

300W Single Output with PFC Function

HRPG-300 series



Features :

- Universal AC input / Full range
 Duith in action DE0 function DE 0.05
- Built-in active PFC function, PF>0.95
- High efficiency up to 89%
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in constant current limiting circuit
- 1U low profile 41mm
- Built-in cooling fan ON-OFF control
- Built-in DC OK signal
- Built-in remote ON-OFF control
- Standby 5V@0.3A
- Built-in remote sense function
- No load power consumption<0.5W (Note.6)
- 5 years warranty

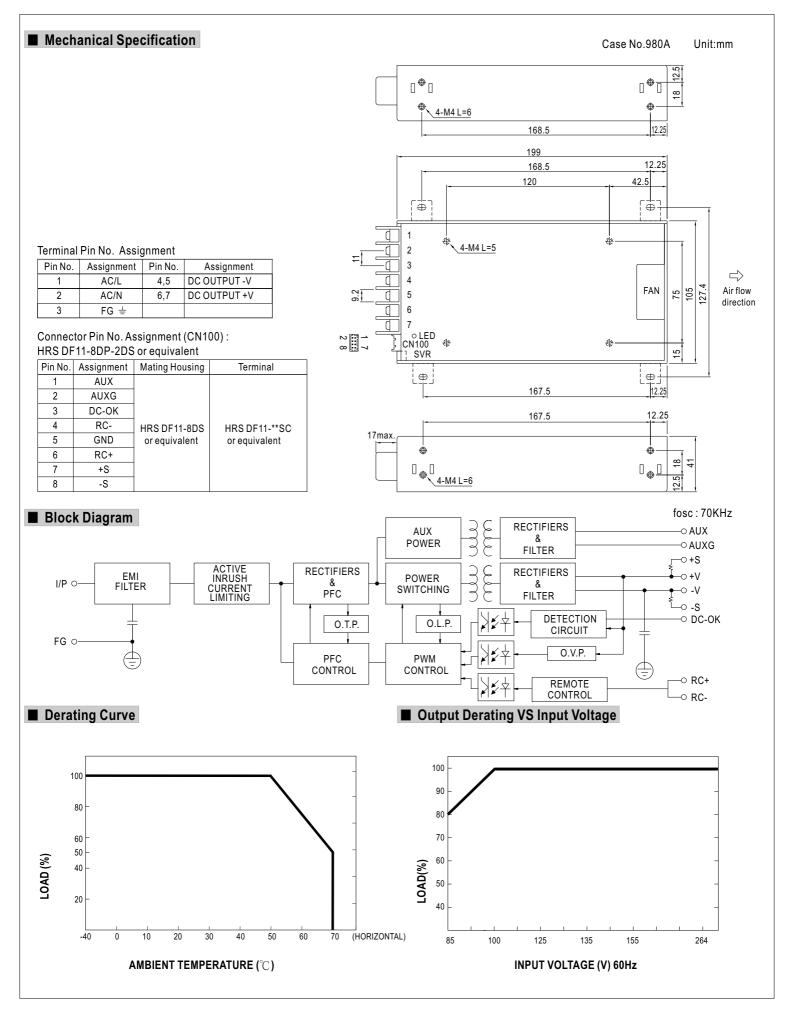


SPECIFICATION

MODEL		HRPG-300-3.3	HRPG-300-5	HRPG-300-7.5	HRPG-300-12	HRPG-300-15	HRPG-300-24	HRPG-300-36	HRPG-300-48	
	DC VOLTAGE	3.3V	5V	7.5V	12V	15V	24V	36V	48V	
OUTPUT	RATED CURRENT	60A	60A	40A	27A	22A	14A	9A	7A	
	CURRENT RANGE	0~60A	0~60A	0~40A	0~27A	0~22A	0~14A	0~9A	0~7A	
	RATED POWER	198W	300W	300W	324W	330W	336W	324W	336W	
	RIPPLE & NOISE (max.) Note.2	80mVp-p	90mVp-p	100mVp-p	120mVp-p	150mVp-p	150mVp-p	250mVp-p	250mVp-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	±2.5%	±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								
VOLTAGE RANGE Note 5 85 ~ 264VAC 120 ~ 370VDC										
	FREQUENCY RANGE	47~63Hz								
	POWER FACTOR (Typ.)	PF>0.95/230VAC PF>0.99/115VAC at full load								
INPUT	EFFICIENCY (Typ.)	80%	82%	86%	88%	88%	87%	88%	89%	
	AC CURRENT (Typ.)	4.5A/115VAC	2.5A/230VA							
	INRUSH CURRENT (Typ.)	35A/115VAC 70A/230VAC 70A/230VAC								
	LEAKAGE CURRENT	<1.2mA/240VAC								
	OVERLOAD	105 ~ 135% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed								
		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	
PROTECTION	OVER VOLTAGE								0.10 0.121	
		Protection type : Shut down o/p voltage, re-power on to recover $90^{\circ}C \pm 5^{\circ}C$ (TSW1: detect on heatsink of power transistor)								
	OVER TEMPERATURE	$100^{\circ}C \pm 5^{\circ}C$ for $3.3V,5V,7.5V$; $95^{\circ}C \pm 5^{\circ}C$ for others (TSW2: detect on heatsink of power diode)								
		Protection type : Shut down o/p voltage, recovers automatically after temperature goes down								
	5V STANDBY	5VSB : 5V@0.3A ; tolerance ± 5%, ripple : 50mVp-p(max.)								
	DC OK SIGNAL				,					
FUNCTION	REMOTE CONTROL	PSU turns on : 3.3 ~ 5.6V ; PSU turns off : 0 ~ 1V RC+ / RC-: 4 ~ 10V or open = power on ; 0 ~ 0.8V or short = power off								
	FAN CONTROL (Typ.)	Load $35\pm15\%$ or RTH2 $\ge50^{\circ}$ C Fan on								
	WORKING TEMP.	-40 ~ +70°C (Refer to "Derating Curve")								
		20 ~ 90% RH non-condensing								
ENVIRONMENT	STORAGE TEMP., HUMIDITY									
	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)								
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes								
	SAFETY STANDARDS									
SAFETY &	WITHSTAND VOLTAGE	UL60950-1, TUV EN60950-1 approved I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC								
	ISOLATION RESISTANCE									
