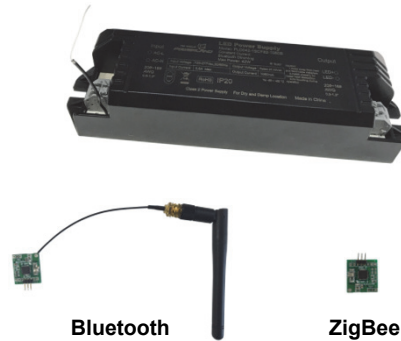


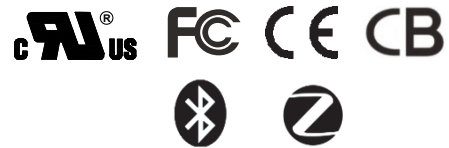
Powerland's 42/50W wireless dimming and programmable series offers LED drivers with wide-range dimmable, flicker-free output current and 108~305Vac universal input.

The output currents of this series are digital programmable through Bluetooth/ZigBee communication, and dimming, adjustable and wide-range dimmable output current.



Applications

- Indoor LED lights
- LED lights with flexible current settings
- Downlights, high bay and low bay lights, spot lights, LED troffers



Specifications

Models	Max. Output Power	Input Voltage	Output Voltage Range	Max. Output Current	Efficiency	Max. Case Temperature	THD	Power Factor	Dimensions
PLD042-1SCF82-XXXB	42W	108~305Vac	27~40V	1050mA	86%	90°C	<20%	>0.9	130.7x40.8x28.5mm
PLD050-1SCF82-XXXB	50W	108~305Vac	27~40V	1250mA	86%	90°C	<20%	>0.9	130.7x40.8x28.5mm

* Based on 25°C ambient temperature, rated input voltage, and full load.

** Refer to Page 2 for detailed specifications for this series of LED drivers.

Features

- Flicker-free with < 5% current ripple
- > 50,000 hours lifetime at 75°C Tcase
- > 5 years warranty at 75°C Tcase
- Bluetooth/ZigBee programming and dimming
- Universal input voltage: 108~305Vac
- Safety according to UL1310 & EN61347-2-13
- UL Class 2 Output
- EMC according to FCC Part 15 Class A
- Lightning, OVP, SCP, OTP & Open Circuit Protection

