

TEST DATA OF PJA50F-24

Regulated DC Power Supply
May 26, 2026

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Design Manager

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Design Engineer

COSEL CO.,LTD.

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(Final Page 15)

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Model		PJA50F-24		Temperature 25°C																																																		
Item		Input Current (by Load Current)		Testing Circuitry Figure A																																																		
Object		_____																																																				
1.Graph		—△— Input Volt. 100V ---□--- Input Volt. 115V ---○--- Input Volt. 230V		2.Values																																																		
Input Current [A] 0.000.501.001.502.00 0.01.02.0 Load Current [A] Note: Slanted line shows the range of the rated load current.		<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. 115[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.00</td><td>0.031</td><td>0.034</td><td>0.064</td></tr><tr><td>0.40</td><td>0.250</td><td>0.226</td><td>0.159</td></tr><tr><td>0.80</td><td>0.433</td><td>0.393</td><td>0.254</td></tr><tr><td>1.20</td><td>0.609</td><td>0.553</td><td>0.345</td></tr><tr><td>1.60</td><td>0.791</td><td>0.704</td><td>0.434</td></tr><tr><td>2.00</td><td>0.975</td><td>0.872</td><td>0.527</td></tr><tr><td>2.20</td><td>1.072</td><td>0.958</td><td>0.567</td></tr><tr><td>2.42</td><td>1.176</td><td>1.051</td><td>0.614</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. 115[V]	Input Volt. 230[V]	0.00	0.031	0.034	0.064	0.40	0.250	0.226	0.159	0.80	0.433	0.393	0.254	1.20	0.609	0.553	0.345	1.60	0.791	0.704	0.434	2.00	0.975	0.872	0.527	2.20	1.072	0.958	0.567	2.42	1.176	1.051	0.614	--	-	-	-	--	-	-	-	--	-	-	-
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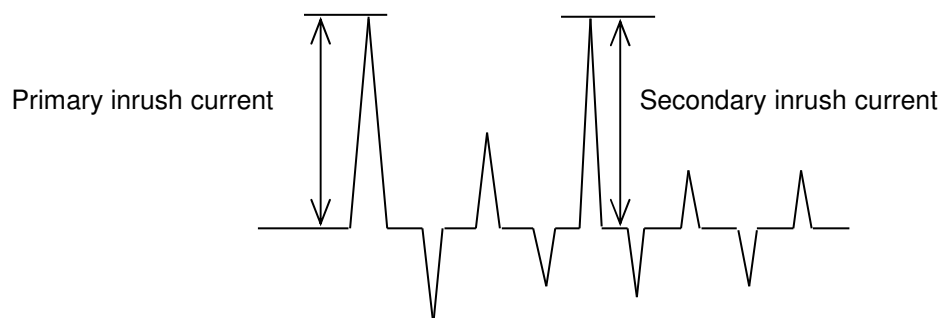
