



**FEATURES:**

- Accurate Constant Current Output  $\pm 5\%$
- High Efficiency: Up to 88%
- Active Power Factor Correction
- Short Circuit / Open Circuit Protection
- Class 2 Power Unit
- Long Life, High reliability
- IP20, Suitable for Indoor LED Lighting
- 3 Years Limited Warranty

**Models**  
**Single output**



Model	Max Output Power (W)	Output Voltage Range (V)	Output Current (mA)	Input Voltage (VAC/Hz)	Efficiency (%)
AMEPR16-4229Z	12	24-42	290	90-264/47-63	87
AMEPR16-5829Z	17	40-58	290	90-264/47-63	88
AMEPR16-4236Z	15	30-42	360	90-264/47-63	87

NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity <75%, nominal input voltage and at rated output load unless otherwise specified.

**Input Specifications**

Parameters	Conditions	Typical	Maximum	Units
Input Current	90 VAC, full load		0.24	Arms
Inrush current <2ms	115 VAC, cold start		20	A
	230 VAC, cold start		40	
Leakage current			0.75	mA
Input dissipation	No Load		1	W
	Output Short		2	W
Power Factor	115 VAC, full load		0.95	
	230 VAC, full load		0.90	
Input Fuse	1A/250V			
Start-up Time	115 VAC, full load		2.0	Sec.
	230 VAC, full load		1.0	Sec.

**Output Specifications**

Parameters	Conditions	Typical	Maximum	Units
Current accuracy		$\pm 5$		%
Line regulation	LL to HL	$\pm 3$		%
Load regulation	Full Output Voltage Range	$\pm 3$		%
Ripple & Noise			1650	mV p-p
Output Current Ripple	Full load, 16.7-20ms duration		850	mA p-p
Current Overshoot	LL to HL, full load at cold start, % of rated output current		10	%
Hold-up time (min)			0	ms
Minimum Load Voltage	See Models Table Above			

**Isolation Specifications**

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	IEC61347		3750	VAC
Isolation Resistance	500Vdc	>100M $\Omega$		VAC
Isolation Capacitance		100		pF

**General Specifications**

Parameters	Conditions	Typical	Maximum	Units
Switching frequency			135	KHz
Over voltage protection	AMEPR16-4229Z, AMEPR16-4236Z		50	V
	AMEPR16-5829Z		63	V
Short circuit protection	Continuous, Hiccup Mode			

Short circuit restart	Auto Recovery		
Open circuit protection	Continuous, Hiccup Mode		
Operating temperature	Without derating	-20 to +50	°C
Maximum case temperature		80	°C
Storage temperature		-30 to +90	°C
Temperature coefficient		0.05	% / °C
Cooling	Free Air Convection		
Humidity		90	% RH
Case material	Plastic		
Weight	70		g
Dimensions (L X W+ X H)	3.68 X 1.76 X 1.08 inches 93.5 X 44.7 X 27.5 mm		
MTBF	>300,000 hrs (MIL-HDBK-217F at +25°C)		

