

General

| Product Type | Constant Voltage Driver |
|------------------|-------------------------|
| Length (mm) | 292 |
| 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 |
| Output Voltage | 24V DC |
| Output Current Max. (A) | 4.17 |
| Output Power Range (W) | 0~100 |
| Output Power (W) | 100W @ 24V |
| Power Factor at Full Load | +0.98 @ 230VAC |
| | |
| Power Supply | Internal |
| Power Supply Anti Surge | Internal L-N: 2kV |
| , | |
| Anti Surge | L-N: 2kV |
| Anti Surge Efficiency | L-N: 2kV 93% |
| Anti Surge Efficiency Leakage current max. (mA) | L-N: 2kV 93% 0.5 |

Lighting

| Color Range | Tunable White |
|-------------|---------------|
|-------------|---------------|

Control

| Output Signal | PWM-CV |
|--------------------|--------|
| Control | 0-10V |
| Dimming Range | 0~100% |
| Number of Channels | 2 |

Protection

| Protection Class | II | |
|------------------|----|--|
|------------------|----|--|

Environmental

| Operating Temperature | -20 ~ +50 °C |
|-----------------------|--------------|
| Ingress Protection | IP20 |

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

5 in 1 DIM & CT adjustment

LTECH

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.
- \bullet Suitable for indoor $\mathbb{I}/\mathbb{II}/\mathbb{II}$ type lamps application.









Flicker-free

IEEE 1789



Achieve the exemption level.





DIM & CT adjustment





Dimmable: 0.1%-100%















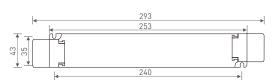
Specification

| Model | | LM-75-12-G2A2 | LM-75-24-G2A2 | LM-100-24-G2A2 | |
|-------------|---------------------------|--|------------------------------|------------------------------|--|
| | 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 | | 0~100W | |
| OUTPUT | 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 | | | |
| | 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 | | |
| INPUT | 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% peak) Cold start 45.2A at 230Vac (twidth=372µs measured at 50% peak) | | | |
| | Control surge capability | L-N:2KV | | | |
| | Leakage Current | Max. 0.5mA | | | |
| | Working Temperature | ta: -20°C ~ 50°C tc: 80°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. | | | |
| | Over-heat Protection | Intelligently adjusting or turning off the output current if the PCB temperature ≥110°C, auto recovers. Shut down the output when non-load voltage Shut down the output when non-load voltage ≥26V, 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. | | | |
| PROTECTION | Over Voltage Protection | | | | |
| | 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: 100MΩ/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 | 293×43×30mm(L×W×H) | | | |
| OTHERS | 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





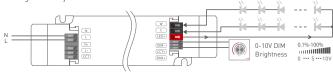


0-10V/Push DIM/CCT

Wiring Diagram

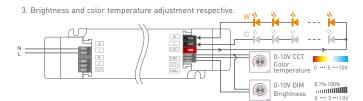
0-10V Connection

1. Brightness adjustment.

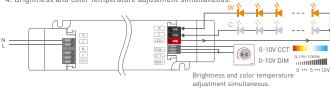


2. Color temperature adjustment.



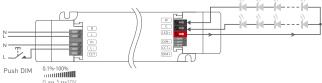


4. Brightness and color temperature adjustment simultaneous.

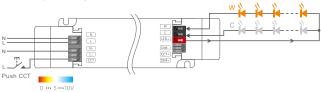


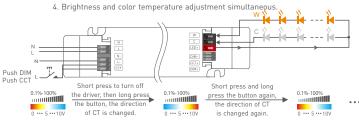
Push DIM/CCT Connection

1. Brightness adjustment.



2. Color temperature adjustment.

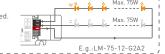




* Dimming interface priority: First 0-10V, next Push DIM/CCT.

* 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

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

when turning off and on again.

• 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

DIM/CCT

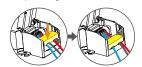
* Applicable to brightness adjustment, color temperature adjustment and brightness/CT adjustment respective of Push DIM/CCT connection.

2

Application of Protective Cover

Wire pressing board:

Reset switch



Push the wire pressing board to fix the wire



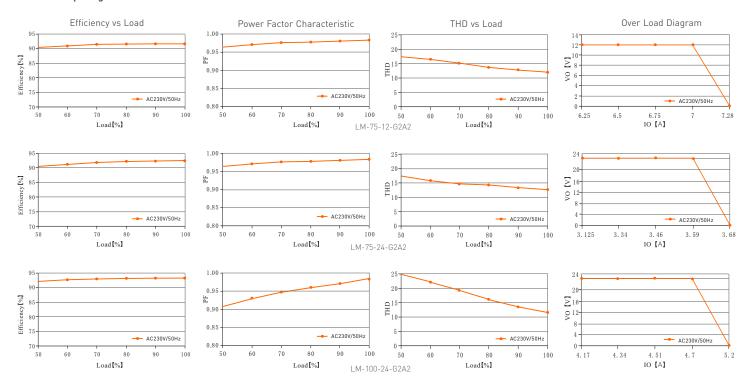
Push outward the side plate, meanwhile use the tool to uninstall the wire pressing board.



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



Relationship Diagrams



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