Product Description

LF-AAT040-1050-42 is a 40W constant current flicker free LED driver with Triac dimming function. It is compatible with leading edge and trailing edge dimmers. It has flicker free effect during the whole process of dimming. The dimming range is 0-100%. The dimming depth is 0.1%. The input voltage range is 198-253Vac. The output current can be adjusted via the DIP switch from 700mA to 1050mA, in steps of 50mA.

Features

- IP20
- Suitable for Class II light fixtures
- Constant current output and the output current can be adjusted via the DIP switch
- Built-in active PFC function
- 0.1% dimming depth
- Triac dimming
- Compact size
- Smooth dimming effect with 0.1% dimming depth
- 5-year warranty (Please refer to the warranty condition.)

Applications

- EU-Standard panel light
- Spot light
- Down light

Product Model

LF- AAT 040 - 1050- 42

- 42: maximum output voltage of 42V
- 1050: maximum output current of 1050mA
- 040: rated power of 40W
- AAT: CC Triac dimming LED driver series

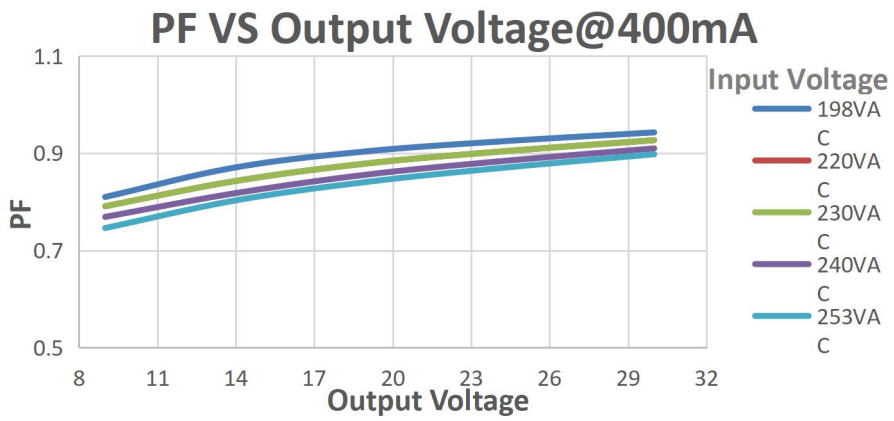
Electrical Characteristics

Model		LF-AAT0401050-42							
Output	Output Voltage	9-42V	9-42V	9-42V	9-42V	9-42V	9-42V	9-40V	9-38V
	Output Current	Adjustable current via the DIP switch, please refer to the DIP Switch Table.							
		700mA	750mA	800mA	850mA	900mA	950mA	1000mA	1050mA
	Flicker Index	IEC-Pst ≤1, CIE SVM ≤0.9, Modulation Depth ≤1% Conforms to the flicker free standard (IEEE Std 1789-2015)							
	Current Tolerance	±5%							
	Temperature Drift	±5%							
	Startup Time	<1.5S@230Vac, 38V/1050mA							
Input	Input Voltage	220-240Vac (voltage limit: 198-253Vac)							
	DC Input Voltage	176-280Vdc							
	Input Frequency	47Hz-63Hz							
	Input Current	0.3A Max.							
	PF	≥0.88	≥0.89	≥0.85	≥0.90	≥0.90	≥0.90	≥0.90	≥0.90
	Efficiency	≥83%	≥83%	≥83%	≥84%	≥84%	≥84%	≥83%	≥83%
	Inrush Current	≤60A&2600uS@230Vac							
	Anti-Surge	L-N: 1KV							
	Leakage Current	≤0.5mA							
Protections	Open Circuit	<59V							
	Short Circuit	Hiccup Mode (auto-recovery)							
Environment Descriptions	Working Temperature	-20℃~+45℃							
	Working Humidity	20-90%RH (no condensation)							
	Storage Temperature/Humidity	-30℃~+60℃ (six months under class I environment); 10-90%RH (no condensation)							
	Atmospheric Pressure	86KPa~106KPa							