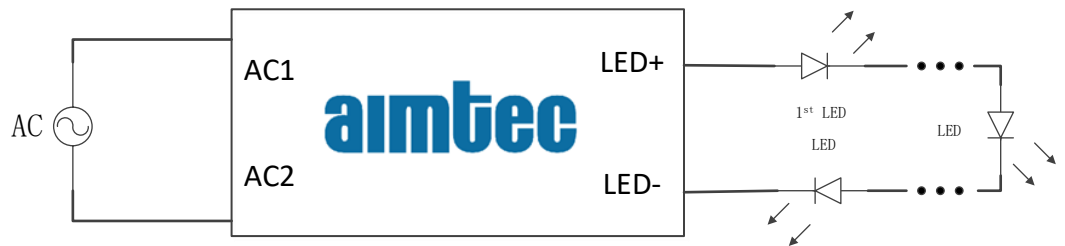
## Safety Specifications

Parameters		
Standards	Electromagnetic Interference	EN55015 / FCC Part 15, Class B
	Harmonic Current Emissions	EN61000-3-2, Class B
	Voltage fluctuations and flicker	EN61000-3-3
	Electrostatic Discharge Immunity	EN61000-4-2, 8kV Air, 4kV Contact, Level 3, Criteria A
	RF, Electromagnetic Field Immunity	EN61000-4-3, Test-RS Level 3, Criteria A
	Electrical Fast Transient / Burst Immunity	EN61000-4-4, Burst EFT Level 3, Criteria A
	Surge Immunity	EN61000-4-5, Line to Neutral 2kV
	RF, Conducted Disturbance Immunity	EN61000-4-6. Test-CS Level 3, Criteria A
	Power frequency Magnetic Field Immunity	EN61000-4-8, Test 3A/m, Criteria A
	Voltage dips, Short Interruptions Immunity	EN61000-4-11, Criteria B
	Electromagnetic Immunity Requirements Applies to Lighting Equipment	EN61547

## Pin Definition

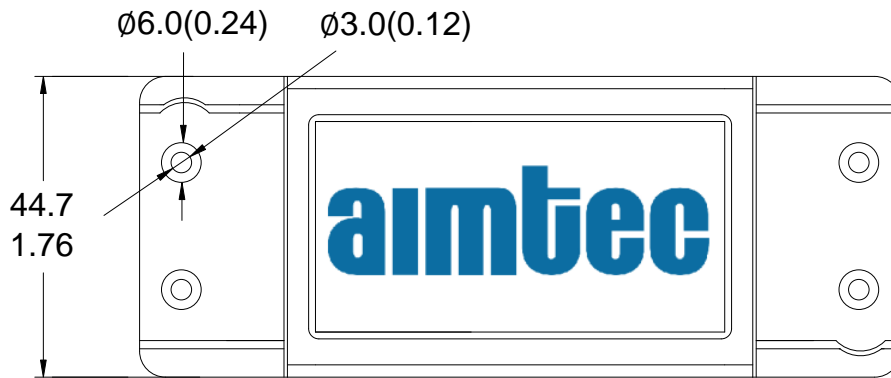
Recommended Wire gauge	Connection
20-24	AC L
20-24	AC N
14-26	LED+
14-26	LED-

