For Reference

TEST DATA OF PDA75F-12

Regulated DC Power Supply
September 30, 2026

Approved by : Yoshiaki Shimizu
Design Manager

Prepared by : Riku Okuda
Design Engineer

COSEL CO.,LTD.

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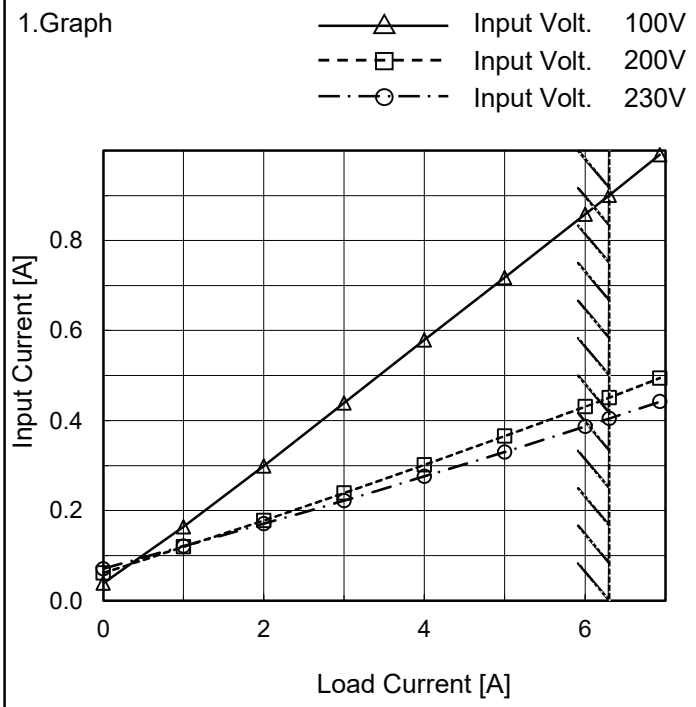
Model	PDA75F-12
Item	Input Current (by Load Current)
Object	———————

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	0.039	0.062	0.071
1.00	0.164	0.120	0.122
2.00	0.299	0.179	0.171
3.00	0.439	0.239	0.223
4.00	0.579	0.302	0.276
5.00	0.718	0.366	0.331
6.00	0.858	0.431	0.387
6.30	0.900	0.451	0.405
6.93	0.991	0.495	0.442
--	-	-	-
--	-	-	-

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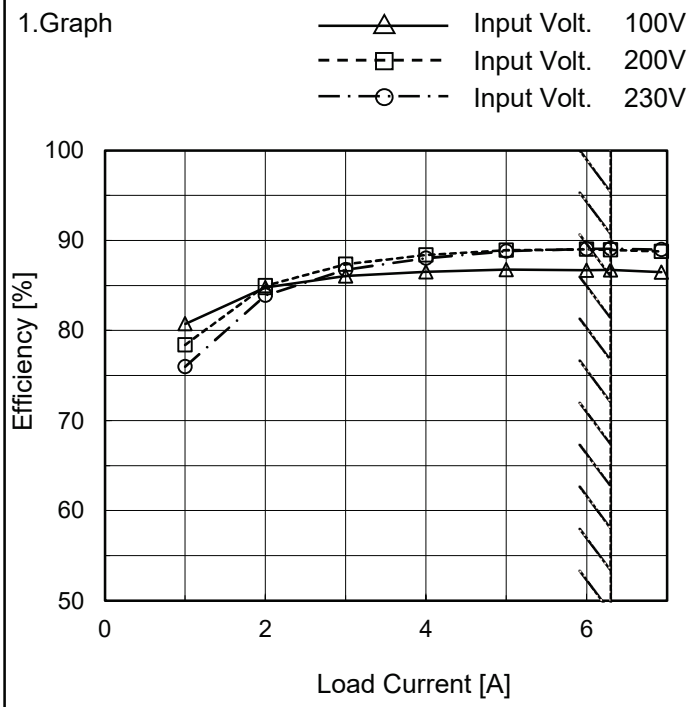
Model	PDA75F-12
Item	Efficiency (by Load Current)
Object	———————

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	-	-	-
1.00	80.8	78.4	76.0
2.00	84.8	85.0	83.9
3.00	86.1	87.4	86.8
4.00	86.5	88.4	88.1
5.00	86.8	88.9	88.8
6.00	86.7	89.0	89.1
6.30	86.7	89.0	89.1
6.93	86.5	88.8	89.0
--	-	-	-
--	-	-	-

