For Reference

COSEL

TEST DATA OF AEA800F-36

Regulated DC Power Supply
August 9, 2022

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COSEL CO.,LTD.

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Model	AEA800F-36
Item	Input Current (by Load Current)
Object	———————

Temperature 25°C
Testing Circuitry Figure A

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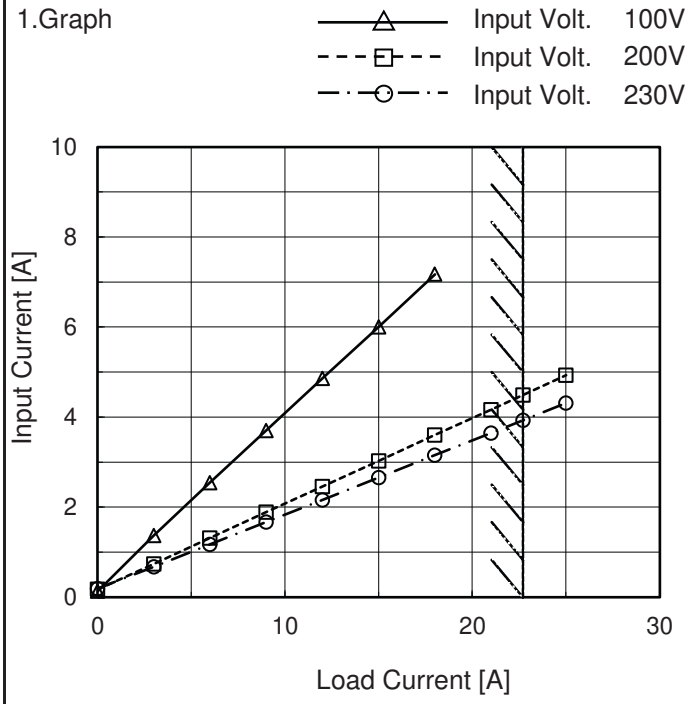

Note: Slanted line shows the range of the rated load current.

2.Values

Load Current [A]	Input Current [A]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
0.0	0.131	0.173	0.194
3.0	1.374	0.740	0.672
6.0	2.540	1.315	1.170
9.0	3.704	1.890	1.667
12.0	4.858	2.455	2.162
15.0	6.006	3.024	2.658
18.0	7.172	3.598	3.150
21.0	-	4.166	3.645
22.7	-	4.491	3.927
25.0	-	4.930	4.313
--	-	-	-

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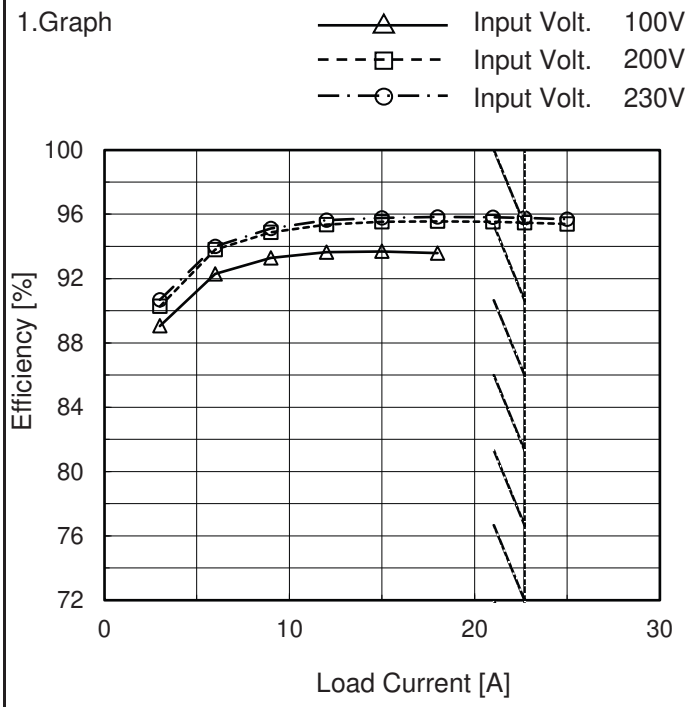
Model	AEA800F-36
Item	Efficiency (by Load Current)
Object	————————

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	89.1	90.3	90.7
6.0	92.3	93.8	94.0
9.0	93.3	94.9	95.1
12.0	93.6	95.3	95.6
15.0	93.7	95.5	95.8
18.0	93.6	95.6	95.8
21.0	-	95.5	95.8
22.7	-	95.5	95.8
25.0	-	95.4	95.7
--	-	-	-

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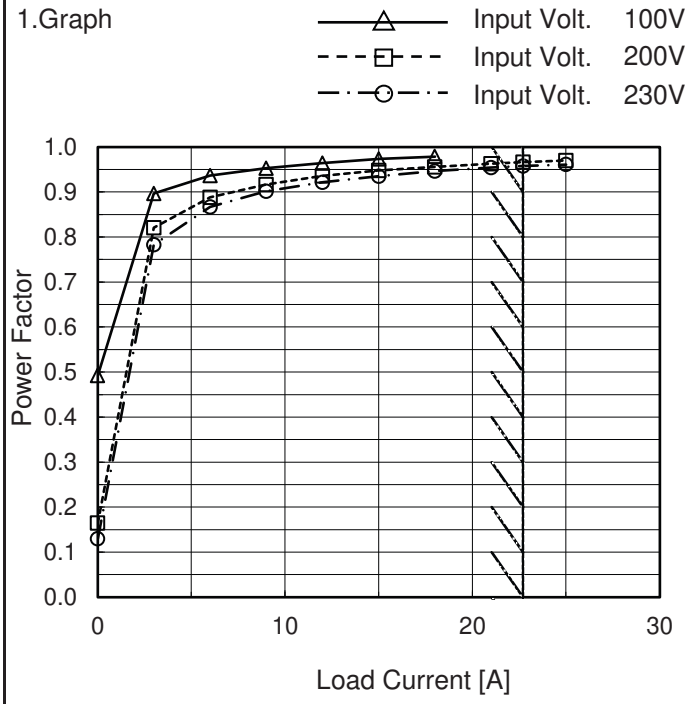
Model	AEA800F-36
Item	Power Factor (by Load Current)
Object	————————

