



TEST DATA OF MODULE B

(ACE series)

Regulated DC power supply
May.27.2003

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Prepared by : 
M. Hamaguchi Design Engineer

COSEL CO.,LTD.



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| COSEL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------------|--|----------|-------------------|--------------------|--|----------|-----------|----|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|----|---|---|----|---|---|----|---|---|
| Model | MODULE B | Temperature | 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Item | Line Regulation | Testing Circuitry | Figure A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | +3.3V26A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>1. Graph</p> <div style="text-align: right;"> <p>---□--- Load 50%</p> <p>—△— Load 100%</p> </div> <p style="text-align: center;">Input Voltage [V]</p> | | <p>2. Values</p> <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>3.333</td><td>3.323</td></tr> <tr><td>100</td><td>3.333</td><td>3.324</td></tr> <tr><td>120</td><td>3.333</td><td>3.324</td></tr> <tr><td>200</td><td>3.333</td><td>3.324</td></tr> <tr><td>230</td><td>3.333</td><td>3.324</td></tr> <tr><td>264</td><td>3.333</td><td>3.324</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 | 3.333 | 3.323 | 100 | 3.333 | 3.324 | 120 | 3.333 | 3.324 | 200 | 3.333 | 3.324 | 230 | 3.333 | 3.324 | 264 | 3.333 | 3.324 | -- | - | - | -- | - | - | -- | - | - |
| Input Voltage [V] | Output Voltage [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Load 50% | Load 100% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 85 | 3.333 | 3.323 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 | 3.333 | 3.324 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 120 | 3.333 | 3.324 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200 | 3.333 | 3.324 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 230 | 3.333 | 3.324 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 264 | 3.333 | 3.324 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Note: Slanted line shows the range of the rated input voltage.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



| Model | | MODULE B | | Temperature 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------------|---|--------------------|----------------------------|--|------------------|--------------------|--|--|--------------------|--------------------|--------------------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|----|---|---|---|----|---|---|---|
| Item | | Load Regulation | | Testing Circuitry Figure A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | +3.3V26A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | —△— Input Volt. 100V - - - □ - - - Input Volt. 200V - · - ○ - · - - Input Volt. 230V | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th rowspan="2">Load Current [A]</th> <th colspan="3">Output Voltage [V]</th> </tr> <tr> <th>Input Volt. 100[V]</th> <th>Input Volt. 200[V]</th> <th>Input Volt. 230[V]</th> </tr> </thead> <tbody> <tr><td>0.0</td><td>3.342</td><td>3.342</td><td>3.343</td></tr> <tr><td>4.0</td><td>3.339</td><td>3.339</td><td>3.340</td></tr> <tr><td>8.0</td><td>3.336</td><td>3.336</td><td>3.337</td></tr> <tr><td>12.0</td><td>3.333</td><td>3.333</td><td>3.334</td></tr> <tr><td>16.0</td><td>3.330</td><td>3.331</td><td>3.331</td></tr> <tr><td>20.0</td><td>3.327</td><td>3.328</td><td>3.328</td></tr> <tr><td>24.0</td><td>3.325</td><td>3.325</td><td>3.325</td></tr> <tr><td>26.0</td><td>3.323</td><td>3.324</td><td>3.324</td></tr> <tr><td>28.6</td><td>3.321</td><td>3.322</td><td>3.322</td></tr> <tr><td>--</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td><td>-</td></tr> </tbody> </table> | | | | Load Current [A] | Output Voltage [V] | | | Input Volt. 100[V] | Input Volt. 200[V] | Input Volt. 230[V] | 0.0 | 3.342 | 3.342 | 3.343 | 4.0 | 3.339 | 3.339 | 3.340 | 8.0 | 3.336 | 3.336 | 3.337 | 12.0 | 3.333 | 3.333 | 3.334 | 16.0 | 3.330 | 3.331 | 3.331 | 20.0 | 3.327 | 3.328 | 3.328 | 24.0 | 3.325 | 3.325 | 3.325 | 26.0 | 3.323 | 3.324 | 3.324 | 28.6 | 3.321 | 3.322 | 3.322 | -- | - | - | - | -- | - | - | - |
| Load Current [A] | Output Voltage [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 100[V] | Input Volt. 200[V] | Input Volt. 230[V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | 3.342 | 3.342 | 3.343 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.0 | 3.339 | 3.339 | 3.340 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.0 | 3.336 | 3.336 | 3.337 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.0 | 3.333 | 3.333 | 3.334 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16.0 | 3.330 | 3.331 | 3.331 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20.0 | 3.327 | 3.328 | 3.328 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24.0 | 3.325 | 3.325 | 3.325 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26.0 | 3.323 | 3.324 | 3.324 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28.6 | 3.321 | 3.322 | 3.322 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Note: Slanted line shows the range of the rated load current. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