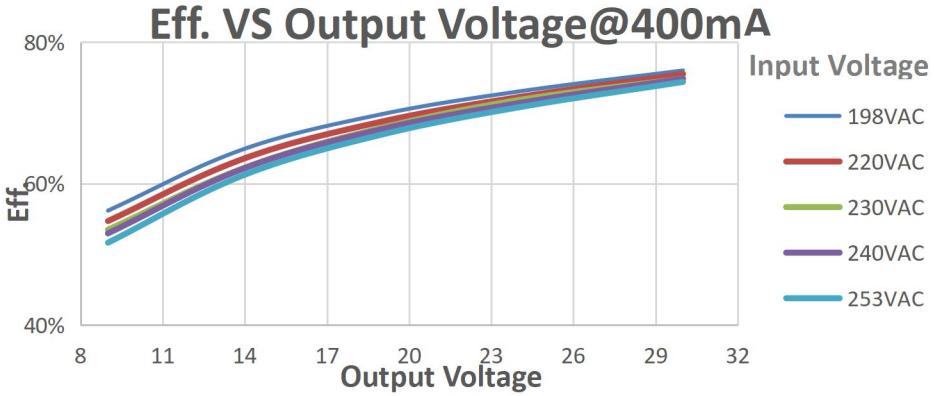
Safety & Electromagnetic Compatibility	Certifications	CE, CCC
	Withstanding Voltage	I/P-O/P: 3.75kV 5mA 60S
	Insulation Resistance	I/P-O/P: >100MΩ@500Vdc
	Safety Standards	CE-LVD: EN 61347-2-13: 2014/A1: 2017, EN 61347-1: 2015, EN 62493: 2015 CCC: GB19510.1-2009, GB19510.14-2009
	EMI	CE-EMC: EN55015, EN61000-3-2, EN61000-3-3 CCC:GB/T17743, GB17625.1, GB17625.2
	EMS	CE-EMC: EN61000-4-2, 3, 4, 5, 6, 11 CCC: GB/T17626.2, 3, 4, 5, 6, 11
Other Parameters	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty Condition	5 yrs (Tc≤86℃)
	Noise Level	≤29dBA (It is tested in a quiet room and the noise collector should be tested 10CM from the LED driver)
Remarks	1. It is recommended that client install over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety. 2. Please disconnect input AC power supply before adjusting the output current via the DIP switch. 3. The PC shade, casing and plug for assembling the LED driver in the light fixture must meet the fire rating of UL94-V0 or above. 4. The LED driver used in combination with the end device is one of the accessories in the whole light fixture, and its EMC 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 performance of LED driver before the whole light fixture is finished. 5. The above parameters are tested at the ambient temperature of 25℃, humidity of 50%, full load, input voltage of 230Vac/50Hz without any special remarks.	

