



35W Single Output Switching Power Supply

RS-35 series



■ Features :

- Universal AC input / Full range
- Protections: Short circuit/Over load/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



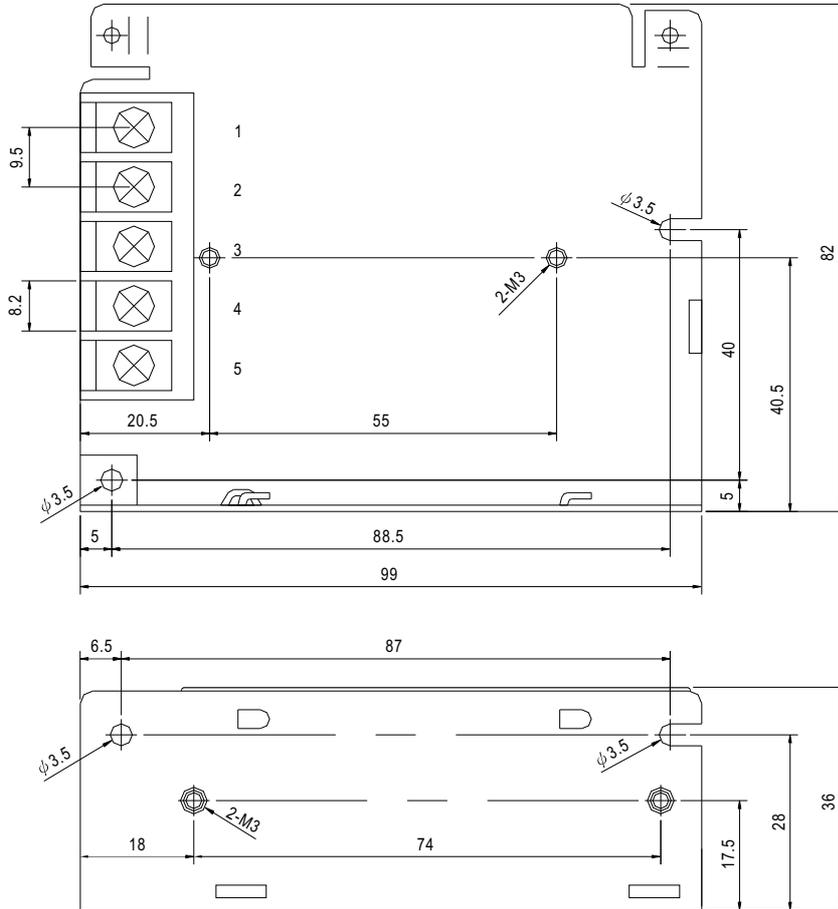
SPECIFICATION

| MODEL                 | RS-35-3.3                                 | RS-35-5   | RS-35-12     | RS-35-15     | RS-35-24       | RS-35-48     |              |
|-----------------------|---|---|--------------|--------------|----------------|--------------|--------------|
| OUTPUT                | DC VOLTAGE                                | 3.3V  | 5V           | 12V          | 15V            | 24V          | 48V          |
|                       | RATED CURRENT                             | 7A  | 7A           | 3A           | 2.4A           | 1.5A         | 0.8A         |
|                       | CURRENT RANGE                             | 0 ~ 7A  | 0 ~ 7A       | 0 ~ 3A       | 0 ~ 2.4A       | 0 ~ 1.5A     | 0 ~ 0.8A     |
|                       | RATED POWER                               | 23.1W   | 35W          | 36W          | 36W            | 36W          | 38.4W        |
|                       | RIPPLE & NOISE (max.) Note.2              | 80mVp-p   | 80mVp-p      | 120mVp-p     | 120mVp-p       | 120mVp-p     | 200mVp-p     |
|                       | VOLTAGE ADJ. RANGE                        | 2.9V ~ 3.6V   | 4.5 ~ 5.5V   | 10.8 ~ 13.2V | 13.5 ~ 16.5V   | 22 ~ 27.6V   | 42 ~ 54V     |
|                       | VOLTAGE TOLERANCE Note.3                  | ±3.0%   | ±2.0%        | ±1.0%        | ±1.0%          | ±1.0%        | ±1.0%        |
|                       | LINE REGULATION Note.4                    | ±0.5%   | ±0.5%        | ±0.5%        | ±0.5%          | ±0.5%        | ±0.5%        |
|                       | LOAD REGULATION Note.5                    | ±2.0%   | ±1.0%        | ±0.5%        | ±0.5%          | ±0.5%        | ±0.5%        |
|                       | SETUP, RISE TIME                          | 500ms, 30ms/230VAC      1200ms, 30ms/115VAC at full load  |              |              |                |              |              |
| HOLD TIME (Typ.)      | 80ms/230VAC      15ms/115VAC at full load |   |              |              |                |              |              |
| INPUT                 | VOLTAGE RANGE                             | 88 ~ 264VAC      125 ~ 373VDC (Withstand 300VAC surge for 5sec. Without damage)   |              |              |                |              |              |
|                       | FREQUENCY RANGE                           | 47 ~ 63Hz   |              |              |                |              |              |
|                       | EFFICIENCY(Typ.)                          | 73%   | 77%          | 81%          | 83%            | 84%          | 84%          |
|                       | AC CURRENT (Typ.)                         | 0.8A/115VAC      0.55A/230VAC   |              |              |                |              |              |
|                       | INRUSH CURRENT (Typ.)                     | COLD START 36A/230VAC   |              |              |                |              |              |
| LEAKAGE CURRENT       | <2mA / 240VAC                             |   |              |              |                |              |              |
