

Features

- Supports 0-10V/PWM/Rx dimming
- THD <15%
- Output current adjustable via a DIP switch
- Standby power consumption ≤0.5W
- Flicker free
- IP20
- Suitable for Class II light fixtures
- 5-year warranty (please refer to the warranty condition)





Applications

Indoor office lighting \cdot decorative lighting \cdot commercial lighting \cdot residential lighting

Descriptions

LF-ABA030-0750-42 is a constant current LED driver with the maximum output power of 31.5W. Its rated input voltage range from 198 to 264Vac and its output current can be adjusted via a DIP switch from 500mA to 750mA with every 50mA as a step. Besides, it has all-round protections, including over voltage protection and short circuit protection. It is suitable for panel light, linear light and so on.

Product Model

LF - ABA 030 - 0750 - 42 42: maximum output voltage: 42V 0750: maximum output current: 750mA 030: rated power: 30W

ABA: indoor 3-in-1 dimming LED driver series



■ Electrical Characteristics

Model		LF-ABA030-0600-42			LF-ABA030-0750-42				
Output Voltage		25-42V							
Output	Output Current	500mA	550mA	600	mA	650mA		700mA	750mA
	Flicker Index	IEC-Pst≤1, CIE SVM≤0.4 Complies with IEEE Std 1789-2015.							
	Current Tolerance	(30-40V)±5%; (25-42V)±7%							
	Temperature Drift	±10%							
	Startup Time	<1S@230Vac							
	Input Voltage	220-240Vac (voltage limit: 198-264Vac)							
	DC Input Voltage		180-280Vdc						
	Input Frequency	47-63Hz							
	Input Current	0.3A max.							
	PF	≥0.93	≥0.94	≥0.0≤	≥0.95				
	THD <15%								
Input	Efficiency	≥83.5% ≥85%		≥86%					
	Inrush Current	<20A/120uS @230Vac							
	Loading Quantities of Circuit Breaker	Model	B10		C10		B16		C16
		Quantity (pcs	s) 26		26		42		42
	Leakage Current	<0.7mA							
	Standby Power Consumption	≤0.5W (dim to off)							
Barda etterre	Open Circuit	<59V							
Protections Short Circuit		Hiccup mode (auto-recovery)							
	Operating Temperature	-20°C - +45°C							
Environment Descriptions	Operating Humidity	20-90%RH (without condensation)							
	Storage Temperature/ Humidity	-40°C~+80°C (6 months in Class I environment); 10-90%RH (without condensation							
	Atmospheric Pressure	86-106kPa							



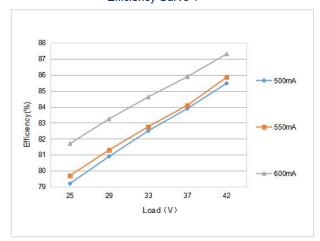
■ Electrical Characteristics

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Safety and EMC	Certifications	ENEC, CE, RCM, CCC			
	Withstanding Voltage	I/P-O/P: 3.75kV 5mA 60S			
	Insulation Resistance	I/P-O/P: >100MΩ@500Vdc			
	Safety Standards	ENEC: EN61347-1: 2015, EN 61347-2-13: 2014/A1: 2017, EN 62384: 2016/A1: 2009 CE-LVD: EN 61347-2-13: 2014/A1: 2017, EN 61347-1: 2015, EN 62493: 2015 RCM: AS 61347.2-13: 2018 CCC: GB19510.1-2009, GB19510.14-2009			
	ЕМІ	CE-EMC/RCM: EN55015, EN61000-3-2, EN61000-3-3 CCC: GB/T17743, GB17625.1, GB17625.2			
	EMS	CE-EMC/RCM: EN61000-4-2, 3, 4, 5 (lightning strike L-N: 1kV), 6, 11 CCC: GB/T17626.2, 3, 4, 5 (lightning strike L-N: 1kV), 6, 11			
	IP Rating	IP20			
Other	RoHS	RoHS 2.0 (EU) 2015/863			
Parameters	Warranty Condition	5 years (Tc ≤87°C)			
	Noise Level	≤25db (this data is measured in a soundproof room and the noise collector should be 10CM away from LED driver)			
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, withstanding voltage tester: TH9201B, flicker tester (flicker-free coefficient test) 60N-01, etc.				
Additional Remarks	 It is recommended that user install over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety. The LED driver used in combination with the end device is one of the accessories of the whole light fixture, and the EMC of the whole light fixture is not only susceptible to the driver itself, but to the LED light fixture and the whole light fixture's wiring. Thus, the manufacturer of LED light fixture should re-confirm the EMC of the whole light fixture before the whole light fixture is finished. The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current. The above parameters are tested at the ambient temperature of 25°C, humidity of 50%, full load and input voltage of 230Vac without any special remarks. Lifud reserves the right to interpret any of the above parameters. 				

