

LF-FMR020NA0350-BU

FMR*NA non-SELV LED driver | Constant Current - Non Dimmable



Product family features

- Low THD $\leq 15\%$ @full load
- Rated input voltage: 127-220Vac
- Ta: -30°C~+50°C
- Fixed output current (non dimmable)
- Suitable for Class II light fixtures
- 3 years guarantee



Product family benefits

- Compact and cost-effective
- Non-SELV output

Typical applications

- For linear light and tri-proof light
- For office, commercial, and decorative lighting

Product parameters

- Output current 350mA
- Output power 8.75-20W
- Input voltage 127-220Vac
- Output voltage 25-57Vdc
- Efficiency 87%

Electrical data

Input data

Rated input voltage	127 ... 220V
AC voltage range	100 ... 264V
Mains frequency	50/60Hz
Input voltage DC	-
Power factor	$\geq 0.92^{1)}$
Efficiency	$87\%^{2)}$
THD	$\leq 15\% @ 220V_{ac}$
Input current	0.28A Max
Inrush current	$80A^{3)}$
Loading number on circuit breaker 10 A (B)	18
Loading number on circuit breaker 10 A (C)	30
Loading number on circuit breaker 16 A (B)	29
Loading number on circuit breaker 16 A (C)	49
Protective conductor current	$\leq 0.7mA$
No-load power consumption	$\leq 0.6W$

Output data

Nominal output voltage	$25... 57V^{4)}$
Nominal output current	350mA
Maximum output power	20W
Nominal output power	$8.75... 20W$
Output current tolerance	$\pm 5\%$
Temperature tolerance	$\pm 10\%$
Start-up time	$< 0.5S^{5)}$

Safety

Withstanding voltage	-
Surge capability (L-N)	1kV
Surge capability (L/N-Ground)	-
Insulation resistance	-
Guarantee	3 years ⁶⁾

1) $0.92 @ 127V_{ac}$; $0.92 @ 220V_{ac}$

2) $86\% @ 127V_{ac}$; $87\% @ 220V_{ac}$

3) $t = 60 \mu s @ 230V_{ac}$

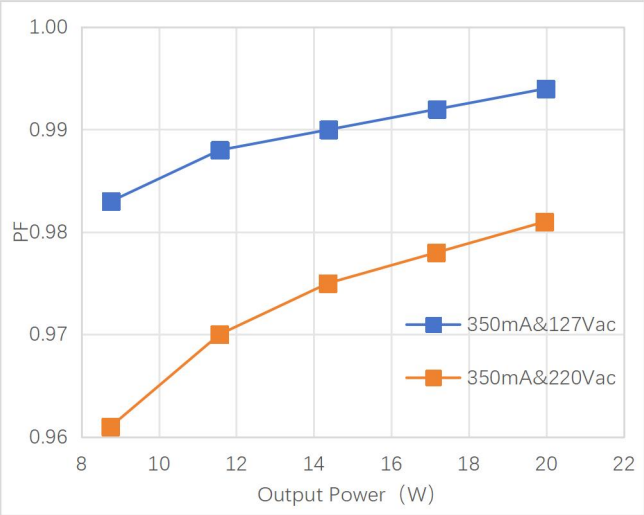
4) Please refer to the operating window about the relationship between output voltage and output current

5) $0.5S @ 220V_{ac}$; $1S @ 127V_{ac}$

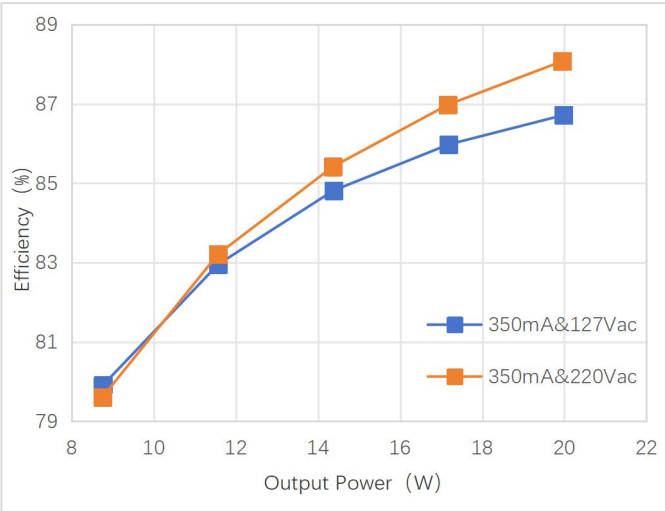
6) 3 years @ $T_c \leq 75^{\circ}C$

Characteristic diagrams

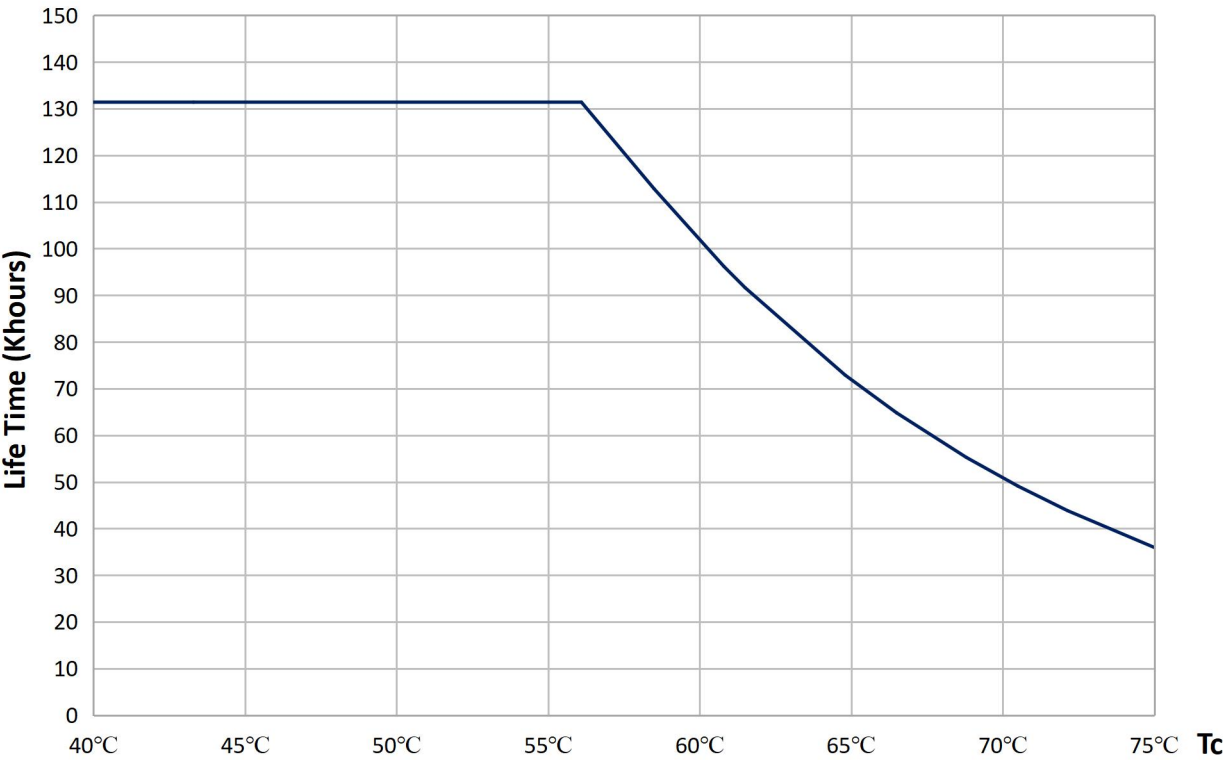
Typical Power Factor vs Load



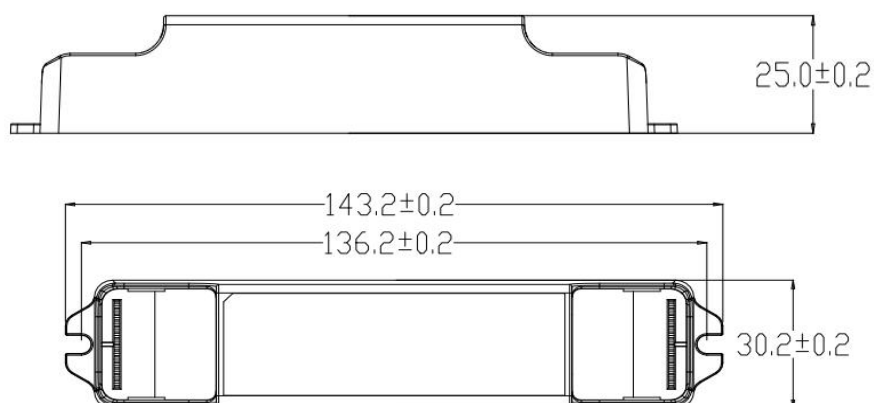
Typical Efficiency vs Load



Lifespan



Dimensions (Unit: mm)



Mounting hole spacing, length	136.2±0.2mm
Positioning hole diameter	4.3mm
Product weight	53g±5%
Cable cross-section, input side	0.75 ... 1.5 mm ²
Cable cross-section, output side	0.5 ... 1.0 mm ²
Wire preparation length, input side	7 ... 8mm
Wire preparation length, output side	7 ... 8mm
Length	143.2±0.2mm
Width	30.2±0.2mm
Height	25.0±0.2mm

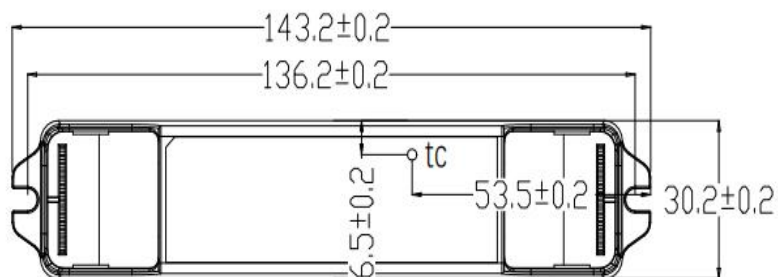
Colors & materials

Casing material	PC
Casing color	White

Temperature & operating conditions

Ambient temperature range	-30°C - +50°C
Maximum temperature at Tc test point	75°C
Temperature range at storage	-40°C - +80°C (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 (Unit: mm)



Note: this diagram is the front view and Tc point is at the top of the driver. The left end is the input and the right end is the output.

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	-
Open circuit protection	<80V
Short circuit protection	Automatic reversible
No-load protection	-
Suitable for fixtures with prot. class	II
Control interface	-
Number of channels	1 channel

Programming

Programmer	-
DALI control software	-
APP	-

Certificates & standards

Approval marks	none
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Logistical data

Product	Packaging unit (Pieces/Unit)	Dimensions (L*W*H)	Volume	Gross weight
LF-FMR020NA0350-BU	84	385mm*285mm*210mm	23.04 dm ³	5.57kg±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.
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If there are no special remarks, the above parameters are tested at the ambient temperature of 25℃, humidity of 50%, maximum output power 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 number of LED drivers that can be connected to a circuit breaker and the inrush current are tested under the same conditions.
3. 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.