

Powerland's 13/20/36/52W Triac/ELV Dimming and Current DIP Settable Series offers constant current LED drivers with wide-range dimmable output current and 90~305Vac universal input.

The output current of this series is settable with a built-in DIP switch for four-level driving current range, and designed for Triac/ELV dimming applications.

Applications

- Indoor LED lights
- LED lights with flexible current settings
- Downlights, spotlights, LED troffers



Specifications

Model	Max. Output Power	Input Voltage	Output Voltage Range	Max. Output Current	Efficiency	Max. Case Temperature	THD	Power Factor	Dimensions
PLD013-1SCF503TS-325	13.65W	90~305Vac	34~42V	325mA	81.5%	90°C	<20%	>0.95	95x40x25mm
PLD020-1SCF503TS-500	21W	90~305Vac	34~42V	500mA	84.0%	90°C	<20%	>0.95	95x40x25mm
PLD020-1SCF51TS-700	20W	90~305Vac	14~28V	700mA	84.0%	90°C	<20%	>0.95	95x40x25mm
PLD036-1SCF521TS-900	36W	90~305Vac	28~52V	900mA	85.0%	90°C	<20%	>0.95	115x45x25.4mm
PLD052-1SCF512TS-1300	52W	90~305Vac	28~52V	1300mA	84.0%	90°C	<20%	>0.95	95x70x32mm

 $^{^{\}star}$ Based on 25°C ambient temperature, rated input voltage, and full load.

Features

- 100.000 hours lifetime at 65°C Tcase
- 5 years warranty at 50°C Tcase
- Constant current output
- Compatible with Triac/ELV dimming
- Output current settable with DIP switches

- Universal input voltage: 90~305Vac
- Safety according to UL1310 & EN61347-2-13
- UL Class 2 output
- EMC according to FCC Part 15 Class B
- Lightning, OVP, SCP, OTP & Open Circuit Protection

^{**} Refer to the next page for detailed specifications for this series of LED drivers.



Electrical Specifications

Model	PLD013-1SCF503TS-325	PLD020-1SCF503TS-500	PLD020-1SCF51TS-700	PLD036-1SCF521TS-900	PLD052-1SCF512TS-1300					
Dimming	Triac/ELV	Triac/ELV	Triac/ELV	Triac/ELV	Triac/ELV					
Output Power	13.65W	21W	20W	36W	52W					
Current Setting DIP Switches	Yes	Yes	Yes	Yes	Yes					
Output Current Setting & Voltage Range	325mA: 34~42V 300mA: 34~42V 275mA: 34~42V 250mA: 34~42V	500mA: 34~42V 450mA: 34~42V 400mA: 34~42V 350mA: 34~42V	700mA: 14~28V 600mA: 22~28V 500mA: 22~28V 400mA: 22~28V	900mA: 28~40V 800mA: 28~48V 700mA: 28~50V 600mA: 28~52V	1300mA: 28~40V 1200mA: 28~42V 1100mA: 28~48V 1000mA: 28~52V					
Max. Current Ripple	±30%	±30%	±30%	±30%	±30%					
Voltage Range	90~305Vac	90~305Vac	90~305Vac	90~305Vac	90~305Vac					
Frequency Range	47~63Hz	47~63Hz	47~63Hz	47~63Hz	47~63Hz					
Max. Input Current	0.20A	0.29A	0.27A	0.65A	0.72A					
Max. Input Power	18W	26W	24W	43.5W	65W					
Power Factor	>0.95 @ 115Vac & 80~100% load, >0.75 @ 277Vac & 80~100% load									
Efficiency	81.5%	84.0%	84.0%	85.0%	84.0%					
Max. Open Circuit Voltage	35V	50V	35V	60V	60V					
Ingress Protection	IP64									
THD	<20% @ 120Vac & 80~100% load									
Protections	OVP, OCP, SCP, OTP & Open Circuit Protection									
Environmental Protection	UL Dry & Damp									
Working Temperature	-20~+60°C									
Max. Case Temperature	90°C									
Surge Protection	1kV									
ANSI Surge Type	1.2/50μs Combination Wave (w/t 2Ω)									
Agency Approbations	UL1310 Class 2 & EN61347-2-13									
Electromagnetic Compliance	Per Title 47 CFR Part 15 Class B									
Isolation	Primary to Secondary: 3750Vac / 10mAMax / 60seconds									
Dimension	95x40x25mm	95x40x25mm	95x40x25mm	115x45x25.4mm	95x70x32mm					
Mounting Length	85mm	85mm	85mm	105mm	85mm					
Overall Length	95mm	95mm	95mm	115mm	95mm					
Weight	0.15kg	0.15kg	0.15kg	0.20kg	0.34kg					
Life Time	100,000 hours @ full load, 65°C Tcase									

 $^{^{\}star}$ Unless otherwise noted, the data are based on 25°C ambient temperature, 230Vac input voltage, and full load.