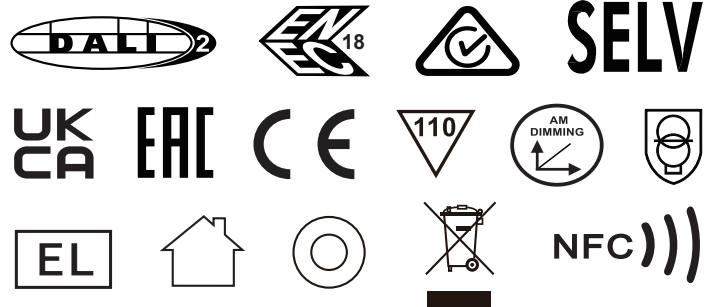


Constant Current Dimmable Driver

Model: CC36W150-900 DALI NFC



| Model | Output Current | Input Current | Input Power | Output Power Range | PF | Efficiency | Output Voltage | No load Voltage |
|-----------------------|----------------|---------------|-------------|--------------------|--------|------------|----------------|-----------------|
| CC36W150-900 DALI NFC | 150-900mA | ≤0.25A | 40.9W | 0.38-36.00W | ≥ 0.95 | 88% | 2.5-50Vdc | 60Vdc |

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

1. Parameters

| category | Item | Technical Norm |
|-----------------------------------|---|--|
| Features | Output Type | Constant Current |
| | Dimming Type | DALI-2 / Touch Dim |
| | Output current setting | Near field communication (NFC) |
| | Output Features | Isolation |
| | IP Grade | IP20 |
| | Insulation Class | Class II (compatible Class I) |
| 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 |
| | Input Current | ≤0.25A max |
| | Input Power | ≤40.9W max |
| | Power Factor | ≥0.95 (230VAC, full load) |
| | THD | ≤10% (230VAC, full load) |
| | Standby Power Consumption | ≤0.45W @230VAC (DALI system DIM to off) |
| | Inrush Current | ≤8.5A/16us (230VAC, full load) |
| | Connected quantity of 10A Breaker | 23pcs/type A ; 37pcs/type B ; 59pcs/type C |
| Connected quantity of 16A Breaker | 37pcs/type A ; 59pcs/type B ; 94pcs/type C | |
| Connected quantity of 20A Breaker | 46pcs/type A ; 74pcs/type B ; 118pcs/type C | |
| Output Voltage | | 2.5-50VDC@150-700mA |
| | | 2.5-42VDC@750-850mA |
| | | 2.5-40VDC@900mA |

| | | |
|----------------|-------------------------------------|--|
| Output | No Load Voltage (Uout) | 60VDC Max. |
| | Output Current | 150-900mA (by NFC setting ,Factory set current of 150mA) |
| | Max. Output Power | 36W |
| | Efficiency | ≥88% (230VAC, full load@max current) |
| | Output LF current ripple (< 120 Hz) | ±3% (Imax-Imin) / (Imax+Imin) |
| | Current Accuracy | ±5% |
| | Output PstLM (at full load) | ≤1 |
| | Output SVM (at full load) | ≤0.4 |
| | Starting Time (AC mode) | ≤0.8S (230VAC, full load, by DALI system) |
| | Starting Time (DC mode) | ≤0.4S |
| | Switching over time (AC/DC) | ≤0.4S |
| Control Method | PUSH dimming | PUSH dimming (Max. lead wire length: 20m,same port of DALI) |
| | DALI function | DALI dimming (Max. lead wire length: 30m) logarithm or linear dimming curve selectable |
| | Dimming range | DALI dimming: 1%-100% |
| | NFC current setting | The output current can be set within the total value range in 1-mA-steps. Output current is mean value. Setting is by KGP's software APP/APK/PC with FEIG equipment or mobile phone. |
| Protection | Short Circuit Protection | Auto Recovery |
| | Overload Protection | Auto Recovery (not be hot swap) |
| | No-load Protection | Auto Recovery |
| | Insulation voltage | 3000V 5mA 60S between P-S, 1500V 5mA 60S between P-E |
| | Insulation resistance | >100M ohm @ 500VDC L/N to PE |
| | Leakage current | < 700μA, I/P to O/P @230V input |
| Environment | Ta/Operation Temperature | -20...+50°C |
| | Ts/Storage Temperature | -20...+90°C |
| | Tc/Enclosure Temperature | 90°C |
| | Humidity | 10%....90%RH |
| | Atmosphere | 86-108KPa |
| Construction | Connection Method | Push-in Terminal |
| | Installation | Build-in |
| | PRI Wire preparation | 0.5-1.5 [□] / 8-9mm |
| | SEC Wire preparation | 0.5-1.5 [□] / 8-9mm |
| | DALI Wire preparation | 0.5-1.5 [□] / 8-9mm |
| | Dimension | 128*30*21mm (L*W*H) |
| | Certification | CE/ENEC/SAA/UKCA/EAC |
| | Safety Standards | EN61347-1:2015/A1:2021; EN61347-2-13:2014/A1:2017; EN62384:2006/A1:2009; AS 61347.2.13:2018; AS/NZS61347.1:2016; BS EN61347-1:2015/A1:2021; BS EN61347-2-13:2014/A1:2017; IEC 61347-1:2015+A1:2017; IEC 61347-2-13:2014+A1:2016; |