EMC (Note 4)	EMC EMISSION	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/70% RH Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3 Compliance to EN61000 4.2.2.4.5.6.8.11 EN55024 EN61000.6.2. heavy industry level, criteria A								
, ,	EMC IMMUNITY									
	MTBF	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2, heavy industry level, criteria A 176K hrs min. MIL-HDBK-217F (25°C)								
OTHERS	DIMENSION	199*105*41mm (L*W*H)								
UTIEND	PACKING		· /	т						
NOTE	 All parameters NOT special Ripple & noise are measure Tolerance : includes set up The power supply is consid EMC directives. For guidan (as available on http://www. Derating may be needed ur 	0.95Kg;15pcs/15.3Kg/0.69CUFT ally mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. ed at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. tolerance, line regulation and load regulation. lered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets ince on how to perform these EMC tests, please refer to "EMI testing of component power supplies." meanwell.com) nder low input voltages. Please check the derating curve for more details. n<0.5W when RC- & RC+ (CN100 pin4,6) 0 ~ 8V or short.								



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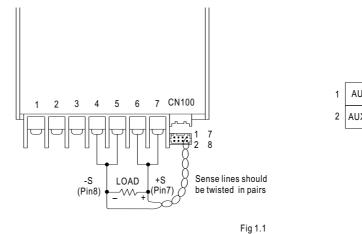
Function Description of CN100

Pin No.	Function	Description
1	AUX	Auxiliary voltage output, 4.75~5.25V, reference to pin 2(AUXG). The maximum load current is 0.3A. This output has the built-in oring diodes and is not controlled by the "remote ON/OFF control".
2	AUXG	Auxiliary voltage output ground. The signal return is isolated from the output terminals (+V & -V).
3	DC-OK	DC-OK signal is a TTL level signal, referenced to pin5(DC-OK GND). High when PSU turns on.
4	RC-	Remote control ground.
5	GND	This pin connects to the negative terminal(-V). Return for DC-OK signal output.
6	RC+	Turns the output on and off by electrical or dry contact between pin 4 (RC-), Short: Power OFF, Open: Power ON.
7	+S	Positive sensing. The +S signal should be connected to the positive terminal of the load. The +S and -S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V.
8		Negative sensing. The -S signal should be connected to the negative terminal of the load. The -S and +S leads should be twisted in pair t minimize noise pick-up effect. The maximum line drop compensation is 0.5V.

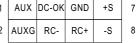
Function Manual

1.Remote Sense

The remote sensing compensates voltage drop on the load wiring up to 0.5V.



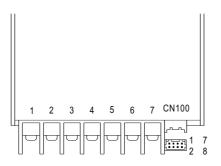
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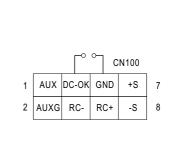


2.DC-OK Signal

DC-OK signal is a TTL level signal. High when PSU turns on.

Between DC-OK(pin6) and GND(pin4)	Output Status	
3.3 ~ 5.6V	ON	
0 ~ 1V	OFF	







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3.Remote Control

The PSU can be turned ON/OFF by using the "Remote ON/OFF" function

Between RC+(pin3) and RC-(pin5)	Output Status		
SW ON (Short)	OFF		
SW OFF (Open)	ON		

