



# 150W Triple Output with PFC Function

# TP-150 series



### Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.94
- Protections:Short circuit/Over load/Over voltage
- Forced air cooling by built-in DC fan
- Fixed switching frequency at 100KHz(Optional)
- 3 years warranty

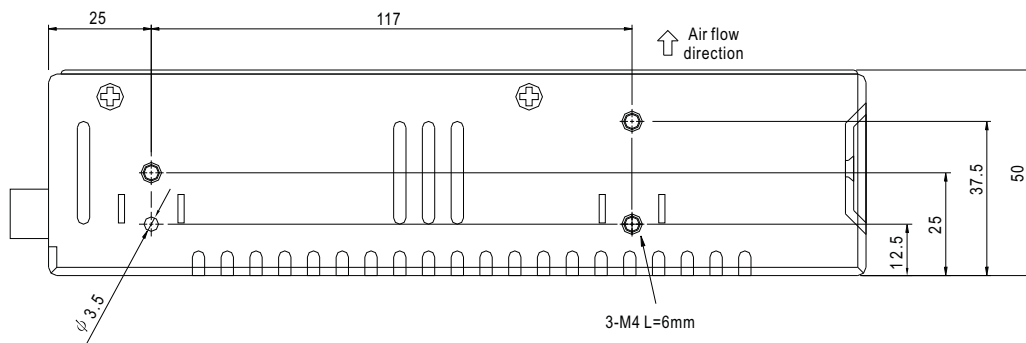
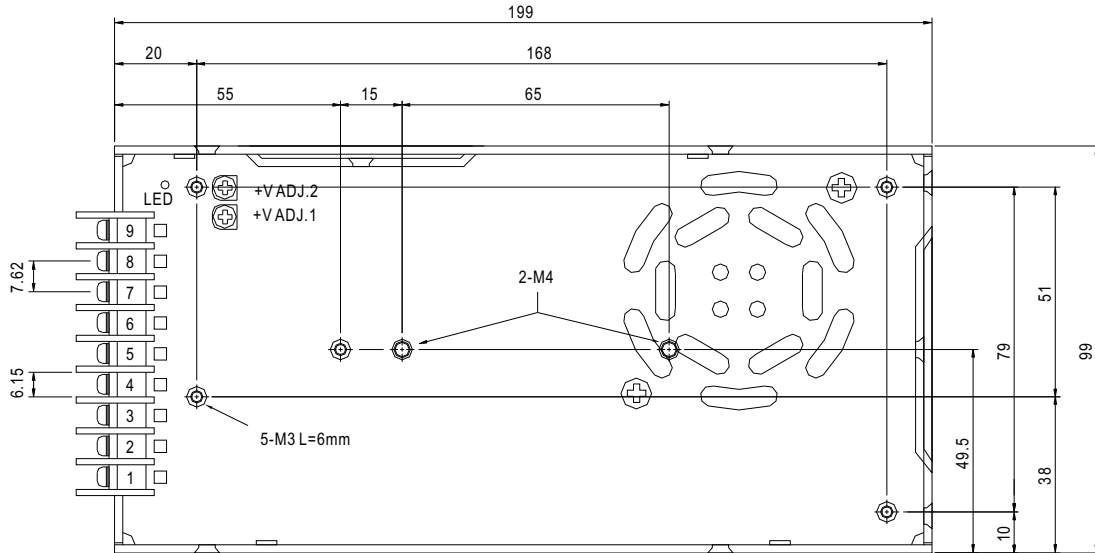


