

## APV-25 SERIES

## 25W Single Output Programmable LED Driver



- Programmable output voltage and current
- Wide Input Voltage 90 to 265VAC, 47 to 63Hz
- Over Voltage / Short Circuit / Over Temperature Protection
- High Efficiency (up to 86%)
- IP30 Waterproof Rating, Fully isolated
- Comply to worldwide safety regulations for lighting
- Cooling by free air convection
- Suitable for LED lighting & moving sign applications, for dry / damp / wet locations

5 Year Warranty

Approvals: **IP30** **RoHS** **CE**

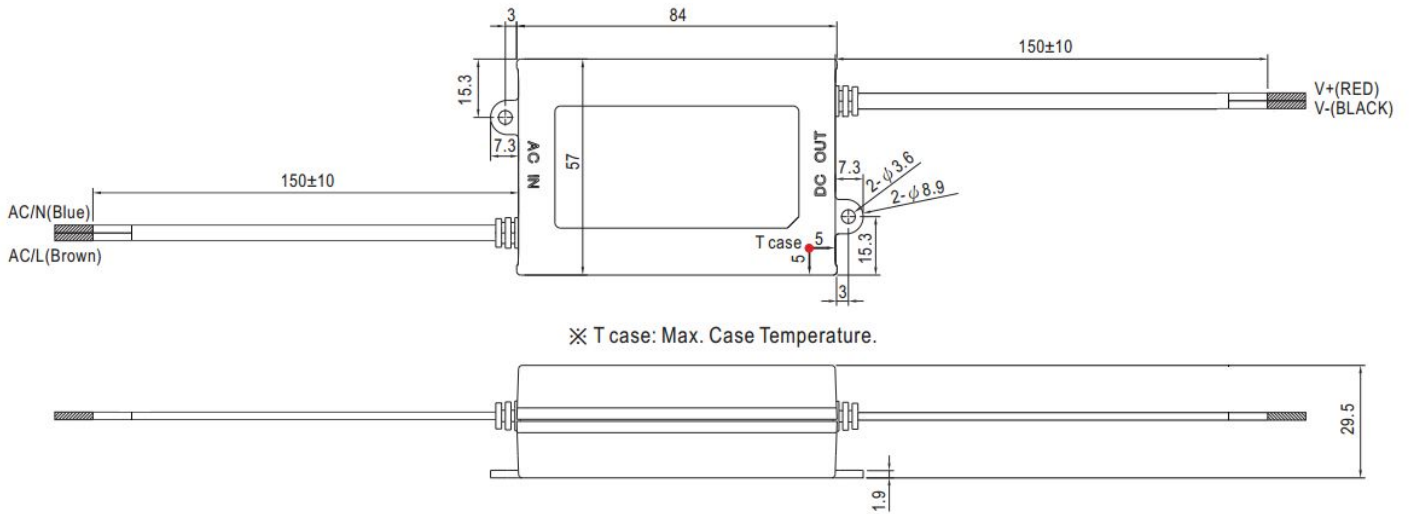
### SPECIFICATION

Part Number		APV-25-V5	APV-25-V12	APV-25-V24	APV-25-V36
OUTPUT	DC VOLTAGE	5V	12V	24V	36V
	CONSTANT CURRENT REGION Note.4	0-3.5	0-2.1A	0-1.05A	0-0.7A
	RATED POWER	17.5-25.2W			
	RIPPLE & NOISE(max.) Note.2	500mV	500mV	500mV	500mV
	VOLTAGE TOLERANCE Note.3	±5.0%			
	LINE REGULATION	±1%			
	LOAD REGULATION	±3.0%	±3.0%	±3.0%	±3.0%
	SETUP, RISE TIME(Typ.) Note.7	1500ms/100ms 115VAC at full load		1000ms/100ms 230VAC	
INPUT	VOLTAGE RANGE Note.5	90 ~ 265VAC			
	FREQUENCY RANGE	47 ~ 63Hz			
	POWER FACTOR(Typ.)	NPF			
	EFFICIENCY(Typ.)	75%	82%	84%	86%
	AC CURRENT(Typ.)	0.5A/115VAC	0.25A/230VAC		
	INRUSH CURRENT(Typ.)	COLD START 34A ( Twidth=270us measured at 50% Ipeak ) at 230VAC			
	LEAKAGE CURRENT	<0.75mA/265VAC			
PROTECTION	OVER CURRENT Note.4	95 ~ 108% Protection type: Constant current limiting, recovers automatically after fault condition is removed			
	SHORT CURRENT	Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	5.3V	12.6V	25.2V	36.7V
	OVER TEMP.	Hiccup mode, recovers automatically after fault condition is removed			
ENVIRONMENT	WORKING TEMP.	-35 ~ +70°C (Refer to "Derating Curve")			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.2%/°C (0~50°C)			
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes			
SAFETY & EMC	SATETY STANDARDS Note.6	UL8750, UL935, UL1012, CSA-C22.2 No.107.1, EN61347-1, EN61347-2-13			
	WITHSTAND VOLTAGE	I/P – O/P: 3.75kVAC			
	ISOLTATION RESISTANCE	I/P – O/P: 100M Ohms / 500VDC /25°C / 70% RH			
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C (≥60% load); EN61000-3-3			
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024, light industry level (surge 2kV), criteria A			
OTHERS	MTBF	450khrs min. MIL-HDBK-217F (25°C)			
	DIMENSIION	84*57*29.5MM (L*W*H)			
	PACKING	150g			

**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 0.1uf & 47uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation & load regulation.
4. Please refer to "DRIVING METHODS OF LED MODULE".
5. Derating may be needed under low input voltages. Please check the static characteristics for details.
6. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minutes.
7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.
8. 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.
9. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.
10. To fulfill requirements of the latest ERP regulation for lighting fixtures, this LED power supply can only be used behind switch without permanently connected to the mains.

**Mechanical Specification**



**Derating Curve**