| | | |
|-----------|--------------------------|---|
| Standards | EMC Standards | AS/NZS CISPR 15:2011; AS CISPR 15:2017 ; BS EN IEC 55015:2019+A11:2020; EN 61547:2009; BS EN IEC 61000-3-2:2019; BS EN 61000-3-3:2013+A1:2019; |
| | Performance | EN 62384 |
| | DALI Performance | EN 62386-101 (DALI-2) EN 62386-102 (DALI-2) EN 62386-207 (DALI-2, including part 251, 252, 253) |
| | Surge | L/N-Ground:2kV; L-N:1kV |
| Others | RoHS | 2011/65/EU |
| | Life Time | 50000h Tc=90°C |
| | | 75000h Tc=85°C |
| | | 100000h Tc=80°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.Please make sure Tc under Lifetime condition when long term operate under DC input.
4.Light output level in DC operation: (factory default = 100 %, EOfi = 1)

2. Label

KGP
KGP Electronics GmbH
Hueckstraße 19
DE-58511 Lüdenscheid
LED Dimmable Driver
Constant Current LED Power Supply
CC36W150-900 DALI NFC
PRI:220-240VAC 0/50/60Hz Max. 0.25A
SEC:150-900mA 2.5-50VDC
V-OUT:60VDC Max. 36W
PF > 0.95, ta=50°C
Current setting by NFC, step 1mA
DC 180-280V

