

Specification

Customer: _____

Product Material No. : _____

Model No. : LF-GDE023YF

Version: V3.3

Customer Approval

Examination	Review	Approve

Lifud Approval

Drafting	Review	Approve

Model Numbers Chosen by Customer

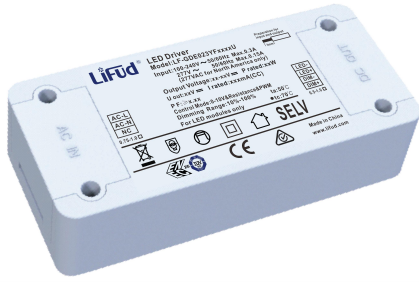
Full Model Number		Full Model Number	
Full Model Number		Full Model Number	

E.C. List

Version	Description of Change	Engineer	Date
3.0	Format change	Tian Qiao	2015-10-22
3.1	Revised some parameters	Tian Qiao	2015-12-25
3.2	Revised the description of dimming curve	Liao Xinggao	2016-11-21
3.3	Revised the packaging specification and certification	Lei Shuifang	2020-07-10



Product description



Isolated LED driver designed for class II light fixtures.

Category: 0-10V/PWM/Rx dimming, plastic casing

Product properties: active PFC, high PF, high efficiency, low THD

Application: commercial lighting, residential lighting and decorative lighting.

Warranty: 5 years (please refer to the warranty condition).

Certificate:



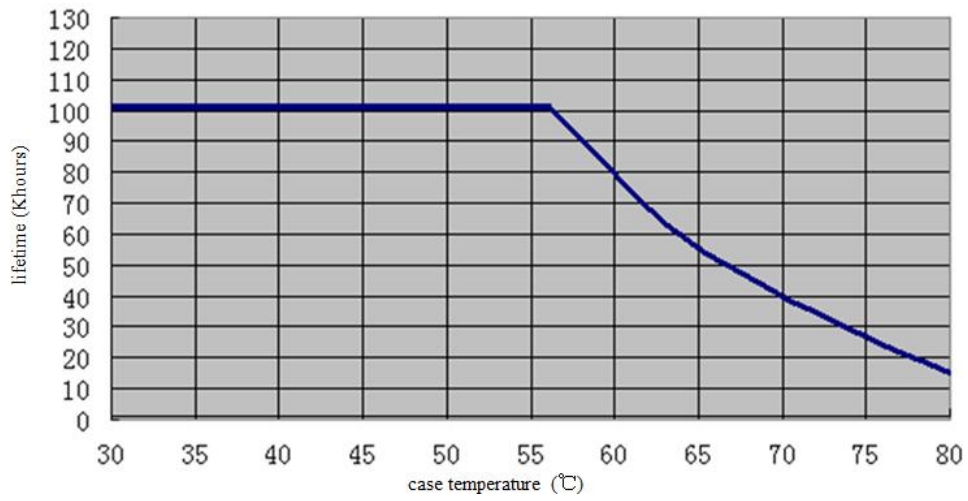
Technical data

Full model number		LF-GDE023YF 0350U(A)	LF-GDE023YF 0400U(A)	LF-GDE023YF 0450U(A)	LF-GDE023YF 0500U(A)	LF-GDE023YF 0550U(A)	
Output	Output voltage	27-42 VDC	27-42 VDC	27-42 VDC	27-42 VDC	27-42 VDC	
	Output current	350mA	400mA	450mA	500mA	550mA	
	Ripple voltage	< 4.2V					
	Current tolerance	±5%					
	Time to light	100Vac<1S 230Vac <0.5S 277ac <0.5S					
	Temperature drift	±10%					
	Output Line regulation	±5%					
Input	Input Line regulation	±5%					
	Rated input voltage	100-240 Vac, 277 Vac (Max input voltage: 90-305Vac)					
	Frequency	47Hz-63Hz					
	Input current	0.3A Max					
	Power factor		≥0.98/100Vac	≥0.98/100Vac	≥0.98/100Vac	≥0.98/100Vac	≥0.98/100Vac
			≥0.95/230Vac	≥0.95/230Vac	≥0.95/230Vac	≥0.95/230Vac	≥0.95/230Vac
			≥0.90/277Vac	≥0.90/277Vac	≥0.90/277Vac	≥0.90/277Vac	≥0.90/277Vac
	THD	≤20%					
	Efficiency		≥84%/100Vac	≥84%/100Vac	≥84%/100Vac	≥84%/100Vac	≥84%/100Vac
			≥85%/230Vac	≥85%/230Vac	≥86%/230Vac	≥86%/230Vac	≥86%/230Vac
			≥84%/277Vac	≥84%/277Vac	≥85%/277Vac	≥85%/277Vac	≥85%/277Vac
In-rush current	I<60A/300uS@230Vac						
Typical stand-by power consumption	Pin<1W						
Protective Features	No-load	Max. output voltage (no-load voltage) 55V					
	Short-circuit	Hiccup mode (auto-recovery)					

