

- High Efficiency (Up to 93%)
- Active Power Factor Correction
- Constant Voltage Output
- Up to 305VAC Operation
- Waterproof to IP67
- Comprehensive Protection Circuitry
- UL8750 & EN61347 Safety Approvals
- RoHS Compliant
- 3 Year Warranty

Electrical Specifications

Input

| | |
|---------------------------|--------------------------------|
| Input Voltage | 90-305VAC |
| Input Frequency | 47-63 Hz |
| Input Current | 3.5A @ 100VAC 1.6A @ 220VAC |
| Inrush Current | 150A @ 220VAC/25°C/Cold Start |
| Power Factor | See table |
| Leakage Current | 750µA @ 277VAC, 60Hz |
| No Load Power Dissipation | 5W |

General

| | |
|----------------------|--|
| Efficiency | See tables |
| Isolation | 3kVAC input to output 1.5kVAC input to ground 0.5kVAC output to ground |
| MTBF (MIL-HDBK-217F) | 278,000 Hours @120VAC, 80% load, 25°C |
| Dimensions | 8.82"L x 3.86"W x 1.75"H |
| Net Weight | 3.5 lbs. |

Output

| | |
|--------------------------|--|
| Output Voltage | See table |
| Start Up Delay | 0.2 second maximum at 120VAC |
| Line Regulation | ±1% |
| Load Regulation | ±3% |
| Ripple & Noise | 2% pk-pk, 20MHz bandwidth |
| Overvoltage Protection | Latch mode, 107-150%; cycle power to reset |
| Overload Protection | Hiccup mode, 130-200%; auto restart when fault removed |
| Short Circuit Protection | Hiccup mode; auto restart when fault removed |
| Temperature Coefficient | <0.2%/°C |

Note: All specifications typical at 25°C unless noted.

Environmental

| | |
|---------------------|--|
| Operating Temp. | -40°C to +70°C maximum, see derating curve |
| Operating Humidity | 10% to 100% RH, non-condensing |
| Storage Temperature | -40°C to +85°C |

Safety & EMC

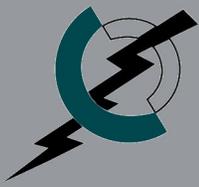
Safety Approvals

| | |
|----------------------|-----------------------------------|
| USA | UL8750, UL1012 |
| Canada | CSA-C22.2 No. 107.1 |
| Europe | EN61347, EN61347-2-13 |
| EMI | EN55015 (Radiated & Conducted) |
| Harmonic Currents | EN61000-3-2 |
| Voltage Flicker | EN61000-3-3 |
| ESD Immunity | EN61000-4-2; 8kV air; 4kV contact |
| Radiated Immunity | EN61000-4-3 |
| EFT/Burst | EN61000-4-4 |
| Surge | EN61000-4-5 |
| Conducted Immunity | EN61000-4-6 |
| Dips / Interruptions | EN61000-4-11 |

Your Partners in Power.....

Power Partners, Inc. | 43 Broad Street | Hudson, MA 01749
Tel: (978)567-9600 | Fax: (978)567-9601
Website: www.powerpartners-inc.com

