aled

AURA+ ALCC040
LED DRIVER SERIES

SMALL-SIZE
CONSTANT CURRENT
LED DRIVER WITH
## DALI DIMMING

ALCC040-0xxxx-04x-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%,
  smooth dimming with no flicker
- Flicker Free
- Half Potted Electronics
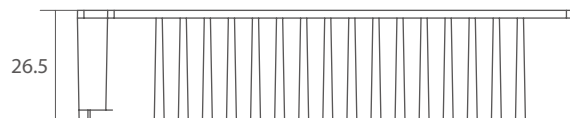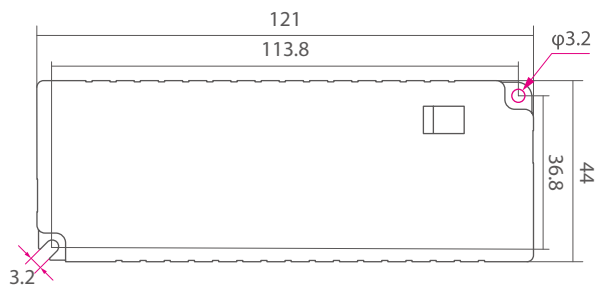- IP20
- With Wires

APPLICATION

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

Class 2
SELV

Dimmable
0.1%-100%

Class P

UL LISTED
E490914

aled
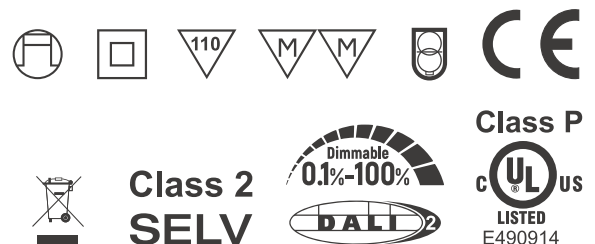
Technical Data

Product Code		ALCC040-00850-048-DALI			ALCC040-01200-042-DALI		
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**	DALI/Touch DIM (Push DIM)					
	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					

aled

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/5m
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

ARRANT-LIGHT OY
+358 2 246 2300 | INFO@LIGHT.FI
RAJAKIVENKATU 8, 20740 TURKU, FINLAND
@ARRANTLIGHTOY **WWW.LIGHT.FI**

arrantlight
LIGHTING YOUR BUSINESS SINCE 1984

Wiring Diagram

DALI Signal Inpu t

DA1(Purple) — Signal
DA2(Gray)

L (Black) — Input
N (White)

3
2
1

Output
LED+(Red)
LED-(Black)

L

N

Input wire Length:
150mm±5mm

Stripping length:
10mm±5mm

Signal wire Length:
160mm±5mm

Stripping length:
10mm±5mm

Output Wire Length:
150mm±5mm

Stripping length:
10mm±5mm

DALI and Touch DIM Diagram

DALI Diagram

DALI Controller

DA
DA
L
N

DALI Driver

LED+
LED-

DA
DA
L
N

DALI Driver

LED+
LED-

DA
DA
L
N

DALI Driver

LED+
LED-

L
N

Touch DIM(Push DIM) Diagram

N L

Push DIM Panel (Touch DIM)

DA
DA
L
N

DALI Driver

LED+
LED-

DA
DA
L
N

DALI Driver

LED+
LED-

DA
DA
L
N

DALI Driver

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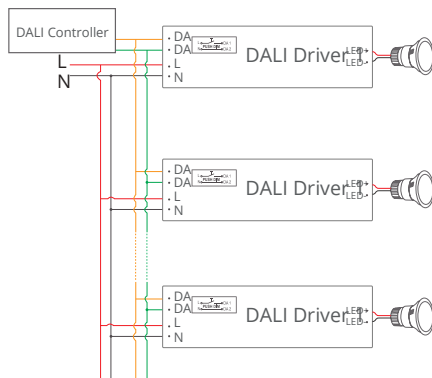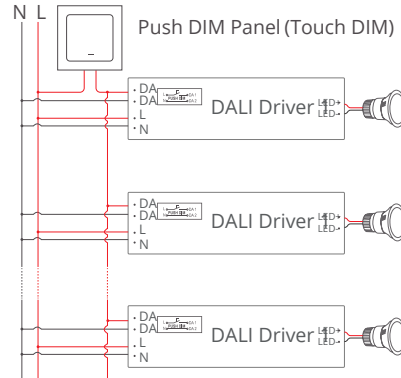
Remark: Only use open push button without indicator light. Maximum cable length between each Unit: 20 meters

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.

LIGHTING YOUR BUSINESS SINCE 1984

Current Selection Table

ALCC040-00850-048-DALI

ON	OFF	1 2 3							
		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-DALI

ON	OFF	1 2 3							
		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 0.75-2.5mm2 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.
6. In case of malfunction, do not repair it yourself.

LIGHTING YOUR BUSINESS SINCE 1984