Features

- Triac dimmable
- Compatible with trailing edge dimmers
- Output current adjustable via DIP switch
- Flicker free; isolated
- IP20
- Suitable for Class II light fixtures
- 5-year warranty (please refer to the warranty condition)



Applications

· Panel light · down light · spot light

Descriptions

LF-ABT040-1050-42 is a 40W (max.) constant current Triac dimmable LED driver. Its rated input voltage ranges from 220 to 240Vac and output current is adjustable from 700 to 1000mA via DIP switch with every 100mA as a step. Besides, it is compatible with trailing edge dimmers and has all-round protections: over voltage protection and short circuit protection.

Product Model

LF - ABT 040 - 1000 - 42

- 42: max. output voltage: 42V
- 1000: max. output current: 1000mA
- 040: rated power: 40W
- ABT: external Triac dimmable LED driver

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■ Electrical Characteristics

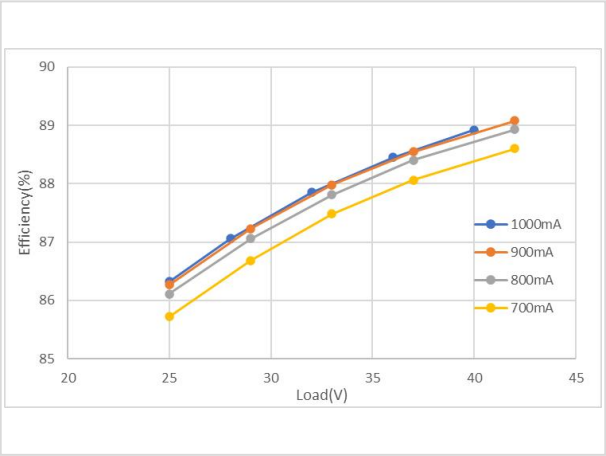
Model		LF-ABT040-1000-42				
Output	Output Voltage	25-42V				25-40V
	Output Current	700mA	800mA	900mA		1000mA
	Flicker Index	IEC-Pst≤1, CIE SVM≤0.4 According to IEEE Std 1789-2015				
	Current Tolerance	±5%				
	Temperature Drift	±10%				
	Start-up Time	<1.5S@230Vac				
Input	Input Voltage	220-240Vac (voltage limit: 198-264Vac)				
	Input Frequency	47-63Hz				
	Input Current	0.4A max.				
	PF	≥0.91	≥0.92	≥0.93		≥0.94
	THD	<25%				
	Efficiency	≥86%	≥87%	≥87%		≥87%
	Inrush Current	<20A/100uS @230Vac				
	Loading Quantity on Circuit Breaker	Model	B10	C10	B16	C16
		Quantity (pcs)	16	16	26	26
	Leakage Current	<0.7mA				
Protection Characteristics	Open Circuit	<59V				
	Short Circuit	No damage (auto-recovery)				
Environment Descriptions	Operating Temperature	-20℃~+45℃				
	Operating Humidity	20-90%RH (no condensation)				
	Storage Temperature/ Humidity	-40℃~+80℃ (6 months in Class I environment); 10-95%RH (no condensation)				
	Atmospheric Pressure	86-106kPa				

■ Electrical Characteristics

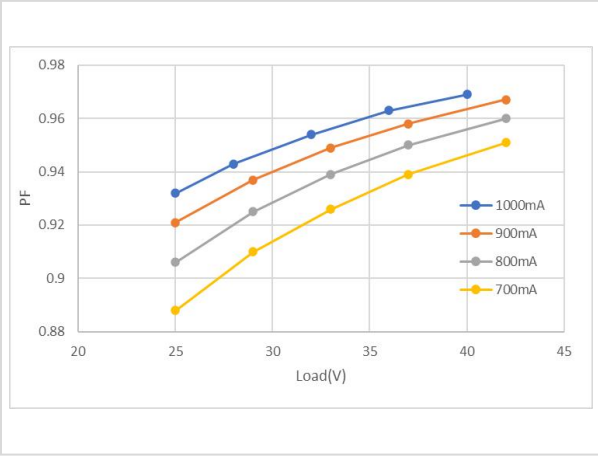
Safety & EMC	Certifications	TUV-ENEC, CE, CB, UKCA, RCM, CCC, SAA
	Withstand Voltage	I/P-O/P: 3.75kV 5mA 60S
	Insulation Resistance	I/P-O/P: >100MΩ@500Vdc
	Safety Standards	ENEC: EN61347-1:2015, EN 61347-2-13:2014/A1:2017, EN 62384: 2016/A1:2009 CE-LVD: EN 61347-2-13:2014/A1:2017, EN 61347-1:2015, EN 62493:2015 CB: IEC 61347-1:2015, IE61347-2-3:2014, IEC 61347-2-13:2014/AMD1:2016 SAA: AS 61347.2-13:2018 CCC: GB19510.1-2009, GB19510.14-2009 UKCA-LVD: EN 61347-1:2015/A1:2021 EN 61347-2-13:2014/A1:2017
	EMI	CE-EMC/RCM/UKCA-EMC: EN55015, EN61000-3-2, EN61000-3-3 CCC: GB/T17743, GB17625.1, GB17625.2
	EMS	CE-EMC/RCM/UKCA: EN61000-4-2, 3, 4, 5 (L-N: 1kV), 6, 11 CCC: GB/T17626.2, 3, 4, 5 (L-N: 1kV), 6, 11
Other Parameters	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty	5 years (Tc≤90℃)
	Noise Level	≤29dB (this data is measured in a soundproof room and the noise collector should be 10CM away from LED driver)
Test Equipment	AC power source: CHROMA6530, digital power meter: CHROMA66202, oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectroanalyzer: KH3935, Hi-pot tester: EEC SE7440, flicker tester (flicker-free coefficient test) Everfine LFA-3000, etc.	
Test Remark	If there are no special remarks, the above parameters are tested at the ambient temperature of 25℃, humidity of 50%, full load and input voltage of 230Vac/50Hz.	
Additional Remarks	1. It is recommended that user install the over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety. 2. 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. 3. The number of LED drivers that can be connected to a circuit breaker and the inrush current are tested under the same conditions. 4. It is recommended to use it together with the trailing edge dimmers. It is not recommended to directly connect the LED driver to the mains. 5. It is recommended to connect the luminaire first and then the mains. 4. Lifud Technology Co., Ltd. reserves the right to interpret all parameters above.	

