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.4	90 ~ 264VAC 127 ~ 370VDC								
	FREQUENCY RANGE	47 ~ 63Hz								
	POWER FACTOR (Typ.)	PF>0.95/230VAC PF>0.97/115VAC at full load								
	EFFICIENCY (Typ.)	70%								
	AC CURRENT (Typ.)	1.5A/115VAC 0.8A/230VAC								
	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 "Derating Curve")								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH non-condensing								
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes								
SAFETY & EMC (Note 5)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved								
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC 1min.								
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃/ 70% RH								
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3								
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, 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. Derating may be needed under low input voltages. Please check the derating curve for more details.
5. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. 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)
6. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).

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

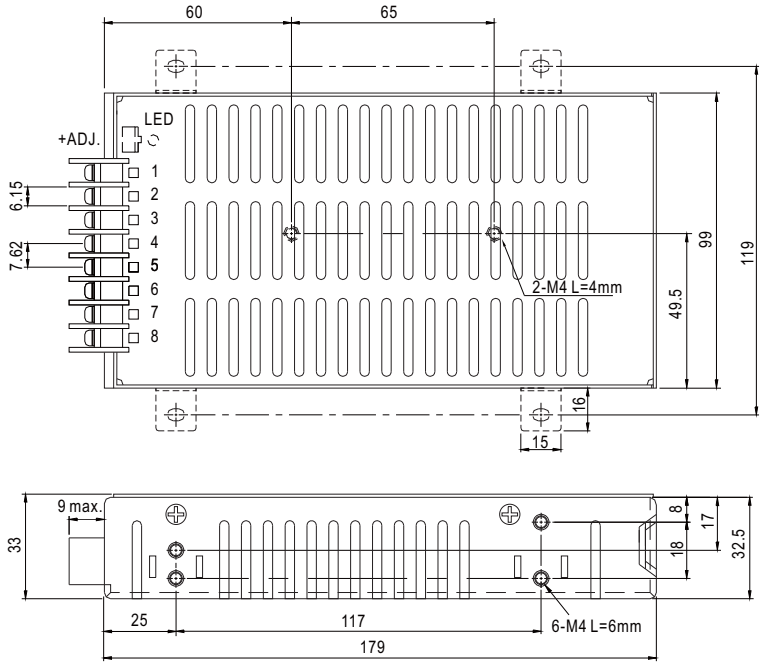
MODEL		TP-75D			TP-7503		
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH3	CH1	CH2	CH3
	DC VOLTAGE	5V	24V	12V	5V	3.3V	12V
	RATED CURRENT	7A	1.5A	0.4A	9A	8A	0.3A
	CURRENT RANGE	1.5 ~ 10A	0.2 ~ 2.5A	0 ~ 0.6A	1.5 ~ 10A	0.2 ~ 8A	0 ~ 0.6A
	RATED POWER	75.8W			75W		
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	120mVp-p	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.4	90 ~ 264VAC 127 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)	PF>0.95/230VAC PF>0.97/115VAC at full load					
	EFFICIENCY (Typ.)	70%					
	AC CURRENT (Typ.)	1.5A/115VAC 0.8A/230VAC					
	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 "Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH non-condensing					
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
SAFETY & EMC (Note 5)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved					
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC 1min.					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃/ 70% RH					
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3					
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, 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. Derating may be needed under low input voltages. Please check the derating curve for more details.
5. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. 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)
6. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).

■ Mechanical Specification

Case No. 920A Unit:mm

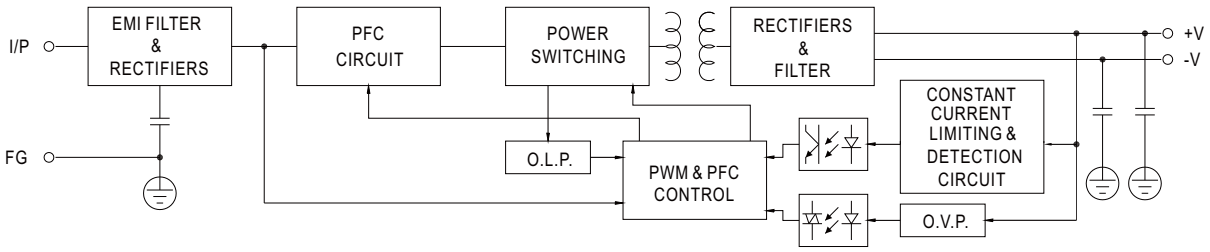


Terminal Pin No. Assignment

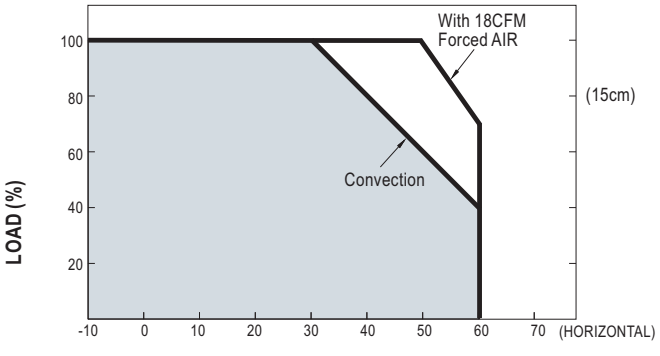
Pin No.	Assignment	Pin No.	Assignment
1	DC OUTPUT +V2	6	FG ⏚
2,3	COM	7	AC/N
4	DC OUTPUT +V1	8	AC/L
5	DC OUTPUT +V3		

■ Block Diagram

PFC fosc : 67KHz
PWM fosc : 134KHz

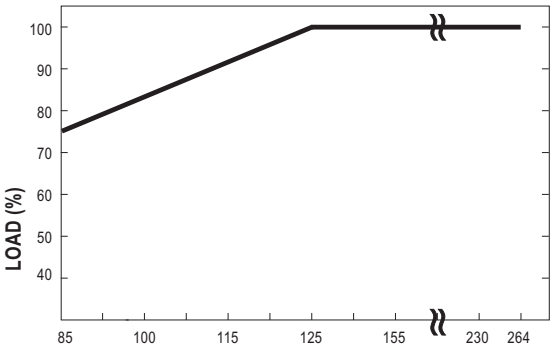


■ Derating Curve



AMBIENT TEMPERATURE (℃)

■ Output Derating VS Input Voltage



INPUT VOLTAGE (VAC) 60Hz