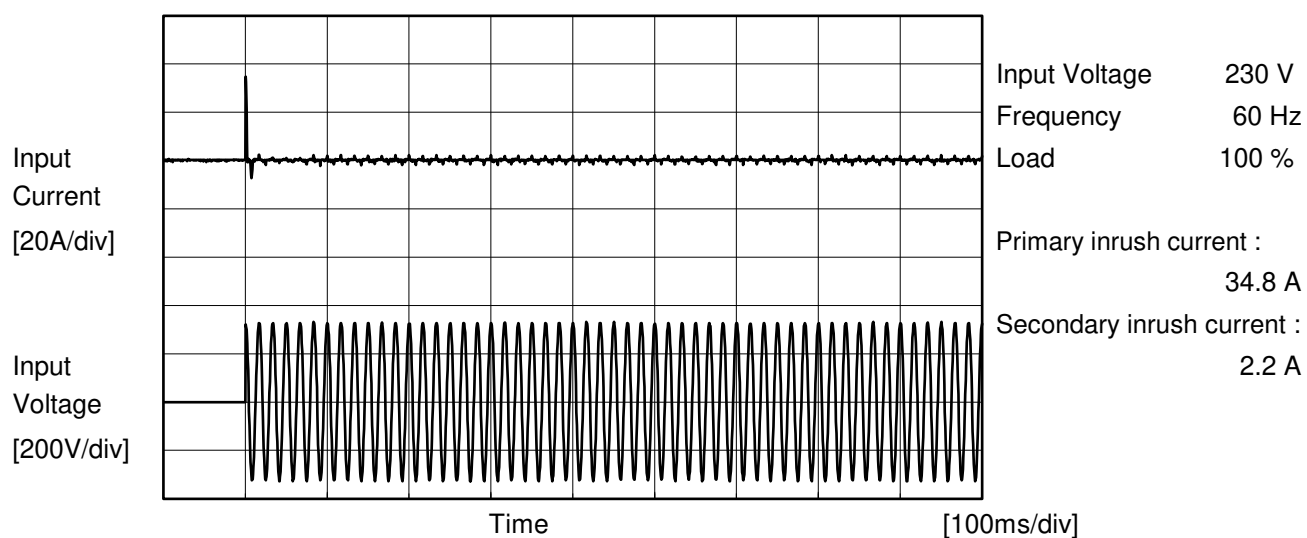
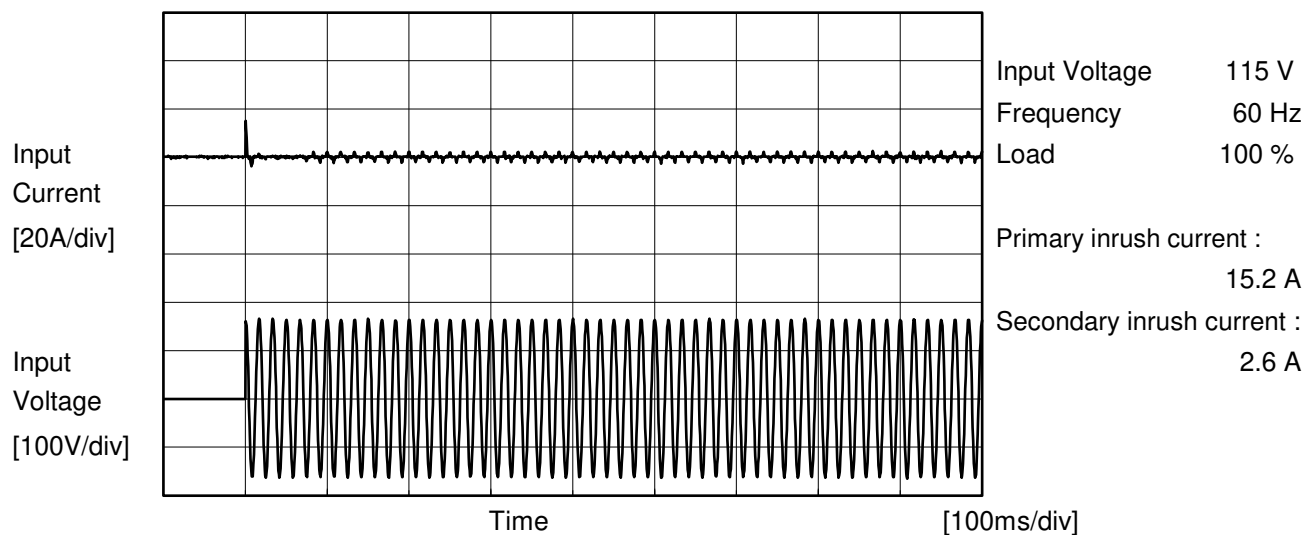
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Model	PJA50F-24																																																					
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—△— Input Volt. 100V ---□--- Input Volt. 115V ---○--- Input Volt. 230V Efficiency [%] 100 90 80 70 60 50 0.0 1.0 2.0 0.0 1.0 2.0 Load Current [A]		<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. 115[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.00</td><td>-</td><td>-</td><td>-</td></tr><tr><td>0.40</td><td>84.3</td><td>85.0</td><td>81.8</td></tr><tr><td>0.80</td><td>86.2</td><td>86.2</td><td>86.1</td></tr><tr><td>1.20</td><td>86.5</td><td>86.2</td><td>86.9</td></tr><tr><td>1.60</td><td>86.0</td><td>87.2</td><td>87.3</td></tr><tr><td>2.00</td><td>85.7</td><td>86.3</td><td>86.7</td></tr><tr><td>2.20</td><td>85.7</td><td>86.3</td><td>87.7</td></tr><tr><td>2.42</td><td>85.6</td><td>86.2</td><td>88.4</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. 115[V]	Input Volt. 230[V]	0.00	-	-	-	0.40	84.3	85.0	81.8	0.80	86.2	86.2	86.1	1.20	86.5	86.2	86.9	1.60	86.0	87.2	87.3	2.00	85.7	86.3	86.7	2.20	85.7	86.3	87.7	2.42	85.6	86.2	88.4	--	-	-	-	--	-	-	-	--	-	-	-
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Model		PJA50F-24		Temperature Testing Circuitry	25°C Figure A																																																			
Item		Power Factor (by Load Current)																																																						
Object		_____																																																						
1.Graph				2.Values																																																				
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Model	PJA50F-24	Temperature	25°C
Item	Inrush Current	Testing Circuitry	Figure A
Object	_____		





