

Features

- Triac dimmable
- Compatible with leading edge and trailing edge dimmers
- THD $\leq 20\%$
- Output current adjustable via DIP switch
- Flicker free; IP20
- Suitable for Class II light fixtures
- 5-year warranty (please refer to the warranty condition)



Applications

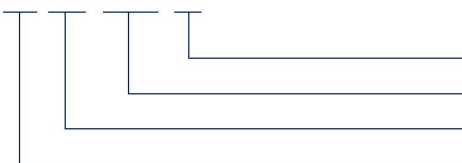
· Panel light · down light · spot light

Descriptions

LF-ABT008-0250-42 is a 8W (max.) constant current Triac dimmable LED driver. Its rated input voltage ranges from 220 to 240Vac and output current is adjustable from 100 to 250mA via DIP switch with every 50mA as a step. Besides, it is compatible with leading edge and trailing edge dimmers and has all-round protections: over voltage protection and short circuit protection.

Product Model

LF - ABT 008 - 0250 - 42



- 42: max. output voltage: 42V
- 0250: max. output current: 250mA
- 008: rated power: 8W
- ABT: external Triac dimmable LED driver

■ Electrical Characteristics

Model		LF-ABT008-0250-42					
Output	Output Voltage	25-42V	25-42V	25-40V	25-34V		
	Output Current	100mA	150mA	200mA	250mA		
	Flicker Index	IEC-Pst \leq 1, CIE SVM \leq 0.9, modulation depth \leq 1% Complies with flicker-free standard IEEE Std 1789-2015					
	Current Tolerance	$\pm 10\%$	$\pm 7\%$	$\pm 5\%$			
	Temperature Drift	$\pm 10\%$					
	Start-up Time	<2S@230Vac					
Input	Input Voltage	220-240Vac (voltage limit: 198-264Vac)					
	Input Frequency	0/50/60Hz					
	Input Current	0.1A max.					
	PF	≥ 0.9					
	THD	$\leq 20\%$ @250mA/34V					
	Efficiency	$\geq 67\%$	$\geq 73\%$	$\geq 74\%$	$\geq 74\%$		
	Inrush Current	<3.2A/35uS @230Vac					
	Loading Quantities of Circuit Breaker	Model	B10	C10	B16	C16	
		Quantity (pcs)	112	112	178	178	
Leakage Current	≤ 0.7 mA						
Protection Characteristics	Open Circuit	<59V					
	Short Circuit	No damage (auto-recovery)					
Environment Descriptions	Operating Temperature	$-20^{\circ}\text{C}\sim+45^{\circ}\text{C}$					
	Operating Humidity	20-90%RH (no condensation)					
	Storage Temperature/ Humidity	$-30^{\circ}\text{C}\sim+80^{\circ}\text{C}$ (6 months in Class I environment); 10-90%RH (no condensation)					
	Atmospheric Pressure	86-106kPa					