Electrical Specifications

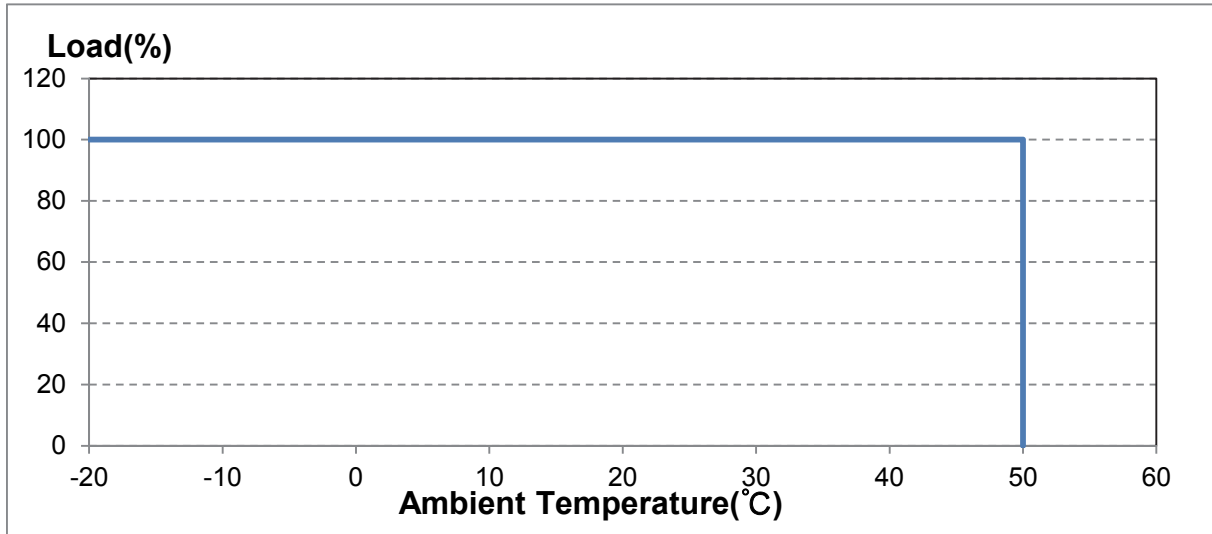
Model	PLD042-1SCF82-XXXB	PLD050-1SCF82-XXXB
Output Voltage	27~40V	27~40V
Current Programmable	Yes (Bluetooth/ZigBee Programming)	Yes (Bluetooth/ZigBee Programming)
Output Current Programmable Range	525~1050mA	625~1250mA
Dimming	Bluetooth/ZigBee Dimming	Bluetooth/ZigBee Dimming
Dimming Range	5~100%	5~100%
Output Power	42W	50W
Max. Current Ripple	±5%	±5%
Input Voltage Range	108~305Vac	108~305Vac
Frequency Range	47~63Hz	47~63Hz
Max. Input Current	0.5A	0.6A
Max. Input Power	50W	60W
Power Factor	>0.95 @ 120Vac & 80~100% full load; >0.91 @ 277Vac & 80~100% full load	
Efficiency	86%	86%
Max. Open Circuit Voltage	59.5V	59.5V
THD	<20% @ 120Vac/277Vac & 80~100% full load	
Protections	OVP, OTP, OCP, SCP	
Environmental Protection	UL Dry & Damp	
