



65W Triple Output Switching Power Supply

RT-65 series



■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- All using 105°C long life electrolytic capacitors
- Withstand 300VAC surge input for 5 second
- High operating temperature up to 70°C
- Withstand 5G vibration test
- High efficiency, long life and high reliability
- 3 years warranty

User's Manual



UL62368-1

BS EN/EN62368-1

IEC62368-1

CB

EAC

CE

UKCA

SPECIFICATION

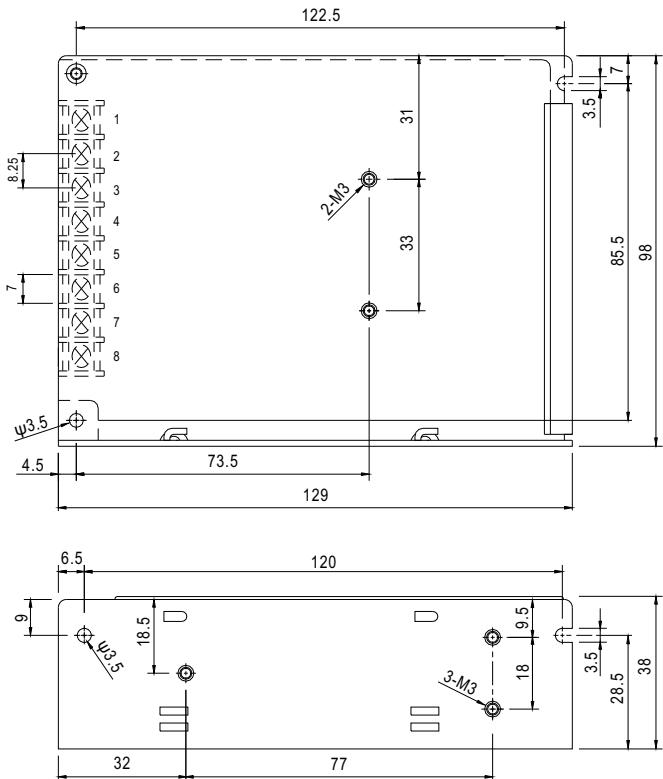
| MODEL | RT-65A | | | RT-65B | | | RT-65C | | | RT-65D | | | | |
|-----------------------|-------------------------|--------|--|----------|--|---------|------------------|---------|------------------|---------|---------|----------|----------|--------|
| OUTPUT | OUTPUT NUMBER | CH1 | CH2 | CH3 | CH1 | CH2 | CH3 | CH1 | CH2 | CH3 | CH1 | CH2 | CH3 | |
| | DC VOLTAGE | 5V | 12V | -5V | 5V | 12V | -12V | 5V | 15V | -15V | 5V | 24V | 12V | |
| | RATED CURRENT | 6A | 2.8A | 0.5A | 5A | 2.8A | 0.5A | 5A | 2.2A | 0.5A | 4A | 1.5A | 1A | |
| | CURRENT RANGE | Note.6 | 0 ~ 8A | 0 ~ 3.5A | 0 ~ 1A | 0 ~ 8A | 0 ~ 3.5A | 0 ~ 1A | 0 ~ 8A | 0 ~ 3A | 0 ~ 1A | 0 ~ 8A | 0 ~ 2A | 0 ~ 1A |
| | RATED POWER | Note.6 | 66.1W | | 64.6W | | 65.5W | | 68W | | | | | |
| | RIPPLE & NOISE (max.) | Note.2 | 80mVp-p | 120mVp-p | 80mVp-p | 80mVp-p | 120mVp-p | 80mVp-p | 120mVp-p | 80mVp-p | 80mVp-p | 150mVp-p | 120mVp-p | |
| | VOLTAGE ADJ. RANGE | | CH1: 4.75 ~ 5.5V | | CH1: 4.75 ~ 5.5V | | CH1: 4.75 ~ 5.5V | | CH1: 4.75 ~ 5.5V | | | | | |
| | VOLTAGE TOLERANCE | Note.3 | ±2.0% | ±6.0% | ±5.0% | ±2.0% | ±6.0% | ±5.0% | ±2.0% | +8,-4% | ±5.0% | ±2.0% | +4,-10% | ±6.0% |
| | LINE REGULATION | Note.4 | ±0.5% | ±1.5% | ±0.5% | ±0.5% | ±1.5% | ±0.5% | ±0.5% | ±1.5% | ±0.5% | ±0.5% | ±1.5% | ±2.0% |
| | LOAD REGULATION | Note.5 | ±1.0% | ±3.0% | ±1.0% | ±1.0% | ±3.0% | ±1.0% | ±1.0% | ±3.0% | ±1.0% | ±1.0% | ±3.0% | ±4.0% |
| INPUT | SETUP, RISE TIME | | 500ms, 20ms/230VAC | | 1200ms, 30ms/115VAC at full load | | | | | | | | | |
| | HOLD UP TIME (Typ.) | | 60ms/230VAC | | 14ms/115VAC at full load | | | | | | | | | |
| | VOLTAGE RANGE | | 88 ~ 264VAC | | 125 ~ 373VDC (Withstand 300VAC surge for 5sec. Without damage) | | | | | | | | | |
| | FREQUENCY RANGE | | 47 ~ 63Hz | | | | | | | | | | | |
| | EFFICIENCY(Typ.) | | 76% | | 76% | | 77% | | 78% | | | | | |
| | AC CURRENT (Typ.) | | 2A/115VAC | | 1.2A/230VAC | | | | | | | | | |
| PROTECTION | INRUSH CURRENT (Typ.) | | COLD START 50A/230VAC | | | | | | | | | | | |
| | LEAKAGE CURRENT | | <2mA / 240VAC | | | | | | | | | | | |
| | OVERLOAD | | 110 ~ 150% rated output power | | | | | | | | | | | |
| | | | Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | | | | | |
| ENVIRONMENT | OVER VOLTAGE | | CH1: 5.75 ~ 6.75V | | | | | | | | | | | |
| | | | Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | | | | | |
| | WORKING TEMP. | | -25 ~ +70°C (Refer to "Derating Curve") | | | | | | | | | | | |
| | WORKING HUMIDITY | | 20 ~ 90% RH non-condensing | | | | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | | -40 ~ +85°C, 10 ~ 95% RH | | | | | | | | | | | |
| SAFETY & EMC (Note 7) | TEMP. COEFFICIENT | | ±0.03%/°C (0 ~ 50°C)on +5V output | | | | | | | | | | | |
| | VIBRATION | | 10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes | | | | | | | | | | | |
| | SAFETY STANDARDS | | UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004 approved | | | | | | | | | | | |
| | WITHSTAND VOLTAGE | | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC | | | | | | | | | | | |
| OTHERS | ISOLATION RESISTANCE | | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH | | | | | | | | | | | |
| | EMC EMISSION | | Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020 | | | | | | | | | | | |
| | EMC IMMUNITY | | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN61000-6-2 (BS EN/EN50082-2), heavy industry level, criteria A, EAC TP TC 020 | | | | | | | | | | | |
| NOTE | MTBF | | 254.6Khrs min. MIL-HDBK-217F (25°C) | | | | | | | | | | | |
| | DIMENSION | | 129*98*38mm (L*W*H) | | | | | | | | | | | |
| | PACKING | | 0.44Kg; 30pcs/13.2Kg/0.72CUFT | | | | | | | | | | | |

