



General

|                  |                         |
|------------------|-------------------------|
| Product Type     | Constant Voltage Driver |
| Length (mm)      | 293                     |
| Width (mm)       | 43                      |
| Height (mm)      | 30                      |
| Housing Color    | White                   |
| Housing Material | Plastic                 |
| Mounting         | Surface mounted         |
| Weight (g)       | 355                     |

Electronics

|                           |                |
|---------------------------|----------------|
| Input Domain              | AC             |
| Input Voltage             | 220 ~ 240V AC  |
| Input Current max (A)     | 0.4            |
| Output Voltage            | 24V DC         |
| Output Current Max. (A)   | 6.25           |
| Output Power Range (W)    | 0~75           |
| Power Factor at Full Load | +0.98 @ 230VAC |
| Anti Surge                | L-N: 2kV       |
| Leakage current max. (mA) | 0.5            |
| THD (at full load)        | 6% @ 230V AC   |
| Input Frequency           | 50 ~ 60Hz      |
| Inrush Current            | 30A @ 230VAC   |

Lighting

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

Control

|               |        |
|---------------|--------|
| Output Signal | PWM-CV |
| Control       | TRIAC  |
| Dimming Range | 0~100% |

Protection

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

Environmental

|                       |              |
|-----------------------|--------------|
| Storage Temperature   | -40 ~ +80 °C |
| Operating Temperature | -20 ~ +50 °C |
| Ingress Protection    | IP20         |



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.



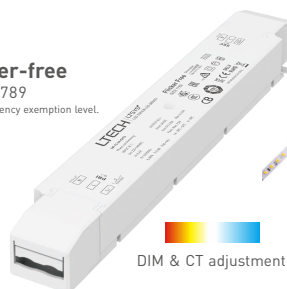
## LED CT Intelligent Driver (CV)

- Leading edge (Triac), Trailing edge (ELV) phase-cut and Push DIM/CCT.
- With soft-on and fade in function, visual more comfortable.
- 2 independently SELV constant voltage output channels.
- Constant power design, adjust brightness and color temperature synchronously.
- Dimming range: 0~100%, LED start at 0.1% possible.
- 0~100% flicker-free, High frequency exemption level.
- High Efficient driver: efficiency 88%, PF>0.98, THD<6%
- Innovative thermal management technology, intelligent power life protection.
- Over load / Over temp. / Short circuit / Over voltage protection, recover automatically.
- Suitable for internal lights application for I /II/III.
- Up to 50000-hour life time.
- 5 years warranty (Rubycon capacitor).

### Flicker-free

IEEE 1789

High frequency exemption level.



DIM & CT adjustment

Dimmable:  
Max: 0.1-100%



**SELV Class 2**  
**RoHS**



The certification icon represents undergoing certification applications only, and final certification qualification subject to actual product.



