

Product Description

LF-AAA040 is a 40W constant current LED driver. It has 0-10V+PWM+Rx dimming functions and 12V auxiliary power supply (50mA maximum). The output current can be adjusted via the DIP switch from 550mA to 1050mA, in steps of 50mA.

Features

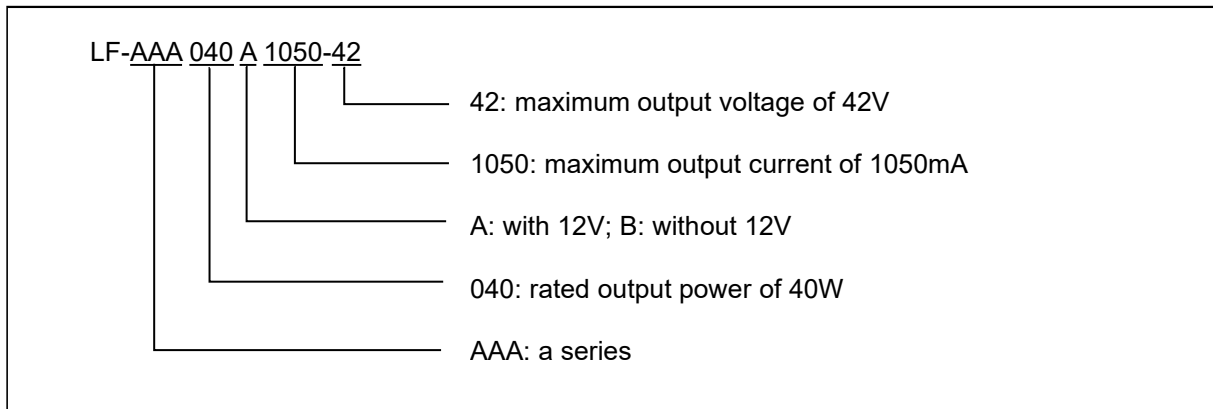
- IP20
- Suitable for Class II light fixtures
- Constant current output. The output current can be adjusted via the DIP switch
- Built-in active PFC function
- Standby power consumption is less than 0.5W
- 12Vdc 50mA auxiliary power supply
- 0-10//PWM/Rx dimming function
- 5-year warranty (Please refer to the warranty condition.)

Applications

- Indoor office lighting
- Decorative lighting
- Commercial lighting
- Residential lighting



Product Naming



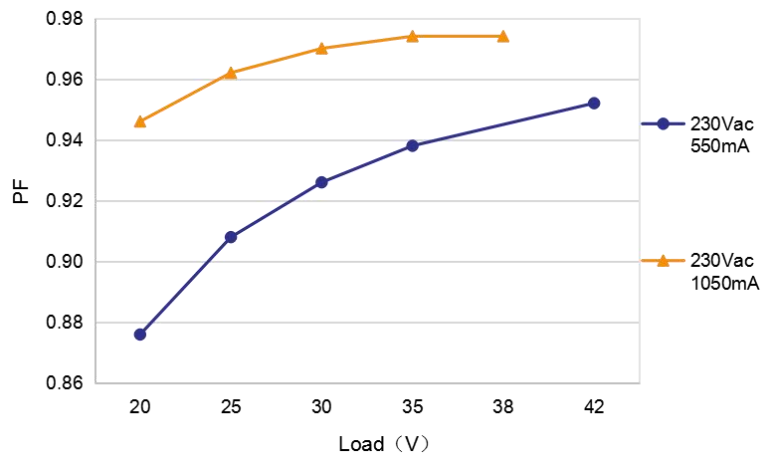
Electrical Characteristics

Model		LF-AAA040A1050-42/LF-AAA040B1050-42												
Output	Output Voltage	9-42V										9-40V	9-38V	
	Output Current	550 mA	600 mA	650 mA	700 mA	750 mA	800 mA	850 mA	900 mA	950 mA	1000 mA	1050 mA		
	Auxiliary Output (version A)	12Vdc±5% 50mA(max)												
	Percent Flicker (Modulation Depth)	.<1% (Meet with flicker free standard: IEEE Std 1789-2015)												
	Ripple Current	<10% (rated current)												
	Current Tolerance	±5%												
	Temperature Drift	±5%												
	Start-up Time	<0.5S@230Vac												
Input	Input Voltage	220-240Vac (voltage limit: 198-264Vac)												
	DC Input Voltage	180-280Vdc												
	Input Frequency	47Hz-63Hz												
	Input Current	0.3A Max.												
	Power Factor	≥0.9@230Vac												
	THD	≤15%												
	Efficiency	≥86 %	≥86.5 %	≥87 %	≥87.5%				≥88%					
	Inrush Current	≤60A & 260uS @230Vac												
	Load Quantity Carried by the Circuit Breaker	Circuit Breaker Model	B10			C10			B16			C16		
		Quantity (pcs)	25			40			40			64		
Leakage Current	≤0.5mA													
Standby Power Consumption	≤0.5W (DIM OFF)													
Protection Characteristics	Open Circuit Protection	<59V												
	Short Circuit Protection	Hiccup mode (auto-recovery)												

