

## 100W Single Output Industrial DIN Rail Power Supply

# **PS-100 Series**



#### ■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- · Cooling by free air convection
- · Can be installed on DIN rail TS-35/7.5 or 15
- Isolation class II
- LED indicator for power on
- No load power consumption<1W</li>
- 100% full load burn-in test
- 3 years warranty



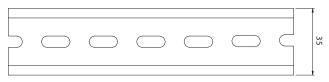
#### **SPECIFICATION** MODEL PS-10012 PS-10015 PS-10024 DC VOLTAGE 15V 24V 12V 7.5A RATED CURRENT 6.5A 4.2A 0 ~ 4.2A **CURRENT RANGE** 0 ~ 7.5A 0~6.5A RATED POWER 90W 97.5W 100.8W RIPPLE & NOISE (max.) Note.2 120mVp-p 120mVp-p 150mVp-p OUTPUT **VOLTAGE ADJ. RANGE** 12 ~ 15V 15 ~ 18V 24 ~ 29V VOLTAGE TOLERANCE Note.3 ±2.0% ±1.0% ±1.0% LINE REGULATION ±1.0% ±1.0% ±1.0% LOAD REGULATION ±1.0% ±1.0% ±1.0% 2700ms, 80ms/230VAC 2700ms, 80ms/115VAC at full load SETUP, RISE TIME HOLD UP TIME (Typ.) 50ms/230VAC 18ms/115VAC at full load 88 ~ 264VAC 124 ~ 370VDC **VOLTAGE RANGE** FREQUENCY RANGE 47 ~ 63Hz **INPUT** EFFICIENCY (Typ.) 87% 89% AC CURRENT (Typ.) 3A/115VAC 1.6A/230VAC INRUSH CURRENT (Typ.) COLD START 30A/115VAC 45A/230VAC 105 ~ 135% rated output power **OVERLOAD** Protection type: Constant current limiting, recovers automatically after fault condition is removed 16 ~ 20V 30 ~ 35V 19 ~ 23V PROTECTION **OVER VOLTAGE** Protection type: Shut down o/p voltage, re-power on to recover 90°C ±15°C (RTH2) detect on heatsink of power transistor **OVER TEMPERATURE** Protection type: Shut down o/p voltage, re-power on to recover WORKING TEMP. -20 ~ +60°C (Refer to output load derating curve) **WORKING HUMIDITY** 20 ~ 90% RH non-condensing ENVIRONMENT STORAGE TEMP., HUMIDITY -40 ~ +85°C, 10 ~ 95% RH TEMP. COEFFICIENT ±0.03%/°C (0 ~ 50°C) VIBRATION Component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6 SAFETY STANDARDS UL60950-1, design refer to EN50178 WITHSTAND VOLTAGE I/P-O/P:3KVAC SAFETY & ISOLATION RESISTANCE I/P-O/P:>100M Ohms/500VDC 25°C 70%RH FMC **EMI CONDUCTION & RADIATION** Compliance to EN61204-3, EN55022 ClassB (Note 4) HARMONIC CURRENT Compliance to EN61000-3-2,-3 **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 **MTBF** 486K hrs min. MIL-HDBK-217F (25°C) **OTHERS** DIMENSION 100 x 93 x 56 mm (WxHxD); 3.94 x 3.66 x 2.20 in. **PACKING** 0.35Kg; 0.75 lbs. 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. NOTE 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. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. 5. Harmonic current test @ 90% load.



### **Mechanical Specification**

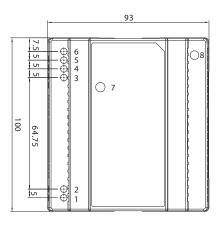
Terminal Pin No. Assignment

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

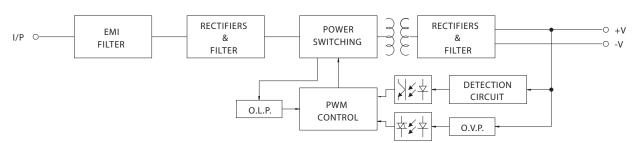


ADMISSIBLE DIN-RAIL:TS35/7.5 OR TS35/15

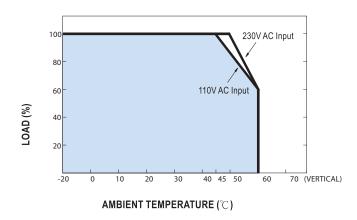
# 68 45 45 46.5 46.5



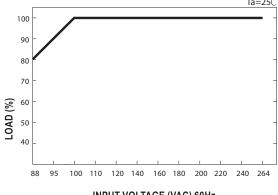
#### **Block Diagram**



#### **Derating Curve VS Ambient Temperature**



#### **Output Derating VS Input Voltage**



INPUT VOLTAGE (VAC) 60Hz