

6-25 Watts

AEP Series



- Universal Input 90–264 VAC
- Continuous Short Circuit Protection
- EN550022 Class B
- Low Cost
- 6, 15 and 25 Watt Versions
- Non-standard Outputs Available
- 3 Year Warranty

Specification

Input

Input Voltage	• 90-264 VAC
Input Frequency	• 47-63 Hz
Input Current	• 0.5/0.25 A max at 115/230 VAC (6 W & 15 W) 0.7/0.3 A at 115/230 VAC (25 W)
Inrush Current	• 15/30 A max at 115/230 VAC (6 W) 25/50 A max at 115/230 VAC (15 W & 25 W)
Power Factor	• Meets EN61000-3-2, Class A

Output

Output Voltage	• See tables
Initial Set Accuracy	• See tables
Minimum Load	• No minimum load requirement
Start Up Delay	• 6 W 100 ms, 15 W 270 ms, 25 W 280 ms
Hold Up Time	• 10 ms typical at 115 VAC, 60 ms typical at 230 VAC
Line Regulation	• See tables
Load Regulation	• See tables
Ripple & Noise	• 1 % pk-pk max (see note 2)
Overvoltage Protection	• 125% typical
Overload Protection	• Trip and restart (Hiccup mode)
Short Circuit Protection	• Constant current (6 W) Continuous (auto recovery) (15 W & 25 W)
Temp. Coefficient	• $\pm 0.05\%/^{\circ}\text{C}$

General

Efficiency	• Typically 67% for 6 W, 75% for 15 W, 80% for 25 W
Isolation	• 3000 VAC Input to Output
Switching Frequency	• 30-200 kHz (6 W) 30-35 kHz typical (15 W & 25 W)
Power Density	• 0.75 W/in ³ (6W), 1.87 W/in ³ (15 W) 1.88 W/in ³ (25 W)
MTBF	• >200 kHrs to MIL-HDBK-217F at 25 °C, GB

Environmental

Operating Temperature	• 0 °C to +60 °C, derate linearly from +40 °C at 100% load to 60% load at +60 °C (6 W & AEP15 5 V-13.6 V), 50% load at 60 °C (25 W & AEP15 15 V-24 V)
Storage Temperature	• -20 °C to +85 °C
Operating Humidity	• 93% RH, non-condensing
Operating Altitude	• 2000 m

EMC & Safety

Emissions	• EN55022 Class B conducted and radiated
Harmonic Currents	• EN61000-3-2 Class A
Voltage Flicker	• EN61000-3-3
ESD Immunity	• EN61000-4-2, level 2 Perf Criteria B
Radiated Immunity	• EN61000-4-3, level 2 Perf Criteria A
EFT/Burst	• EN61000-4-4, level 2 Perf Criteria B
Surge	• EN61000-4-5, Installation Class 2, Perf Criteria B
Conducted Immunity	• EN61000-4-6, level 2 Perf Criteria B
Dips & Interruptions	• EN61000-4-11, 5 % Ut 10 ms, Perf Criteria B, 70 % Ut 500 ms, Perf Criteria C
Safety Approvals	• EN60950, UL1950, CSA C22.2 No.234 cUL

Models and Ratings

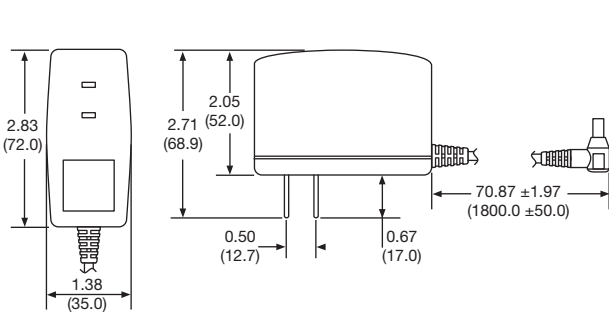
Output Voltage	Output Current	Ripple & Noise ⁽²⁾	Initial Set Accuracy ⁽¹⁾	Line Regulation ⁽³⁾	Load Regulation ⁽⁴⁾	Model Number
4.2 V	1000 mA	1%	±3%	±1%	±4%	AEP06US042
5.0 V	1200 mA	1%	±3%	±1%	±4%	AEP06US05
6.0 V	1000 mA	1%	±3%	±1%	±4%	AEP06US06
6.5 V	650 mA	1%	±3%	±1%	±3%	AEP06US065
7.0 V	650 mA	1%	±3%	±1%	±3%	AEP06US07
7.5 V	650 mA	1%	±3%	±1%	±3%	AEP06US075
8.0 V	650 mA	1%	±3%	±1%	±3%	AEP06US08
9.0 V	650 mA	1%	±3%	±1%	±2%	AEP06US09
10.0 V	600 mA	1%	±3%	±1%	±2%	AEP06US10
12.0 V	500 mA	1%	±3%	±1%	±2%	AEP06US12

