

# Smart LED Driver

Design and Quality EASEIC of USA

# LND118

## Smart E-Dim Dali DRIVER

### SPEC SHEET



18W 3-62V 180-900mA Dali Dim  
LND118  
613118



**SELV RoHS**

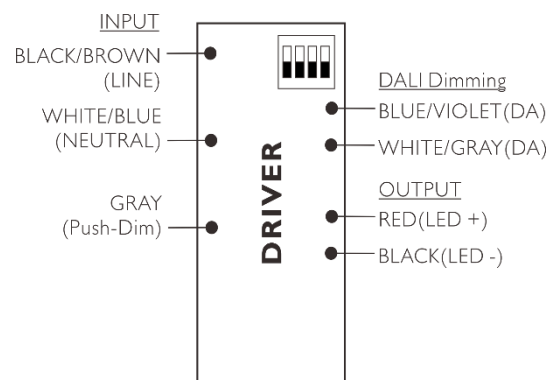
### Features

- Multilevel current output, Constant current output 180-900mA
- Multi-power driver supplied with dip-switch for the selection of the output current
- DALI digital dimming control interface, compatible with standard (IEC 62386) DALI interfaces.
- Memory function for sets or light groups. Recall of stored functions.
- Dimming range from 0 -100%, LED start at 0.1% possible.
- PUSH-Dim, dimming and switching via push-button with memory function.
- Universal AC input (90~265Vac)
- Designed for LED lighting applications
- UL Class 2 output, Class 2 protection against electric shock for direct or indirect contact
- Supplied with terminal cover and cable retainer.
- Driver can be secured with slot for screws.
- Can be switched on and off on secondary circuit for power LED.
- Protections: Short circuit , Over voltage, Over Current
- 5 year warranty

### Benefits

- Enables design of low profile and compact fixtures
- Helps to maximize energy savings and allows application specific light levels
- Supports majority of available dimming solutions

### Wire Diagram



### Note:

Install in accordance with National and Local Electrical Codes.

Use 16-24 AWG solid copper wire rated  $\geq 300V/85^{\circ}C$ .

Strip wire 3/8".

Please pay special attention to wiring installation guidelines, Wrong wiring will cause damage to the LED driver.

Before connection the power; make sure you have access to the LED load.

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### Electrical Specifications

<b>Ordering Information</b>			
Type	LND118		
Order Code	613118		
Full product name	Smart 18W 3-62V 180-900mA Dali Dim		
<b>Input Information</b>			
Line Voltage	100-240Vac_rms		
Line Current	0.22A@100VAC	0.18A@120VAC	0.10A@230VAC
Line Frequency	50/60Hz		
Min, Mains Voltage operational	90[min]		
Max, Mains Voltage operational	265[max]		
THD(total)	<20%		
Power Factor(PF)	>0.92		
Input Power (Max.)	21.8W		
Efficiency @Max Load and 70°C case	87%@100VAC	87%@120VAC	88%@230VAC
Inrush Current(Typ.)	Cold Start 55A(twidth=270us measured at 50% Ipeak) at 230VAC		
Leakage Current(Typ.)	<0.5mA/230VAC		
<b>Output Information</b>			
Output Power	18W(See Output current settings table)		
Output voltage	3V to 62V		
Output Constant Current	180-90mA ±5%(See Output current settings table)		
Maximum open circuit voltage	<60V		
Output Current Ripple (ripple=peak to peak)	2% of nominal output voltage (whichever is greater),measured at 20Mhz bandwidth with 0.1uf ceramic capacitor in parallel with 10uf electrolytic capacitor connected at the end of the output connector.		
Protections	Over Current, Over Voltage, Short Circuit and Open Circuit Protection for LED+ and LED-		
Ambient Temp Range	-20°C to +50°C, 20-95% RH non-condensing		
Max Case Temperature(Tc)	75°C for Life & 85°C for UL Safety		
<b>Dimming Features</b>			
Dimming Interface	DALI(IEC62386), Push-Dim, On/off Dim		
DALI Dimming Specifications	Sink Current <2mA		
Dimming range	0-100%		
<b>Environment &amp; Approbation</b>			
Environmental Protection Rating	UL damp and dry		
Agency Approbations	UL8750,UL1310, CSA-C22.2 No.250.0-08,ENEC EN61347-1,EN61347-2-13 independent, EN62384,TUV EN60950-1		
Electromagnetic Compliance	FCC Title 47 Part 15 Class A Compliance to EN55015,EN61000-3-2 Class C(@100% Load);en6100-3-3 Compliance to EN61000-4-2,3,4,5,6,8,11;EN61547,EN55024, light industry level(surge 2KV), criteria A		
Audible noise	<24dB Class A		
<b>Other information</b>			
Dimension	167x39x30mm (LxWxH)		
Packing	0.15Kg(0.37lbs); 42Pcs/7.1kg(15.2Lbs)		

