



■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- High efficiency up to 89%(typ.)
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in cooling fan ON-OFF control (by load)
- With DC OK signal output
- Built-in remote ON-OFF control
- Standby 5V@0.3A
- Built-in remote sense function
- No load power consumption<0.75W
- Current sharing up to 2400W (3+1) (24V,36V,48V)
- 5 years warranty



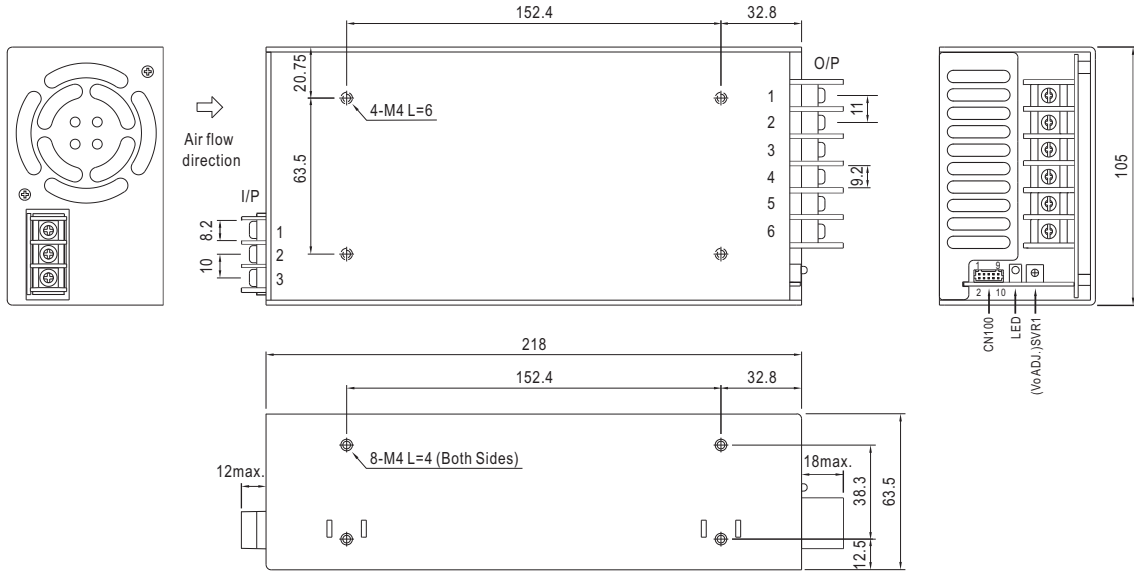
SPECIFICATION

| MODEL | HRPG-600-3.3 | HRPG-600-5 | HRPG-600-7.5 | HRPG-600-12 | HRPG-600-15 | HRPG-600-24 | HRPG-600-36 | HRPG-600-48 | | |
|-----------------------|---|---|--------------------------|----------------------------------|--------------|----------------|--------------|--------------|--------------|--|
| OUTPUT | DC VOLTAGE | 3.3V | 5V | 7.5V | 12V | 15V | 24V | 36V | 48V | |
| | RATED CURRENT | 120A | 120A | 80A | 53A | 43A | 27A | 17.5A | 13A | |
| | CURRENT RANGE | 0 ~ 120A | 0 ~ 120A | 0 ~ 80A | 0 ~ 53A | 0 ~ 43A | 0 ~ 27A | 0 ~ 17.5A | 0 ~ 13A | |
| | RATED POWER | 396W | 600W | 600W | 636W | 645W | 648W | 630W | 624W | |
| | RIPPLE & NOISE (max.) Note.2 | 100mVp-p | 100mVp-p | 100mVp-p | 120mVp-p | 150mVp-p | 150mVp-p | 200mVp-p | 240mVp-p | |
| | VOLTAGE ADJ. RANGE | 2.8 ~ 3.8V | 4.3 ~ 5.8V | 6.8 ~ 9V | 10.2 ~ 13.8V | 13.5 ~ 18V | 21.6 ~ 28.8V | 28.8 ~ 39.6V | 40.8 ~ 55.2V | |
| | VOLTAGE TOLERANCE Note.3 | ±2.0% | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.3% | ±0.3% | ±0.2% | ±0.2% | ±0.2% | |
| | LOAD REGULATION | ±1.0% | ±1.0% | ±1.0% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| | SETUP, RISE TIME | 1000ms, 50ms/230VAC | | 2500ms, 50ms/115VAC at full load | | | | | | |
| HOLD UP TIME (Typ.) | 16ms/230VAC | | 16ms/115VAC at full load | | | | | | | |
| INPUT | VOLTAGE RANGE Note.5 | 85 ~ 264VAC | | 120 ~ 370VDC | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | |
| | POWER FACTOR (Typ.) | PF>0.94/230VAC | | PF>0.99/115VAC at full load | | | | | | |
| | EFFICIENCY (Typ.) | 78.5% | 82% | 86% | 88% | 88% | 88% | 89% | 89% | |
| | AC CURRENT (Typ.) | 8.5A/115VAC | | 5A/230VAC | | | | | | |
| | INRUSH CURRENT (Typ.) | 35A/115VAC | | 70A/230VAC | | | | | | |
| LEAKAGE CURRENT | <1.2mA / 240VAC | | | | | | | | | |
| PROTECTION | OVERLOAD | 105 ~ 135% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed | | | | | | | | |
| | OVER VOLTAGE | 3.96 ~ 4.62V | 6 ~ 7V | 9.4 ~ 10.9V | 14.4 ~ 16.8V | 18.8 ~ 21.8V | 30 ~ 34.8V | 41.4 ~ 48.6V | 57.6 ~ 67.2V | |
| | OVER TEMPERATURE | 80°C ±5°C (TSW1) detect on heatsink of power transistor 90°C ±5°C (TSW2) detect on heatsink of power diode for 3.3V,5V,7.5V; 100°C ±5°C (TSW2) detect on main power output choke for others Protection type : Shut down o/p voltage, recovers automatically after temperature goes down | | | | | | | | |
| FUNCTION | 5V STANDBY | 5VSB : 5V@0.3A ; tolerance ± 5% , ripple : 50mVp-p(max.) | | | | | | | | |
| | DC OK SIGNAL | PSU turn on : 3.3 ~ 5.6V ; PSU turn off : 0 ~ 1V | | | | | | | | |
| | REMOTE CONTROL | RC+ / RC- : 4 ~ 10V or open = power on ; 0 ~ 0.8V or short = power off | | | | | | | | |
| | FAN CONTROL (Typ.) | Load 35±15% or RTH2 ≥ 50°C Fan on | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | -30 ~ +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, 60min. each along X, Y, Z axes | | | | | | | | |
| SAFETY & EMC (Note 4) | 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 / 25°C / 70% RH | | | | | | | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022 (CISPR22) Class B | | | | | | | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2,-3 | | | | | | | | |
| | EMS IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, ENV50204, EN55024, EN61000-6-2, heavy industry level, criteria A | | | | | | | | |
| OTHERS | MTBF | 147.7K hrs min. MIL-HDBK-217F (25°C) | | | | | | | | |
| | DIMENSION | 218*105*63.5mm (L*W*H) | | | | | | | | |
| | PACKING | 1.58Kg;8pcs/13.6Kg/1.34CUFT | | | | | | | | |
| NOTE | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. 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.</p> <p>5. Derating may be needed under low input voltages. Please check the derating curve for more details.</p> <p>6. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.</p> | | | | | | | | | |

