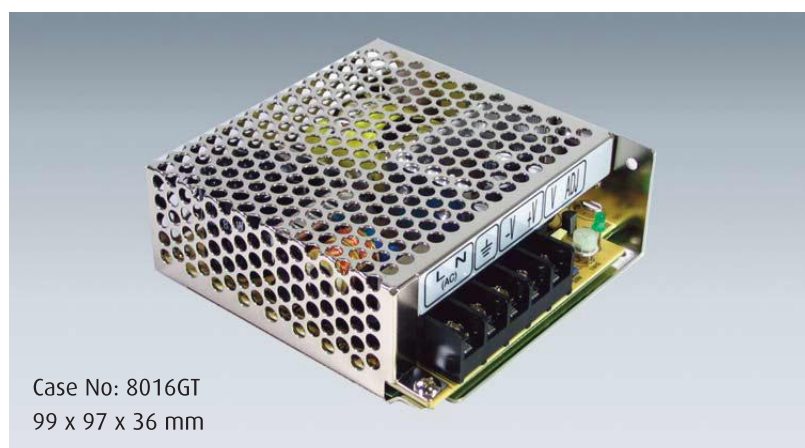


RT-50 Series

50W Triple Output Switching Power Supplies



Case No: 8016GT
99 x 97 x 36 mm

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



Specification

INPUT	Voltage	88V ~ 264VAC universal full range or 125V ~ 373VDC					
	Frequency	47 ----- 63 Hz					
	Current	<1.3A@115V, 0.8A@230V AC input, full load condition					
	Inrush Current	<36A@230VAC input, Cold start at 25°C ambient					
	Leakage Current	<2.0mA@240V AC input					
OUTPUT	MODEL No.	RT-50A			RT-50B		
	Channel	CH1	CH2	CH3	CH1	CH2	CH3
	Voltage	5V	12V	-5V	5V	12V	-15V
	Rated Current	4A	2A	0.5A	4A	2A	0.5A
	Current Range	0.5~5A	0.2~2.5A	0.1~1A	0.5~5A	0.2~2.5A	0.1~1A
	Voltage Adj. Range	CH1: 4.75~5.5V			CH1: 4.75~5.5V		
	Output Tolerance	± 2%	± 6%	± 2%	± 2%	± 6%	± 2%
	Line Regulation	± 0.5%	± 1.5%	± 0.5%	± 0.5%	± 1.5%	± 0.5%
	Load Regulation	± 1%	± 3%	± 1%	± 1%	± 3%	± 1%
	Ripple Noise MAX.	80mV	120mV	100mV	80mV	120mV	120mV
	Efficiency (TYP.)	77%			77%		
	Power	46.5W			50W		
PROTECTION	Over Voltage	CH1: 4.75~5.5V			CH1: 4.75~5.5V		
		Hiccup mode, recovers automatically after fault condition is removed					
	Over Load	When the power supply is over 110%~ 150% max load or short circuited it will go into hiccup mode and recover automatically after the fault is removed.					
ELEC. CHAR.	Rise Time	<20mS@230VAC 30mS@115VAC					
	Hold up Time	>60mS@230V, 10mS@115VAC full load					
	Setup Time	<0.5 Sec@230VAC 1.2mS@115VAC					
ENVIRONMENT	Temperature	Operating: -25 ~ +70°C ; Storage: -40~ +85°C					
	Humidity	Operating: 20% ~ 90% RH; Storage: 10% ~ 95% RH (non condensing)					
SAFETY	Withstand Voltage	I/P-O/P:3KVAC, I/P-FG:1.5KVAC, O/P-FG:0.5KVAC, 1minute					
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG 100MΩ/500VDC					
	Safety Standard	UL60950-1, TUV EN60950-1 Approved.					
EMC	EMI	Compliance to EN55022; EN61000-3-2,3					
	EMS	EN61000-4-2,3,4,5,6,8,11; ENV50204; EN61000-6-2					
OTHERS	Cooling	Natural cooling					
	M.T.B.F.	169.2Khrs min. MIL-HDBK-217F (25°C)					
	Packing	0.41Kg; 45 pcs/19.5Kg/0.9 CUFT					

1 All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.

2 Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.

3 Tolerance : includes set up tolerance, line regulation and load regulation.

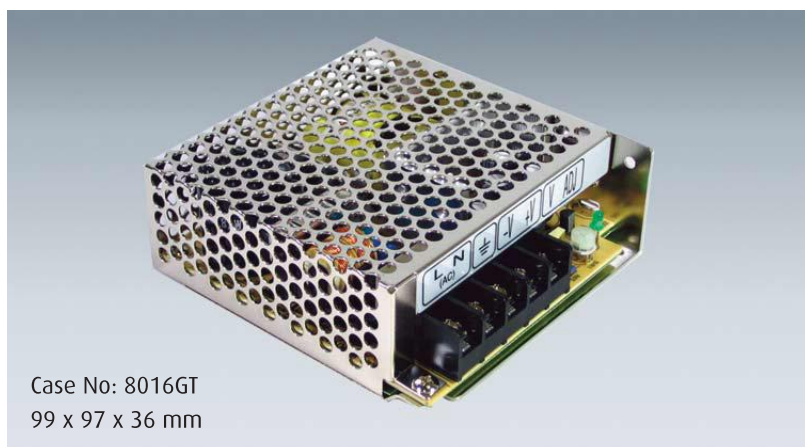
4 Line regulation is measured from low line to high line at rated load.

