



Wall Industries, Inc.

PSATC Series
10 Watt

Single and Dual Outputs
Encapsulated AC/DC Power Supply

FEATURES

- High Efficiency
- 2 Year Warranty
- Regulated Output
- Low Ripple and Noise
- CE, cUL, TUV Approval
- Fully Encapsulated Plastic Case
- Switching Power Module for PCB Mounting
- Universal Input Range 90-260VAC, 47-440 Hz



SPECIFICATIONS: PSATC Series

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.
We reserve the right to change specifications based on technological advances.

INPUT SPECIFICATIONS

Input Voltage Range	90 ~ 260VAC or 120 ~ 370VDC
Input Frequency	47 to 440Hz
Input Current (Full Load)	200mA max @ 115VAC / 130mA max @ 230VAC
Inrush Current (<2ms)	10A max @ 115VAC / 20A max @230VAC
Leakage Current	0.75mA max

OUTPUT SPECIFICATIONS

Output Voltage	See Table
Output Power Range	10 Watts max.
Voltage Accuracy	±2%
Line Regulation	±0.3% typical
Load Regulation (5% to 100%)	±0.5% typical
Output Current	See Table
Minimum Load	See Table
Ripple & Noise	< 0.5% Vout +50mV max (Vp-p)
Maximum Capacitive Load	470 - 23,000µF depending on model
Hold-Up Time	15ms min.
Current Limitation (Dual Outputs)	120 ~ 180% fold back
Temperature Coefficient	±0.02%/°C

PROTECTION

Over Current Protection	Hiccup technique, auto-recovery
Over Voltage Protection	Zener diode clamp
Short Circuit Protection	Hiccup mode, indefinite (automatic recovery)
Input Fuse Recommendation	1.5A slow blow type

GENERAL SPECIFICATIONS

Switching Frequency	100KHz
Efficiency	See Table
Isolation Voltage (Input to Output)	3000VAC
Isolation Voltage (Input to Field Ground)	1500VAC
Isolation Voltage (Output to Field Ground)	500VAC

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-25°C to +71°C
Storage Temperature	-40°C to +85°C
Humidity	95% RH
Cooling	Free air convection
MTBF	> 250,000 hours @ 25°C (MIL-HDBK-217F)

PHYSICAL SPECIFICATIONS

Weight	100g
Case Material	Plastic resin + fiberglass (flammability to UL 94V-0)
Dimensions	2.52(L) x 1.77(W) x 0.81(H) inches (64.0(L) x 45.0(W) x 20.5(H) mm)

SAFETY & EMC

Agency Approvals	UL/cUL, CE, TUV
EMI (Conducted & Radiated Emission)	EN 55022 class B
EMS (Noise Immunity)	EN 50082-1

OUTPUT VOLTAGE / CURRENT RATING CHART

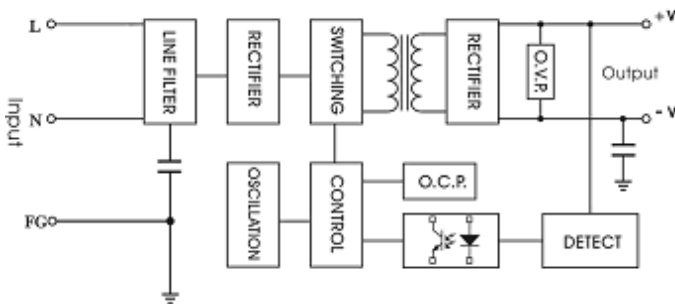
Model Number	Output Voltage	Minimum Load	Output Current	Max Output Power	Efficiency
PSATC-3.3S	3.3 VDC	4%	3000mA	10W	68%
PSATC-5S	5 VDC	5%	2000mA	10W	71%
PSATC-12S	12 VDC	5%	833mA	10W	76%
PSATC-15S	15 VDC	3%	666mA	10W	76%
PSATC-24S	24 VDC	5%	416mA	10W	80%
PSATC-5D	±5 VDC	1%	±800mA	8W	72%
PSATC-12D	±12 VDC	3%	±380mA	10W	77%
PSATC-15D	±15 VDC	1%	±300mA	10W	77%