Specifications subject to change.
PIL300U-V: 11-17-13



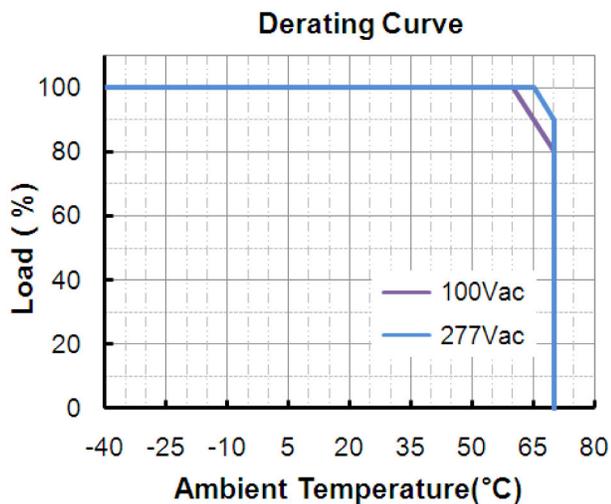
Models and Ratings Chart

| Output Voltage | Input Voltage Range | Output Current Range | Max. Output Power | Typical Efficiency (1) | Power Factor | | Model Number (2) |
|----------------|---------------------|----------------------|-------------------|------------------------|--------------|--------|------------------|
| | | | | | 110Vac | 220Vac | |
| 12 Vdc | 90 ~ 305 Vac | 0~22.9 A | 275 W | 91.5% | 0.99 | 0.93 | PIL300U-V12-ST |
| 24 Vdc | 90 ~ 305 Vac | 0~12.5 A | 300 W | 91.0% | 0.99 | 0.96 | PIL300U-V24-ST |
| 28 Vdc | 90 ~ 305 Vac | 0~10.71 A | 300 W | 91.5% | 0.99 | 0.96 | PIL300U-V28-ST |
| 36 Vdc | 90 ~ 305 Vac | 0~8.33 A | 300 W | 92.0% | 0.99 | 0.96 | PIL300U-V36-ST |
| 48 Vdc | 90 ~ 305 Vac | 0~6.25 A | 300 W | 92.5% | 0.99 | 0.96 | PIL300U-V48-ST |
| 54 Vdc | 90 ~ 305 Vac | 0~5.56 A | 300 W | 93.0% | 0.99 | 0.96 | PIL300U-V54-ST |

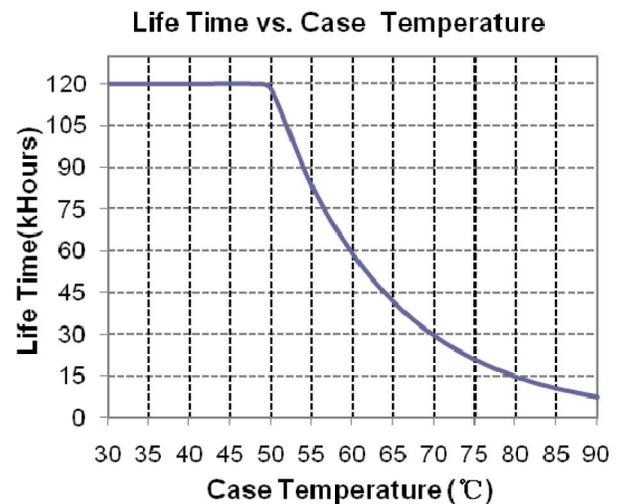
(1) Measured at full load and 220 Vac input.

(2) A suffix -xxxx may be added to denote variations or modifications to the base product, where x can be any alphanumeric character or blank.

Derating Curve



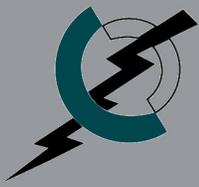
Life Time vs. Case Temperature Curve



Your Partners in Power.....

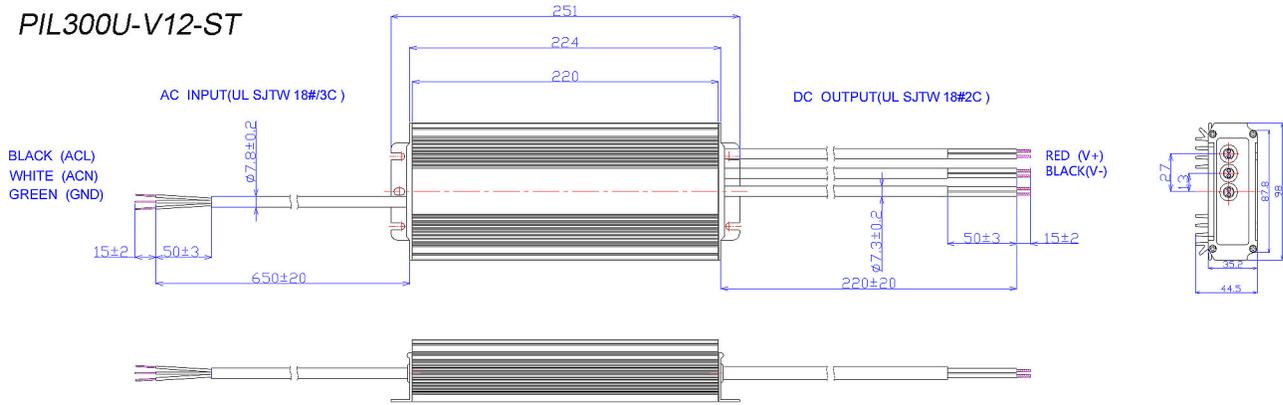
Power Partners, Inc. | 43 Broad Street | Hudson, MA 01749
 Tel: (978)567-9600 | Fax: (978)567-9601
 Website: www.powerpartners-inc.com

Specifications subject to change.
 PIL300U-V: 11-17-13

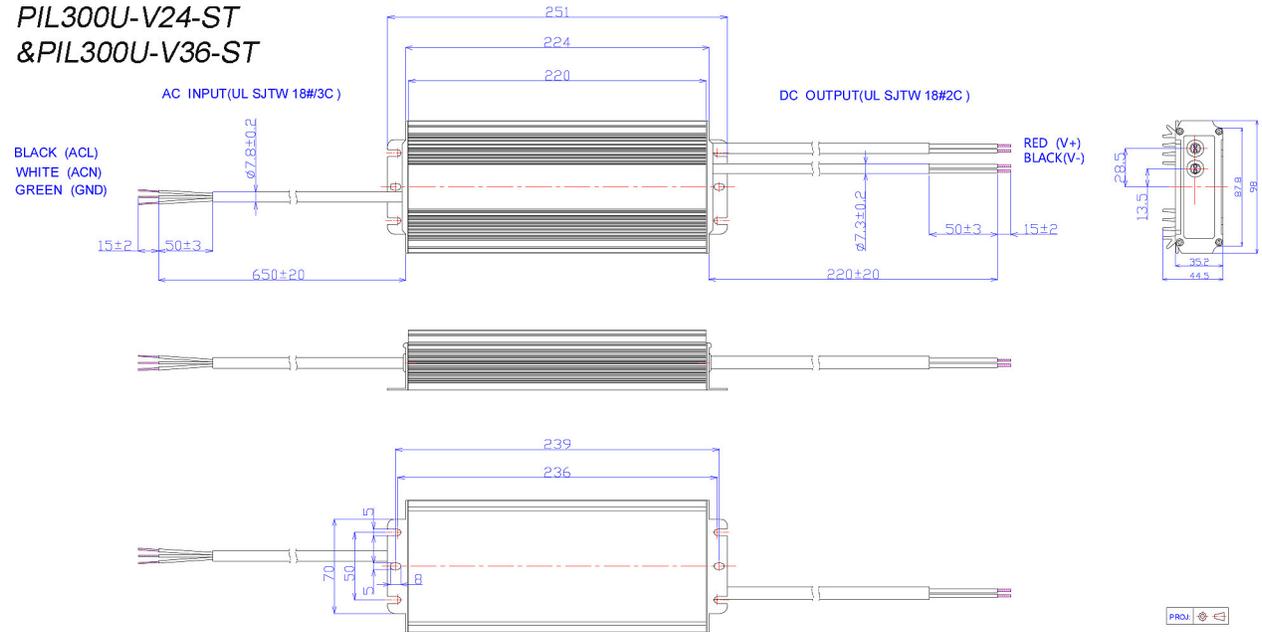


Mechanical Outline

PIL300U-V12-ST



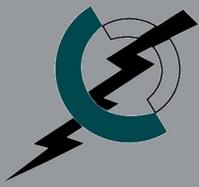
PIL300U-V24-ST & PIL300U-V36-ST



Your Partners in Power.....

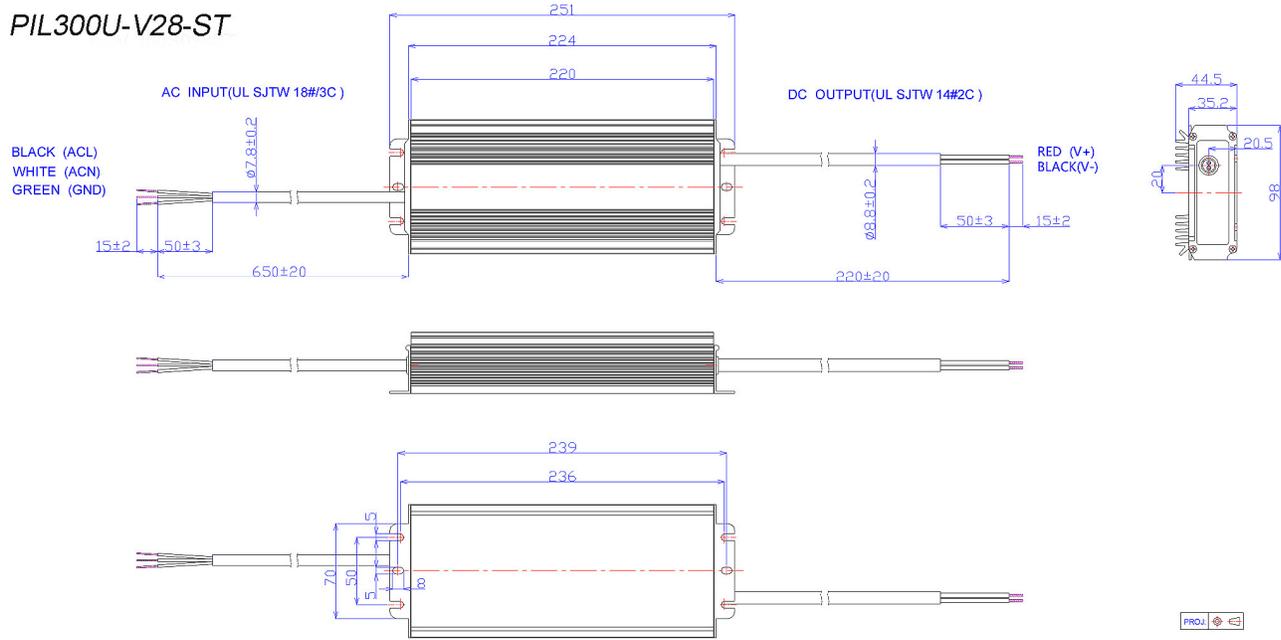
Power Partners, Inc. | 43 Broad Street | Hudson, MA 01749
 Tel: (978)567-9600 | Fax: (978)567-9601
 Website: www.powerpartners-inc.com

