



- Dimming Control
- High Efficiency (Up to 92%)
- Active Power Factor Correction
- Constant Output Current
- Up to 305VAC Operation
- Waterproof to IP67
- Lightning Protection
- Comprehensive Protection Circuitry
- UL8750 & EN61347 Safety Approvals
- RoHS Compliant

Electrical Specifications

Input

Input Voltage	90-305VAC
Input Frequency	47-63 Hz
Input Current	0.9A @ 100VAC 0.42A @ 220VAC
Inrush Current	50A @ 230VAC/25°C/Cold Start
Power Factor	See table

Output

Output Voltage	See table
Overshoot/Undershoot	±10%
Start Up Delay	0.8 seconds maximum at 110VAC
Line Regulation	±1%
Load Regulation	±3%
Ripple & Noise	5% pk-pk, 20MHz bandwidth
Overvoltage Protection	Latch mode; restart power to return to normal operation
Over Temperature Protection	Latch mode; restart power to return to normal operation
Short Circuit Protection	No damage to unit; auto recovery when fault removed

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)	450kHrs @110VAC, 2800mA model, 80% load, 25°C
Dimensions	5.91"L x 2.66"W x 1.46"H
Net Weight	1.65lbs.

Environmental

Operating Temp.	-35°C to +70°C no derating
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	EN61347-1, EN61347-2-13 EN55015 (Radiated & Conducted)
EMI	EN61000-3-2
Harmonic Currents	EN61000-3-3
Voltage Flicker	EN61000-4-2; 8kV air; 4kV contact
ESD Immunity	EN61000-4-3
Radiated Immunity	EN61000-4-4
EFT/Burst	EN61000-4-5 (2kV line-line; 4kV line-gnd)
Surge Immunity	EN61000-4-6
Conducted Immunity	EN61000-4-8
Magnetic Field	EN61000-4-11
Dips / Interruptions	

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Specifications subject to change.
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Models and Ratings Chart

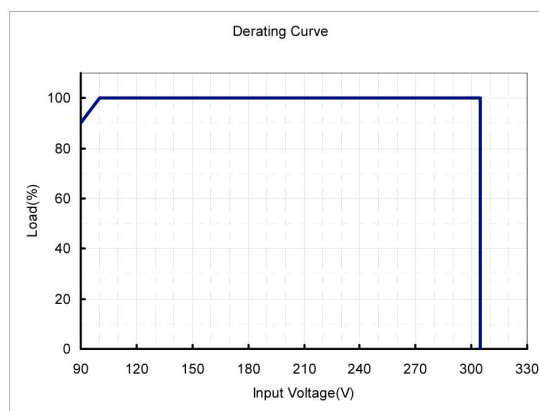
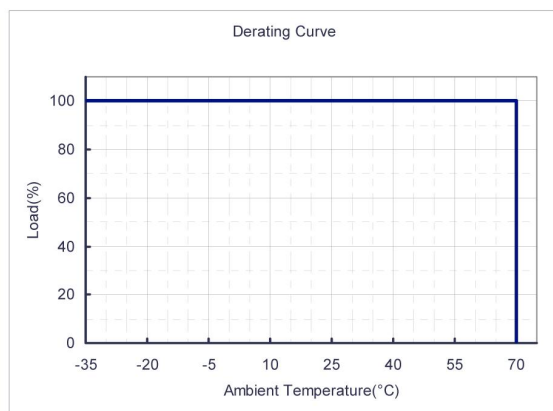
Nominal Output Current	Output Current Range (Note 3)	Output Voltage Range	Max. Output Power	Typical Efficiency (Note 1)	Power Factor		Model Number With Dimming Control (Note 2)
					110VAC	220VAC	
350mA	333mA - 368mA	107VDC - 214VDC	75W	92.0%	0.99	0.96	PIL75U-C350-DT
450mA	428mA - 472mA	83VDC - 166VDC	75W	92.0%	0.99	0.96	PIL75U-C450-DT
700mA	665mA - 735mA	54VDC - 108VDC	75W	91.0%	0.99	0.96	PIL75U-C700-DT
1050mA	1000mA - 1100mA	36VDC - 72VDC	75W	90.0%	0.99	0.96	PIL75U-C1050-DT
1400mA	1330mA - 1470mA	27VDC - 54VDC	75W	90.0%	0.99	0.96	PIL75U-C1400-DT
2100mA	1995mA - 2205mA	18VDC - 36VDC	75W	89.0%	0.99	0.96	PIL75U-C2100-DT
2800mA	2660mA - 2940mA	13VDC - 27VDC	75W	89.0%	0.99	0.96	PIL75U-C2800-DT
3750mA	3565mA - 3935mA	10VDC - 20VDC	75W	88.0%	0.99	0.96	PIL75U-C3750-DT
5000mA	4750mA - 5250mA	7VDC - 15VDC	75W	88.0%	0.99	0.96	PIL75U-C5000-DT

