

APV-25 Series

25W Single Output Switching Power Supply



Features

- Constant Voltage Mode Power Supply
- Universal AC input / Full range
- Withstand 300VAC Surge input for 5 seconds
- Protections: Short circuit / Over load / Over voltage
- Fully isolated plastic case
- Cooling by free air convection
- Small and compact size
- IP42 design
- Class 2 power unit
- Pass LPS
- 100% full load burn-in test
- Low cost, high reliability
- Suitable for LED lighting and moving sign applications
- 2 years warranty



Specification

INPUT	Voltage Range	90 ~ 264VAC	127VDC ~ 370VDC			
	Frequency	47 ~ 63 Hz				
	AC Current	0.4A//230VAC 0.8A//115VAC				
	Inrush Current (Typ.)	Cold start 45A (twidth=310µs measured at 50% Ipeak) at 230VAC				
	Max. No. of PSUs on 16A Circuit Breaker	9 units (circuit breaker of type B) / 15 units (circuit breaker of type C) at 230VAC				
OUTPUT	Leakage Current	<0.25mA/240VAC				
	MODEL No.	APV-25-5	APV-25-12	APV-25-15	APV-25-24	APV-25-36
	DC Voltage	5V	12V	15V	24V	36V
	Rated Current	3.5A	2.1A	1.68A	1.05A	0.7A
	Current Range	0 ~ 3.5A	0 ~ 2.1A	0 ~ 1.68A	0 ~ 1.05A	0 ~ 0.7A
	Rated Power	17.5W	25.2W	25.2W	25.2W	25.2W
	Efficiency	75.5%	82%	83%	83%	84%
	Ripple & Voltage	120mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p
	Voltage Tolerance	±5.0%				
	Line Regulation	±1.0%				
	Load Regulation	±2.0%				
	Setup, Rise Time	1500ms, 30ms/230VAC 1500ms, 30ms/115VAC at full load				
	Hold Up Time	20ms/230VAC 12ms/115VAC at full load				
PROTECTIONS	Over Load	Above 105% rated output power Hiccup mode, recovers automatically after fault condition is removed				
	Over Voltage	5.75 ~ 6.95V	13.8 ~ 16.2V	17.25 ~ 21V	27 ~ 32.4V	41.4 ~ 48.6V
ENVIRONMENT	Working Temperature	-30 ~ +70°C (Refer to 'Derating Curve')				
	Working Humidity	20 ~ 90% RH non-condensing				
	Storage Temp., Humidity	-40 ~ +80 °C, 10 ~ 95% RH				
	Temp Coefficient	±0.03%/°C (0 ~ 50°C)				
	Vibration	10 ~ 500Hz, 2G 10 min./1cycle, period for 60 min. each along X, Y, Z axes				
SAFETY & EMC	Safety Standards	UL8750, CSA C22.2 NO.250.13, IP42 approved; design refers to EN60950-1				
	Withstand Voltage	I/P-O/P:3KVAC				
	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH				
	EMC Emission	Compliance to EN55032,EN61000-3-2 Class A,EN61000-3-3				
OTHERS	EMC Immunity	Compliance to EN55024,EN61000-4-2,3,4,5,6,8,11; light industry level(surge 2KV), criteria A				
	M.T.B.F.	692.8K hrs min. MIL-HDBK-217F (25°C)				
	Packing	0.13Kg; 72pcs/10.4Kg/0.92CUFT				

