

| Model           | Item Code | Output current | Input current | Input power | Output power range | PF    | Efficiency | Output voltage |
|-----------------|-----------|----------------|---------------|-------------|--------------------|-------|------------|----------------|
| CV24W24-DALI-NX | 158860    | 250-1000mA     | ≤0.13A        | 27.90W      | 6.00-24.00W        | ≥0.93 | 86%        | 24V            |

**\* Test result @230V, 50Hz, Full Load.**

### 1. Parameters

| Category | Item                                                                                                                                             | Technical Norm                          |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Features | Output Type                                                                                                                                      | Constant Voltage                        |
|          | Dimming Type                                                                                                                                     | PMW (DALI-2)                            |
|          | Output Features                                                                                                                                  | Isolation                               |
|          | IP Grade                                                                                                                                         | IP20                                    |
|          | Insulation Class                                                                                                                                 | Class II                                |
| Input    | Rated Input Voltage                                                                                                                              | 220-240VAC                              |
|          | Range of Input Voltage                                                                                                                           | 198-264VAC                              |
|          | Range of DC Input Voltage                                                                                                                        | 180-280VDC                              |
|          | Frequency                                                                                                                                        | 0/50/60Hz, Range:0/47-63Hz              |
|          | Overvoltage protection                                                                                                                           | 2h@380VAC, 48h@320VAC                   |
|          | Input Current                                                                                                                                    | ≤0.13A max                              |
|          | Input Power                                                                                                                                      | ≤27.90W max                             |
|          | Power Factor                                                                                                                                     | ≥0.93 (230VAC, full load)               |
|          | THD                                                                                                                                              | ≤N/A (230VAC, full load)                |
|          | Standby Power Consumption                                                                                                                        | ≤0.5W @230VAC (DALI system DIM to off ) |
|          | Inrush Current                                                                                                                                   | ≤N/A (230VAC, full load)                |
|          | Connected quantity of 10A Breaker<br>Connected quantity of 13A Breaker<br>Connected quantity of 16A Breaker<br>Connected quantity of 20A Breaker | N/A                                     |

