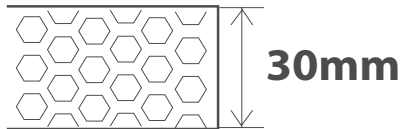




**SMALLER SIZE low profile**



## Features

- Universal AC input / Full range.
- With stand 300VAC surge input for 5 seconds.
- Miniature size and 1U low profile, low weight.
- Protections: Short circuit / Overload / Over voltage.
- Cooling by free air convection.
- No load power consumption <0.5W.
- Operating altitude up to 5000 meters (Note 6).
- LED indicator for power on.
- 100% kill load burn-in test.
- High efficiency, long life and high reliability.
- Extended life high quality capacitors.
- 5 year limited warranty.\*

\*Check special warranty support with your vendor.

## Applications

- Industrial automation machinery.
- Industrial control system.
- Mechanical and electrical equipment.
- Electronic instruments, equipments or apparatus.
- Lighting control and decoration.
- Lighting fixtures control.

## Description

MYNOX-050P series is a 50W single-output enclosed type power supply with 30mm of low profile design. Adopting the full range 90-264VAC input, the entire series provides an output voltage line of 5V, 12V 15V, 24V, 36V and 48V.

In addition to the high efficiency up to 90%, the design of metallic mesh case enhances the heat dissipation of MYNOX-050P that the whole series operates from - 30°C through 70°C under air convection without a fan. Delivering an extremely low no load power consumption (less than 0.5W), it allows the end system to easily meet the worldwide energy requirement, MYNOX-050P has the complete protection functions and 5G anti-vibration capability; it is complied with the international safety regulations such as TUV EN60950-1, UL 60950-1 and GB4943, MYNOX-050P series serve as a high price-to-performance power supply solution for various industrial applications.

## Specification

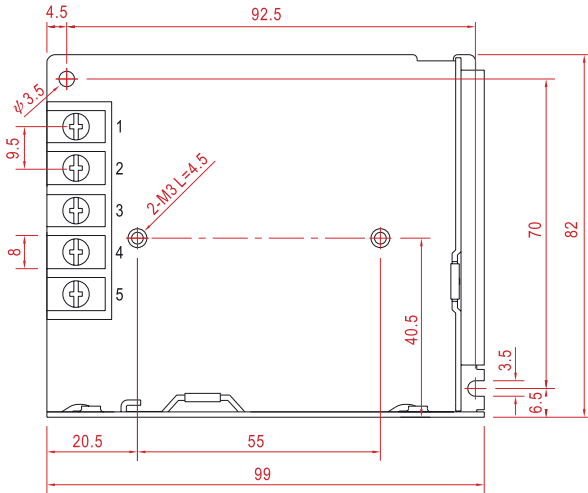
	Model	MYNOX-050P05	MYNOX-050P12	MYNOX-050P15	MYNOX-050P24	MYNOX-050P36	MYNOX-050P48
Output	DC Voltage	5V	12V	15V	24V	36V	48V
	Rated current	10A	4.2A	3.4A	2.2A	1.45A	1.1A
	Current range	0~10A	0~4.2A	0~3.4A	0~2.2A	0~1.45A	0~1.1A
	Rated power	50W	50.4W	51W	52.8W	52.2W	52.8W
	Ripple&noise	100mVp-p	120mVp-p	120mVp-p	150mVp-p	200mVp-p	200mVp-p
	DC Voltage ADJ range	±10%	±10%	±10%	±10%	±10%	±10%
	Voltage tolerance (Note3)	±3%	±2%	±1%	±1%	±1%	±1%
	Line regulation (Note 4)	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load regulation (Note 5)	±2%	±1%	±0.5%	±0.5%	±0.5%	±0.5%
	Setup, rise, hold up time	800ms, 30ms, 30ms / 230VAC (full load)					
Input	Voltage range	90 ~ 264VAC, 127 ~ 373VDC (withstand 300VAC surge input for 5 second)					
	Frequency range	47~63Hz					
	AC current	0.95A / 115VAC 0.56 / 230VAC					
	Efficiency	83%	86%	87%	88%	89%	90%
	Inrush current	Cold start 45A / 230VAC					
	Leakage current	<0.75mA / 240VAC					
Protection	Overload	Rated output power 110% ~ 150% Start overload protection					
		Protection type: hiccup mode, auto-recovery after fault condition is removed					
	Over voltage	Rated output voltage 115% ~ 135% Start over voltage protection					
		Protection type: cut off the output, auto-recovery after fault condition is removed					
Environment	Working temperature	-30°C ~ +70°C (Please refer to "derating curve")					
	Working humidity	20% ~ +90% RH Non-condensing					
	Storage temp & humidity	-40°C ~ +85°C; 10% ~ 95% RH Non-condensing					
	Withstand vibration	10 ~ 500Hz, 3G 10min/1 Cycle, Period for 60min, Each axes					
Safety	Withstand voltage	I/P-O/P: 3KVAC I/P-FG: 2KVAC O/P-FG: 1.25KVAC					
	Isolation resistance	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25°C / 70%RH					
Standards compliance	Safety standard	Compliance to UL60950-1, TUV EN60950-1, GB4943					
	EMC emission	Compliance to EN55022 (CISPR22) Class B, GB9254 Class B, EN55014, EN61000-3-2,3					
	EMC immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-1					
Others	Dimension	99*82*30mm ( L*W*H )					
	Weight	0.21kg / 60pcs / 13.6kg / 0.025m <sup>3</sup> / 0.88CUFT					
	MTBF	≥1130K hrs min. MIL-HDBK-217F(25°C)					

