



#### ■ 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
- IP42 design
- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)(Note.7)
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

IS 15885(Part 2/Sec13)

SELV  LPS IP42

 R-41027766 (except for 15V)

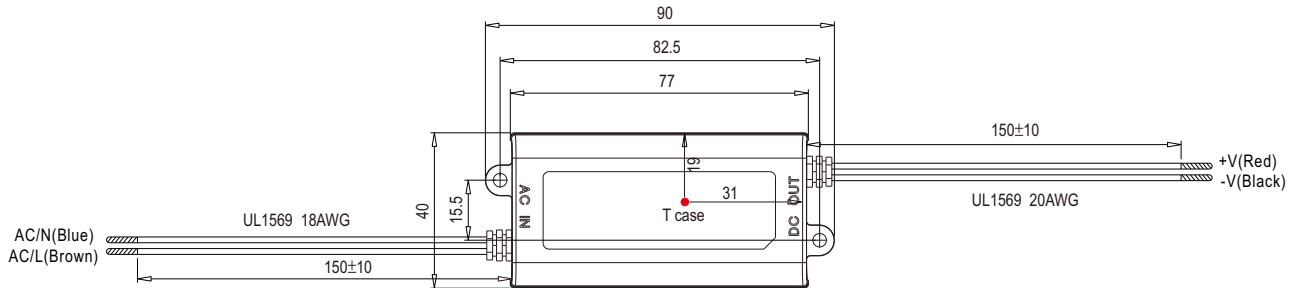
EAC      (optional)

#### SPECIFICATION

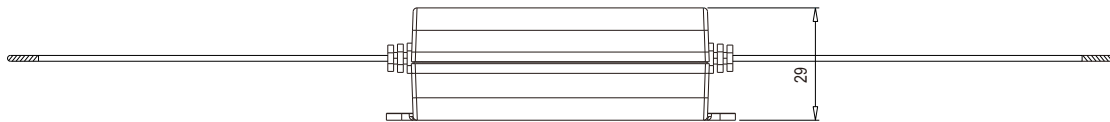
| SPECIFICATION |   |   |            |            |              |
|---------------|---|---|------------|------------|--------------|
| MODEL         |   | APV-12-5  | APV-12-12  | APV-12-15  | APV-12-24    |
| OUTPUT        | DC VOLTAGE  | 5V  | 12V        | 15V        | 24V          |
|               | RATED CURRENT   | 2A  | 1A         | 0.8A       | 0.5A         |
|               | CURRENT RANGE   | 0 ~ 2A  | 0 ~ 1A     | 0 ~ 0.8A   | 0 ~ 0.5A     |
|               | RATED POWER   | 10W   | 12W        | 12W        | 12W          |
|               | RIPPLE & NOISE (max.) <small>Note.2</small>   | 100mVp-p  | 120mVp-p   | 120mVp-p   | 150mVp-p     |
|               | VOLTAGE TOLERANCE <small>Note.3</small>   | ±5.0%   |            |            |              |
|               | LINE REGULATION   | ±1.0%   |            |            |              |
|               | LOAD REGULATION   | ±2.0%   |            |            |              |
|               | SETUP, RISE TIME <small>Note.6</small>  | 1500ms, 30ms / 230VAC      1500ms,30ms / 115VAC at full load  |            |            |              |
|               | HOLD UP TIME (Typ.)   | 20ms/230VAC      15ms/115VAC at full load   |            |            |              |
| INPUT         | VOLTAGE RANGE <small>Note.4</small>   | 90 ~ 264VAC      127 ~ 370VDC   |            |            |              |
|               | FREQUENCY RANGE   | 47 ~ 63Hz   |            |            |              |
|               | EFFICIENCY (Typ.)   | 76%   | 82%        | 82%        | 84%          |
|               | AC CURRENT  | 0.2A/230VAC    0.35A/115VAC   |            |            |              |
|               | INRUSH CURRENT(Typ.)  | COLD START 70A(twidth=120μs measured at 50% Ipeak) at 230VAC  |            |            |              |
|               | MAX. No. of PSUs on 16A CIRCUIT BREAKER   | 17 units (circuit breaker of type B) / 29 units (circuit breaker of type C) at 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 |
|               |   | Protection type : Shut off o/p voltage, clamping by zener diode   |            |            |              |
| ENVIRONMENT   | WORKING TEMP.   | -30 ~ +70℃ (Refer to "Derating Curve")  |            |            |              |
|               | WORKING HUMIDITY  | 20 ~ 90% RH non-condensing  |            |            |              |
|               | STORAGE TEMP., HUMIDITY   | -40 ~ +80℃, 10 ~ 95% RH   |            |            |              |
|               | TEMP. COEFFICIENT   | ±0.03%/℃ (0 ~ 50℃)  |            |            |              |
|               | VIBRATION   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes   |            |            |              |
| SAFETY & EMC  | SAFETY STANDARDS <small>Note.8</small>  | UL8750,CSA C22.2 No.250.0-08, BIS IS15885(except for 15V),EAC TP TC 004,IP42 approved; design refer to BS EN/EN 62368-1 |            |            |              |
|               | WITHSTAND VOLTAGE   | I/P-O/P:3.75KVAC  |            |            |              |
|               | ISOLATION RESISTANCE  | I/P-O/P:>100M Ohms / 500VDC / 25℃ / 70% RH  |            |            |              |
|               | EMC EMISSION  | Compliance to BS EN/EN55032,BS EN/EN61000-3-2,BS EN/EN61000-3-3, EAC TP TC 020  |            |            |              |
|               | EMC IMMUNITY  | Compliance to BS EN/EN55024,BS EN/EN61000-4-2,3,4,5,6,8,11; light industry level(surge 2KV), criteria A, EAC TP TC 020  |            |            |              |
| OTHERS        | MTBF  | 1145.7K hrs min.      MIL-HDBK-217F (25℃)   |            |            |              |
|               | DIMENSION   | 77*40*29(L*W*H)   |            |            |              |
|               | PACKING   | 0.08Kg; 120pcs/11.8Kg/1.06CUFT  |            |            |              |
| NOTE          | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<br>4. Derating may be needed under low input voltage. Please check the static characteristics for more details.<br>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.<br>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.<br>7. This product is not intended for LED lighting luminaire applications in the EU.(In the EU the LPF/NPF/XLG series are recommended.)<br>8. The model certified for CCC(GB19510.14, GB19510.1, GB17743 and GB17625.1) is an optional model . Please contact MEAN WELL for details.<br>9. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).<br>10. Products sourced from the Americas regions may not have the ENEC/BIS/CCC logo. Please contact your MEAN WELL sales for more information.<br>11. For any application note and IP water proof function installation caution, please refer our user manual before using.<br><a href="https://www.meanwell.com/Upload/PDF/LED_EN.pdf">https://www.meanwell.com/Upload/PDF/LED_EN.pdf</a><br>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a> |   |            |            |              |

