

## Test Data

Model Number: mUZP-120-24-JB0

Model Name: DC POWER SUPPLY

INPUT: 85V – 264V AC, 50 / 60 Hz

OUTPUT: 24 V 5A (8.4 A<sub>peak</sub>)

Minimum load : 0W  
Rated load :120W  
Peak output power: 201.6W

Approved by : *T. Ishikawa* (QA manager)  
Designed by : *Kazuhiko Yamada* (R&D engineer)  
Tested by : *Hiroyuki Watanabe* (Evaluation test engineer)

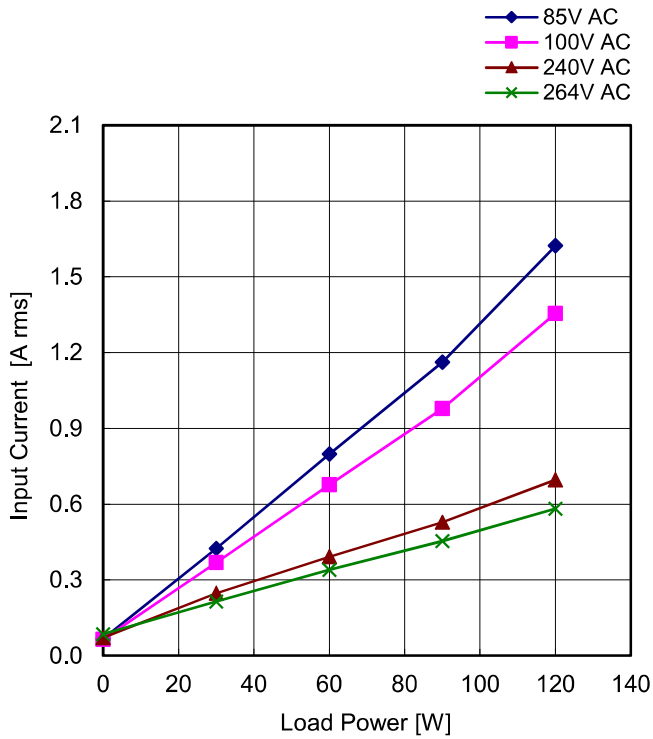
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Model mUZP-120-24-JB0

Temperature: 25°C

Item Input Current (by Load Power)



| Load Power [W] | Input Current [A rms] |                       |                       |                       |
|----------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                | Input Voltage 85V AC  | Input Voltage 100V AC | Input Voltage 240V AC | Input Voltage 264V AC |
| 0.0            | 0.07                  | 0.07                  | 0.07                  | 0.09                  |
| 30.0           | 0.42                  | 0.37                  | 0.25                  | 0.22                  |
| 60.0           | 0.80                  | 0.68                  | 0.39                  | 0.34                  |
| 90.0           | 1.16                  | 0.98                  | 0.53                  | 0.45                  |
| 120.0          | 1.62                  | 1.35                  | 0.70                  | 0.58                  |

| Model  | mUZP-120-24-JB0      | Temperature: 25°C     |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|--|----------------------|-----------------------|-----------------------|-----------------------|----|-------|----------------------|-----------------------|-----------------------|-----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|----------------------|---|----------------|----------------|------------|----|-------|----------------------|-----------------------|-----------------------|-----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Item   | Efficiency           |                       |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| <p>■ Efficiency(by Input Voltage)</p> <table border="1"> <thead> <tr> <th>AC Input Voltage [V]</th> <th>50% Load</th> <th>Rated Load</th> </tr> </thead> <tbody> <tr><td>85</td><td>89.80</td><td>88.04</td></tr> <tr><td>100</td><td>90.50</td><td>89.79</td></tr> <tr><td>132</td><td>91.04</td><td>91.48</td></tr> <tr><td>176</td><td>91.75</td><td>92.58</td></tr> <tr><td>200</td><td>92.02</td><td>92.88</td></tr> <tr><td>220</td><td>92.24</td><td>93.14</td></tr> <tr><td>240</td><td>92.30</td><td>93.32</td></tr> <tr><td>264</td><td>92.36</td><td>93.29</td></tr> </tbody> </table>  |                      | AC Input Voltage [V]  | 50% Load              | Rated Load            | 85 | 89.80 | 88.04                | 100                   | 90.50                 | 89.79                 | 132  | 91.04 | 91.48 | 176   | 91.75 | 92.58 | 200   | 92.02 | 92.88 | 220   | 92.24 | 93.14 | 240   | 92.30 | 93.32 | 264   | 92.36 | 93.29 | <table border="1"> <thead> <tr> <th rowspan="2">AC Input Voltage [V]</th> <th colspan="2">Efficiency [%]</th> </tr> <tr> <th>50% Load</th> <th>Rated Load</th> </tr> </thead> <tbody> <tr><td>85</td><td>89.80</td><td>88.04</td></tr> <tr><td>100</td><td>90.50</td><td>89.79</td></tr> <tr><td>132</td><td>91.04</td><td>91.48</td></tr> <tr><td>176</td><td>91.75</td><td>92.58</td></tr> <tr><td>200</td><td>92.02</td><td>92.88</td></tr> <tr><td>220</td><td>92.24</td><td>93.14</td></tr> <tr><td>240</td><td>92.30</td><td>93.32</td></tr> <tr><td>264</td><td>92.36</td><td>93.29</td></tr> </tbody> </table> | AC Input Voltage [V] | Efficiency [%]  |                | 50% Load       | Rated Load | 85 | 89.80 | 88.04                | 100                   | 90.50                 | 89.79                 | 132  | 91.04 | 91.48 | 176   | 91.75 | 92.58 | 200   | 92.02 | 92.88 | 220   | 92.24 | 93.14 | 240   | 92.30 | 93.32 | 264   | 92.36 | 93.29 |       |       |
| AC Input Voltage [V]   | 50% Load             | Rated Load            |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 85   | 89.80                | 88.04                 |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 100  | 90.50                | 89.79                 |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 132  | 91.04                | 91.48                 |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 176  | 91.75                | 92.58                 |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 200  | 92.02                | 92.88                 |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 220  | 92.24                | 93.14                 |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 240  | 92.30                | 93.32                 |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 264  | 92.36                | 93.29                 |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| AC Input Voltage [V]   | Efficiency [%]       |                       |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|  | 50% Load             | Rated Load            |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 85   | 89.80                | 88.04                 |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 100  | 90.50                | 89.79                 |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 132  | 91.04                | 91.48                 |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 176  | 91.75                | 92.58                 |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 200  | 92.02                | 92.88                 |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 220  | 92.24                | 93.14                 |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 240  | 92.30                | 93.32                 |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 264  | 92.36                | 93.29                 |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| <p>■ Efficiency(by Load Power)</p> <table border="1"> <thead> <tr> <th rowspan="2">Load Power [W]</th> <th colspan="4">Efficiency [%]</th> </tr> <tr> <th>Input Voltage 85V AC</th> <th>Input Voltage 100V AC</th> <th>Input Voltage 240V AC</th> <th>Input Voltage 264V AC</th> </tr> </thead> <tbody> <tr><td>30.0</td><td>86.08</td><td>86.10</td><td>87.33</td><td>87.05</td></tr> <tr><td>60.0</td><td>89.80</td><td>90.50</td><td>92.30</td><td>92.36</td></tr> <tr><td>90.0</td><td>92.41</td><td>93.41</td><td>96.01</td><td>96.13</td></tr> <tr><td>120.0</td><td>88.04</td><td>89.79</td><td>93.32</td><td>93.29</td></tr> </tbody> </table> |                      | Load Power [W]        | Efficiency [%]        |                       |    |       | Input Voltage 85V AC | Input Voltage 100V AC | Input Voltage 240V AC | Input Voltage 264V AC | 30.0 | 86.08 | 86.10 | 87.33 | 87.05 | 60.0  | 89.80 | 90.50 | 92.30 | 92.36 | 90.0  | 92.41 | 93.41 | 96.01 | 96.13 | 120.0 | 88.04 | 89.79 | 93.32  | 93.29                | <table border="1"> <thead> <tr> <th rowspan="2">Load Power [W]</th> <th colspan="4">Efficiency [%]</th> </tr> <tr> <th>Input Voltage 85V AC</th> <th>Input Voltage 100V AC</th> <th>Input Voltage 240V AC</th> <th>Input Voltage 264V AC</th> </tr> </thead> <tbody> <tr><td>30.0</td><td>86.08</td><td>86.10</td><td>87.33</td><td>87.05</td></tr> <tr><td>60.0</td><td>89.80</td><td>90.50</td><td>92.30</td><td>92.36</td></tr> <tr><td>90.0</td><td>92.41</td><td>93.41</td><td>96.01</td><td>96.13</td></tr> <tr><td>120.0</td><td>88.04</td><td>89.79</td><td>93.32</td><td>93.29</td></tr> </tbody> </table> | Load Power [W] | Efficiency [%] |            |    |       | Input Voltage 85V AC | Input Voltage 100V AC | Input Voltage 240V AC | Input Voltage 264V AC | 30.0 | 86.08 | 86.10 | 87.33 | 87.05 | 60.0  | 89.80 | 90.50 | 92.30 | 92.36 | 90.0  | 92.41 | 93.41 | 96.01 | 96.13 | 120.0 | 88.04 | 89.79 | 93.32 | 93.29 |
| Load Power [W]   | Efficiency [%]       |                       |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|  | Input Voltage 85V AC | Input Voltage 100V AC | Input Voltage 240V AC | Input Voltage 264V AC |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 30.0   | 86.08                | 86.10                 | 87.33                 | 87.05                 |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 60.0   | 89.80                | 90.50                 | 92.30                 | 92.36                 |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 90.0   | 92.41                | 93.41                 | 96.01                 | 96.13                 |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 120.0  | 88.04                | 89.79                 | 93.32                 | 93.29                 |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Load Power [W]   | Efficiency [%]       |                       |                       |                       |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|  | Input Voltage 85V AC | Input Voltage 100V AC | Input Voltage 240V AC | Input Voltage 264V AC |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 30.0   | 86.08                | 86.10                 | 87.33                 | 87.05                 |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 60.0   | 89.80                | 90.50                 | 92.30                 | 92.36                 |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 90.0   | 92.41                | 93.41                 | 96.01                 | 96.13                 |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 120.0  | 88.04                | 89.79                 | 93.32                 | 93.29                 |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |                      |   |                |                |            |    |       |                      |                       |                       |                       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |

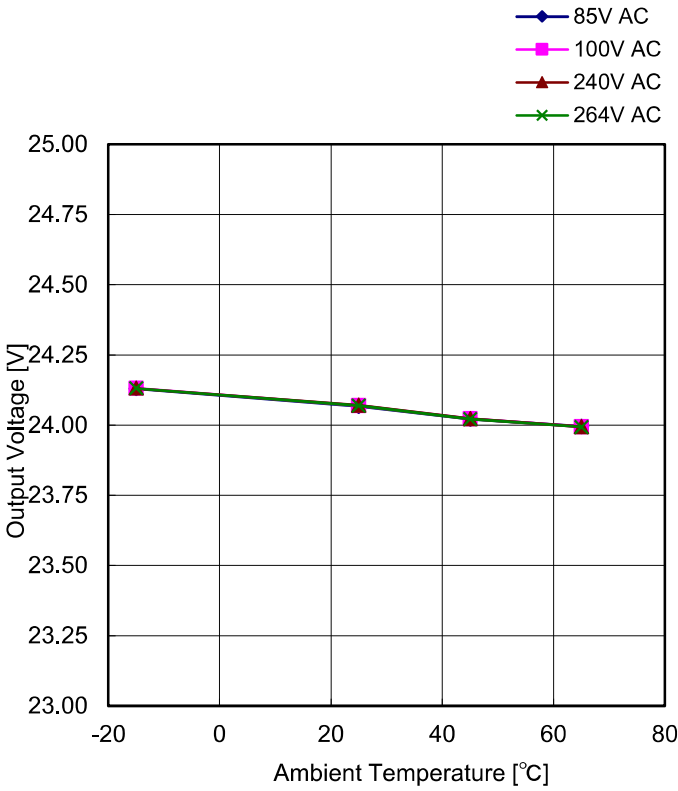
| Model   | mUZP-120-24-JB0      | Temperature: 25°C     |                       |                       |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |
|---|----------------------|-----------------------|-----------------------|-----------------------|------------------|------------|----|------|----------------------|-----------------------|-----------------------|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Item  | Power Factor         |                       |                       |                       |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |
| <p>■ Power Factor (by Input Voltage)</p> <table border="1"> <thead> <tr> <th>AC Input Voltage [V]</th> <th>50% Load</th> <th>Rated Load</th> </tr> </thead> <tbody> <tr><td>85</td><td>98.6</td><td>99.1</td></tr> <tr><td>100</td><td>98.0</td><td>98.9</td></tr> <tr><td>132</td><td>94.7</td><td>98.4</td></tr> <tr><td>176</td><td>87.7</td><td>95.0</td></tr> <tr><td>200</td><td>83.4</td><td>92.9</td></tr> <tr><td>220</td><td>78.4</td><td>90.4</td></tr> <tr><td>240</td><td>75.1</td><td>87.6</td></tr> <tr><td>264</td><td>72.4</td><td>83.7</td></tr> </tbody> </table>  |                      |                       |                       | AC Input Voltage [V]  | 50% Load         | Rated Load | 85 | 98.6 | 99.1                 | 100                   | 98.0                  | 98.9                  | 132  | 94.7 | 98.4 | 176  | 87.7 | 95.0 | 200  | 83.4 | 92.9 | 220  | 78.4 | 90.4 | 240  | 75.1 | 87.6 | 264   | 72.4 | 83.7 |      |      |
| AC Input Voltage [V]  | 50% Load             | Rated Load            |                       |                       |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |
| 85  | 98.6                 | 99.1                  |                       |                       |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |
| 100   | 98.0                 | 98.9                  |                       |                       |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |
| 132   | 94.7                 | 98.4                  |                       |                       |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |
| 176   | 87.7                 | 95.0                  |                       |                       |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |
| 200   | 83.4                 | 92.9                  |                       |                       |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |
| 220   | 78.4                 | 90.4                  |                       |                       |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |
| 240   | 75.1                 | 87.6                  |                       |                       |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |
| 264   | 72.4                 | 83.7                  |                       |                       |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |
| <p>■ Power Factor (by Load Power)</p> <table border="1"> <thead> <tr> <th rowspan="2">Load Power [W]</th> <th colspan="4">Power Factor [%]</th> </tr> <tr> <th>Input Voltage 85V AC</th> <th>Input Voltage 100V AC</th> <th>Input Voltage 240V AC</th> <th>Input Voltage 264V AC</th> </tr> </thead> <tbody> <tr><td>30.0</td><td>96.9</td><td>94.6</td><td>70.0</td><td>60.9</td></tr> <tr><td>60.0</td><td>98.6</td><td>98.0</td><td>83.4</td><td>72.4</td></tr> <tr><td>90.0</td><td>98.8</td><td>98.7</td><td>89.0</td><td>78.2</td></tr> <tr><td>120.0</td><td>99.1</td><td>98.9</td><td>92.9</td><td>83.7</td></tr> </tbody> </table> |                      |                       |                       | Load Power [W]        | Power Factor [%] |            |    |      | Input Voltage 85V AC | Input Voltage 100V AC | Input Voltage 240V AC | Input Voltage 264V AC | 30.0 | 96.9 | 94.6 | 70.0 | 60.9 | 60.0 | 98.6 | 98.0 | 83.4 | 72.4 | 90.0 | 98.8 | 98.7 | 89.0 | 78.2 | 120.0 | 99.1 | 98.9 | 92.9 | 83.7 |
| Load Power [W]  | Power Factor [%]     |                       |                       |                       |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |
|   | Input Voltage 85V AC | Input Voltage 100V AC | Input Voltage 240V AC | Input Voltage 264V AC |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |
| 30.0  | 96.9                 | 94.6                  | 70.0                  | 60.9                  |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |
| 60.0  | 98.6                 | 98.0                  | 83.4                  | 72.4                  |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |
| 90.0  | 98.8                 | 98.7                  | 89.0                  | 78.2                  |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |
| 120.0   | 99.1                 | 98.9                  | 92.9                  | 83.7                  |                  |            |    |      |                      |                       |                       |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |

| Model                         | mUZP-120-24-JB0    | Temperature: 25°C   |                      |                    |    |        |     |        |     |        |     |        |     |        |     |        |     |        |     |        |
|-------------------------------|--------------------|---|----------------------|--------------------|----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|
| Item                          | Line Regulation    |   |                      |                    |    |        |     |        |     |        |     |        |     |        |     |        |     |        |     |        |
| <p>Legend: —◆— Rated load</p> |                    | <table border="1"> <thead> <tr> <th>AC Input Voltage [V]</th> <th>Output Voltage [V]</th> </tr> </thead> <tbody> <tr><td>85</td><td>24.067</td></tr> <tr><td>100</td><td>24.069</td></tr> <tr><td>132</td><td>24.069</td></tr> <tr><td>176</td><td>24.068</td></tr> <tr><td>200</td><td>24.070</td></tr> <tr><td>220</td><td>24.068</td></tr> <tr><td>240</td><td>24.070</td></tr> <tr><td>264</td><td>24.069</td></tr> </tbody> </table> | AC Input Voltage [V] | Output Voltage [V] | 85 | 24.067 | 100 | 24.069 | 132 | 24.069 | 176 | 24.068 | 200 | 24.070 | 220 | 24.068 | 240 | 24.070 | 264 | 24.069 |
| AC Input Voltage [V]          | Output Voltage [V] |   |                      |                    |    |        |     |        |     |        |     |        |     |        |     |        |     |        |     |        |
| 85                            | 24.067             |   |                      |                    |    |        |     |        |     |        |     |        |     |        |     |        |     |        |     |        |
| 100                           | 24.069             |   |                      |                    |    |        |     |        |     |        |     |        |     |        |     |        |     |        |     |        |
| 132                           | 24.069             |   |                      |                    |    |        |     |        |     |        |     |        |     |        |     |        |     |        |     |        |
| 176                           | 24.068             |   |                      |                    |    |        |     |        |     |        |     |        |     |        |     |        |     |        |     |        |
| 200                           | 24.070             |   |                      |                    |    |        |     |        |     |        |     |        |     |        |     |        |     |        |     |        |
| 220                           | 24.068             |   |                      |                    |    |        |     |        |     |        |     |        |     |        |     |        |     |        |     |        |
| 240                           | 24.070             |   |                      |                    |    |        |     |        |     |        |     |        |     |        |     |        |     |        |     |        |
| 264                           | 24.069             |   |                      |                    |    |        |     |        |     |        |     |        |     |        |     |        |     |        |     |        |

