

MPA300-□1 Series



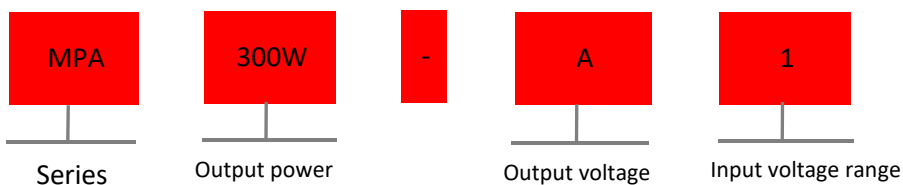
▲ Specification

- 100% full load burn-in test
- Protection: Over-temp./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 application in severe environment
- Terminal with protective cover
- Aluminum case
- Seismic protection
- 2 years warranty

▲ Applications

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

▲ Model encoding



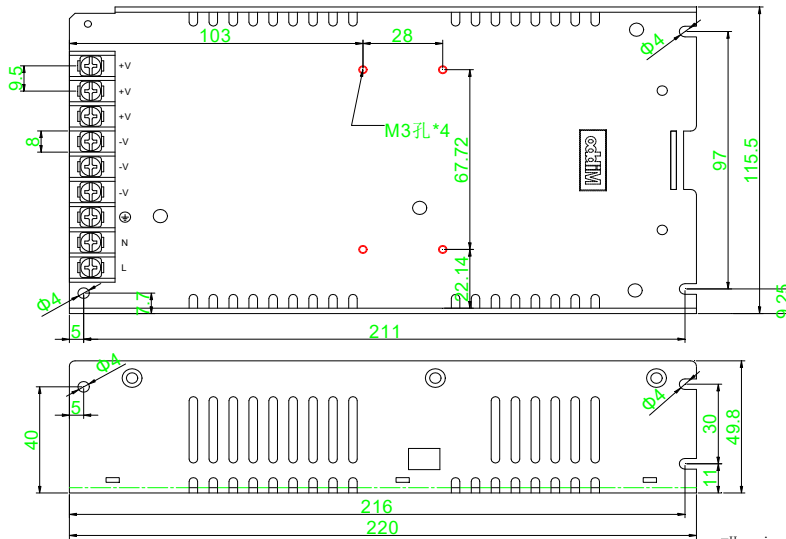


Specification

Input																	
Voltage range	176-264VAC 250-370VDC																
AC current	4.0A/230VAC																
Frequency range	47-63Hz																
Inrush current (max)	44A/230VAC																
Output																	
Model	MPA300-A1		MPA300-B1		MPA300-C1		MPA300-D1		MPA300-F1		MPA300-G1		MPA300-H1		MPA300-I1		
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	Ch1:4.75-5.5V		Ch1:4.75-5.5V		Ch1:11.7-12.2V		Ch1:4.75-5.5V		Ch1:11.7-12.2V		Ch1:4.75-5.5V		Ch1:11.7-12.2V		Ch1:14.6-15.4V		
Rated current(A)	26A	10A	12A	10A	8.4A	8.3A	12A	5A	5A	5A	25A	25A	12.5A	12.5A	10A	10A	
Rated power (W)	250W		300W		300W		300W		300W		250W		300W		300W		
Ripple & noise(max) note2	80mVp-p	100mVp-p	80mVp-p	120mVp-p	100mVp-p	120mVp-p	80mVp-p	160mVp-p	100mVp-p	160mVp-p	80mVp-p	80mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	
Voltage tolerance note3	±3%	±6%	±3%	±8%	±3%	±8%	±3%	±10%	±3%	±10%	±3%	±2%	±3%	±6%	±3%	±6%	
Line regulation note4	±2%																
Load regulation note5	±1%	±2%	±1%	±2%	±1%	±2%	±1%	±2%	±1%	±2%	±1%	±2%	±1%	±2%	±1%	±2%	
Setup, rise time	1000ms 50ms/230VAC(at full load)																
Hold up time	20ms/230VAC(at full load)																
Status indicator	Green LED																
Protection																	
Over load	110%-150% of the rated output power Protection mode: shut down output, recover when the power restart.																
Over voltage (V)	Ch1:5.6-6.8V	Ch1:5.6-6.8V	Ch1:13.8-16.2V	Ch1:5.6-6.8V	Ch1:13.8-16.2V	Ch1:5.6-6.8V	Ch1:13.8-16.2V	Ch1:5.6-6.8V	Ch1:13.8-16.2V	Ch1:5.6-6.8V	Ch1:13.8-16.2V	Ch1:13.8-16.2V	Ch1:18-21V				
	Protection mode: shut down output, recover when the power restart.																
Intelligent fan	Detect the temperature intelligently. When reaching 40℃, start the fan to reduce the temperature																
Over Temperature	Intelligent over temperature protection. Automatically recover when the temperature within normal range																
Three proof treatment	Application in the dusty and condensation environment																
Safety and EMC																	
Withstand voltage	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC																
Insulation resistance	I/P-O/P,I/P-FG,O/P-FG:100M Ohms/500VDC/25℃/70% RH																
Safety standards *6	Design refer to EN IEC 62368-1、GB4943.1																
EMC emission	Parameter		Standard						Test level								
	Conducted		EN 55032						Design refer to Class A								
	Radiated		EN 55032						Design refer to Class A								
	Voltage Flicker		EN 61000-3-3						Design refer to Class A								
	Harmonic Current		EN IEC 61000-3-2						Design refer to Class 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								
Voltage Dips and interruptions		EN 61000-4-11						<5% residual voltage for 0.5 cycles ,70% residual voltage for 25 cycles ,<5% residual voltage for 250 cycles:									
Environent																	
Working temperature	- 25~+60℃ (Refer to derating curve diagram)																
Storage temperature	- 20~+85℃																
Storage humidity	10-95 % RH																
Vibration resistance	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 0.85Kg	
Dimension	220*115*50mm(Length* width* Height)	
Data	Description	Model
	MPA 250W 26.0A/5V 10.0A/12V	MPA300-A1
	MPA 300W 12.0A/5V 10.0A/24V	MPA300-B1
	MPA 300W 8.4A/12V 8.3A/24V	MPA300-C1
	MPA 300W 12A/5V 5.0A/48V	MPA300-D1
	MPA 300W 5.0A/12V 5.0A/48V	MPA300-F1
	MPA 250W 25A/-5V 25A/+5V	MPA300-G1
	MPA 300W 12.5A/-12V 12.5A/+12V	MPA300-H1
	MPA 300W 10A/-15V 10A/+15V	MPA300-I1
Accessory	Description	Model
Rail Pin	TS35 Mounting accessory	MPS-F050B

