

## LED Intelligent CT Driver

- Dimming interface: DALI DT8, Push DIM/CCT
- 2 independently SELV constant voltage output channels.
- DALI DT8, DIM and color temperature adjusting driver.
- 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: 2500-6000K
- 0-100% flicker-free, High Frequency Exemption
- Over-heat / Over voltage / Over load / Short circuit protection, recover automatically.
- Standby Power Loss: <0.5W
- Full protective plastic housing.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for indoor I / II / III type lamps application.



**Flicker-free**  
IEEE 1789  
Achieve the exemption level.



Dimmable:  
0.1%-100%



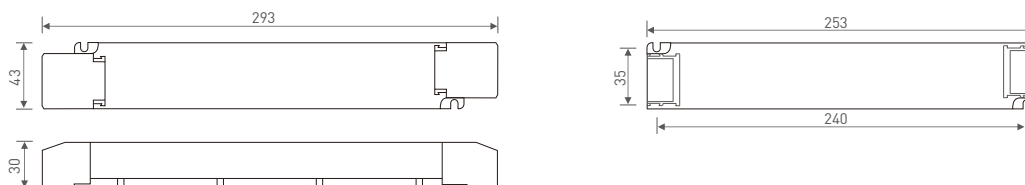
### Specification

Model	LM-75-12-G2D2	LM-75-24-G2D2	LM-100-24-G2D2	
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	DALI DT8(IEC62386), 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%
	Standby Power Loss	<0.5W		
	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.

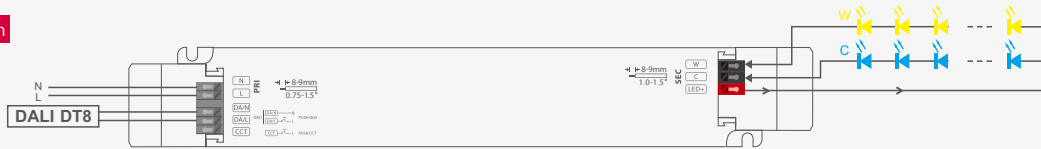
### Dimensions

Unit: mm



## Wiring Diagram

### DALI DT8 Connection



DIM: 0-100% brightness adjustment.  
CCT: 2500-6000K color temperature adjustment.

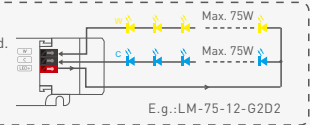
### Push DIM/CCT Connection



DIM: 0-100% brightness adjustment.  
CCT: 2500-6000K  
Color temperature adjustment.

\* Dimming interface priority: First DALI DT8, 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

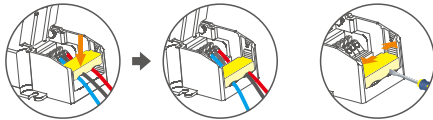
- On/off control: Short press.
- Stepless dimming: Long press.
- With every other long press, the light level goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted when turning off and on again.

### 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.

## Application of Protective Cover

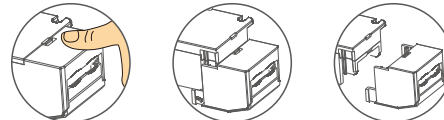
Wire pressing board:



Push the wire pressing board to fix the wire.