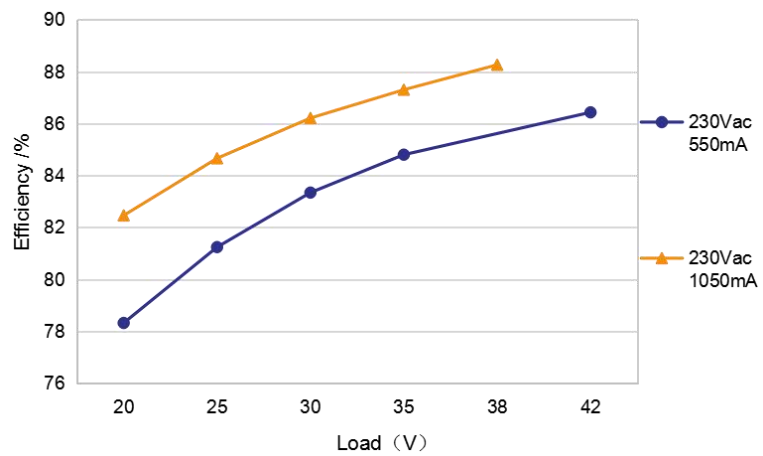
Environment Description	Working Temperature	-30℃~+45℃
	Working Humidity	20-90%RH (no condensation)
	Storage Temperature/Humidity	-30℃~+ 60℃ (six months under class I environment); 10-95%RH (no condensation)
	Atmospheric Pressure	86KPa~106KPa
Safety & Electromagnetic Compatibility	Certifications	ENEC, CE, CB, RCM, CCC, SAA
	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 CCC: GB19510.1-2009, GB19510.14-2009 RCM: AS 61347.2-13: 2018 CE-LVD: EN 61347-2-13: 2014/A1: 2017, EN 61347-1: 2015, EN 62493: 2015 CB: IEC 61347-1: 2015, IEC61347-2-3: 2014, IEC 61347-2-13: 2014/AMD1: 2016
	EMI	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 1KV), 6, 11 CCC: GB/T17626.2, 3, 4, 5 (lightning strike 1KV), 6, 11
Others	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty Condition	5 yrs (Please refer to the lifetime curve)
Remarks	<p>1. It is recommended that customer should install overvoltage and undervoltage protection devices and surge protection devices in the power supply circuits of the light fixtures to ensure safety before connecting to electricity.</p> <p>2. As an accessory, the LED driver is not the only factor determining the EMC performance of the LED light fixture. The structure and the wiring of the light fixture are also relevant. Thus it's strongly recommended the LED light fixture manufacturer re-confirms the EMC of the whole LED light fixture.</p> <p>3. The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current test.</p> <p>4. Unless otherwise stated, the parameters above are test results under these conditions: ambient temperature 25℃, humidity 50%, 100% load, maximum output current and input voltage 230Vac.</p>	

Product Characteristic Curves

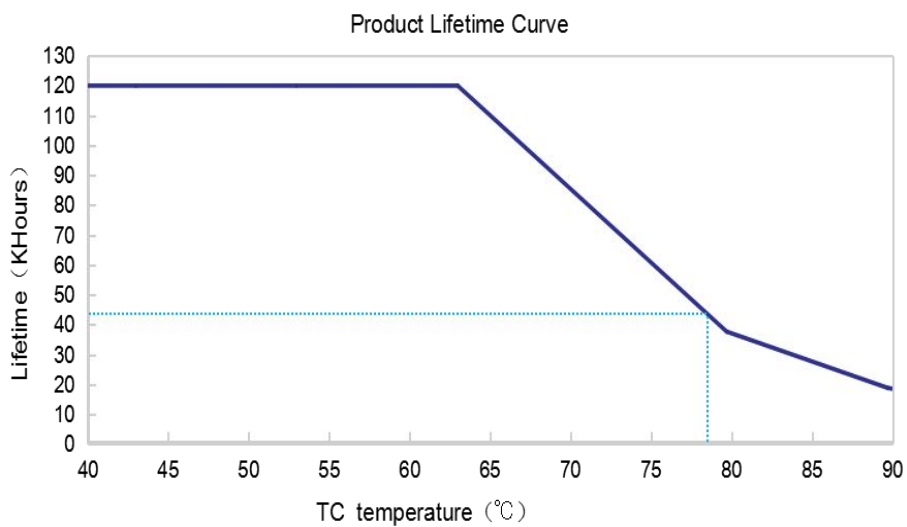
■ **PF Curve**



■ **Efficiency Curve**



■ **Lifetime Curve**



Instructions of Dimming Operation

■ Terminals (Version A)

