## Features

－DALI－2＋pushDIM dimming interface
－16－level current output can be realized by DIP－switch
－Soft dimming and flicker－free at any brightness
－Using HPC patented technology at any dimming level，the brightness between lights is same
－Standby power input＜0．5W，meets the requirements of ErP certification
－High PF，high efficiency，low THD
－Intelligent LED hot－plug protection function
－SELV and Class I design，suitable for use inside of the light
－Passed CE，DALI－2 certifications
－IP20 protection grade，indoor use
－Nominal life－time up to $100,000 \mathrm{~h}$

Interfaces
－DALI－2（DALI－2 DT6）
－PUSH（pushDIM）

## Functions

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

## Suitable for lights

－Suitable for linear lights，tri－proof lights，working lights and other linear or ultra－thin lights etc．

Typical applications
－LED indoor lighting
－LED office lighting
－LED commercial lighting

## - Dimmable Constant current 1-Channel LED driver with DALI Dt6

- Support DALI dimming and tunable white function
- Support PUSH dimming and tunable white function
- Dimming range 1 to $100 \%$
- Output Wattage : 60W Max
- Output voltage range of $12-42 \mathrm{Vdc}$
- Output Current: 90-1650mA
- Flicker-free at any brightness,meeting the standard of flicker-free(IEEE 1789-2015)
- Application
- LED indoor lighting
- LED office lighting
- LED architectural lighting


## General Specifications

| Rated Input Voltage | 200-240VAC, $200-240 \mathrm{VDC}, 0 / 50 / 60 \mathrm{~Hz}$ |
| :---: | :---: |
| Operating Input Voltage Range | 180-264VAC, $180-264 \mathrm{VDC}, 0 / 50 / 60 \mathrm{~Hz}$ |
| Input Current | $<0.38 \mathrm{~A}$ (Rated input voltage) |
| Input Power | 70.85W |
| Power Factor | PF>0.95 (230V AC \& Full load), DF $>0.98$ (230V AC \& Full load) |
| THD | $\leq 10 \%$ (230V AC \& Full Load) |
| Efficiency (Typical) | $\geq 88.5 \%$ (230V AC \& Full Load) |
| Driver Type | Constant Current |
| Output Current | $900 \mathrm{~mA} \pm 3 \%, 950 \mathrm{~mA} \pm 3 \%, 1000 \mathrm{~mA} \pm 3 \%, 1050 \mathrm{~mA} \pm 3 \%, 1100 \mathrm{~mA} \pm 3 \%, 1150 \mathrm{~mA} \pm 3 \%, 1200 \mathrm{~mA} \pm 3 \%$ |
|  | $1250 \mathrm{~mA} \pm 3 \%, 1300 \mathrm{~mA} \pm 3 \%, 1350 \mathrm{~mA} \pm 3 \%, 1400 \mathrm{~mA} \pm 3 \%, 1450 \mathrm{~mA} \pm 3 \%, 1500 \mathrm{~mA} \pm 3 \%$, @ 6-42V |
|  | $1550 \mathrm{~mA} \pm 3 \%$ @ 6-40V, $1600 \mathrm{~mA} \pm 3 \%$ @ 6-38V, $1650 \mathrm{~mA} \pm 3 \%$ @ 6-36V |
|  | *Refer DIP switch Table for O/P current selection |
| Output Voltage Range | 6-42VDC |
| No Load Output Volatge | 50VDC |
| Output Power | 62.7W Max |
| Number of Output Channels | 1 Channel |
| Class | Class I |
| Dimming Controller Type/Dimming Range | DALI 2,1\%-100\% |
| Ambient Operating Temperature Range | $-20^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C}$ |
| Max. Case Temperature | $90^{\circ} \mathrm{C}$ |
| Input Surge Protection | L-N:2KV,L-FG/N-FG:2KV |
| Protections | Output Short Circuit : Yes |
|  | Output Open Circuit . Yes |
|  | Output Overload : Yes |
|  | Over Temperature : Auto Recovery (HICCUP Mode) |
| Safety Standards | EN61347-1/2-13, GB19510.1/14, EN62384 |
| Flicker-free Standard | IEEE1789 |
| Dali Standards | IEC62386-101, 102, 207 |
| Withstand Voltage | I/P-O/P:3750Vac, I/P-FG:1750Vac, O/P-FG:500Vac, I/P-DALI:500Vac |
| Leakage Current | $<0.7 \mathrm{~mA}$ @ 240Vac |
| Isolation resistance | I/P-O/P:100M / 500Vdc / 25 ${ }^{\circ} \mathrm{C} / 70 \% \mathrm{RH}$ |
| Life | 50,000 Hours @ 82 ${ }^{\circ} \mathrm{C}$ |
| Approvals / Class | SELV Equivalent |
| Warranty | 5 Years |
| Weight | 0.273 Kg |

