

TECHNICAL SPECIFICATION

MODEL NO.:APMS-60-24 DOCUMENT NO.:

CUSTOMER NO.:

DATA.:

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APMS-60-24

IP67 Waterproof LED Power Supply

60W Single output with PFC function



- 🔷 Constant Voltage Mode
- Built-in Active PFC Function, High efficiency up to 89%
- Protection: Overload/Short Circuit
- Aluminum housing design with functional Ground
- IP67 full sealed for indoor and outdoor installations
- Super Compact Design
- 💲 5 Years warranty

IP67

TECHNICAL PARAMETERS

1. Output

| Items | Specs | Unit | Conditions | |
|-------------------------|--------------------|------|---------------------------------|--|
| Rated Output voltage | 24 | VDC | | |
| Rated Output Current | 2.5 | A | | |
| Rated Output Power | 60 | W | | |
| Tcase | 90 | C° | Ta:60C°, 230VAC, full load | |
| Efficiency | ≥87.5 (Typical 88) | % | 240VAC input, Rated Load | |
| Line Regulation | ±0.5% | | | |
| Load Regulation | ±1.5% | | | |
| Voltage tolerance | ±3% | | | |
| Rise time | ≤60 | mS | 25C° , full load | |
| Power On Delay time | ≤2 | S | 200-240VAC, full load | |
| Switch off Hold Up time | / | ms | Rated input voltage, rated load | |

2. Input

| Items | Specs | Unit | Conditions |
|---------------------|----------------------|------|-----------------------------|
| Rated Input voltage | 200-277 | VAC | |
| Input voltage range | 176-305 | VAC | |
| Input Frequency | 47-63(Typical 50/60) | Hz | |
| Input Current Max | 0.5 | А | Vin=176Vac, Full Load |
| Inrush Current | ≤20 | А | 220Vac, full load, 25C° |
| Power Factor | ≥0.95 | | 176~277Vac input, full load |
| THD | ≤15 | % | Vin=176~277Vac, full load |

3. Protection

| Current Limiting | 110%-160% | А | Hi-CCUP Mode, Auto-recovery after fault condition is removed |
|-------------------------------|-----------|---|--|
| Short circuit | Yes | | Hi-CCUP Mode, Auto-recovery after fault condition is removed |
| Input Undervoltage protection | >80 | V | |

4. Temperature and others

| Operating Temperature range | -40 to +80 (Typical25) | C° | Refer to Derating Curve | |
|------------------------------|---|----|--|--|
| Storage Temperature range | -45 to +80(Typical25 | C° | | |
| Humidity | 10~95 | % | NON-Condensing | |
| Altitude | 0 ~ 5000 | М | Altitude Over 2000 meters, 1.5% derating for every 100 meters increase | |
| Waterproof Level | IP67 | | | |
| Cooling method | Air convection | | | |
| Temperature Coefficient | 0.03%/C° (0-60C°) | | | |
| Vibration | 10-500Hz, 5G 12min./1cycle, period for 72 min, each along X.Y. Z axes | | | |

5. Safety & EMC Standards

| Safety standard | UL8750, IEC/EN61347-1,EN61347-2-13,EN62368, GB19510.1,GB19510.14, IP67 Approved | | |
|----------------------|--|--------------------|--|
| | I/P-O/P | 3000Vac 10mA (Max) | |
| Withstand voltage | I/P-FG | 1500Vac 10mA (Max) | |
| | O/P-FG | 500Vac 10mA (Max) | |
| Isolation Resistance | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25C°/ 70% RH | | |
| Leakage Current | < 0.75mA | 240Vac/60Hz | |

EMI

| Conducted | EN55015(CISPR15), GB17743 | | |
|------------------|---------------------------------|--|--|
| Radiated | EN55015(CISPR15), GB17743 | | |
| Harmonic Current | EN61000-3-2 , Class C @load≥50% | | |

EMS

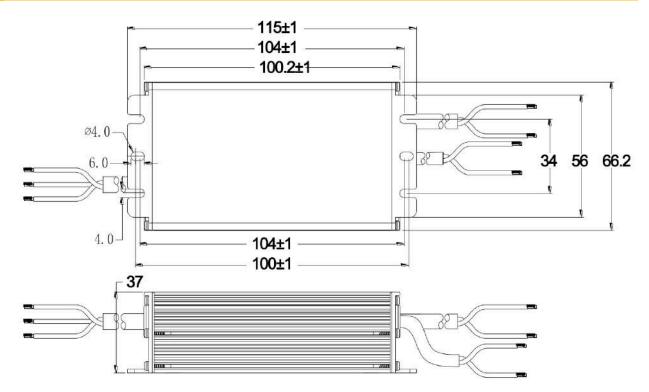
| ESD | EN61000-4-2, 8KV air ; Level 2, 4KV contact | | |
|--|---|--|--|
| Radiated | EN61000-4-3 | | |
| EFT/Burst | EN61000-4-4 | | |
| Surge | EN61000-4-5, 4KV/Line-Line 6KV/Line-Earth | | |
| Conducted | EN61000-4-6 | | |
| EN61547, Electromagnetic Immunity Requirements applies to lighting Equipment | | | |

