

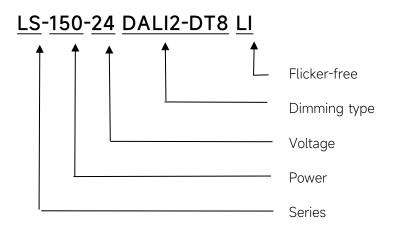
150W DALI+PUSH Dimming power supply



♦ Description

LS-150-24 DALI2-DT8 LI is a 150W constant voltage LED driver that operates from 198-264Vac input with 24V output voltage. With it's dimensions from 340 x 45 x 30.5 mm. It is easy to integrate in LED strips products. To ensure trouble-free operation, protection is provided against output short circuit, over Load and over temperature.

♦ Model code





◆ Specification

	Constant Voltage	24VDC		
Output	Current Range	0-6.25A		
	Voltage Accuracy	±5%		
	Output HF current ripple(>1KHz)	±1%		
	Output LF current ripple(≤120Hz)	±1%		
	SVM	≤0.4		
	Pst	≤ 1		
	Efficiency(Typ.)	91%		
	Rated input voltage	220-240VAC		
	Range of input voltage	198-264VAC		
	Rated input voltage(DC)	198-280VDC		
	Frequency(Hz)	0/50/60 Hz		
	Displacement factor	≥0.9		
_	Power Factor	0.95		
Input	Input Current max	1 A MAX		
	Start-up time	< 0.5S		
	No Load Power	<0.5W		
	Standby Power	≤0.5W@DALI OFF signal is in effect		
	Network standby power	≤0.5W		
	THD (Typ.)	<8%		
	Dimming	YES		
D'	Dimming mode	DALI-2 IEC 62386-101,102,207,209 & Push Dimming (Corridor Function)		
Dimming	Dimming depth	1%		
	Dimming current range	1-100%		
	Over Load Protection	105-150% rated output power		
		YES/Auto Resume		
Darlanda	Over Voltage Protection	>25.2VDC		
Protection		YES/Auto Resume		
	Short circuit Protection	YES/Auto Resume		
	Over Temperature Protection	YES/Auto Resume		
	Operating Temperature	-20°C~+45°C		
	Humidity	20%-90%RH		
Environment	Tc	85°C		
	Storage Temperature	-20°C~+60°C		
	Life time	>50000h@Tc=85°C		
Surface	Dimension	340x45 x30.5 (LXWXH)mm		
Standards	IEC61347- 1, IEC61347-2- 13;EN613	347- 1, EN61347-2- 13;EN61347- 1;EN61347-2- 13, EN62384;EN55015		
Others	ErP	EU 2019/2020		
Ou 1013	RoHS	RoHS (2011/65/EU) (EU)2015/863		





1.All parameters not specially mentioned are measured at 230VAC input, full load and 25°C of ambient temperature.

2.Ripple & Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF & 47 uF parallel capacitor.

Note

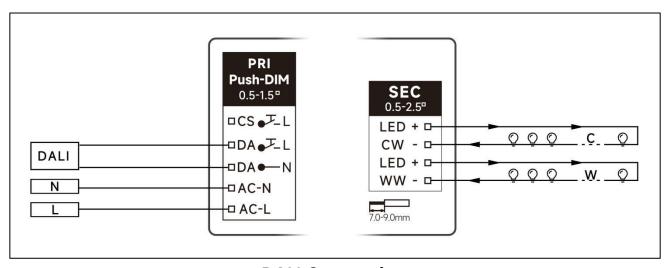
3.The DC input for this product is only used for emergency lighting and applies to functional and safety requirements, EMC is not considered.

4.This LED driver meets the EMI specifications above, but EMI performance of a lighting fixture also depends on the other devices on the fixture.

