

## Powerland's 42/50W 0-10V Dimming and Current

**DIP Settable Series** offers constant current LED drivers with wide-range dimmable output current and 90~305/108~305Vac 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 0-10V dimming applications.

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### **Applications**

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

### **Specifications**

| Model                | Max. Output<br>Power | Input<br>Voltage | Output Voltage<br>Range | Max. Output<br>Current | Efficiency | Max. Case<br>Temperature | THD  | Power<br>Factor | Dimensions |
|----------------------|----------------------|------------------|-------------------------|------------------------|------------|--------------------------|------|-----------------|------------|
| PLD042-1SCF55AS-900  | 42W                  | 90~305Vac        | 27~55V                  | 900mA                  | 89.0%      | 90°C                     | <20% | >0.95           | 95x70x32mm |
| PLD050-1SCF55AS-2100 | 50W                  | 90~305Vac        | 16~40V                  | 2100mA                 | 87.0%      | 90°C                     | <20% | >0.95           | 95x70x32mm |
| PLD050-1SCF55AS-1200 | 50W                  | 108~305Vac       | 25~40V                  | 1200mA                 | 88.0%      | 90°C                     | <20% | >0.95           | 95x70x32mm |

<sup>\*</sup> 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 0-10V dimming
- Output current settable with DIP switches

- Universal input voltage: 90~305/108~305Vac
- Safety according to UL8750 & EN61347-2-13
- EMC according to FCC Part 15 Class B
- Lightning, OVP, SCP, OTP & Open Circuit Protection

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



# **Electrical Specifications**

| Model                                     | PLD042-1SCF55AS-900  | PLD050-1SCF55AS-2100   | PLD050-1SCF55AS-1200   |  |  |  |
|---|--|--|--|--|--|--|
| Dimming                                   | 0-10V Dimming  | 0-10V Dimming  | 0-10V Dimming  |  |  |  |
| Output Power                              | 42W  | 50W  | 50W  |  |  |  |
| Current Setting DIP Switches              | Yes  | Yes  | Yes  |  |  |  |
| Output Current Setting<br>& Voltage Range | 900mA: 27~46V<br>800mA: 27~50V<br>700mA: 27~55V<br>600mA: 27~55V | 2100mA: 16~24V<br>1750mA: 16~28V<br>1400mA: 18~36V<br>1050mA: 18~40V | 1200mA: 25~40V<br>1000mA: 25~40V<br>800mA: 25~40V<br>600mA: 25~40V |  |  |  |
| Max. Current Ripple                       | ±30%   | ±30%   | ±30%   |  |  |  |
| Voltage Range                             | 90~305Vac  | 90~305Vac  | 108~305Vac   |  |  |  |
| Frequency Range                           | 47~63Hz  | 47~63Hz  | 47~63Hz  |  |  |  |
| Max. Input Current                        | 0.6A   | 0.75A  | 0.55A  |  |  |  |
| Max. Input Power                          | 50W  | 60W  | 59W  |  |  |  |
| Power Factor                              | >0.95 @ 115Vac & 80~100% load, >0.90 @ 277Vac & 80~100% load     |  |  |  |  |  |
| Efficiency                                | 89.0%  | 87.0%  | 88.0%  |  |  |  |
| Max. Open Circuit Voltage                 | 70V  | 70V  | 70V  |  |  |  |
| Ingress Protection                        | IP64   |  |  |  |  |  |
| THD                                       | <20% @ 120Vac & 80~100% load                                     |  |  |  |  |  |
| Protections                               | 0/   | OVP, OCP, SCP, OTP & Open Circuit Protection                         |  |  |  |  |
| Environmental Protection                  | UL Dry & Damp  |  |  |  |  |  |
| Norking 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                       | UL8750 & EN61347-2-13  |  |  |  |  |  |
| Electromagnetic Compliance                | Per Title 47 CFR Part 15 Class B                                 |  |  |  |  |  |
| solation                                  | Primary to Secondary: 3750Vac / 10mAMax / 60seconds              |  |  |  |  |  |
| Dimension                                 |  | 95x70x32mm   |  |  |  |  |
| Mounting Length                           | 85mm   |  |  |  |  |  |
| Overall Length                            | 95mm   |  |  |  |  |  |
| Weight                                    | 0.27kg   | 0.34kg   | 0.34kg   |  |  |  |
| Life Time                                 | 100,000 hours @ full load, 65°C Tcase                            |  |  |  |  |  |

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