Notes

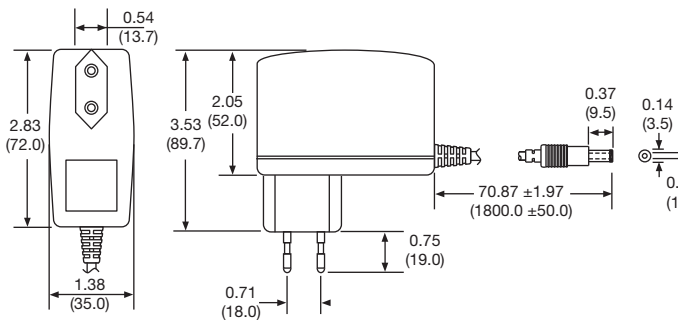
1. Initial set accuracy is at 60% full load.
2. Add a 0.1µF E.L capacitor to output for ripple & noise measurement at 20 MHz BW.
3. Line regulation measured from 100 VAC to 240 VAC, full load.
4. Load regulation measured from 60% to full load and from 60% to 20% load (60% ±40% load).

Mechanical Details 6 & 15 Watt Models

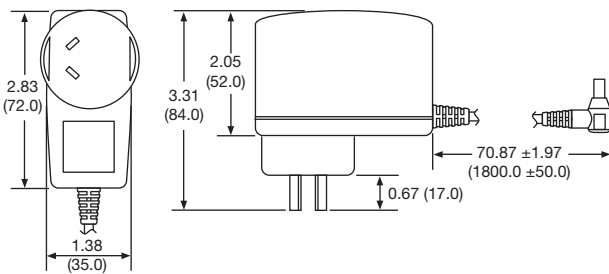
All dimensions are in inches (mm)



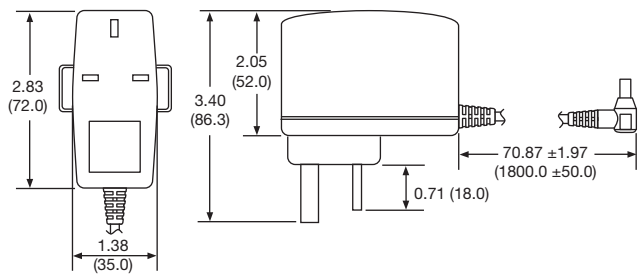
To order US add suffix ' -US' to model number



To order European add suffix ' -EU' to model number



To order Australian add suffix ' -AU' to model number



To order UK add suffix ' -UK' to model number

Weight: AEP06: 0.3 lb (135 g)
AEP15: 0.35 lb (160 g)

Output Plug: 0.22 x 0.10 x 0.37 (5.5 x 2.5 x 9.5)