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.

Derating Curve



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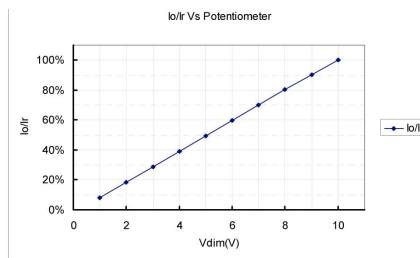
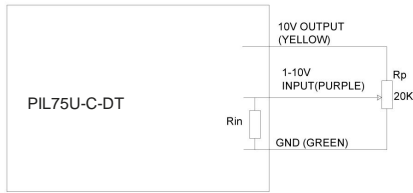
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Optional Dimming Control (Secondary Side)

Parameter	Min.	Typ.	Max.
10V Output Voltage	9.8VDC	10VDC	10.2VDC
10V Output Source Current	-10mA	---	10mA
Maximum Voltage on 0-10V Input Pin	-2VDC	---	12VDC
Source Current on 0-10V Input Pin	0mA	---	1mA
Value of Rin		10K	

Implementation 1: Potentiometer Control



Note 1: If the dimming function is not used, short the 10V output pin (yellow) and the 1-10V input pin (purple)

Note 2: I_o is the actual output current and I_r is the rated current without the dimming control.

Note 3: For proper operation, the load voltage must be maintained above the minimum voltage threshold (approximately 50% of the maximum output voltage for any given model).

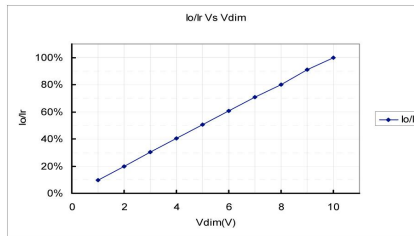
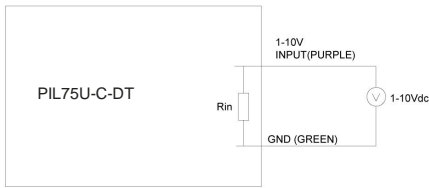
Note 4: If the output voltage is above 50% of the maximum, the dimming control will operate over the entire 1-10V range, while the output current is at 100% down to 10% load.

Note 5: The dimming signal may be less than 1V, however, from 0-1V, the output current linearity cannot be guaranteed.

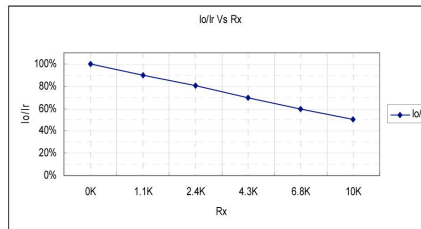
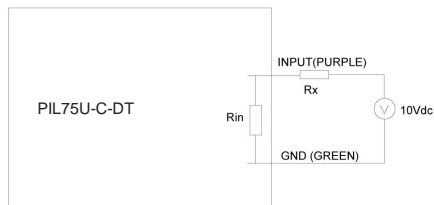
Note 6: The recommended value of R_p , which is the potentiometer used in Implementation #1, is between 10 and 100K.

