

TECHNICAL SPECIFICATION

MODEL NO.: APMS-150CAJ-700 DOCUMENT NO.:_

CUSTOMER NO .:_

DATA.:

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APMS-150CAJ-700 Series

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150W output with current adjustable function



1. Constant Power Mode

- 2. Built-in Active PFC Function, High efficiency up to 92%
- 3. Protection: Over load/overvoltage/over temperature Short Circuit Protection
- 4. Output current support adjustable
- 5. Aluminum housing design with functional Ground
- 6. IP67 full sealed for indoor and outdoor installations
- 7. Low ripple, 100% flicker-free design
- 8.5 Years warranty

TECHNICAL PARAMETERS

| Model | | APMS-150CAJ-700 | |
|--------|--|---|--|
| OUTPUT | Output voltage range | 107-214VDC | |
| | Output Current range | 700mA-1050mA | |
| | Output Power | 150W | |
| | Open Circuit Voltage(Max) | 230VDC | |
| | Efficiency | ≥92% | |
| | Total Output Current Ripple (pk-pk) | 5% lo Max | |
| | Current Tolerance | ±5.0% | |
| | Startup overshoot current | 10% Io Max, at 100% Load condition | |
| | Line Regulation | ±1%, @100% load | |
| | Load Regulation | ±3% | |
| | Turn-on delay time | <2\$ | |
| | Efficiency | 90%/120VAC, 92%/220VAC, 92.5%/277VAC, Measured at 100% load and steady-state temperature in 25 C ambient; (Efficiency will be about 2.0% lower if measured immediately after startup.) | |

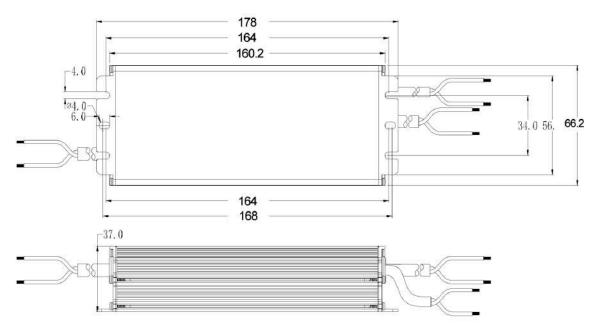
| INPUT | Rated Input voltage | 100-277VAC | |
|-----------------|-------------------------|--|--|
| | Input voltage range | 90-305VAC | |
| | Input Frequency | 47-63(Typical 50/60)HZ | |
| | Input Current Max | 2.0A Max | |
| | Inrush Current | 3.49 A2s, At 220Vac input, 25C° cold start, duration=244 μ s, 10%lpk-10%lpk. See Inrush Current Waveform for the details. | |
| | Power Factor | ≥0.95 /230VAC; ≥0.92/277VAC @ full load | |
| | THD | ≤10% At 220-240Vac, 50-60Hz, 75%-100%load (112.5-150W) | |
| | Leakage Current | <0.75mA/277VAC | |
| | Short Circuit | Auto Recovery. No damage will occur when any output is short circuited. The output shall return to normal when the fault condition is removed. | |
| | Over Load | Hiccup mode, auto-recovery after fault condition is removed | |
| PROTECTI ON | Over Temperature | Decreases output current, auto-recovery after temperature goes down | |
| | Over Voltage | Shut-down output voltage, re-power on to recover | |
| | Open circuit | yes | |
| | Working Temperature | -40C°~+85C°(Typical25C°), refer to derating curve | |
| | Max Case Temperature | 90C° Max,Ta:60C° | |
| | Working Humidity | 20-95% RH NO-condensing | |
| | Storage Temp/Humidity | -40C°~+80C°, 10-90% RH | |
| ENVIRON MENT | Attitude | 0 ~ 5000 M, Altitude Over 2000 meters, 1.5% derating for every 100 meters increase | |
| | Temperature Coefficient | 0.03%/C° (0-60C°) | |
| | Vibration | 10-500Hz, 5G 12min./1cycle, period for 72 min, each along X.Y. Z axes | |
| | MTBF | 200Khours, MIL-HDBK-217F (25C°) | |
| others | Lifetime | 50Khours(230Vac&100% load, 75°C case temperature, refer to lifetime curve for details) | |
| | Dimension | 178(L)*66.2(W)*37(H) mm | |
| | Packing | 0.65Kg;20pcs/ 14Kg/0.025CBM | |

| | Safety Standards | UL8750, IEC/EN61347-1,EN61347-2-13,EN62368, GB19510.1,GB19510.14, IP67 Approved | | |
|----------------|--|--|--|--|
| SAFETY& EMC | Withstand Voltage | I/P-O/P:3KVAC, I/P-FG:1.5KVAC, O/P-FG: 500VAC | | |
| | Isolation Resistance | I/P-O/P,I/P-FG,O/P-FG:100M Ohms/500VDC/25C°/70RH | | |
| | Storage Temp/Humidity | -40C°~+80C°, 10-90% RH | | |
| | 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 | | | |

Note: (1) This LED driver meets the EMI specifications above, but EMI performance of a luminaire that contains it depends also on the other devices connected to the driver and on the fixture itself.