| PROTECTION            | OVER LOAD                                 | 110 ~ 150% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed   |              |              |                |              |              |
|                       | OVER VOLTAGE                              | 3.8 ~ 4.45V   | 5.75 ~ 6.75V | 13.8 ~ 16.2V | 17.25 ~ 20.25V | 27.6 ~ 32.4V | 55.2 ~ 64.8V |
| ENVIRONMENT           | WORKING TEMP.                             | -25 ~ +70°C (Refer to output load 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)  |              |              |                |              |              |
|                       | VIBRATION                                 | 10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes   |              |              |                |              |              |
| SAFETY & EMC (Note 6) | SAFETY STANDARDS                          | UL60950-1, TUV EN60950-1 Approved   |              |              |                |              |              |
|                       | WITHSTAND VOLTAGE                         | I/P-O/P:3KVAC    I/P-FG:1.5KVAC    O/P-FG:0.5KVAC   |              |              |                |              |              |
|                       | ISOLATION RESISTANCE                      | I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC  |              |              |                |              |              |
|                       | EMI CONDUCTION & RADIATION                | Compliance to EN55022 (CISPR22) Class B   |              |              |                |              |              |
|                       | HARMONIC CURRENT                          | Compliance to EN61000-3-2,-3  |              |              |                |              |              |
| OTHERS                | EMS IMMUNITY                              | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61000-6-2 (EN50082-2) heavy industry level, criteria A  |              |              |                |              |              |
|                       | MTBF                                      | 249Khrs min.    MIL-HDBK-217F (25°C)  |              |              |                |              |              |
|                       | DIMENSION                                 | 99*82*36mm (L*W*H)  |              |              |                |              |              |
| NOTE                  | PACKING                                   | 0.3Kg; 45pcs/14Kg/0.83CUFT  |              |              |                |              |              |
|                       |   | 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 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<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. The final equipment must be re-confirmed that it still meets EMC directives. |              |              |                |              |              |



■ Mechanical Specification

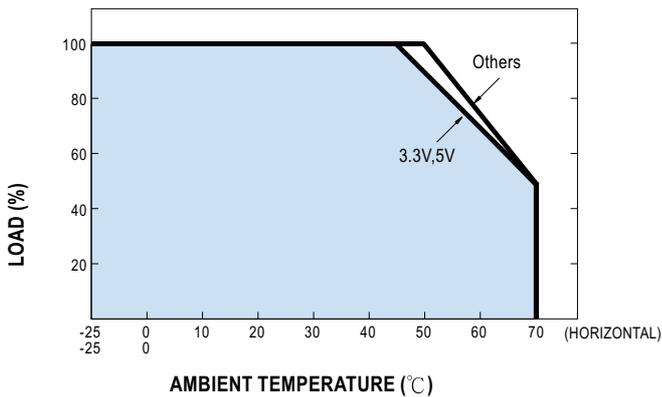
Case No. 932A Unit:mm



Terminal Pin. No Assignment

| Pin No. | Assignment | Pin No. | Assignment   |
|---------|------------|---------|--------------|
| 1       | AC/L       | 4       | DC OUTPUT -V |
| 2       | AC/N       | 5       | DC OUTPUT +V |
| 3       | FG $\perp$ |         |              |

■ Output Derating



■ Static Characteristics (24V)