■ Electrical Characteristics

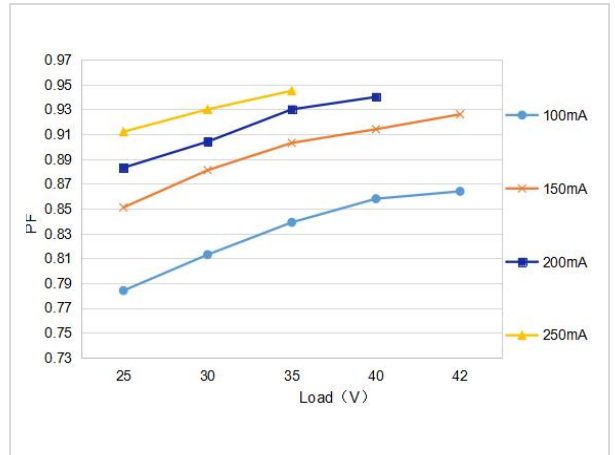
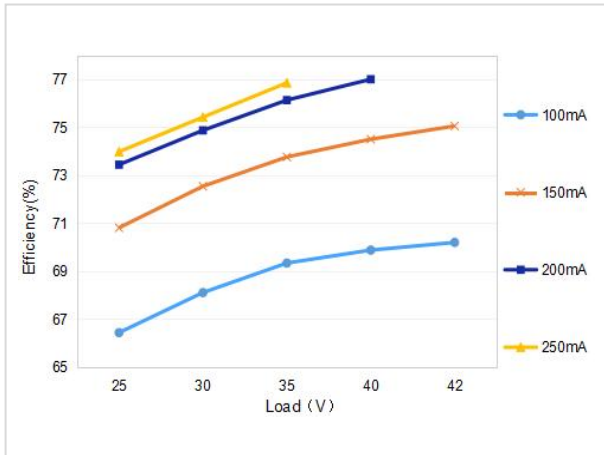
Safety & EMC	Certifications	TUV-ENEC, CE-LVD, CB, UKCA, RCM, CCC
	Withstand Voltage	I/P-O/P: 3.75kV 5mA 60S
	Insulation Resistance	I/P-O/P: >100MΩ@500Vdc
	Safety Standards	ENEC: EN 61347-2-13: 2014/A1: 2017 EN 61347-1: 2015/A1: 2021 EN IEC62384: 2020 CE-LVD: EN 61347-2-13: 2014/A1: 2017 EN 61347-1: 2015/A1: 2021 EN 62493: 2015 CB: IEC61347-1: 2015 IEC61347-1: 2015/AMD1: 2017 IEC61347-2-13: 2014 IEC61347-2-13: 2014/AMD1: 2016 RCM: AS 61347.2.13: 2018&AS/NZS 61347.1: 2016+A1 EN IEC55015: 2019/A11:2020 EN 61547: 2009 EN IEC 61000-3-2: 2019/A1: 2021 EN 61000-3-3: 2013/A2: 2021 CCC: GB19510.1-2009, GB19510.14-2009 UKCA-LVD: EN 61347-1: 2015/A1: 2021 EN 61347-2-13: 2014/A1: 2017 EN 62493: 2015
	EMI	CE-EMC/RCM: EN IEC 55015: 2019/A11: 2020 EN 61547: 2009 EN IEC 61000-3-2: 2019/A1: 2021 EN 61000-3-3: 2013/A2: 2021 CCC: GB 17625.1-2012 GB/T 17743-2021 UKCA-EMC: EN IEC 55015: 2019/A11: 2020 EN 61547: 2009 EN IEC 61000-3-2: 2019/A1: 2021 EN 61000-3-3: 2013/A2: 2021
	EMS	CE-EMC/RCM: EN61000-4-2, 3, 4, 5 (L-N: 1kV), 6, 11 CCC-EMC: 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≤70°C)
	Noise Level	≤29dB (this data is measured in a soundproof room and the noise collector should be 10CM away from LED driver)
Compatible Dimmers	Hamiton: L400/G, YIKAI: EU200P, CRESTRON SYSTEM: DIN-IDIM4, LUTRON SYSTEM: LQSE-4A-D, HDL SYSTEM: MD0602.432, S1-K, DELIXI: Q86TGIH, MOORGEN SYSTEM, CDN	
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°C, humidity of 50%, full load and input voltage of 230Vac/50Hz.	

Electrical Characteristics

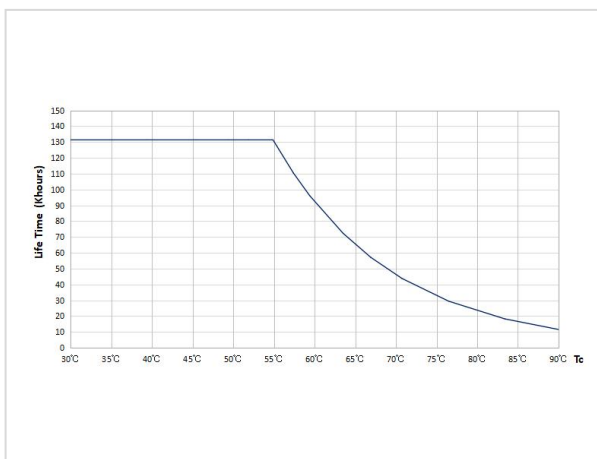
Additional Remarks	<ol style="list-style-type: none"> 1. It is recommended that user install the over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety. 2. The LED driver used in combination with the end 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 test conditions of the circuit breaker configuration quantity are the same as those of the inrush current. 4. When the output voltage ranges from 32 to 42V, the 100A current tolerance is 10%.
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Product Characteristic Curves