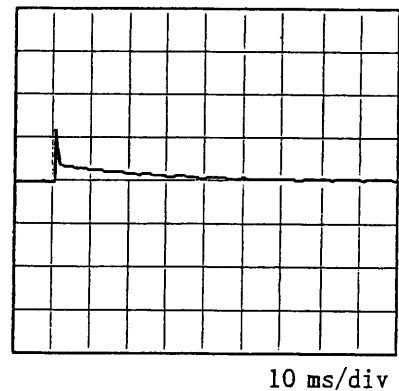
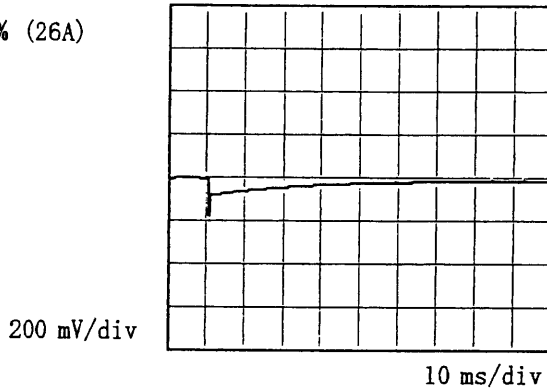


| | | | |
|--------|-----------------------|-------------------|----------|
| Model | MODULE B | Temperature | 25°C |
| Item | Dynamic Load Response | Testing Circuitry | Figure A |
| Object | +3.3V26A | | |

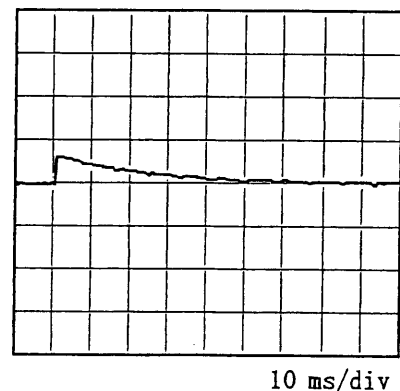
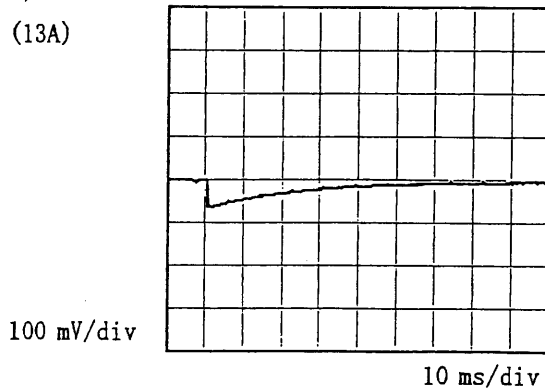
Input Volt. 100 V
 Cycle 1000 mS

Load Current

Min. Load (0A) \longleftrightarrow
 Load 100% (26A)