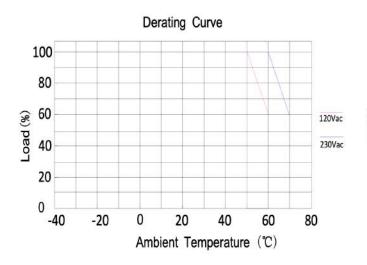
Mechanical Mounting

| DIMENSION | 178(L)*66.2 (W)*37(H) mm | | |
|--------------|---|--|-----------------|
| Input Cable | AC/N(Blue) AC/L(Brown) FG(Green/Yellow) | VDE 17AWGx3C & 3x1.0mm ² | 250±30mm Length |
| Output Cable | V+(RED)/Brown, V-(BLACK)/Blue | VDE 17AWGx2C & 2x1.0mm ² | 250±30mm Length |

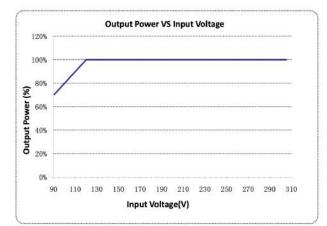


Characteristics & Derating

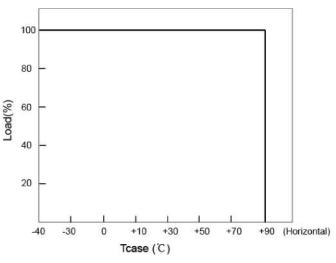
OUTPUT LOAD vs TEMPERATURE



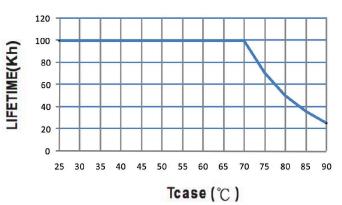
STATIC CHARACTERISTIC

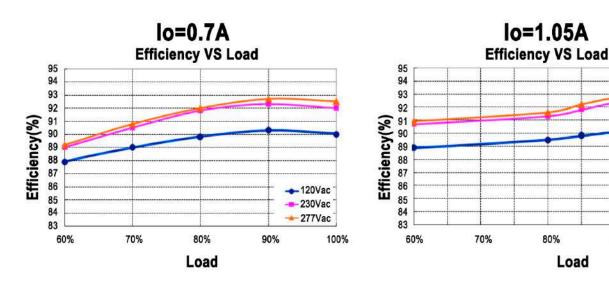


OUTPUT LOAD vs Tcase

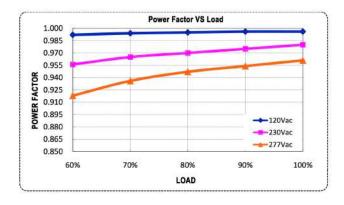


LIFE TIME

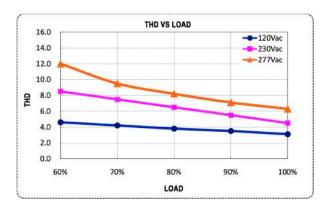




POWER FACTOR VS LOAD



TOTAL HARMONIC DISTORTION



-120Vac

230Vac

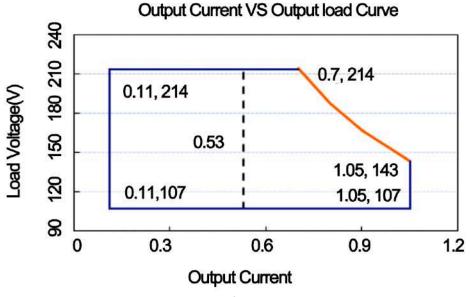
277Vac

100%

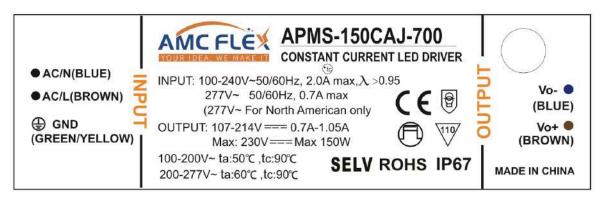
90%

RoHS Compliance Our products comply with reference to RoHS Directive (EU) 2015/863 amending 2011/65/EU, calling for the elimination of lead and other hazardous substances from electronic products

Operation Area



Product Labels



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.