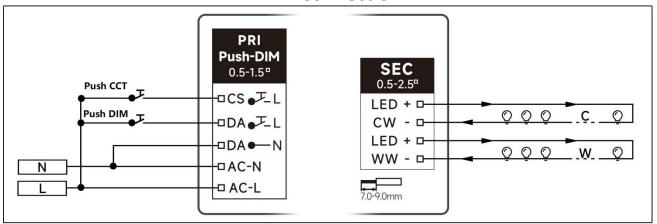
♦ Circuit Breaker

I ^{peak}	Twidth	B10	B16	B20	C10	C16	C20
43.8A	342 µs	5pcs	8pcs	10pcs	8pcs	12pcs	16pcs

♦ Wiring diagram



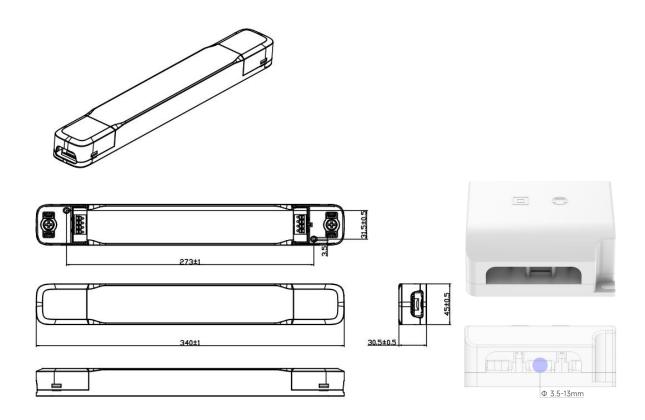
DALI Connection



push DIM/CCT Connection

♦ 2D diagram





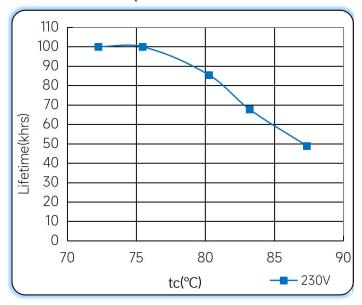
♦ Wiring & Connections

	Specification item	Value (Unit)
Input	Input wire cross-section	0.51.5 mm²
	Input wire gauge.	1620 AWG
	Input wire strip length	79mm
Output	Output wire cross-section	0.52.5 mm²
	Output wire gauge.	1620 AWG
	Output wire strip length	79mm

