



POWER SUPPLIES SERIES LN320

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 LED lighting
- stage LED lighting
- digital signage systems
- architectural LED lighting

YEARS WARRANTY

LN-320 is a series of high quality for LED lighting systems. It is a high-quality power unit which 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

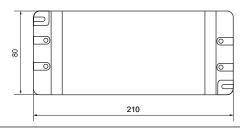
Group	Parameter	LN32012CV	LN32024CV	Conditions
	Rated input voltage	230 VA	AC	
	Input voltage range	220-240	220-240 VAC	
	Mains frequency range	50-60	50-60 Hz	
	AC current (max.)	2.5 A	2.5 A	
Input	Inrush current (max.)	180 Å	180 A	
	No load power consumption	200 m	200 mW	
	Input leakage current (max.)	0.4 m	0.4 mA	
	Power factor correction	Yes	Yes	
	Power factor (typ.)	0.9	0.9	
Output	Regulation type	CV – constan	CV – constant voltage	
	Rated output voltage	12 V	12 V 24 V	
	No-load output voltage (max.)	12.6 V	24.8 V	
	Rated output power	260 W	320 W	
	Rated output current	21.6 A	13.3 A	
	Energy efficiency	92%	94%	At 230 VAC & rated load
	Line regulation	±1%	±1%	
	Load regulation	±3,5%	±2%	
	Ripples and noise	200 mVpp	150 mVpp	At 230 VAC & rated load
	Minimal output current required	No		
	Hold up time (max.)	40 m	40 ms	
	DC voltage rise time (max.)	50 m	50 ms	
	Turn on delay time (max.)	Up to 0	Up to 0.5 s	
Adjustment	Output voltage regulation	No	No	
	Working temperature range	-20 to +	-20 to +45°C	
	Maximum enclosure temperature	+85°0	+85℃	
	Working humidity range	20 ~ 95%	20 ~ 95% RH	
Environmental	Storage temperature range	-40°C ~ +	-40°C ~ +85°C	
	Working height of installation (max.)	2000	2000 m	
	Cooling method	Free air circ	Free air circulation	
	Input: overvoltage (OVP), undervoltage (UVP)	OVP, U	OVP, UVP	
	Output: overcurrent (OCP), short circuit (SCP)	OCP (125-150	OCP (125-150%), SCP	
	OCP protection	Automatic	Automatic restore	
Protection	Output overvoltage protection	Yes, 19 V	Yes, 36 V	
	Transient voltage protection	Yes		MOV protection
	Thermal protection	Yes	Yes	
	Automatic recovery on fault remove	Yes	Yes	
Safety and EMC	Withstand isolation voltage (min.)	3 kVA	3 kVAC	
	Isolation resistance (min.)	100 M	100 ΜΩ	
	Isolation class	2		
	Safety compliance		EN61347-2-13:2014+A1:2017, EN61347- 1:2015+A1:2021, EN62493:2015	
	EMC compliance	EN55015, EN61547, EN61000-	EN55015, EN61547, EN61000-3-2 Class C EN61000-3-3	
	Marking	CE, UKCA,	CE, UKCA, RoHS	
	Functional marking	SELV. L	SELV, LPS	

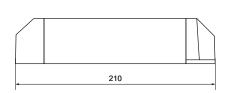
Mechanical and features	Enclosure type	White ABS plastic		IP20
	Dimensions	210 × 80 × 36 mm		
	Weight	500 g		
	Input connector	Terminal block		
	Output connector	Double pins terminal block		
	Single package size	220 × 90 × 50 mm		
	Packing	390 × 260 × 240 mm		20 items
	Manufacturing	China		
	Warranty	5 year		
	MTBF	30 000 h		At 40℃
	EAN	5904139609767	5904139609774	

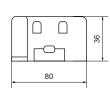
Notes: Unless otherwise stated, all parameters are specified at 230 VAC input voltage, 50 Hz, ambient temperature 25°C and relative humidity 70% for rated load output. The values of parameters related to the output voltage regulation is measured from low to high line or for load changes from 0 to 100%, 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.

BLOCK DIAGRAM Short circuit and overvoltage Pulse Output filter protection Mains filter Rectifie Filte Rectifier Output PWM Circuit protection and voltage regulation

MECHANICAL SPECIFICATION







PRODUCT LABEL



Legend to the label icons:

IP20

- line connection (brown or black wire)

- neutral connection (blue) tc: 85℃ - maximum case temperature

ta: 40℃ - maximum ambient temperature

– Il 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℃

- designed for continuous operation

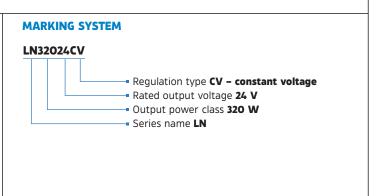
- the product must not be disposed of in normal waste containers

- Safety Extra Low Voltage output insulated from both the mains and ground circuits

- defined in EN 60529 levels of sealing effectiveness of electrical enclosures against intrusion from foreign bodies (tools, dirt) and moisture

ESPE LN LED POWER SUPPLY FAMILY

Symbol	Output power	Dimensions
LN06	6 W	67 × 51 × 21 mm
LN12	12 W	90 × 40 × 24 mm
LN24	24 W	147 × 48 × 25 mm
LN36	36 W	133 × 42 × 30 mm
LN60	60 W	186 × 64 × 22 mm
LN100	100 W	180 × 64 × 22 mm
LN200	200 W	205 × 71 × 35 mm
LN320	320 W	210 × 80 × 36 mm



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