



- 10KV Lightning Surge Protection
- Smart Over-Temperature Protection
- Universal AC Input up to 305Vac
- High Efficiency (Up to 91%)
- Active Power Factor Correction
- Constant Current With Dimming Options
- Waterproof up to IP67
- Comprehensive Protection Circuitry
- UL8750 & EN61347 Approvals
- 5 Year Warranty



Electrical Specifications

<p>Input</p> <p>Input Voltage 90-305VAC Input Frequency 47-63 Hz Input Current 0.9A@115VAC, 0.45A@230VAC, 0.4A@277Vac Inrush Current 60A Peak @ 230VAC, Cold Start Power Factor >0.98 @ 115VAC >0.96 @ 230VAC Leakage Current 0.75mA @ 277VAC</p>	<p>General</p> <p>Efficiency Isolation See graph p.5 3.75kVAC input to output 2kVAC input to ground 0.5kVAC output to ground 350Khrs min. (25°C) >50,000hrs @ 230Vac, 100% load Tcase = 70°C</p> <p>MTBF (MIL-HDBK-217F) Lifetime</p> <p>Dimensions 6.7"(170mm)L x 2.48"(63mm)W x 1.57"(40mm)H Net Weight 1.61lbs.</p>
<p>Output</p> <p>Output Voltage See table p.2 Start Up Delay <1.5S @ 115VAC, full load <0.5S @ 230VAC, full load Hold Up Time >16mS @ 115VAC, full load Line Regulation ±1% Output Current Tolerance ±5% Ripple & Noise 1V pk-pk, measured at 20MHz bandwidth with a 22uF electrolytic capacitor in parallel with a 0.1uF ceramic capacitor across output</p>	<p>Environmental</p> <p>Operating Temp. -40°C to +70°C (see derating curve p.2) Operating Humidity 10% to 95% RH, non-condensing Storage Temperature -40°C to +85°C Vibration IEC 68-2-2-1995/CNS-3629-C6016/GB/T 2423.10-2008; 5-500Hz, 1.0G, 1 Oct/min, 2 cycles: x, y, z, 75 min</p>
<p>Protection</p> <p>Overvoltage Protection 110-150% of rated output voltage, auto recovery Over Power Protection 110-150% of rated output power, auto recovery Short Circuit Protection No damage to unit, auto recovery</p> <p>Smart Over-Temperature Protection When ambient temperature is >70°C±10°C, output load is limited to 75% When ambient temperature is >85±10°C output is disabled. Auto recovery when case temperature is <95°C</p> <p>Note: All specifications typical at 25°C unless noted.</p>	<p>Safety & EMC</p> <p>Safety Approvals USA/Canada UL/cUL 8750 Approved Europe EN61347-1, EN61347-2-13</p> <p>EMC Approvals EMI EN55015 (Radiated & Conducted) Class B FCC Part 18 Class B EN61000-3-2: Class C EN61000-3-3: EN61000-4-2: 8kV air; 4kV contact EN61000-4-3: 3V/m EN61000-4-4: ±1.0kV EN61000-4-5: (5kV line-line; 10kV line-ground) EN61000-4-6: 3Vrms EN61000-4-8: 3 A/m EN61000-4-11: 100% reduction for 10ms, 30% reduction for 100ms.</p> <p>Harmonic Currents Voltage Flicker ESD Immunity Radiated Immunity EFT/Burst Surge Immunity Conducted Immunity Magnetic Field Dips / Interruptions</p>

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Models and Ratings Chart

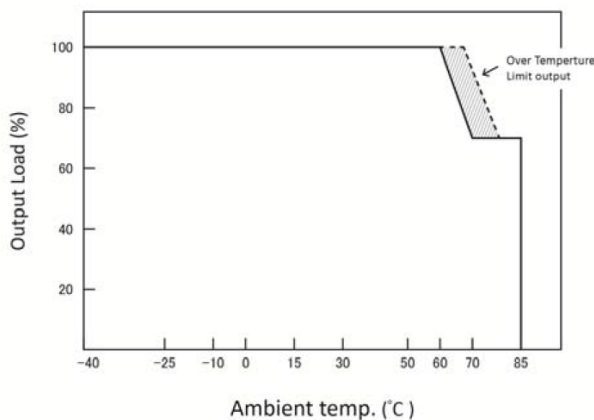
Model ¹	Rated Output Current	Current Adjustment Range	Output Voltage	Output Power	Efficiency ²
PDL60U-C350-A	350mA	210-350mA	100-200V	70W	91%
PDL60U-C700-A	700mA	420-700mA	50-100V	70W	91%
PDL60U-C1050-A	1050mA	630-1050mA	49-70V	70W	91%
PDL60U-C1400-A	1400mA	840-1400mA	33-49V	68W	90%
PDL60U-C1750-A	1750mA	1050-1750mA	21-35V	60W	90%
PDL60U-C2280-A	2280mA	1400-2280mA	21-27V	60W	90%

