For Reference

TEST DATA OF PDA150F-15

Regulated DC Power Supply
December 13, 2024

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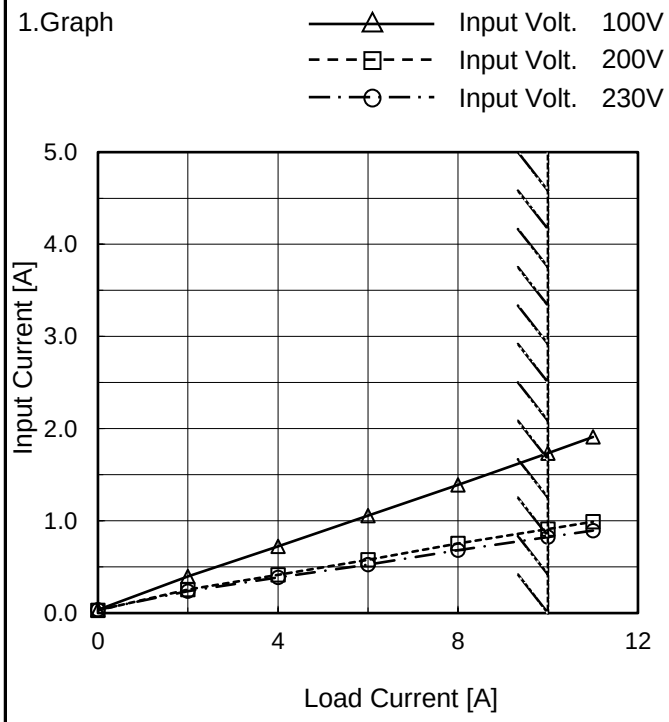
Model	PDA150F-15
Item	Input Current (by Load Current)
Object	————————

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]
0.00	0.036	0.030	0.035
2.00	0.396	0.254	0.236
4.00	0.724	0.416	0.385
6.00	1.058	0.579	0.527
8.00	1.391	0.756	0.681
10.00	1.736	0.911	0.825
11.00	1.910	0.990	0.895
--	-	-	-
--	-	-	-
--	-	-	-
--	-	-	-

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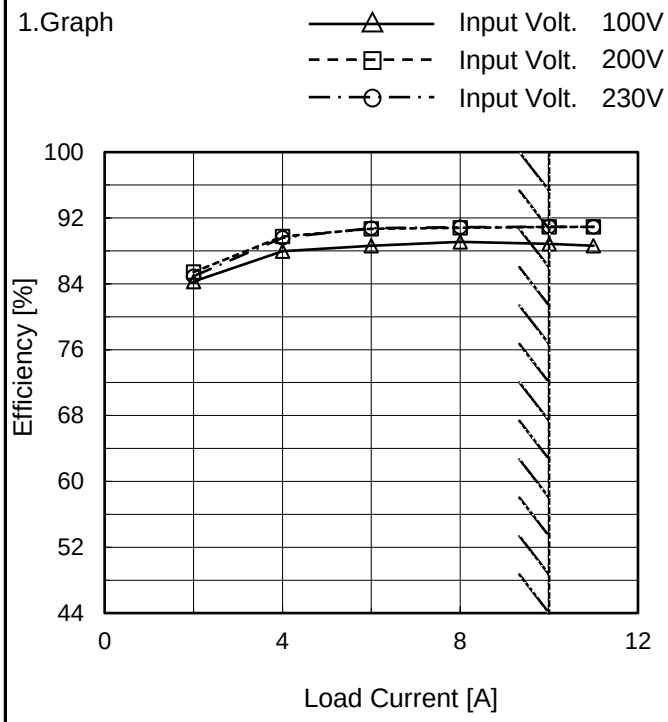
Model	PDA150F-15
Item	Efficiency (by Load Current)
Object	———————

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

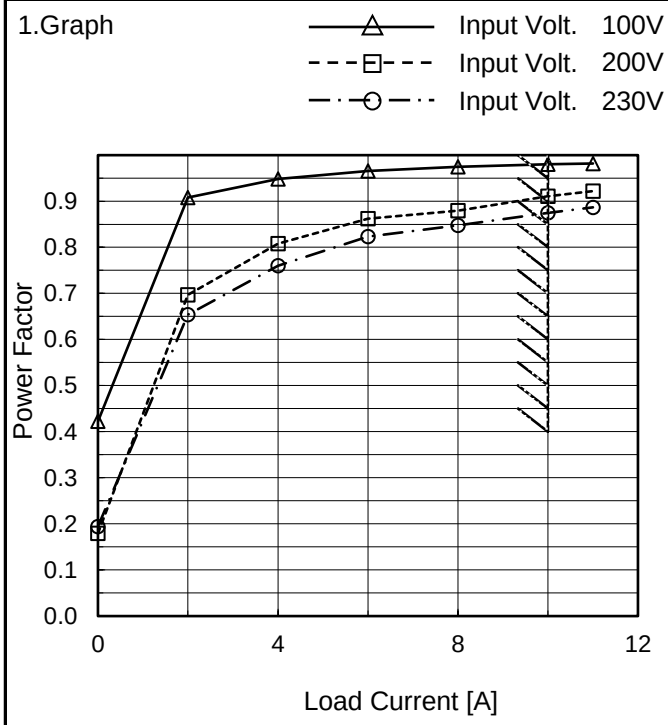
Load Current [A]	Efficiency [%]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
0.00	-	-	-
2.00	84.3	85.4	84.9
4.00	87.9	89.7	89.6
6.00	88.6	90.7	90.8
8.00	89.1	90.8	90.9
10.00	88.8	90.9	90.9
11.00	88.6	90.9	90.9
--	-	-	-
--	-	-	-
--	-	-	-
--	-	-	-

