

MPA050-□F Series



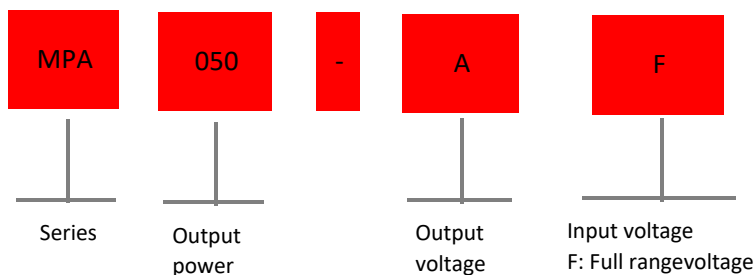
▲ Specifecation

- 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
- Electronic instruments and devices
- LED power supply
- Household appliances

▲ Model encoding



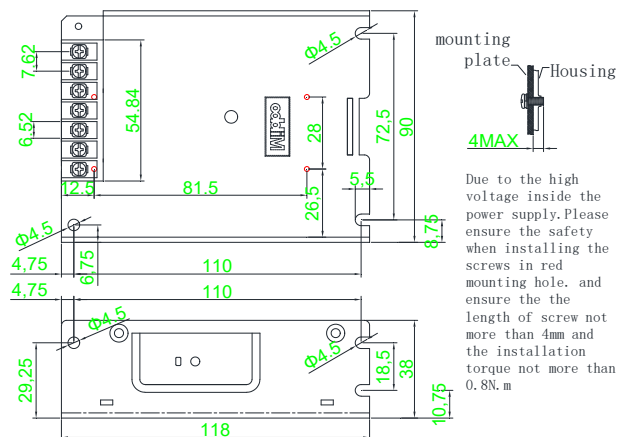


Specification

Input																	
Voltage range	85-264VAC 120-370VDC																
AC current	1.1A/115VAC 0.65A/230VAC																
Frequency range	47-63Hz																
Inrush current (max)	22A/115VAC 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	Ch1:4.75-5.5V		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)	5.2A	2A	5.2A	1A	1A	1.6A	5.2A	0.5A	2.2A	0.5A	5A	5A	2.1A	2.1A	1.7A	1.7A	
Rated power (W)	50W		50W		50.4W		50W		50.4W		50W		50.4W		51W		
Ripple & noise(max)note2	60mVp-p	80mVp-p	60mVp-p	80mVp-p	80mVp-p	80mVp-p	60mVp-p	100mVp-p	80mVp-p	100mVp-p	60mVp-p	60mVp-p	60mVp-p	60mVp-p	60mVp-p	60mVp-p	
Voltage tolerance note3	±2%	±6%	±2%	±6%	±2%	±6%	±2%	±6%	±2%	±6%	±2%	±6%	±2%	±6%	±2%	±6%	
Line regulation noite4	±0.5%	±1%	±0.5%	±1%	±0.5%	±1%	±0.5%	±1%	±0.5%	±1%	±0.5%	±1%	±0.5%	±1%	±0.5%	±1%	
Load regulation note5	±1.5%	±3%	±1.5%	±3%	±1.5%	±3%	±1.5%	±3%	±1.5%	±3%	±1.5%	±3%	±1.5%	±3%	±1.5%	±3%	
Setup, rise time	500ms 30ms/230VAC 1200ms 30ms/115VAC(at full load)																
Hold up time	50ms/230VAC 10ms/115VAC(at full load)																
Status indicator	Green LED																
Protection																	
Over load	110%-150% of the rated output power Protection mode: Hiccup mode, recover automatically after fault condition is removed																
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		Ch1:18-21V		
	Protection mode: Hiccup mode, recover automatically after fault condition is removed																
Three proof treatment	Application in 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°C/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:					
Environment																	
Working temperature	- 25~+60°C (Refer to derating curve diagram)																
Storage temperature	- 20~+85°C																
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℃)	
Installation	Screw in plate or install in TS35 rail with the accessory	
Protection class	IP20	
Weight	about 0.35Kg	
Dimension	118*90*38mm(Length* width* Height)	
Data	Description	Models
	MPA 50W 5.2A/5V 2.0A/12V	MPA050-AF
	MPA 50W 5.2A/5V 1.0A/24V	MPA050-BF
	MPA 50.4W 1.0A/12V 1.6A/24V	MPA050-CF
	MPA 50W 5.2A/5V 0.5A/48V	MPA050-DF
	MPA 50.4W 2.2A/12V 0.5A/48V	MPA050-FF
	MPA 50W 5.0A/-5V 5.0A/+5V	MPA050-GF
	MPA 50.4W 2.1A/-12V 2.1A/+12V	MPA050-HF
	MPA 51W 1.7A/-15V 1.7A/+15V	MPA050-IF
Accessory	Description	Model
Rail pin	TS35 mounting accessory	MPS-F050B

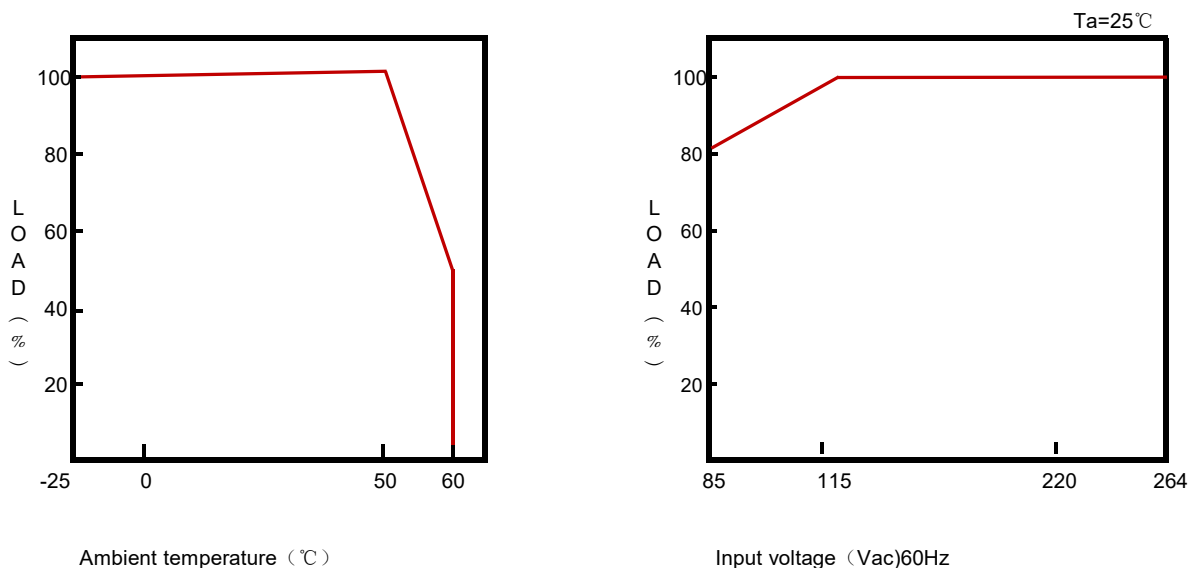
Installation instruction



Terminal installation instruction

Terminal size	connector width	wire specification	Torque
762端子排	6.5mm MAX	22-14AWG	0.8N.m(MAX)

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 terminated 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 voltage to high voltage 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.