PS-S10 Series

Specifications

Features:

- Universal AC input / full range
- Protections: Short Circuit / Overload / Overvoltage
- Cooling by free air convection
- DIN rail mountable
- Built in DC OK active signal
- LED indicator for power on
- No load power consumption < 0.75W
- 100% full load burn-in test
- 3 year warranty

	Cat. No.	PS-S1005	PS-S1012	PS-S1015	PS-S1024
OUTPUT	DC VOLTAGE	5V	12V	15V	24V
	RATED CURRENT	2A	0.84A	0.67A	0.42A
	CURRENT RANGE	0~2A	0~0.84A	0~0.67A	0~0.42A
	RATED POWER	10W	10W	10W	10W
	RIPPLE & NOISE (max)	80mVp-p	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 TOLERANCE	±5.0%	±3.0%	±3.0%	±2.0%
		Tolerance: includes set up tolerance, line regulation and load regulation.			
	LINE REGULATION	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±5.0%	±3.0%	±3.0%	±2.0%
	SETUP, RISE TIME	500ms, 30ms/230VAC; 1000ms, 30ms/115VAC at full load			
		Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.			
	HOLD UP TIME (Typ.)	120ms/230VAC; 25ms/115VAC at full load			
INPUT	VOLTAGE RANGE	85~264VAC; 120~370VDC			
	FREQUENCY RANGE	47~63Hz			
	EFFICIENCY (Typ.)	77%	81%	81%	84%
	AC CURRENT (max.)	0.33A/115VAC; 0.21A/230VAC			
	INRUSH CURRENT (Typ.)	COLD START: 35A/115VAC; 70A/230VAC			
	LEAKAGE CURRENT	<1mA/ 240VAC			
PROTECTION	OVERLOAD PROTECTION	Above 105% rated output power			
		Protection type: Hiccup mode, recovers automatically after fault condition is removed			
	OVERVOLTAGE PROTECTION	5.75~6.75V	13.8~16.2V	17.25~20.25V	27.6~32.4V
		Protection type: Shut down overvoltage, re-power on to recover			
	OVER TEMPERATURE PROTECTION	Power supply shut down at 70°C constant current limiting / output voltage goes to 0; re-power on to recover			
	DC OK AKTIV SIGNAL (max.)	3.75~6V (50mA)	9~13.5V (40mA)	11.5~16.5V (40mA)	18~27V (20mA)
ENVIRONMENT	WORKING TEMP.	-20 ~ +70°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	Component: 10 ~ 500Hz, 2G 10min. / 1cycle, 60 min. each long X,Y, Z axes			
	MOUNTING	Compliance to IEC60068-2-6			
SAFETY & EMC	SAFETY STANDARDS	UL508			
		EN60950-1 compliant			
	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			
	EMI CONDUCTION & RADIATION	Compliance to EN55011			
		EN55022 (CISPR22)			
		EN61204-3 Class B			
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3			
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; EN55024; EN61000-6-1;EN61204-3; light 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	584K hrs min. MIL-HDBK-217K (25°C)			
	DIMENSION	22.5x90x100mm (WxHxD)			
	PACKING	0.17Kg; 72pcs / 13.2Kg / 0.91CUFT			
		All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25°C of ambient temperature			

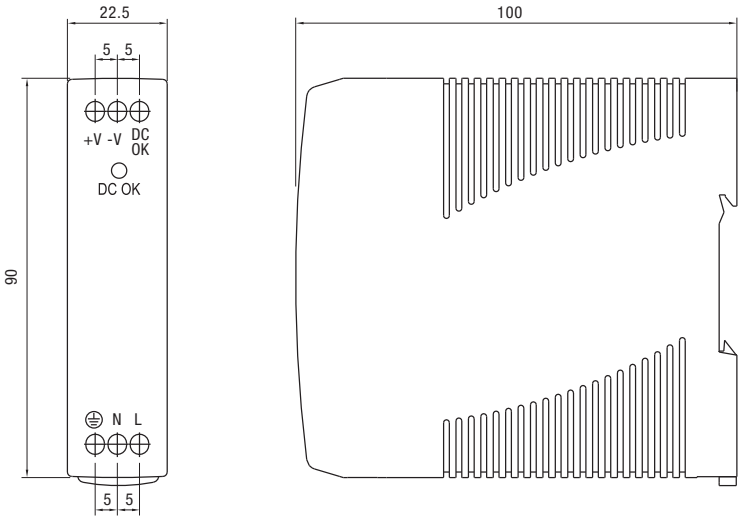
Mechanical Specification

Terminal Pin. No Assign. (TB1)

