



FEATURES

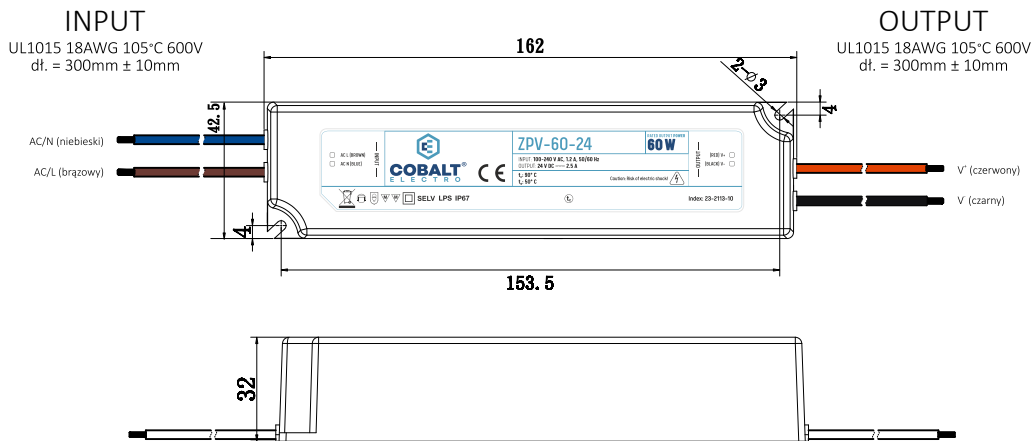
- Stable constant voltage output
- Universal AC input / Full range
- Overvoltage, overload, short circuit, over temperature protection
- Suitable for dry and wet conditions (note 7.)
 - Isolation class II
 - IP67 protection
- Cooling by free air convection
- 5-year warranty

SPECIFICATION		ZPV-60-12	ZPV-60-24
OUTPUT	DC Voltage	12V	24V
	Rated Current	5A	2.5A
	Current Range	0 ÷ 5A	0 ÷ 2.5A
	Rated Power	60W	60W
	Line Regulaon	± 1%	± 1%
	Load Regulaon	± 2%	± 2%
	Setup, Rise Time (note 6.)	1200ms/40ms (230VAC at full load) 2400ms/30ms (115VAC at full load)	
	Hold up meq	50ms/(230VAC) at full load 15ms/(115VAC) at full load	
	Ripple & Noise (note 2.)	≤120mVp-p	≤150mVp-p
	Voltage Tolerance (note 3.)	±5%	
INPUT	Voltage Range	90 ÷ 264VAC 127 ÷ 373VDC	
	Frequency Range	47 ÷ 63HZ	
	Efficiency (Typ.)	≥83.5%	≥88%
	AC Current (Typ.)	1.2A/115VAC 0.6A/230VAC	
	Inrush Current (Typ.)	COLD START 35A/115VAC 60A/230VAC	
	Leakage Current (Max.)	<1mA / 240VAC	
	No Load Power Consumpon	<0.5W	

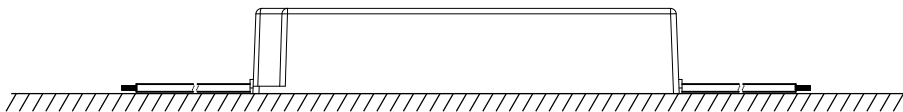
PROTECTION	Overload	105 ÷ 175% rated output current Hiccup mode, auto-recovery after fault condition is removed	105 ÷ 175% rated output current Hiccup mode, auto-recovery after fault condition is removed
	Over Voltage	115 ÷ 150% shut down o/p voltage, re-power on to recover	115 ÷ 150% shut down o/p voltage, re-power on to recover
	Short Circuit	Hiccup mode, auto-recovery after fault condition is removed	
WORKING ENVIRONMENT	Working Temp.	-30 ÷ +70°C (Refer to "derating curve")	
	Working Humidity	20 ÷ 95% RH non-condensing	
	Storage Temp., Humidity	-40 ÷ +85°C, 10 ÷ 95% RH non-condensing	
	Temp. Coefficient	0.03%/°C (0°C ÷ 50°C)	
	Vibration	10 ÷ 500Hz, 2G, 10min/1 cycle, 60min. each along X, Y, Z axes	
SAFETY & EMC	Safety Standards	EN61347-1, EN61347-2-13, IP67	
	Withstand Voltage	I/P-O/P: 3kVAC/10mA; I/P-CASE: 1.5kVAC/10mA; O/P-CASE: 0.5kVAC/10mA	
	Isolation Resistance	I/P-O/P: 100M ohms/500VDC/25°C/70%	
	EMC Immunity	EN61547	
	EMC Emission	EN55032 CLASS B; EN61000-4-2, 3, 4, 5, 6, 8, 11	
	Harmonic Current	EN61000-3-2, EN61000-3-3	
OTHERS	Dimension	162 × 42.5 × 32mm (L*W*H)	
	Weight and Packing	50PCS/CTN 19.5KGS/CTN	

