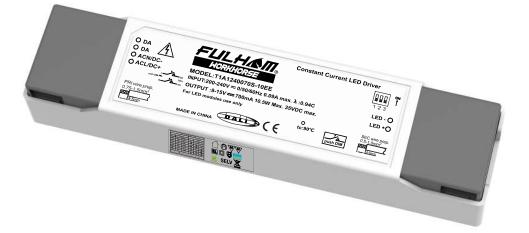


# T1A1240070S-10EE

Constant Current Independent Dimmable Driver (DALI-2+pushDIM)



# Features

- -Support DALI-2+pushDIM dimming mode
- -8-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 of the lights is the same
- -Dimming range 1~100%, output current accuracy 3%
- -Standby power input<0.5W, meets the requirements of ErP certification
- -High PF, high efficiency, low THD
- -Screw-free and pressing type strain relief, supports thicker cables and is easier to install
- -Independent input and output strain relief, stronger wiring
- -Intelligent LED hot-plug protection function
- -SELV and Class II design, suitable for use inside of the light
- -Comply with CE,DALI-2 certifications
- -IP20 protection grade, indoor use
- -Nominal life-time up to 100,000 h
- -5-year guarantee

# Interfaces

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

#### Functions

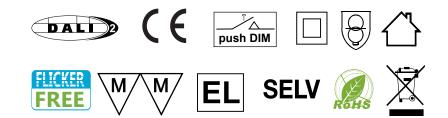
- -Support central emergency application (dimming normal in DC input)
- Support self-contained emergency application
- -Protective features
- (short-circuit, overload, no-load, hot plug-in protection )

#### Suitable for lights

- -Suitable for lights with independent drivers such as downlights, spotlights, panel lights, etc
- -Not suitable for lights with built-in drivers

#### **Typical applications**

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





# T1A1240070S-10EE

**SPECIFICATIONS** 

**Output Wattage : 10W Max** 

Output voltage range of 6-27Vdc

Flicker-free at any brightness, meeting

the standard of flicker-free(IEEE 1789-2015)

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- LED indoor lighting

- LED office lighting

- LED architectural lighting

- LED panel lamp lighting

Application

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- Dimmable Constant Current LED Driver
- Multiple current selection through dip switch.
- Output Current: 350 700mA
- Flicker Free: O/P Ripple current < 10%</li>
- Dimming range 1 to 100%

# **General Specifications**

Rated Input Voltage	200-240VAC, 50/60Hz
Operating Input Voltage Range	180-264VDC
Input Current	<0.09A (Rated input voltage)
Input Power	13.5W
Power Factor	PF>0.94 (230V AC & Full load),DF>0.96 (230V AC & Full load)
THD	≤10% (230V AC & Full Load)
Efficiency (Typical)	80%(230V AC & Full Load)
Driver Type	Constant Current DALI-2
Output Current	350mA ±3%, 400mA ±3% @6-27VDC, 450mA ±3% @6-24VDC, 500mA ±3% @6-21VDC,
	550mA ±3%, 600mA ±3%, 650mA ±3%, 700mA ±3%, @6-15VDC
	* Refer DIP switch Table for O/P current selection.
Output Voltage Range	6-27Vdc
No Load Output Volatge	35VDC
Output Power	10.8W Max
Number of Output Channels	1 Channel
Class	Class II
Dimming Controller Type/Dimming Range	DALI 2.0,1%-100%
Ambient Operating Temperature Range	-20°C to 50°C
Max. Case Temperature	90°C
Input Surge Protection	L-N:2KV
Protections	Output Short Circuit : Yes
	Output Open Circuit : Yes
	Output Overload : Yes
Certification and Standards	EN61347-1, EN61347-2-13, En62384
	EN55015, EN61000-3-2, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547
	EN62386-101(DALI-2), EN62386-102(DALI-2),, EN62386-207(DALI-2)
	IEC 62386-101, IEC 62386-102, IEC 62386-107
Withstand Voltage	I/P-O/P(LED):3750V AC, I/P-DALI: 1500V AC, O/P-DALI: 3750V AC.
Isolation resistance	I/P-FG:100MΩ/500Vdc/25°C/70% RH
Life	Nominal life-time up to 100,000 h
Approvals / Class	BIS,CE
Warranty	5 Years
Weight	76 gm
Note : Suitable for indoor application only	
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T1A1240070S-10EE

SPECIFICATIONS

# **Electrical values**

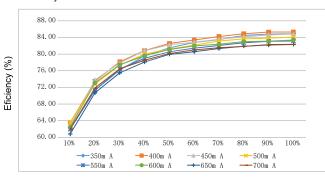
## **DIP-switch & output current**

Output				•	
Prated(w)	Irated(mA)	Voltage(Vdc)	1	2	3
9.45	350	6-27	ON	ON	ON
10.8	400	6-27		ON	ON
10.8	450	6-24	ON		ON
10.5	500	6-21			ON
9.90	550	6-18	ON	ON	
10.8	600	6-18		ON	
9.75	650	6-15	ON		
10.5	700	6-15			

Remark: This current is factory default.

