

### MPS-035W□FS Series



### **▲** Features

Superior performance with small ripple

100% full load burn-in test

Protections:short circuit/overload/over voltage

LED indicator for power on

Optional rail mounting bracket can be installed on DIN rail TS35

Instant overload capability is 120-180%

Cooling by free air convection

Seismic protection

"Three pivot points" M4 large caliber installation

"Three proof" treatment, suitable for severe environment

Terminal with protective cover

All aluminum case

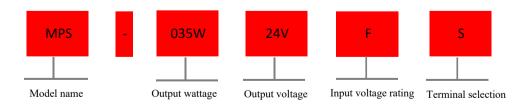
Surge protection

3 years warranty

## **▲** Applications

Industrial automation control system
Intelligent control system
Electronic instruments and devices
LED control
Household appliances

# **▲** Model Encoding





## Specification

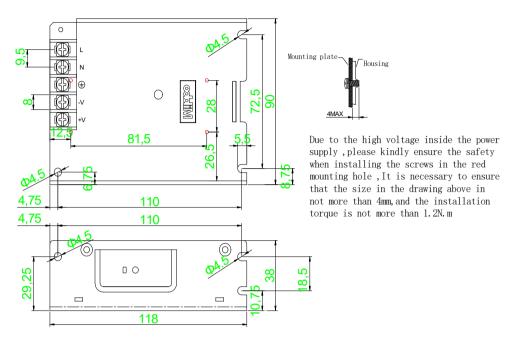
| Innut  |  |  |  |                   |  |  |  |  |  |  |  |
|--|--|--|--|-------------------|--|--|--|--|--|--|--|
| Input Voltage range                              | 85-264VAC 120-37   | OVDC   |  |                   |  |  |  |  |  |  |  |
| AC current                                       | _  |  |  |                   |  |  |  |  |  |  |  |
| Frequency range                                  | 0.75A/115VAC 0.5A/230VAC   |  |  |                   |  |  |  |  |  |  |  |
| Inrush current (max)                             | 47-63Hz<br>22A/115VAC 44A/230VAC   |  |  |                   |  |  |  |  |  |  |  |
| Output   | 22A/113VAC 44A/2   | 230VAC   |  |                   |  |  |  |  |  |  |  |
| DC voltage (V)                                   | 3.3V   | 5V   | 12V  | 15V               | 24V  | 48V  |  |  |  |  |  |
| Efficiency                                       | 78%  | 80%  | 83%  | 84%               | 86%  | 86%  |  |  |  |  |  |
| Voltage ADJ.range                                | ±10%   | 8070   | 8376   | 8470              | 8076   | 8070   |  |  |  |  |  |
| Rated Current(A)                                 | 7.2A   | 7A   | 2.9A   | 2.3A              | 1.46A  | 0.73A  |  |  |  |  |  |
| Rated power(W)                                   | 23.7W  | 35W  | 34.8W  | 34.5W             | 35W  | 35W  |  |  |  |  |  |
| Ripple & noise(max ) Note.2                      | 80mVp-p  | 80mVp-p  | 120mVp-p   | 150mVp-p          | 200mVp-p   | 200mVp-p   |  |  |  |  |  |
| Voltage tolerange Note.3                         | ±2%  | ±2%  | ±1%  | ±1%               | ±1%  | ±1%  |  |  |  |  |  |
| Line regulation Note.4                           | ±0.5%  | ±270   | ±170   | ±170              | 11/0   | ±170   |  |  |  |  |  |
| Load regulation Note.5                           | ±1%  | ±1%  | ±0.5%  | ±0.5%             | ±0.5%  | ±0.5%  |  |  |  |  |  |
| Setup, rise time                                 | _  |  |  | ±0.570            | ±0.570   | ±0.570   |  |  |  |  |  |
| Hold up time                                     |  | 500ms 30ms/230VAC 1200ms 30ms/115VAC(at full load) |  |                   |  |  |  |  |  |  |  |
| Status indicator                                 | Green LED  | 50ms/230VAC 10ms/115VAC(at full load)              |  |                   |  |  |  |  |  |  |  |
| Protection                                       | GICCH LED  |  |  |                   |  |  |  |  |  |  |  |
| riotection                                       | 120%-180% rated ou   | but name   |  |                   |  |  |  |  |  |  |  |
| Overload   |  | ip mode, recovers auton                            | noticelly often fault cand   | lition is removed |  |  |  |  |  |  |  |
|  | 3.7-4.2V   | 5.6-6.8V   | 13.8-16.2V   | 18-21V            | 27.6-32.4V   | 57.6-67.2V   |  |  |  |  |  |
| Over voltage(V)                                  |  | up mode, recovers auton                            |  |                   | 27.0-32.4 V  | 37.0-07.2V   |  |  |  |  |  |
| Three proof treatment                            |  |  | •  | ition is removed  |  |  |  |  |  |  |  |
| -  | Suitable for high dust   | , condensation occasions                           | •  |                   |  |  |  |  |  |  |  |
| Safety and EMC Withstand voltage                 | I/D O/D-2VX/AC I/D   | EC.1 SVVAC O/D EC                                  | CO SEVIAC  |                   |  |  |  |  |  |  |  |
| Isolation resistance                             |  |  |  |                   |  | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC                                  |  |  |  |  |  |
|  |  |  | I/P-O/P,I/P-FG,O/P-FG:100M Ohms/500VDC/25 °C/70 % RH   |                   |  |  |  |  |  |  |  |
| Safety standards                                 | Design refer to EN IEC 62368-1、GB4943.1  Parameter   |  |  |                   |  |  |  |  |  |  |  |
|  |  |  | 1  |                   | Test I evel  |  |  |  |  |  |  |
| EMC amission                                     |  |  | Standard   |                   | Test Level   |  |  |  |  |  |  |
|  | Conducted  |  | Standard<br>EN 55032   |                   | Class A  |  |  |  |  |  |  |
| EMC emission                                     | Conducted Radiated   |  | <b>Standard</b> EN 55032 EN 55032  |                   | Class A  | use A  |  |  |  |  |  |
| LIVIC BIHISSION                                  | Conducted Radiated Voltage Flicker   |  | Standard EN 55032 EN 55032 EN 61000-3-3  |                   | Class A Class A Design refer to Cla  |  |  |  |  |  |  |
| LING BIIISSION                                   | Conducted Radiated Voltage Flicker Harmonic Current  |  | Standard  EN 55032  EN 55032  EN 61000-3-3  EN IEC 61000-3-2   |                   | Class A Class A Design refer to Cla  |  |  |  |  |  |  |
