

MPS-012W□FB Series



▲ Features

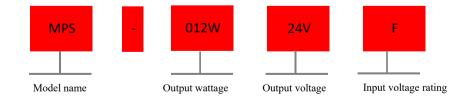
Superior performance with small ripple
Universal AC input/Full range
100% full load burn-in test
Protections:short circuit/overload/over voltage
LED indicator for power on
Small size, standard front mounting accessories
Cooling by free air convection
Seismic protection
Surge protection
3 years warranty

▲ Applications

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

Terminal selection

▲ Model Encoding





Specification

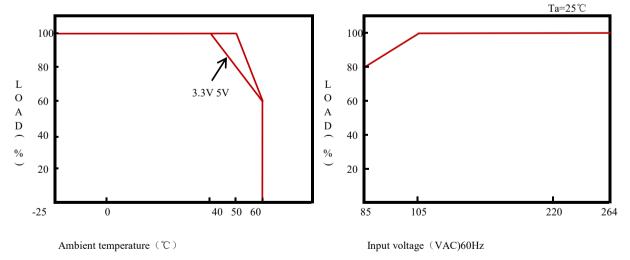
Specification							
Input							
Voltage range	85-264VAC 120-370V	85-264VAC 120-370VDC					
AC current	0.35A/115VAC 0.25A	0.35A/115VAC 0.25A/230VAC					
Frequency range	47-63Hz	47-63Hz					
Inrush current (max)	22A/115VAC 44A/23	22A/115VAC 44A/230VAC					
Output							
DC voltage (V)	3.3V	5V	12V	15V		24V	
Efficiency	80%	80%	82%	82%		83%	
Voltage ADJ.range	±10%						
Rated Current(A)	2.4A	2.4A	1A	0.8A		0.5A	
Rated power(W)	7.9W	12W	12W	12W		12W	
Ripple & noise(max) Note.2	25mVp-p	25mVp-p	30mVp-p	35mV _J	р-р	40mVp-p	
Voltage tolerange Note.3	±2%	±2%	±1%	±1%		±1%	
Line regulation Note.4	±0.5%	±0.5%					
Load regulation Note.5	±1%	±1%	±0.5%	±0.5%)	±0.5%	
Setup, rise time	500ms 30ms/230VAC	500ms 30ms/230VAC 1000ms 30ms/115VAC(at full load)					
Hold up time	100ms/230VAC 20ms/115VAC(at full load)						
Status indicator	Green LED	Green LED					
Protection							
Overload	110%-150% rated output power						
	Protection type: Hiccup mode, recovers automatically after fault condition is removed						
	3.7-4.2V	5.6-6.8V	13.8-16.2V	13.8-16.2V 18-21		27.6-32.4V	
Over voltage(V)	Protection type: Hiccup	up mode, recovers automatically after fault condition is remov		is removed	-		
Safety and EMC							
Withstand voltage	I/P-O/P:2KVAC I/P-F	I/P-O/P:2KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC					
Isolation resistance	I/P-O/P,I/P-FG,O/P-FG	I/P-O/P,I/P-FG,O/P-FG:100M Ohms/500VDC/25°C/70 % RH					
Safety standard	Design refer to EN	I IEC 62368-1、	GB4943.1				
EMC emission	Parameter		Standard	Standard		Test Level	
	Conducted		EN 55032	EN 55032		Class A	
	Radiated		EN 55032	EN 55032		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	EN 61000-4-2		Level 3 8KV air;Level 2 4KV contact	
	Radiated Susceptibility		EN 61000-4-3	EN 61000-4-3		Level 2 3V/m	
	EFT/Burest		EN 61000-4-4	EN 61000-4-4		Level 3 2KV	
	Surge		EN 61000-4-5	EN 61000-4-5		Level 3 2KV/Line-Line;Level3 4kV/Line-Line-FG	
	Conducted		EN 61000-4-6	EN 61000-4-6		Level 2 3V	
	Magnetic Field		EN 61000-4-8	EN 61000-4-8		Level 2 3A/m	
	Voltage Dips and interruptions		EN 61000-4-11	EN 61000-4-11		< 5% residual voltage for 0.5 cycles ,70% residual voltage for 25 cycles , < 5% residual voltage for 250 cycles:	
Environmental					23 Gyolds , ~ 3 /6 TeSid	ida. Foliago foi 200 byoles.	
Working temperature	- 25~+60°C (Refer to	- 25∼+60°C (Refer to "Derating curve ")					
Storage temperature	- 40∼+85°C	- 40∼+85°C					
Storage humidity	10-95 % RH						
Vibration	Component:10-500Hz,2	Component:10-500Hz,2G 10 min/1cycle 60 min each along X,Y,Z axes					



Others					
Mean time between failure	≥240K hrs,MIL-HDBK-217F(25°C)	≥240K hrs,MIL-HDBK-217F(25°C)			
Installation	Back mounting, standard mounting accessorie	Back mounting, standard mounting accessories for front mounting			
Protection class	IP20	IP20			
Weight	About 0.07Kg	About 0.07Kg			
Length*width*height	78.5*48*20mm	78.5*48*20mm			
Data	Details	Model name			
	MPS 7.9W 2.4A/3.3V	MPS-012W03VFB			
	MPS 12W 2.4A/05V	MPS-012W05VFB			
	MPS 12W 1A/12V	MPS-012W12VFB			
	MPS 12W 0.8A/15V	MPS-012W15VFB			
	MPS 12W 0.5A/24V	MPS-012W24VFB			
Attachment	Details	Model name			
Rail pin	Mounting accessories	MPS-F090B			



Derating curve



- **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.