

# LPE6012CV

- 60-watt power supply for LED lighting in the IP67 housing



**LPE6012CV** is a high-performance and high-efficiency 60-watt power supply for LED lighting systems. 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. The power supply enclosure provides full protection against dust and water (IP67).

## FEATURES:

- compact design
- IP67 enclosure
- reliable and powerful
- high efficiency
- fully protected
- compliant with international lighting standards
- easy to mount housing

## APPLICATIONS:

- indoor lighting systems
- retail and industrial lighting
- stage lighting
- digital signage systems
- architectural lighting
- horticultural lighting
- emergency lighting

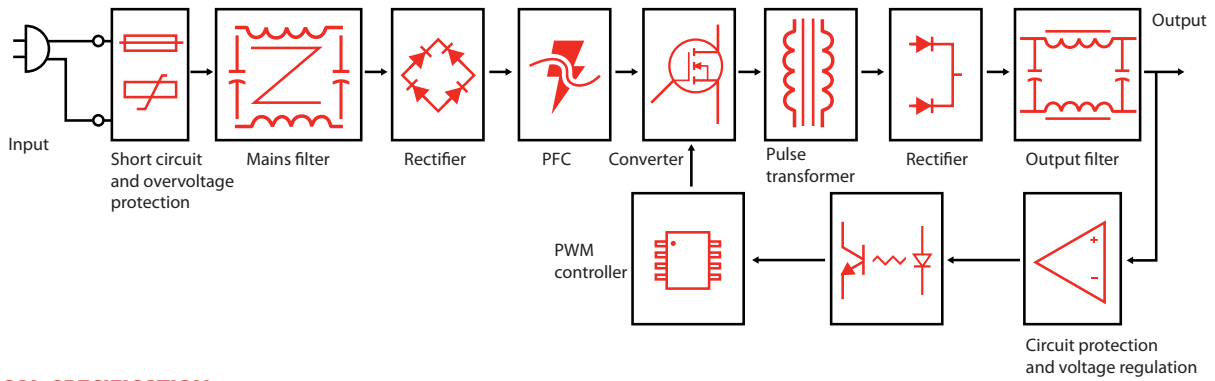
## TECHNICAL CHARACTERISTICS

Group	Parameter	Value	Conditions
Input	Rated input voltage	230 VAC	
	Input voltage range	220-240 VAC	
	Mains frequency range	50 Hz	
	AC current (max.)	0.4 A	At 240 VAC and full load
	Inrush current (max.)	40 A	At 240 VAC and full load
	No-load power consumption (max.)	1 W	
	Input leakage current (max.)	2.5 mA	At 240 VAC
	Power factor correction	Yes	Active type
	Power factor	Over 0.9	
Output	Regulation type	CV – constant voltage	
	Rated output voltage	12 V	
	No-load output voltage (max.)	12.6 V	
	Full load output voltage (min.)	11.4 V	
	Rated output power	60 W	
	Rated output current	5 A	
	Efficiency	85%	At 240 VAC and full load
	Line regulation	±5%	220-240 VAC
	Load regulation	±3%	
Turn on delay time (max.)	500 ms		
LED brightness	Brightness control	No	
Environmental	Working temperature	-10°C to +40°C	
	Maximum enclosure temperature	85°C	
	Working humidity	20% to 90% RH	Without condensation
	Storage temperature	-20°C to +60°C	
	Cooling method	Free air circulation	
Protection	Input: overvoltage (OVP), undervoltage (UVP)	OVP	
	Output: overcurrent (OCP), short circuit (SCP)	OCP (105-150%) SCP, OVP (16 V)	Rectangular characteristic
	Spike voltage protection	Yes	MOV
	Automatic recovery on fault remove	Yes	Output sampling
	Thermal switch off	Yes	110°C
Safety and EMC	Withstand isolation voltage	3 kVAC (input to output)	5 mA, 1 min
	Insulation resistance	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	RoHS, CE	
Mechanical	Life time	30,000 h	40°C
	Enclosure	White ABS plastic	IP67
	Size	166 × 40 × 33 mm	L × W × H
	Weight	366 g	
	Input connector	PVC insulated wire 0.2 m	2 × 0.75 mm <sup>2</sup>
	Output connector	PVC insulated wire 0.2 m	2 × 0.51 mm <sup>2</sup> UL2464
	Single package	245 × 50 × 50 mm	
	Bulk package	510 × 270 × 270 mm	50 pieces
Country of manufacturing	China		

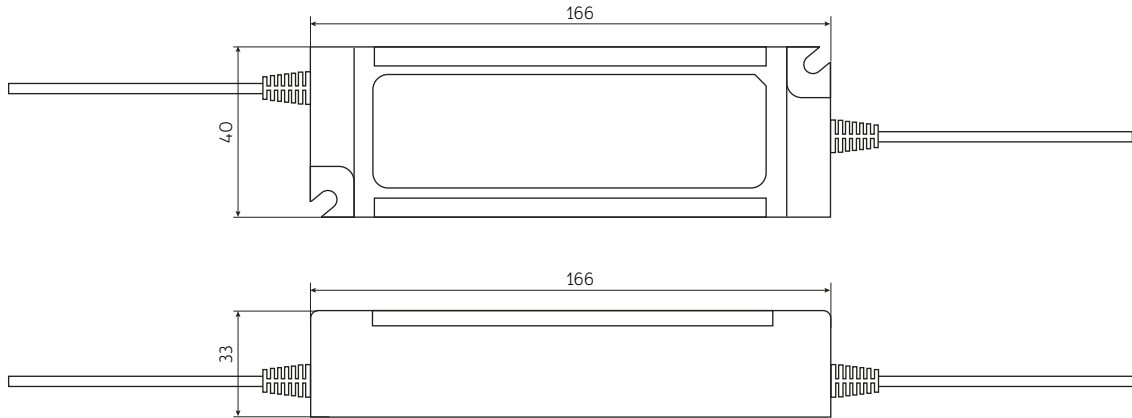
## Notes:

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.

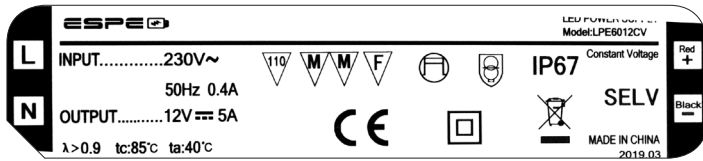
## BLOCK DIAGRAM



## MECHANICAL SPECIFICATION



## PRODUCT LABEL



### Legend to the label icons:

- line connection (brown wire)
- neutral connection (blue wire)
- output plus (positive) wire (red)
- output minus (negative) wire (black)
- Tc: 85°C – maximum case temperature
- Ta: 40°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
- for direct mounting on or at normal or slightly flammable building materials such as wood.
- thermally protected at 110°C
- the product must not be disposed of in normal waste containers
- SELV – Safety Extra Low Voltage output insulated from both the mains and ground circuits
- IP67 – defined in EN 60529 levels of sealing effectiveness of electrical enclosures against intrusion from foreign bodies (tools, dirt) and moisture

## ESPE LP LED IP67 12 V POWER SUPPLY FAMILY

Symbol	Output power	Output current	Dimensions
LPA0612CV	6 W	0.5 A	55 × 29.5 × 22 mm
LPB1212CV	12 W	1 A	50.5 × 49 × 20 mm
LPC2412CV	24 W	2 A	121 × 37 × 26 mm
LPD3612CV	36 W	3 A	148 × 40 × 30 mm
LPE6012CV	60 W	5 A	166 × 40 × 33 mm
LPF10012CV	100 W	8.3 A	190 × 52 × 37 mm

## MARKING SYSTEM

### ESPE LPE6012CV

- Regulation type **CV** – constant voltage
- Rated voltage **12 V**
- Output wattage **60 W**
- Series name **LPE**
- Family **ESPE**