

Features

- · Constant current output and current adjustable via DIP switch
- All-round protections: short circuit, over load, no load and anti-reverse connection
- Compact size
- 0-10V/PWM/Rx dimmable
- · Flicker free during the whole process of dimming
- 5-year warranty (please refer to the warranty condition)



Applications

Horticultural lighting · indoor office lighting · decorative lighting · commercial lighting · residential lighting

Descriptions

LF-BAA016-0400-42 is a 16W constant current 0-10V/PWM/Rx dimmable LED driver. Its rated input voltage is $48Vdc\pm5\%$ and output current can be adjusted via DIP switch from 100 to 400mA with every 50mA as a step. It features compact size, built-in design (inside the magnetic track box), high efficiency and flicker-free effect.

Product Model

LF - BAA 016 - 0400 - 42

- 42: maximum output voltage: 42V
- 0400: maximum output current: 400mA
- 016: rated power: 16W
- BAA: 0-10V/PWM/Rx dimmable LED driver

Lifud Technology Co., Ltd.



■ Electrical Characteristics

Model		LF-BAA016-0400-42					
	Output Current	Adjustable via DIP switch					
Environment Descriptions		100mA	150mA	200mA	250mA	300mA	350mA
	Output Voltage	9-42V (Vin-Vo ≥7V)					
	Output Power	16.8W max.					
	Flicker Index	IEC-Pst ≤1, CIE SVM ≤0.9, modulation depth ≤1% Complies with flicker-free standard: IEEE Std 1789-2015					
	Current Tolerance	\pm 10%	% ±8% ±5%				
Input	Input Voltage	48Vdc±5% (positive or negative electrode not necessary to be identified)					
	Input Current	0.45A max.					
	Efficiency	≥86%	≥88%	≥91%			≥92%
Protections	Short Circuit	Auto-recovery (after the short-circuit state is removed)					
	Over Load	The output current decreases when the actual voltage exceeds the output voltage and automatically recovers after the load is lightened.					
Protections	No Load	The driver cannot be easily damaged (no-load voltage ≤59V).					
	Anti-reverse Connection	When the input of driver is reversely connected, its output is of no abnormalities.					
	Operating Temperature	-20°C - +60°C					
Environment	Operating Humidity	20-90%RH (without condensation)					
Descriptions	Storage Temperature/ Humidity	-30°C - 80°C (6 months in Class I environment); 10-90%RH (without condensation)					
	Atmospheric Pressure	86-106kPa					
	IP Rating	IP20					
Other Parameters	RoHS	RoHS 2.0 (EU) 2015/863					
- urumotoro	Warranty Condition	5 years					
Testing Equipment	Digital power meter: CHROMA66202, oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber; Everfine EMS61000-5B: Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: TH9201B, flicker tester (flicker-free coefficient test): 60N-01, etc.						
Testing Remarks	If there are no special remarks, the above parameters are tested at the ambient temperature of 25°C, humidity of 50%, full load and input voltage of 48Vdc.						



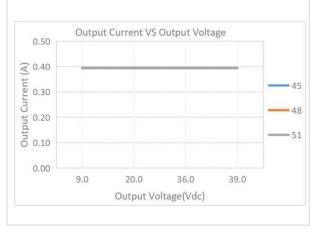
■ Electrical Characteristics

Testing Remarks

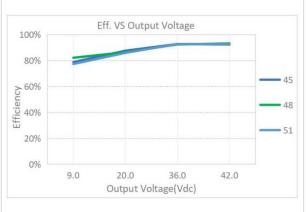
- 1. When using the magnetic function, pay attention to making the PCB insulated in case that the driver fails to work.
- 2. For some special requirements on driver's installation, make sure that the installation dimension match the one of PCB in case that the circuit board is damaged; during the installation, avoid the abnormalities such as short circuit, open circuit and so on which would incur the failure or damage of LED driver.
- 3. The plastic accessories matching the magnetic light driver must meet the fire rating of UL94-V0 or above.
- 4. Pay attention to keeping the driver away from water, moisture, etc. during application in case of the abnormality of short circuit.