Model		PJA50F-24	Temperature 25°C Testing Circuitry Figure C
Item		Leakage Current	
Object		_____	

1.Results

[mA]

Standards	Testing Circuitry	Measuring Method	Input Volt.			Note
			100 [V]	115 [V]	230 [V]	
DEN-AN	Figure C-1	Both phases	0.21	0.25	0.54	Operation
		One of phases	0.30	0.35	0.78	Stand by
IEC62368-1	Figure C-2	Both phases	0.21	0.24	0.53	Operation
		One of phases	0.30	0.35	0.76	Stand by
	Figure C-3	Both phases	0.21	0.24	0.52	Operation
		One of phases	0.30	0.35	0.76	Stand by

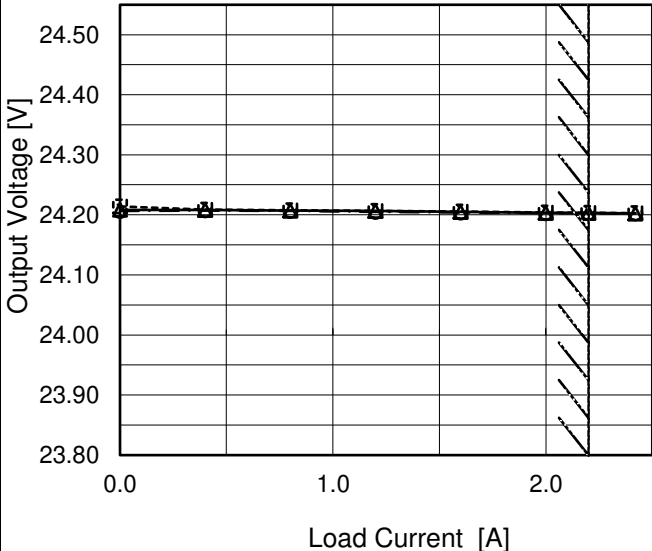
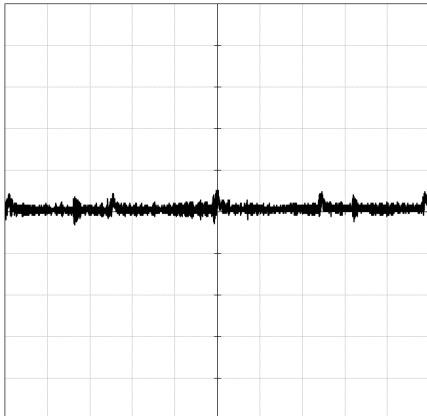
The value for "One of phases" is the reference value only.

2.Condition

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

Model		PJA50F-24	Temperature		25°C
Item		Line Regulation	Testing Circuitry		Figure A
Object		+24V2.2A			
1.Graph			2.Values		

