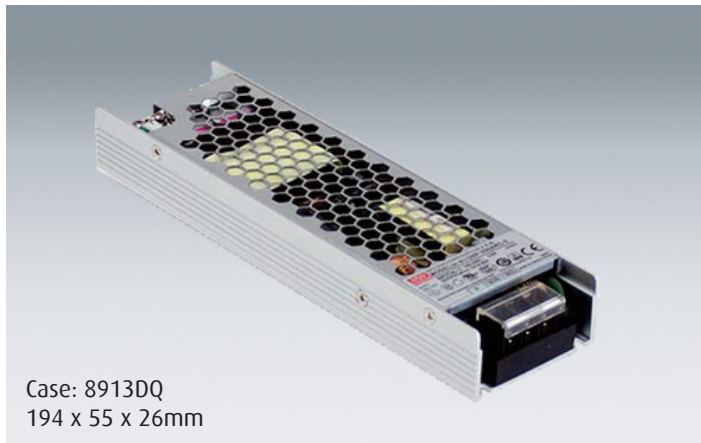


UHP-200(R) Series

200W Slim Type with PFC Switching Power Supply



Features

- Slim and low profile (26mm)
- Fanless design, 200W convection
- Withstand 300VAC surge input for 5 seconds
- Built-in active PFC function
- 150% peak load capability (100ms)
- -30 ~ +70°C working temperature
- Protections: Short circuit / Overload / Over voltage / Over temperature
- No load power consumption <0.15W
- DC OK active signal and redundant function (option)
- Operating altitude up to 5000 meters
- LED indicator for power on
- 3 years warranty

TYPE	Description
Blank	Enclosed
R	Built-in DC OK active signal and redundant function

UHP - 200 - [] 5 ← Function options
Series name Rated wattage R or blank



Specification

INPUT	Voltage	90 ~ 264VAC	127VDC ~ 370VDC						
	Frequency	47 ~ 63 Hz							
	Power Factor	PF≥0.94/230VAC, PF≥0.98/115VAC at full load							
	AC Current	2.2A/115VAC	1.1A/230VAC						
	Inrush Current (Typ.)	Cold start 40A/115VAC 80A/230VAC							
	Leakage Current	<0.75mA/240VAC							
OUTPUT	MODEL No.	UHP-200□-3.3	UHP-200□-4.2	UHP-200□-5	UHP-200□-12	UHP-200□-15	UHP-200□-24	UHP-200□-36	UHP-200□-48
	Voltage	3.3V	4.2V	5V	12V	15V	24V	36V	48V
	Rated Current	40A	40A	40A	16.7A	13.4A	8.4A	5.6A	4.2A
	Rated Power (convection)	132W	168W	200W	200.4W	201W	201.6W	201.6W	201.6W
	R&N	150mVp-p	150mVp-p	200mVp-p	240mVp-p	240mVp-p	240mVp-p	240mVp-p	300mVp-p
	Efficiency	89%	90%	91%	93%	94%	94%	94%	94%
	Voltage Adj. Range	3.2 ~ 3.5V	3.6 ~ 4.4V	4.5 ~ 5.5V	11.4 ~ 12.6V	14.3 ~ 15.8V	22.8 ~ 25.2V	34.2 ~ 37.8V	45.6 ~ 50.4V
	Voltage Tolerance	±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%	±0.3%	±0.3%	±0.3%
	Load Regulation	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Setup Rise Time	2000ms, 80ms/230VAC		3000ms, 80ms/115VAC at full load					
	Hold Up Time	10ms/230VAC	10ms/115VAC						
	PROTECTION	Overload	110 ~ 140% rated output power						
		Hiccup mode, recovers automatically after fault condition is removed							
Over Voltage		3.8 ~ 4.6V	4.62 ~ 5.46V	5.75 ~ 6.75V	13.2 ~ 15.6V	16.5 ~ 19.5V	26.4 ~ 31.2V	39.6 ~ 46.8V	52.8 ~ 62.4V
		Shut down O/P voltage, re-power on to recover							
FUNCTION	Over Temperature	Shut down O/P voltage, recovers automatically after temperature goes down							
	DC OK Signal (optional)	Contact rating (max.): 15Vdc/10mA resistive load							
ENVIRONMENT	Redundant (optional)	For parallel connection protection: For parallel applications, when one PSU can not work, the another one will be automatically enabled. This can prevent the system crash, and provide the reliability of system							
	Working Temperature	-30 ~ +70°C (Please refer to 'Derating Curve' section)							
	Working Humidity	20 ~ 95% RH non-condensing							
	Storage Temperature	-40 ~ +85°C, 10 ~ 95% RH non-condensing							
	Temp Coefficient	±0.03%/°C (0 ~ 50°C)							
	Vibration	10 ~ 500Hz, 5G 10 min./1cycle, period for 60 min. each along X, Y, Z axes							
SAFETY & EMC	Safety Standards	UL60950-1, TUV EN60950-1, EN60335-1, CCC GB4943, EAC TP TC 004, approved, Design refer to EN61558-1,-2-16							
	Withstand Voltage	I/P-O/P: 3.75KVAC	I/P-FG: 2KVAC	O/P-FG: 1.25KVAC					
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25°C / 70% RH							
	EMC Emission	Compliance to EN55032, GB9254, Class B, EN55014, EN61000-3-2, -3, EAC TP TC 020, BSMI CNS13438							
	EMC Immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61000-6-2 (EN50082-2), heavy industry level, criteria A							
OTHERS	M.T.B.F.	257K hrs min. MIL-HDBK-217F (25°C)							
	Packing	0.468Kg; 24pcs/12.2Kg/0.49CUFT							