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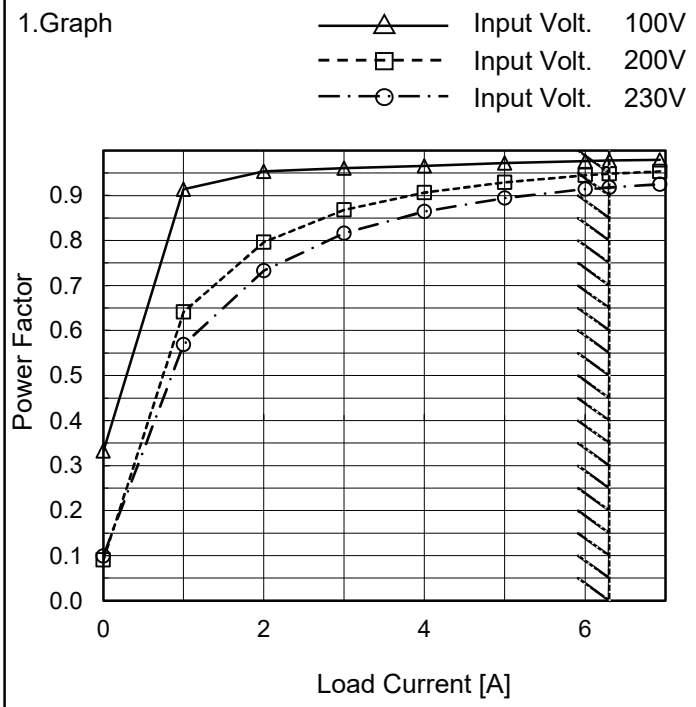
Model	PDA75F-12
Item	Power Factor (by Load Current)
Object	———————

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	0.333	0.091	0.099
1.00	0.913	0.641	0.569
2.00	0.953	0.797	0.733
3.00	0.960	0.868	0.816
4.00	0.966	0.907	0.864
5.00	0.972	0.930	0.895
6.00	0.976	0.945	0.914
6.30	0.977	0.948	0.918
6.93	0.979	0.954	0.925
--	-	-	-
--	-	-	-

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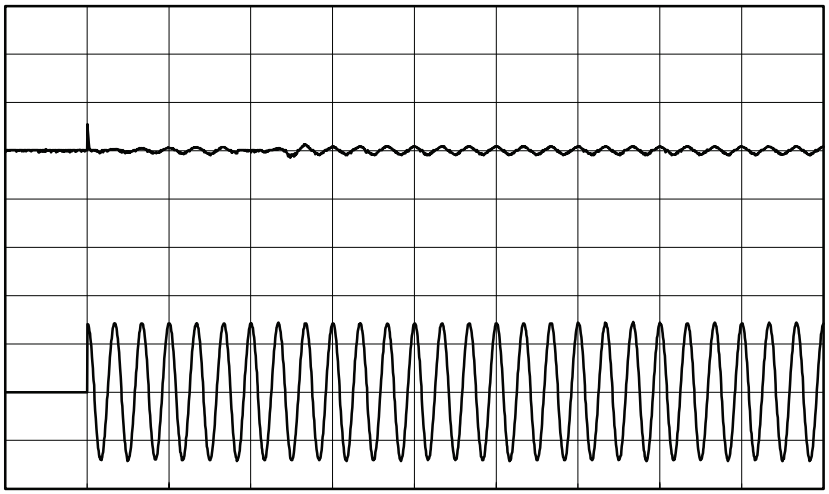
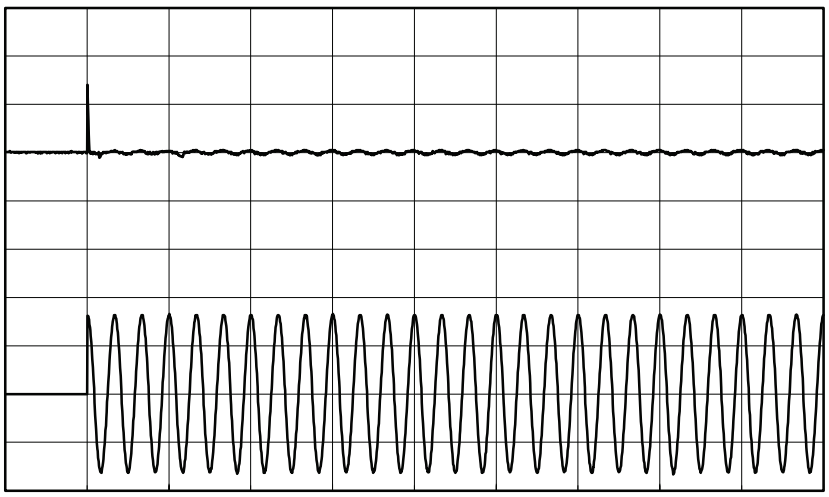
Model	PDA75F-12
Item	Inrush Current
Object	———————

Temperature 25°C
Testing Circuitry Figure A



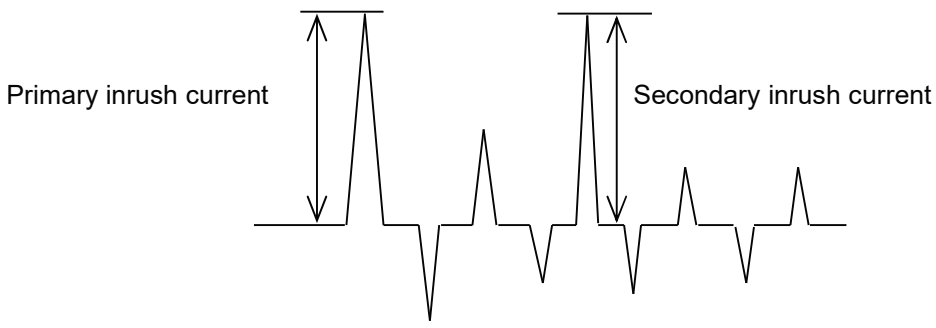
Input Voltage 100 V
Frequency 60 Hz
Load 100 %