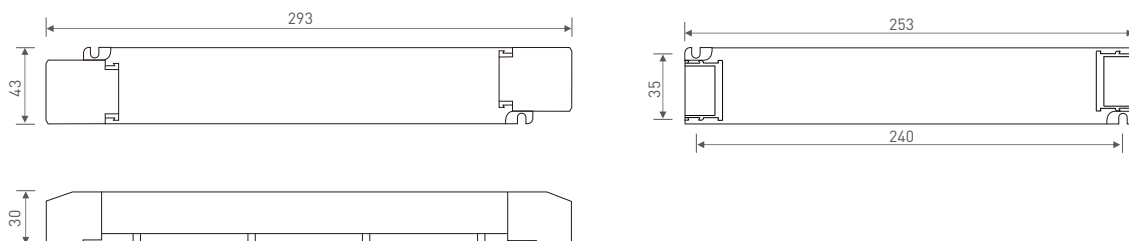
## Specification

| Model        |                           | LM-75-24-G2T2                                                                                             | LM-75-12-G2T2                                                                                             |
|--------------|---------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| OUTPUT       | Output voltage            | 24Vdc                                                                                                     | 12Vdc                                                                                                     |
|              | Output voltage range      | 24Vdc ± 0.5Vdc                                                                                            | 12Vdc ± 0.5Vdc                                                                                            |
|              | Output current            | Max. 3.125A                                                                                               | Max. 6.25A                                                                                                |
|              | Output power              | Max. 75W                                                                                                  |                                                                                                           |
|              | Output power range        | 0~75W                                                                                                     |                                                                                                           |
|              | Strobe level              | High frequency exemption level.                                                                           |                                                                                                           |
|              | Dimming range             | 0~100%, dimming depth: Max. 0.1%                                                                          |                                                                                                           |
|              | Overload power limitation | ≥102%                                                                                                     |                                                                                                           |
|              | Ripple & Noise            | ≤150mV                                                                                                    |                                                                                                           |
|              | PWM frequency             | 3600Hz                                                                                                    |                                                                                                           |
| INPUT        | Dimming interface         | Leading edge (Triac), Trailing edge (ELV) phase-cut and Push DIM/CCT.                                     |                                                                                                           |
|              | Input voltage             | 220-240Vac                                                                                                |                                                                                                           |
|              | Frequency                 | 50/60Hz                                                                                                   |                                                                                                           |
|              | Input current             | 230Vac≤0.4A                                                                                               |                                                                                                           |
|              | Power factor              | PF>0.98/230Vac , at full load                                                                             |                                                                                                           |
|              | THD                       | 230Vac@THD<6%, at full load                                                                               |                                                                                                           |
|              | Efficiency (typ.)         | 88%                                                                                                       | 87%                                                                                                       |
|              | Inrush current(typ.)      | Cold start 30A at 230Vac                                                                                  |                                                                                                           |
|              | Control surge capability  | L-N: 2kV                                                                                                  |                                                                                                           |
| ENVIRONMENT  | Leakage current           | Max. 0.5mA                                                                                                |                                                                                                           |
|              | Working temperature       | ta: -20 ~ 50°C tc: 90°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)                                                                                         |                                                                                                           |
| PROTECTION   | 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.   |                                                                                                           |
|              | 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.                                           |                                                                                                           |
|              | Over voltage protection   | 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 ≥13V, re-power on to recover after fault condition is removed. |
| 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.]              | 350g±10g                                                                                                  |                                                                                                           |

\* 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 (hiccup 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.

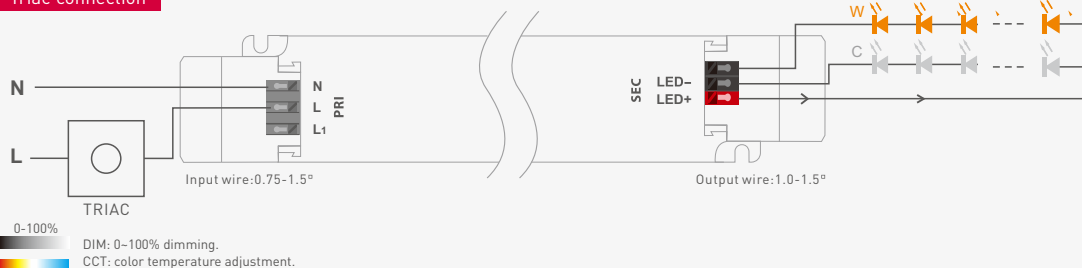
## Dimensions

Unit: mm

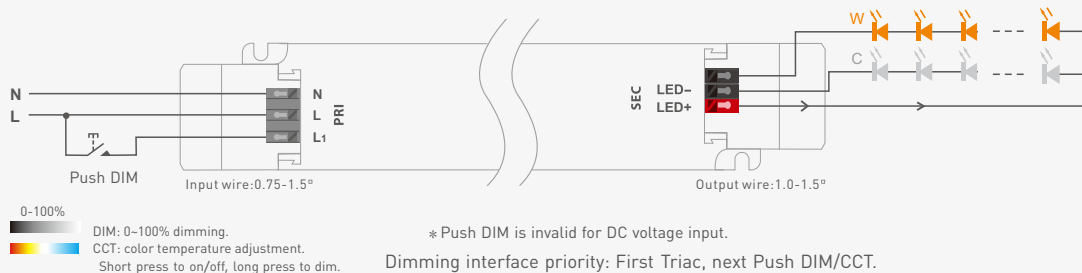


## Wiring Diagram

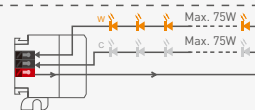
### Triac connection



### Push DIM/CCT Connection



\* Adopting constant power program design, adjust brightness and color temperature synchronously. 75W driver, 75W X 2CH load can be connected, the total power of the 2 channels will be kept in 75W.



