

MEAN WELL RS-15 Series 15W Single Output Switching Power Supply



# MEAN WELL RS-15 Series 15W Single Output Switching Power Supply Owner's Manual

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**MEAN WELL RS-15 Series 15W Single Output Switching Power Supply**



## Specifications

- Product: 15W Single Output Switching Power Supply
- Series: RS-15 series
- Features:
  - Universal AC input / Full range
  - Protections: Short circuit / Overload / Over voltage / Over temperature
  - Cooling by free air convection
  - LED indicator for power on
  - 100% full load burn-in test
  - No load power consumption

## Product Usage Instructions

1. **Universal AC Input:** This power supply can accept a universal AC input, ensuring compatibility across different regions.
2. **Protections:** The power supply is equipped with protections against short circuits, overloads, over voltages, and over temperatures. Ensure these protections are not triggered during use.
3. **Cooling:** The power supply utilizes free air convection for cooling. Ensure proper ventilation around the unit for efficient cooling.
4. **LED Indicator:** The LED indicator signals when the power supply is turned on, providing visual confirmation of its operational status.
5. **Burn-in Test:** This power supply has undergone a 100% full load burn-in test to ensure reliability and performance under load conditions.
6. **No Load Power Consumption:** Note the power consumption of the unit when there is no load connected.

Minimize unnecessary power consumption by disconnecting when not in use.

#### Frequently Asked Questions (FAQ):

**Q: What should I do if the LED indicator does not light up?**

**A:** Check the power connection and ensure the input source is active. If the issue persists, consult the user manual for troubleshooting steps.

### 15W Single Output Switching Power Supply

#### Features

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- No load power consumption<0.5W
- All using 105°C long life electrolytic capacitors
- Withstand 300VAC surge input for 5 second
- High operating temperature up to 70°C
- Withstand 5G vibration test
- High efficiency, long life and high reliability
- 3 years warranty