|                |                          |                                                                                                                                                                                                                      |                                                                                                                                                                              |
|----------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Output         | Output Voltage           | 24VDC+5%                                                                                                                                                                                                             |                                                                                                                                                                              |
|                | No Load Voltage          | 24VDC+5%                                                                                                                                                                                                             |                                                                                                                                                                              |
|                | Line Regulation          | ±1%                                                                                                                                                                                                                  |                                                                                                                                                                              |
|                | Load Regulation          | ±2%                                                                                                                                                                                                                  |                                                                                                                                                                              |
|                | Overshoot                | <105%Vo                                                                                                                                                                                                              |                                                                                                                                                                              |
|                | Output Voltage Ripple    | <240mV <sub>PK-PK</sub> (0.5%)                                                                                                                                                                                       |                                                                                                                                                                              |
|                | Start-up Time            | Start-up time <0.5s @ power switch on without DALI control. Start-up time <1s @ DALI system on.                                                                                                                      |                                                                                                                                                                              |
|                | Hold-up time(mS)         | 30                                                                                                                                                                                                                   | (230VAC,LED Rated Load,Hold-up time measure from AC input turn-off to output voltage drop to 90%, turn-off time measure from AC input turn-off to output voltage drop to 90% |
|                | Turn-off time(mS)        | 72.3                                                                                                                                                                                                                 |                                                                                                                                                                              |
|                | Efficiency               | ≥85% typ.<br>86% max.                                                                                                                                                                                                | 230VAC, Rated Load,<br>at output terminals                                                                                                                                   |
| Control Method | Secondary PUSH dimming   | Secondary PUSH dimming (Max. lead wire length: 20m, same port of DALI)                                                                                                                                               |                                                                                                                                                                              |
|                | PUSH-button              | Max parallel connections qty for Push-dim 15                                                                                                                                                                         |                                                                                                                                                                              |
|                | DALI function            | DALI dimming (Max. lead wire length: 300m) logarithm or linear dimming curve selectable                                                                                                                              |                                                                                                                                                                              |
|                | Dimming range            | DALI dimming: 0.1%-100%                                                                                                                                                                                              |                                                                                                                                                                              |
| Protection     | Short Circuit Protection | Auto Recovery                                                                                                                                                                                                        |                                                                                                                                                                              |
|                | Over Current Protection  | 120%-180%Io, Auto Recovery                                                                                                                                                                                           |                                                                                                                                                                              |
|                | Over Voltage Protection  | 110%-150%Vo, Auto Recovery                                                                                                                                                                                           |                                                                                                                                                                              |
|                | Insulation voltage       | I/P to O/P,3KV <sub>ac</sub> /5mA/1min                                                                                                                                                                               |                                                                                                                                                                              |
|                | Insulation resistance    | >100M ohm @ 500VDC                                                                                                                                                                                                   |                                                                                                                                                                              |
|                | Leakage current          | I/P to O/P < 250μA                                                                                                                                                                                                   |                                                                                                                                                                              |
| Environment    | Ta/Operation Temperature | -25....+50℃                                                                                                                                                                                                          |                                                                                                                                                                              |
|                | Ts/Storage Temperature   | -20....+85℃                                                                                                                                                                                                          |                                                                                                                                                                              |
|                | Tc/Enclosure Temperature | 85℃                                                                                                                                                                                                                  |                                                                                                                                                                              |
|                | Humidity                 | 5%85%RH                                                                                                                                                                                                              |                                                                                                                                                                              |
|                | Atmosphere               | 86-108KPa                                                                                                                                                                                                            |                                                                                                                                                                              |
| Construction   | Connection Method        | Push-in Terminal                                                                                                                                                                                                     |                                                                                                                                                                              |
|                | Installation             | Build-in & Independent                                                                                                                                                                                               |                                                                                                                                                                              |
|                | Output Cable Length      | Max. 3M                                                                                                                                                                                                              |                                                                                                                                                                              |
|                | Input Wire preparation   | 0.5-1.5□/ 8-9mm                                                                                                                                                                                                      |                                                                                                                                                                              |
|                | Output Wire preparation  | 0.5-1.5□/ 8-9mm                                                                                                                                                                                                      |                                                                                                                                                                              |
|                | DALI Wire preparation    | 0.5-1.5□/ 8-9mm                                                                                                                                                                                                      |                                                                                                                                                                              |
|                | SEC Wire preparation     | 0-0.8±0.05m (The EMC test results were achieved at approximately 0.8 meters) (the length required by the standard). If there are any data differences, please test according to the length required by the standard) |                                                                                                                                                                              |
|                | Dimension                | 128*30*21mm (L*W*H)                                                                                                                                                                                                  |                                                                                                                                                                              |

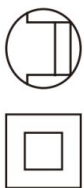
|           |                  |                                                                                                       |
|-----------|------------------|-------------------------------------------------------------------------------------------------------|
| Standards | Certification    | CE                                                                                                    |
|           | Safety Standards | EN61347-1:2015/A1:2021;<br>EN61347-2-13:2014/A1:2017;                                                 |
|           | Performance      | EN62384                                                                                               |
|           | DALI Performance | EN 62386-101 (DALI-2)<br>EN 62386-102 (DALI-2)<br>EN 62386-207 (DALI-2, including part 251, 252, 253) |
|           | Surge            | L-N:1kV                                                                                               |
| Others    | RoHS             | complied to 2011/65/EU                                                                                |
|           | MTBF             | ≥250KHours, Ta=25°C (MIL-HDBK-217F)                                                                   |
|           | Life Time        | 50000h Tc=85°C                                                                                        |
|           |                  | 75000h Tc=80°C                                                                                        |
|           |                  | 100000h Tc=75°C                                                                                       |
|           | Warranty         | 5years , F.R. < 10000ppm                                                                              |

**Remark:**

- 1.All Parameters, if not specified, are measured at 230VAC/50Hz and 25°C ambient temperature.
- 2.LED Driver is a component of the luminaires. Luminaires and wire layout will affect the EMC, please check the EMC with end products again.
- 3.During the PUSH DIM test, the number of parallel connections must be less than 15PCS.
- 4.Output wire length up to 50m.