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, when multi-channel output, it is recommended that CH1 load > 10%.
4. Line regulation is measured from low line to high line at rated load.
5. Load regulation is measured from 20% to 100% rated load, and other output at 60% rated load.
6. Each output can work within current range. But total output power can't exceed rated output power.
7. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. 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>)
8. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).

※ Product Liability Disclaimer : For detailed information, please refer to <https://www.meanwell.com/serviceDisclaimer.aspx>

■ Mechanical Specification

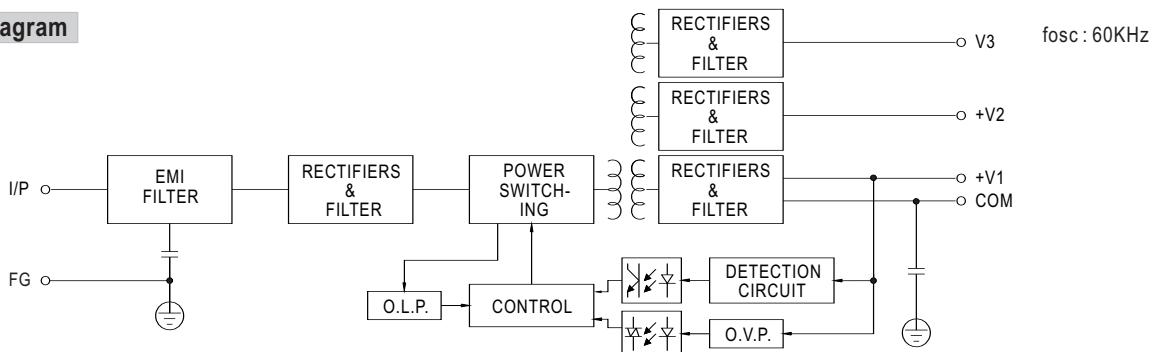
Case No. 903 Unit:mm



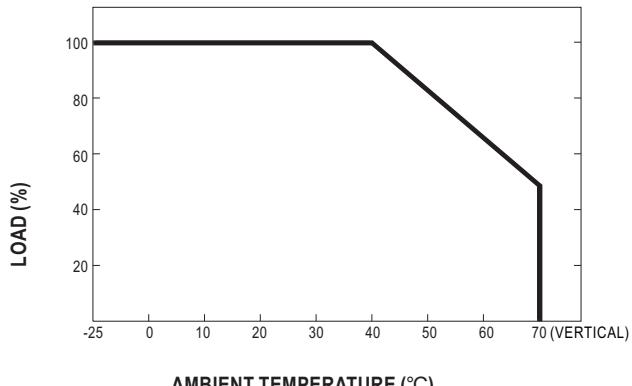
Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment |
|---------|------------|---------|---------------|
| 1 | AC/L | 5 | DC OUTPUT V3 |
| 2 | AC/N | 6 | DC OUTPUT +V2 |
| 3 | FG | 7 | DC OUTPUT COM |
| 4 | NC | 8 | DC OUTPUT +V1 |

■ Block Diagram



■ Derating Curve



■ Output Derating VS Input Voltage

