

**Powerland's 30/42/50/60W All-in-One Dimming and Programmable Series** offers LED drivers with wide-range dimmable output current and 108~305Vac universal input.

The output currents of this series are digital programmable, and designed for 0(0.1)-10V/PWM/Rset/Clock dimming applications.

## Applications

- Outdoor & indoor LED lights
- LED lights with flexible current settings
- Downlights, high bay and low bay lights, spot lights, LED troffers



## Specifications

Model	Max. Output Power	Input Voltage	Output Voltage Range	Max. Output Current	Efficiency	Max. Case Temperature	THD	Power Factor	Dimensions
<b>PLD030-1SCF691WX-700</b>	30W	108~305Vac	20~50V	700mA	85.0%	90°C	<20%	>0.95	108x45x29.5mm (A/C versions)
<b>PLD042-1SCF691WX-1200</b>	42W	108~305Vac	20~50V	1200mA	89.0%	90°C	<20%	>0.95	136x46x31mm (B/D versions)
<b>PLD050-1SCF692WX-1400</b>	50W	108~305Vac	20~50V	1400mA	88.0%	90°C	<20%	>0.95	118x48x32mm (E version)
<b>PLD060-1SCF692WE-800</b>	60W	108~305Vac	30~75V	800mA	89.0%	90°C	<20%	>0.95	

\* X=A, B, C, D, and E

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

\*\*\* Refer to the next page for detailed specifications for this series of LED drivers.

## Features

- Ultra-deep dimming down to 1%, with dimming-off control
- > 50,000 hours lifetime at 75°C Tcase (A/B/C/D version)
- > 70,000 hours lifetime at 75°C Tcase (E version)
- > 5 years warranty at 75°C Tcase (A/B/C/D version)
- > 7 years warranty at 75°C Tcase (E version)
- Constant current output
- Output current programmable
- Compatible with 0(0.1)-10V, PWM, external resistor, clock dimming
- Universal input voltage: 108~305Vac
- Safety according to UL1310 & EN61347-2-13
- A/B/C/D version: UL Class 2 output
- EMC according to FCC Part 15 Class A
- Lightning, OVP, SCP, OTP & Open Circuit Protection



## Electrical Specifications

Model	PLD030-1SCF691WA/C-700 PLD030-1SCF691WB/D-700 PLD030-1SCF691WE-700	PLD042-1SCF691WA/C-1200 PLD042-1SCF691WB/D-1200 PLD042-1SCF691WE-1200	PLD050-1SCF692WA/C-1400 PLD050-1SCF692WB/D-1400 PLD050-1SCF692WE-1400	PLD060-1SCF692WE-800
Output Voltage	20~50V	20~50V	20~50V	30~75V
Current Programmable	Yes	Yes	Yes	Yes
Output Current Programmable Range	350~700mA	600~1200mA	700~1400mA	400~800mA
Dimming	0~10V, PWM, External Resistor, Clock			
Dimming Range	1~100%	1~100%	1~100%	1~100%
Output Power	30W	42W	50W	60W
Max. Current Ripple	± 40%	± 40%	± 40%	± 40%
Input Voltage Range	108~305Vac			
Input Frequency Range	47~63Hz			
Max. Input Current	0.4A	0.5A	0.65A	0.7A
Max. Input Power	37W	50W	59W	71W
Power Factor	>0.95 @ 120Vac & 80~100% full load, >0.90 @ 277Vac & 80~100% full load			
Efficiency	85.0%	89.0%	88.0%	89.0%
Max. Open Circuit Voltage	59.5V	59.5V	59.5V	90V
THD	<20% @ 120Vac/230Vac/277Vac & 80~100% full load			
Protections	OVP, OCP, SCP, OTP & Open Circuit Protection			
Environmental Protection	UL Dry & Damp, and Type TL (A/B/C/D versions) UL Dry & Damp & Wet (E version)			
Working Temperature	-20~+50°C (A/B/C/D versions) -40~+60°C (E version)			
Max. Case Temperature	90°C			
Ingress Protection	IP20 (A/B/C/D versions) IP65 (E version)			
Surge Protection	Line to Line 1kV (A/B/C/D versions) Line to Line 1kV, Line To Earth 2kV (E version)			
ANSI Surge Type	1.2/50µs Combination Wave (w/t 2Ω)			
Agency Approbations	UL1310 Class 2 & EN61347-2-13 (A/B/C/D versions) UL8750 & EN61347-2-13 (E version)			
Electromagnetic Compliance	Per Title 47 CFR Part 15 Class A			
Isolation (Primary to Secondary)	3750Vac / 10mAMax / 60seconds			
Isolation (Primary to Earth)	1875Vac / 10mAMax / 60seconds (E version)			
Isolation (Secondary to Earth)	500Vac / 10mAMax / 60seconds (E version)			
Dimension and Case Material	108x45x29.5mm, Plastic (A/C versions) 136x46x31mm, Steel (B/D versions) 118x48x32mm, Aluminum (E version)			
Weight	0.13kg (A/C versions) 0.21kg (B/D versions) 0.37kg (E version)			
Life Time	>50,000 hours @ full load, 75°C Tcase (A/B/C/D versions) >70,000 hours @ full load, 75°C Tcase (E version)			

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