#### GTIN CODE

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

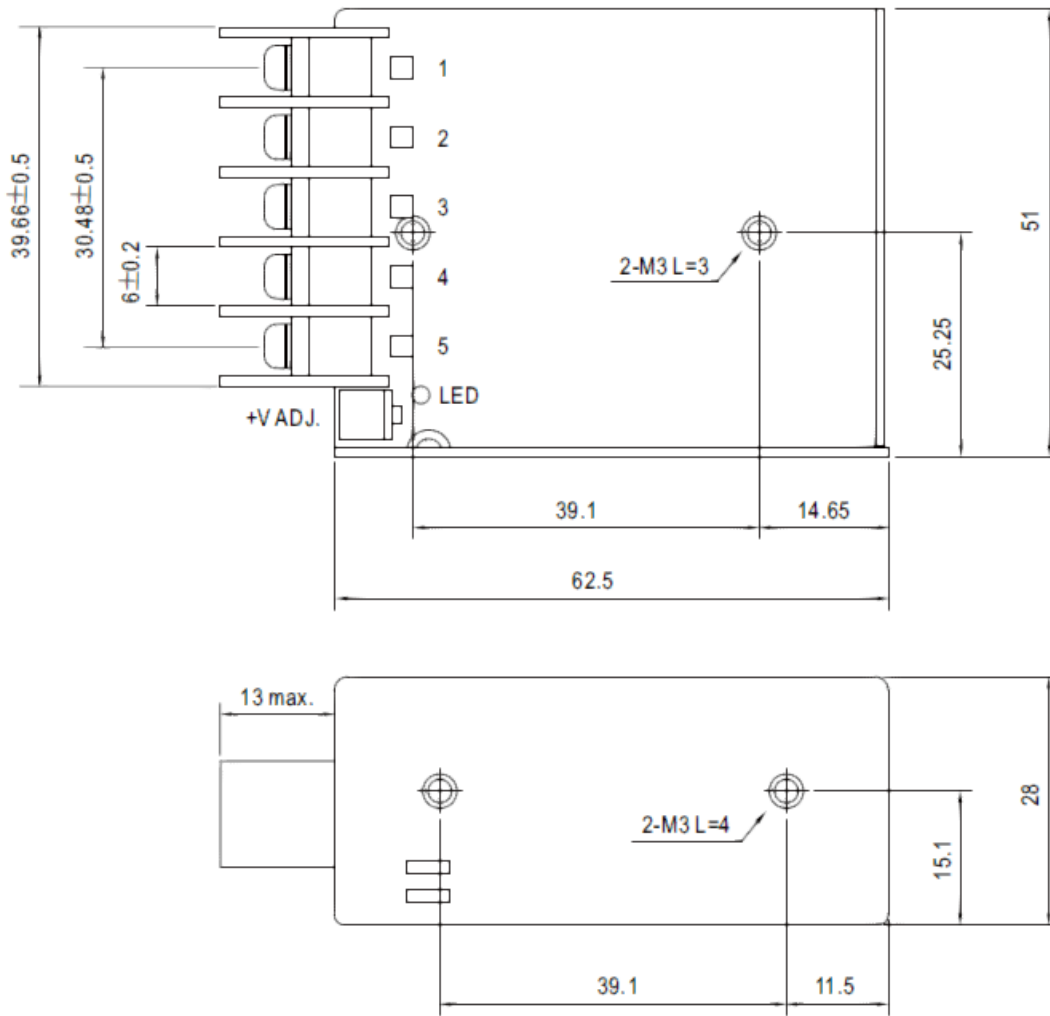
#### SPECIFICATION

MODEL		RS-15-3.3	RS-15-5	RS-15-12	RS-15-15	RS-15-24	RS-15-48
	DC VOLTAGE	3.3V	5V	12V	15V	24V	48V
	RATED CURRENT	3A	3A	1.3A	1A	0.625A	0.313A
	CURRENT RANGE	0 ~ 3A	0 ~ 3A	0 ~ 1.3A	0 ~ 1A	0 ~ 0.625A	0 ~ 0.313A
	RATED POWER	9.9W	15W	15.6W	15W	15W	15.024W

OUTP UT	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	120mVp-p	120mVp-p	200mVp-p	200mVp-p
	VOLTAGE ADJ. R ANGE	2.9 ~ 3.6V	4.75 ~ 5.5V	10.8 ~ 13.2 V	13.5 ~ 16.5 V	22 ~ 27.6V	43.2 ~ 52.8 V
	VOLTAGE TOLER ANCE Note.3	±3.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATI ON Note.4	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATI ON Note.5	±2.0%	±1.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIM E	1000ms, 30ms/230VAC      1000ms, 30ms/115VAC at full load					
	HOLD UP TIME (Typ.)	70ms/230VAC      12ms/115VAC at full load					
INPU T	VOLTAGE RANG E	85 ~ 264VAC      120 ~ 370VDC					
	FREQUENCY RA NGE	47 ~ 63Hz					
	EFFICIENCY (Ty p.)	72%	77%	81%	81%	82%	82%
	AC CURRENT (Ty p.)	0.35A/115VAC      0.25A/230VAC					
	INRUSH CURRE NT (Typ.)	COLD START 65A / 230VAC					
	LEAKAGE CURR ENT	<2mA / 240VAC					
PROT ECTI ON	OVERLOAD	Above 105% rated output power					
		Protection type : Hiccup mode, recovers automatically after fault condition is removed					
	OVER VOLTAGE	3.8 ~ 4.45V	5.75 ~ 6.75 V	13.8 ~ 16.2 V	17.25 ~ 20. 25V	28.4 ~ 32.4 V	55.2 ~ 64.8 V
		Protection type : Shut off o/p voltage, clamping by zener diode					
ENVI RON MENT	OVER TEMPERA TURE	Shut down o/p voltage, recovers automatically after temperature goes down					
	WORKING TEMP.	-20 ~ +70°C (Refer to “Derating Curve”)					
	WORKING HUMI DITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP. , HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH					
	TEMP. COEFFICI ENT	±0.03%/°C (0 ~ 50°C)					

	<b>VIBRATION</b>	10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes
<b>SAFETY &amp; EMC</b>  (Note 6)	<b>SAFETY STANDARDS</b>	UL62368-1, TUV BS EN/EN62368-1, AS/NZS 62368.1, EAC TP TC 004, CCC GB4943.1, BSMI CNS14336-1, BIS IS13252(Part1):2010/IEC 60950-1: 2005 approved
	<b>WITHSTAND VOLTAGE</b>	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC
	<b>ISOLATION RESISTANCE</b>	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH
	<b>EMC EMISSION</b>	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3,GB9254 class B,GB17625.1, EAC TP TC 020, CNS13438 Class B
	<b>EMC IMMUNITY</b>	Compliance to BS EN/EN61000-4-2, 3, 4, 5, 6, 8,11, BS EN/EN55035, BS EN/EN61000-6-1, light industry level, EAC TP TC 020
<b>OTHERS</b>	<b>MTBF</b>	4914.9K hrs min. Telcordia SR-332 (Bellcore) ; 1608.9K hrs min. MIL-HDB K-217F (25°C)
	<b>DIMENSION</b>	62.5*51*28mm (L*W*H)
	<b>PACKING</b>	0.13Kg; 108pcs/15Kg/0.8CUFT
<b>NOTE</b>	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF &amp; 47μF parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Line regulation is measured from low line to high line at rated load.</p> <p>5. Load regulation is measured from 0% to 100% rated load.</p> <p>6. 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 230mm*230mm 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 <a href="https://www.meanwell.com//Upload/PDF/EMI statement en.pdf">https://www.meanwell.com//Upload/PDF/EMI statement en.pdf</a> )</p> <p>7. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</p> <p>Product Liability Disclaimer For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p>	