| Model  | mUZP-120-24-JB0      | Temperature: 25°C   |                       |                       |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
|--|----------------------|---|-----------------------|-----------------------|--|--|--|----------------------|-----------------------|-----------------------|-----------------------|-----|--------|--------|--------|--------|------|--------|--------|--------|--------|------|--------|--------|--------|--------|------|--------|--------|--------|--------|-------|--------|--------|--------|--------|-------|--------|--------|--------|--------|----------------|----------------|--|------------------|--|-----|-----|--|------|------|--|------|------|--|------|------|--|-------|------|--|-------|------|--|--|------|--|
| Item   | Load Regulation      |   |                       |                       |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
| <p>The graph plots Output Voltage [V] on the y-axis (ranging from 23.00 to 25.00) against Load Power [W] on the x-axis (ranging from 0 to 250). Four data series are shown for different input voltages: 85V AC (blue diamonds), 100V AC (magenta squares), 240V AC (red triangles), and 264V AC (green crosses). All series show a nearly constant output voltage of approximately 24.07V across the entire load range from 0W to 200W.</p> |                      | <table border="1"> <thead> <tr> <th rowspan="2">Load Power [W]</th> <th colspan="4">Output Voltage [V]</th> </tr> <tr> <th>Input Voltage 85V AC</th> <th>Input Voltage 100V AC</th> <th>Input Voltage 240V AC</th> <th>Input Voltage 264V AC</th> </tr> </thead> <tbody> <tr> <td>0.0</td> <td>24.072</td> <td>24.072</td> <td>24.072</td> <td>24.072</td> </tr> <tr> <td>30.0</td> <td>24.070</td> <td>24.071</td> <td>24.071</td> <td>24.070</td> </tr> <tr> <td>60.0</td> <td>24.070</td> <td>24.070</td> <td>24.070</td> <td>24.069</td> </tr> <tr> <td>90.0</td> <td>24.070</td> <td>24.069</td> <td>24.069</td> <td>24.067</td> </tr> <tr> <td>120.0</td> <td>24.069</td> <td>24.070</td> <td>24.069</td> <td>24.067</td> </tr> <tr> <td>201.6</td> <td>24.083</td> <td>24.082</td> <td>24.077</td> <td>24.072</td> </tr> </tbody> </table><br><table border="1"> <thead> <tr> <th rowspan="2">Load Power [W]</th> <th colspan="2">Load Condition</th> </tr> <tr> <th colspan="2">Load Current [A]</th> </tr> </thead> <tbody> <tr> <td>0.0</td> <td colspan="2">24V</td> </tr> <tr> <td>30.0</td> <td colspan="2">0.00</td> </tr> <tr> <td>60.0</td> <td colspan="2">1.25</td> </tr> <tr> <td>90.0</td> <td colspan="2">2.50</td> </tr> <tr> <td>120.0</td> <td colspan="2">3.75</td> </tr> <tr> <td>201.6</td> <td colspan="2">5.00</td> </tr> <tr> <td></td> <td colspan="2">8.40</td> </tr> </tbody> </table> | Load Power [W]        | Output Voltage [V]    |  |  |  | Input Voltage 85V AC | Input Voltage 100V AC | Input Voltage 240V AC | Input Voltage 264V AC | 0.0 | 24.072 | 24.072 | 24.072 | 24.072 | 30.0 | 24.070 | 24.071 | 24.071 | 24.070 | 60.0 | 24.070 | 24.070 | 24.070 | 24.069 | 90.0 | 24.070 | 24.069 | 24.069 | 24.067 | 120.0 | 24.069 | 24.070 | 24.069 | 24.067 | 201.6 | 24.083 | 24.082 | 24.077 | 24.072 | Load Power [W] | Load Condition |  | Load Current [A] |  | 0.0 | 24V |  | 30.0 | 0.00 |  | 60.0 | 1.25 |  | 90.0 | 2.50 |  | 120.0 | 3.75 |  | 201.6 | 5.00 |  |  | 8.40 |  |
| Load Power [W]   | Output Voltage [V]   |   |                       |                       |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
|  | Input Voltage 85V AC | Input Voltage 100V AC   | Input Voltage 240V AC | Input Voltage 264V AC |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
| 0.0  | 24.072               | 24.072  | 24.072                | 24.072                |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
| 30.0   | 24.070               | 24.071  | 24.071                | 24.070                |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
| 60.0   | 24.070               | 24.070  | 24.070                | 24.069                |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
| 90.0   | 24.070               | 24.069  | 24.069                | 24.067                |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
| 120.0  | 24.069               | 24.070  | 24.069                | 24.067                |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
| 201.6  | 24.083               | 24.082  | 24.077                | 24.072                |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
| Load Power [W]   | Load Condition       |   |                       |                       |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
|  | Load Current [A]     |   |                       |                       |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
| 0.0  | 24V                  |   |                       |                       |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
| 30.0   | 0.00                 |   |                       |                       |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
| 60.0   | 1.25                 |   |                       |                       |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
| 90.0   | 2.50                 |   |                       |                       |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
| 120.0  | 3.75                 |   |                       |                       |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
| 201.6  | 5.00                 |   |                       |                       |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |
|  | 8.40                 |   |                       |                       |  |  |  |                      |                       |                       |                       |     |        |        |        |        |      |        |        |        |        |      |        |        |        |        |      |        |        |        |        |       |        |        |        |        |       |        |        |        |        |                |                |  |                  |  |     |     |  |      |      |  |      |      |  |      |      |  |       |      |  |       |      |  |  |      |  |

Model mUZP-120-24-JB0

Item Ambient Temperature Drift



| Ambient Temp. (°C) | Output Voltage [V]   |                       |                       |                       |
|--------------------|----------------------|-----------------------|-----------------------|-----------------------|
|                    | Input Voltage 85V AC | Input Voltage 100V AC | Input Voltage 240V AC | Input Voltage 264V AC |
| -15                | 24.130               | 24.132                | 24.131                | 24.131                |
| 25                 | 24.067               | 24.069                | 24.070                | 24.069                |
| 45                 | 24.021               | 24.022                | 24.022                | 24.021                |
| 65                 | 23.995               | 23.994                | 23.994                | 23.993                |

**Load Condition**

| Ambient Temp. (°C) | Load Current [A] |
|--------------------|------------------|
|                    | 24V              |
| -15                | 5.00             |
| 25                 | 5.00             |
| 45                 | 5.00             |
| 65                 | 3.75             |

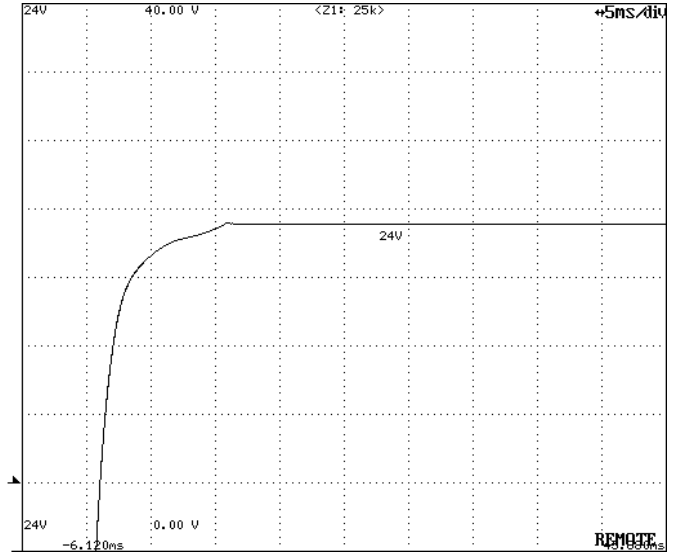
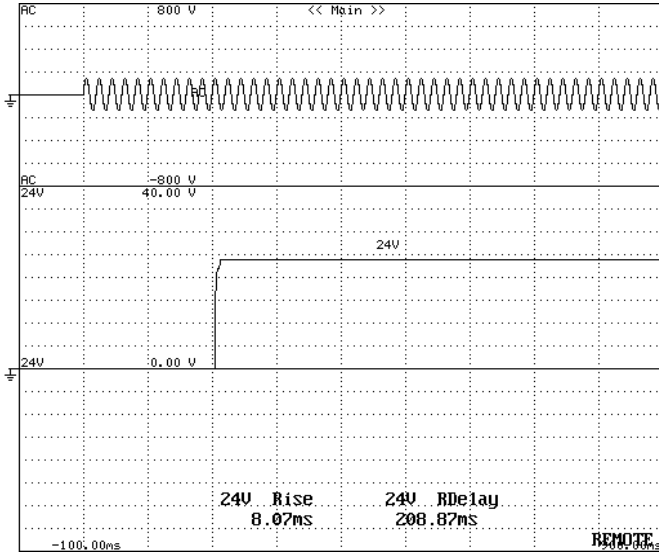


|       |  |                   |
|-------|--|-------------------|
| Model | mUZP-120-24-JB0                              | Temperature: 25°C |
| Item  | Output Rise Characteristics (at AC Power ON) |                   |

