

# AURA+ ALCC040/50 LED DRIVER SERIES

## DALI DIMMABLE CONSTANT CURRENT LED DRIVER

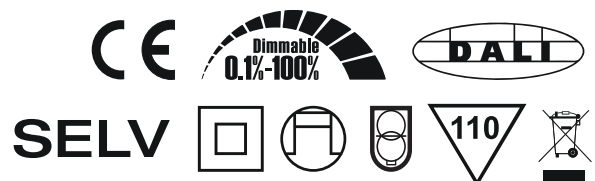
**ALCC040-01200-045-DALI-SR**  
**ALCC050-01400-045-DALI-SR**

### FEATURES

- Single channel output, output current level selectable by DIP switch
- Compact sizing with strain reliefs
- Meet DALI Protocol IEC 62386
- Supports Touch-DIM function
- Built-in active PFC function
- Dimming effect smooth, no flicker
- Protections: Short circuit, Over load, Over voltage

### APPLICATION

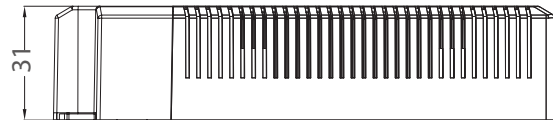
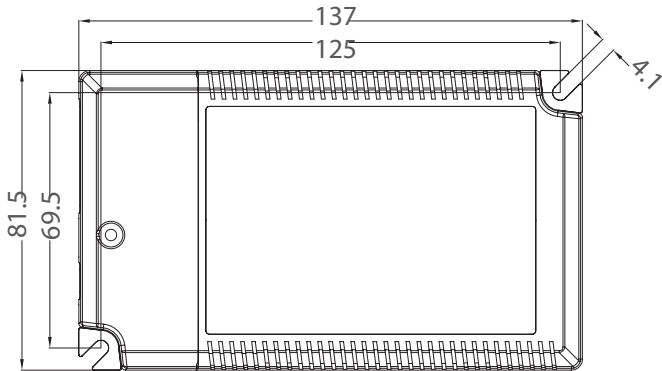
- Suitable for indoor LED lighting application, such as down lights and spot lights



## Technical Data

Product Code		ALCC040-01200-045-DALI-SR			ALCC050-01400-045-DALI-SR		
Output	DIP Switch Technical Values	Current	Voltage	Power	Current	Voltage	Power
		850mA	9-45V	38.25W	1050mA	9-45V	47.25W
		900mA	9-44V	39.6W	1100mA	9-45V	49.5W
		950mA	9-42V	39.9W	1150mA	9-43V	49.45W
		1000mA	9-40V	40W	1200mA	9-42V	50.4W
		1050mA	9-38V	39.9W	1250mA	9-40V	50W
		1100mA	9-36V	39.6W	1300mA	9-38V	49.4W
		1150mA	9-35V	40.25W	1350mA	9-37V	49.95W
	1200mA	9-33V	39.6W	1400mA	9-36V	50.4W	
	Channel	1					
	No load output voltage	55V Max					
	Current Tolerance	±5%					
	Turn on delay Time	<1.5s, at 230Vac					
	Current Ripple	<3%					
Input	Voltage	220VAC-240VAC					
	Frequency	50/60Hz					
	Efficiency	88%@230VAC,Full load					
	Power Factor	>0.95@230VAC, Full load					
	THD (full load)	<10%@230VAC					
	AC Current Max	0.023Amax@230VAC			0.28Amax@230VAC		
	Stanby Power	<0.5W					
	Inrush Current	Cold start,40A(twidth=12.8 us measured at 50% Ipeak)@230VAC					
Protections	Short Circuit	Close output, recovers automatically after fault removed					
	Over Load	When the output voltage is exceeded, the output current decreases and, recovers automatically when the load is reduced.					
	Over Temperature	Shut down the output, recovers automatically when temp. back to normal.					
Dimming	Dimming Type	DALI /Touch DIM (Push DIM)					
	Dimming Range	1%-100% Dimming to off					
Environment	IP Rating	IP20					
	Working temp.	-20°C~50°C					
	Storage Temp. Humidity	-40°C~85°C, 20-90%RH					
	Tc.	95°C			80°C		

## Dimensions



Length	137mm
Width	82mm
Height	31mm
Weight	225g
Material	Pc
Packing	50PCS/Cartron;11.75kg±5%/Cartron; Carton Size: 517*337*179mm(L*W*H)