¹Model numbers for IP65 internal potentiometer type dimming shown. For external IP67 rated dimming type, model numbers are PDL60U-CXXXX-D.

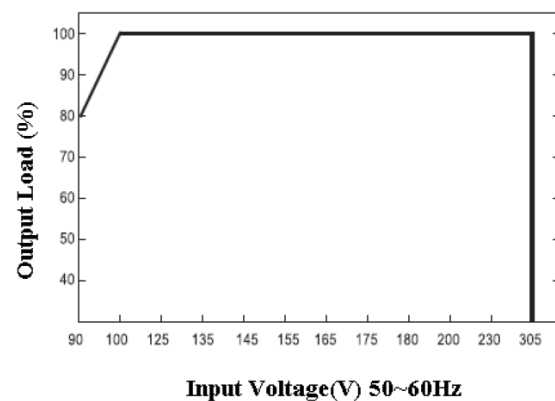
²Please reference efficiency vs. Load graph for more precise values.

Derating Curves

Temperature vs. Load %



Input Voltage vs. Load %



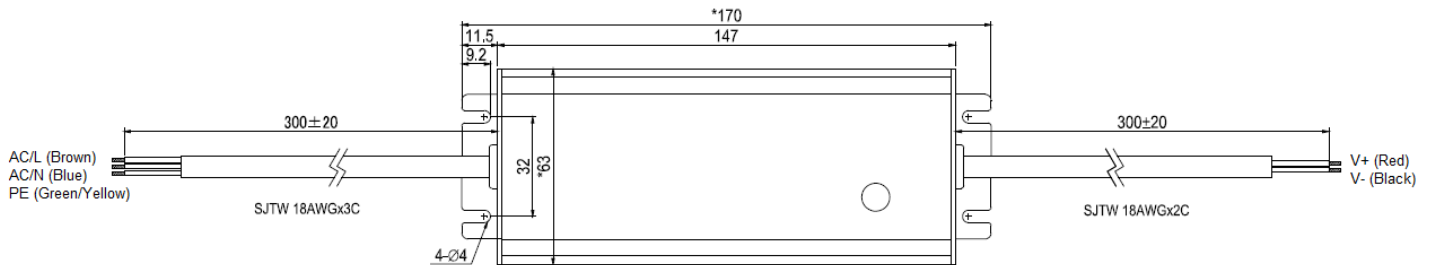
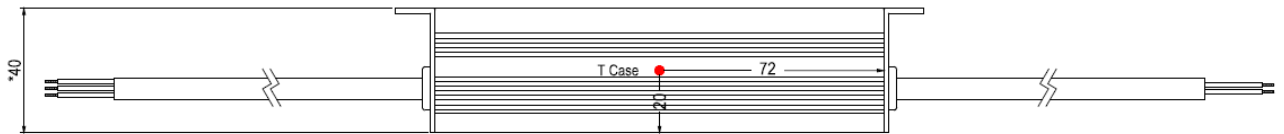
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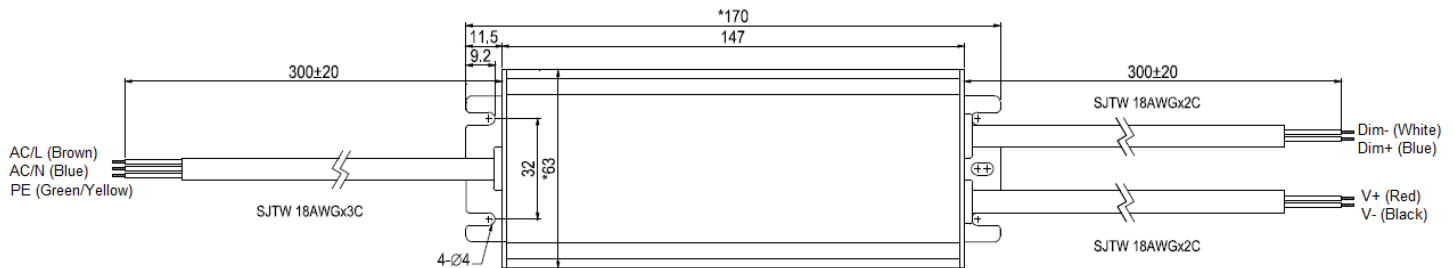
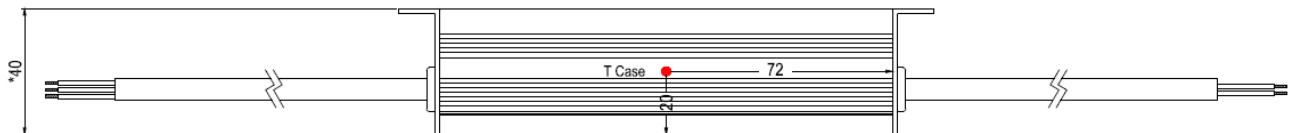
Specifications subject to change.
 PDL60U-C-A: August 11, 2015