Working Temperature	-20~+50°C	
Max. Case Temperature	90°C	
Surge Protection	1kV	
ANSI Surge Type	1.2/50µs Combination Wave (w/t 2Ω)	
Agency Approbations	UL 1310 Class 2 & EN61347-2-13	
Electromagnetic Compliance	Per Title 47 CFR Part 15 Class A	
Isolation	Primary to Secondary: 3750Vac / 10mAMax / 60seconds	
Dimension	130.7x40.8x28.5 mm	130.7x40.8x28.5 mm
Mounting Length	136.9mm	136.9mm
Overall Length	148.8 mm	148.8 mm
Weight	0.13 kg	0.13 kg
Life Time	> 50,000 hours @ full load, 75°C Tcase	

* Note: XXX stands for output current, e.g. 1050 stands for 1050mA. XXX in PLD042-1SCF82-XXXB=525~1050; XXX in PLD050-1SCF82-XXXB=625~1250.

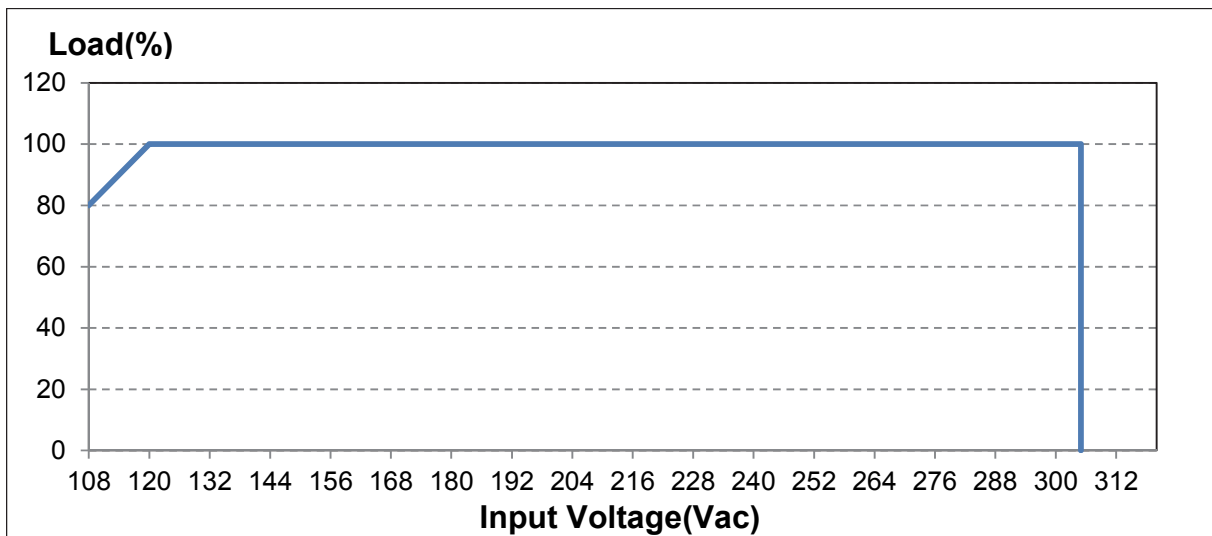
** Unless otherwise noted, the data are based on 25°C ambient temperature, 230Vac input voltage, and full load.