Input: 100V AC  
Load: Rated Load

Timebase Range: 100ms/div

Vertical Sensitivity: 5V/div  
Timebase Range: 5ms/div



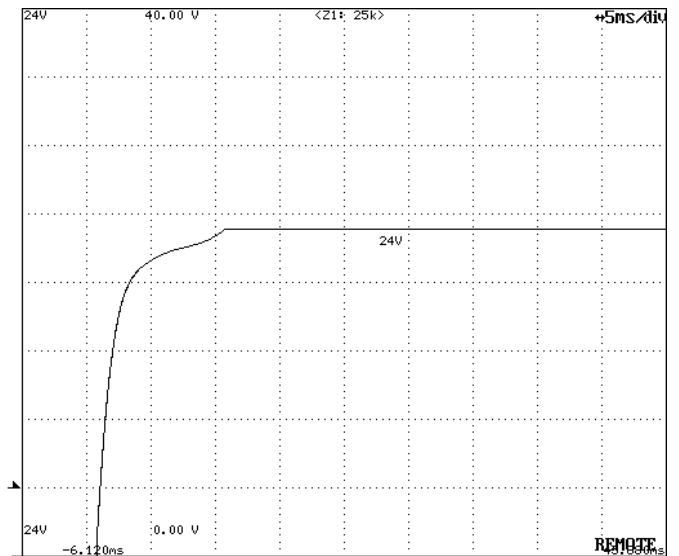
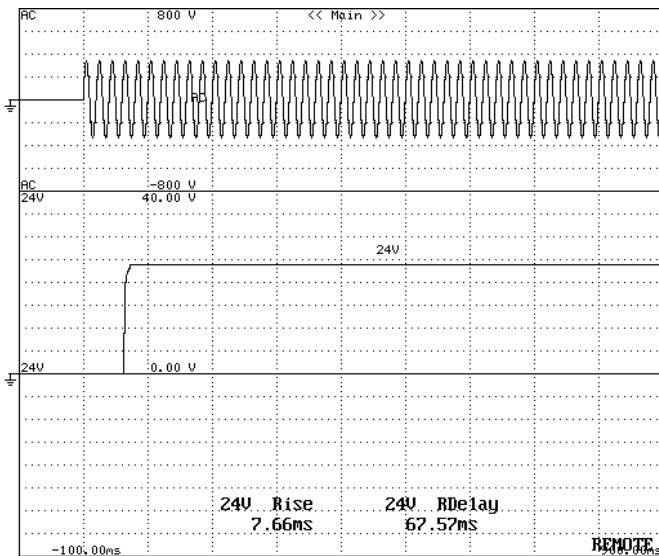
All Output Start-up Sequence

24V DC Output Rise Characteristics

Input: 240V AC  
Load: Rated Load

Timebase Range: 100ms/div

Vertical Sensitivity: 5V/div  
Timebase Range: 5ms/div



All Output Start-up Sequence

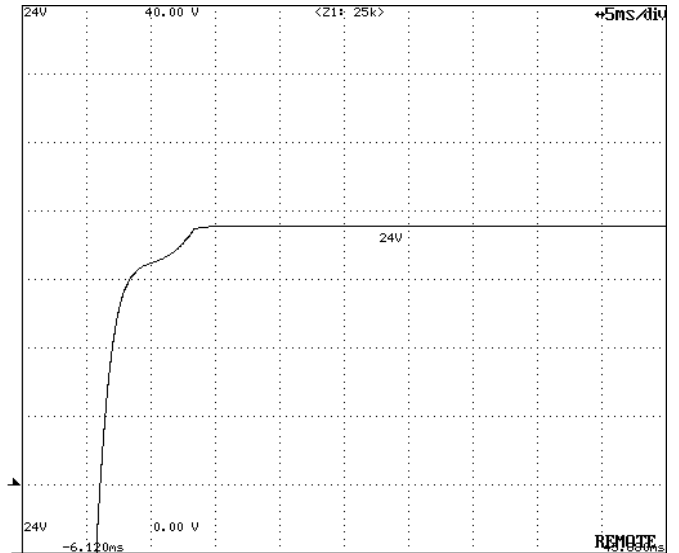
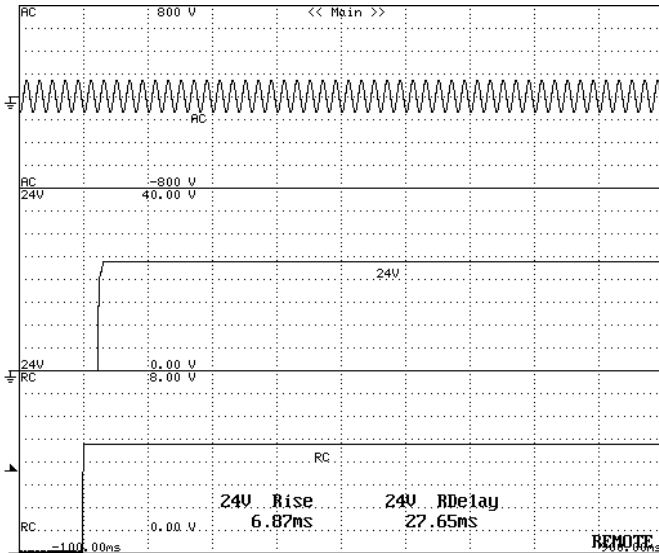
24V DC Output Rise Characteristics

|       |  |                   |
|-------|--|-------------------|
| Model | mUZP-120-24-JB0                            | Temperature: 25°C |
| Item  | Output Rise Characteristics (at Remote ON) |                   |

Input: 100V AC  
Load: Rated Load

Timebase Range: 100ms/div

Vertical Sensitivity: 5V/div  
Timebase Range: 5ms/div



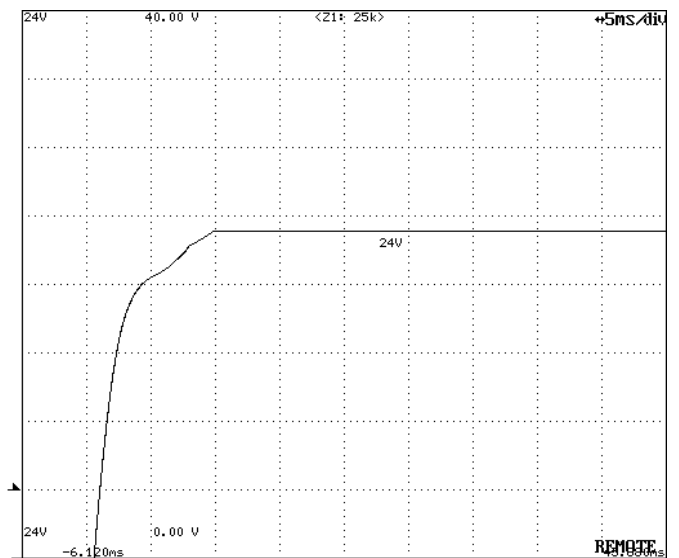
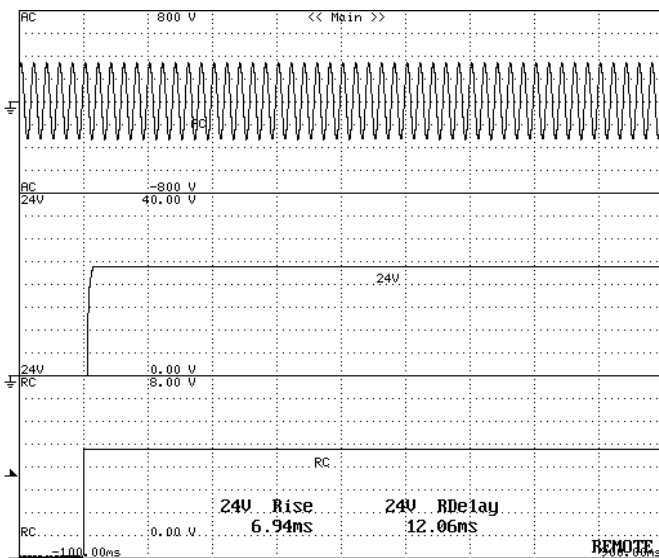
All Output Start-up Sequence