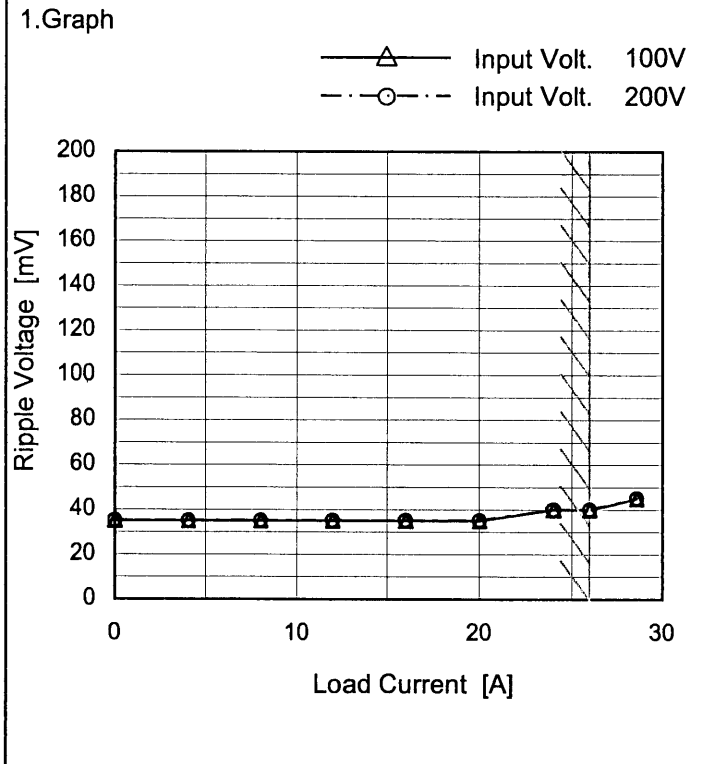
Min. Load (0A) \longleftrightarrow
 Load 50% (13A)



* The characteristic of AC200V is equal.



| | | | |
|--------|----------------------------------|-------------------|----------|
| Model | MODULE B | Temperature | 25°C |
| Item | Ripple Voltage (by Load Current) | Testing Circuitry | Figure A |
| Object | +3.3V26A | | |



2. Values

| Load Current [A] | Ripple Voltage [mV] | |
|------------------|---------------------|---------------------|
| | Input Volt. 100 [V] | Input Volt. 200 [V] |
| 0.0 | 35 | 35 |
| 4.0 | 35 | 35 |
| 8.0 | 35 | 35 |
| 12.0 | 35 | 35 |
| 16.0 | 35 | 35 |
| 20.0 | 35 | 35 |
| 24.0 | 40 | 40 |
| 26.0 | 40 | 40 |
| 28.6 | 45 | 45 |
| -- | - | - |
| -- | - | - |

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

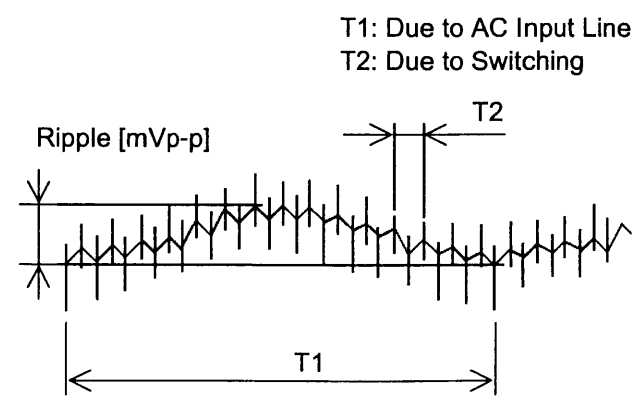
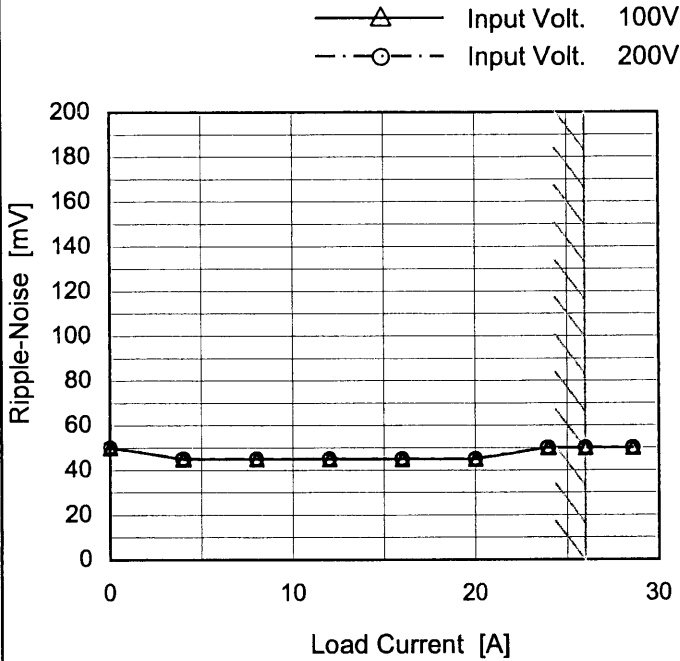


