



**MEAN WELL PLM-25  
Series 25W Single Output  
LED Power Supply**



# MEAN WELL PLM-25 Series 25W Single Output LED Power Supply User Guide

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## MEAN WELL PLM-25 Series 25W Single Output LED Power Supply



# Product Usage Instructions

## Installation

1. Ensure the input voltage is within the specified range.
2. Connect the output wires to the LED device, ensuring correct polarity.
3. Securely mount the power supply in a well-ventilated area to prevent overheating.

## Operation

1. Apply the input power within the specified voltage and frequency range.
2. The power supply will regulate the output current based on the connected LED device's requirements.

## Maintenance

1. Periodically check for any loose connections or signs of damage.
2. Clean the power supply unit regularly to prevent dust accumulation.

## Frequently Asked Questions (FAQ):

### Q: What should I do if the power supply overheats?

A: If the power supply overheats, immediately disconnect the input power and allow it to cool down before resuming operation.

## 25W Single Output LED Power Supply



## Features

- 230VAC only or Full range (up to 295VAC) models available
- Built-in active PFC function
- Constant current design
- Protections: Short circuit
- Cooling by free air convection
- Fully isolated plastic case • Class II power unit, no FG
- Class 2 power unit (for PLM-25-500/700/1050)
- No load power consumption <0.5W
- High reliability, low cost
- 2 years warranty

## Applications

- Indoor LED lighting
- LED office lighting
- LED commercial lighting

- LED decorative lighting

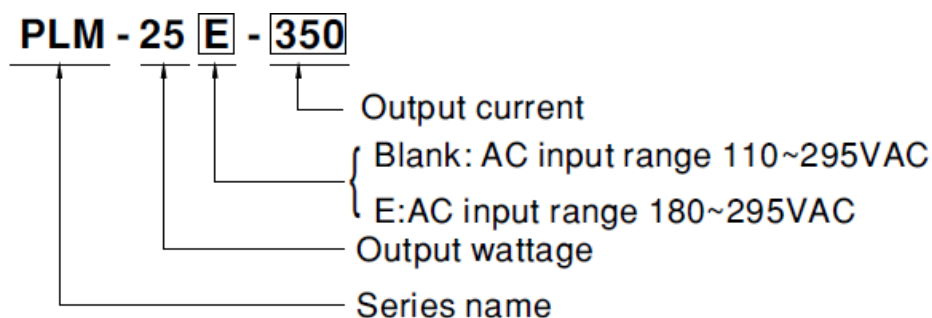
## GTIN CODE MW

Search: <https://www.meanwell.com/serviceGTIN.aspx>

### Description

PLM-25 is a 25W economical AC/DC LED power supply series. Incorporating a built-in active PFC design, PLM-25 provides a high Power Factor value greater than 0.9. In addition, with the low no load power consumption below 0.5W, and the setup time less than 500ms, PLM-25 is complied with the ErP regulation required by European Union for lighting fixtures. PLM-25 is a class II (without FG pin) power unit housed with the UL 94V-0 rated flame retardant plastic case. The 1/0 terminals are designed with screw-less clamp style terminal block that greatly simplifies the wiring installation. Two types of models with different input voltage range are offered: PLM-25 series, which operates from 110~295VAC, and PLM-25E series, which operates from 180~295VAC. These two series are both constant current output design, supplying models with the current of 350mA, 500mA, 700mA and 1050mA, respectively.

