



- High Efficiency (Up to 84%)
- Active Power Factor Correction
- Constant Output Current
- Up to 305VAC Operation
- Waterproof to IP66
- Dimming Control (optional)
- 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	0.32A @ 100VAC 0.15A @ 220VAC
Inrush Current	20A @ 230VAC/25°C/Cold Start
Power Factor	See table
Leakage Current	300µA @ 120VAC 500µA @ 240VAC
No Load Power Dissipation	≤5W

#### Output

Output Voltage	See table
Initial Set Accuracy	±10%
Dimming Control	Optional (specify suffix DS on model)
Start Up Delay	2 seconds maximum at 110VAC
Line Regulation	±2%
Load Regulation	±5%
Ripple & Noise	25% pk-pk, 20MHz bandwidth
Overvoltage Protection	Hiccup mode; auto restart when fault removed
Overload Protection	Hiccup mode; auto restart 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.

#### General

Efficiency	See tables
Isolation	3kVAC input to output 1.5kVAC input to ground 0.5kVAC output to ground
MTBF (MIL-HDBK-217F)	484kHrs @ 110VAC, 2080mA model, 80% load, 25°C
Dimensions	3.07"L x 3.15"W x 0.98"H
Net Weight	0.44 lbs.

#### Environmental

Operating Temp.	-20°C to +70°C maximum
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
Europe	EN61347, EN61347-2-13
EMI	EN55015 (Radiated & Conducted)
Harmonic Currents	EN61000-3-2 Class C
Voltage Flicker	EN61000-3-3
ESD Immunity	EN61000-4-2; 8kV air; 4kV contact
Radiated Immunity	EN61000-4-3 Level 2
EFT/Burst	EN61000-4-4 Level 2
Conducted Immunity	EN61000-4-6
Dips / Interruptions	EN61000-4-11

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### Models and Ratings Chart

Nominal Output Current	Output Current Range (Note 3)	Max. Output Voltage	Max. Output Power	Typical Efficiency (Note 1)	Power Factor		Model Number With Dimming Control (Note 2)	Model Number (Note 2)
					110VAC	220VAC		
350mA	333mA - 368mA	72VDC	25W	84.0%	0.99	0.94	PIL25U-C350-DS	PIL25U-C350-PS
450mA	428mA - 473mA	56VDC	25W	84.0%	0.99	0.94	PIL25U-C450-DS	PIL25U-C450-PS
620mA	589mA - 651mA	40VDC	25W	83.0%	0.99	0.94	PIL25U-C620-DS	PIL25U-C620-PS
700mA	665mA - 735mA	36VDC	25W	83.0%	0.99	0.94	PIL25U-C700-DS	PIL25U-C700-PS
1050mA	998mA - 1103mA	24VDC	25W	82.0%	0.99	0.94	PIL25U-C1050-DS	PIL25U-C1050-PS
1400mA	1330mA - 1470mA	18VDC	25W	82.0%	0.99	0.94	PIL25U-C1400-DS	PIL25U-C1400-PS
1750mA	1663mA - 1838mA	14VDC	25W	80.0%	0.99	0.94	PIL25U-C1750-DS	PIL25U-C1750-PS
2080mA	1976mA - 2184mA	12VDC	25W	80.0%	0.99	0.94	PIL25U-C2080-DS	PIL25U-C2080-PS

