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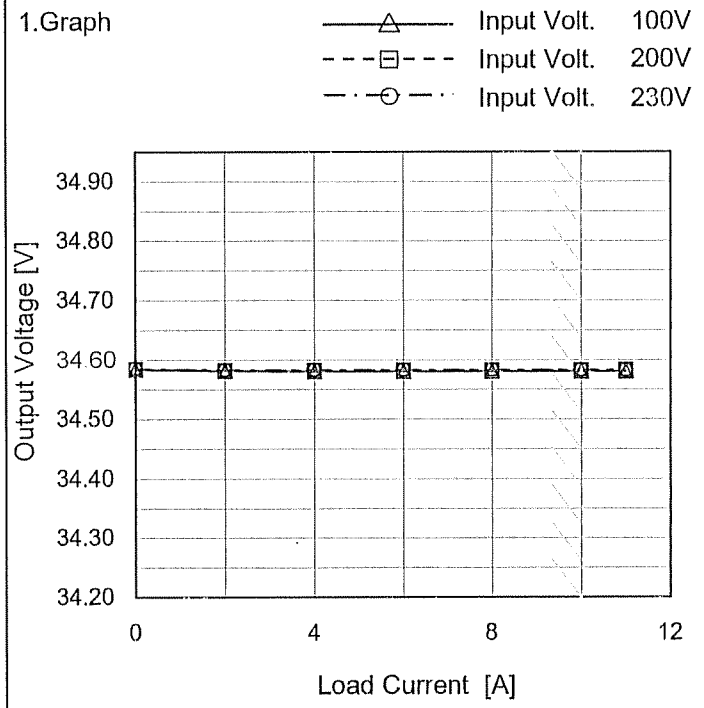
(Final Page 12)



Model		MODULE 2J	Temperature 25°C Testing Circuitry Figure A																																
Item		Line Regulation																																	
Object		+34V10A																																	
1.Graph		<div style="text-align: right;"> --- □ --- Load 50% — △ — Load 100% </div>	2.Values																																
		<table border="1"> <thead> <tr> <th rowspan="2">Input Voltage [V]</th> <th colspan="2">Output Voltage [V]</th> </tr> <tr> <th>Load 50%</th> <th>Load 100%</th> </tr> </thead> <tbody> <tr> <td>85</td> <td>34.581</td> <td>34.581</td> </tr> <tr> <td>100</td> <td>34.581</td> <td>34.581</td> </tr> <tr> <td>120</td> <td>34.581</td> <td>34.581</td> </tr> <tr> <td>200</td> <td>34.582</td> <td>34.581</td> </tr> <tr> <td>230</td> <td>34.582</td> <td>34.581</td> </tr> <tr> <td>264</td> <td>34.582</td> <td>34.581</td> </tr> <tr> <td>--</td> <td>-</td> <td>-</td> </tr> <tr> <td>--</td> <td>-</td> <td>-</td> </tr> <tr> <td>--</td> <td>-</td> <td>-</td> </tr> </tbody> </table>	Input Voltage [V]	Output Voltage [V]		Load 50%	Load 100%	85	34.581	34.581	100	34.581	34.581	120	34.581	34.581	200	34.582	34.581	230	34.582	34.581	264	34.582	34.581	--	-	-	--	-	-	--	-	-	
Input Voltage [V]	Output Voltage [V]																																		
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85	34.581	34.581																																	
100	34.581	34.581																																	
120	34.581	34.581																																	
200	34.582	34.581																																	
230	34.582	34.581																																	
264	34.582	34.581																																	
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<p>Note: Slanted line shows the range of the rated input voltage.</p>																																			



Model	MODULE 2J	Temperature	25°C
Item	Load Regulation	Testing Circuitry	Figure A
Object	+34V10A		