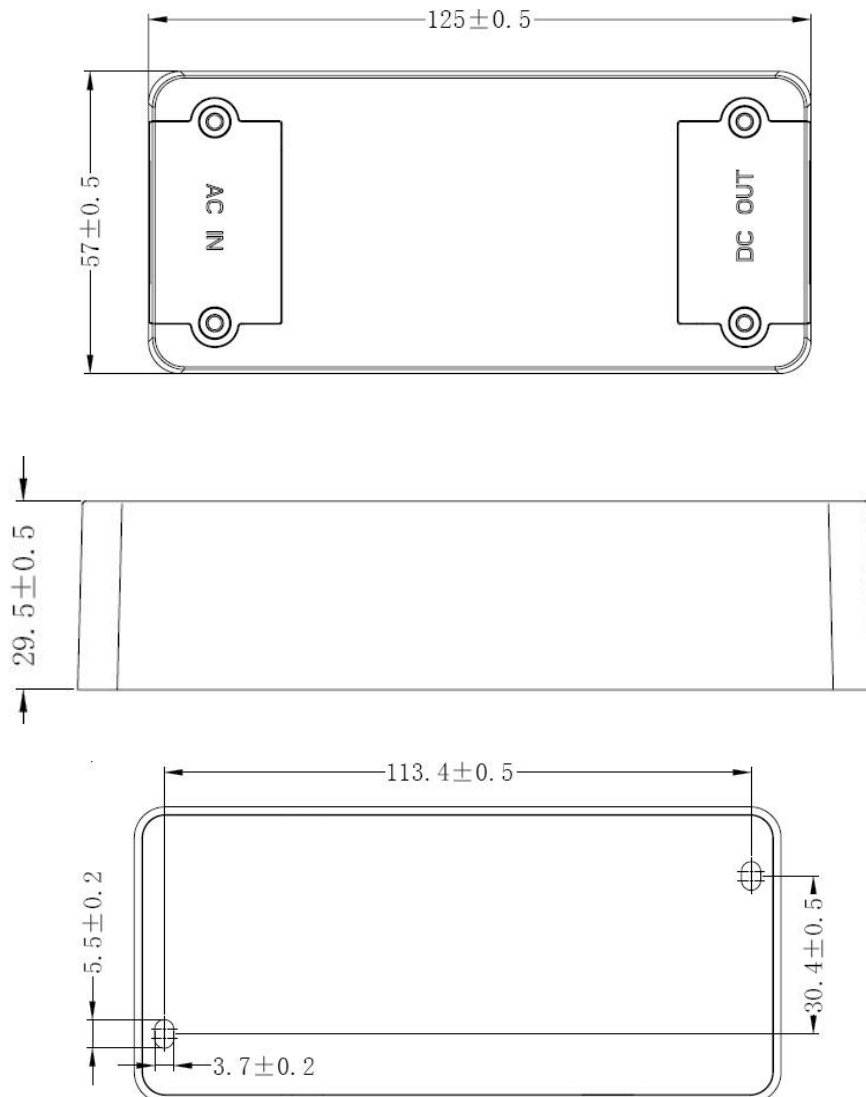
Environment Condition	Working temperature	-30℃ - +50℃
	Working humidity	20-90%RH (no condensation)
	Storage temperature/humidity	-40℃ ~ +80℃ (6 months under the class I environment); 10-90%RH (no condensation)
	Atmospheric pressure	86-106KPa
Safety & Norms	Certificate	ENEC, CE, CB, RCM
	Hi-pot test	I/P-O/P: 3.75KVAC, <5mA, 60S
	Insulation resistance	I/P-O/P: 500VAC, >100MΩ
	Surge rating	Conform to IEC61000-4-5 (L/N: 1KV)
	EMI	Conform to EN55015, EN61000-3-2, FCC Part15.
	EMS	Conform to EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547.
Others	Packing (weight)	Carton size: 385*285*210 mm (L*W*H); Net weight: 120g±5%/pc; 5.87KG±5%/ctn; Quantity: 8 PCS/layer, 5 layer/ctn, 40 PCS/ctn
	IP rating	IP20
	Warranty condition	5 years (Max. case temperature must not exceed 65℃).
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, spectrum analyzer: KH3935, hi-pot tester: TH9201B, stroboscope (flicker index tester) 60N-01, etc.	
Test Condition	Unless otherwise stated, the electrical parameters above, including the power factor, THD and efficiency, are tested under the ambient temperature 25℃ and humidity 50%, input 230Vac and 90% load.	
Additional Remark	<ol style="list-style-type: none"> 1. It is recommended that customer should install protection devices for surge, for overvoltage and for undervoltage to ensure safety before connecting to electricity. 2. The PC cover, casing, end caps and other parts of the LED driver inside the LED light fixture must conform to UL94-V0 flammability standard or above. 3. As an accessory, the LED driver is not the only factor determining the EMC performance of the LED luminaire. 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. 	