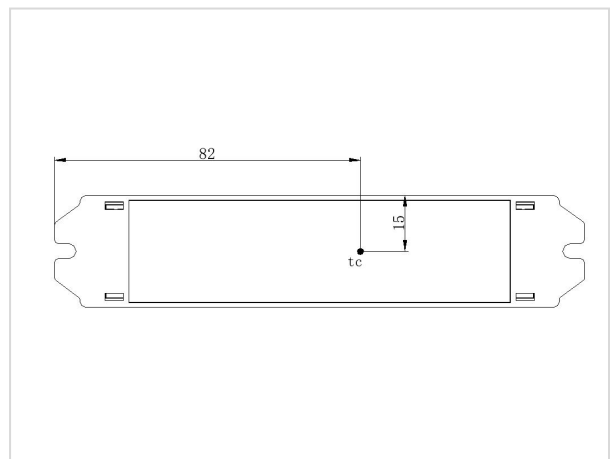
Efficiency Curve



Lifetime Curve



Tc Point Test Diagram



■ **Product Definitions**

Product terminals

INPUT		OUTPUT	
AC-L	AC live wire input	LED+	Positive electrode output of LED driver
AC-N	AC neutral wire input	LED-	Negative electrode output of LED driver

Product DIP Switch

Vo DC	I rated (CC)	1	2	3
25-34V	250mA	0N	ON	-
25-40V	200mA	-	ON	-
25-42V	150mA	ON	-	ON
25-42V	100mA	-	-	ON

Remarks:

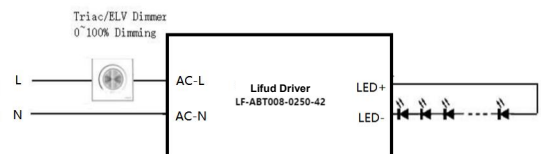
- When adjusting the output current via the DIP switch, please disconnect input AC power supply first so as to use the DIP switch without the input AC power supply connected;
- When using the DIP switch, pay attention: 250-200mA PIN3 OFF & 100-150mA PIN3 ON;
- The output current is relatively low on the condition of 200-250mA PIN3 ON.

■ **Triac Dimming Operation Instructions**

Triac Dimming Operations

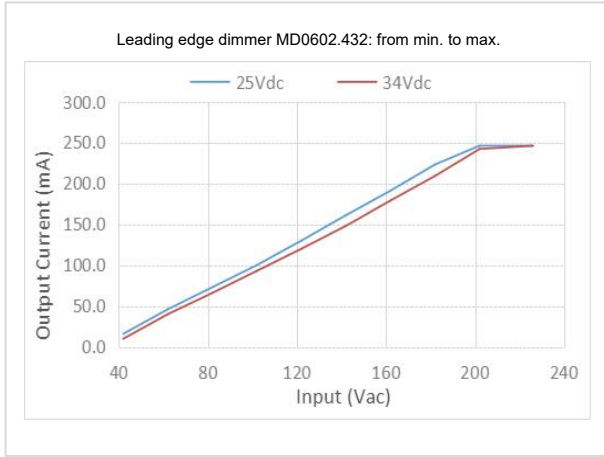
- Connect AC live wire to the input of dimmer and the output wire of dimmer to AC-L;
- Connect AC neutral wire to AC-N
- Dimming range: 0-100%