## Application Block diagram

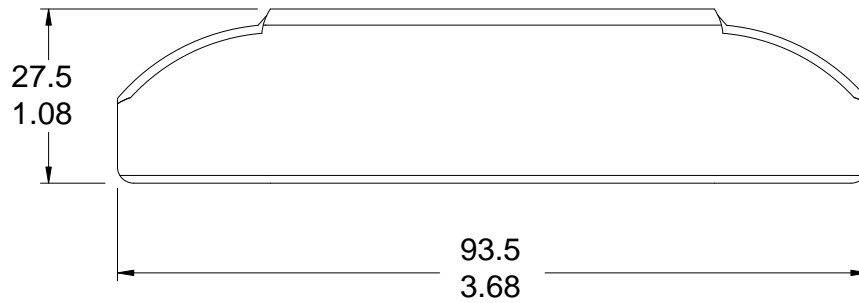


**Dimensions**

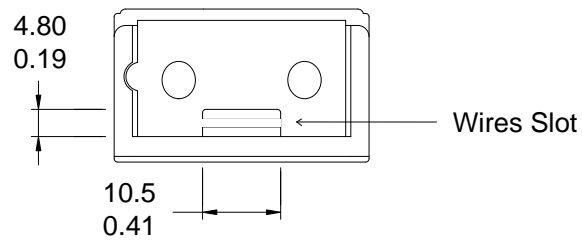
Top View



Side View1

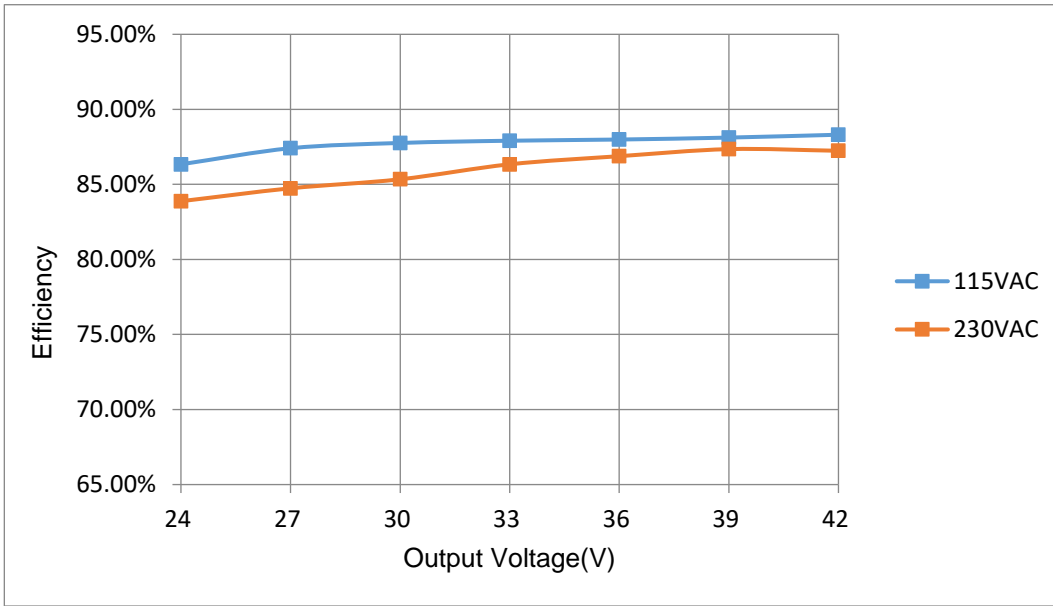


Side View2

