



- Ultra High Efficiency (Up to 94%)
- High Power Factor Correction
- Constant Output Voltage
- Up to 305VAC Input Operation
- Waterproof to IP67
- Lightning Protection
- 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	3.3A @ 110VAC 1.6A @ 220VAC
Inrush Current	50A @ 230VAC/25°C/Cold Start
Power Factor	See table
Leakage Current	250µA @ 120VAC 500µA @ 240VAC
No Load Input Power	≤3W

#### Output

Output Voltage	See table
Minimum Load	No minimum load required
Start Up Delay	0.2S max. @110VAC
Hold Up Time	≥10mS @ 110VAC, full load
Line Regulation	±1%
Load Regulation	±3%
Transient Response	±5% max. deviation, recovery to within spec in 10ms for a 50% step load change at a 1A/µs slew rate
Ripple & Noise	2% pk-pk, 20MHz bandwidth
Overvoltage Protection	Latch mode; power on to return to normal operation
Overload Protection	Hiccup mode; auto restart when fault removed
Short Circuit Protection	No damage to unit; auto recovery when fault removed
Overtemperature Protection	110°C nominal internal component temperature

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

#### General

Efficiency	See tables
Isolation	3kVAC input to output 1.8kVAC input to ground 0.5kVAC output to ground 227kHrs @110VAC, 54VDC output 80% load, 25°C
MTBF (MIL-HDBK-217F)	8.78"L x 3.86"W x 1.75"H 3.40 lbs.
Dimensions	
Net Weight	

#### Environmental

Operating Temp.	-35°C to +70°C maximum
Operating Humidity	10% to 100% RH, non-condensing
Storage Temperature	-40°C to +85°C

#### Safety & EMC

Safety Approvals	UL8750 Approved
USA	Compliance to UL1012, UL935
Canada	Compliance to CAN/CSA-C22.2 No. 0 CSA-C22.2 No. 107.1, CSA-C22.2 No. 250.0
Europe	EN61347-1 Approved
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; 2kV line-line; 4kV line-earth
Conducted Immunity	EN61000-4-6
Magnetic Field	EN61000-4-8
Dips / Interruptions	EN61000-4-11

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Specifications subject to change.  
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### Models and Ratings Chart

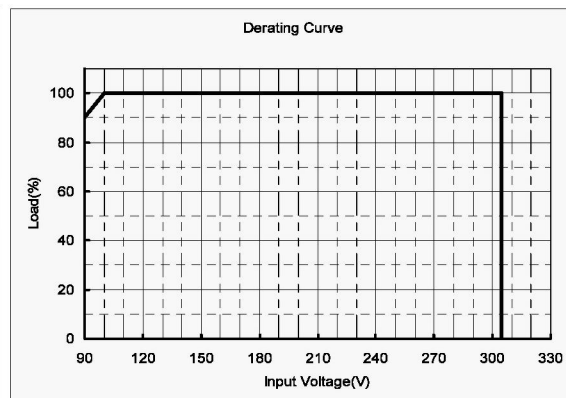
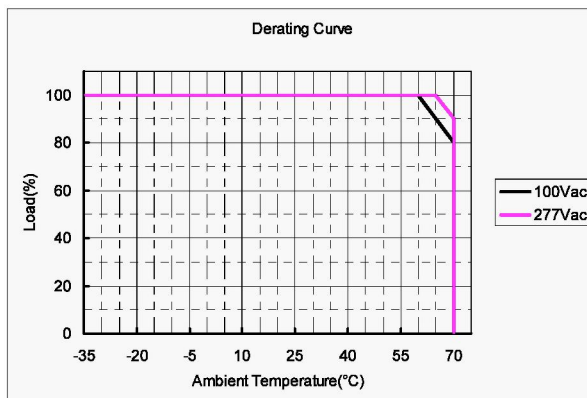
Nominal Output Voltage	Output Voltage Range (Note 3)	Max. Output Current	Max. Output Power	Typical Efficiency (Note 1)	Power Factor		Model Number (Note 2)
					110VAC	220VAC	
12VDC	11.4 - 12.6VDC	22.90A	275W	91.5%	0.99	0.93	<b>PIL300U-V12</b>
24VDC	22.8 - 25.2VDC	12.50A	300W	93.0%	0.99	0.96	<b>PIL300U-V24</b>
36VDC	34.2 - 37.8VDC	8.33A	300W	94.0%	0.99	0.96	<b>PIL300U-V36</b>
42VDC	39.9 - 44.1VDC	7.14A	300W	93.5%	0.99	0.96	<b>PIL300U-V42</b>
48VDC	45.6 - 50.4VDC	6.25A	300W	93.5%	0.99	0.96	<b>PIL300U-V48</b>
52VDC	49.4 - 54.6VDC	5.76A	300W	93.5%	0.99	0.96	<b>PIL300U-V52</b>
54VDC	51.3 - 56.7VDC	5.55A	300W	94.0%	0.99	0.96	<b>PIL300U-V54</b>
56VDC	53.2 - 58.8VDC	5.35A	300W	94.0%	0.99	0.96	<b>PIL300U-V56</b>
60VDC	57.0 - 63.0VDC	5.00A	300W	94.0%	0.99	0.96	<b>PIL300U-V60</b>
84VDC	79.8 - 88.2VDC	3.57A	300W	94.0%	0.99	0.96	<b>PIL300U-V84</b>
105VDC	99.75 - 110.25VDC	2.85A	300W	94.0%	0.99	0.96	<b>PIL300U-V105</b>
150VDC	142.5 - 157.5VDC	2.00A	300W	94.0%	0.99	0.96	<b>PIL300U-V150</b>

