180 Watts

AML180 Series



- Energy Star Level V
- CEC2008 & EISA2007 Compliant
- High Power Density
- Single Outputs from 18 V to 48 V
- High Efficiency
- 0 °C to +70 °C Operating Temperature
- 3 Year Warranty

Specification

Input

Input Voltage	• 90-264 VAC
Input Frequency	• 47-63 Hz
Input Current	• 2.5 A rms at 115 VAC, 1.25 A rms at 230 VAC
Inrush Current	• 60 A at 115 VAC, 120 A at 230 VAC, cold start +25 °C
Power Factor	• 0.95 typical
Earth Leakage Current	• 150 µA max at 115 VAC, 250 µA max at 230 VAC
Input Protection	• Internal T4 A/250 V fuse
Standby Power Consumption	• <0.5 W

Output

Output Voltage	• See table
Output Voltage Trim	• Not user-adjustable
Initial Set Accuracy	• ±2% maximum at 100% load
Minimum Load	• No minimum load required
Start Up Delay	• 3 s maximum at 100 VAC
Hold Up Time	• 5 ms minimum at 100 VAC
Line Regulation	• ±0.5% maximum
Load Regulation	• See table
Transient Response	• 4% max. deviation, recovery to within 1% in 500 µs for a 25% load change
Ripple & Noise	• 2% max pk-pk (see note 1)
Overvoltage Protection	• 110-140% Vnom, recycle input to reset
Overtemperature Protection	• Unit shuts down, recycle input to reset
Overload Protection	• 110-150%, auto recovery
Short Circuit Protection	• Trip and restart (Hiccup mode)
Temperature Coefficient	• 0.04%/°C maximum

General

Efficiency	• 87% min
Isolation	• 3000 VAC Input to Output 1500 VAC Input to Ground Output return is electrically connected to Input Earth
Switching Frequency	• 20-80 kHz variable
Power Density	• 5.0 W/In^3
MTBF	• >100 kHrs to MIL-HDBK-217F at 25 °C, GB

Environmental

Operating Temperature	• 0 °C to 70 °C, derate from 100% power at 40 °C to 60% power at 70 °C
Operating Humidity	• 10-95% RH, non-condensing
Storage Temperature	• -20 °C to +80 °C
Operating Altitude	• 3000 m
Shock	• 30 g, 10 ms on 3 axes
Vibration	• 5-100 Hz, 2.31 m/s^2, 20 mins, 3 axes

EMC & Safety

Emissions	• EN55022/FCC, Class B conducted EN55022/FCC, Class B radiated
Harmonic Currents	• EN61000-3-2, Class A
Voltage Flicker	• EN61000-3-3
ESD Immunity	• EN61000-4-2, ±4 kV contact, ±8 kV air discharge Perf Criteria A
Radiated Immunity	• EN61000-4-3, 3 V/m Perf Criteria A
EFT/Burst	• EN61000-4-4, level 2 Perf Criteria A
Surge	• EN61000-4-5, installation class 3 Perf Criteria A
Conducted Immunity	• EN61000-4-6, 3 Vrms Perf Criteria A
Magnetic Field	• EN61000-4-8, 1 A/m Perf Criteria A
Dips & Interruptions	• EN61000-4-11, 30% for 10 ms, 60% 100 ms, 100% 5000 ms, Perf Criteria A, B, B
Safety Approvals	• EN60950, UL60950, CSA22.2 No. 60950 per cUL, CE Mark

