

AURA+ ALCC020 LED DRIVER SERIES

SMALL-SIZE CONSTANT CURRENT LED DRIVER WITH DALI DIMMING

ALCC020-00700-045-DALI

FEATURES

- Small Size
- DALI-2 and Push DIM Dimmable
- Single Channel Output,
Output Current Selectable by DIP Switch
- Input Voltage 120VAC-277VAC
- Dimming Range from 0,1%
- Flicker Free
- Half Potted Electronics
- IP20
- With Wires

APPLICATION

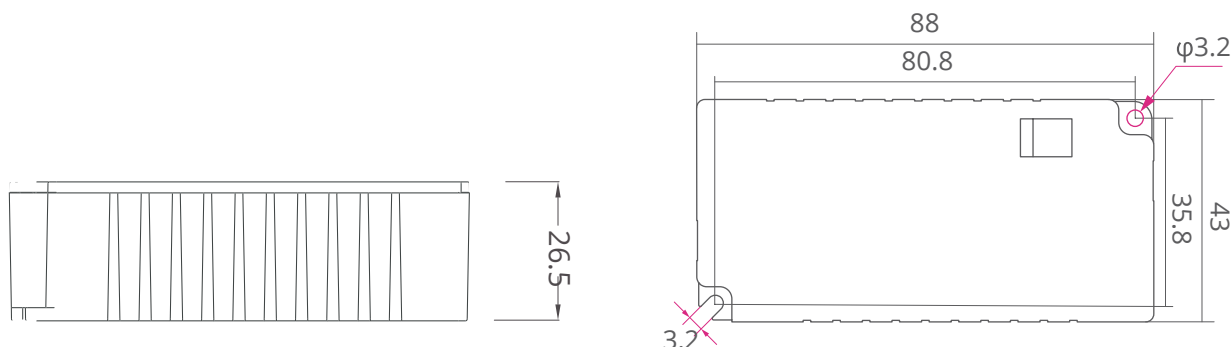
- Indoor use
- Great for Luminaires Which Need Super Small
Sized LED Driver
- Downlights, Panel Lights, Spotlights, Ceiling
Lights, Decorative Lights, Floor Lights, Track Lights
and Flood Lights



Technical Data

Product Code		ALCC020-00700-045-DALI		
Output	DIP Switch Technical Values	Current	Voltage	Power
		350mA	9-45V	15.75W
		400mA	9-45V	18W
		450mA	9-44V	19.8W
		500mA	9-40V	20W
		550mA	9-36V	19.8W
		600mA	9-33V	19.8W
		650mA	9-30V	19.5W
		700mA	9-28V	19.6W
	Channel	1		
	No load output voltage	58V Max		
	Frequency	1KHz Min PWM		
	Current Accuracy	±5%		
	LF current ripple(<120Hz)	<3%		
Input	Voltage	120VAC-277VAC		
	Frequency	50/60Hz		
	Efficiency	85%@120VAC, Full load		
	PF	0.98@120VAC, Full load		
	THD(full load)	<10%@120VAC, Full load		
	Current	0.12A max @120VAC		
	Inrush Current	Cold start, 30A@120VAC		
	Standby Power	<1W		
Protections	Over Voltage	Hiccup, recovers after fault condition is removed		
	Over load	Hiccup, recovers after fault condition is removed		
	Short circuit	Close output, recovers automatically after fault removed		
Dimming	Dimming type	DALI/Touch DIM (Push DIM)		
	Dimming range	0.1%-100% Dimming to off		
Others	IP rating	IP20		
	Working temp.	-20 ~+50°C		
	Tc.	+90°C		
	Relative humidity	20~90% RH		
	Lifetime	50,000h@tc:+85°C		
	Switch cycle	>25,000 times		
	Warranty	5 years		

Dimensions

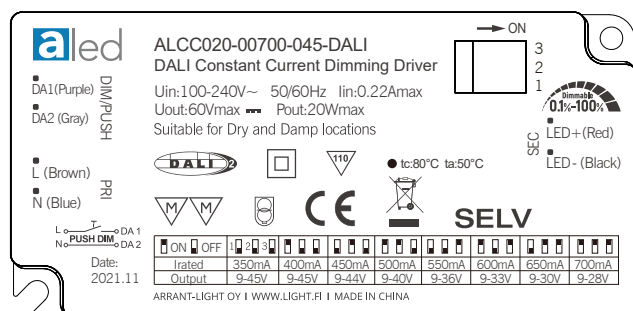


Lenght	88mm
Width	43mm
Height	26.5mm
Lenght of the wires	150mm
Stripping Length	10mm
Weight	105g
Packing Size	50pcs
Material	PC

