

High quality LED power supplies with constant voltage output (CV)

FEATURES:

- compact design
- reliable and powerful
- high efficiency
- compliant with international lighting standards
- fully protected
- durable and robust unit
- easy to mount case

APPLICATIONS:

- indoor lighting LED systems
- retail and industrial lighting
- stage LED lighting
- digital signage systems
- architectural LED lighting



LNF-60 is a series of high-performance 60-watt power supplies for LED lighting systems. It has a slim case made of durable plastic. It is a high-quality power unit, meets the requirements of international standards and provides high output power. It is based on high quality electronic components that allow continuous, long-lasting work in all environmental conditions. It is reliable, fully protected and stable. 5 years warranty included.

TECHNICAL CHARACTERISTICS

Group	Parameter	LNF-6012	LNF-6024	Conditions
Input	Rated input voltage	230 VAC		
	Input voltage range	220 – 240 VAC		
	Mains frequency range	50 Hz		
	AC current (max.)	0.5 A		At 240 VAC and full load
	Inrush current (max.)	40 A	40 A	At 240 VAC and full load
	No-load power consumption (max.)	0.25 W	0.25 W	
	Input leakage current (max.)	0.25 mA		At 240 VAC
	Power factor correction	Yes		Active type
	Power factor (min.)	0.9		
Output	Regulation type	CV – constant voltage		
	Rated output voltage	12 V	24 V	
	Ripples and noise voltage	150 mVpp	200 mVpp	
	Rated output power	60 W		
	Rated output current	5 A	2.5 A	
	Efficiency	88%	89%	At 240 VAC and full load
	Line regulation	±2%		220 – 240 VAC
	Load regulation	±3%	±2.5%	
	Turn on delay time (max.)	300 ms		At 240 VAC and full load
	Hold time after power loss (max.)	1 s		At no load
LED brightness	Brightness control	No		
Environmental	Working temperature range	-20°C to +45°C		
	Maximum enclosure temperature	85°C		
	Working humidity range	20 – 90% RH		Without condensation
	Storage temperature range	-20°C to +60°C		
	Cooling method	Free air circulation		
Protection	Input: overvoltage (OVP), undervoltage (UVP)	OVP		
	Output: overcurrent (OCP), short circuit (SCP), overvoltage (OVP)	OCP (105 – 145%), SCP, OVP (16 V)	OCP (115 – 145%), SCP, OVP (36 V)	Rectangular characteristic
	Spike voltage protection	Yes		MOV
	Automatic recovery on fault remove	Yes		
	Thermal switch off	Yes		110°C
Safety and EMC	Withstand isolation voltage (min.)	3 kVAC (input to output)		5 mA, 1 min
	Isolation resistance (min.)	10 MΩ		500 VDC
	Isolation class	2		Grounding is not required
	Safety compliance	EN61347-1, EN61347-2-13 EN60598-1, EN60598-2-6		
	EMC compliance (emission)	EN55015		
	EMC compliance (harmonic current emission)	EN61000-3-2, -3-3, Class C		
	EMC compliance (immunity)	EN61547 EN61000-4-2, -4-5, Class C		
	Marking	CE, UKCA, RoHS		

Notes: Unless otherwise stated, all parameters are specified at 230 VAC input voltage, 50 Hz, ambient temperature 25°C and relative humidity 70% for rated load output. The values of parameters related to the output voltage regulation is measured from low to high line or for load changes from 0 to 100%, respectively. The power supply is considered as an independent unit, but the final equipment still need to reconfirm that the whole system complies with the EMC directives. If the PSU is installed in the final device as a subassembly, the tests should be repeated to verify that the system has been met compliance. Detailed technical data are available on request.

Mechanical	Enclosure type	White ABS plastic (removable connector covers)	
	Dimensions	147 × 48 × 25 mm	L × W × H
	Weight	228 g	
	Input connector	Terminal block	0.75 – 1.5 mm ²
	Output connector	Terminal block	1.0 – 2.5 mm ²
	Single package size	155 × 58 × 35 mm	
	Packing	330 × 300 × 200 mm	50 items
	Manufacturing	China	
	Warranty	5 years	
	EAN code	5904139614037	5904139613962

BLOCK DIAGRAM

MARKING SYSTEM

LNF-6012

- Rated output voltage **12 V**
- Output power class **60 W**
- Series name **LNF**

MECHANICAL SPECIFICATION

PRODUCT LABEL

Legend to the label icons:

- L** – line connection (brown or black wire)
- N** – neutral connection (blue)
- tc: 85°C** – maximum case temperature
- ta: 45°C** – maximum ambient temperature
- II safety class: no grounding is required, no dangerous voltage even in an emergency situation will appear on output
- power supply intended for indoor use only
- it can be installed separately outside a lighting fixture without an additional housing
- means safety isolating control gear with short circuit protection
- can be placed on wood surfaces or built into furniture
- thermally protected at 110°C
- designed for continuous operation
- the product must not be disposed of in normal waste containers
- Safety Extra Low Voltage output insulated from both the mains and ground circuits
- IP20** – defined in EN 60529 levels of sealing effectiveness of electrical enclosures against intrusion from foreign bodies (tools, dirt) and moisture

LNF LED POWER SUPPLY SERIES

No.	Series	Model	Power Supply Name	EAN	Voltage [V]	Current [A]	Power [W]	Dimensions [mm]
1.	LNF	LNF-3012	LED ESPE LNF 12V 2.5A 30W IP20	5904139614013	12	2.5	30	120 × 42 × 20
2.	LNF	LNF-3024	LED ESPE LNF 24V 1.25A 30W IP20	5904139614020	24	1.25	30	120 × 42 × 20
3.	LNF	LNF-6012	LED ESPE LNF 12V 5A 60W IP20	5904139614037	12	5	60	147 × 48 × 25
4.	LNF	LNF-6024	LED ESPE LNF 24V 2.5A 60W IP20	5904139613962	24	2.5	60	147 × 48 × 25
5.	LNF	LNF-10012	LED ESPE LNF 12V 8.33A 100W IP20	5904139613979	12	8.33	100	170 × 57 × 32
6.	LNF	LNF-10024	LED ESPE LNF 24V 4.16A 100W IP20	5904139614044	24	4.16	100	170 × 57 × 32
7.	LNF	LNF-15012	LED ESPE LNF 12V 12.5A 150W IP20	5904139614075	12	12.5	150	180 × 65 × 32
8.	LNF	LNF-15024	LED ESPE LNF 24V 6.25A 150W IP20	5904139613986	24	6.25	150	180 × 65 × 32