



125W Quad Output Switching Power Supply

RQ-125 series



■ Features :

- 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



■ GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>



SPECIFICATION

MODEL	RQ-125B				RQ-125C				RQ-125D			
	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH4
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	4.5A	1A	0.5A	10A	4A	1A	0.5A	8A	2.5A	2A	0.5A
CURRENT RANGE <small>Note.3</small>	0 ~ 12A	0 ~ 4.5A	0 ~ 1A	0 ~ 1A	0 ~ 12A	0 ~ 4A	0 ~ 1A	0 ~ 1A	0 ~ 12A	0 ~ 4A	0 ~ 2.5A	0 ~ 1A
RATED POWER <small>Note.6</small>	120W				122.5W				124W			
RIPPLE & NOISE (max.) <small>Note.2</small>	80mVp-p	120mVp-p	80mVp-p	80mVp-p	80mVp-p	120mVp-p	80mVp-p	80mVp-p	80mVp-p	120mVp-p	150mVp-p	80mVp-p
VOLTAGE ADJ. RANGE	CH1: 4.75 ~ 5.5V				CH1: 4.75 ~ 5.5V				CH1: 4.75 ~ 5.5V			
VOLTAGE TOLERANCE <small>Note.3</small>	±2.0%	+10,-1%	+6,-10%	±5.0%	±2.0%	+10,-1%	+6,-10%	±5.0%	±2.0%	+10,-1%	±8.0%	±5.0%
LINE REGULATION <small>Note.4</small>	±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 <small>Note.5</small>	±1.0%	±3.0%	±6.0%	±2.0%	±1.0%	±3.0%	±6.0%	±2.0%	±1.0%	±3.0%	±6.0%	±2.0%
SETUP, RISE TIME	500ms, 20ms/230VAC				1200ms, 30ms/115VAC at full load							
HOLD UP TIME (Typ.)	25ms/230VAC		30ms/115VAC at full load									
INPUT												
VOLTAGE RANGE	88 ~ 132VAC / 176 ~ 264VAC selected by switch				248 ~ 373VDC(Withstand 300VAC surge for 5sec. Without damage)							
FREQUENCY RANGE	47 ~ 63Hz											
EFFICIENCY (Typ.)	77%				78%				80%			
AC CURRENT (Typ.)	3A/115VAC		2A/230VAC									
INRUSH CURRENT (Typ.)	COLD START 50A/230VAC											
LEAKAGE CURRENT	<2mA / 240VAC											
PROTECTION												
OVERLOAD	110 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed											
OVER VOLTAGE	CH1: 5.75 ~ 6.75V Protection type : Hiccup mode, recovers automatically after fault condition is removed											
ENVIRONMENT												
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											
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 & EMC (Note 7)												
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/EN55035, BS EN/EN61000-6-2 (BS EN/EN50082-2), heavy industry level, EAC TP TC 020											
OTHERS												
MTBF	2535.9K hrs min. Telcordia SR-332 (Bellcore) ; 377.7K hrs min. MIL-HDBK-217F (25°C)											
DIMENSION	199*98*38mm (L*W*H)											
PACKING	0.7Kg; 20pcs/14Kg/0.85CUFT											

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. (In order to meet tolerance, it is recommended that CH1 load > 20% rated current for B, C type and CH1 load > 10% rated current for D type.)
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. Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time.
9. 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>