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	0.492	0.165	0.130
3.0	0.897	0.820	0.783
6.0	0.937	0.888	0.867
9.0	0.953	0.917	0.901
12.0	0.964	0.936	0.922
15.0	0.973	0.948	0.935
18.0	0.979	0.955	0.946
21.0	-	0.963	0.954
22.7	-	0.966	0.957
25.0	-	0.970	0.961
--	-	-	-

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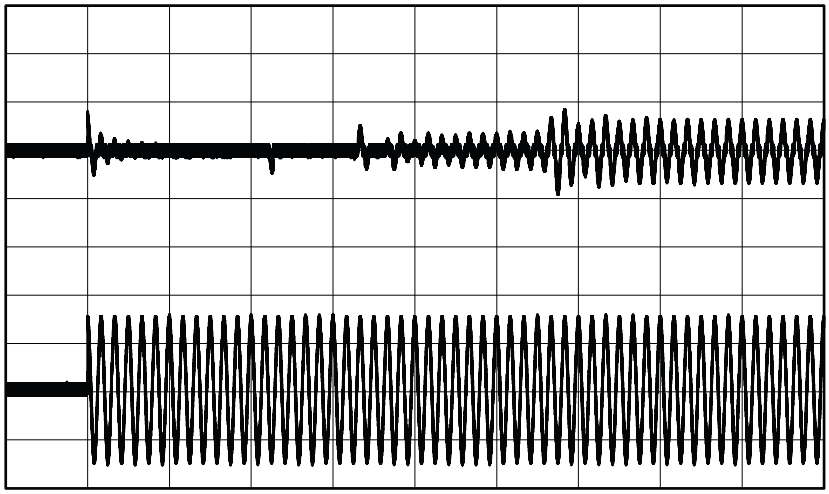
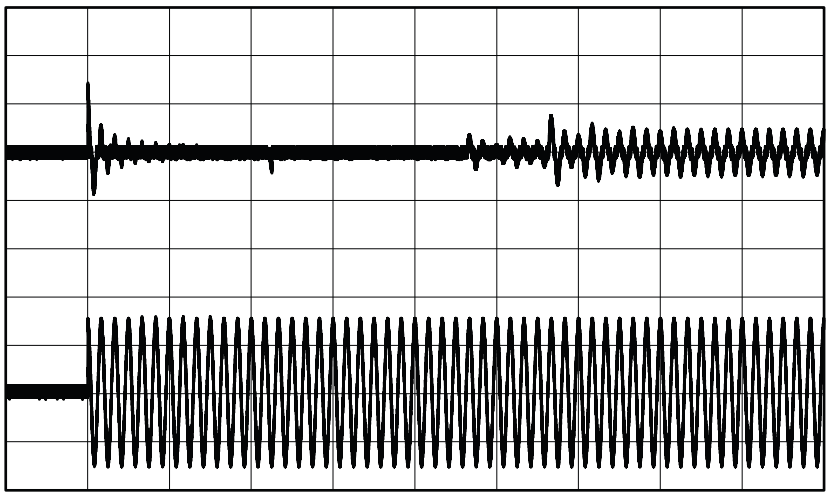
Model	AEA800F-36
Item	Inrush Current
Object	————————

Temperature 25°C
Testing Circuitry Figure A



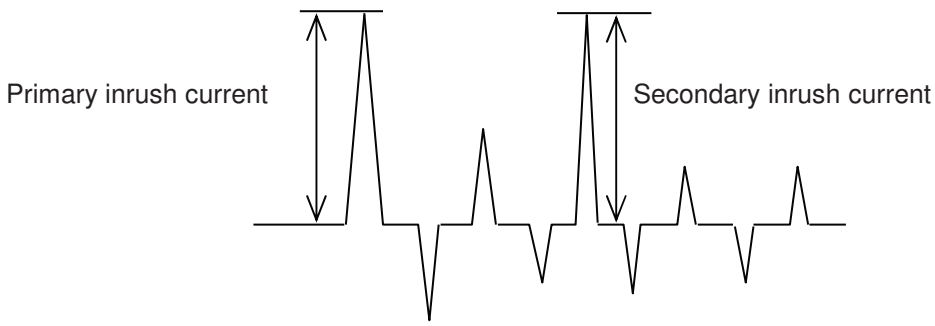
Input Voltage 100 V
Frequency 60 Hz
Load 100 %

Primary inrush current :
16.0 A
Secondary inrush current :
9.6 A



Input Voltage 200 V
Frequency 60 Hz
Load 100 %

Primary inrush current :
28.8 A
Secondary inrush current :
8.8 A



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Model	AEA800F-36	
Item	Leakage Current	Temperature 25°C Testing Circuitry Figure B
Object	———————————	

1.Results

[mA]

