LF-008SxxxxH

008S SELV | Constant Current - Non Dimmable

Product family features

— Flicker free

— Ultra-quiet operation

— IP20

— 5 years guarantee

Product family benefits

— Compact volume: compatible with 35mm hole

— High cost performance

Typical applications

— For indoor down light

— For spotlight, wall light

Product parameters

— Output current 80/100/120/135/150/160/180/200/220mA

— Output power 2.4-8.4W

— Input voltage 220-240Vac

— Output voltage 30-40Vdc

— Efficiency 82%

Electrical data

Input data

Rated input voltage	220 ... 240V
Input voltage AC	198 ... 264V
Mains frequency	50/60Hz
Phase factor	≥0.7
Power factor	≥0.5
Efficiency	≥82%[1)]
THD	/
Input current	0.1A Max
Inrush current	15A[2)]
Loading number on circuit breaker 10 A (B)	83
Loading number on circuit breaker 10 A (C)	83
Loading number on circuit breaker 16 A (B)	132
Loading number on circuit breaker 16 A (C)	132
Protective conductor current	≤0.7mA

Output data

Nominal output voltage	30... 40V[3)]
Nominal output current	80/100/120/135/150/160/180/200/220mA
Maximum output power	8.4W
Nominal output power	2.4...8.4W
Output ripple current (100 Hz)	<5%
Flicker	According to IEEE Std 1789-2015
CIE SVM	≤0.4
IEC-Pst	≤1
Current tolerance	±7%[4)]
Temperature tolerance	±10%
Start-up time	<0.5S

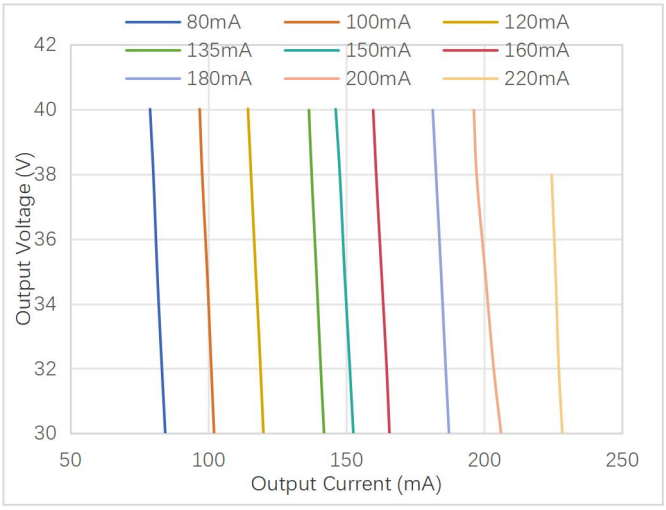
Safety

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

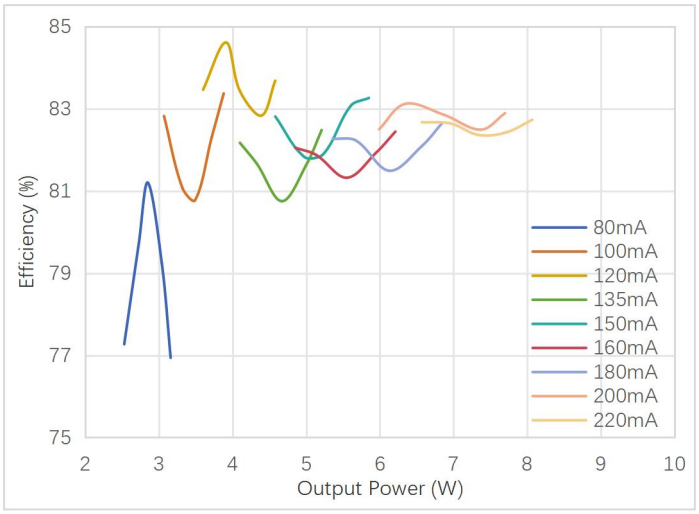
1) 82%@135-220mA, 79%@100-120mA, 73%@80mA
2) t =60μs
3) The output voltage is 30-38V when the output current is 220mA; LF-008S0135H can meet the new standard IEC 61000-3-2:2019/A1:2021 with the output voltage range of 34-40Vdc; LF-008S0150H can meet the new standard IEC 61000-3-2:2019/A1:2021 with the output voltage range of 31-40Vdc.
4) 7%@135-220mA, 8%@100-120mA, 9%@80mA
5) 5 years@Tc≤75℃