5 Load regulation is measured from 0% to 100% ratedload.

6 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.

RT-50 Series

50W Triple Output Switching Power Supplies



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99 x 97 x 36 mm

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	Frequency	47 ----- 63 Hz					
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	Inrush Current	<36A@230VAC input, Cold start at 25°C ambient					
	Leakage Current	<2.0mA@240V AC input					
OUTPUT	MODEL No.	RT-50C			RT-50D		
	Channel	CH1	CH2	CH3	CH1	CH2	CH3
	Voltage	5V	15V	-15V	5V	24V	12V
	Rated Current	4A	1.5A	0.5A	3A	1A	1A
	Current Range	0.5~5A	0.2~2A	0.1~1A	0.5~5A	0.2~1.5A	0.1~1A
	Voltage Adj. Range	CH1: 4.75~5.5V			CH1: 4.75~5.5V		
	Output Tolerance	± 2%	+8, -4%	± 2%	± 2%	+8, -4%	± 6%
	Line Regulation	± 0.5%	± 1.5%	± 0.5%	± 0.5%	± 2%	± 2%
	Load Regulation	± 1%	± 3%	± 1%	± 1%	± 3%	± 4%
	Ripple Noise MAX.	80mV	120mV	120mV	80mV	150mV	120mV
	Efficiency (TYP.)	78%			80%		
	Power	50W			51W		
PROTECTION	Over Voltage	CH1: 4.75~5.5V			CH1: 4.75~5.5V		
		Hiccup mode, recovers automatically after fault condition is removed					
	Over Load	When the power supply is over 110%~ 150% max load or short circuited it will go into hiccup mode and recover automatically after the fault is removed.					
ELEC. CHAR.	Rise Time	<20mS@230VAC 30mS@115VAC					
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	Humidity	Operating: 20% ~ 90% RH; Storage: 10% ~ 95% RH (non condensing)					
SAFETY	Withstand Voltage	I/P-O/P:3KVAC, I/P-FG:1.5KVAC, O/P-FG:0.5KVAC, 1minute					
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG 100MΩ/500VDC					
	Safety Standard	UL60950-1, TUV EN60950-1 Approved					
EMC	EMI	Compliance to EN55022; EN61000-3-2,3					
	EMS	EN61000-4-2,3,4,5,6,8,11; ENV50204; EN61000-6-2					
OTHERS	Cooling	Natural cooling					
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	Packing	0.41Kg; 45 pcs/19.5Kg/0.9 CUFT					

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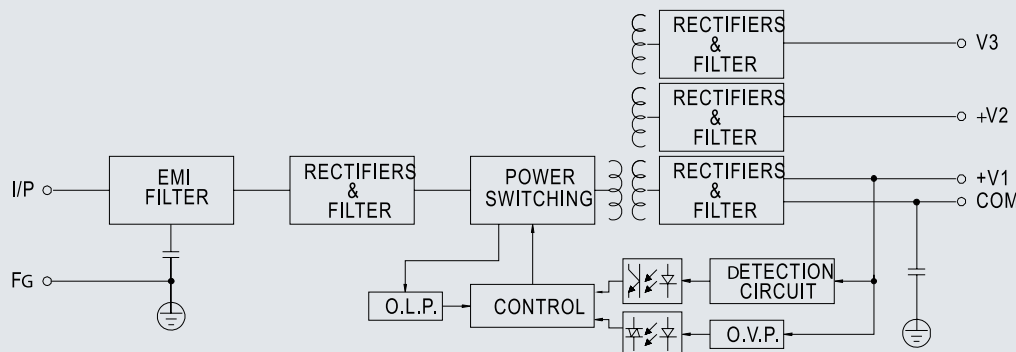
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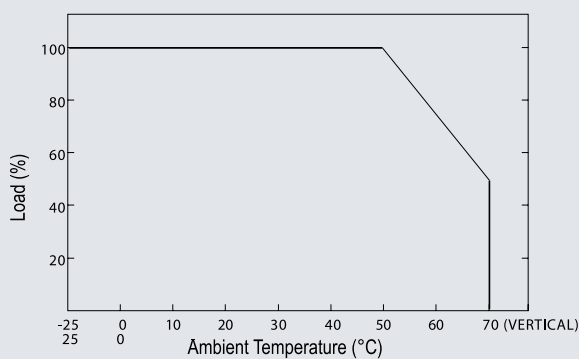
RT-50 Series

50W Triple Output Switching Power Supplies

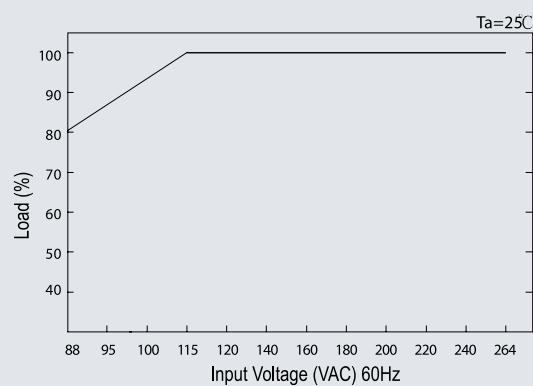
Block Diagram



De-Rating Curve



Output De-Rating Vs. Input Voltage



Dimensions

Terminal Pin. No Assignment:

Pin No.	Assignment
1	AC/L
2	AC/N
3	FG
4	NC
5	DC OUTPUT V3
6	DC OUTPUT +V2
7	DC OUTPUT COM
8	DC OUTPUT +V1