COSEL

Model	PDA150F-15
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]
0.00	0.422	0.179	0.194
2.00	0.908	0.697	0.654
4.00	0.948	0.808	0.760
6.00	0.966	0.862	0.823
8.00	0.975	0.879	0.848
10.00	0.980	0.911	0.874
11.00	0.982	0.922	0.887
--	-	-	-
--	-	-	-
--	-	-	-
--	-	-	-

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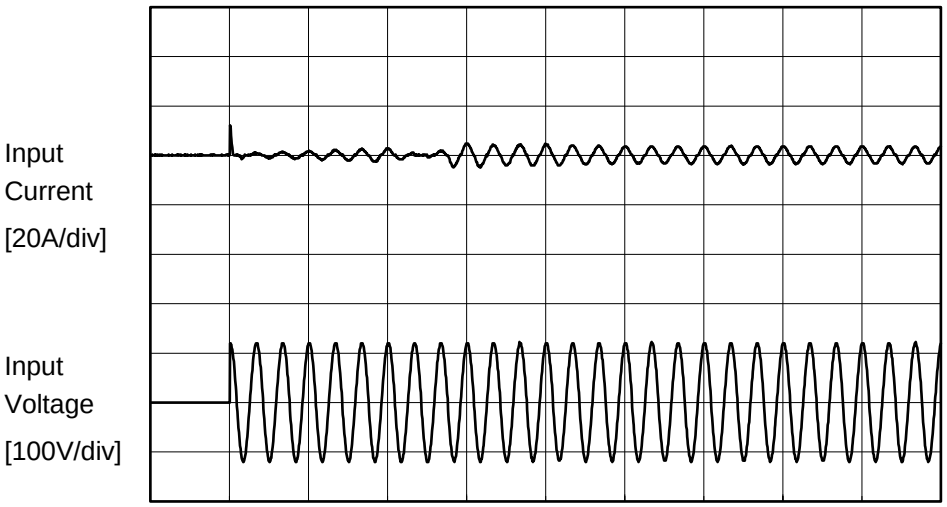
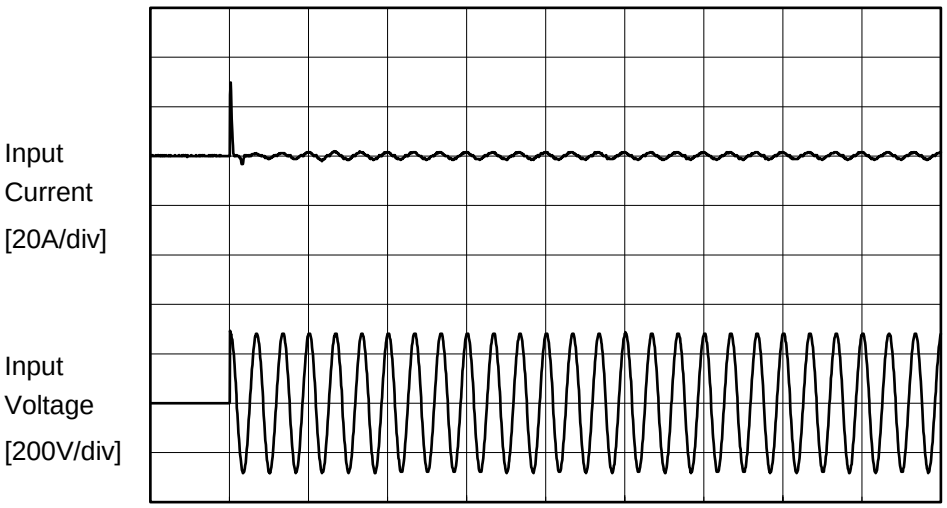
Model	PDA150F-15		
Item	Inrush Current	Temperature	25°C
		Testing Circuitry	Figure A
Object	———————		



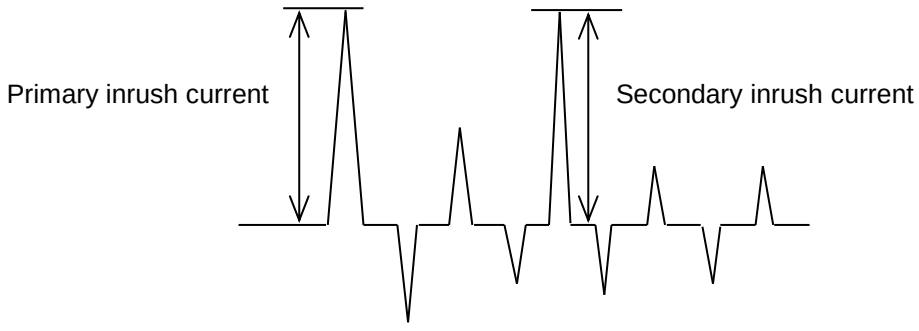
Input Voltage 100 V
Frequency 60 Hz
Load 100 %