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

2.Values

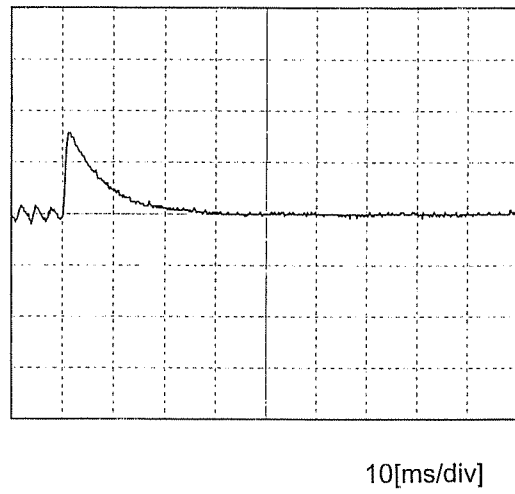
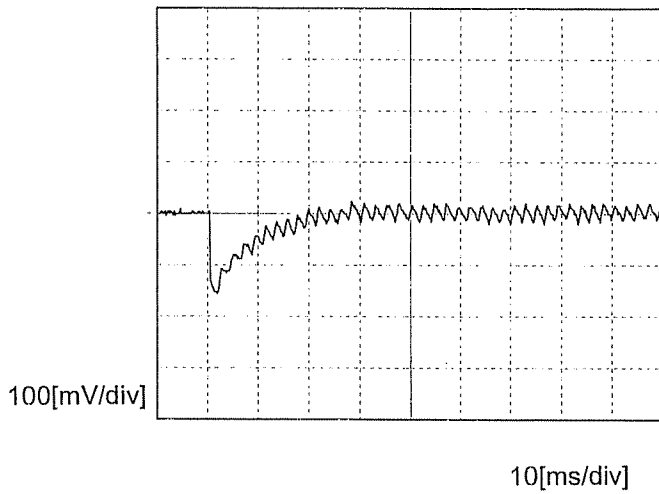
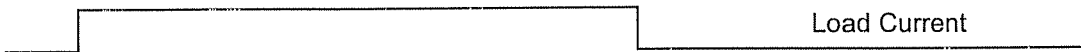
Load Current [A]	Output Voltage [V]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
0	34.583	34.584	34.585
2	34.581	34.582	34.583
4	34.580	34.582	34.583
6	34.581	34.582	34.583
8	34.581	34.582	34.583
10	34.580	34.582	34.582
11	34.580	34.582	34.582
--	-	-	-
--	-	-	-
--	-	-	-
--	-	-	-



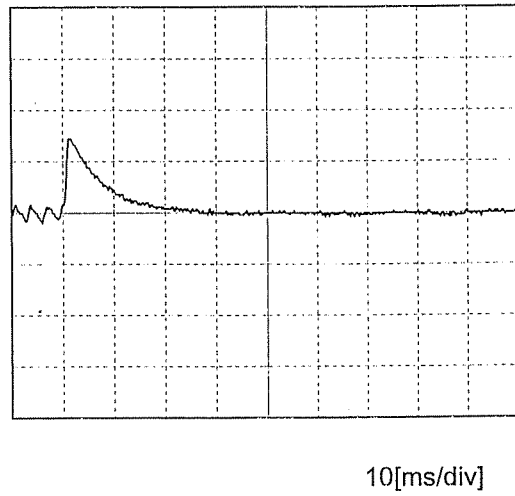
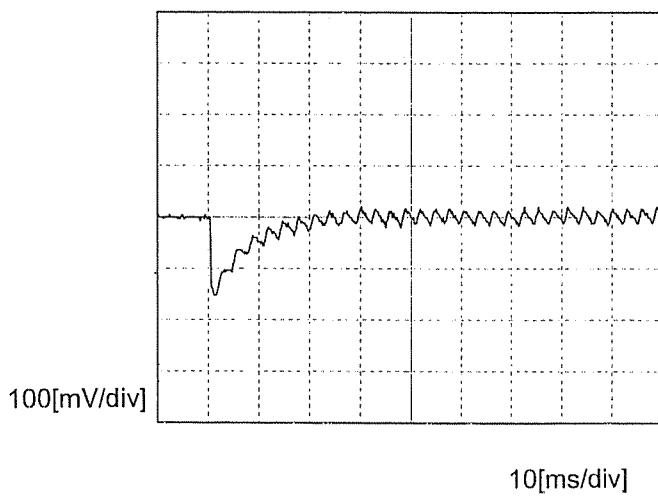
Model	MODULE 2J	Temperature	25°C
Item	Dynamic Load Response	Testing Circuitry	Figure A
Object	+34V10A		