| Distance        | 15m                | 30m                 | 50m                |
|-----------------|--------------------|---------------------|--------------------|
| Cable selection | 0.5mm <sup>2</sup> | 0.75mm <sup>2</sup> | 1.0mm <sup>2</sup> |

## 2. Label



**NEXIVO**  
by KGP Electronics GmbH  
Hueckstraße 19  
DE-58511 Lüdenschied

LED Dimmable Driver  
**CV24W24-DALI-NX**  
**158860**

Constant Voltage Type for  
operation with LED modules only • tc

PRI: 220-240VAC 0/50/60Hz Max. 0.13A

Range of application: 180-280VDC

SEC: 24VDC 250-1000mA Max. 24W

PF ≥ 0.93C ta = 50°C tc = 85°C

☐ N PRI

☐ L PRI

☐ DA PUSH-CONTROL

☐ DA L

SEC: ☐ + ☐ -

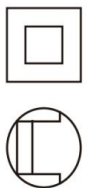
wire preparation

8-9mm

PRI: 0.5-1.5"

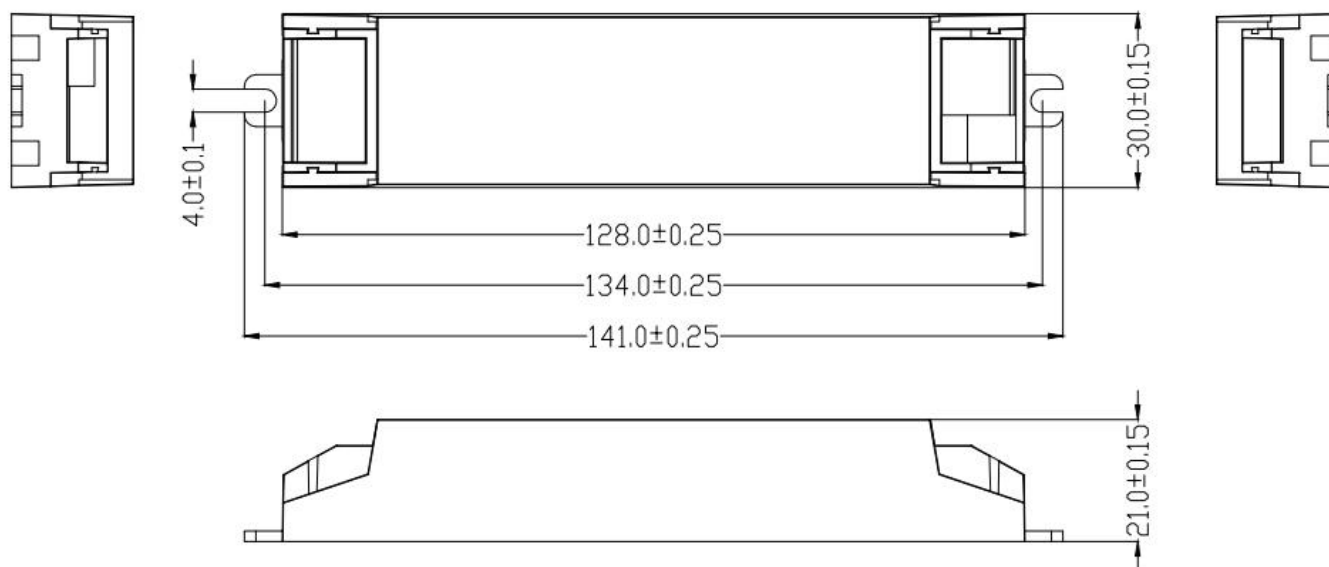
DALI: 0.5-1.5"

SEC: 0.5-1.5"