Primary inrush current :
12.2 A
Secondary inrush current :
4.8 A



Input Voltage 230 V
Frequency 60 Hz
Load 100 %

Primary inrush current :
29.8 A
Secondary inrush current :
2.0 A



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Model	PDA150F-15	
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	0.15	0.37	0.39	Operation
		One of phases	0.28	0.71	0.74	Stand by
IEC62368-1	Figure C-2	Both phases	0.14	0.36	0.38	Operation
		One of phases	0.27	0.69	0.72	Stand by
	Figure C-3	Both phases	0.14	0.35	0.37	Operation
		One of phases	0.27	0.68	0.71	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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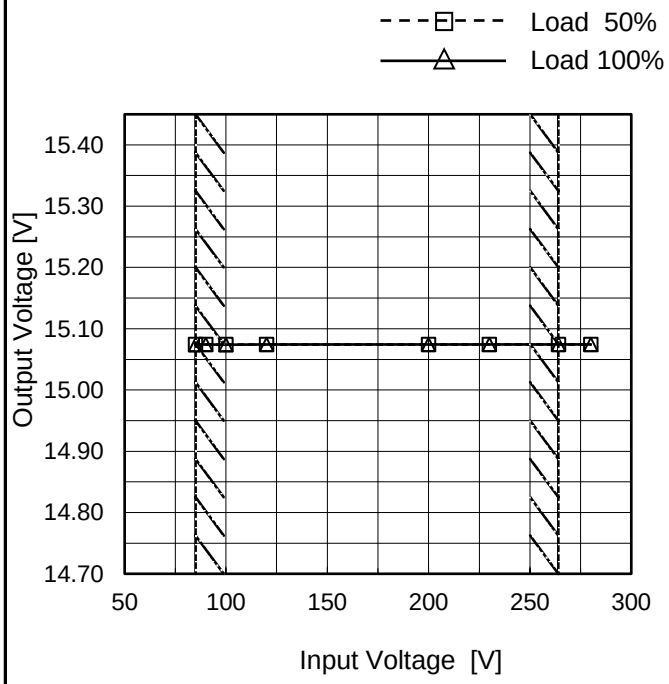
Model	PDA150F-15
Item	Line Regulation
Object	+15V10A

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	15.074	15.074
90	15.074	15.074
100	15.074	15.074
120	15.074	15.074
200	15.074	15.074
230	15.074	15.074
264	15.074	15.074
280	15.074	15.074
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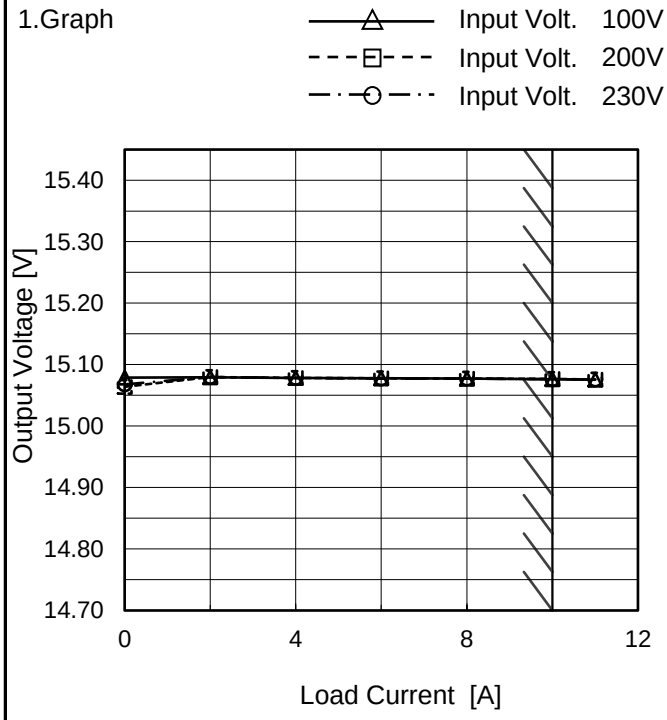
COSEL

Model	PDA150F-15
Item	Load Regulation
Object	+15V10A

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]
0.00	15.079	15.064	15.068
2.00	15.079	15.080	15.080
4.00	15.078	15.078	15.079
6.00	15.078	15.078	15.078
8.00	15.077	15.078	15.078
10.00	15.076	15.077	15.076
11.00	15.076	15.076	15.076
--	--	--	--
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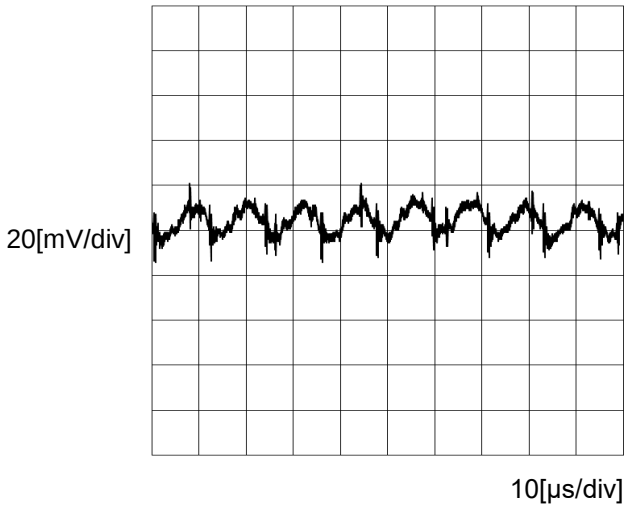
Item	Ripple-Noise
Object	+15V10A

