

PSAW36NA Power Supply Series (36W)



Features:

- Class II Configuration
- Efficiency Level VI
- <100mW No Load Power Consumption
- Short Circuit Protection
- Overload Protection
- No Load Operation



Description:

The PSAW36NA series of AC/DC wall mount switching power supplies provide 20-36 watts of continuous power. They are Class II devices with fixed AC blades that are optimized for standard North American outlets. All models meet FCC class B emission limits, and comply with UL, IEC, DOE level VI, and more.

Model Number	Voltage	Current	Total Power	Output Regulation	Ripple & Noise (P-P)	Efficiency Level
PSAW36NA-10-B2 ¹	5VDC	4A	20W	±5%	200mV	VI
PSAW36NA-11-B2	9VDC	4A	36W	±5%	200mV	VI
PSAW36NA-12-B2	12VDC	3A	36W	±5%	200mV	VI
PSAW36NA-13-B2	15VDC	2.4A	36W	±5%	200mV	VI
PSAW36NA-13-1-B2	18VDC	2A	36W	±5%	200mV	VI
PSAW36NA-13-2-B2	19VDC	1.89A	36W	±5%	200mV	VI
PSAW36NA-14-B2	24VDC	1.5A	36W	±5%	200mV	VI
PSAW36NA-17-B2	36VDC	1A	36W	±5%	200mV	VI

Notes:

1. PSAW36I-10-B2 is equipped with a 1m output cable. All other models are equipped with a 1.2m output cable as standard.
2. Ripple and noise is measured at output within 20MHz bandwidth, at rated line voltage and full load, with a 10 µF tantalum capacitor in parallel with a 0.1 µF ceramic capacitor across the output.

Specifications	
Input	
Input Voltage	90-264VAC
Input Frequency	47-63Hz
Input Current	1.3A Max.
Inrush Current	<40A peak @ 264VAC, cold start at 25°C
No Load Power Consumption	<100mW, meets DOE level VI Requirements
Output	
Total Output	36W, see table for details
Output Voltage	See table
Turn on Time	<3S @100-200VAC input & full output load
Rise Time	20mS max. @full load
Fall Time	20mS max. @full load
Line Regulation	± 1% of rated output voltage at full load
Load Regulation	± 5% of rated voltage from 0 to full load
Transient Response	Maximum voltage excursion of 5% for 25% load change with 0.25A/uS slew rate
Efficiency	Meets DOE level VI requirements
Protection Features	
Overcurrent Protection	150-200% Max. of rated current. Auto-restart when fault removed.
Short Circuit Protection	Hiccup Mode. Auto Recovery
Ingress	IP22 Compliant
Environmental	
Operating Temperature	0°C to 60°C (Derate output power linearly from 100% at 40°C to 50% at 60°C)
Storage Temperature	-20°C to +80°C
Operating Humidity	10% - 90% non-condensing
General Specifications	
Dimensions	3.82"(97.1mm) x 1.78"(45.1mm) x 1.26"(32mm)
Weight	0.44lbs
MTBF	>100,000 hours per MIL-HDBK-217F at full load and 25°C ambient
AC Input Receptacle	Fixed North American AC Blade (others available)
DC output Plug	Barrel Type: 5.5mm x 2.5mm x 10mm Center positive (others available)

Specifications Continued

Safety

Approved to USA/Canada	UL60950-1 CUL60950-1
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*Consult with TT Electronics for information on additional country safety approvals

EMC

EMC	FCC Class B Radiated & Conducted
Harmonic Currents	IEC 61000-3-2
Voltage Flicker	IEC 61000-3-3
Electrostatic Discharge	IEC 61000-4-2: ± 8 KV air, ± 4 KV contact
Radiated Immunity	IEC 61000-4-3: 3V/m
EFT/Burst	IEC 61000-4-4: ± 1 KV
Surge Immunity	IEC 61000-4-5: ± 1 KV differential mode
Conducted Immunity	IEC 61000-4-6: 3Vrms
Magnetic Field	IEC 61000-4-8: 1A/m
Dips/Interruptions	IEC 61000-4-11: 30% reduction for 500 ms, and >95% reduction for 10 ms

Mechanical Outline

Diagrams

