

- High Efficiency (Up to 90%)
- 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	1.20A @ 100VAC 0.6A @ 220VAC
Inrush Current	69A @ 220VAC/25°C/Cold Start
Power Factor	See table
Leakage Current	1mA @ 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)	200,000 Hours @120VAC, 80% load, 25°C
Dimensions	6.85"L x 2.66"W x 1.44"H
Net Weight	2 lbs.

#### Output

Output Voltage	See table
Start Up Delay	2 second maximum at 120VAC
Line Regulation	±1%
Load Regulation	±2%
Ripple & Noise	3% pk-pk, 20MHz bandwidth
Overvoltage Protection	150% max; auto reset
Overload Protection	Hiccup mode, 110% max; 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, UL1310
Canada	CAN/CSA-C22.2 No. 223-M91
Europe	EN61347, EN61347-2-13
EMI	EN55015 (Radiated & Conducted) FCC CFR47 Part 15 Class B
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
Magfield	EN61000-4-8
Dips / Interruptions	EN61000-4-11
Lighting Immunity	EN61547

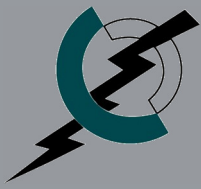
Your Partners in Power.....

Power Partners, Inc. | 43 Broad Street | Hudson, MA 01749

Tel: (978)567-9600 | Fax: (978)567-9601

Website: [www.powerpartners-inc.com](http://www.powerpartners-inc.com)

Specifications subject to change.  
PIL96U-V: Dec. 26, 2013

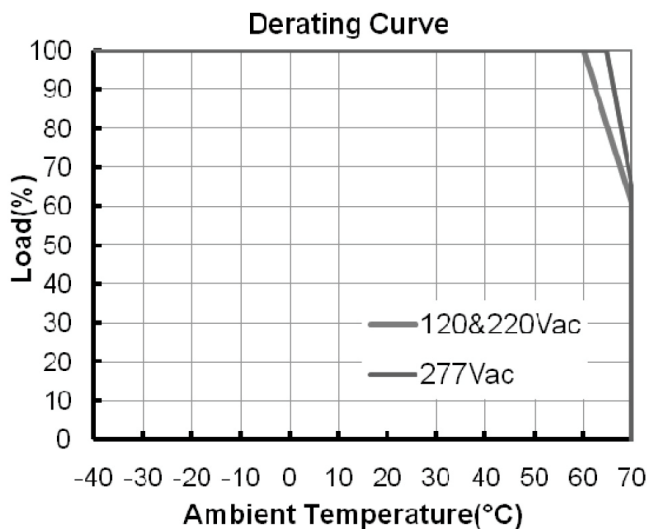


### Models and Ratings Chart

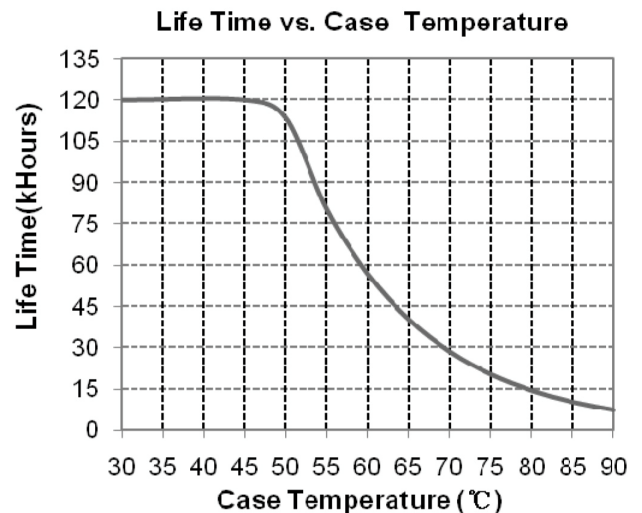
Output Voltage	Input Voltage Range	Output Current Range	Max. Output Power	Typical Efficiency (1)	Power Factor		Model Number (2)
					120Vac	220Vac	
24 Vdc	90 ~ 305 Vac	0~4.00 A	96 W	87%	0.99	0.96	PIL96U-V24-ST(3)(5)(7)
36 Vdc	90 ~ 305 Vac	0~2.66 A	96 W	88%	0.99	0.96	PIL96U-V36-ST(3)(6)(7)
48 Vdc	90 ~ 305 Vac	0~2.00 A	96 W	88%	0.99	0.96	PIL96U-V48-ST(4)(7)
54 Vdc	90 ~ 305 Vac	0~1.77 A	96 W	90%	0.99	0.96	PIL96U-V54-ST(4)(7)

