参考資料

COSEL

TEST DATA OF AME400F

(100VAC INPUT)

Regulated DC power supply
August 21, 2019

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INPUT : 90 - 132VAC

COSEL CO.,LTD.

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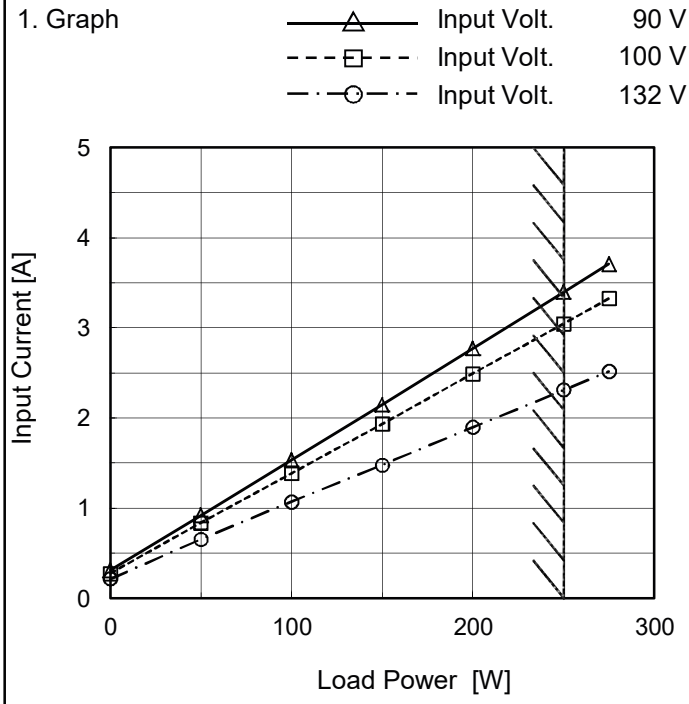
Model	AME400F
Item	Input Current
Object	———————

Temperature 25°C
Testing Circuitry Figure A

1. Graph



Note:
Hatched line shows the range of the rated load power.

2. Value

Load Power [W]	Input Current [A]		
	Input Volt. 90[V]	Input Volt. 100[V]	Input Volt. 132[V]
0	0.309	0.275	0.216
50	0.918	0.837	0.655
100	1.534	1.385	1.070
150	2.148	1.932	1.480
200	2.773	2.491	1.896
250	3.396	3.048	2.312
275	3.710	3.325	2.517
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BC-11388

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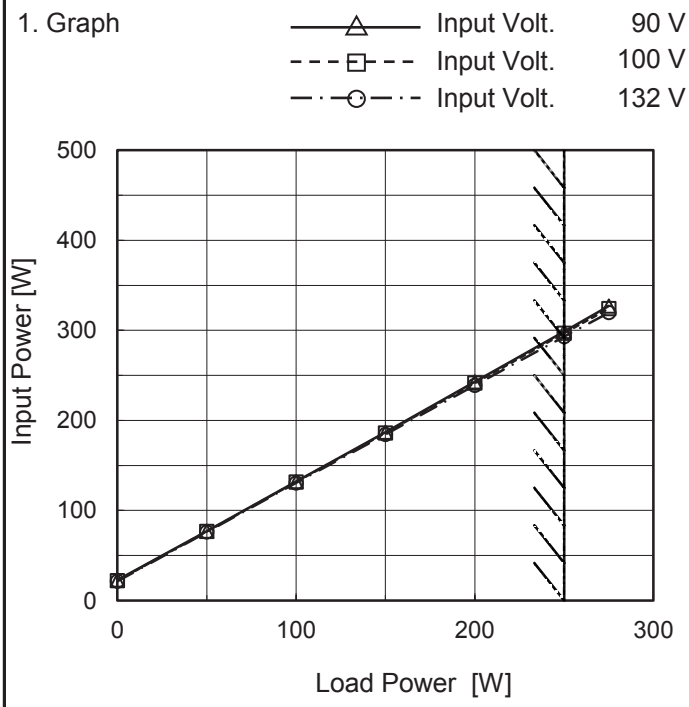
Model	AME400F
Item	Input Power
Object	———————

Temperature 25°C
Testing Circuitry Figure A

1. Graph



Note:
Hatched line shows the range of the rated load power.

