LTECH

DALI
Push DIM

LED Intelligent Driver

- Dimming interface: DALI, Push DIM.
- Dimming range from 0-100%, LED start at 0.1% possible.
- DALI protocol: DALI 1, DALI 2.
- DALI dimming curve: Liner curve or logarithmic curve.
- 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.
- DALI bus standard: IEC62386-101,102, 207.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for indoor Ⅰ/Ⅱ/Ⅲ type lamps application.
- 5 years warranty (Rubycon capacitor).

Flicker-free
IEEE 1789
Achieve the exemption level.

Dimmable:
0.1%-100%

DALI PUSH DIM | PWM Digital Dimming | Over-heat Protection | Over voltage protection | Over Load Protection | Short Circuit Protection

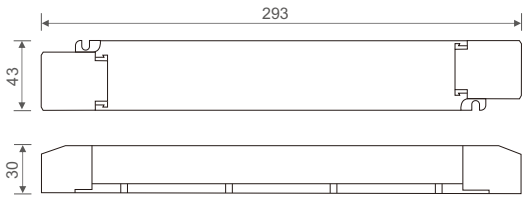
Specification

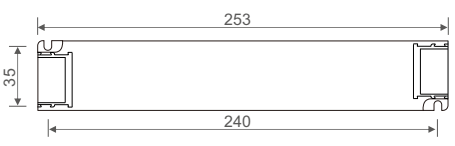
Model		LM-75-12-G1D2	LM-75-24-G1D2	LM-100-24-G1D2
OUTPUT	Output Voltage	12Vdc	24Vdc	
	Output Voltage Range	12Vdc ±0.5Vdc	24Vdc ± 0.5Vdc	
	Output Current	Max. 6.25A	Max. 3.125A	Max. 4.17A
	Output Power	Max. 75W		Max. 100W
	Output Power Range	0~75W		0~100W
	Strobe Level	High frequency exemption level.		
	Dimming Range	0~100%, dimming depth: Max. 0.1%		
	Overload Power Limitation	⩾102%		
	Ripple & Noise	⩽200mV	⩽300mV	
	PWM Frequency	3600Hz		
INPUT	Dimming Interface	DALI (IEC62386), Push DIM		
	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		230Vac@THD⩽12% , at full load
	Efficiency (typ.)	91%	92%	93%
	Standby Power Loss	<0.5W		
	Inrush Current(typ.)	Cold start 40A at 230Vac		Cold start 45.2A at 230Vac
	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, auto recovers.	Shut down the output when non-load voltage⩾26V, auto recovers.	
	Over Load Protection	Shut down the output when current load⩾102%, auto recovers.		
	Short Circuit Protection	Shut down automatically 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

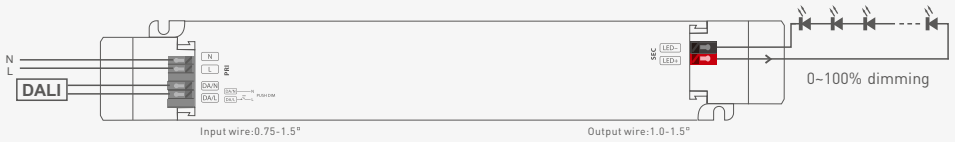
Unit: mm



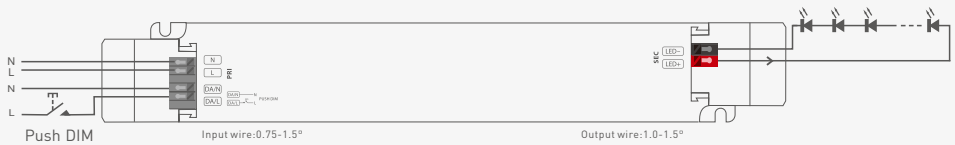


Wiring Diagram

DALI Connection



Push DIM Connection

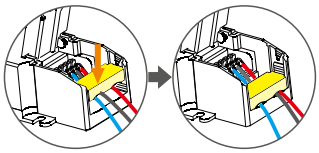


Short press to on/off, long press to DIM.

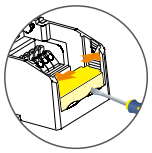
Dimming interface priority: First DALI, next Push DIM.

Application of Protective Cover

Wire pressing board:

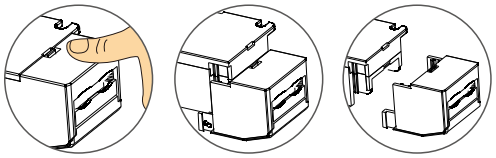


Push the wire pressing board to fix the wire.



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

Uninstall protective cover:



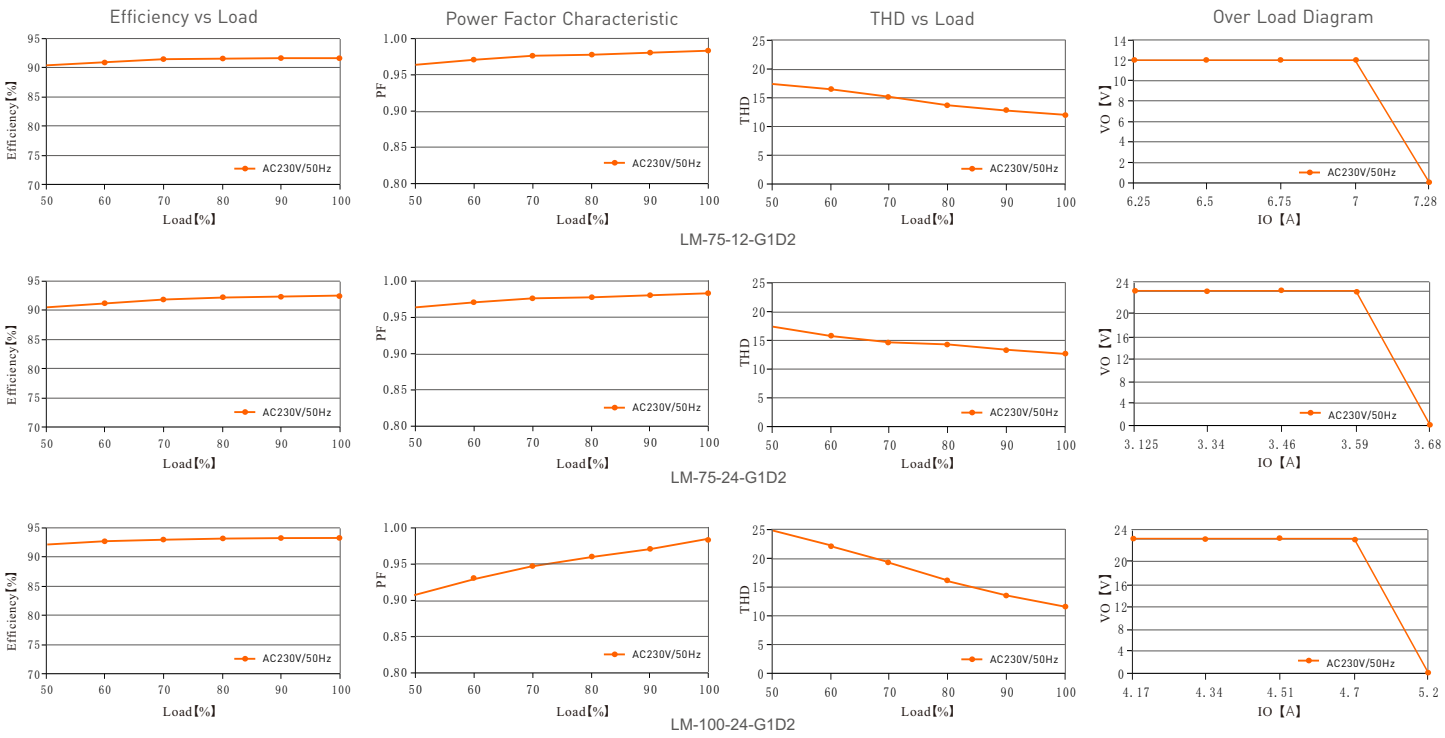
Break off the bottom left and right to remove the protective cover.

Push Dimming

Reset switch

- 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.

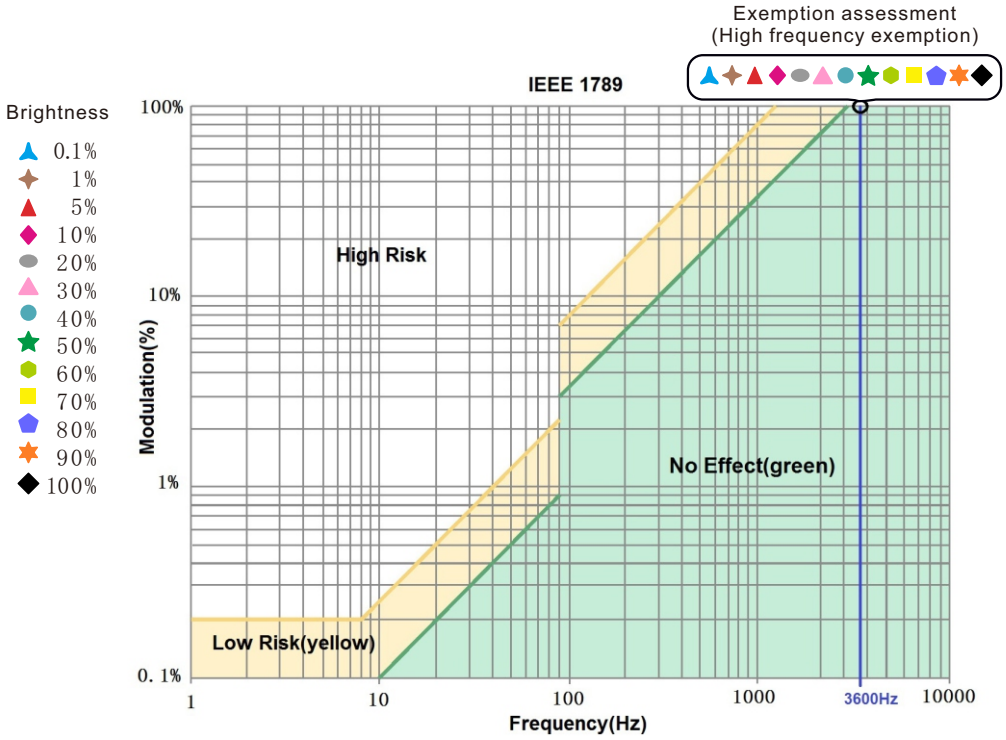
Relationship Diagrams



Flicker test form

IEEE 1789

Limit of Modulation in low risk area	
Waveform frequency of Optical output	limit (%)
$f \leqslant$ 8Hz	0.2
8Hz < $f \leqslant$ 90Hz	0.025 × f
90Hz < $f \leqslant$ 1250Hz	0.08 × f
f > 1250Hz	Exemption assessment
Limit of Modulation in no effect area	
Waveform frequency of Optical output	limit (%)
$f \leqslant$ 10Hz	0.1
10Hz < $f \leqslant$ 90Hz	0.01 × f
90Hz < $f \leqslant$ 3125Hz	(0.08/2.5) × f
f > 3125Hz	Exemption assessment (High frequency exemption)



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.

✻ No further notice if any changes in the manual. Product function depends on the goods. Please feel free to contact your supplier if any question.