For Reference

TEST DATA OF PDA600F-36

Regulated DC Power Supply
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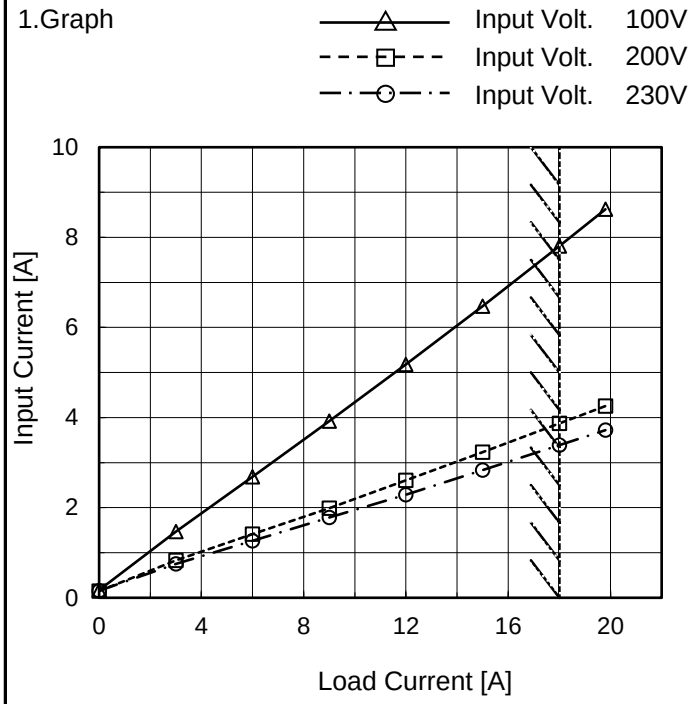
Model	PDA600F-36
Item	Input Current (by Load Current)
Object	――――――

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

Load Current [A]	Input Current [A]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
0.0	0.171	0.148	0.156
3.0	1.470	0.829	0.754
6.0	2.684	1.411	1.261
9.0	3.919	1.992	1.779
12.0	5.180	2.609	2.289
15.0	6.471	3.233	2.831
18.0	7.805	3.869	3.385
19.8	8.622	4.255	3.720
--	-	-	-
--	-	-	-
--	-	-	-

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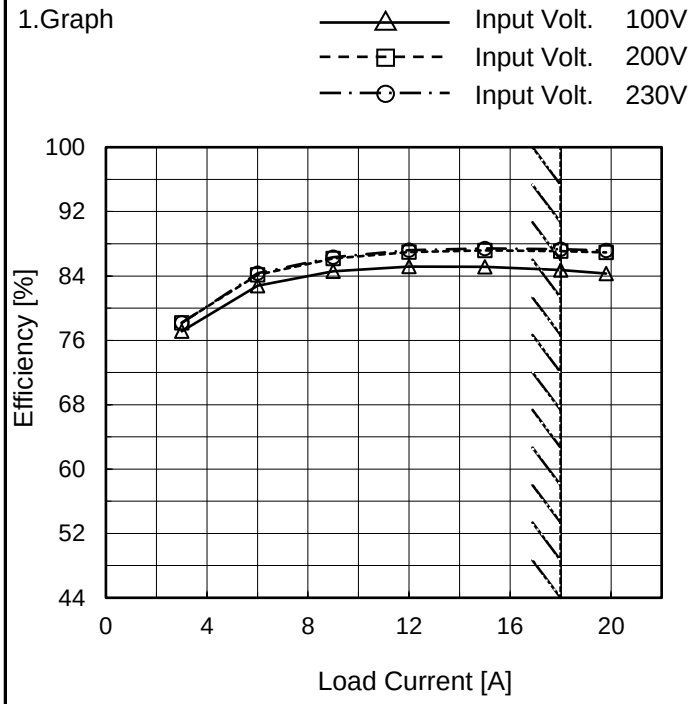
Model	PDA600F-36
Item	Efficiency (by Load Current)
Object	————————

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

Load Current [A]	Efficiency [%]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
0.0	-	-	-
3.0	77.1	78.2	78.2
6.0	82.8	84.1	84.3
9.0	84.6	86.2	86.3
12.0	85.2	87.0	87.2
15.0	85.1	87.2	87.4
18.0	84.7	87.1	87.3
19.8	84.3	86.9	87.2
--	-	-	-
--	-	-	-
--	-	-	-

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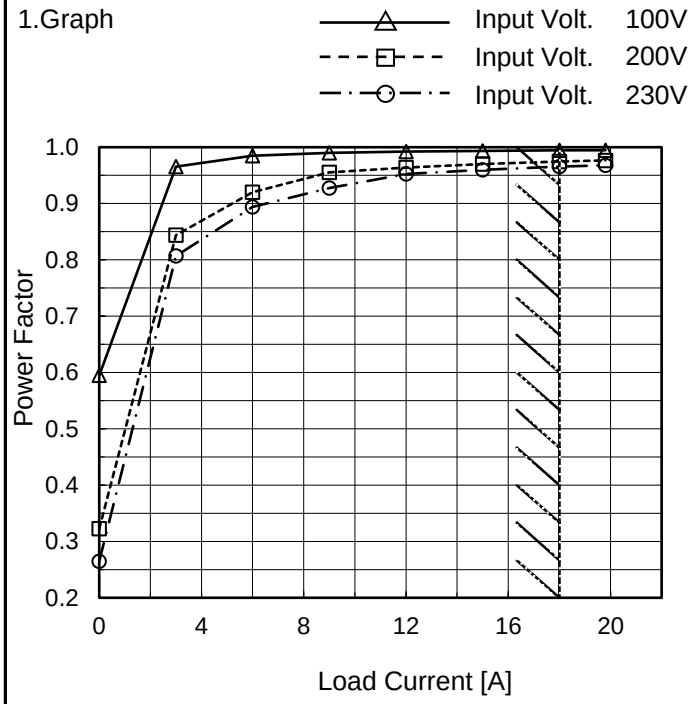
Model	PDA600F-36
Item	Power Factor (by Load Current)
Object	————————

