



**FEATURES:**

- Constant Current LED Driver
- High Efficiency: Up to 89%
- 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 (%)
AMEPR30-4250Z	21.0	30-42	500	90-264/47-63	88
AMEPR30-4260Z	25.2	28-42	600	90-264/47-63	89
AMEPR30-4270Z	29.4	28-42	700	90-264/47-63	89

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		0.4	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		0.98	
	230 VAC, full load		0.95	
Input Fuse	2A / 250V			
Start-up Time	115 VAC, full load		2.5	Sec.
	230 VAC, full load		1.2	Sec.

**Output Specifications**

Parameters	Conditions	Typical	Maximum	Units
Current accuracy		±5		%
Line regulation	LL to HL	±5		%
Load regulation	Full Output Voltage Range	±5		%
Ripple & Noise			1.9	V p-p
Output Current Ripple	Full load, 16.7-20ms duration		1.1	A p-p
Current Overshoot	LL to HL, full load at cold start		10	% Iout
Hold-up time (min)			0	ms
Minimum Load Voltage	See Models Table Above			

**Isolation Specifications**

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage			3750	VAC
Isolation Resistance	500Vdc	>100MΩ		VAC
Isolation Capacitance		100		pF

**General Specifications**

Parameters	Conditions	Typical	Maximum	Units
Switching frequency		135		KHz
Over voltage protection			50	VDC
Over current protection	Refer to Constant Current vs. Constant Voltage Mode curve			
Short circuit protection	Continuous, Hiccup Mode			
Short circuit restart	Auto Recovery			

Open circuit protection	Continuous		
Operating temperature	-20 to +50		°C
Maximum case temperature	80		°C
Storage temperature	-30 to +85		°C
Temperature coefficient			0.03 % / °C
Cooling	Free Air Convection		
Humidity	20 - 90		% RH
Case material	Plastic		
IP Rating	IP20		
Weight	60		g
Dimensions (L x W x H)	4.33 x 1.65 x 0.98 inches	110 x 42 x 25 mm	
MTBF	300,000 hrs (MIL-HDBK-217F at +25°C)		

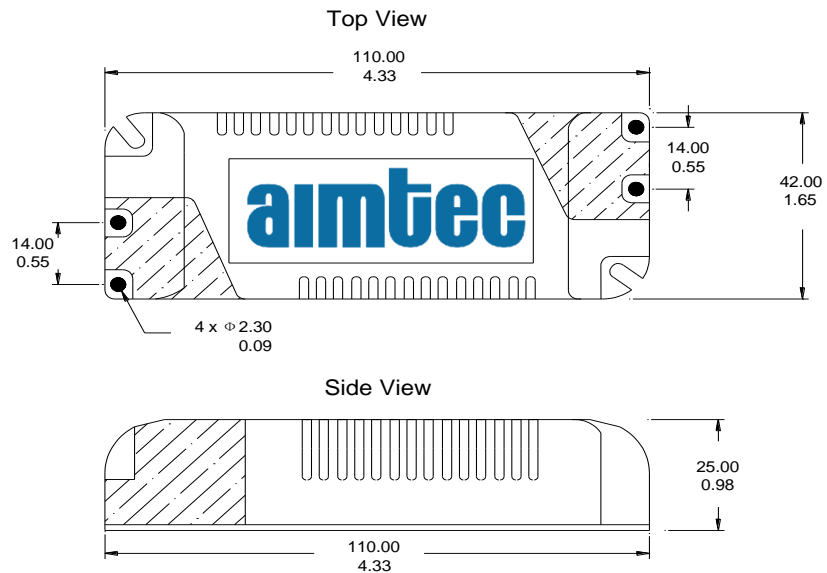
## Safety Specifications

Parameters		
Designed to meet	IEC61346, UL8750, UL1310,	
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