Temperature 25°C
Testing Circuitry Figure B

1.Graph

Input Voltage 230V
Load 100%



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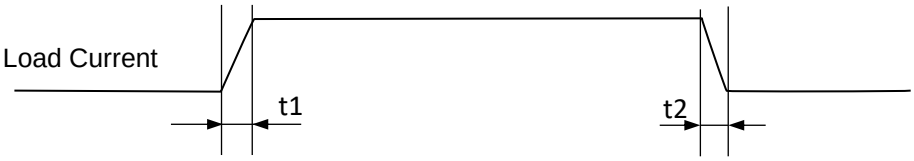
Model	PDA150F-15	
Item	Dynamic Load Response	Temperature 25°C Testing Circuitry Figure A
Object	+15V10A	

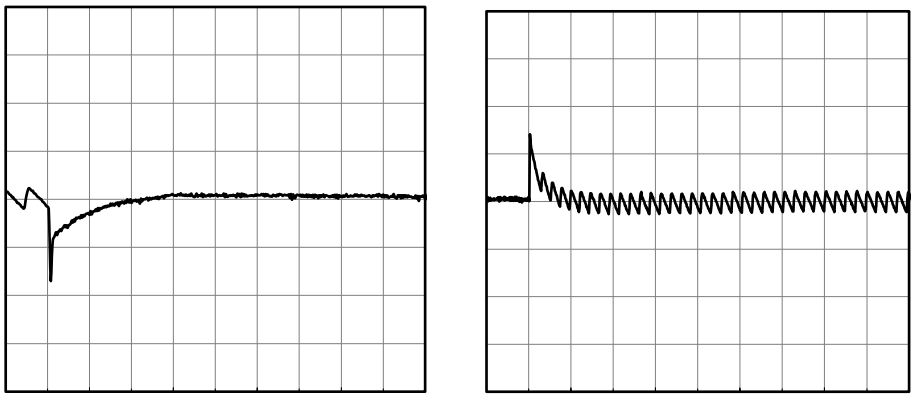
Input Volt. 230 V

Cycle 1000 ms

Response. t1=t2=50µs. Typ



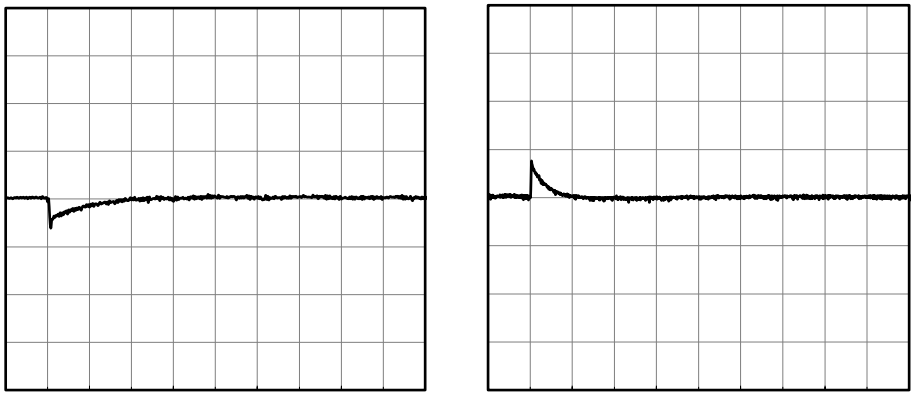
Load 0%(0A) ←→
Load 100%(10A)



200[mV/div]

4[ms/div] 10[ms/div]

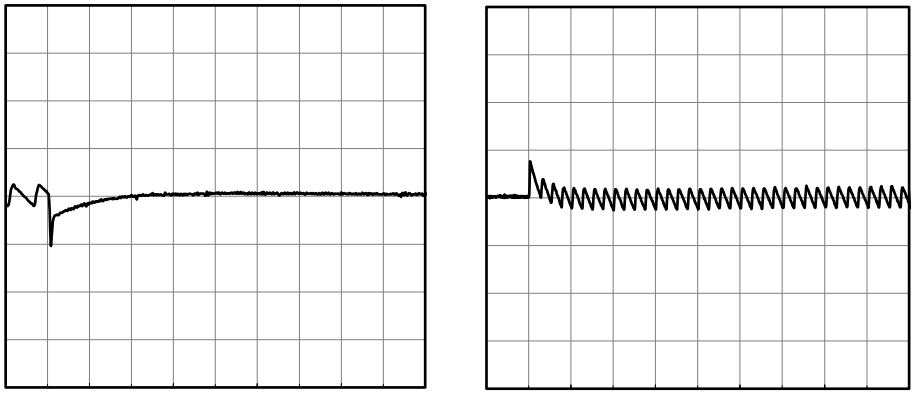
Load 50%(5A) ←→
Load 100%(10A)



200[mV/div]

4[ms/div] 10[ms/div]

Load 0%(0A) ←→
Load 50%(5A)



200[mV/div]

4[ms/div] 10[ms/div]