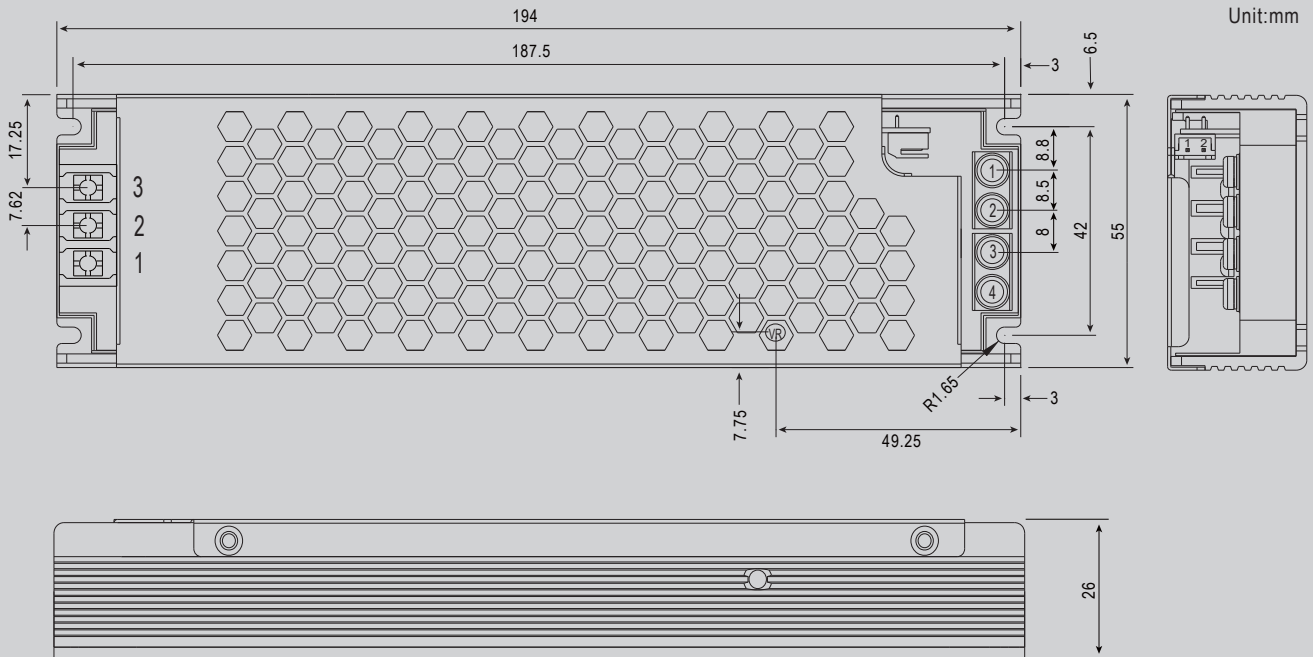
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple and Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with 0.1uF & 47uF parallel capacitor.
3. Tolerance: includes setup of tolerance, line regulation and load regulation.
4. The ambient temperature derating of 5°C/1000m is needed for operating altitude greater than 2000m (6500ft)
5. Length of set up time is measured at first cold start. Turning ON/OFF the power supply very quickly may lead to the increase of the set up time.
6. Derating may be needed under low input voltages. Please check the static characteristics for more details.
7. The power supply is considered as an independent component that will be operated in combination with final equipment, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again. For guidance on how to perform these EMC tests, please refer to 'EMI testing of component power supplies.'