NOTE:

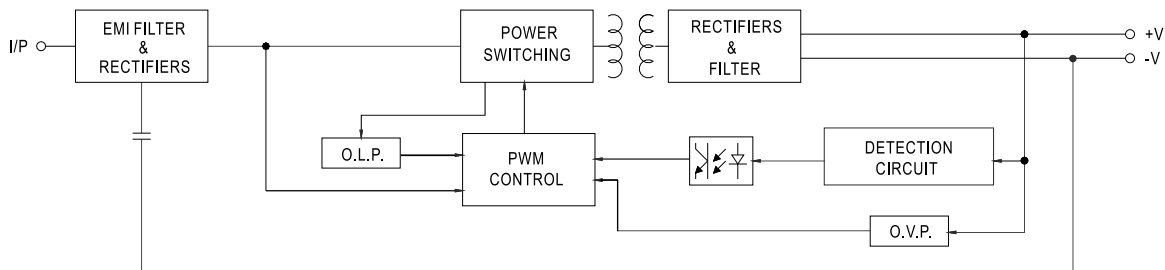
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. Derating may be needed under low input voltage. Please check the static characteristics for more details.
5. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.
6. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
7. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid direct exposure to sunlight and immersion in water for over 30 minutes.



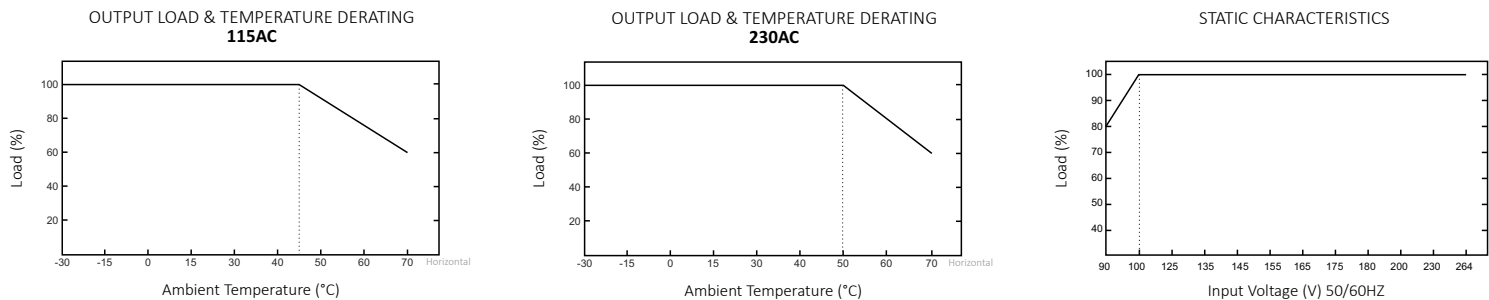
RECOMMEND MOUNTING DIRECTION



BLOCK DIAGRAM



DERATING CURVE



EXPLANATION OF THE SYMBOLS USED ON THE DEVICE



Short-circuit proof safety transformer



II IEC protection class



The device is designed to be placed on wooden surfaces in accordance with: DIN VDE 0710-14



Risk of electric shock

SELV

Safe low voltage output not exceeding 50V AC or 120V DC

LPS

The end product does not need the fire enclosure

IP

Rate of protection against access to dangerous parts inside the housing, ingress of solids and water



Independent electronic transformer: it can be installed separately outside the luminaire without any additional housing