

LED Intelligent Driver (CV)

- Leading edge (Triac), Trailing edge (ELV) phase-cut and Push DIM.
- Built-in SCM, dimming curve and smoothing time can be customized.
- Dimming range: 0~100%, LED start at 0.1% possible.
- 0~100% flicker-free, High Frequency Exemption
- High Efficient driver: efficiency 88%, PF>0.98, THD<6%
- Innovative thermal management technology, intelligent power life protection.
- Over load / Over temp. / Short circuit / Over voltage protection, recover automatically.
- Suitable for internal lights application for I / II / III.
- 5 years warranty (Rubycon capacitor).



Flicker-free
IEEE 1789
Achieve the exemption level.



Dimmable:
Max. 0.1%-100%

SELV Class 2
RoHS



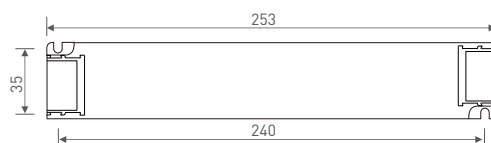
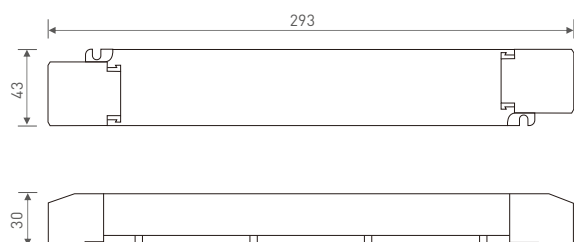
Specification

Model		LM-75-12-G1T2	LM-75-24-G1T2
OUTPUT	Output voltage	12Vdc	24Vdc
	Output voltage range	12Vdc \pm 0.5Vdc	24Vdc \pm 0.5Vdc
	Output current	Max. 6.25A	Max. 3.125A
	Output power	Max. 75W	
	Output power range	0~75W	
	Strobe level	High frequency exemption level.	
	Dimming range	0~100%, dimming depth: Max. 0.1%	
	Overload power limitation	$\geq 102\%$	
	Ripple & Noise	$\leq 150\text{mV}$	
	PWM frequency	3600Hz	
INPUT	Dimming interface	Leading edge (Triac), Trailing edge (ELV) phase-cut and Push DIM.	
	Input voltage	220-240Vac	
	Frequency	50/60Hz	
	Input current	230Vac \leq 0.4A	
	Power factor	PF>0.98/230Vac, at full load	
	THD	230Vac@THD \leq 6%, at full load	
	Efficiency (typ.)	87%	88%
	Inrush current(typ.)	Cold start 30A at 230Vac	
	Control surge capability	L-N: 2kV	
ENVIRONMENT	Leakage current	Max. 0.5mA	
	Working temperature	ta: -20 ~ 50°C tc: 90°C	
	Working humidity	20 ~ 95%RH, non-condensing	
	Storage temp., humidity	-40°C ~ 80°C, 10~95%RH	
	Temp. coefficient	$\pm 0.03\%/^{\circ}\text{C}$ (0~50°C)	
PROTECTION	Vibration	10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.	
	Over-heat protection	Intelligently adjusting or turning off the output current if the PCB temperature $\geq 110^{\circ}\text{C}$, auto recovers.	
	Over load protection	Shut down the output when current load $\geq 102\%$, auto recovers.	
	Short circuit protection	Shut down automatically if short circuit occurs, auto recovers.	
	Over voltage protection	Shut down the output when non-load voltage $\geq 13\text{V}$, re-power on to recover after fault condition is removed.	Shut down the output when non-load voltage $\geq 26\text{V}$, re-power on to recover after fault condition is removed.
SAFETY & EMC	Withstand voltage	I/P-O/P: 3750Vac	
	Isolation resistance	I/P-O/P: 100M Ω /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	
OTHERS	Dimension	293 \times 43 \times 30mm(L \times W \times H)	
	Packing	296 \times 44 \times 33mm(L \times W \times H)	
	Weight[G.W.]	350g \pm 10g	

* The driver is suitable for connecting resistor current-limiting LED fixture (e.g. LED strip). The inrush current will be dozens of times increased if connecting built-in constant current IC current-limiting LED fixtures, the driver will activate the overloaded protection (hiccup flickering). When you order, please remark controlling the constant current LED fixture (e.g. MR16 lamp, underground light, LED wall washer, constant current LED strip, etc.), then we can prepare the special programs.

