

1. Product description



Isolated LED driver suitable for class II LED luminaires.

Category: AC100-277V DALI dimmable plastic case series.

Product properties: active PFC, high PF, low THD, DALI dimmable.

Application: commercial, residential and decorative lighting.

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

Certifications:



2. Technical data

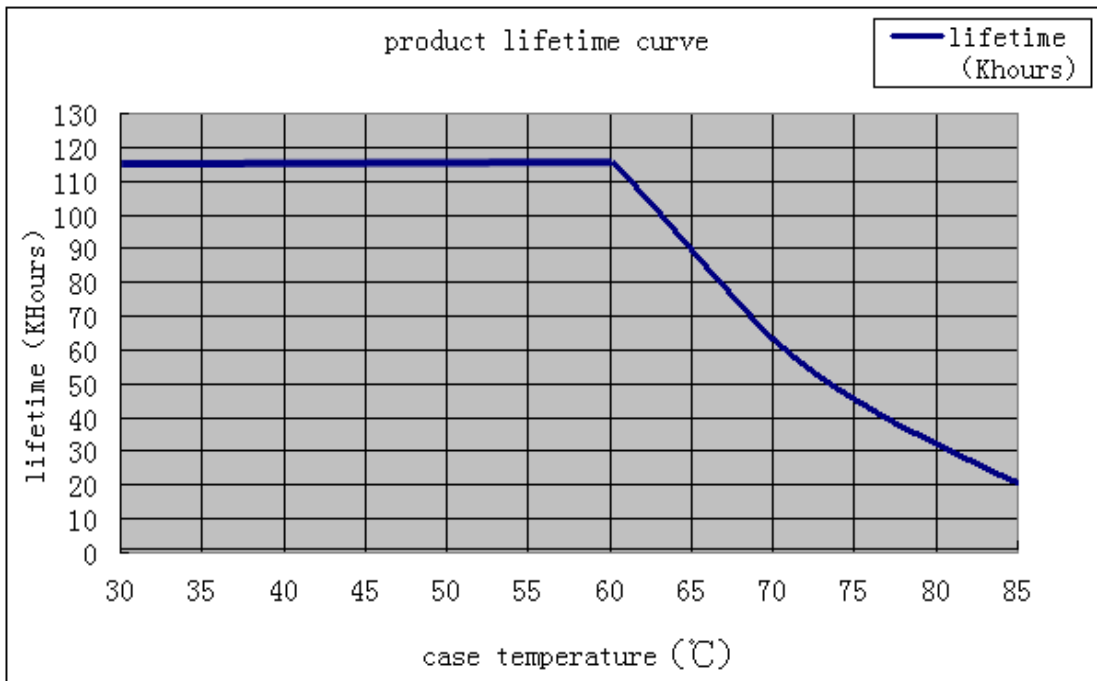
	Full model number	LF-GDE042YF (S)0800U	LF-GDE042YF (S)0900U	LF-GDE042YF (S)0950U	LF-GDE042YF (S)1000U	LF-GDE042YF (S)1050U
Output	Output voltage	27-42 VDC	27-42 VDC	27-42 VDC	27-42 VDC	27-42 VDC
	Output current	800mA	900mA	950mA	1000mA	1050mA
	Ripple current	≤500mA				
	Ripple voltage	≤4.2V				
	Current tolerance	±5%				
	Time to light	100Vac <1S , 230Vac <0.5S , 277Vac <0.5S				
	Temperature drift	±10%				
	Line regulation	±5%				
Input	Line regulation	±5%				
	Rated input voltage	100-240 Vac , 277 Vac (Max. input voltage: 90-305Vac)				
	Frequency	47Hz-63 Hz				
	Input current	0.6A 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
		≥83%/230Vac	≥83%/230Vac	≥84%/230Vac	≥85%/230Vac	≥85%/230Vac
≥83%/277Vac		≥83%/277Vac	≥84%/277Vac	≥85%/277Vac	≥85%/277Vac	
In-rush current (peak /duration)	I<60A/350uS@230 Vac					
Typ. power input on stand-by	Pin<1W					
Protective features	No-load	Max. output voltage (no-load voltage) 55 V				
	Short-circuit	Hiccup mode (auto-recovery)				
Environment condition	Working temperature	-30°C~ +50°C				
	Working humidity	20-90% RH (no condensation)				
	Storage temperature/humidity	-40°C ~ +80°C (6 months under the class I environment); 10-90% RH (no condensation)				
	Atmospheric pressure	86-106KPa				
Safety and norms	Certifications	TUV, RCM, CE, CB				
	Hi-pot test	I/P-O/P: 4KVac, <5mA, 60S				
	Insulation resistance	I/P-O/P: 500VDC, >100MΩ				
	Surge level	Comply with IEC61000-4-5(L/N: 1KV)				
	EMI	Comply with EN55015 , EN61000-3-2.				
	EMS	Comply with EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547.				
	DALI protocol	Comply with the IEC62386-101, 102, 207				
Others	Packing (weight)	Net weight : 185g ±5%/pc;30pcs/carton; 6.5KG±5%/carton. Carton size: 39 x 29 x 21 cm (L xW xH).				
	IP level	IP20				
	Warranty condition	5 years (Max. case temperature must not exceed 70°C).				

