75W Single Output with PFC Function

SP-75 series

Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.93
- Protections: Short circuit / Overload / Over voltage
- Built-in constant current limiting circuit
- Low profile: 33mm thickness
- LED indicator for power on
- 100% full load burn-in test
- Fixed switching frequency at PFC:67KHz PWM:134KHz
- 3 years warranty

SPECIFICATION

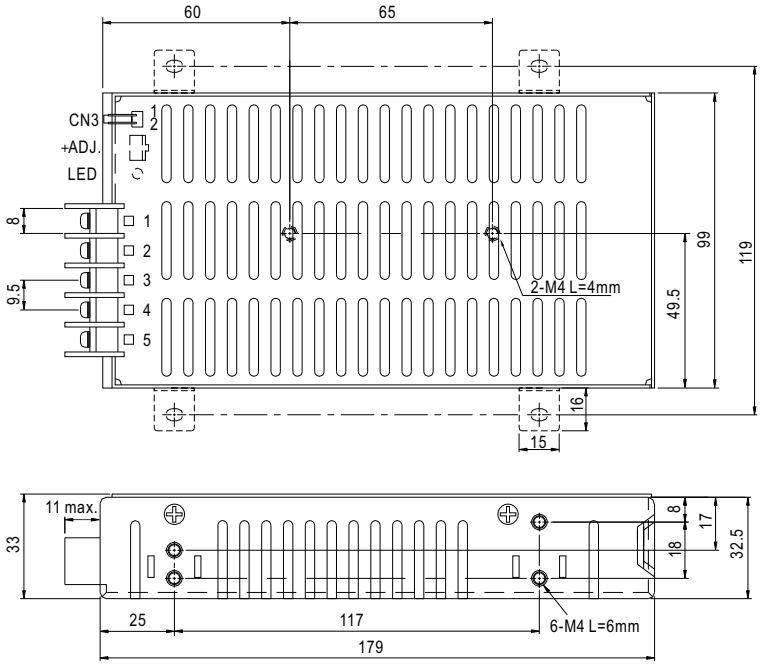
MODEL		SP-75-3.3	SP-75-5	SP-75-7.5	SP-75-12	SP-75-13.5	SP-75-15	SP-75-24	SP-75-27	SP-75-48
OUTPUT	DC VOLTAGE	3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48V
	RATED CURRENT	15A	15A	10A	6.3A	5.6A	5A	3.2A	2.8A	1.6A
	CURRENT RANGE	0 ~ 15A	0 ~ 15A	0 ~ 10A	0 ~ 6.3A	0 ~ 5.6A	0 ~ 5A	0 ~ 3.2A	0 ~ 2.8A	0 ~ 1.6A
	RATED POWER	49.5W	75W	75W	75.6W	75.6W	75W	76.8W	75.6W	76.8W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	80mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	100mVp-p	100mVp-p
	VOLTAGE ADJ. RANGE	3.14 ~ 3.63V	4.75 ~ 5.5V	7.13 ~ 8.25V	11.4 ~ 13.2V	12.8 ~ 14.9V	14.3 ~ 16.5V	22.8 ~ 26.4V	25.7 ~ 29.7V	45.6 ~ 52.8V
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	600ms, 60ms at full load								
	HOLD UP TIME (Typ.)	36ms at full load								
INPUT	VOLTAGE RANGE Note.5	85 ~ 264VAC 120 ~ 370VDC								
	FREQUENCY RANGE	47 ~ 63Hz								
	POWER FACTOR (Typ.)	PF>0.93/230VAC 0.96/115VAC at full load								
	EFFICIENCY (Typ.)	68%	72%	74%	77%	78%	79%	80%	80%	80%
	AC CURRENT (Typ.)	1.3A/115VAC 0.7A/230VAC								
	INRUSH CURRENT (Typ.)	COLD START 30A/230VAC								
	LEAKAGE CURRENT	<2mA / 240VAC								
PROTECTION	OVERLOAD	105 ~ 150% rated output power								
		Protection type : Constant current limiting, recovers automatically after fault condition is removed								
	OVER VOLTAGE	3.8 ~ 4.46V	5.75 ~ 6.75V	8.63 ~ 10.13V	13.8 ~ 16.2V	15.53 ~ 18.23V	17.25 ~ 20.25V	27.6 ~ 32.4V	31.05 ~ 36.45V	55.2 ~ 64.8V
		Protection type : Shut down o/p voltage, re-power on to recover								
FUNCTION	REMOTE CONTROL(OPTION)	CN3:4 ~ 10VDC POWER OFF, <0 ~ 0.8VDC POWER ON								
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to "Derating Curve")								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.05%/℃ (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								
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃/ 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, light industry level, criteria A								
OTHERS	MTBF	208.8K hrs min. MIL-HDBK-217F (25℃)								
	DIMENSION	179*97*33mm (L*W*H)								
	PACKING	0.58Kg; 20pcs/12Kg/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