Primary inrush current :
11.0 A
Secondary inrush current :
2.8 A



Input Voltage 230 V
Frequency 60 Hz
Load 100 %

Primary inrush current :
28.2 A
Secondary inrush current :
1.8 A



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COSEL

Model	PDA75F-12	
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	0.13	0.33	0.35	Operation
		One of phases	0.25	0.63	0.66	Stand by
IEC62368-1	Figure C-2	Both phases	0.13	0.33	0.34	Operation
		One of phases	0.25	0.63	0.65	Stand by
	Figure C-3	Both phases	0.13	0.32	0.34	Operation
		One of phases	0.25	0.62	0.65	Stand by

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

2.Condition

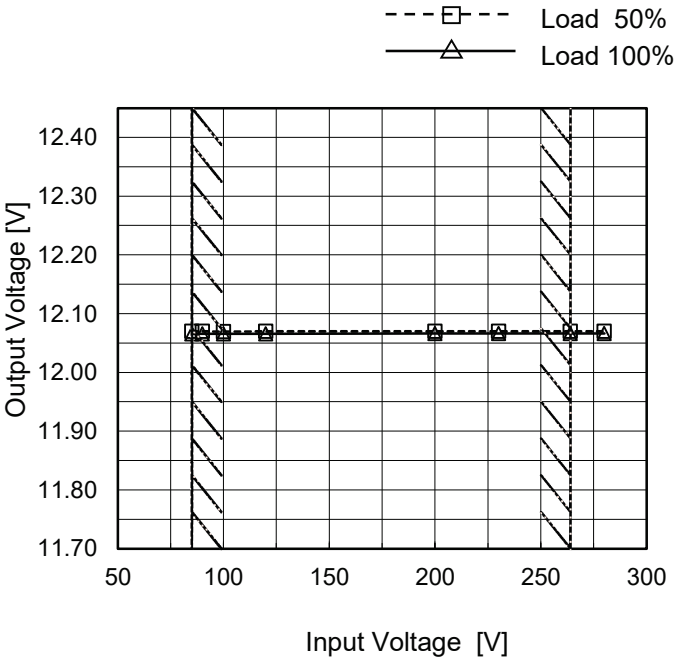
Leakage current value is concluded after measuring both phases of AC input and by choosing the larger one.

COSEL

Model	PDA75F-12
Item	Line Regulation
Object	+12V6.3A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

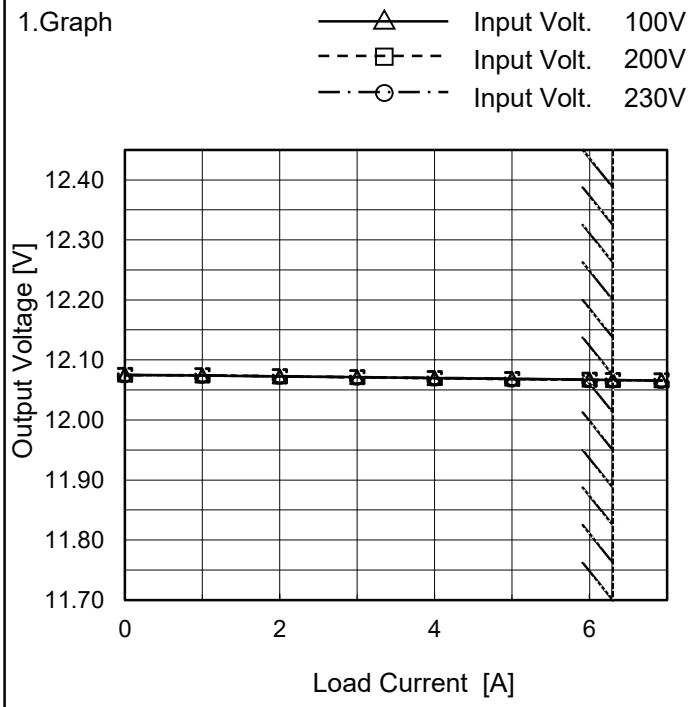
Input Voltage [V]	Output Voltage [V]	
	Load 50%	Load 100%
85	12.070	12.066
90	12.070	12.066
100	12.070	12.066
120	12.070	12.066
200	12.070	12.066
230	12.070	12.066
264	12.070	12.066
280	12.070	12.066
--	-	-

COSEL

Model	PDA75F-12
Item	Load Regulation
Object	+12V6.3A

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	12.075	12.075	12.075
1.00	12.074	12.074	12.075
2.00	12.073	12.073	12.073
3.00	12.071	12.072	12.072
4.00	12.070	12.070	12.070
5.00	12.069	12.068	12.069
6.00	12.067	12.067	12.067
6.30	12.066	12.067	12.067
6.93	12.066	12.066	12.066
--	--	--	--
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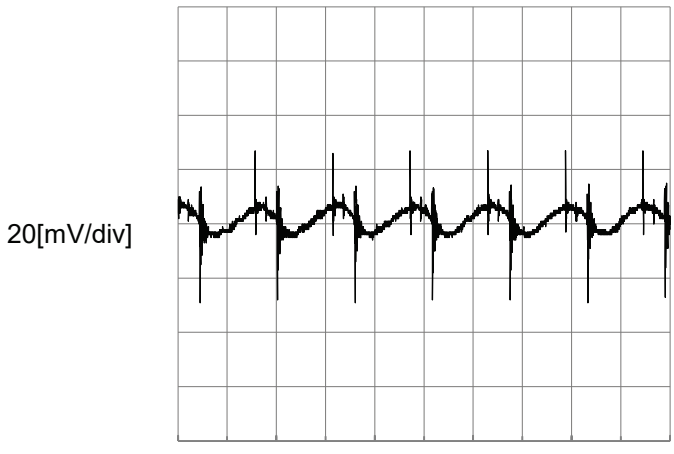
Item	Ripple-Noise
Object	+12V6.3A