Standards	Testing Circuitry	Measuring Method	Input Volt.			Note
			100 [V]	240 [V]	264 [V]	
DEN-AN	Figure B-1	Both phases	0.08	0.21	0.23	Operation
		One of phases	0.15	0.39	0.44	Stand by
IEC62368-1	Figure B-2	Both phases	0.08	0.20	0.23	Operation
		One of phases	0.15	0.39	0.43	Stand by
	Figure B-3	Both phases	0.08	0.20	0.23	Operation
		One of phases	0.15	0.38	0.43	Stand by
IEC60601-1	Figure B-4	Both phases	0.08	0.20	0.23	Operation
		One of phases	0.15	0.38	0.43	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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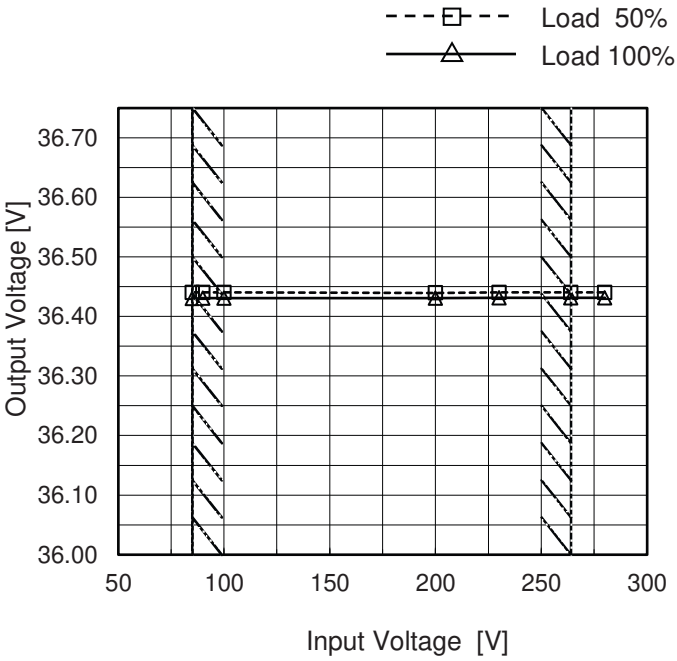
Model	AEA800F-36
Item	Line Regulation
Object	+36V22.7A

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	36.440	36.430 ※1
90	36.440	36.430 ※2
100	36.440	36.431 ※2
200	36.440	36.431
230	36.440	36.431
264	36.440	36.431
280	36.440	36.431
--	-	-
--	-	-

※1 : Load 60%
※2 : Load 75%

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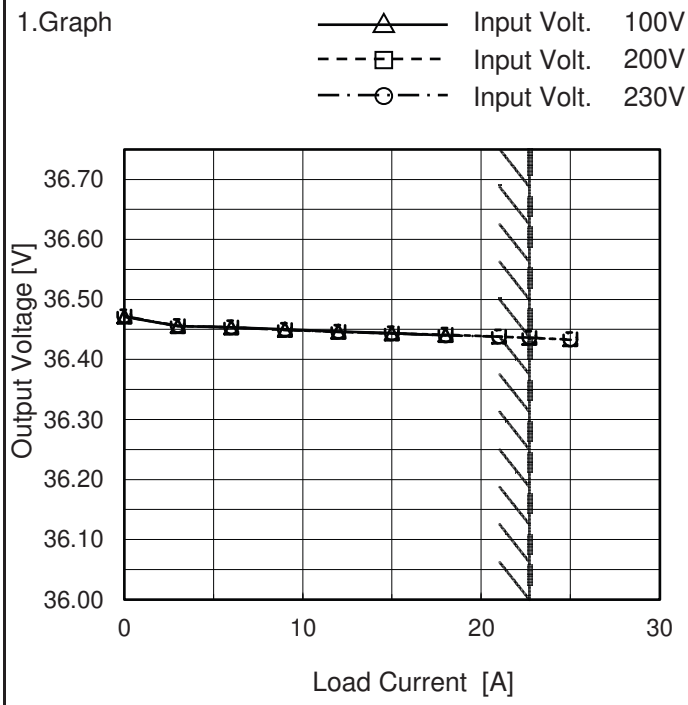
Model	AEA800F-36
Item	Load Regulation
Object	+36V22.7A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

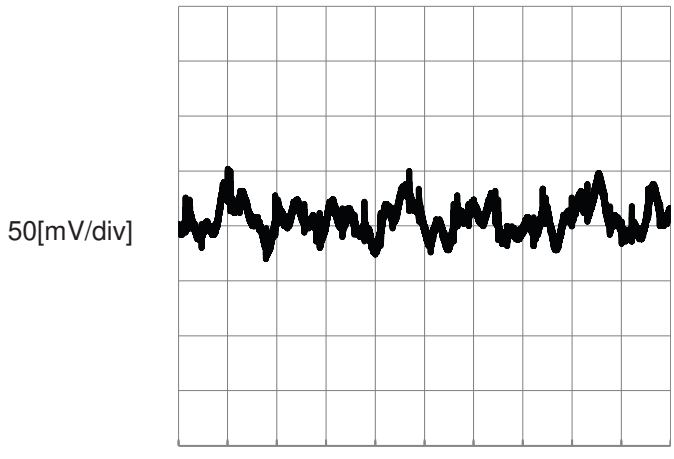
Load Current [A]	Output Voltage [V]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
0.0	36.471	36.472	36.472
3.0	36.456	36.456	36.456
6.0	36.453	36.453	36.453
9.0	36.450	36.449	36.449
12.0	36.446	36.446	36.446
15.0	36.444	36.444	36.443
18.0	36.441	36.441	36.440
21.0	--	36.438	36.438
22.7	--	36.436	36.436
25.0	--	36.434	36.433
--	--	--	--

