

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







SPECIFIC	ATION	• 3 ye	ars warranty	FC CULJUS (
MODEL		PS-S10012	PS-S10024	PS-S10048	
ОИТРИТ	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%	±1.0%	
	LINE REGULATION	±1.0%	±1.0%	±1.0%	
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	
	SETUP, RISE TIME Note.5	3000ms, 50ms/230VAC 3000ms, 50ms/115VAC at full load			
	HOLD UP TIME (Typ.)	50ms/230VAC 20ms/115VAC at full load			
INPUT	VOLTAGE RANGE Note.6	6 85 ~ 264VAC 120 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz			
	POWER FACTOR (Typ.)	PF≥0.95/230VAC PF≥0.98/115VAC	C at full load		
	EFFICIENCY (Typ.)	85%	86%	88%	
	AC CURRENT (Typ.)	1.3A/115VAC 0.8A/230VAC			
	INRUSH CURRENT (Typ.)	COLD START 30A/115VAC 60A/230VAC			
	LEAKAGE CURRENT	<1mA/240VAC			
PROTECTION	OVERLOAD	105 ~ 150% rated output power			
		Protection type: Constant current limiting, recovers automatically after fault condition is removed			
		15.6 ~ 18V	31.2 ~ 36V	57.6 ~ 64.8V	
	OVER VOLTAGE	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			
		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 & EMC (Note 4)	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			
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:>100M Ohms/500VDC 25℃ 70%RH			
	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, ENV50204, EN55024, EN61000-6-2, EN61204-3, heavy industry level, criteria A			
OTHERS	MTBF	346K hrs min. MIL-HDBK-217F (25°C)			
	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 consid EMC directives. Length of set up time is me	ally mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. In ally mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. In all 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. In polerance, line regulation and load regulation. In the final equipment must be re-confirmed that it still meets the saured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time. In all y meets with the dereating curve for more detail.			



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Mechanical Specification Unit:mm Case No.973A 35 100 000000+V+V-V-V 60 DC OK O DC OK **⊘**\+ +V ADJ 90 ⊕ N L 7.5 7.5 Install DIN rail TS35/7.5 or TS35/15 **Block Diagram** DC OK EMI FILTER **RECTIFIERS** PFC **POWER** CIRCUIT **SWITCHING** -V RECTIFIERS FILTER 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