24V DC Output Rise Characteristics

Input: 240V AC  
Load: Rated Load

Timebase Range: 100ms/div

Vertical Sensitivity: 5V/div  
Timebase Range: 5ms/div



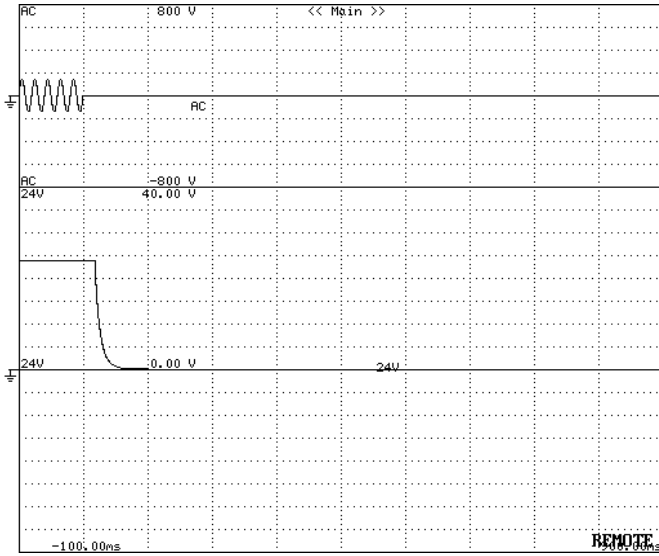
All Output Start-up Sequence

24V DC Output Rise Characteristics

|       |   |                   |
|-------|---|-------------------|
| Model | mUZP-120-24-JB0                               | Temperature: 25°C |
| Item  | Output Fall Characteristics (at AC Power OFF) |                   |

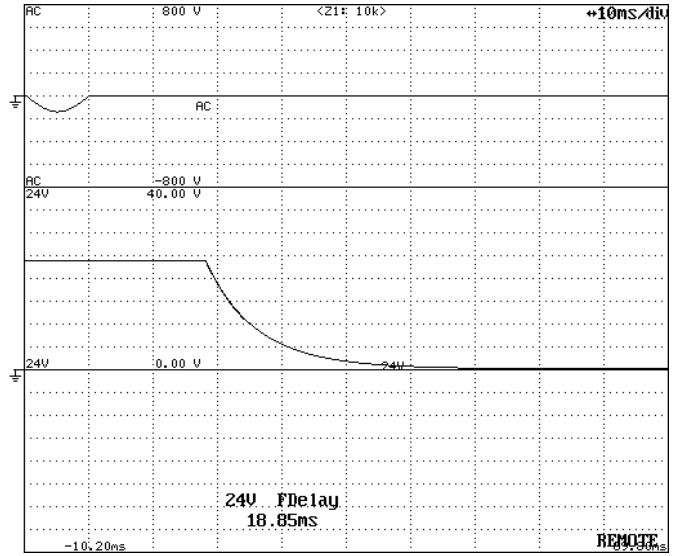
Input: 100V AC  
Load: Rated Load

Timebase Range: 100ms/div



Output Fall Characteristics

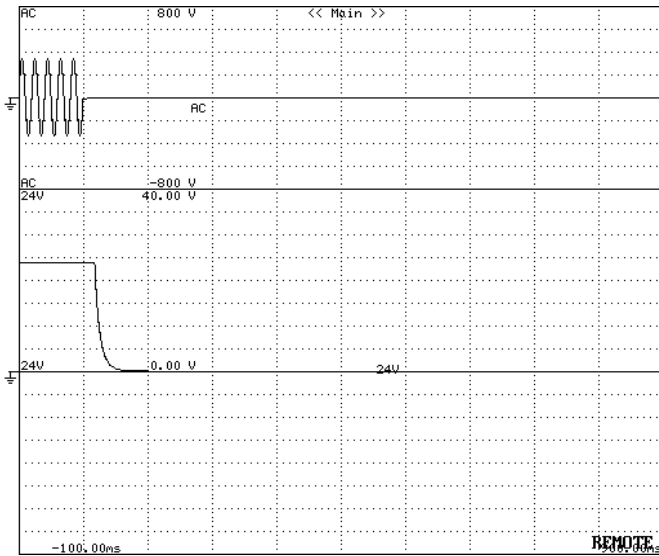
Timebase Range: 10ms/div



Output Fall Characteristics (magnification)

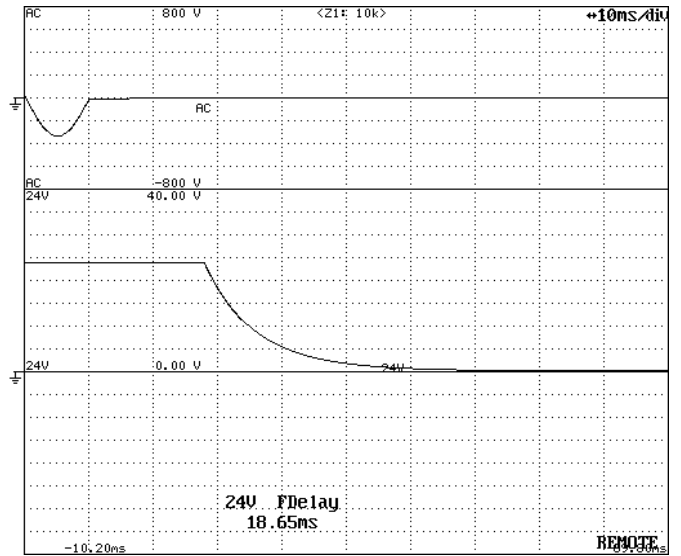
Input: 240V AC  
Load: Rated Load

Timebase Range: 100ms/div



Output Fall Characteristics

Timebase Range: 10ms/div

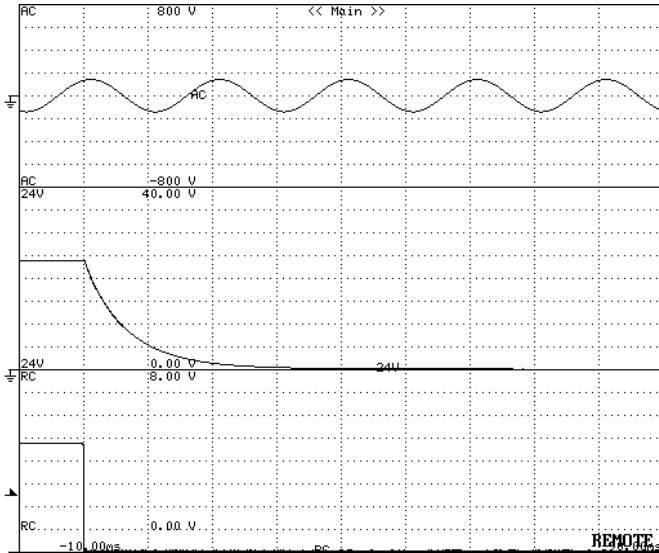


Output Fall Characteristics (magnification)

|       |   |                   |
|-------|---|-------------------|
| Model | mUZP-120-24-JB0                             | Temperature: 25°C |
| Item  | Output Fall Characteristics (at Remote OFF) |                   |

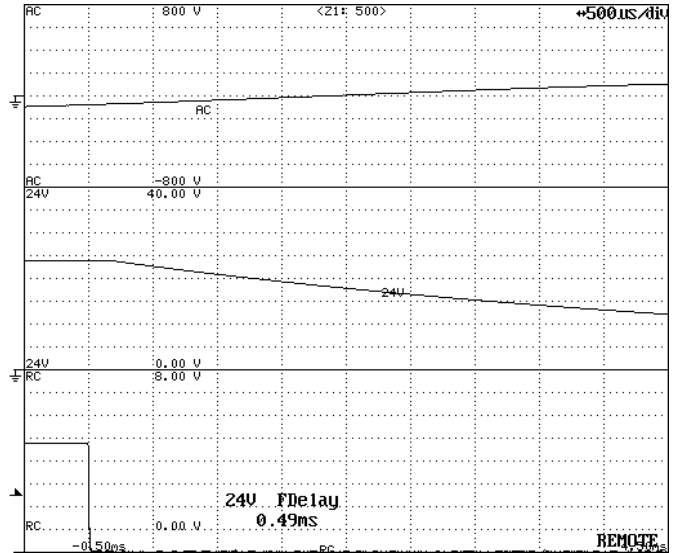
Input: 100V AC  
Load: Rated Load

Timebase Range: 10ms/div



Output Fall Characteristics

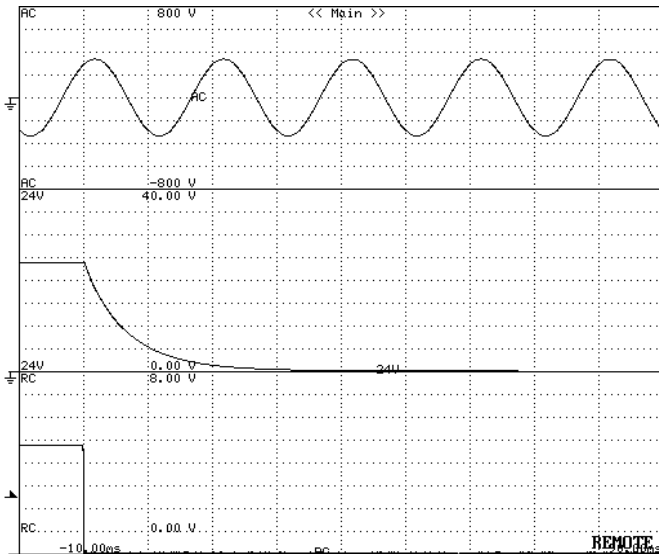
Timebase Range: 500 μs/div



Output Fall Characteristics (magnification)

