

#### General

Product Type	Constant Voltage Driver	
Length (mm)	352	
Width (mm)	43	
Height (mm)	30	
Housing Color	White	
Housing Material	Plastic	
Mounting	Surface mounted	
Weight (g)	300	

#### **Electronics**

Input Domain	AC	
Input Voltage	220 ~ 240V AC	
Input Current max (A)	0.75A @ 230V AC	
Output Voltage	12V DC	
Output Current (mA) max/output	12500	
Output Current Max. (A)	12.5	
Output Power Range (W)	0~150	
Power Factor at Full Load	+0.98 @ 230VAC	
LED Outputs	1	
Leakage current max. (mA)	0.5	
Standby Power Loss Max. (W)	0.5	
THD (at full load)	6% @ 230V AC	
Input Frequency	50 ~ 60Hz	
Inrush Current	45A @ 230VAC	

#### Lighting

Color Range Single Color

#### Control

Output Signal	PWM-CV
Control	O-1OV
Dimming Range	O~100%
Number of Channels	1
Functions	Push DIM

#### **Protection**

Protection Class

#### **Environmental**

Operating Temperature	-20 ~ +50 °C
Ingress Protection	IP20
Safety Standards	NEN-EN-IEC 61347-1,
	NEN-EN-IEC 61347-2-13,

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.



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# LTECH

## LED Intelligent Driver (constant voltage)

- Dimming interface: 0-10V(1-10V/10V PWM/RX), Push DIM
- Dimming range from 0-100%, LED start at 0.1% possible.
- With soft-on and fade in function, visual more comfortable.
- Automatic recognition of 0-10V, 1-10V input signal.
- 0-100% flicker-free ,High frequency exemption level.
- High efficient driver: efficiency 93%, PF>0.98, THD<6%.
- Ultra-low consumption of 0-10V ports: < 0.05mA.
- Dimming interface with photoelectric isolation, in line with the latest safety standards, more safe and reliable.
- In line with the EU energy efficiency ERP directive, standby power consumption < 0.5W
- Innovative thermal management technology, intelligent power life protection.
- Over-heat / Over voltage / Over load / Short circuit protection, recover automatically.
- Fully-protected plastic housing with design of dismountable end cover.
- $\bullet~$  Suitable for internal lights application for  $\,\mathbb{I}\,/\mathbb{II}/\mathbb{II}\,$
- Up to 50000-hour life time.
- 5 years warranty (Rubycon capacitor).











Flicker-free IEEE 1789

Dimmable:

0.1%-100%

Achieve the exemption level.





0-10V 1-10V

10V PWM

Push DIM

5 in 1 dimming













Ultra-low consumption of 0-10V ports: < 0.05mA.



## Specification

Model		LM-150-24-G1A2	LM-150-12-G1A2	
	Output Voltage	24Vdc	12Vdc	
İ	Output Voltage Range	24Vdc ± 0.5Vdc	12Vdc ±0.5Vdc	
Ī	Output Current	Max. 6.25A	Max. 12.5A	
	Output Power	Max. 150W		
ОИТРИТ	Output Power Range	0~150W		
	Strobe Level	High frequency exemption level.		
	PWM Frequency	3600Hz		
	Dimming Range	0~100%, dimming depth: Max. 0.1%		
	Overload Power Limitation	≥102%		
	Ripple & Noise	Switch ripple≤200mV, noise≤500mV	Switch ripple≤200mV, noise≤800mV	
	Dimming Interface	0-10V(1-10V/10V PWM/RX), Push DIM		
	Interface consumption   <0.05mA @ 0-10V     Input Voltage   220-240Vac   200-280Vdc     Frequency   50/60Hz     Input Current   Max. 0.75A/230Vac			
ľ				
INPUT	Power Factor	PF>0.98/230Vac, at full load		
	THD	<6% at 230Vac, at full load		
ĺ	Efficiency (typ.)	93%	92%	
Ī	Standby Power Loss	<0.5W		
Ī	Inrush Current(typ.)	Cold start 45A at 230Vac		
Ī	Control surge capability	L-N:2KV		
	Leakage Current	Max. 0.5mA		
	Working Temperature	ta: -20°C ~ 50°C tc: 85°C		
	Working Humidity	20 ~ 95%RH, non-condensing		
ENVIRONMENT	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≥28V, re-power on to recover after fault condition is removed.	Shut down the output when non-load voltage≥16V, 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.		
	Withstand Voltage	I/P-0/P: 3750Vac		
	Isolation Resistance	I/P-0/P: 100M <b>Ω</b> /500VDC/25°C/70%RH		
SAFETY &	Safety Standards	IEC/EN61347-1, IEC/EN61347-2-13		
EMC	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		
	Dimension	352×43×30mm(L×W×H)		
OTHERS	Packing	355×44×33mm(L×W×H)		
İ	Weight(G.W.)	430g±10g		