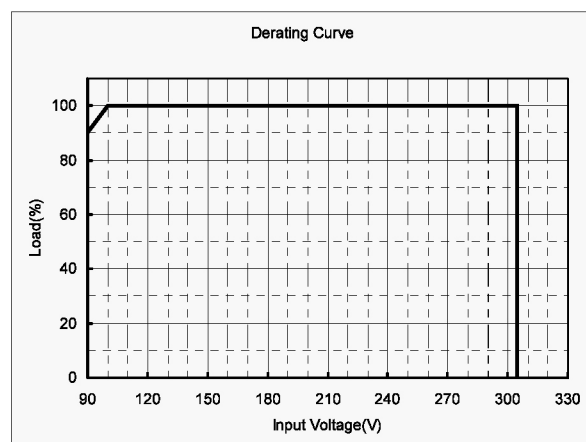
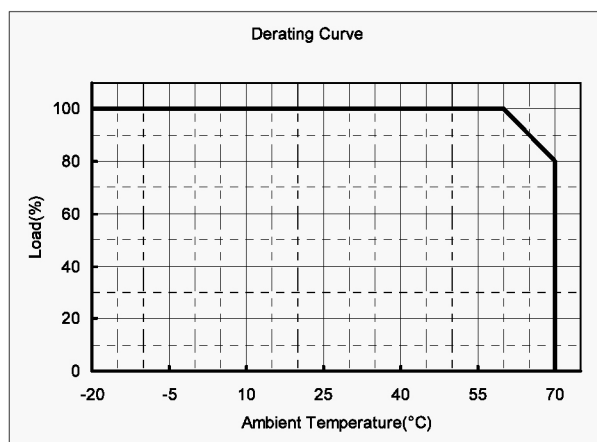
Note 1: Measured at 220VAC input and full load.

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

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

Note 4: Models without the dimming function have a suffix of PS

### Derating Curve



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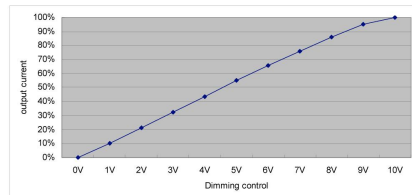
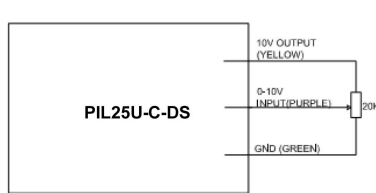
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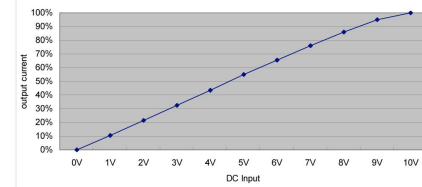
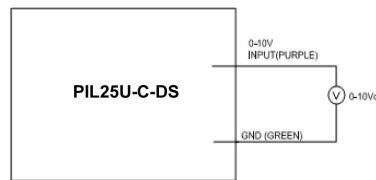


### Optional Dimming Control (Secondary Side)

Parameter	Min.	Typ.	Max.
10V Output Voltage	9.8VDC	10VDC	10.2VDC
10V Output Source Current	-10mA	---	2mA
Maximum Voltage on 0-10V Input Pin	-2VDC	---	15VDC
Source Current on 0-10V Input Pin	0mA	---	1mA



Implementation 1: Potentiometer Control



Implementation 2: DC Input

Note 1: For proper operation, the load voltage must be maintained above the minimum voltage threshold (approximately 33% of the maximum output voltage for any given model)

Note 2: If the input voltage is between 90-175VAC, the input current can be varied from 100% to 10% (See Figure 1)

Note 3: If the input voltage is between 175-305VAC, the input current can be varied from 100% to 20% (See Figure 2)