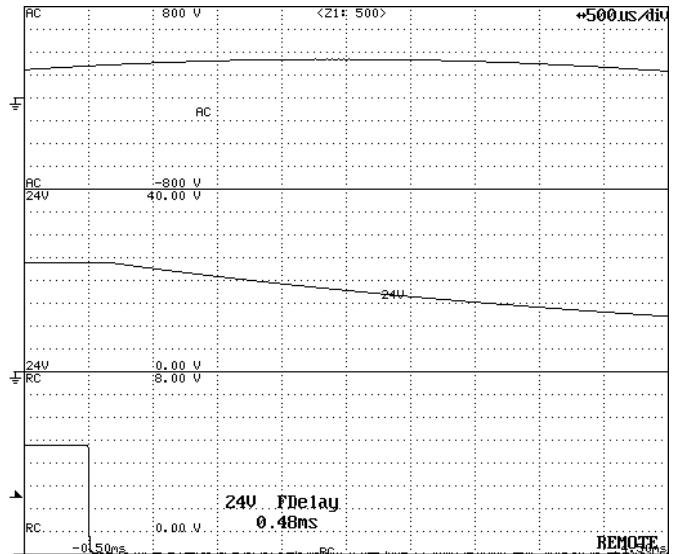
Input: 240V AC  
Load: Rated Load

Timebase Range: 10ms/div



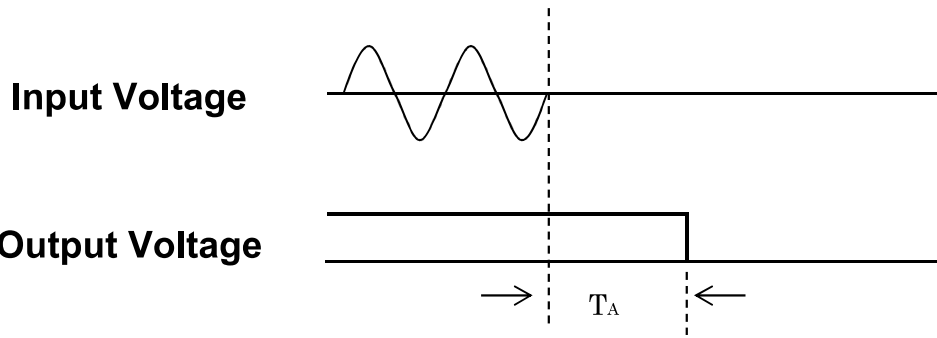
Output Fall Characteristics

Timebase Range: 500 μs/div

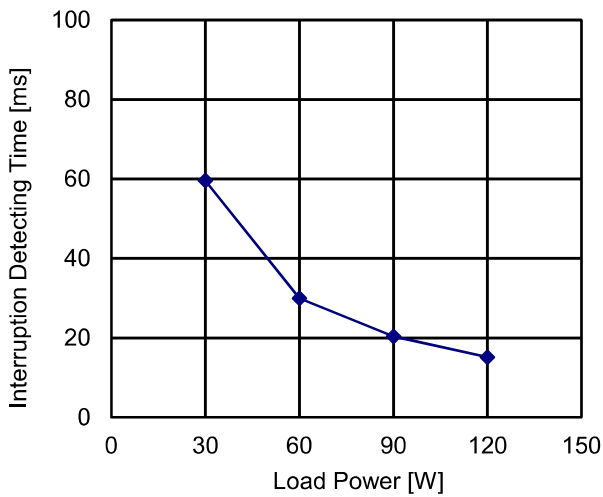


Output Fall Characteristics (magnification)

|       |   |                   |
|-------|---|-------------------|
| Model | mUZP-120-24-JB0   | Temperature: 25°C |
| Item  | Instantaneous Interruption Compensation (by Load Power) |                   |

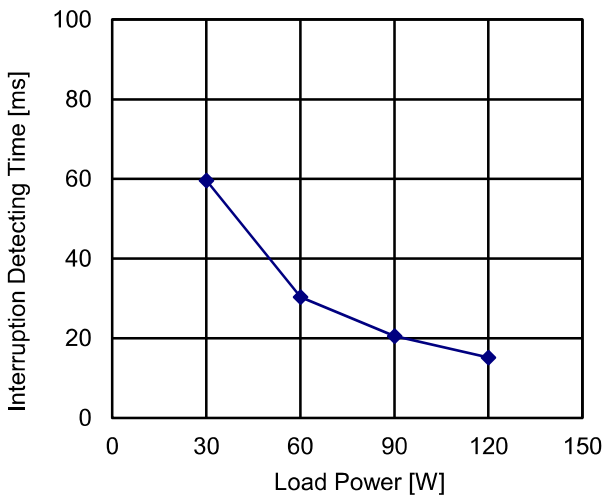


### Input Voltage:100V AC



| Load Power [W] | Interruption Detecting Time [ms] |
|----------------|----------------------------------|
|                | Output Voltage                   |
|                | $T_A$                            |
| 30.0           | 59.6                             |
| 60.0           | 30.0                             |
| 90.0           | 20.4                             |
| 120.0          | 15.2                             |

### Input Voltage:240V AC

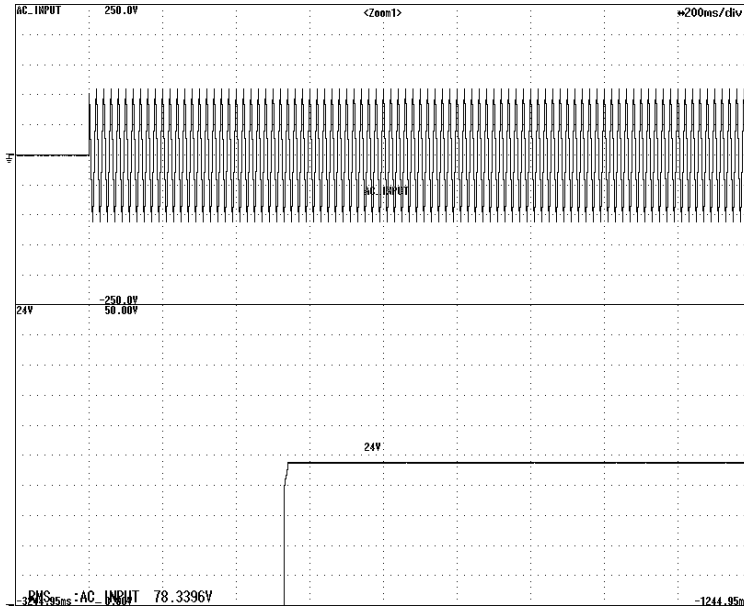


| Load Power [W] | Interruption Detecting Time [ms] |
|----------------|----------------------------------|
|                | Output Voltage                   |
|                | $T_A$                            |
| 30.0           | 59.6                             |
| 60.0           | 30.4                             |
| 90.0           | 20.6                             |
| 120.0          | 15.2                             |

|       |                  |                   |
|-------|------------------|-------------------|
| Model | mUZP-120-24-JB0  | Temperature: 25°C |
| Item  | Start-Up Voltage |                   |

**Timebase Range: 200ms/div**  
**Load: Rated Load**

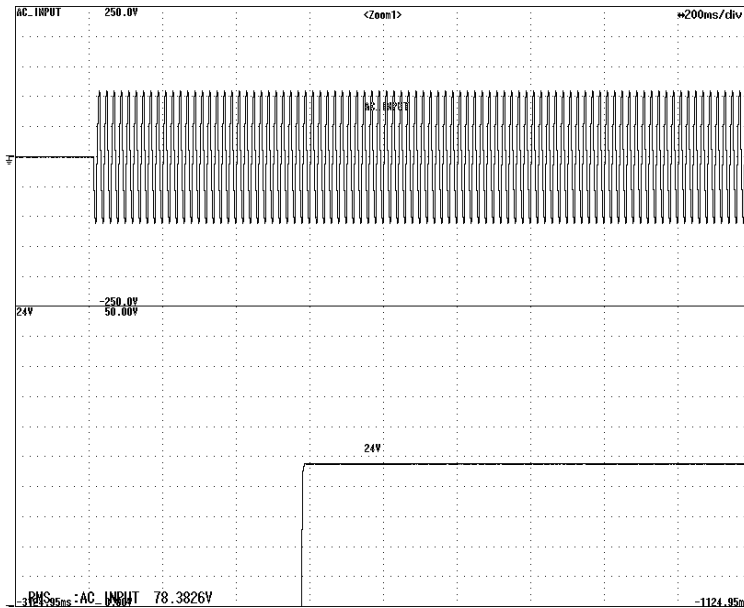
AC Input



**Start-up Voltage: 78.3V AC**

**Timebase Range: 200ms/div**  
**Load: Minimum Load**

AC Input

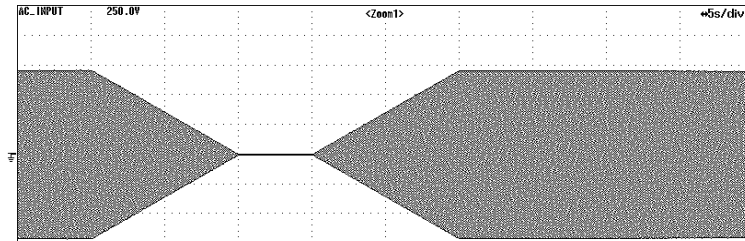


**Start-up Voltage: 78.4V AC**

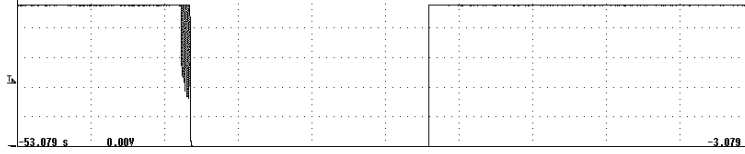
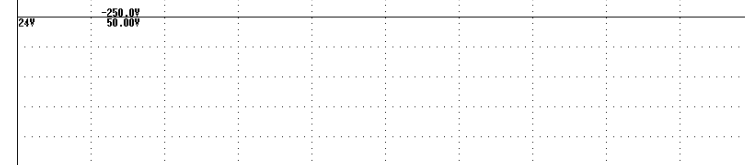
|       |                             |                   |
|-------|-----------------------------|-------------------|
| Model | mUZP-120-24-JB0             | Temperature: 25°C |
| Item  | Input Voltage Sweep Up/Down |                   |