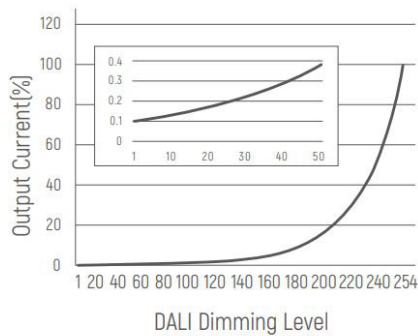
### Safety

Surge	L-N:1KV
Withstand Voltage	I/P-O/P: 3000VAC/1min/5mA
Safety Standars	IEC/EN61347-1,IEC/EN61347-2-13,GB19510.1,GB19510.14
EMC Eission	EN50515,EN61000-3-2 Class C,IEC61000-3-3,GB/T17743
EMC Immunity	EN61000-4-2,3,4,5,6,8,11 EN61547,GB17625.1

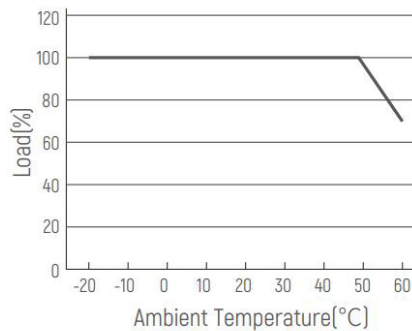
### Warranty and Lifetime

Lifetime	50,000h@ tc:75
Switch cycle	>100,000 times
Warranty	5 years

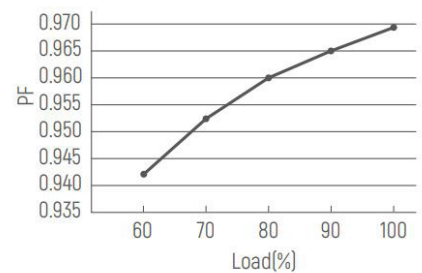
Dimming Curve



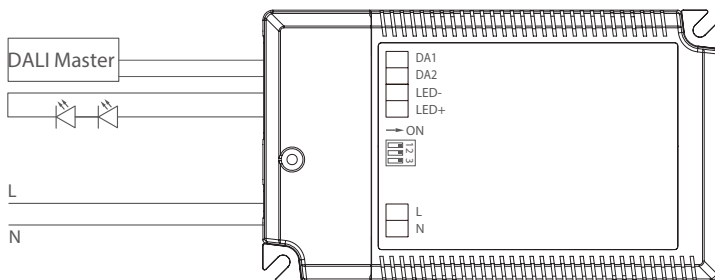
Derating Curve



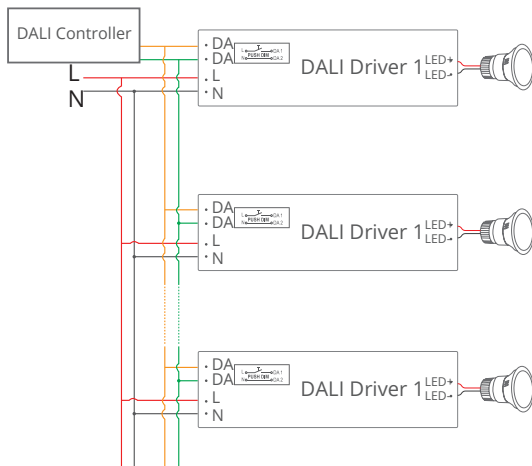
PF vs Load



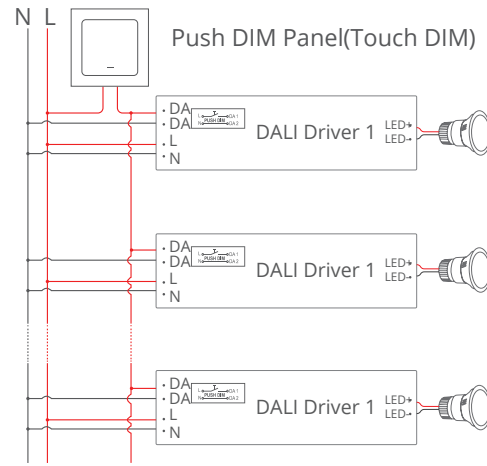
## Wiring Diagram



DALI Diagram



Push DIM (Touch DIM) Diagram



Remark: Only use open push button without indicator light. Maximum cable length between each Unit: 20 meters.

## 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

This is a multi-current dimming driver, output current level selectable by DIP S.W., as the following:

### ALCC040-01200-045-DALI-SR

		1	2	3															
ON	OFF				850mA	900mA	950mA	1000mA	1050mA	1100mA	1150mA	1200mA							
					9-45V	9-44V	9-42V	9-40V	9-38V	9-36V	9-35V	9-33V							

Remark: Function default setting is:  
850mA (@switch are all OFF state)

### ALCC050-01400-045-DALI-SR

		1	2	3															
ON	OFF				1050mA	1100mA	1150mA	1200mA	1250mA	1300mA	1350mA	1400mA							
					9-45V	9-45V	9-43V	9-42V	9-40V	9-38V	9-37V	9-36V							

Remark: Function default setting is:  
1050mA (@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 0.75-2.5mm<sup>2</sup> 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.