



General

Product Type	Constant Voltage Driver
Length (mm)	293
Width (mm)	43
Height (mm)	30
Housing Color	White
Housing Material	Plastic
Mounting	Surface mounted
Weight (g)	355

Electronics

Input Domain	AC
Input Voltage	220 ~ 240V AC
Input Current max (A)	0.4
Output Voltage	24V DC
Output Current Max. (A)	3.125
Output Power Range (W)	0~75
Power Factor at Full Load	+0.98 @ 230VAC
Anti Surge	L-N: 2kV
Leakage current max. (mA)	0.5
THD (at full load)	6% @ 230V AC
Input Frequency	50 ~ 60Hz
Inrush Current	30A @ 230VAC

Lighting

Color Range	Tunable White
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Control

Output Signal	PWM-CV
Control	TRIAC
Dimming Range	0~100%

Protection

Protection Class	II
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Environmental

Storage Temperature	-40 ~ +80 °C
Operating Temperature	-20 ~ +50 °C
Ingress Protection	IP20

CE IP20 5^{year} warranty

Disclaimer

Due to the technical evolution and improvement of our products, the data provided in this document may be updated on a regular basis, and as such, confirmation of this information is strongly recommended prior to the order process. OneEightyOne is not responsible for any discrepancies in this document following changes in our products. We reserve the right to make technical changes to our products and to change information, at its sole discretion, without notice.



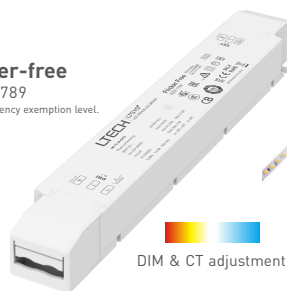
LED CT Intelligent Driver (CV)

- Leading edge (Triac), Trailing edge (ELV) phase-cut and Push DIM/CCT.
- With soft-on and fade in function, visual more comfortable.
- 2 independently SELV constant voltage output channels.
- Constant power design, adjust brightness and color temperature synchronously.
- Dimming range: 0~100%, LED start at 0.1% possible.
- 0~100% flicker-free, High frequency exemption level.
- 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.
- Up to 50000-hour life time.
- 5 years warranty (Rubycon capacitor).

Flicker-free

IEEE 1789

High frequency exemption level.



DIM & CT adjustment



Dimmable:
Max: 0.1-100%



SELV Class 2
RoHS



The certification icon represents undergoing certification applications only, and final certification qualification subject to actual product.



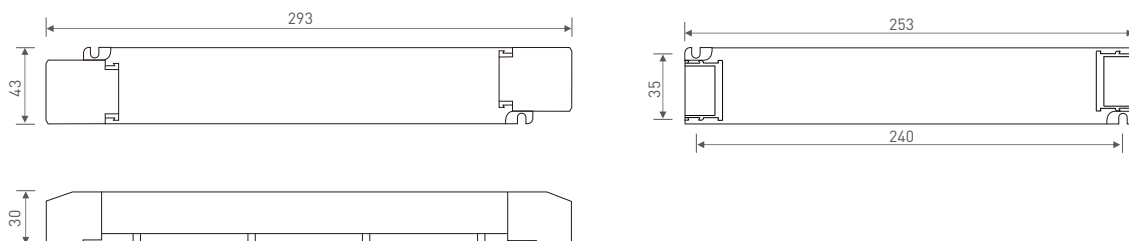
Specification

Model		LM-75-24-G2T2	LM-75-12-G2T2
OUTPUT	Output voltage	24Vdc	12Vdc
	Output voltage range	24Vdc $\pm$ 0.5Vdc	12Vdc $\pm$ 0.5Vdc
	Output current	Max. 3.125A	Max. 6.25A
	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/CCT.	
	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<6%, at full load	
	Efficiency (typ.)	88%	87%
	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 $\geq 26\text{V}$, re-power on to recover after fault condition is removed.	Shut down the output when non-load voltage $\geq 13\text{V}$, 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

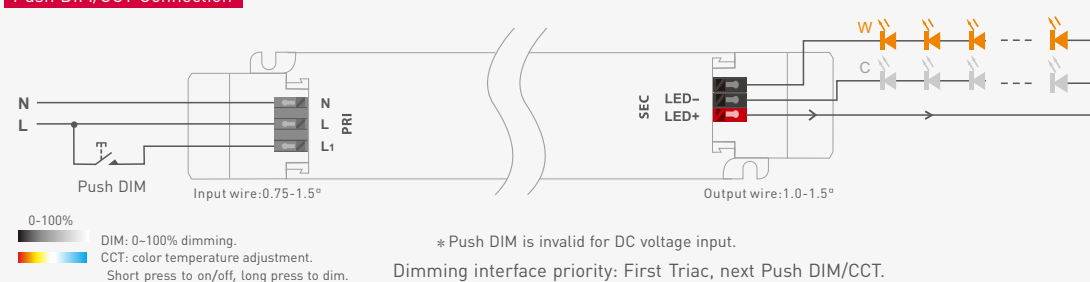


Wiring Diagram

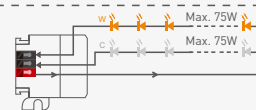
Triac connection



Push DIM/CCT Connection



* Adopting constant power program design, adjust brightness and color temperature synchronously.
75W driver, 75W X 2CH load can be connected, the total power of the 2 channels will be kept in 75W.



