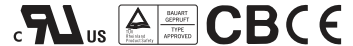




■ Features :

- 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

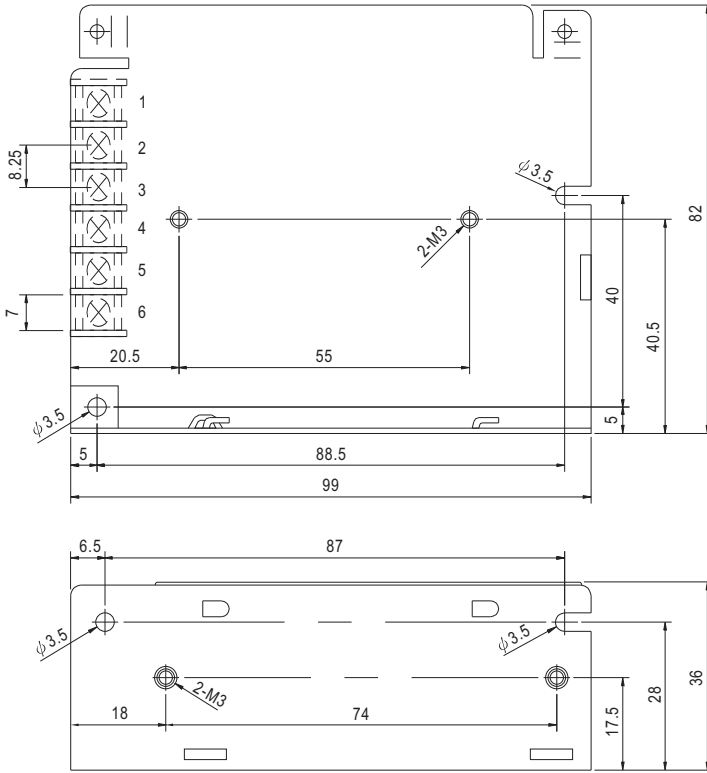


**SPECIFICATION**

| MODEL                 | RD-35A                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | RD-35B                           |                                                                | RD-3513    |                                                                                                               |            |
|-----------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------------------|------------|---------------------------------------------------------------------------------------------------------------|------------|
| OUTPUT                | OUTPUT NUMBER                | CH1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | CH2                              | CH1                                                            | CH2        | CH1                                                                                                           | CH2        |
|                       | DC VOLTAGE                   | 5V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 12V                              | 5V                                                             | 24V        | 13.5V                                                                                                         | -13.5V     |
|                       | RATED CURRENT                | 4A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1A                               | 2.2A                                                           | 1A         | 1.3A                                                                                                          | 1.3A       |
|                       | CURRENT RANGE                | 0.3 ~ 4A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.2 ~ 1A                         | 0.3 ~ 4A                                                       | 0.2 ~ 1.3A | 0.3 ~ 2A                                                                                                      | 0.2 ~ 1.5A |
|                       | RATED POWER                  | 32W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                  | 35W                                                            |            | 35.1W                                                                                                         |            |
|                       | RIPPLE & NOISE (max.) Note.2 | 80mVp-p                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  | 120mVp-p                                                       |            | 120mVp-p                                                                                                      |            |
|                       | VOLTAGE ADJ. RANGE           | CH1: 4.75 ~ 5.5V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                  | CH1: 4.75 ~ 5.5V                                               |            | CH1: 11.5 ~ 15.5V                                                                                             |            |
|                       | VOLTAGE TOLERANCE Note.3     | ±2.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                  | ±6.0%                                                          |            | ±4.0%                                                                                                         |            |
|                       | LINE REGULATION Note.4       | ±0.5%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                  | ±1.5%                                                          |            | ±0.5%                                                                                                         |            |
|                       | LOAD REGULATION Note.5       | ±0.5%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                  | ±3.0%                                                          |            | ±3.0%                                                                                                         |            |
| SETUP, RISE TIME      | 500ms, 30ms/230VAC           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1200ms, 30ms/115VAC at full load |                                                                |            |                                                                                                               |            |
| HOLD UP TIME (Typ.)   | 80ms/230VAC                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 16ms/115VAC at full load         |                                                                |            |                                                                                                               |            |
| INPUT                 | VOLTAGE RANGE                | 88 ~ 264VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                  | 125 ~ 373VDC (Withstand 300VAC surge for 5sec. Without damage) |            |                                                                                                               |            |
|                       | FREQUENCY RANGE              | 47 ~ 63Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                  |                                                                |            |                                                                                                               |            |
|                       | EFFICIENCY (Typ.)            | 79%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                  | 82%                                                            |            | 80%                                                                                                           |            |
|                       | AC CURRENT (Typ.)            | 0.8A/115VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                  | 0.55A/230VAC                                                   |            |                                                                                                               |            |
|                       | INRUSH CURRENT (Typ.)        | COLD START 36A/230VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                  |                                                                |            |                                                                                                               |            |
| LEAKAGE CURRENT       | <2mA / 240VAC                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                  |                                                                |            |                                                                                                               |            |
| PROTECTION            | OVERLOAD                     | 110 ~ 150% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |                                                                |            |                                                                                                               |            |
|                       | OVER VOLTAGE                 | CH1: 5.75 ~ 6.75V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  |                                                                |            | CH1: 16.87 ~ 19.57V<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 CH1 output                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |                                                                |            |                                                                                                               |            |
| SAFETY & EMC (Note 6) | VIBRATION                    | 10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |                                                                |            |                                                                                                               |            |
|                       | SAFETY STANDARDS             | UL60950, TUV EN60950 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 EN55022 (CISPR22) Class B, EN61000-3-2,-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |                                                                |            |                                                                                                               |            |
| OTHERS                | EMC IMMUNITY                 | Compliance to EN61000-4-2,3,4,5,6,8,11, EN61000-6-2 (EN50082-2), heavy industry level, criteria A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  |                                                                |            |                                                                                                               |            |
|                       | MTBF                         | 179Khrs min. MIL-HDBK-217F (25°C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  |                                                                |            |                                                                                                               |            |
|                       | DIMENSION                    | 99*82*36mm (L*W*H)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |                                                                |            |                                                                                                               |            |
| NOTE                  | PACKING                      | 0.3Kg; 45pcs/14Kg/0.83CUFT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                  |                                                                |            |                                                                                                               |            |
|                       |                              | <ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. Line regulation is measured from low line to high line at rated load.</li> <li>5. Load regulation is measured from 0% to 100% rated load.</li> <li>6. 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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</li> </ol> |                                  |                                                                |            |                                                                                                               |            |