Mechanical Drawings

Standard Version (Type -A)



Type -D



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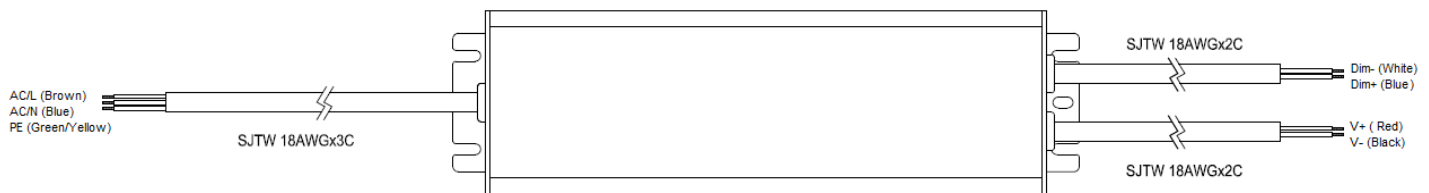
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Dimming Control (-D type only)

For -A type, dimming and output current adjustment is set by internal potentiometer, which can be accessed by removing the "Adj lo" plug on the LED driver case. For -D type, dimming can be controlled in 3 different ways using the Dim(+) and Dim(-) leads: using an external variable/fix resistor, using a 0-10V signal, or by using a PWM signal. If dimming control is not used, leave the Dim(+) and Dim(-) leads floating.

NOTE: Do not connect Dim- to V-, this can damage the LED driver.



External Resistor Dimming

Resistor value	10K Ω	20K Ω	30K Ω	40K Ω	50K Ω	60K Ω	70K Ω	80K Ω	90K Ω	100K Ω	OPEN
% of Rated Output Current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~105%

0-10V Signal Dimming

Vdc	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
% of Rated Output Current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~105%

10V PWM Signal Dimming: Frequency range 100Hz~3KHz

Duty Cycle	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
% of Rated Output Current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~105%