- (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.
- (3) Class 2 output (USR & CNR).
- (4) Class 2 output (USR), Non-Class 2 output (CNR).
- (5) Class 2 output (USR & CNR) for wet location.
- (6) Class 2 output (CNR only) only for wet location.
- (7) SELV Output

### Derating Curve



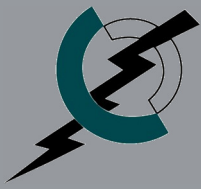
### Life Time vs. Case Temperature Curve



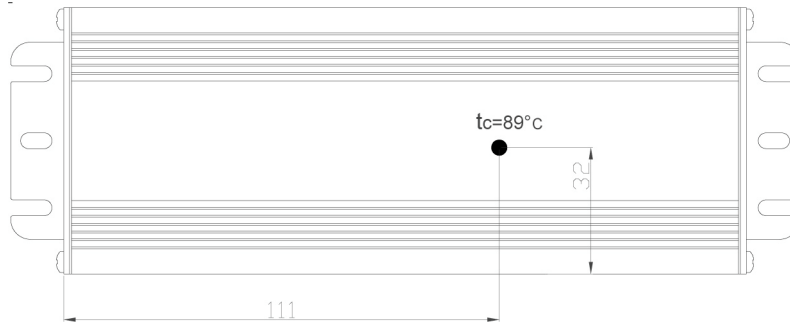
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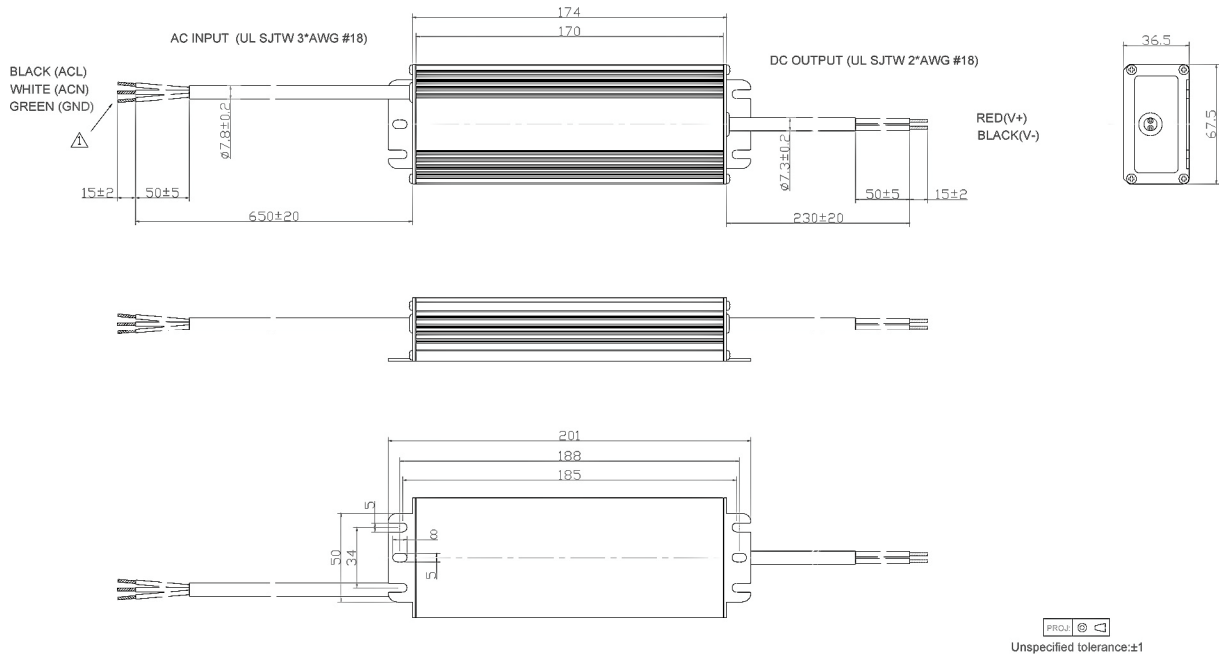
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### Max Case Temperature



### Mechanical Outline



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