

Constant current independent color temperature driver (DALI-2 + PUSH-DIM + PUSH-CCT)



FEATURES

- Supports DALI-2 + PUSH DIM + PUSH CCT Control
- Inbuilt CLO Function
- compliance to DALI-2 PART 101, 102, 207, 209, 250, 251, 252, 253
- DALI Function setting through NFC
 - a. O/P Current setting in step of 1mA.
 - b. Set Min-Max level.
 - c. Set system failure level.
 - d. Set power on level.
 - e. Set address manually 0 to 63.
 - f. Create Groups manually 1 t0 16.
 - g. Set Fade time.
 - h. Set fade rate.
 - i. change dimming curve manually Linear OR Logarithmic.
 - j. Set Scenes manually.
- SELV CLASS II Design.
- Dimming range 0.1% to 100%.
- High PF, Low THD, High Efficiency.
- CE, Flicker free.
- Life 50,000hrs.
- Suitable for indoor use only.

INTERFACE

- DALI-2 DT8
- PUSH-DIM
- PUSH-CCT

FUNCTIONS

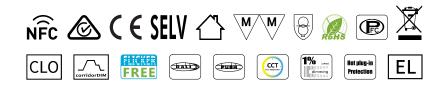
- Memory function
- Suitable for emergency lighting (EL)
- Protection features (short circuit, open circuit, over load, no load, hot plug-in)

SUITABLE FOR LIGHTS

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

TYPICAL APPLICATIONS

- LED Indoor lighting.
- LED Office lighting.
- LED Commercial lighting.





SPECIFICATIONS

Inbuilt CLO Function Output Wattage : 40W Max

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- Dimmable Constant current 2-Channel LED driver with DALI DT8
 - Support DALI dimming and tunable white function
- Dimming range 0.1 to 100%
- NFC Programable

- Output voltage range of 10-54Vdc
 Output Current: 500 1050mA
 Flicker-free at any brightness,meeting
 - the standard of flicker-free(IEEE 1789-2015)

Application

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- LED indoor lighting
- LED office lighting
 - LED architectural lighting
- LED panel lamp lighting

• DALI PART 101, 102, 207, 209, 251, 252 & 253

General Specifications

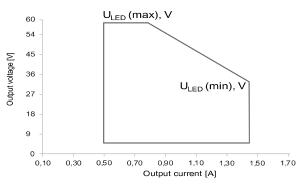
Rated Input Voltage	200-240Vac,50/60Hz	
Operating Input Voltage Range	120-277Vac,50/60Hz	
Input Current	<0.3 @ 230Vac	
Input Power	46W	
Power Factor	>0.95 @ 230Vac/Full Load, >90 @ 230Vac/>50% Load	
THD	<10% @ 230Vac/Full Load, THD <20% @ 230Vac/>50% Load	
Efficiency (Typical)	87%	
Driver Type	Constant Current DALI-2	
Output Current	500mA to 1050mA ±3% (Current setting through NFC, with step of 1mA)	
	*Refer Voltage vs O/P current graph	
Output Voltage Range	10-54Vdc	
Dimming Controller Type	DALI-2 (Amplitude/CCR dimming)	
Output Power	40W	
Number of Output Channels	2 Channel	
Output Type	Class II	
Ambient Operating Temperature Range	-20°C to 50°C	
Max. Case Temperature	85°C	
Input Surge Protection	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 : YES	
	Over Temperature : Auto Recovery (HICCUP Mode)	
Safety Standards	EN61347-1/2-13, GB19510.1/14, EN62384	
Flicker-free Standard	IEEE1789	
Withstand Voltage	I/P-O/P:3750Vac, I/P-FG:1750Vac, O/P-FG:500Vac, I/P-DALI:500Vac	
Leakage Current	<0.7mA @ 240Vac	
Isolation resistance	I/P-O/P:100MΩ / 500Vdc / 25°C / 70% RH	
Life	50,000 Hours @ 82°C	
Approvals / Class	SELV Equivalent	
Warranty	5 Years	
Weight	0.280 Kg	
Note : Suitable for indoor application only		