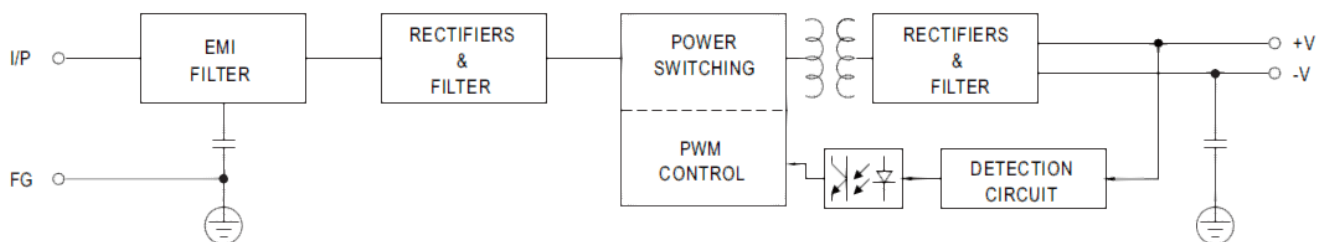
## Mechanical Specification



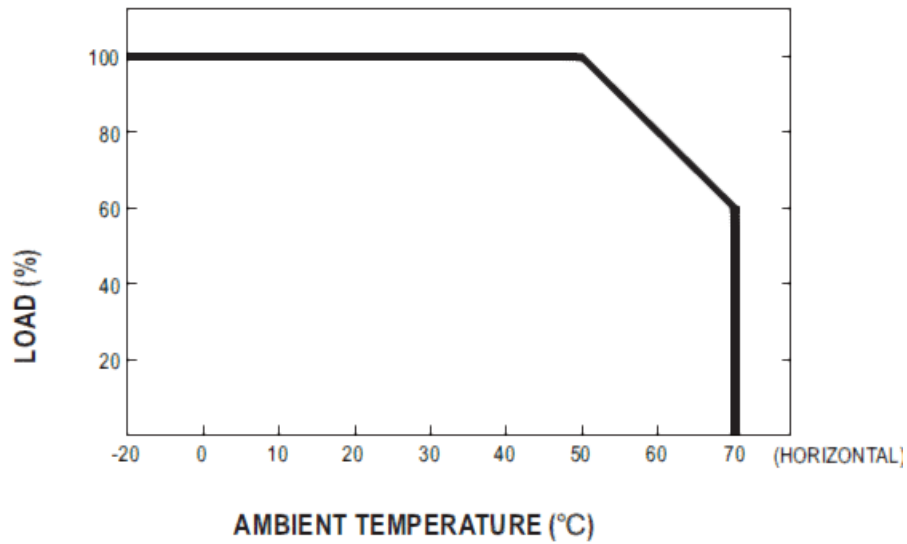
Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4	DC OUTPUT -V
2	AC/N	5	DC OUTPUT +V
3	FG		

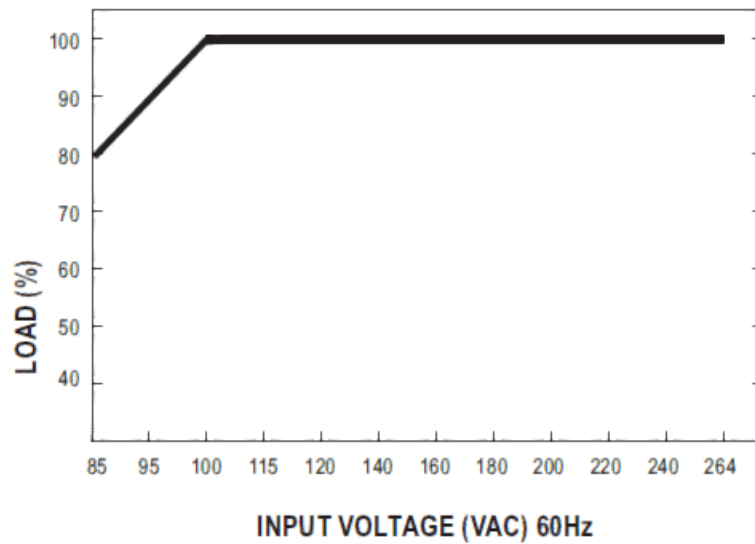
Block Diagram



Derating Curve




### Output Derating VS Input Voltage



Downloaded from [Arrow.com](https://www.arrow.com)

### Documents / Resources

	<p><a href="#">MEAN WELL RS-15 Series 15W Single Output Switching Power Supply</a> [pdf] Owner's Manual</p> <p>RS-15 Series 15W Single Output Switching Power Supply, RS-15 Series, 15W Single Output Switching Power Supply, Output Switching Power Supply, Switching Power Supply, Power Supply, Supply</p>
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### References

- [User Manual](#)

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

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