

**KEY FEATURES**

- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-305VAC, 47-63 Hz
- Isolation Class II
- Maximum No-Load Watts < 0.3W
- CE, CB and UL Approval
- 3-Year Product Warranty



**ELECTRICAL SPECIFICATIONS**

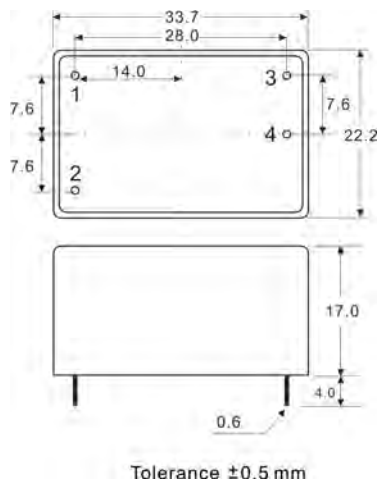
All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Model No. (Single Output)	VPYC-3.3S	VPYC-5S	VPYC-9S	VPYC-12S	VPYC-15S	VPYC-24S	
Max Output Wattage (W)	2W						
Input	Voltage						90-305 VAC or 120-430 VDC
	Frequency (Hz)						47-63 Hz
	Current (Full load)						75 mA max. (115 VAC) / 55 mA max. (230 VAC)
	Inrush Current (<2ms)						30 A max. (115 VAC) / 50 A max. (230 VAC)
	Leakage Current (<240 VAC)						0.25 mA max.
	External Fuse (mandatory)						3.15 A slow blow type
	External Varistor						14S561K
Output	Voltage (V.DC.)						3.3V    5V    9V    12V    15V    24V
	Voltage Accuracy						±6%
	Current (mA) max						600    400    222    167    133    83
	Line Regulation (LL-HL) (typ.)						±5%
	Load Regulation (10-100%) (typ.)						±6%
	Minimum Load						0%
	Maximum Capacitive Load						7000uF    4000uF    1200uF    500uF    350uF    110uF
	Ripple & Noise (Vp-p)						300mV
	Efficiency (at 115 VAC)						66%    70%    73%    73%    73%    75%
Hold-up Time (at 230 VAC)						15 ms min.	
Protection	Over Power Protection						Hiccup technique, auto-recovery
	Short Circuit Protection						Hiccup mode, indefinite (automatic recovery)
Isolation	Input-Output (V.AC)						3000V
Environment	Operating Temperature						-40°C...+80°C ( with derating )
	Storage Temperature						-40°C...+85°C
	Temperature Coefficient						±0.02%/°C
	Humidity						95% RH
	MTBF						>450,000 h @ 25°C (MIL-HDBK-217F)
Physical	Dimensions (L x W x H)						1.33 x 0.87 x 0.67 Inches ( 33.7 x 22.2 x 17.0 mm ) Tolerance ±0.5 mm
	Case Material						Plastic resin (flammability to UL 94V-0)
	Weight						20.1 g
	Cooling Method						Free air convection
Safety	Agency Approvals						UL, cUL, CE, CB
EMC	EMI (Conducted & Radiated Emission)						EN 55032 class B
	EMS (Noise Immunity)						EN 55024

**NOTE**

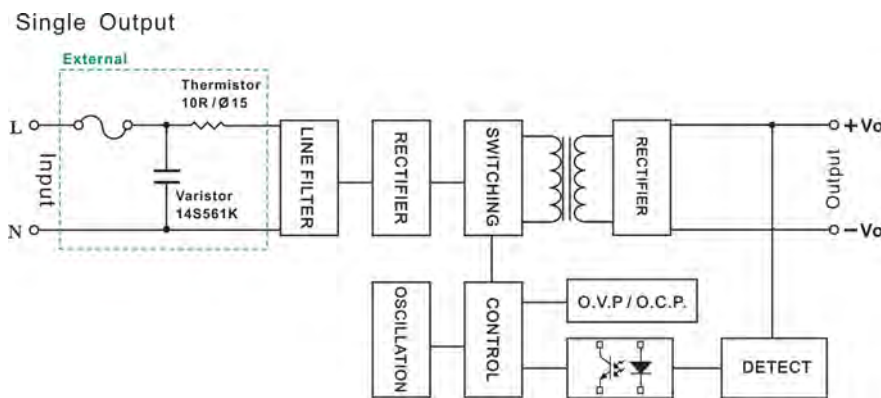
1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. Hold-up Time measured at 90% Vout.
3. It's necessary Varistor 14S561K at L / N input side in parallel.
4. It's necessary 10R / 15  $\phi$  thermistor at L input side in series connection.

**MECHANICAL DIMENSIONS ( Top View )**

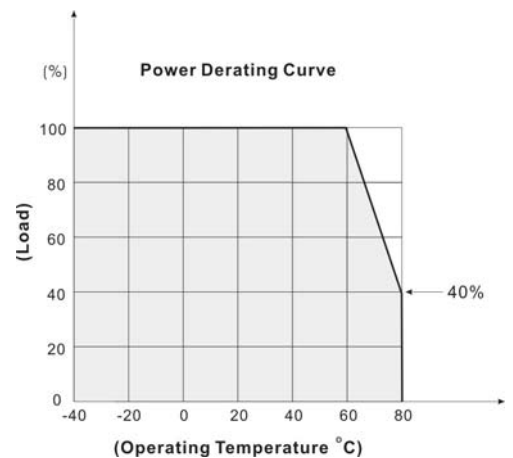


PIN#	Single
1	AC IN (N)
2	AC IN (L)
3	-DC OUT
4	+DC OUT

**BLOCK DIAGRAM**



**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.