LTECH

LM-75-12-G2A2 LM-75-24-G2A2 LM-100-24-G2A2

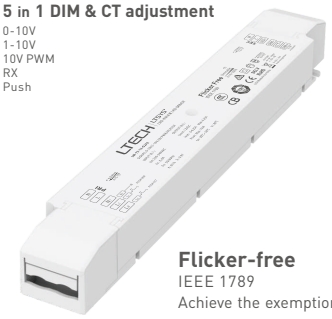
0-10V/Push DIM/CCT

LED Intelligent Driver

- Dimming interface: 0-10V(1-10V/10V PWM/RX), Push DIM/CCT
- 0-10V DIM and color temperature adjusting driver, 2 independently SELV constant voltage output channels.
- Constant power design, adjust different color temperature to keep the same brightness.
- Dimming range from 0-100%, LED start at 0.1% possible.
- Color temperature adjusting range: 2700-6500K
- Automatic recognition of 0-10V, 1-10V input signal.
- 0~100% flicker-free, achieve the level of exemption assessment.
- Over-heat / Over voltage / Over load / Short circuit protection, recover automatically.
- Full protective plastic housing.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for indoor Ⅰ/Ⅱ/Ⅲ type lamps application.

5 in 1 DIM & CT adjustment

0-10V
1-10V
10V PWM
RX
Push



Flicker-free
IEEE 1789
Achieve the exemption level.

DIM & CT adjustment

Dimmable:
0.1%-100%

0-10V PUSH | PWM Digital Dimming | Over-heat Protection | Over voltage protection | Over Load Protection | Constant Power Design | Short Circuit Protection

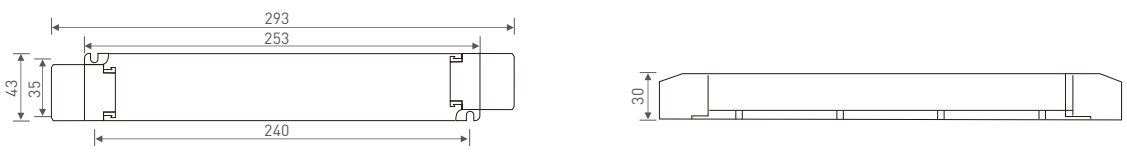
Specification

Model		LM-75-12-G2A2	LM-75-24-G2A2	LM-100-24-G2A2
OUTPUT	Output Voltage	12Vdc	24Vdc	
	Output Voltage Range	12Vdc ±0.5Vdc	24Vdc ±0.5Vdc	
	Output Current	Max. 6.25A	Max. 3.125A	Max. 4.17A
	Output Power	Max. 75W		Max. 100W
	Output Power Range	0~75W		0~100W
	Strobe Level	High frequency exemption level.		
	Dimming Range	0~100%, dimming depth: Max. 0.1%		
	Overload Power Limitation	⩾102%		
	Ripple & Noise	⩽200mV	⩽300mV	
	PWM Frequency	⩽3600Hz		
INPUT	Dimming Interface	0-10V(1-10V/10V PWM/RX) DIM/CCT, Push DIM/CCT		
	Input Voltage	220-240Vac		
	Frequency	50/60Hz		
	Input Current	Max. 0.4A/230Vac		Max. 0.5A/230Vac
	Power Factor	PF>0.97/230Vac, at full load		PF>0.98/230Vac, at full load
	THD	⩽14% at 230Vac, at full load		⩽12% at 230Vac, at full load
	Efficiency (typ.)	91%	92%	93%
	Inrush Current(typ.)	Cold start 30A at 230Vac (twidth=1000μs measured at 50% Ipeak)		Cold start 45.2A at 230Vac (twidth=372μs measured at 50% Ipeak)
	Control surge capability	L-N:2KV		
	Leakage Current	Max. 0.5mA		
ENVIRONMENT	Working Temperature	ta: -20°C ~ 50°C tc: 80°C		
	Working Humidity	20 ~ 95%RH, non-condensing		
	Storage Temp., Humidity	-40°C ~ 80°C, 10~95%RH		
	Temp. Coefficient	±0.03%/°C (0-50°C)		
	Vibration	10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.		
PROTECTION	Over-heat Protection	Intelligently adjusting or turning off the output current if the PCB temperature ⩾110°C, auto recovers.		
	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⩾102%, auto recovers.		
	Short Circuit Protection	Enter hiccup mode if short circuit occurs, auto recovers.		
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		
OTHERS	Dimension	293×43×30mm(L×W×H)		
	Packing	296×44×33mm(L×W×H)		
	Weight(G.W.)	300g±10g		