Others

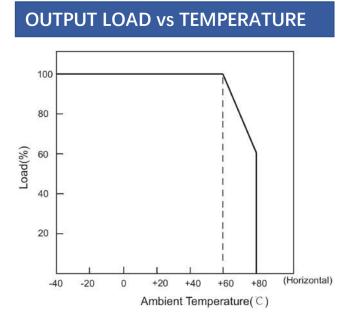
| MTBF | 200Khours, MIL-HDBK-217F (25C°) | | |
|-----------|---------------------------------|--|--|
| Dimension | 115(L)*66.2 (W)*37(H) | | |
| Packing | 0.41Kg;24pcs/ 10.5Kg/0.026CBM | | |

6. Mechanical Mounting

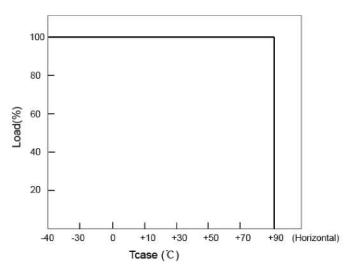
| DIMENSION | 115(L)*66.2 (W)*37(H) mm | | |
|--------------|---|--|-----------------|
| Input Cable | AC/N(Blue) AC/L(Brown) FG(Green/Yellow) | VDE 17AWGx3C & 3x1.0mm ² | 270±20mm Length |
| Output Cable | V+(RED)/Brown, V-(BLACK)/Blue | VDE 17AWGx2C & 2x1.0mm ² | 300±20mm Length |

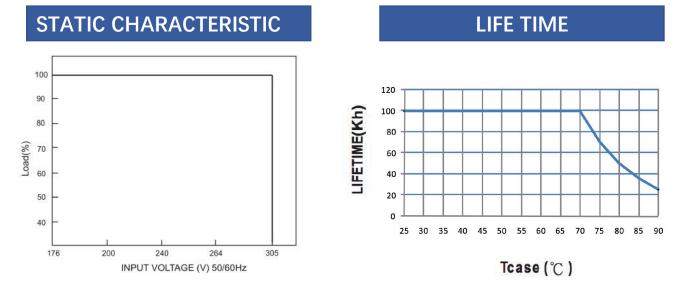


7. Characteristics & Derating

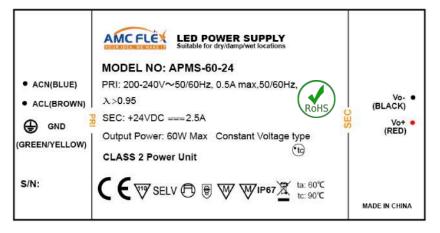


OUTPUT LOAD vs Tcase





8. Product Label



9. Installation Manuel & Caution

(1).Before commencing any installation or maintenance work, please disconnect the power supply from the utility. Ensure that it cannot be re-connected inadvertently.

(2). Keep proper ventilation around the unit and do not put any object on it. 15-20cm clearance must be kept when the adjacent device is a heat source

(3).Operating under high ambient temperature may cause the internal component temperature and will require a de-rating in output load

(4).Install in wet condition need use waterproof connectors, make sure there is no space between the unit and lighting fixtures.

(5). Output current and output wattage must not exceed the rated values on the specifications(6).Wiring

Connect the ACL wire (Brown) of the LED power supply to Live (black or brown).

Connect the ACN wire (Blue) of the LED power supply to Neutral (white or blue)

(7) . Risk of electrical shock and energy hazard. All failure should be examined by a qualified technician.

Please do not remove the case of the power supply by yourself!

(8). Can't be installed under water or buried in soil directly

(9). Please do not install LED power supplies in places with high ambient temperature or close to fire source (10). The FG (\bigoplus) must be well connected to PE(protective earth)

(11). If the external flexible cable or cord of this switching power supply is damaged, it shall be exclusively replaced by the manufacturer or similar qualified person in order to avoid a hazard.