MEAN WELL PPT-125 Series 125W Triple Output with PFC Function Owner's Manual

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MEAN WELL PPT-125 Series 125W Triple Output with PFC Function

Specifications:

- Model: PPT-125 series
- Output Power: 125W
- Input: Universal AC input / Full range
- Features: Built-in active PFC function, Short circuit / Overload / Over voltage protections, PWM control and regulated, High power density, LED indicator for power on, 100% full load burn-in test, 18CFM FAN, Compact size, 3 years warranty
- Certifications: AS/NZS62368-1, UL62368-1, BS EN/EN62368-1, IEC62368-1 TPTC004

Product Usage Instructions

Connection:
Connect the PPT-125 series power supply to a suitable AC power source using the provided universal AC input.

Output Configuration:
The PPT-125 series offers multiple output channels (CH1, CH2,CH3) with different voltage and current ratings. Ensure to connect your devices to the appropriate output channel based on your requirements.

Power On:
After connecting the power supply and configuring the output channels, turn on the power supply using the LED indicator for power on.

Safety Precautions:
Ensure the input voltage is within the specified range (90 ~ 264VAC) and frequency range (47~63Hz). Avoid overloading the power supply to prevent damage.

Frequently Asked Questions (FAQ):

Q: What is the warranty period for the PPT-125 series?
A: The PPT-125 series comes with a 3-year warranty.

Q: How can I check the GTIN code for my product?
A: You can use the MW Search tool at **https://www.meanwell.com/serviceGTIN.aspx** to find the GTIN code for your PPT-125 series unit.

125W Triple Output with PFC Function

PPT-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’
- LED indicator for power on
- 100% full load burn-in test
- 125W with 18CFM FAN
- 5″x3″ compact size
- 3 years warranty

