



FEATURES:

- Accurate Constant Current Output $\pm 5\%$
- High Efficiency: Up to 86%
- 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 (%) |
|---------------|----------------------|--------------------------|---------------------|------------------------|----------------|
| AMEPR10-2629Z | 8 | 18-26 | 290 | 90-264/47-63 | 83 |
| AMEPR10-3329Z | 10 | 23-33 | 290 | 90-264/47-63 | 83 |
| AMEPR10-4224Z | 10 | 30-42 | 240 | 90-264/47-63 | 86 |

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 | | 0.15 | 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 | | 0.90 | |
| | 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 | | ± 5 | | % |
| Line regulation | LL to HL | ± 3 | | % |
| Load regulation | Full Output Voltage Range | ± 3 | | % |
| Ripple & Noise | | | 1150 | mV p-p |
| Output Current Ripple | Full load, 16.7-20ms duration | | 550 | 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 Ω | | VAC |
| Isolation Capacitance | | 100 | | pF |

General Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|---------------------|------------|---------|---------|-------|
| Switching frequency | | | 135 | KHz |

| | | | | |
|--------------------------|---------------------------------------|---------------------------|-----------------------|--------|
| Over voltage protection | AMEPR10-2629Z | | 30 | V |
| | AMEPR10-3329Z | | 36 | V |
| | AMEPR10-4224Z | | 50 | 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 | AMEPR10-2629Z, AMEPR10-3329Z | | 60 | g |
| | AMEPR10-4224Z | | 70 | g |
| Dimensions (L X W X H) | AMEPR10-2629Z, AMEPR10-3329Z | 3.46 x 1.54 x 0.91 inches | 88.0 x 39.2 x 23.1 mm | |
| Dimensions (L X W X H) | AMEPR10-4224Z | 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) | | | |