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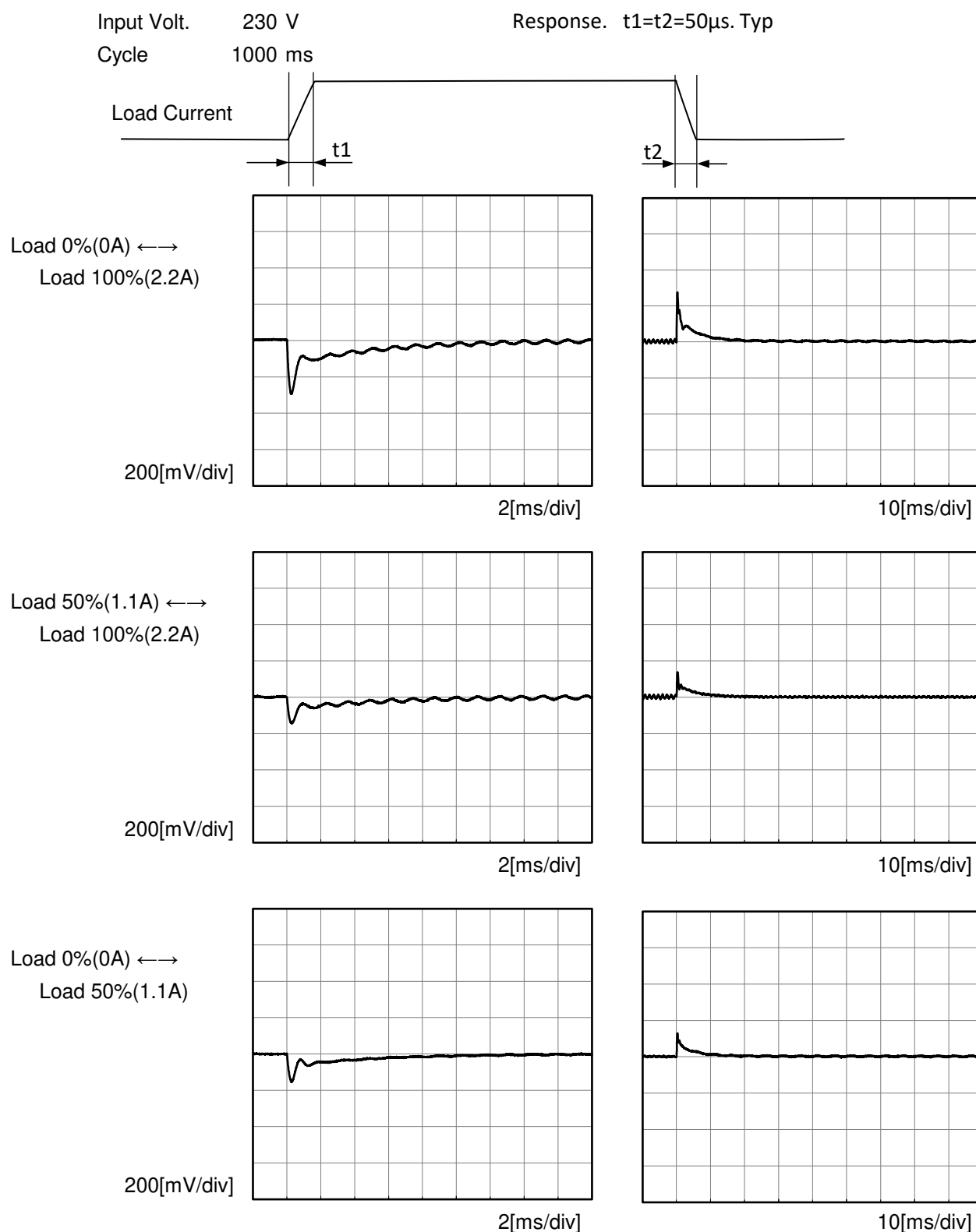
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Item		Load Regulation		Testing Circuitry Figure A																																																				
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		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Output Voltage [V]</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 115[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.00</td><td>24.209</td><td>24.214</td><td>24.206</td></tr><tr><td>0.40</td><td>24.208</td><td>24.208</td><td>24.207</td></tr><tr><td>0.80</td><td>24.207</td><td>24.208</td><td>24.206</td></tr><tr><td>1.20</td><td>24.207</td><td>24.206</td><td>24.205</td></tr><tr><td>1.60</td><td>24.205</td><td>24.206</td><td>24.204</td></tr><tr><td>2.00</td><td>24.204</td><td>24.204</td><td>24.203</td></tr><tr><td>2.20</td><td>24.203</td><td>24.204</td><td>24.203</td></tr><tr><td>2.42</td><td>24.202</td><td>24.203</td><td>24.202</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. 115[V]	Input Volt. 230[V]	0.00	24.209	24.214	24.206	0.40	24.208	24.208	24.207	0.80	24.207	24.208	24.206	1.20	24.207	24.206	24.205	1.60	24.205	24.206	24.204	2.00	24.204	24.204	24.203	2.20	24.203	24.204	24.203	2.42	24.202	24.203	24.202	--	--	--	--	--	--	--	--	--	--	--	--
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Item		Ripple-Noise		Temperature 25°C																																																				
Object		+24V2.2A		Testing Circuitry Figure B																																																				
1.Graph		Input Voltage230V Load100%  20[mV/div] 4[μs/div]																																																						

