Features

- Triac dimmable
- Constant current output and output current adjustable via DIP switch
- Built-in active PFC function
- Flicker free; compact size
- All-round protections: over voltage protection/short circuit protection
- IP20
- Suitable for Class II light fixtures (light fixture not connected to the ground)
- 5-year warranty (please refer to the warranty condition)

Applications

· Panel light · down light · spot light

Descriptions

LF-AAT008-0700-12 is an 8W constant current Triac dimmable LED driver. Its rated input voltage ranges from 220 to 240Vac and output current is adjustable from 350 to 700mA via DIP switch with every 50mA as a step.

Product Model

LF - AAT 008 - 0700 - 12

- 12: output voltage: 12Vdc
- 0700: maximum output current: 700mA
- 008: maximum output power: 8W
- AAT: Triac dimmable LED driver

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■ Electrical Characteristics

Model		LF-AAT008-0700-12							
Output	Output Current	Adjustable via DIP switch							
		350mA	400mA	450mA	500mA	550mA	600mA	650mA	700mA
	Output Voltage	2-12Vdc							
	Output Power	8W max.							
	Current Tolerance	±8%			±5%				
	Start-up Time	≤3S@230Vac full load							
	Temperature Drift	≤1mA/℃							
Input	Input Voltage	220-240Vac (voltage limit: 198-253Vac)							
	DC Input Voltage	176-280Vdc							
	Input Current	0.2A max.							
	PF	≥0.85					≥0.9		
	Efficiency	≥66%					≥68%		
	THD	≤15%@230Vac full load							
	Inrush Current	≤10A/200uS@230Vac							
Protections	Surge	≤1kV@L-N							
	Open Circuit	Open-circuit voltage <25Vdc							
	Short Circuit	Auto-recovery							
Environment Descriptions	Operating Temperature	-20℃ - +45℃							
	Operating Humidity	20-95%RH (without condensation)							
	Storage Temperature/ Humidity	-30℃ - +60℃ (6 months in Class I environment); 10-95%RH (without condensation)							
	Atmospheric Pressure	86-106kPa							
Safety & EMC	Certifications	ENEC, CE, RCM, CCC							
	Withstanding Voltage	I/P-O/P: 3.75kVac@5mA@60S							
	Safety Standards	CE-LVD: EN61347-2-13: 2014/A1: 2017, EN61347-1: 2015, EN62493: 2015; CCC: GB19510.1-2009, GB19510.14-2009							
	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, 6, 11 CCC: GB/T17626.2, 3, 4, 5, 6, 11							

■ Electrical Characteristics

Other Parameters	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty Condition	5 years (Tc ≤79℃)
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 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.	
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 PC cover, casing, end caps and other parts of the LED driver inside the LED light fixture must comform to UL94-V0 flammability standard or above. 3. 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. 4. It is suggested that user use a slotted screwdriver or a Philips to adjust the output current of LED driver, otherwise the potentiometer may be damaged. (the screwdriver should have good insulation at the head, body and handle, and the screwdriver with a 2mm head is recommended as well. What's more, please pay attention that the intensity of torque not exceed 0.5KN.m). 5. When using the LED driver, please pay attention that the total output power not exceed the maximum rated output power, otherwise the warranty service of LED driver would be failed. 6. The withstanding voltage of LEDs and aluminum substrates must >2kVac.	