Fig. Complex Ripple Wave Form



| | | | |
|--------|--------------|-------------------|----------|
| Model | MODULE B | Temperature | 25°C |
| Item | Ripple-Noise | Testing Circuitry | Figure A |
| Object | +3.3V26A | | |

1.Graph



2.Values

| Load Current [A] | Ripple-Noise [mV] | |
|------------------|---------------------|---------------------|
| | Input Volt. 100 [V] | Input Volt. 200 [V] |
| 0.0 | 50 | 50 |
| 4.0 | 45 | 45 |
| 8.0 | 45 | 45 |
| 12.0 | 45 | 45 |
| 16.0 | 45 | 45 |
| 20.0 | 45 | 45 |
| 24.0 | 50 | 50 |
| 26.0 | 50 | 50 |
| 28.6 | 50 | 50 |
| -- | - | - |
| -- | - | - |

Ripple-Noise is shown as p-p in the figure below.
 Note: Slanted line shows the range of the rated load current.

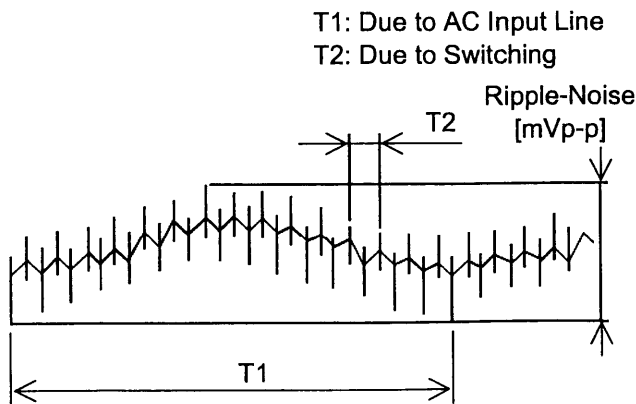


Fig. Complex Ripple Wave Form



| Model | | MODULE B | Testing Circuitry Figure A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---------------------|--|--|--------------------------|---------------------|--|---------------------|---------------------|-----|----|----|-----|----|----|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Item | | Ripple Voltage (by Ambient Temp.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | +3.3V26A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | <p>--- □ --- Input Volt. 100V — △ — Input Volt. 200V</p> <p>Ripple Voltage [mV]</p> <p>Ambient Temperature [°C]</p> <p>Load 100 %</p> | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | <table border="1"> <thead> <tr> <th rowspan="2">Ambient Temperature [°C]</th> <th colspan="2">Ripple Voltage [mV]</th> </tr> <tr> <th>Input Volt. 100 [V]</th> <th>Input Volt. 200 [V]</th> </tr> </thead> <tbody> <tr><td>-20</td><td>85</td><td>85</td></tr> <tr><td>-10</td><td>70</td><td>70</td></tr> <tr><td>0</td><td>60</td><td>60</td></tr> <tr><td>10</td><td>55</td><td>55</td></tr> <tr><td>20</td><td>40</td><td>40</td></tr> <tr><td>25</td><td>40</td><td>40</td></tr> <tr><td>30</td><td>40</td><td>40</td></tr> <tr><td>40</td><td>35</td><td>35</td></tr> <tr><td>50</td><td>30</td><td>30</td></tr> <tr><td>60</td><td>30</td><td>30</td></tr> <tr><td>70</td><td>30</td><td>30</td></tr> </tbody> </table> | Ambient Temperature [°C] | Ripple Voltage [mV] | | Input Volt. 100 [V] | Input Volt. 200 [V] | -20 | 85 | 85 | -10 | 70 | 70 | 0 | 60 | 60 | 10 | 55 | 55 | 20 | 40 | 40 | 25 | 40 | 40 | 30 | 40 | 40 | 40 | 35 | 35 | 50 | 30 | 30 | 60 | 30 | 30 | 70 | 30 | 30 |
| Ambient Temperature [°C] | Ripple Voltage [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 100 [V] | Input Volt. 200 [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -20 | 85 | 85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -10 | 70 | 70 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 60 | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 55 | 55 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 40 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | 40 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | 40 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40 | 35 | 35 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 70 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Note: Slanted line shows the range of the rated ambient temperature. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



