

Smart LED Driver

Design and Quality EASEIC of USA



LNDI54BL

Smart E-Dim Dali
DRIVER

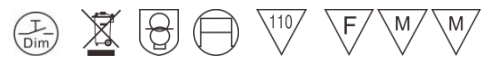
SPEC SHEET

54W 3-48V 1050-1750mA Dali

Dim

LNDI54BL

673154



SELV RoHS

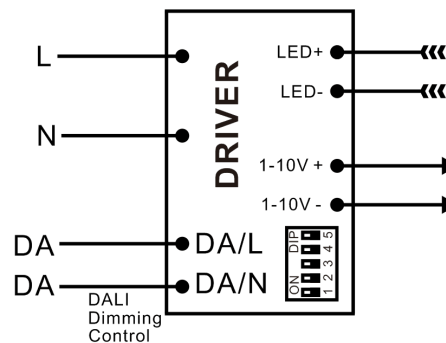
Features

- Multilevel current output, Constant current output 1050-1750mA
- Multi-power driver supplied with dip-switch for the selection of the output current
- DALI 2, with DALI Feedback
- 1-10v
- Analogue flicker-free dimming
- Dimming range from 0 -100%, LED start at 0.1% possible.
- PUSH-Dim, dimming and switching via push-button function.
- Universal AC input (100~277Vac)
- Designed for LED lighting applications
- 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.

LND154BL

Smart E-Dim Dali DRIVER

SPEC SHEET

Electrical Specifications

Ordering Information			
Type	LND154BL		
Order Code	673154		
Full product name	Smart 54W 3-48V 1050-1750mA Dali Dim		
Input Information			
Line Voltage	100-240Vac_rms		
Line Current	0.69A@100VAC	0.61A@120VAC	0.31A@230VAC
Line Frequency	50/60Hz		
Min, Mains Voltage operational	90[min]		
Max, Mains Voltage operational	277[max]		
THD(total)	<10%		
Power Factor(PF)	>0.95@230V full load		
Input Power (Max.)	61.5W		
Efficiency @Max Load and 70°C case	87%@100VAC	87%@120VAC	88%@230VAC
Inrush Current(Typ.)	Cold Start 39A(twidth=270us measured at 50% Ipeak) at 230VAC		
Leakage Current(Typ.)	<0.5mA/230VAC		
Output Information			
Output Power	54W(See Output current settings table)		
Output voltage	3V to 48V		
Output Constant Current	200-1050mA ±5%(See Output current settings table)		
Maximum open circuit voltage	<57V		
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		
Dimming Features			
Dimming Interface	DALI(IEC62386), 1-10v, PWM, Resistor, Switch Dim		
DALI Dimming Specifications	Sink Current <2mA		
Dimming range	0-100%		
Environment & Approbation			
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		
Other information			
Dimension	118x67x30mm (LxWxH)		
Packing	0.23Kg(0.51lbs); 40Pcs/10.1kg(22.2Lbs)		

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

LNDI54BL

Smart E-Dim Dali DRIVER

SPEC SHEET

Output Current Settings

LNDI54BL, Constant Current output 1050-1750mA.

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

Factory default setting is 1050mA.

LNDI54BL		DIP-Switch Settings					
Pout Max.	Vout DC	Iout DC	1	2	3	4	5
50W	3-48V	1050mA	--	--	--	--	--
53W	3-48V	1100mA	ON	--	--	--	--
53W	3-46V	1150mA	--	ON	--	--	--
54W	3-45V	1200mA	ON	ON	--	--	--
54W	3-43V	1250mA	ON	--	ON	--	--
54W	3-41V	1300mA	--	ON	ON --	--	--
54W	3-40V	1350mA	ON	ON	ON	--	--
54W	3-38V	1400mA	--	ON	ON	--	--
54W	3-37V	1450mA	ON	--	ON	ON	--
54W	3-36V	1500mA	--	ON	ON	ON	--
54W	3-34V	1550mA	ON	ON	ON	ON	--
54W	3-33V	1600mA	--	--	ON	ON	ON
54W	3-32V	1650mA	ON	--	ON	ON	ON
54W	3-31V	1700mA	--	ON	ON	ON	ON
54W	3-30V	1750mA	ON	ON	ON	ON	ON

