HDP-240 Series

240W Dual Output Power Supply with PFC function

Case: 8019KF
215 x 115 x 36mm

Features

- Universal AC Input/Full range
- Built-in active PFC function, PF>0.94
- High Efficiency up to 84%
- Protections: Short circuit / Overload / Over Voltage / Over temperature
- Forced air cooling by built in DC fan
- 1U low profile 36mm
- Conformal coated
- Built-in cooling fan ON/OFF control
- ZVS technology to reduce power dissipation
- LED indicator for power on
- 3 years warranty

Specification

INPUT	Voltage	90 ~ 264VAC 127 ~ 370VDC	
	Frequency	47 ~ 63 Hz	
	Power Factor	PF≧0.94/230VAC PF≧0.98/115VAC at full load	
	Efficiency	84%	84%
	AC Current	3.3A/115VAC 1.3A/230VAC	
	Inrush Current (Typ.)	30A/115VAC 45A/230VAC	
	Leakage Current	<0.7mA/240VAC	
OUTPUT	MODEL No.	**HDP-240**	
	Output number	**V1**	**V2**
	Voltage	+3.8V	+2.8V
	Rated Current	41.5A	25A
	Current Range	0 ~ 50A	0 ~ 27.5A
	Rated Power	227.7W (typ.) 241W (max)	
	Output Power (max)	241W continue. V1 total power output shall not exceed 200W (max. 50A); V2 total power output shall not exceed 82.5W (max. 27.5A)	
		(The V1 & V2 combine total power output shall not exceed 241W)	
	Ripple Noise MAX.	100mVp-p	100mVp-p
	Voltage Adj. Range	3.6 ~ 4V	2.5 ~ 3V
	Voltage Tolerance	± 2.0%	± 2.0%
	Line Regulation	± 0.5%	± 0.5%
	Load Regulation	± 2.0%	± 2.0%
	Setup Rise Time	1000ms, 50ms/230VAC 2500ms, 50ms/115VAC at full load	
	Holdup Time (Typ.)	16ms/230VAC 16ms/115VAC at full load	
PROTECTION	Overload	V1+V2: 105 ~ 150% max. Output power; or V1: 125 ~ 170% rated current	
		Protection Type: Hiccup mode, recovers automatically after fault condition is removed	
	Over Voltage	V1: 4.37 ~ 5.13V	V2: 3.22 ~ 3.78V
		Protection Type: Shut down o/p voltage, re-power on to recover	
	Over Temperature	Shut down O/P voltage, re-power on to recovery	
FUNCTION	Fan Control	RTH4 ≧50°C Fan on; RTH4 ≦45°C Fan off	
ENVIRONMENT	Working Temp.	-30 ~ +70°C (Refer to "Derating Curve")	
	Working Humidity	20 ~ 90% RH non-condensing	
	Storage Temp., Humidity	-40 ~ +85°C, 10~95%RH	
	Temp. Co-efficient	±0.03% / °C (0~50°C)	
	Vibration	10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes	
SAFETY & EMC	Safety Standards	UL60950-1, EN60950-1 approved	
	Withstand Voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC	
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/70% RH	
	EMC Emission	Compliance to EN55032 (CISPR32), GB9254, class B, EN61000-3-2,-3, GB17625.1	
	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2, heavy industry level, criteria A	
OTHERS	M.T.B.F.	111.3K hrs min. MIL-HDBK-217F (25°C)	
	Packaging	1Kg; 15pcs/16Kg/0.7CUFT	

1. All measurements not specially mentioned are based on 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 0.1uf & 47uf 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 final equipment. 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."
5. Derating may be needed under low input voltages. Please check the static characteristics for more details.
6. Output voltage between V1 and V2 should be higher than 1.0V (V1-V2≧1.0V)