GTIN CODE

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

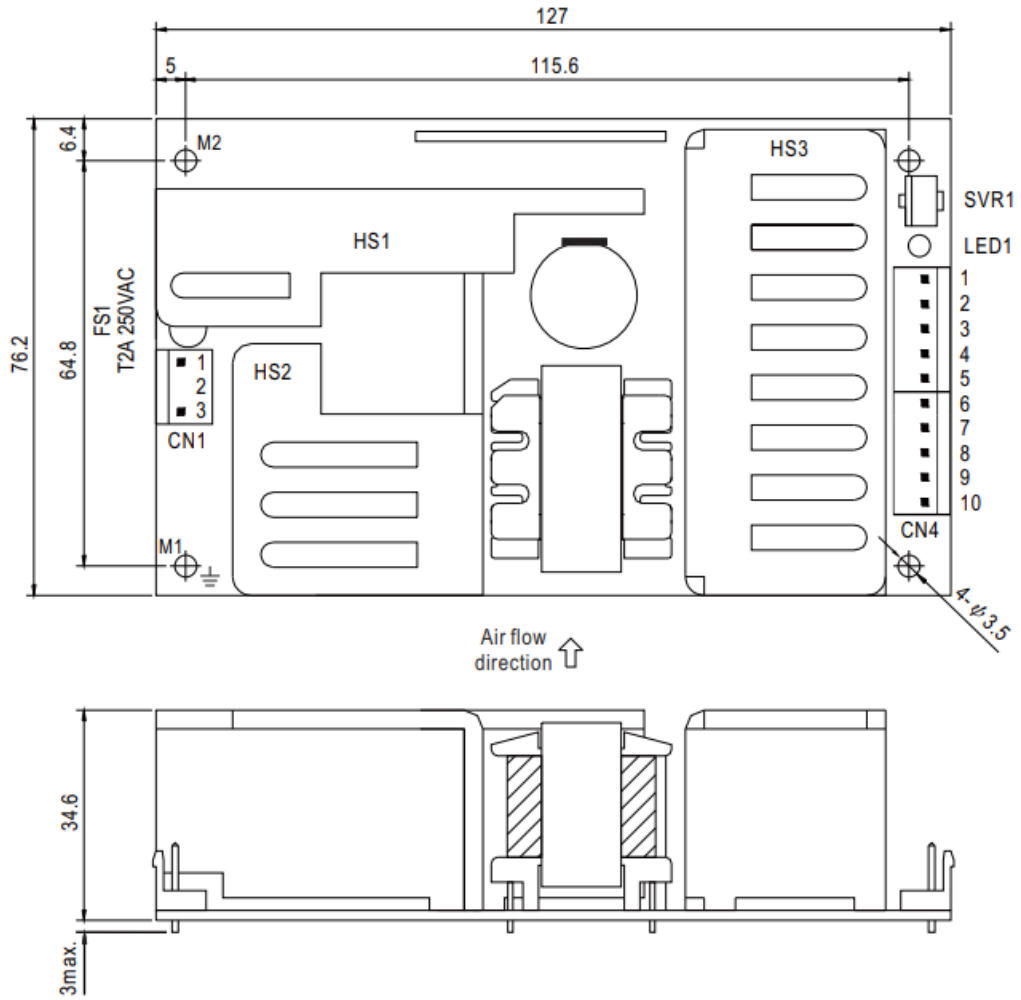
SPECIFICATION

MODEL		PPT-125A			PPT-125B			PPT-125C			PPT-125D		
	OUTPUT NUMBER	CH1	CH2	CH3	CH1	CH2	CH3	CH1	CH2	CH3	CH1	CH2	CH3
	DC VOLTAGE	3.3V	5V	12V	5V	12V	-12V	5V	15V	-15V	5V	24V	12V
	RATED CURRENT	10A	8A	0.5A	11.5A	3A	0.5A	11A	2.5A	0.5A	7A	2.5A	0.5A
	CURRENT RANGE (convection)	1 ~ 10A	0.8 ~ 8A	0.05 ~ 0.5A	1 ~ 11.5A	0.3 ~ 3A	0.05 ~ 0.5A	1 ~ 11A	0.25 ~ 2.5A	0.05 ~ 0.5A	1 ~ 7A	0.25 ~ 2.5A	0.05 ~ 0.5A
	CURRENT RANGE (18CFM FAN)	1 ~ 12.5A	0.8 ~ 10A	0.05 ~ 0.63A	1 ~ 14.38A	0.3 ~ 3.75A	0.05 ~ 0.63A	1 ~ 13.75A	0.25 ~ 3.13A	0.05 ~ 0.63A	1 ~ 8.75A	0.25 ~ 3.13A	0.05 ~ 0.63A
	RATED POWER (convection)	79W			99.5W			100W			101W		
	RATED POWER (18CFM FAN)	98.81W			124.46W			125.15W			126.43W		

OUTPUT	**RIPPLE & NOISE (max.) Note.2**	100 mVp-p	100 mVp-p	120 mVp-p	100 mVp-p	120 mVp-p	120 mVp-p	100 mVp-p	150 mVp-p	150 mVp-p	100 mVp-p	240 mVp-p	120m Vp-p
	VOLTAGE ADJ. RANGE	CH1:3.13 ~ 3.46V			CH1:4.75 ~ 5.25V			CH1:4.75 ~ 5.25V			CH1:4.75 ~ 5.25V		
	VOLTAGE TOLERANCE Note.3	±3.0 %	±5.0 %	±6.0 %	±3.0 %	±5.0 %	±6.0 %	±3.0 %	±5.0 %	±6.0 %	±3.0 %	±5.0 %	±6.0 %
	LINE REGULATION	±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %
	LOAD REGULATION	±3.0 %	±3.0 %	±5.0 %	±3.0 %	±3.0 %	±5.0 %	±3.0 %	±3.0 %	±5.0 %	±3.0 %	±3.0 %	±5.0 %
	SETUP, RISE TIME	1000ms, 30ms/230VAC 2000ms, 30ms/115VAC at full load											
	HOLD UP TIME (Typ.)	24ms/230VAC 24ms/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.)	75%			78%			78%			78%		
	AC CURRENT (Typ.)	1.7A/115VAC 0.75A/230VAC											
	INRUSH CURRENT (Typ.)	COLD START 24A/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	CH1:3.6 ~ 4.45V			CH1:5.75 ~ 6.75V			CH1:5.75 ~ 6.75V			CH1:5.75 ~ 6.75V		
		Protection type : Hiccup mode, recovers automatically after fault condition is removed											
ENVIRON	**WORKING TEMP., HUMIDITY**	-20 ~ +70℃ (Refer to “Derating Curve”)											
	WORKING TEMP.	20 ~ 90% RH non-condensing											
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH											