| LING BIIISSION                                   | Conducted Radiated Voltage Flicker Harmonic Current Parameter  |  | Standard  EN 55032  EN 55032  EN 61000-3-3  EN IEC 61000-3-2  Standard   |                   | Class A Class A Design refer to Cla Design refer to Cla Test Level   | ass A  |  |  |  |  |  |
| LING BIIISSION                                   | Conducted Radiated Voltage Flicker Harmonic Current Parameter ESD  | ility  | Standard  EN 55032  EN 55032  EN 61000-3-3  EN IEC 61000-3-2  Standard  EN 61000-4-2   |                   | Class A Class A Design refer to Cla Design refer to Cla Test Level Level 3 8KV air;Le  |  |  |  |  |  |  |
| LING BIIISSION                                   | Conducted Radiated Voltage Flicker Harmonic Current Parameter ESD Radiated Susceptib   | ility  | Standard EN 55032 EN 55032 EN 61000-3-3 EN IEC 61000-3-2 Standard EN 61000-4-2 EN 61000-4-3  |                   | Class A Class A Design refer to Cla Design refer to Cla Test Level Level 3 8KV air;Le Level 2 3V/m   | ass A  |  |  |  |  |  |
| EMC emission                                     | Conducted Radiated Voltage Flicker Harmonic Current Parameter ESD Radiated Susceptib EFT/Burest  | ility  | Standard EN 55032 EN 55032 EN 61000-3-3 EN IEC 61000-3-2 Standard EN 61000-4-2 EN 61000-4-3 EN 61000-4-4                                     |                   | Class A Class A Design refer to Cla Design refer to Cla Test Level Level 3 8KV air;Le Level 2 3V/m Level 3 2KV   | vel 2 4KV contact  |  |  |  |  |  |
|  | Conducted Radiated Voltage Flicker Harmonic Current Parameter ESD Radiated Susceptib   | ility  | Standard EN 55032 EN 55032 EN 61000-3-3 EN IEC 61000-3-2 Standard EN 61000-4-2 EN 61000-4-3  |                   | Class A  Class A  Design refer to Cla  Design refer to Cla  Test Level  Level 3 8KV air;Le  Level 2 3V/m  Level 3 2KV  Level 3 2KV/Line-Line                                     | ass A  |  |  |  |  |  |
|  | Conducted Radiated Voltage Flicker Harmonic Current  Parameter  ESD  Radiated Susceptib  EFT/Burest  Surge  Conducted                              | ility  | Standard  EN 55032  EN 55032  EN 61000-3-3  EN IEC 61000-3-2  Standard  EN 61000-4-2  EN 61000-4-3  EN 61000-4-4  EN 61000-4-5  EN 61000-4-6 |                   | Class A  Class A  Design refer to Cla  Design refer to Cla  Test Level  Level 3 8KV air;Le  Level 2 3V/m  Level 3 2KV  Level 3 2KV/Line-Line  Level 2 3V                         | vel 2 4KV contact  |  |  |  |  |  |
|  | Conducted Radiated Voltage Flicker Harmonic Current Parameter ESD Radiated Susceptib EFT/Burest Surge Conducted Magnetic Field                     |  | Standard  EN 55032  EN 55032  EN 61000-3-3  EN IEC 61000-3-2  Standard  EN 61000-4-2  EN 61000-4-3  EN 61000-4-5  EN 61000-4-6  EN 61000-4-8 |                   | Class A  Class A  Design refer to Cla  Design refer to Cla  Test Level  Level 3 8KV air;Le  Level 2 3V/m  Level 3 2KV/Line-Line  Level 2 3V  Level 2 3V  Level 2 3A/m            | vel 2 4KV contact  |  |  |  |  |  |
| EMC immunity                                     | Conducted Radiated Voltage Flicker Harmonic Current  Parameter  ESD  Radiated Susceptib  EFT/Burest  Surge  Conducted                              |  | Standard  EN 55032  EN 55032  EN 61000-3-3  EN IEC 61000-3-2  Standard  EN 61000-4-2  EN 61000-4-3  EN 61000-4-4  EN 61000-4-5  EN 61000-4-6 |                   | Class A  Class A  Design refer to Cla  Design refer to Cla  Test Level  Level 3 8KV air;Le  Level 2 3V/m  Level 3 2KV/Line-Line  Level 2 3V  Level 2 3V  Level 2 3V  Level 2 3KV | vel 2 4KV contact e;Level3 4kV/Line-Line-FG                                  |  |  |  |  |  |
| EMC immunity  Environmental                      | Conducted Radiated Voltage Flicker Harmonic Current Parameter ESD Radiated Susceptib EFT/Burest Surge Conducted Magnetic Field Voltage Dips and in | terruptions  | Standard  EN 55032  EN 55032  EN 61000-3-3  EN IEC 61000-3-2  Standard  EN 61000-4-2  EN 61000-4-3  EN 61000-4-5  EN 61000-4-6  EN 61000-4-8 |                   | Class A  Class A  Design refer to Cla  Design refer to Cla  Test Level  Level 3 8KV air;Le  Level 2 3V/m  Level 3 2KV/Line-Line  Level 2 3V  Level 2 3V  Level 2 3V  Level 2 3KV | vel 2 4KV contact e;Level3 4kV/Line-Line-FG 0.5 cycles ,70% residual voltage |  |  |  |  |  |
| EMC immunity  Environmental  Working temperature | Conducted Radiated Voltage Flicker Harmonic Current Parameter ESD Radiated Susceptib EFT/Burest Surge Conducted Magnetic Field Voltage Dips and in |  | Standard  EN 55032  EN 55032  EN 61000-3-3  EN IEC 61000-3-2  Standard  EN 61000-4-2  EN 61000-4-3  EN 61000-4-5  EN 61000-4-6  EN 61000-4-8 |                   | Class A  Class A  Design refer to Cla  Design refer to Cla  Test Level  Level 3 8KV air;Le  Level 2 3V/m  Level 3 2KV/Line-Line  Level 2 3V  Level 2 3V  Level 2 3V  Level 2 3KV | vel 2 4KV contact e;Level3 4kV/Line-Line-FG 0.5 cycles ,70% residual voltage |  |  |  |  |  |
| EMC immunity  Environmental                      | Conducted Radiated Voltage Flicker Harmonic Current Parameter ESD Radiated Susceptib EFT/Burest Surge Conducted Magnetic Field Voltage Dips and in | terruptions  | Standard  EN 55032  EN 55032  EN 61000-3-3  EN IEC 61000-3-2  Standard  EN 61000-4-2  EN 61000-4-3  EN 61000-4-5  EN 61000-4-6  EN 61000-4-8 |                   | Class A  Class A  Design refer to Cla  Design refer to Cla  Test Level  Level 3 8KV air;Le  Level 2 3V/m  Level 3 2KV/Line-Line  Level 2 3V  Level 2 3V  Level 2 3V  Level 2 3KV | vel 2 4KV contact e;Level3 4kV/Line-Line-FG 0.5 cycles ,70% residual voltage |  |  |  |  |  |



