LPB1212CV

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

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
- digital signage systems
- architectural lighting
- emergency lighting

LPB1212CV is a high-performance and high-efficiency 12-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).

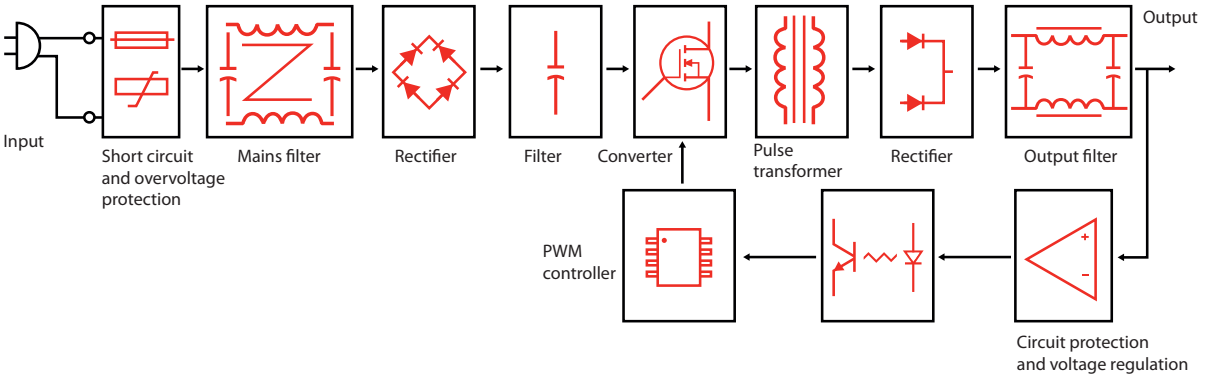
TECHNICAL CHARACTERISTICS

Group	Parameter	Value	Conditions
Input	Rated input voltage	230 VAC	
	Input voltage range	220-240 VAC	
	Mains frequency range	50 Hz	
	AC current (max.)	0.2 A	At 240 VAC and full load
	Inrush current (max.)	40 A	At 240 VAC and full load
	No-load power consumption (max.)	0.5 W	
	Input leakage current (max.)	0.5 mA	At 240 VAC
	Power factor correction	No	
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	12 W	
	Rated output current	1 A	
	Efficiency	75%	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℃ to +40℃	
	Maximum enclosure temperature	85℃	
	Working humidity	20% to 90% RH	Without condensation
	Storage temperature	-20℃ to +60℃	
	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℃
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	50℃
	Enclosure	White ABS plastic	IP67
	Size	50.5 × 49 × 20 mm	L × W × H
	Weight	96 g	
	Input connector	PVC insulated wire 0.2 m	2 × 0.5 mm²
	Output connector	PVC insulated wire 0.2 m	2 × 0.32 mm² UL2468
	Single package	85 × 53 × 70 mm	
	Bulk package	405 × 260 × 300 mm	100 pieces
	Country of manufacturing	China	

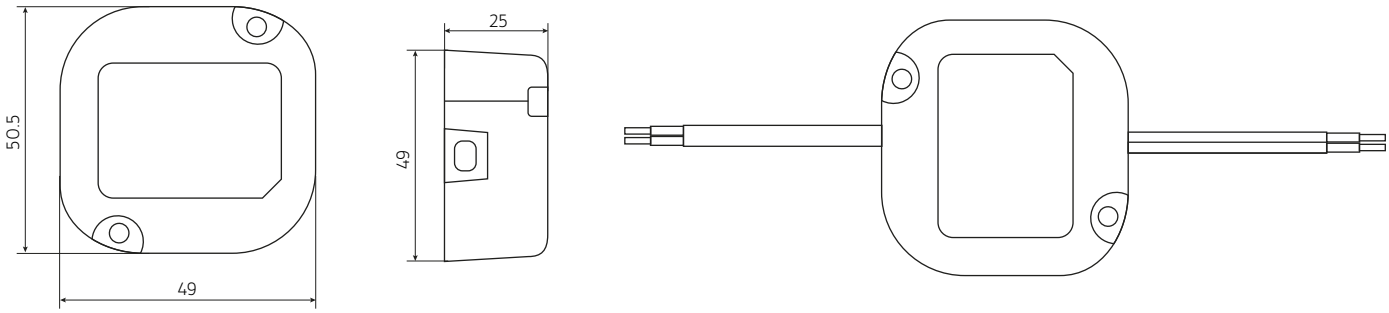
Notes:

Unless otherwise stated, all parameters are specified at 230 VAC input voltage, 50 Hz, ambient temperature 25℃ 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.

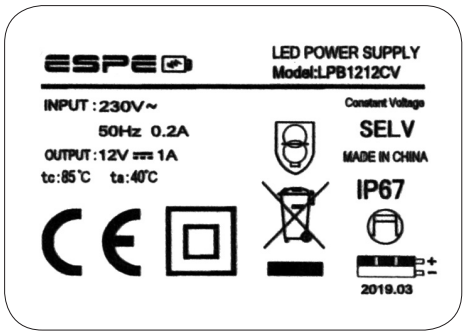
BLOCK DIAGRAM



MECHANICAL SPECIFICATION



PRODUCT LABEL



Legend to the label icons:

Tc: 85℃ – maximum case temperature

Ta: 40℃ – 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

– 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

– output cable polarization

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 LPB1212CV

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