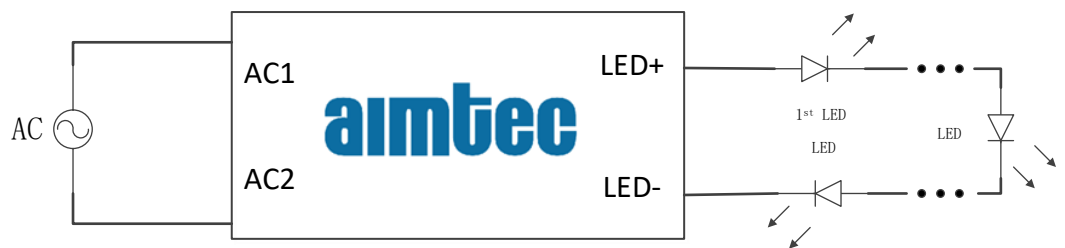
Safety Specifications

| 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- |

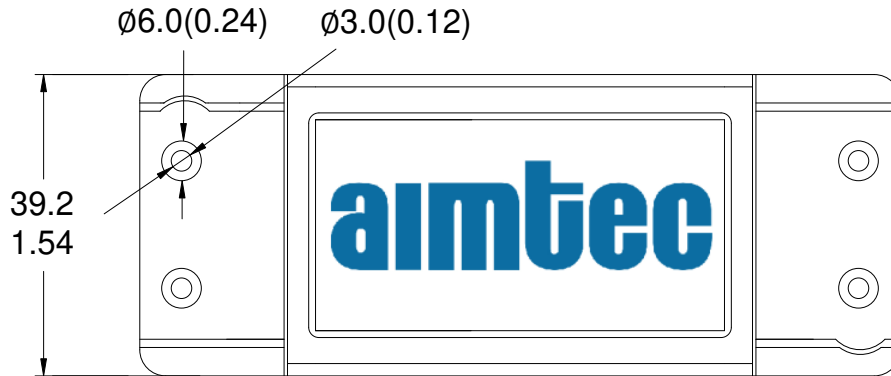
Application Block diagram



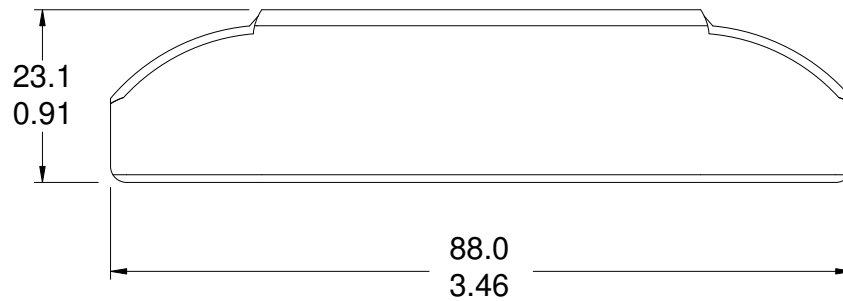
Dimensions

AMEPR10-2629Z & AMEPR10-3329Z

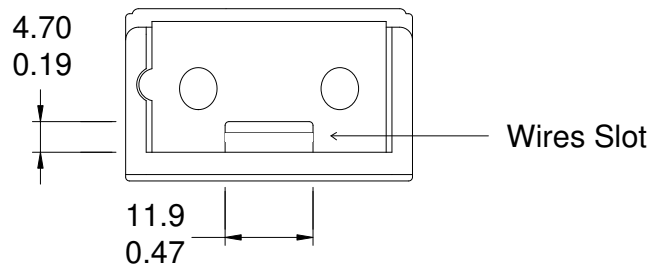
Top View



Side View1

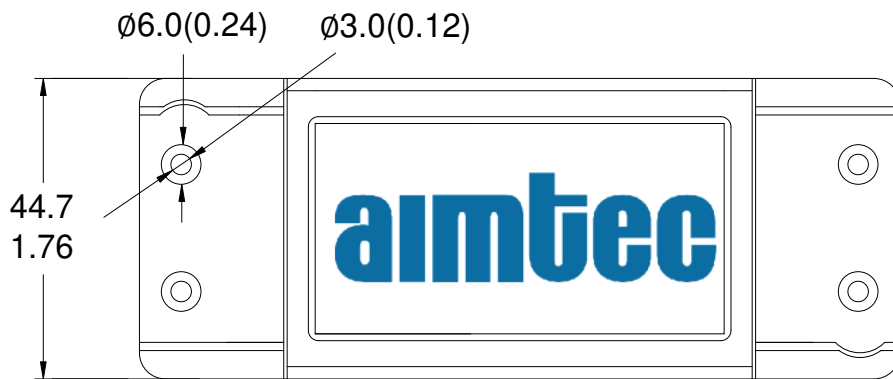


Side View2

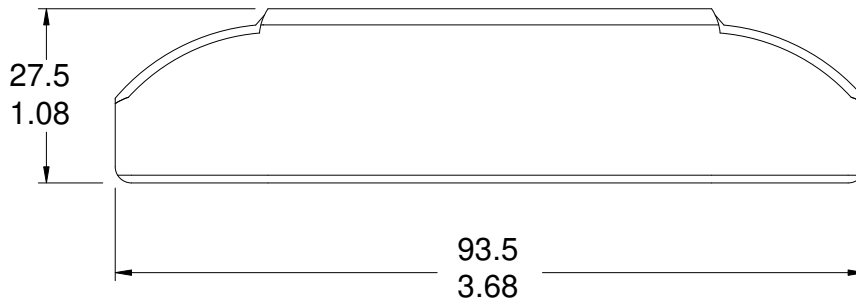


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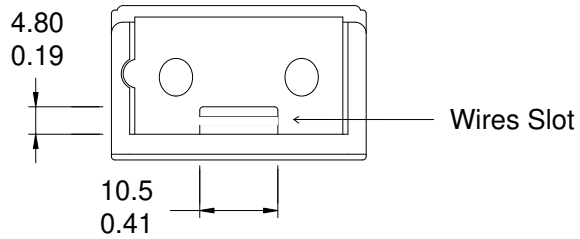
Top View