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

MCB	B10	B16	C10	C16
LNDI54BL	10	16	17	28

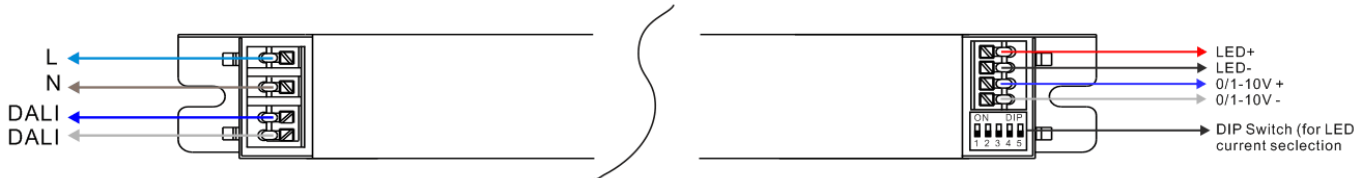
Note: These calculated values are based on MCB S201 series manufactured by ABB

LNDI54BL

Smart E-Dim Dali DRIVER

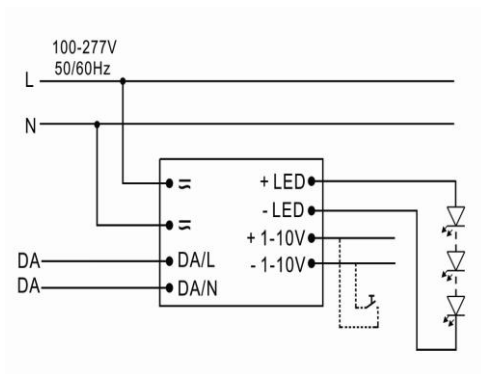
SPEC SHEET

Terminals

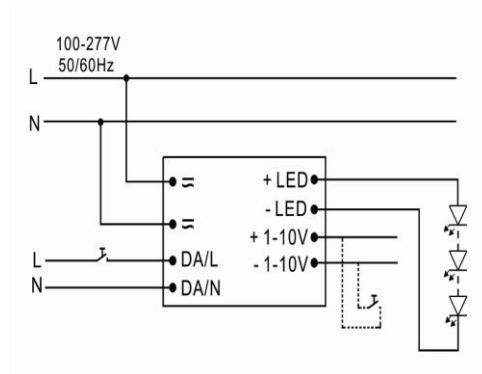


➤ Circuit Diagram

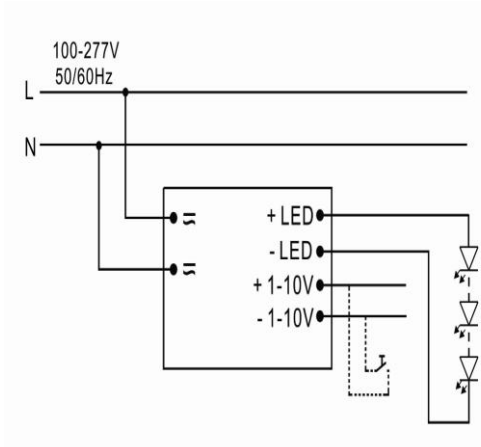
DALI dimming



Switch-Dim Dimming



I-10v dimming



Note: 1. Unused terminals have been omitted for clarity.

2. If connecting DALI interface, the I-10v and switch-dim function are disabled. Please refer to the relevant section in this datasheet for details.

3. Digital DALI signal or switchDIM can be wired on the same terminals (DA/N and DA/L).

LNDI54BL

Smart E-Dim Dali DRIVER

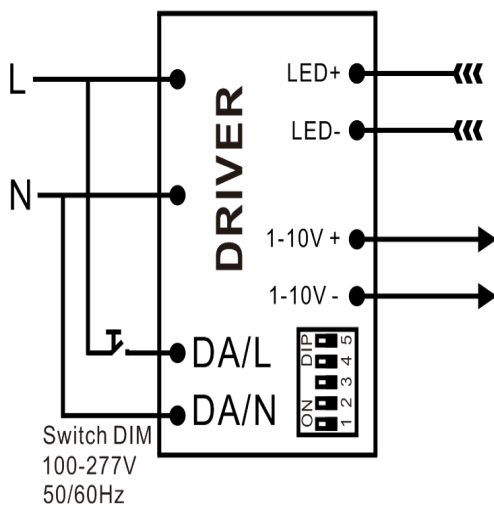
SPEC SHEET

➤ I-10v Interface dimming control

The I-10V input is operable via commercially available simple rotary wall switches designed for I-10V dimming equipment or from dedicated system central dimming controllers.

Note: This I-10v terminal also could be used for switch-dim terminal, but different from DALI switch dim terminal, this switch dim terminal just could be worked with low voltage switch(It means not need to wire connect with L). When use this port for switch, firstly need to press the switch for 4 or 5 times, then let it come into switch dim function, If you wire more than 2 lamps, you could find maybe these lamps not be synchronous. At this situation, if you want them keep synchronous, short press switch more than 6 or 7 times, when all these lamps under control, whether these lamp brightness is same or not, long press the switch and then all these lamps will increase 100% brightness. Then it will memory this and all these lamps will be synchronous.