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

Load Current [A]	Power Factor		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
0.0	0.595	0.323	0.265
3.0	0.965	0.844	0.807
6.0	0.985	0.920	0.894
9.0	0.990	0.955	0.928
12.0	0.992	0.964	0.952
15.0	0.994	0.970	0.960
18.0	0.994	0.975	0.965
19.8	0.995	0.977	0.968
--	-	-	-
--	-	-	-
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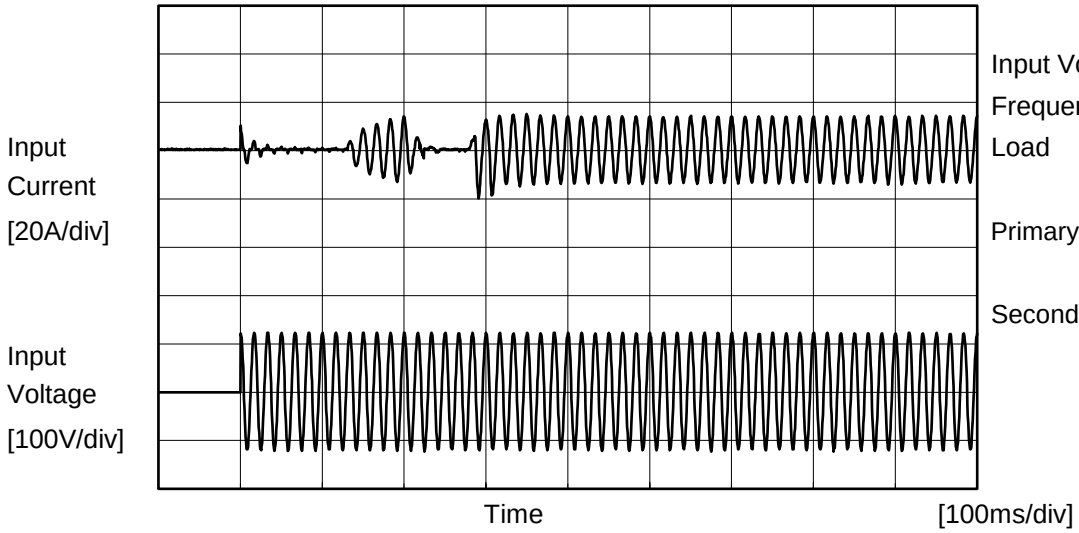
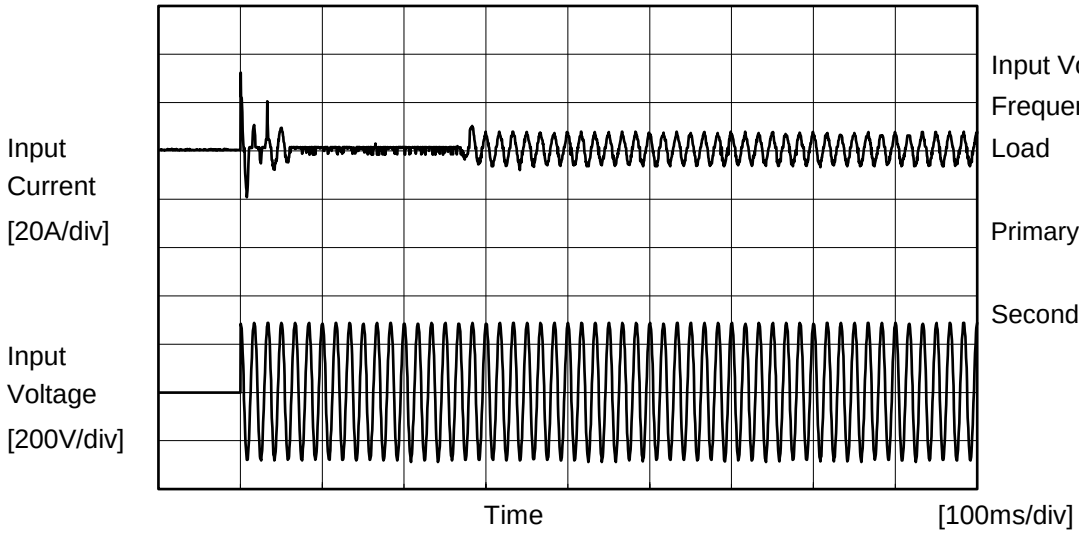
Model	PDA600F-36	
Item	Inrush Current	Temperature 25°C Testing Circuitry Figure A
Object	————————	