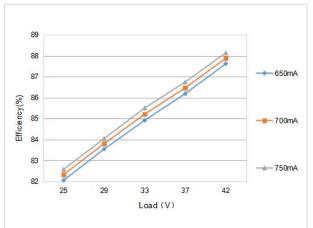


■ Product Characteristic Curves

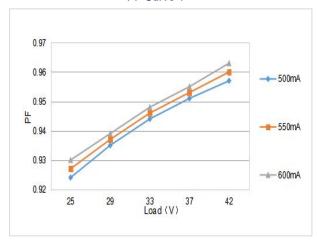
Efficiency Curve 1



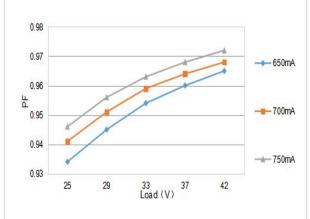
Efficiency Curve 2



PF Curve 1



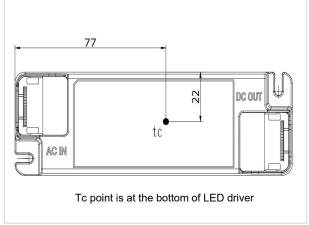
PF Curve 2



Lifetime Curve



Tc Point Testing Diagram



■ Definitions of Product Terminals

	INPUT	OUTPUT		
AC-L	Input terminal of AC live wire	LED+	Positive electrode output of LED driver	
NC		LED-	Negaitive electrode output of LED driver	
AC-N	Input terminal of AC neutral wire	DIM+	Positive electrode of dimming	
/	1	DIM-	Negaitive electrode of dimming	

■ Definitions of DIP Switch

LF-ABA030-0600-42 (500-600mA)			LF-ABA030-0750-42 (650-750mA)			
I rated (CC)	1	2	I rated (CC)	1	2	
600mA	OFF	ON	750mA	OFF	ON	
550mA	ON	OFF	700mA	ON	OFF	
500mA	OFF	OFF	650mA	OFF	OFF	

Remark: please do not use the DIP switch when the LED driver is powered on. If DIP switch function needed, please disconnect input AC power supply first.

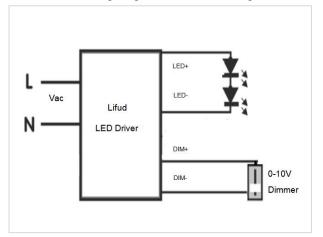


0-10V Dimming Operation

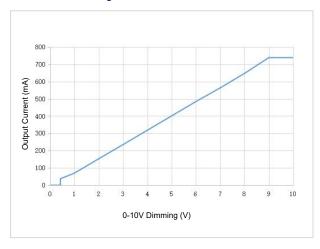
Connect 0-10V signal to DIM terminal.