Product Characteristic Curves

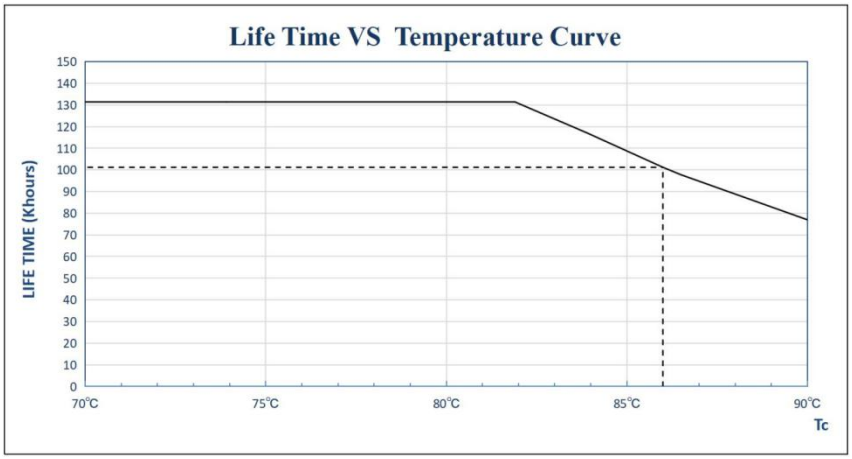
■ PF Curve



■ Efficiency Curve



■ Lifetime Curve



Instructions of Dimming Operation

■ Terminals

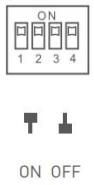
INPUT

AC-L	Input terminal of AC live wire
AC-N	Input terminal of AC neutral wire

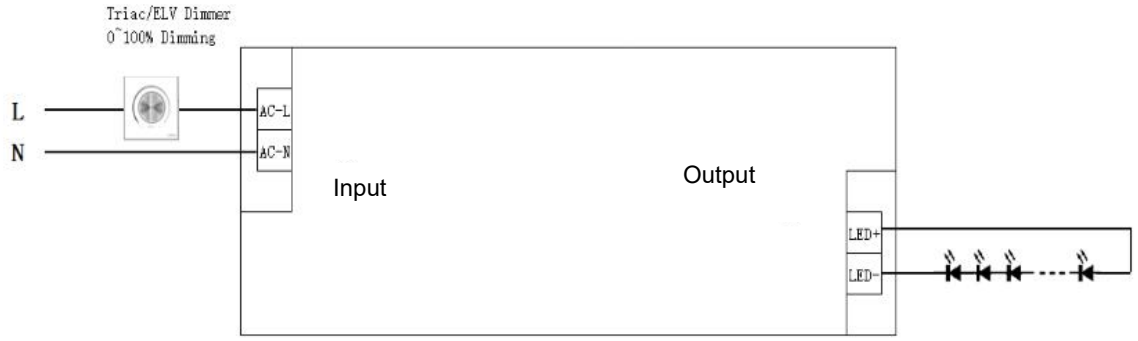
OUTPUT

LED+	Positive electrode output of the driver
LED-	Negative electrode output of the driver

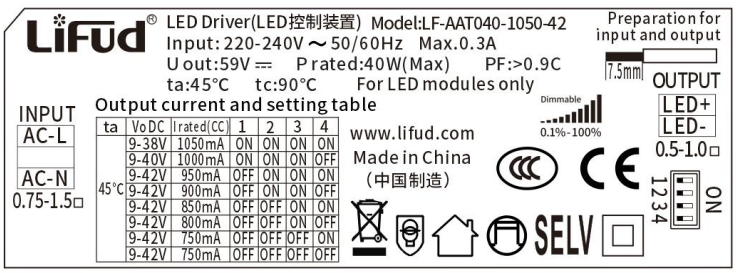
■ DIP Switch

I rated (CC)	1	2	3	4	DIP Switch Diagram
1050mA	ON	ON	ON	ON	
1000mA	ON	ON	ON	OFF	
950mA	OFF	ON	ON	ON	
900mA	OFF	ON	ON	OFF	
850mA	OFF	OFF	ON	ON	
800mA	OFF	OFF	ON	OFF	
750mA	OFF	OFF	OFF	ON	
700mA	OFF	OFF	OFF	OFF	

■ Triac Dimming Wiring Diagram

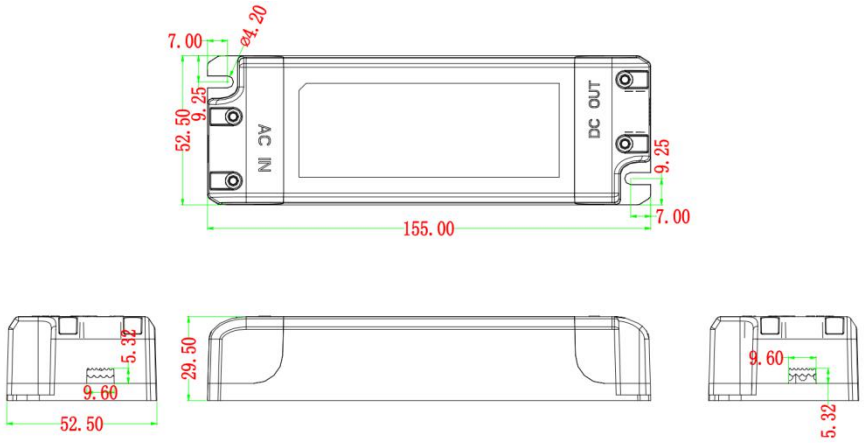


Label



ta	Vo DC	I rated(CC)	1	2	3	4
45°C	9-38V	1050mA	ON	ON	ON	ON
	9-40V	1000mA	ON	ON	ON	OFF
	9-42V	950mA	OFF	ON	ON	ON
	9-42V	900mA	OFF	ON	ON	OFF
	9-42V	850mA	OFF	OFF	ON	ON
	9-42V	800mA	OFF	OFF	ON	OFF
	9-42V	750mA	OFF	OFF	OFF	ON
	9-42V	750mA	OFF	OFF	OFF	OFF

Structures & Dimensions (unit: mm)



Packaging Specifications

Model	LF-AAT030-0750-42
Packaging Dimensions	385*285*210 mm (L*W*H)
Quantities	8 pcs/layer; 5 layers/ctn; 40 pcs/ctn
Weights	0.209 kg/pc; 8.86 kg/ctn

Transportation & Storage

■ **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.

■ **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.

Attention

■ 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.

■ The problem of man-made damage to LED driver cannot be solved by Lifud.

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