LF-GIF050CSxxxxH

GIF*CS Isolated Compact CCT Adjustable Constant Current LED Driver - Non Dimmable

Product family features

— Nominal input voltage: 220–240 Vac

— Ta range: -30 - +45 °C

— Ripple current < 5%

— 5 years guarantee

Product family benefits

— CCT adjustable (4 shifts)

— High efficiency

— Long lifetime and high reliability

— Flicker free; isolated

Typical applications

— For panel lights

— For office, commercial, and decorative lighting

Product parameters

— Output current 1100/1150/1200/1250/1300mA

— Output power 27.5-52.5W

— Input voltage 198–264Vac

— Output voltage 25-42Vdc

— Efficiency 90%

Electrical data

Input data

Nominal input voltage	220 ... 240 V
Input voltage AC	198 ... 264 V
Mains frequency	50/60Hz
Power factor	≧0.95
Efficiency	90% [1)]
THD	≤20%
Input current	0.4A Max
Inrush current	40A [2)]
Loading number on circuit breaker 10 A (B)	16
Loading number on circuit breaker 10 A (C)	26
Loading number on circuit breaker 16 A (B)	20
Loading number on circuit breaker 16 A (C)	32
Protective conductor current	≤0.7mA

Output data

Nominal output voltage	25 ... 42V
Nominal output current	1100 / 1150 / 1200 / 1250 /1300mA [3)]
Maximum output power	52.5W
Nominal output power	27.5... 52.5W
Output ripple current (100 Hz)	＜5%
Flicker	According to IEEE Std 1789-2015
CIE SVM	≦0.4
IEC-Pst	≦1
Output current tolerance	±5%
Temperature tolerance	±10%
Start-up time	＜0.5S

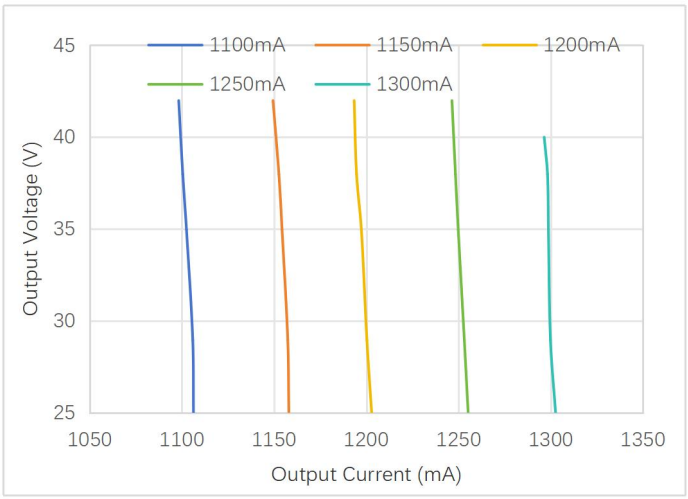
Safety

Withstanding voltage	I/P-O/P: 3.75kV&5mA&60S
Surge capability (L-N)	1kV
Surge capability (L/N-Ground)	-
Insulation resistance	I/P-O/P: >100MΩ@500Vdc
Guarantee	5year [4)]

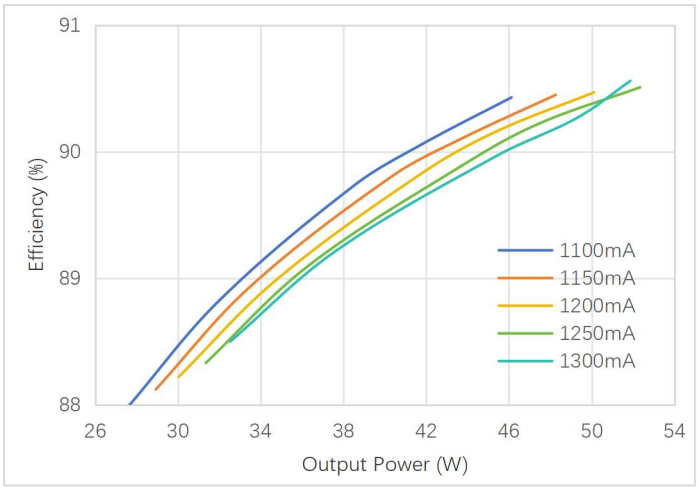
1) @full load
2) t =130 μs
3) The relationship between output voltage and current refers to the operating window
4) 5 years@Tc≤90℃

