

## Features

## - Support DALI-2 dimming mode

-10-level current output can be realized by DIP-switch

- Soft dimming and flicker-free at any brightness
- Dimming range 1~100\%
- Standby power input<0.5W, meets the requirements of ErP certification
- High PF, high efficiency, low THD
- Independent input and output strain relief, stronger wiring
- Intelligent LED hot-plug protection function
- SELV and Class II design, suitable for use outside of the light
- Passed ENEC-TUV,CE,RCM,CCC,DALI-2 and other certifications
- IP20 protection grade, indoor use
- Nominal life-time up to $50,000 \mathrm{~h}$


## 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,no-load, hot plug-in protection )


## Suitable for lights

- Suitable for lights with independent drivers such as downlights, spotlights, panel lights, etc

Typical applications

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


## 

- DALI-2 Constant Current LED Driver
- Multiple current selection through dip switch
- Output Current: 550-1000mA
- Flicker Free: O/P Ripple current < 10\%
- Output Wattage : 50W Max
- Output voltage range of $3-54 \mathrm{Vdc}$
- Linear CRCA Cabinet
- Suitable For Dry Locations


## - Application:

- Suitable for indoor SELV application
- Suitable for Linear fixture for Office,

Education, Storage area and Retail

## General Specifications

| Rated Input Voltage | 200-240Vac,50/60Hz |
| :---: | :---: |
| Operating Input Voltage Range | 180-264Vac,50/60Hz |
| Input Current | <0.35 @ 230Vac |
| Input Power | 55.5W |
| Power Factor | >0.95 @ 230Vac/Full Load, >90 @ 230Vac/>50\% Load |
| THD | <15\% @ 230Vac/Full Load, THD <20\% @ 230Vac/>50\% Load |
| Efficiency (Typical) | 88\% |
| Driver Type | Constant Current DALI-2 |
| Output Current | $1000 \mathrm{~mA} \pm 5 \%, 950 \mathrm{~mA} \pm 5 \%, 900 \mathrm{~mA} \pm 5 \%, 850 \mathrm{~mA} \pm 5 \%, 800 \mathrm{~mA} \pm 5 \%, 750 \mathrm{~mA} \pm 5 \%, 700 \mathrm{~mA} \pm 5 \%$, $650 \mathrm{~mA} \pm 5 \%, 600 \mathrm{~mA} \pm 5 \%, 550 \mathrm{~mA} \pm 5 \%$ *Refer DIP switch Table for O/P current selection |
| Output Voltage Range | $3-54 \mathrm{Vdc}(3-52 \mathrm{Vdc} @ 950 \mathrm{~mA}$, 3-50Vdc @1000mA) |
| Output Power | 50W |
| Number of Output Channels | 1 Channel |
| Output Type | Class I |
| Dimming Controller Type | DALI-2 |
| Ambient Operating Temperature Range | $-20^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C}$ |
| Max. Case Temperature | $90^{\circ} \mathrm{C}$ |
| Input Surge Protection | 2.5KV / 2.5KV |
| Protections | Input Over Current : Non Resettable (Fuse) |
|  | Output Short Circuit : Auto Recovery (HICCUP Mode) |
|  | Output Open Circuit : Auto Recovery (HICCUP Mode) |
|  | Output Overload : Auto Recovery (HICCUP Mode) |
|  | Over Temperature : Auto Recovery (HICCUP Mode) |
| Safety Standards | EN61347-1/2-13, GB19510.1/14, EN62384, IEEE1789 |
| Dali Standards | IEC62386-101, 102, 207 |
| Withstand Voltage | I/P-O/P:3750Vac, I/P-FG:1750Vac, O/P-FG:500Vac |
| Leakage Current | <0.75mA @ 240Vac |
| Isolation resistance | I/P-O/P:100M / 500Vdc / 25 ${ }^{\circ} \mathrm{C} / 70 \% \mathrm{RH}$ |
| Life | 50,000 Hours |
| Approvals / Class | SELV Equivalent |
| Warranty | 3 Years |
| Weight | 0.230 Kg |

Note : Suitable for indoor application only

[^0]
## DIP Switch Chart :

| Sin(W) <br> typ. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Prated(W) | Irated(mA) | Voltage(Vdc) | 1 | 2 | 3 | 4 |  |
| 33.5 | 29.7 | 550 | $\square$ | $3-54$ | - | ON | ON | ON |
| 36.5 | 32.4 | 600 | $\square$ | $3-54$ | ON | - | ON | ON |
| 39.5 | 35.1 | 650 | $\square$ | $3-54$ | - | - | ON | ON |
| 42.5 | 37.8 | 700 | $\square$ | $3-54$ | - | ON | - | ON |
| 45.5 | 40.5 | 750 | $\square$ | $3-54$ | - | - | - | ON |
| 48.5 | 43.2 | 800 | $\square$ | $3-54$ | ON | ON | ON | - |
| 51.5 | 45.9 | 850 | $\square$ | $3-54$ | - | - | ON | - |
| 54.0 | 48.6 | 900 | $\square$ | $3-54$ | - | ON | - | - |
| 55.0 | 49.4 | 950 | $\square$ | $3-52$ | ON | - | - | - |
| 55.5 | 50.0 | 1000 | $\square$ | $3-50$ | - | - | - | - |
| Before use,always check dipswitch settings! |  |  |  |  |  |  |  |  |

THD vs Load


Load

Efficiency vs Load


Remark: this current is factory default.

- this Switch is off.

4. 



Load

## Life Time vs Case Temperature Curve



Case temperature

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 22.5 V ,type 16 V .
- 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 300 m at $2 \times 1.5 \mathrm{~mm}^{2}$.
- DALI bus can be wired together with any mains voltage cables, but separate wiring is recommended.


## Wiring distance vs cable size

| Cable size | Distance |
| :---: | :---: |
| $2 \times 0.50 \mathrm{~mm}^{2}$ | max. 100 m |
| $2 \times 0.75 \mathrm{~mm}^{2}$ | max. 150 m |
| $2 \times 1.00 \mathrm{~mm}^{2}$ | max. 200 m |
| $\geqslant 2 \times 1.50 \mathrm{~mm}^{2}$ | max. 300 m |

## Dimming curve



[^1][^2]T1A1240100S-50EE SPECIFICATIONS

## Mechanical Data :



Note : All Dimensions are in mm.
Tolerance $= \pm 0.5 \mathrm{~mm}$

## Packaging


Master carton

| OUTER DIMENSION |  |  |
| :---: | :---: | :---: |
| L |  | W |
| 355 mm | 285 mm | 170 mm |
| Net <br> Weight | Gross <br> Weight | QUANTITY |
| 8.02 kg | 9.15 kg | 35 pc. |

## Installation Instructions:

Connect Wires as per details given on the Driver Screen. Keep proper ventilation around the LED Driver and do not stack any object on it. Also a $10-15 \mathrm{~cm}$ 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.

[^3]
[^0]:    Fulham extends a limited warranty only to the original purchaser or to the first user for a period of 03 years @ $\mathrm{Tc}_{\mathrm{c}} 85^{\circ} \mathrm{C}$ from the date of manufacture when properly installed and operated under normal conditions of use. For complete terms and conditions, please reference the Fulham Product Catalog (www.fulham.com).
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[^1]:    Remarks:
    The dimming curve can be selected by DALI configuration. The default is logarithmic dimming curve.

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