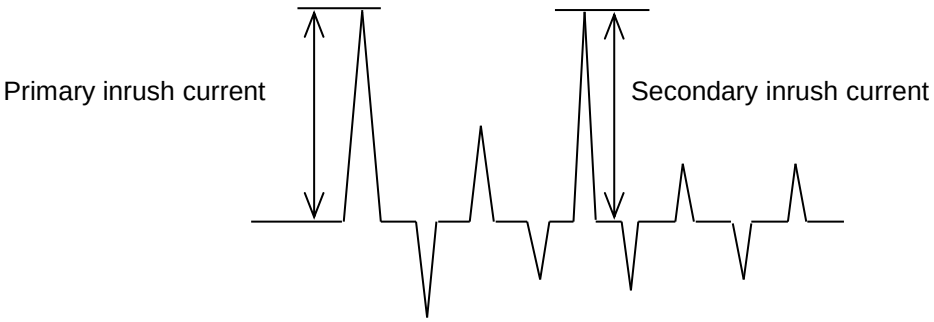
Input Voltage 100 V
Frequency 60 Hz
Load 100 %

Primary inrush current :
10.4 A
Secondary inrush current :
19.8 A



Input Voltage 230 V
Frequency 60 Hz
Load 100 %

Primary inrush current :
32.4 A
Secondary inrush current :
10.4 A



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Model	PDA600F-36	
Item	Leakage Current	Temperature 25°C Testing Circuitry Figure C
Object	――――――――――――	

1.Results

[mA]

Standards	Testing Circuitry	Measuring Method	Input Volt.			Note
			100 [V]	230 [V]	240 [V]	
DEN-AN	Figure C-1	Both phases	0.16	0.43	0.45	Operation
		One of phases	0.31	0.81	0.85	Stand by
IEC62368-1	Figure C-2	Both phases	0.16	0.42	0.45	Operation
		One of phases	0.31	0.80	0.84	Stand by
	Figure C-3	Both phases	0.16	0.42	0.44	Operation
		One of phases	0.31	0.79	0.83	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.

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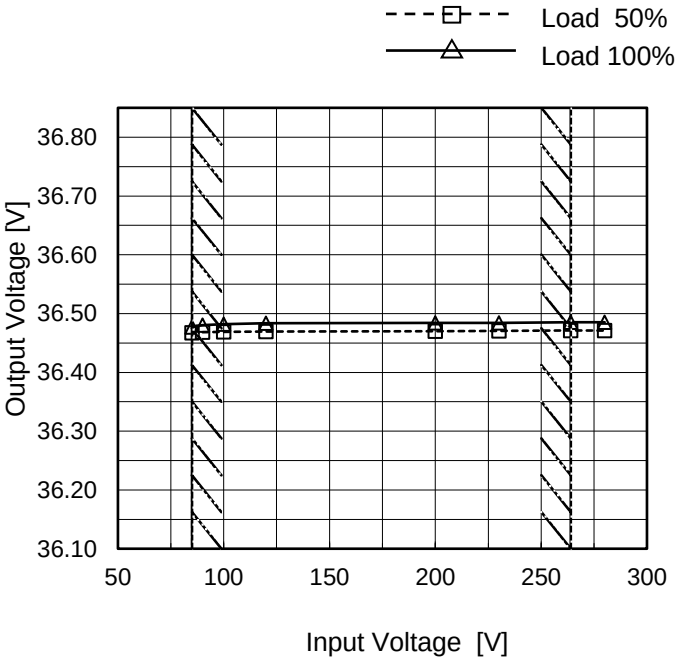
Model	PDA600F-36
Item	Line Regulation
Object	+36V18A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

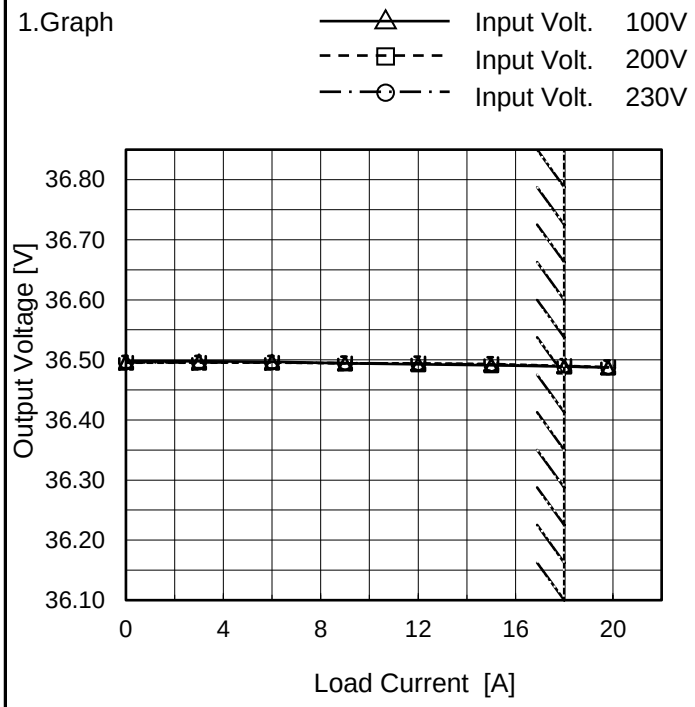
Input Voltage [V]	Output Voltage [V]	
	Load 50%	Load 100%
85	36.467	36.477
90	36.468	36.480
100	36.469	36.482
120	36.469	36.484
200	36.470	36.484
230	36.471	36.484
264	36.471	36.485
280	36.471	36.485
--	-	-