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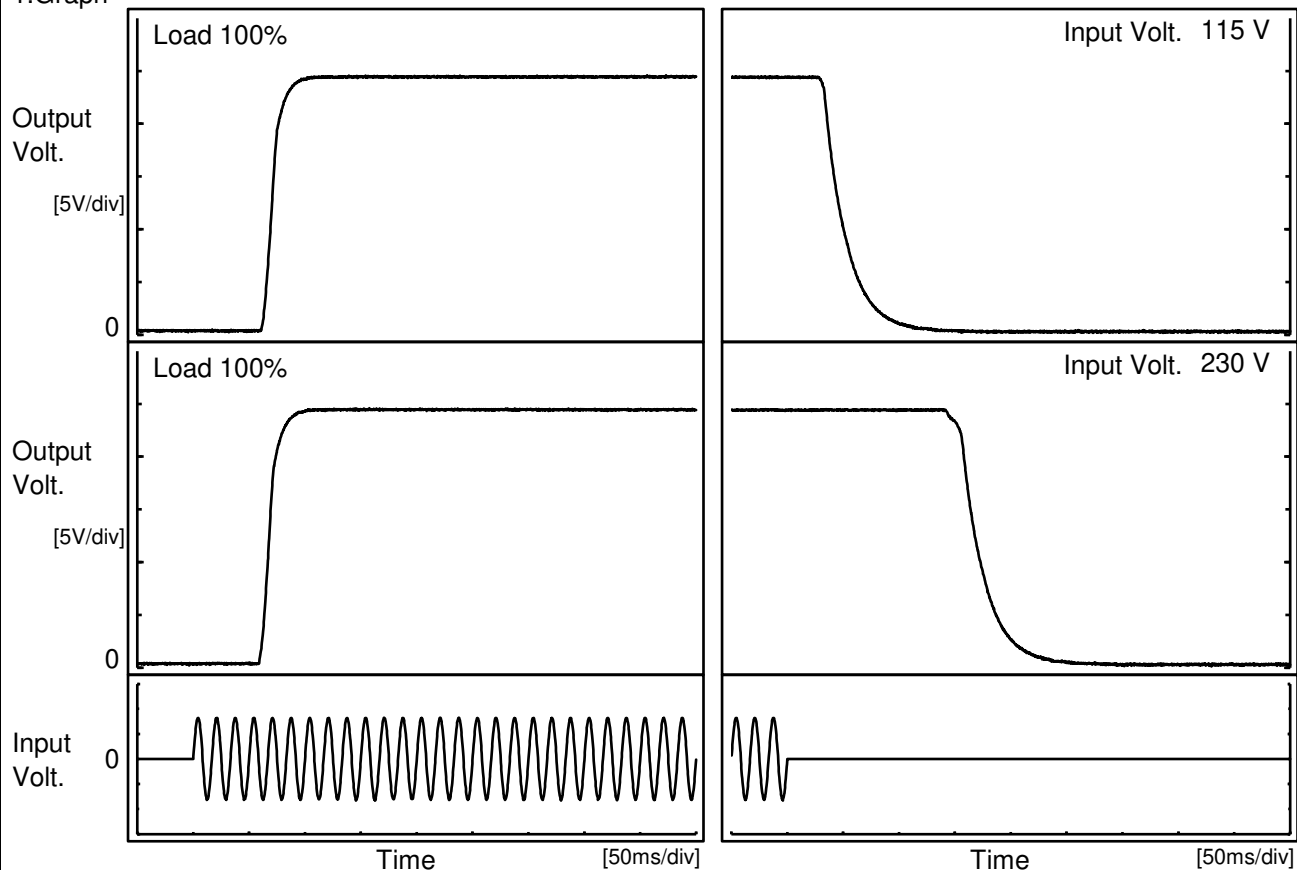
Model	PJA50F-24	Temperature 25°C Testing Circuitry Figure A
Item	Dynamic Load Response	
Object	+24V2.2A	