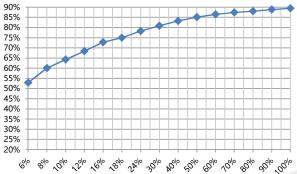
SPECIFICATIONS



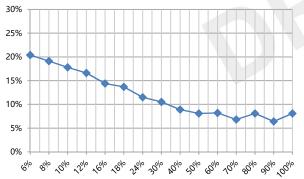
Voltage and current operating window



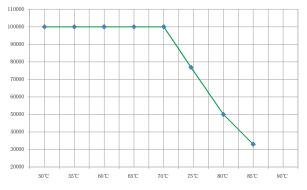
Typical Efficiency Vs Load %



A-THD Vs Load %

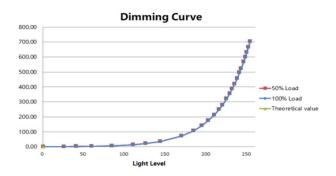


Life VS Tc

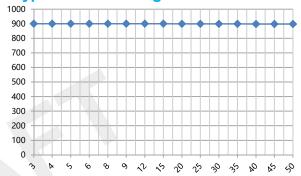


Fulham extends a limited warranty only to the original purchaser or to the first user for a period of <u>05 years @ Tc 82°C</u> from the date of manufacture when properly installed and operated under normal conditions of use. For complete terms and conditions, please reference the Fulham Product Catalog (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.

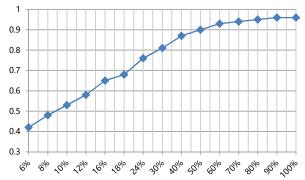
Dimming Curve



Typical Load voltage V/S Current



Power factor vs Load

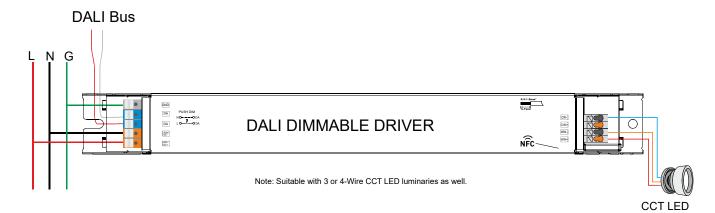




SPECIFICATIONS



DALI dimming application



Note: The CW and WW LED strings must be connected separately, and the common anode connection is not supported

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:

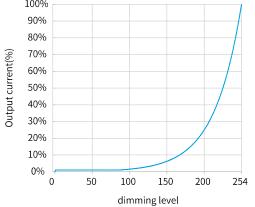
- Standard DALI control line voltage range:9.5V to 22.5V, type 16V.
- The two DALI control lines polarity-reversible.
- Max. 64 DALI drivers per DALI control line.
- The maximum distance length of the DALI control line is 300m at 2×1.5mm².
- DALI bus can be wired together with any mains voltage cables, 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
$\geq 2 \times 1.50 \text{mm}^2$	max.300m

Logarithmic dimmer curve

Dimming curve



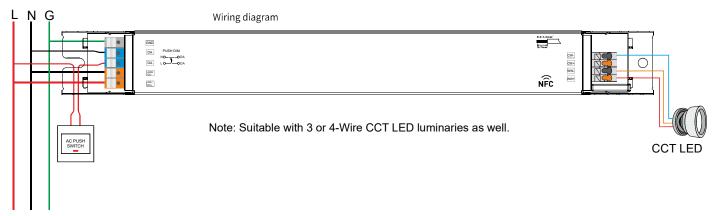
Remarks: The dimming curve can be selected by DALI configuration. The default is logarithmic dimming curve.