COSEL

Model	PDA600F-36
Item	Load Regulation
Object	+36V18A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

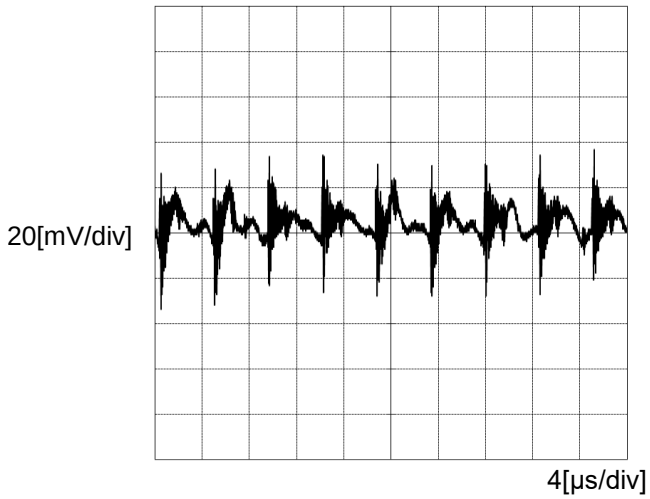
Load Current [A]	Output Voltage [V]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
0.0	36.498	36.495	36.496
3.0	36.498	36.495	36.496
6.0	36.497	36.496	36.496
9.0	36.494	36.494	36.495
12.0	36.493	36.494	36.494
15.0	36.491	36.493	36.492
18.0	36.489	36.490	36.490
19.8	36.487	36.488	36.487
--	--	--	--
--	--	--	--
--	--	--	--

Item	Ripple-Noise
Object	+36V18A

Temperature 25°C
Testing Circuitry Figure B

1.Graph

Input Voltage 230V
Load 100%



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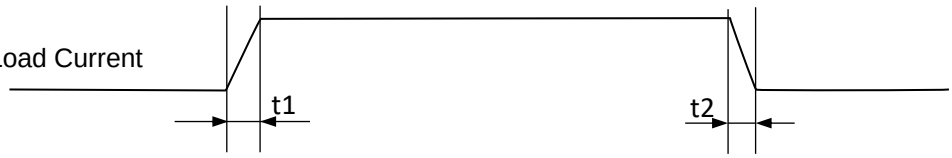
Model	PDA600F-36	
Item	Dynamic Load Response	Temperature 25°C Testing Circuitry Figure A
Object	+36V18A	

Input Volt. 230 V

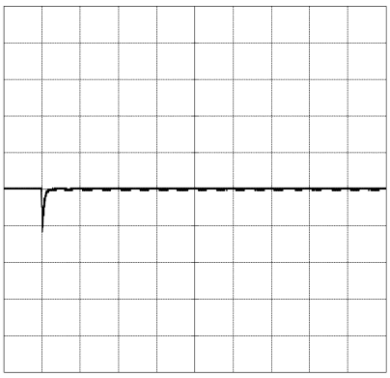
Cycle 1000 ms

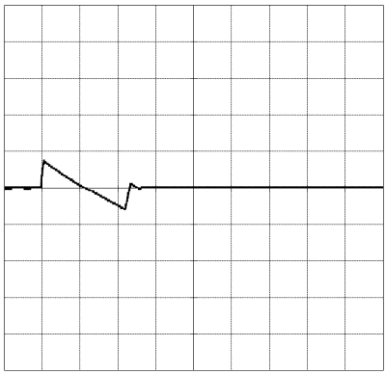
Response. t1=t2=50µs. Typ

Load Current



Load 0%(0A) ←→
Load 100%(18A)



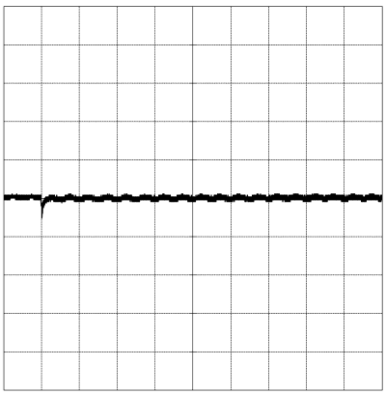


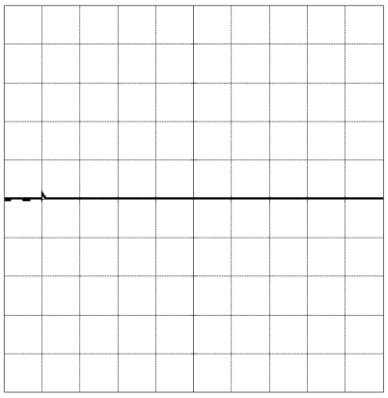
500[mV/div]

20[ms/div]

20[ms/div]

Load 50%(9A) ←→
Load 100%(18A)



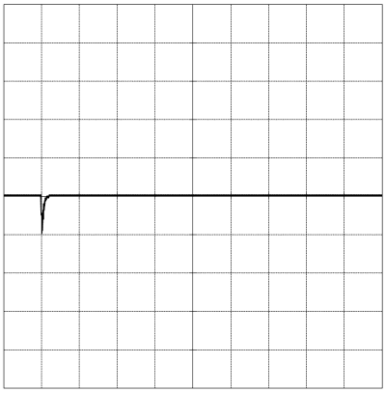


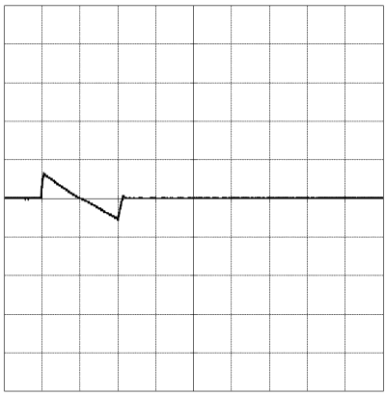
500[mV/div]