Models and Ratings

Output Voltage	Output Current	Ripple & Noise ⁽²⁾	Initial Set Accuracy ⁽¹⁾	Line Regulation ⁽³⁾	Load Regulation ⁽⁴⁾	Model Number
5.0 V	2.00 A	1%	±2%	±1%	±4%	AEP15US05
6.0 V	1.50 A	1%	±2%	±1%	±4%	AEP15US06
7.5 V	1.60 A	1%	±2%	±1%	±4%	AEP15US075
9.0 V	1.40 A	1%	±2%	±1%	±4%	AEP15US09
12.0 V	1.00 A	1%	±2%	±1%	±4%	AEP15US12
13.6 V	1.00 A	1%	±2%	±1%	±4%	AEP15US136
15.0 V	1.00 A	1%	±2%	±1%	±4%	AEP15US15
18.0 V	0.83 A	1%	±2%	±1%	±4%	AEP15US18
24.0 V	0.63 A	1%	±2%	±1%	±4%	AEP15US24
3.3 V	4.00 A	50 mV pk-pk	±2%	±1%	±6%	AEP25US033
5.0 V	4.00 A	1%	±2%	±1%	±6%	AEP25US05
12.0 V	2.10 A	1%	±2%	±1%	±5%	AEP25US12
15.0 V	1.67 A	1%	±2%	±1%	±3%	AEP25US15
18.0 V	1.40 A	1%	±2%	±1%	±2%	AEP25US18
24.0 V	1.05 A	1%	±2%	±1%	±2%	AEP25US24

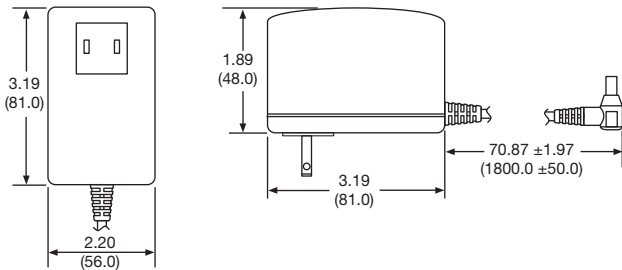
Notes

1. Initial set accuracy is at 60% full load.
2. Add a 0.1µF E.L capacitor to output for ripple & noise measurement at 20 MHz BW.
3. Line regulation measured from 100 VAC to 240 VAC, full load.
4. Load regulation measured from 60% to full load and from 60% to 20% load (60% ±40% load).

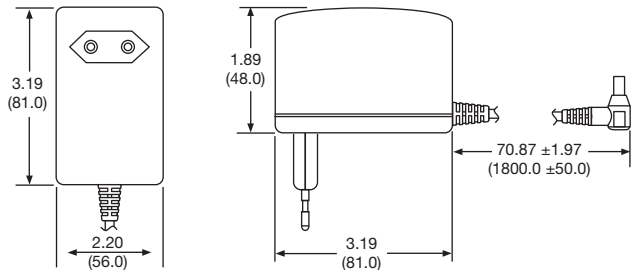
Mechanical Details 25 Watt Models

All dimensions are in inches (mm)

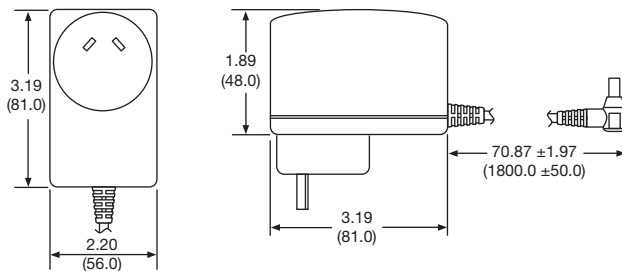
For 15 Watt model mechanical details see 6 Watt model



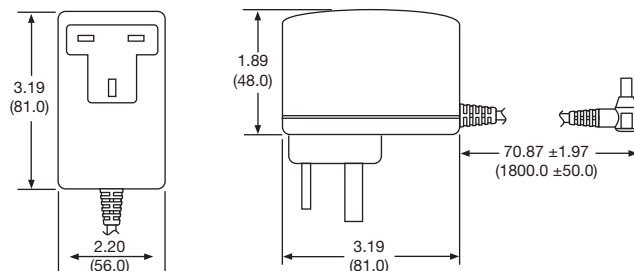
To order US add suffix ' -US' to model number



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To order Australian add suffix ' -AU' to model number



To order UK add suffix ' -UK' to model number

Weight: 0.485 lb (220 g)

Output Plug: 0.22 x 0.10 x 0.37 (5.5 x 2.5 x 9.5)