Dimensions

Unit: mm

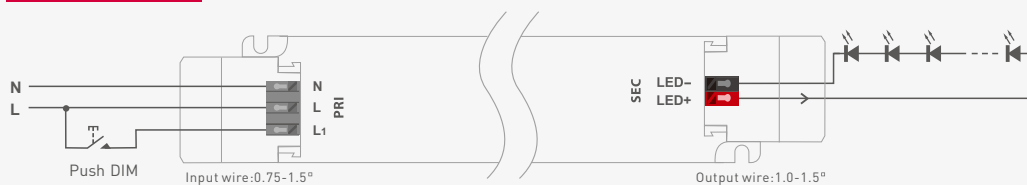


Wiring diagram

Triac connection



Push DIM connection



Short press to on/off, long press to dim.

* Push DIM is invalid for DC voltage input.
Dimming interface priority: First Triac, next Push DIM.

Push dimming

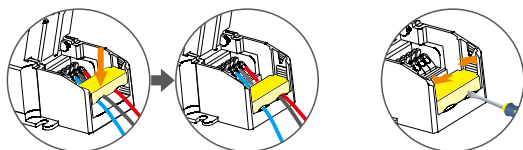


Reset switch

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

Application of protective cover

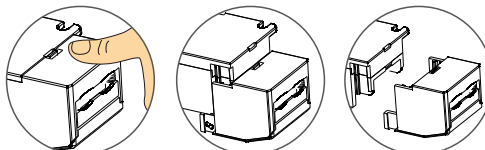
Wire pressing board:



Push the wire pressing board to fix the wire.

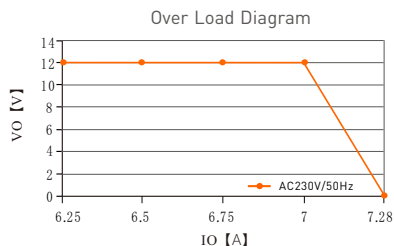
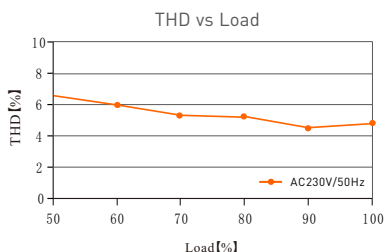
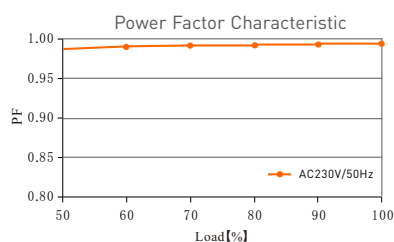
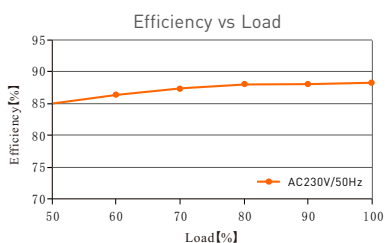
Push outward the side plate, meanwhile use the tool to uninstall the wire pressing board.

Uninstall protective cover:

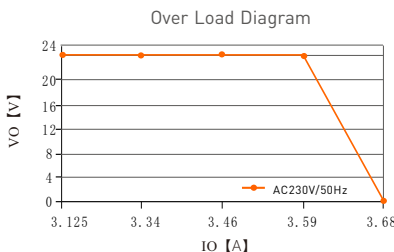
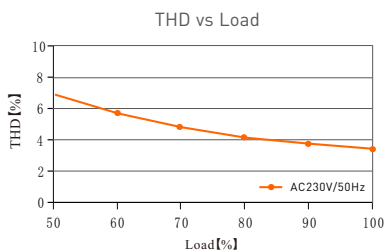
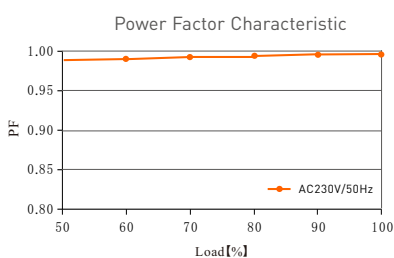
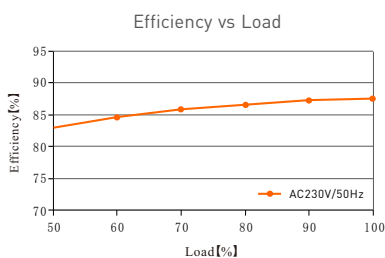


Break off the bottom left and right to remove the protective cover.

Relationship diagrams



LM-75-12-G1T2



LM-75-24-G1T2

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)