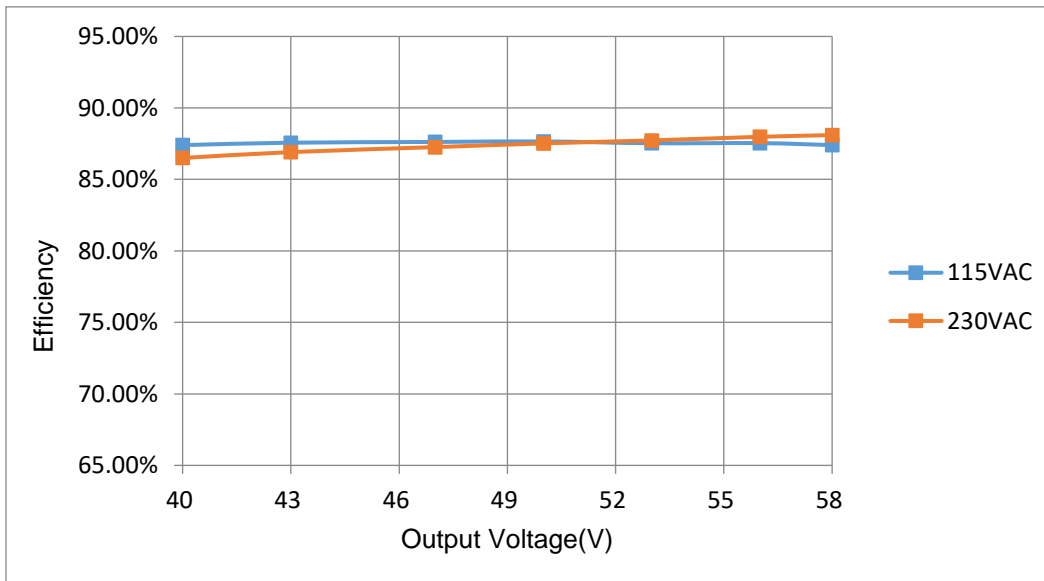


**Efficiency Vs. Input Voltage & Output Load Voltage**

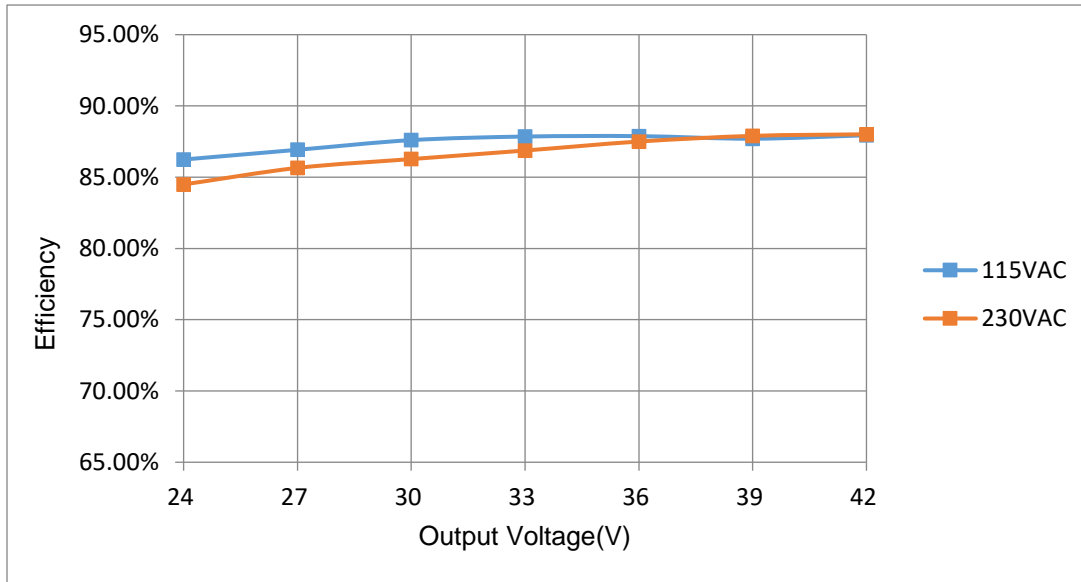
AMEPR16-4229Z



AMEPR16-5829Z

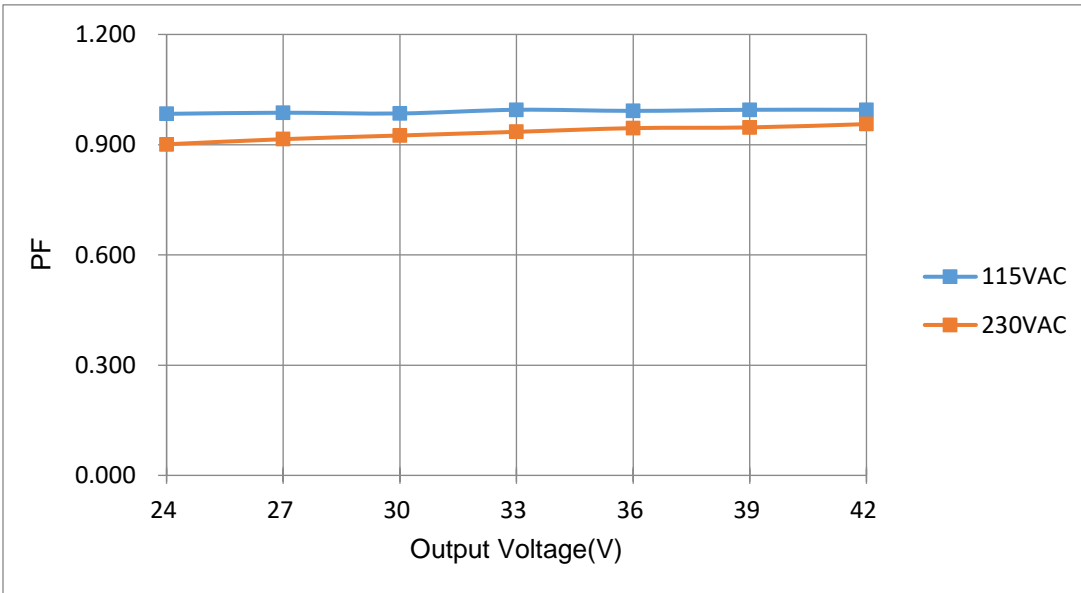


AMEPR16-4236Z