Side View1

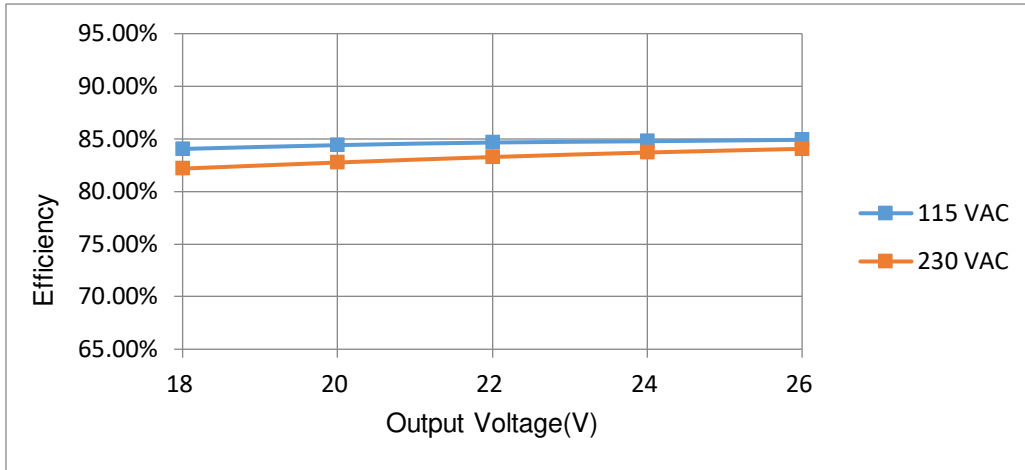


Side View2

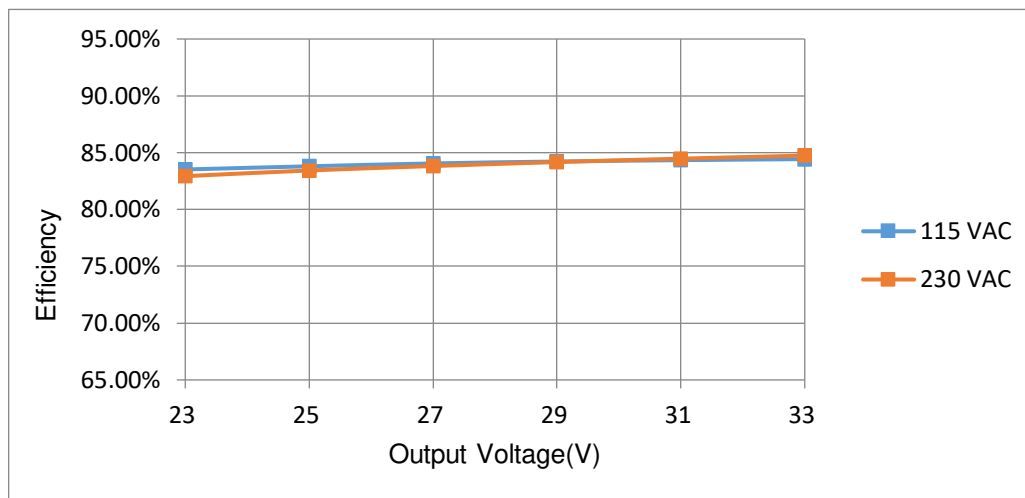


Efficiency Vs. Input Voltage & Output Load Voltage

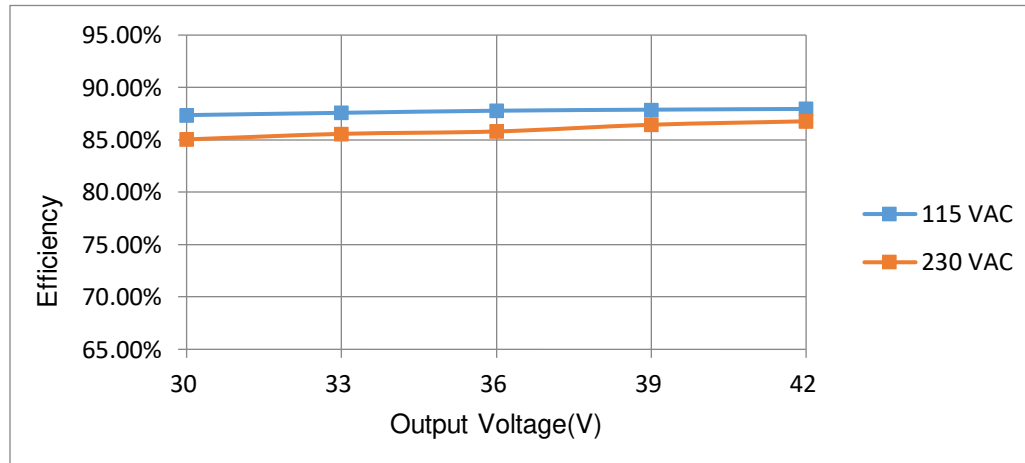
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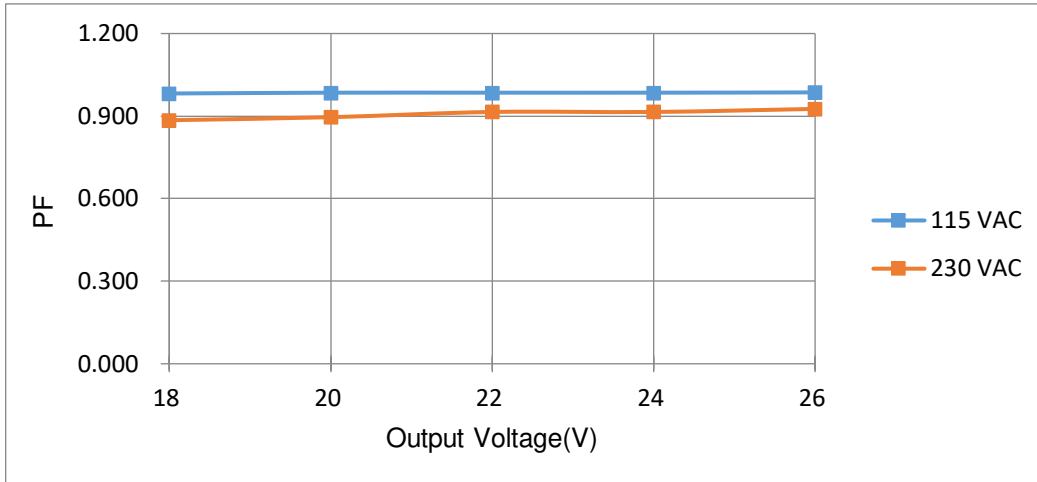


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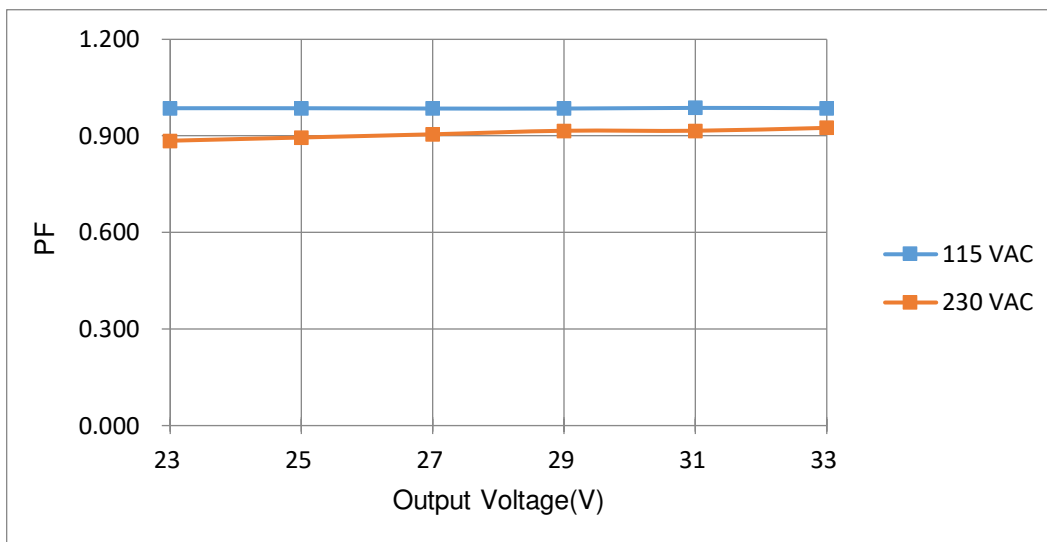


PF vs. Input Voltage & Output Load Voltage

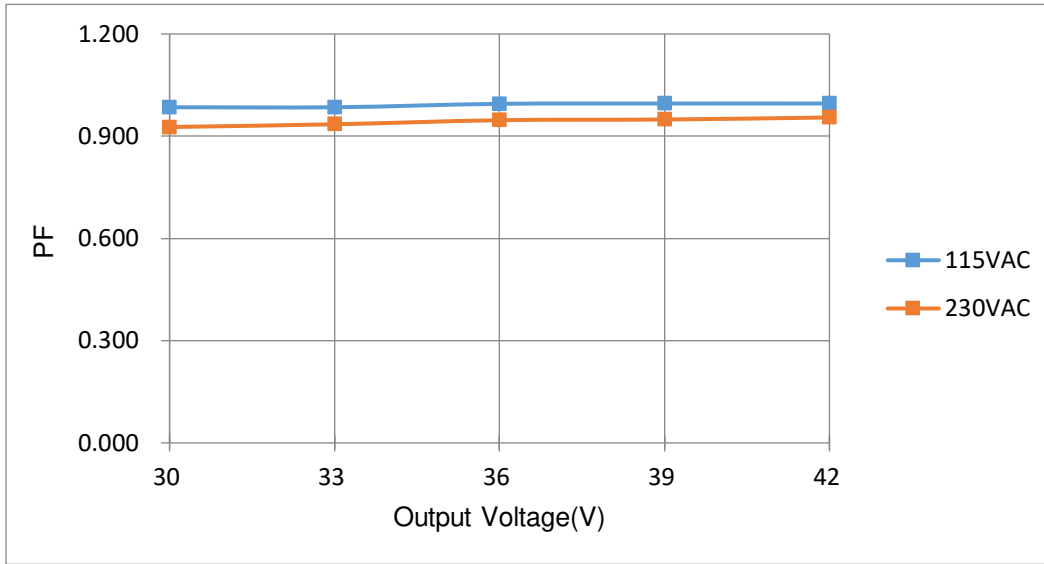
AMEPR10-2629Z



AMEPR10-3329Z



AMEPR10-4224Z



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