

## AURA+ ALCC040 LED DRIVER SERIES

### SMALL-SIZE CONSTANT CURRENT LED DRIVER WITH 3-IN-1 DIMMING

ALCC040-0xxxx-04x-010V

#### FEATURES

- Single channel output, output current level selectable by DIP Switch
- Support 3-in-1 dimming mode: 0/1-10V active signal, adjustable resistance, PWM(A model)
- Input voltage of 120VAC ~ 277VAC
- Dimming range: 0.1-100% Dimming effect smooth, no flicker
- Protections: Short circuit, over load, over voltage
- Small Size
- Half Potted Electronics
- Flicker Free
- IP20
- With Wires

#### APPLICATION

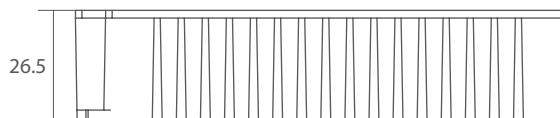
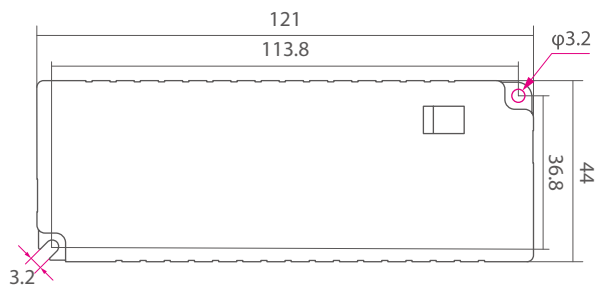
- Downlights, Panel Lights, Spotlights, Ceiling Lights, Decorative Lights, Floor Lights, Track Lights and Flood Lights



## Technical Data

Product Code		ALCC040-00850-048-010V			ALCC040-01200-042-010V		
Output	DIP Switch Technical Values	Current	Voltage	Power	Current	Voltage	Power
		500mA	9-48V	24W	850mA	9-42V	35.7W
		550mA	9-48V	26.4W	900mA	9-42V	37.8W
		600mA	9-48V	28.8W	950mA	9-42V	39.99W
		650mA	9-48V	31.2W	1000mA	9-40V	40W
		700mA	9-48V	33.6W	1050mA	9-38V	39.9W
		750mA	9-48V	36W	1100mA	9-36V	39.6W
		800mA	9-48V	38.4W	1150mA	9-34V	39.1W
	850mA	9-47V	39.95W	1200mA	9-33V	39.6W	
	Channel	1					
	No load output voltage	58V Max			58V Max		
	Frequency	1KHz Min PWM					
	Current Tolerance	±5%					
Ripple Current	<3%						
Input	Voltage	120VAC-277VAC					
	Frequency	50/60Hz					
	Efficiency	87%@120VAC, Full load			87%@120VAC, Full load		
	PF	>0.99@120VAC, Full load					
	THD(full load)	<10%@120VAC, Full load					
	Current	0.6A max @120VAC					
	Inrush Current	Cold start, 30A@120VAC					
	Protections	Over Voltage	Hiccup, recovers after fault condition is removed				
Short Circuit		Hiccup, recovers after fault condition is removed					
Over load		Close output, recovers automatically after fault removed					
Dimming	Dimming type	0/1-10V(Type A)					
	Dimming range	0.1%-100% Dimming to off					
Environment	IP rating	IP20					
	Working temp.	-20 ~+50°C					
	Tc.	+90°C					
	Relative humidity	20~90% RH					

## Dimensions



Lenght	121mm
Width	44mm
Height	26.5mm
Lenght of the wires	150mm
Stripping Length	10mm
Weight	156g
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 Labels

**aled** ALCC040-00850-048-010V  
0/1-10V Constant Current Dimming Driver

U<sub>in</sub>: 120-277V~ 50/60Hz I<sub>in</sub>: 0.6A<sub>max</sub>@120V~  
U<sub>out</sub>: 58V<sub>max</sub> P<sub>out</sub>: 40W<sub>max</sub>  
Suitable for Dry and Damp locations

tc: 90°C ta: 50°C

Class P

UL 8750 E490914

SELV

ON OFF 500mA 550mA 600mA 650mA 700mA 750mA 800mA 850mA  
9-48V 9-48V 9-48V 9-48V 9-48V 9-48V 9-48V 9-47V