2. Value

Load Power [W]	Input Power [W]		
	Input Volt. 90[V]	Input Volt. 100[V]	Input Volt. 132[V]
0	22.7	22.0	21.4
50	77.0	76.7	76.1
100	132.0	131.6	130.5
150	186.9	186.0	184.4
200	242.8	241.5	238.9
250	298.8	296.8	293.0
275	327.0	324.2	319.8
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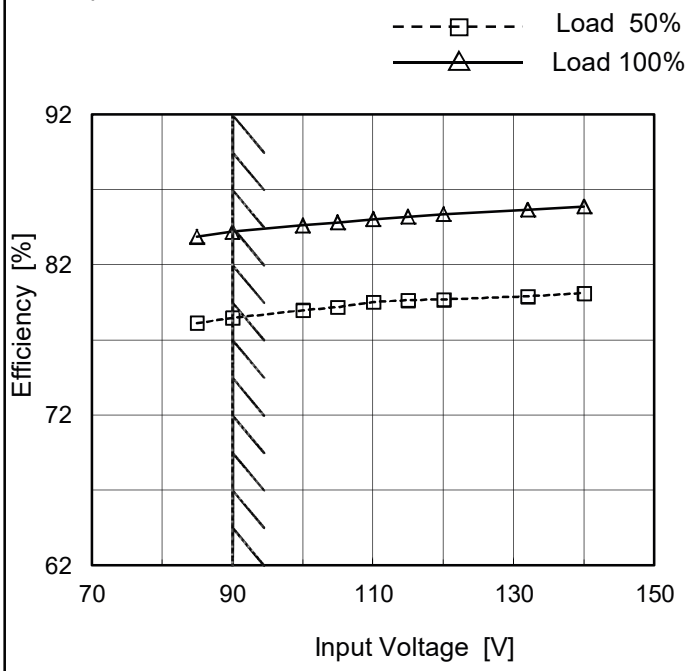
Model	AME400F
Item	Efficiency (by Input Voltage)
Object	———————

Temperature 25°C
Testing Circuitry Figure A

1. Graph



Note:
Hatched line shows the input voltage range without the input derating.

2. Value

Input Voltage [V]	Efficiency [%]	
	Load 50%	Load 100%
85	78.1	83.9
90	78.5	84.2
100	78.9	84.6
105	79.2	84.8
110	79.5	85.0
115	79.7	85.2
120	79.7	85.4
132	79.9	85.7
140	80.1	85.9

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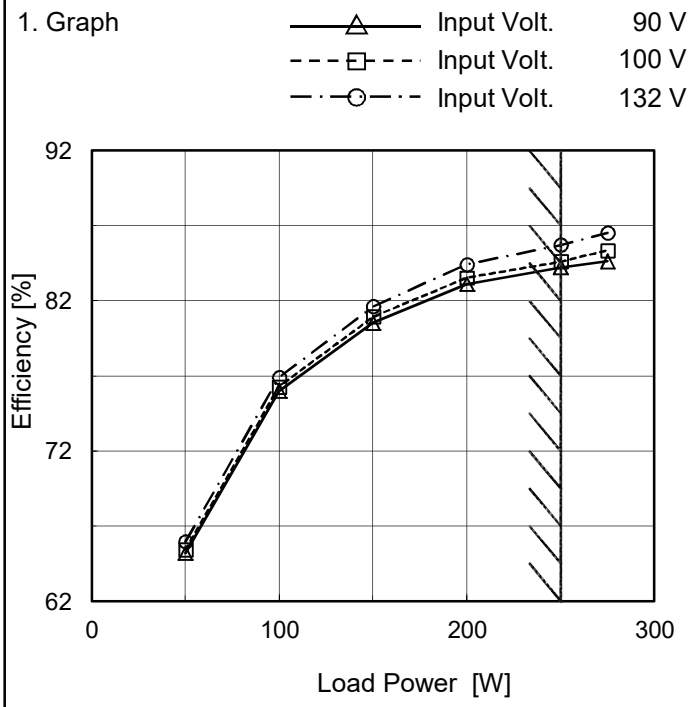
Model	AME400F
Item	Efficiency (by Load Power)
Object	————————

Temperature 25°C
Testing Circuitry Figure A

1. Graph



Note:
Hatched line shows the range of the rated load power.

2. Value

Load Power [W]	Efficiency [%]		
	Input Volt. 90[V]	Input Volt. 100[V]	Input Volt. 132[V]
0	--	--	--
50	65.2	65.4	65.9
100	76.0	76.3	76.9
150	80.5	80.9	81.6
200	83.1	83.5	84.4
250	84.2	84.6	85.7
275	84.6	85.4	86.5
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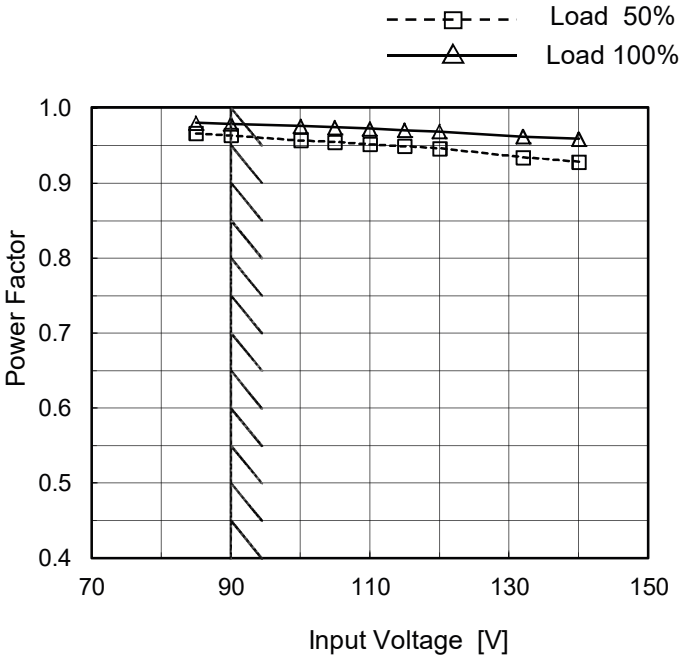
Model	AME400F
Item	Power Factor (by Input Voltage)
Object	————————