Item	Ripple-Noise
Object	+36V22.7A

Temperature 25°C
Testing Circuitry Figure C

1.Graph

Input Voltage 200V
Load 100%



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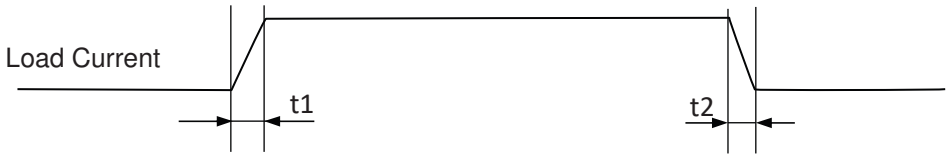
Model	AEA800F-36
Item	Dynamic Load Response
Object	+36V22.7A

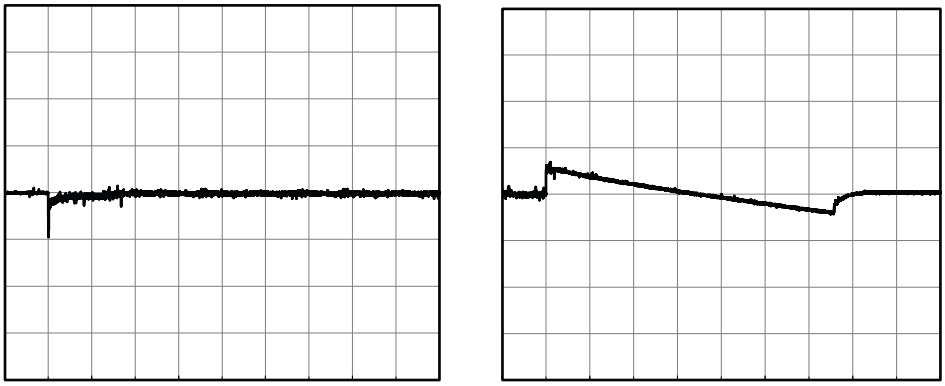
Temperature 25°C
Testing Circuitry Figure A

Input Volt. 200 V
Cycle 1000 ms

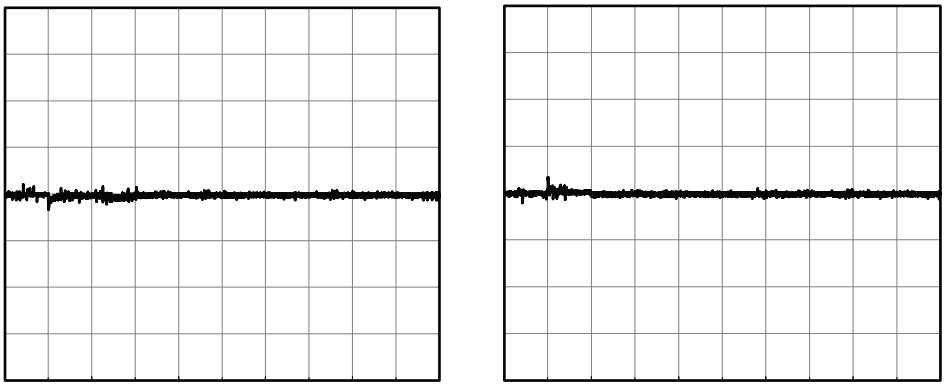
Response. t1=t2=50µs. Typ



Load 0%(0A) ←→
Load 100%(22.7A)



Load 50%(11.35A) ←→
Load 100%(22.7A)