Electrical Specifications

Load Derating vs. Ambient Temperature

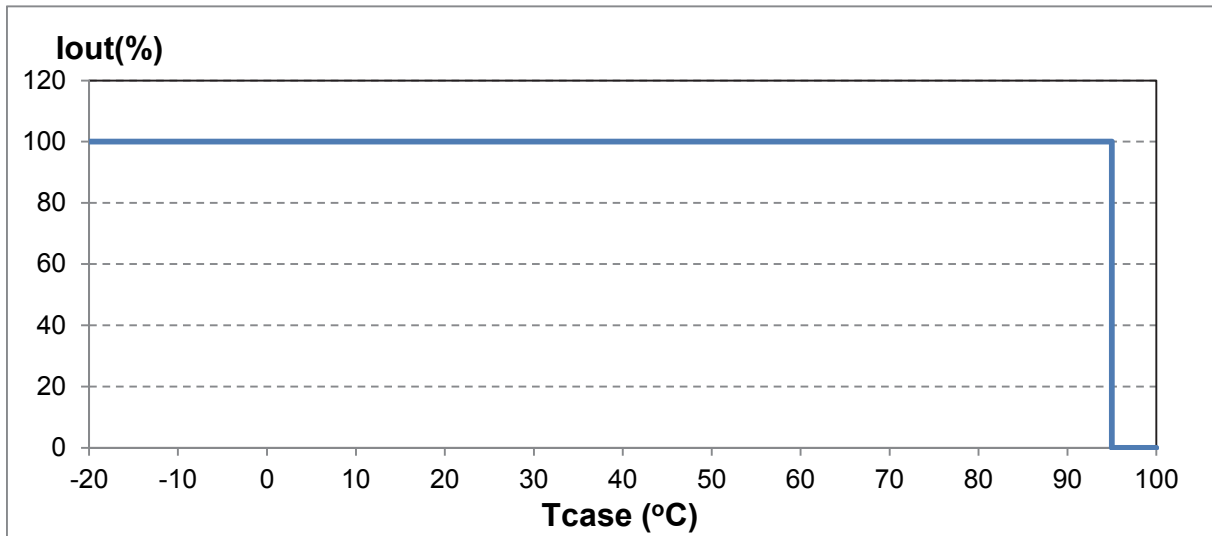


Load Derating vs. Input Voltage

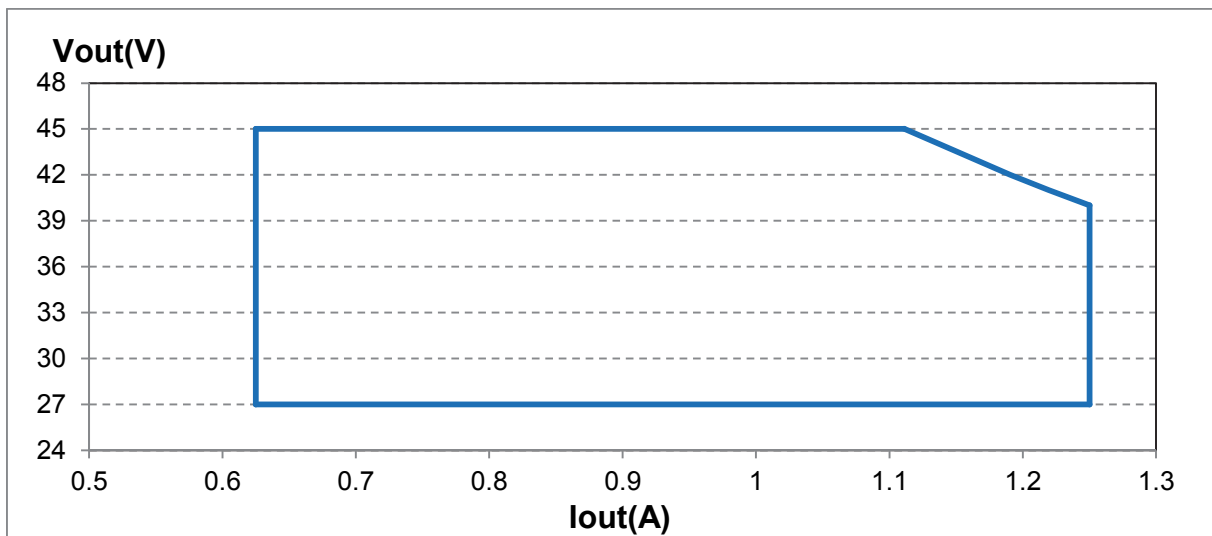


Electrical Specifications

Output Current vs. Case Temperature (with $\pm 5^{\circ}\text{C}$ Tolerance)

