



LED Dimming Driver (CV)

- Design for indoor installations
- TRIAC/ 0-10V/1-10V/10V PWM/RESISTANCE DIM
- Dimming range: 0~100%, LED start at 1% possible.
- 0-100% flicker-free, High frequency exemption level.
- Over load / Over temp. / Short circuit / Over voltage protection, recover automatically.
- Cooling by free air convection
- 100% full load burn-in test
- Suitable for internal lights application for I / II / III.



SELV IP20

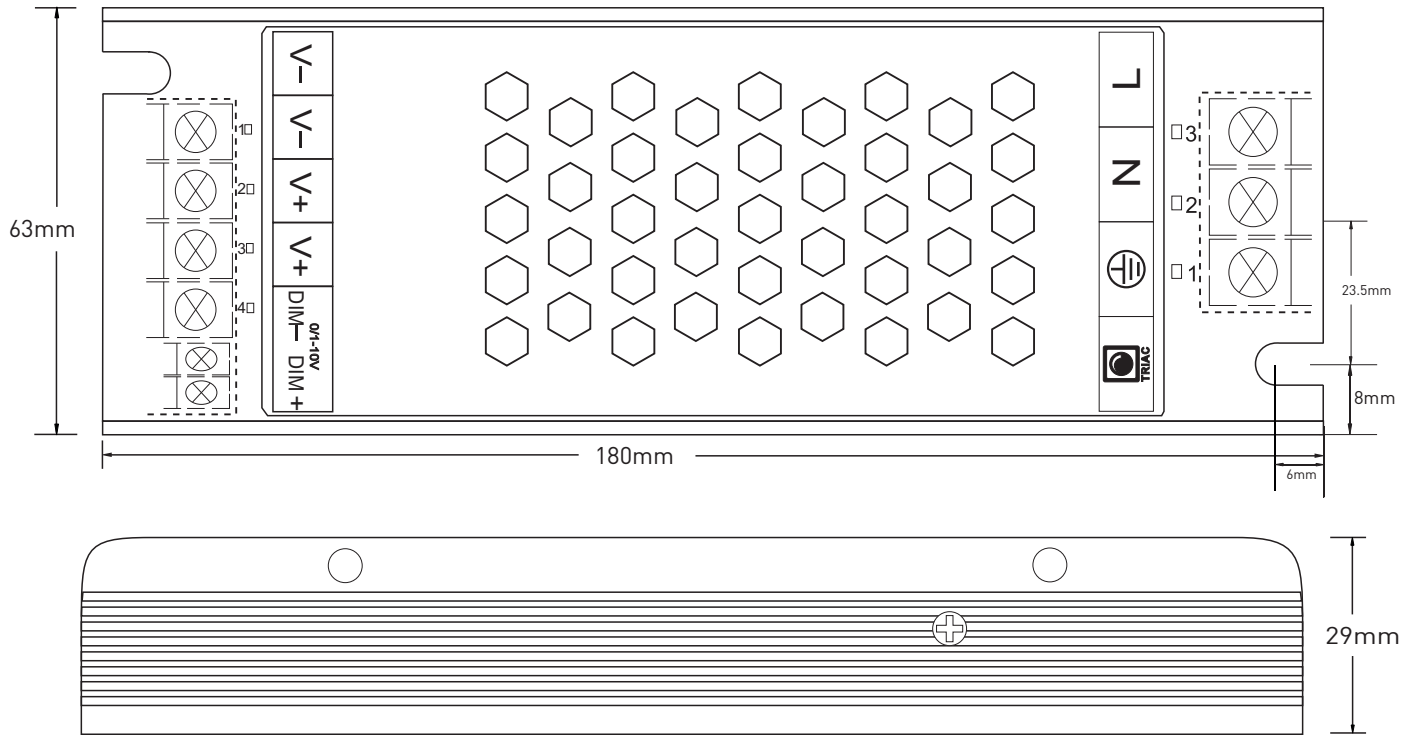


Specification

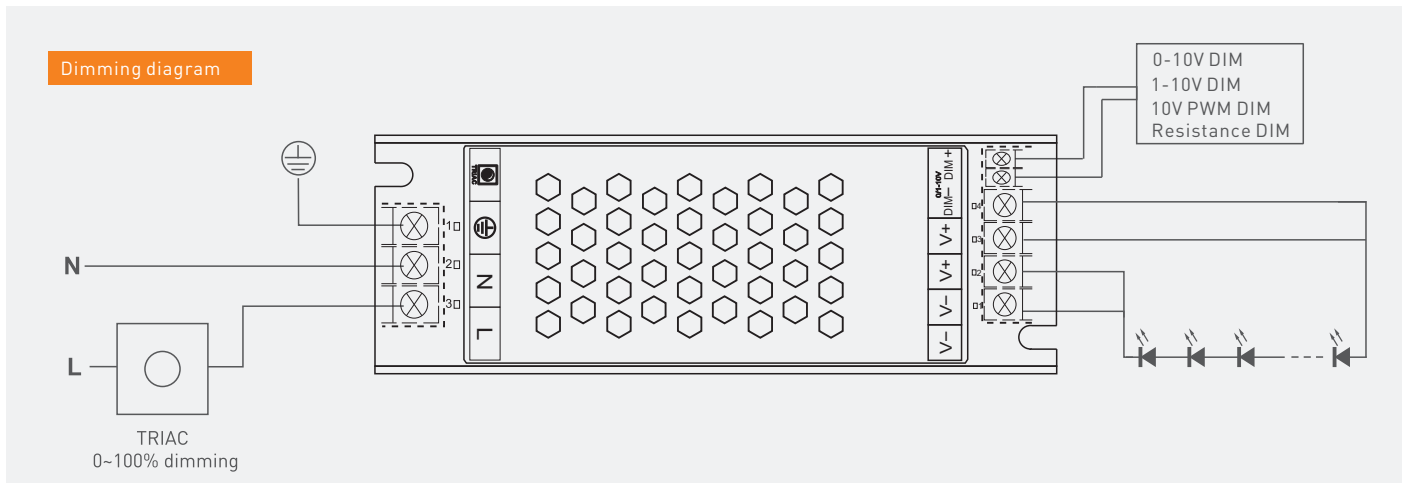
| Model | | DIM20-12V-150W | DIM20-24V-150W |
|-----------------|---|---|--|
| OUTPUT | Output voltage | 12VDC | 24VDC |
| | Output voltage range | 12VDC±0.5VDC | 24VDC±0.5VDC |
| | Output current | Max 12.5A | Max 6.25A |
| | Output power | Max 150W | |
| | Output power range | 0~150W | |
| | With or without strobe | No strobe | |
| | Dimming range | 0~100%, dimming depth: Max. 1% | |
| | Ripple & Noise | ≤200mV | ≤400mV |
| INPUT | Dimming interface | TRIAC/ 0-10V/1-10V/10V PWM/RESISTANCE DIM 0-100k Ohms | |
| | Input voltage | 175-264Vac or 100~130Vac | |
| | Frequency | 50/60Hz | |
| | Input current | 1.32A/230Vac or 2.6A/115Vac | |
| | Power factor | PF>0.6/230Vac, at full load | |
| | Efficiency (typ.) | 86% | 88% |
| | Inrush current(typ.) | Cold start 55A at 230Vac | |
| | Control surge capability | L-N:2KV | |
| Leakage current | Max. 0.5mA | | |
| ENVIRONMENT | Working temperature | ta: -30°C ~ 50°C tc: 80°C | |