Input Volt. 100 V
 Cycle 1000 ms

Min. Load (0 A) -- Load 100% (10 A)



Min. Load (0 A) -- Load 50% (5 A)



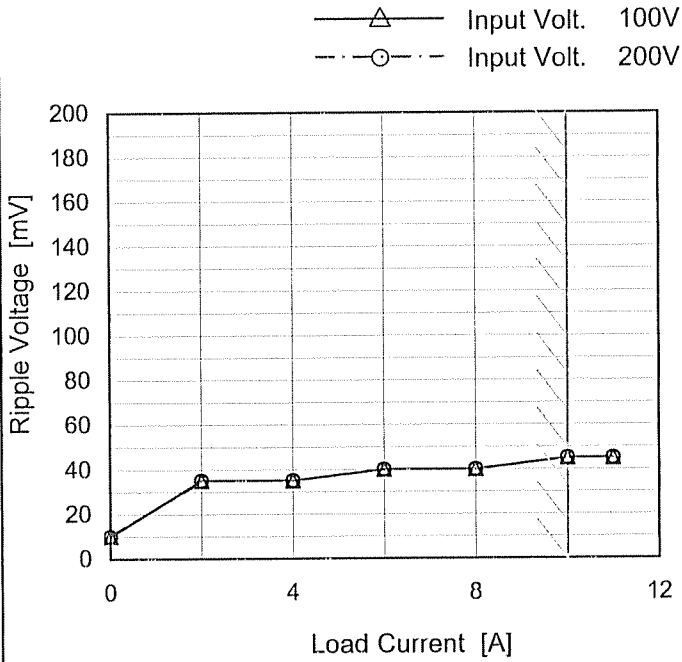
* The characteristic of AC200V is equal.



Model	MODULE 2J
Item	Ripple Voltage (by Load Current)
Object	+34V10A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



2.Values

Load Current [A]	Ripple Voltage [mV]	
	Input Volt. 100 [V]	Input Volt. 200 [V]
0	10	10
2	35	35
4	35	35
6	40	40
8	40	40
10	45	45
11	45	45
--	-	-
--	-	-
--	-	-
--	-	-

Measured by 20 MHz Oscilloscope.
Ripple Voltage is shown as p-p in the figure below.
Note: Slanted line shows the range of the rated load current.