Temperature 25°C
Testing Circuitry Figure B

1.Graph

Input Voltage 230V
Load 100%



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Model	PDA75F-12
Item	Dynamic Load Response
Object	+12V6.3A

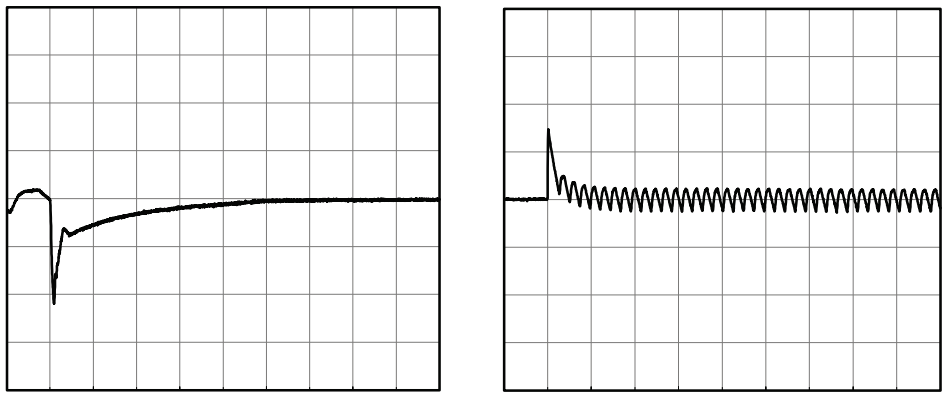
Temperature 25°C
Testing Circuitry Figure A

Input Volt. 230 V
Cycle 1000 ms

Response. t1=t2=50µs. Typ



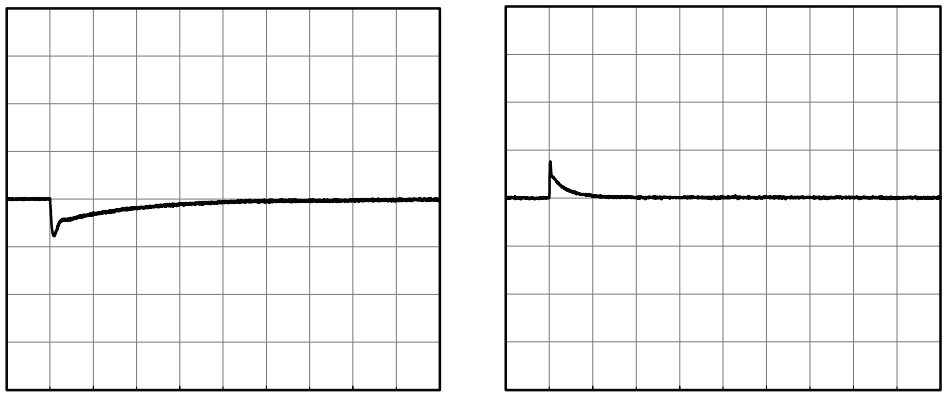
Load 0%(0A) ←→
Load 100%(6.3A)



200[mV/div]

2[ms/div] 10[ms/div]

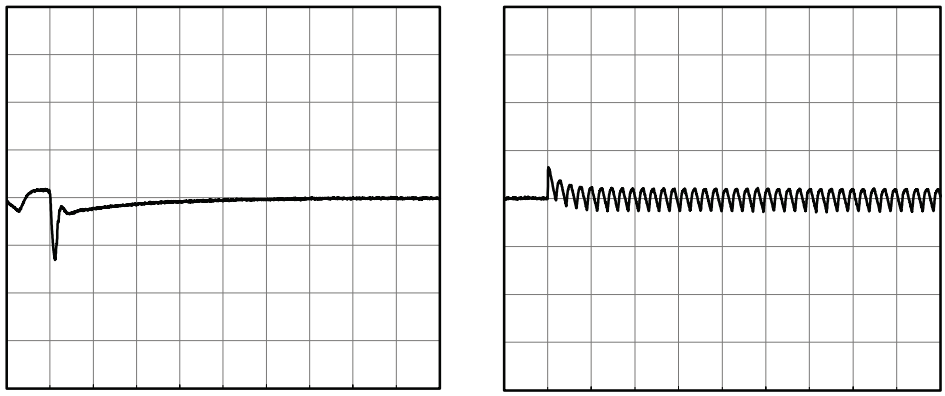
Load 50%(3.15A) ←→
Load 100%(6.3A)



200[mV/div]

2[ms/div] 10[ms/div]