tc:90°C

DALI **EN 18** **UK CA**

CE SELV EAC

110 **EL** **AM DIMMING** **NFC**

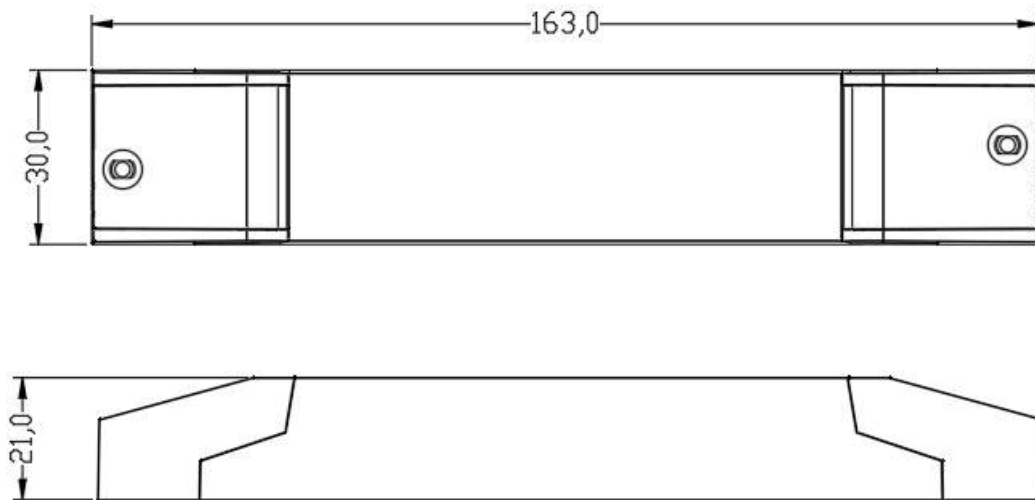
SEC + - ⚡

wire preparation (8-9mm)
PRI: 0.5-1.5 °
DALI: 0.5-1.5 °
SEC: 0.5-1.5 °

