



Your Power House
VP ELECTRONIQUE

EA-0403

PRELIMINARY

VER : PA_0 update : 2021.11.09

AC-DC ITE Power Module

VPCV60 SERIES 60 Watts

KEY FEATURES

- Universal Input Range 90-305VAC, 47-63 Hz
- I/O Isolation 4500VAC
- Operating Ambient Temperature Range -40°C to +85°C
- No Load Power Consumption < 0.1W
- 5000m Altitude Application
- Over-Voltage Category OVC III EN 61558 (New Edition)
- High Efficiency up to 90%
- Isolation Class II
- EMC Compliant without External Components
- Safety Approval to UL / IEC / EN 62368-1, EN 60335-1, EN 61558-2-16
- 3-Year Product Warranty



(In Progress)

ELECTRICAL SPECIFICATIONS

All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Model No.		VPCV60-12S	VPCV60-15S	VPCV60-24S
Max Output Wattage (W)		60W		
Input	Voltage	85-305 VAC or 120-430 VDC		
	Frequency (Hz)	47-63 Hz		
	Current (Full load)	1500 mA max. (115 VAC) / 1000 mA max. (230 VAC)		
	Inrush Current (<2ms)	45 A max. (115 VAC) / 90 A max. (230 VAC)		
	Leakage Current	0.25 mA max. (100-240 VAC)		
	No Load Power Consumption	< 0.1W (at 90-264 VAC)		
Output	Voltage (V.DC.)	12V	15V	24V
	Voltage Accuracy	±2%		
	Current (mA) max	5000	4000	2500
	Line Regulation (LL-HL) (typ.)	±2%		
	Load Regulation (0-100%) (typ.)	±2.5%		
	Minimum Load	0%		
	Maximum Capacitive Load	In Progress	In Progress	In Progress
	Ripple & Noise	120mV	150mV	240mV
	Efficiency (at 230 VAC)	90%	90%	90%
Protection	Hold-up Time (typ)	30 ms (at 230VAC)		
	Over Power Protection	Auto recovery		
	Over Voltage Protection	Zener diode clamp		
Isolation	Short Circuit Protection	Hiccup mode, indefinite (automatic recovery)		
	Input-Output (V.AC)	4500V		
Environment	Operating Temperature	-40°C...+85°C (with derating)		
	Storage Temperature	-40°C...+85°C		
	Temperature Coefficient	±0.05%/°C		
	Altitude During Operation (UL / IEC / EN 62368-1)	5000m		
	Humidity	95% RH		
	MTBF	>300,000 h @ 25°C (MIL-HDBK-217F)		
	Over Voltage Category	III: Compliance to EN 61558; altitude up to 2000 meters.		
	Vibration	IEC60068-2-6 (10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes)		
Physical	Shock	IEC60068-2-27		
	Dimensions (L x W x H)	2.92 x 1.85 x 0.91 Inches (74.2 x 47.0 x 23.1 mm) Tolerance ±0.5 mm		
	Case Material	Plastic resin (flammability to UL 94V-0)		
	Weight	158 g		
Safety	Cooling Method	Free air convection		
	Agency Approvals	UL / IEC / EN 62368-1, EN 60335-1, EN 61558-2-16 (In Progress)		
EMC	EMI (Conducted & Radiated Emission)	EN 55032 class B (In Progress)		
	EMS (Noise Immunity)	EN 55035 (In Progress)		



NOTE

1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.



2. **SMPS** incorporating a short-circuit-proof safety isolating transformer (non-inherently)



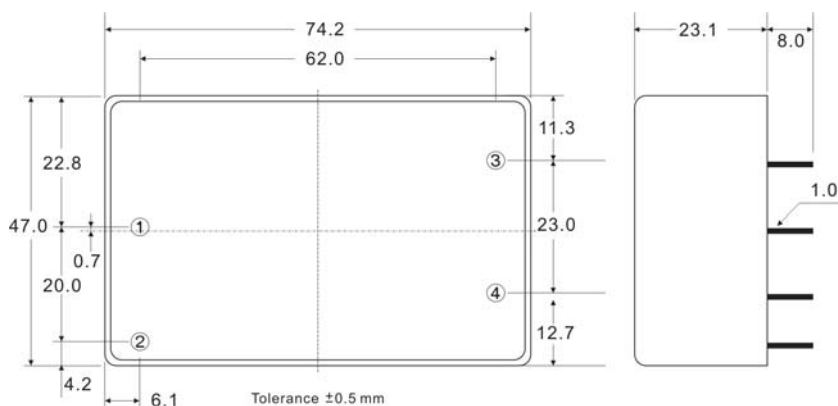
3. **SMPS** (Switching mode power supply unit)

4. **CAUTION: Double pole, neutral fusing. Disconnect mains before servicing.**

(ATTENTION : 2 poles avec fusible sur le neutre. Deconnecter le secteur avant intervention.)

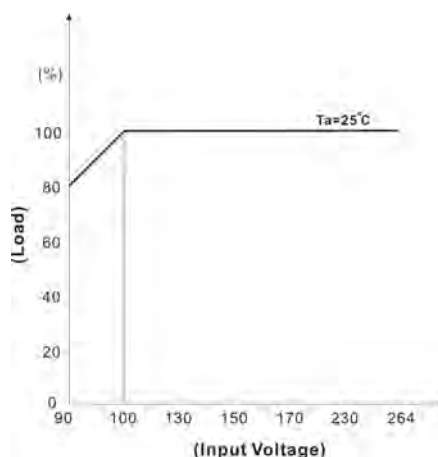
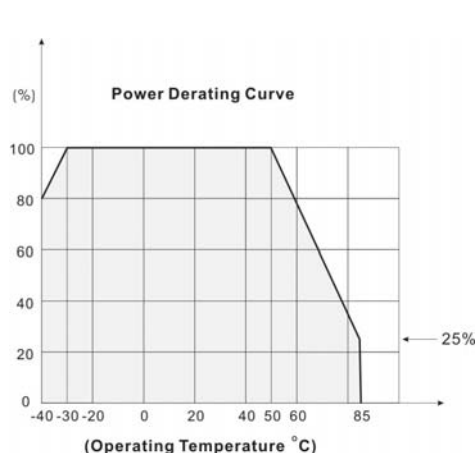
5. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).

MECHANICAL DIMENSIONS (Top View)



PIN#	Single
1	AC IN (N)
2	AC IN (L)
3	-DC OUT
4	+DC OUT

DERATING



We reserve the right to make alterations in the product materials and specifications without prior notification and consent to improve reliability, function or design or otherwise.