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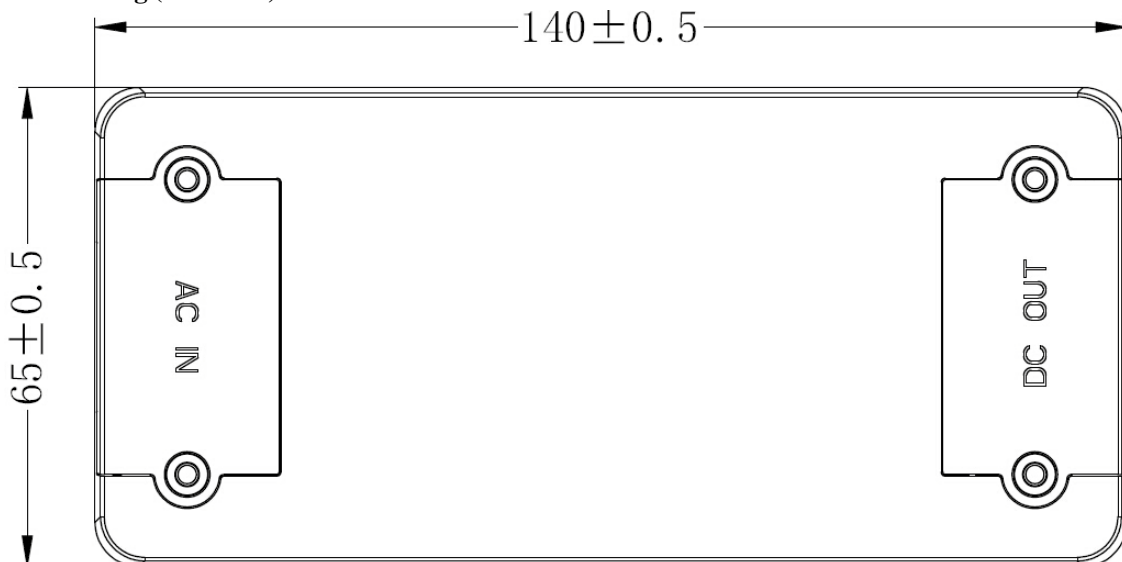
Testing equipments	AC power source: CHROMA6530, digital power meter: CHROMA66202, Oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: TH9201B, flicker-free tester (flicker-free coefficient tester) 60N-01, etc.
Test conditions	The parameters above including the power factor, THD, efficiency are all tested under the ambient temperature 25°C and humidity 50%, AC input 230V and 90% DC load.
Additional Remark	<ol style="list-style-type: none"> In the power supply circuit, it is recommended that the customer should install an over-under-voltage protection and surge protection device to ensure the safety of using electricity. The PC cover, shell, end caps used together with the LED driver inside the LED lamp must meet the UL94 V-0 fire rating level or above. As a part of the LED lamp, the LED driver is not the only factor determining the EMC performance of the LED lamp. And the EMC performance is also related to the LED lamp's structure and the wire routing. Thus we strongly recommend the manufacturer of the finished LED lamp must re-confirm the EMC of the LED lamps.