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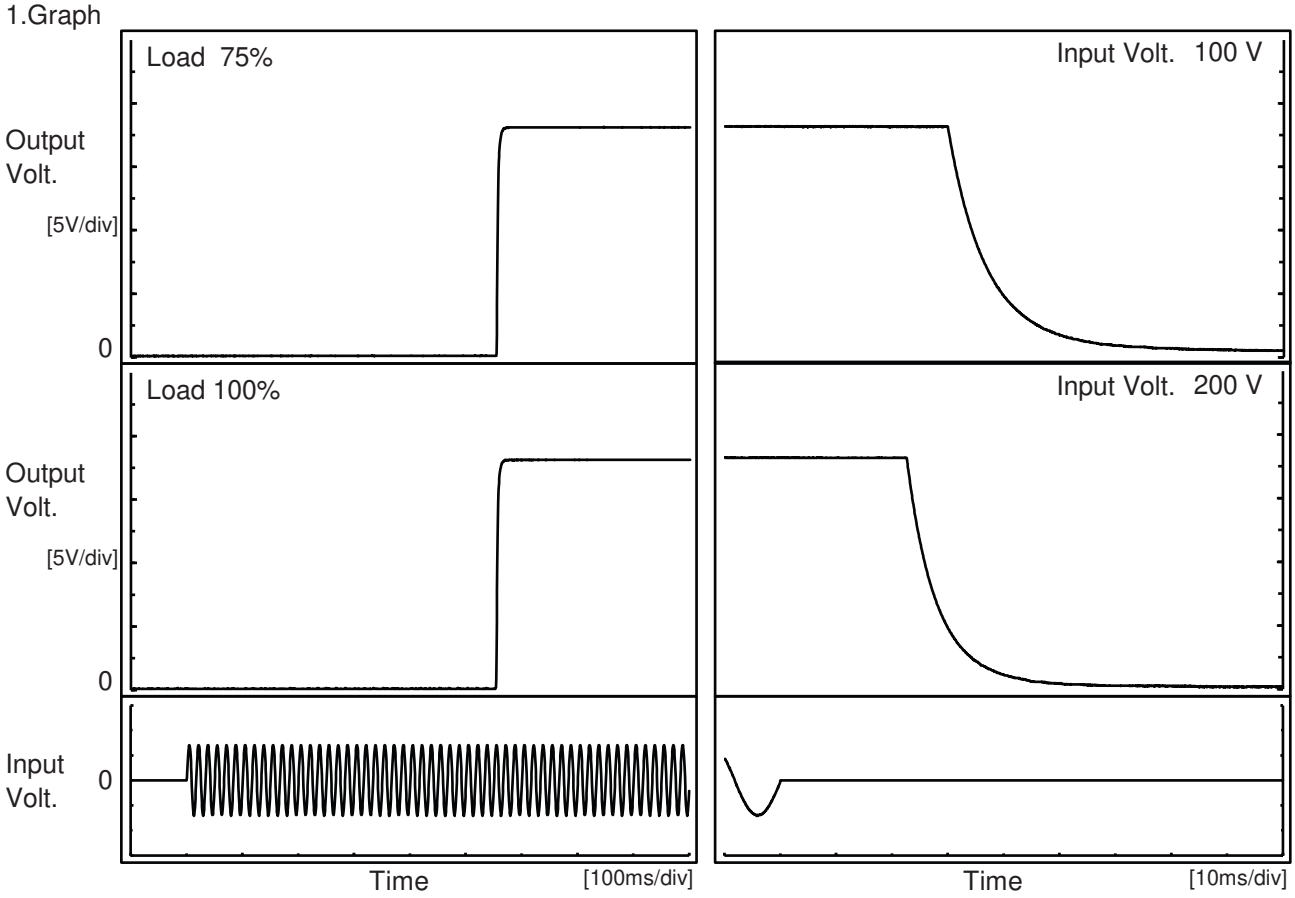
Model	AEA800F-36
Item	Rise and Fall Time
Object	+36V22.7A

Temperature 25°C
Testing Circuitry Figure A

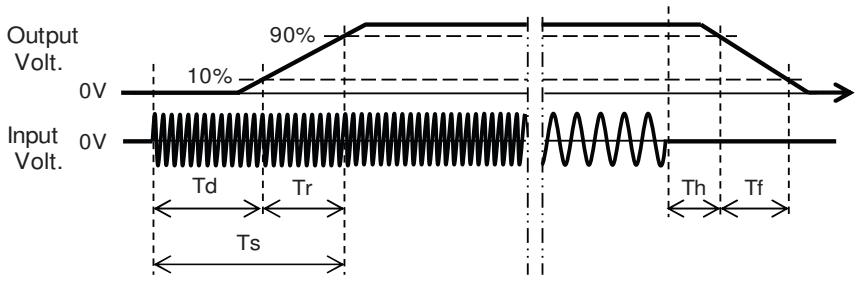
1.Graph



2.Values

[ms]

Load \ Time	Td	Tr	Ts	Th	Tf
100 %	555.0	4.5	559.5	30.7	18.4
100 %	554.0	4.5	558.5	23.2	12.7



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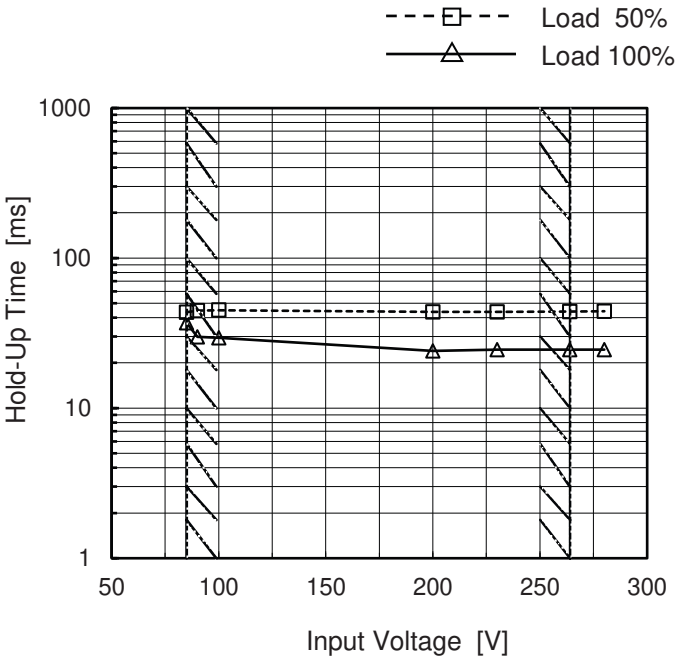
Model	AEA800F-36
Item	Hold-Up Time
Object	+36V22.7A

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	44	37 ※1
90	45	30 ※2
100	45	29 ※2
200	44	24
230	44	25
264	44	25
280	44	25
--	-	-
--	-	-

