

MEAN WELL HRPG-200 Series Single Output with PFC **Function Installation Guide**

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MEAN WELL HRPG-200 Series Single Output with PFC Function



Features:

- Universal AC input / Full range
- 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
- Cooling by free air convection
- Built-in constant current limiting circuit
- 1U low profile 38mm
- 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

GTIN CODE

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

SPECIFICATIONS

MODEL		HRPG- 200-3.3	HRPG- 200-5	HRPG- 200-7.5	HRPG- 200-12	HRPG- 200-15	HRPG- 200-24	HRPG- 200-36	HRPG- 200-48
	DC VOLTAGE	3.3V	5V	7.5V	12V	15V	24V	36V	48V
OUTP	RATED CURREN T	40A	35A	26.7A	16.7A	13.4A	8.4A	5.7A	4.3A
	CURRENT RANG E	0 ~ 40A	0 ~ 35A	0 ~ 26.7 A	0 ~ 16.7 A	0 ~ 13.4 A	0 ~ 8.4A	0 ~ 5.7A	0 ~ 4.3A
	RATED POWER	132W	175W	200.3W	200.4W	201W	201.6W	205.2W	206.4W
	RIPPLE & NOISE (max.) Note.2	80mVp-	90mVp-	100mVp -p	120mVp -p	150mVp -p	150mVp -p	250mVp -p	250mVp -p
	VOLTAGE ADJ. R ANGE	2.8 ~ 3. 8V	4.3 ~ 5. 8V	6.8 ~ 9V	10.2 ~ 1 3.8V	13.5 ~ 1 8V	21.6 ~ 2 8.8V	28.8 ~ 3 9.6V	40.8 ~ 5 5.2V
	VOLTAGE TOLERANCE Not e.3	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATI ON	±0.5%	±0.5%	±0.5%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%
	LOAD REGULATI ON	±1.5%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIM E	1000ms, 50ms/230VAC 2500ms, 50ms/115VAC at full load							

	HOLD UP TIME (Typ.)	16ms/230VAC 16ms/115VAC at full load								
	VOLTAGE RANG E Note.5	85 ~ 264VAC 120 ~ 370VDC								
	FREQUENCY RA	47 ~ 63Hz								
	POWER FACTOR (Typ.)	PF>0.95/230VAC PF>0.99/115VAC at full load								
INPU T	EFFICIENCY (Ty p.)	80%	84%	86%	88%	88%	88%	89%	89%	
	AC CURRENT (Ty p.)	2.1A/115VAC 1.1A/230VAC								
	INRUSH CURRE NT (Typ.)	35A/115VAC 70A/230VAC								
	LEAKAGE CURR ENT	<1.2mA / 240VAC								
		105 ~ 13	5% rated o	utput powe	er					
	OVERLOAD	Protection type: Constant current limiting, recovers automatically after fault condition is removed								
PROT	OVER VOLTAGE	3.96 ~ 4 .62V	6 ~ 7V	9.4 ~ 10 .9V	14.4 ~ 1 6.8V	18.8 ~ 2 1.8V	30 ~ 34. 8V	41.4 ~ 4 8.6V	57.6 ~ 6 7.2V	
ECTI		Protection type : Shut down o/p voltage, re-power on to recover								
ON	OVER TEMPERA TURE	Shut down o/p voltage, recovers automatically after temperature goes down								
	5V STANDBY	5VSB: 5V@0.3A; tolerance±5%, ripple: 50mVp-p(max.)								
FUNC TION	REMOTE CONTR	RC+/RC-: 4 ~10V or open = power on; 0 ~ 0.8V or short = power						ower off		
	WORKING TEMP.	-40 ~ +70°C (Refer to "Derating Curve")								
	WORKING HUMI DITY	20 ~ 90% RH non-condensing								
ENVI	STORAGE TEMP. , HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH								
RON MENT	TEMP. COEFFICI	±0.03%/°C (0 ~ 50°C								
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes								
	SAFETY STAND ARDS	UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004 approved								
	WITHSTAND VO LTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC								
SAFE TY &										

EMC (Note	ISOLATION RESI STANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH						
4)	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EA C TP TC 020						
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, heavy industry level, EAC TP TC 020						
OTHE RS	МТВБ	1612.1K hrs min. Telcordia SR-332 (Bellcore) ; 189.1K hrs min. MIL-HDBK-2 17F (25°C)						
	DIMENSION	199*98*38mm (L*W*H)						
	PACKING	0.77Kg; 18pcs/14.9Kg/0.87CUFT						
	4. All managements as NI	stave NOT anasially mantianed are massyred at 000\/AC innut, retail lead and 05°C of						

