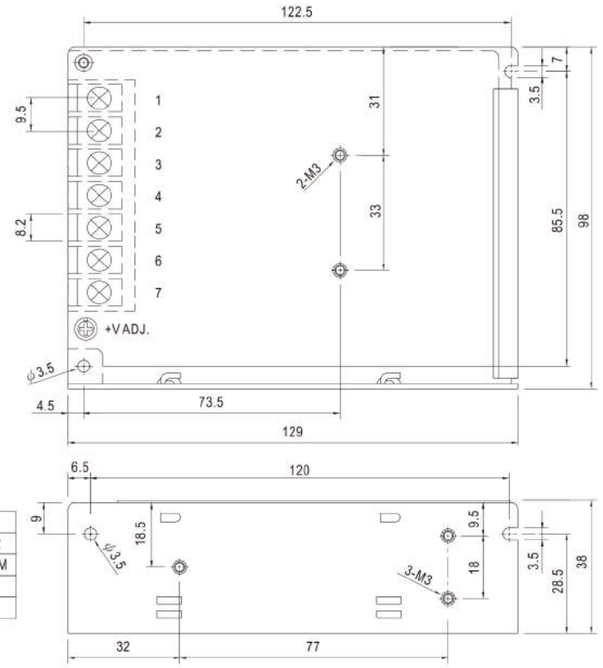
50W Triple Output Switching Power Supply

■ Mechanical Specification

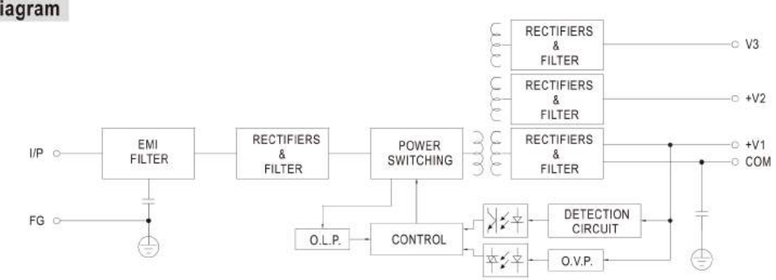
Case No. 903 Unit:mm



Terminal Pin No. Assignment

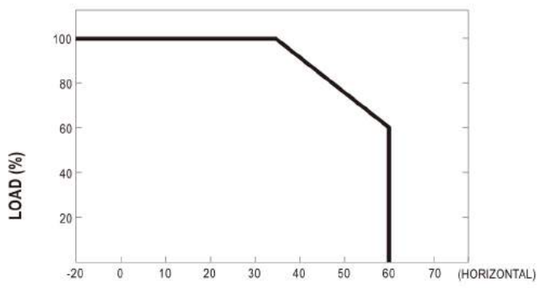
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5	DC OUTPUT +V2
2	AC/N	6	DC OUTPUT COM
3	FG ⏚	7	DC OUTPUT +V1
4	DC OUTPUT V3		

■ Block Diagram

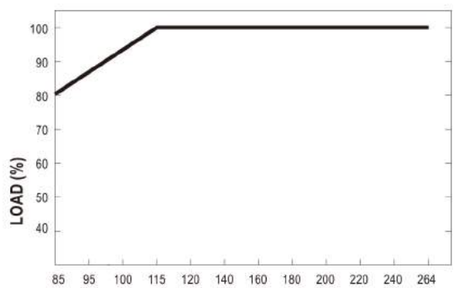


fosc : 60KHz

■ Derating Curve



■ Output Derating VS Input Voltage



NET-50W

50W Triple Output Switching Power Supply

■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test

CE

SPECIFICATION

MODEL		NET-50A			NET-50B			NET-50C			NET-50D		
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH3	CH1	CH2	CH3	CH1	CH2	CH3	CH1	CH2	CH3
	DC VOLTAGE	5V	12V	-5V	5V	12V	-12V	5V	15V	-15V	5V	24V	12V
	RATED CURRENT	4A	2A	0.5A	4A	2A	0.5A	4A	1.5A	0.5A	3A	1A	1A
	CURRENT RANGE Note.6	0.6~4A	0.2~2A	0.1~0.5A	0.6~4A	0.2~2A	0.1~0.5A	0.6~4A	0.1~1.5A	0.1~0.5A	0.6~3A	0.1~1A	0.1~1A
	RATED POWER	46.5W			50W			50W			51W		
	RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	120mVp-p	80mVp-p	120mVp-p	120mVp-p	80mVp-p	150mVp-p	150mVp-p	80mVp-p	200mVp-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	±2.0%	±6.0%	±5.0%	±2.0%	±6.0%	±5.0%	±2.0%	±8.0%	±5.0%	±2.0%	±8.0%	±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	±1.5%	±3.0%	±1.0%	±1.5%	±3.0%	±1.0%	±1.5%	±3.0%	±1.0%	±1.5%	±3.0%	±3.0%
	SETUP, RISE TIME	500ms, 30ms/230VAC 1200ms, 30ms/115VAC at full load											
	HOLD UP TIME (Typ.)	50ms/230VAC 10ms/115VAC at full load											
INPUT	VOLTAGE RANGE	85 ~ 264VAC 120 ~ 370VDC											
	FREQUENCY RANGE	47 ~ 63Hz											
	EFFICIENCY (Typ.)	76%			78%			78%			80%		
	AC CURRENT (Typ.)	1.1A/115VAC 0.65A/230VAC											
	INRUSH CURRENT (Typ.)	COLD START 45A											
	LEAKAGE CURRENT	<2mA / 240VAC											
PROTECTION	OVERLOAD	110 ~ 150% rated output power											
		Protection type : Hiccup mode, recovers automatically after fault condition is removed											
	OVER VOLTAGE	CH1: 5.75 ~ 6.75V											
		Protection type : Shut down o/p voltage, re-power on to recover											
ENVIRONMENT	WORKING TEMP.	-20 ~ +60°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 ~ 45°C)											
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes											
SAFETY & EMC (Note 7)	SAFETY STANDARDS	UL60950-1, CB(IEC60950-1) approved											
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC											
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH											
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3											
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-1, light industry level, criteria A											
OTHERS	MTBF	348.4K hrs min. MIL-HDBK-217F (25°C)											
	DIMENSION	129*98*38mm (L*W*H)											
	PACKING	0.44Kg; 30pcs/14.2Kg/0.72CUFT											

NOTE

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 20% to 100% rated load, and other output at 60% rated load.
6. Each output can work within current range. But total output power can't exceed rated output power.
7. 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 http://www.meanwell.com)