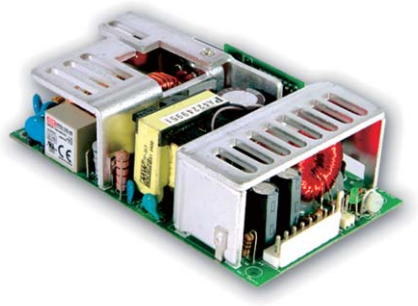
MEAN WELL

125W Single Output with PFC Function

PPS-125 series



Features :

- Universal AC input / Full range
- Built-in active PFC function
- Protections: Short circuit / Overload / Over voltage
- PWM control and regulated
- High power density 6.117W/inch^3
- Built-in remote sense function
- LED indicator for power on
- 100% full load burn-in test
- 125W with 18CFM FAN
- 5"x3" compact size
- 3 years warranty

AS/NZS62368-1 UL62368-1 EN62368-1 IEC62368-1

SPECIFICATION

MODEL		PPS-125-3.3	PPS-125-5	PPS-125-12	PPS-125-13.5	PPS-125-15	PPS-125-24	PPS-125-27	PPS-125-48
OUTPUT	DC VOLTAGE	3.3V	5V	12V	13.5V	15V	24V	27V	48V
	RATED CURRENT	20A	20A	8.5A	7.5A	6.7A	4.2A	3.8A	2.1A
	CURRENT RANGE (convection)	0 ~ 20A	0 ~ 20A	0 ~ 8.5A	0 ~ 7.5A	0 ~ 6.7A	0 ~ 4.2A	0 ~ 3.8A	0 ~ 2.1A
	CURRENT RANGE (18CFM FAN)	0 ~ 25A	0 ~ 25A	0 ~ 10.5A	0 ~ 9.3A	0 ~ 8.4A	0 ~ 5.2A	0 ~ 4.6A	0 ~ 2.6A
	RATED POWER (convection)	66W	100W	102W	101.25W	100.5W	100.8W	102.6W	100.8W
	RATED POWER (18CFM FAN)	82.5W	125W	126W	125.55W	126W	124.8W	124.2W	124.8W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p	250mVp-p
	VOLTAGE ADJ. RANGE	3.13 ~ 3.46V	4.75 ~ 5.25V	11.40 ~ 12.60V	12.82 ~ 14.17V	14.25 ~ 15.75V	22.80 ~ 25.20V	25.65 ~ 28.35V	45.60 ~ 50.40V
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME	1000ms, 30ms/230VAC 2000ms, 30ms/115VAC at full load							
	HOLD UP TIME (Typ.)	20ms/230VAC 20ms/115VAC at full load							
INPUT	VOLTAGE RANGE	90 ~ 264VAC 127 ~ 370VDC							
	FREQUENCY RANGE	47~63Hz							
	POWER FACTOR (Typ.)	PF>0.93/230VAC PF>0.98/115VAC at full load							
	EFFICIENCY (Typ.)	70%	79%	80%	80%	80%	83%	83%	84%
	AC CURRENT (Typ.) 115VAC	1.2A	1.7A						
	AC CURRENT (Typ.) 230VAC	0.6A	0.75A						
	INRUSH CURRENT (Typ.)	COLD START 40A/230VAC							
	LEAKAGE CURRENT	<2mA / 240VAC							
PROTECTION	OVERLOAD	130 ~ 160% rated output power							
		Protection type : Fold back current limiting, recovers automatically after fault condition is removed							
	OVER VOLTAGE	3.63 ~ 4.45V	5.5 ~ 6.75V	13.8 ~ 16.2V	15.5 ~ 20.25V	17.25 ~ 20.25V	27.6 ~ 32.4V	31.05 ~ 36.45V	57.6 ~ 67.2V
		Protection type : Hiccup mode, recovers automatically after fault condition is removed							
ENVIRONMENT	WORKING TEMP.	-20 ~ +70℃ (Refer to "Derating Curve")							
	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.05%/℃ (0 ~ 50℃)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes							
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL62368-1, TUV EN62368-1, AS/NZS 62368.1 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℃/ 70% RH							
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3							
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55035, light industry level							
OTHERS	MTBF	111.7Khrs min. MIL-HDBK-217F (25℃)							
	DIMENSION	127*76.2*34.6mm (L*W*H)							
	PACKING	0.37Kg; 36pcs/14.3Kg/0.96CUFT							

NOTE

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ 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 a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. 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.” (as available on http://www.meanwell.com)
5. Heat Sink HS1,HS2 & HS3 can not be shorted.