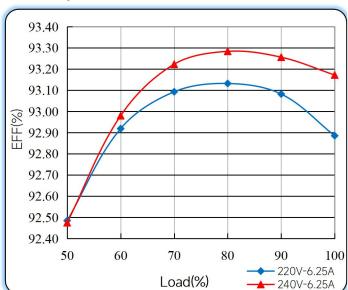


◆ Curve for LS-150-24 DALI2-DT8 LI

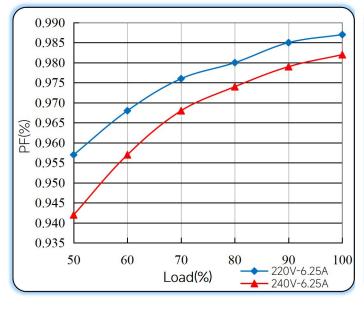
Lifetime vs. Temperature Curve



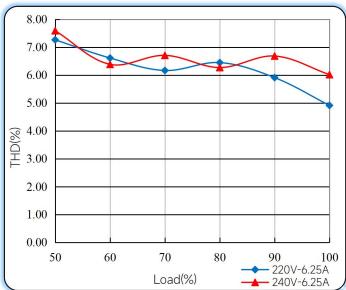
Efficiency vs. Load



Power Factor Characteristics



THD vs. Load



◆ Push dimming operation



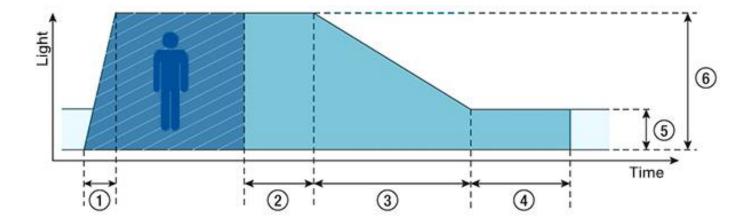
movement	Current state	Brightness key operation	Color temperature button operation
Short press (50ms < PUSH < 500ms)	ON	Turn off the light	Turn off the light
Short press (50ms < PUSH < 500ms)	Off	Turn on the light to restore the brightness before OFF, if there is a memory brightness, restore the brightness of the memory	Turn on the light to restore the brightness before OFF, and restore the brightness of the memory if there is memory brightness
Double-click (Press twice within 500ms)	On	Save the current brightness and color temperature. If the indicator blinks twice (Max-Min-Max-Min), the storage is saved successfully	Save the current brightness and color temperature. If the indicator blinks twice (Max-Min-Max-Min), the storage is saved successfully
Double-click (Press twice within 500ms)	Off	Cancel double click save value, restore default brightness (100%) and default color temperature (4000K)	
Tap and hold (0.5 -120s)	ON	Adjust the brightness and switch the adjustment direction after each release	Adjust the color temperature and switch the adjustment direction after each release
Tap and hold (0.5 -120s)	Off	Turn on the light and turn it on from the minimum brightness	Turn on the light at the lowest brightness and turn it down from the warmest color temperature
Enter Corridor mode: Hold down for 120 seconds	Max	to the brightest indicates entering the corridor	First, long press dimming to the darkest, 120S to the brightest indicates entering the corridor mode, if there is a save color temperature, switch to the save color temperature
Enter Corridor mode: Hold down for 120 seconds	Min	to the brightest indicates entering the corridor mode, if there is a save color temperature,	First, long press the dimmer to the brightest, then turn it to the darkest in 120S, then turn it up to the brightest indicates entering the corridor mode, and switch to the saved color temperature if there is a save color temperature
Exit Corridor mode: Tap 5 times within 3 seconds	Corridor model	Quits The corridor mode and enters the PUSH mod	Quits The corridor mode and enters the PUSH mod

Attention:

- 1. Do not use PUSH dimming and DALI dimming at the same time, otherwise it may damage other DALI equipment
- 2.PUSH Button needs to be connected to 50/60Hz AC, can not be PUSH dimming when connected to DC
- 3. The product enters PUSH mode after PUSH dimming. If DALI mode needs to be returned, send DALI instructions to return to DALI mode and power-on.



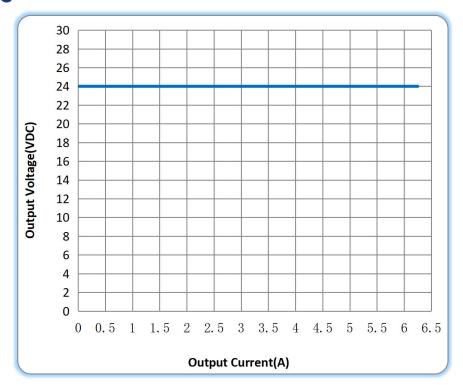
Corridor mode



- ◆ ①Fade-in time(0.5s): the time that starts as soon as the presence of a person is detected. During the fade-in time the luminous intensity is faded up to the presence value.
- ②Run-on time(120s): the time that starts as soon as the presence of a person is no longer detected. If the presence of a person is detected again during the run-on time the run-on time is restarted from zero. If no presence is detected during the run-on time the fade time is started as soon as the run-on time expires.
- ◆ ③Fade time(32s): the time during which the luminous intensity is faded from the presence value to the absence value.
- **@Switch-off delay (Never Off):** the time during which the absence value is held before the lighting is switched off. Depending on the profile selected the switch-off delay may have different values or may not be defined.
- ◆ ⑤Absence value(default: 10 %): the luminous intensity when there is no person present.
- ©Presence value (default: 100 %): the luminous intensity when persons are present.



♦ Operating window



Operating window 100%

◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			Α	2022/05/15

Remark:The final interpretation of the contents of the specification belongs to Astralux.

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