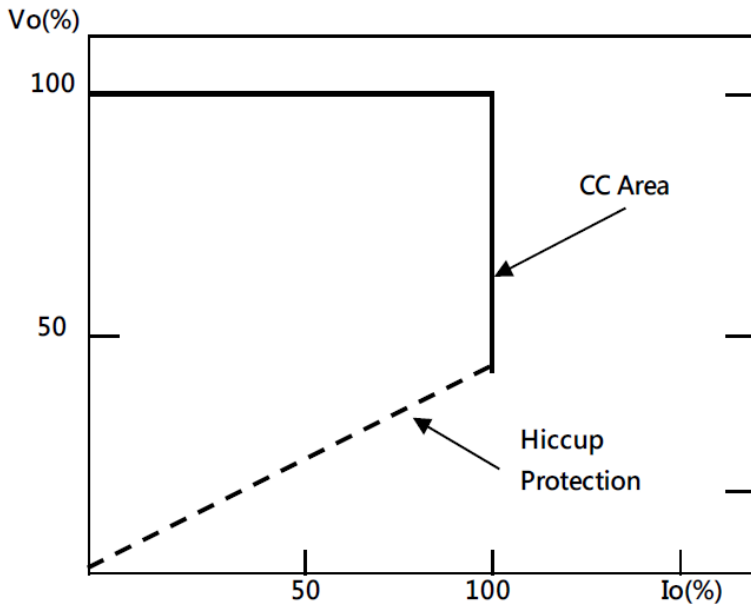
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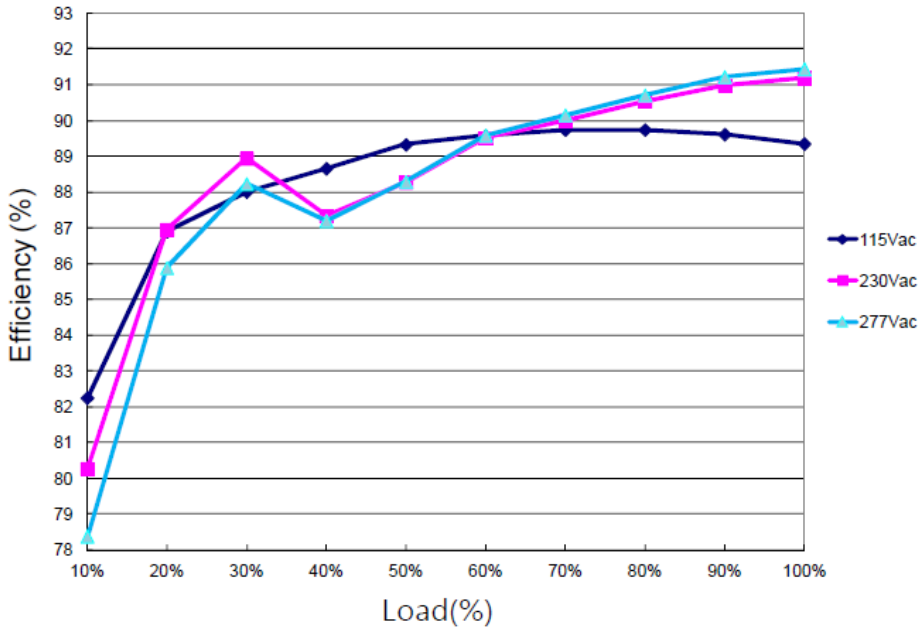
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LED Driver I-V Curve



Efficiency vs. Load



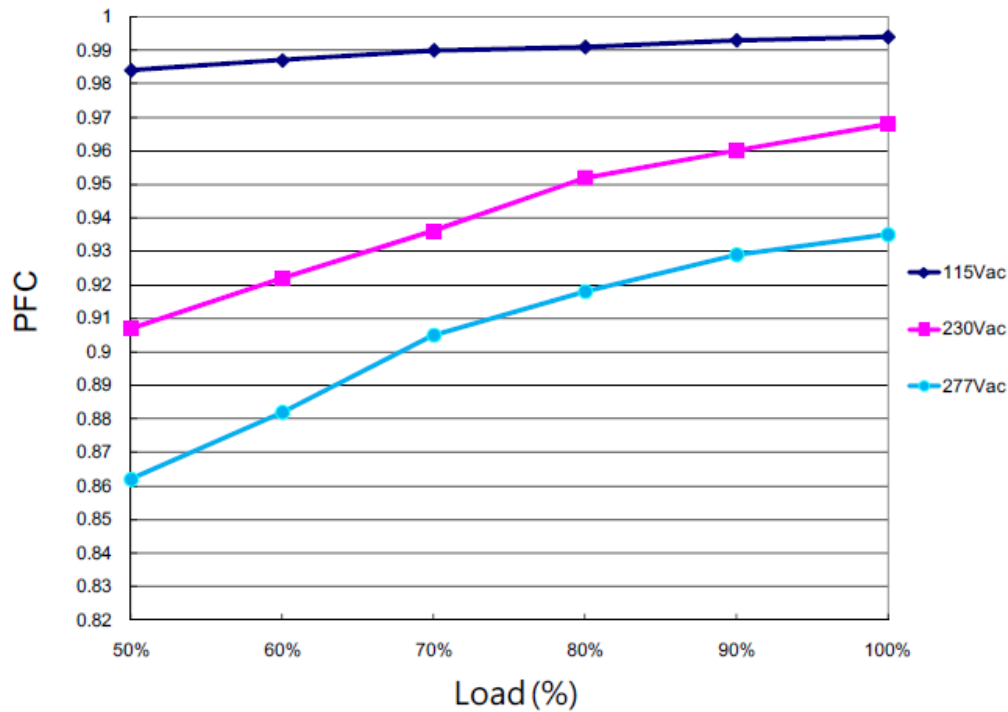
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Power Factor vs. Load



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