

# **MEAN WELL RD-65 Series 65W Dual Output Switching Power Supply Owner's Manual**

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MEAN WELL RD-65 Series 65W Dual Output Switching Power Supply



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### **GTIN CODE**

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

### **Features**

- Universal AC input/ Full range
- Protections: Short circuit/ Overload/ Over volta
- Cooling by free air convection
- · LED indicator for power on
- 100% full load burn-in test
- All using 1 05°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





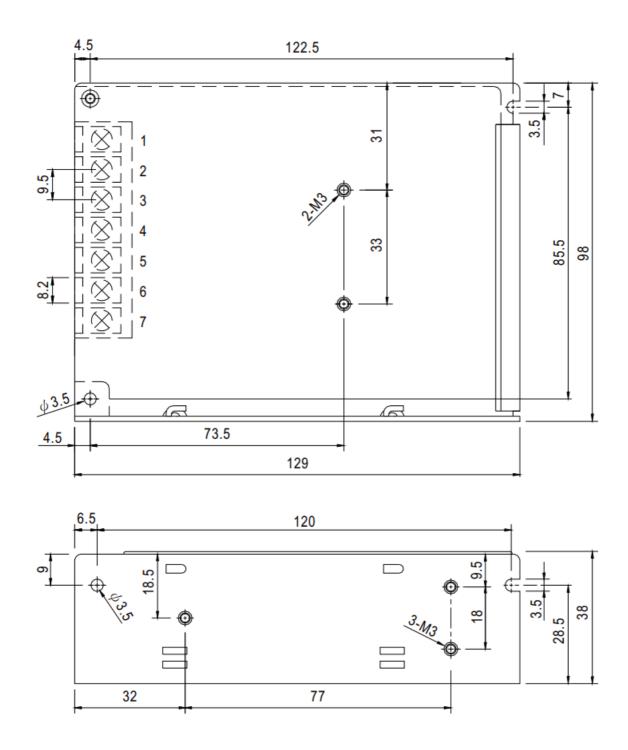
### **SPECIFICATION**

MODEL		RD-65A		RD-65B	
C	OUTPUT NUMBE	CH1	CH2	CH1	CH2
	DC VOLTAGE	5V	12V	5V	24V
F	RATED CURREN T	6A	ЗА	4A	2A

CURRENT RANG E Note.6	0 ~ 8A	0 ~ 4A	0 ~ 8A	0 ~ 3A	
RATED POWER Note.6	66W		68W		
RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	80mVp-p	150mVp-p	
VOLTAGE ADJ. R ANGE	CH1: 4.75 ~ 5.5V		CH1: 4.75 ~ 5.5V		
VOLTAGE TOLER ANCE Note.3	±2.0%	±6.0%	±2.0%	+4,-8%	
LINE REGULATIO N Note.4	±0.5%	±1.5%	±0.5%	±2.0%	
LOAD REGULATI ON Note.5	±0.5%	±3.0%	±0.5%	±6.0%	
SETUP, RISE TIM E	500ms, 20ms/230VAC 1200ms, 30ms/115VAC at full load				
HOLD UP TIME ( Typ.)	60ms/230VAC 14ms/115VAC at full load				
VOLTAGE RANGE	88 ~ 264VAC 125 ~ 373VDC (Withstand 300VAC surge for 5sec. Without damage)				
FREQUENCY RA NGE	47 ~ 63Hz				
EFFICIENCY(Typ.	78%		77%		
AC CURRENT (Ty p.)	2A/115VAC 1.2A/23	80VAC			
INRUSH CURRE NT (Typ.)	COLD START 50A/230VAC				
LEAKAGE CURR ENT	<2mA / 240VAC				
OVERLOAD	110 ~ 150% rated output power				
	Protection type: Hiccup mode, recovers automatically after fault condition is removed				
	CH1: 5.75 ~ 6.75V				
OVER VOLTAGE	Protection type: Hiccup mode, recovers automatically after fault condition is removed				
WORKING TEMP.	-25 ~ +70°C (Refer to "Derating Curve")				
WORKING HUMI DITY	20 ~ 90% RH non-condensing				
	E Note.6  RATED POWER Note.6  RIPPLE & NOISE (max.) Note.2  VOLTAGE ADJ. R ANGE  VOLTAGE TOLER ANCE Note.3  LINE REGULATIO N Note.4  LOAD REGULATI ON Note.5  SETUP, RISE TIM E  HOLD UP TIME (Typ.)  VOLTAGE RANGE  FREQUENCY RANGE  EFFICIENCY (Typ.)  AC CURRENT (Typ.)  INRUSH CURRENT (Typ.)  LEAKAGE CURRENT (Typ.)  COVER VOLTAGE  WORKING TEMP.  WORKING HUMI	E Note.6         0 ~ 8A           RATED POWER Note.6         66W           RIPPLE & NOISE (max.) Note.2         80mVp-p           VOLTAGE ADJ. R ANGE         CH1: 4.75 ~ 5.5V           VOLTAGE TOLER ANCE Note.3         ±2.0%           LINE REGULATIO Note.4         ±0.5%           LOAD REGULATI ON Note.5         ±0.5%           SETUP, RISE TIM E Oms, 20ms/230VAC 14ms         500ms, 20ms/230VAC 14ms           WOLTAGE RANGE Without damage)         88 ~ 264VAC 125 ~ Without damage)           FREQUENCY RANGE         47 ~ 63Hz           EFFICIENCY(Typ.) 78%         78%           AC CURRENT (Typ.) 2A/115VAC 1.2A/23           INRUSH CURRE NT (Typ.)         