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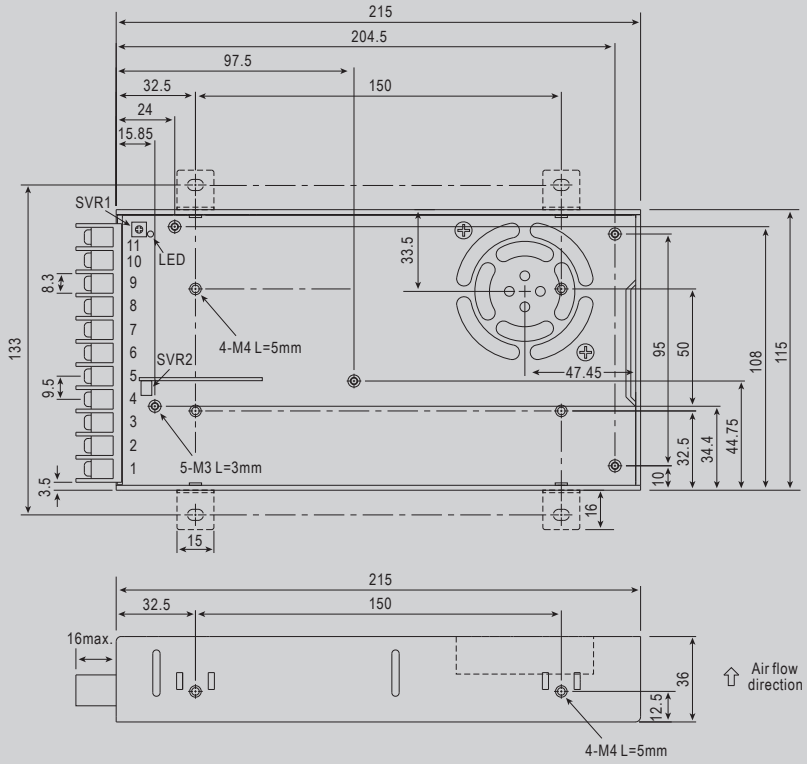
Mechanical Diagram

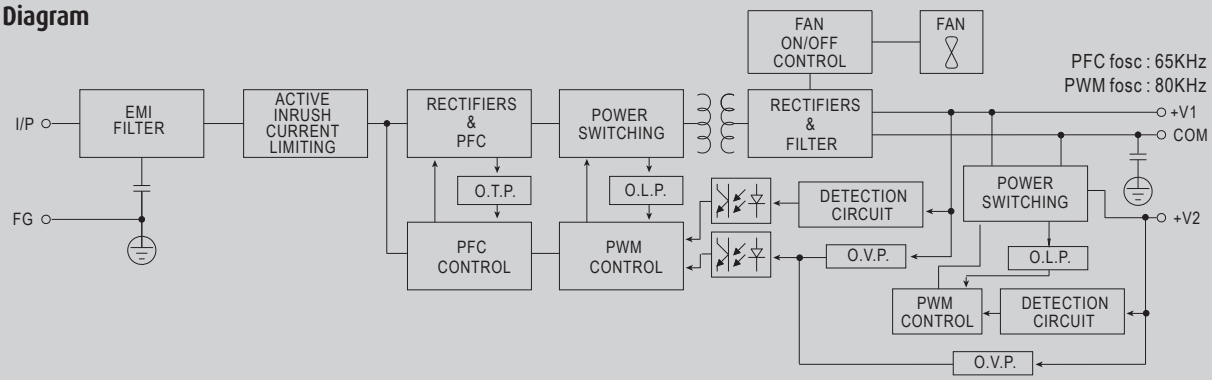


Terminal Pin No. Assignment :

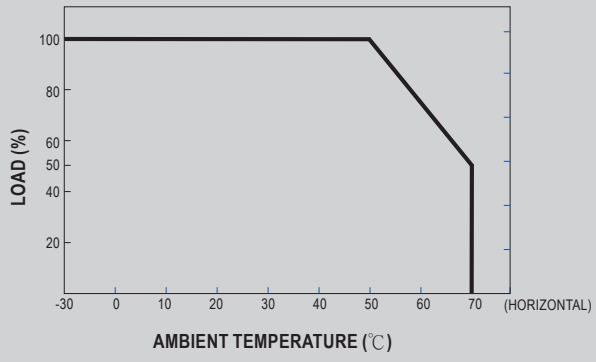
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,5	V2(+2.8V)
2	AC/N	6,7	V1(+3.8V)
3	FG ⏚	8,9,10,11	COM

SVR1: V1(+3.8V)ADJ.
SVR2: V2(+2.8V)ADJ.

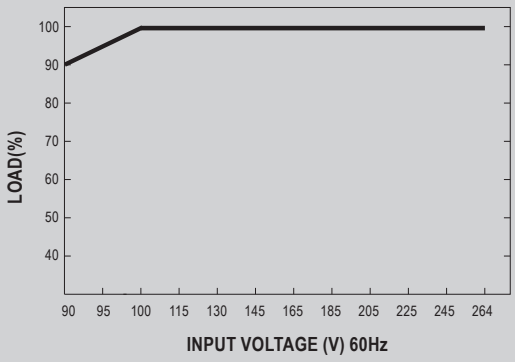
Block Diagram



Derating Curve



Output Derating Vs Input Voltage



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