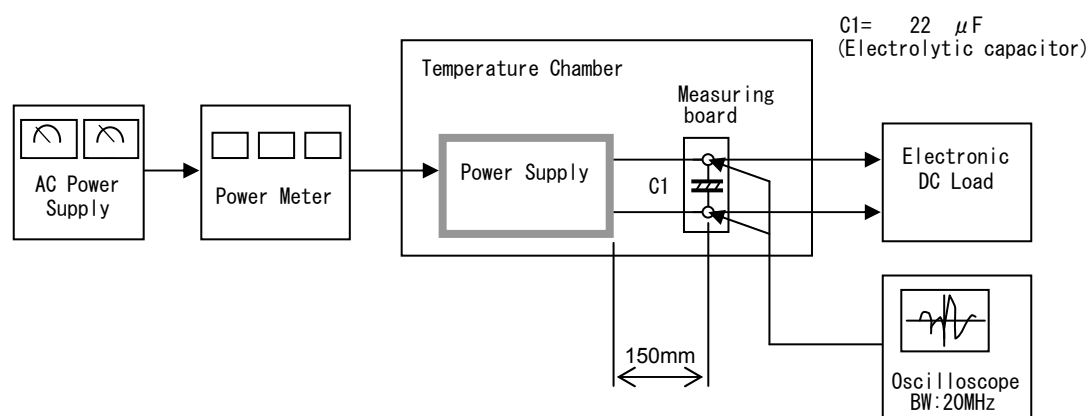


Figure C