20[ms/div]

20[ms/div]

Load %(0A) ←→
Load 50%(9A)





500[mV/div]

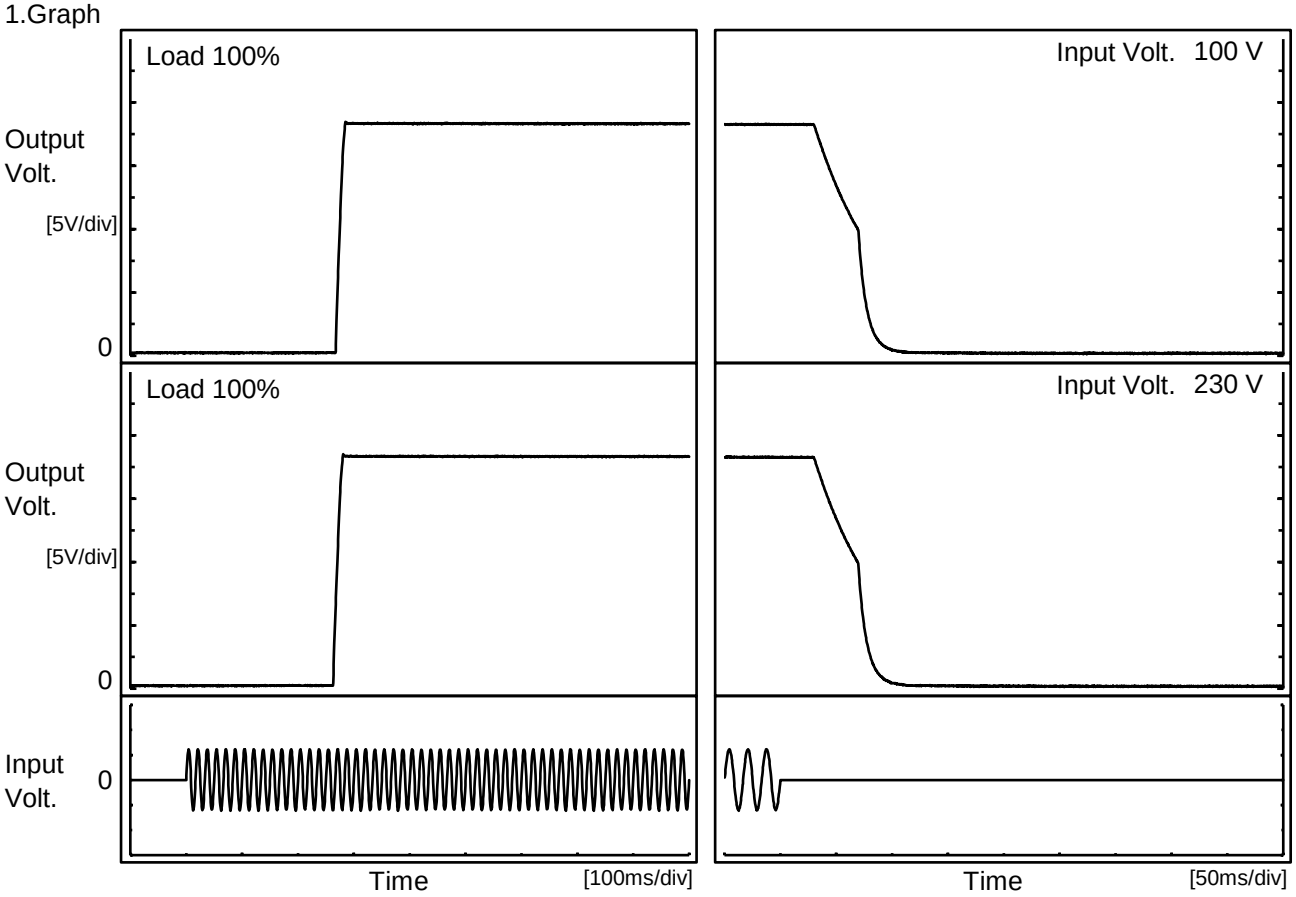
20[ms/div]

20[ms/div]

COSEL

Model	PDA600F-36	
Item	Rise and Fall Time	Temperature 25°C Testing Circuitry Figure A
Object	+36V18A	

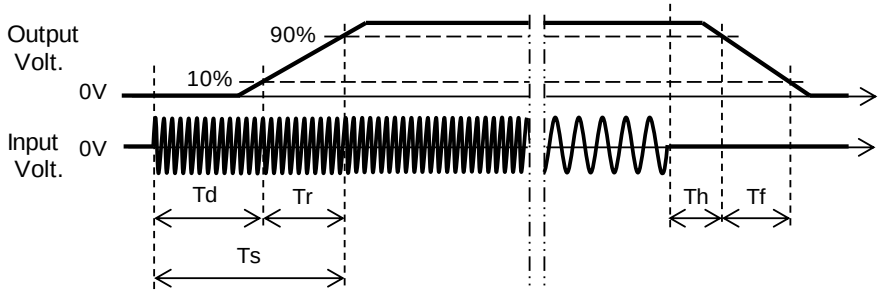
1.Graph



2.Values

[ms]