| Model | | MODULE B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--------------------|---|----------------------------|--|--------------------------|--------------------|--|--|--------------------|--------------------|--------------------|-----|-------|-------|-------|-----|-------|-------|-------|---|-------|-------|-------|----|-------|-------|-------|----|-------|-------|-------|----|-------|-------|-------|----|-------|-------|-------|----|-------|-------|-------|----|-------|-------|-------|----|-------|-------|-------|----|---|---|---|
| Item | | Ambient Temperature Drift | Testing Circuitry Figure A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | +3.3V26A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | <p>—△— Input Volt. 100V</p> <p>---□--- Input Volt. 200V</p> <p>---○--- Input Volt. 230V</p> | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th rowspan="2">Ambient Temperature [°C]</th> <th colspan="3">Output Voltage [V]</th> </tr> <tr> <th>Input Volt. 100[V]</th> <th>Input Volt. 200[V]</th> <th>Input Volt. 230[V]</th> </tr> </thead> <tbody> <tr><td>-20</td><td>3.315</td><td>3.315</td><td>3.315</td></tr> <tr><td>-10</td><td>3.316</td><td>3.315</td><td>3.316</td></tr> <tr><td>0</td><td>3.318</td><td>3.318</td><td>3.318</td></tr> <tr><td>10</td><td>3.318</td><td>3.318</td><td>3.318</td></tr> <tr><td>20</td><td>3.320</td><td>3.320</td><td>3.320</td></tr> <tr><td>25</td><td>3.321</td><td>3.321</td><td>3.321</td></tr> <tr><td>30</td><td>3.322</td><td>3.321</td><td>3.321</td></tr> <tr><td>40</td><td>3.322</td><td>3.322</td><td>3.322</td></tr> <tr><td>50</td><td>3.322</td><td>3.322</td><td>3.322</td></tr> <tr><td>60</td><td>3.321</td><td>3.321</td><td>3.321</td></tr> <tr><td>--</td><td>-</td><td>-</td><td>-</td></tr> </tbody> </table> | | | Ambient Temperature [°C] | Output Voltage [V] | | | Input Volt. 100[V] | Input Volt. 200[V] | Input Volt. 230[V] | -20 | 3.315 | 3.315 | 3.315 | -10 | 3.316 | 3.315 | 3.316 | 0 | 3.318 | 3.318 | 3.318 | 10 | 3.318 | 3.318 | 3.318 | 20 | 3.320 | 3.320 | 3.320 | 25 | 3.321 | 3.321 | 3.321 | 30 | 3.322 | 3.321 | 3.321 | 40 | 3.322 | 3.322 | 3.322 | 50 | 3.322 | 3.322 | 3.322 | 60 | 3.321 | 3.321 | 3.321 | -- | - | - | - |
| Ambient Temperature [°C] | Output Voltage [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 100[V] | Input Volt. 200[V] | Input Volt. 230[V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -20 | 3.315 | 3.315 | 3.315 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -10 | 3.316 | 3.315 | 3.316 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 3.318 | 3.318 | 3.318 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 3.318 | 3.318 | 3.318 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 3.320 | 3.320 | 3.320 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | 3.321 | 3.321 | 3.321 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | 3.322 | 3.321 | 3.321 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40 | 3.322 | 3.322 | 3.322 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50 | 3.322 | 3.322 | 3.322 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60 | 3.321 | 3.321 | 3.321 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Note: Slanted line shows the range of the rated ambient temperature. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



| | | |
|--------------|-------------------------|----------------------------|
| COSEL | | |
| Model | MODULE B | |
| Item | Output Voltage Accuracy | Testing Circuitry Figure A |
| Object | +3.3V26A | |

