MPS-450W□SS Series

▲ Features

Superior performance with small ripple
Input 115/230VAC ,selectable by switch
100% full load burn-in test
Protections:short circuit/overload/over voltage/over temperature
LED indicator for power on
Optional installation accessories, can be installed flat
Compensating output voltage function
Instant overload capability is 110%-150%
“Three proof”treatment， suitable for severe environment
Seismic protection
Terminal with protective cover
All aluminum case
Surge protection
2 years warranty

▲ Applications

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

▲ Model Encoding

MPS	-	450W	24V	S	S
Model name		Output wattage	Output voltage	Input voltage 115/230V	Terminal selection

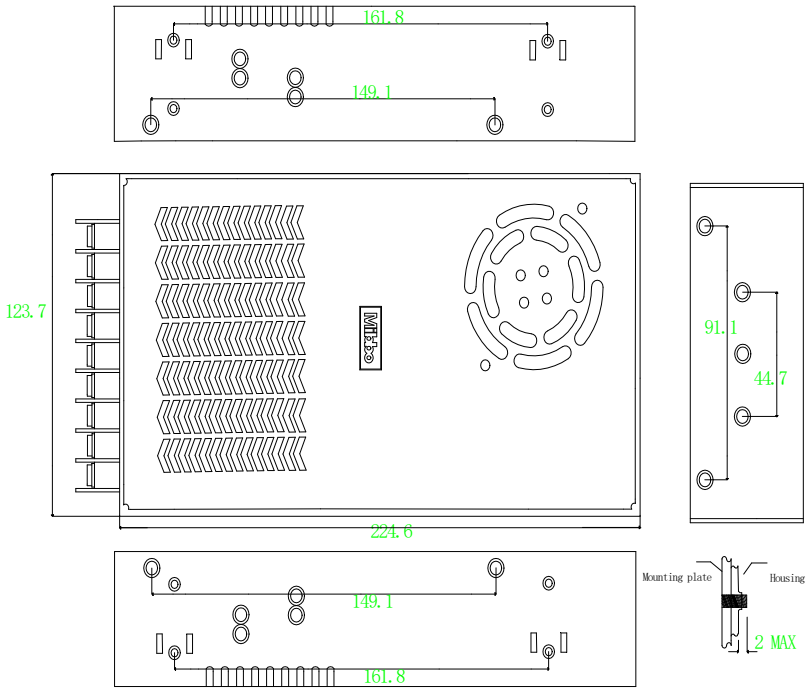
Mibbo

Specification

Input								
Voltage range	90-132VAC or 180-264VAC（Code switch switch） 254-370VDC							
AC current	10A/115VAC 6A/230VAC							
Frequency range	47-63Hz							
Inrush current (max)	35A/115VAC 55A/230VAC							
Output								
DC voltage (V)	3.3V	5V	12V	15V	24V	27V	36V	48V
Efficiency	76%	78%	85%	86%	86%	86%	87%	87%
Voltage ADJ.range	±10%							
Rated Current(A)	75A	75A	37.5A	30A	18.8A	16.7A	12.5A	9.4A
Rated power(W)	247.5W	375W	450W	450W	451.2W	450.9W	450W	451.2W
Ripple & noise(max) Note.2	120mVp-p	120mVp-p	140mVp-p	140mVp-p	150mVp-p	150mVp-p	180mVp-p	180mVp-p
Voltage tolerange Note.3	±3%	±3%	±1%	±1%	±1%	±1%	±1%	±1%
Line regulation Note.4	±0.5%	±0.5%	±0.3%	±0.3%	±0.3%	±0.3%	±0.3%	±0.3%
Load regulation Note.5	±2%	±2%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
Setup，rise time	1500ms 20ms/230VAC 1500ms 20ms/115VAC(at full load)							
Hold up time	20ms/230VAC 16ms/115VAC(at full load)							
Status indicator	Green LED							
Protection								
Overload	110%-150% rated output power							
	Protection type: shut down o/p voltage,re power on to recover							
Over voltage(V)	3.7-4.2V	5.6-6.8V	13.8-16.2V	18-21V	27.6-32.4V	33.7-39.2V	41.4-46.8V	57.6-67.2V
	Protection type: shut down o/p voltage,re power on to recover							
Over temperature	Protection type:shut down o/p voltage,recovers antomatically after temperature goes down							
Three proof treatment	Suitable for high dust, condensation occasions							
Safety and EMC								
Withstand voltage	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC							
Isolation resistance	I/P-O/P,I/P-FG,O/P-FG:100M Ohms/500VDC/25℃/70％RH							
Safety standards	Design refer to EN IEC 62368-1、GB4943.1							
EMC emission	**Parameter**	**Standard**	**Test Level**					
	Conducted	EN 55032	Class A					
	Radiated	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	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:					
Environmental								
Working temperature	－25～+60℃(Refer to "Derating curve ")							
Storage temperature	－20～+85℃							
Storage humidity	10-95％RH							
Vibration	Component:10-500Hz,2G 10 min/1cycle 60 min each along X,Y,Z axes							
Others								
Mean time between failure	≥270K hrs,MIL-HDBK-217F(25℃)							
Installation	Rear mounting or optional accessory front mounting							
Protection class	IP20							
Weight	About 1.3Kg							
Length*width*height	225*124*50mm							

Data	Details	Model name
	MPS 247.5W 75.0A/3.3V	MPS-450W03VSS
	MPS 375.0W 75.0A/05V	MPS-450W05VSS
	MPS 450.0W 37.5A/12V	MPS-450W12VSS
	MPS 450.0W 30.0A/15V	MPS-450W15VSS
	MPS 451.2W 18.8A/24V	MPS-450W24VSS
	MPS 450.9W 16.7A/27V	MPS-450W27VSS
	MPS 450.0W 12.5A/36V	MPS-450W36VSS
	MPS 451.2W 9.4A/48V	MPS-450W48VSS
Attachment	**Details**	**Model name**
Rail pin	Front mounting attachment	MPS-060A

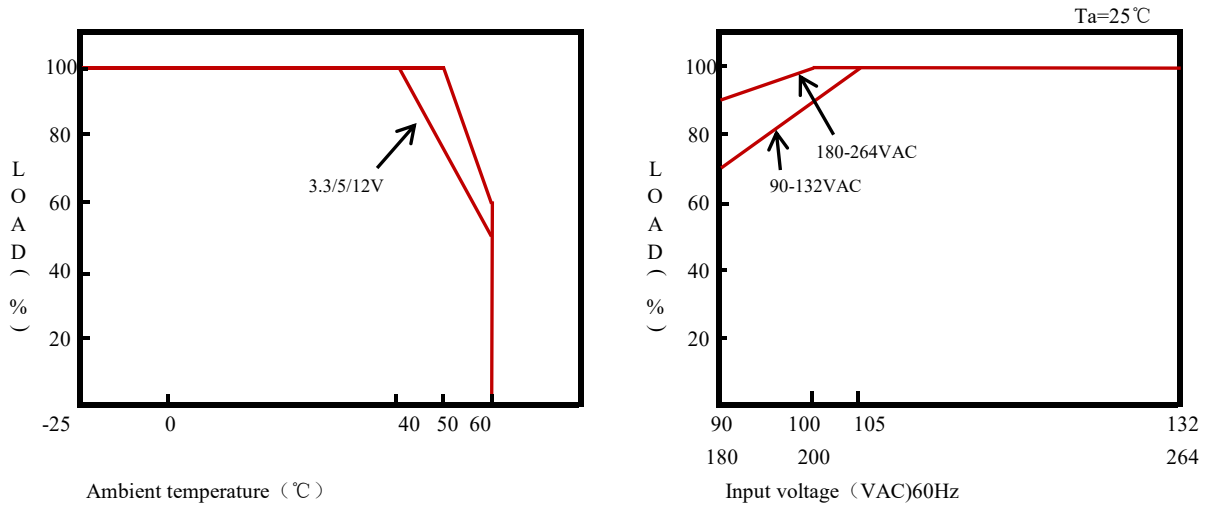
Installation Instruction



Installation Instructions

Terminal Spec	U Type of the width of the terminal	Wire installation specification	Max.Torque
65 Terminal	11mm(MAX)	22-12AWG	1.2N m(MAX)

Derating curve



Note: 1.All parameters NOT specially mentioned are measured at 230VAC input,rated load and 25℃ 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.