MENT	**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 BS EN/EN62368-1, AS/NZS 62368.1 , EAC TP TC 004 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 BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, light industry level, EAC TP TC 020
OTHERS	**MTBF**	2173.4K hrs min. Telcordia SR-332 (Bellcore) ; 269.9K hrs 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 0.1μF & 47μF 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 **https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf**) 5. Heat Sink HS1,HS2 & HS3 can not be shorted. 6. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/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



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 (CN4) : JST B5P-VH*2 or equivalent

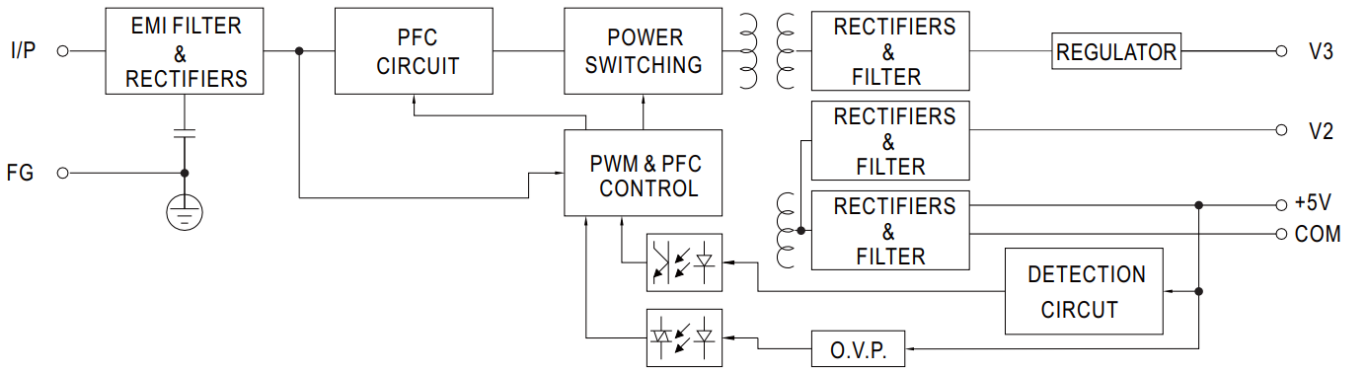
Pin No.	Assignment	Mating Housing	Terminal
1	CH3	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2,3	CH2		
4~8	GND		
9,10	CH1		