Load 0%(0A) ←→
Load 50%(3.15A)



200[mV/div]

2[ms/div] 10[ms/div]

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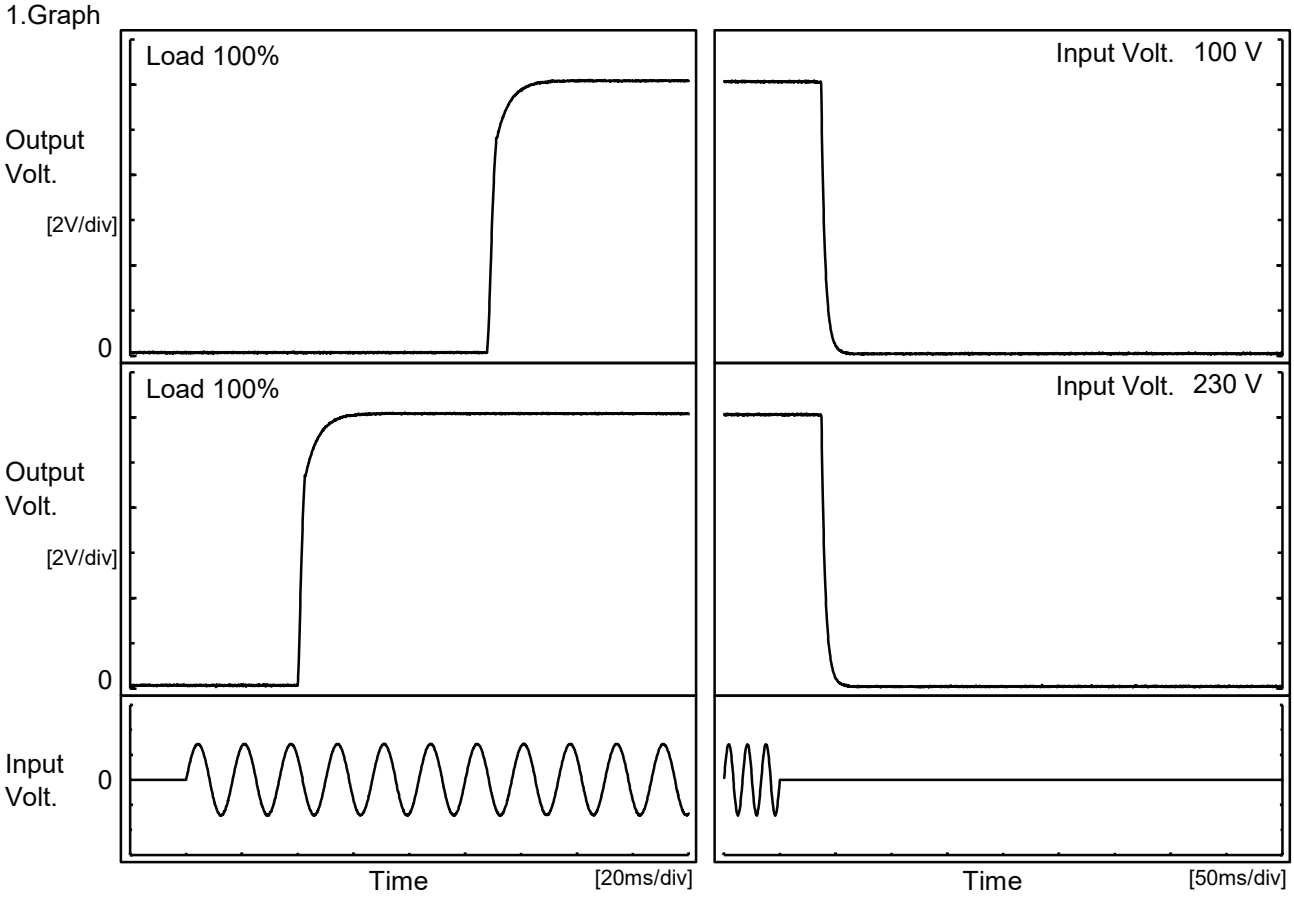
Model	PDA75F-12
Item	Rise and Fall Time
Object	+12V6.3A

Temperature 25°C
Testing Circuitry Figure A

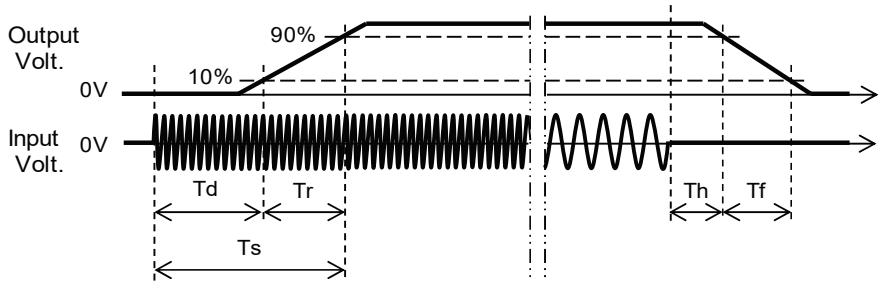
1.Graph



2.Values

[ms]

Input Volt. \ Time	Td	Tr	Ts	Th	Tf
100 V	108.4	6.2	114.6	37.3	8.0
230 V	40.5	5.9	46.4	37.5	8.0



