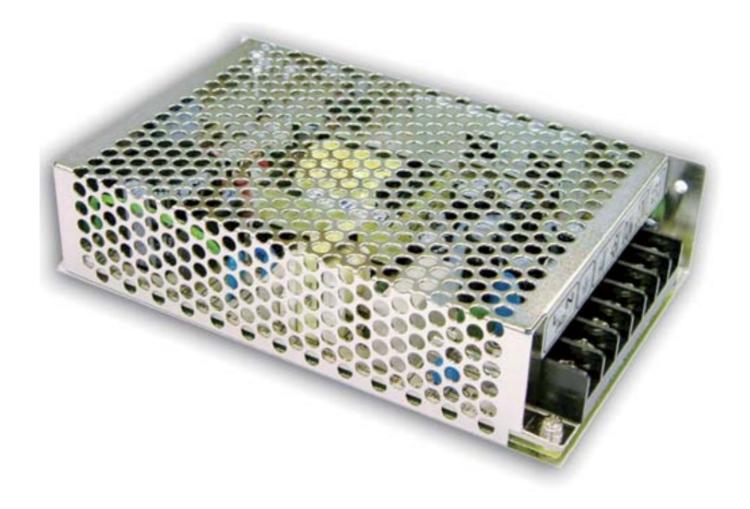
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# **MEAN WELL RS-100-3.3 100W Single Output Switching Power Supply Owner's Manual**

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MEAN WELL RS-100-3.3 100W Single Output Switching Power Supply



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## **Features**

- Universal AC input/ Full range
- Protections: Short circuit/ Overload/ Over voltage
- Cooling by free air convection
- · LED indicator for power on
- 100% full load burn-in test
- 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: <a href="https://www.meanwell.com/serviceGTIN.aspx">https://www.meanwell.com/serviceGTIN.aspx</a>

## **SPECIFICATION**

MODEL		RS-100-3.	RS-100-5	RS-100-12	RS-100-15	RS-100-24	RS-100-48			
	DC VOLTAGE	3.3V	5V	12V	15V	24V	48V			
	RATED CURREN T	20A	16A	8.5A	7A	4.5A	2.3A			
	CURRENT RANG E	0 ~ 20A	0 – 16A	0 – 8.5A	0 – 7A	0 – 4.5A	0- 2.3A			
	RATED POWER	66W	BOW	102W	105W	108W	110.4W			
	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	120mVp-p	120mVp-p	120mVp-p	200mVp-p			
ОИТРИ	VOLTAGE ADJ. R ANGE	3.2V ~ 3.5 V	4.75 ~ <i>5.5</i> <i>V</i>	11.4~ 13.2 V	14.25 – 16. 5V	22.8 – <i>26.4</i> <i>V</i>	45.6 – <i>52.8</i> <i>V</i>			
Т	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%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%			
	SETUP, RISE TIM E	500ms , 20ms/230VAC 1200ms, 30ms/115VAC at full load								
	HOLD UP TIME ( Typ.)	95ms/230VAC 17ms/115VAC at full load								
	VOLTAGE RANG E	88 – 264VAC 125- 373VDC (Withstand 300VAC surge for 5sec. Without damag e)								
	FREQUENCY RA	47 – 63Hz								
INPUT	EFFICIENCY (Ty p,)	74%	77%	81%	82%	84%	84%			
	AC CURRENT (Ty p.)	2.5A/115VAC 1.5A/230VAC								
	INRUSH CURRE NT (Typ,)	COLD START 40A/230VAC								
	LEAKAGE CURR ENT	<2mA/ 240VAC								

	OVERLOAD	110 – 150% rated output power								
PROTE CTION		Protection type: Hiccup mode, recovers automatically after fault condition is removed								
	OVER VOLTAGE	3.8 ~ 4.45 V	5.75 – 6.75V		13.8 – 16.2 V	17.25 – <i>20.</i> <i>25V</i>	27.6 – <i>32.4</i> <i>V</i>	55.2 – <i>64.8</i> <i>V</i>		
		Protection type: Hiccup mode, recovers automatically after fault condition is rem oved								
	WORKING TEMP.	-25- +70°C (Refer to "Derating Curve")								
ENVIR ONME NT	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)								
	VIBRATION	10 – 500Hz, 5G 1Omin./1cycle, period for 60min. each along X, Y, Z axes								
SAFET Y & EM C (Not e 6)	SAFETY STAND ARDS	UL62368-1, <i>TUV</i> BS EN/EN62368-1 , AS/NZS 62368.1, EAC TP TC 004 approv ed								
	WITHSTAND VO LTAGE	I/P-O/P3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC								
	ISOLATION RESI STANCE	1/P-0/P, 1/P-FG, 0/P-FG:1 QOM Ohms/ 500VDC / 25"Ci 70% RH								
	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, E AC TP TC 020								
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, BS EN/EN6 1000-6-2 (BS EN/EN50082-2) , heavy industry level, EAC TP TC 020								
	MTBF	3196.6K hrs min. Telcordia SR-332 (Bellcore); 526.7K hrs min. MIL-HDBK-2								
	DIMENSION	159'97'38mm (L'W'H) 0.6Kg; 24pcs/15.4Kg/0.83CUFT								
	PACKING									