■ Product Characteristic Curves

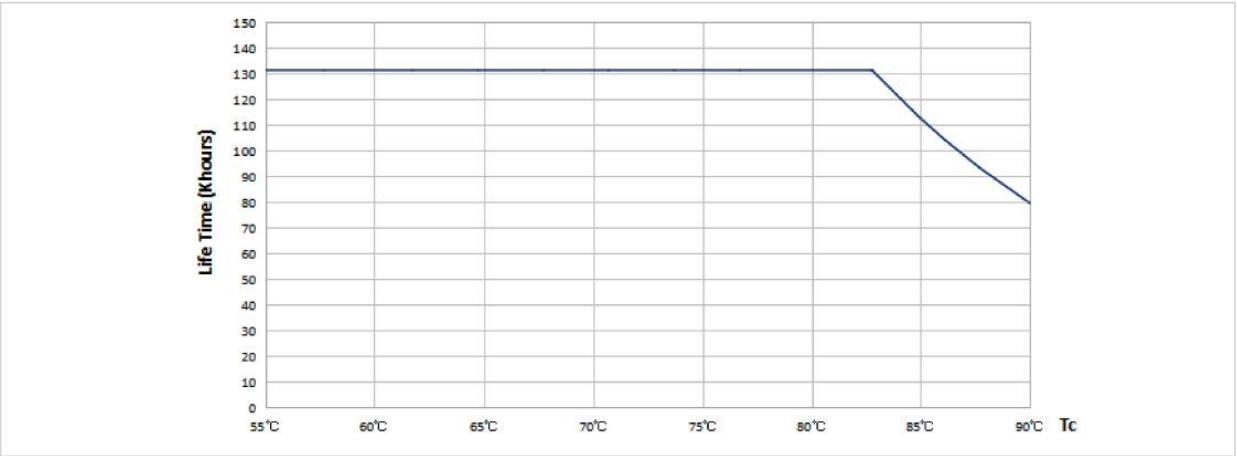
Efficiency Curve



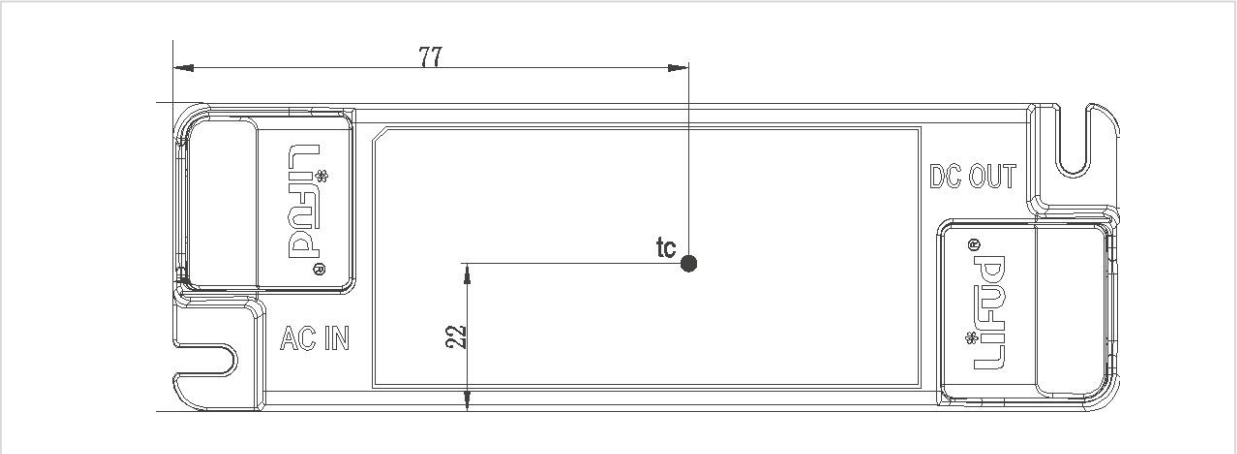
PF Curve



Lifetime Curve



Tc Point Test Diagram



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■ Product Definition

Product terminals

INPUT	
AC-L	AC live wire input
AC-N	AC neutral wire input

OUTPUT	
LED+	Positive terminal output of LED driver
LED-	Negative terminal output of LED driver