| Others                    |   |               |  |  |  |
|---------------------------|---|---------------|--|--|--|
| Mean time between failure | ≥390K hrs,MIL-HDBK-217F(25°C)   |               |  |  |  |
| Installation              | Plate screws fixed, or optional accessories can be TS35 guide rail installation |               |  |  |  |
| Protection class          | IP20  |               |  |  |  |
| Weight                    | About 0.29Kg  |               |  |  |  |
| Length*width*height       | 118*90*38mm   |               |  |  |  |
| Data                      | Details   | Model name    |  |  |  |
|                           | MPS 23.7W 7.2A/3.3V   | MPS-035W03VFS |  |  |  |
|                           | MPS 35.0W 7.0A/05V  | MPS-035W05VFS |  |  |  |
|                           | MPS 34.8W 2.9A/12V  | MPS-035W12VFS |  |  |  |
|                           | MPS 34.5W 2.3A/15V  | MPS-035W15VFS |  |  |  |
|                           | MPS 35.0W 1.46A/24V   | MPS-035W24VFS |  |  |  |
|                           | MPS 35.0W 0.73A/48V   | MPS-035W48VFS |  |  |  |
| Attachment                | Details   | Model name    |  |  |  |
| Rail pin                  | TS35 installation accessories   | MPS-F050B     |  |  |  |