## Push Dimming

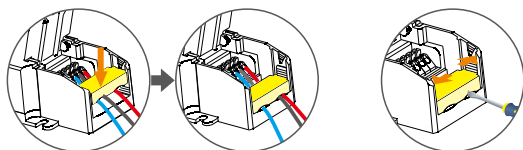


Reset switch

- On/off control: Short press.
  - Stepless dimming: Long press.
  - With every other long press, the brightness goes to the opposite direction.
  - Dimming memory: The lights will return to its previous brightness value when short press on PUSH DIM button.
- Power on again after power cut, the output brightness is subjected to the input voltage of drivers.

## Application of protective cover

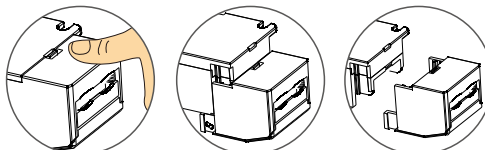
Wire pressing board:



Push the wire pressing board to fix the wire.

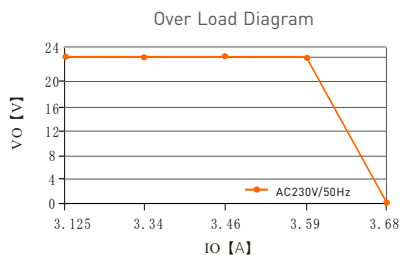
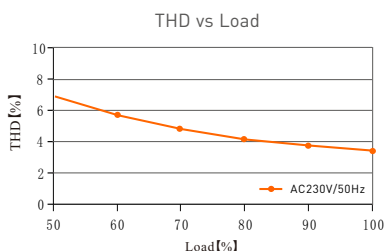
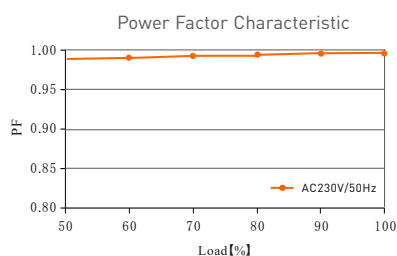
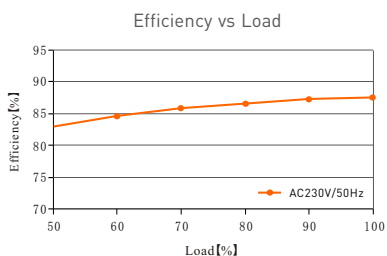
Push outward the side plate, meanwhile use the tool to uninstall the wire pressing board.

Uninstall protective cover:

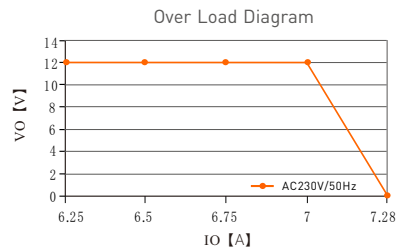
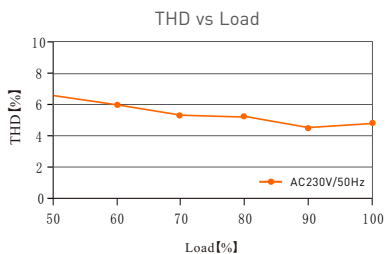
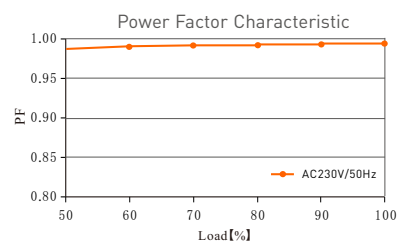
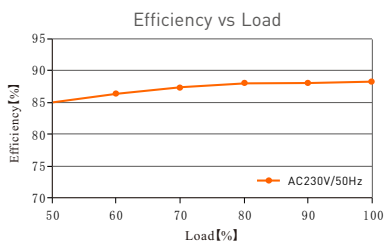


Break off the bottom left and right to remove the protective cover.

## Relationship diagrams



LM-75-24-G2T2



LM-75-12-G2T2

## 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<br>(High frequency exemption) |