Push Dimming

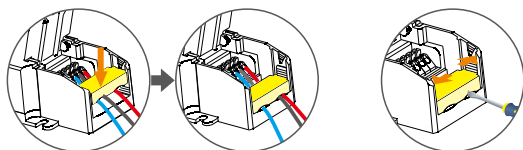


Reset switch

- On/off control: Short press.
 - Stepless dimming: Long press.
 - With every other long press, the brightness goes to the opposite direction.
 - Dimming memory: The lights will return to its previous brightness value when short press on PUSH DIM button.
- Power on again after power cut, the output brightness is subjected to the input voltage of drivers.

Application of protective cover

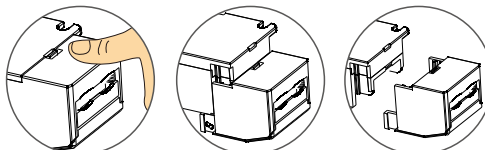
Wire pressing board:



Push the wire pressing board to fix the wire.

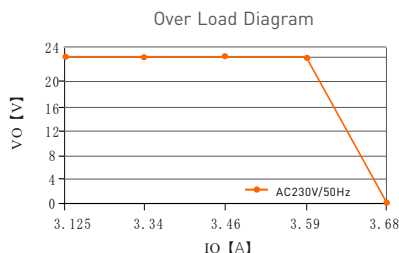
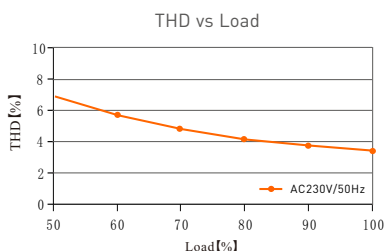
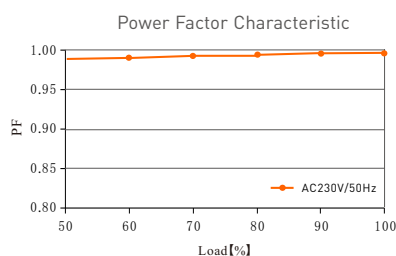
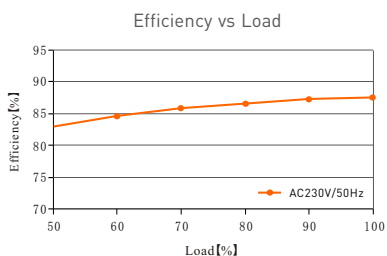
Push outward the side plate, meanwhile use the tool to uninstall the wire pressing board.

Uninstall protective cover:

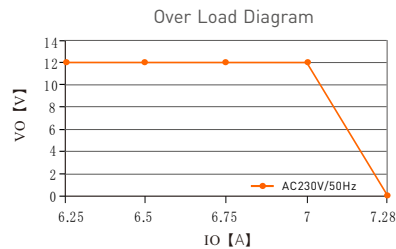
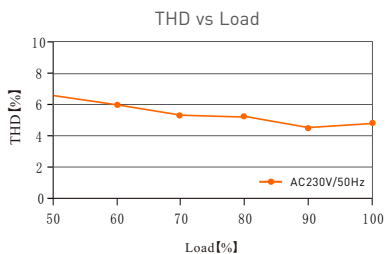
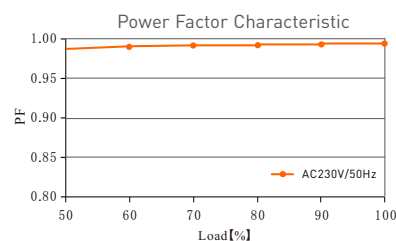
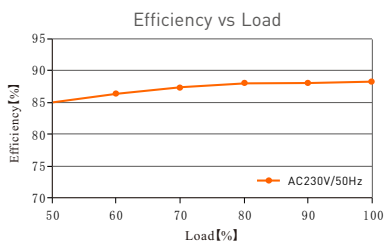


Break off the bottom left and right to remove the protective cover.

Relationship diagrams



LM-75-24-G2T2



LM-75-12-G2T2

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)