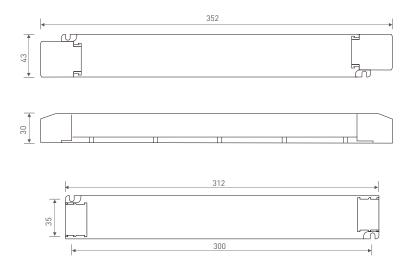
<sup>\*</sup> The driver is suitable for connecting resistor current-limiting LED fixture (e.g. LED strip). The inrush current will be dozens of times increased if connecting built-in constant current IC current-limiting LED fixtures, the driver will activate the overloaded protection (hiccups flickering). 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.

1

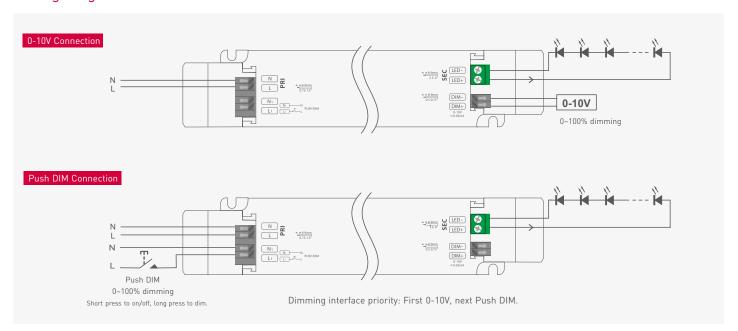


## **Dimensions**

Unit: mm



## Wiring Diagram



# **Push Dimming**

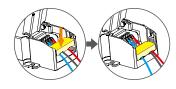


Reset switch

- 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.

# Application of Protective Cover

Wire pressing board:

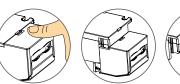


Push the wire pressing board to fix the wire.



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

Uninstall protective cover:

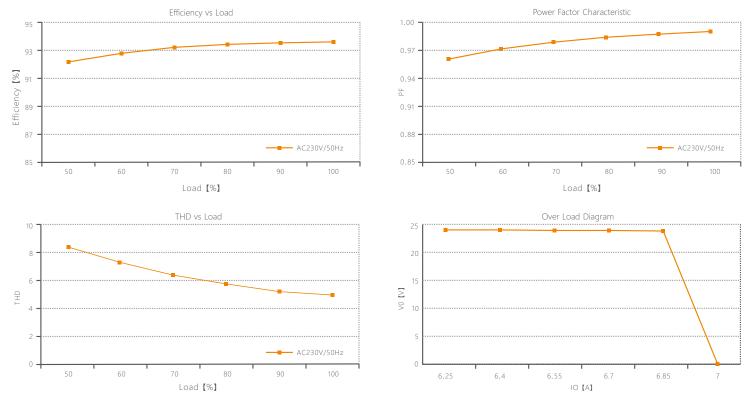




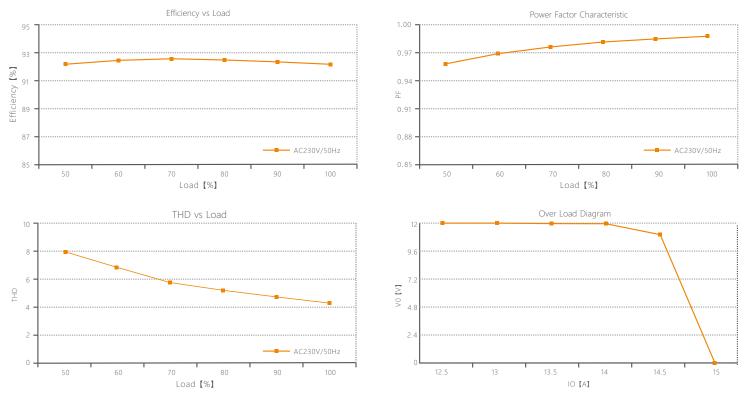
Break off the bottom left and right to remove the protective cover.



# Relationship Diagrams



LM-150-24-G1A2



LM-150-12-G1A2

3



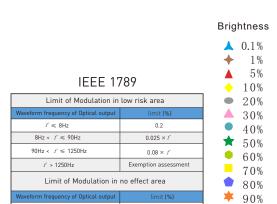
## Flicker Test Form

f ≤ 10Hz

10Hz < f ≤ 90Hz

90Hz < f ≤ 3125Hz

f > 3125Hz



0.1

0.01 × 1

Exemption assessment [High frequency exemption]

[0.08/2.5]×

**◆** 100%