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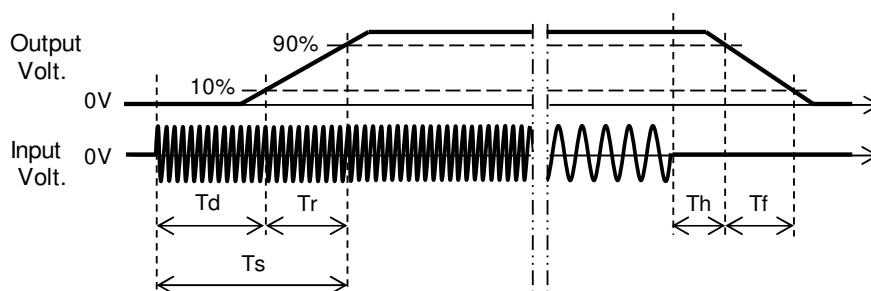
Model	PJA50F-24	Temperature 25°C Testing Circuitry Figure A
Item	Rise and Fall Time	
Object	+24V2.2A	

1.Graph



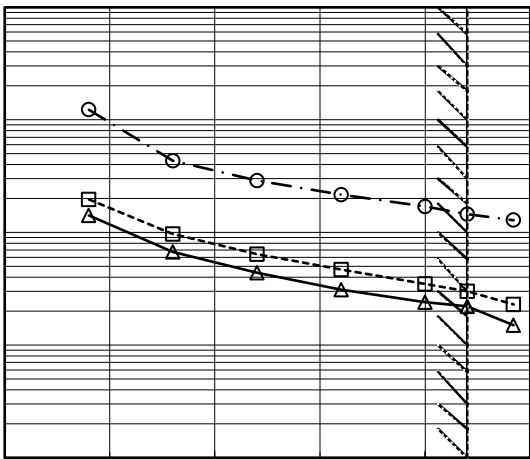
2.Values

		[ms]				
Input Volt.	Time	Td	Tr	Ts	Th	Tf
115 V		64.0	16.8	80.8	34.3	44.0
230 V		62.0	16.3	78.3	156.0	44.8



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Model		PJA50F-24	Temperature25°C	
Item		Hold-Up Time	Testing CircuitryFigure A	
Object		+24V2.2A		
1.Graph			2.Values	
Hold-Up Time [ms] <				

Model		PJA50F-24	Temperature25°C	
Item		Instantaneous Interruption Compensation	Testing CircuitryFigure A	
Object		+24V2.2A		
1.Graph		—△— Input Volt.100V ---□--- Input Volt.115V -·-○-·- Input Volt.230V	2.Values	
Instantaneous Compensation Time [ms]				
	Load Current [A]			
Note: Slanted line shows the range of the rated load current.				

Model		PJA50F-24	
Item		Overcurrent Protection	
Object		+24V2.2A	

1.Graph

Input Volt. 115V

Input Volt. 230V

Output Voltage [V]



Model		PJA50F-24	Testing Circuitry Figure A	
Item		Ambient Temperature Drift		
Object		+24V2.2A		
1.Values		Load 100%		
Ambient Temperature[°C]		Output Voltage [V]		
		Input Volt. 100V	Input Volt. 115V	Input Volt. 230V
-10		24.150	24.150	24.150
25		24.200	24.199	24.199
50		24.218	24.218	24.218

Item		Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object		+24V2.2A	
1.Values			
Ambient Temperature[°C]		Input Voltage [V]	
		Load 50%	Load 100%
-10		33	56
25		33	56
50		33	56

Item		Overvoltage Protection	Testing Circuitry Figure A
Object		+24V2.2A	
1.Values		Load 0%	
Ambient Temperature[°C]		Operating Point [V]	
		Input Volt. 115V	Input Volt. 230V
-20		30.29	30.29
25		31.57	31.57
50		32.18	32.18