Safety

Surge	L-N:1KV
Withstand Voltage	I/P-O/P: 3000VAC/1min/5mA; I/P-Gnd: 1500VAC/1min/5mA; O/P-Gnd: 500VAC/1min/5mA
Safety standards	UL8750/UL1310/CSA25013, CSA class P
EMI Eission	EN55015, EN61000-3-2 Class C, IEC61000-3-3
EMC Immunity	FCC class B(120V)/class A(277V)

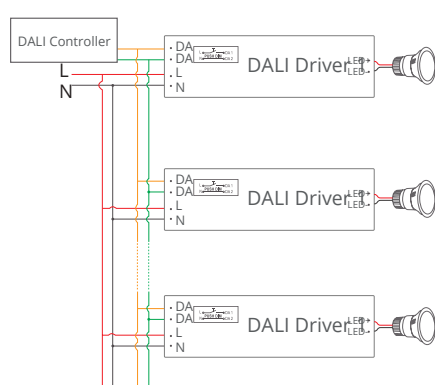
Safety Label



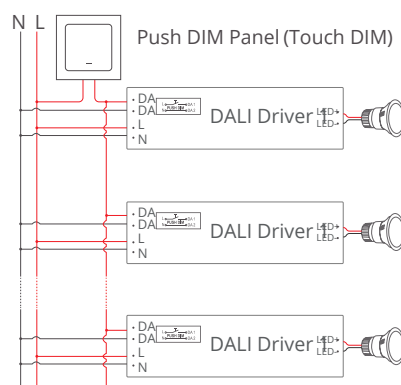
Wiring diagram for a DALI dimmer switch with 2-wire DALI signal and 2-wire load. The diagram shows the following connections and dimensions:

- Input:** L (Line) and N (Neutral) wires connected to the main power input.
- DALI Signal Input:** DA1 (Purple) and DA2 (Gray) signal wires connected to the DALI input terminals.
- Output:** L (Black) and N (White) load wires connected to the output terminals.
- Dimensions:**
 - Input wire Length: $150\text{mm} \pm 5\text{mm}$
 - Stripping length: $10\text{mm} \pm 5\text{mm}$
 - Signal wire Length: $160\text{mm} \pm 5\text{mm}$
 - Stripping length: $10\text{mm} \pm 5\text{mm}$
 - Output Wire Length: $150\text{mm} \pm 5\text{mm}$
 - Stripping length: $10\text{mm} \pm 5\text{mm}$

DAI Diagram



Touch DIM(Push DIM) Diagram































Push DIM Function

1. Press the Touch DIM (Push DIM) switch for 8s or more, the driver can be controlled via Push DIM switch.
2. Short press the Touch DIM (Push DIM) switch (<0.5s) to control the lamp on or off.
3. Long press the Touch DIM (Push DIM) switch (>0.5s) to dim the brightness of light. The dimming direction will change every time after pressing switch.
4. Double-click the Touch DIM (Push DIM) switch (<0.3s), then all lamps connected on the device will be set maximum brightness.
5. The brightness adjustment range is 1%-100%, and the light can be turned off through short pressing when doing the adjustment with long pressing Push DIM switch.
6. With the Power off memory function, the power-down state will be recovered when power on again.

Current Selection Table

ALCC020-00700-045-DALI

		1 	2 	3 	  	  	  	  	  	  	  	  
ON	OFF	350mA	400mA	450mA	500mA	550mA	600mA	650mA	700mA			
		9-45V	9-45V	9-44V	9-40V	9-36V	9-33V	9-30V	9-28V			

Remark: Function default setting is:
350mA (@switch are all OFF state)

Cautions

1. This product should be installed by qualified personnel.
2. This product is non waterproof, need to avoid sun and rain. In case of outdoor use, please ensure it is mounted in a water proof enclosure.
3. Good heat dissipation conditions extend product life. Please install the product in a well-ventilated environment.
4. Please make sure LED power supply output voltage, current is used to meet the product requirements.
5. Please ensure that adequate sized cable is used from the controller to the LED lights to carry the current. Please also ensure that the cable is secured tightly in the connector.
6. Due to safety concerns, PVC or rubber cord of 0.75-2.5mm² is recommended for input and output terminal(s) (excluding signal terminals). Flat power cord is not suitable. Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
7. In case of malfunction, do not repair it yourself.