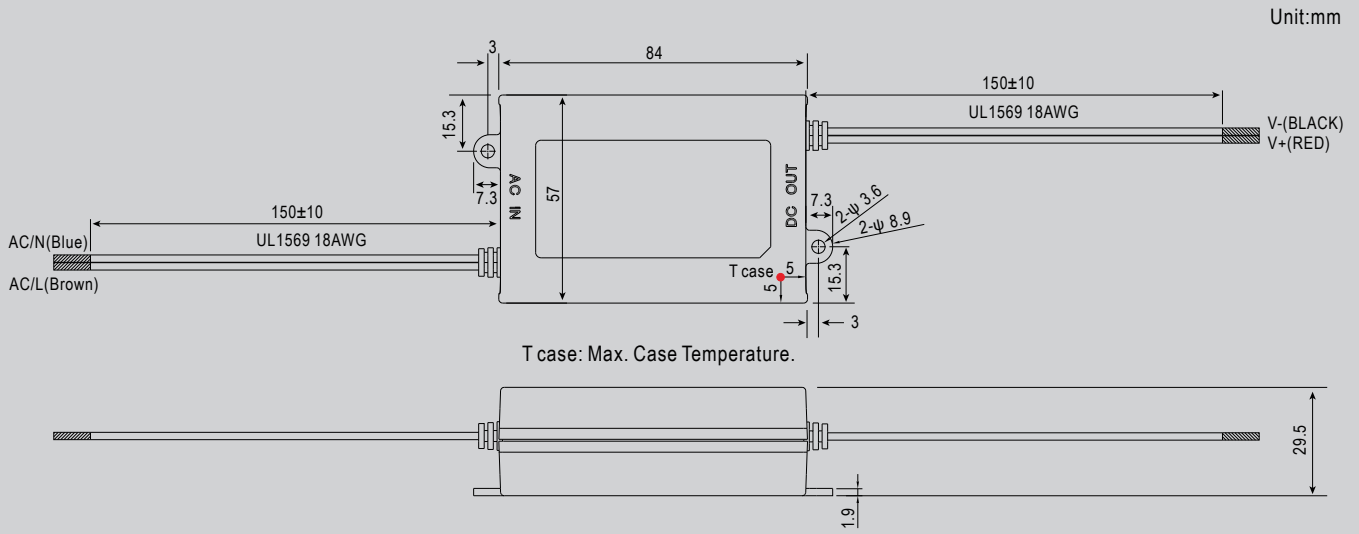
1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.
2. Ripple and Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with 0.1µf & 2.2µf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. Derating may be needed under low input voltages. Please check the 'static characteristics' for more details.
5. The power supply is considered as a component which will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to 'EMI testing of component power supplies.'
6. The unit might not be suitable for lighting applications in EU countries. Please check with your local authorities for the possible use of the unit.
7. 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.

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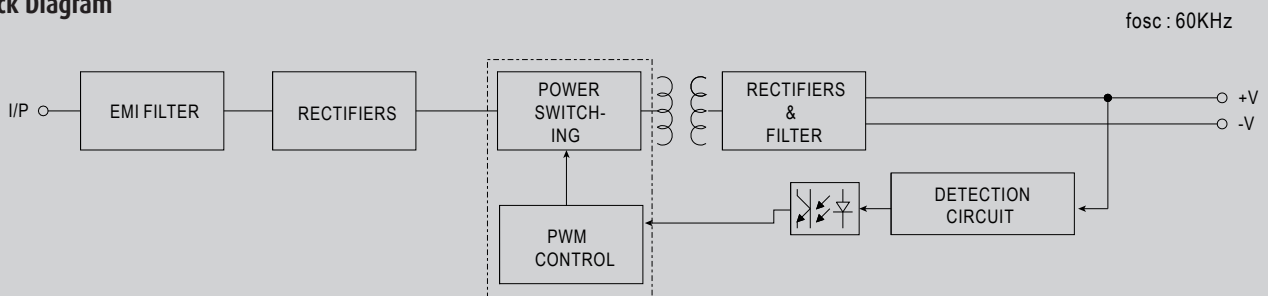
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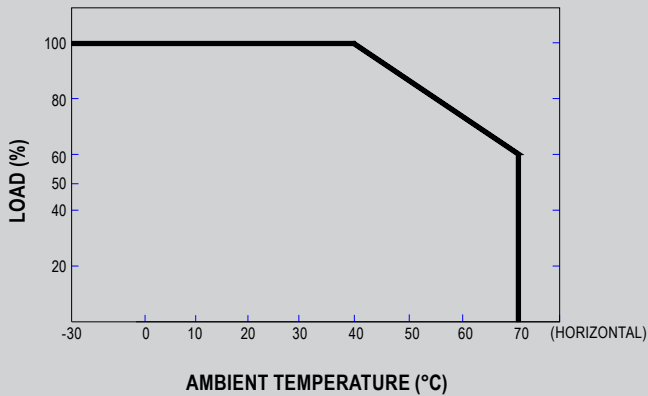
Mechanical Diagram



Block Diagram



Derating Curve



Static Characteristic