**Timebase Range: 5s/div  
Load: Rated Load**

**AC Input**



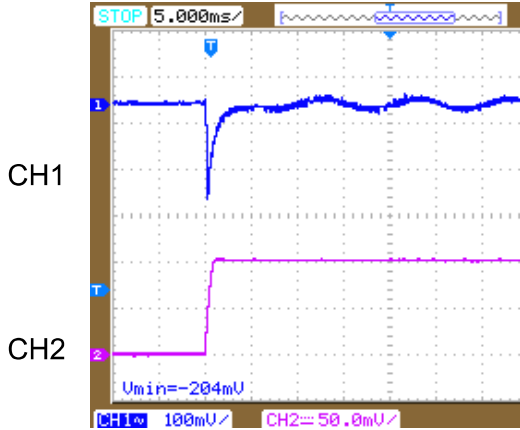
**+24V**



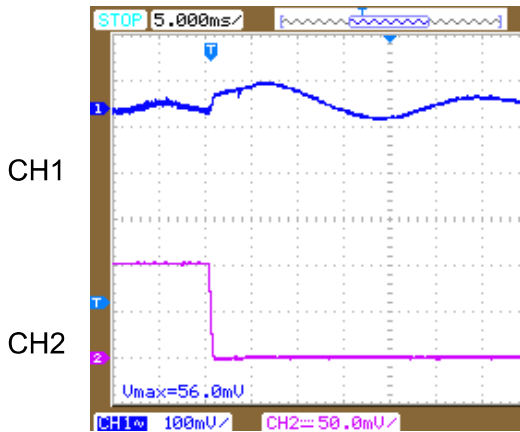
**Sweep Rate: 10Vave/sec**

|       |                       |                   |
|-------|-----------------------|-------------------|
| Model | mUZP-120-24-JB0       | Temperature: 25°C |
| Item  | Dynamic Load Response |                   |

## +24V DC Output Transient Response Waveforms



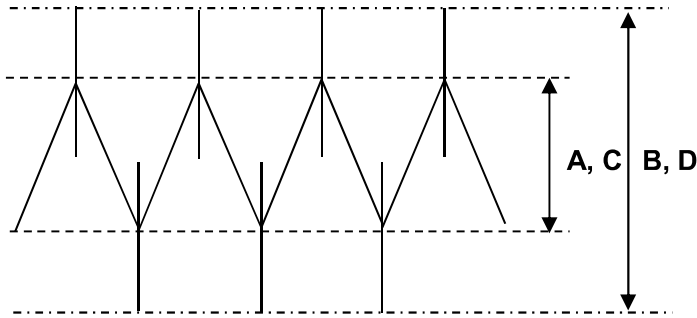
| Waveform 1                                    |                                       |
|---|---------------------------------------|
| CH1   | Measuring Point:<br>DC Output Voltage |
|   | Vertical Sensitivity:<br>100mV/div    |
| CH2   | Measuring Point:<br>DC Output Current |
|   | Vertical Sensitivity:<br>2.5A/div     |
| Timebase Range                                | 5ms/div                               |
| Condition                                     | Input: 100V AC                        |
| Note:<br>Minimum load(0A)<br>→ Rated Load(5A) |                                       |



| Waveform 2                                    |                                       |
|---|---------------------------------------|
| CH1   | Measuring Point:<br>DC Output Voltage |
|   | Vertical Sensitivity:<br>100mV/div    |
| CH2   | Measuring Point:<br>DC Output Current |
|   | Vertical Sensitivity:<br>2.5A/div     |
| Timebase Range                                | 5ms/div                               |
| Condition                                     | Input: 100V AC                        |
| Note:<br>Rated Load(5A)<br>→ Minimum load(0A) |                                       |



|       |                        |                  |
|-------|------------------------|------------------|
| Model | mUZP-120-24-JB0        | Load: Rated Load |
| Item  | Ripple / Noise Voltage |                  |



**at 100V AC**

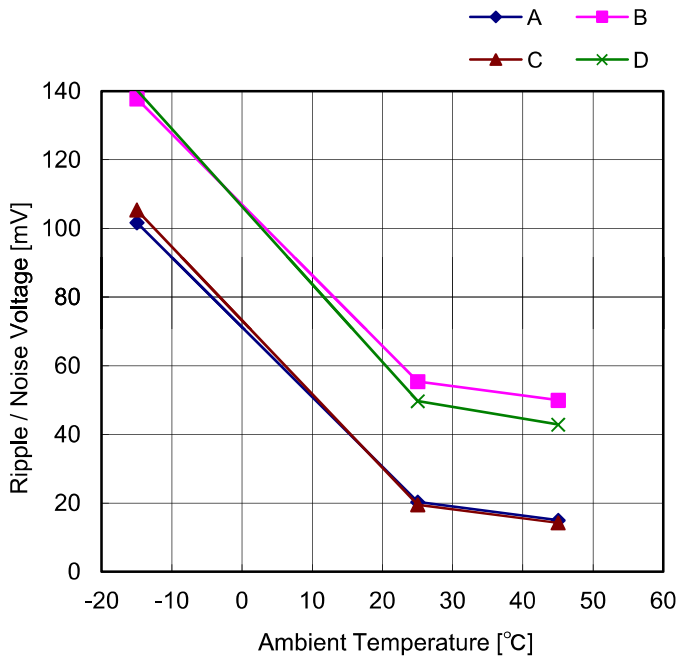
A: Ripple Voltage (mV<sub>P-P</sub>)

B: Noise Voltage (mV<sub>P-P</sub>)

**at 240V AC**

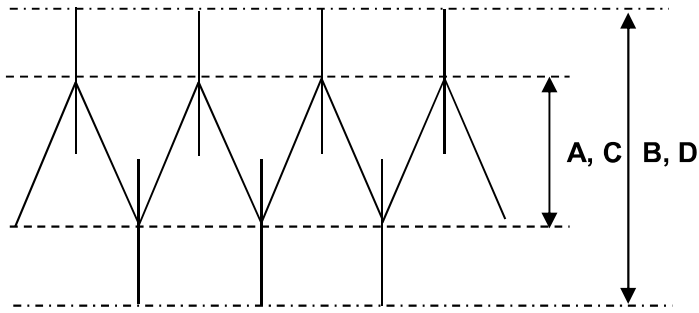
C: Ripple Voltage (mV<sub>P-P</sub>)

D: Noise Voltage (mV<sub>P-P</sub>)



| Ambient Temp. [°C] | Ripple / Noise Voltage [mV] |       |       |       |
|--------------------|-----------------------------|-------|-------|-------|
|                    | A                           | B     | C     | D     |
| -15                | 101.7                       | 137.8 | 105.4 | 140.3 |
| 25                 | 20.3                        | 55.4  | 19.5  | 49.6  |
| 45                 | 15.0                        | 49.9  | 14.2  | 42.8  |

|       |                        |                    |
|-------|------------------------|--------------------|
| Model | mUZP-120-24-JB0        | Temperature : 25°C |
| Item  | Ripple / Noise Voltage |                    |

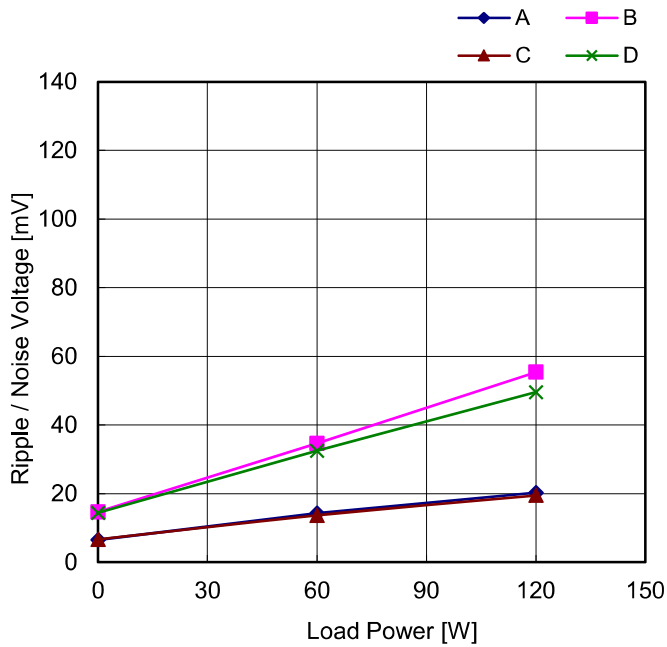


**at 100V AC**

A: Ripple Voltage (mVP-P)  
B: Noise Voltage (mVP-P)

