



- Ultra High Efficiency (Up to 87%)
- Active Power Factor Correction
- Constant Output Voltage
- Up to 305VAC Operation
- Waterproof to IP67
- Comprehensive Protection Circuitry
- Approved to UL8750 & EN61347
- RoHS Compliant
- 3 Year Warranty

Electrical Specifications

Input

Input Voltage	90-305VAC
Input Frequency	47-63 Hz
Input Current	0.70A @ 110VAC 0.35A @ 220VAC
Inrush Current	20A @ 230VAC/25°C/Cold Start
Power Factor	See table
Leakage Current	300µA @ 120VAC 500µA @ 240VAC
No Load Input Power	≤3W

General

Efficiency	See tables
Isolation	3kVAC input to output 1.5kVAC input to ground 0.5kVAC output to ground 487kHrs @110VAC, 12VDC model, 80% load, 25°C
MTBF (MIL-HDBK-217F)	6.77"L x 1.36"W x 1.67"H
Dimensions	1.06 lbs.
Net Weight	

Output

Output Voltage	See table
Initial Set Accuracy	±10%
Minimum Load	No minimum load required
Start Up Delay	2 seconds max @110VAC
Hold Up Time	≥10mS @ 120VAC, full load
Line Regulation	±3%
Load Regulation	±10%
Transient Response	±15% max. deviation, recovery to within spec in 300ms for a 50% step load change at a 1A/µs slew rate
Ripple & Noise	10% pk-pk, 20MHz bandwidth
Overvoltage Protection	Hiccup mode; auto-recover when fault removed
Overcurrent Protection	Hiccup mode; auto-recover when fault removed
Short Circuit Protection	No damage to unit; auto recovery when fault removed
Temperature Coefficient	<0.03%/°C

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

Environmental

Operating Temp.	-35°C to +70°C, (see derating curve)
Operating Humidity	10% to 100% RH, non-condensing
Storage Temperature	-40°C to +85°C

Safety & EMC

Safety Approvals USA	UL8750 Approved Compliance to UL1310 Class 2, UL1012, UL935
Canada	Compliance to CAN/CSA-C22.2 No. 0 CSA-C22.2 No. 107.1, CSA-C22.2 No. 250.0 EN61347-1
Europe	EN55015 (Radiated & Conducted)
EMI	EN61000-3-2 Class C
Harmonic Currents	EN61000-3-3
Voltage Flicker	EN61000-4-2; 8kV air; 4kV contact
ESD Immunity	EN61000-4-3 Level 2
Radiated Immunity	EN61000-4-4 Level 2
EFT/Burst	EN61000-4-5; 2kV line-line; 4kV line-earth
Surge	EN61000-4-6
Conducted Immunity	EN61000-4-8
Magnetic Field	EN61000-4-8
Dips / Interruptions	EN61000-4-11