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Mechanical Diagram



AC Input Terminal(TB1) pin NO. Assignment

Pin No.	Assignment	Terminal	Max mounting torque
1	AC/L	(DEGSON) DG28C-B-03P	5Kgf-cm
2	AC/N		
3	⊥		

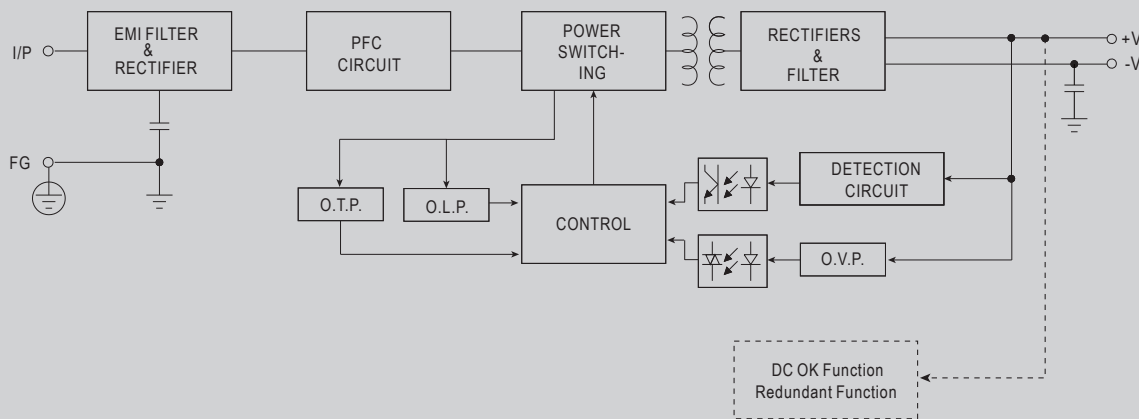
DC Output Terminal(TB2, TB3) pin NO. Assignment

Pin No.	Assignment	Terminal	Max mounting torque
1,2	-V	(MW) TB-HTP-200-40A	8Kgf-cm
3,4	+V		

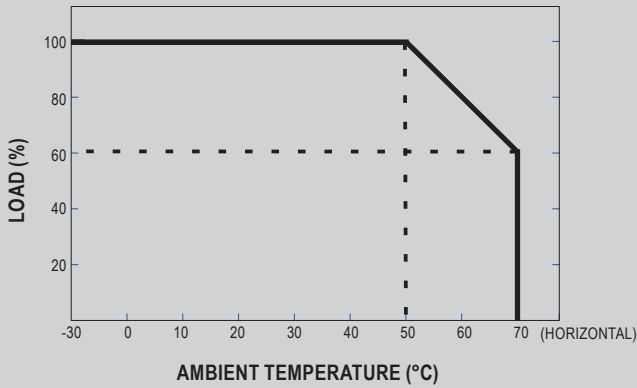
DC OK Connector(CN10):JST B2B-PH-K-S or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	DC COM	JST PHR-2 or equivalent	JST SPH-002T-P0.5S or equivalent
2	DC OK +V		