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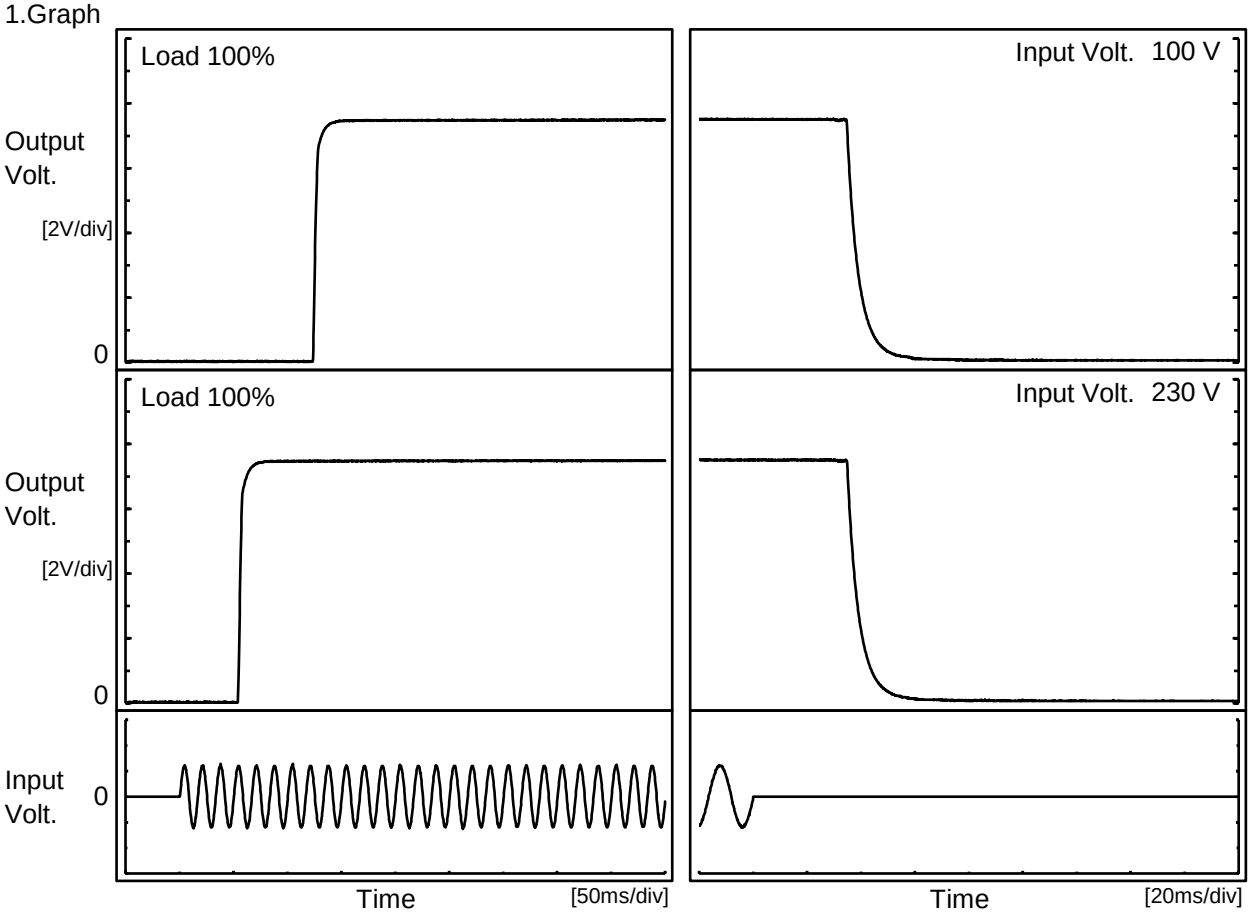
Model	PDA150F-15
Item	Rise and Fall Time
Object	+15V10A

Temperature 25°C
Testing Circuitry Figure A

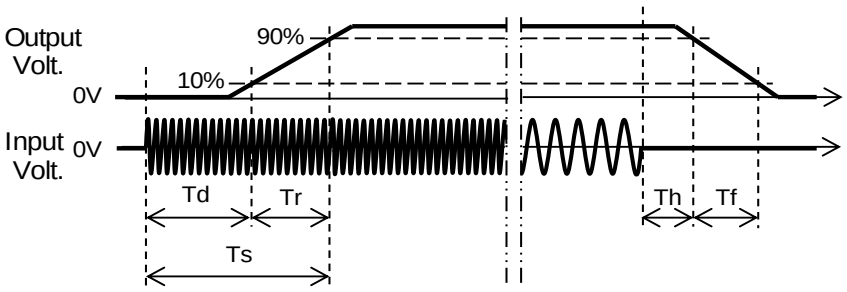
1.Graph



2.Values

[ms]

Input Volt. \ Time	Td	Tr	Ts	Th	Tf
100 V	124.3	5.5	129.8	35.1	9.9
230 V	55.0	5.5	60.5	35.2	9.9