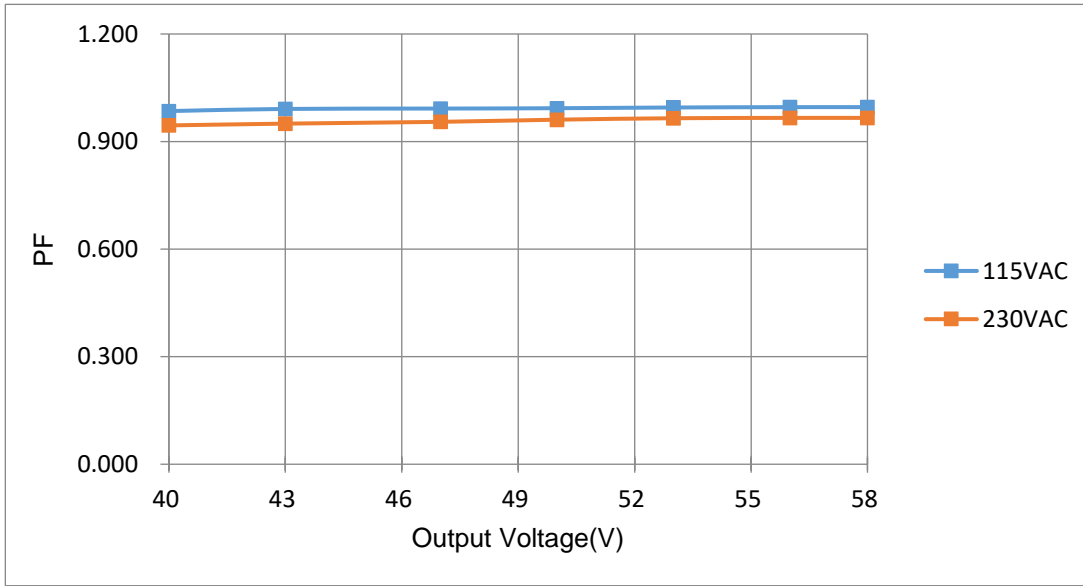


**PF vs. Input Voltage & Output Load Voltage**

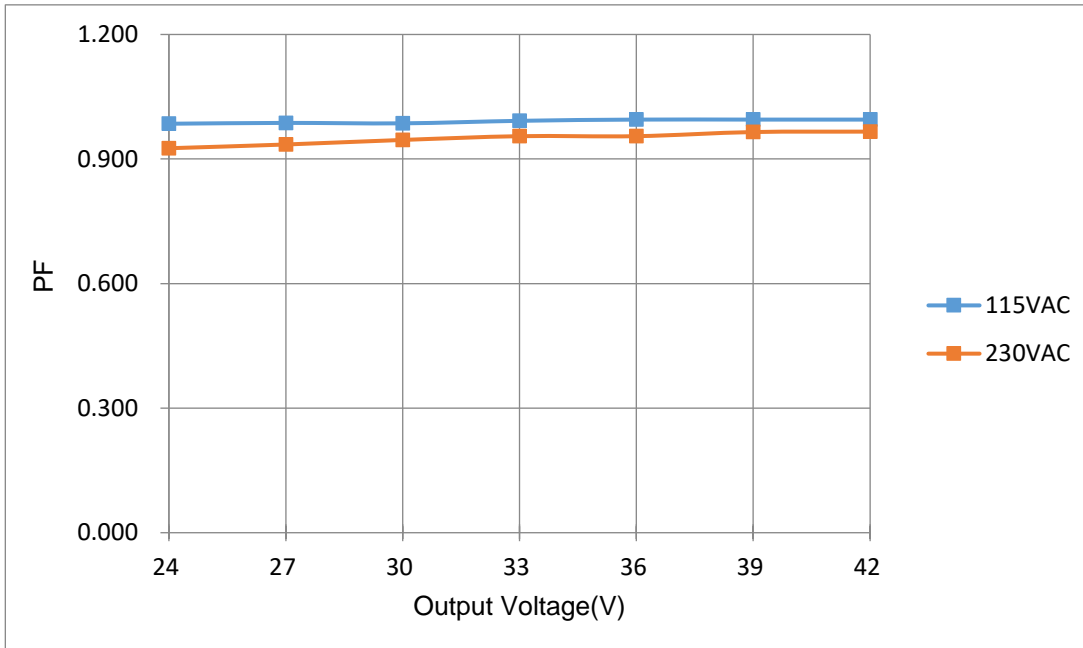
AMEPR16-4229Z



AMEPR16-5829Z



AMEPR16-4236Z



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