Wiring Diagram of Triac Dimming

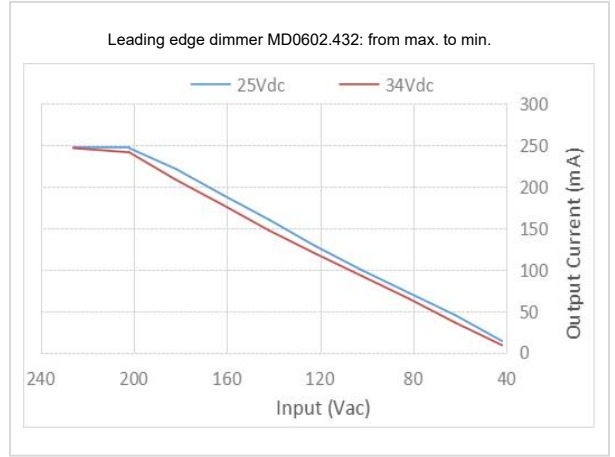


■ **Triac Dimming Operation Instructions**

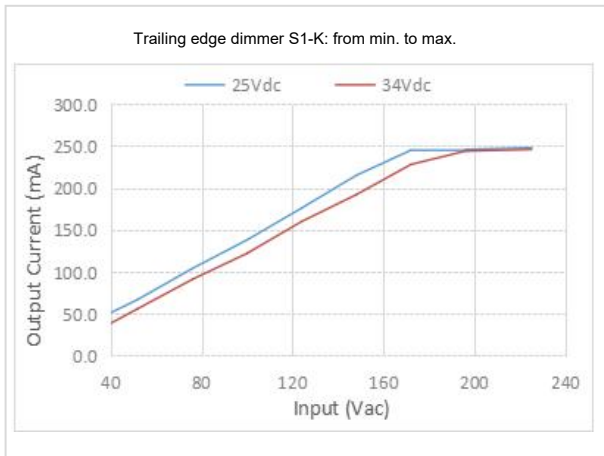
Triac Dimming Curve 1



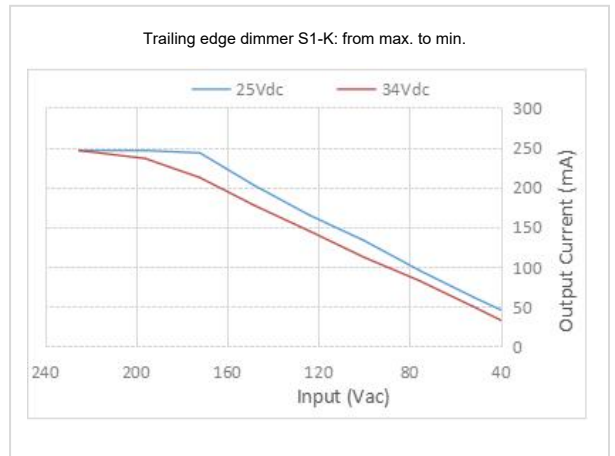
Triac Dimming Curve 2



Triac Dimming Curve 3

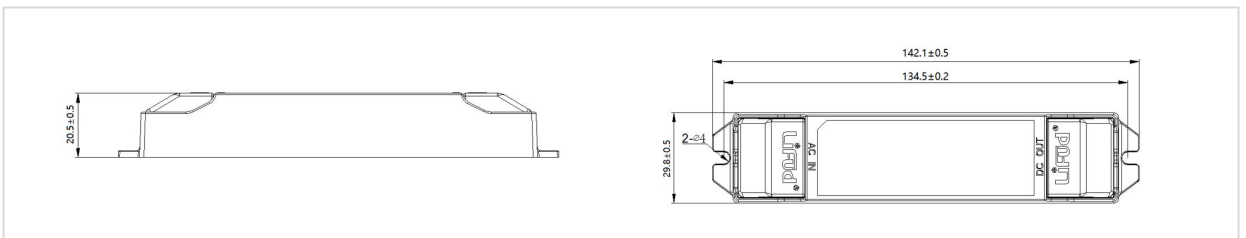


Triac Dimming Curve 4



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

Model	Overall Appearance (L*W*H)	Distance Between 2 Positioning Holes	Diameter of Positioning Hole
LF-ABT008-0250-42	142.1*29.8*20.5 mm	134.5 mm	4 mm



■ Packaging Specifications

Model	LF-ABT008-0250-42
Carton Size	385*285*210 mm (L*W*H)
Quantity	12 pcs/layer; 7 layers/ctn; 84 pcs/ctn
Weight	0.070 kg/pc; 6.0 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 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.