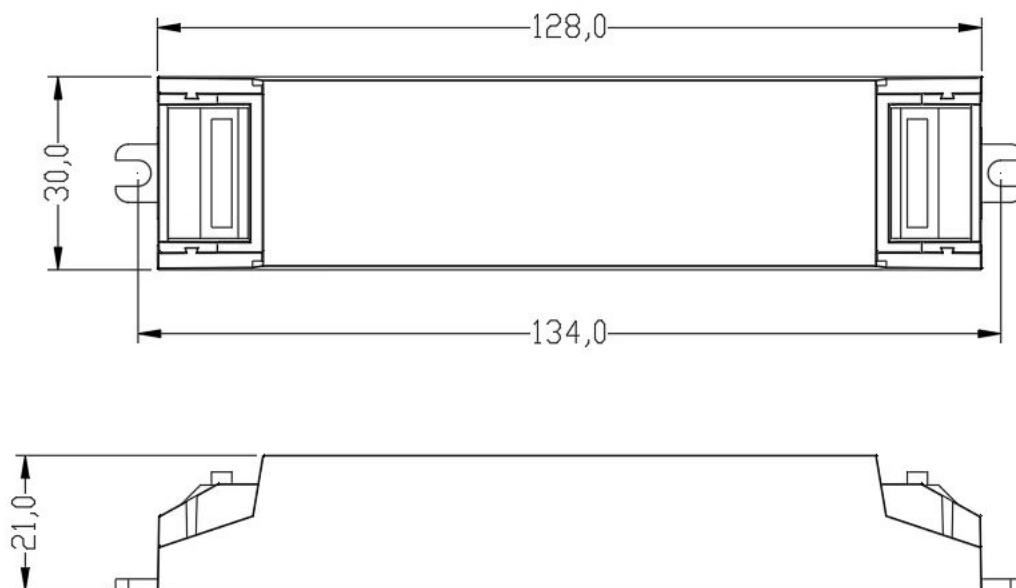
N L DA DA

PUSH-CONTROL
L N
E+ DALI

3. Dimension (Unit: mm)

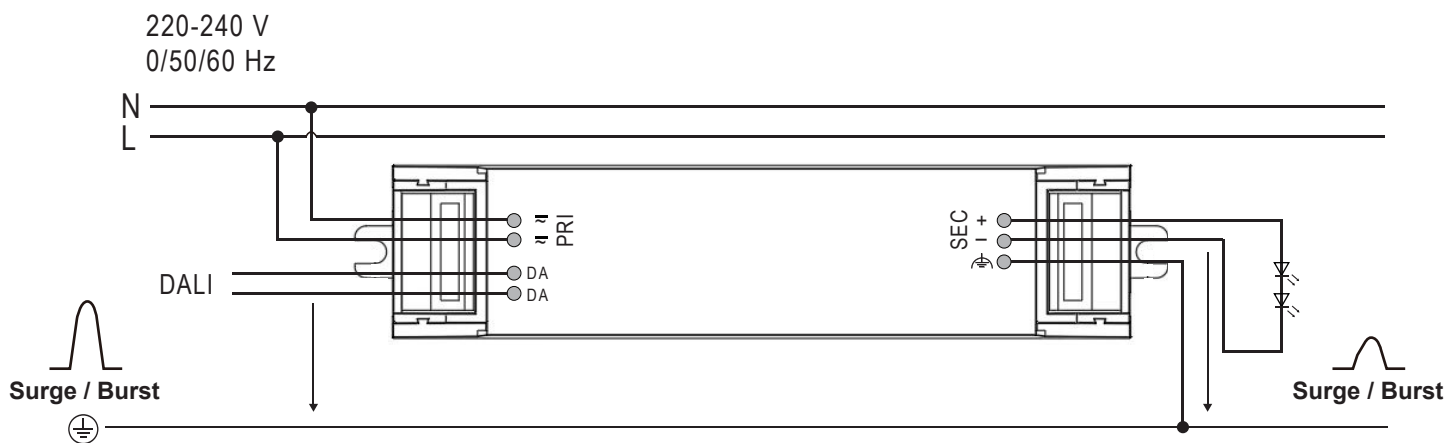
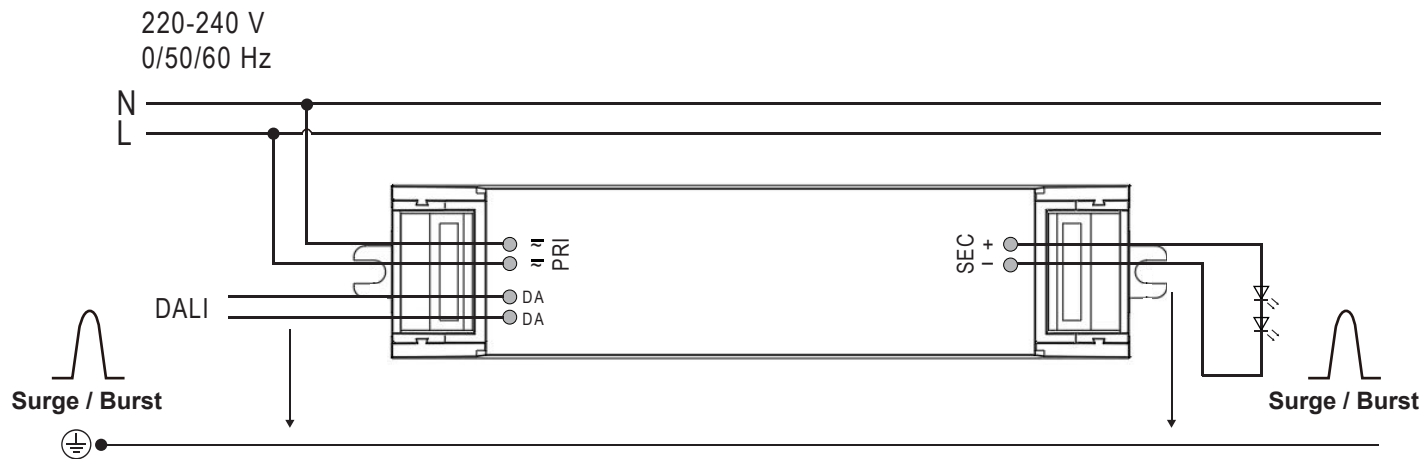


Built in type:



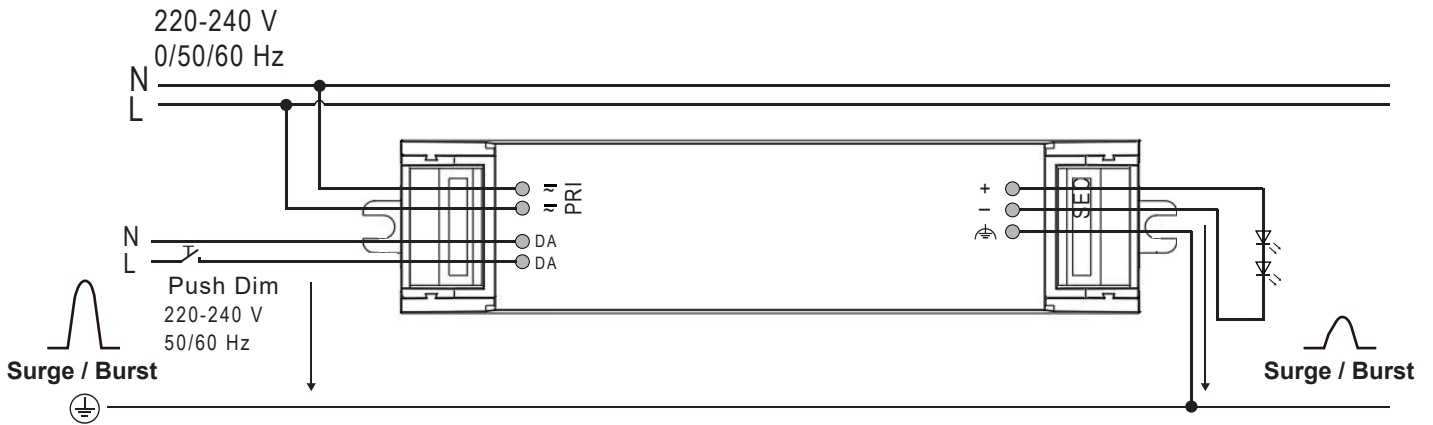
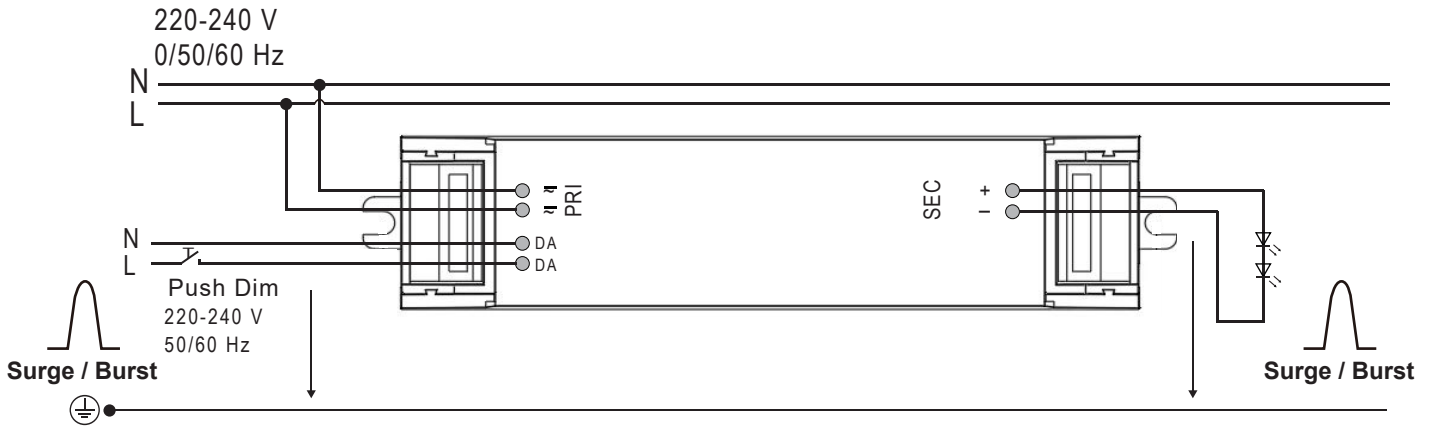
4. Wiring Diagram