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.

### Derating Curve



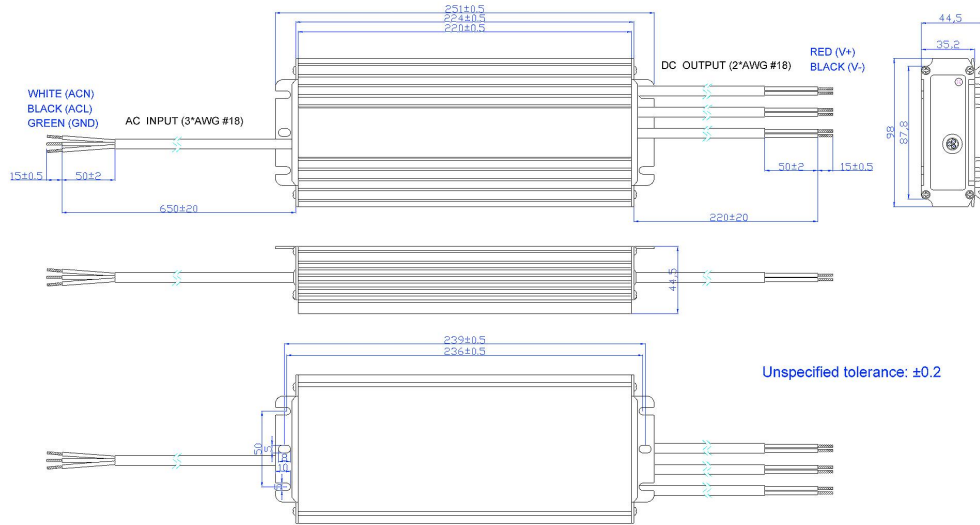
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 Tel: (978)567-9610 | Fax: (978)567-9601  
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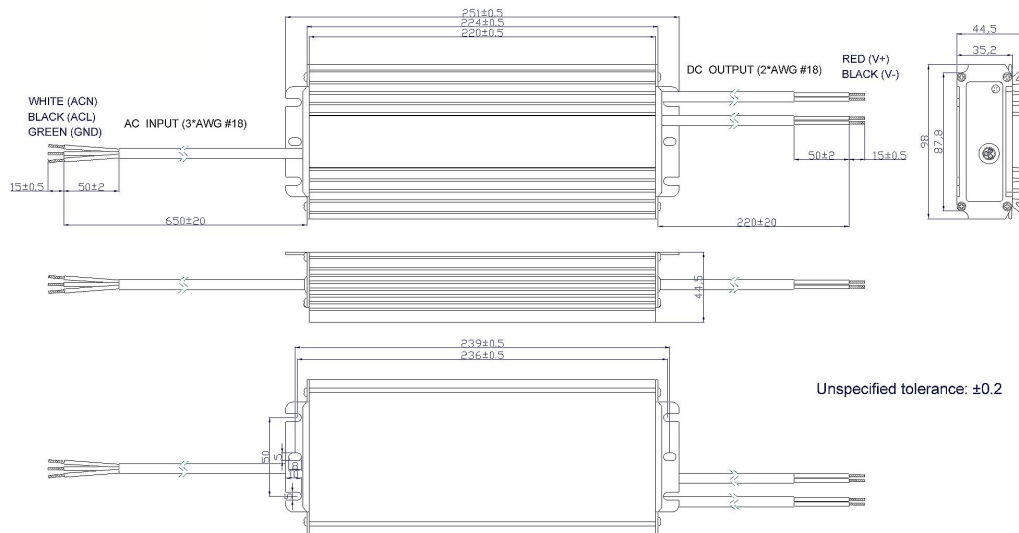
### Mechanical Outline Drawing Model PIL300W-V12



