

**KEY FEATURES**

- Ultra Compact Size: 2.92" x 1.85"
- Universal Input Range 90-305VAC, 47-440Hz
- I/O Isolation 4000VAC
- Operating Ambient Temperature Range -40°C to +70°C
- No Load Power Consumption < 0.1W
- High Efficiency up to 89%
- Operating altitude 5000m (UL / IEC / EN 62368-1)
- Screw Terminal for Option
- EMC Compliant without External Components
- Safety Approval to UL / IEC / EN 62368-1, IEC / EN 60950-1, IEC / EN 60335-1, IEC / EN 61558-2-16
- 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.	DPANCH50-12S	DPANCH50-15S	DPANCH50-24S
Max Output Wattage (W)	50W		
Input	Voltage		
	90-305 VAC or 120-430 VDC		
	Frequency (Hz)		
	47-440 Hz		
	Current (Full load)		
1000 mA max. (115 VAC) / 600 mA max. (230 VAC)			
Inrush Current (Cold star)			
45 A max. (115 VAC) / 90 A max. (230 VAC)			
Leakage Current			
0.25 mA max. (100-240 VAC)			
Output	Voltage (V.DC.)		
	12V	15V	24V
	Voltage Accuracy		
	±2%		
	Current (mA) max		
	4167	3333	2083
	Line Regulation (LL-HL) (typ.)		
	±2%		
	Load Regulation (0-100%) (typ.)		
	±2.5%		
Minimum Load			
0%			
Maximum Capacitive Load			
3500µF	3000µF	2200µF	
Ripple & Noise (Vp-p) (max.)			
120mV	150mV	240mV	
Efficiency (at 230 VAC)			
89%	88%	88%	
Hold-up Time (typ)			
30 ms (at 230VAC)			
Protection	Over Power Protection		
	Hiccup technique, auto-recovery		
	Over Voltage Protection		
Zener diode clamp			
Short Circuit Protection			
Hiccup mode (automatic recovery)			
Isolation	Input-Output (V.AC)		
4000V			
Environment	Operating Temperature		
	-40°C...+70°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)			
Vibration			
IEC60068-2-6 (10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes)			
Shock			
IEC60068-2-27			
Physical	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, Height Tolerance ±1 mm		
	Case Material		
Plastic resin (flammability to UL 94V-0)			
Weight			
158 g			
Cooling Method			
Free air convection			
Safety	Agency Approvals		
UL / IEC / EN 62368-1, IEC / EN 60950-1, IEC / EN 60335-1(A2 Series N/A), IEC / EN 61558-2-16(A2 Series N/A)			
EMC	EMI (Conducted & Radiated Emission)		
	EN 55032 class B		
EMS (Noise Immunity)			
EN 55035			

For quotes and customization requests, please contact us at (877) 634-0982 or sales@digipwr.com



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## 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)

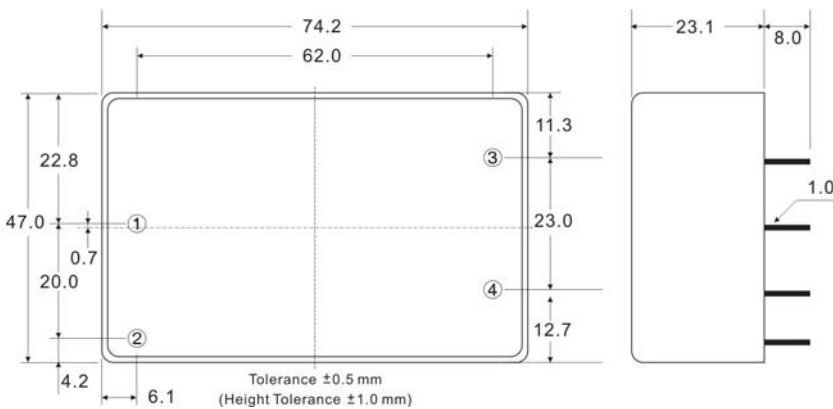


3. **SMPS** (Switching mode power supply unit)