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 - 26A

* 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 | 50 | 85 | 0 | 3.341 | ±15 | ±0.5 |
| Minimum Voltage | -20 | 85 | 26 | 3.312 | | |



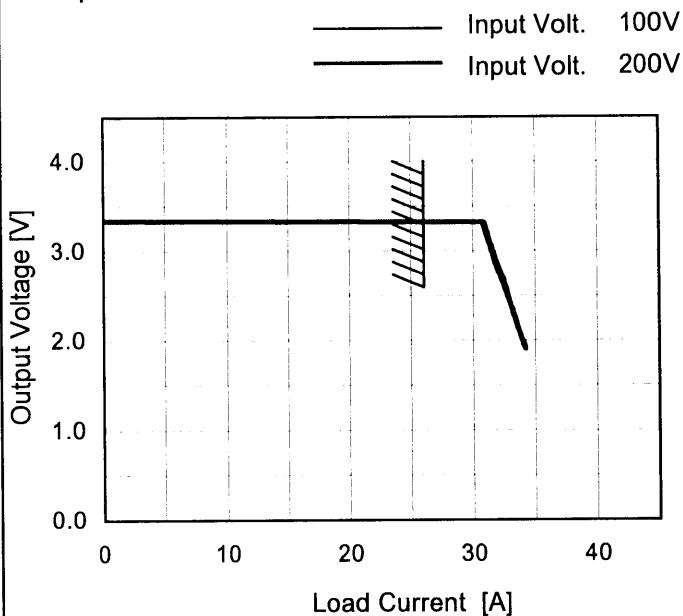
| COSEL | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--------------------|--|----------|----------------------|--------------------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| Model | MODULE B | Temperature | 25°C | | | | | | | | | | | | | | | | | | | | | | |
| Item | Time Lapse Drift | Testing Circuitry | Figure A | | | | | | | | | | | | | | | | | | | | | | |
| Object | +3.3V26A | | | | | | | | | | | | | | | | | | | | | | | | |
| <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>3.323</td></tr> <tr><td>0.5</td><td>3.324</td></tr> <tr><td>1.0</td><td>3.324</td></tr> <tr><td>2.0</td><td>3.324</td></tr> <tr><td>3.0</td><td>3.324</td></tr> <tr><td>4.0</td><td>3.324</td></tr> <tr><td>5.0</td><td>3.324</td></tr> <tr><td>6.0</td><td>3.324</td></tr> <tr><td>7.0</td><td>3.324</td></tr> <tr><td>8.0</td><td>3.324</td></tr> </tbody> </table> | | Time since start [H] | Output Voltage [V] | 0.0 | 3.323 | 0.5 | 3.324 | 1.0 | 3.324 | 2.0 | 3.324 | 3.0 | 3.324 | 4.0 | 3.324 | 5.0 | 3.324 | 6.0 | 3.324 | 7.0 | 3.324 | 8.0 | 3.324 |
| Time since start [H] | Output Voltage [V] | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | 3.323 | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.5 | 3.324 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.0 | 3.324 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.0 | 3.324 | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.0 | 3.324 | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.0 | 3.324 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.0 | 3.324 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.0 | 3.324 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7.0 | 3.324 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.0 | 3.324 | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>* The characteristic of AC200V is equal.</p> | | | | | | | | | | | | | | | | | | | | | | | | | |



| | |
|--------|------------------------|
| Model | MODULE B |
| Item | Overcurrent Protection |
| Object | +3.3V26A |

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

Intermittent operation occurs when the output voltage is from 1.9V to 0V.

