

Smart

LED Driver

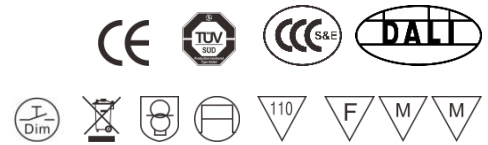
Design and Quality EASEIC of USA

LND180 AL

Smart E-Dim DALI DRIVER

SPEC SHEET

80W 20-54V 1050-1750mA DALI Dim
LND180 AL
673180



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 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%.
- Flickering less
- PUSH-Dim, dimming and switching via push-button with memory function.
- AC input (176~264Vac)
- Lower standby power 0.5W
- High PF>0.9, THD<10%
- Compact form factor; Fully isolated metal case.
- 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

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Electrical Specifications

Ordering Information	
Type	LND 180 AL
Order Code	673180
Full product name	Smart 80W 20-54V 1050-1750mA DALI Dim
Input Information	
Line Voltage	220-240Vac_rms
Line Current	0.41A MAX
Line Frequency	47/63Hz
Min, Mains Voltage operational	176[min]
Max, Mains Voltage operational	264[max]
THD(total)	<10%
Power Factor(PF)	>0.99
Input Power (Max.)	80W
Efficiency @Max Load and 70°C case	92%-87%
Inrush Current(Typ.)	Cold Start 30A(twidth=270us measured at 50% Ipeak) at 230VAC
Leakage Current(Typ.)	<0.75mA/230VAC
Output Information	
Output Power	56.7-80.5W(See Output current settings table)
Output voltage	20V to 54V
Output Constant Current	1050-1750mA ±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
Dimming Features	
Dimming Interface	DALI(IEC62386), Push-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	358x30x21mm (LxWxH)
Packing	0.41Kg(0.51lbs); 30pcs/12.3Kg/512*338*250mm

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

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Output Current Settings

LND180 AL, Constant Current output 1050-1750mA.

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

Factory default setting is 1050mA.

LND180 AL		DIP-Switch Settings						
Pout Max.	Vout DC	Iout DC	1	2	3	4	5	6
56.7W	20-54V	1050mA	ON	ON	ON	ON	ON	ON
59.4W	20-54V	1100mA	ON	ON	ON	--	ON	ON
62.1W	20-54V	1150mA	ON	ON	ON	ON	--	ON
64.8W	20-54V	1200mA	ON	ON	ON	--	--	ON
67.5W	20-54V	1250mA	ON	ON	ON	ON	ON	--
70.2W	20-54V	1300mA	ON	ON	ON	--	ON	--
72.9W	20-54V	1350mA	ON	ON	ON	ON	--	--
75.6W	20-54V	1400mA	ON	ON	ON	--	--	--
78.3W	20-54V	1450mA	--	ON	ON	--	--	--
81W	20-54V	1500mA	ON	--	ON	--	--	--
80.6W	20-52V	1550mA	--	--	ON	--	--	--
80W	20-50V	1600mA	ON	ON	--	--	--	--
80W	20-48.5V	1650mA	--	ON	--	--	--	--
79.9W	12-47V	1700mA	ON	--	--	--	--	--
80.5W	12-46V	1750mA	--	--	--	--	--	--

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

MCB	B10	B16	C10	C16
LND180 AL	9	15	16	26

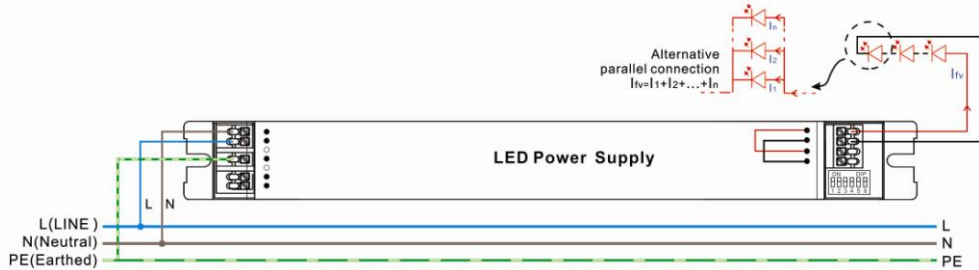
Note: These calculated values are based on MCB S201 series manufactured by ABB

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Dimming Control Wiring Diagrams



Note:

Install in accordance with National and Local Electrical Codes.