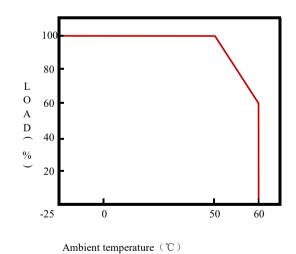
### **Installation Instruction**

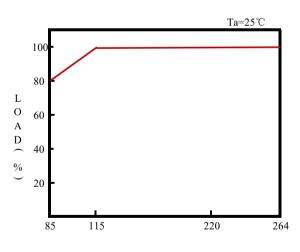


#### Installation instructions

| Terminal Spec | U Type of the width of the terminal | Wire installation specification | Max. Torque    |
|---------------|-------------------------------------|---------------------------------|----------------|
| 95 Terminal   | 8mm MAX                             | 22-12AWG                        | 1. 2N. m (MAX) |

### Derating curve





Input voltage (VAC)60Hz

**Note:** 1.All parameters NOT specially mentioned are measured at 230VAC input,rated load and 25 °C of ambient temperature.

- 2.Ripple & noise are measured at 20MHZ of bandwidth by using a 12"twisted pair-wire teminated with a 0.1uf & 47uf parallel capacitor."
- 3. Tolerance:includes set up tolerance, line regulation and load regulation.
- 4.Line regulation is measured from low line to high line at rated load.
- 5.Load regulation is measured from 0% to 100% rated load.
- 6.According to the requirements of GB4943.1,the power supply is only used for safe use in areas below sea level of 2000M and non-tropical climates.