### 3. Dimension (Unit: mm)

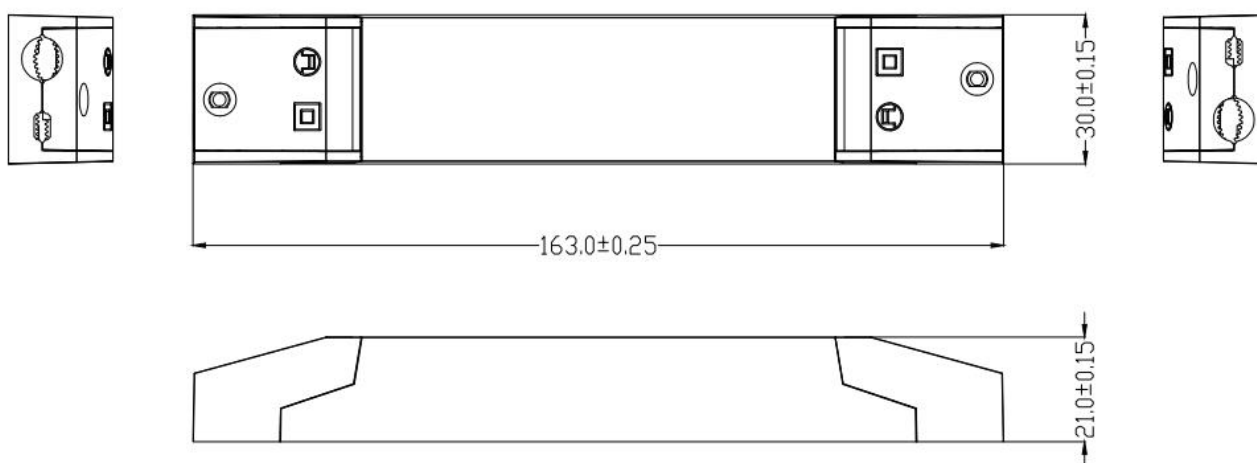
Built in type:



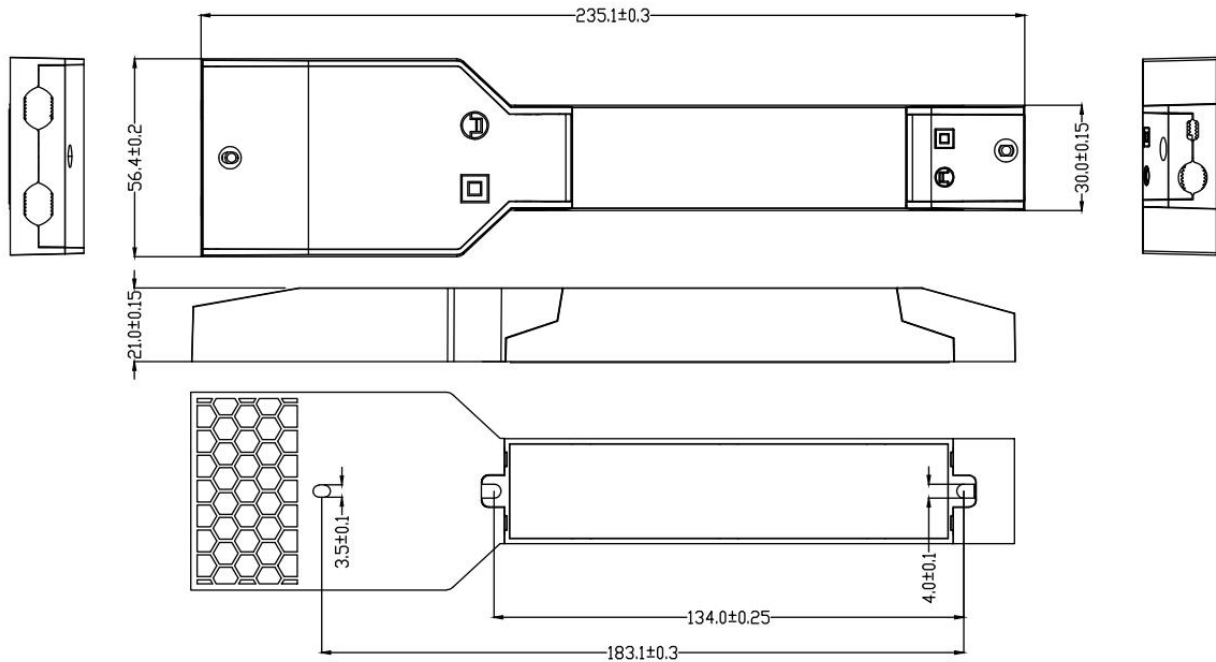
Compatible Small Strain reliefs: SR\_CC\_15-23-36\_UNI