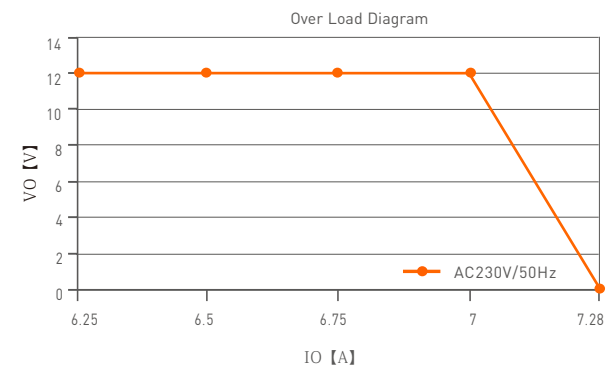
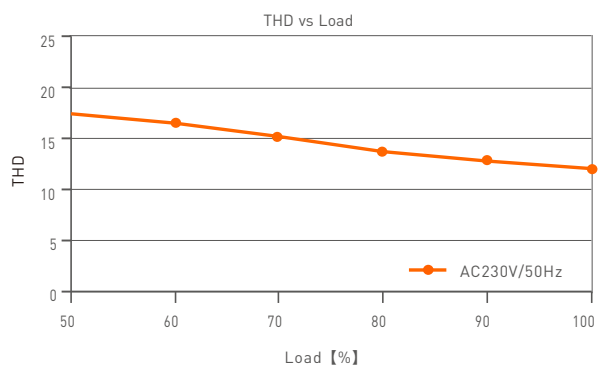
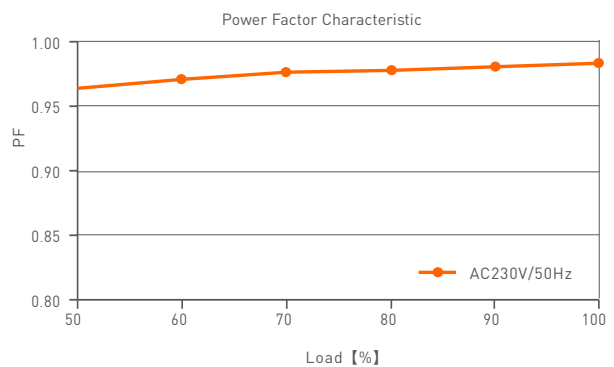
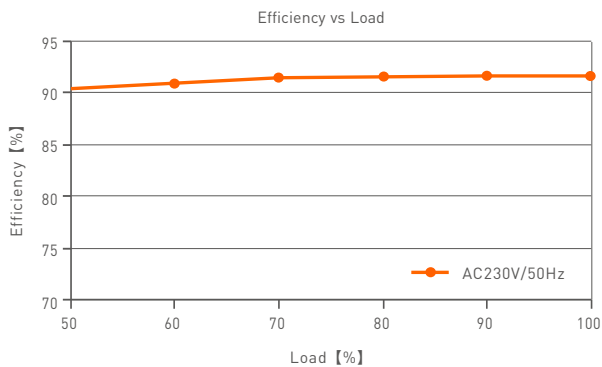
Push outward the side plate, meanwhile use the tool to uninstall the wire pressing board.

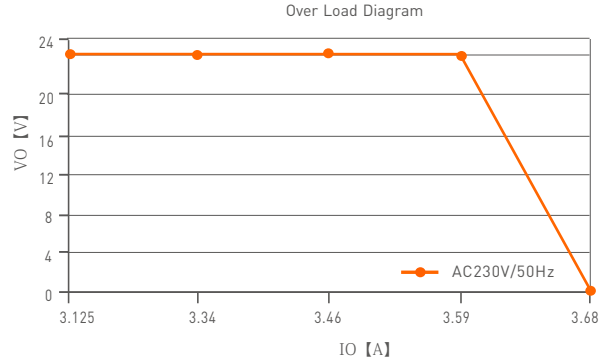
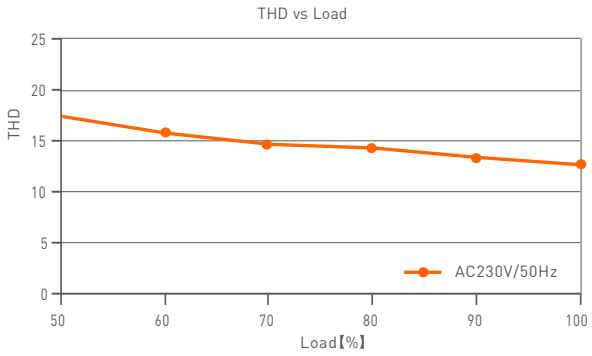
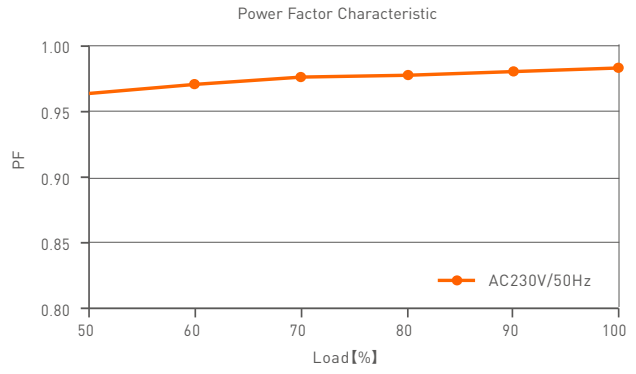
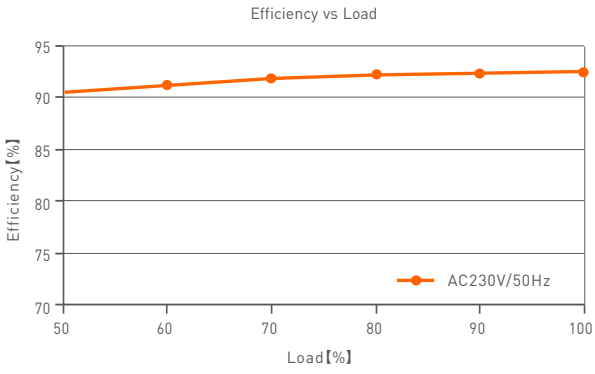
Uninstall protective cover:



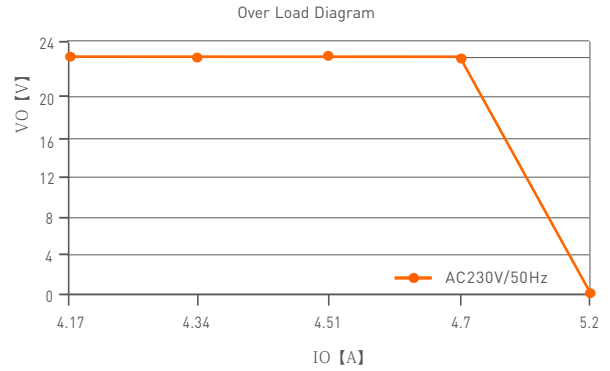
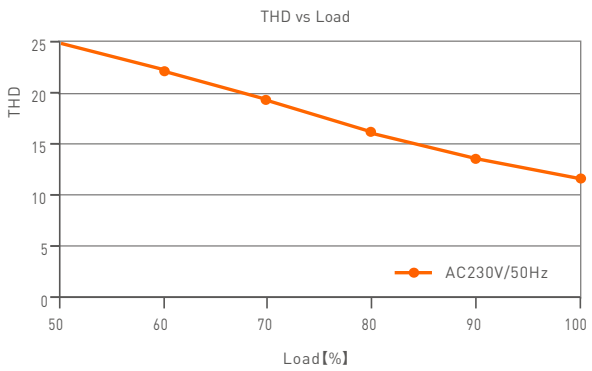
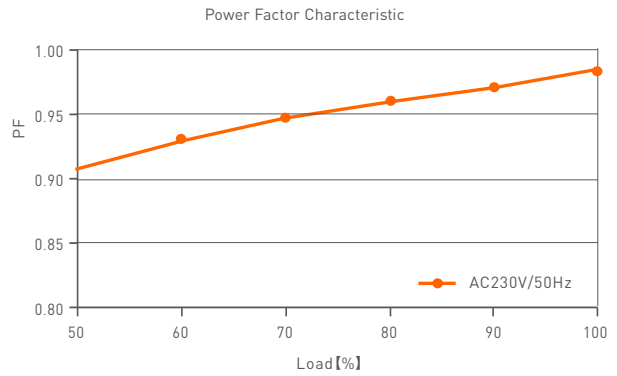
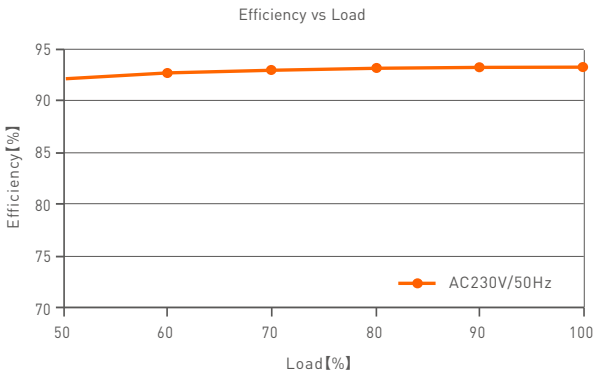
Break off the bottom left and right to remove the protective cover.