※1 : Load 60%
※2 : Load 75%

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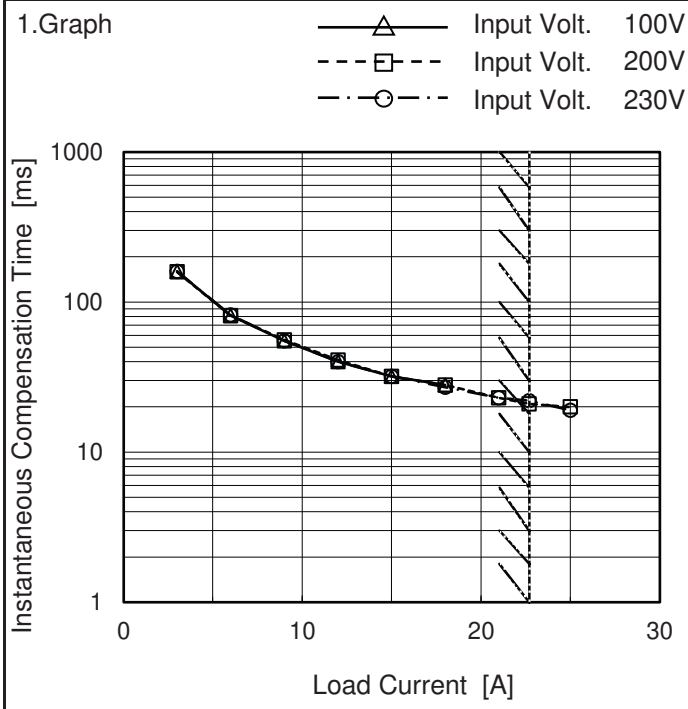
Model	AEA800F-36
Item	Instantaneous Interruption Compensation
Object	+36V22.7A

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	160	159	160
6.0	81	81	82
9.0	55	56	55
12.0	40	41	40
15.0	32	32	32
18.0	28	28	27
21.0	-	23	23
22.7	-	21	22
25.0	-	20	19
--	-	-	-

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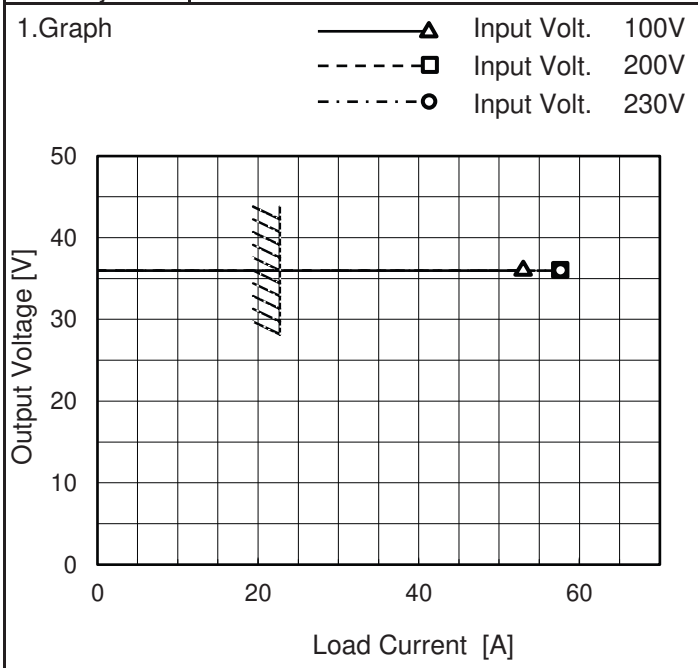
Model	AEA800F-36
Item	Overcurrent Protection
Object	+36V22.7A

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. 200[V]	Input Volt. 230[V]
36	52.23	57.20	57.20
--	-	-	-
--	-	-	-
--	-	-	-
--	-	-	-
--	-	-	-
--	-	-	-
--	-	-	-
--	-	-	-
--	-	-	-
--	-	-	-
--	-	-	-

COSEL

Model	AEA800F-36	
Item	Ambient Temperature Drift	Testing Circuitry Figure A
Object	+36V22.7A	

1.Values

Load 100%

Ambient Temperature[℃]	Output Voltage [V]		
	Input Volt. 100V	Input Volt. 200V	Input Volt. 230V
-20	36.257	36.257	36.257
25	36.431	36.431	36.432
50	36.484	36.484	36.484

Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object	+36V22.7A	

1.Values

Ambient Temperature[℃]	Input Voltage [V]	
	Load 50%	Load 100%
-20	72	72
25	72	72
50	72	72

Item	Overvoltage Protection	Testing Circuitry Figure A
Object	+36V22.7A	

1.Values

Load 0%

Ambient Temperature[℃]	Operating Point [V]	
	Input Volt. 100V	Input Volt. 200V
-20	47.12	46.60
25	48.52	48.52
50	49.51	49.51