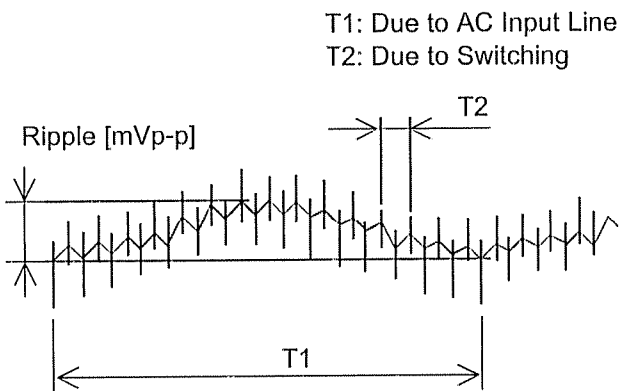


Fig. Complex Ripple Wave Form



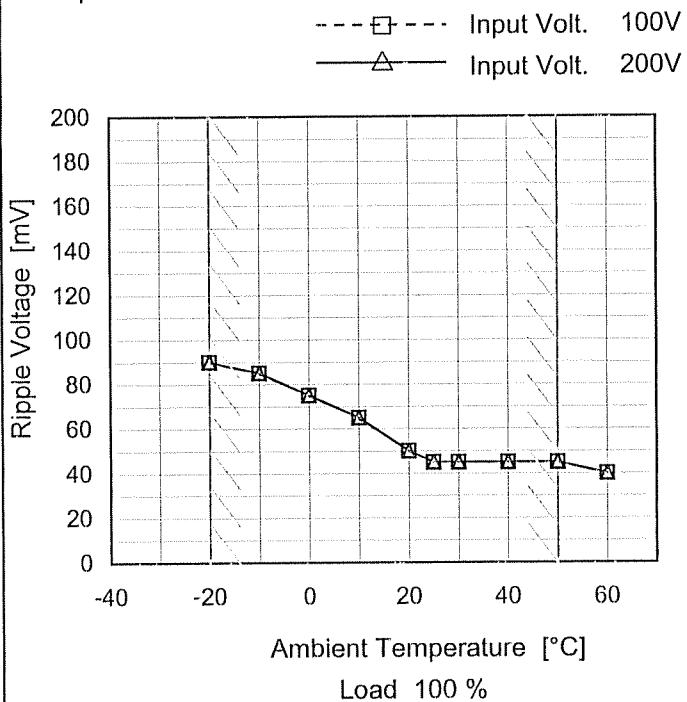
<p>Model MODULE 2J</p>		<p>Temperature 25°C Testing Circuitry Figure A</p>																																						
<p>Item Ripple-Noise</p>																																								
<p>Object +34V10A</p>																																								
<p>1.Graph</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>—△— Input Volt. 100V</p> <p>-○- Input Volt. 200V</p> </div> </div> <p>Measured by 20 MHz Oscilloscope. Ripple-Noise is shown as p-p in the figure below. Note: Slanted line shows the range of the rated load current.</p>		<p>2.Values</p> <table border="1"> <thead> <tr> <th rowspan="2">Load Current [A]</th> <th colspan="2">Ripple-Noise [mV]</th> </tr> <tr> <th>Input Volt. 100 [V]</th> <th>Input Volt. 200 [V]</th> </tr> </thead> <tbody> <tr><td>0</td><td>20</td><td>20</td></tr> <tr><td>2</td><td>45</td><td>45</td></tr> <tr><td>4</td><td>60</td><td>60</td></tr> <tr><td>6</td><td>60</td><td>60</td></tr> <tr><td>8</td><td>70</td><td>70</td></tr> <tr><td>10</td><td>75</td><td>75</td></tr> <tr><td>11</td><td>75</td><td>75</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> </tbody> </table>	Load Current [A]	Ripple-Noise [mV]		Input Volt. 100 [V]	Input Volt. 200 [V]	0	20	20	2	45	45	4	60	60	6	60	60	8	70	70	10	75	75	11	75	75	--	-	-	--	-	-	--	-	-	--	-	-
Load Current [A]	Ripple-Noise [mV]																																							
	Input Volt. 100 [V]	Input Volt. 200 [V]																																						
0	20	20																																						
2	45	45																																						
4	60	60																																						
6	60	60																																						
8	70	70																																						
10	75	75																																						
11	75	75																																						
--	-	-																																						
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<div style="text-align: center;"> <p>T1: Due to AC Input Line T2: Due to Switching</p> <p>Fig. Complex Ripple Wave Form</p> </div>																																								



Model	MODULE 2J
Item	Ripple Voltage (by Ambient Temp.)
Object	+34V10A

Testing Circuitry Figure A

1. Graph



2. Values

Ambient Temperature [°C]	Ripple Voltage [mV]	
	Input Volt. 100 [V]	Input Volt. 200 [V]
-20	90	90
-10	85	85
0	75	75
10	65	65
20	50	50
25	45	45
30	45	45
40	45	45
50	45	45
60	40	40
--	-	-

Measured by 20 MHz Oscilloscope.

Note: Slanted line shows the range of the rated ambient temperature.

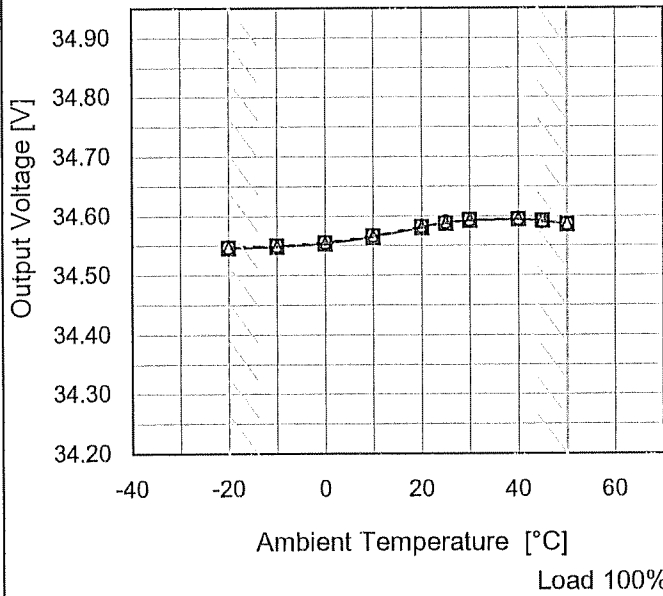


Model	MODULE 2J
Item	Ambient Temperature Drift
Object	+34V10A

Testing Circuitry Figure A

1.Graph

—△— Input Volt. 100V
 - - - □ - - - Input Volt. 200V
 - · - ○ - · - · Input Volt. 230V