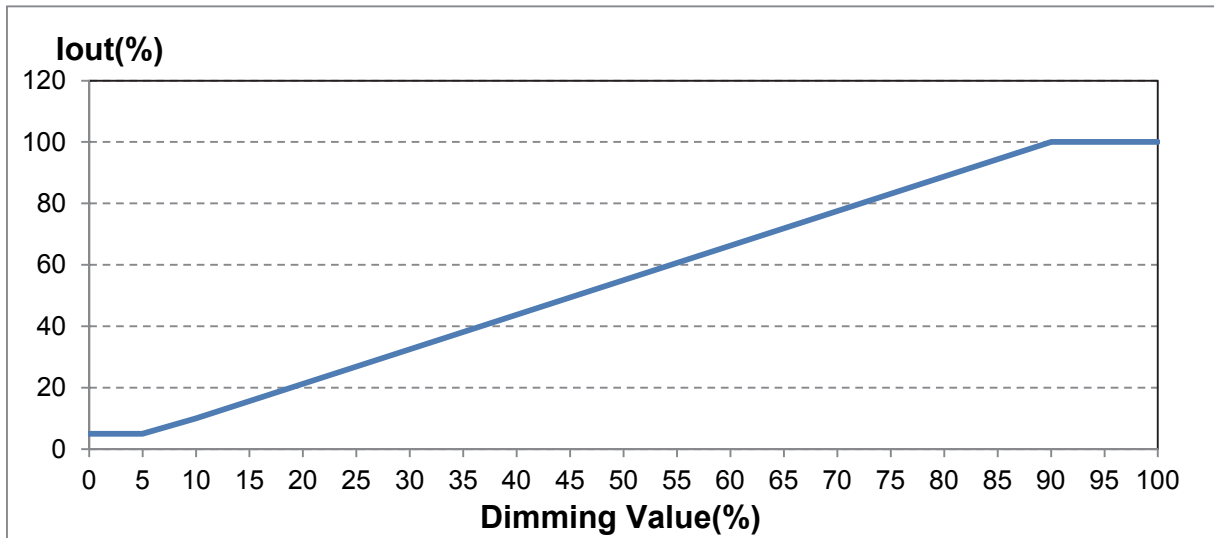


I-V Programming Area: Output Voltage vs. Output Current



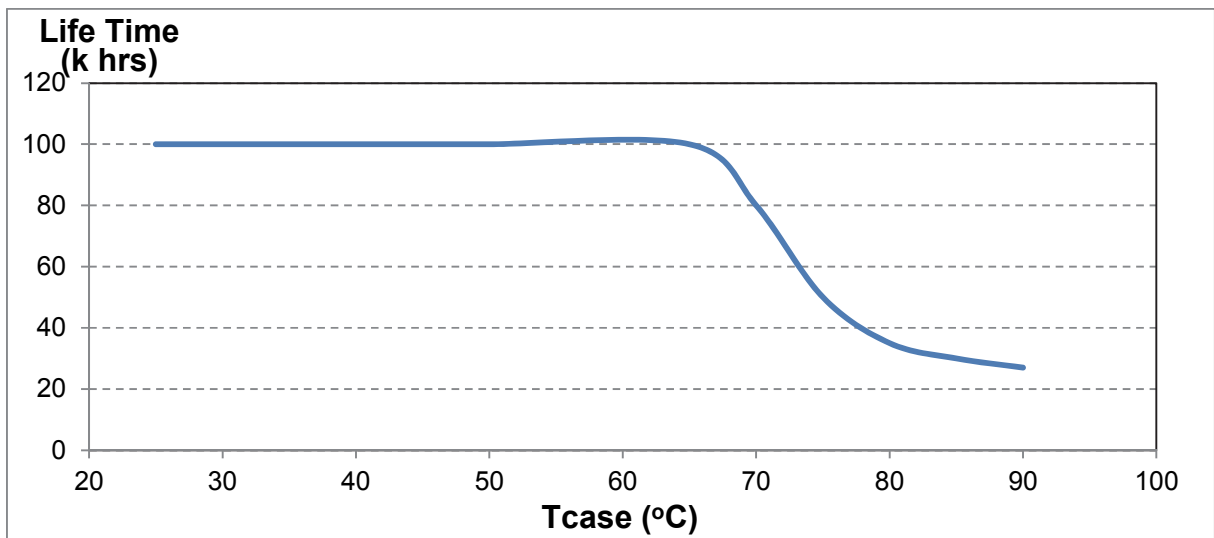
Electrical Specifications

Output Current vs. Dimming Value



