

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

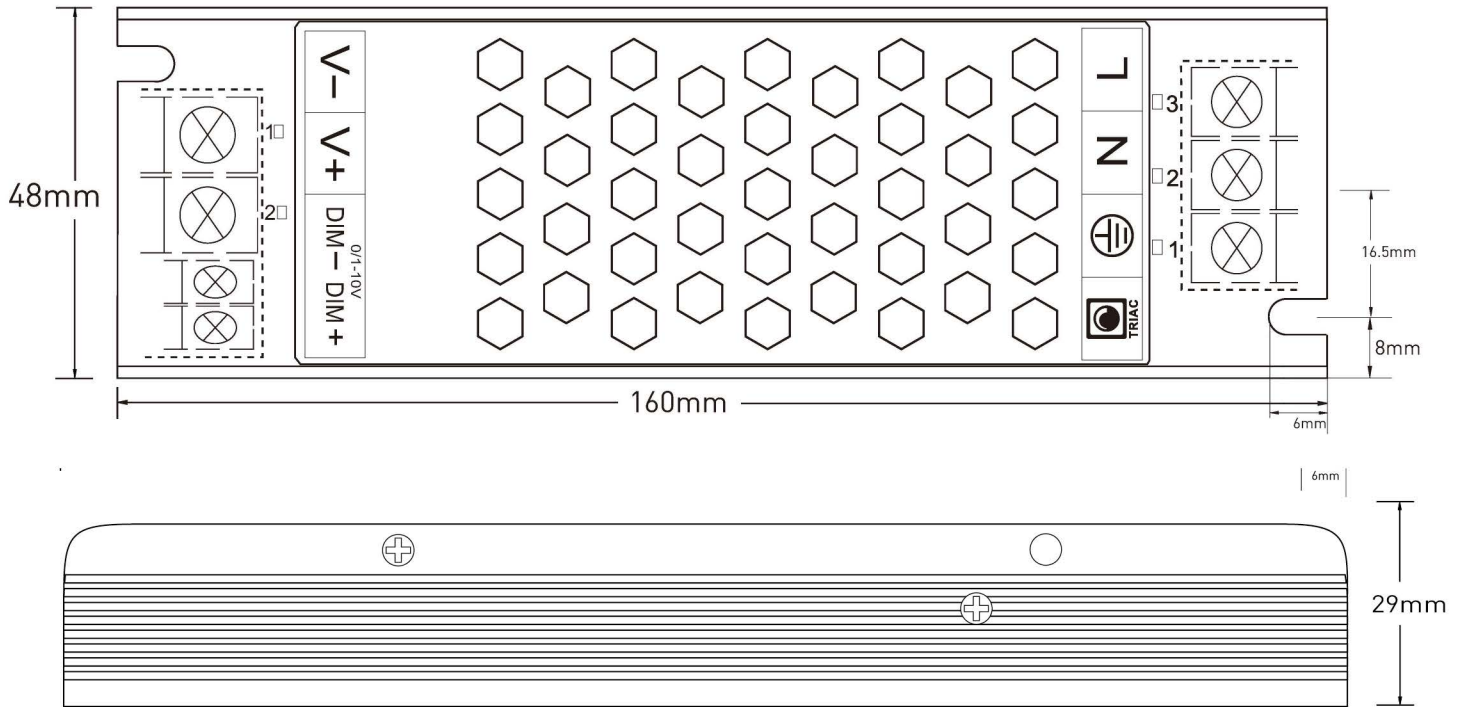


Specification

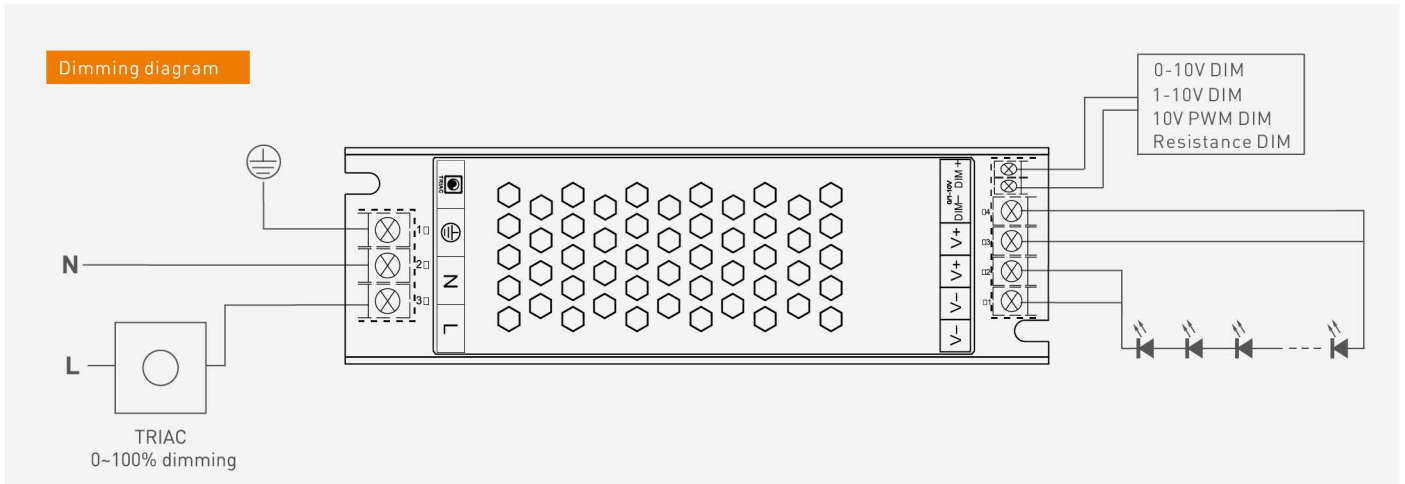
Model		DIM20-12V-200W	DIM20-24V-200W
OUTPUT	Output voltage	12VDC	24VDC
	Output voltage range	12VDC±0.5VDC	24VDC±0.5VDC
	Output current	Max 16.7A	Max 8.5A
	Output power	Max 200W	
	Output power range	0~200W	
	With or without strobe	No strobe	
	Dimming range	0~100%, dimming depth: Max. 1%	
	Ripple & Noise	≤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	1.8A/230Vac or 3.6A/115Vac	
	Power factor	PF>0.6/230Vac, at full load	