Input Volt. \ Time	Td	Tr	Ts	Th	Tf
100 V	269.0	12.0	281.0	37.5	45.8
230 V	264.0	12.5	276.5	37.3	45.8



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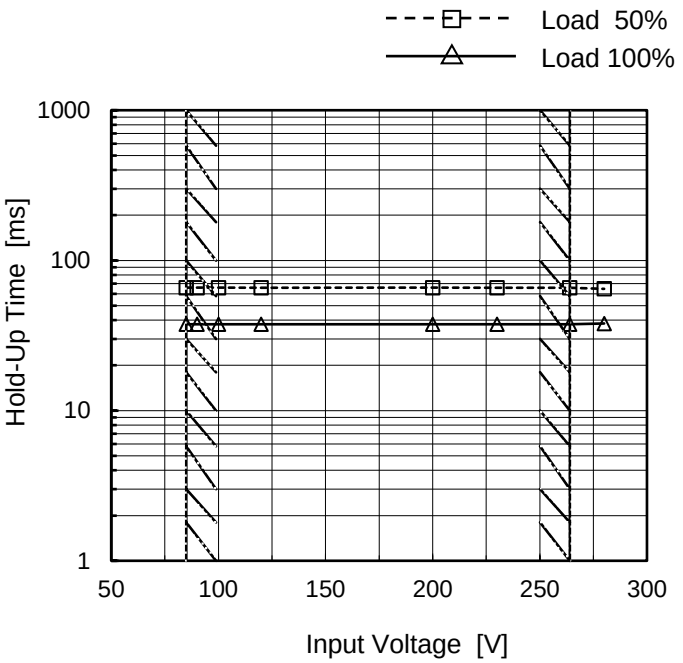
Model	PDA600F-36
Item	Hold-Up Time
Object	+36V18A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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.

2.Values

Input Voltage [V]	Hold-Up Time [ms]	
	Load 50%	Load 100%
85	66	38
90	66	38
100	66	38
120	66	38
200	66	38
230	66	38
264	66	38
280	65	38
--	-	-

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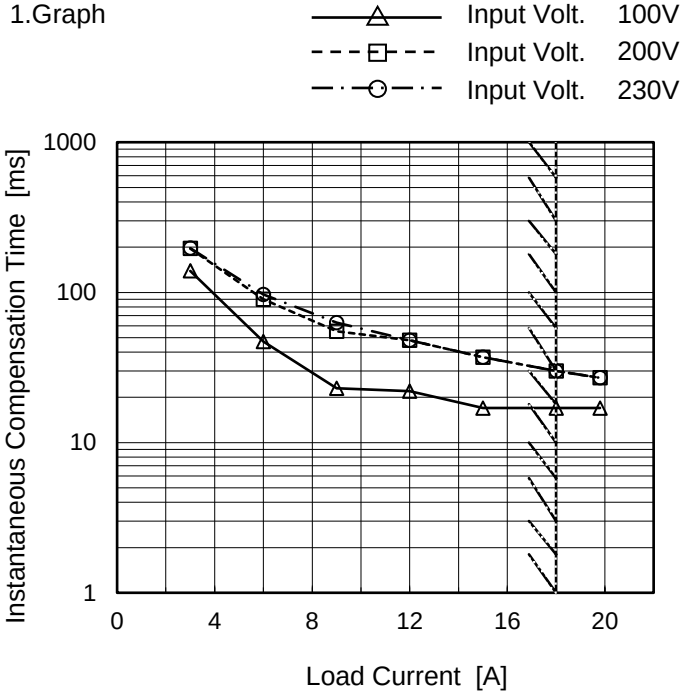
Model	PDA600F-36
Item	Instantaneous Interruption Compensation
Object	+36V18A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

Load Current [A]	Time [ms]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
0.0	-	-	-
3.0	139	196	197
6.0	47	90	97
9.0	23	55	63
12.0	22	48	48
15.0	17	37	37
18.0	17	30	30
19.8	17	27	27
--	-	-	-
--	-	-	-
--	-	-	-

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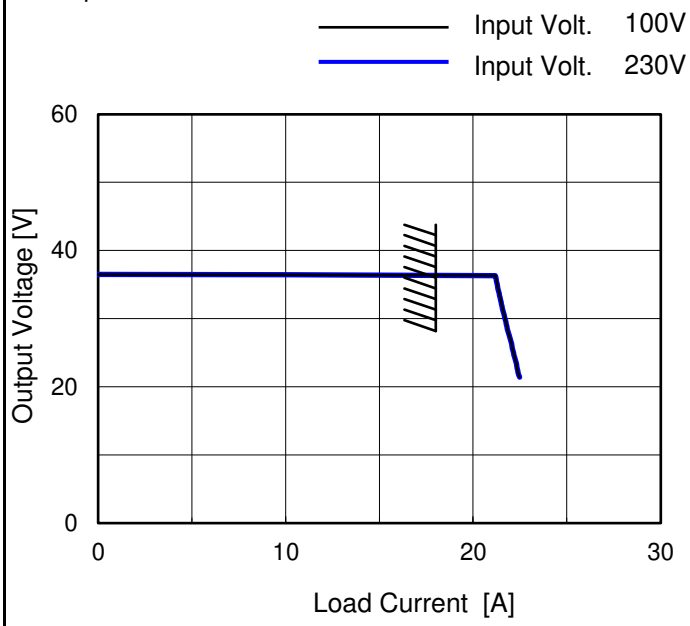
Model	PDA600F-36
Item	Overcurrent Protection
Object	+36V18A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

Intermittent operation occurs when the output voltage is from 21.6V to 0V.