### Model Encodina



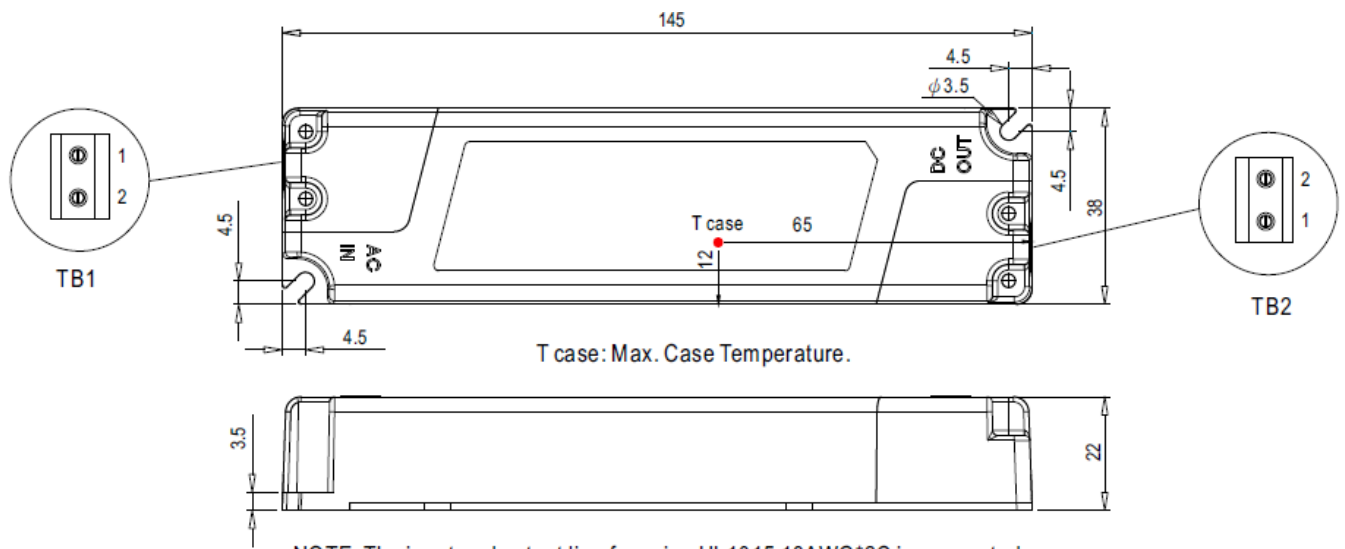
## SPECIFICATION

MODEL			PLM-25 -350	PLM-25 -500	PLM-25 -700	PLM-25 -1050
OUTPUT	CONSTANT CURRENT REGION Note.5		42 ~ 72V	30 ~ 50V	21 ~ 36V	14 ~ 24V
	RATED CURRENT		0.35A	0.5A	0.7A	1.05A
	NO LOAD OUTPUT VOLTAGE(max.)		80V	56V	42V	28V
	RATED POWER		25.2W	25W	25.2W	25.2W
	RIPPLE & NOISE (max.) Note.2	Blank type	7.2Vp-p	5.0Vp-p	3.6Vp-p	2.4Vp-p
		E type	9Vp-p	7.5Vp-p	5.4Vp-p	3.6Vp-p
	CURRENT ACCURACY Note.3		±5.0%			