Wire	Connection
Brown	AC L
Blue	AC N
Red	+V Output
Black	-V Output

## Dimensions

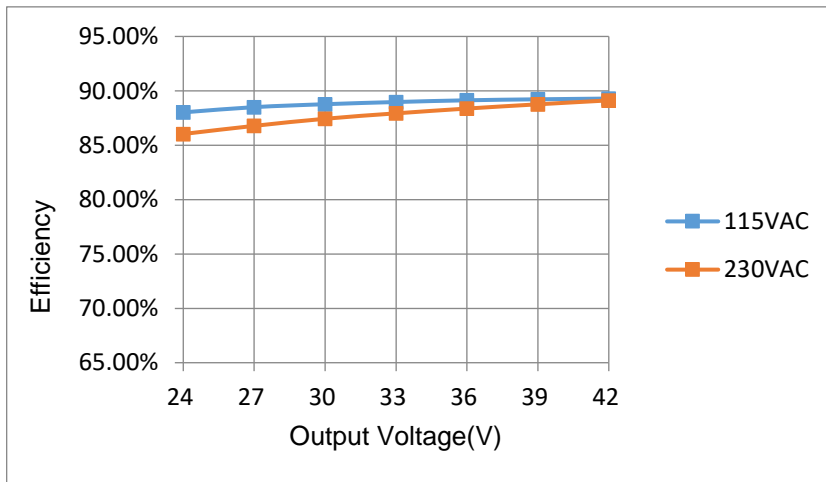


**Application Block diagram**

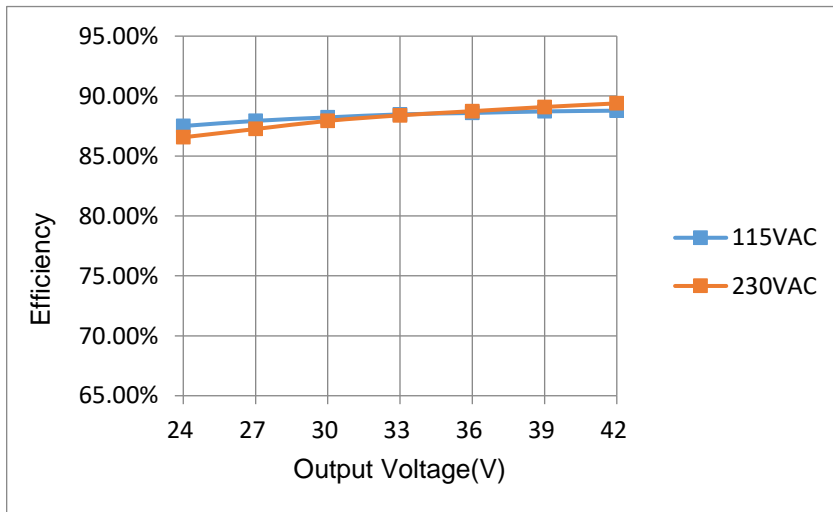


**Efficiency Vs. Input Voltage & Output Load Voltage**

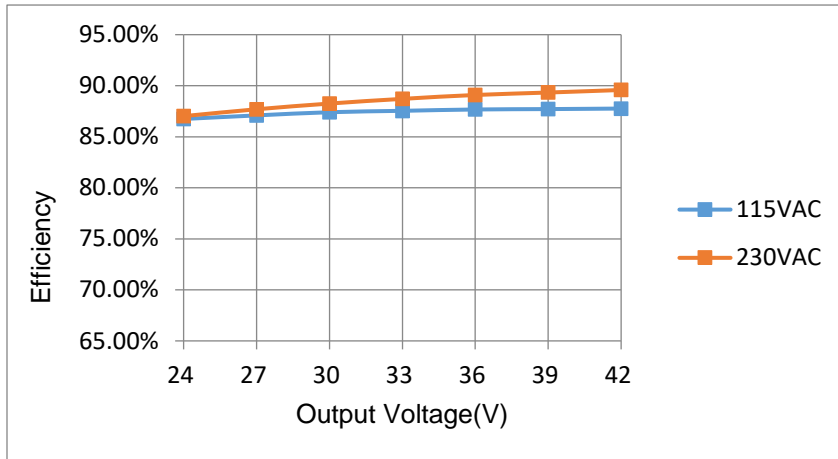
AMEPR30-4250Z



AMEPR30-4260Z

