



■ Features :

- AC input range selected by switch
- Protections: Short circuit/Over load/Over voltage
- 100% full load burn-in test
- Fixed switching frequency at 25KHz
- 2 years warranty

SPECIFICATION

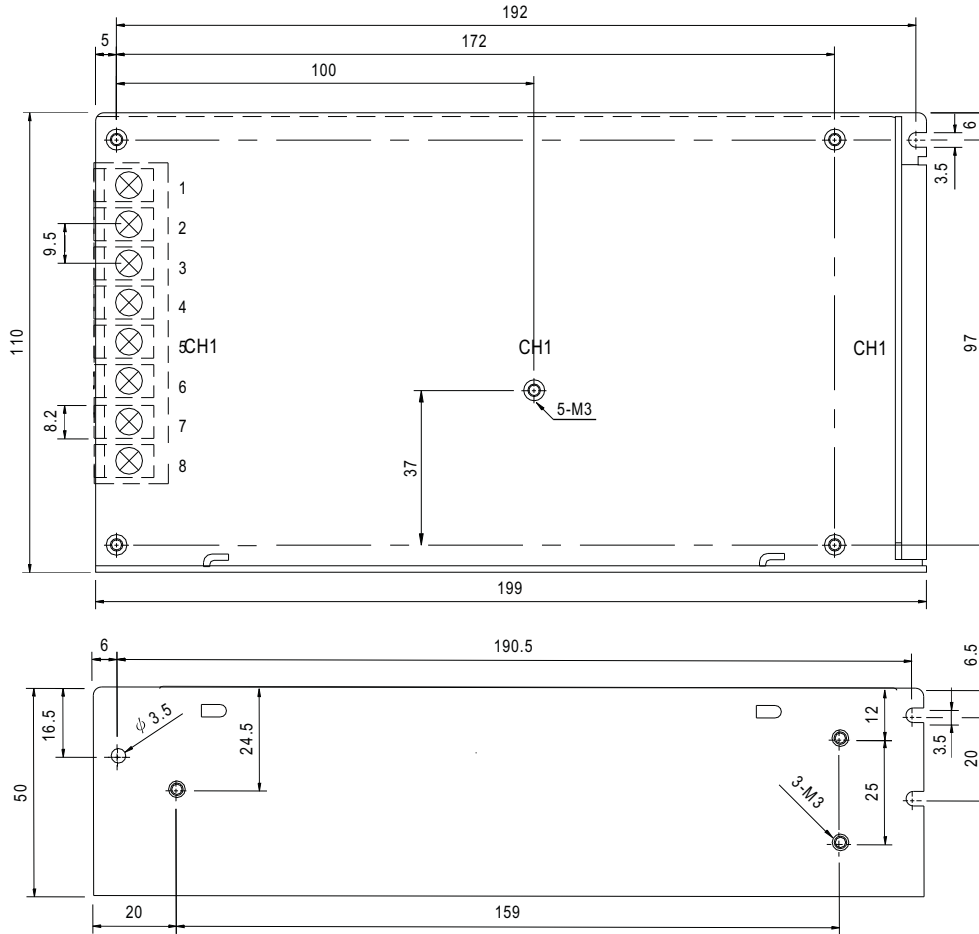
| MODEL | | SM-Q120B | | | | SM-Q120C | | | | SM-Q120D | | | | | | | | |
|------------------------|--------------------------------|--|----------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--|--|--|--|--|
| OUTPUT | OUTPUT NUMBER | CH1 | CH2 | CH3 | CH4 | CH1 | CH2 | CH3 | CH4 | CH1 | CH2 | CH3 | CH4 | | | | | |
| | DC VOLTAGE | 5V | 12V | -5V | -12V | 5V | 15V | -5V | -15V | 5V | 12V | 24V | -12V | | | | | |
| | RATED CURRENT | 11A | 4A | 1A | 1A | 10A | 3.5A | 1A | 1A | 8A | 2A | 2A | 1A | | | | | |
| | CURRENT RANGE | 2 ~ 12A | 0.5 ~ 5A | 0.2 ~ 1A | 0.2 ~ 1A | 2 ~ 12A | 0.5 ~ 5A | 0.2 ~ 1A | 0.2 ~ 1A | 2 ~ 12A | 0.2 ~ 5A | 0.2 ~ 2A | 0.2 ~ 1A | | | | | |
| | RATED POWER | 120W | | | | 122.5W | | | | 124W | | | | | | | | |
| | RIPPLE & NOISE (max.) Note.2 | 80mVp-p | 120mVp-p | 80mVp-p | 120mVp-p | 80mVp-p | 150mVp-p | 80mVp-p | 150mVp-p | 80mVp-p | 120mVp-p | 180mVp-p | 120mVp-p | | | | | |
| | VOLTAGE ADJ. RANGE | CH1: 4.75 ~ 5.5V | | | | | | | | | | | | | | | | |
| | VOLTAGE TOLERANCE Note.3 | ±2.0% | ±6.0% | ±6.0% | ±6.0% | ±2.0% | +10,-5% | ±6.0% | +10,-5% | ±2.0% | ±6.0% | ±6.0% | ±6.0% | | | | | |
| | LINE REGULATION | ±0.5% | ±1.0% | ±1.0% | ±1.0% | ±0.5% | ±1.0% | ±1.0% | ±1.0% | ±0.5% | ±1.0% | ±1.0% | ±1.0% | | | | | |
| | LOAD REGULATION | ±0.5% | ±5.0% | ±5.0% | ±5.0% | ±0.5% | ±6.0% | ±5.0% | ±6.0% | ±0.5% | ±5.0% | ±5.0% | ±5.0% | | | | | |
| SETUP, RISE, HOLD TIME | 200ms, 50ms, 20ms at full load | | | | | | | | | | | | | | | | | |
| INPUT | VOLTAGE RANGE | 88 ~ 132VAC/176 ~ 264VAC selected by switch 240 ~ 370VDC | | | | | | | | | | | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | | | | | | | | | |
| | EFFICIENCY (Typ.) | 77% | | | | 76% | | | | 80% | | | | | | | | |
| | AC CURRENT | 2.8A/115VAC | | 1.6A/230VAC | | | | | | | | | | | | | | |
| | INRUSH CURRENT (max.) | COLD START 35A | | | | | | | | | | | | | | | | |
| | LEAKAGE CURRENT | <3.5mA / 240VAC | | | | | | | | | | | | | | | | |
| PROTECTION | OVER LOAD | 105 ~ 135% rated output power Protection type : Shut down o/p voltage, re-power on to recover | | | | | | | | | | | | | | | | |
| | OVER VOLTAGE | CH1: 5.75 ~ 6.75VDC Protection type : Shut down o/p voltage, re-power on to recover | | | | | | | | | | | | | | | | |
| 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) | | | | | | | | | | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes | | | | | | | | | | | | | | | | |
| OTHERS | MTBF | 261.4 K hrs min. MIL- HDBK- 217F (25°C) | | | | | | | | | | | | | | | | |
| | DIMENSION | 199 * 110 * 50 mm (L * W * H) | | | | | | | | | | | | | | | | |
| | PACKING | 0.86Kg ; 16 pcs / 14.7Kg / 0.95CUFT | | | | | | | | | | | | | | | | |

