

PEAD180 Power Supply Series (180W)



Features:

- Class I and Class II Versions
- Efficiency Level VI
- Active Power Factor Correction
- CoC Tier 2
- Overload Protection
- Short Circuit Protection
- No Load Operation
- 100% Burn-in/ Hi-Pot Testing
- RoHS Compliant



*Consult with TT Electronics for information on safety approvals per model.



Description:

The PEAD180 series of AC/DC switching power supplies are for 160-180 watts of continuous power. They are available as Class I or Class II devices with the inlet of the IEC320/C14, C6, C8, or C18 to mate with an interchangeable cord for world-wide use. All models meet FCC, EN55032, and CISPR32 class B emission limits, and comply with UL, IEC, DOE level VI, CE, and more.

Model	Voltage	Max Current	Total Power	Load Regulation	Line Regulation	Ripple & Noise (P-P)
PEAD180-12	12VDC	13.33A	160W	±5%	±1%	240mV
PEAD180-13	15VDC	10.66A	160W	±5%	±1%	240mV
PEAD180-13-2	19VDC	9.47A	180W	±5%	±1%	360mV
PEAD180-14	24VDC	7.5A	180W	±5%	±1%	360mV
PEAD180-17	36VDC	5.0A	180W	±5%	±1%	630mV
PEAD180-18	48VDC	3.75A	180W	±5%	±1%	840mV
PEAD180-19-1	56VDC	3.21A	180W	±5%	±1%	840mV

NOTES:

C14 Standard Receptacle.

For C6 Class I Receptacle , model number is PEAD180S, for example PEAD180S-12.

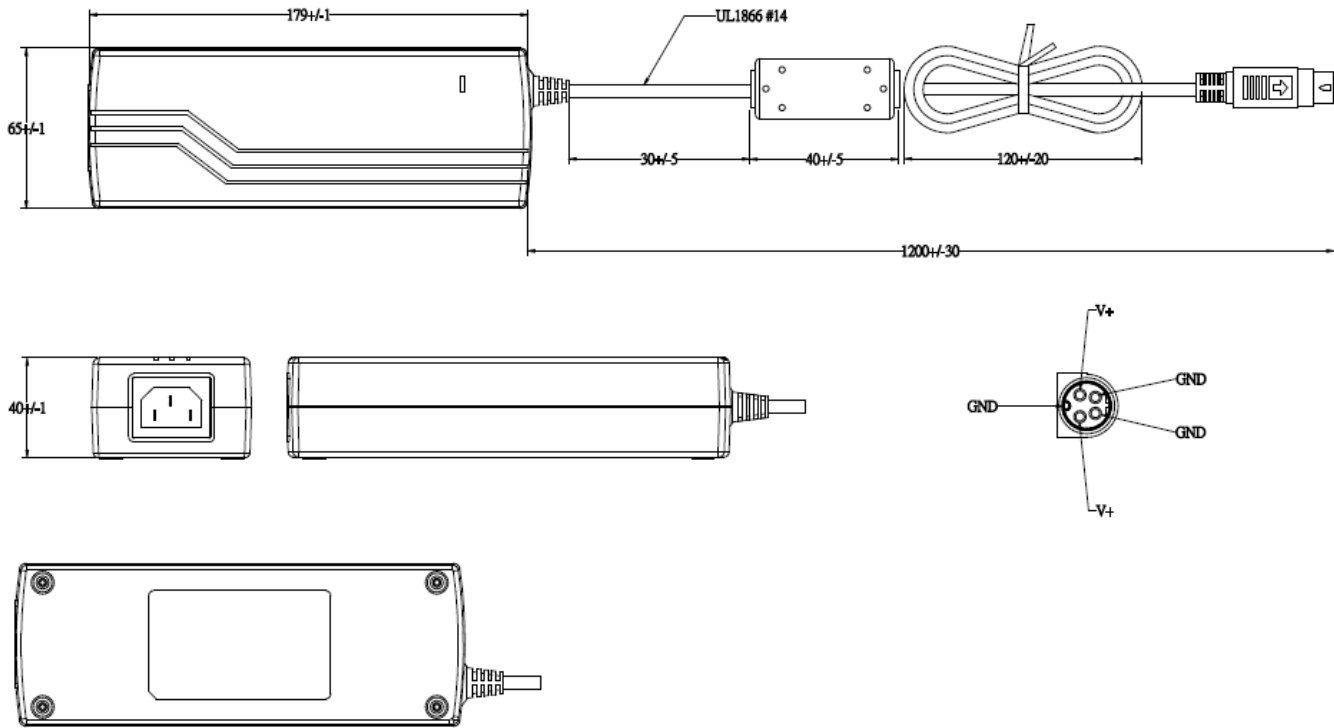
For C8 Class II Receptacle , model number is PEAD180SF, for example PEAD180SF-12.

For C18 Class II Receptacle, model number is PEAD180F, for example PEAD180F-12.

Specifications	
Input	
Input Voltage	90-264VAC
Input Frequency	47-63 Hz
Input Current	2.5A max at 115 VAC 1.3A max at 230 VAC
Inrush Current	<60A peak at 115VAC <120A peak at 230VAC, cold start, 25°C
Safety Isolation	3.0kVAC Input to Output 1.5kVAC Input to Ground
Leakage Current	250µA max. at 240VAC
Power Factor	>0.95 @100VAC and >0.9 @240Vac
Output	
Total Output Power	180W max
Output Voltage	See Table
Hold Up Time	≥10mS typical/full load/115VAC
Average Active efficiency	>88% with 115VAC/60Hz & 230Vac/50Hz input voltage (CEC level VI compliant)
No Load Power Consumption	<210mW at 230VAC/50Hz
Turn on Delay	<3 seconds
Rise Time	<50mS at full load from 10%-90% of output voltage
Minimum Load	No minimum load
Protection Features	
Overvoltage Protection	150% Max. of nominal. Cycle AC power to reset after fault is removed
Overcurrent Protection	110%-150% of maximum output current. Auto recovery
Short Circuit	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
Altitude	<5000m operational and storage
General Specifications	
Dimensions	7.04"(178.8mm)L x 2.56"(65mm)W x 1.57"(39.9mm)H
Weight	1.55lb
MTBF	>100,000 hours per MIL-HDBK-217F at full load and 25°C ambient
AC Input Receptacle	IEC60320 C14, C6, C8, C18
DC output Plug	Kycon KPP-4P equivalent, others available upon request

Specifications Continued	
Safety	
Approvals	UL62368-1 cUL623628-1 TUV EN62368-1/A12: 2011 CB Report EN62368-1
*Consult with TT Electronics for information on additional country safety approvals	
EMC	
Emissions	FCC Class B Radiated & Conducted CISPR32 Class B Radiated & Conducted EN55032 Class B Radiated & Conducted EN55024: 2010
Harmonic Currents Voltage Flicker Electrostatic Discharge Radiated Immunity EFT Surge Immunity Conducted Immunity Power Frequency Magnetic Field Immunity Dips/Interruptions	IEC 61000-3-2 IEC 61000-3-3 IEC 61000-4-2: 8kV Air, 6kV contact IEC 61000-4-3: 3V/m IEC 61000-4-4: +/-1kV IEC 61000-4-5: 2005 1kV diff, 2kV com Optional 2kV diff, 4kV com IEC 61000-4-6: 3Vrms IEC 61000-4-8: 1A/m IEC 61000-4-11: 30% reduction for 500ms, >95% reduction for 10ms.

Diagrams



Thermal Derating Curve