	<b>SETUP TIME</b>		Blank type: 500ms / 115VAC, 230VAC at full load; E type: 500ms / 230VAC at full load			
INPUT	<b>VOLTAGE RANGE</b> E Note.4		Blank type: 110 ~ 295VAC 156 ~ 417VDC; E type: 180 ~ 295VAC 254~ 417VDC			
	<b>FREQUENCY RANGE</b>		47 ~ 63Hz			
	<b>POWER FACTOR</b>	<b>Blank type</b>	PF≥0.97/115VAC,PF≥0.95/230VAC,PF>0.9/277VAC(at full load)(Please refer to “Power Factor Characteristic” curve)			
		<b>E type</b>	PF≥0.95/230VAC,PF≥0.9/277VAC (at full load)(Please refer to “Power Factor Characteristic” curve)			
	<b>TOTAL HARMONIC DISTORTION</b>	<b>Blank type</b>	THD< 20% when output loading≥60% at 115VAC/230VAC input and output loading≥75% at 277VAC input			
		<b>E type</b>	THD< 20% when output loading≥60% at 230VAC input and output loading≥75% at 277VAC input			
	<b>EFFICIENCY</b>  (Typ.)	<b>Blank type</b>	87%	86%	86%	85%
		<b>E type</b>	86%	85%	85%	82%
	<b>AC CURRENT</b>		Blank type: 0.3A/115VAC 0.15A/230VAC 0.12A/277VAC; E type: 0.15A/230VAC 0.12A/277VAC			
	<b>INRUSH CURRENT(Typ.)</b>		COLD START 15A(twidth=50μs measured at 50% Ipeak) at 230VAC			
	<b>MAX. No. of PSUs on 16A CIRCUIT BREAKER</b>		80 units (circuit breaker of type B) / 80 units (circuit breaker of type C) at 230VAC			
	<b>LEAKAGE CURRENT</b>		0.25mA / 240VAC			
<b>PROTECTION</b>	<b>SHORT CIRCUIT</b>		Hiccup mode, recovers automatically after fault condition is removed.			
<b>ENVIRONMENT</b>	<b>WORKING TEMP.</b>		-30 ~ +45°C			
	<b>WORKING HUMIDITY</b>		20 ~ 90% RH non-condensing			
	<b>STORAGE TEMP. , HUMIDITY</b>		-40 ~ +80°C, 10 ~ 95% RH			
	<b>TEMP. COEFFICIENT</b>		±0.06%/°C (0 ~ 50°C)			
	<b>VIBRATION</b>		10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes			
	<b>SAFETY STANDARDS</b>		UL8750, CSA C22.2 No. 250.13-12(for Blank type only); ENEC BS EN/EN61347-1, BS EN/EN61347-2-13, BS EN/EN62384,GB19510.14,GB19510.1(for E type only),EAC TP TC 004, IP30 approved			
	<b>WITHSTAND VOLTAGE</b>		I/P-O/P:3.75KVAC			

<b>SAFETY &amp; EMC</b>	<b>ISOLATION RESISTANCE</b>	I/P-O/P:100M Ohms/500VDC / 25°C/ 70%RH
	<b>EMC EMISSION</b>	Compliance to BS EN/EN55015, GB/T 17743,GB17625.1(for E type only),BS EN/EN61000-3-2 Class C( $\geq 60\%$ load); BS EN/EN61000-3-3,EAC TP TC 020
	<b>EMC IMMUNITY</b>	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11;BS EN/EN61547, light industry level, criteria B(surge 2KV),EAC TP TC 020
<b>OTHERS</b>	<b>MTBF</b>	7905.4K hrs min. Telcordia SR-332 (Bellcore) ; 608.9Khrs min. MIL-HDBK-217F (25°C)
	<b>DIMENSION</b>	145*38*22mm (L*W*H)
	<b>PACKING</b>	0.126Kg;60pcs/8.6 Kg/0.48CUFT
<b>NOTE</b>	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Please see "AC input voltage drop vs. output current characteristics" table.</li> <li>4. Derating may be needed under low input voltage, please check the static characteristic for more details.</li> <li>5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.</li> <li>6. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again. (as available on <a href="https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf">https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf</a>)</li> <li>7. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.</li> <li>8. ※ Product Liability Disclaimer For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></li> </ol>	