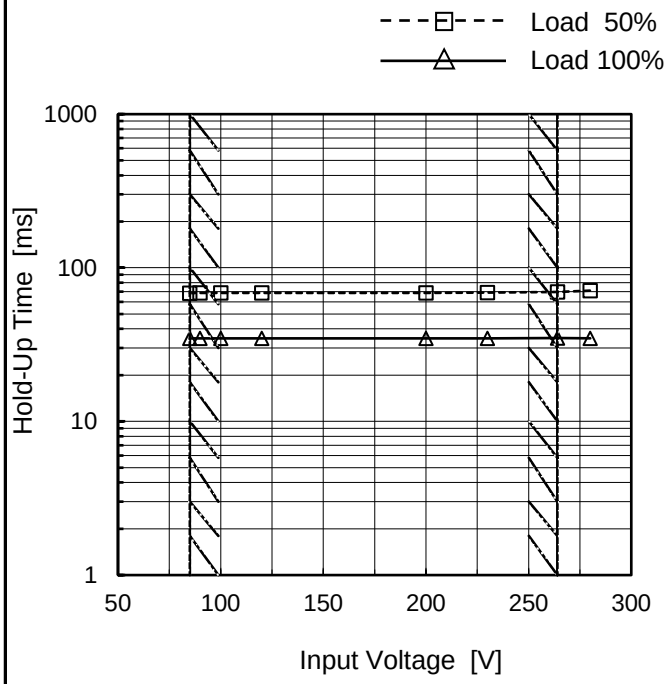


COSEL

Model	PDA150F-15
Item	Hold-Up Time
Object	+15V10A

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	68	35
90	68	35
100	69	35
120	69	35
200	69	35
230	69	35
264	70	35
280	71	35
--	-	-

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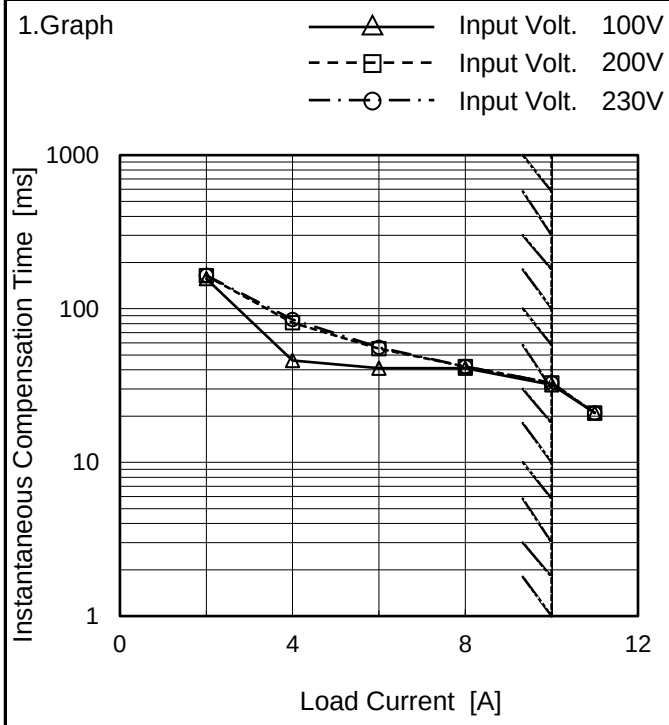
Model	PDA150F-15
Item	Instantaneous Interruption Compensation
Object	+15V10A

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]
0.00	-	-	-
2.00	157	164	165
4.00	46	81	85
6.00	41	55	56
8.00	41	42	42
10.00	32	33	33
11.00	21	21	21
--	-	-	-
--	-	-	-
--	-	-	-
--	-	-	-

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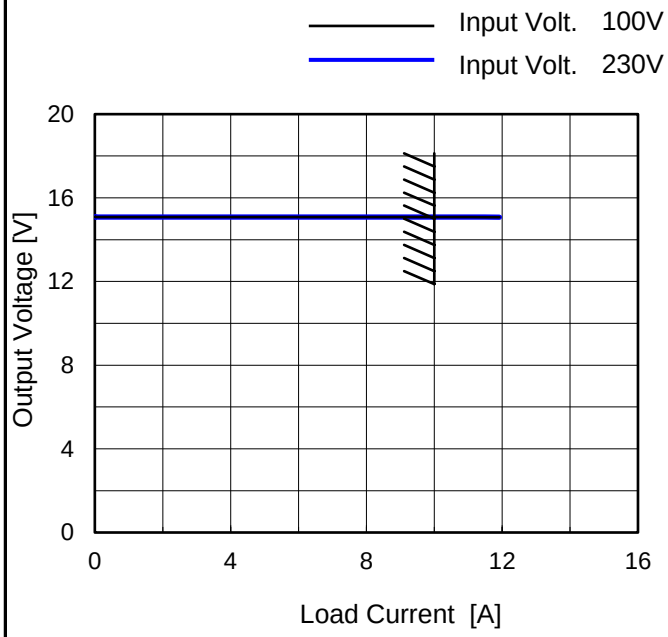
Model	PDA150F-15
Item	Overcurrent Protection
Object	+15V10A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

Output Voltage [V]	Load Current [A]	
	Input Volt. 100[V]	Input Volt. 230[V]
15.00	11.92	11.92
14.25	-	-
13.50	-	-
12.00	-	-
10.50	-	-
9.00	-	-
7.50	-	-
6.00	-	-
4.50	-	-
3.00	-	-
1.50	-	-
0.00	-	-