File Name:HRPG-600-SPEC 2009-10-27

Mechanical Specification

Case No. 977A Unit:mm



AC Input Terminal Pin No. Assignment

| Pin No. | Assignment |
|---------|------------|
| 1 | AC/L |
| 2 | AC/N |
| 3 | FG \perp |

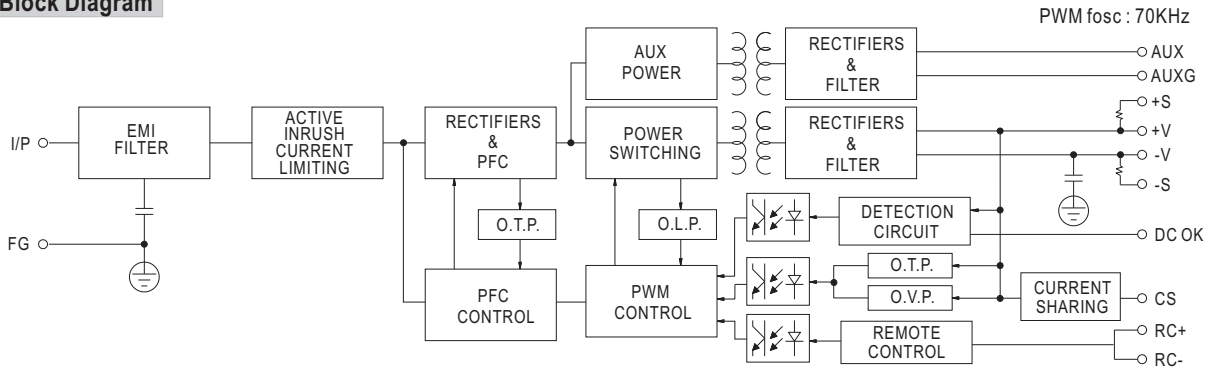
DC Output Terminal Pin No. Assignment

| Pin No. | Assignment |
|---------|------------|
| 1~3 | -V |
| 4~6 | +V |

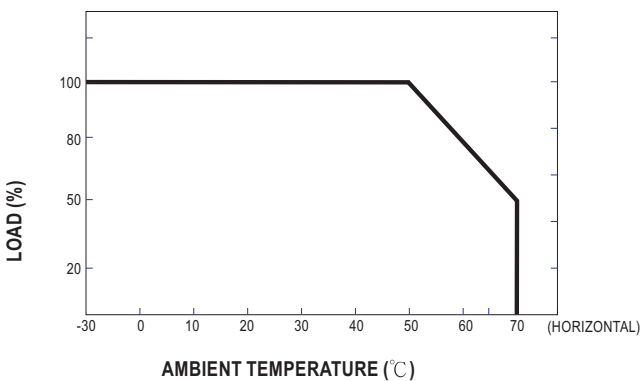
Connector Pin No. Assignment(CN100) : HRS DF11-10DP-2DS or equivalent

| Pin No. | Assignment | Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|---------|------------|-----------------------------|-----------------------------|
| 1 | AUXG | 6,8 | GND | HRS DF11-10DS or equivalent | HRS DF11-11SC or equivalent |
| 2 | AUX | 7 | DC-OK | | |
| 3 | RC+ | 9 | +S | | |
| 4 | RC- | 10 | -S | | |
| 5 | CS | | | | |

Block Diagram



Derating Curve



Output Derating VS Input Voltage