| | Working humidity | 20 ~ 95%RH, non-condensing | |
| | Storage temp., humidity | -40°C ~ 80°C, 10-95%RH | |
| | Vibration | 10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes. | |
| PROTECTION | Overtemperature | Protection type: Shut down o/p voltage, re--power on to recover | |
| | Over voltage protection | Shut down the output when non-load voltage ≥ 13V, re-power on to recover after fault condition is removed. | Shut down the output when non-load voltage ≥ 26V, re-power on to recover after fault condition is removed. |
| | Over load protection | Shut down the output when current load ≥ 110%, auto recovers. | |
| | Short circuit protection | Protection type: 1. When the first-level short-circuit protection is triggered, the fault can be automatically recovered; 2. When the second-level short-circuit protection is triggered, the power needs to be turned on again after the fault is eliminated | |
| SAFETY & EMC | Withstand voltage | I/P-O/P: 3750Vac | |
| | 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 | |
| | Strobe test standard | IEEE 1789 | |
| NOTE | 1. All parameters not specifically mentioned are measured at 230VAC input, rated load and 25 °C ambient temperature. 2. Ripple and noise test method: connect 0.1uF and 47uF capacitors in parallel at the terminal, and measure under 20MHZ bandwidth. 3. Ensure that the power supply is used under the rated parameters and environment. | | |



