MEAN WELL

75W Triple Output with PFC Function

TP-75 series



Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage
- Low profile: 33mm thickness
- LED indicator for power on
- Cooling by free air convection
- Fixed switching frequency at PFC:67KHz PWM:134KHz
- 3 years warranty

SPECIFICATION

MODEL		TP-75A			TP-75B			TP-75C		
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH3	CH1	CH2	CH3	CH1	CH2	CH3
	DC VOLTAGE	5V	12V	-5V	5V	12V	-12V	5V	15V	-15V
	RATED CURRENT	7A	3A	0.6A	7A	3A	0.4A	6A	2.5A	0.5A
	CURRENT RANGE	1.5 ~ 10A	0.2 ~ 4A	0 ~ 0.6A	1.5 ~ 10A	0.2 ~ 4A	0 ~ 0.6A	1.5 ~ 10A	0.2 ~ 3A	0 ~ 0.6A
	RATED POWER	74W			75.8W			75W		
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	100mVp-p	100mVp-p	120mVp-p	120mVp-p	100mVp-p	120mVp-p	120mVp-p
	VOLTAGE ADJ. RANGE	CH1: 4.75 ~ 5.5V								
	VOLTAGE TOLERANCE Note.3	±3.0%	±4.0%	±8.0%	±3.0%	±4.0%	±8.0%	±3.0%	±4.0%	±8.0%
	LINE REGULATION	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±3.0%	±4.0%	±8.0%	±3.0%	±4.0%	±8.0%	±3.0%	±4.0%	±8.0%
	SETUP, RISE TIME	800ms, 60ms at full load								
	HOLD UP TIME (Typ.)	36ms at full load								
INPUT	VOLTAGE RANGE Note.5	90 ~ 264VAC 127 ~ 370VDC								
	FREQUENCY RANGE	47 ~ 63Hz								
	POWER FACTOR (Typ.)	PF>0.95/230VAC PF>0.98/115VAC at full load								
	EFFICIENCY (Typ.)	70%								
	AC CURRENT (Typ.)	1.5A/115VAC 0.8A/115VAC								
	INRUSH CURRENT (Typ.)	COLD START 20A/230VAC								
	LEAKAGE CURRENT	<2mA / 240VAC								
PROTECTION	OVERLOAD	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								
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to output load derating curve)								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes								
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 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 / 25℃/ 70% RH								
	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	198.4K hrs min. MIL-HDBK-217F (25℃)								
	DIMENSION	179*99*33mm (L*W*H)								
	PACKING	0.65Kg; 20pcs/12.7Kg/0.64CUFT								
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ 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. 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) 5. Derating may be needed under low input voltages. Please check the derating curve for more details.									

MEAN WELL

75W Triple Output with PFC Function

TP-75 series



■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload/ Over voltage
- Low profile: 33mm thickness
- LED indicator for power on
- Cooling by free air convection
- Fixed switching frequency at PFC:67KHz PWM:134KHz
- 3 years warranty

SPECIFICATION

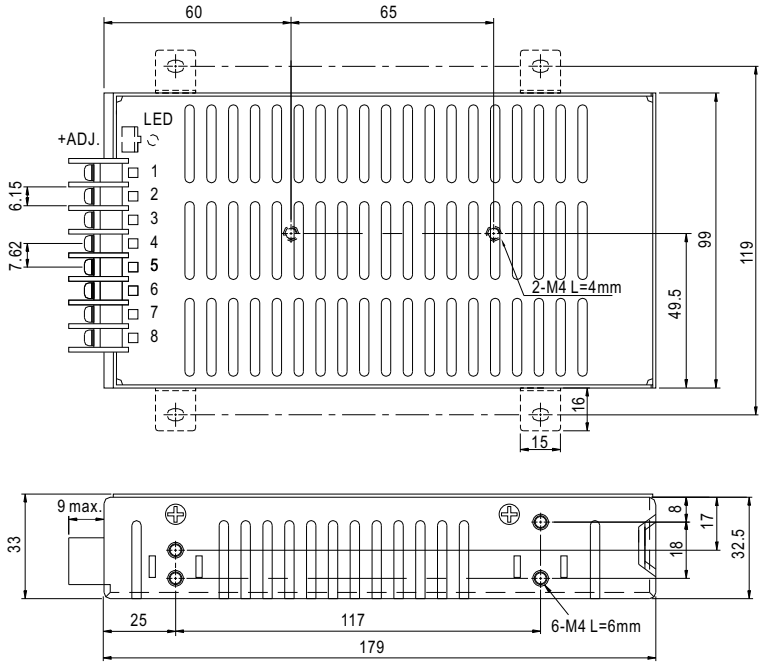
MODEL		TP-75D			TP-7503		
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH3	CH1	CH2	CH3
	DC VOLTAGE	5V	24V	12V	5V	3.3V	12V
	RATED CURRENT	7A	1.5A	0.4A	9A	8A	0.3A
	CURRENT RANGE	1.5 ~ 10A	0.2 ~ 2.5A	0 ~ 0.6A	1.5 ~ 10A	0.2 ~ 8A	0 ~ 0.6A
	RATED POWER	75.8W			75W		
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	120mVp-p	100mVp-p	50mVp-p	120mVp-p
	VOLTAGE ADJ. RANGE	CH1: 4.75 ~ 5.5V					
	VOLTAGE TOLERANCE Note.3	±3.0%	±4.0%	±8.0%	±3.0%	±4.0%	±8.0%
	LINE REGULATION	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±3.0%	±4.0%	±8.0%	±3.0%	±4.0%	±8.0%
	SETUP, RISE TIME	800ms, 60ms at full load					
	HOLD UP TIME (Typ.)	36ms at full load					
INPUT	VOLTAGE RANGE Note.5	90 ~ 264VAC 127 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR	PF>0.95/230VAC PF>0.98/115VAC at full load					
	EFFICIENCY (Typ.)	70%					
	AC CURRENT	1.5A/115VAC 0.8A/115VAC					
	INRUSH CURRENT (max.)	COLD START 20A/230VAC					
	LEAKAGE CURRENT	<2mA / 240VAC					
PROTECTION	OVERLOAD	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					
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to output load derating curve)					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 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 / 25℃/ 70% RH					
	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	198.4K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	179*99*33mm (L*W*H)					
	PACKING	0.65Kg; 20pcs/12.7Kg/0.64CUFT					

