



■ Features

- 5"×3" compact size
- 320W convection, 500W force air
- 550W peak power (3sec.)
- EMI for both Class I & Class II configuration
- -30~+70°C wide range operating temperature
- No load power consumption < 0.5W by PS_ON control
- High efficiency up to 94%
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 5Vdc standby output, 12Vdc fan supply, Power Good, Power Fail and remote sense
- Operating altitude up to 5000 meters (Note.5)
- LED indicator for power on
- 3 years warranty

■ Applications

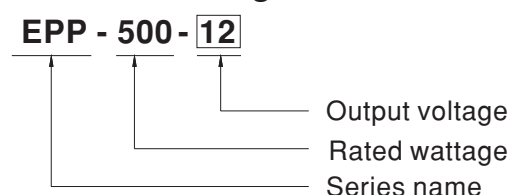
- Industrial automation machinery
- Industrial control system
- Mechanical and electrical equipment
- Electronic instruments, equipments or apparatus

■ Description

EPP-500 is a 500W highly reliable green PCB type power supply with a high power density on the 5" by 3" footprint. It accepts 80~264VAC input and offers various output voltages between 12V and 54V.

The working efficiency is up to 94% and the extremely low no load power consumption is down below 0.5W. EPP-500 is able to be used for both Class I (with FG) and Class II (no FG) system design. EPP-500 has complete protection functions; it is complied with the international safety regulations such as TUV EN62368-1, UL62368-1 and IEC62368-1. EPP-500 series serves as a high price-to-performance power supply solution for various industrial applications.

■ Model Encoding





SPECIFICATION

MODEL		EPP-500-12	EPP-500-15	EPP-500-18	EPP-500-24	EPP-500-27	EPP-500-36	EPP-500-48	EPP-500-54	
OUTPUT	DC VOLTAGE	12V	15V	18V	24V	27V	36V	48V	54V	
	CURRENT	25CFM	41.6A	33.3A	27.8A	20.8A	18.5A	13.9A	10.4A	9.26A
		Convection	26.7A	21.3A	17.8A	13.4A	11.9A	8.9A	6.7A	5.93A
	RATED POWER Note.5	25CFM	499.2W	499.5W	500.4W	499.2W	499.5W	500.4W	499.2W	500W
		Convection	320.4W	319.5W	320.4W	321W	321.3W	320.4W	321.6W	320.2W
	PEAK POWER(3sec.)	550W								
	RIPPLE & NOISE (max.) Note.2	200mVp-p								
	VOLTAGE ADJ. RANGE(MAIN OUTPUT)	11.4~12.6V	14.3~15.8V	17.1~18.9V	22.8~25.2V	25.6 ~ 28.4V	34.2 ~37.8V	45.6 ~50.4V	51 ~56V	
	VOLTAGE TOLERANCE Note.3	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	SETUP, RISE TIME	1000ms, 30ms/230VAC			1500ms, 30ms/115VAC at full load					
HOLD UP TIME (Typ.)	10ms/230VAC			10ms/115VAC at full load						
INPUT	VOLTAGE RANGE Note.4	80 ~ 264VAC		113 ~ 370VDC						
	FREQUENCY RANGE	47 ~ 63Hz								
	POWER FACTOR	PF>0.94/230VAC PF>0.98/115VAC at full load								
	EFFICIENCY (Typ.)	91%	92%	92.5%	93%	93.5%	94%	94%	94%	
	AC CURRENT (Typ.)	5.8A/115VAC		2.9A/230VAC						
	INRUSH CURRENT (Typ.)	COLD START 40A/115VAC			80A/230VAC					
	LEAKAGE CURRENT	<0.75mA / 240VAC								
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed								
	OVER VOLTAGE	13.2 ~ 15.6V	16.5 ~ 19.5V	19.8 ~23.4V	26.4 ~ 31.2V	29.7 ~ 35.1V	39.6 ~ 46.8V	52.8 ~ 62.4V	56.7~59.4V	
	OVER TEMPERATURE	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down								
FUNCTION	5V STANDBY	5Vsb : 5V@0.6A without fan, 1A with fan 25CFM ; tolerance ±2%, ripple : 120mVp-p(max.)								
	12V FAN SUPPLY	12V@0.5A for driving a fan ; tolerance ±10%								
	PS-ON INPUT SIGNAL	Power on: PS-ON = "Hi" or " > 2 ~ 5V" ; Power off: PS-ON = "Low" or " < 0 ~ 0.5V"								
	POWER GOOD / POWER FAIL	500ms>PG>10ms ; The TTL signal goes high with 10ms to 500ms delay after power set up ; The TTL signal goes low at least 1ms before Vo below 90% of rated value								
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP.	-40 ~ +85°C								
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes								
	OPERATING ALTITUDE Note.5	5000 meters								