➤ Switch-Dim dimming control(DALI side high voltage Push dim)



Digital DALI signal or switchDIM can be wired on the same terminals (DA/N and DA/L).

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%.



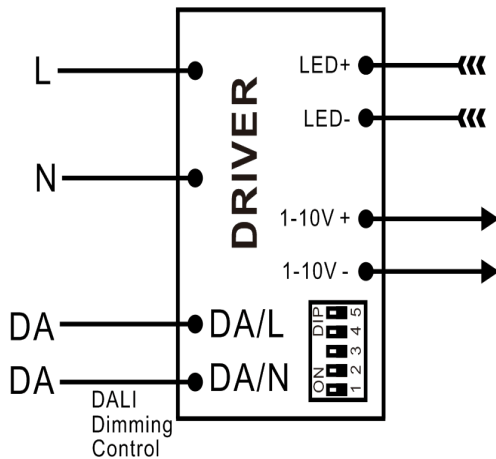
Note: Only use self-reset push button without indicator light.
Risk of short circuit.

LND I54BL

Smart E-Dim Dali DRIVER

SPEC SHEET

➤ 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 mm² 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



DALI RGB



DALI SC



DBC202D



DALI RGBW



DALI CCT4



DBC402D



DALI RGBWD



DALI CCT4U

More DALI Lighting control modules and details ,
please browse www.easeic.com

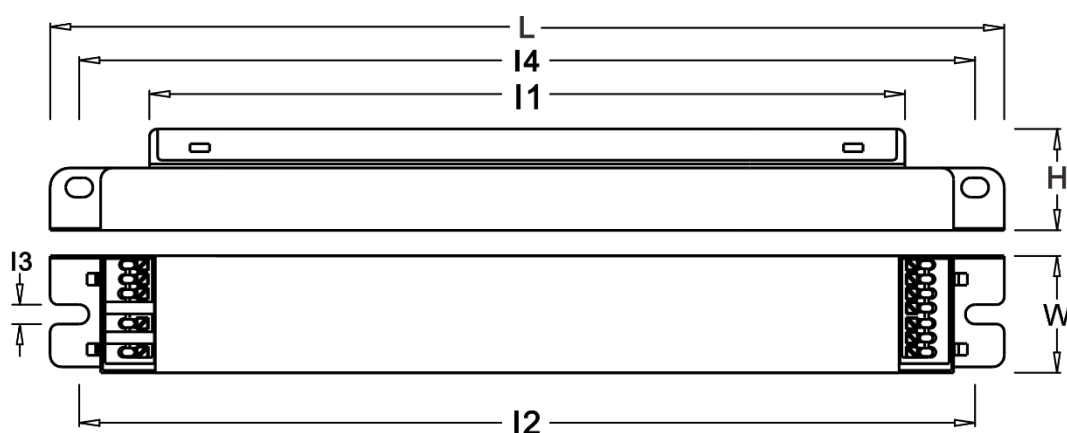
LND154BL

Smart E-Dim Dali DRIVER

SPEC SHEET

Mechanical Specifications

Mechanical Drawing:



Dimensions

	In.	mm
Case Length(L)	11.0	280
Case Width(W)	1.2	30
Case Height(H)	1.0	26
Mounting Holes(I1)	8.7	222
Mounting Holes(I2)	10.6	270
Mounting Holes(I3)	0.2	5
Mounting Holes(I4)	10.6	270
Overall Length	11.0	280

EASEIC

© Copyright 2013 EASEIC INC.
All rights reserved. Rev A2.0
Data is subject to change without notice.
www.easeic.com

Easeic Inc.

27 Hall Street, Brooklyn, NY 11205
Tel.: 1-718-243-9388
Fax: 1-718-243-9403
Customer Support
Customer Care: 1-646-4029788
E-Mail: ny@easeic.com

Easeic Asia Limited.

Rm. 19C, Lockhart Ctr., 301-307
Lockhart Rd., Wan Chai, Hong Kong
Tel.: 852-6955-8075
Fax: 852-6915-3639
E-Mail: info@easeic.com

Easeic Sci-tech Co., Ltd.

Building 6, Huangzhou Industrial
Zone, Chebei Road, Tianhe District,
Guangzhou, China, 510660
Tel.: 86-20-8230-9676
Fax: 86-20-8230-9677
E-Mail: sales@easeic.com