**at 240V AC**

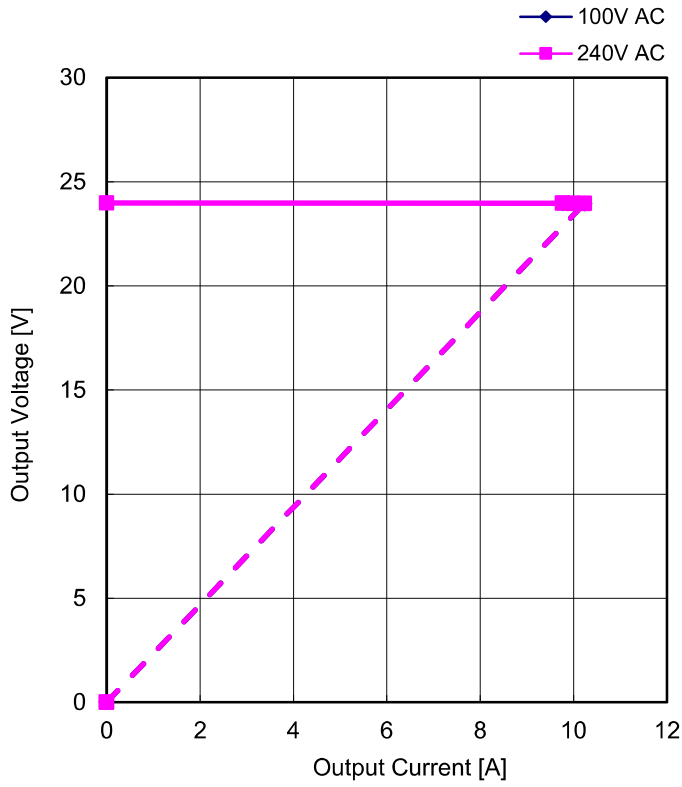
C: Ripple Voltage (mVP-P)  
D: Noise Voltage (mVP-P)



| Load Power [W] | Ripple / Noise Voltage [mV] |      |      |      |
|----------------|-----------------------------|------|------|------|
|                | A                           | B    | C    | D    |
| 0              | 6.5                         | 14.7 | 6.6  | 14.4 |
| 60.0           | 14.3                        | 34.6 | 13.7 | 32.5 |
| 120.0          | 20.3                        | 55.4 | 19.5 | 49.6 |

|       |                         |                   |
|-------|-------------------------|-------------------|
| Model | mUZP-120-24-JB0         | Temperature: 25°C |
| Item  | Over-Current Protection |                   |

## V-I Characteristics of 24V O.C.P



| Input Voltage: 100V AC |                    | Input Voltage: 240V AC |                    |
|------------------------|--------------------|------------------------|--------------------|
| Output Current [A]     | Output Voltage [V] | Output Current [A]     | Output Voltage [V] |
| 0.00                   | 23.98              | 0.00                   | 23.98              |
| 9.77                   | 23.97              | 9.77                   | 23.97              |
| 9.99                   | 23.97              | 9.99                   | 23.97              |
| 10.23                  | 23.95              | 10.23                  | 23.96              |

|       |                         |                    |
|-------|-------------------------|--------------------|
| Model | mUZP-120-24-JB0         | Load: Minimum Load |
| Item  | Over-Voltage Protection |                    |

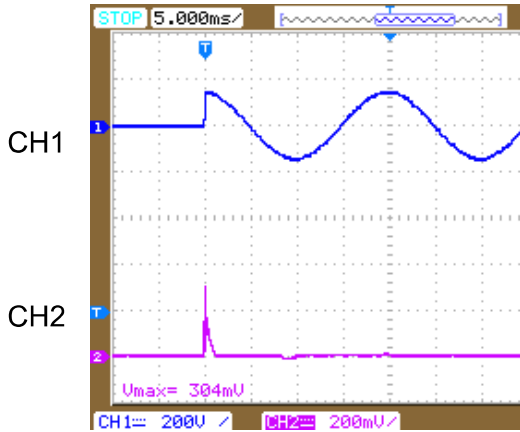
  

Legend:  
◆ 100V AC  
■ 240V AC

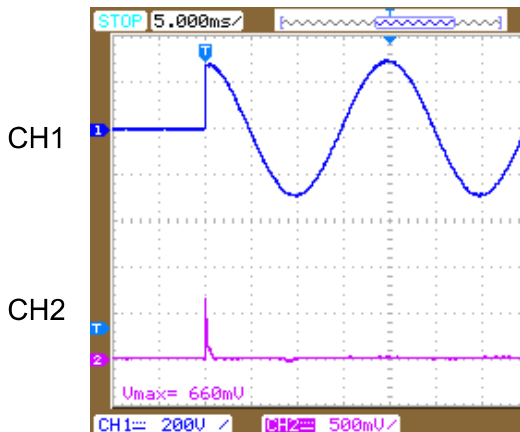
| Ambient Temp. [°C] | Output Voltage [V] |         |
|--------------------|--------------------|---------|
|                    | 100V AC            | 240V AC |
| -15                | 31.43              | 31.43   |
| 25                 | 32.38              | 32.38   |
| 45                 | 33.04              | 33.03   |
| 65                 | 33.13              | 33.13   |

|       |                 |                   |
|-------|-----------------|-------------------|
| Model | mUZP-120-24-JB0 | Temperature: 25°C |
| Item  | Inrush Current  | Load: Rated Load  |

## Inrush Current Waveforms



| Waveform 1                     |                                      |
|--------------------------------|--------------------------------------|
| CH1                            | Measuring Point:<br>AC Input Voltage |
|                                | Range: 200V/div                      |
| CH2                            | Measuring Point:<br>AC Input Current |
|                                | Range: 10A/div                       |
| Timebase<br>Range              | 5ms/div                              |
| Condition                      | Input: 100V AC<br>Load: Rated Load   |
| Note:<br>Inrush Current: 15.2A |                                      |



| Waveform 2                     |                                      |
|--------------------------------|--------------------------------------|
| CH1                            | Measuring Point:<br>AC Input Voltage |
|                                | Range: 200V/div                      |
| CH2                            | Measuring Point:<br>AC Input Current |
|                                | Range: 25A/div                       |
| Timebase<br>Range              | 5ms/div                              |
| Condition                      | Input: 200V AC<br>Load: Rated Load   |
| Note:<br>Inrush Current: 33.0A |                                      |

| Model  | mUZP-120-24-JB0      | Load: Rated Load     |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
|--|----------------------|----------------------|----------------------|----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|---|----------------------|----------------------|----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|
| Item   | Leakage Current      |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| <p>The graph plots Leakage Current [mA] on the y-axis (0 to 1) against AC Input Voltage [V] on the x-axis (50 to 300). The data points are as follows:</p> <table border="1"> <thead> <tr> <th>AC Input Voltage [V]</th> <th>Leakage Current [mA]</th> </tr> </thead> <tbody> <tr><td>85</td><td>0.02</td></tr> <tr><td>100</td><td>0.03</td></tr> <tr><td>132</td><td>0.04</td></tr> <tr><td>176</td><td>0.05</td></tr> <tr><td>200</td><td>0.06</td></tr> <tr><td>220</td><td>0.07</td></tr> <tr><td>240</td><td>0.08</td></tr> <tr><td>264</td><td>0.09</td></tr> </tbody> </table> |                      | AC Input Voltage [V] | Leakage Current [mA] | 85 | 0.02 | 100 | 0.03 | 132 | 0.04 | 176 | 0.05 | 200 | 0.06 | 220 | 0.07 | 240 | 0.08 | 264 | 0.09 | <table border="1"> <thead> <tr> <th>AC Input Voltage [V]</th> <th>Leakage Current [mA]</th> </tr> </thead> <tbody> <tr><td>85</td><td>0.02</td></tr> <tr><td>100</td><td>0.03</td></tr> <tr><td>132</td><td>0.04</td></tr> <tr><td>176</td><td>0.05</td></tr> <tr><td>200</td><td>0.06</td></tr> <tr><td>220</td><td>0.07</td></tr> <tr><td>240</td><td>0.08</td></tr> <tr><td>264</td><td>0.09</td></tr> </tbody> </table> | AC Input Voltage [V] | Leakage Current [mA] | 85 | 0.02 | 100 | 0.03 | 132 | 0.04 | 176 | 0.05 | 200 | 0.06 | 220 | 0.07 | 240 | 0.08 | 264 | 0.09 |
| AC Input Voltage [V]   | Leakage Current [mA] |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| 85   | 0.02                 |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| 100  | 0.03                 |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| 132  | 0.04                 |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| 176  | 0.05                 |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| 200  | 0.06                 |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| 220  | 0.07                 |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| 240  | 0.08                 |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| 264  | 0.09                 |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| AC Input Voltage [V]   | Leakage Current [mA] |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| 85   | 0.02                 |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| 100  | 0.03                 |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| 132  | 0.04                 |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| 176  | 0.05                 |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| 200  | 0.06                 |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| 220  | 0.07                 |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| 240  | 0.08                 |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |
| 264  | 0.09                 |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |                      |                      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |