

24v Constant Voltage DALI-2 Driver



Features

- Support DALI-2 dimming

- Soft dimming and flicker-free at any brightness
- Dimming range 1~100%, support multiple lights dimming
- Standby power input<0.5W, meets the requirements of ErP certification
- High PF, high efficiency, low THD
- SELV and Class I design, suitable for use inside of the light
- IP20 protection grade, indoor use
- Nominal life-time up to 100,000 h

Interfaces

- DALI-2(DALI-2 DT6)

Functions

- Support central emergency application (dimming normal in DC input)
- Support self-contained emergency application
- Protective features (short-circuit, overload,no-load protection)

Suitable for lights

- Suitable for CV strip lights, CV linear lights, floor lights, three-proof lights, etc

Typical applications

- LED indoor lighting
- LED office lighting
- LED commercial lighting

| Model | Input voltage | Output power | Output voltage | Output current | Dimension |
|-----------------|---------------|--------------|----------------|----------------|----------------|
| T1A1240024V-60E | 200-240VAC | 60.0W | 24VDC | 2.5A | L285*W30*H21mm |





SPECIFICATIONS



- DALI-2 DT6 Constant Voltage LED Driver
- Output Wattage : 60W Max
- Flicker Free: O/P Ripple current < 10%
- Output voltage 24Vdc •
 - Linear CRCA Cabinet
- Suitable For Dry Locations
- Application: • - Suitable for CV Strips, Linear Lights
 - Floor lights, three profile lights etc.

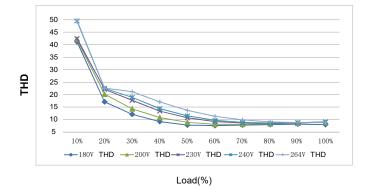
General Specifications

| Rated Input Voltage | 200-240Vac,50/60Hz | | |
|---|---|--|--|
| Operating Input Voltage Range | 180-264Vac,50/60Hz | | |
| Input Current | <0.35A @ 230Vac | | |
| Input Power | 67W | | |
| Power Factor | >0.95 @ 230Vac/Full Load | | |
| THD | <10% @ 230Vac/Full Load | | |
| Efficiency (Typical) | 85% | | |
| Driver Type | Constant Voltage DALI-2 | | |
| Output Current | 2.5A | | |
| Output Voltage | 24Vdc +/- 5% | | |
| Output Power | 60W | | |
| Number of Output Channels | 1 Channel | | |
| Output Type | Class I | | |
| Dimming Controller Type | DALI-2 | | |
| Ambient Operating Temperature Range | -10°C to 50°C | | |
| Max. Case Temperature | 90°C | | |
| Input Surge Protection | 2KV | | |
| Protections | Input Over Current : Non Resettable (Fuse) | | |
| | Output Short Circuit : Auto Recovery (HICCUP Mode) | | |
| | Output Open Circuit : Auto Recovery (HICCUP Mode) | | |
| | Output Overload : YES | | |
| | Over Temperature : NA | | |
| Complies to Standards | EN61347-1, EN61347-2-13, En62384, En55015, EN61000-3-2, EN61000-3-3 | | |
| | EN61000-4-2,3,4,5,6,8,11, EN61547 | | |
| Dali Standards | IEC62386-101, IEC62386-102, IEC62386-207 | | |
| Withstand Voltage | I/P-O/P:3750Vac, I/P-FG:1750Vac, O/P-FG:500Vac | | |
| Leakage Current | <0.7mA @ 240Vac | | |
| Isolation resistance | I/P-O/P:100MΩ / 500Vdc / 25°C / 70% RH | | |
| Life | 50,000 Hours @ TC 82°C | | |
| Approvals / Class | SELV Equivalent | | |
| Warranty | 3 Years | | |
| Weight | 0.250 Kg | | |
| Note : Suitable for indoor application only | | | |

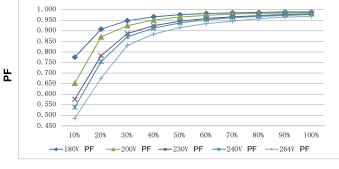




Total harmonic distortion vs Load characteristic curve

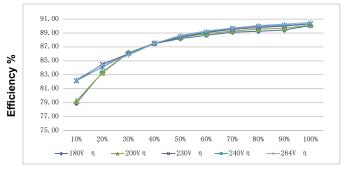


Power Factor vs LOAD Characteristic curve

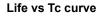


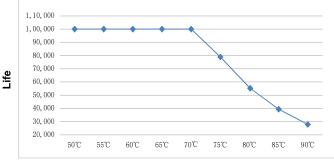
Load(%)











Тс



SPECIFICATIONS



DALI dimming application

Wiring diagram



Activating DALI control mode

- After installation according to the wiring diagram of DALI control application, the driver will automatically switch to the DALI control mode after receiving any DALI command.

Remarks:

- Standard DALI control line voltage range:9.5V to 22.5V ,type 16V.

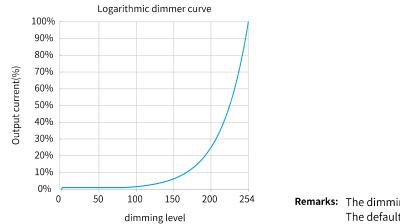
- The two DALI control lines polarity-reversible.

- Max. 64 DALI drivers per DALI control line.
- The maximum distance length of the DALI control line is 300m at 2×1.5 mm².
- DALI bus can be wired together with any mains voltage cables, but separate wiring is recommended.

Wiring distance vs cable size

| Cable size | Distance | | |
|------------------------|----------|--|--|
| 2×0.50mm ² | max.100m | | |
| 2×0.75mm ² | max.150m | | |
| 2×1.00mm ² | max.200m | | |
| ≥2×1.50mm ² | max.300m | | |

Dimming curve



Remarks: The dimming curve can be selected by DALI configuration. The default is logarithmic dimming curve.



SPECIFICATIONS



PUSH dimming application

Wiring diagram



Activating PUSH control mode

- After installation according to the wiring diagram of PUSH dimming application, short press the PUSH switch 3 times within 3 seconds, the driver will automatically switch to PUSH dimming mode.

Remarks:

Max.50driversperPUSHcontrolline.

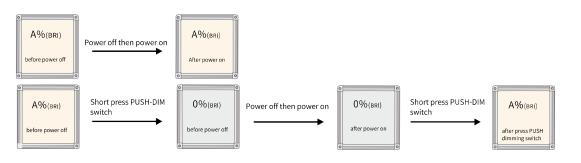
Turn on or turn off: short press push switch for 0.2-1s.

Dimming: long press push switch for 1-5s.

Power on status:

- After power on, the light state will be the same as the last dimming level.

- If the light is on before the power is turned on, after turning the power back on, the brightness will be the same as the last time.
- If the light is off before the power is turned off, the light will be turned off after the power is turned back on. You need to press the PUSH-DIM dimming switch for a short time to turn on the light. The brightness after lighting will be the same as the last time.



Multiple lights synchronize control operation

method 1: Step 1:long press the PUSH-DIM switch, confirm each light is on.

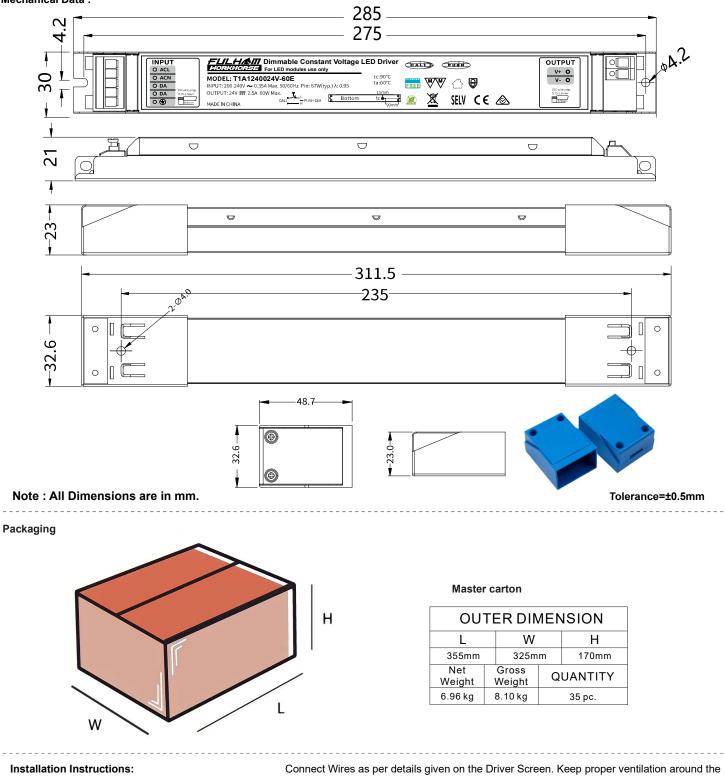
- Step 2:short press the PUSH-DIM switch, confirm each light is off.
 - Step 3:long press the PUSH-DIM switch, confirm each light is from darkest to brightest and all the lights are synchronous.
- method 2: Long press the PUSH-DIM dimming switch for more than 15s, all drivers will output 100% brightness.



SPECIFICATIONS



Mechanical Data :



LED Driver and do not stack any object on it. Also a 10-15 cm clearance must be kept when the adjacent device is a heat source. Do not exceed the declared Hot spot temperature(Tc max) under any circumstances.