Note : Suitable for indoor application only

## DIP Switch Chart:

| Pin | Irated | Voltage | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 42.0 W | 900 mA | 42 VDC | ON | ON | ON | ON |
| 44.3 W | 950 mA | 42 VDC | -- | ON | ON | ON |
| 46.7 W | 1000 mA | 42 VDC | ON | -- | ON | ON |
| 49.0 W | 1050 mA | 42 VDC | -- | -- | ON | ON |
| 51.3 W | 1100 mA | 42 VDC | ON | ON | -- | ON |
| 53.7 W | 1150 mA | 42 VDC | -- | ON | -- | ON |
| 56.0 W | 1200 mA | 42 VDC | ON | -- | -- | ON |
| 58.3 W | 1250 mA | 42 VDC | -- | -- | -- | ON |
| 60.6 W | 1300 mA | 42 VDC | ON | ON | ON | -- |
| 63.0 W | 1350 mA | 42 VDC | -- | ON | ON | -- |
| 65.3 W | 1400 mA | 42 VDC | ON | -- | ON | -- |
| 67.6 W | 1450 mA | 42 VDC | -- | -- | ON | -- |
| 70.2 W | 1500 mA | 42 VDC | ON | ON | -- | -- |
| 69.2 W | 1550 mA | 40 VDC | -- | ON | -- | -- |
| 67.9 W | 1600 mA | 38 VDC | ON | -- | -- | -- |
| 66.6 W | $1650 \mathrm{~mA} \star$ | 36 VDC | -- | -- | -- | -- |

Remark: $\star$ this current is factory default.
-- this Switch is off.


Load (\%)


THD vs. Load


Load (\%)

Life-time vs. case temperature


Case temperature (Tc)

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: 9.5 V 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 |

The configuration parameters of the driver can be set through the DALI configuration tool or DALI application controller during installation, such as setting device address, group address, power-on level, bus-failure level, scene level, fade time, dimming curve, etc.

## Power-on level

When the driver is in DALI-2 dimming mode, the factory default level after each power-on is the brightest.
The power-on level can be set through the DALI configuration tool or DALI application controller during installation, and can be set to memory or fixed any brightness (such as off, darkest, $50 \%$, etc.).

Note: The recommended setting for the default factory power-on level of the DALI-2 driver is the brightest in the DALI-2 standard.

Dimming curve


[^0]Fulham extends a limited warranty only to the original purchaser or to the first user for a period of 05 years @ $\mathbf{T c} 85^{\circ} \mathrm{C}$ 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).
Due to a program of continuous improvement, Fulham reserves the right to make modifications or variations in design or construction to the equipment described. © Fulham Company Limited, All Rights Reserved.
pushDIM dimming application
Wiring diagram


## Activating pushDIM dimming mode

After installation according to the wiring diagr am of pushDIM dimming applic ation, long pr ess the pushbuttom 3 seconds, the driver will aut omatically switch to pushDIM dimming mode.

Remarks:
Max. 50 drivers per pushDIM control line.
Turn on or turn off:short press pushbuttom for 0.2-1s.
Dimming: long press pushbuttom for 1-5s.
Power on status: after power on, the light state will be the same as the lighting on state.
If the light is on before power on,the light will be on after power on again, brightness will be the same as the last lighting on brightness.
If the light is off before power off,the light will be off after power on again,short press the pushbuttom,then the light will be on,the brightness will be the same as the last brightness.


## Multiple light s synchronize control operation

method 1:
Step 1:long press the pushbuttom, confirm each light is on.
Step 2:short press the pushbuttom,confirm each light is off.
Step 3:long press the pushbuttomh,confirm each light is from darkest to brightest and all the lights are synchronous.
method 2:

- Long press the pushbuttom 15 s, all lights output to the brightest state.

Fulham extends a limited warranty only to the original purchaser or to the first user for a period of 05 years @ $\mathrm{Tc} 85^{\circ} \mathrm{C}$ 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).
Due to a program of continuous improvement, Fulham reserves the right to make modifications or variations in design or construction to the equipment described. © Fulham Company Limited, All Rights Reserved.

N

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

## Packaging


Master carton

| OUTER DIMENSION |  |  |
| :---: | :---: | :---: |
| L | W | H |
| 415 mm | 330 mm | 190 mm |
| Net <br> Weight | Gross <br> Weight | QUANTITY |
| 9.56 kg | 11.1 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 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.

Fulham extends a limited warranty only to the original purchaser or to the first user for a period of 05 years @ $\mathrm{Tc} 85^{\circ} \mathrm{C}$ 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).
Due to a program of continuous improvement, Fulham reserves the right to make modifications or variations in design or construction to the equipment described. © Fulham Company Limited, All Rights Reserved.


[^0]:    Remarks: The dimming cur ve can be selected by DALI configuration. The default is logarithmic dimming curve.