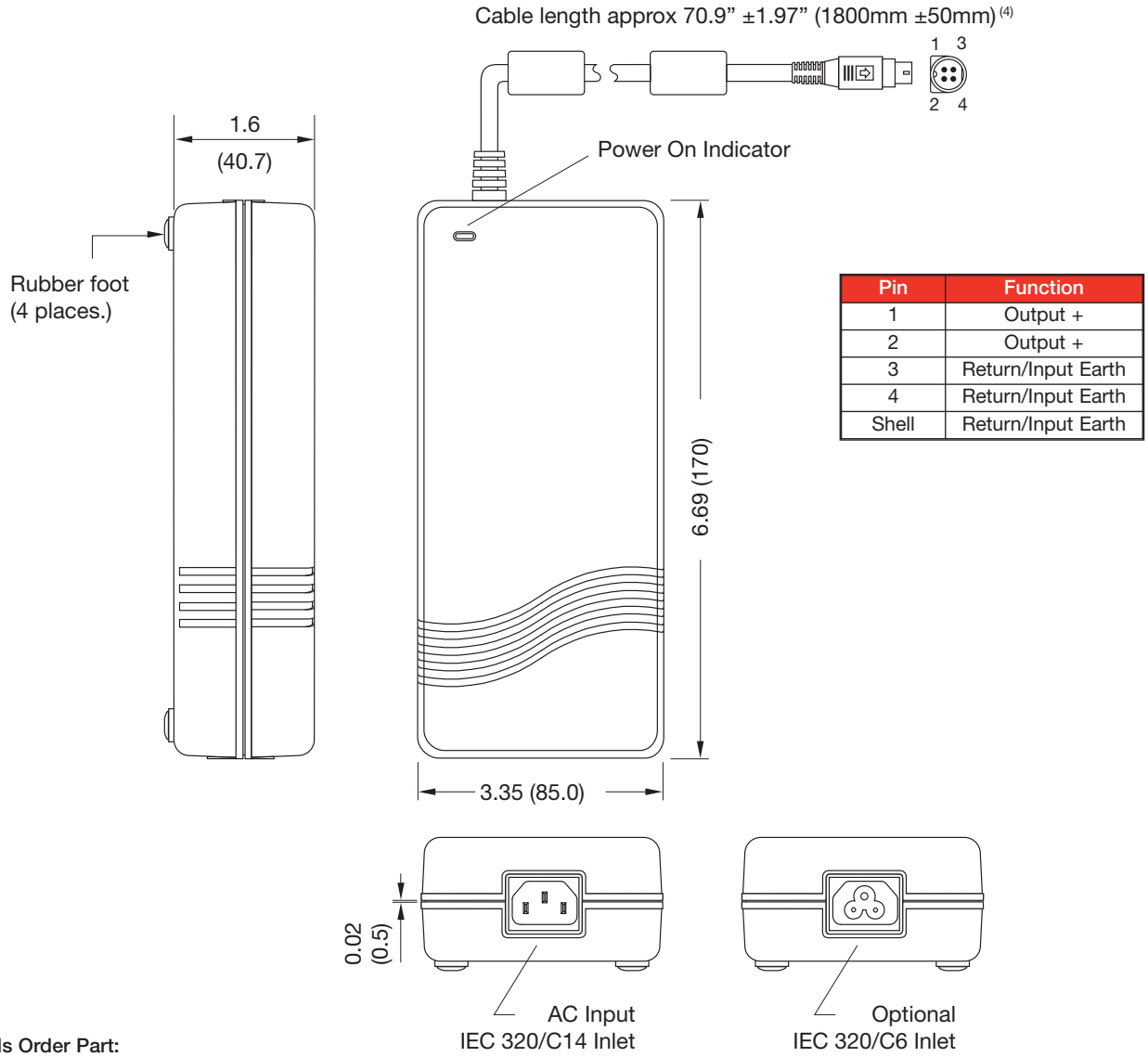
Models and Ratings

Output Power	Output Voltage	Output Current	Total Regulation[2]	Model Number[3]
180 W	18 V	10.00 A	5%	AML180PS18
180 W	19 V	9.47 A	5%	AML180PS19
180 W	24 V	7.50 A	5%	AML180PS24
180 W	48 V	3.75 A	5%	AML180PS48

Notes

1. Ripple and noise measured at 20 MHz bandwidth with a 47 µF tantalum and 0.1 µF ceramic cap connected at the measurement point.
2. Total regulation includes initial set accuracy, line and load regulation.
3. For optional IEC320-C6 input connector, add suffix 'C6' to end of part number.

Mechanical Details



Pin	Function
1	Output +
2	Output +
3	Return/Input Earth
4	Return/Input Earth
Shell	Return/Input Earth

Mains Leads Order Part:
UK - C14 inlet: UK-MAINS-IEC, C6 inlet: UK-MAINS-5
European - C14 inlet: EU-MAINS-IEC, C6 inlet: EU-MAINS-5
US - C14 inlet: US-MAINS-IEC, C6 inlet: US-MAINS-5

Notes

1. Dimensions shown in inches (mm). Tolerance is 0.02 (0.5) maximum, except output cable length.
2. Weight: 1.89 lb (860 g).
3. Optional output connectors available. Consult sales.
4. Output connector is non locking 4 pin DC power plug and mates with Kycon KPJ-4S or equivalent.
5. Mains lead length is 76" (1930 mm) approx