※ The driver is suitable for connecting resistor current-limiting LED fixture (e.g. LED strip). The instantaneous surge current will be several times increased if connecting built-in constant current IC current-limiting LED fixtures, the driver will activate the overloaded protection (hiccups 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

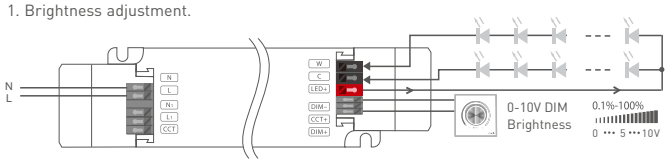
Unit: mm



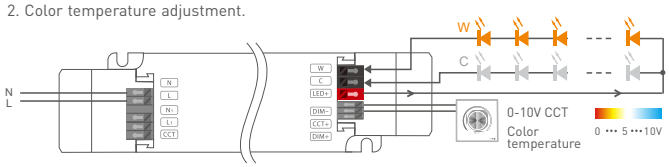
Wiring Diagram

0-10V Connection

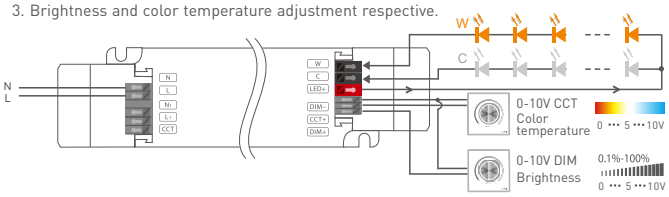
1. Brightness adjustment.



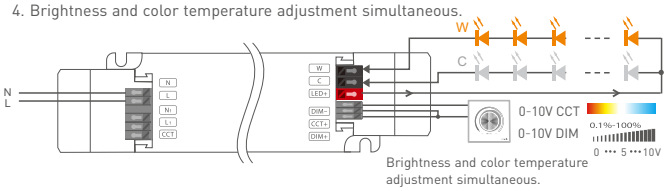
2. Color temperature adjustment.



3. Brightness and color temperature adjustment respective.

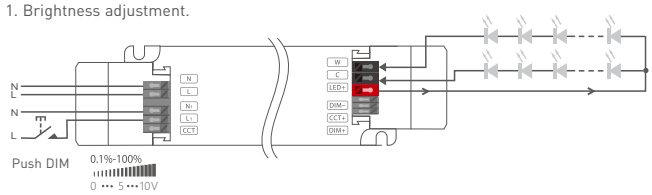


4. Brightness and color temperature adjustment simultaneous.

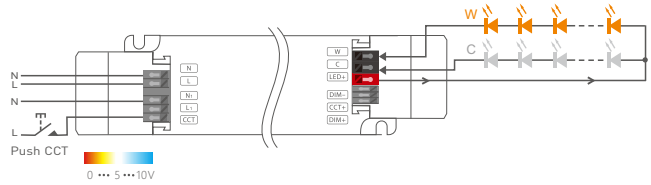


Push DIM/CCT Connection

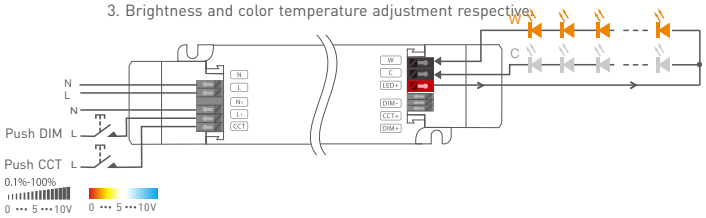
1. Brightness adjustment.



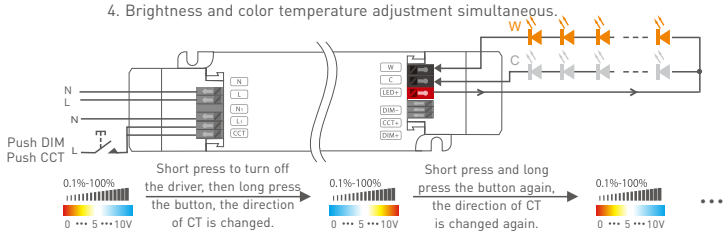
2. Color temperature adjustment.



3. Brightness and color temperature adjustment respective.

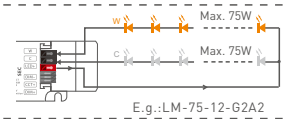


4. Brightness and color temperature adjustment simultaneous.



✻ Dimming interface priority: First 0-10V, next Push DIM/CCT.

✻ Adopting constant power program design, it keeps the same brightness in color temperature dimming, twice the rated power load can be connected.
75W driver, 75W X 2CH load can be connected, the total power of the 2 channels will be kept in 75W.
100W driver, 100W X 2CH load can be connected, the total power of the 2 channels will be kept in 100W.



