



65W Quad Output Switching Power Supply

RQ-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



us BS EN/EN62368-1 IEC62368-1 TPTC004

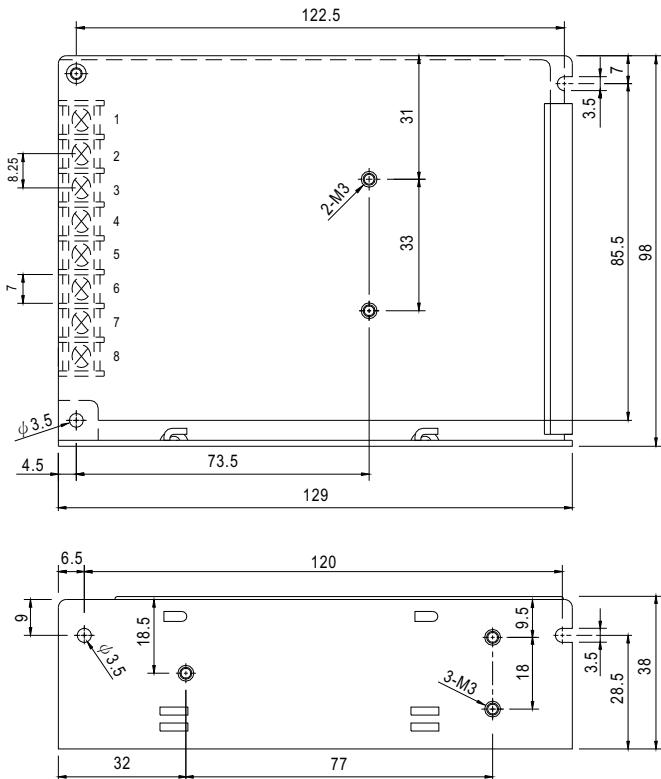
CB EAC CE UKCA

SPECIFICATION

MODEL	RQ-65B				RQ-65C				RQ-65D												
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	6A	2A	0.5A	0.5A	5A	2A	0.5A	0.5A	4A	1.5A	1A	0.5A								
	CURRENT RANGE	Note.6	0 ~ 8A	0 ~ 3A	0 ~ 1A	0 ~ 1A	0 ~ 8A	0 ~ 3A	0 ~ 1A	0 ~ 1A	0 ~ 8A	0 ~ 3A	0 ~ 1.5A								
	RATED POWER	Note.6	62.5W			65W				68W											
	RIPPLE & NOISE (max.)	Note.2	80mVp-p	120mVp-p	80mVp-p	80mVp-p	80mVp-p	120mVp-p	80mVp-p	80mVp-p	80mVp-p	120mVp-p	180mVp-p								
	VOLTAGE ADJ. RANGE	CH1: 4.75 ~ 5.5V				CH1: 4.75 ~ 5.5V				CH1: 4.75 ~ 5.5V											
	VOLTAGE TOLERANCE	Note.3	±2.0%	+9,-5%	±5.0%	±5.0%	±2.0%	+10,-4%	±5.0%	±5.0%	±2.0%	+6,-10%	+6,-10%								
	LINE REGULATION	Note.4	±0.5%	±1.5%	±0.5%	±0.5%	±0.5%	±1.5%	±0.5%	±0.5%	±0.5%	±1.5%	±2.0%								
	LOAD REGULATION	Note.5	±0.5%	±3.0%	±1.0%	±1.0%	±0.5%	±4.0%	±1.0%	±1.0%	±0.5%	±3.0%	±5.0%								
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.)	75%				75%				77%											
	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																			
SAFETY & EMC (Note 7)	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH																			
	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																			
OTHERS	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																			
	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	245.5Khrs 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

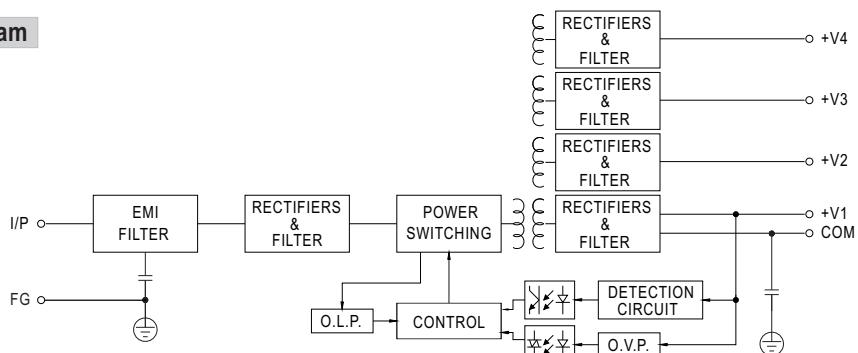
Case No. 903 Unit:mm



Terminal Pin No. Assignment

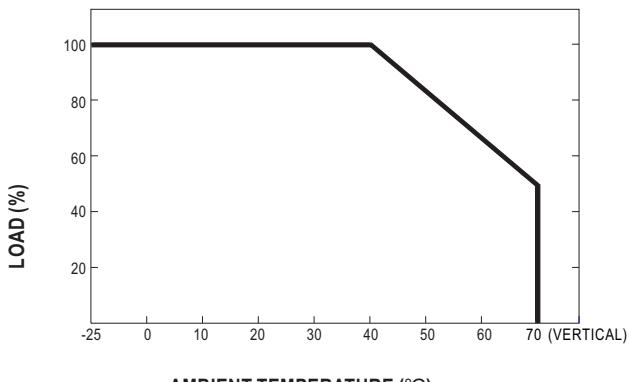
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5	DC OUTPUT V3
2	AC/N	6	DC OUTPUT +V2
3	FG	7	DC OUTPUT COM
4	DC OUTPUT -V4	8	DC OUTPUT +V1

■ Block Diagram



fosc : 60KHz

■ Derating Curve



■ Output Derating VS Input Voltage

