

RoHS Compliant



Description

This step shape power family are designed with ultra-slim plastic housing and for full range .

The series are isolation Class II Level, achieving high efficiency and low no-load power consumption. They provide adjustable DC output voltage .

The good performance can be used for building automation, household and industrial control systems etc.

Features

- Isolation Class II
- · Ultra Slim Step Shape
- · Protection Short Circuit/Overload/ Over Voltage
- · DC Output Voltage Adjustable
- · Over Voltage Category II

Model Information

Part Number	DC Voltage	Rated Current	Rated Power
MP100S-1207100	12V	7.1A	85.2W
MP100S-2404170	24V	4.17A	100W
MP100S-4802080	48V	2.08A	100W

Input

Voltage Range	90-264V AC, 127-370V DC
Frequency Range	47-63Hz
Inrush Current	Cold Start 35A/115V AC, 70A/230V AC
AC Current	3A/115V AC, 1.6A/230V AC
Efficiency	88% - MP100S-1207100
	90% - MP100S-2404170
	90% - MP100S-4802080





Output

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Ripple & Noise	120mVp-p - MP100S-1207100	
	150mVp-p - MP100S-2404170	
	240mVp-p - MP100S-4802080	
Voltage Tolerance	12-13V - MP100S-1207100	
	21.6-29V - MP100S-2404170	
	43.2-55.2V - MP100S-4802080	
Voltage Tolerance	±2%	
Line Regulation	±1%	
Load Regulation	±1%	
Setup, Rise Time	500ms, 50ms/100-240V AC at full load	
Hold Up Time (Typ.)	30ms/100-240V AC at full load	

Protection

Over Load	102 ~ 110% rated output power; (Below 92.2W) 105 ~ 150% rated output powerabove 92.2W) Hiccup mode when output voltage <50%, recovers automatically after fault condition is removed Constant current limiting within 50%~ 100% rated output voltage, recovers automatically after fault condition is removed
Over Voltage	14.2-16.2V - MP100S-1207100 30-36V - MP100S-2404170 56.5-64.8V - MP100S-4802080 Protection type : Shut down 0/p voltage, re-power on to recover

Environment

Working Temp.	-20°C - +70°C
Working Humidity	20 ~ 90% RH Non-Condensing
Storage Temp, Humidity	-40°C~+85°C,10 ~ 95% RH non-condensing
Temp. Coefficient	+0.03%/ C(0 ~ 50°C RH non-condensing
Vibration	10 ~ 500HZz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6
Operating Altitude	5000m
Over Voltage Category	II, According to EN62368-1 altitude up to 2000 meters
MTBF	800K hrs min. MIL-HDBK-217F (25°C)

- 1. All parameters NOT specially mentioned at 230V AC input, rated load and 25°C of ambient temperature.
- 2. Ripple&noise are measured from peak to peak with band width limit of 20MHz (0.1uF and 47uF/50V parallel capacitor under DC output full load,AC nominal input 25°C ambient temperature).
- 3. Installation clearances: top with 40mm, bottom with 20mm, left and right with 5mm. Increase the space to 10-15mm when the adjacent device is heat source.
- 4. Derating may be needed under low input voltage. Please check the derating curve for more details.
- 5. Efficiency test after 30 minutes of burn-in.
- 6. The ambient temperature derating of 3.5°C /1000m for operating altitude higher than 2000m(6500ft).





Dimensions & Weight

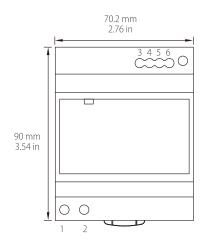
 Length
 : 90mm / 3.54 in

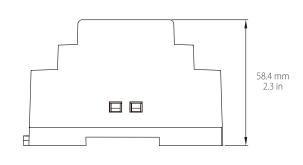
 Width
 : 70.2mm /2.76in

 Height
 : 58.4mm / 2.3in

Weight : 270

Dimensions and Installation





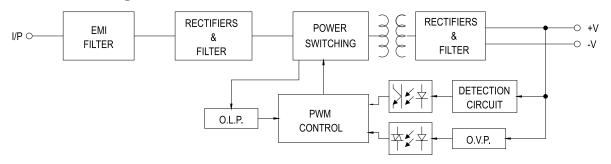
Input

Output

No.	Description	
1	AC/L	
2	AC/N	

No.	Description
3,4	-V
5,6	+V

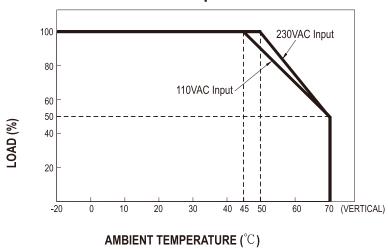
Functional Diagram



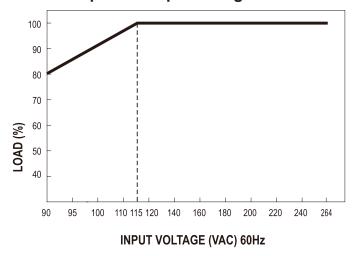




Deduction Curve and Temperature



Minus Output and Input Voltage Curves



Part Number Table

Description	Part Number
DIN Rail Mount Power Supply, 12V, 7.1A	MP100S-1207100
DIN Rail Mount Power Supply, 24V, 4.17A	MP100S-2404170
DIN Rail Mount Power Supply, 48V, 2.08A	MP100S-4802080

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