

LED Intelligent Driver

150W 12.5A 12Vdc



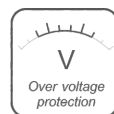
Dimmable:
0.1%~100%

- Dimming interface: Triac/ELV, Push DIM.
- Apply to leading edge and trailing edge triac dimmers.
- Built-in high performance MCU, dimming curve can be customized.
- PWM digital dimming, no alter LED color rendering index.
- Dimming range: 0~100%, LED start at 0.1% possible.
- Efficiency > 85%.
- Short circuit / Over-heat / Over load / Over voltage protection.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for internal lights application for I /II/III.

SELV



RoHS



Main Characteristics

Dimming Interface: Triac/ELV, Push DIM
 Input Voltage Range: 200-240Vac ±10%
 Frequency: 50/60Hz
 Input Current: 230Vac ≤ 1.4A
 Efficiency: > 85%
 Inrush Current(typ.): Cold start 50A at 230Vac
 Control Surge Capability: L-N: 1kV L/N-G: 2kV
 Leakage Current: I/P-O/P: <0.5mA/230Vac, I/P-GND: <0.75mA/230Vac
 Output Current: Max. 12.5A
 Output Voltage: 12Vdc
 Output Voltage Range: 12Vdc ±0.5Vdc

Ripple & Noise: ≤ 200mV
 Output Power: Max. 150W
 Output Power Range: 1~150W
 Overload Power Limitation: ≥ 102%~125%
 PWM Frequency: ≤ 4KHz
 Dimming Range: 0~100%, Max. 0.1% dimming depth
 Working Temperature.: ta: -20°C ~ 45°C tc: 90°C
 Working Humidity: 20 ~ 95%RH, non-condensing
 Storage Temp., Humidity: -40 ~ 80°C, 10~95%RH
 Temp. Coefficient: ±0.03%/°C(0-50°C)
 Vibration: 10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes

Protection

Over-heat Protection: Shut down the output when PCB temp. ≥ 110°C, auto recovers when temp. back to normal.
 Over Voltage Protection: Shut down the output when Non-load Voltage ≥ 13-18V, re-power on to recover after fault condition is removed.
 Over Load Protection: Power Load ≥ 102%~125%, start hiccup mode, auto recovers when the load is reduced.
 Short Circuit Protection: Shut down automatically if short circuit occurs, auto recovers after faulty condition is removed.

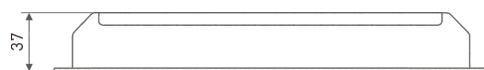
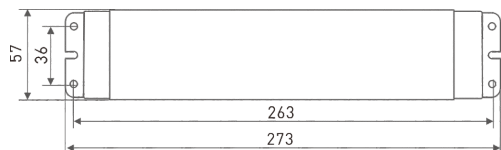
Safety & EMC

Withstand Voltage: I/P-O/P: 3750Vac I/P-GND: 1800Vac
 Isolation Resistance: I/P-O/P: 100MΩ/500VDC/25°C/70%RH
 Safety Standards: IEC/EN61347-1, IEC/EN61347-2-13
 EMC Emission: EN55015, EN61000-3-2 Class C, IEC61000-3-3
 EMC Immunity: EN61000-4-2,3,4,5,6,8,11, EN61547

Others

Dimension: 273×57×37mm(L×W×H)
 Packing: 278×63×43mm(L×W×H)
 Weight(G.W.): 710g±10g

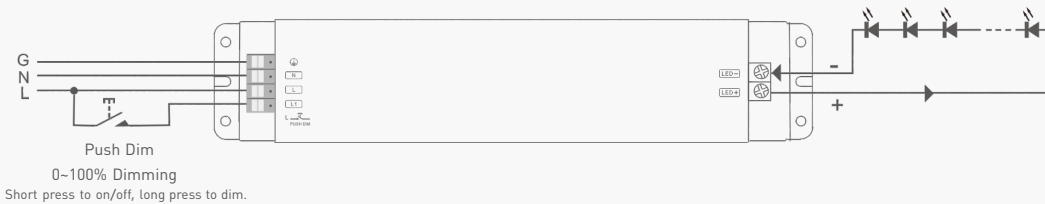
Dimensions



Triac Connection



Push Dim Connection



The dimming interface priority: First Triac, next Push Dim.

Selecting between ordinary dimmer and dimming system

Ordinary dimmer and dimming system have different dimming precision, precision of dimming system is higher. To meet customers' requirements on perfect dimming effects, we LTECH designed two programme options.

Method: Turn off the power and then remove the housing of the LED driver to find right component on the PCB. Shift system by selecting different contact pin (for installation professionals use only). Factory default as common (for ordinary dimmer).

Common



Ordinary dimmer

System



Dimming system

Push Dimming



Reset Switch

- On/off control: Short press.
- Stepless dimming: Long press.
- With every other long press, the light level goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted when turning off and on again.