Temperature 25°C
Testing Circuitry Figure A

1. Graph



Note:
Hatched line shows the input voltage range without the input derating.

2. Value

Input Voltage [V]	Power Factor	
	Load 50%	Load 100%
85	0.966	0.980
90	0.964	0.979
100	0.957	0.976
105	0.955	0.974
110	0.952	0.973
115	0.949	0.971
120	0.946	0.969
132	0.934	0.962
140	0.928	0.959

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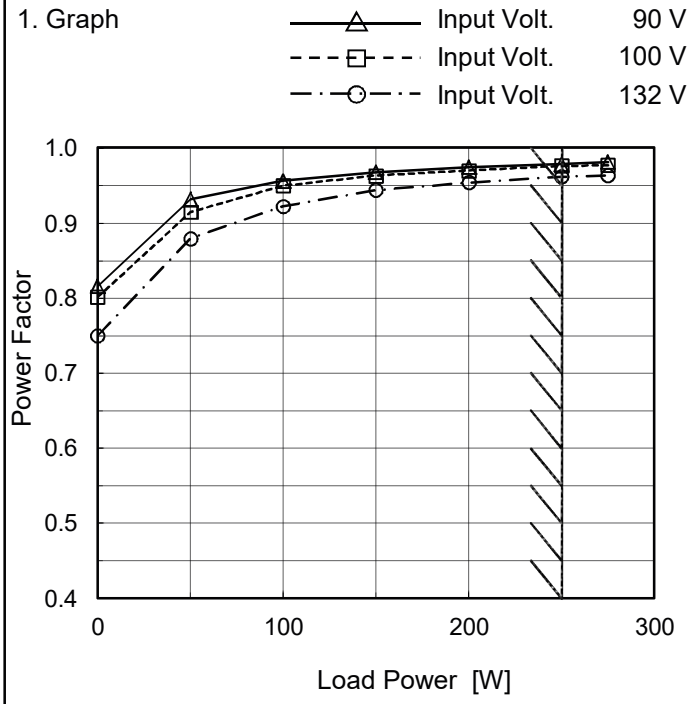
Model	AME400F
Item	Power Factor (by Load Power)
Object	————————

Temperature 25°C
Testing Circuitry Figure A

1. Graph



Note:
Hatched line shows the range of the rated load power.