**Mechanical Specification**

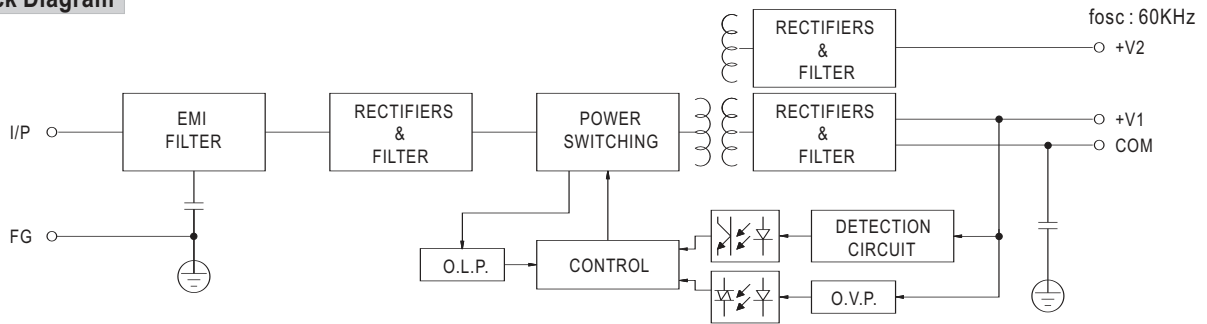
Case No. 932A Unit:mm



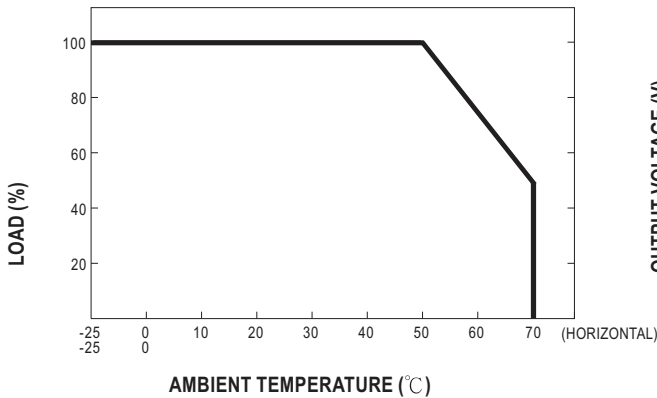
Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment    |
|---------|------------|---------|---------------|
| 1       | AC/L       | 4       | DC OUTPUT V2  |
| 2       | AC/N       | 5       | DC OUTPUT COM |
| 3       | FG $\perp$ | 6       | DC OUTPUT V1  |

**Block Diagram**



**Derating Curve**



**Static Characteristics (A)**