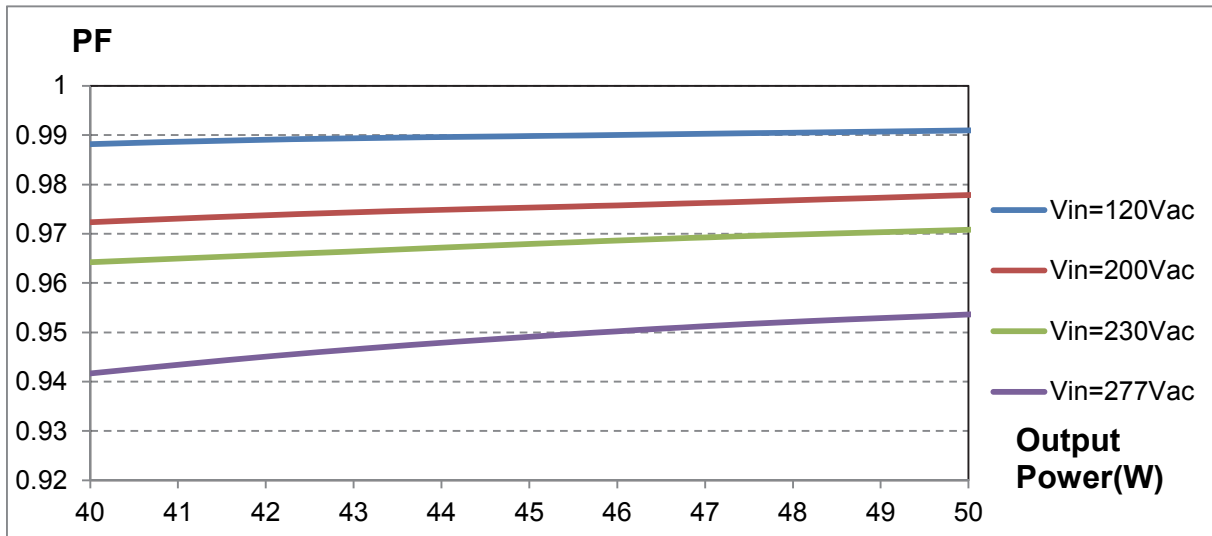
Performance Characteristics

Life Time vs. Case Temperature

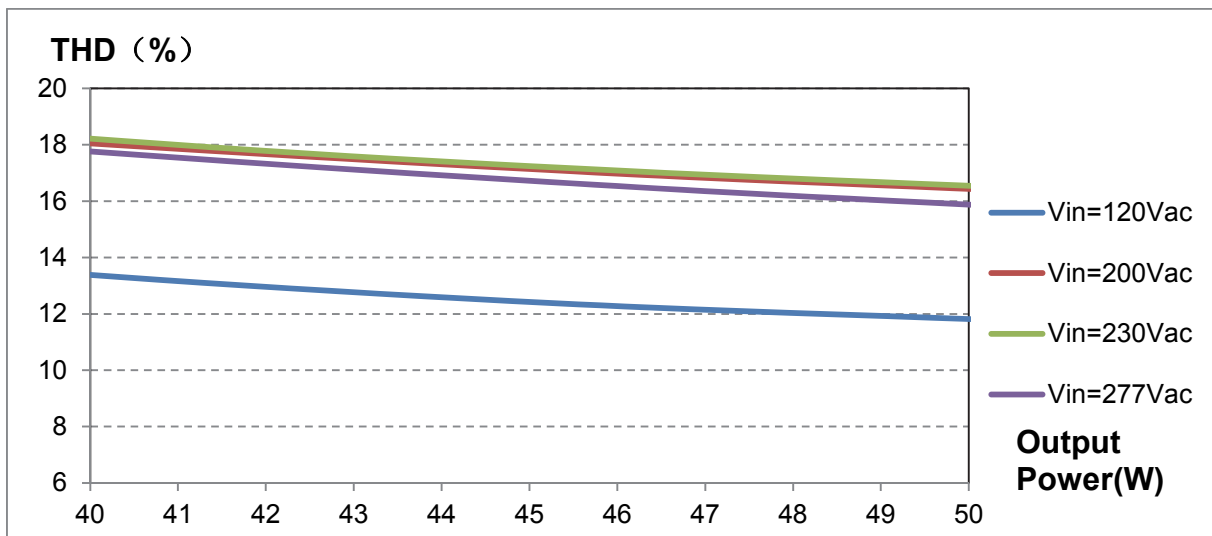


Performance Characteristics

Power Factor vs. Output Power (@ 25°C)