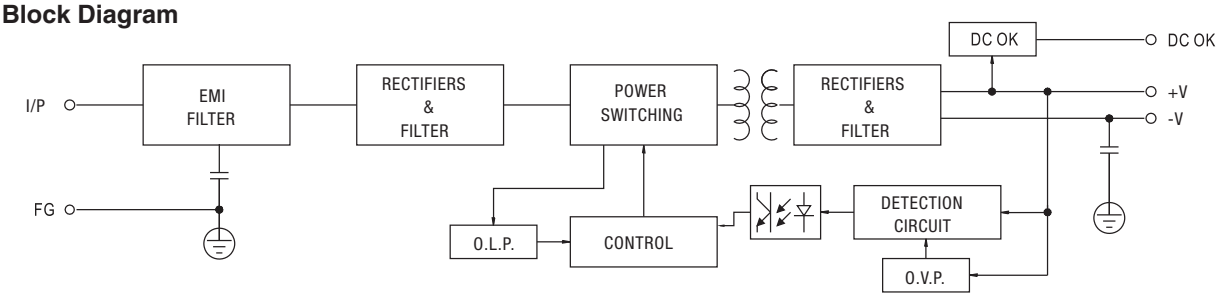
Pin No.	Assignment
1	FG ⏚
2	AC/N
3	AC/L

Terminal Pin. No Assign. (TB2)

Pin No.	Assignment
4	DC OUTPUT +V
5	DC OUTPUT -V
6	DC OK SIGNAL

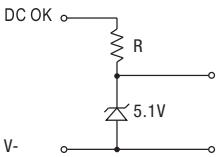


Block Diagram



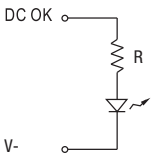
Application of DC OK Signal

(a) 5V signal



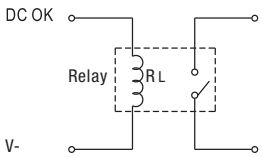
Model	R
5V	≧200Ω
12V	≧1.5KΩ
15V	≧2KΩ
24V	≧3.9KΩ

(b) LED



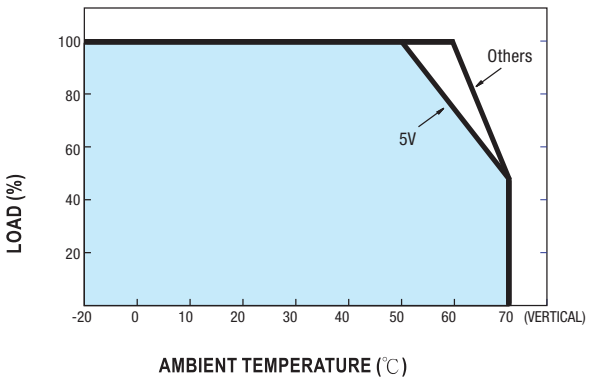
Model	R
5V	≧1KΩ
12V	≧2.4KΩ
15V	≧3KΩ
24V	≧4.7KΩ

(c) Relay

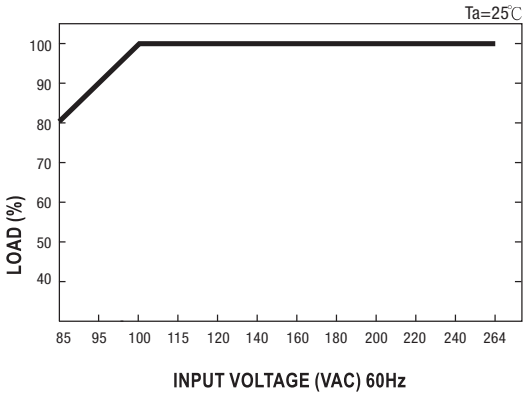


Model	RL
5V	≧120Ω
12V	≧700Ω
15V	≧700Ω
24V	≧1.2KΩ

Derating Curve



Output Derating VS Input Voltage



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