## Relationship Diagrams





LM-75-24-G2D2



LM-100-24-G2D2

## 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)

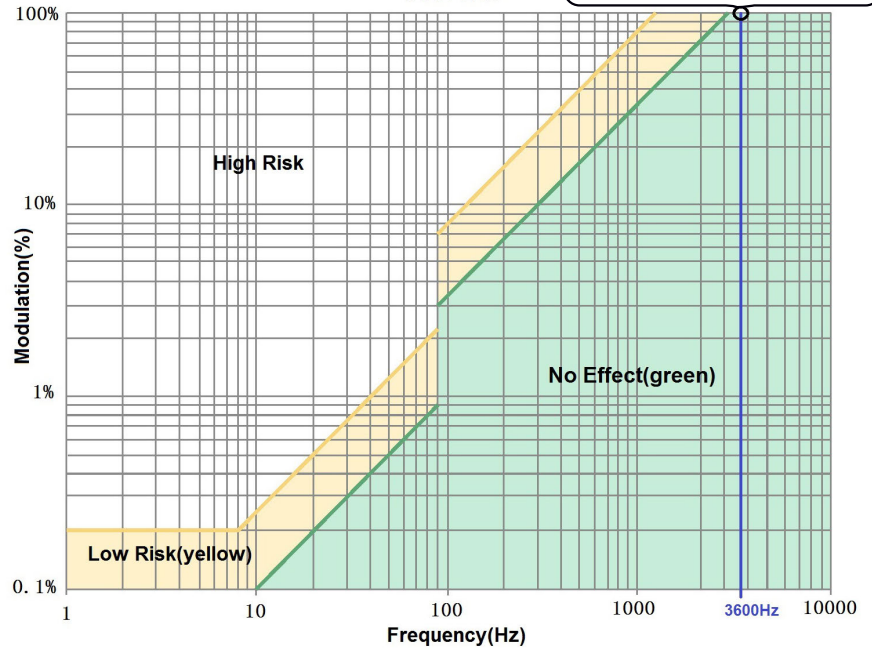
Brightness

- ▲ 0.1%
- ◆ 1%
- ▲ 5%
- ◆ 10%
- 20%
- ▲ 30%
- 40%
- ★ 50%
- 60%
- 70%
- ★ 80%
- ◆ 90%
- ◆ 100%

Exemption assessment  
(High frequency exemption)



IEEE 1789



## Attentions

- Products shall be installed by qualified professionals.
- LTECH products are non-waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure it is mounted in a water proof enclosure.
- Good heat dissipation will extend the working life of products. Please ensure good ventilation.
- Please check if the working voltage used complies with the parameter requirements of products.
- The diameter of wire used must be able to load the light fixtures you connect and ensure the firm wiring.
- Before you power on products, please make sure all the wiring is correct in case of incorrect connection that causes damage to light fixtures.
- If a fault occurs, please do not attempt to fix products by yourself. If you have any question, please contact your suppliers.

\* This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.

## Warranty Agreement

- Warranty periods from the date of delivery: 5 years
- Free repair or replacement services for quality problems are provided within warranty periods.

Warranty exclusions below:

- Beyond warranty periods.
- Any artificial damage caused by high voltage, overload, or improper operations.
- Products with severe physical damage.
- Damage caused by natural disasters and force majeure.
- Warranty labels and barcodes have been damaged.
- No any contract signed by LTECH.

1. Repair or replacement provided is the only remedy for customers. LTECH is not liable for any incidental or consequential damage unless it is within the law.
2. LTECH has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.