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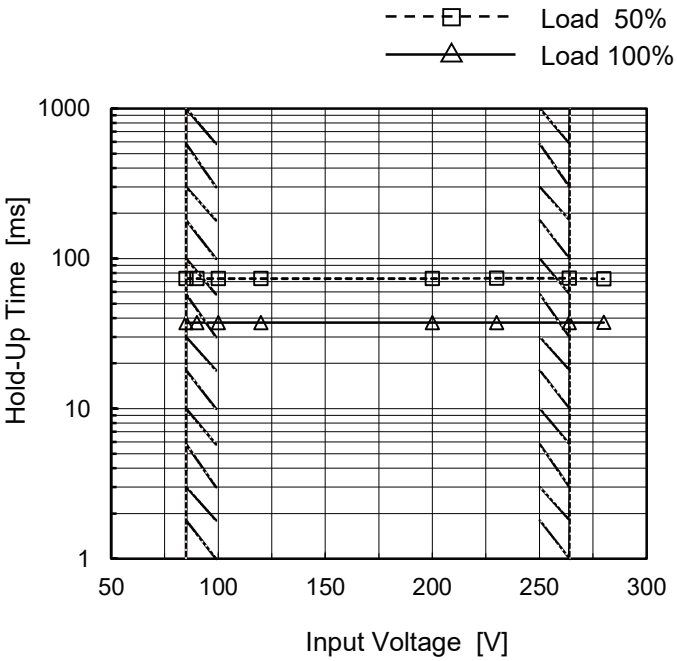
COSEL

Model	PDA75F-12
Item	Hold-Up Time
Object	+12V6.3A

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

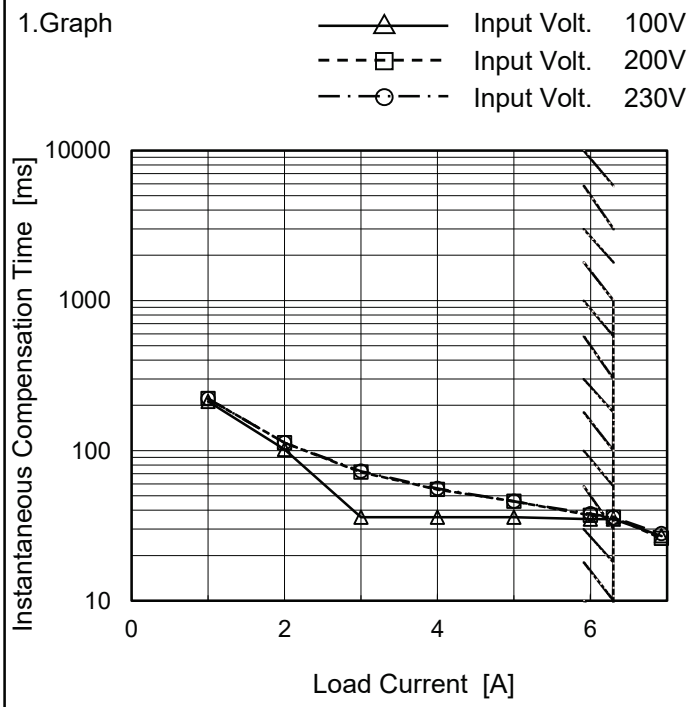
Input Voltage [V]	Hold-Up Time [ms]	
	Load 50%	Load 100%
85	74	37
90	74	37
100	74	37
120	74	37
200	74	37
230	74	37
264	74	37
280	73	38
--	-	-

COSEL

Model	PDA75F-12
Item	Instantaneous Interruption Compensation
Object	+12V6.3A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

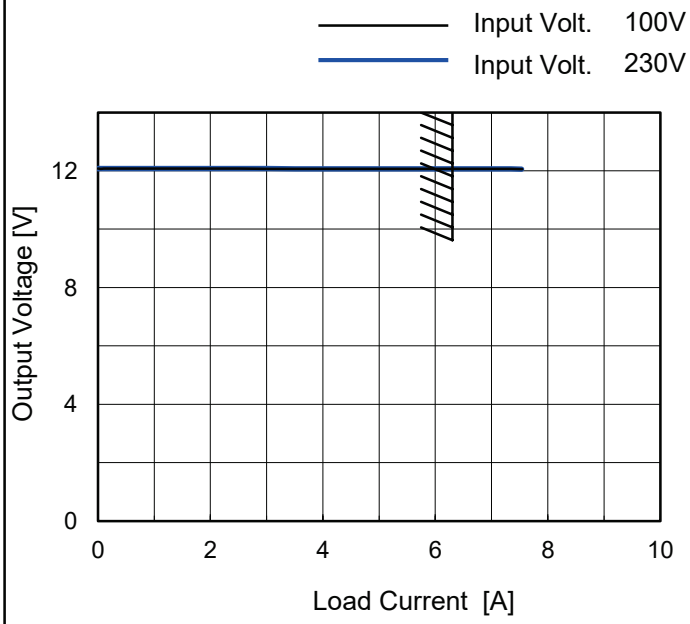
Load Current [A]	Time [ms]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
0.00	-	-	-
1.00	213	222	222
2.00	102	113	113
3.00	36	72	73
4.00	36	55	56
5.00	36	46	46
6.00	35	37	38
6.30	35	36	36
6.93	27	26	28
--	-	-	-
--	-	-	-

COSEL

Model	PDA75F-12
Item	Overcurrent Protection
Object	+12V6.3A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

Overcurrent protection is Hiccup mode.

