

AEH Series



- Output Voltages from 3- 48 VDC Available
- Non-Standard Outputs
- Universal Input
- +70 °C Operating Temperature
- High Efficiency - Up to 85%
- Class 1 Earthing
- Non-standard Connectors Available

Specification

Input

Input Voltage	• 90-264 VAC
Input Frequency	• 47-63 Hz
Input Current	• 0.4 A for AEH15, at 230 VAC • 0.7 A for AEH24, at 230 VAC
Inrush Current	• 15/30 A max at 115/230 VAC 100% load, cold start
Earth Leakage Current	• <0.5 mA max at 115 VAC/60Hz • <0.75 mA max at 230 VAC/50Hz

Output

Output Voltage	• See tables (factory set). Non-standard voltages available - contact sales
Initial Set Accuracy	• 5%
Start Up Delay	• 2 s max
Hold Up Time	• 20 ms min at full load and 115 VAC
Line Regulation	• See tables
Load Regulation	• See tables
Transient Response	• 4% max. deviation, recovery to within 1% in 500 μ s for a 25% load change
Ripple & Noise	• 2% pk-pk, 20 MHz BW
Overvoltage Protection	• 112-132% Vnom, auto reset
Overload Protection	• 112-132% of nominal, auto recovery
Temperature Coefficient	• $\pm 0.04\%$ /°C max

General

Efficiency	• Up to 85%
Isolation	• 3000 VAC Input to Output • 1500 VAC Input to Ground • 500 VAC Output to Ground
MTBF	• 100 kHrs per MIL-HDBK-217F

Environmental

Operating Temperature	• 0 °C to +70 °C, derate linearly from full load at +40 °C to half load at +70 °C
Operating Humidity	• 5-95 % RH, non-condensing
Storage Temperature	• -40 °C to +85 °C
Vibration	• 2 g on 3 axes

EMC & Safety

Emissions	• EN55022 level 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 A
Radiated Immunity	• EN61000-4-3, level 3 Perf Criteria A
EFT/Burst	• EN61000-4-4, level 2 Perf Criteria A
Surge	• EN61000-4-5, level 3 Perf Criteria A
Conducted Immunity	• EN61000-4-6, level 2 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, UL60950, CSA C22.2 No. 950 per cUL, UL60950

Models and Ratings

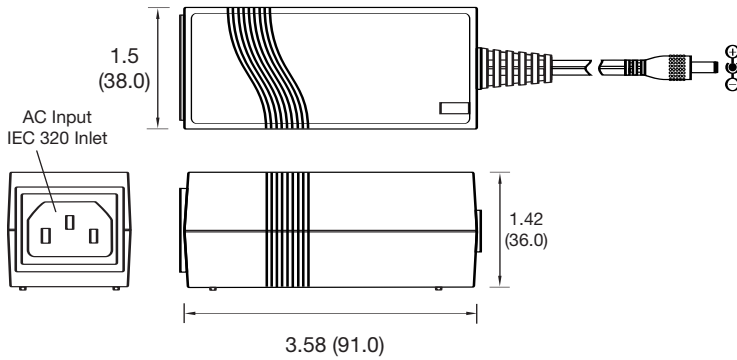
Output Power	Output Voltage Nominal ⁽¹⁾	Output Current		Total Regulation ⁽²⁾	Model Number
		Minimum	Maximum		
8.25 W	3.3 V	0.0 A	2.50 A	7%	AEH15US03
12.00 W	5.0 V	0.0 A	2.40 A	5%	AEH15US05
12.00 W	7.0 V	0.0 A	1.70 A	5%	AEH15US07
15.00 W	10.0 V	0.0 A	1.50 A	5%	AEH15US10
15.00 W	12.0 V	0.0 A	1.25 A	5%	AEH15US12
15.00 W	15.0 V	0.0 A	1.00 A	5%	AEH15US15
15.00 W	18.0 V	0.0 A	0.80 A	5%	AEH15US18
15.00 W	24.0 V	0.0 A	0.62 A	5%	AEH15US24
15.00 W	30.0 V	0.0 A	0.50 A	5%	AEH15US30
15.00 W	36.0 V	0.0 A	0.40 A	3%	AEH15US36
15.00 W	48.0 V	0.0 A	0.30 A	3%	AEH15US48