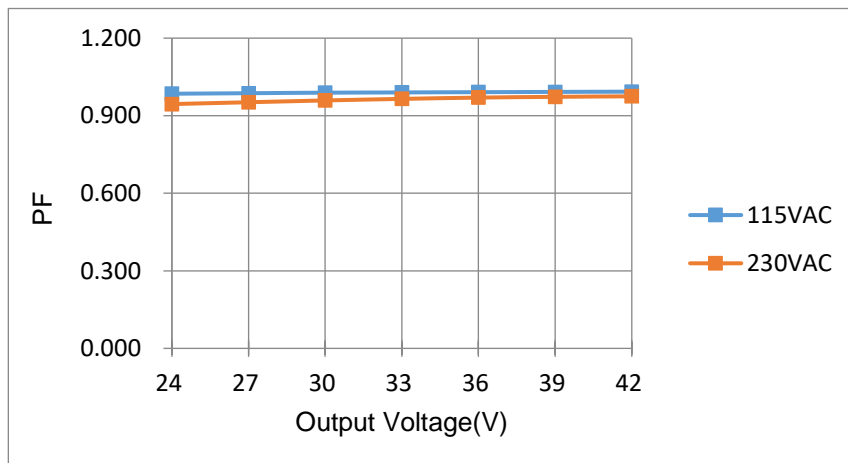


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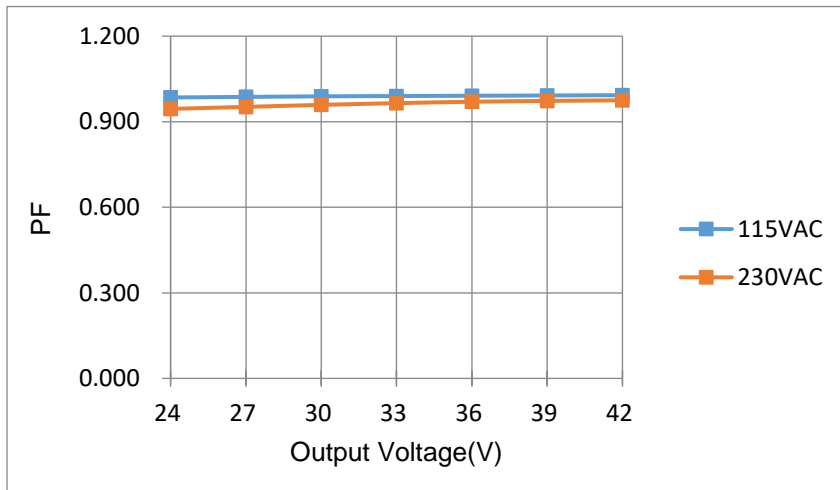


**PF vs. Input Voltage & Output Load Voltage**

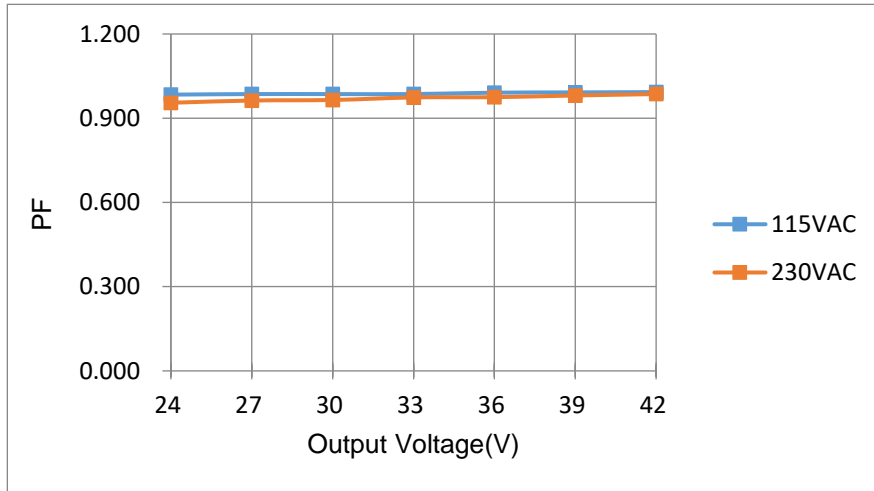
AMEPR30-4250Z



AMEPR30-4260Z



AMEPR30-4270Z



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