2.Values

Output Voltage [V]	Load Current [A]	
	Input Volt. 100[V]	Input Volt. 230[V]
12.0	7.55	7.53
11.4	-	-
10.8	-	-
9.6	-	-
8.4	-	-
7.2	-	-
6.0	-	-
4.8	-	-
3.6	-	-
2.4	-	-
1.2	-	-
0.0	-	-

COSEL

Model	PDA75F-12	
Item	Ambient Temperature Drift	Testing Circuitry Figure A
Object	+12V6.3A	

1.Values Load 100%

Ambient Temperature[℃]	Output Voltage [V]		
	Input Volt. 100V	Input Volt. 200V	Input Volt. 230V
-20	12.032	12.032	12.032
25	12.066	12.066	12.066
50	12.075	12.075	12.075

Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object	+12V6.3A	

1.Values

Ambient Temperature[℃]	Input Voltage [V]	
	Load 50%	Load 100%
-20	40	56
25	40	53
50	40	57

Item	Overvoltage Protection	Testing Circuitry Figure A
Object	+12V6.3A	

1.Values Load 0%

Ambient Temperature[℃]	Operating Point [V]	
	Input Volt. 100V	Input Volt. 230V
-20	16.31	16.36
25	16.78	16.80
50	17.06	17.06

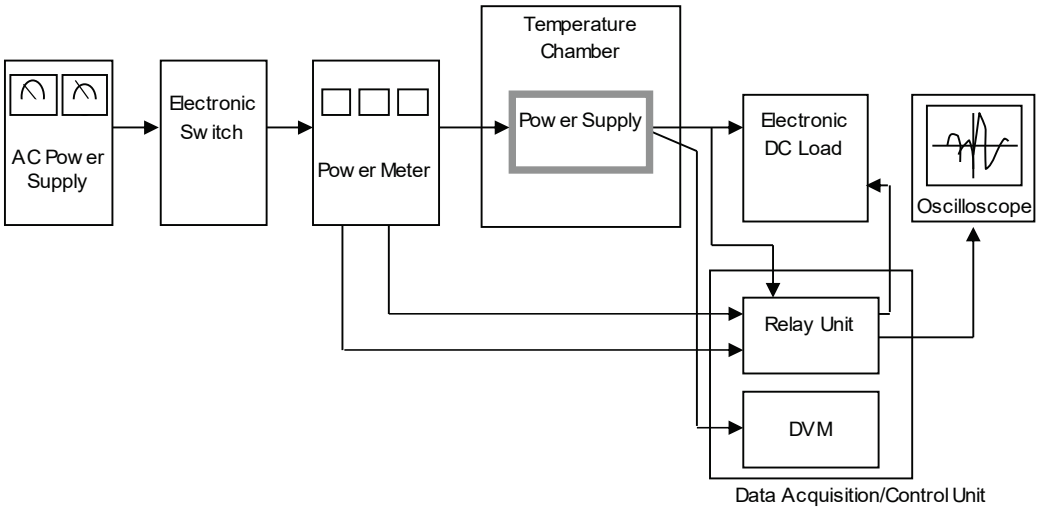
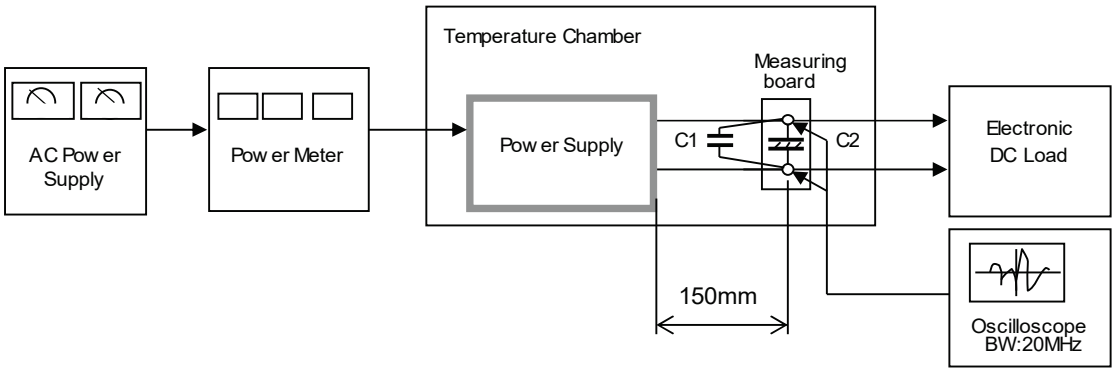


Figure A



C1= 0.1 μF
(Ceramic capacitor)

C2= 22 μF
(Electrolytic capacitor)