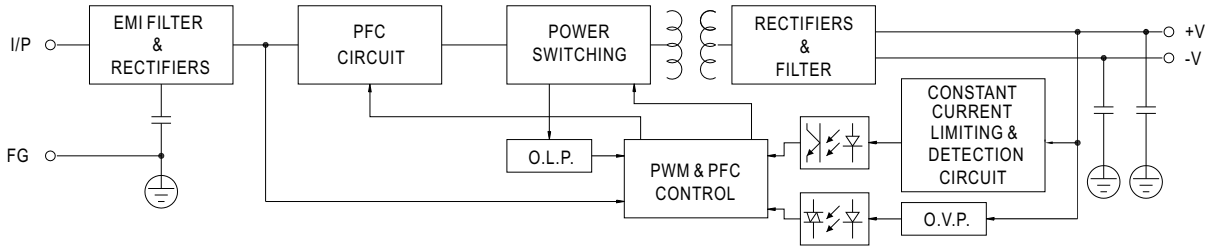
Pin No.	Assignment	Pin No.	Assignment
1	DC OUTPUT +V	4	AC/N
2	DC OUTPUT -V	5	AC/L
3	FG ⏚		

Remote ON/OFF(CN3): Molex 5046-02 or equivalent(optional)

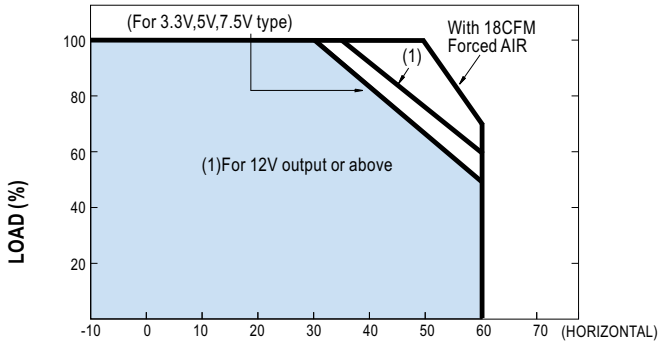
Pin No.	Assignment	Mating Housing	Terminal
1	RC-	Molex 5051 or equivalent	Molex 2759 or equivalent
2	RC+		

■ Block Diagram

PFC fosc : 67KHz
PWM fosc : 134KHz

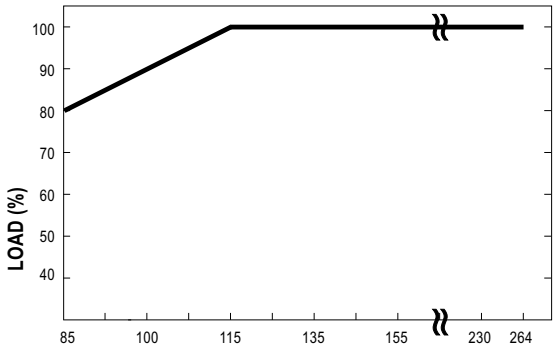


■ Derating Curve



AMBIENT TEMPERATURE (℃)

■ Output Derating VS Input Voltage



INPUT VOLTAGE (VAC) 60Hz