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

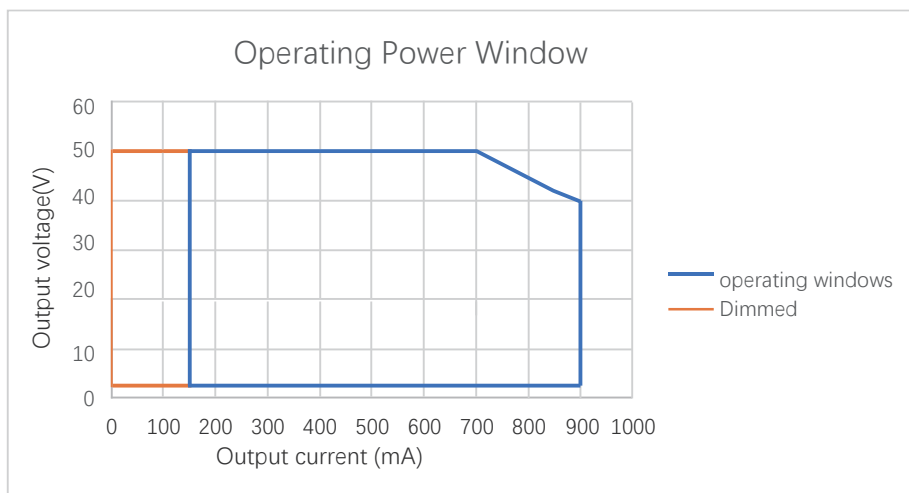


Push Dimming

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



5. Output Power Window



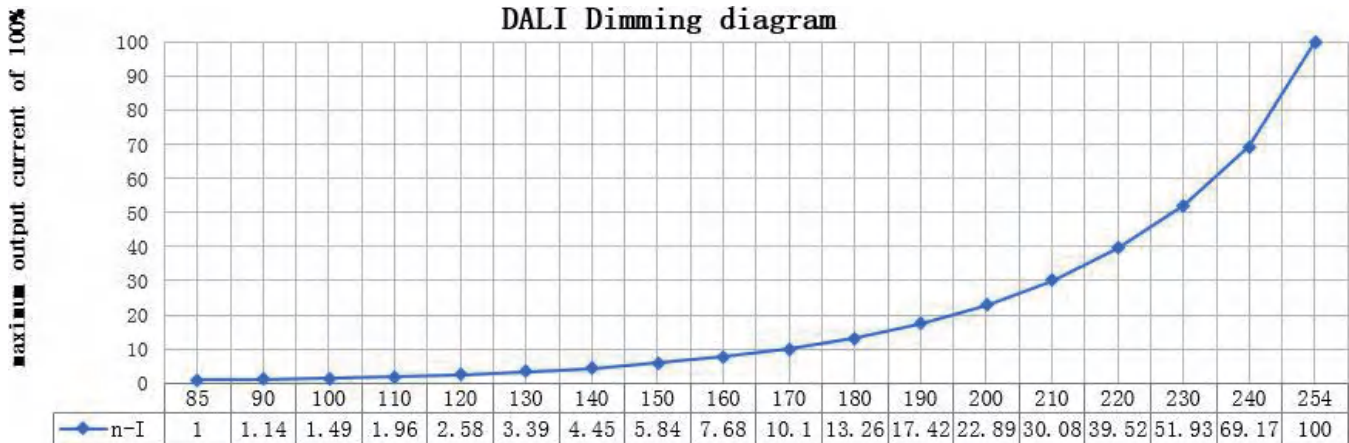
6. DALI dimming curve

formula for DALI dimming.

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

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

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



7. Packing information

SC

| Carton L*W*H(mm) | Pcs/Carton | Net weight/ Pcs(kg) | Net weight/ Carton(kg) | Gross weight / Carton(kg) |
|---------------------|------------|---------------------|---------------------------|------------------------------|
| T.B.D | T.B.D | T.B.D | T.B.D | T.B.D |

Small side cover

| Carton L*W*H(mm) | Pcs/Carton | Net weight/ Pcs(kg) | Net weight/ Carton(kg) | Gross weight / Carton(kg) |
|---------------------|------------|---------------------|---------------------------|------------------------------|
| T.B.D | T.B.D | T.B.D | T.B.D | T.B.D |

8. Function of the earth terminal:



The earth connection is conducted as protection earth (PE). The LED Driver can be earthed via earth terminal or metal housing (if device has metal housing). If the LED Driver will be earthed, protection earth (PE) has to be used. There is no earth connection required for the functionality of the LED Driver. Earth connection is recommended to improve following behaviour.

- Electromagnetic interferences (EMI)
- LED glowing at standby

In general, it is recommended to earth the LED Driver if the LED module is mounted on earthed luminaire parts respectively heat sinks and thereby representing a high capacity against earth.

Avoiding residual LED glow on standby

Residual LED glow on standby may occur as a result of capacitive leakage currents from the LED module onto earthed luminaire parts (such as the heat sink). This mainly affects high-efficiency LED systems with large surface areas installed in luminaires with protection class 1.

The topology has been improved so that residual LED glow can be virtually eliminated by earthing the devices.

9. NFC current setting:

T.B.D

10. Push Dim :

10.1 On / off:

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

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

10.2 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)

10.3 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.

10.4 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.)

10.5 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.

10.6 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, and it can also be changed by MAGIC or production software.

11. REVISION HISTORY

| Date | Revision | Remark |
|------|----------|--------|
| | | |
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