

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.



5 in 1 dimming
0-10V
1-10V
10V PWM
TRIAC DIM
Resistance DIM

Flicker-free
IEEE 1789
High frequency exemption level



SELV IP20



0-10V
1-10V
DIM

Triac/
Resistance
DIM

PWM
Digital
Dimming

Over-heat
Protection

Short Circuit
Protection

Over Load
Protection

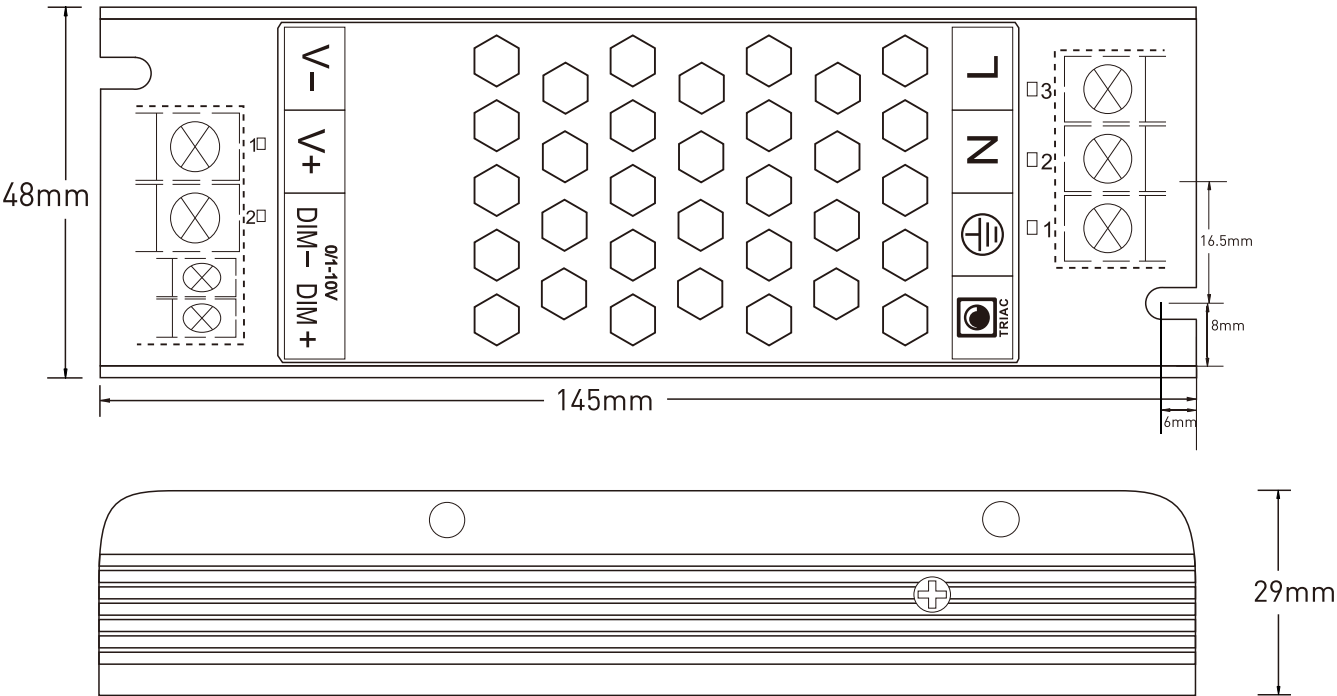
Over voltage
protection

Specification

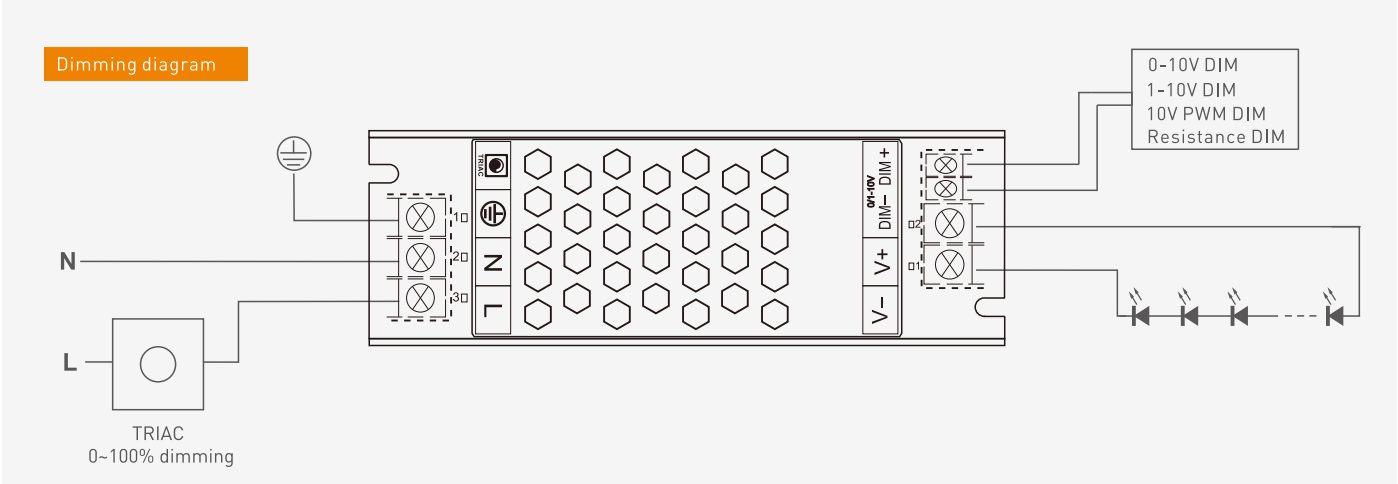
Model		ERA S-60-12-CPDIM		ERA S-60-24-CPDIM	
OUTPUT	Output voltage	12VDC		24VDC	
	Output voltage range	12VDC±0.5VDC		24VDC±0.5VDC	
	Output current	Max 5A		Max 2.5A	
	Output power	Max 60W			
	Output power range	0~60W			
	With or without strobe	No strobe			
	Dimming range	0~100%, dimming depth: Max. 1%			
	Ripple & Noise	≤200mV		≤400mV	
INPUT	Dimming interface	TRIAC/ 0-10V/1-10V/10V PWM/RESISTANCE DIM			
	Input voltage	175-264Vac or 100-130Vac			
	Frequency	50/60Hz			
	Input current	0.52A/230Vac or 1.08A/115Vac			
	Power factor	PF>0.55/230Vac, at full load			