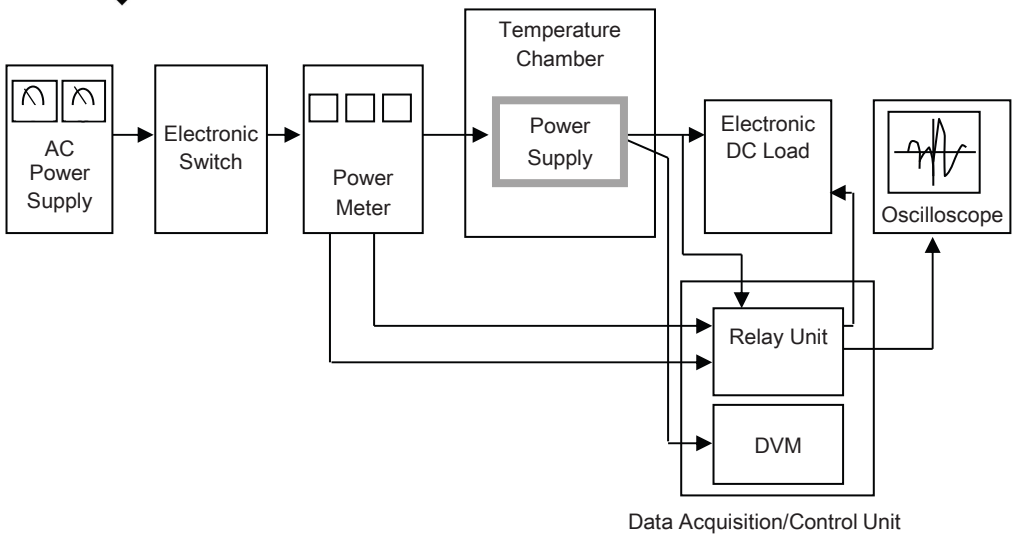


Figure A

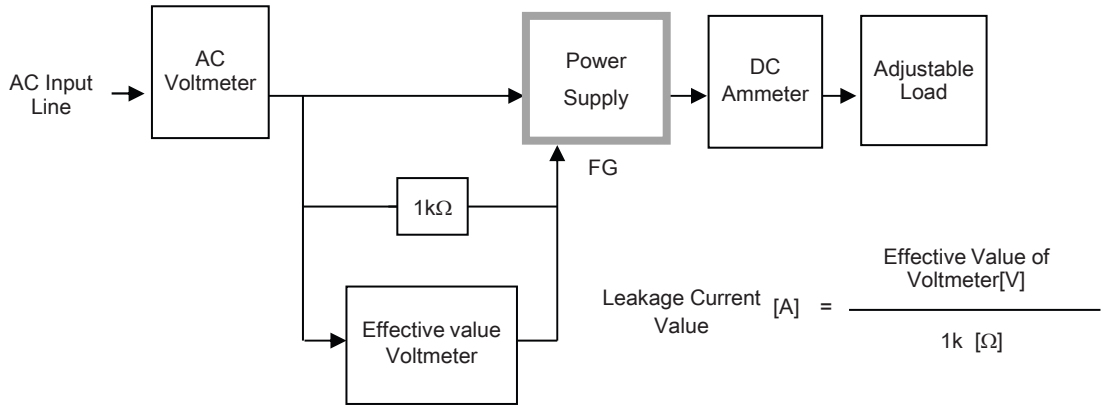


Figure B-1 (DEN-AN)

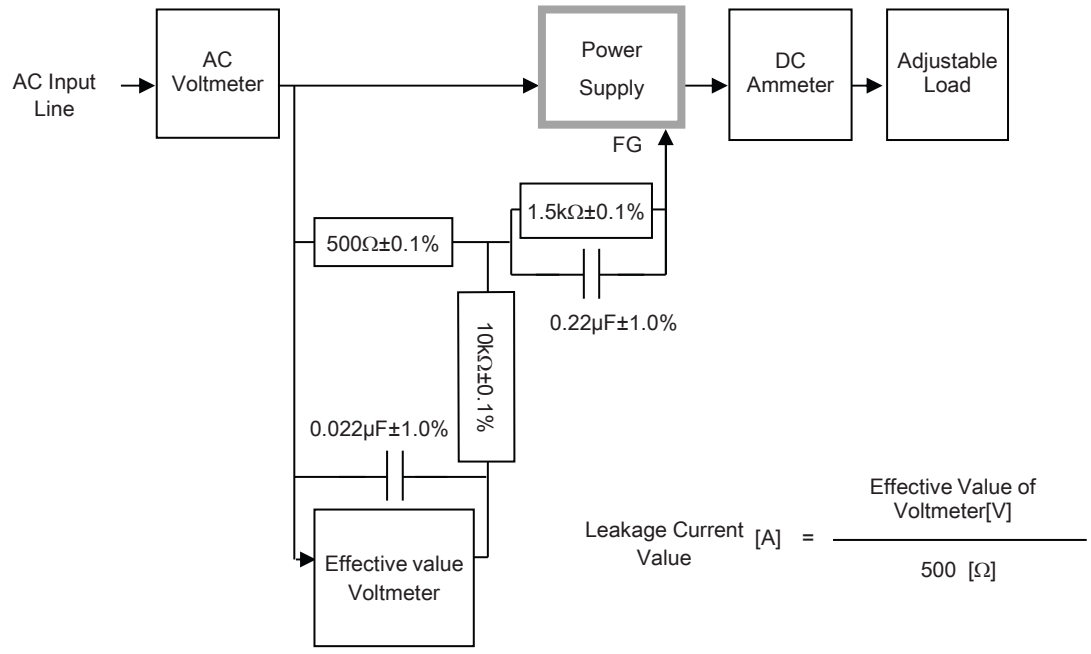


Figure B-2 (IEC62368-1 refer to IEC60990 Fig.4)