### SPECIFICATION

MODEL		TP-150A			TP-150B			TP-150C			TP-150D		
OUTPUT	DC VOLTAGE	5V	12V	-5V	5V	12V	-12V	5V	15V	-15V	5V	24V	12V
	RATED CURRENT	15A	6A	0.6A	15A	5.5A	0.6A	15A	4.5A	0.6A	15A	3A	0.6A
	CURRENT RANGE	2 ~ 20A	0.4 ~ 7A	0 ~ 1A	2 ~ 20A	0.4 ~ 7A	0 ~ 1A	2 ~ 20A	0.4 ~ 6A	0 ~ 1A	2 ~ 20A	0.4 ~ 4A	0 ~ 1A
	RATED POWER	150W			148.2W			151.5W			154.2W		
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	100mVp-p	100mVp-p	120mVp-p	100mVp-p	100mVp-p	150mVp-p	100mVp-p	100mVp-p	150mVp-p	100mVp-p
	VOLTAGE ADJ. RANGE	CH1: 4.75 ~ 5.5V											
	VOLTAGE TOLERANCE Note.3	±3.0%	±8.0%	±6.0%	±3.0%	±8.0%	±6.0%	±3.0%	+10,-6%	±6.0%	±3.0%	±8.0%	±6.0%
	LINE REGULATION	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±3.0%	±6.0%	±4.0%	±3.0%	±6.0%	±4.0%	±3.0%	±6.0%	±4.0%	±3.0%	±6.0%	±4.0%
SETUP, RISE, HOLD TIME	800ms, 60ms, 20ms/230VAC      800ms, 60ms, 20ms/115VAC at full load												
INPUT	VOLTAGE RANGE	90 ~ 264VAC      127 ~ 370VDC											
	FREQUENCY RANGE	47 ~ 63Hz											
	POWER FACTOR	PF>0.94/230VAC      PF>0.98/115VAC at full load											
	EFFICIENCY (Typ.)	75%			77%			77%			78%		
	AC CURRENT	2.5A/115VAC      1.2A/230VAC											
	INRUSH CURRENT (max.)	COLD START ≤45A/230V											
	LEAKAGE CURRENT	<3.5mA / 240VAC											
PROTECTION	OVER LOAD	105 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed											
	OVER VOLTAGE	5.75 ~ 6.75V on +5V Protection type : Shut down o/p voltage, re-power on to recover											
	OVER TEMPERATURE(OPTION)	95°C ±5°C (TSW1) Protection type : Shut down o/p voltage, recovers automatically after temperature goes down											
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to output load derating curve)											
	WORKING HUMIDITY	20 ~ 90% RH non-condensing											
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH											
	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)											
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes											
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL1950, TUV EN60950 Approved											
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC    I/P-FG:1.5KVAC    O/P-FG:0.5KVAC 1min.											
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC											
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B											
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3											
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A											
OTHERS	MTBF	161.6K hrs min.    MIL-HDBK-217F (25°C)											
	DIMENSION	199*99*50mm (L*W*H)											
	PACKING	0.8Kg; 20pcs/16Kg/1.28CUFT											
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF &amp; 47uF parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. 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.</li> </ol>												

**Mechanical Specification**

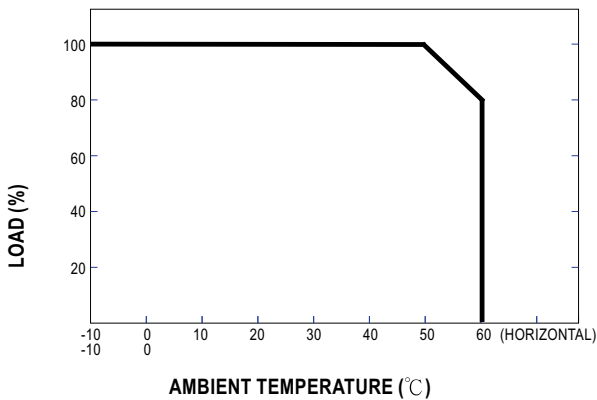
Case No. 916B Unit:mm



Terminal Pin No. Assignment :

Pin No.	Assignment	Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4	DC OUTPUT V3	8,9	DC OUTPUT COM
2	AC/N	5	DC OUTPUT V2		
3	FG $\perp$	6,7	DC OUTPUT V1		

**Derating Curve**



**Output Derating VS Input Voltage**