- In 0-10V dimming mode, when the input voltage is $0.5V \!\pm\! 0.1,$ the light turns on. When it's $0.3V \!\pm\! 0.1,$ the light turns off.
- Dimming depth: 3% (typical value)
- DIM+/- (without signal connected): 100% rated current output

Wiring Diagram of 0-10V Dimming



Dimming Curve of Dim-to-Off Version



Input: 230Vac, output: 42Vdc/750mA (The data is measured by Lifud 0-10V dimmer and the chart is for reference only)

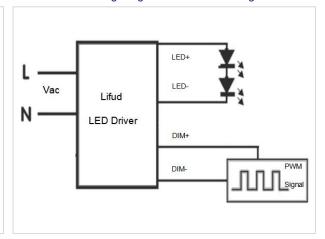


PWM Dimming Operation

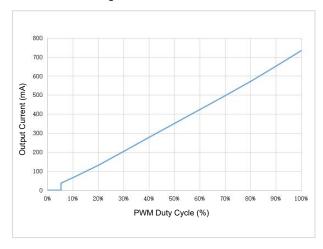
Connect PWM signal to DIM terminal.

- Compatible signal range: 2500-3000(Hz); amplitude: 9-10(V)
 - When it is $6\% \pm 1\%$, the light turns on; when it is $5\% \pm 1\%$, the light turns off.
- Dimming depth: 4% (typical value)
- DIM+/- (without signal connected): 100% rated current output

Wiring Diagram of PWM Dimming



Dimming Curve of Dim-to-Off Version



Input: 230Vac, output: 42Vdc/750mA (The data is measured by PWM signal generator RIGOL and the chart is for reference only)

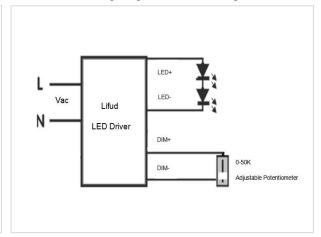


Rx Dimming Operation

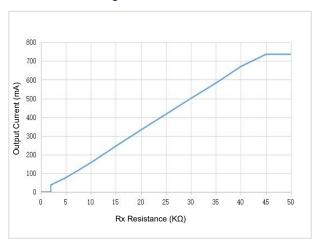
Connect Rx signal to DIM terminal.

- Range: 0-100KΩ When it is $3K \pm 1K$, the light turns on; when it is $2K \pm 1K$, the light turns off.
- Dimming depth: 4% (typical value)
- DIM+/- (without signal connected): 100% rated current output

Wiring Diagram of Rx Dimming



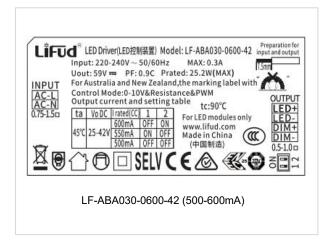
Dimming Curve of Dim-to-Off Version

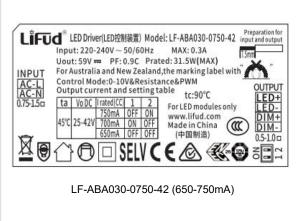


Input: 230Vac, output: 42Vdc/750mA (The data is measured by LEVITON dimmer and the chart is for reference only)



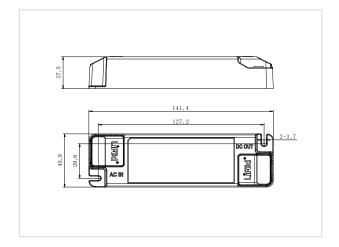
■ Label





■ Structure & Dimensions (unit: mm; tolerance: ±0.5mm)

Model	Overall Appearance Dimension (L*W*H)	Distance Between 2 Positioning Holes	Diameter of Positioning Hole
LF-ABA030-0750-42	141.4*45.9*27.7 mm	127.2 mm	3.7 mm





■ Packaging Specifications

Model	LF-ABA030-0750-42	
Carton Size	385*285*210 mm (L*W*H)	
Quantity	10 pcs/layer; 7 layers/ctn; 70 pcs/ctn	
Weight	0.1355 kg/pc; 10.35 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
- 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.