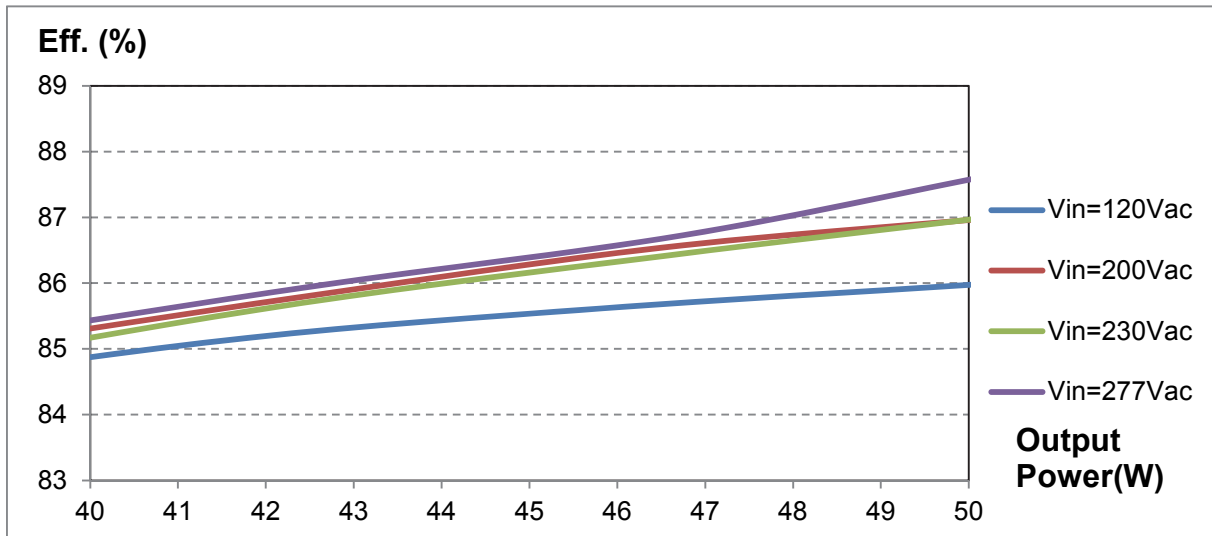


THD vs. Output Power (@ 25°C)

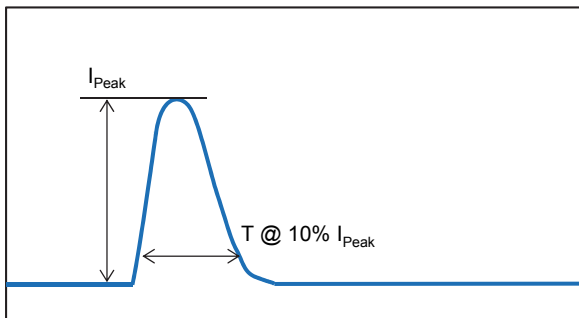


Performance Characteristics

Efficiency vs. Output Power (@ 25°C)

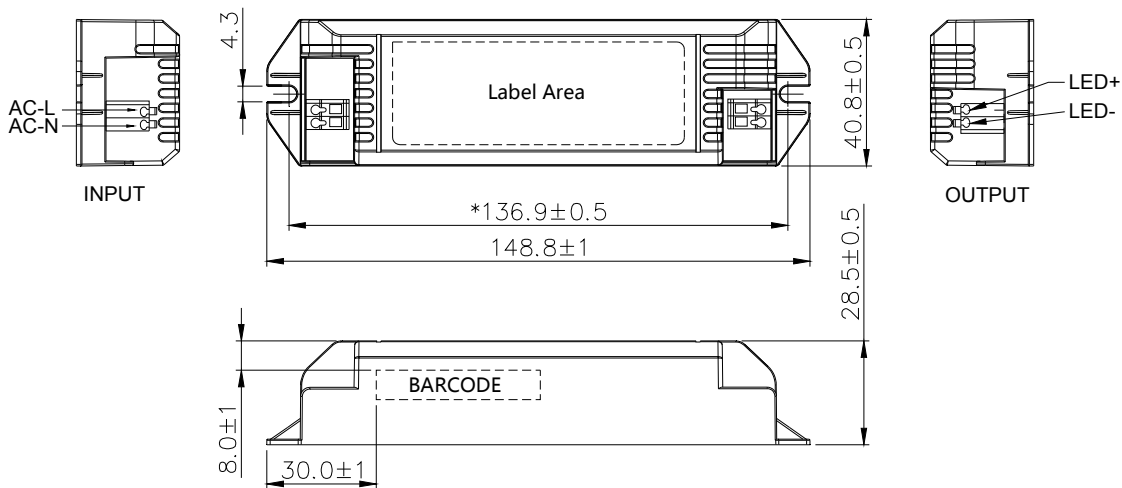


Inrush Current



V_{in}	I_{peak}	T
108 Vac	7.44A	267us
120 Vac	8.00 A	264 us
230 Vac	15.6 A	245 us
305 Vac	19.4 A	253us

Mechanical Specification



- NOTES : 1. OUTLINE DIMENSION : $148.8L * 40.8W * 28.5H$
 2. IF CASE BY NCT PROCESS, THE TOLERANCE OF ALL DIMENSIONS MUST BE ENLARGED $\pm 0.2\text{mm}$ FOR CPK INSPECTION.

Revision History

Date	Rev.	Item of Change
2018-01-02	A	Datasheets Release

UL Certification

Please refer to E359093 for Powerland's UL File Number.

Please contact sales@fsp-powerland.com, +86-25-85582306 ext. 8888, or our local sales representative for related documents.