2. Value

Load Power [W]	Power Factor		
	Input Volt. 90[V]	Input Volt. 100[V]	Input Volt. 132[V]
0	0.816	0.802	0.750
50	0.932	0.915	0.880
100	0.957	0.950	0.923
150	0.968	0.963	0.944
200	0.975	0.970	0.954
250	0.979	0.976	0.962
275	0.982	0.977	0.964
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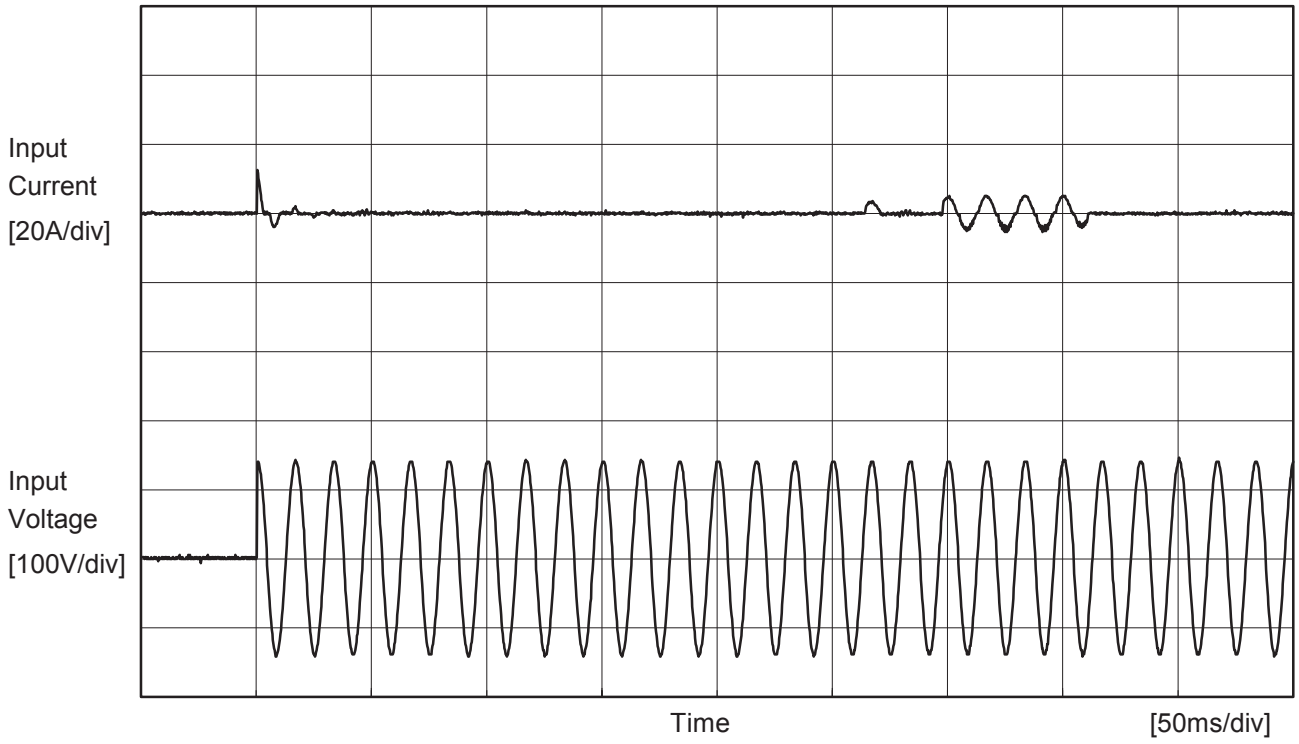
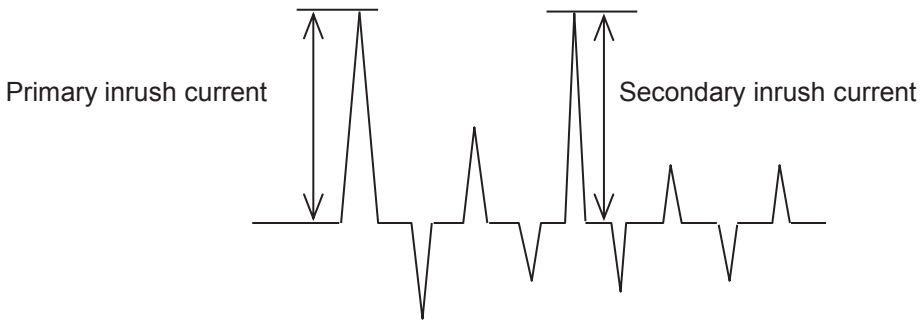
Model	AME400F	
Item	Inrush Current	Temperature 25°C Testing Circuitry Figure A
Object	————————	



Input Voltage	100 V
Frequency	60 Hz
Load	100 %
Primary inrush current	12.6 A
Secondary inrush current	5.4 A



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Model	AME400F
Item	Leakage Current
Object	————————

Temperature 25°C
Testing Circuitry Figure B

[mA]

Standards	Testing Circuitry	Measuring Method	Input Volt.			Note
			90 [V]	100 [V]	132 [V]	
DEN-AN	Figure B-1	Both phases	0.07	0.07	0.10	Operation
		One of phases	0.12	0.13	0.18	Stand by
IEC62368-1	Figure B-2	Both phases	0.07	0.08	0.10	Operation
		One of phases	0.12	0.13	0.18	Stand by
	Figure B-3	Both phases	0.06	0.07	0.10	Operation
		One of phases	0.12	0.13	0.18	Stand by
IEC60601-1	Figure B-4	Both phases	0.07	0.07	0.10	Operation
		One of phases	0.12	0.13	0.18	Stand by

Note:
The value of "One of phases" is for reference only.
The above value is the larger one of each phase of AC input.

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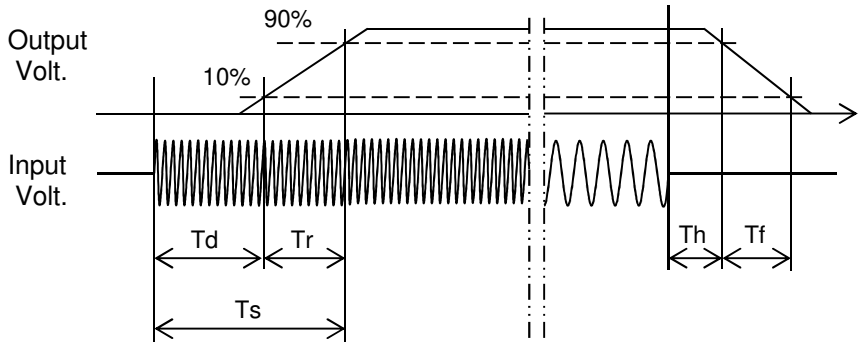
Model	AME400F	
Item	Rise and Fall Time	Temperature 25°C Testing Circuitry Figure A
Object	———————	



