



■ Features

- Constant current design
- Universal AC input / Full range
- Class II power unit, no FG
- Fully isolated plastic case
- IP42 design
- Small and compact size
- Cooling by free air convection
- Protection: Short circuit
- No load power consumption <0.5W
- 100% full load burn-in test
- Low cost / High reliability
- 2 years warranty

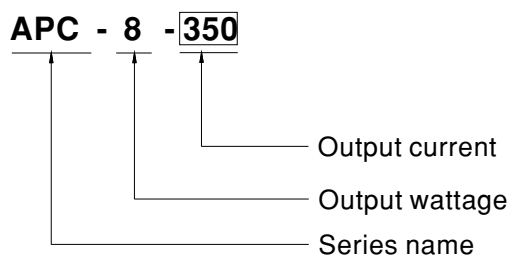
■ Applications

- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)

■ Description

APC-8 series is one 8W AC/DC constant current mode single output LED power supply. It accepts the full range input 90~264VAC and provides four models with different output current, 250mA, 350mA, 500mA and 700mA, respectively, that the small wattage LED applications employ the most frequently. Exploiting Class II design (without FG pin) and adopting the 94V-0 flame retardant plastic enclosure, APC-8 ideally fits the entry-level LED applications.

■ Model Encoding



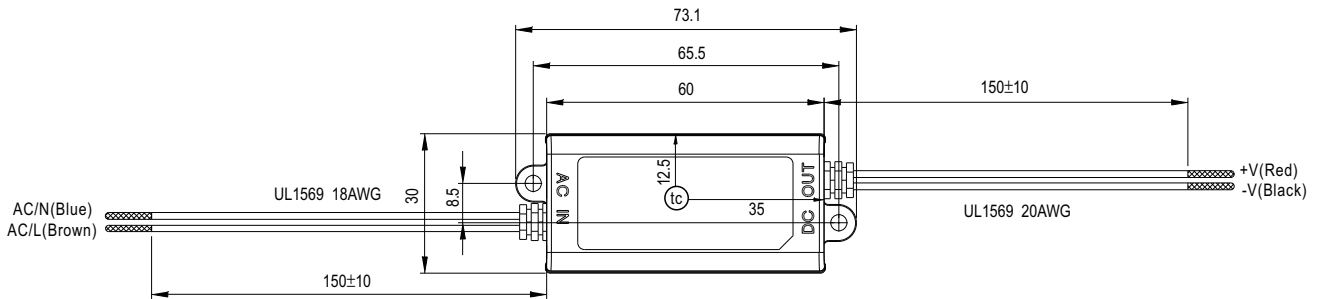


SPECIFICATION

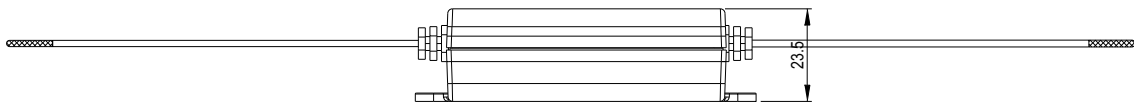
| MODEL | APC-8-250 | APC-8-350 | APC-8-500 | APC-8-700 | |
|--------------------------------------|--|---|-----------|-----------|----------|
| OUTPUT | RATED CURRENT | 250mA | 350mA | 500mA | 700mA |
| | OPERATING VOLTAGE RANGE <small>Note.4</small> | 16~32V | 11~23V | 8~16V | 6~11V |
| | RATED POWER | 8W | 8.05W | 8W | 7.7W |
| | RIPPLE & NOISE <small>(max.) Note.2</small> | 350mVp-p | 300mVp-p | 300mVp-p | 250mVp-p |
| | NO LOAD OUTPUT VOLTAGE _{E(max.)} | 38V | 29V | 24V | 17V |
| | CURRENT ACCURACY | ±8.0% | | | |
| | SETUP, RISE TIME | 500ms, 180ms / 230VAC 3000ms, 150ms / 115VAC at full load | | | |
| HOLD UP TIME (Typ.) | 20ms/230VAC at full load | | | | |
| INPUT | VOLTAGE RANGE <small>Note.3</small> | 90 ~ 264VAC 127 ~ 370VDC <small>(Note.5)</small> | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | |
| | EFFICIENCY(Typ.) | 82.5% | 81.5% | 81% | 80% |
