

## Features

- Support DALI-2 dimming mode
- Support advanced functions such as CLO
- The output current of the driver can be programming through the DALI interface
- High PF, high efficiency, low THD
- Dimming range 1%~100%, output current accuracy 1%
- Soft dimming and flicker-free at any brightness, meets the new requirements of ErP certification
- Using HPC patented technology, at any dimming level, the brightness of the lights is the same
- Low smoke halogen-free flame retardant wires are optional for input and output
- Suitable for working at -30-60°C
- Aluminum metal housing design
- Power input on stand-by < 0.5 W, compatible with ERP.
- LED hot-plug in protection function.
- Compliance with CE, DALI-2, EL certifications.
- Nominal life-time up to 50,000 h

## Interfaces

- DALI-2(DALI-2 DT6)

## Functions

- Support central emergency application (dimming normal in DC input )
- Support self-contained emergency application
- Constant light output function (CLO)
- Programming via DALI wires
- Protective features  
(short-circuit, overload, no-load, hot plug-in protection )

## Typical applications

- LED Industrial lighting
- LED rail-transit lighting
- LED Subway station lighting

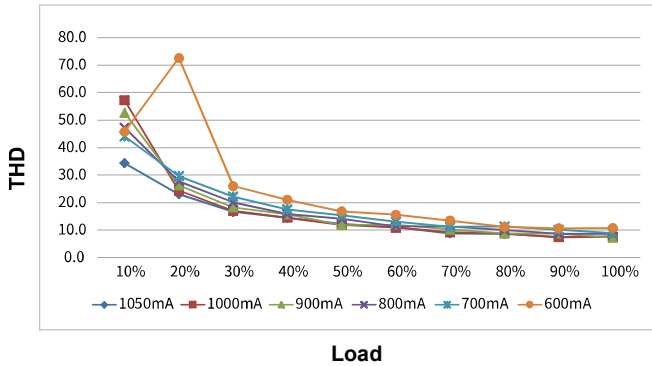


- **DALI-2 Constant Current LED Driver**
- **Output Voltage: 12-42V**
- **Output Current: 500 - 1050mA**
- **Flicker Free: O/P Ripple current < 5% (LF)**
- **Output Wattage : 42W Max**
- **Aluminum Extrusion**
- **Suitable For wet Locations**
- **Application:**
  - LED Industrial Lighting.
  - LED rail-transit Lighting.
  - Subway station Lighting.

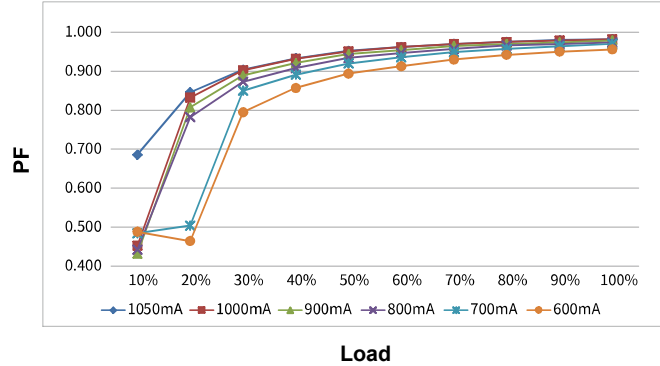
## General Specifications

Rated Input Voltage	200-240Vac,50/60Hz
Operating Input Voltage Range	180-264Vac,50/60Hz
Input Current	<0.3 @ 230Vac
Input Power	49W (Max)
Power Factor	>0.95 @ 230Vac/Full Load
THD	<10% @ 230Vac/Full Load
Efficiency (Typical)	86%
Driver Type	Constant Current DALI-2
Output Current	Programable 500-1050mA ±3%
Output Voltage Range	12-42Vdc
Output Power	42W
Number of Output Channels	1 Channel
Output Type	Class I
Dimming Controller Type	DALI-2
Ambient Operating Temperature Range	-20°C to 60°C
Max. Case Temperature	90°C
Input Surge Protection	4KV/6KV
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, I/P-DALI:1500Vac, O/P-DALI:1500Vac
Leakage Current	<0.7mA @ 240Vac
Isolation resistance	I/P-O/P:100MΩ / 500Vdc / 25°C / 70% RH
Life	50,000 Hours @ 80°C
Approvals / Class	SELV Equivalent
IP Rating	IP 67
Warranty	5 Years
Weight	0.480Kg