Input Voltage 100V

Load Power 100%

[ms]

Time / MODULE	Td	Tr	Ts	Th	Tf
120W, SINGLE	786	8	794	33	1 - 8
240W, SINGLE	786	5	791	34	0.2 - 6
150W, DUAL	785	4	789	37	0.6

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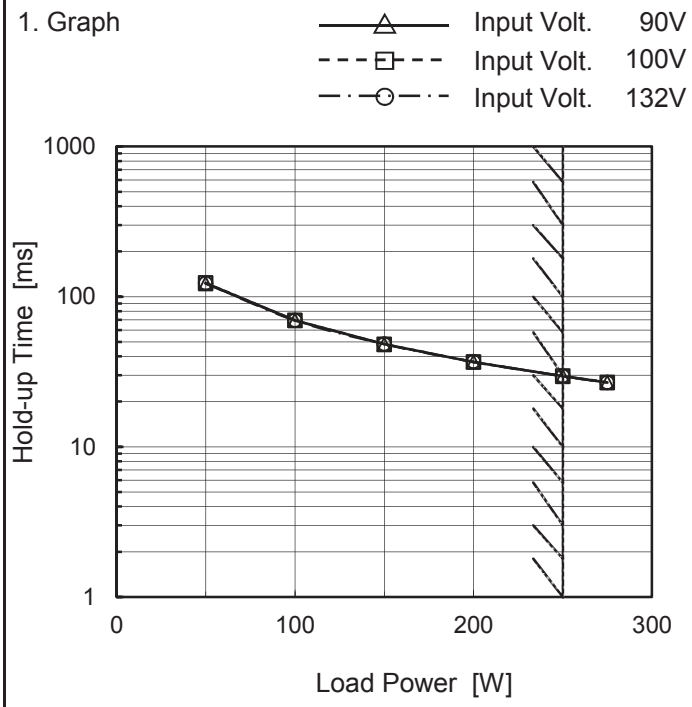
Model	AME400F
Item	Hold-up Time
Object	———

Temperature 25°C
Testing Circuitry Figure A

1. Graph



2. Value

Load Power [W]	Hold-up Time [ms]		
	Input Volt. 90[V]	Input Volt. 100[V]	Input Volt. 132[V]
0	--	--	--
50	123	124	123
100	70	70	70
150	48	48	48
200	37	37	37
250	30	30	30
275	27	27	27
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Note:
Hatched line shows the range of the rated load power.

"Hold-up time" is the amount of time a power supply can maintain output voltage within the range of the output voltage accuracy after a loss of input power.

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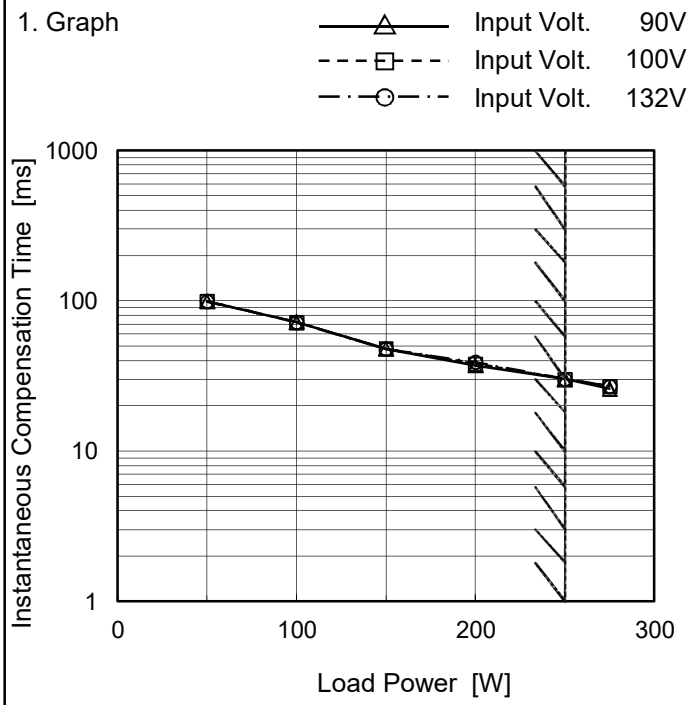
Model	AME400F
Item	Instantaneous Interruption Compensation
Object	———————

Temperature 25°C
Testing Circuitry Figure A

1. Graph



Note:
Hatched line shows the range of the rated load power.