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

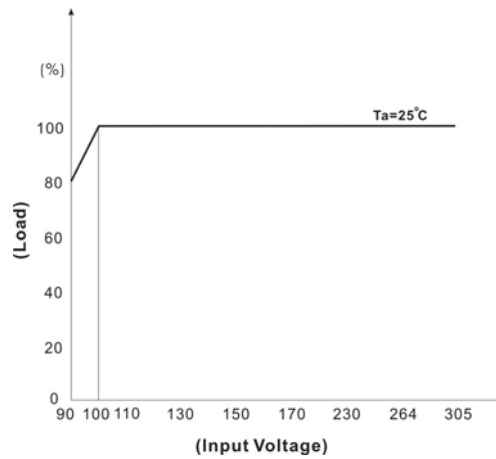
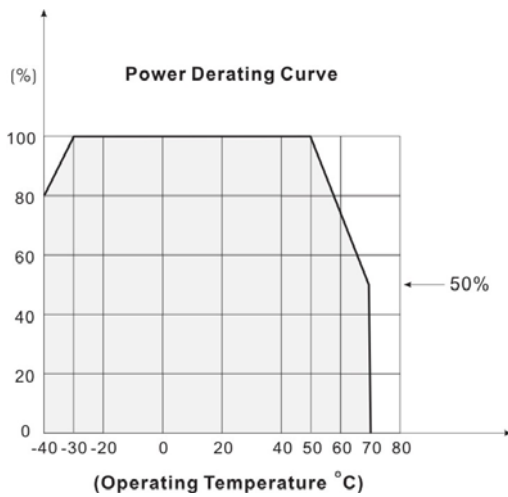
**(ATTENTION : 2 poles avec fusible sur le neutre. Deconnecter le secteur avant intervention.)**

## MECHANICAL DIMENSIONS ( Top View )



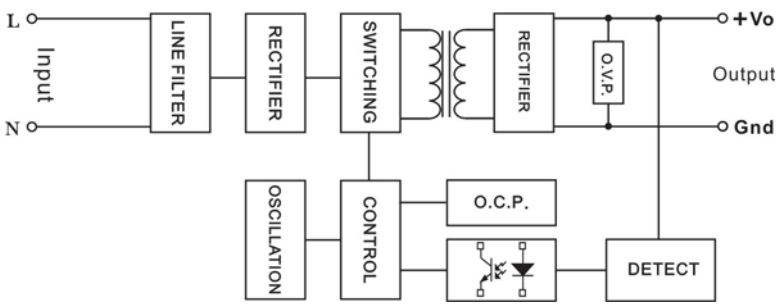
PIN#	Single
1	AC IN (N)
2	AC IN (L)
3	-DC OUT
4	+DC OUT

## DERATING



## BLOCK DIAGRAM

Single Output

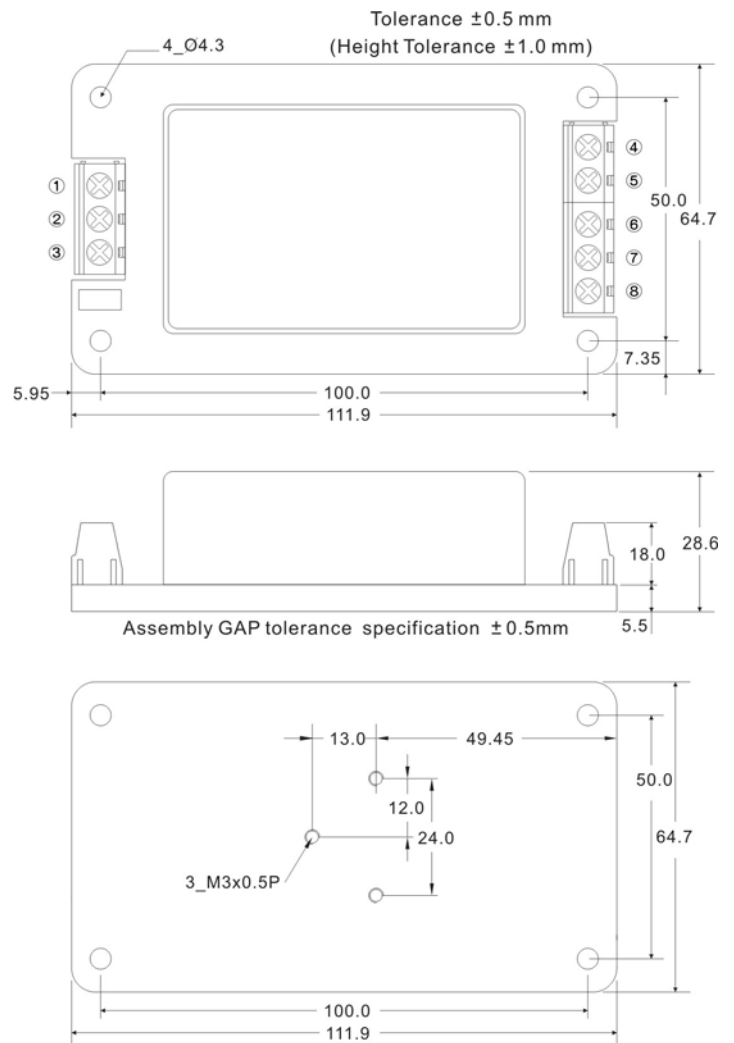


## SCREW TERMINAL

### DPANCH50-A2



PIN#	Single
1	NO CONNECT
2	AC IN (N)
3	AC IN (L)
4	NO CONNECT
5	-DC OUT
6	NO CONNECT
7	+DC OUT
8	NO CONNECT



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Flexible Power Solutions

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