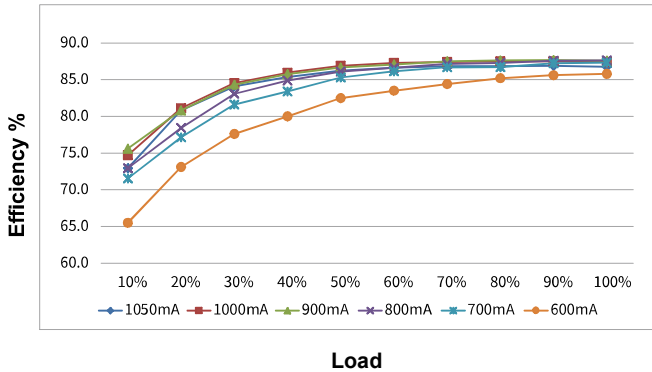
### THD vs Load



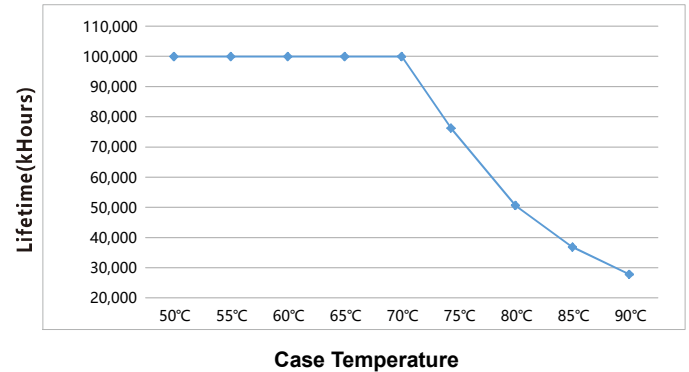
### Power Factor vs Load



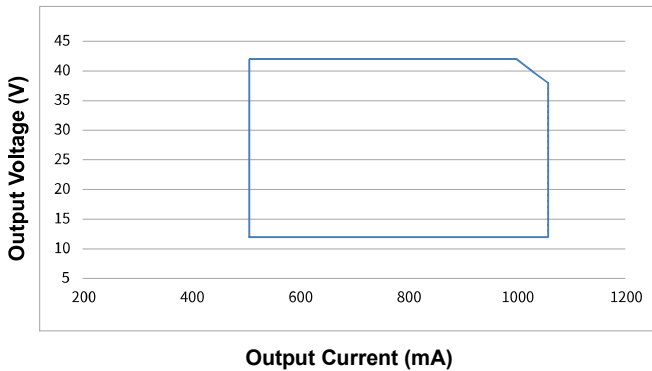
### Efficiency vs Load



### Life Time vs Case Temperature



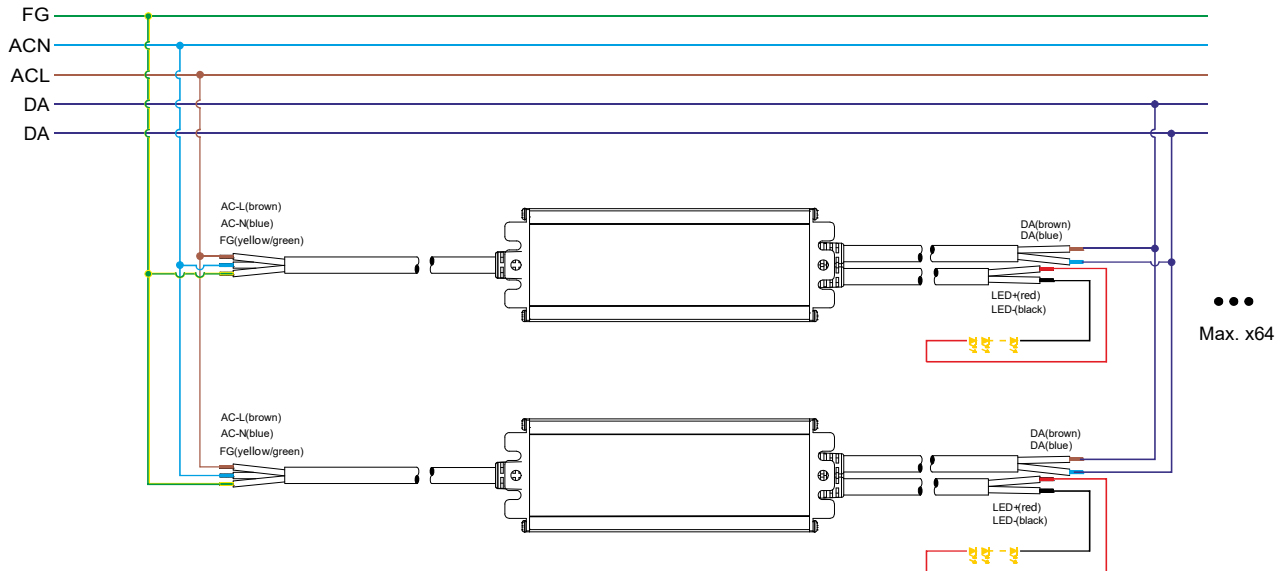
### Operating Window



- Output voltage x output current = output power
- The minimum current step is 1mA, the minimum voltage step is 1V, the voltage range is 12-42V, the current range is 500-1050mA, and the voltage and current can be set arbitrarily under the premise that the output power does not exceed 42W.

### 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.

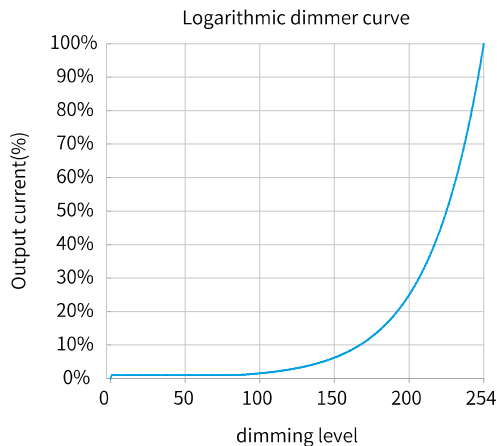
#### Remarks:

- 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  $2 \times 1.5\text{mm}^2$ .
- DALI bus can be wired together with any mains voltage cables, but separate wiring is recommended.