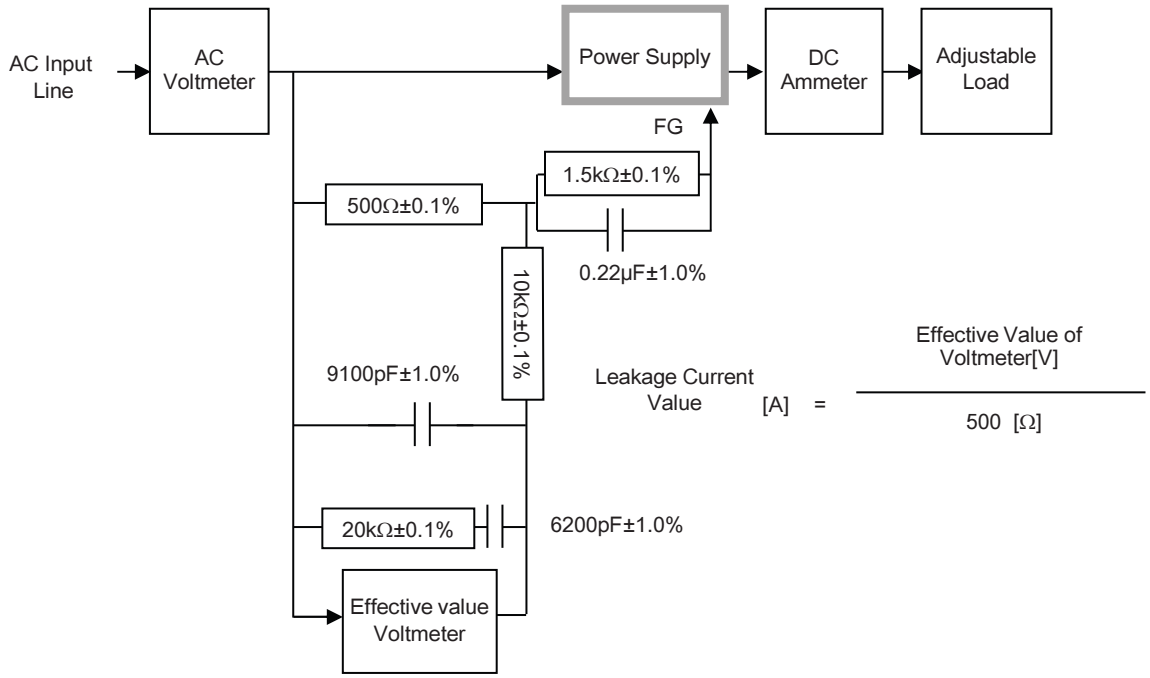


Figure B-3 (IEC62368-1 refer to IEC60990 Fig.5)

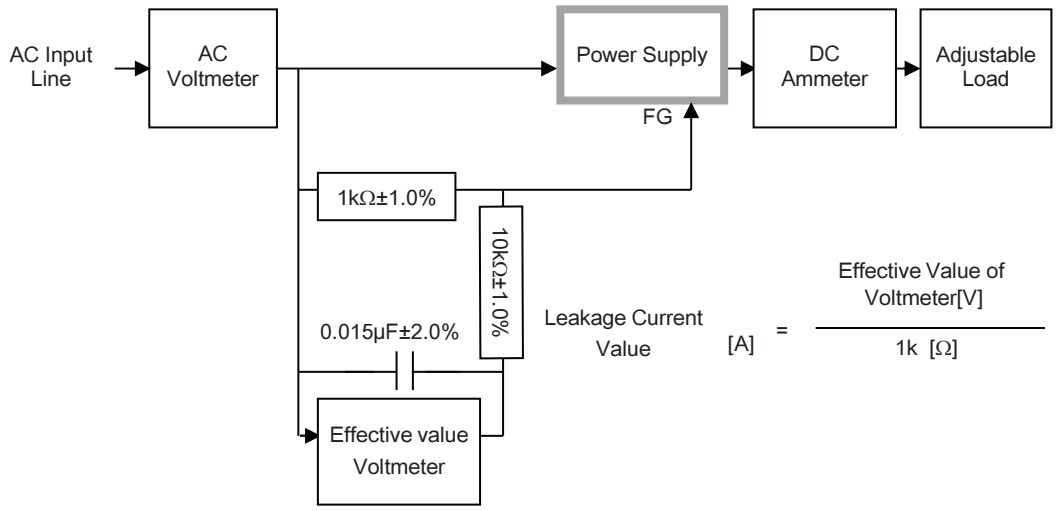


Figure B-4 (IEC60601-1)

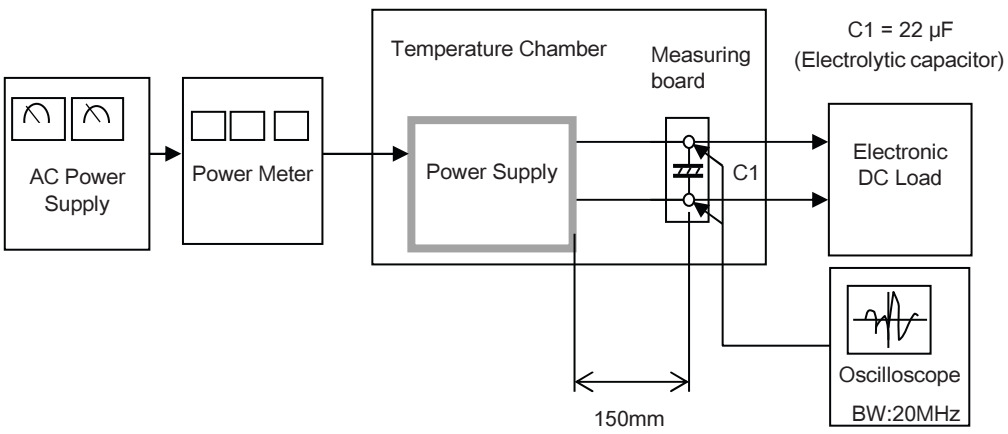


Figure C