

Powerland's 42/50W "Pickle 2020" Series LED

drivers offer flicker-free, programmable and wide-range dimmable output current LED Driver with less than 5% current ripple at 108~305Vac universal input.

The output currents of this series are adjustable at 600-1400mA which is programmed through dimming wires, and designed for isolated 0(0.5)-10V/PWM/Rest dimming applications, complying with UL8750  $2^{\rm th}$  edition. It also offers optional 12V auxiliary power which is isolated from main output.





## **Applications**

- Indoor LED lights
- LED lights with flexible current settings
- Downlights, high bay and low bay lights, spot lights, 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   |
|---------------------|----------------------|------------------|-------------------------|------------------------|------------|--------------------------|------|-----------------|--------------|
| PLD042-1SCF793-1250 | 42W                  | 108~305Vac       | 27~45V                  | 1250mA                 | 87.0%      | 90°C                     | <20% | >0.9            | 160,20,26,55 |
| PLD050-1SCF793-1400 | 50W                  | 108~305Vac       | 27~45V                  | 1400mA                 | 87.5%      | 90°C                     | <20% | >0.9            | 160x30x26mm  |

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

## **Features**

- Flicker-free with < 5% current ripple
- > 50,000 hours lifetime at 75°C Tcase
- > 5 years warranty at 75°C Tcase
- Constant current output
- Output current programmable
- Compatible with 0(0.5)-10V, PWM, external resistor

- Universal input voltage: 108~305Vac
- Safety according to UL8750 & UL1310 & EN61347-2-13
- UL Class 2 output
- EMC according to FCC Part 15 Class A
- Lightning, OVP, SCP, OTP & Open Circuit Protection
- Isolated 12V/100mA auxiliary power output

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



## **Electrical Specifications**

| Model                             | PLD042-1SCF793-1250  | PLD050-1SCF793-1400  |  |  |  |
|-----------------------------------|--|--|--|--|--|
| Output Voltage                    | 27~45V   | 27~45V   |  |  |  |
| Current Programmable              | Yes  | Yes  |  |  |  |
| Output Current Programmable Range | 600~1250mA   | 700~1400mA   |  |  |  |
| Dimming                           | 0(0.5)~10V, PWM, External Resistor   | 0(0.5)~10V, PWM, External Resistor   |  |  |  |
| 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                | 0.6A@ 25°C 120Vac input & full load<br>0.3A@ 25°C 230Vac input & full load<br>0.27A@ 25°C 277Vac input & full load | 0.6A@ 25°C 120Vac input & full load<br>0.3A@ 25°C 230Vac input & full load<br>0.27A@ 25°C 277Vac input & full load |  |  |  |
| Max. Input Power                  | 52W  | 62W  |  |  |  |
| Power Factor                      | >0.96 @ 120Vac & 80~100% full load<br>>0.94 @ 230Vac & 80~100% full load<br>>0.92 @ 277Vac & 80~100% full load     | >0.96 @ 120Vac & 80~100% full load<br>>0.94 @ 230Vac & 80~100% full load<br>>0.92 @ 277Vac & 80~100% full load     |  |  |  |
| Efficiency                        | 87.0%  | 87.5%  |  |  |  |
| Max. Open Circuit Voltage         | 59.5V  | 59.5V  |  |  |  |
| THD                               | <20% @ 25°C 120Vac/230Vac/277Vac & 80~100% full load   |  |  |  |  |
| Protections                       | OVP, OCP, SCP, OTP & Open Circuit Protection   |  |  |  |  |
| Environmental Protection          | UL Dry & Damp  |  |  |  |  |
| Working Temperature               | -20~+50°C  |  |  |  |  |
| Max. Case Temperature             | 90°C   |  |  |  |  |
| Ingress Protection                | IP20   | IP65   |  |  |  |
| Surge Protection                  | Line to Line 1kV   |  |  |  |  |
| ANSI Surge Type                   | 1.2/50μs Combination Wave (w/t 2Ω)   |  |  |  |  |
| Agency Approbations               | UL8750 & UL1310 Class 2 & EN61347-2-13   |  |  |  |  |
| Electromagnetic Compliance        | FCC Part 15 Class A  |  |  |  |  |
| Isolation                         | Primary to Secondary: 3750Vac / 10mAMax / 60seconds  |  |  |  |  |
| Case & Terminal Type              | Metal & Wire   |  |  |  |  |
| Dimension                         | 160x30x26mm  |  |  |  |  |
| Mounting Length                   | 160mm  |  |  |  |  |
| Overall Length                    | 168mm  |  |  |  |  |
| Weight                            | 0.22kg   |  |  |  |  |
| Life Time                         | >50,000 hours @ full load, 75°C Tcase  |  |  |  |  |
|                                   |  |  |  |  |  |

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