Note 7: To ensure proper operation, do not connect the GND of the dimming to the output

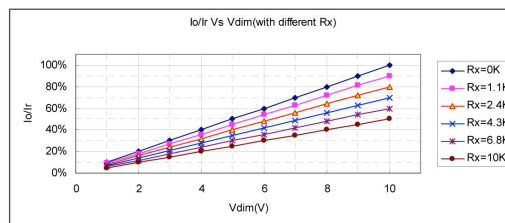
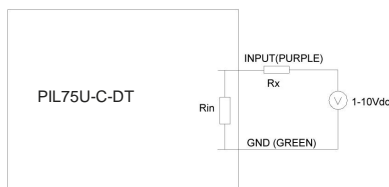
Implementation 2: DC Input



Implementation 3: External Resistor

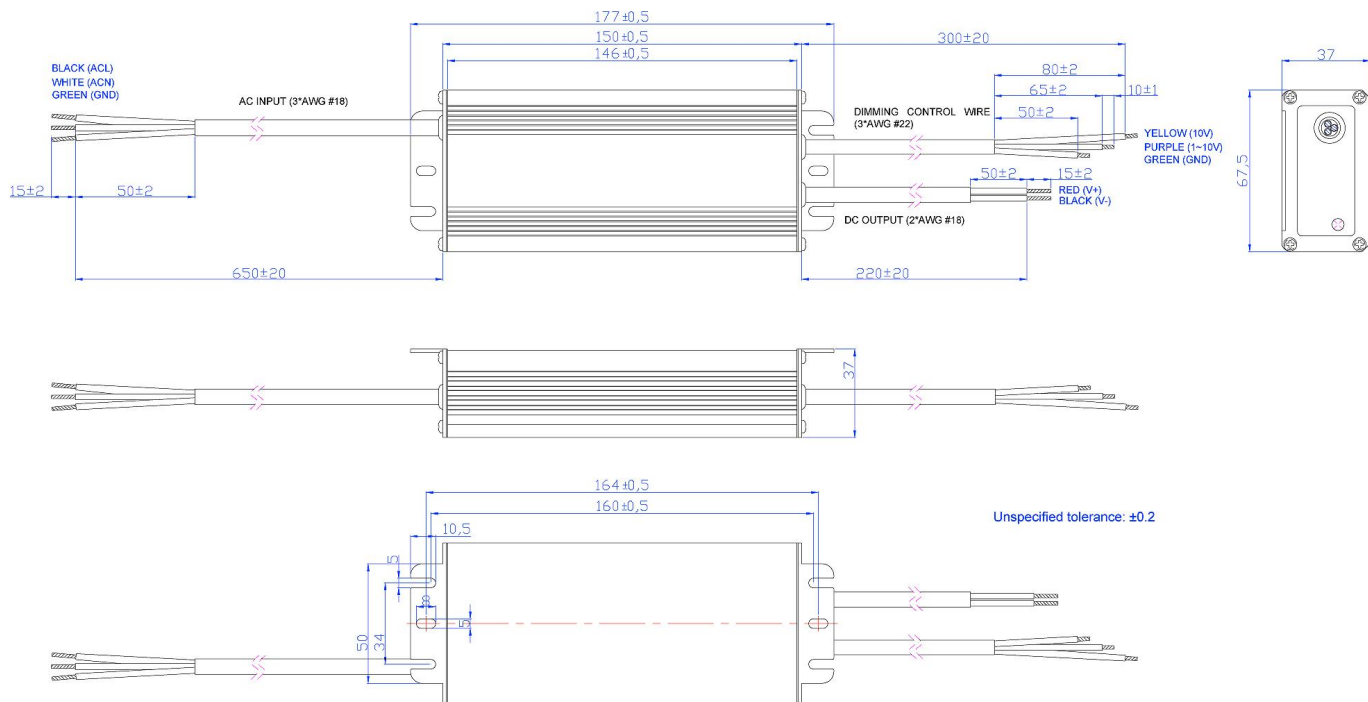


Implementation 4: External Resistor & DC Input





Mechanical Outline Drawing



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