2.Values

| Output Voltage [V] | Load Current [A] | |
|--------------------|--------------------|--------------------|
| | Input Volt. 100[V] | Input Volt. 200[V] |
| 3.30 | 28.93 | 28.80 |
| 3.14 | 31.02 | 31.24 |
| 2.97 | 31.45 | 31.69 |
| 2.64 | 32.35 | 32.56 |
| 2.31 | 33.13 | 33.28 |
| 1.98 | 33.93 | 34.06 |
| -- | - | - |
| -- | - | - |
| -- | - | - |
| -- | - | - |
| -- | - | - |
| -- | - | - |



| Model | | MODULE B | Testing Circuitry Figure A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---------------------|------------------------|--|--------------------------|---------------------|--|--------------------|--------------------|-----|------|------|-----|------|------|---|------|------|----|------|------|----|------|------|----|------|------|----|------|------|----|------|------|----|------|------|----|------|------|----|---|---|
| Item | | Overvoltage Protection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | +3.3V26A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p> —△— Input Volt. 100V - - - □ - - - Input Volt. 200V </p> <p>Operating Point [V]</p> <p>Ambient Temperature [°C]</p> <p>Load 0%</p> <p>Note: Slanted line shows the range of the rated ambient temperature.</p> | | | <table border="1"> <thead> <tr> <th rowspan="2">Ambient Temperature [°C]</th> <th colspan="2">Operating Point [V]</th> </tr> <tr> <th>Input Volt. 100[V]</th> <th>Input Volt. 200[V]</th> </tr> </thead> <tbody> <tr><td>-20</td><td>4.92</td><td>4.92</td></tr> <tr><td>-10</td><td>4.86</td><td>4.86</td></tr> <tr><td>0</td><td>4.80</td><td>4.86</td></tr> <tr><td>10</td><td>4.74</td><td>4.80</td></tr> <tr><td>20</td><td>4.74</td><td>4.74</td></tr> <tr><td>25</td><td>4.74</td><td>4.74</td></tr> <tr><td>30</td><td>4.68</td><td>4.68</td></tr> <tr><td>40</td><td>4.68</td><td>4.68</td></tr> <tr><td>50</td><td>4.62</td><td>4.62</td></tr> <tr><td>60</td><td>4.57</td><td>4.57</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> </tbody> </table> | Ambient Temperature [°C] | Operating Point [V] | | Input Volt. 100[V] | Input Volt. 200[V] | -20 | 4.92 | 4.92 | -10 | 4.86 | 4.86 | 0 | 4.80 | 4.86 | 10 | 4.74 | 4.80 | 20 | 4.74 | 4.74 | 25 | 4.74 | 4.74 | 30 | 4.68 | 4.68 | 40 | 4.68 | 4.68 | 50 | 4.62 | 4.62 | 60 | 4.57 | 4.57 | -- | - | - |
| Ambient Temperature [°C] | Operating Point [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 100[V] | Input Volt. 200[V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -20 | 4.92 | 4.92 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -10 | 4.86 | 4.86 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 4.80 | 4.86 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 4.74 | 4.80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 4.74 | 4.74 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | 4.74 | 4.74 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | 4.68 | 4.68 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40 | 4.68 | 4.68 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50 | 4.62 | 4.62 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60 | 4.57 | 4.57 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