INPUT

12V	Positive electrode of 12V
DIM+	Positive electrode of dimming
DIM-	Negative electrode of dimming/12V
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

■ Terminals (Version B)

INPUT

DIM+	Positive electrode of dimming
DIM-	Negative electrode of dimming
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 Table

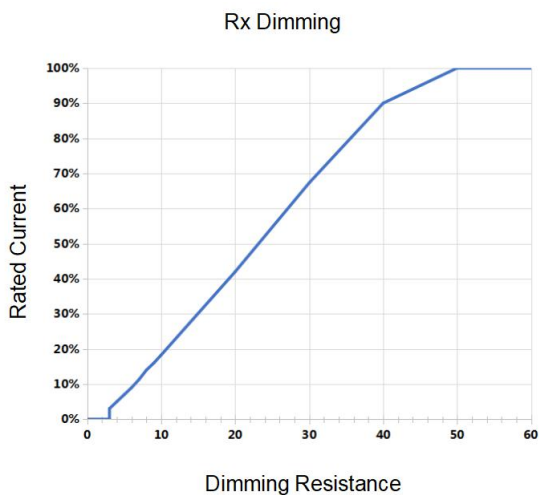
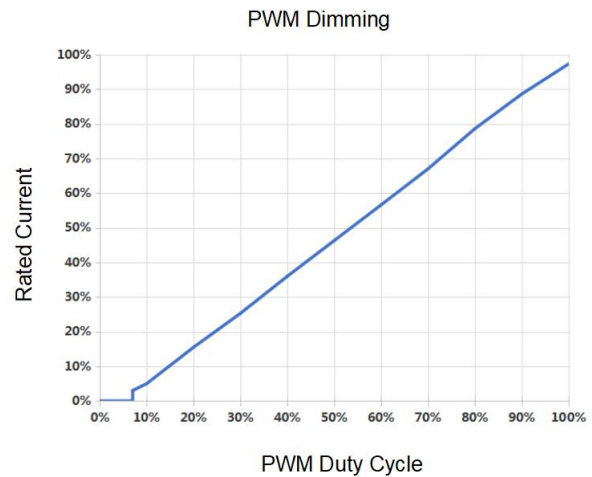
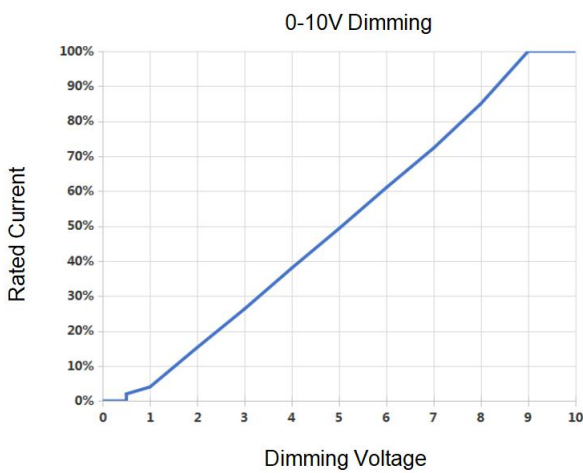
I rated (C.C.)	1	2	3	4
1050mA	OFF	OFF	OFF	OFF
1000mA	OFF	OFF	OFF	ON
950mA	OFF	OFF	ON	OFF
900mA	OFF	OFF	ON	ON
850mA	OFF	ON	OFF	OFF
800mA	OFF	ON	OFF	ON
750mA	OFF	ON	ON	OFF
700mA	OFF	ON	ON	ON
650mA	ON	OFF	OFF	OFF
600mA	ON	OFF	OFF	ON
550mA	ON	OFF	ON	OFF

Remark: Except the settings mentioned in the table above, other DIP switch settings are default to be the maximum current 1050mA.