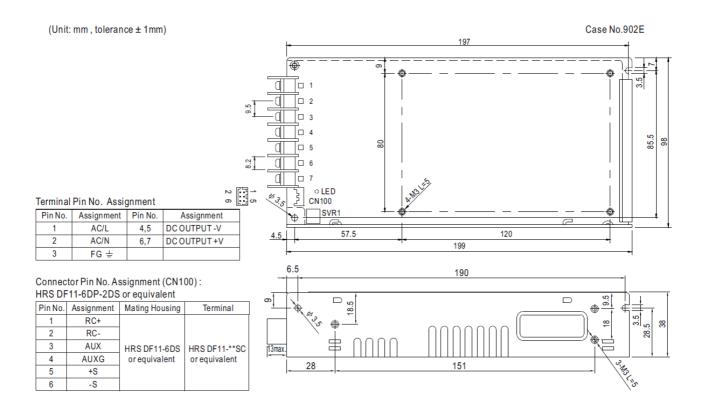
- 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a $0.1\mu F$ & $47\mu F$ parallel capacitor.
- 3. Tolerance: includes set up tolerance, line regulation and load regulation.
- 4. The power supply is considered a component which will be installed into a final equipment. All the E MC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickne ss. 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."

NOTE

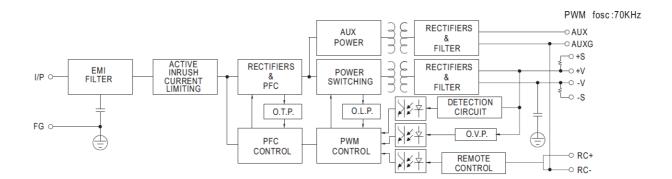
(as available on https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)

- 5. Derating may be needed under low input voltages. Please check the derating curve for more details.
- 6. No load power consumption<0.5W when RC+ & RC- (CN100 pin1,2) 0 ~ 0.8V or short.
- 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).
- * Product Liability Disclaimer For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

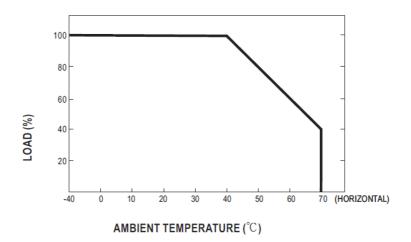
Mechanical Specification



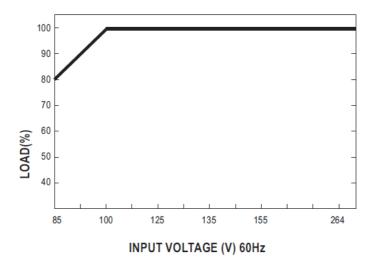
Block Diagram



Derating Curve



Output Derating VS Input Voltage



Function Description of CN100

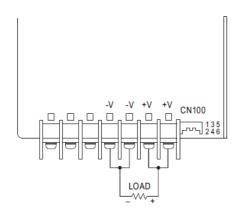
Pin No.	Fun ctio n	Description
1	RC+	Turns the output on and off by electrical or dry contact between pin 2 (RC-). Short: Power OFF, O pen: Power ON.
2	RC-	Remote control ground.
3	AUX	Auxiliary voltage output, 4.75~5.25V, reference to pin 4(AUXG). The maximum load current is 0.3 A. This output is not controlled by the "remote ON/OFF control".
4	AUX G	Auxiliary voltage output ground. The signal return is isolated from the output terminals (+V & -V).
5	+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 co mpensation is 0.5V.
6	-S	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 to minimize noise pick-up effect. The maximum line drop c ompensation is 0.5V.

Function Manual

1. Remote Control

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

Between RC-(pin2) and RC+(pin1)	Output Status		
SW ON (Short)	OFF		
SW OFF (Open)	ON		



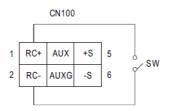


Fig 1.1

2. Remote Sense

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

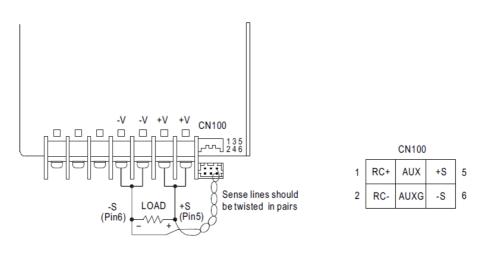


Fig 2.1

File Name: HRPG-200-SPEC 2024-10-30.

Documents / Resources



MEAN WELL HRPG-200 Series Single Output with PFC Function [pdf] Installation Guide HRPG-200 Series Single Output with PFC Function, HRPG-200 Series, Single Output with PFC Function, Output with PFC Function, PFC Function, Function

References

• User Manual

Manuals+, Privacy Policy

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