2. Value

Load Power [W]	Time [ms]		
	Input Volt. 90[V]	Input Volt. 100[V]	Input Volt. 132[V]
0	--	--	--
50	99	99	99
100	72	72	72
150	48	48	48
200	37	38	39
250	30	30	30
275	26	27	27
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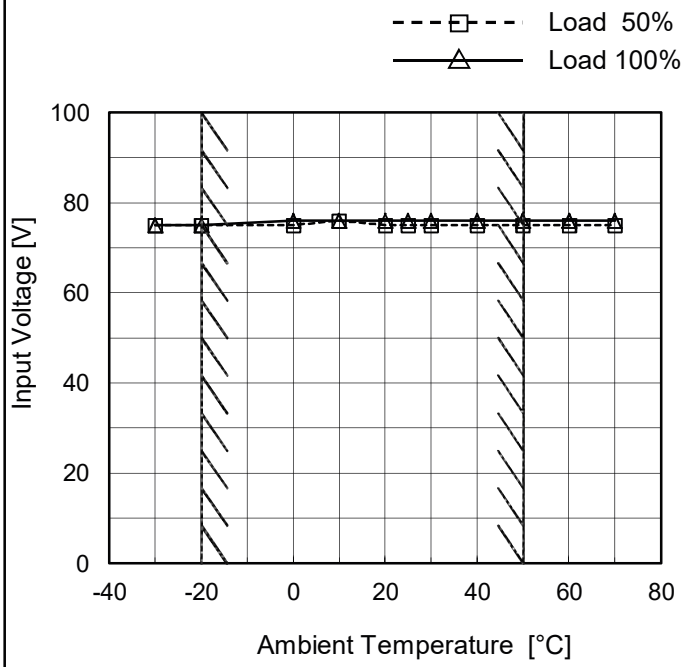
Model	AME400F
Item	Minimum Input Voltage for Regulated Output Voltage
Object	———————

Testing Circuitry Figure A

1. Graph



2. Value

Ambient Temperature [°C]	Input Voltage [V]	
	Load 50%	Load 100%
-30	75	75
-20	75	75
0	75	76
10	76	76
20	75	76
25	75	76
30	75	76
40	75	76
50	75	76
60	75	76
70	75	76

Note:
Hatched line shows the range of the rated operating temperature.