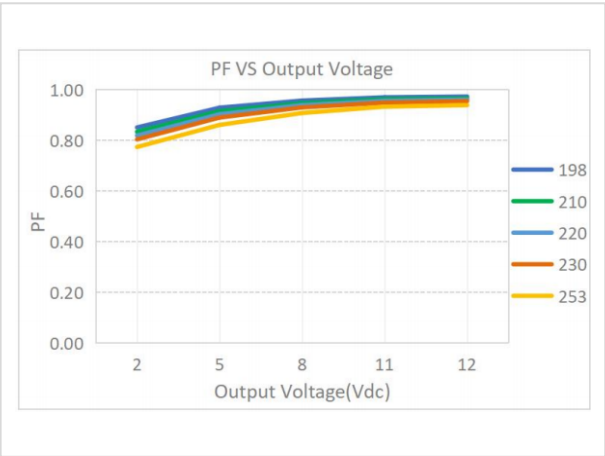
■ Recommended Dimmers Matching LF-AAT008-0700-12

Leading-edge Dimmers	Trailing-edge Dimmers
BULL: G07D101D	GIRA: 030700
CLIPSAL: 32E45LM	LUTRON SYSTEM: LQSE-4A-D
S1-K	S1-K

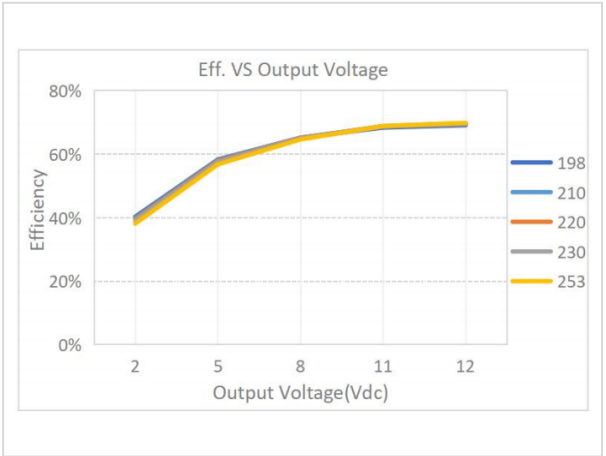
Remark: please test whether your dimmer matches this driver before a batch order.

