

MPA100-□1 Series



▲ Specifecation

100% full load burn-in test

Protection: Over Voltage/Over load/Short circuit

Power ON LED indicator

TS 35 rail installation(with optional rail mounting bracket)

Seismic protection

"Three pivot point"M4 installation

Three proof treatment, suitable the applicatiin in severe environment

Terminal with protective cover

Alluminum case

Surge protection

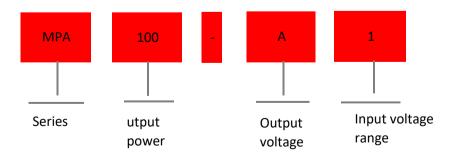
2 years warranty

▲ Applications

Industrial automation control system
Intelligent control system
Electonic instruments and devices
LED power supply

Household appliances

▲ Model encoding





Specification

| Input | | | | | | | | | | | | | | | | |
|---------------------------|--|---|-----------|-----------|-----------|----------|---------------|------------|------------|----------------------|----------|---|-------------|---------|----------|---------|
| Voltage range | 176-264\ | VAC 25 | 0-370VD | С | | | | | | | | | | | | |
| AC current | 1.2A/230 | VAC | | | | | | | | | | | | | | |
| Frequency range | 47-63Hz | | | | | | | | | | | | | | | |
| Inrush current (max) | ush current (max) 44A/230VAC | | | | | | | | | | | | | | | |
| Output | | | | | | | | | | | | | | | | |
| Chanel | Ch1 | Ch2 | Ch1 | Ch2 | Ch1 | Ch2 | Ch1 | Ch2 | Ch1 | Ch2 | Ch1 | Ch2 | Ch1 | Ch2 | Ch1 | Ch2 |
| DC voltage (V) | 5V | 12V | 5V | 24V | 12V | 24V | 5V | 48V | 12V | 48V | -5V | +5V | -12V | +12V | -15V | +15V |
| Efficiency | 80% | | 83% | | 83% | | 84% | | 84% | | 80% | | 82% | | 82% | |
| Voltage ADJ range | Ch1:4.75 | 5-5.5V | Ch1:4.7 | 5-5.5V | Ch1:11.7 | -12.2V | Ch1:4.75 | 5-5.5V | Ch1:11. | 7-12.2V | Ch1:4.75 | 5-5.5V | Ch1:11.7 | 7-12.2V | Ch1:14.6 | 6-15.4V |
| Rated current(A) | 7A | 3.8A | 3.5A | 3.5A | 2.8A | 2.8A | 5.4A | 1.5A | 2A | 1.6A | 10A | 10A | 4.2A | 4.2A | 3.3A | 3.3A |
| Rated power (W) | 80.6W | | 101.5W | | 100.8W | | 99W | | 100.8W | | 100W | | 100.8W | | 99W | |
| Ripple & noise(max)note2 | 60mVp-p | 80mVp-p | 60mVp-p | 80mVp-p | 80mVp-p | 80mVp-p | 60mVp-p | 100mVp- | 80mVp-p | 100mVp- _I | 60mVp-p | 60mVp-p | 60mVp-p | 60mVp-p | 60mVp-p | 60mVp-p |
| Voltage tolerance note3 | ±2% | ±6% | ±2% | ±8% | ±2% | ±8% | ±2% | ±10% | ±2% | ±10% | ±2% | ±2% | ±2% | ±6% | ±2% | ±6% |
| Line regulation noite4 | ±0.5% | | | | | | | | | | | | | | | |
| Load regulation note5 | ±1% | ±2% | ±1% | ±4% | ±1% | ±4% | ±1% | ±5% | ±1% | ±5% | ±1% | ±1% | ±1% | ±2% | ±1% | ±2% |
| Setup, rise time | 2000ms 30ms/230VAC(at full load) | | | | | | | | | | | | | | | |
| Hold up time | 20ms/230VAC(at full load) | | | | | | | | | | | | | | | |
| Status indicator | s indicator 绿色LED | | | | | | | | | | | | | | | |
| Protection | | | | | | | | | | | | | | | | |
| Over load | 110%-15 | 0% of the | e rated o | utput pow | /er | | | | | | | | | | | |
| | Protectio | n mode: | Hiccup | mode, re | ecover au | tomatica | lly after fa | ult condit | ion is ren | noved | | | | | | |
| Over voltage (V) | Ch1:5.6- | 6.8V | Ch1:5.6 | -6.8V | Ch1:13.8 | -16.2V | Ch1:5.6- | 6.8V | Ch1:13.8 | 8-16.2V | Ch1:5.6- | 6.8V | Ch1:13.8 | 3-16.2V | Ch1:18- | 21V |
| | Protection mode: Hiccup mode, recover automatically after fault condition is removed | | | | | | | | | | | | | | | |
| Three proof treatment | pplication in dusty and condesation environment | | | | | | | | | | | | | | | |
| Safety and EMC | | | | | | | | | | | | | | | | |
| Withstand voltage | I/P-O/P:3 | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC | | | | | | | | | | | | | | |
| Insulation resistance | l/P-O/P,l/P-FG,O/P-FG:100M Ohms/500VDC/25℃/70 % RH | | | | | | | | | | | | | | | |
| Safety standards *6 | Design re | Design refer to EN IEC 62368-1、GB4943.1 | | | | | | | | | | | | | | |
| EMC emission | Parameter | | | | | | Standard | | | | | Test level | | | | |
| | Conducted | | | | | EN | EN 55032 | | | | | Design refer to Class A | | | | |
| | Radiated | | | | | EN | EN 55032 | | | | | Design refer to Class A | | | | |
| | Voltage I | Flicker | | | | | EN 61000-3-3 | | | | | Design refer to Class A | | | | |
| | Harmoni | c Current | i | | | EN | IEC 6100 | 0-3-2 | | | | Design r | efer to Cla | ass A | | |
| EMC immunity | Parameter | | | | | | Standard | | | | | Test level | | | | |
| | ESD | | | | | | EN 61000-4-2 | | | | | Level 3 8KV air;Level 2 4KV contact | | | | |
| | Radiated Susceptibility | | | | | | EN 61000-4-3 | | | | | Level 2 3V/m | | | | |
| | EFT/Burest | | | | | | EN 61000-4-4 | | | | | Level 3 2KV | | | | |
| | Surge | | | | | | EN 61000-4-5 | | | | | Level 3 2KV/Line-Line;Level3 4kV/Line-Line-FG | | | | |
| | Conducted | | | | | | EN 61000-4-6 | | | | | Level 2 3V | | | | |
| | Magnetic Field | | | | | | EN 61000-4-8 | | | | | Level 2 3A/m | | | | |
| | | | | | | | EN 61000-4-11 | | | | | <5% residual voltage for 0.5 cycles ,70% residual voltage for 25 cycles ,<5% residual voltage for 250 cycles: | | | | |
| Environment | | | | | | | | | | | | | | | | |
| Working temperature | - 25∼+60℃ (Refer to derating curve diagram) | | | | | | | | | | | | | | | |
| Storage temperature | - 20∼+85℃ | | | | | | | | | | | | | | | |
| Storage humidity | 10-95% | RH | | | | | | | | | | | | | | |
| Vibration resistance | e 10-500Hz,2G 10Min/Circle 60min in each X,Y,Z direction | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |



| Others | | | | | | | | |
|------------------|---|-----------|-----------|--|--|--|--|--|
| MTBF | ≥370K hrs,MIL-HDBK-217F(25°C) | | | | | | | |
| Installation | Screw in plate or install in TS35 rail with the accessory | | | | | | | |
| Protection class | IP20 | | | | | | | |
| Weight | About 0.45Kg | | | | | | | |
| Dimension | 168*98*38mm(Length* width* Height) | | | | | | | |
| Data | Description | Model | | | | | | |
| | MPA 100.2W 7A/5V 3.8A/12V | MPA100-A1 | | | | | | |
| | MPA 101.5W 3.5A/5V 3.5A/24V | MPA100-B1 | | | | | | |
| | MPA 100.8W 2.8A/12V 2.8A/24V | MPA100-C1 | | | | | | |
| | MPA 99W 5.4A/5V 1.5A/48V | MPA100-D1 | | | | | | |
| | MPA 100.8W 2.0A/12V 1.6A/48V | MPA100-F1 | | | | | | |
| | MPA 100W 10.0A/-5V 10.0A/+5V | MPA100-G1 | | | | | | |
| | MPA 100.8W 4.2A/-12V 4.2A/+12V | MPA100-H1 | | | | | | |
| | MPA 99W 3.3A/-15V 3.3A/+15V | MPA100-I1 | MPA100-l1 | | | | | |
| Accessory | Description | Model | | | | | | |
| Rail pin | TS35 mounting accessory | MPS-F050C | | | | | | |



O 60

A D

%

40

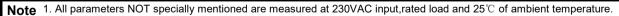
20

-25

0

Ambient temperature ($^{\circ}$ C)

Installation instruction 67,9 28,1 Mounting plate--Housing 88 Due to the high voltage inside the power supply, please kindly ensure the 120 safety when installing the screws in the red mounting hole , It is necessary to the ensure that the size in the drawing above in not more than 4mm, and 160 the installation torque is not more 168 than 1.2N.m 4,75 160 0 25 29 168 Installation Instructions Terminal Spec $\left| U \right|$ Type of the width of the terminal $\left| \text{Wire installation specification} \right|$ Max. Torque 95 Terminal 8mm MAX 22-12AWG 1. 2N. m(MAX) **Derating curve** Ta=25℃ 100 100 80 80



 $2. \\ Ripple \& noise are measured at 20 \\ MHZ of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 \\ uf \& 47 \\ uf parallel capacitor."$

O 60

D

- 40 %

20

176

200

Input voltage (Vac)60Hz

- 3.Tolerance:includes set up tolerance,line regulation and load regulation.
- 4.Line regulation is measured from high voltage to low voltage of rated load

50

- 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

264