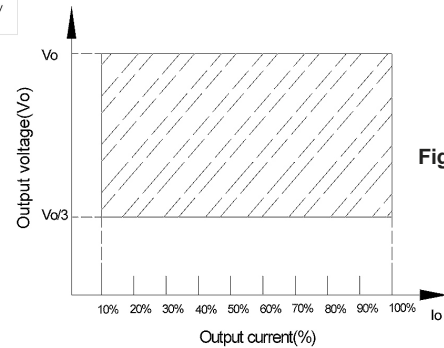


Figure 1

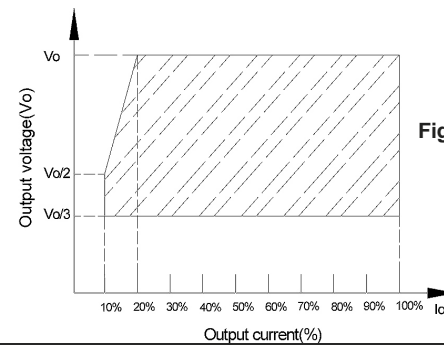


Figure 2

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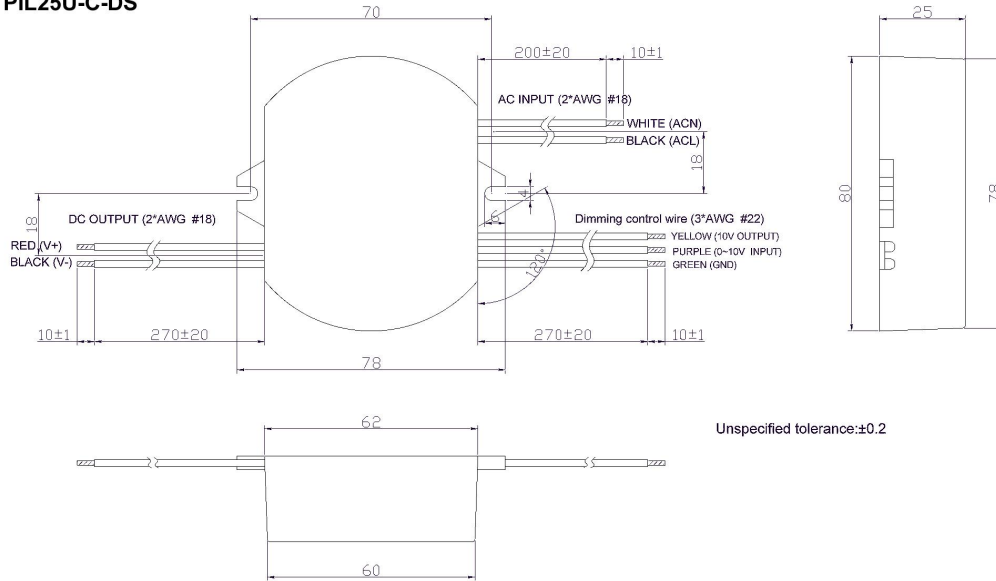
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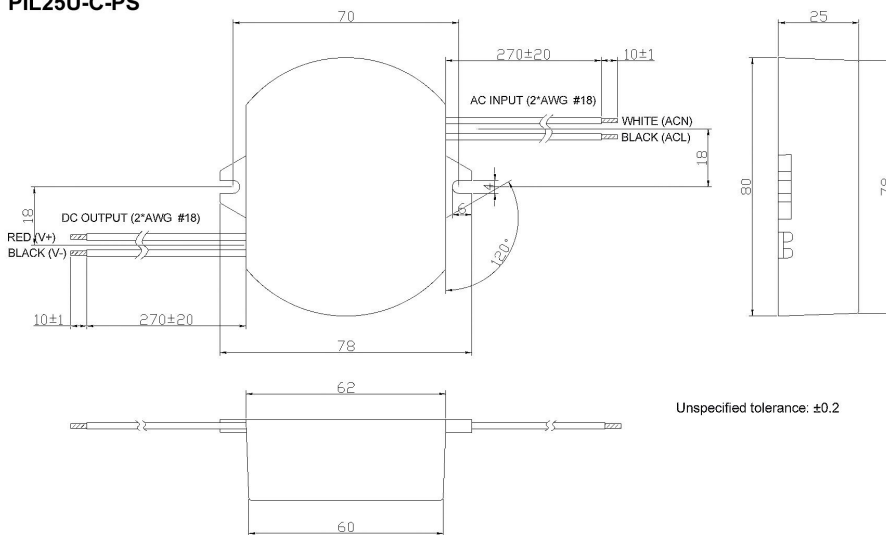


### Mechanical Outline Drawings

**PIL25U-C-DS**



**PIL25U-C-PS**



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