Notes

1. Factory-set non-standard outputs available in single output versions.

2. Total regulation includes initial set accuracy, line and load regulation.

Mechanical Details



Notes

- Dimensions shown in inches (mm).
- Tolerance 0.02 (0.5) max.
- Output connector is 5.5mm outer diameter barrel. Inner diameter is 2.5mm with centre positive (+) and outer shell negative (-).
- Output cable length is 72.0 (1830).
- Optional output connectors available. Contact sales office.
- Weight 0.3 lb (135 g) approx.
- For UK mains lead order part: UK-MAINS-IEC. For European mains lead order part: EU-MAINS-IEC.

Models and Ratings

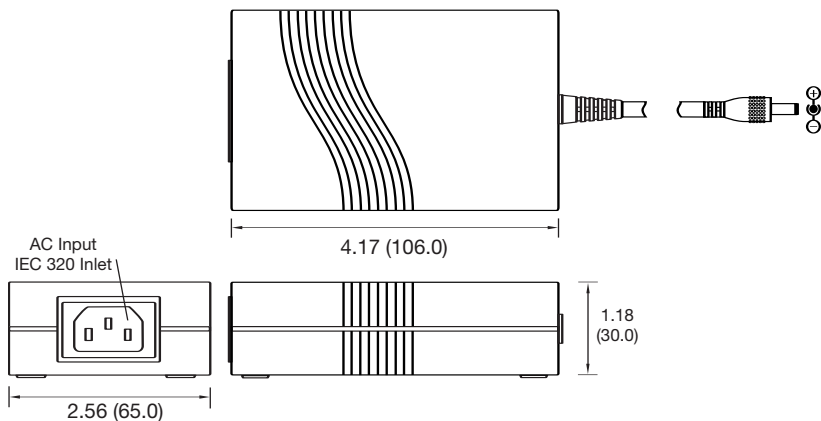
Output Power	Output Voltage Nominal ⁽¹⁾	Output Current		Total Regulation ⁽²⁾	Model Number
		Minimum	Maximum		
15.00 W	5.0 V	0.0 A	3.00 A	5%	AEH24US05
20.00 W	7.0 V	0.0 A	2.80 A	5%	AEH24US07
22.00 W	10.0 V	0.0 A	2.20 A	5%	AEH24US10
24.00 W	12.0 V	0.0 A	2.00 A	5%	AEH24US12
24.00 W	15.0 V	0.0 A	1.60 A	5%	AEH24US15
24.00 W	18.0 V	0.0 A	1.30 A	5%	AEH24US18
24.00 W	24.0 V	0.0 A	1.00 A	3%	AEH24US24
24.00 W	30.0 V	0.0 A	0.80 A	3%	AEH24US30
24.00 W	36.0 V	0.0 A	0.66 A	3%	AEH24US36
24.00 W	48.0 V	0.0 A	0.50 A	2%	AEH24US48

Notes

1. Factory-set non-standard outputs available in single output versions.

2. Total regulation includes initial set accuracy, line and load regulation.

Mechanical Details



Notes

- Dimensions shown in inches (mm).
- Tolerance 0.02 (0.5) max.
- Output connector is 5.5mm outer diameter barrel. Inner diameter is 2.5mm with centre positive (+) and outer shell negative (-).
- Output cable length is 72.0 (1830).
- Optional output connectors available. Contact sales office.
- Weight 0.47 lb (215 g) approx.
- For UK mains lead order part: UK-MAINS-IEC. For European mains lead order part: EU-MAINS-IEC.