

AEL60 SERIES

AC/DC Single Output: 60 Watts



Features

- Energy Efficiency Level V
- CEC 2008 and EISA 2007 Compliant
- Limited Power Source Approval
- China Compulsory Certification (CCC) Qualified
- +70 °C Operating Temperature
- Compact Dimensions
- 3 Year Warranty
- AS/NZ 60950 approval-N24134



Specification

Input

Input Voltage	• 90-264 VAC
Input Frequency	• 47-63 Hz
Input Current	• AEL15/20: 0.4 A max at 115 VAC AEL40: 1.0 A max at 115 VAC AEL60: 1.6 A max at 115 VAC AEL80: 1.1 A max at 115 VAC
Inrush Current	• AEL15/20: 15/30 A max for 115/230 VAC, AEL40: 25/50 A max for 115/230 VAC, AEL60: 35/70 A max for 115/230 VAC, AEL80: 45/92 A max for 115/230 VAC, cold start at 25 °C
Earth Leakage Current	• 0.75 mA at 240 VAC
Power Factor	• EN61000-3-2, Class A
Input Protection	• Internal fuse in line, AEL15/20: T1 A, 250 V AEL40: T2 A, 250 V AEL60/80: T3.15 A, 250 V
No Load Input Power	• 0.5 W maximum, model dependent

Output

Output Voltage	• See tables
Minimum Load	• No minimum load required
Hold Up Time	• AEL15: 5 ms min, AEL20/40: 12 ms min, AEL60/80: 16 ms min, at full load 110 VAC
Start Up Delay	• AEL20/40: 0.5 s, AEL15/60/80: 2.0 s max at full load 100 VAC
Transient Response	• 2% max deviation, recovery to within 1% of nominal in 500 µs for 50% load change
Line Regulation	• See tables
Load Regulation	• See tables
Ripple & Noise	• 1% pk-pk, 20 MHz bandwidth
Overvoltage Protection	• 112-132% (AEL40/60/80 only)
Overload Protection	• 110-150% (AEL20/40/60/80 only)
Short Circuit Protection	• Trip & restart (hiccup mode), auto recovery
Temperature Coefficient	• ±0.04%/°C

General

Efficiency	• See tables
Energy Efficiency	• Model dependent, see tables
Isolation	• 3000 VAC Input to Output 1500 VAC Input to Ground* 500 VDC Output to Ground* *Not C8 version
Switching Frequency	• 63 kHz typical
MTBF	• >100 kHrs to MIL-HDBK-217F at 25 °C, GB

Environmental

Operating Temperature	• -20 °C to +70 °C, derate linearly from 100% power at +40 °C to 50% power at +70 °C
Storage Temperature	• -40 °C to +85 °C
Cooling	• Convection cooled
Operating Humidity	• 5-95% RH, non-condensing
Operating Altitude	• 3000 m
Shock	• 10 g, 10 ms on 3 axes

EMC & Safety

Emissions	• EN55022 level B conducted & radiated
Harmonic Current	• EN61000-3-2 class A
Voltage Flicker	• EN61000-3-3
ESD Immunity	• EN61000-4-2, level 3, 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, level 2, Perf criteria A
Magnetic Field	• EN61000-4-8, 1 A/m, Perf criteria A
Dips & Interruptions	• EN61000-4-11, 30% 10 ms, 60% 100 ms, 100% 5000 ms Perf Criteria A, B, B
Safety Approvals	• EN60950-1: UL/cUL60950-1, Approved as Limited Power Source (AEL15-60 only), China Compulsory Certification (CCC) qualified.

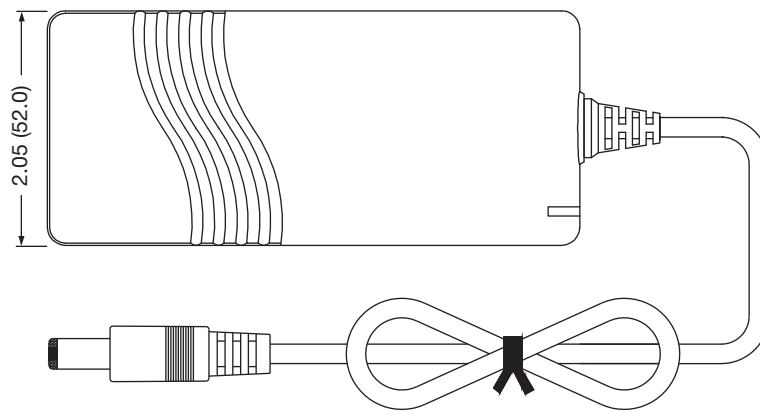
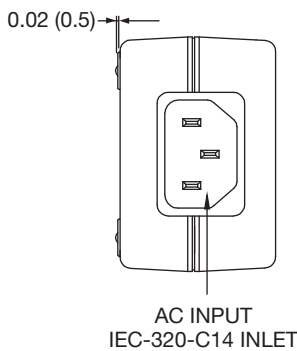
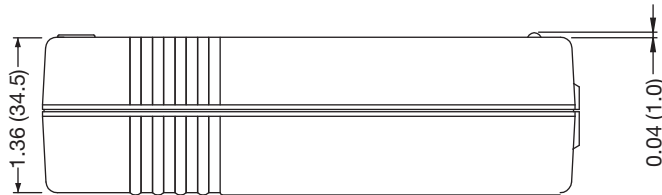
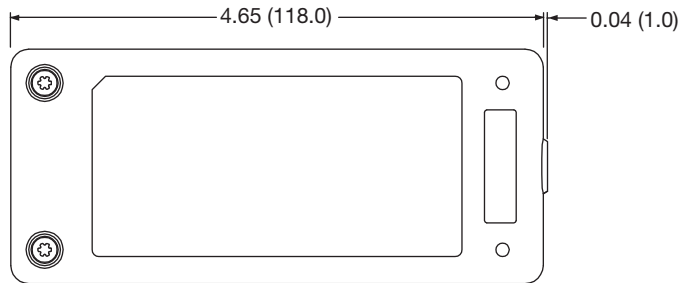
Models and Ratings

Max Output Power	Output Voltage ⁽²⁾	Output Current	Total Regulation ⁽¹⁾	Efficiency ⁽³⁾	Model Number
57 W	12 VDC	4.75 A	5%	87%	AEL60US12
63 W	15 VDC	4.20 A	5%	88%	AEL60US15
	18 VDC	3.50 A	5%	88%	AEL60US18
	24 VDC	2.63 A	5%	88%	AEL60US24
	30 VDC	2.15 A	5%	90%	AEL60US30
	36 VDC	1.75 A	3%	90%	AEL60US36
	48 VDC	1.31 A	3%	90%	AEL60US48

Notes

1. Total regulation includes line regulation and load regulation.
2. Other output voltages available, contact sales for details.
3. Minimum average of efficiencies measured at 25%, 50%, 75% & 100% load.

Mechanical Details



Exchangeable Plug

Notes

1. All dimensions are shown in inches (mm). Tolerance ± 0.04 (± 1.0) max.
2. Output connector: 0.22 (5.5) outer diameter barrel, 0.10 (2.5) inner diameter barrel with centre positive (+) and outer shell negative (-). Length is 0.433 (11.0).
3. Output cable length is 48" (1220mm) approx.
4. Weight: 0.79 lbs (340 g).
5. For European mains lead order part: EU-MAINS-IEC.
6. For UK mains lead order part: UK-MAINS-IEC.
7. For US mains lead order part: US-MAINS-IEC.
8. Mains lead length is 78" (2000 mm) approx