Push DIM/CCT

Reset switch

DIM

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

CCT

- Color temperature adjustment: Long press.
- With every other long press, the color temperature level goes to the opposite direction.
- Color temperature memory: Color temperature will be the same as previously adjusted when turning off and on again.

Reset switch

DIM/CCT

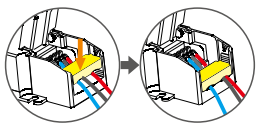
- On/off control: Short press.
- Stepless dimming and changing color: Long press.
- With every other long press, the CT goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted when turning off and on again.

✻ Applicable to brightness adjustment, color temperature adjustment and brightness/CT adjustment respective of Push DIM/CCT connection.

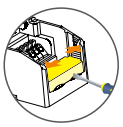
✻ Applicable to brightness and CT adjustment simultaneous of Push DIM/CCT connection.

Application of Protective Cover

Wire pressing board:

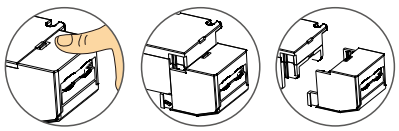


Push the wire pressing board to fix the wire.



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

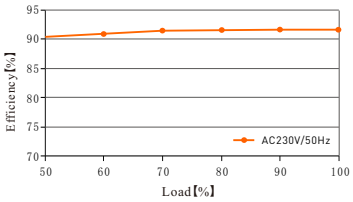
Uninstall protective cover:



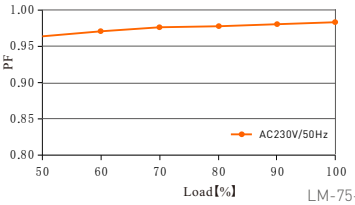
Break off the bottom left and right to remove the protective cover.

Relationship Diagrams

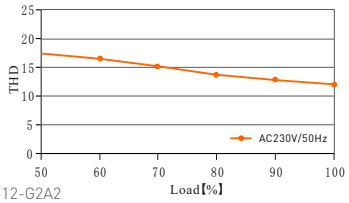
Efficiency vs Load



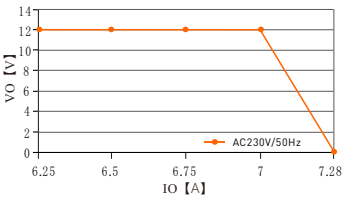
Power Factor Characteristic



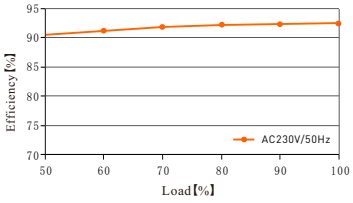
THD vs Load

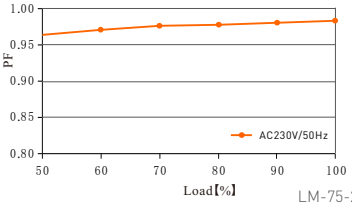


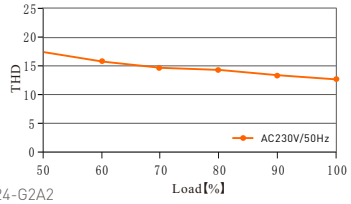
Over Load Diagram

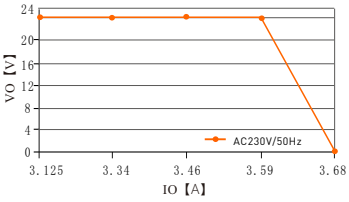


LM-75-12-G2A2

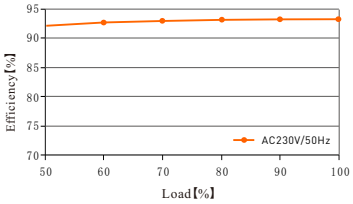


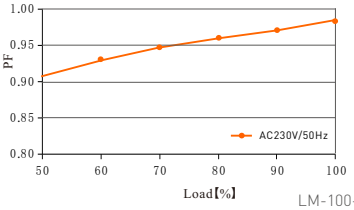


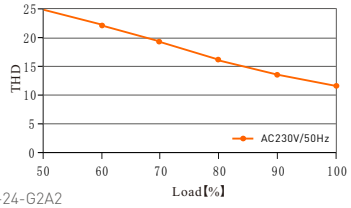


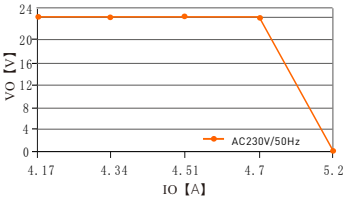


LM-75-24-G2A2









LM-100-24-G2A2