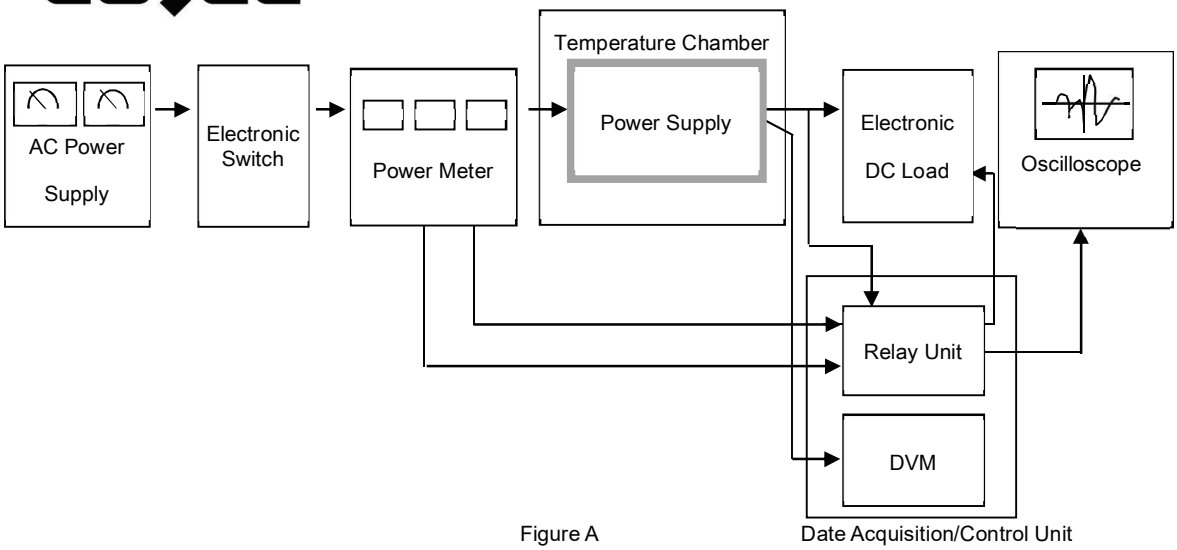


Figure A

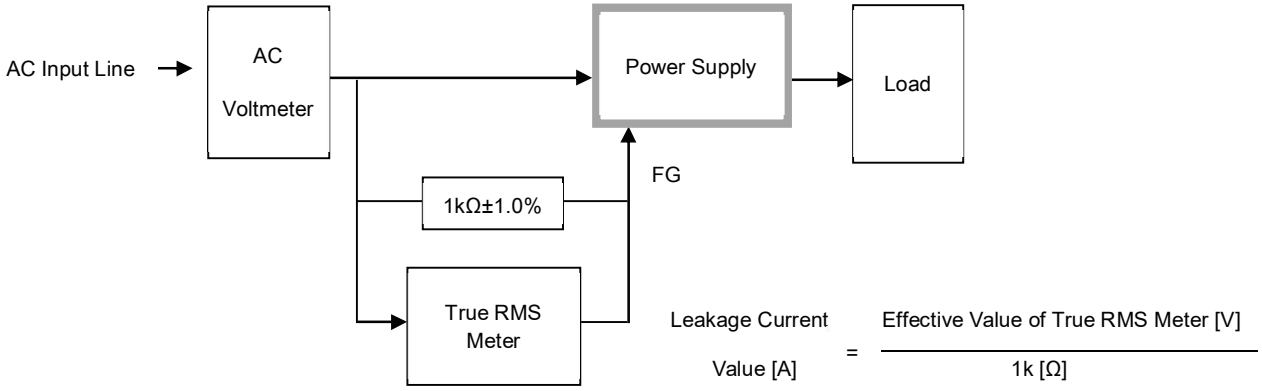


Figure B-1 (DEN-AN)

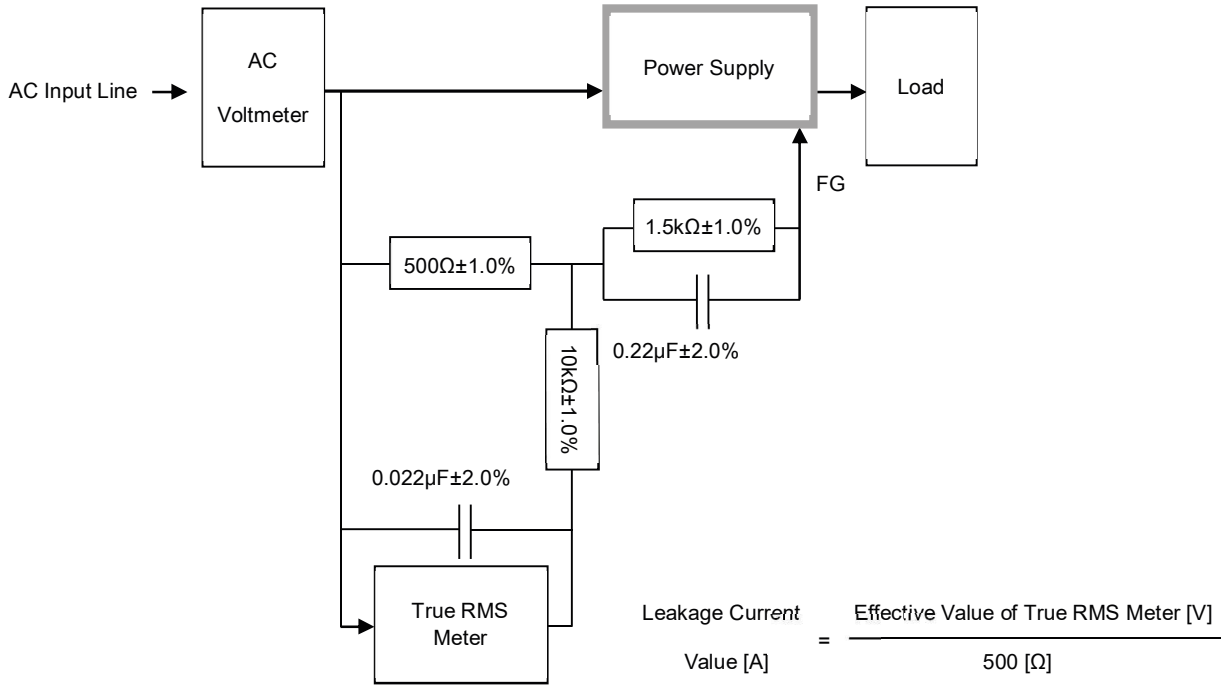


Figure B-2 (IEC62368-1 refer to IEC60990 Fig.4)

