MEAN WELL RT-85 Series 85W Triple Output Switching Power Supply



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# **MEAN WELL RT-85 Series 85W Triple Output Switching Power Supply Owner's Manual**

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MEAN WELL RT-85 Series 85W Triple Output Switching Power Supply



#### **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

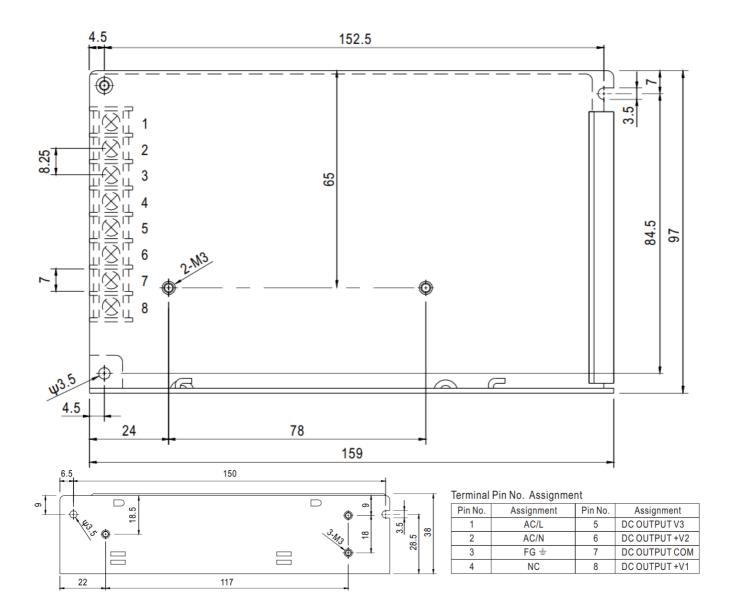
### **GTIN CODE**

MW Search: <a href="https://www.meanwell.com/serviceGTIN.aspx">https://www.meanwell.com/serviceGTIN.aspx</a>

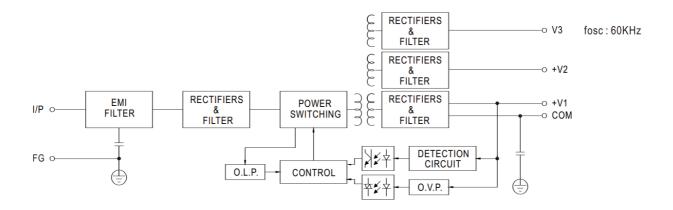
# **SpECIFICATION**

MODEL	RT-85A			RT-85B			RT-85C			RT-85D			
	OUTPUT NUMBER	CH1	CH2	CH3	CH1	CH2	CH3	CH1	CH2	CH3	CH1	CH2	CH3
ОИТРИТ	DC VOLTAGE	5V	12V	-5V	5V	12V	-12V	5V	15V	-15V	5V	24V	12V
	RATED CURRENT	8A	3.5A	0.5A	8A	3.5A	0.5A	7A	3A	0.5A	6A	2A	1A
	CURRENT RANGE Note.3	0~ 10A	0 ~ 4A	0 ~ 1A	0 ~ 10A	0 ~ 4A	0 ~ 1A	0 ~ 10A	0 ~ 4A	0 ~ 1A	0 ~ 10A	0~2.5A	0 ~ 1A
		84.5W			88W			87.5W			90W		
	RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	100mVp-p	80mVp-p	120mVp-p	120mVp-p	80mVp-p	120mVp-p	120mVp-p	80mVp-p	150mVp-p	120mVp-p
	VOLTAGE ADJ. RANGE	CH1: 4.75 ~ 5.5V		CH1: 4.75 ~ 5.5V		CH1: 4.75 ~ 5.5V			CH1: 4.75 ~ 5.5V				
	VOLTAGE TOLERANCE Note.3		±5.0%	±6.0%	±2.0%	±5.0%	±6.0%	±2.0%	+3,-7%	±6.0%	±2.0%	±5.0%	±6.0%
	LINE REGULATION Note.4	±0.5%	±1.0%	±1.0%	±0.5%	±1.0%	±1.0%	±0.5%	±1.0%	±1.0%	±0.5%	±1.0%	±1.0%
	LOAD REGULATION Note.5	±1.0%	±3.0%	±6.0%	±1.0%	±3.0%	±6.0%	±1.0%	±3.0%	±6.0%	±1.0%	±3.0%	±6.0%
	SETUP, RISE TIME	500ms, 20	ms/230VA	C 120	0ms, 30ms	/115VAC at	full load						
	HOLD UP TIME (Typ.)	100ms/230VAC 18ms/115VAC at full load											
	VOLTAGE RANGE	88 ~ 264VAC 125 ~ 373VDC (Withstand 300VAC surge for 5sec. Without damage)											
INPUT	FREQUENCY RANGE	47 ~ 63Hz											
	EFFICIENCY (Typ.)	76%			76%			77%			79%		
	AC CURRENT (Typ.)	2.5A/115\	/AC 1	.5A/230VA	C								
	INRUSH CURRENT (Typ.)	COLD START 50A/230VAC											
	LEAKAGE CURRENT	<2mA / 240VAC											
PROTECTION		110 ~ 150% rated output power											
	OVERLOAD	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											
ENVIRONMENT	WORKING TEMP.	-25 ~ +70°C (Refer to "Derating Curve")											
	WORKING HUMIDITY	20 ~ 90% RH non-condensing											
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH											
	TEMP. COEFFICIENT	±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 STANDARDS	UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004 approved											
<b>SAFETY &amp;</b>	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2.0KVAC O/P-FG:0.5KVAC											
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH											
(Note 7)	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,BS EN/EN61000-6-2 (BS EN/EN50082-2), heavy industry level, EAC TP TC 020											
OTHERS	MTBF	2760.8K hrs min. Telcordia SR-332 (Bellcore) ; 449.2K hrs min. MIL-HDBK-217F (25°C)											
	DIMENSION	159*97*38mm (L*W*H)											
	PACKING	0.6Kg; 24pcs/15.4Kg/0.83CUFT											
NOTE	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μ F &amp; 47 μ F parallel capacitor.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation. (In order to meet tolerance, it is recommended that CH1 load &gt; 20% rated current for A, B type and CH1 load &gt; 10% rated current for C,D type.)</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. 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>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.</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>												

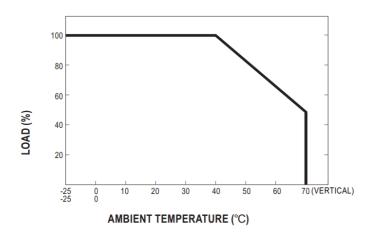
# **Mechanical Specification**

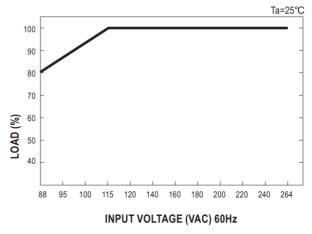


#### **Block Diagram**



## **Derating Curve**





#### **Documents / Resources**



MEAN WELL RT-85 Series 85W Triple Output Switching Power Supply [pdf] Owner's Manual

RT-85 Series 85W Triple Output Switching Power Supply, RT-85 Series, 85W Triple Output Switching Power Supply, Triple Output Switching Power Supply, Output Switching Power Supply, Switching Power Supply, Power Supply, Supply

#### References

- ▲ TÜV Rheinland Home | US | TÜV Rheinland
- User Manual

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