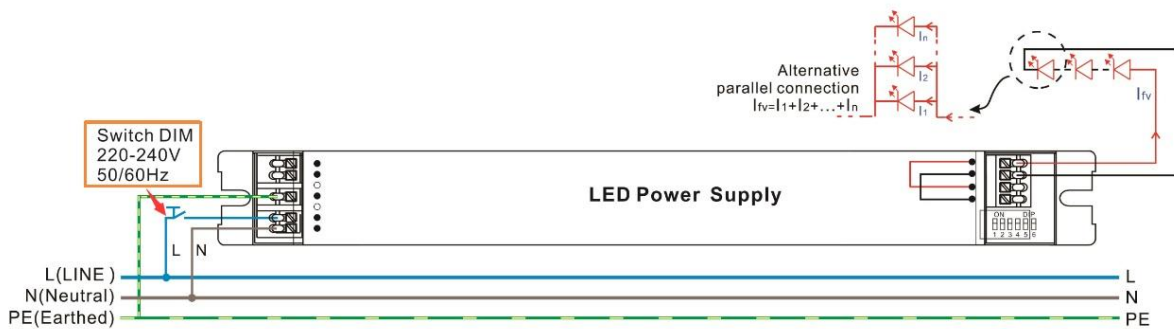
Use 16-24 AWG solid copper wire rated $\geq 300V/85^\circ C$.

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.

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%.

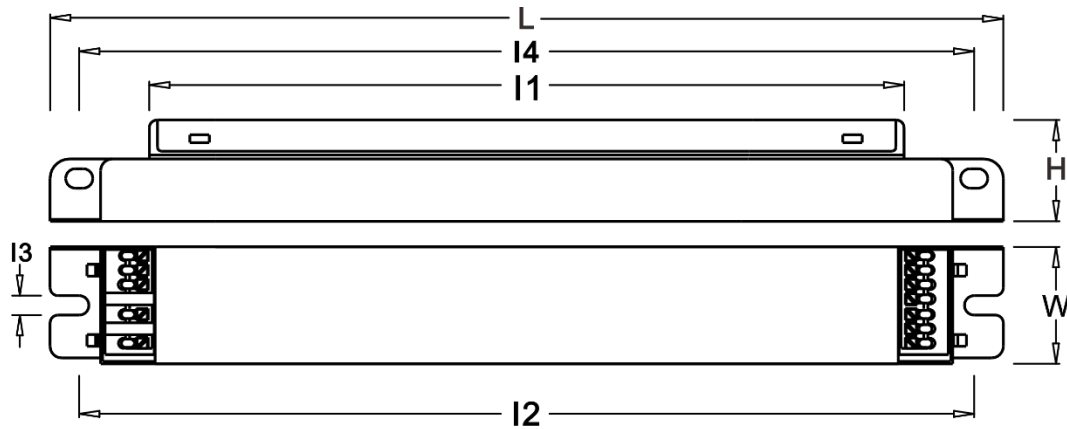
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Mechanical Specifications

Mechanical Drawing:



Dimensions

	In.	mm
Case Length(L)	114.2	360
Case Width(W)	1.2	30
Case Height(H)	0.8	21
Mounting Holes(I1)	11.5	292
Mounting Holes(I2)	13.8	350
Mounting Holes(I3)	0.2	4.1
Mounting Holes(I4)	13.8	350
Overall Length	114.2	360