## Mechanical Specification



NOTE: The input and output line for using UL1015 18AWG\*2C is suggested

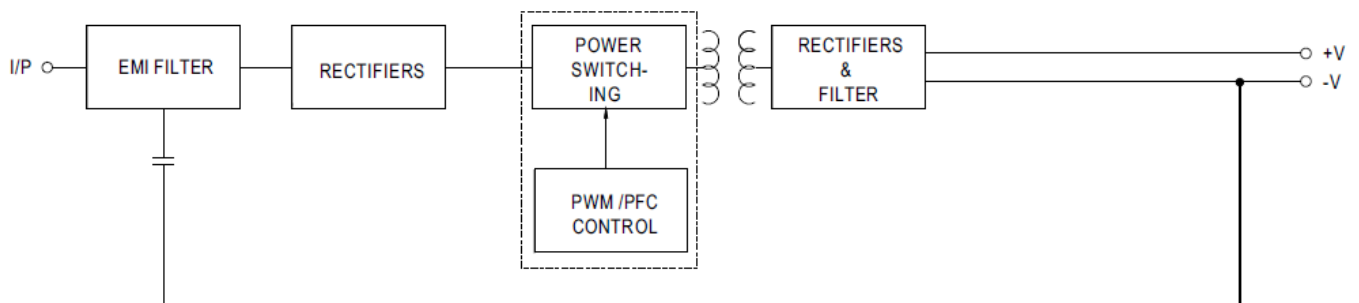
Terminal Pin No. Assignment (TB1):  
 SWITCHLAB MWX201-75002EB (GRAY)

Pin No.	Assignment
1	AC/L
2	AC/N

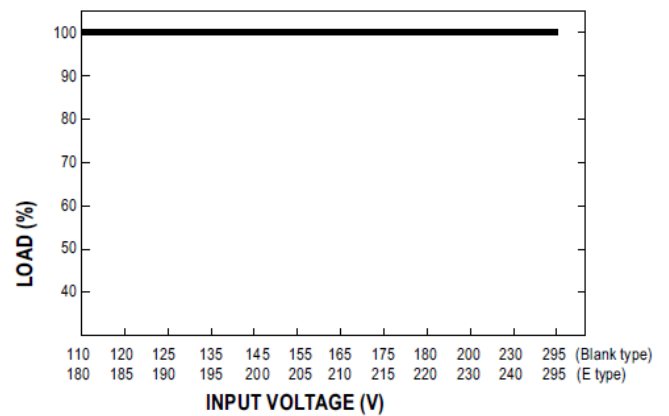
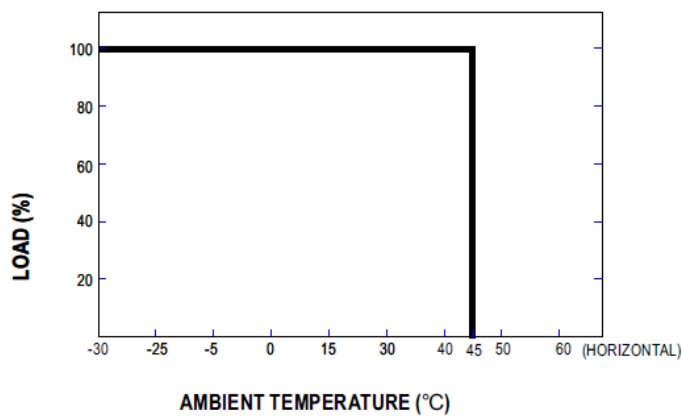
Terminal Pin No. Assignment (TB2):  
 SWITCHLAB MWX201-75002B (BLUE)

