



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              | 12V DC         |
| Output Current Max. (A)     | 6.25           |
| Output Power Range (W)      | 0~75           |
| Power Factor at Full Load   | +0.97 @ 230VAC |
| Power Supply                | Internal       |
| LED Outputs                 | 1              |
| Efficiency                  | 91%            |
| Leakage current max. (mA)   | 0.5            |
| Standby Power Loss Max. (W) | 0.5            |
| Input Frequency             | 50 ~ 60Hz      |
| Inrush Current              | 30A @ 230VAC   |

Lighting

|             |              |
|-------------|--------------|
| Color Range | Single Color |
|-------------|--------------|

Control

|                    |        |
|--------------------|--------|
| Output Signal      | PWM-CV |
| Control            | 0-10V  |
| Dimming Range      | 0~100% |
| Number of Channels | 1      |

Protection

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

Environmental

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

CE IP20

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.



## LED Intelligent Driver

- Dimming interface: 0-10V(1-10V/10V PWM/RX), Push DIM
- Built-in SCM, dimming curve and smoothing time of power on can be customized.
- Dimming range from 0-100%, LED start at 0.1% possible.
- 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.



**Flicker-free**

IEEE 1789  
Achieve the exemption level.

**Dimmable:**

0.1%-100%

**5 in 1 dimming**

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



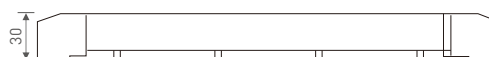
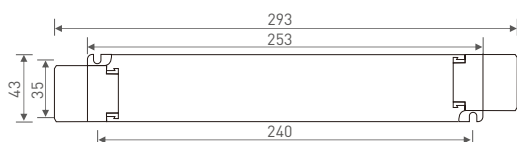
### Specification

| Model        | LM-75-12-G1A2             | LM-75-24-G1A2                                                                                                                | LM-100-24-G1A2                                                                                                   |
|--------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| OUTPUT       | Output Voltage            | 12Vdc                                                                                                                        | 24Vdc                                                                                                            |
|              | Output Voltage Range      | 12Vdc $\pm 0.5$ Vdc                                                                                                          | 24Vdc $\pm 0.5$ Vdc                                                                                              |
|              | Output Current            | Max. 6.25A                                                                                                                   | Max. 3.125A                                                                                                      |
|              | Output Power              | Max. 75W                                                                                                                     | Max. 4.17A                                                                                                       |
|              | Output Power Range        | 0~75W                                                                                                                        | Max. 100W                                                                                                        |
|              | Strobe Level              | High frequency exemption level.                                                                                              | 0~100W                                                                                                           |
|              | Dimming Range             | 0~100%, dimming depth: Max. 0.1%                                                                                             |                                                                                                                  |
|              | Overload Power Limitation | $\geq 102\%$                                                                                                                 |                                                                                                                  |
|              | Ripple & Noise            | $\leq 200$ mV                                                                                                                | $\leq 300$ mV                                                                                                    |
| INPUT        | PWM Frequency             | $\leq 3600$ Hz                                                                                                               |                                                                                                                  |
|              | Dimming Interface         | 0-10V(1-10V/10V PWM/RX), 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                       | $\leq 14\%$ at 230Vac, at full load                                                                                          | $\leq 12\%$ at 230Vac, at full load                                                                              |
|              | Efficiency (typ.)         | 91%                                                                                                                          | 92%                                                                                                              |
|              | Inrush Current(typ.)      | Cold start 30A at 230Vac                                                                                                     | Cold start 45A at 230Vac                                                                                         |
| ENVIRONMENT  | 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                                                                                                   |                                                                                                                  |
|              | Storage Temp., Humidity   | -40°C ~ 80°C, 10-95%RH                                                                                                       |                                                                                                                  |
| PROTECTION   | Temp. Coefficient         | $\pm 0.03\%/^{\circ}\text{C}$ (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 $\geq 110^{\circ}\text{C}$ , auto recovers. |                                                                                                                  |
|              | Over Voltage Protection   | Shut down the output when non-load voltage $\geq 13$ V, re-power on to recover after fault condition is removed.             | Shut down the output when non-load voltage $\geq 26$ V, re-power on to recover after fault condition is removed. |
| SAFETY & EMC | Over Load Protection      | Shut down the output when current load $\geq 102\%$ , auto recovers.                                                         |                                                                                                                  |
|              | Short Circuit Protection  | Shut down automatically if short circuit occurs, auto recovers.                                                              |                                                                                                                  |
|              | Withstand Voltage         | I/P-O/P: 3750Vac                                                                                                             |                                                                                                                  |
|              | Isolation Resistance      | I/P-O/P: 100M $\Omega$ /500VDC/25°C/70%RH                                                                                    |                                                                                                                  |
| OTHERS       | 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 $\times$ 43 $\times$ 30mm(L $\times$ W $\times$ H)                                                                       |                                                                                                                  |
|              | Packing                   | 296 $\times$ 44 $\times$ 33mm(L $\times$ W $\times$ H)                                                                       |                                                                                                                  |
|              | Weight(G.W.)              | 300g $\pm$ 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.

