

Powerland's 75/80/96W 0-10V Dimming Series

offers constant current/constant voltage drivers with wide-range dimmable output current and 90~305Vac universal input.

The output power, voltage and current of this series is up to 96W, 114V and 4A, respectively and designed for 0-10V dimming applications.



Applications

- Indoor LED lights
- High bay and low bay lights, LED troffers



Specifications

| Model | Max. Output Power | Input Voltage | Output Voltage Range | Max. Output Current | Efficiency | Max. Case Temperature | THD | Power Factor | Dimensions |
|-------------------|----------------------|------------------|-------------------------|------------------------|------------|--------------------------|------|-----------------|---------------|
| PLD075-1TAF2A-40 | 75W | 90~305Vac | 20~40V | 1.8A | 90.0% | 90°C | <20% | >0.95 | 213.5x43x30mm |
| PLD080-1TAF2A-24 | 80W | 90~305Vac | 12~24V | 3.33A | 89.0% | 90°C | <20% | >0.95 | 213.5x43x30mm |
| PLD080-1TAF2A-40 | 80W | 90~305Vac | 20~40V | 2.00A | 90.0% | 90°C | <20% | >0.95 | 213.5x43x30mm |
| PLD080-1TAF2A-57 | 80W | 90~305Vac | 28~57V | 1.40A | 91.0% | 90°C | <20% | >0.95 | 213.5x43x30mm |
| PLD080-1TAF2A-76 | 80W | 90~305Vac | 38~76V | 1.05A | 91.5% | 90°C | <20% | >0.95 | 213.5x43x30mm |
| PLD080-1TAF2A-114 | 80W | 90~305Vac | 57~114V | 0.7A | 92.0% | 90°C | <20% | >0.95 | 213.5x43x30mm |
| PLD096-1TAF2A-24 | 96W | 90~305Vac | 12~24V | 4A | 89.0% | 90°C | <20% | >0.95 | 213.5x43x30mm |
| PLD096-1TAF2A-40 | 96W | 90~305Vac | 20~40V | 2.4A | 90.0% | 90°C | <20% | >0.95 | 213.5x43x30mm |

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

Features

- > 50,000 hours lifetime at 75°C Tcase
- > 5 years warranty at 75°C Tcase
- Constant current & constant voltage output
- Compatible with 0-10V dimming
- Universal input voltage: 90~305Vac

- Safety according to UL1310 / UL8750, & EN61347-2-13
- UL Class 2 output
- Surge voltage rating: L-N 4kV, L/N-Earth 4kV
- EMC according to FCC Part 15 Class A
- Lightning, OVP, SCP, OTP & Open Circuit Protection

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



Electrical Specifications

| Model | PLD075-1TAF2A -40 | PLD080-1TAF2A -24 | PLD080-1TAF2A -40 | PLD080-1TAF2A -57 | PLD080-1TAF2A -76 | PLD080-1TAF2A -114 | PLD096-1TAF2A -24 | PLD096-1TAF2A -40 | | | |
|------------------------------|--|----------------------|----------------------|----------------------|----------------------|-----------------------|----------------------|----------------------|--|--|--|
| Output Voltage | 20~40V | 12~24V | 20~40V | 28~57V | 38~76V | 57~114V | 12~24V | 20~40V | | | |
| Output Current | 1.8A | 3.33A | 2.00A | 1.40A | 1.05A | 0.7A | 4A | 2.4A | | | |
| Dimming | A Version: 0-10V Dimming | | | | | | | | | | |
| Output Power | 75W | 80W | 80W | 80W | 80W | 80W | 96W | 96W | | | |
| Max. Current Ripple | 200mA | 350mA | 200mA | 150mA | 120mA | 100mA | 400mA | 240mA | | | |
| Max. Voltage Ripple | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | | | |
| Voltage Range | 90~305Vac | 90~305Vac | 90~305Vac | 90~305Vac | 90~305Vac | 90~305Vac | 90~305Vac | 90~305Vac | | | |
| Frequency Range | 47~63Hz | 47~63Hz | 47~63Hz | 47~63Hz | 47~63Hz | 47~63Hz | 47~63Hz | 47~63Hz | | | |
| Max. Input Current | 1.0A | 1.1A | 1.1A | 1.1A | 1.1A | 1.1A | 1.3A | 1.3A | | | |
| Max. Input Power | 85.5W | 95W | 95W | 95W | 95W | 95W | 113W | 113W | | | |
| Power Factor | >0.95 @ 115Vac & 80~100% full load, >0.90 @ 277Vac & 80~100% full load | | | | | | | | | | |
| Efficiency | 90.0% | 89.0% | 90.0% | 91.0% | 91.5% | 92.0% | 89.0% | 90.0% | | | |
| Max. Open Circuit Voltage | 43V | 35V | 50V | 65V | 85V | 125V | 26V | 43V | | | |
| Ingress Protection | IP54 IP64 | | | | | | | | | | |
| 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 | | | | | | | | | | |
| Working Temperature | -20~+60°C | | | | | | | | | | |
| Max. Case Temperature | 90°C | | | | | | | | | | |
| Surge Protection | L-N 4kV, L/N-Earth 4kV | | | | | | | | | | |
| ANSI Surge Type | 1.2/50μs Combination Wave (w/t 2Ω) | | | | | | | | | | |
| Agency Approbations | UL1310 Class 2 & EN61347-2-13 | | | | | | | & EN61347-2-13 | | | |
| Electromagnetic Compliance | Per Title 47 CFR Part 15 Class A | | | | | | | | | | |
| Isolation | Primary to Secondary: 3750Vac / 10mAMax / 60seconds | | | | | | | | | | |
| Dimension | | 213.5x43x30mm | | | | | | | | | |
| Mounting Length | 228mm | | | | | | | | | | |
| Overall Length | 242mm | | | | | | | | | | |
| Weight | 0.5kg | | | | | | 0.65kg | | | | |
| Life Time | >50,000 hours @ full load, 75°C Tcase | | | | | | | | | | |

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