All the specifications are typical and at 25 °C Tcase unless specified otherwise

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#### Output Current Settings

LND118, Constant Current output 180-900mA.

Multi-power driver supplied with dip-switch for the selection of the output current.

Factory default setting is 180mA.

LND118		DIP-Switch Settings				
Pout Max.	Vout DC	Iout DC	1	2	3	4
11W	3-62V	180mA	--	--	--	
15W	3-62V	250mA	ON	--	--	
18W	3-52V	350mA	--	ON	--	
18W	3-45V	400mA	--	--	ON	
18W	3-40V	450mA	--	--	--	ON
18W	3-35V	520mA	ON	--	--	ON
18W	3-33V	550mA	--	ON	ON	--
18W	3-30V	600mA	--	ON	--	ON
18W	3-28V	650mA	--	--	ON	ON
18W	3-26V	700mA	ON	ON	--	ON
18W	3-22V	820mA	--	ON	ON	ON
18W	3-20V	900mA	ON	ON	ON	ON

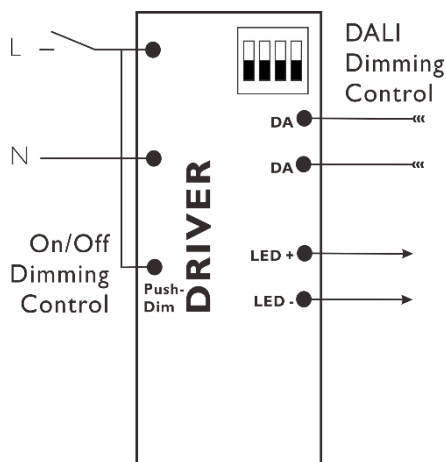
#### Suggested max. number of the LNX units that can be connected to a MCB@230VAC

MCB	B10	B16	C10	C16
LND118	18	26	28	38

Note: These calculated values are based on MCB S201 series manufactured by ABB

#### Dimming Control Wiring Diagrams

##### ➤ On/Off sectional dimming control



LNA, LND Series LED dimming driver support segmented dimming, sectional dimming only need to use the standard ON / OFF wall switch can easily start without rewiring.

According to the following steps:

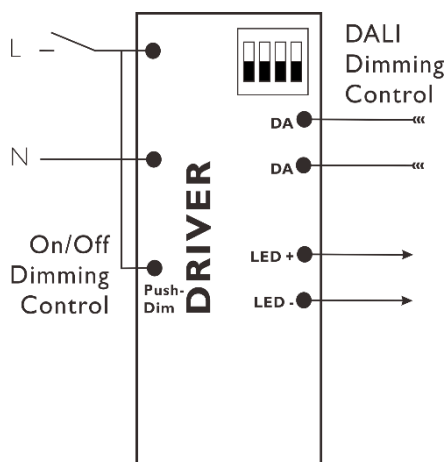
- ✧ According to the requirements of sectional dimming LED driver wiring, confirm before power ON / OFF wall switch in the ON state;
- ✧ There are 30%, 60% and 100% in three segments dimming state, dimming depends on the number of state power, it will turn cycle.



Risk of short circuit.

Push-Dim can only port L (AC) short circuit, does not allow Push-DIM port N (AC) short circuited.

##### ➤ Push-dim 0-100% dimming control



By pressing the push button for less than one second the LEDs turn on or off. By pressing the push button for more than one second the light intensity of the LEDs is dimmed according to the following modalities:

- ✧ If the light intensity is not at maximum, by pressing the key there will be an increase of this to maximum or to the corresponding level at the moment the key is released;
- ✧ A further pressure on the key inverts the dimming direction to the minimum value or to the corresponding level at the moment the key is released;
- ✧ If light intensity is at maximum by pressing the key there will be a decrease to the minimum value or to the corresponding level at the moment the key is released.

