100-150 Watts

AEF Series

- Energy Star Level V
- CEC2008 & EISA2007 Compliant
- High Efficiency up to 93%
- Class I & II Construction
- International Safety Approvals
- Low Earth Leakage Current
- 3 Year Warranty

Specification

Input

Input Voltage	• 90-264 VAC
Input Frequency	• 47-63 Hz
Input Current	• 100 W: 1.2 A at 115 VAC, 0.55 A at 230 VAC, 120 W: 1.4 A at 115 VAC, 0.63 A at 230 VAC, 150 W: 2.0 A at 115 VAC, 0.80 A at 230 VAC
Power Factor	• 0.95 typical
Earth Leakage Current	• 200 µA max at 115 VAC, 400 µA max at 230 VAC (except C2 version)
No Load Input Power	• <0.5 W

Output

Output Voltage	• See table
Output Voltage Trim	• Not user-adjustable
Initial Set Accuracy	• See note 3
Minimum Load	• No minimum load required
Start Up Delay	• 2 s max at 100 VAC
Start Up Rise Time	• 25 ms max
Hold Up Time	• 100 W & 120 W: 16 ms minimum at 90 VAC 150 W: 9 ms minimum at 90 VAC
Line Regulation	• ±0.5% maximum
Load Regulation	• See table
Transient Response	• 5% max. deviation, recovery to within 1% in 10 ms for a 50% load change
Ripple & Noise	• 1.5% 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	• 125% typical, auto recovery
Short Circuit Protection	• Trip and restart (Hiccup mode)
Temperature Coefficient	• 0.04%/°C

General

Efficiency	• See tables
Isolation	• 3000 VAC Input to Output 1500 VAC Input to Ground (not C2 version) Output 0 V and connector shell are electrically connected to Input Ground (not C2 version)
Switching Frequency	• PFC 30-90 kHz variable PWM 100-120 kHz typical
Power Density	• 5.95 W/In^3 for 150 W
MTBF	• >150 kHrs to MIL-HDBK-217F at 25 °C, GB

Environmental

Operating Temperature	• 0 °C to +50 °C, derate from 100% power at +40 °C to 75% power at +50 °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, Class B conducted and radiated
Harmonic Currents	• EN61000-3-2, Class A
Voltage Flicker	• EN61000-3-3
ESD Immunity	• EN61000-4-2, 8 kV air, 4 kV contact, Perf Criteria A
Radiated Immunity	• EN61000-4-3, level 2 Perf Criteria A
EFT/Burst	• EN61000-4-4, level 2 Perf Criteria A
Surge	• EN61000-4-5, level 2 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	• EN60950-1, cUL60950-1