SPECIFICATIONS



PUSH dimm



Activating PUSH control mode

- Method 1: After installation according to the wiring diagram of PUSH-DIM control application, short press the PUSH dimmming switch(PUSH-DIM port) 5 times within 3 seconds, the driver will automatically switch to PUSH control mode.
- Method 2: Use the configuration tool to set the driver's PUSH control function parameters and turn on the PUSH control function.
- After activating the PUSH control mode, the corridorFUNCTION dimming mode will be automatically deactivate.

Number of mounted drivers

- Up to 50pcs drivers can be mounted.

PUSH dimming switch operating instructions

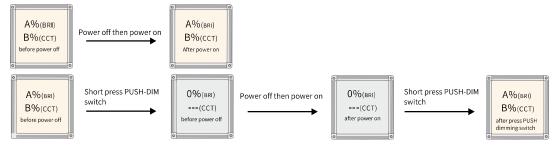
- Turn on or turn off: short press PUSH dimming switch for 0.2-1s.
- Stepless dimming : long press PUSH dimming switch for 1-6s, Press again to switch dimming directions.

PUSH CCT switch operating instructions

- Switch CCT level: short press PUSH CCT switch for 0.2-1s, 9 levels of preset CCT can be switched.
- Stepless CCT adjustment: long press CCT PUSH switch for 1-6s, Press again to switch CCT adjustment directions.

Power on status:

- After power on, the light state will be the same as the last dimming level and the last CCT level.
- If the light is on before the power is turned off, after turning the power back on, the brightness will be the same as the last time, and the color temperature 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, and the color temperature will be the same as the last time.



Multiple lights synchronize control operation

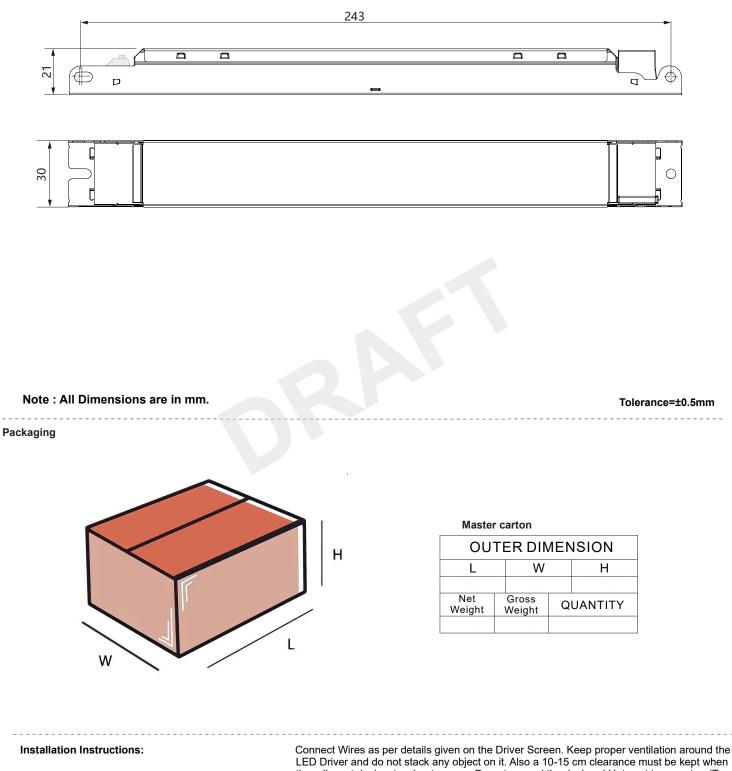
- method 1: Step 1:long press the PUSH-DIM switch, confirm each light is on.
 - Step 2:short press the PUSH-DIM switch, confirm each light is off.
 - Step 3:long press the PUSH-DIM switch, confirm each light is from darkest to brightest and all the lights are synchronous.
- method 2: Long press the PUSH-DIM dimming switch for more than 15s, all drivers will output 100% brightness and the color temperature is natural white (middle of color temperature range).



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.