COSEL

Model	PDA150F-15
Item	Ambient Temperature Drift
Object	+15V10A

Testing Circuitry Figure A

1.Values

Load 100%

Ambient Temperature[℃]	Output Voltage [V]		
	Input Volt. 100V	Input Volt. 200V	Input Volt. 230V
-10	15.031	15.031	15.031
25	15.073	15.073	15.073
50	15.088	15.088	15.088

Item	Minimum Input Voltage for Regulated Output Voltage
Object	+15V10A

Testing Circuitry Figure A

1.Values

Ambient Temperature[℃]	Input Voltage [V]	
	Load 50%	Load 100%
-10	42	57
25	41	57
50	40	57

Item	Overvoltage Protection
Object	+15V10A

Testing Circuitry Figure A

1.Values

Load 0%

Ambient Temperature[℃]	Operating Point [V]	
	Input Volt. 100V	Input Volt. 230V
-20	23.43	23.43
25	24.00	24.00
50	24.29	24.29

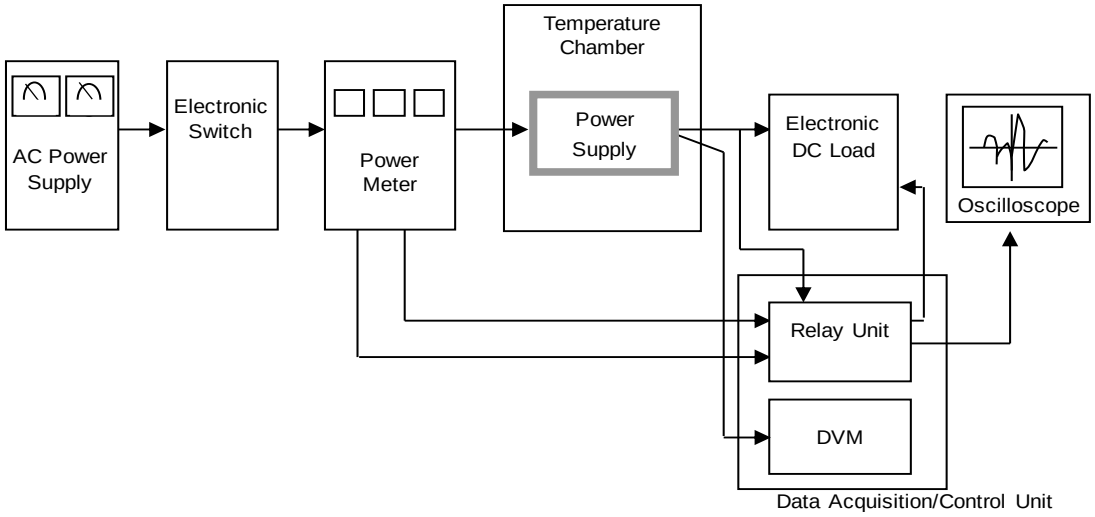
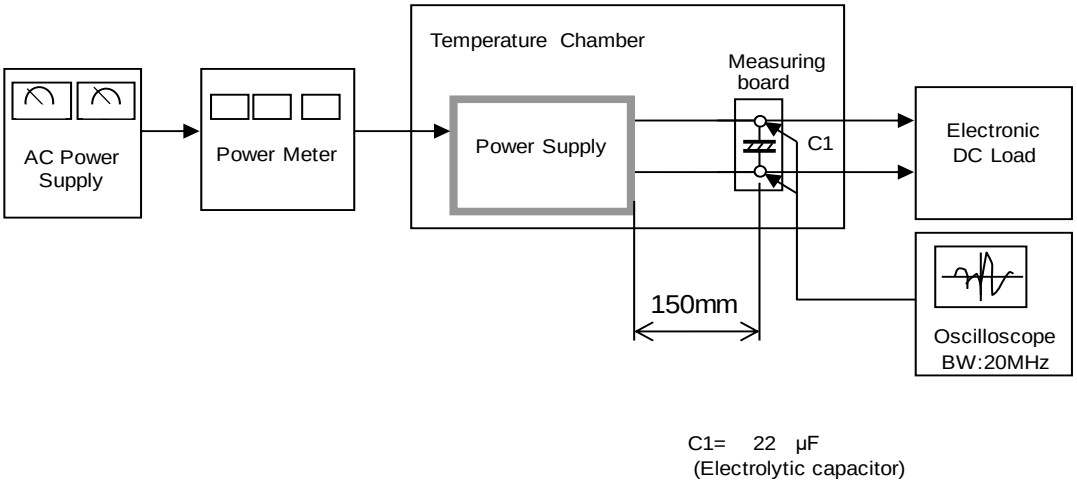


Figure A



C1= 22 µF
(Electrolytic capacitor)

Figure B

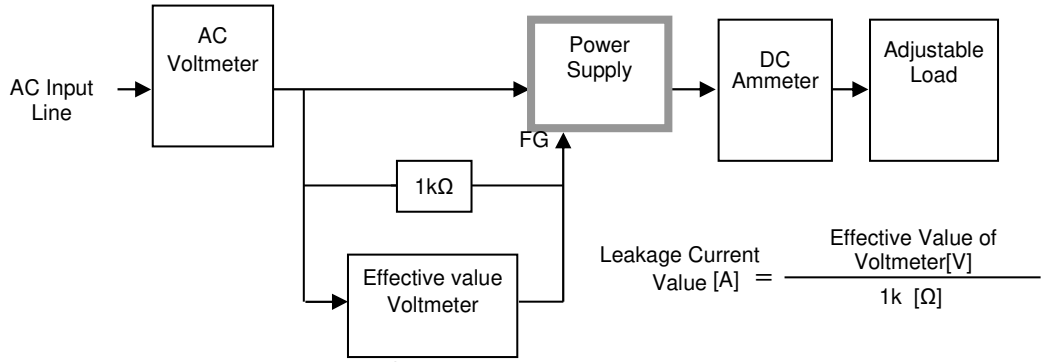


Figure C-1 (DEN-AN)

