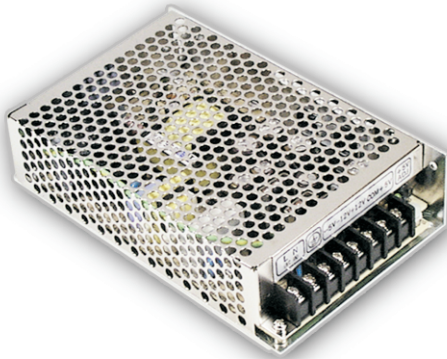




60W Isolated Quad Output Switching Power Supply

IQ-60 series



■ Features :

- Isolated output & GND for CH1, CH2 & CH3, CH4
- Universal AC input/Full range
- Protections: Short circuit / Overload / Over voltage
- LED indicator for power on
- 100% full load burn-in test
- Fixed switching frequency at 67KHz
- 2 years warranty

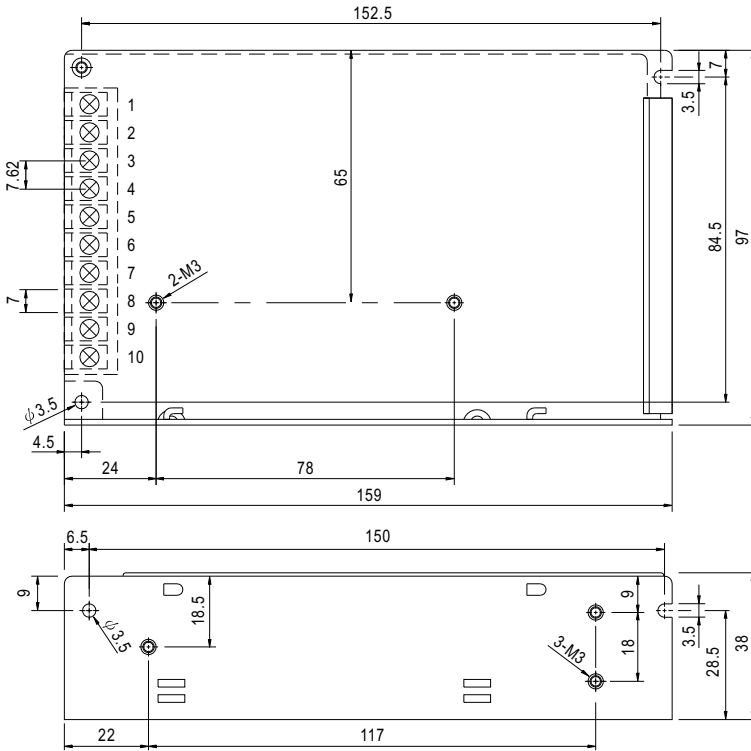


SPECIFICATION

| MODEL | | IQ-60D | | | | IQ-60F | | | |
|--------------------------------------|---|---|----------|--------------|----------|-------------------|----------|----------|----------|
| OUTPUT | OUTPUT | CH1 | CH2 | CH3 | CH4 | CH1 | CH2 | CH3 | CH4 |
| | DC VOLTAGE | 5V | 12V | -12V | 24V | 5V | 15V | -15V | 24V |
| | RATED CURRENT | 3A | 0.5A | 0.5A | 1.3A | 3A | 0.5A | 0.5A | 1.25A |
| | CURRENT RANGE | 0.5 ~ 3A | 0.1 ~ 1A | 0.1 ~ 1A | 0.2 ~ 2A | 0.5 ~ 3A | 0.1 ~ 1A | 0.1 ~ 1A | 0.2 ~ 2A |
| | RATED POWER | 58.2W | | | | 60W | | | |
| | PEAK LOAD (3sec.) <small>Note.4</small> | 70W | | | | | | | |
| | RIPPLE & NOISE (max.) <small>Note.2</small> | 80mVp-p | 120mVp-p | 120mVp-p | 240mVp-p | 80mVp-p | 150mVp-p | 150mVp-p | 240mVp-p |
| | VOLTAGE ADJ. RANGE | CH1 : 4.75 ~ 5.5V | | | | CH1 : 4.75 ~ 5.5V | | | |
| | VOLTAGE TOLERANCE <small>Note.3</small> | ±3.0% | ±8.0% | ±8.0% | ±8.0% | ±3.0% | ±8.0% | ±8.0% | ±8.0% |
| | LINE REGULATION | ±1.0% | ±2.0% | ±2.0% | ±2.0% | ±1.0% | ±2.0% | ±2.0% | ±2.0% |
| | LOAD REGULATION | ±2.0% | ±5.0% | ±5.0% | ±5.0% | ±2.0% | ±5.0% | ±5.0% | ±5.0% |
| | SETUP, RISE TIME | 300ms, 20ms/230VAC 800ms, 20ms/115VAC at full load | | | | | | | |
| HOLD UP TIME (Typ.) | 80ms/230VAC 18ms/115VAC at full load | | | | | | | | |
| INPUT | VOLTAGE RANGE | 90 ~ 264VAC | | 127 ~ 370VDC | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | |
| | EFFICIENCY (Typ.) | 76% | | | | | | | |
| | AC CURRENT (Typ.) | 1.8A/115VAC | | 0.9A/230VAC | | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 20A/115VAC | | 40A/230VAC | | | | | |
| LEAKAGE CURRENT | <1mA / 240VAC | | | | | | | | |
| PROTECTION | OVERLOAD | 70 ~ 90W rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | |
| | OVER VOLTAGE | 5V: 5.75 ~ 6.75V Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +60°C (Refer to output load derating curve) | | | | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85°C, 10 ~ 95% RH | | | | | | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0 ~ 50°C) on +5V output | | | | | | | |
| VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | | | | | | | | |
| SAFETY & EMC <small>(Note 5)</small> | SAFETY STANDARDS | UL60950-1, TUV EN60950-1 approved | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH | | | | | | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022 (CISPR22) Class B | | | | | | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2,-3 | | | | | | | |
| EMS IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, ENV50204, EN55024, light industry level, criteria A | | | | | | | | |
| OTHERS | MTBF | 313K hrs min. MIL-HDBK-217F (25°C) | | | | | | | |
| | DIMENSION | 159*97*38mm (L*W*H) | | | | | | | |
| | PACKING | 0.55Kg; 24pcs/14.2Kg/0.75CUFT | | | | | | | |
| NOTE | <ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. 5% Duty cycle maximum within every 1min. Average output power should not exceed the rated power. 5. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com) | | | | | | | | |