Total length of PUSH cables <20m. Factory dimming setting at 100%.



Note: Only use self-reset push button without indicator light.

Risk of short circuit. The self-reset button can only be linked between the Push-dim and the L(AC).

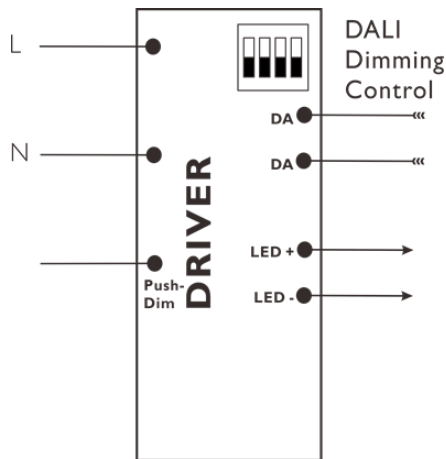
Do Not connect the self-reset button to the N(AC)

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#### ➤ DALI interface dimming control



LND series of LED dimming driver; in line with DALI protocol specification IEC62386, acceptable compliance with ON / OFF, scenes and dimming DALI controller instruction norms issued.

Each DALI subnets can only have a maximum of 64 DALI slave devices (DALI LED dimming drivers).

Each DALI LED dimming drivers will consume 2mA control terminal of the current.

DALI connections of up to 300 m can be made with any 2 wire 0.5 - 1.5 mm<sup>2</sup> mains rated cable.

DALI cable must be mains-rated and the maximum voltage drop along the length of the cable must not exceed 2V.

In rare instances where the environment may be electrically noisy, due to adjacent circuits carrying high switching currents, we recommend a 2 wire twisted pair screened and sheathed cable.

#### DALI Interface Lighting Controller



DBC102D



DBC202D



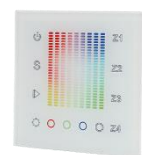
DBC402D



DALI RGB



DALI RGBW



DALI RGBWD



DALI SC



DALI CCT4



DALI CCT4U

**More DALI Lighting control modules and details , please browse [www.easeic.com](http://www.easeic.com)**

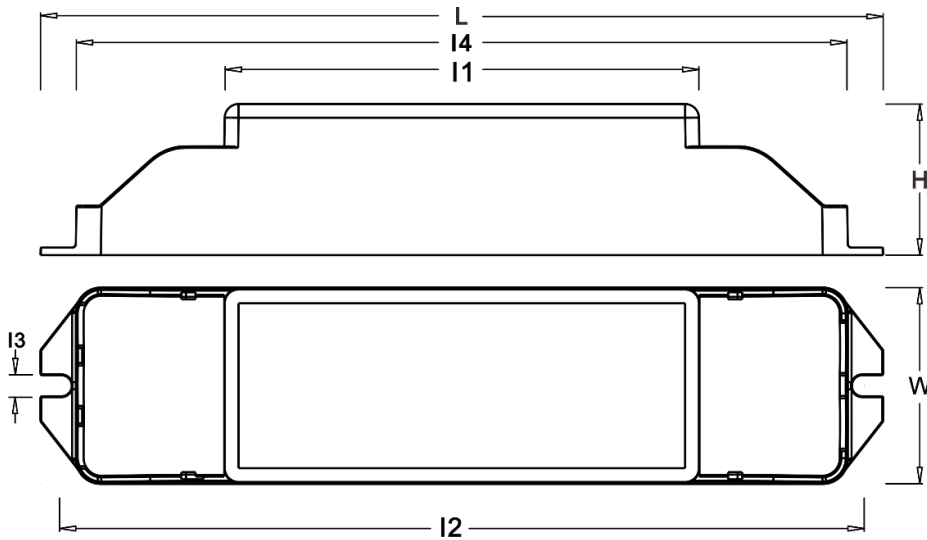
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#### Mechanical Specifications

#### Mechanical Drawing:



#### Dimensions

	In.	mm
Case Length(L)	6.6	167
Case Width(W)	1.5	39
Case Height(H)	1.2	30
Mounting Holes(I1)	3.8	95
Mounting Holes(I2)	6.3	160
Mounting Holes(I3)	0.18	4.5
Mounting Holes(I4)	6.0	154
Overall Length	6.6	167



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