Characteristic diagram

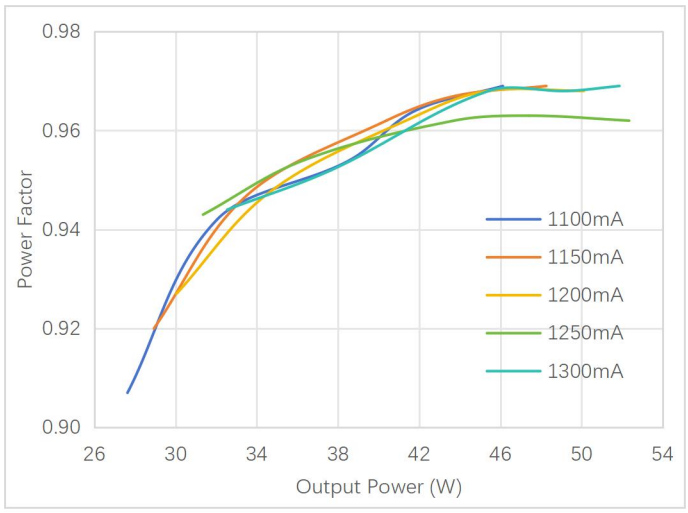
Operating Window



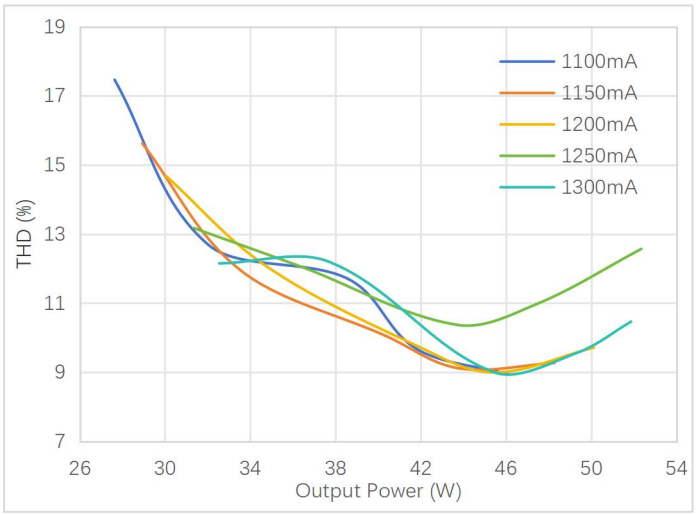
Typical Efficiency vs Load



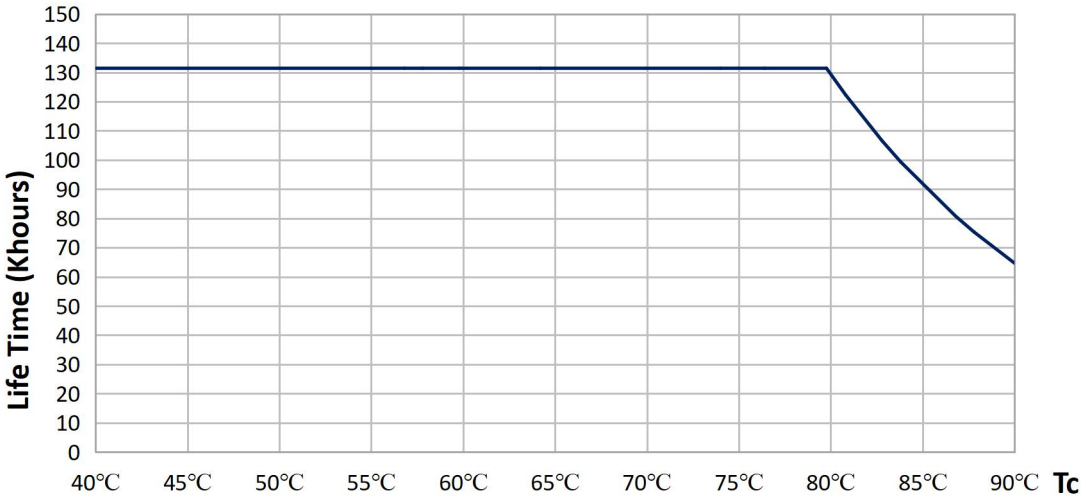
Typical Power Factor vs Load



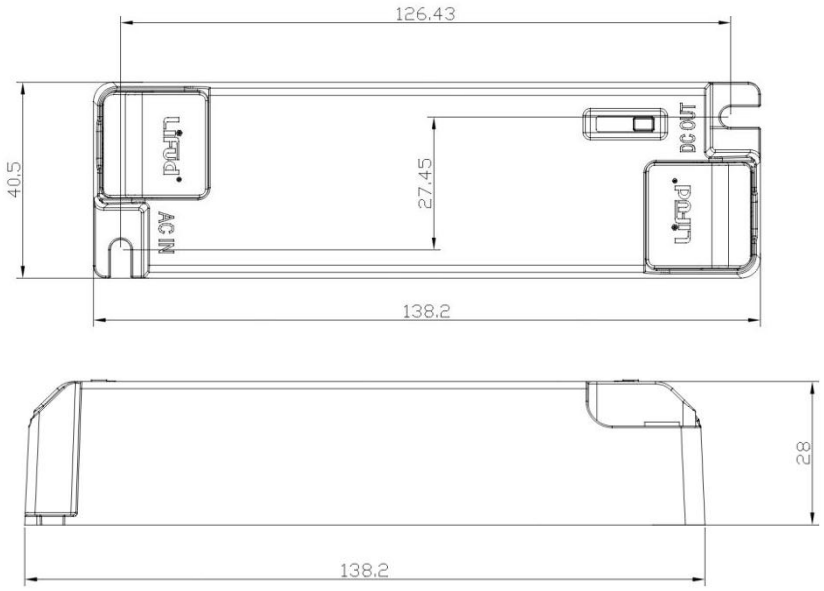
Typical THD vs Load



Lifespan



Dimensions



Mounting hole spacing, length	126.4mm
Positioning hole diameter	4.3mm
Product weight	120.0 g
Cable cross-section, input side	0.75 ... 1.5 mm²
Cable cross-section, output side	0.5 ... 1.5 mm²
Wire outside diameter, input side	Max: 7.0mm Min: 3.0mm
Wire outside diameter, output side	Max: 7.0mm Min: 3.0mm
Wire preparation length, input side	7 ... 8mm
Wire preparation length, output side	7 ... 8mm
Length	138.2mm
Width	40.5mm
Height	28.0mm

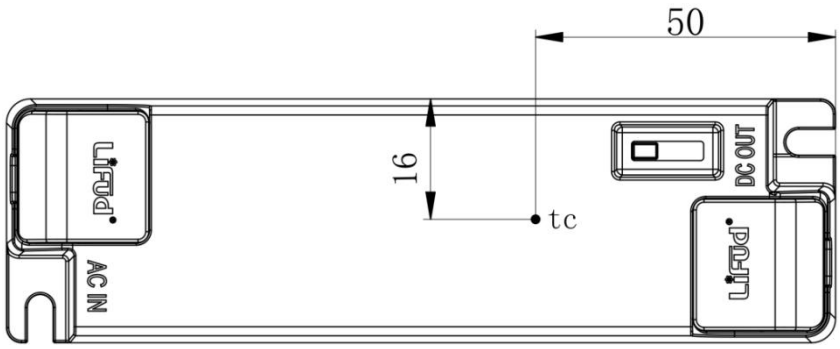
Colors & materials

Casing material	PC
Casing color	White

Temperature & operating conditions

Ambient temperature range	-30 ... +45°C
Maximum temperature at tc test point	90°C
Temperature range at storage	-30 ... +80℃ (6 months in Class I environment)
Humidity range at storage	10-95%RH (no condensation)
Humidity during operation	20-90%RH
RoHS	RoHS 2.0 (EU) 2015/863

Tc test point



Note: The picture is a front view, and the Tc point is on the front of the product.

Product terminal

Input		Output	
AC-L	AC live wire input	**LED+**	Positive terminal output of LED driver
AC-N	AC neutral wire input	**CW-**	Negative terminal output of LED driver
		WW-	Negative terminal output of LED driver

CCT DIP switch

Shift	Description
CW	CW-
PW	CW- & WW-
NW	WW- & CW-
WW	WW-