### 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 low line to high line at rated load.
- Load regulation is measured from 0% to 100% rated load.
- The ambient temperature derating of 5°C/1000m is needed for operating altitude greater than 2000m (6500ft).
- The power supply is considered as a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC test.

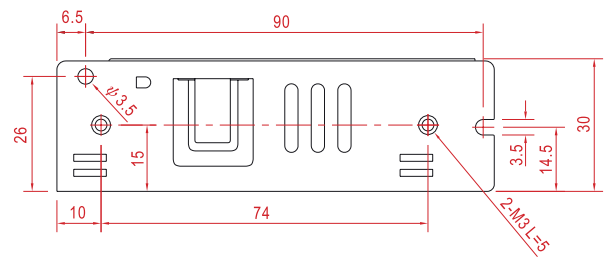
**Mechanical specification**

Unit: mm

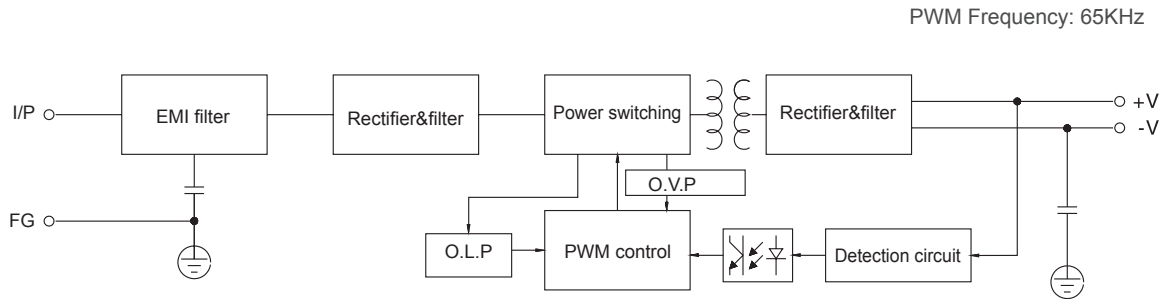


Terminal Pin No. Assignment

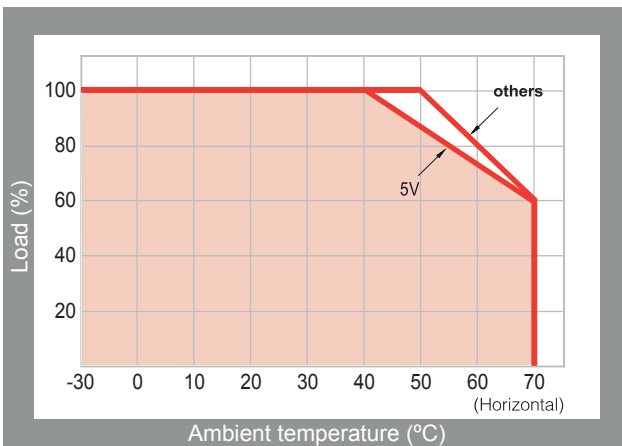
Pin No.	Assignment	Pin No.	Assignment
1	AC/N	4	DC OUTPUT -V
2	AC/L	5	DC OUTPUT +V
3	FG $\perp$		



**Block diagram**



**Derating curve**



**Static characteristics**

