



MEAN WELL

SWITCHING POWER SUPPLY

ISO-9001 CERTIFIED MANUFACTURER

SP-75 SERIES

- .LOW COST, HIGH RELIABILITY
- .105°C OUTPUT CAPACITOR
- .INTERNATIONAL AC INPUT RANGE
- .REMOTE CONTROL (OPTION)
- .HIGH EFFICIENCY, LOW WORKING TEMPERATURE
- .SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
- .SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE PROTECTED

- .COMPACT SIZE, LIGHT WEIGHT
- .100% FULL LOAD BURN-IN TEST
- .BUILT IN EMI FILTER, LOW RIPPLE NOISE
- .BUILT IN PFC CIRCUIT



| 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 |
|---------------------------|--|-------------|---------------|--------------|----------------|--------------|--------------|--------------|--------------|
| DC OUTPUT VOLTAGE | 3.3V | 5V | 7.5V | 12V | 13.5V | 15V | 24V | 27V | 48V |
| OUTPUT V. TOLERANCE | ±2% | ±2% | ±2% | ±2% | ±2% | ±2% | ±1% | ±1% | ±1% |
| OUTPUT RATED CURRENT | 15A | 15A | 10A | 6.3A | 5.6A | 5A | 3.2A | 2.8A | 1.6A |
| OUTPUT CURRENT | 0-15A | 0-15A | 0-10A | 0-6.3A | 0-5.6A | 0-5A | 0-3.2A | 0-2.8A | 0-1.6A |
| RIPPLE & NOISE | 80mV | 80mV | 80mV | 80mV | 80mV | 80mV | 100mV | 100mV | 100mV |
| LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| LOAD REGULATION | ±1% | ±1% | ±1% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| RATED OUTPUT POWER | 49.5W | 75W | 75W | 75.6W | 75.6W | 75W | 76.8W | 75.6W | 76.8W |
| EFFICIENCY | 68% | 72% | 74% | 77% | 78% | 79% | 80% | 80% | 80% |
| DC VOLTAGE ADJ. | +10,-5% | | | | | | | | |
| INPUT VOLTAGE RANGE | 85~264VAC 47~63Hz 120~370VDC | | | | | | | | |
| AC CURRENT | 1.3A/115V 0.7A/230V | | | | | | | | |
| INRUSH CURRENT | COLD START 40A/230V | | | | | | | | |
| LEAKAGE CURRENT | <2mA/240VAC | | | | | | | | |
| OVERLOAD PROTECTION | 105~150% TYPE:CONSTANT CURRENT LIMITING RESET:AUTO RECOVERY | | | | | | | | |
| OVER VOLTAGE PROTECTION | 115%~135% TYPE:SHUTDOWN RESET:RE POWER ON | | | | | | | | |
| TEMP. COEFFICIENT | ±0.05% / °C (0~50°C) | | | | | | | | |
| SETUP, RISE, HOLD UP TIME | 600ms, 60ms, 20ms | | | | | | | | |
| POWER FACTOR | PF>0.93/230VAC, PF>0.96/115VAC | | | | | | | | |
| REMOTE CONTROL (OPTION) | CN3:3V-15VDC POWER OFF, <3VDC POWER ON | | | | | | | | |
| VIBRATION | 10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES | | | | | | | | |
| 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:500VDC / 100M Ohms | | | | | | | | |
| WORKING TEMP., HUMIDITY | -10°C~+60°C(REFER TO OUTPUT DERATING CURVE), 20%~90% RH | | | | | | | | |
| STORAGE TEMP., HUMIDITY | -20°C~+85°C, 10%~95% RH | | | | | | | | |
| DIMENSION | 179* 97* 33mm (L*W*H) CASE:920A | | | | | | | | |
| WEIGHT | 550gs | | | | | | | | |
| SAFETY STANDARDS | UL1950, TUV EN60950 APPROVED | | | | | | | | |
| EMC STANDARDS | CISPR22 (EN55022) CLASS B, EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61000-3-2,-3 VERIFICATION | | | | | | | | |

NOTE :
 1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25°C AMBIENT.
 2.TOLERANCE INCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
 3.RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
 4.LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.

2001-10-29

[NEXT \(MECHANICAL INFO\)](#)



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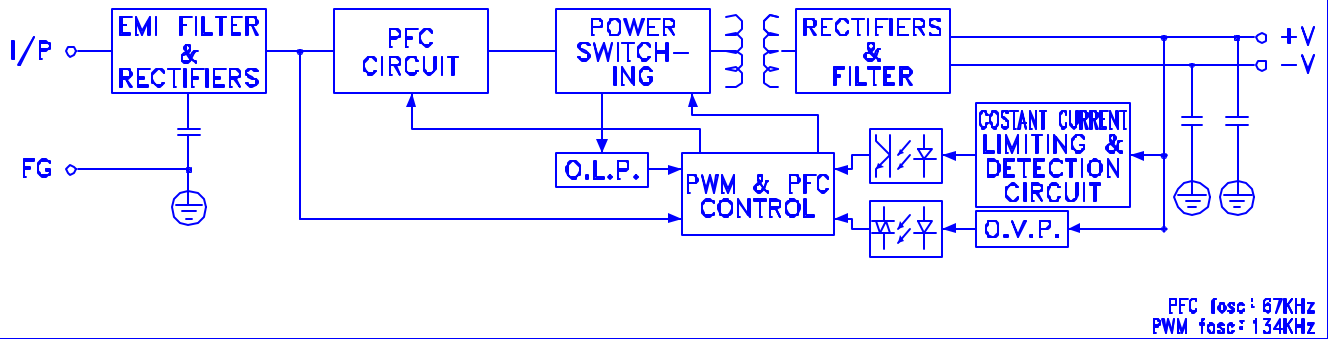
SP-75P SERIES