Note: Slanted line shows the range of the rated ambient temperature.

2.Values

Ambient Temperature [°C]	Output Voltage [V]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
-20	34.545	34.546	34.547
-10	34.548	34.549	34.550
0	34.553	34.555	34.555
10	34.564	34.565	34.567
20	34.579	34.581	34.582
25	34.586	34.587	34.589
30	34.592	34.593	34.593
40	34.594	34.594	34.595
45	34.591	34.592	34.590
50	34.585	34.585	34.586
--	-	-	-



COSEL		
Model	MODULE 2J	Testing Circuitry Figure A
Item	Output Voltage Accuracy	
Object	+34V10A	

1. Output Voltage Accuracy

This is defined as the value of the output voltage, regulation load, ambient temperature and input voltage varied at random in the range as specified below.

Temperature : -20 - 50°C

Input Voltage : 85 - 264V

Load Current : 0 - 10A

* Output Voltage Accuracy = $\pm(\text{Maximum of Output Voltage} - \text{Minimum of Output Voltage}) / 2$

* Output Voltage Accuracy (Ration) = $\frac{\text{Output Voltage Accuracy}}{\text{Rated Output Voltage}} \times 100$

2. Values

Item	Temperature [°C]	Input Voltage[V]	Output		Output Voltage Accuracy	
			Current[A]	Voltage[V]	Value [mV]	Ration [%]
Maximum Voltage	25	264	0	34.599	±26	±0.1
Minimum Voltage	-20	85	10	34.547		