⏚ : Grounding Required

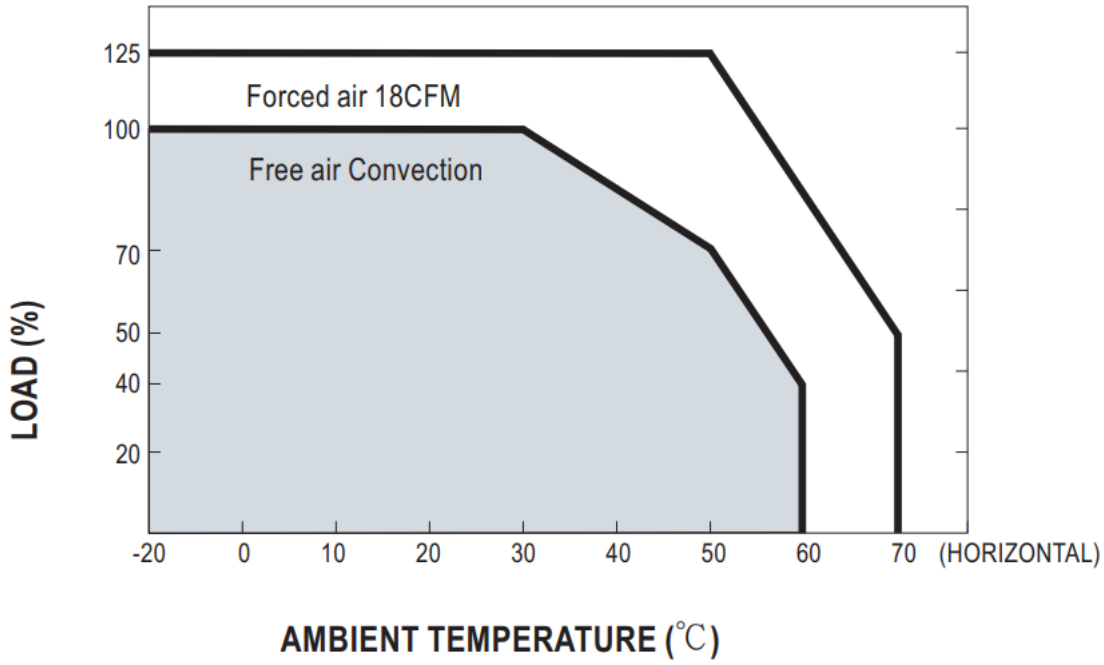
⚠

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.

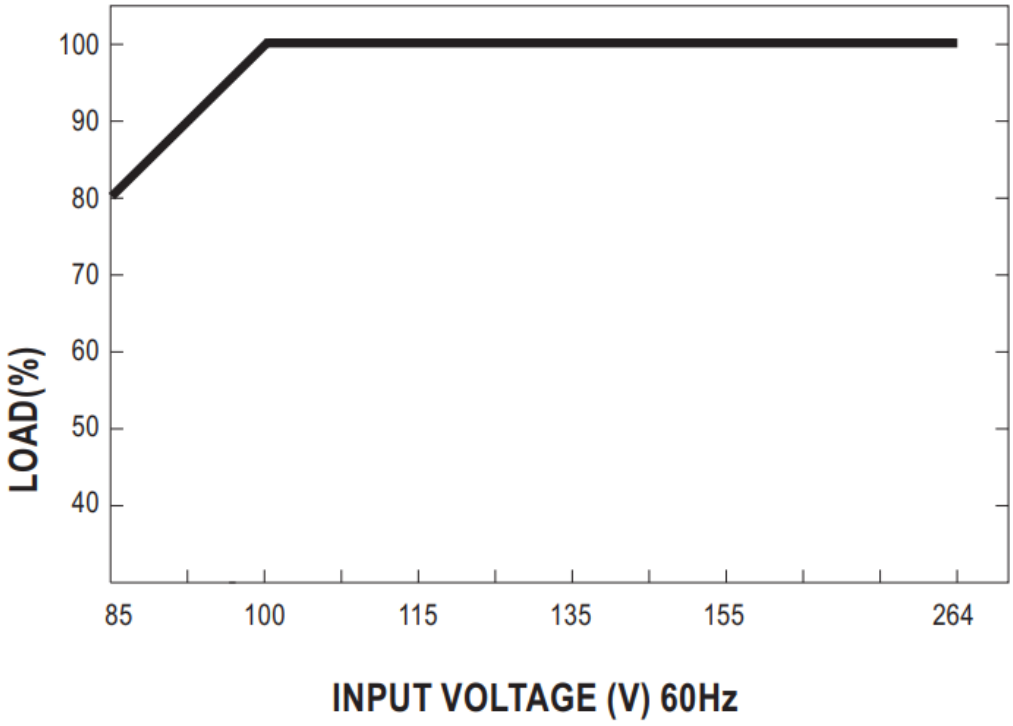
Block Diagram



Derating Curve



Output Derating VS Input Voltage



Documents / Resources

	MEAN WELL PPT-125 Series 125W Triple Output with PFC Function [pdf] Owner's Manual PPT-125A, PPT-125B, PPT-125C, PPT-125D, PPT-125 Series 125W Triple Output with PFC Function, PPT-125 Series, 125W Triple Output with PFC Function, Output with PFC Function, PFC Function

References

- TÜV Rheinland - Home | AU | TÜV Rheinland
- User Manual