Altech Corp.®

45W Single Output Industrial DIN Rail Power Supply

PS-45 Series

■ Features :

- AC input range selectable by switch
- Protections: Short circuit/Over load/Over voltage/Over temperature
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- UL 508 (industrial control equipment) approved
- LED indicator for power on
- 100% full load burn-in test
- Fixed switching frequency at 55KHz
- 3 years warranty

SPECIFICATION

MODEL		PS-4505	PS-4512	PS-4515	PS-4524
OUTPUT	DC VOLTAGE	5V	12V	15V	24V
	RATED CURRENT	5A	3.5A	2.8A	2A
	CURRENT RANGE	0 ~ 5A	0 ~3. 5A	0 ~ 2.8A	0 ~ 2A
	RATED POWER	25W	42W	42W	48W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	200mVp-p	240mVp-p	480mVp-p
	VOLTAGE ADJ. RANGE	4.75 ~ 5.5V	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%
	SETUP, RISE, HOLD TIME	800ms, 60ms, 50ms/230VAC at full load			
INPUT	VOLTAGE RANGE	85 ~ 264VAC 120 ~ 370VDC			
	FREQUENCY RANGE	47~63Hz			
	EFFICIENCY (Typ.)	72%	77%	77%	80%
	AC CURRENT	1.5A/115VAC 0.75A/230VAC			
	INRUSH CURRENT (max.)	COLD START 30A/115VAC 60A/230VAC			
	LEAKAGE CURRENT	<1mA / 240VAC			
PROTECTION	OVER LOAD	105 ~ 150% rated output power			
		Protection type : Constant current limiting, recovers automatically after fault condition is removed			
	OVER VOLTAGE	5.75 ~ 6.75V	13.8 ~ 16.2V	17.25 ~ 20.25V	27.6 ~ 32.4V
		Shut down o/p voltage, re-power on to recover			
	OVER TEMPERATURE	Tj 135℃ typically (U1) Detect on heat sink of power transistor			
		Protection type : Shut down o/p voltage, recovers automatically after temperature goes down			
ENVIRONMENT	WORKING TEMP.	-10 ~ +50℃ (Refer to output load derating curve)			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)			
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes			
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL508, EN60950 Approved			
	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) 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 (EN50082-2) Heavy industry level, criteria A			
OTHERS	MTBF	364.6K hrs min. MIL-HDBK-217F (25℃)			
	DIMENSION	93*78*67mm (L*W*H)			
	PACKING	0.31Kg; 48pcs/16.1Kg/1.3CUFT			
NOTE		℃			

35 Royal Road, Flemington, NJ 08822-6000 • (tel.) 908-806-9400 • (fax) 908-806-9490 • www.altechcorp.com

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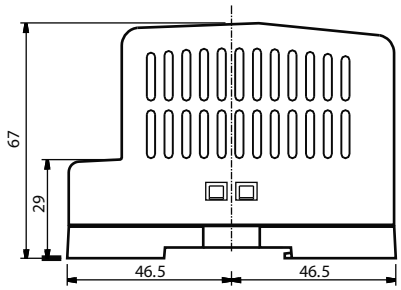
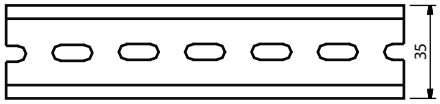
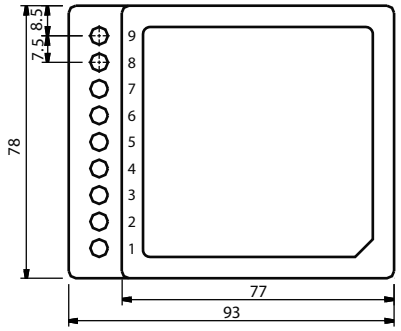
PS-45 Series

Mechanical Specification





Install DIN rail TS35/7.5 or TS35/15

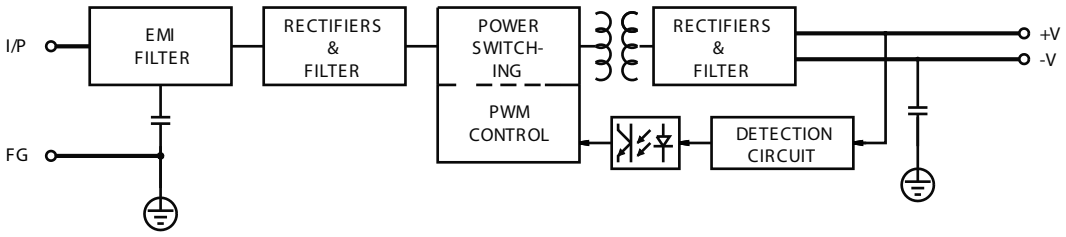


Terminal Pin. No Assignment

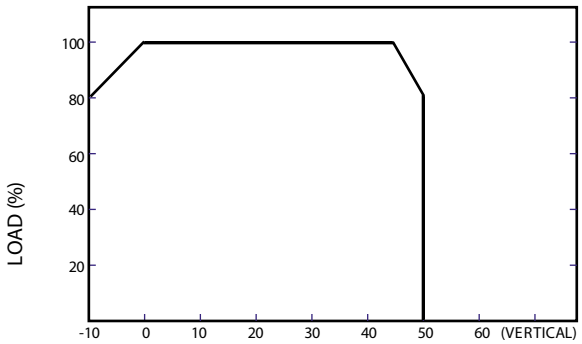
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	6,7	DC OUTPUT+V
2	AC/N	8	LED
3	FG ⏚	9	+V ADJ.
4,5	DC OUTPUT -V		

Block Diagram

fosc : 100KHz

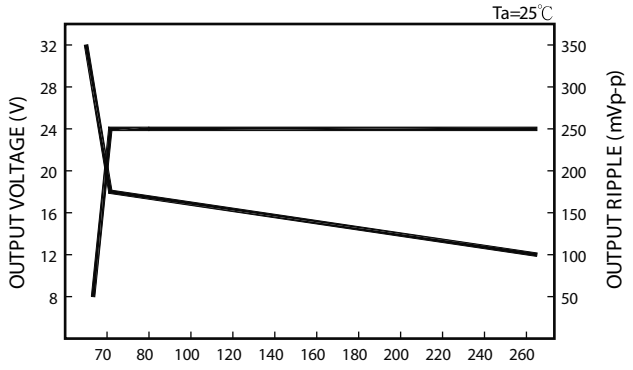


Output Derating



AMBIENT TEMPERATURE (℃)

Static Characteristics (24V)



INPUT VOLTAGE (V) 60Hz

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