| | AC CURRENT | 0.15A/230VAC;0.3A/115VAC | | | |
| | INRUSH CURRENT(Typ.) | COLD START 70A(twidth=120μs measured at 50% Ipeak) at 230VAC | | | |
| | LEAKAGE CURRENT | 0.25mA / 240VAC | | | |
| PROTECTION | SHORT CIRCUIT | Hiccup mode, recovers automatically after fault condition is removed. | | | |
| 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 | ±0.2%/°C (0 ~45°C) | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | | | |
| SAFETY & EMC <small>(Note 5)</small> | SAFETY STANDARDS <small>Note.7</small> | UL8750,CSA C22.2 No.250.0-08, BIS IS15885, EAC TP TC 004 approved; design refer to EN60950-1,EN61347-1,EN61347-2-13 | | | |
| | 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 EN55032,EN61000-3-2 Class A,EN61000-3-3, EAC TP TC 020 | | | |
| | EMC IMMUNITY | Compliance to EN55024,EN61000-4-2,3,4,5,6,8,11; light industry level(surge 2KV), criteria A, EAC TP TC 020 | | | |
| OTHERS | MTBF | 2275.8K hrs min. MIL-HDBK-217F (25°C) | | | |
| | DIMENSION | 60*30*23.5mm(L*W*H) | | | |
| | PACKING | 0.05Kg;144pcs/7.6Kg/0.75CUFT | | | |
| NOTE | <ol style="list-style-type: none">All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.Derating may be needed under low input voltage, please check the static characteristic for more details.Constant current operation region is within 50% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.When applying DC voltage for input, please connect the brown input wire to the positive side whereas blue input wire to the negative side.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.The model certified for CCC(GB19510.14, GB19510.1, GB17743 and GB17625.1) is an optional model . Please contact MEAN WELL for details. | | | | |

Mechanical Specification

Unit:mm

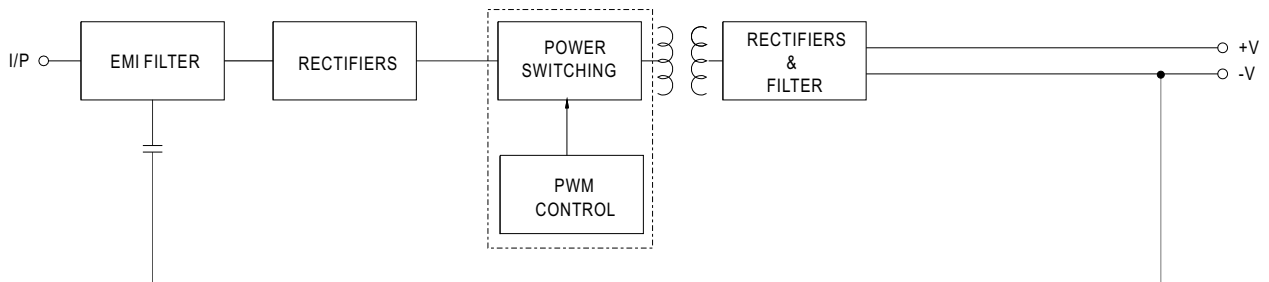


• t_c : Max. Case Temperature

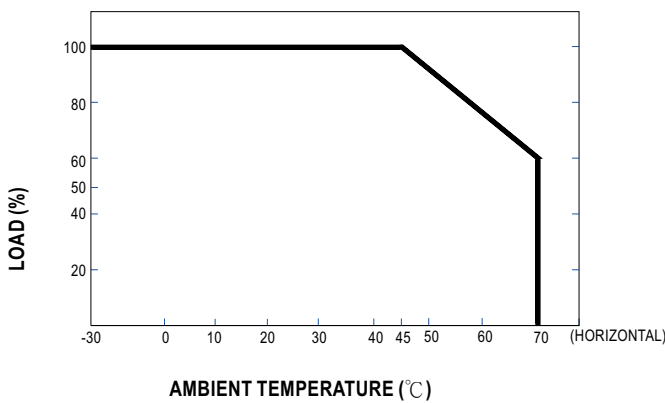


Block Diagram

fosc : 67KHz



Derating Curve



Static Characteristics