Compatible Large Strain reliefs: SR\_CC\_15-23-36\_5POL

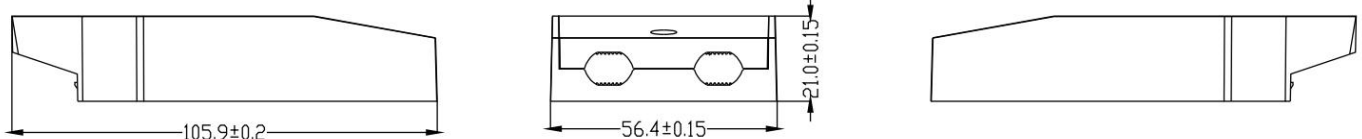
Small Strain reliefs



### Large Strain reliefs



### Large Strain reliefs specifications



Tolerance for dimensions  $\pm 0.1$  mm

### Mechanical, Operating & Storage Conditions

Driver cross-section dimensions: 55.4-57.4 x 20.0-22.0 mm

Wire size: 0.5 - 2.5 mm<sup>2</sup>

Ambient temperature range: -20...+50 °C

Storage temperature range: -20...+85 °C

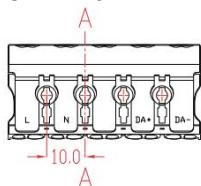
Assembly temperature range: +5...+30 °C

Do not store in wet or humid environment!

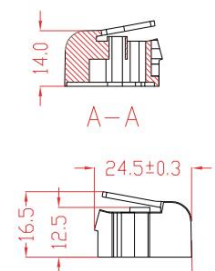
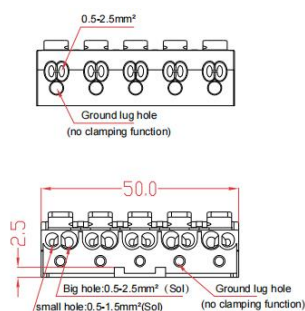
\*Unless otherwise stated in the driver datasheet (for independent installation).

Note! T<sub>c</sub> max temperature of the driver shall not be exceeded.