Note:

The three DC output cables are connected in parallel within the unit. Please connect all three sets of red and all three sets of black output cables together within the application or ensure that each carries the same current. The maximum current rating for each AWG#18 cable is 10A.

### Mechanical Outline Drawing Models PIL300U-V24, PIL300U-V36, PIL300U-V42



Note:

The two DC output cables are connected in parallel within the unit. Please connect both red and both black output cables together within the application or ensure that each carries the same current. The maximum current rating for each AWG#18 cable is 10A.

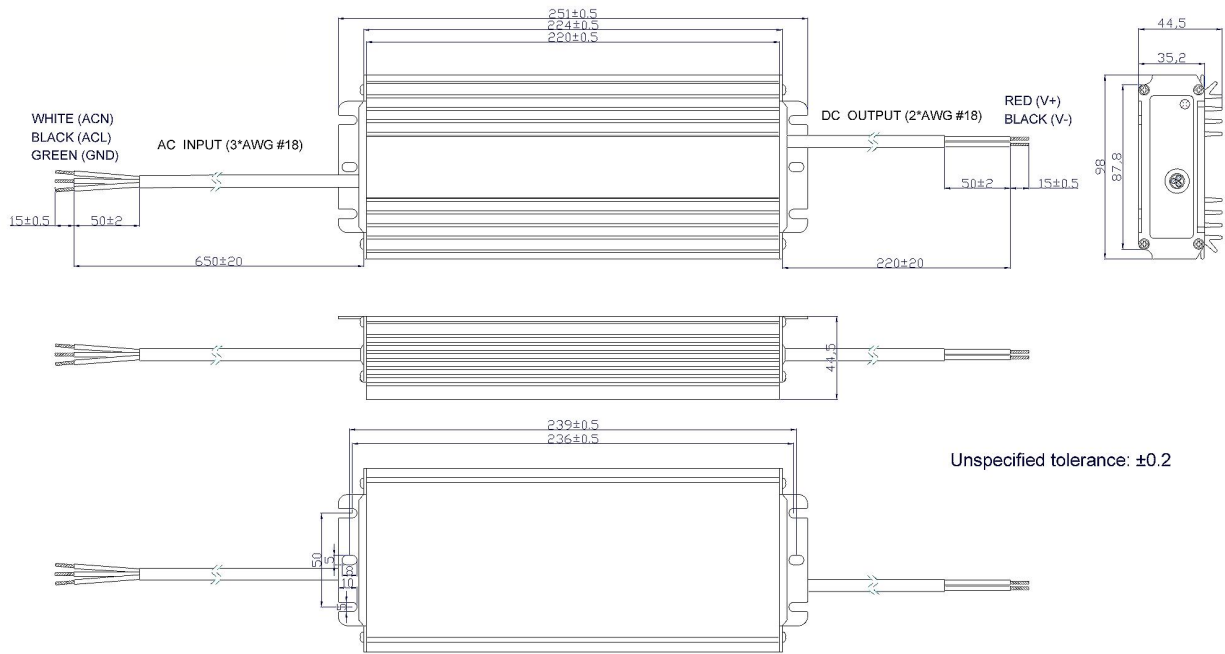
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### Mechanical Outline Drawing All Other Models



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