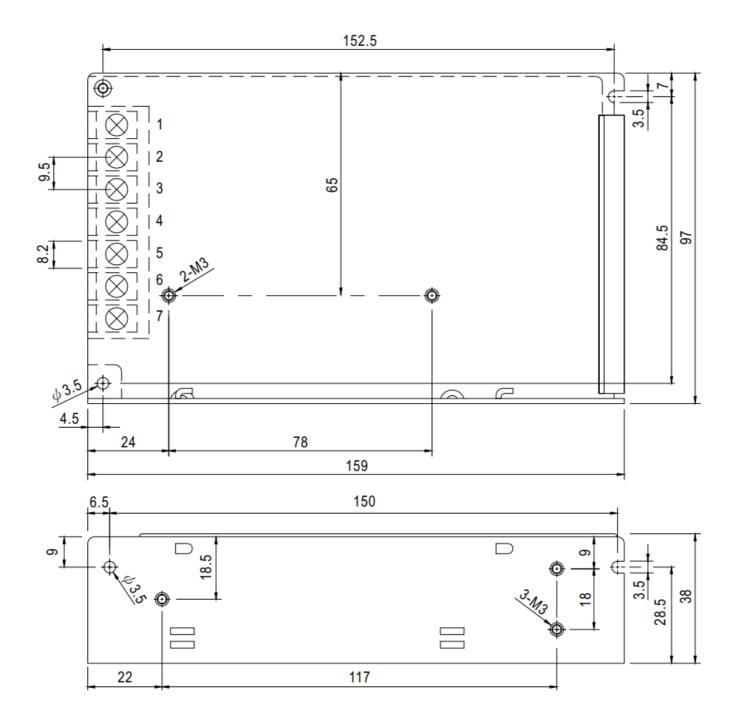
## OTHER S

- 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25"C of a mbient temperature.
- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated w ith a 0.1uf & 47uf parallel capacitor.
- 3. Tolerance : includes set up tolerance, line regulation and load regulation.
- 4. Line regulation is measured from low line to high line at rated load.
- 5. Load regulation is measured from 0% to 100% rated load.

#### NOTE

- 6. The power supply is considered a component which will be installed into a final equipment. The fin all 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="http://www.meanwell.com">http://www.meanwell.com</a>)
- 7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time.
- 8. The ambient temperature derating of 3.5°C /1000m with fanless models and of 5°C/1000m with fan n models for operating altitude higher than 2000m(6500ft) Product Liability Disclaimer: For detaile d information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a>

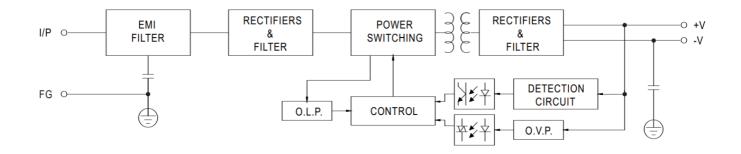
## **Mechanical Specification**



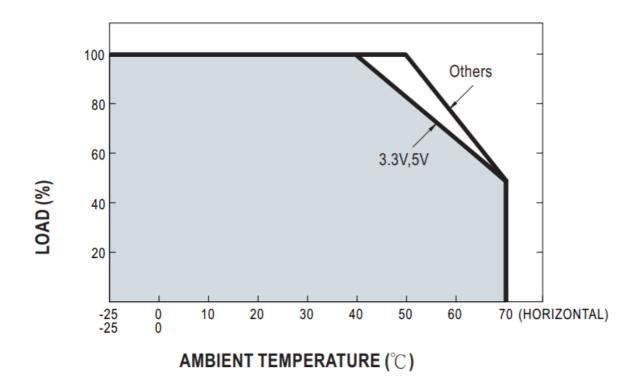
# Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,5	DCOUTPUT-V
2	AC/N	6,7	DCOUTPUT+V
3	FG-½		

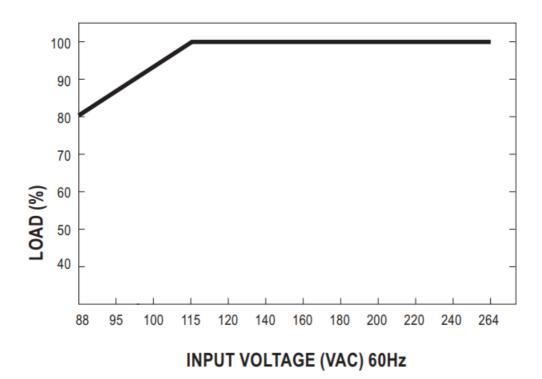
# **Block Diagram**



# **Derating Curve**



**Static Characteristics** 



# **Customer Support**









**Arrow.com** 



## **Documents / Resources**



MEAN WELL RS-100-3.3 100W Single Output Switching Power Supply [pdf] Owner's Manu al

RS-100-3.3 100W Single Output Switching Power Supply, RS-100-3.3, 100W Single Output Switching Power Supply, Single Output Switching Power Supply, Output Switching Power Supply, Switching Power Supply, Supply

#### References

- MEAN WELL Switching Power Supply Manufacturer
- Global Trade Item Number (GTIN)-MEAN WELL Switching Power Supply Manufacturer

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