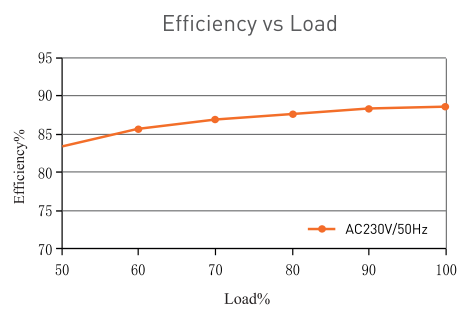
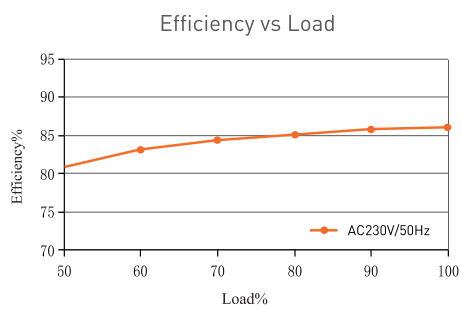
Dimensions
Unit:mm



Wiring diagram



Relationship diagrams

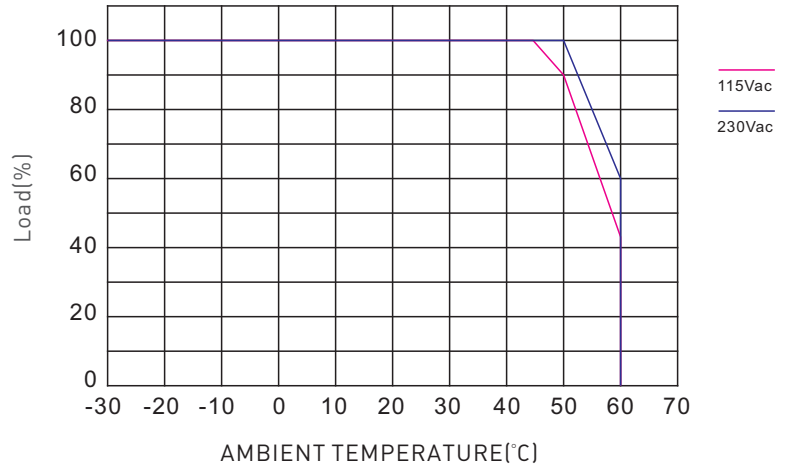




Packaging Information

| | |
|-----------------|----------------------|
| DIMENSION | 180x63x29mm(LxWxH) |
| PACKING | 210x67x33mm(LxWxH) |
| CARTON QUANTITY | 45PCS/Carton |
| CARTON SIZE | 530x225x225mm(LxWxH) |
| WEIGHT | 290g±10g/PCS |

Temperature load curve



Flicker Test Form

IEEE 1789

| Limit of Modulation in low risk area | |
|---------------------------------------|---|
| Waveform frequency of Optical output | limit (%) |
| $f \leq 8\text{Hz}$ | 0.2 |
| $8\text{Hz} < f \leq 90\text{Hz}$ | $0.025 \times f$ |
| $90\text{Hz} < f \leq 1250\text{Hz}$ | $0.08 \times f$ |
| $f > 1250\text{Hz}$ | Exemption assessment |
| Limit of Modulation in no effect area | |
| Waveform frequency of Optical output | limit (%) |
| $f \leq 10\text{Hz}$ | 0.1 |
| $10\text{Hz} < f \leq 90\text{Hz}$ | $0.01 \times f$ |
| $90\text{Hz} < f \leq 3125\text{Hz}$ | $[0.08/2.5] \times f$ |
| $f > 3125\text{Hz}$ | Exemption assessment (High frequency exemption) |

Brightness

- ◆ 1%
- ▲ 5%
- ◆ 10%
- 20%
- ▲ 30%
- 40%
- ★ 50%
- 60%
- 70%
- ★ 80%
- ◆ 90%
- ◆ 100%

Exemption assessment (High frequency exemption)