ON OFF 850mA 900mA 950mA 1000mA 1050mA 1100mA 1150mA 1200mA  
9-42V 9-42V 9-42V 9-42V 9-38V 9-36V 9-34V 9-33V

LED+ (Red)  
LED- (Black)

LED+ (Purple)  
LED- (Gray)

Date: 2020.06

**aled** ALCC040-01200-042-010V  
0/1-10V Constant Current Dimming Driver

U<sub>in</sub>: 120-277V~ 50/60Hz I<sub>in</sub>: 0.6A<sub>max</sub>@120V~  
U<sub>out</sub>: 58V<sub>max</sub> P<sub>out</sub>: 40W<sub>max</sub>  
Suitable for Dry and Damp locations

tc: 90°C ta: 50°C

Class P

UL 8750 E490914

SELV

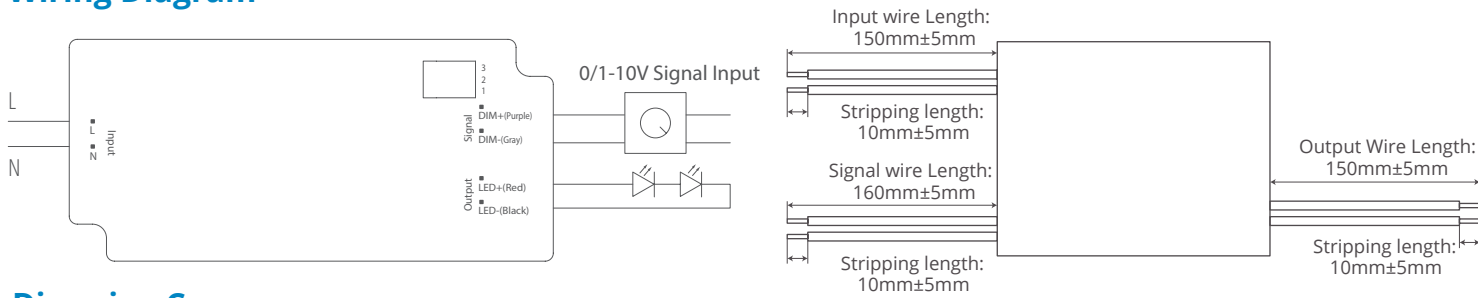
ON OFF 850mA 900mA 950mA 1000mA 1050mA 1100mA 1150mA 1200mA  
9-42V 9-42V 9-42V 9-42V 9-38V 9-36V 9-34V 9-33V

LED+ (Red)  
LED- (Black)

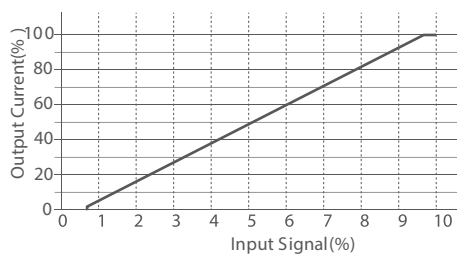
LED+ (Purple)  
LED- (Gray)

Date: 2020.06

## Wiring Diagram



## Dimming Curve



## Current Selection Table

ALCC040-00850-048-010V

ON	OFF	1	2	3	4	5	6	7	8	9	10
		500mA	550mA	600mA	650mA	700mA	750mA	800mA	850mA		
		9-48V	9-48V	9-48V	9-48V	9-48V	9-48V	9-48V	9-47V		

Remark: Function default setting is:  
500mA (@switch are all OFF state)

ALCC040-01200-042-010V

ON	OFF	1	2	3	4	5	6	7	8	9	10
		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.
3. Please make sure LED power supply output voltage, current is used to meet the product requirements.
4. 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.
5. 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.
6. In case of malfunction, do not repair it yourself.