Note: DIP when power on is NOT allowed. Please disconnect the AC power before DIP. When PW and NW are working, both CW- and WW- need to be loaded simultaneously. Otherwise, there is a risk of damage to the LED driver. Damage caused by improper operation will not be compensated by our company.

Capabilities

Dimmable	-
Over-temperature protection	When the front temperature of U2 reaches 137℃, the output current will drop
Overload protection	-
Short circuit protection	Automatic reversible
No load protection	＜55V
Suitable for fixtures with prot. class	II
Control interface	-
Output interface	2 channels

Certificates & standards

Approval marks – approval	ENEC, CB, CE, RCM
Standards	IEC/EN 61347-2-13, IEC/EN 61347-1, IEC/EN 62493 IEC/EN 62384 AS 61347.1, AS 61347.2.13
EMC	GB 17625.1-2022, GB/T 17743-2021 EN 55015, EN 61547, EN 61000-3-2,3
Type of protection	IP20

Logistical data

Product	Packaging unit (Pieces/Unit)	Dimensions (L*W*H)	Volume	Gross weight
LF-GIF050CSxxxxH	72	385mm*285mm*210mm	23.04dm³	9.43kg±5%

Test equipment & condition

Test Equipment	AC power source: CHROMA6530, digital power meter: CHROMA66205, 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.

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/50Hz.

Additional information

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. The PC cover, casing and end cap for assembling the LED driver in the light fixture must meet the fire rating of UL94-V0 or above.

Transportation & storage

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.

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.

Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.

Lifud Technology Co., Ltd. reserves the right to interpret any contents of this specification.