■ Product Characteristic Curves

Output Current & Voltage Curve



Efficiency Curve



■ Product Terminal & DIP Switch Definitions

Product Terminals

INPUT		OUTPUT		
48VIN	DC input terminal (positive or negative electrode not necessary to be identified)	LED+	Positive electrode output of LED driver	
48VIN	DC input terminal (positive or negative electrode not necessary to be identified)	LED-	Negative electrode output of LED driver	
DIM1	Positive electrode output of 0-10V/PWM/Rx dimming terminal			
DIM2	Negative electrode output of 0-10V/PWM/Rx dimming terminal			



■ Product Terminal & DIP Switch Definitions

Product DIP Switch (current adjustable via built-in DIP switch)

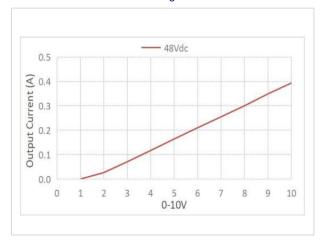
Current Adjustment Reference Table					
Output Current	1	2	3	DIP Switch Diagram	
100mA	OFF	OFF	OFF/ON		
150mA	OFF	ON	OFF	w 105	
200mA	OFF	ON	ON	ON DFF	
250mA	ON	OFF	OFF	<i>ಕ್ರೆಕ್ಕೆ</i> ಕ್ರ	
300mA	ON	OFF	ON	Excepti	
350mA	ON	ON	OFF	ON OFF	
400mA	ON	ON	ON		

■ Dimming Operation Instructions

0-10V Dimming Operation

- Connect 0-10V signal to DIM terminal.
- · Flicker free during the whole process of dimming
- DIM+/- (without signal connected): 100% rated current output

0-10V Dimming Curve



Remark: input: 48Vdc, output: 42Vdc/700mA (this data is measured by Lifud 0-10V dimmer and the chart is for reference only)

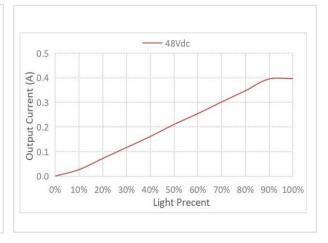


Dimming Operation Instructions

PWM Dimming Operation

- Connect PWM signal to DIM terminal.
- Compatible signal range: 400-4000Hz, amplitude: 10V
- DIM+/- (without signal connected): 100% rated current

PWM Dimming Curve



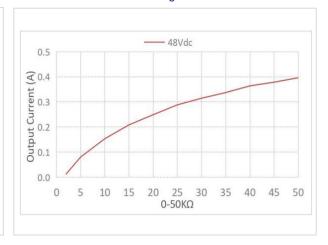
Remark: input: 48Vdc, output: 42Vdc/700mA (this data is measured by Lifud PWM dimmer and the chart is for reference only)

Rx Dimming Operation

Connect Rx signal to the DIM terminal.

- Dimming range: 0-53K (in normal/low temperature); 0-60K (in high temperature)
- DIM+/- (without signal connected): 100% rated current

Rx Dimming Curve

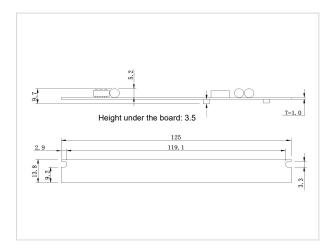


Remark: input: 48Vdc, output: 42Vdc/700mA (this data is measured by Lifud resistance dimmer and the chart is for reference only)



■ Structure & Dimensions (unit: mm)

Appearance dimension (positions of components are subject to the ones of autual object)



■ Packaging Specifications

Model	LF-BAA016-0400-42	
Carton Size	385*285*210 mm (L*W*H)	
Quantity	20 pcs/layer; 11 layers/ctn; 220 pcs/ctn	
Weight	0.01 kg/pc; 3.00 kg/ctn	



■ Transportation and Storage

1. Transportation

- Suitable transportation means: vehicles, boats and aeroplanes.
- In transit, it is necessary to prepare awnings for rain or sun protection. Moreover, please keep civilized loading
 and unloading to prevent the vibration or impact of LED driver as much as possible.

2. Storage

The storage of LED driver shall conform to the standard of Class I environment. When using LED drivers which
have been stored for more than 6 months, please re-test them firstly. Do not use them unless they are tested
to be qualified.

Cautions

- Please use Lifud LED driver according to its parameters in the specification, otherwise the LED driver may malfunction.
- · Using any incompatible light fixtures or those that have not been certified may cause fire, explosion or other risks.
- Man-made damage is beyond the scope of Lifud warranty service.

Remark: Lifud Tecnology Co., Ltd. reserves the right to interpret any contents of this specification.