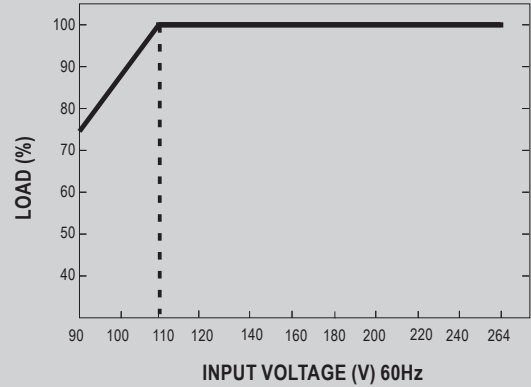
Block Diagram



Derating Curve



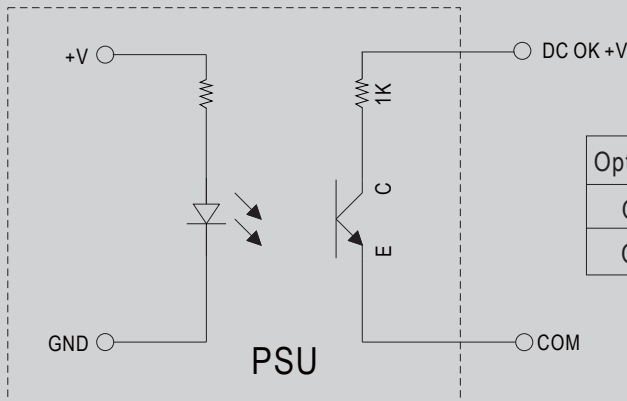
Static Characteristic



Function Manual

1. DC_OK Signal

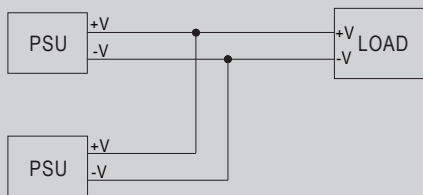
DC_OK is a collector shorted signal. It is used by an optocoupler in the power supply which indicates the output status of the power supply as exhibited below.



Optocoupler C-E Pin Conduction	PSU turns on	DC ok
Optocoupler C-E Pin Open	PSU turns off	DC fail
Optocoupler Rating(max.)	15Vdc/10mA resistive load	

2. Redundant function

- (1) UHP-200R is built-in redundant function and can be connected 2 units in parallel .
- (2) When in parallel operation the maximum load should not be greater than the rated power of any PSU.



UHP-200(R) Series

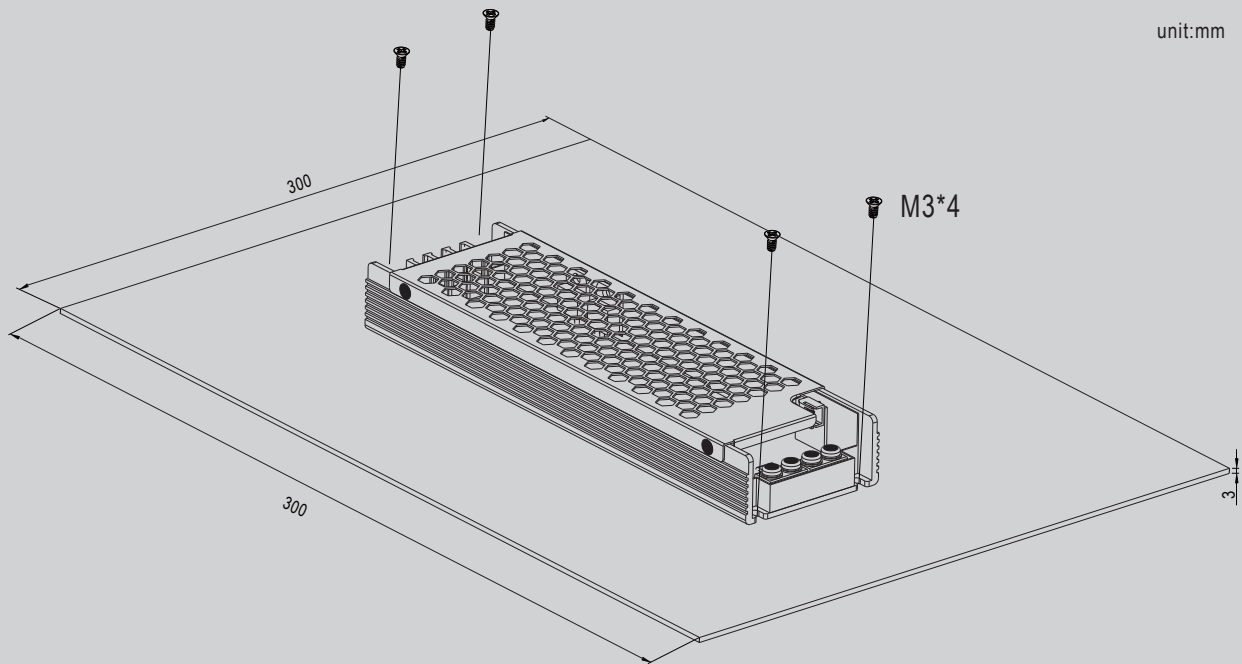
200W Slim Type with PFC Switching Power Supply



Installation

1. Operate with additional aluminum plate

In order to meet the "Derating Curve" and the "Static Characteristics", UHP-200 series must be installed onto an aluminum plate (or the cabinet of the same size) on the bottom. The size of the suggested aluminum plate is shown as below. And for optimizing thermal performance, the aluminum plate must have an even and smooth surface (or coated with thermal grease), and UHP-200 series must be firmly mounted at the center of the aluminum plate.



2. For heat dissipation, at least 5cm installation distance around the PSU should be kept, shown as below:

