



### ■ Features :

- Constant voltage design
- Universal AC input / Full range
- Protections: Short circuit / Over load / Over voltage
- Fully isolated plastic case
- Cooling by free air convection
- Small and compact size
- Class II power unit, no FG
- Class 2 power unit
- Pass LPS
- IP30 design
- Suitable for LED lighting and moving sign applications
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

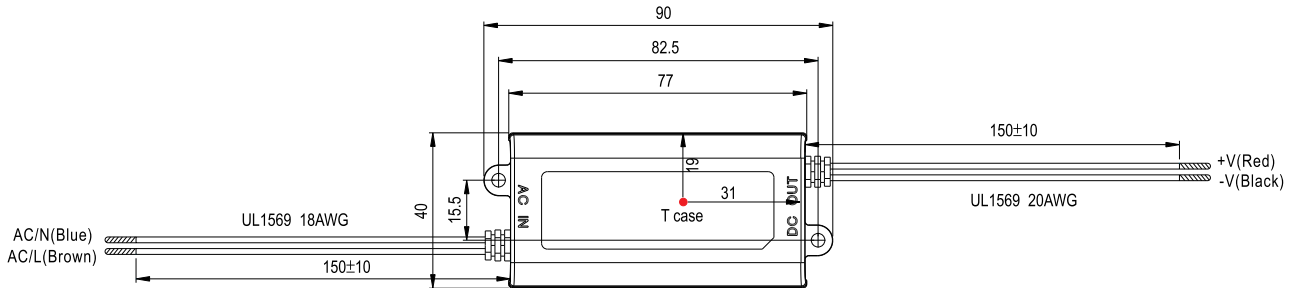


### SPECIFICATION

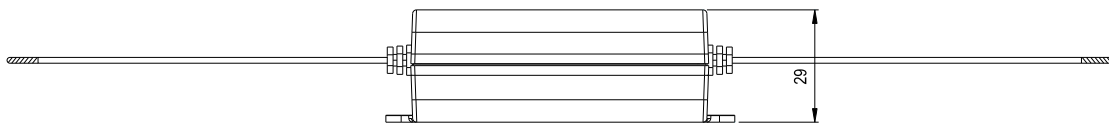
| MODEL               | APV-16-5   | APV-16-12   | APV-16-15    | APV-16-24                          |              |
|---------------------|--|---|--------------|------------------------------------|--------------|
| OUTPUT              | DC VOLTAGE   | 5V  | 12V          | 15V                                | 24V          |
|                     | RATED CURRENT  | 2.6A  | 1.25A        | 1A                                 | 0.67A        |
|                     | CURRENT RANGE  | 0 ~ 2.6A  | 0 ~ 1.25A    | 0 ~ 1A                             | 0 ~ 0.67A    |
|                     | RATED POWER  | 13W   | 15W          | 15W                                | 16.08W       |
|                     | RIPPLE & NOISE (max.) Note.2   | 100mVp-p  | 120mVp-p     | 120mVp-p                           | 150mVp-p     |
|                     | VOLTAGE TOLERANCE Note.3   | ±5.0%   |              |                                    |              |
|                     | LINE REGULATION  | ±1.0%   |              |                                    |              |
|                     | LOAD REGULATION  | ±2.0%   |              |                                    |              |
|                     | SETUP, RISE TIME Note.6  | 1500ms, 30ms / 230VAC   |              | 1500ms, 30ms / 115VAC at full load |              |
| HOLD UP TIME (Typ.) | 20ms/230VAC  | 12ms/115VAC at full load  |              |                                    |              |
| INPUT               | VOLTAGE RANGE Note.4   | 90 ~ 264VAC   | 127 ~ 370VDC |                                    |              |
|                     | FREQUENCY RANGE  | 47 ~ 63Hz   |              |                                    |              |
|                     | EFFICIENCY (Typ.)  | 76%   | 80%          | 81%                                | 83%          |
|                     | AC CURRENT   | 0.3A/230VAC 0.5A/115VAC   |              |                                    |              |
|                     | INRUSH CURRENT(max.)   | COLD START 35A/115VAC   |              | 70A/230VAC                         |              |
|                     | LEAKAGE CURRENT  | 0.25mA / 240VAC   |              |                                    |              |
| PROTECTION          | OVER LOAD  | Above 105% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |              |                                    |              |
|                     | OVER VOLTAGE   | 5.75 ~ 6.75V  | 13.8 ~ 16V   | 17.5 ~ 21V                         | 27.6 ~ 32.4V |
| ENVIRONMENT         | WORKING TEMP.  | -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 10min./1cycle, period for 60min. each along X, Y, Z axes   |              |                                    |              |
| SAFETY & EMC        | SAFETY STANDARDS   | UL8750, CSA C22.2 No.250.0-08 approved, Design refer to TUV EN60950-1   |              |                                    |              |
|                     | WITHSTAND VOLTAGE  | I/P-O/P:3.75KVAC  |              |                                    |              |
|                     | ISOLATION RESISTANCE   | I/P-O/P:>100M Ohms / 500VDC / 25°C / 70% RH   |              |                                    |              |
|                     | EMC EMISSION   | Compliance to EN55015, EN61000-3-2 Class A, EN61000-3-3   |              |                                    |              |
|                     | EMC IMMUNITY   | Compliance to EN61547, EN61000-4-2, 3, 4, 5, 6, 8, 11; light industry level (surge 2KV), criteria A                     |              |                                    |              |
| OTHERS              | MTBF   | 1145.7K hrs min. MIL-HDBK-217F (25°C)   |              |                                    |              |
|                     | DIMENSION  | 77*40*29mm (L*W*H)  |              |                                    |              |
|                     | PACKING  | 0.1Kg; 120pcs/14Kg/0.93CUFT   |              |                                    |              |
| NOTE                | <ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. Derating may be needed under low input voltage. Please check the static characteristics for more details.</li> <li>5. 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.</li> <li>6. 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.</li> <li>7. 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.</li> </ol> |   |              |                                    |              |

## Mechanical Specification

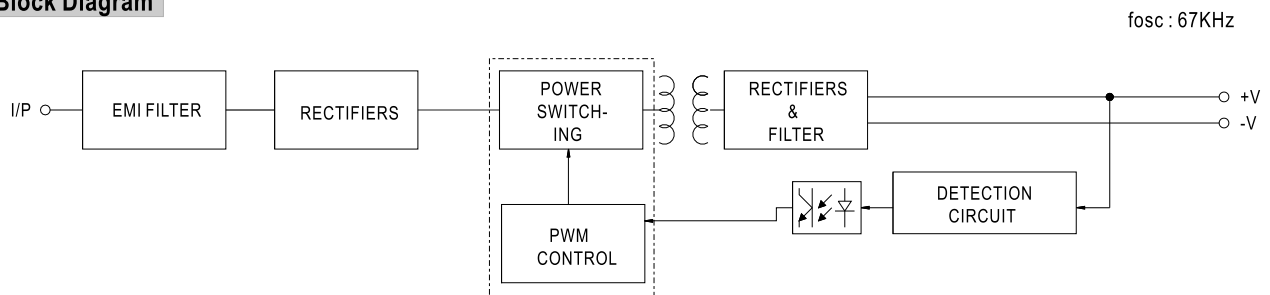
Unit:mm



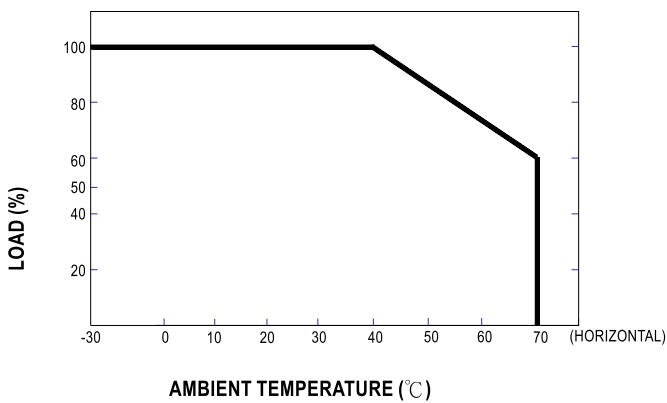
※ T case: Max. Case Temperature



## Block Diagram



## Derating Curve



## Static Characteristics