Model	MODULE 2J																							
Item	Time Lapse Drift	Temperature 25°C Testing Circuitry Figure A																						
Object	+34V10A																							
<p>1.Graph</p> <p style="text-align: center;">Time [H]</p> <p>Input Volt. 100V Load 100%</p>		<p>2.Values</p> <table border="1"> <thead> <tr> <th>Time since start [H]</th> <th>Output Voltage [V]</th> </tr> </thead> <tbody> <tr><td>0.0</td><td>34.579</td></tr> <tr><td>0.5</td><td>34.579</td></tr> <tr><td>1.0</td><td>34.579</td></tr> <tr><td>2.0</td><td>34.579</td></tr> <tr><td>3.0</td><td>34.579</td></tr> <tr><td>4.0</td><td>34.579</td></tr> <tr><td>5.0</td><td>34.579</td></tr> <tr><td>6.0</td><td>34.579</td></tr> <tr><td>7.0</td><td>34.579</td></tr> <tr><td>8.0</td><td>34.579</td></tr> </tbody> </table>	Time since start [H]	Output Voltage [V]	0.0	34.579	0.5	34.579	1.0	34.579	2.0	34.579	3.0	34.579	4.0	34.579	5.0	34.579	6.0	34.579	7.0	34.579	8.0	34.579
Time since start [H]	Output Voltage [V]																							
0.0	34.579																							
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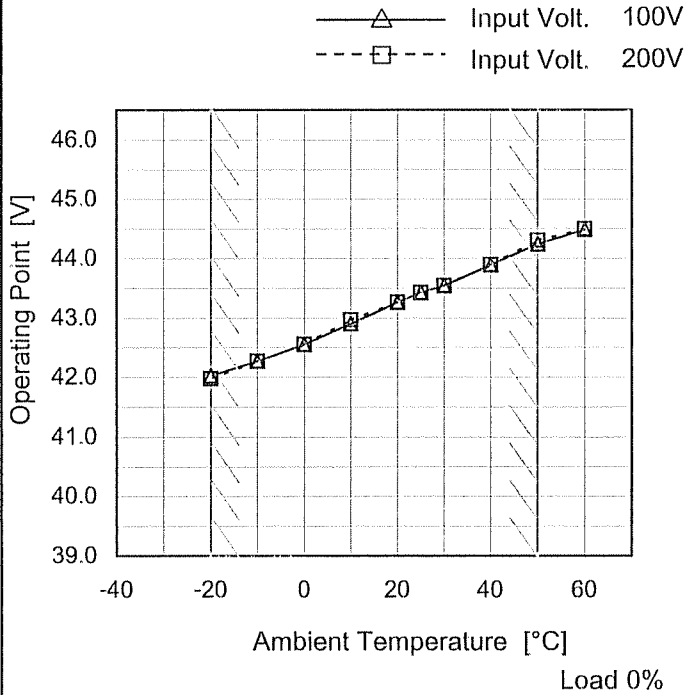
<p>Model MODULE 2J</p> <p>Item Overcurrent Protection</p> <p>Object +34V10A</p>		<p>Temperature 25°C</p> <p>Testing Circuitry Figure A</p>																																															
<p>1.Graph</p> <div style="text-align: right;"> <p>———— Input Volt. 100V</p> <p>———— Input Volt. 200V</p> </div> <p>Note: Slanted line shows the range of the rated load current.</p> <p>Intermittent operation occurs when the output voltage is from 27.2V to 0V.</p>		<p>2.Values</p> <table border="1"> <thead> <tr> <th rowspan="2">Output Voltage [V]</th> <th colspan="2">Load Current [A]</th> </tr> <tr> <th>Input Volt. 100[V]</th> <th>Input Volt. 200[V]</th> </tr> </thead> <tbody> <tr><td>34.0</td><td>15.12</td><td>15.10</td></tr> <tr><td>32.3</td><td>15.16</td><td>15.15</td></tr> <tr><td>30.6</td><td>15.23</td><td>15.24</td></tr> <tr><td>27.2</td><td>15.40</td><td>15.43</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> </tbody> </table>	Output Voltage [V]	Load Current [A]		Input Volt. 100[V]	Input Volt. 200[V]	34.0	15.12	15.10	32.3	15.16	15.15	30.6	15.23	15.24	27.2	15.40	15.43	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-
Output Voltage [V]	Load Current [A]																																																
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Model	MODULE 2J
Item	Overvoltage Protection
Object	+34V10A

Testing Circuitry Figure A

1.Graph



Note: Slanted line shows the range of the rated ambient temperature.

2.Values

Ambient Temperature [°C]	Operating Point [V]	
	Input Volt. 100[V]	Input Volt. 200[V]
-20	42.05	42.00
-10	42.30	42.30
0	42.58	42.58
10	42.93	42.99
20	43.29	43.29
25	43.45	43.45
30	43.57	43.57
40	43.92	43.92
50	44.27	44.33
60	44.51	44.52
--	-	-