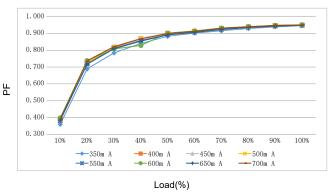
This Switch is off.

Efficiency vs load

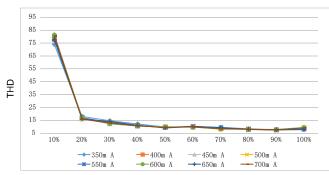


Load(%)

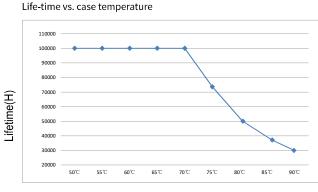
Power factor vs. Load



THD vs. Load



Load(%)



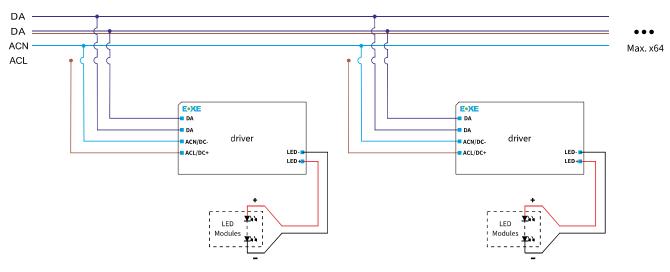
Case temperature(Tc)



**SPECIFICATIONS** 

# **DALI dimming application**





# 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.

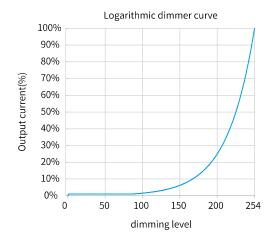
#### **Remarks:**

- 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  $2 \times 1.5$  mm<sup>2</sup>.
- 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 <sup>2</sup>	max.100m		
2×0.75mm <sup>2</sup>	max.150m		
2×1.00mm <sup>2</sup>	max.200m		
≥2×1.50mm <sup>2</sup>	max.300m		

# **Dimming curve**

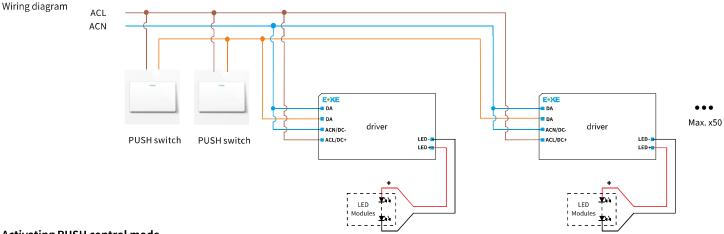


**Remarks:** The dimming curve can be selected by DALI configuration. The default is logarithmic dimming curve.



SPECIFICATIONS

# **PUSH dimming application**



## **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

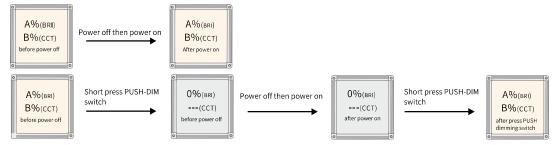
- Turn on or turn off: short press PUSH dimming switch for 0.2-1s.
- Stepless dimming : long press PUSH dimming switch for 1-6s, Press again to switch dimming directions.

## **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.



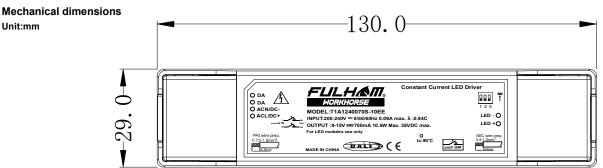
#### Multiple lights synchronize control operation

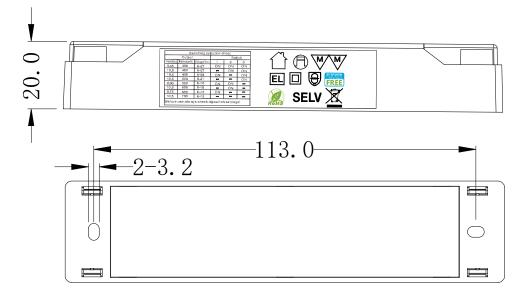
- method 1: Step 1:long press the PUSH-DIM switch, confirm each light is on.
  - Step 2:short press the PUSH-DIM switch, confirm each light is off.
  - Step 3:long press the PUSH-DIM switch, confirm each light is from darkest to brightest and all the lights are synchronous.
- method 2: Long press the 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).

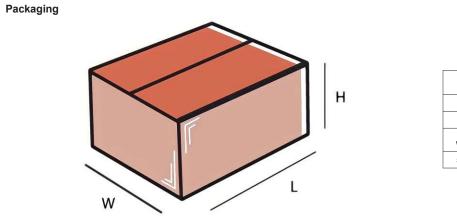


#### Installation

Unit:mm







Master carton
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OUTER DIMENSION						
L		W		Н		
450mm	۱	350mm		180mm		
Net Weight		Gross Weight	QUANTITY			
5.47 kg		6.50 kg	72 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.