Models and Ratings Chart

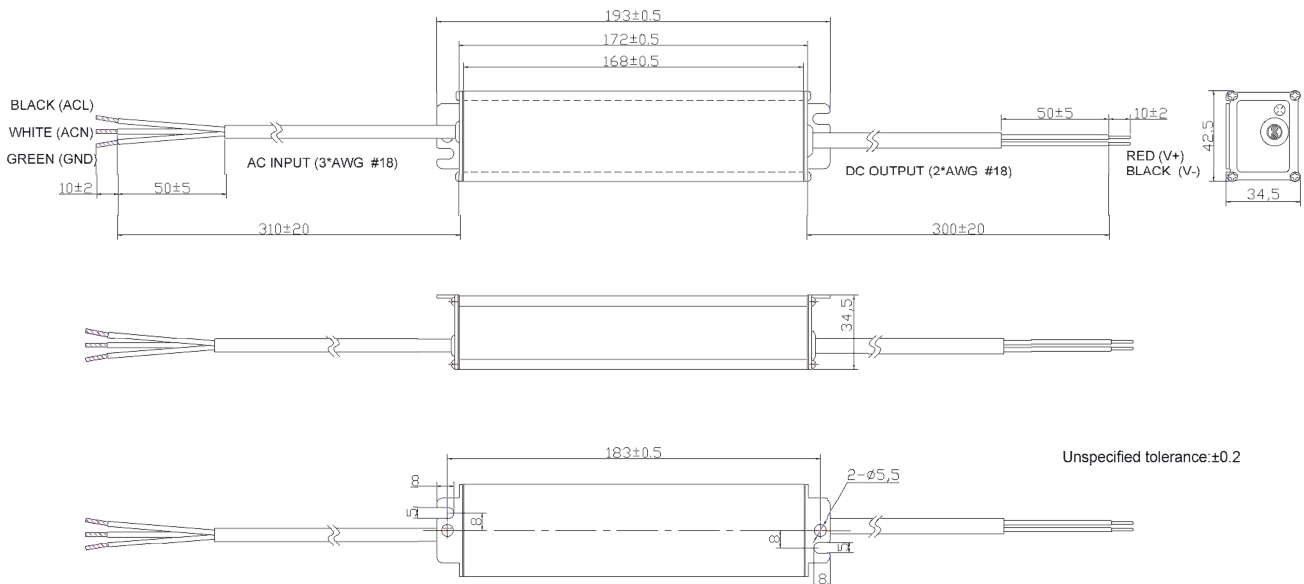
Nominal Output Voltage	Output Voltage Range (Note 3)	Max. Output Current	Max. Output Power	Typical Efficiency (Note 1)	Power Factor		Model Number (Note 2)
					110VAC	220VAC	
12VDC	10.8 - 13.2VDC	4200mA	50W	82%	0.99	0.92	PIL50U-V12
18VDC	16.2 - 19.8VDC	2780mA	50W	84%	0.99	0.92	PIL50U-V18
24VDC	21.6 - 26.4VDC	2100mA	50W	84%	0.99	0.92	PIL50U-V24
36VDC	32.4 - 39.6VDC	1400mA	50W	86%	0.99	0.92	PIL50U-V36
48VDC	43.2 - 52.8VDC	1050mA	50W	87%	0.99	0.92	PIL50U-V48

Note 1: Measured at 220VAC input and full load.

Note 2: Additional suffix may be included to denote variations or modifications to the base product.

Note 3: Voltage factory set to nominal, unless otherwise specified.

Mechanical Outline Drawing



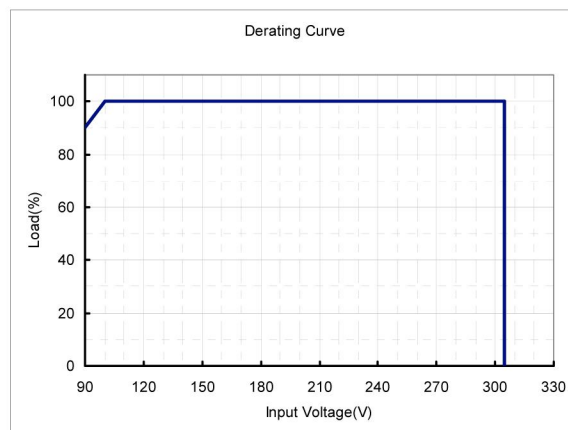
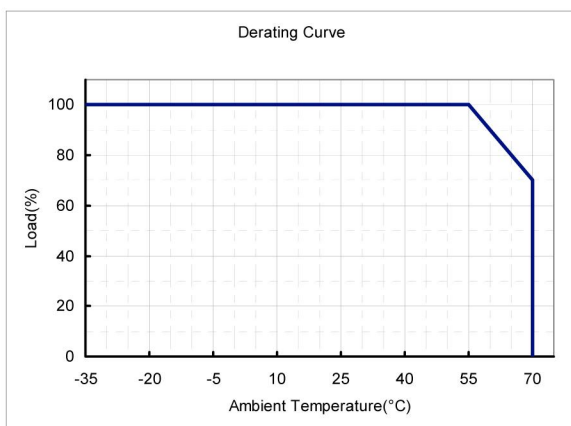
Your Partners in Power.....

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Specifications subject to change.
PIL50U-V: 02/08/2010



Derating Curve



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