NOTES

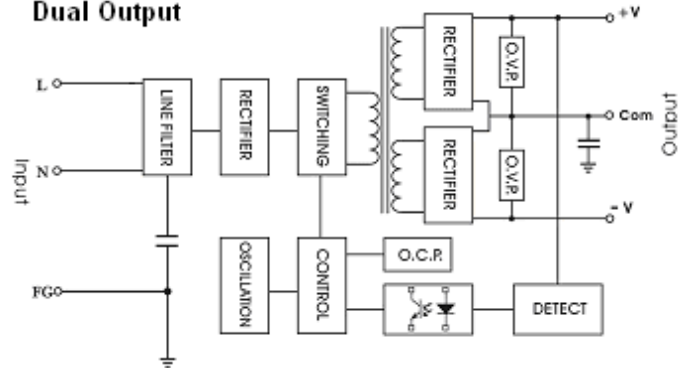
1. Dimensions of the mechanical drawing are shown in millimeters.
2. Weight of the unit is 100 grams.

BLOCK DIAGRAMS

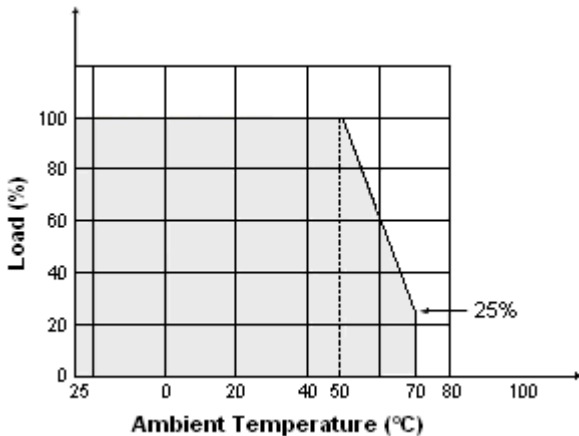
Single Output



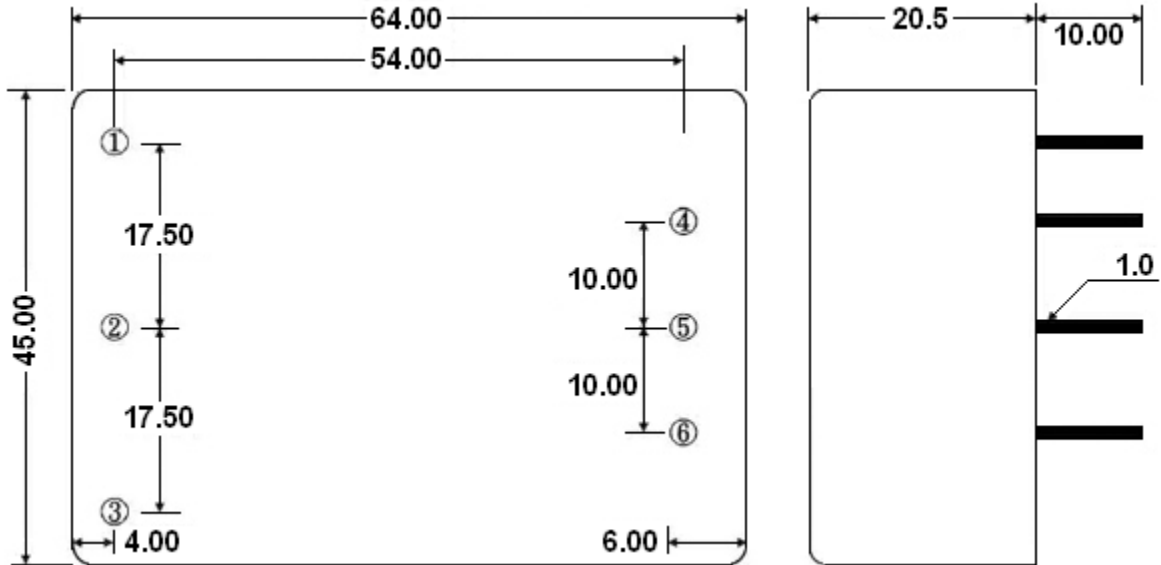
Dual Output



DERATING CURVE



MECHANICAL DRAWING



PIN CONNECTIONS		
PIN #	SINGLE	DUAL
1	FG	FG
2	AC IN (N)	AC IN (N)
3	AC IN (L)	AC IN (L)
4	-DC OUT	-DC OUT
5	NO PIN	COMMON
6	+DC OUT	+DC OUT