NOTE

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. 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.

Mechanical Specification

Unit:mm

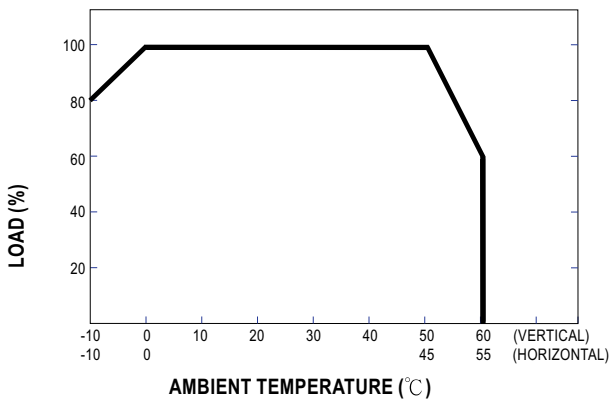


Terminal Pin. No Assignment

| Pin No. | Assignment | Pin No. | Assignment |
|---------|------------|---------|---------------|
| 1 | AC/L | 6 | DC OUTPUT -V1 |
| 2 | AC/N | 7 | DC OUTPUT COM |
| 3 | FG | 8 | DC OUTPUT +V1 |
| 4,5 | DC OUTPUT | | |

| MODEL | SM-Q120B | SM-Q120C | SM-Q120D |
|-----------|----------|----------|----------|
| Pin No. 4 | +12V | +15V | +24V |
| Pin No. 5 | -12V | -15V | +12V |

Derating Curve



Static Characteristics (B)