NOTE

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ 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. 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)
5. Derating may be needed under low input voltages. Please check the derating curve for more details.

■ Mechanical Specification

Case No. 920A Unit:mm

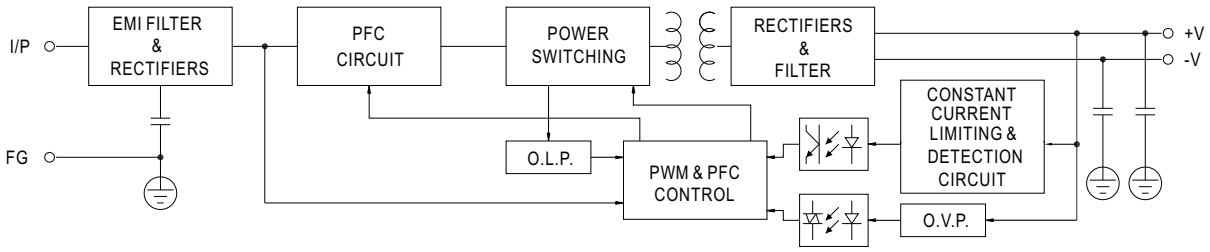


Terminal Pin No. Assignment

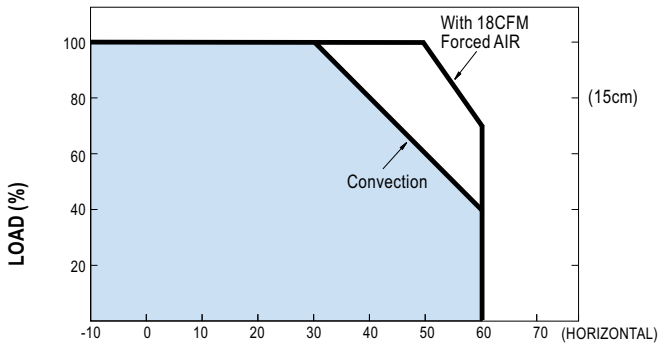
Pin No.	Assignment	Pin No.	Assignment
1	DC OUTPUT +V2	6	FG ⏚
2,3	COM	7	AC/N
4	DC OUTPUT +V1	8	AC/L
5	DC OUTPUT +V3		

■ Block Diagram

PFC fosc : 67KHz
PWM fosc : 134KHz

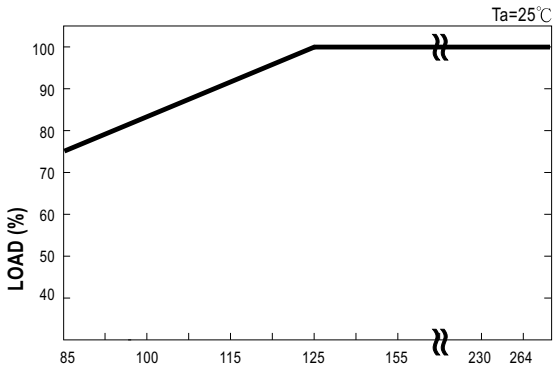


■ Derating Curve



AMBIENT TEMPERATURE (℃)

■ Output Derating VS Input Voltage



INPUT VOLTAGE (VAC) 60Hz