### Terminal

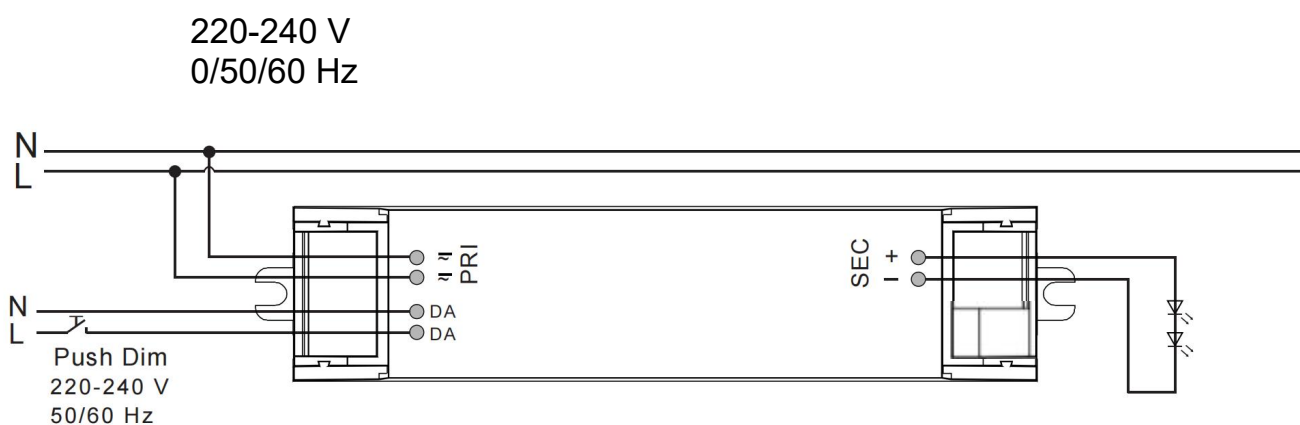
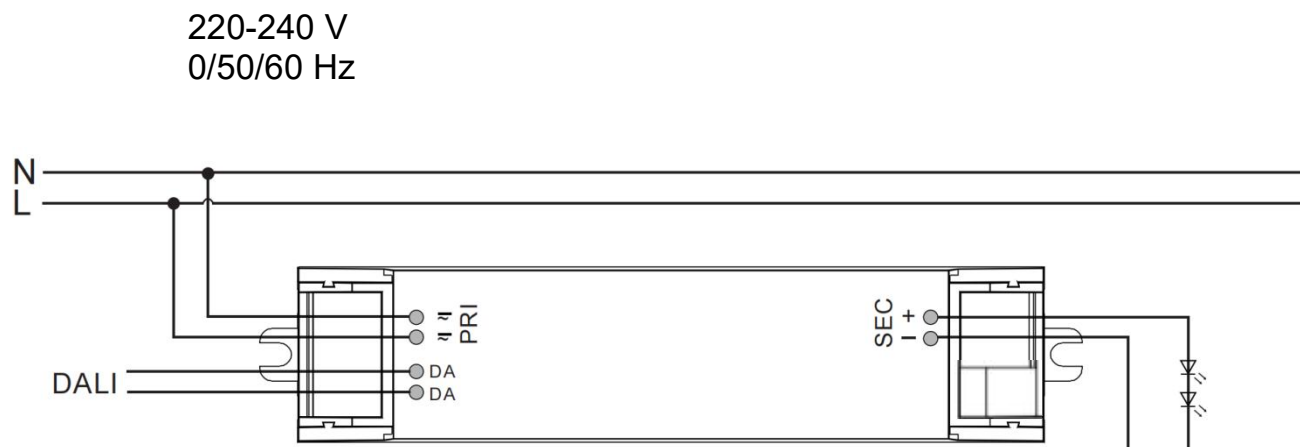


5 - pole connector for DA / CC drivers with LC-SRB-LOOP



## 4. Wiring Diagram

Figure: Voltage peaks for LED driver without earthing (Above) and with earthing (Below)



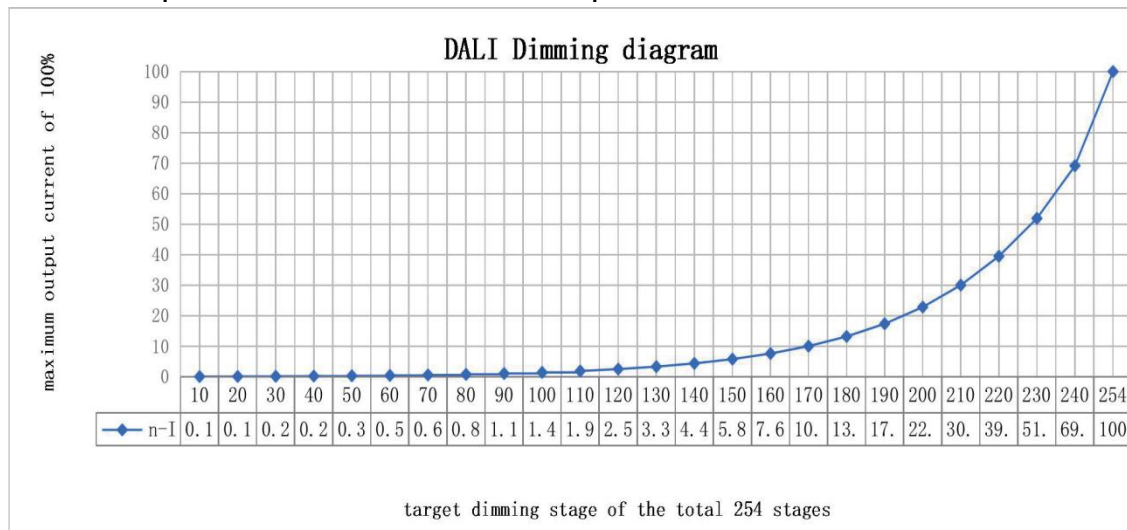
### 5. DALI dimming curve

formula for DALI dimming.