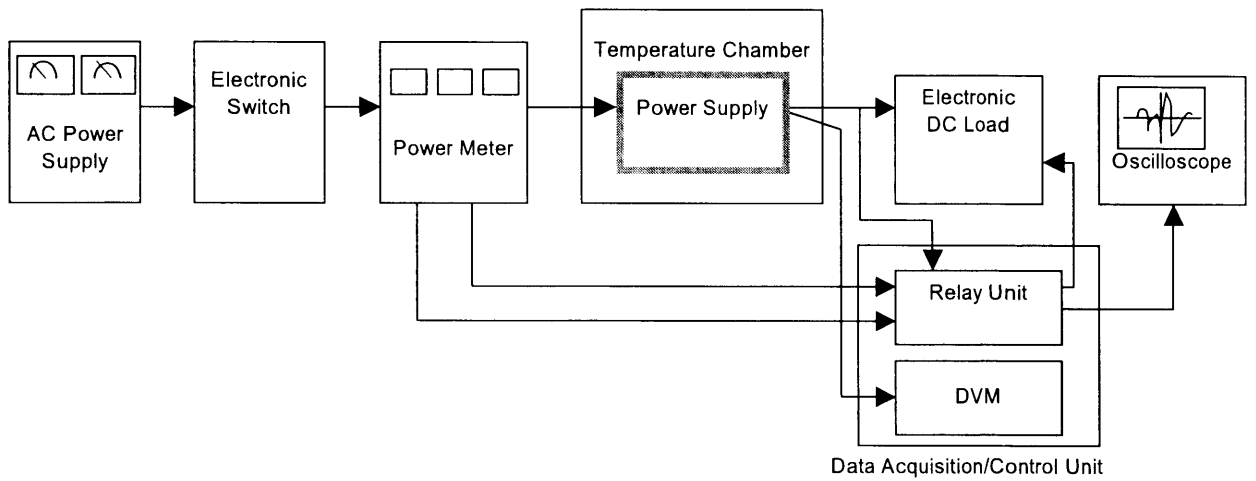


Figure A

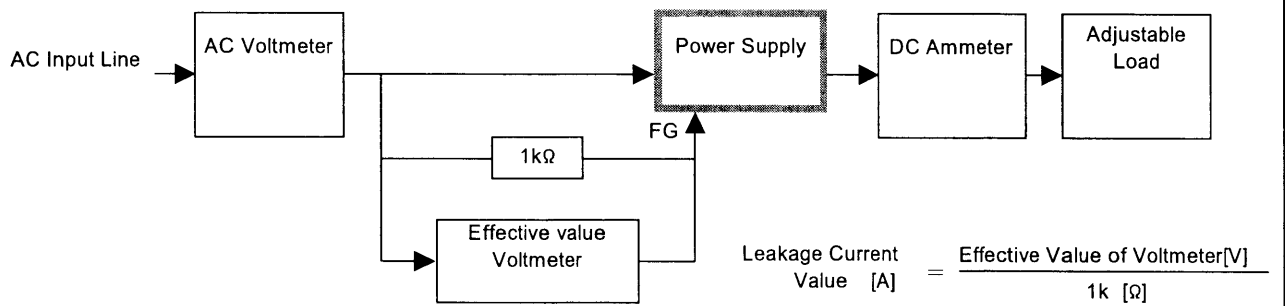


Figure B (DEN-AN)

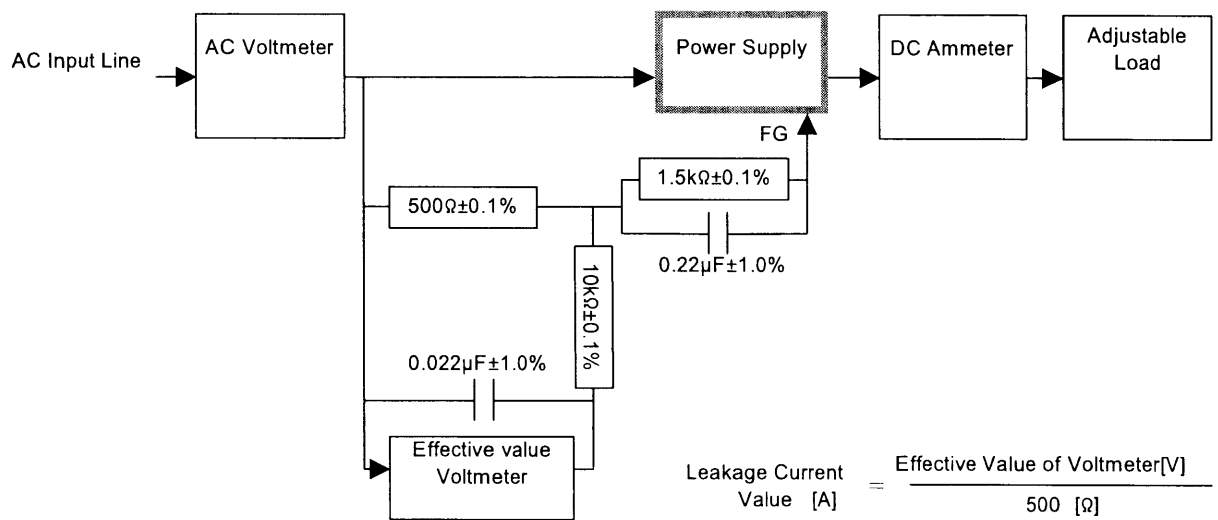


Figure B (IEC60950)