Product DIP Switch

LF-ABT040-1000-42			
Vo DC	I rated (CC)	1	2
25-40V	1000mA	0N	ON
25-42V	900mA	ON	OFF
	800mA	OFF	ON
	700mA	OFF	OFF

Remarks:

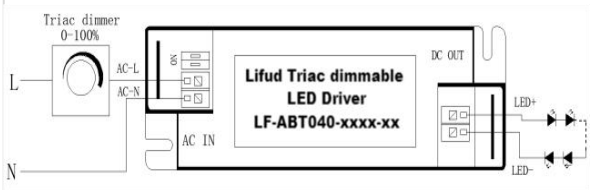
- When adjusting the output current via the DIP switch, please disconnect input AC power supply first.

■ Triac Dimming Operation Instructions

Triac Dimming Operations

- Connect AC live wire to the input of dimmer and the output wire of dimmer to AC-L;
- Connect AC neutral wire to AC-N

Wiring Diagram of Triac Dimming



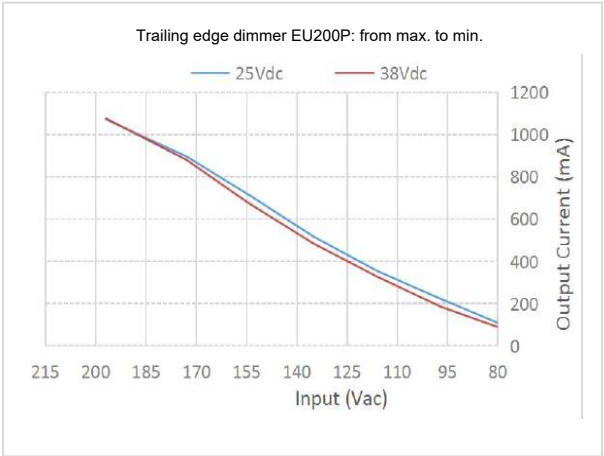
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■ Triac Dimming Operation Instructions

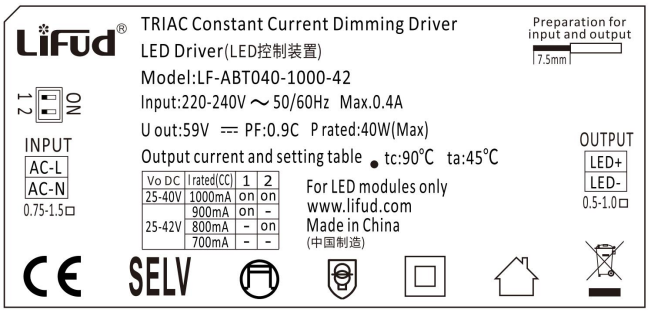
Triac Dimming Curve 1



Triac Dimming Curve 2



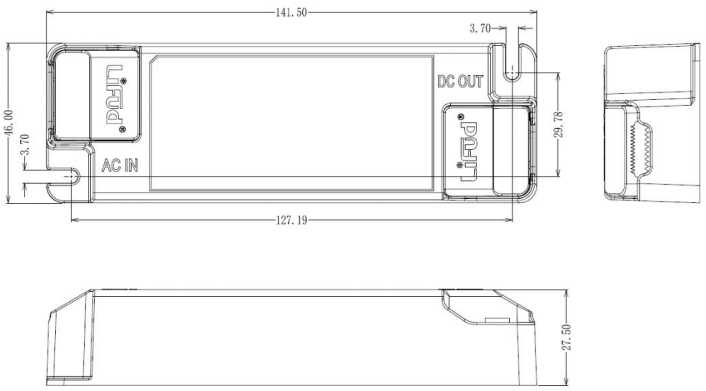
■ Label



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

Model	Overall Appearance (L*W*H)	Distance Between 2 Positioning Holes	Diameter of Positioning Hole
LF-ABT040-1000-42	141.5*46*27.5 mm	127.2*29.78 mm	3.7 mm

Dimensions (L*W*H) : 141.5*46*27.5mm



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■ Packaging Specifications

Model	LF-ABT040-1000-42
Carton Size	385*285*210 mm (L*W*H)
Quantity	10 pcs/layer; 7 layers/ctn; 70 pcs/ctn
Weight	0.18 kg/pc; 12.9 kg/ctn

■ Transportation & 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 on 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 Technology Co., Ltd. reserves the right to interpret any content of this specification.

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