

PEAW20NA Power Supply Series (20W)

Features:

- Class II Configuration
- Efficiency Level VI
- Short Circuit Protection
- Overload Protection
- Overvoltage Protection
- No Load Operation



Description:

The PEAMW20NA series of AC/DC wall mount switching power supplies provide 15-20 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 and EN55011 class B emission limits, and comply with UL, IEC, DOE level VI, CE, and more.

Model Number	Voltage	Current	Total Power	Output Regulation	Ripple & Noise (P-P)	Efficiency Level
PEAW20NA-10-B1	5VDC	3A	15W	±5%	100mV	VI
PEAW20NA-10-1-B1	6VDC	2.5A	15W	±5%	100mV	VI
PEAW20NA-11-B1	9VDC	2.22A	20W	±5%	180mV	VI
PEAW20NA-12-B1	12VDC	1.67A	20W	±5%	180mV	VI
PEAW20NA-13-B1	15VDC	1.33A	20W	±5%	200mV	VI
PEAW20NA-13-1-B1	18VDC	1.11A	20W	±5%	200mV	VI
PEAW20NA-13-2-B1	19VDC	1.05A	20W	±5%	200mV	VI
PEAW20NA-14-B1	24VDC	0.83A	20W	±5%	250mV	VI
PEAW20NA-17-B1	36VDC	0.55A	20W	±5%	360mV	VI
PEAW20NA-18-B1	48VDC	0.42A	20W	±5%	360mV	VI

Notes:

- Ripple & Noise is measured using a 20MHz bandwidth oscilloscope with a 0.1uf ceramic capacitor and 4.7uf electrolytic capacitor in parallel across the output at full load and nominal line voltage.

Specifications	
Input	
Input Voltage	90-264VAC
Input Frequency	47-63Hz
Input Current	<0.8A @ 115VAC input with full load <0.4A @ 230VAC input with full load
Safety Isolation	3.0kVAC Input to Output
Inrush Current	<30A peak @ 115VAC, cold start at 25°C <60A peak @ 230VAC, cold start at 25°C
No Load Power	<100mW
Output	
Total Output	15W-20W, see table
Output Voltage	See table
Hold Up Time	>8.3m sec @ full load and 115VAC/60Hz input
Turn on Time	<3 seconds
Efficiency	Meets DOE level VI Requirements
Minimum Load	No Minimum Load
Line Regulation	<± 1% of rated output voltage at full load
Protection Features	
Overvoltage Protection	180% Max. of rated voltage. Latching mode. Cycle AC for recovery
Overcurrent Protection	180% 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 +85°C
Operating Humidity	10% - 90% non-condensing
Storage Humidity	5% - 90% non-condensing
Operating Altitude	5000m
General Specifications	
Dimensions	2.62"(66.5mm) x 1.02"(26mm) x 1.79"(45.5mm)
Weight	0.27lbs
MTBF	>100,000 hours per MIL-HDBK-217F at full load and 25°C ambient
AC Input Receptacle	Fixed North American Plug
DC output Plug	Barrel Type: 5.5mm x 2.1mm x 9.5mm Center positive (others upon request)

Specifications Continued

Safety

Approved to USA/Canada	UL62368-1 cUL62368-1
Approved to Europe	TUV EN62368-1 CB IEC62368-1
*Consult with TT Electronics for information on additional country safety approvals	

EMC

EMC	FCC Part 15 Radiated & Conducted CISPR32 Class B Radiated & Conducted EN55032 Class B Radiated & Conducted
Harmonic Currents	IEC 61000-3-2
Voltage Flicker	IEC 61000-3-3
Electrostatic Discharge	IEC 61000-4-2: 8kV Air, 4kV contact
Radiated Immunity	IEC 61000-4-3: 3V/m
EFT/Burst	IEC 61000-4-4: ± 1 kV
Surge Immunity	IEC 61000-4-5: 2005 ± 1 kV
Conducted Immunity	IEC 61000-4-6: 3Vrms
Magnetic Field	IEC 61000-4-8: 1A/m
Dips/Interruptions	IEC 61000-4-11: 30% reduction for 500ms, >95% reduction for 10ms.

Diagrams

