

100W Single Output Industrial DIN Rail Power Supply

PS-S100 Series



■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- ZCS/ZVS technology to reduce power dissipation
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- DC OK relay contact
- No load power consumption<1W
- NEC Class 2, limited power source (for 24V,48V only)
- LED indicator for power on
- 100% full load burn-in test
- 3 years warranty







SPECIFIC	ATION	5 ye	ears warranty	Cold us	
MODEL		PS-S10012	PS-S10024	PS-S10048	
OUTPUT	DC VOLTAGE	12V	24V	48V	
	RATED CURRENT	7.5A	4A	2A	
	CURRENT RANGE	0 ~ 7.5A	0 ~ 4A	0 ~ 2A	
	RATED POWER	90W	96W	96W	
	RIPPLE & NOISE (max.) Note.2	120mVp-p	150mVp-p	200mVp-p	
	VOLTAGE ADJ. RANGE	12 ~ 15V	24 ~ 30V	48 ~ 56V	
	VOLTAGE TOLERANCE Note.3		±1.0%	±1.0%	
	LINE REGULATION	±1.0%	±1.0%	±1.0%	
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	
			ms/115VAC at full load	±1.070	
	HOLD UP TIME (Typ.)	50ms/230VAC 20ms/115VAC at full load			
	, , ,	85 ~ 264VAC 120 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz PF≥0.95/230VAC PF≥0.98/115VAC at full load			
	POWER FACTOR (Typ.)			000/	
	EFFICIENCY (Typ.)	85%	86%	88%	
	AC CURRENT (Typ.)	1.3A/115VAC 0.8A/230VAC			
	INRUSH CURRENT (Typ.)	COLD START 30A/115VAC 60A/230VAC 60A/230VAC			
	LEAKAGE CURRENT	<pre><1mA / 240VAC</pre>			
PROTECTION	105 ~ 150% rated output power				
	OVERLOAD	Protection type : Constant current limiting	, recovers automatically after fault condition	is removed	
	OVER VOLTAGE	15.6 ~ 18V	31.2 ~ 36V	57.6 ~ 64.8V	
	Protection type : Shut down o/p voltage, re-power on to recover				
	OVER TEMPERATURE	90°C ±10°C (RTH2) detect on heatsink of power transistor			
	OVER IEWIPERATURE	Protection type : Shut down o/p voltage, re-power on to recover			
FUNCTION	DC OK SIGNAL	Relay contact rating(max.): 30V/1A resistive			
ENVIRONMENT	WORKING TEMP.	-10 ~ +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	Component: 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6			
	SAFETY STANDARDS	UL508, EN60950-1 approved, design refer to NEC CLASS 2 (for 24V,48V only)			
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC			
SAFETY &	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:>100M Ohms/500VDC 25°C 70%RH			
EMC	EMI CONDUCTION & RADIATION	Compliance to EN55011, EN55022 (CISPR22), EN61204-3 Class B			
(Note 4)	HARMONIC CURRENT	Compliance to EN61000-3-2,-3			
	EMS IMMUNITY	Compliance to EN61000-3-2,-3 Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, EN61000-6-2, EN61204-3, heavy industry level, criteria A			
OTHERS	MTBF				
		346K hrs min. MIL-HDBK-217F (25°C) 55*00*100mm (W*H*D)			
	DIMENSION	55*90*100mm (W*H*D)			
	PACKING	0.42Kg; 30pcs/13.6Kg/0.82CUFT			
NOTE	Ripple & noise are measure Tolerance : includes set up The power supply is consided EMC directives. Length of set up time is measure.	ed at 20MHz of bandwidth by using a 12" tolerance, line regulation and load regula ered a component which will be installed	into a final equipment. The final equipment the power supply may lead to increase of	47uf parallel capacitor. must be re-confirmed that it still meets	



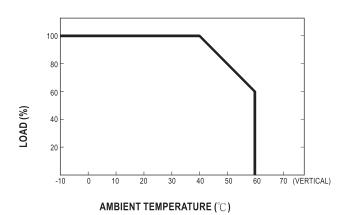
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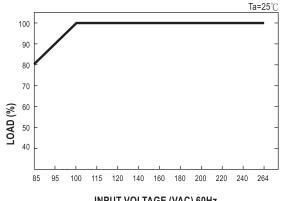
Mechanical Specification Case No.973A Unit:mm 35 100 $\oplus \oplus \oplus \oplus \oplus \oplus$ +V+V-V-V 6/0 DC OK O DC OK **⊘**\+ +V ADJ 90 ⊕ N L $\oplus \oplus \oplus$ 7.5 7.5 Install DIN rail TS35/7.5 or TS35/15 **Block Diagram** DC OK EMI FILTER RECTIFIERS POWER PFC & RECTIFIERS & FILTER CIRCUIT **SWITCHING** -V O.C.P. O.L.P. DETECTION FG O CIRCUIT PFC PWM CONTROL CONTROL 0.V.P. O.T.P. **DC OK Relay Contact**

Contact Close	When the output voltage reaches the adjusted output voltage.	
Contact Open	When the output voltage drop below 90% output voltage.	
Contact Ratings (max.)	30V/1A resistive load	

Derating Curve



Output Derating VS Input Voltage



INPUT VOLTAGE (VAC) 60Hz