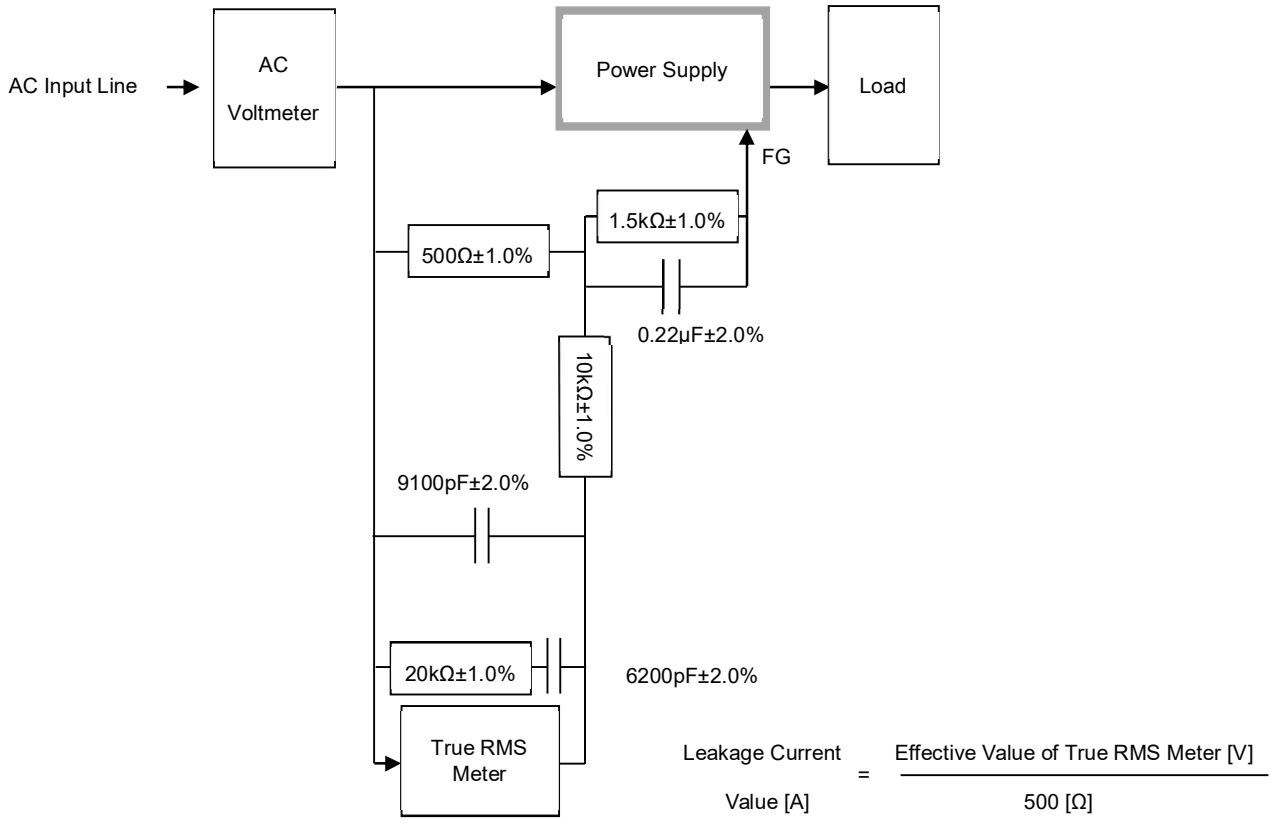


Figure B-3 (IEC62368-1 refer to IEC60990 Fig.5)

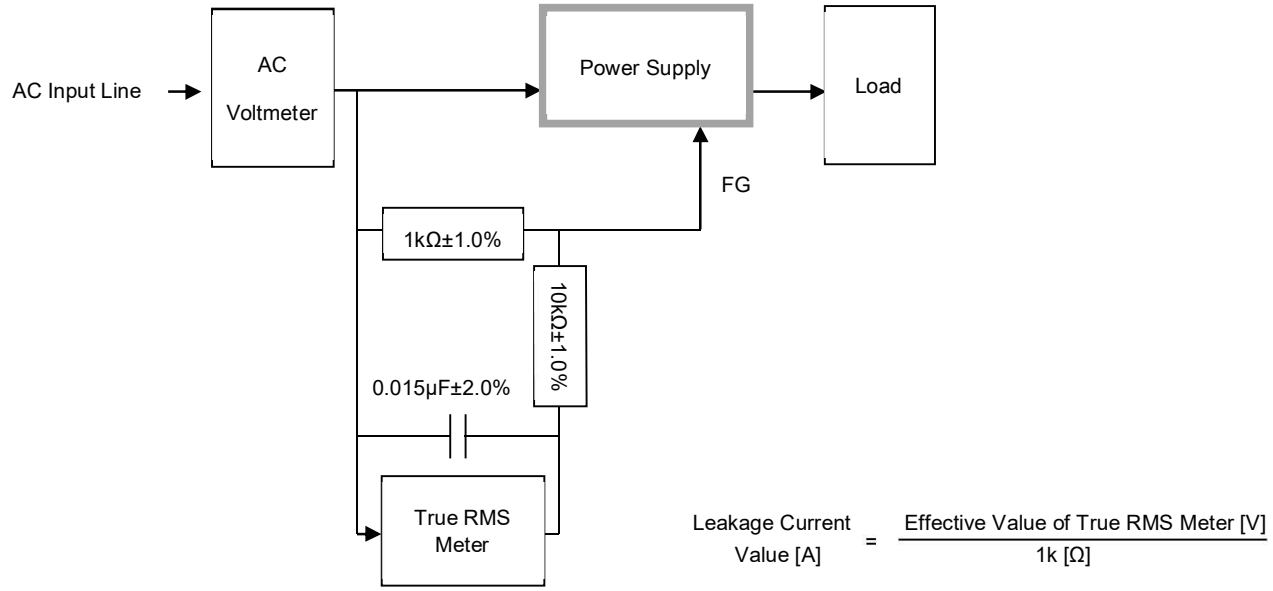


Figure B-4 (IEC60601-1)