$$X(n)=10^{\{[(n-1)/(253/3)]-1\}},$$

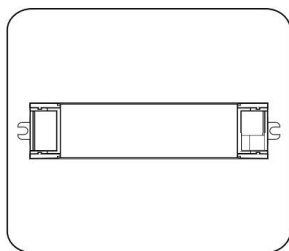
Here, n means the target dimming stage of the total 254 stages.

X(n) means the percent of the maximum output current

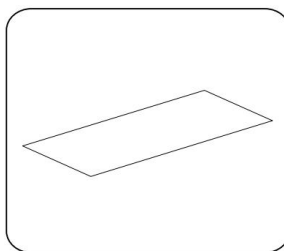


### 6. Packing information

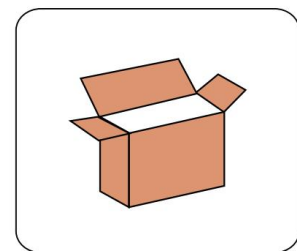
#### Built-in type



Product



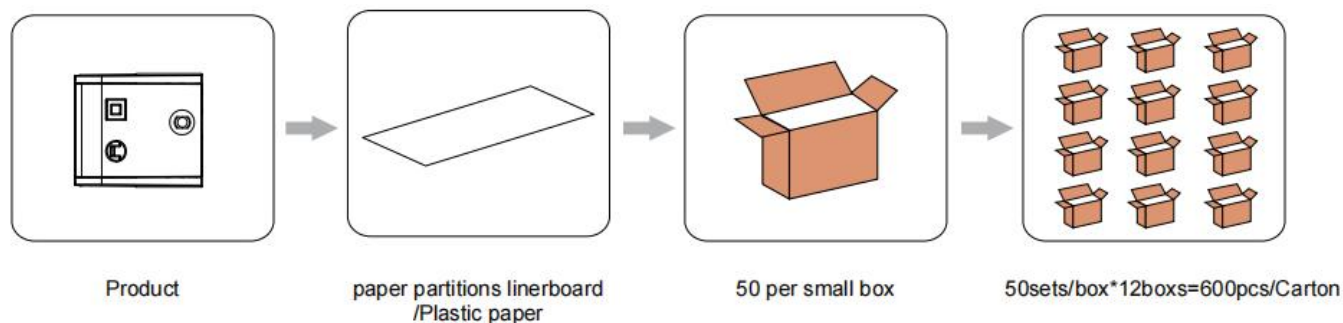
paper partitions linerboard  
/Plastic paper



105 per small box

| Carton<br>L*W*H(mm) | Pcs/Carton | Net weight/<br>Pcs(kg) | Net weight/<br>Carton(kg) | Gross weight /<br>Carton(kg) |
|---------------------|------------|------------------------|---------------------------|------------------------------|
| 398*230*130         | 105        | 0.100                  | 10.50                     | 10.98                        |

### Small Strain reliefs



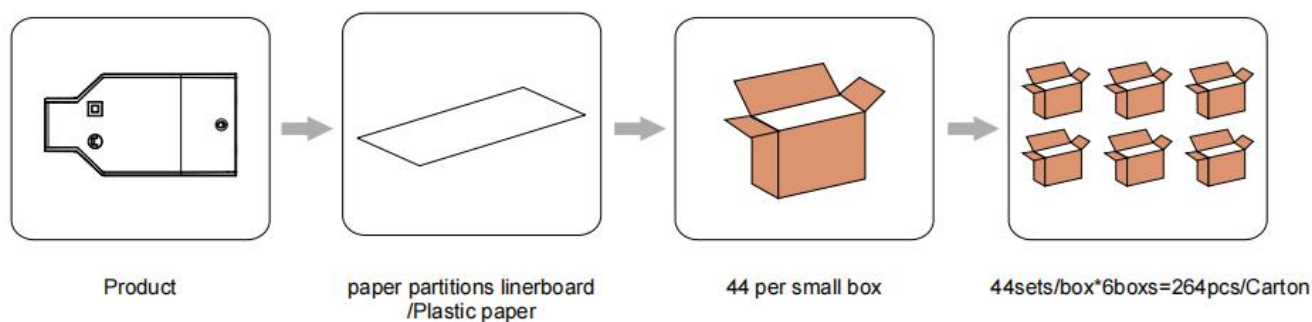
#### Inner box

| Carton<br>L*W*H(mm) | Pcs/Carton | Net weight/ Pcs(kg) | Net weight/<br>Carton(kg) | Gross weight /<br>Carton(kg) |
|---------------------|------------|---------------------|---------------------------|------------------------------|
| 180*118*75          | 50         | 0.007               | 0.36                      | 0.47                         |

#### Outer box

| Carton<br>L*W*H(mm) | Pcs/Carton | Net weight/ Pcs(kg) | Net weight/<br>Carton(kg) | Gross weight /<br>Carton(kg) |
|---------------------|------------|---------------------|---------------------------|------------------------------|
| 500*195*245         | 600        | 0.007               | 4.26                      | 5.56                         |

### Large Strain reliefs



#### Inner box

| Carton<br>L*W*H(mm) | Pcs/Carton | Net weight/ Pcs(kg) | Net weight/<br>Carton(kg) | Gross weight /<br>Carton(kg) |
|---------------------|------------|---------------------|---------------------------|------------------------------|
| 300*180*122         | 44         | 0.055               | 2.42                      | 2.77                         |

#### Outer box

| Carton<br>L*W*H(mm) | Pcs/Carton | Net weight/ Pcs(kg) | Net weight/<br>Carton(kg) | Gross weight /<br>Carton(kg) |
|---------------------|------------|---------------------|---------------------------|------------------------------|
| 375*315*385         | 264        | 0.055               | 14.52                     | 16.16                        |

## 7. Ordering Data

| Model No            | Item code |
|---------------------|-----------|
| CV24W24-DALI-NX     | 158860    |
| SR_CC_15-23-36_UNI  | 147841    |
| SR_CC_15-23-36_5POL | 147851    |

## 8. Constant light output (CLO)

<https://www.kdocs.cn/l/cbWalbA1eiBv>

## 9. Push Dim :

### 12.1 On / off:

Short push (120ms-600ms) on the switch

Stepless dimming: long push (> 0.6sec) on the switch

### 12.2 Power-on memory function

When the LED driver is powered on, it will restore the memory before the LED driver is powered off. (brightness remembers the brightness after the last dimming is stable, and the brightness during dimming is not memorized)

### 12.3 Light on/off

If the light is on, the light will be off after a short press. If the light is off, the light will be on after a short press. The time range of short press is 120-600ms.

### 12.4 PUSH Dimming

Press and hold the push switch for a long time, the light will enter the dimming state, if the previous time is dimming, it will automatically turn to dimming the next time. After releasing the reset button, the dimming stops and the current illuminance is maintained. The dimming range is 1%-100%. The default is to dim when the power is first long-press. If the brightness of the power-on is the maximum brightness, the first long-press is to dim. (Long press 0.6-3S to start dimming.)

### 12.5 Forced synchronization

Long press for 10 seconds to turn on all the lights and turn on the same brightness (50%), and continue to quickly short press will not change. After a short period of time without short press operation, the module exits the synchronization mode, and the short press restores the switch function.

### 12.6 PUSH Dimming rate

Long press the push switch 10S to switch the dimming rate to 3S, Long press the push switch 20S to switch the dimming rate to 6S.

**10. REVISION HISTORY**

| Date       | Revision | Remark                                           |
|------------|----------|--------------------------------------------------|
| 2026.16.03 | V0.01    | Product release                                  |
| 2026.27.06 | V0.02    | Add the logo for applying for ENEC certification |
| 2026.15.07 | V0.03    | Label, update images                             |
|            |          |                                                  |
|            |          |                                                  |
|            |          |                                                  |
|            |          |                                                  |