



Наличие и актуальные цены на

**RQ-50C**

<https://www.mean-well.ru/store/RQ-50C/>



#### ■ 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



#### ■ GTIN CODE

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

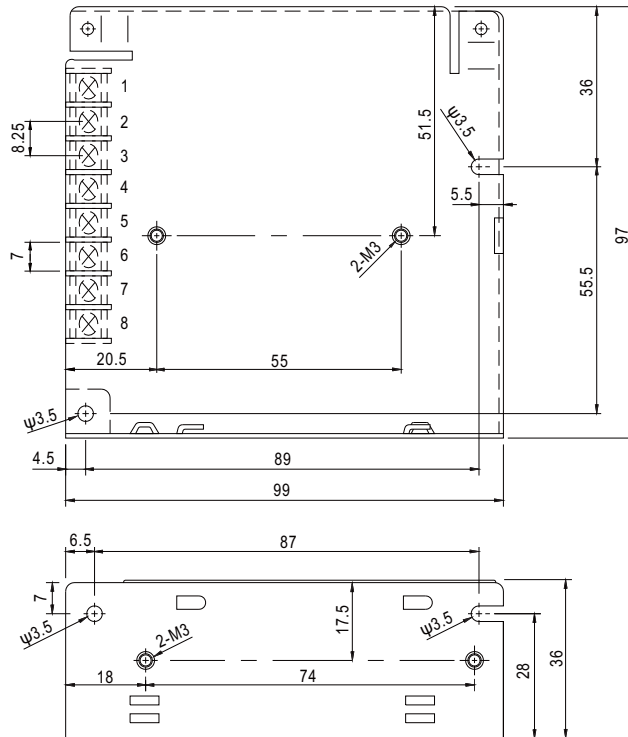
#### SPECIFICATION

| MODEL                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | RQ-50B                                                                                                                                                                                                |          |          |          | RQ-50C           |          |          |          | RQ-50D           |          |          |         |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|------------------|----------|----------|----------|------------------|----------|----------|---------|
| 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 5A                                                                                                                                                                                                    | 1A       | 0.5A     | 0.5A     | 5A               | 1A       | 0.5A     | 0.5A     | 3A               | 0.9A     | 0.9A     | 0.5A    |
|                          | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Note.3<br>0 ~ 6A                                                                                                                                                                                      | 0 ~ 1.5A | 0 ~ 1A   | 0 ~ 1A   | 0 ~ 6A           | 0 ~ 1.5A | 0 ~ 1A   | 0 ~ 1A   | 0 ~ 6A           | 0 ~ 1.5A | 0 ~ 1A   | 0 ~ 1A  |
|                          | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 45.5W                                                                                                                                                                                                 |          |          |          | 50W              |          |          |          | 53.4W            |          |          |         |
|                          | RIPPLE & NOISE (max.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Note.2<br>80mVp-p                                                                                                                                                                                     | 120mVp-p | 100mVp-p | 150mVp-p | 80mVp-p          | 120mVp-p | 100mVp-p | 150mVp-p | 80mVp-p          | 120mVp-p | 180mVp-p | 80mVp-p |
|                          | VOLTAGE ADJ. RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | CH1: 4.75 ~ 5.5V                                                                                                                                                                                      |          |          |          | CH1: 4.75 ~ 5.5V |          |          |          | CH1: 4.75 ~ 5.5V |          |          |         |
|                          | VOLTAGE TOLERANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Note.3<br>±2.0%                                                                                                                                                                                       | ±6.0%    | ±3.0%    | ±3.0%    | ±2.0%            | ±7.0%    | ±3.0%    | ±3.0%    | ±2.0%            | ±6.0%    | ±7.0%    | ±3.0%   |
|                          | LINE REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Note.4<br>±0.5%                                                                                                                                                                                       | ±1.5%    | ±0.5%    | ±0.5%    | ±0.5%            | ±1.5%    | ±0.5%    | ±0.5%    | ±0.5%            | ±1.5%    | ±2.0%    | ±0.5%   |
|                          | LOAD REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Note.5<br>±0.5%                                                                                                                                                                                       | ±3.0%    | ±1.0%    | ±1.0%    | ±0.5%            | ±3.0%    | ±1.0%    | ±1.0%    | ±0.5%            | ±3.0%    | ±3.0%    | ±1.0%   |
|                          | SETUP, RISE TIME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 500ms, 20ms/230VAC      1200ms, 30ms/115VAC at full load                                                                                                                                              |          |          |          |                  |          |          |          |                  |          |          |         |
| HOLD UP TIME (Typ.)      | 60ms/230VAC      10ms/115VAC at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                       |          |          |          |                  |          |          |          |                  |          |          |         |
| INPUT                    | VOLTAGE RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 88 ~ 264VAC      125 ~ 373VDC (Withstand 300VAC surge for 5sec. Without damage)                                                                                                                       |          |          |          |                  |          |          |          |                  |          |          |         |
|                          | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 47 ~ 63Hz                                                                                                                                                                                             |          |          |          |                  |          |          |          |                  |          |          |         |
|                          | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 74%                                                                                                                                                                                                   |          |          |          |                  | 73%      |          |          | 77%              |          |          |         |
|                          | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1.3A/115VAC      0.8A/230VAC                                                                                                                                                                          |          |          |          |                  |          |          |          |                  |          |          |         |
|                          | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | COLD START 48A/230VAC                                                                                                                                                                                 |          |          |          |                  |          |          |          |                  |          |          |         |
| PROTECTION               | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <2mA / 240VAC                                                                                                                                                                                         |          |          |          |                  |          |          |          |                  |          |          |         |
|                          | OVERLOAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 110 ~ 150% rated output power                                                                                                                                                                         |          |          |          |                  |          |          |          |                  |          |          |         |
|                          | OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Protection type : Hiccup mode, recovers automatically after fault condition is removed<br>CH1: 5.75 ~ 6.75V<br>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<br>(Note 6) | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004, BIS IS13252(Part1): 2010/IEC 60950-1:2005 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                                                                                                                    |          |          |          |                  |          |          |          |                  |          |          |         |
| OTHERS                   | 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                                                                 |          |          |          |                  |          |          |          |                  |          |          |         |
|                          | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2519.1K hrs min.    Telcordia SR-332 (Bellcore) ; 450.1K hrs min.    MIL-HDBK-217F (25°C)                                                                                                             |          |          |          |                  |          |          |          |                  |          |          |         |
|                          | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 99*97*36mm (L*W*H)                                                                                                                                                                                    |          |          |          |                  |          |          |          |                  |          |          |         |
| NOTE                     | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 0.41Kg; 45pcs/19.5Kg/0.94CUFT                                                                                                                                                                         |          |          |          |                  |          |          |          |                  |          |          |         |
|                          | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μF & 47 μF parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation, when multi-channel output, it is recommended that CH1 load > 10%.<br>4. Line regulation is measured from low line to high line at rated load.<br>5. Load regulation is measured from 0% to 100% rated load.<br>6. 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."<br>(as available on <a href="https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf">https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf</a> )<br>7. 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).<br>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a> |                                                                                                                                                                                                       |          |          |          |                  |          |          |          |                  |          |          |         |