Pin No.	Assignment
1	+V
2	-V

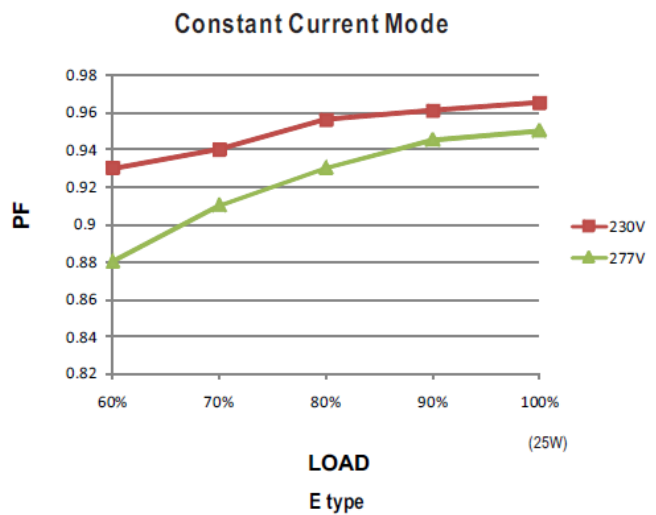
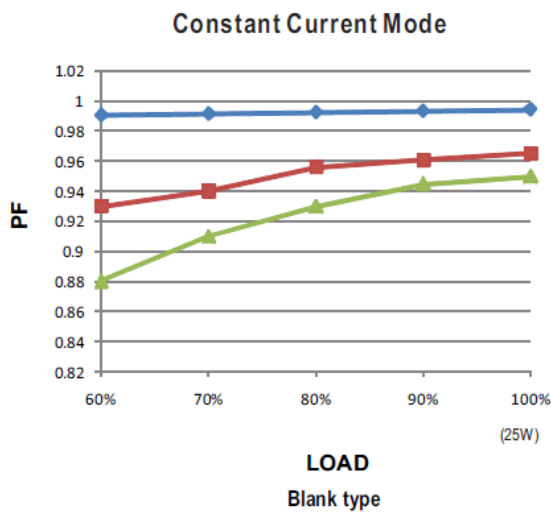
## Block Diagram



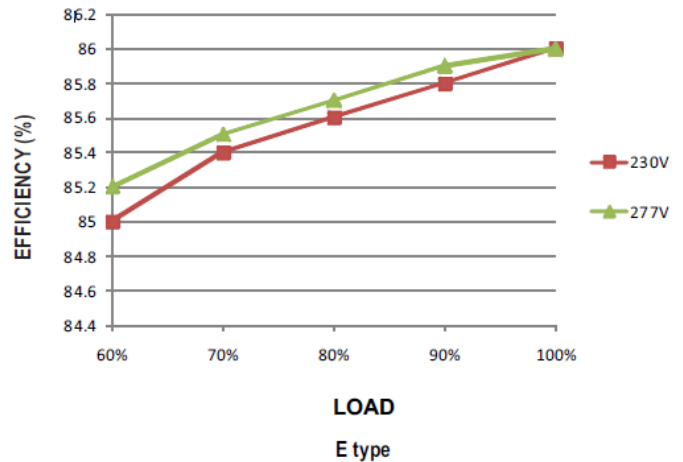
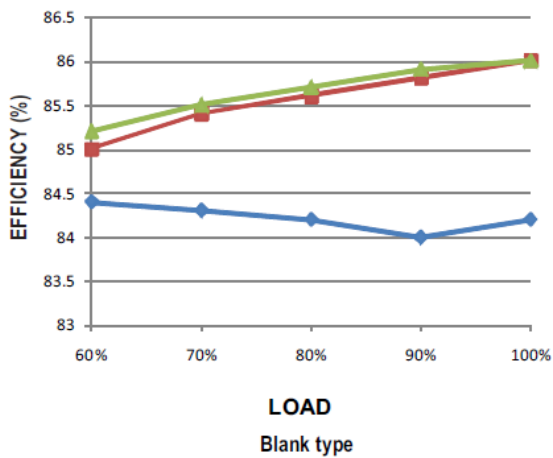
## Derating Curve Static Characteristics



## Power Factor Characteristic



### EFFICIENCY vs LOAD (500mA Model)



### AC input voltage drop vs. output current characteristics

AC input drop	10%	8%	5%	3%
Io drop	<16%	<12%	<8%	<7%

NOTE: Output current will return to the rated value within 50ms

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### Documents / Resources

	<p><b><a href="#">MEAN WELL PLM-25 Series 25W Single Output LED Power Supply</a></b> [pdf] User Guide</p> <p>PLM-25-350, PLM-25-500, PLM-25-700, PLM-25-1050, PLM-25 Series 25W Single Output LED Power Supply, PLM-25 Series, PLM-25 Series LED Power Supply, 25W Single Output LED Power Supply, 25W LED Power Supply, Single Output LED Power Supply, Single Output Power Supply, LED Power Supply, Power Supply</p>
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### References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

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