Models and Ratings

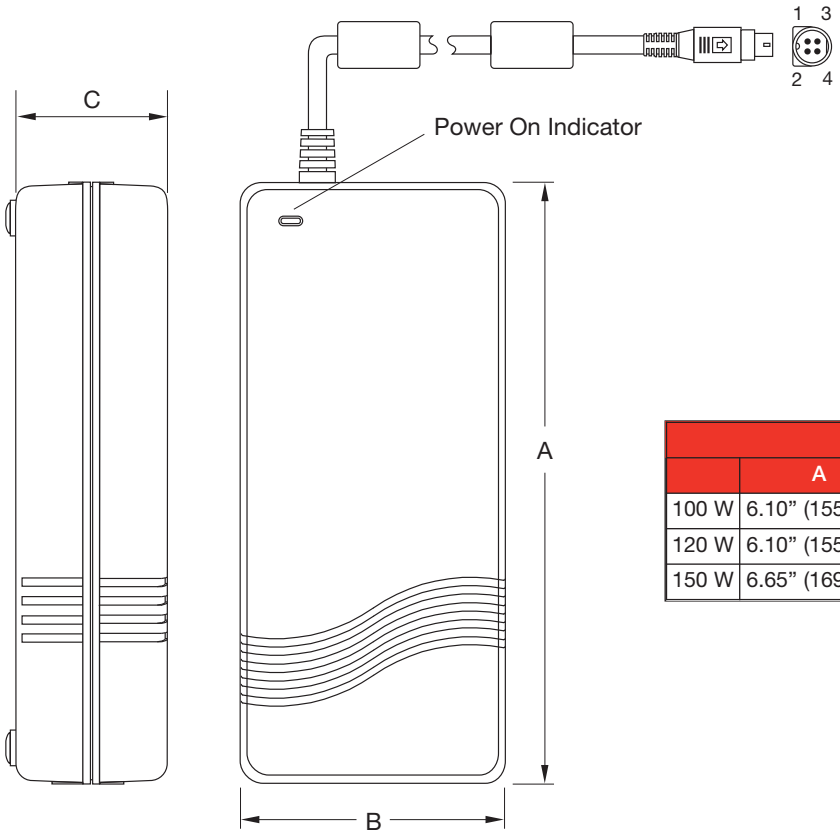
AEF Series

Output Power	Output Voltage	Output Current	Efficiency[2]	Total Regulation[3]	Model Number[4]
100 W	12 V	8.33 A	92%	5%	AEF100PS12
100 W	19 V	5.26 A	93%	5%	AEF100PS19
100 W	24 V	4.17 A	93%	5%	AEF100PS24
100 W	48 V	2.08 A	93%	5%	AEF100PS48
120 W	12 V	10.0 A	92%	5%	AEF120PS12
120 W	19 V	6.32 A	93%	5%	AEF120PS19
120 W	24 V	5.00 A	93%	5%	AEF120PS24
120 W	48 V	2.50 A	93%	5%	AEF120PS48
150 W	12 V	12.5 A	92%	5%	AEF150PS12
150 W	19 V	7.89 A	93%	5%	AEF150PS19
150 W	24 V	6.25 A	93%	5%	AEF150PS24
150 W	36 V	4.17 A	93%	5%	AEF150PS36
150 W	48 V	3.13 A	94%	5%	AEF150PS48

Notes

1. Measured using 0.1 µF ceramic capacitor in parellel with a 10 µF electrolytic at 20 MHz bandwidth.
2. Typical efficiency measured at 230 VAC input and full load.
3. Total regulation includes initial set accuracy, line and load regulation.
4. For Class II versions, add ' C2' to model number, e.g. AEF100PS24C2

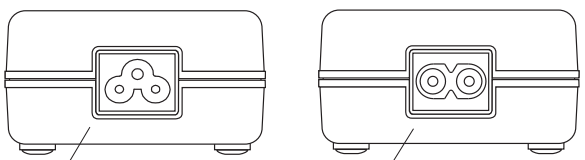
Mechanical Details



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

*Class II versions do not have an input earth

	Dimensions			Weight lb (g)
	A	B	C	
100 W	6.10" (155 mm)	2.36" (60 mm)	1.26" (32 mm)	1.10 (500)
120 W	6.10" (155 mm)	2.36" (60 mm)	1.26" (32 mm)	1.10 (500)
150 W	6.65" (169 mm)	2.56" (65 mm)	1.48" (37.5 mm)	1.26 (500)



AC Input
IEC 320/C6 Inlet

AC Input
IEC-320-C8 INLET
(Optional C2 version)

Power Cord Order Parts
for Class I versions:

UK- UK-MAINS-5
EU- EU-MAINS-C5
US- US-MAINS-5

For Class II versions:

UK- UK-MAINS-8
EU- EU-MAINS-8
US- US-MAINS-8

Notes

1. Dimensions shown in inches (mm). Tolerance is 0.02 (0.5) maximum, except output cable length.
4. Cable length is 35.4" (900 mm) approx.
5. Output connector (Kycon KPP-4P or equivalent) mates with Kycon KPJ-4S or equivalent.