

- Features :
  - 180-264VAC
  - Fully isolated plastic case with IP67 level
  - Protections: Short circuit / Overload / Over voltage / Over temperature
  - IP67 design
  - Cooling by free air convection
  - 100% full load burn-in test
  - Suitable for LED light and moving sign applications
  - High reliability / Low cost
  - 2 years warranty

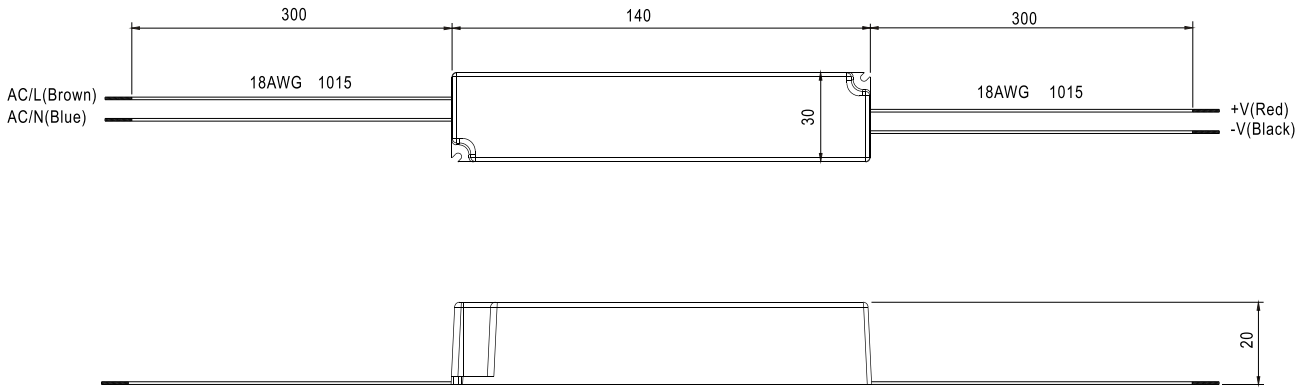


**SPECIFICATION**

| MODEL                 |  | LPH-18-12   | LPH-18-24   | LPH-18-36    |
|-----------------------|--|---|-------------|--------------|
| OUTPUT                | DC VOLTAGE   | 12V   | 24V         | 36V          |
|                       | RATED CURRENT  | 1.5A  | 0.75A       | 0.5A         |
|                       | CURRENT RANGE  | 0 ~ 1.5A  | 0 ~ 0.75A   | 0 ~ 0.5A     |
|                       | RATED POWER  | 18W   | 18W         | 18W          |
|                       | RIPPLE & NOISE (max.) Note.2   | 120mVp-p  | 150mVp-p    | 200mVp-p     |
|                       | VOLTAGE TOLERANCE Note.3   | ±3.0%   |             |              |
|                       | LINE REGULATION  | ±1.0%   |             |              |
|                       | LOAD REGULATION  | ±2.0%   |             |              |
| INPUT                 | SETUP, RISE TIME   | 1500ms, 30ms / 230VAC   |             |              |
|                       | HOLD TIME (Typ.)   | 50ms/230VAC at full load  |             |              |
|                       | VOLTAGE RANGE  | 180 ~ 264VAC  |             |              |
|                       | FREQUENCY RANGE  | 47 ~ 63Hz   |             |              |
|                       | EFFICIENCY(Typ.)   | 77%   | 83%         | 84%          |
|                       | AC CURRENT   | 0.3A/230VAC   |             |              |
| PROTECTION            | INRUSH CURRENT(max.)   | Cold start 50A/230VAC   |             |              |
|                       | LEAKAGE CURRENT  | 0.25mA / 240VAC   |             |              |
|                       | OVER CURRENT   | Above 105% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |             |              |
|                       | OVER VOLTAGE   | 13.8~ 16.2V   | 27.6~ 32.4V | 41.4 ~ 48.6V |
| OVER TEMPERATURE      | Tj 170°C typically (U1) Detect on main control IC  |   |             |              |
|                       | Protection type : Hiccup mode, recovers automatically after temperature goes down  |   |             |              |
| ENVIRONMENT           | WORKING TEMP.  | -25 ~ 70°C (Refer to output load 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)  |             |              |
| SAFETY & EMC (Note 4) | VIBRATION  | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes   |             |              |
|                       | SAFETY STANDARDS   | Design refer to UL1310 Class 2, TUV EN60950-1, EN61347-2-13, CAN/CSA C22.2 No. 223-M91, IP67 approved                   |             |              |
|                       | WITHSTAND VOLTAGE  | I/P-O/P:3KVAC   |             |              |
|                       | ISOLATION RESISTANCE   | I/P-O/P:>100M Ohms/500VDC 25°C 70%RH  |             |              |
|                       | EMI CONDUCTION & RADIATION   | Compliance to EN55022 (CISPR22) Class B   |             |              |
|                       | HARMONIC CURRENT   | Compliance to EN61000-3-2,-3  |             |              |
| OTHERS                | EMS IMMUNITY   | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A                             |             |              |
|                       | MTBF   | 1200.634K hrs min. MIL-HDBK-217F (25°C)   |             |              |
|                       | DIMENSION  | 140*30*20(L*W*H)  |             |              |
| NOTE                  | PACKING  | 0.175Kg; 70pcs/13.3Kgs/0.69CUFT   |             |              |
|                       | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C 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. The power supply is considered a component which will be installed a final equipment. The final equipment must be re-confirmed that it still meets EMC directive |   |             |              |

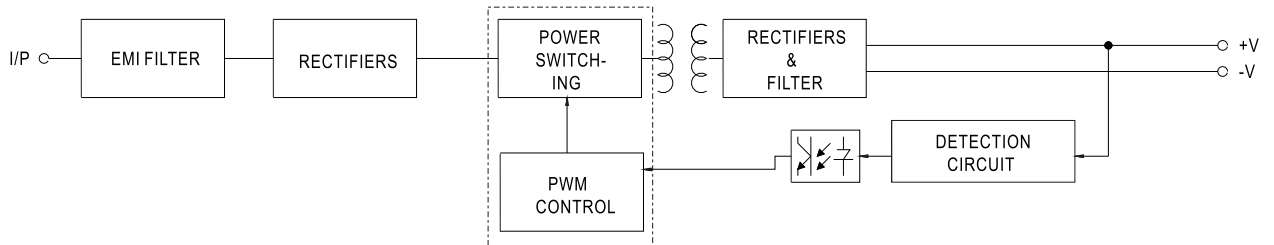
■ Mechanical Specification

Unit:mm

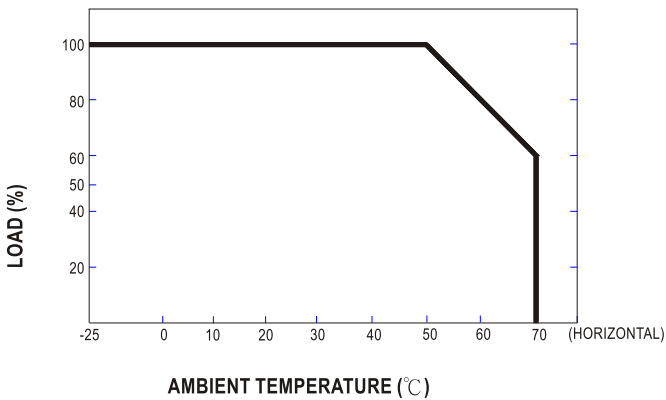


■ Block Diagram

fosc : 60KHz



■ Derating Curve



■ Static Characteristics