Installation instruction



Installation Instructions

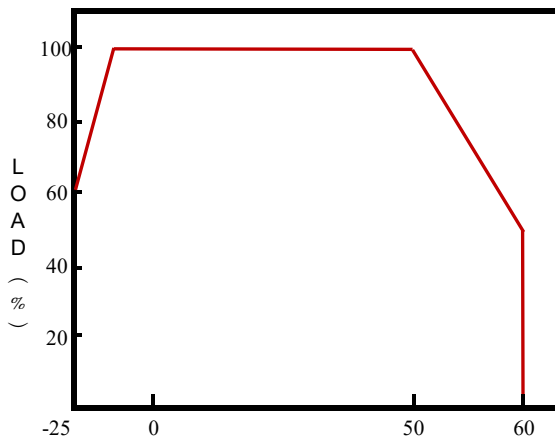
Terminal Spec	U Type of the width of the terminal	Wire installation specification	Max. Torque
95 Terminal	8mm MAX	22-12AWG	12N.m(MAX)

Mounting plate Housing

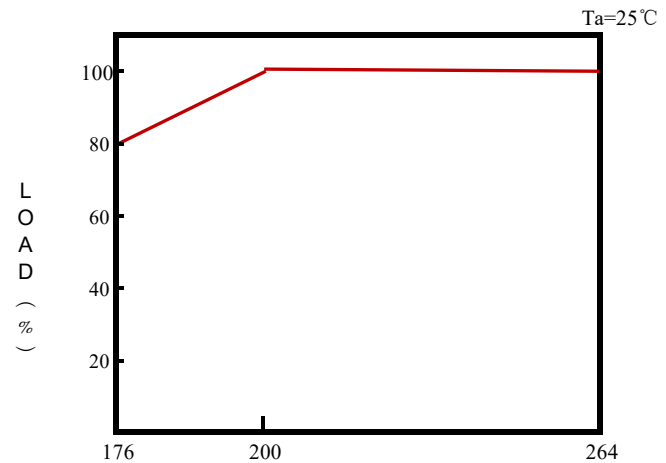
4MAX

Due to the high voltage inside the power supply, please kindly ensure the safety when installing the screws in the red mounting hole. It is necessary to ensure that the size in the drawing above is not more than 4mm, and the installation torque is not more than 1.2N.m

Derating curve



Ambient temperature (°C)



Input voltage (Vac)60Hz

Note:

- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor."
- Tolerance: includes set up tolerance, line regulation and load regulation.
- Line regulation is measured from High voltage to low voltage at rated load
- Load regulation is measured from 0% to 100% rated load.
- According to the requirements of GB4943.1, the power supply is only used in areas below sea level of 2000M and non-tropical climates.