2.Values

Output Voltage [V]	Load Current [A]	
	Input Volt. 100[V]	Input Volt. 230[V]
34.2	21.37	21.36
32.4	21.21	21.19
28.8	21.80	21.79
25.2	22.12	22.12
21.6	22.43	22.43
--	-	-
--	-	-
--	-	-
--	-	-
--	-	-
--	-	-
--	-	-

COSEL

Model	PDA600F-36	
Item	Ambient Temperature Drift	Testing Circuitry Figure A
Object	+36V18A	

1.Values

Load 100%

Ambient Temperature[℃]	Output Voltage [V]		
	Input Volt. 100V	Input Volt. 200V	Input Volt. 230V
-20	36.283	36.284	36.285
25	36.472	36.473	36.473
50	36.544	36.545	36.545

Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object	+36V18A	

1.Values

Ambient Temperature[℃]	Input Voltage [V]	
	Load 50%	Load 100%
-20	67	68
25	67	68
50	67	69

Item	Overvoltage Protection	Testing Circuitry Figure A
Object	+36V18A	

1.Values

Load 0%

Ambient Temperature[℃]	Operating Point [V]	
	Input Volt. 100V	Input Volt. 230V
-20	50.21	50.21
25	50.38	50.38
50	50.38	50.38

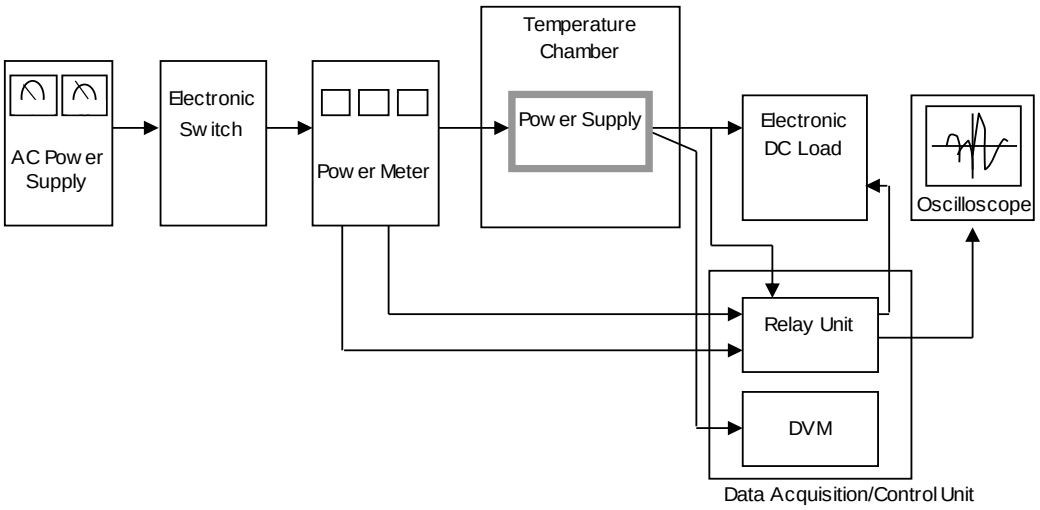


Figure A

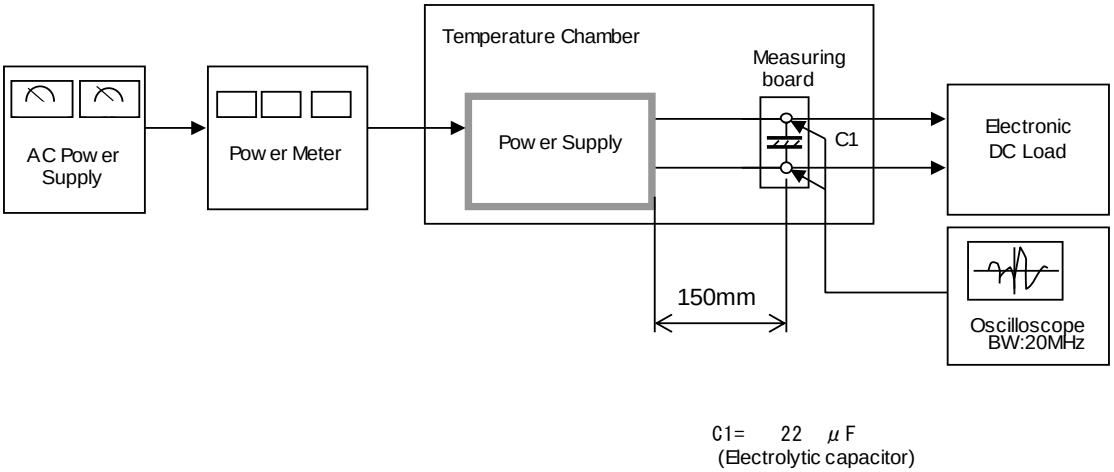


Figure B

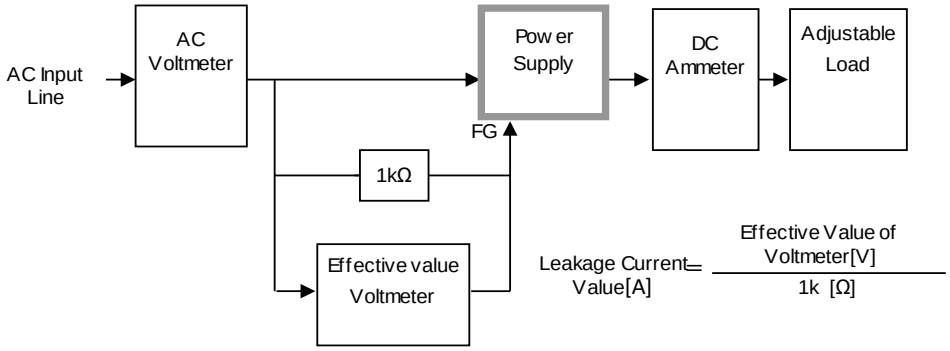


Figure C-1 (DEN-AN)

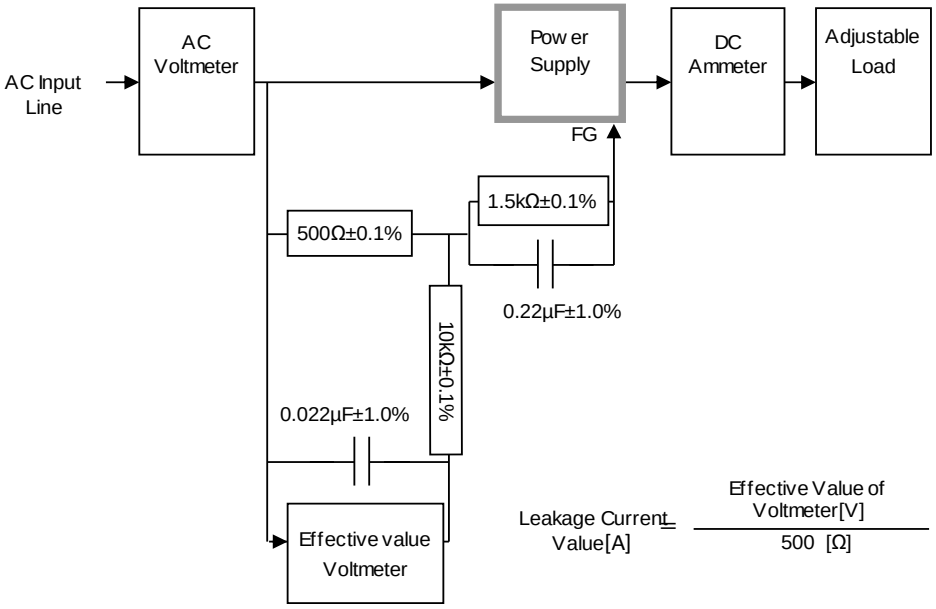


Figure C-2 (IEC62368-1 refer to IEC60990 Fig.4)

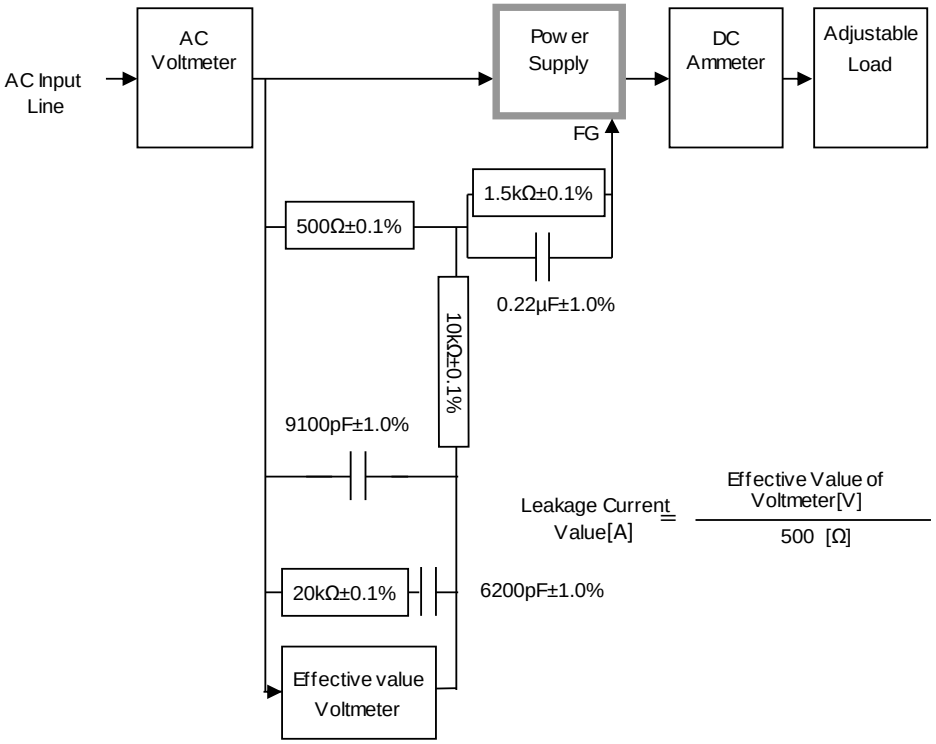


Figure C-3 (IEC62368-1 refer to IEC60990 Fig.5)