Mechanical Specification

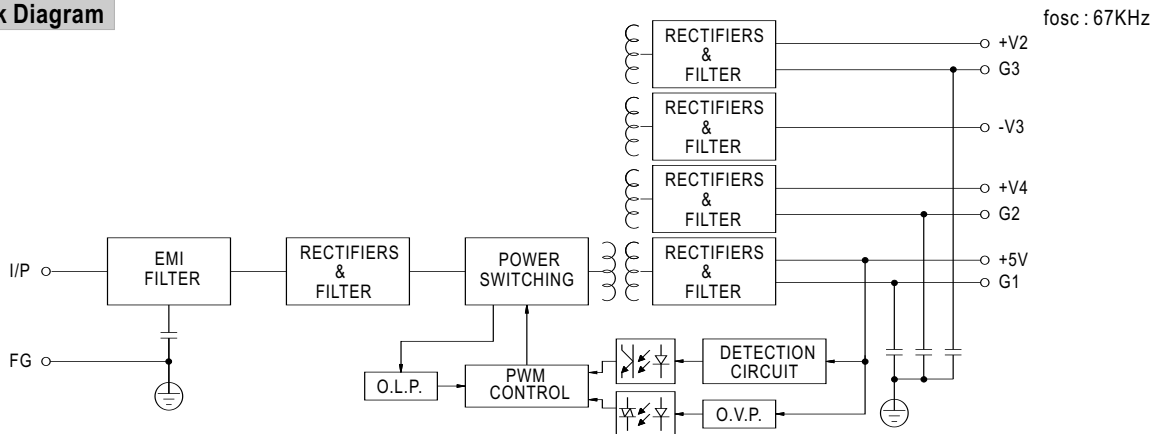
Case No. 901 Unit:mm



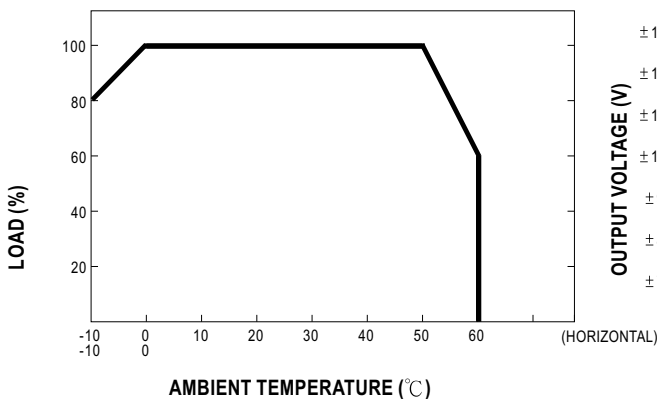
Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment |
|---------|---------------|---------|---------------|
| 1 | AC/L | 6 | DC OUTPUT +V2 |
| 2 | AC/N | 7 | DC OUTPUT G4 |
| 3 | FG \perp | 8 | DC OUTPUT +V4 |
| 4 | DC OUTPUT -V3 | 9 | DC OUTPUT G1 |
| 5 | DC OUTPUT COM | 10 | DC OUTPUT +5V |

Block Diagram



Derating Curve



Static Characteristics