Figure B

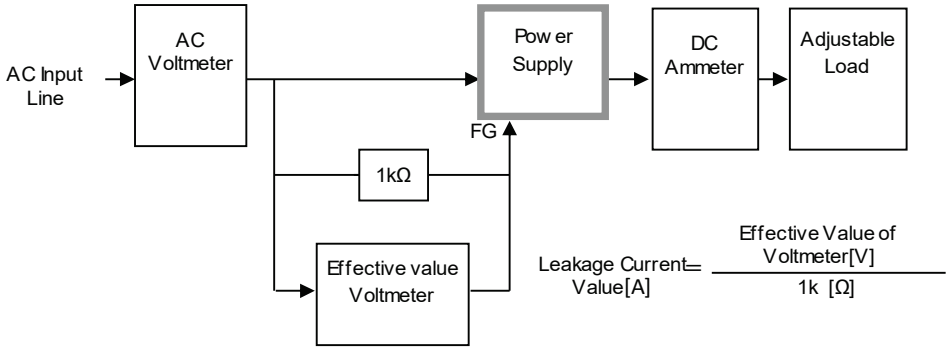


Figure C-1 (DEN-AN)

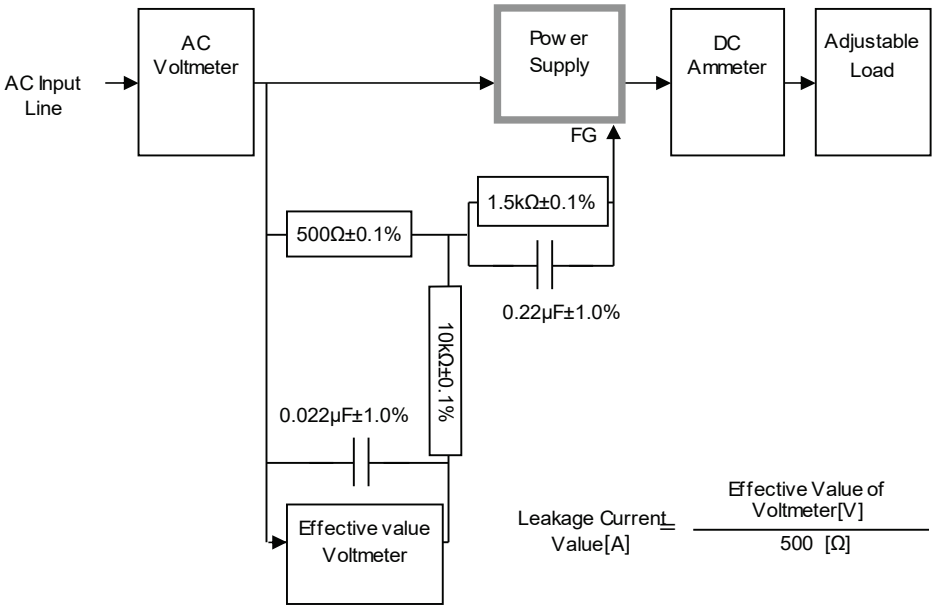


Figure C-2 (IEC62368-1 refer to IEC60990 Fig.4)

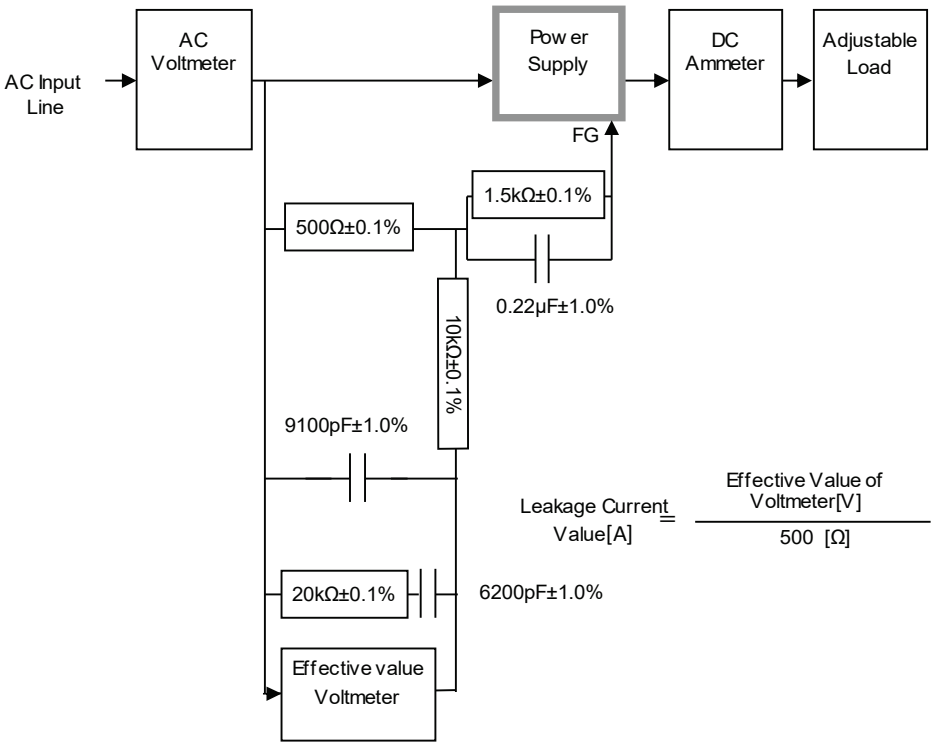


Figure C-3 (IEC62368-1 refer to IEC60990 Fig.5)