#### Wiring distance vs cable size

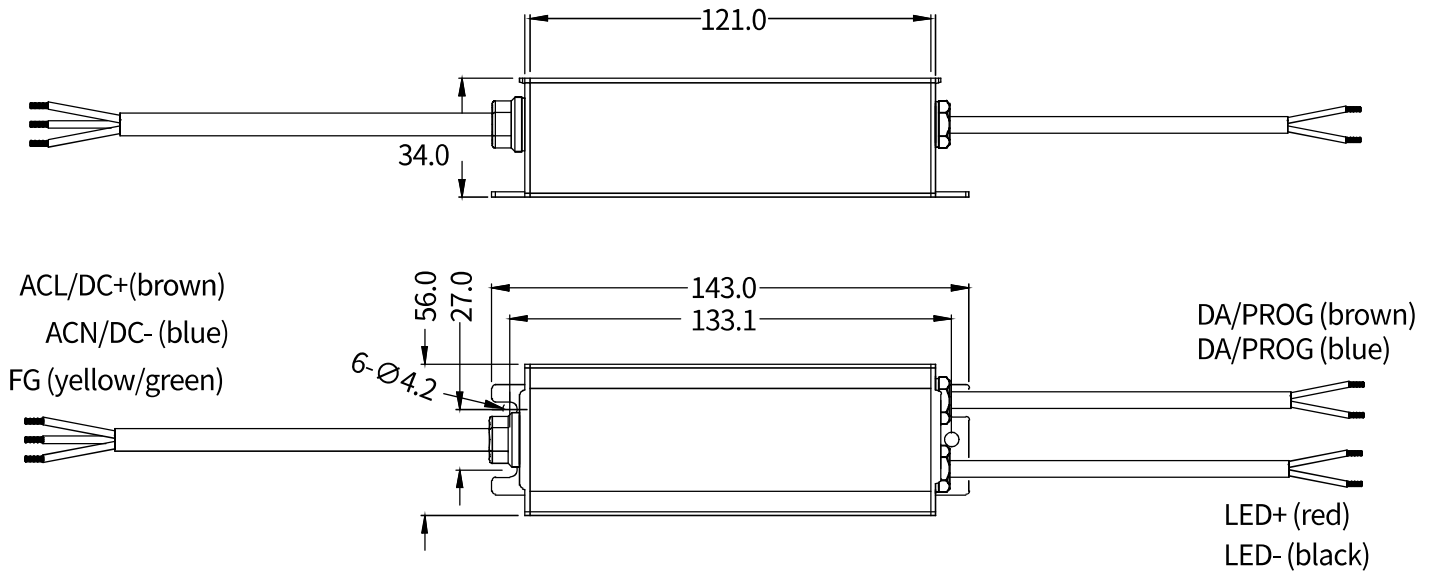
Cable size	Distance
$2 \times 0.50\text{mm}^2$	max.100m
$2 \times 0.75\text{mm}^2$	max.150m
$2 \times 1.00\text{mm}^2$	max.200m
$\geq 2 \times 1.50\text{mm}^2$	max.300m

### Dimming curve



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

### Mechanical Data :

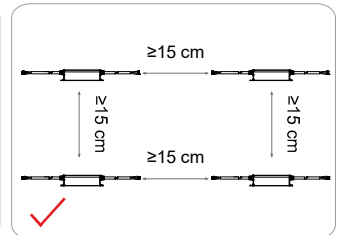
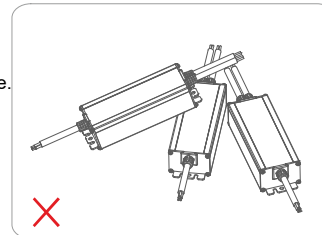


**Note : All Dimensions are in mm.**

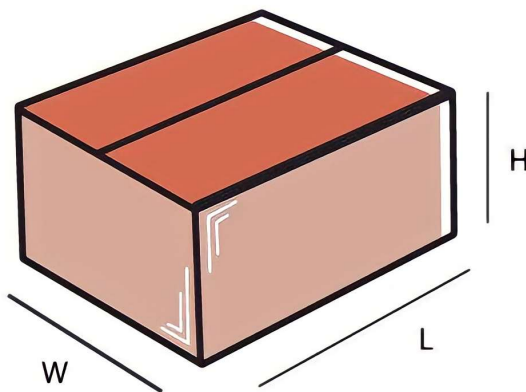
**Tolerance=±0.5mm**

### Installation Instruction

- The driver should be installed in a dry, acid-free, oil-free, fat-free environment.
- The installation ambient temperature of the drive shall not exceed the value of Ta at any time.
- The temperature of the mounting surface of the driver should be lower than 40°C
- The driver should keep a certain distance from the heating stuff (such as the lamp radiator).



### Packaging



### Master carton

OUTER DIMENSION		
L	W	H
500mm	310mm	230mm
Net Weight	Gross Weight	QUANTITY
8.64kg	10.2 kg	18 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 **03 years @ Tc 80°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](http://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.