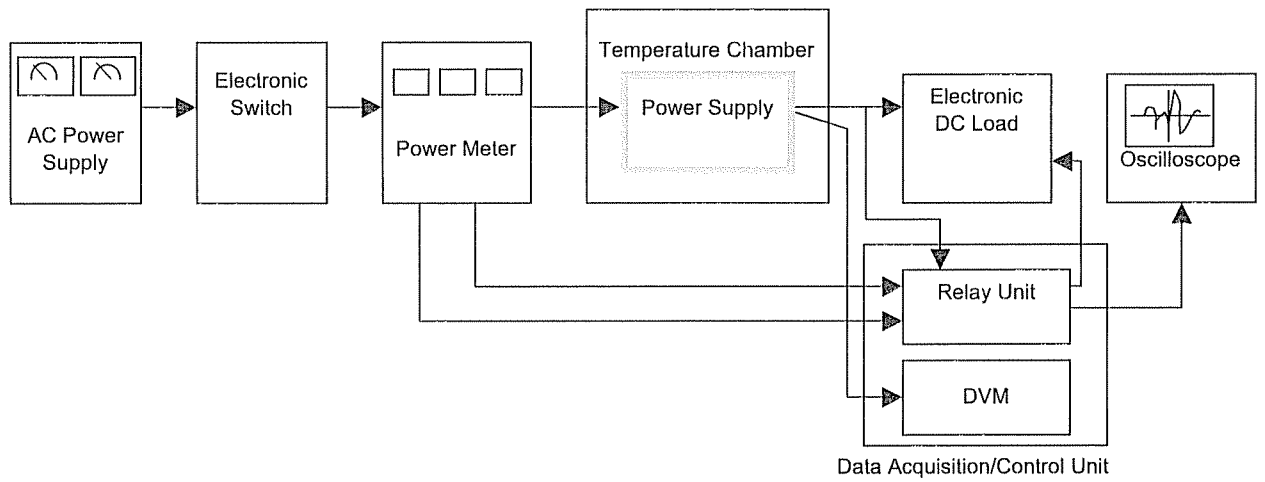


Figure A

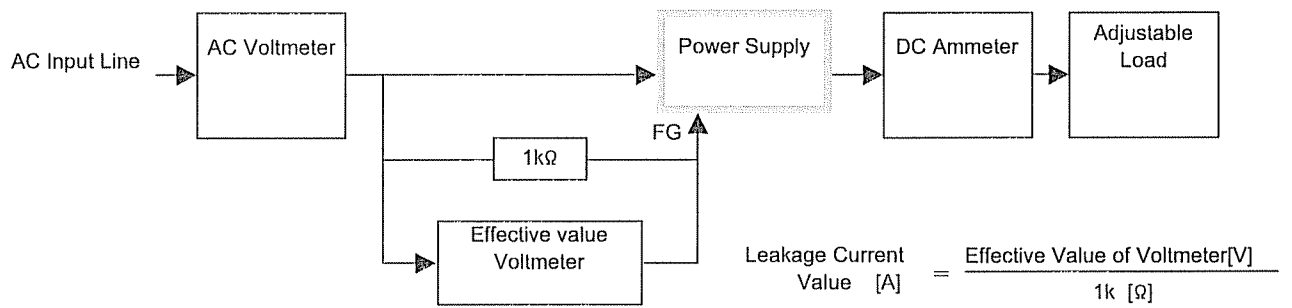


Figure B (DEN-AN)

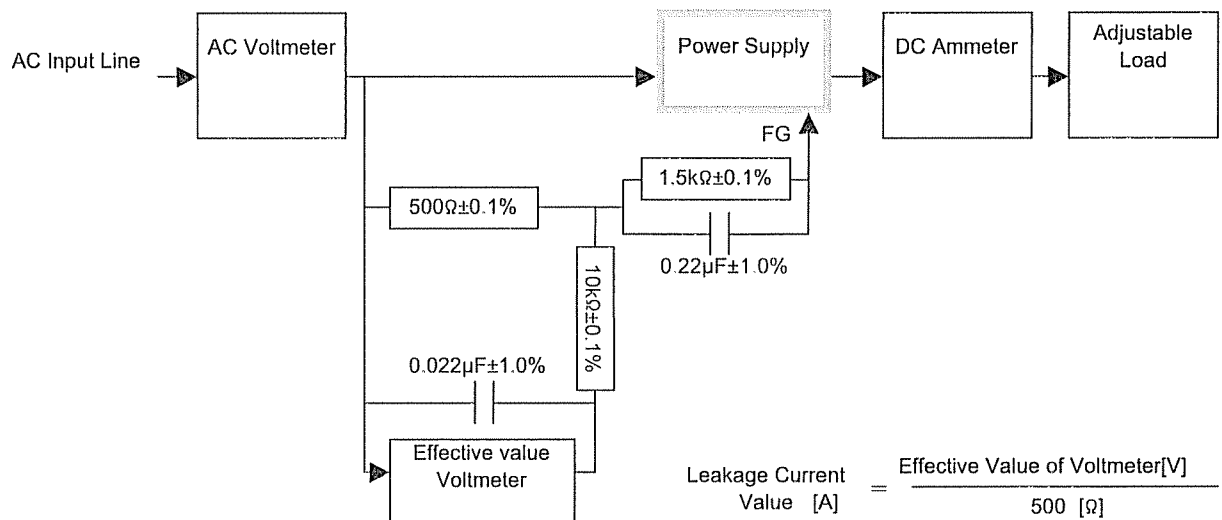


Figure B (IEC60950)