PS-100 Series

Specifications

Features:

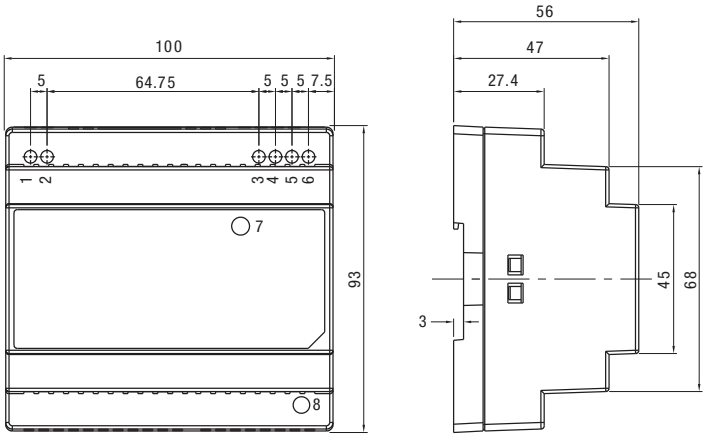
- Universal AC input / full range
- Protections: Short Circuit / Overload / Over Voltage / Overtemperature
- Cooling by free air convection
- DIN rail mountable
- Isolation class II
- LED indicator for power on
- No load power consumption <1W
- 100% full load burn-in test
- 3 year warranty

	Cat. No.	PS-10012	PS-10015	PS-10024
OUTPUT	DC VOLTAGE	12V	15V	24V
	RATED CURRENT	7.5A	6.5A	4.2A
	CURRENT RANGE	0 ~ 7.5A	0 ~ 6.5A	0 ~ 4.2A
	RATED POWER	90W	97.5W	100.8W
	RIPPLE & NOISE (max)	120mVp-p	120mVp-p	150mVp-p
		Ripple & noise are measured at 20MHz of bandwidth by using a 12 twisted pair-wire terminated with a 0.1μF & 47μF parallel capacitor.		
	VOLTAGE ADJ. RANGE	12 ~ 15V	15 ~ 18V	24 ~ 29V
	VOLTAGE TOLERANCE	±2.0%	±1.0%	±1.0%
		Tolerance: includes set up tolerance, line regulation and load regulation.		
	LINE REGULATION	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME	2700ms, 80ms / 230VAC	2700ms, 80ms / 115VAC at full load	
	HOLD UP TIME (Typ.)	50ms / 230VAC	18ms / 115VAC at full load	
INPUT	VOLTAGE RANGE	88 ~ 264VAC	124 ~ 370VDC [Connect AC/L(+), AC/N(-)]	
	FREQUENCY RANGE	47 ~ 63Hz		
	EFFICIENCY (Typ.)	87%	87%	89%
	AC CURRENT (max.)	3A / 115VAC	1.6A / 230VAC	
	INRUSH CURRENT (Typ.)	COLD START 30A / 115VAC;	45A / 230VAC	
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type: Constant current limiting recovers automatically after fault condition is removed Under short circuit or overload ≥ 150% conditions, output voltage may shut down for 5 sec. and then go into constant current protection mode		
	OVERVOLTAGE	16 ~ 20V	19 ~ 23V	30 ~ 35V
		Protection type: Shut down overvoltage, re-power on to recover		
	OVERTEMPERATURE	90˚C ± 15˚C (RTH2) detect on heat sink of power transistor Protection type: Shut down overvoltage, re-power on to recover		
ENVIRONMENT	WORKING TEMP.	-20 ~ +60˚C (Refer to output load derating curve)		
	WORKING HUMIDITY	20 ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +85˚C, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03% / ˚C (0 ~ 50˚C)		
	VIBRATION	10 ~ 500Hz, 2G 10min. / 1cycle, 60 min. each long X,Y, Z axes		
	MOUNTING	Compliance to IEC60068-2-6		
SAFETY & EMC	SAFETY STANDARDS	UL60950-1 EN60950-1 compliant Design refer to EN50178		
	WITHSTAND VOLTAGE	I/P-O/P: 3KVAC		
	ISOLATION RESISTANCE	I/P-O/P: 100M Ohms/500VDC (25°C; 70% RH)		
	EMI CONDUCTION & RADIATION	Compliance to EN61204-3; EN55022 (CISPR22) Class B		
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3 Harmonic current test @ 90% load		
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204; EN55024; EN61000-6-2; EN61204-3; heavy industry level; criteria A The power supply is considered a component which will installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.		
OTHERS	MTBF	486K hrs min. MIL-HDBK-217K (25˚C)		
	DIMENSION	100x93x56mm (WxHxD)		
	PACKING	0.35Kg; 36pcs / 13.6Kg / 0.89CUFT		
	NOTE	All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25˚C of ambient temperature.		

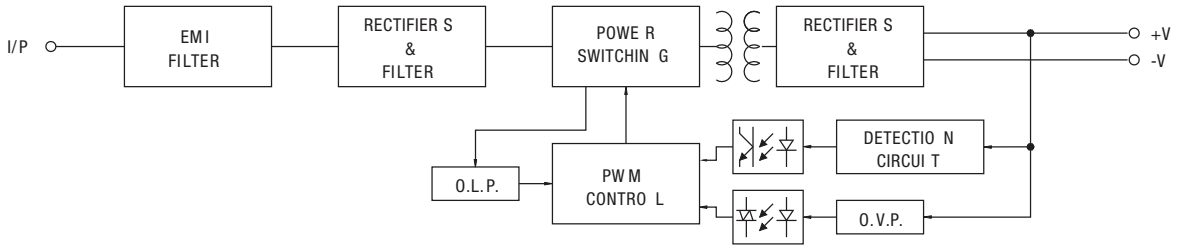
Mechanical Specification

Terminal Pin. No Assignment

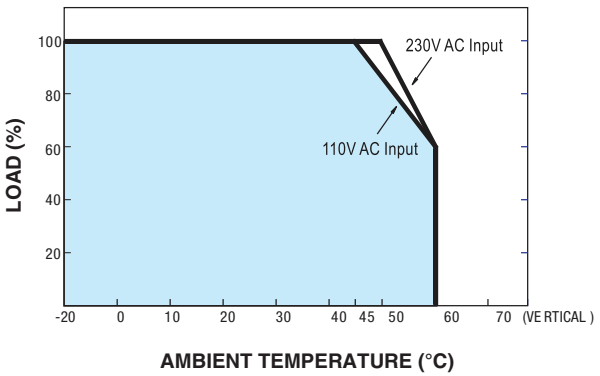
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5,6	-V
2	AC/N	7	LED
3,4	+V	8	+V ADJ.



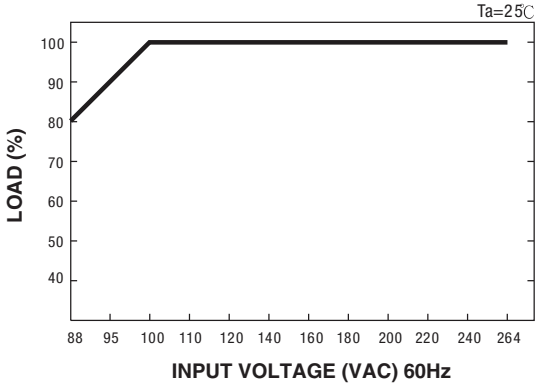
Block Diagram



Derating Curve



Output Derating VS Input Voltage



Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.