COLD START 50A/3           LEAKAGE CURR ENT         <2mA / 240VAC	E Note.6  RATED POWER Note.6  RIPPLE & NOISE (max.) Note.2  VOLTAGE ADJ. R ANGE  VOLTAGE TOLER ANCE Note.3  LINE REGULATIO N Note.4  LOAD REGULATI ON Note.5  SETUP, RISE TIM E  HOLD UP TIME (Typ.)  VOLTAGE RANGE  REQUENCY RANGE  FREQUENCY RANGE  FREQUENCY RANGE  COLD START 50A/230VAC  LINE START SOAVE  RISE TIM SOAND START SOAVE  REPROVED TO START SOAVE  LEAKAGE CURR ENT (Typ.)  OVERLOAD  OVER VOLTAGE  WORKING TEMP.  COLD START SOAVE HICCUp mode, recovers ved  WORKING TEMP.  22 ~ 90% BH non-condensing  RIPPLE & NOISE  ROWD-P  120mVp-p  146.0%  115%  120mVp-p  146.0%  130mVp-p  146.0%  140.0%  1	E Note.6 0 ~ 8A 0 ~ 4A 0 ~ 68W  RATED POWER Note.6 66W 68W  RIPPLE & NOISE (max.) Note.2 80mVp-p 120mVp-p 80mVp-p 80mVp-p 120mVp-p 120	

TEMP. COEFFICI ENT	±0.03%/°C (0 ~ 50°C)on +5V output		
VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes		
SAFETY STANDA RDS	UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004 approved		
WITHSTAND VOL TAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC		
ISOLATION RESI STANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH		
EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, C TP TC 020		
EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, BS EN/EN61000-6-2 (BS EN/EN50082-2), heav y industry level, EAC TP TC 020		
MTBF	2940.2K hrs min. Telcordia SR-332 (Bellcore) ; 541.0K hrs min. MIL-HDBK-217F 25°C)		
DIMENSION	129*98*38mm (L*W*H)		
PACKING	0.44Kg; 30pcs/14.2Kg/0.72CUFT		
<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of am bient temperature.</li> <li>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.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation, when multi-channel output, it is recommended that CH1 load &gt; 10%.</li> <li>Line regulation is measured from low line to high line at rated load.</li> <li>Load regulation is measured from 20% to 100% rated load, and other output at 60% rated load.</li> <li>Each output can work within current range. But total output power can't exceed rated output power.</li> <li>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 thick kness. 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)</li> <li>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).</li> <li>Product Liability Disclaimer For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</li> </ol>			
	ENT  VIBRATION  SAFETY STANDA RDS  WITHSTAND VOL TAGE  ISOLATION RESISTANCE  EMC EMISSION  EMC IMMUNITY  MTBF  DIMENSION  PACKING  1. All parameters Nobient temperature 2. Ripple & noise as head noise as head of the commended 4. Line regulation is 5. Load regulation is 5. Load regulation is 5. Load regulation is 6. Each output can 7. The power supplement of the commended for the commended is 5. The final how to perform the lable on https://width.		