	Efficiency (typ.)	86%	88%
	Inrush current (typ.)	Cold start 60A 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./1 cycle, 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

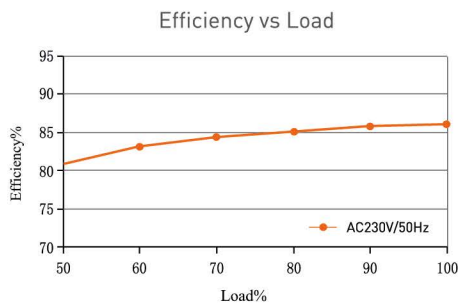
Unit:mm



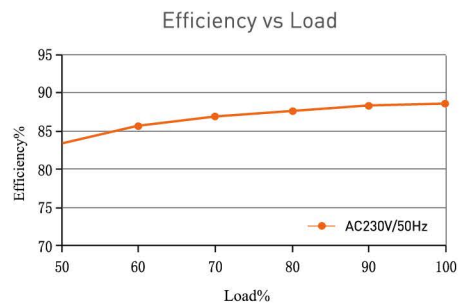
Wiring diagram



Relationship diagrams



DIM20-12V-200W



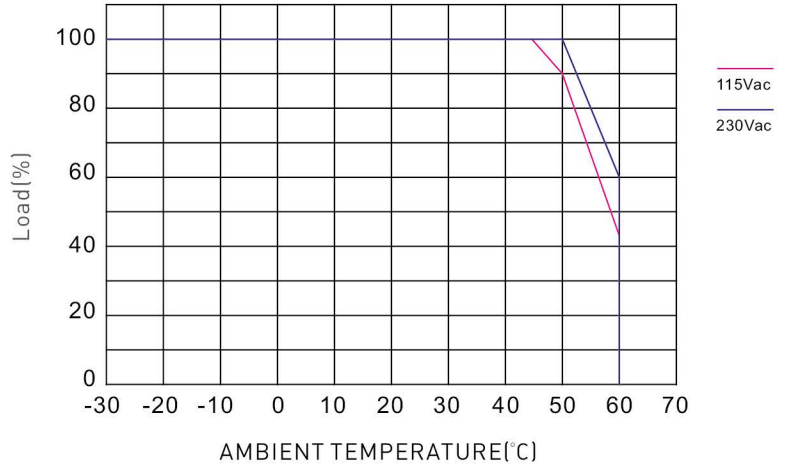
DIM20-24V-200W



Packaging Information

DIMENSION	205x63x29mm(LxWxH)
PACKING	210x67x33mm(LxWxH)
CARTON QUANTITY	45PCS/Carton
CARTON SIZE	530x225x225mm(LxWxH)
WEIGHT	350g±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)