Characteristic diagrams

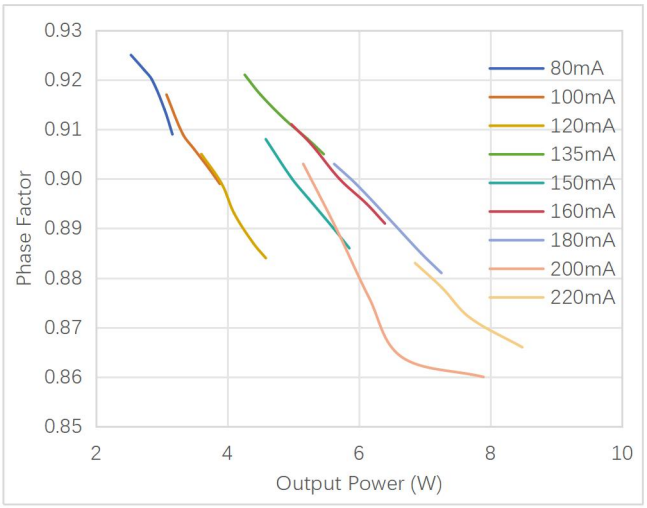
Operating Window



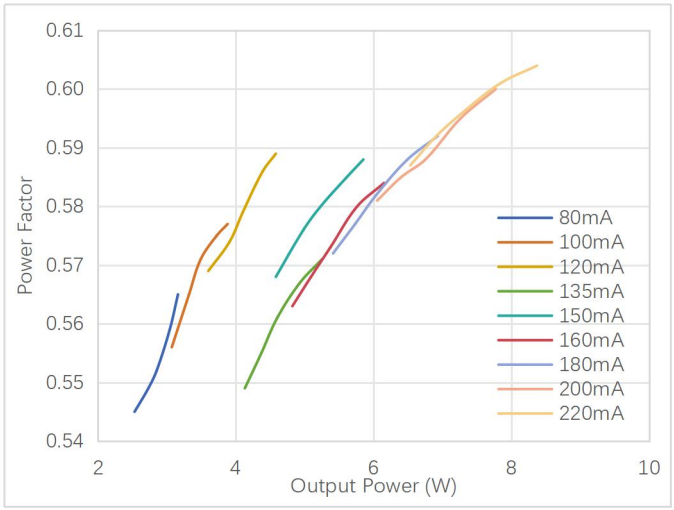
Typical Efficiency vs Load



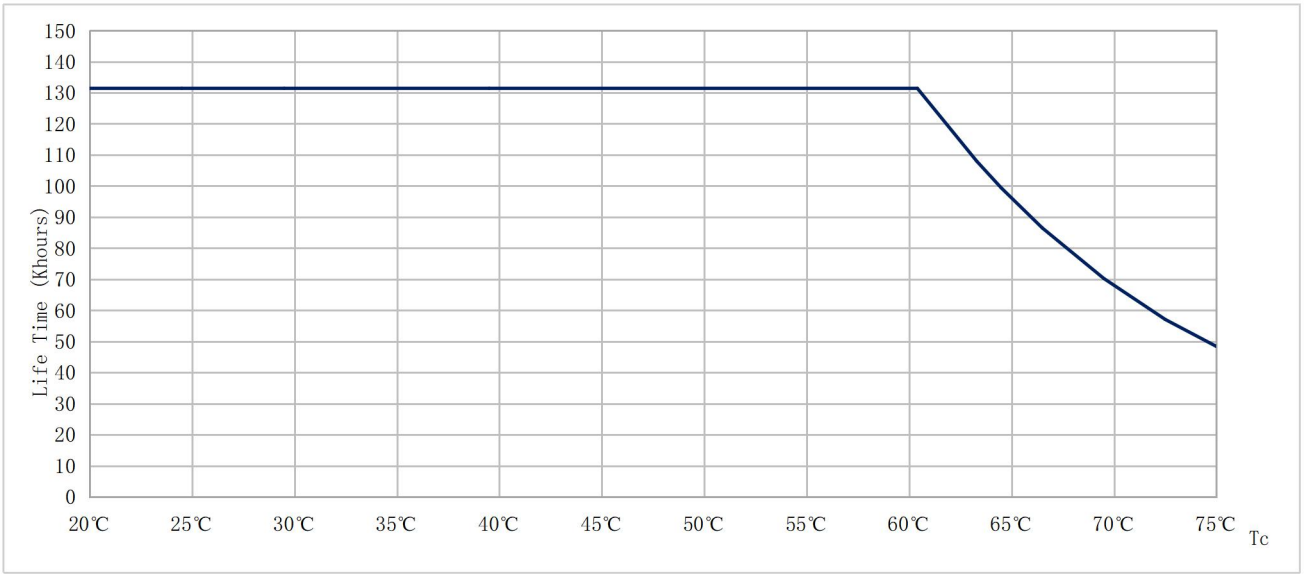
Typical Phase Factor vs Load



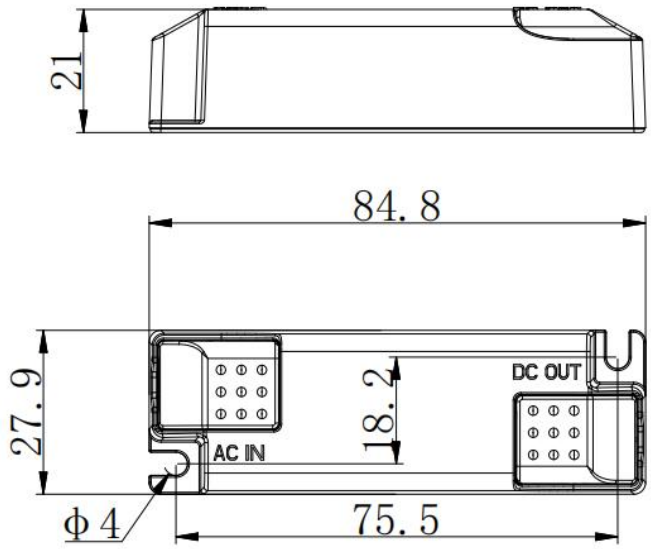
Typical Power Factor vs Load



Lifespan



Dimensions



Mounting hole spacing, length	75.5mm
Positioning hole diameter	4.0mm
Product weight	30 g
Cable cross-section, input side	0.75 ... 1.5 mm²
Cable cross-section, output side	0.5 ... 1.5 mm²
Cable outer diameter, input side	3... 5mm
Cable outer diameter, output side	3... 5mm
Wire preparation length, input side	7 ... 8mm
Wire preparation length, output side	7 ... 8mm
Length	84.8mm
Width	27.9mm
Height	21mm

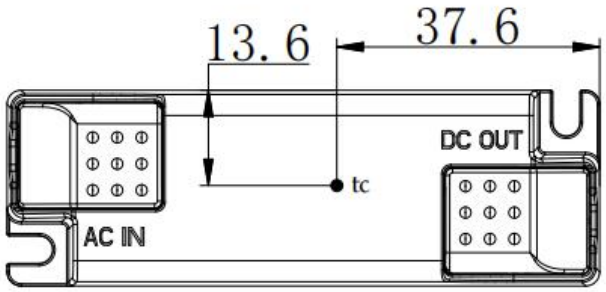
Colors & materials

Casing material	PC
Casing color	White

Temperature & operating conditions

Ambient temperature range	-20 ... +45°C
Maximum temperature at tc test point	75°C
Temperature range at storage	-40 ... +80℃ (6 months in Class I environment)
Humidity range at storage	10-90%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	**LED-**	Negative terminal output of LED driver

Capabilities

Dimmable	-
Over-temperature protection	-
Overload protection	-
Short circuit protection	Self-recovery
No-load protection	<59V
Input overvoltage protection	-
Suitable for fixtures with prot. class	II
Control interface	-
Output interface	-

Programming

Programming device	-
DALI control software	-
APP	-

Certificates & standards

Approval marks	CCC, ENEC[1)], CB, RCM, UKCA, CE[2)]
Standards	GB 19510.1-2009, GB 19510.14-2009 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

Note: 1) The ENEC label of 100/120/150mA products has been updated to the latest ENEC label

2) LF-008S0080H complies with CE

Logistical data

Product	Packaging unit (Pieces/Unit)	Dimensions (L*W*H)	Volume	Gross weight
LF-008SxxxxH	288	385mm*285mm*223mm	24.47 dm³	8.8kg±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%, maximum output 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 number of LED drivers that can be connected to a circuit breaker and the inrush current are tested under the same conditions.

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 on 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 omissions excepted. Always make sure to use the most recent release.

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