3. Product Referenced Lifetime Curve

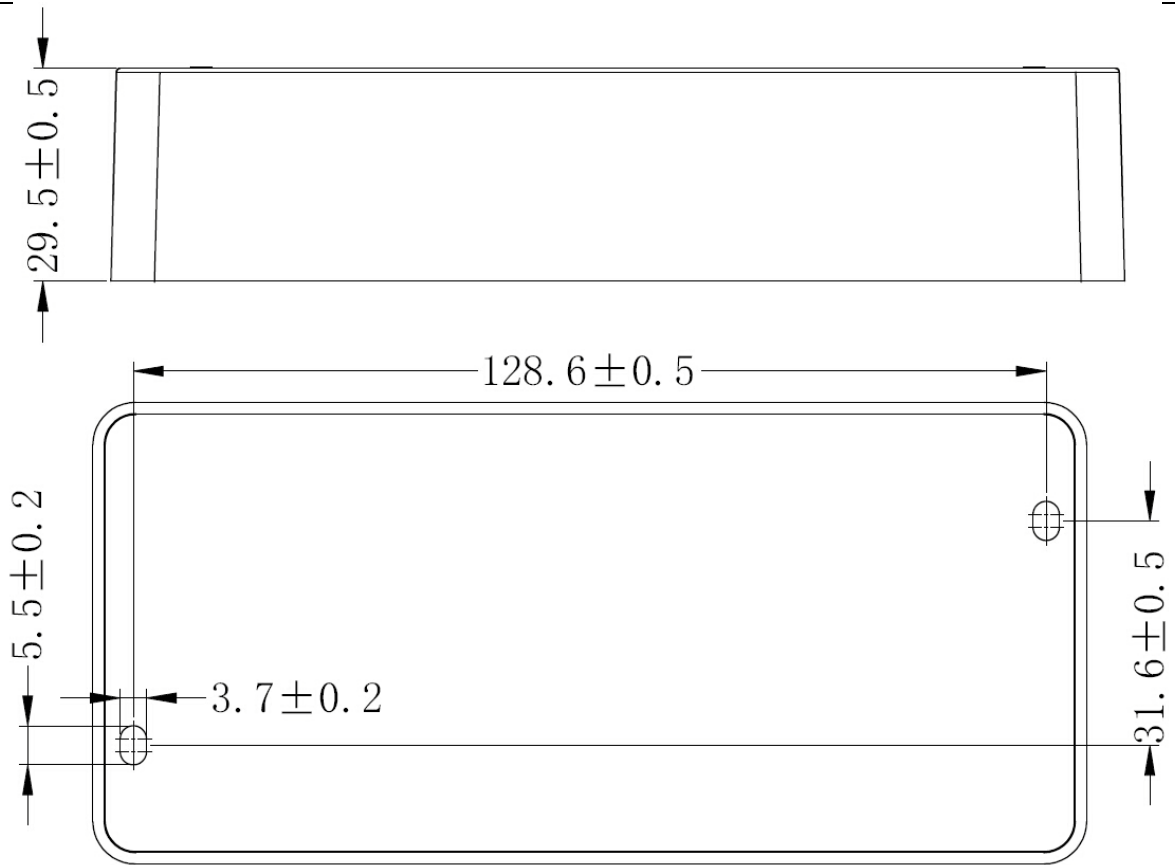
The curve below illustrates the driver's lifetime data when the LED driver's Max. case temperature reaches 40°C, 50°C, 60°C, 70°C, 80°C, 90°C.



4. Dimensional Drawing (unit: mm)



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5. Wire Connection Diagram:



6. DALI Dimming Function

Dimming function for output current adjustment (Typical), dimming range 10%~100% (can be switched off)

DALI signal (%)	0	10	20	30	40	50	60	70	80	90	100	OPEN
Output current	0	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%-105%

Remark: the output currents above are typical values.

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