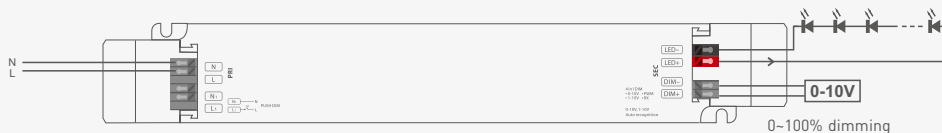
### Dimensions

Unit: mm



## Wiring Diagram

### 0-10V Connection



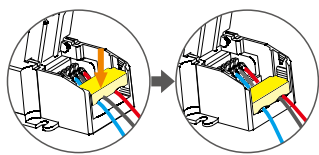
### Push DIM Connection



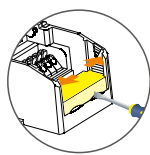
Dimming interface priority: First 0-10V, next Push DIM.

## Application of Protective Cover

Wire pressing board:

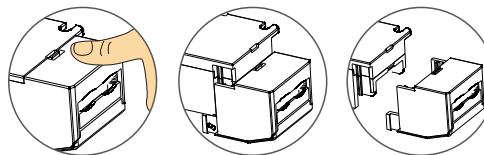


Push the wire pressing board to fix the wire.



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.

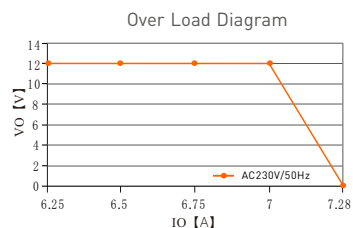
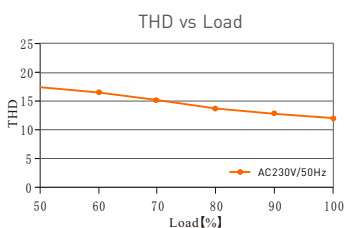
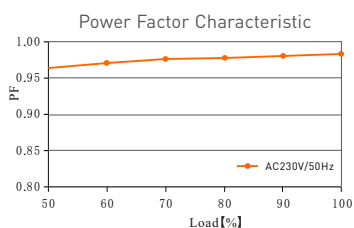
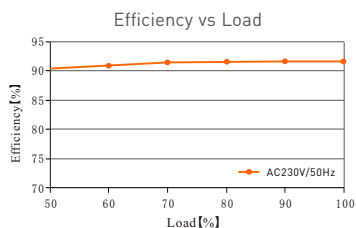
## Push Dimming



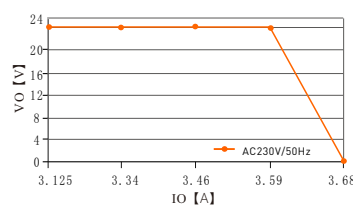
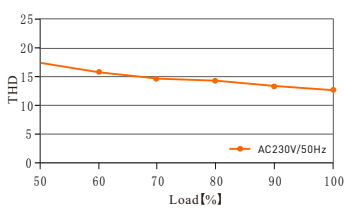
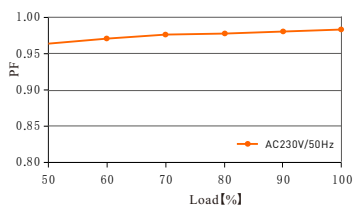
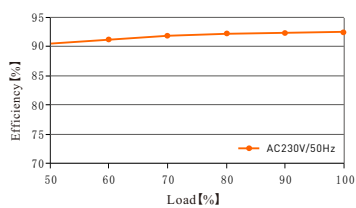
Reset switch

- 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.

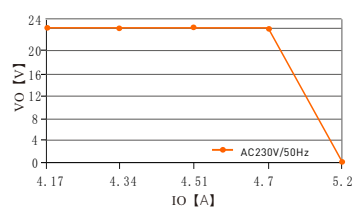
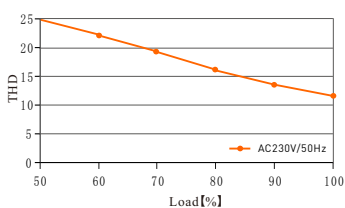
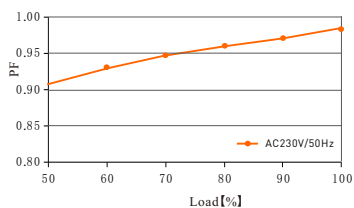
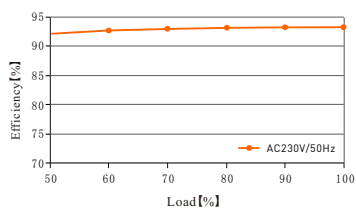
## Relationship Diagrams



LM-75-12-G1A2



LM-75-24-G1A2



LM-100-24-G1A2