Specifications subject to change.
 PIL300U-V: 11-17-13

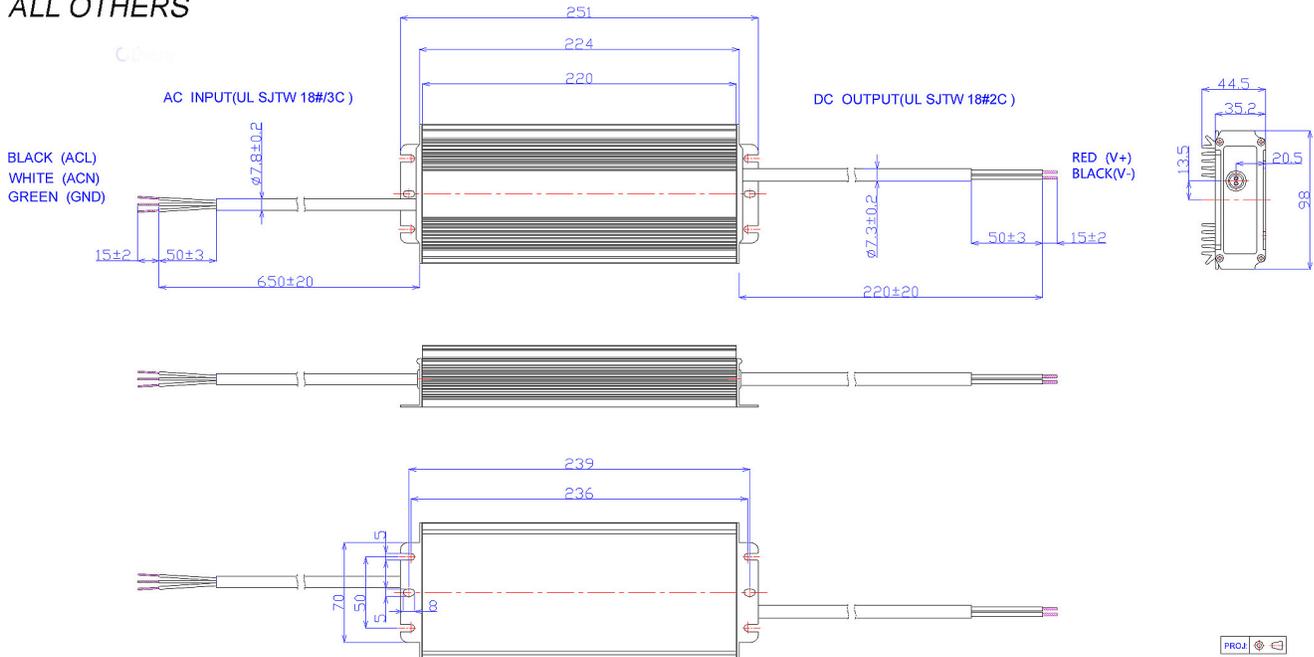


Mechanical Outline

PIL300U-V28-ST



ALL OTHERS



Your Partners in Power.....

Power Partners, Inc. | 43 Broad Street | Hudson, MA 01749
 Tel: (978)567-9600 | Fax: (978)567-9601
 Website: www.powerpartners-inc.com

Specifications subject to change.
 PIL300U-V: 11-17-13