## Mechanical Specification

(Unit: mm , tolerance  $\pm 1$ mm)

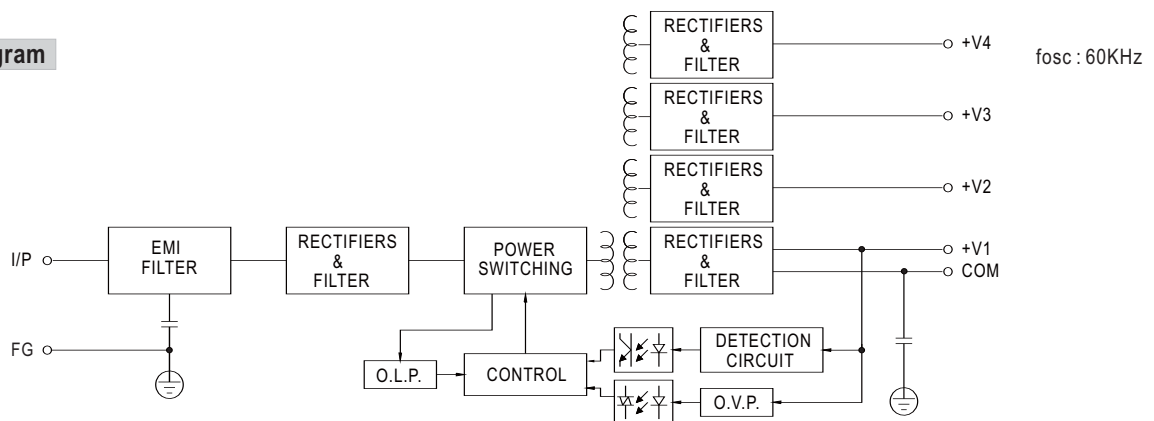
Case No. 905B



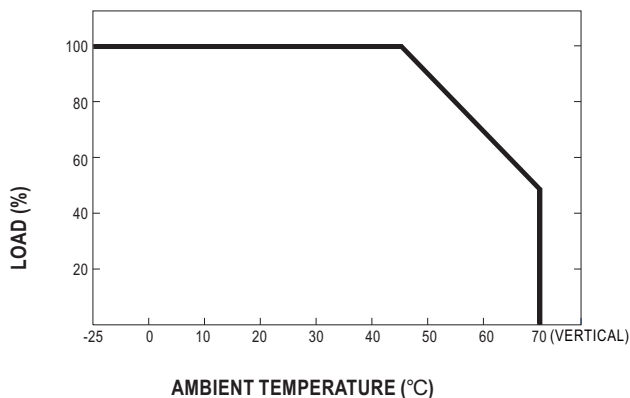
Terminal Pin No. Assignment

| 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



## Output Derating VS Input Voltage