## Mechanical Specification

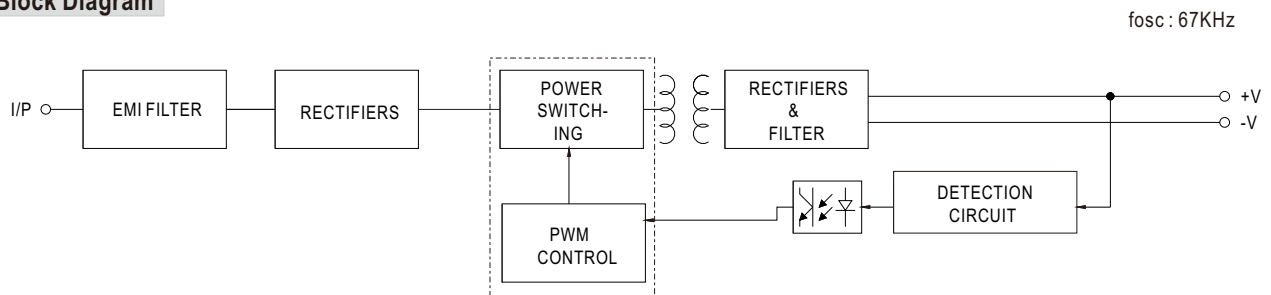
Unit:mm



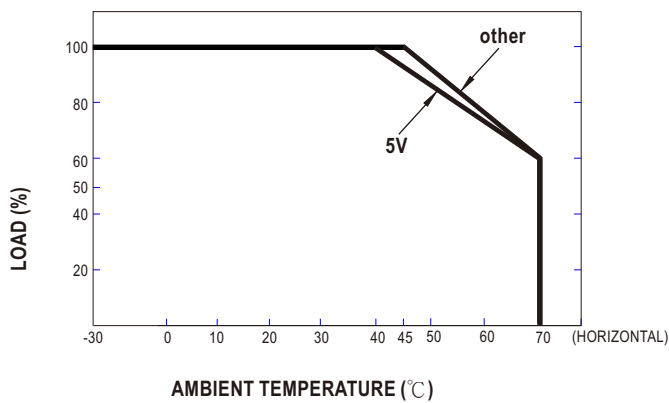
※ T case: Max. Case Temperature



## Block Diagram



## Derating Curve



## Static Characteristics