■ Product Characteristic Curves

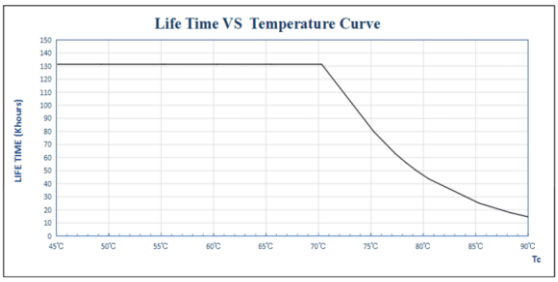
PF Curve



Efficiency Curve

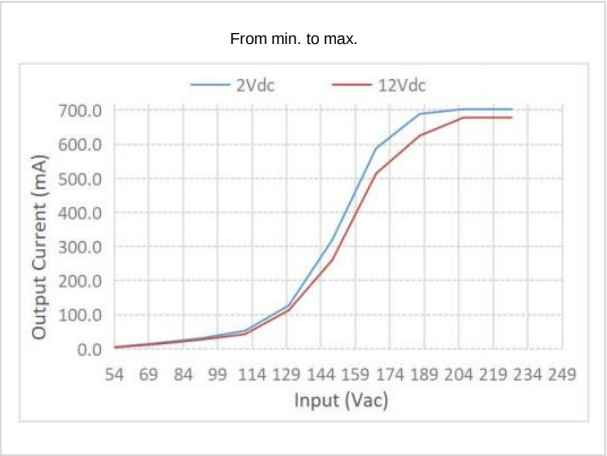


Lifetime Curve

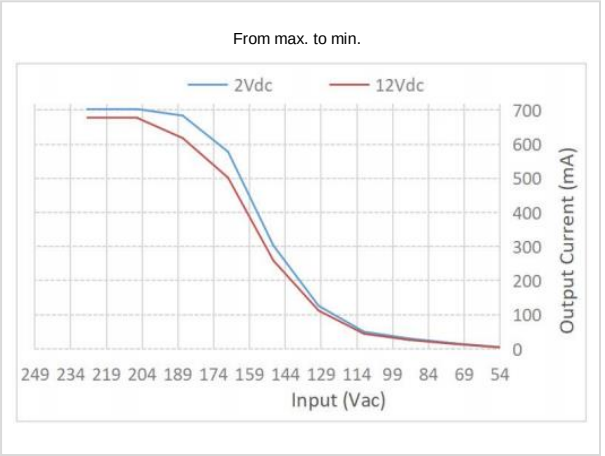


■ Product Characteristic Curves

Triac Dimming Curve 1



Triac Dimming Curve 2



Remark: input: 230Vac; output: 2Vdc/700mA, output: 12Vdc/700mA
(this data is measured by Lifud Triac dimmer and the charts are for reference only)

■ Product Terminal & DIP Switch Definitions

Product terminals

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

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

Product DIP Switch

Parameter	MIN	TYP	MAX	Remark
Adjustable Output Current via built-in DIP Switch	350mA	-	700mA	The total output power should **NOT** exceed 8W

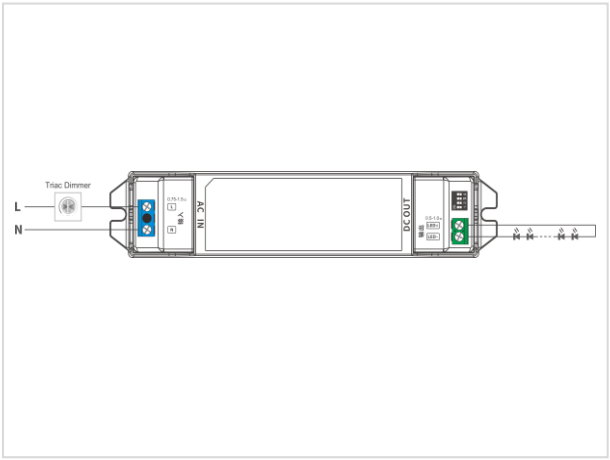
■ Product Terminal & DIP Switch Definitions

Product DIP Switch

Current Adjustment Reference Table				
Output Current	1	2	3	4
700mA	ON	ON	ON	ON
650mA	OFF	ON	ON	ON
600mA	ON	ON	ON	OFF
550mA	OFF	ON	ON	OFF
500mA	ON	ON	OFF	OFF
450mA	OFF	ON	OFF	OFF
400mA	ON	OFF	OFF	OFF
350mA	OFF	OFF	OFF	OFF

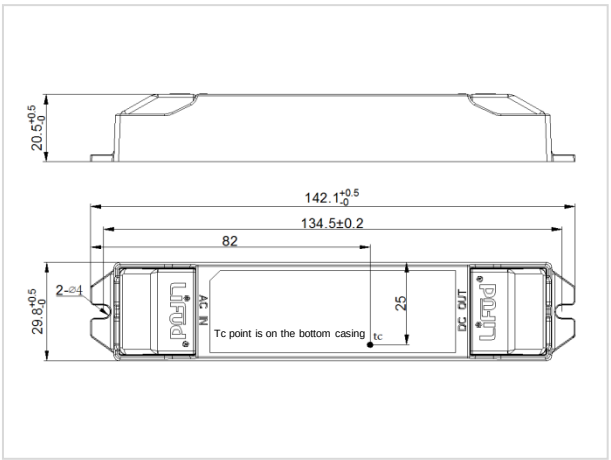
■ Dimming Operation Instruction

Wiring Diagram of Triac Dimming



■ Structure & Dimensions (unit: mm)

Model	Overall Appearance (L*W*H)	Distance Between 2 Positioning Holes	Diameter of Positioning Hole
LF-AAT008-0700-12	142.1*29.8*20.5 mm (+0.5mm)	134.5 mm (±0.2mm)	4 mm



■ Packaging Specifications

Model	LF-AAT008-0700-12
Carton Size	385*285*210 mm (L*W*H)
Quantity	14 pcs/layer; 9 layers/ctn; 126 pcs/ctn
Weight	0.076 kg/pc; 9.5 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.