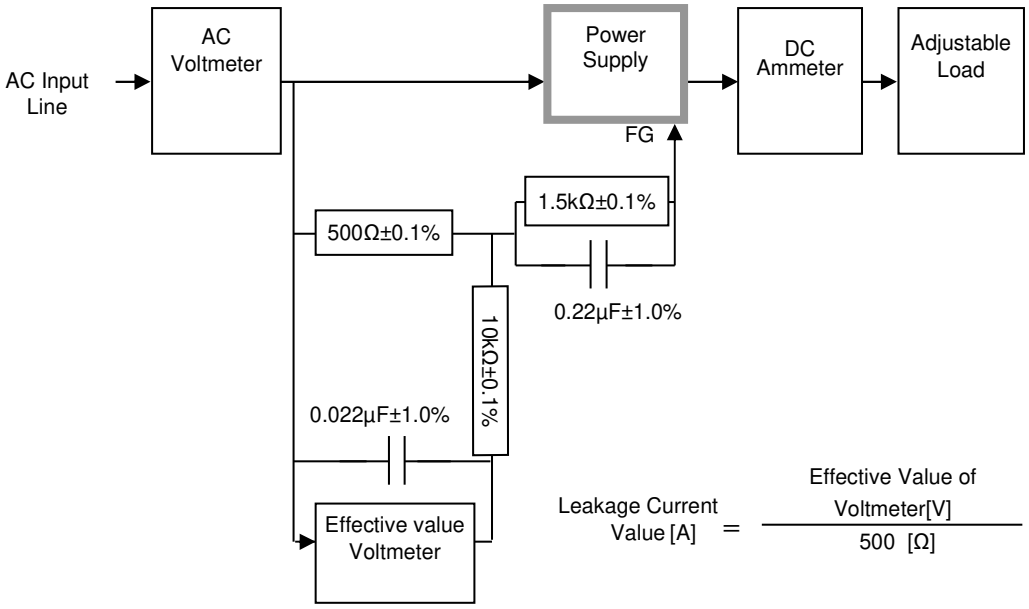


Figure C-2 (IEC62368-1 refer to IEC60990 Fig.4)

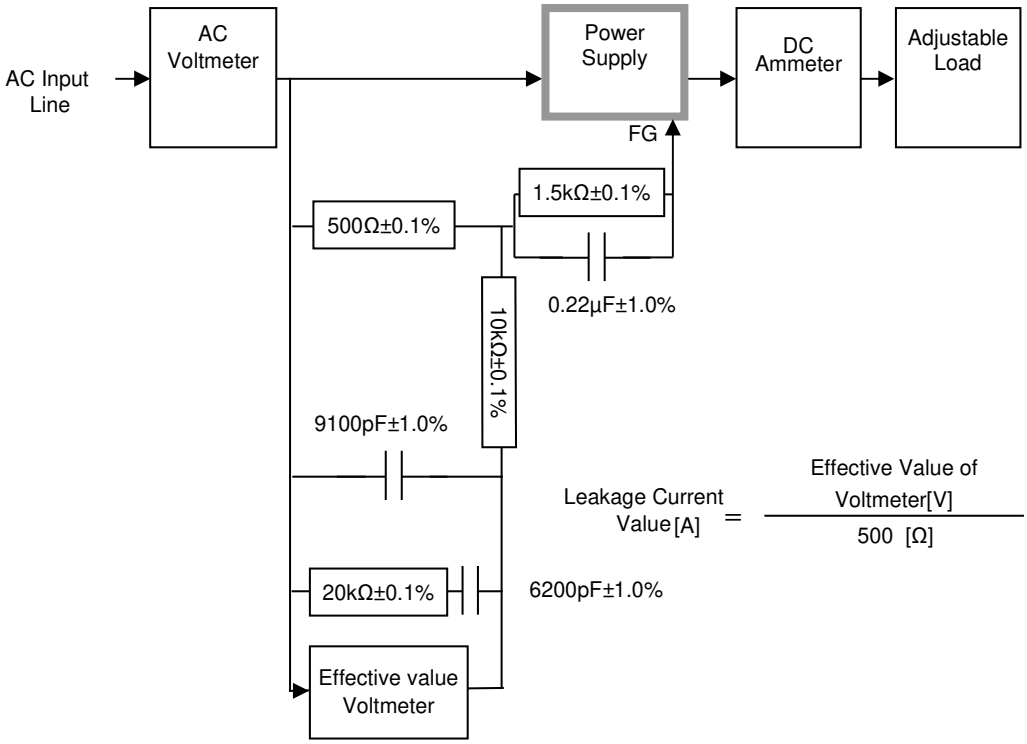


Figure C-3 (IEC62368-1 refer to IEC60990 Fig.5)