	Efficiency (typ.)	86%		88%	
	Inrush current(typ.)	Cold start 50A at 230Vac			
	Control surge capability	L-N:2KV			
	Leakage current	Max. 0.5mA			
ENVIRONMENT	Working temperature	ta: -30℃ ~ 50℃ tc: 80℃			
	Working humidity	20 ~ 95%RH, non-condensing			
	Storage temp., humidity	-40℃ ~ 80℃, 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℃/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℃ 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.				

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10V PWM
TRIAC DIM
Resistance DIM

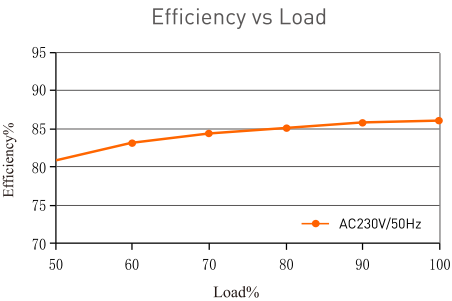
Dimensions
Unit:mm



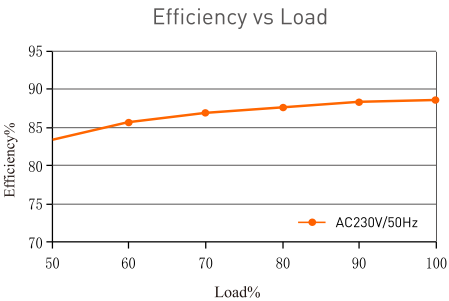
Wiring diagram



Relationship diagrams



S-60-12-CPDIM

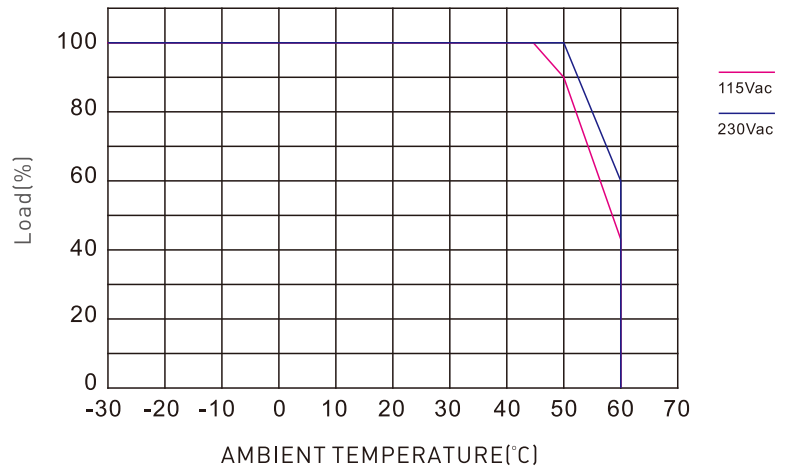


S-60-24-CPDIM

Packaging Information

DIMENSION	145x48x29mm(LxWxH)
PACKING	150x53x33mm(LxWxH)
CARTON QUANTITY	90PCS/Carton
CARTON SIZE	525x315x185mm(LxWxH)
WEIGHT	160g±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)

IEEE 1789