- 13 -

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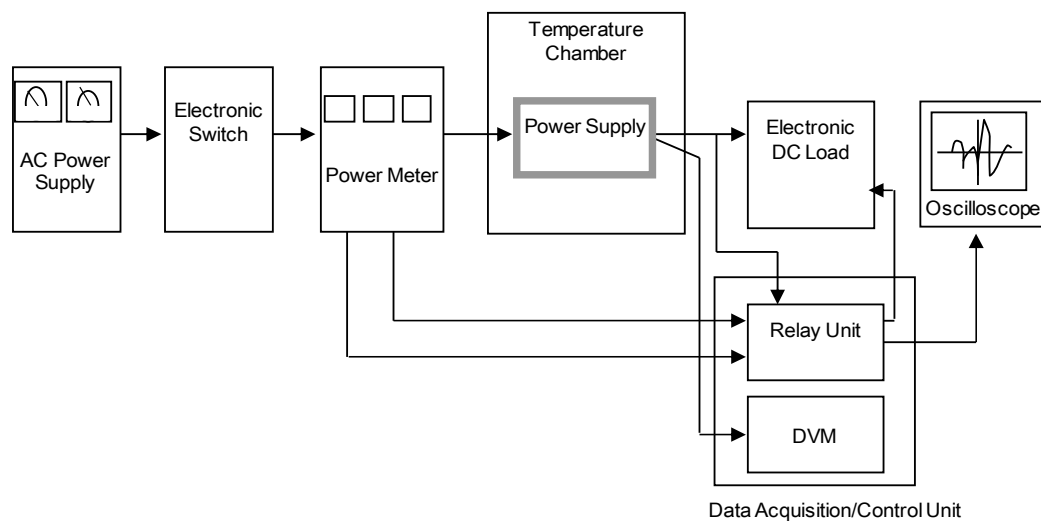


Figure A

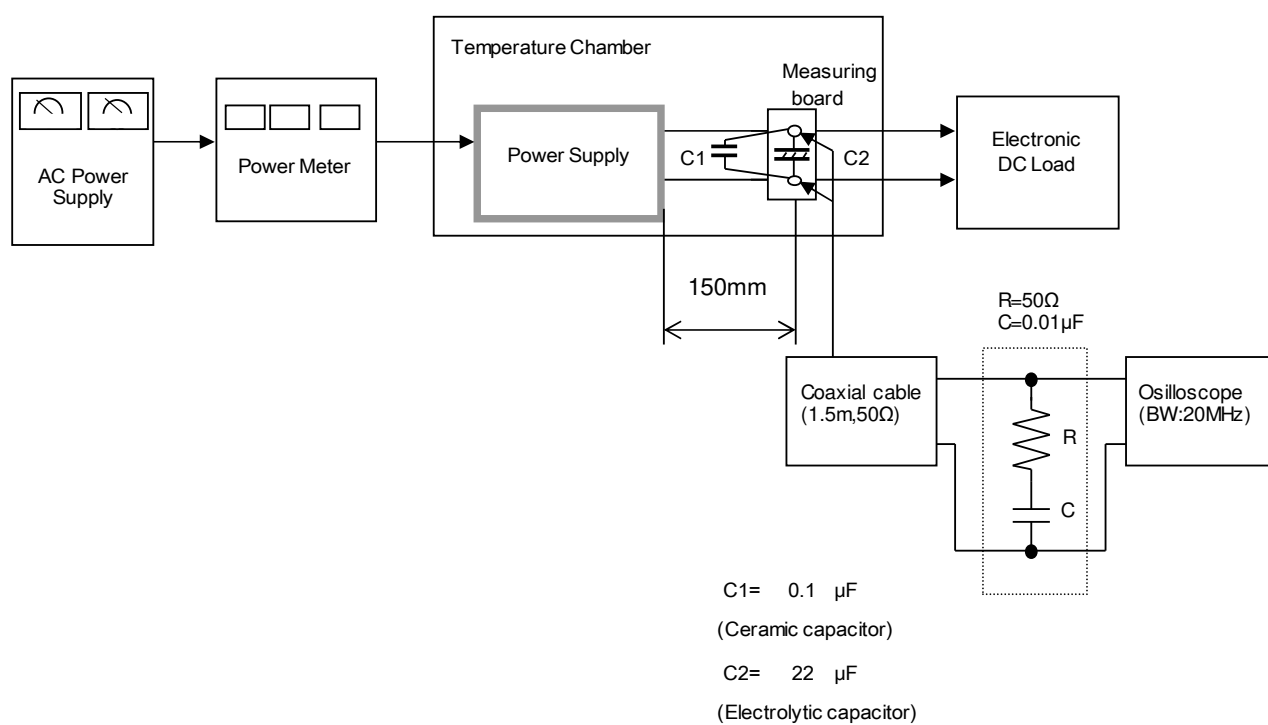


Figure B