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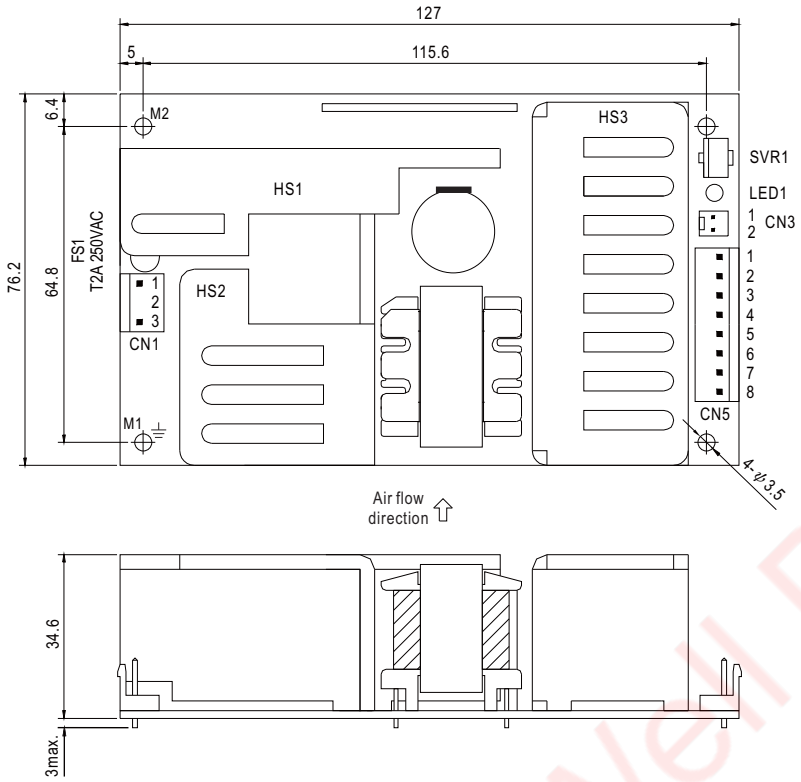
■ Mechanical Specification

Unit:mm



AC Input Connector (CN1) : JST B3P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	AC/L	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2	No Pin		
3	AC/N		

DC Output Connector (CN5) : JST B8P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1~4	-V	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
5~8	+V		

Remote Sense(CN3) : Molex 5045-02 or equivalent

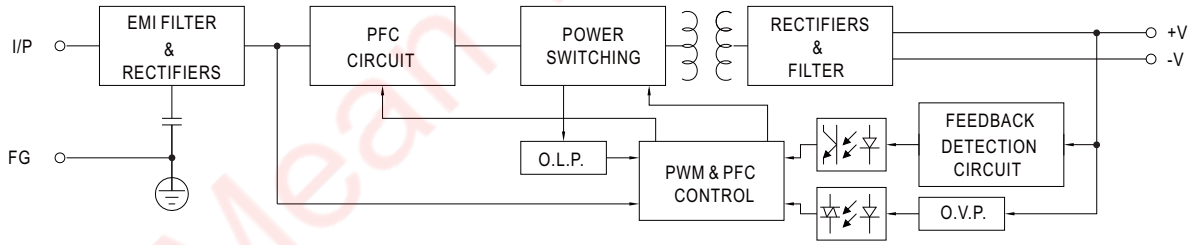
Pin No.	Assignment	Mating Housing	Terminal
1	RS+	Molex 5051 or equivalent	Molex 4809 or equivalent
2	RS-		

⏚ : Grounding Required

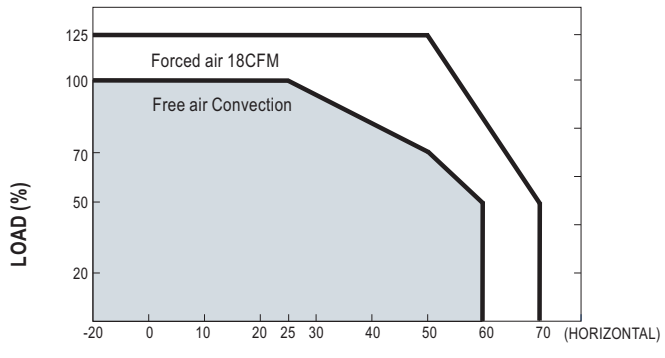
1.HS1,HS2& HS3 cannot be shorted.
2.M1 is safety ground. For better EMC performance,Please secure an electrical connection between M1,M2 and chassis grounding.

■ Block Diagram

fosc : 100KHz

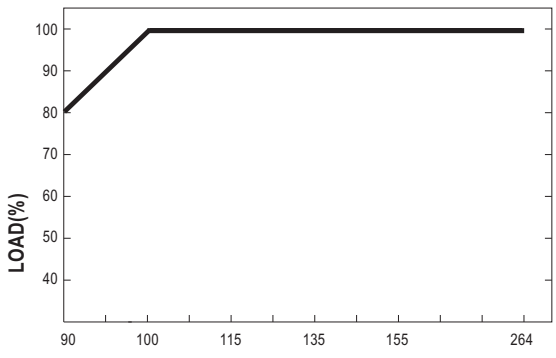


■ Derating Curve



AMBIENT TEMPERATURE (℃)

■ Output Derating VS Input Voltage



INPUT VOLTAGE (V) 60Hz

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