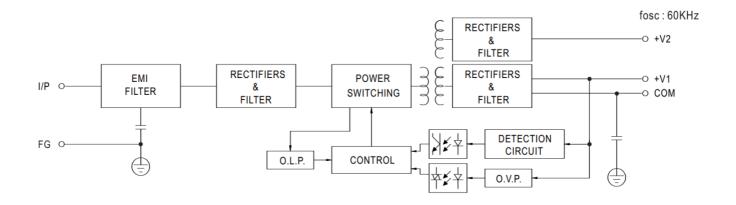
## **Mechanical Specification**



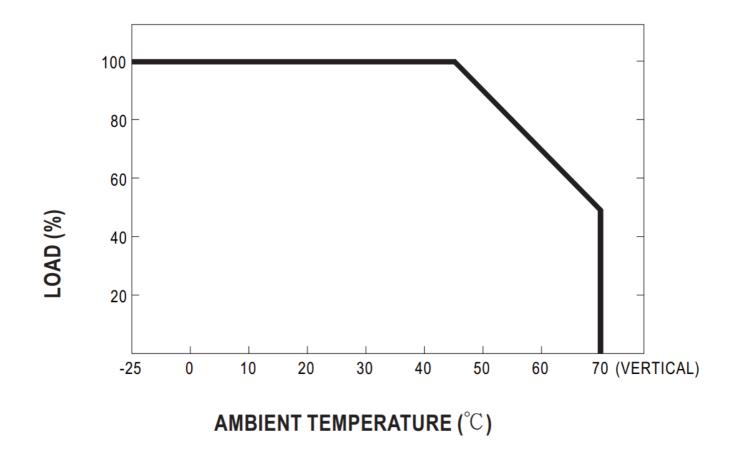
### **Terminal Pin No. Assignment**

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,6	DC OUTPUT COM
2	AC/N	5	DC OUTPUT +V2
3	FG ±	7	DC OUTPUT +V1

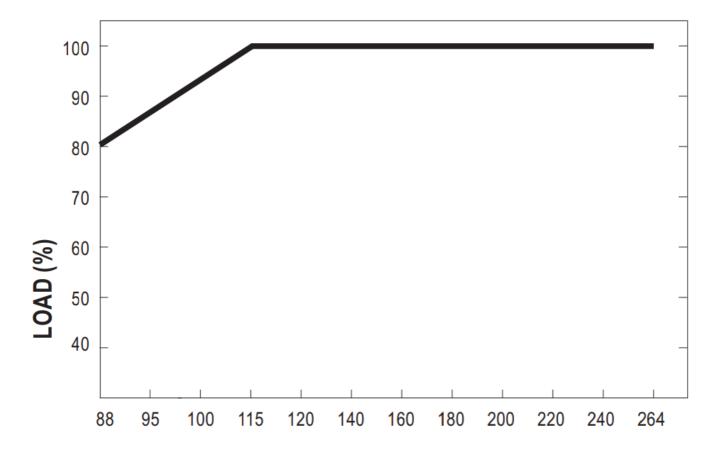
## **Block Diagram**



### **Derating Curve**



**Output Derating VS Input Voltage** 



# **INPUT VOLTAGE (VAC) 60Hz**



#### **Documents / Resources**



MEAN WELL RD-65 Series 65W Dual Output Switching Power Supply [pdf] Owner's Manual RD-65A, RD-65B, RD-65 Series 65W Dual Output Switching Power Supply, RD-65 Series, RD-65 Series Power Supply, 65W Dual Output Switching Power Supply, 65W Power Supply, Dual Output Switching Power Supply, Dual Output Power Supply, Power Supply

### References

- <u>△ TÜV Rheinland Home | US | TÜV Rheinland</u>
- User Manual

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