Lifetime Curve

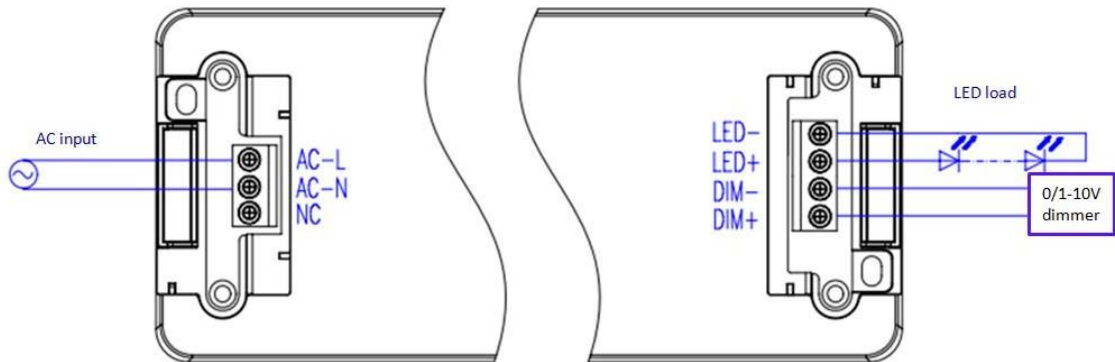
The curve below illustrates the driver's lifetime data when its maximum casing temperature in an airtight space reaches 40°C, 50°C, 60°C, 70°C and 80°C.



Dimension (unit: mm)



Wiring Diagram



Dimming

1) 0-10V dimming, dimming range 10%~100% (Remark: Dim to off at the voltage of 0V).

voltage signal	0	1	2	3	4	5	6	7	8	9	10	OPEN
output current percentage	3%	5%	10%	25%	40%	50%	60%	70%	80%	90%	100%	95%-105%

2) PWM dimming, dimming range 10~100%, the voltage amplitude is 10V and the frequency of PWM signal is 500Hz~5KHz.

PWM signal	0	1	2	3	4	5	6	7	8	9	10	OPEN
output current percentage	3%	5%	10%	25%	40%	50%	60%	70%	80%	90%	100%	95%-105%

Remark: the output current percentages above are typical values.