■ Operation Instructions of 0-10V/PWM/Rx Dimming

- Connect the 0-10V, PWM or Rx signal to the DIM terminals. Positive electrode connects to DIM+, negative electrode connects to DIM-.
- In 0-10V dimming mode, when the input voltage is less than 0.3V, the light will be turned off. When it's more than 0.5V, the light will be turned on.
- The minimum dimming depth of 0-10V is 0.1%.
- The dimming depth of PMW is 0.1%.
- The dimming depth of Rx dimming is 0.1%. (3KΩ DIM off / 50kΩ full load)
- DIM+/- (no signal connection): 100% rated current

■ 0-10V/PWM/Rx Dimming Curve



Label (for reference only)

LiFud LED Driver Model: LF-AAD040A1050-42 **DALI**

Input: 220-240V ~ 50/60Hz Max.0.3A

U out: 59V = PF:>0.9C P rated:40W(Max) tc:90°C

Preparation for input and output

For LED modules only
www.lifud.com
Made in China

OUTPUT LED+ LED- 0.5-1.0

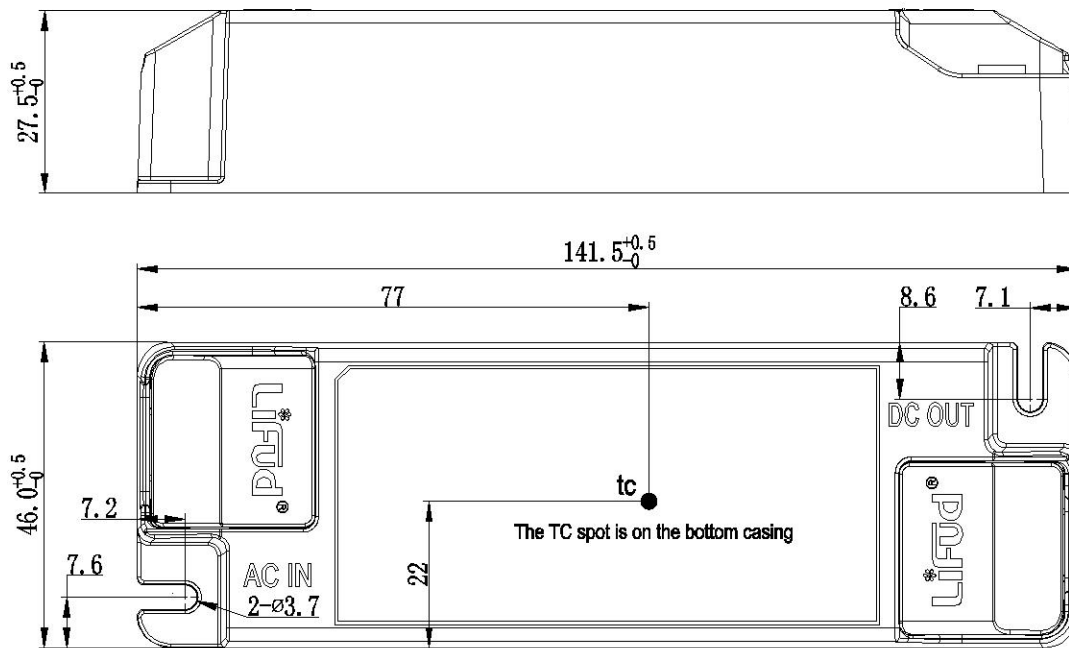
Output current and setting table

ta	VaDC	I rated(CC)	1	2	3	4
45°C	20-38V	1050mA	OFF	OFF	OFF	OFF
	20-40V	1000mA	OFF	OFF	OFF	ON
	20-42V	950mA	OFF	OFF	ON	OFF
	20-42V	900mA	OFF	OFF	ON	ON
	20-42V	850mA	OFF	ON	OFF	OFF
	20-42V	800mA	OFF	ON	OFF	ON
	20-42V	750mA	OFF	ON	ON	OFF
	20-42V	700mA	OFF	ON	ON	ON
	20-42V	650mA	ON	OFF	OFF	OFF
	20-42V	600mA	ON	OFF	OFF	ON
20-42V	550mA	ON	OFF	ON	OFF	

INPUT DA1 PUSH DA2 PUSH AC-L AC-N 0.75-1.5

CE SELV

Structure & Dimension (Unit: mm) (only for reference)



Packaging Specification

Model	LF-AAA040
Packaging Dimension	385*285*210 mm (L*W*H)
Quantity	10 pcs/layer; 6 layers/ctn; 60 pcs/ctn
Weight	135.5 g/pc; 9.13 kg/ctn

Transportation & Storage

■ Transportation

- Suitable transportation means: vehicles, boats and aircraft.
- During transportation, there should be awnings for rain protection and sun protection. Civilized loading and unloading are required. There should be no severe vibration or impact.

■ Storage

- Storage in accordance with the provisions of Class I environment. For products which have been stored for more than six months, they mustn't be used until they pass the re-inspection.

Attention

- Please use this product according to its specifications otherwise there may be malfunction.
- Use light fixtures that have not been certified or are not compatible with the LED drivers may cause fire or other hazards.
- Man-made damage, any use beyond the specification and non-original-factory modification are not covered by warranty.

Remark: The final interpretation right of the contents of this data sheet belongs to Lifud Technology Co., Ltd.