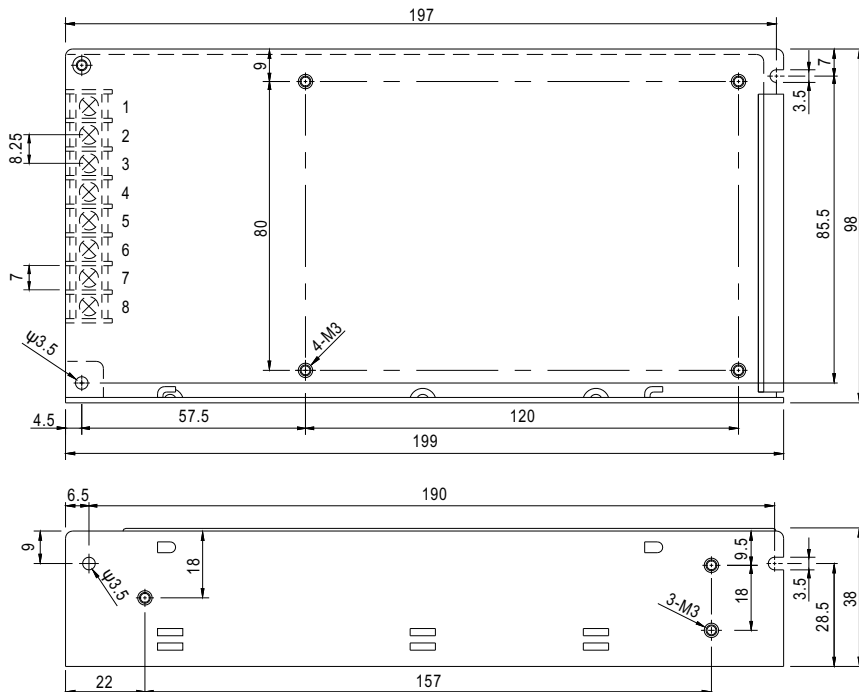


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RQ-125 series

Mechanical Specification

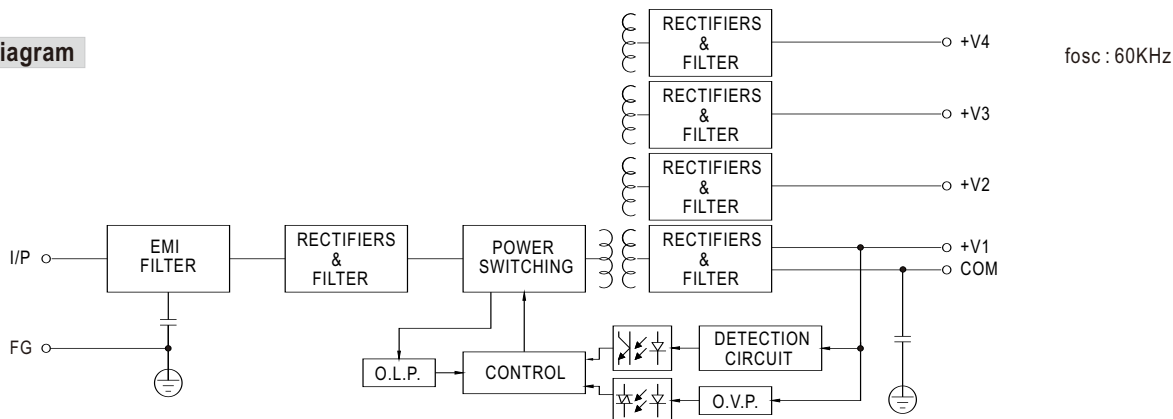
Case No. 902 Unit:mm



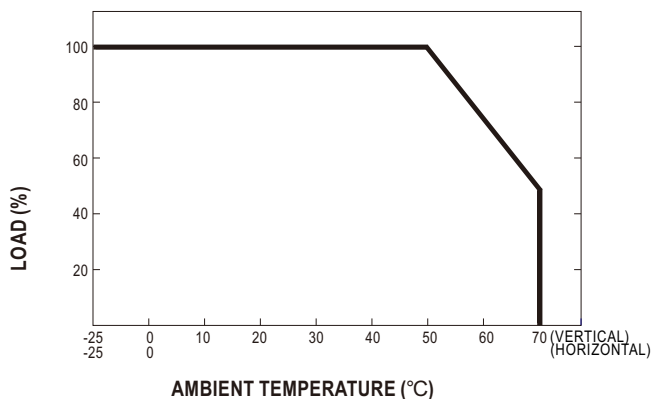
Terminal Pin No. Assignment

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

Block Diagram



Derating Curve



Static Characteristics