- .LOW COST, HIGH RELIABILITY
- .105°C OUTPUT CAPACITOR
- .INTERNATIONAL AC INPUT RANGE
- .HIGH EFFICIENCY, LOW WORKING TEMPERATURE
- .SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
- .SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE PROTECTED
- .COMPACT SIZE, LIGHT WEIGHT
- .100% FULL LOAD BURN-IN TEST
- .BUILT IN EMI FILTER, LOW RIPPLE NOISE
- .BUILT IN PFC CIRCUIT
- .REMOTE CONTROL (OPTION)

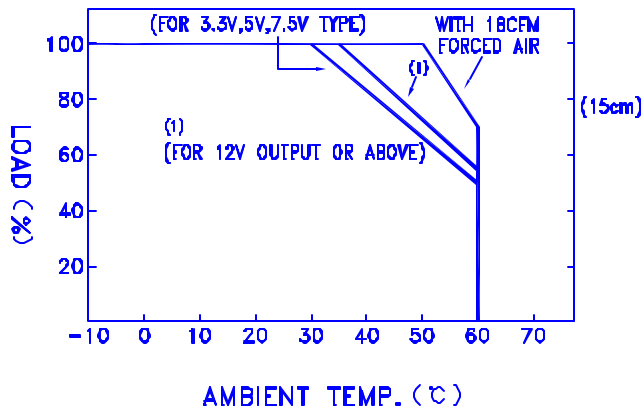
| MODEL | SP-75P -3.3 | SP-75P -5 | SP-75P -7.5 | SP-75P -12 | SP-75P -13.5 | SP-75P -15 | SP-75P -24 | SP-75P -27 | SP-75P -48 |
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| LOAD REGULATION | ±1% | ±1% | ±1% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| RATED OUTPUT POWER | 49.5W | 75W | 75W | 75.6W | 75.6W | 75W | 76.8W | 75.6W | 76.8W |
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| WORKING TEMP., HUMIDITY | -10°C~+60°C(REFER TO OUTPUT DERATING CURVE), 20%~90% RH | | | | | | | | |
| STORAGE TEMP., HUMIDITY | -20°C~+85°C, 10%~95% RH | | | | | | | | |
| DIMENSION | 173* 91* 31mm (L*W*H) | | | | | | | | |
| WEIGHT | 350gs | | | | | | | | |
| SAFETY STANDARDS | UL1950, TUV EN60950 APPROVED | | | | | | | | |
| EMC STANDARDS | CISPR22 (EN55022) CLASS B, EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61000-3-2,-3 VERIFICATION | | | | | | | | |

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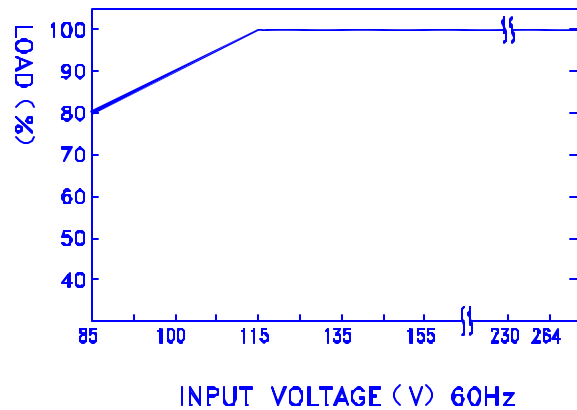
BLOCK DIAGRAM



OUTPUT DERATING VS T_a

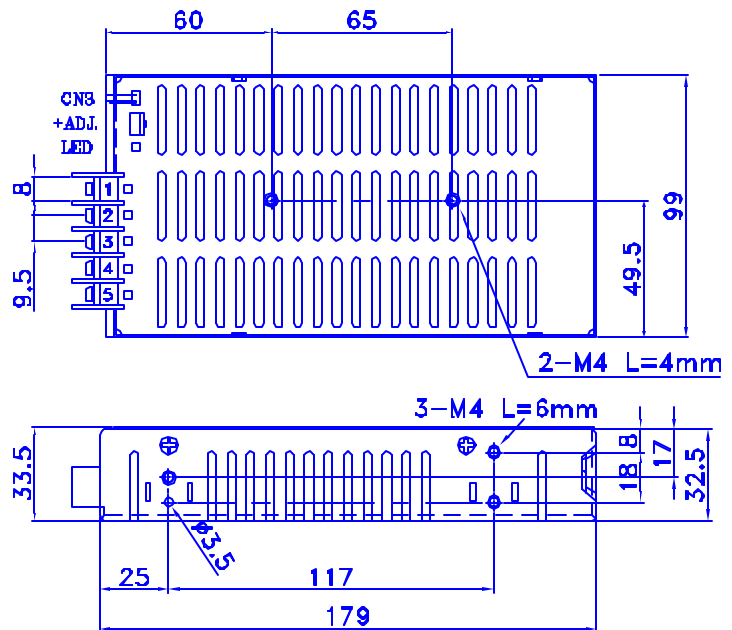


OUTPUT DERATING VS INPUT VOLTAGE



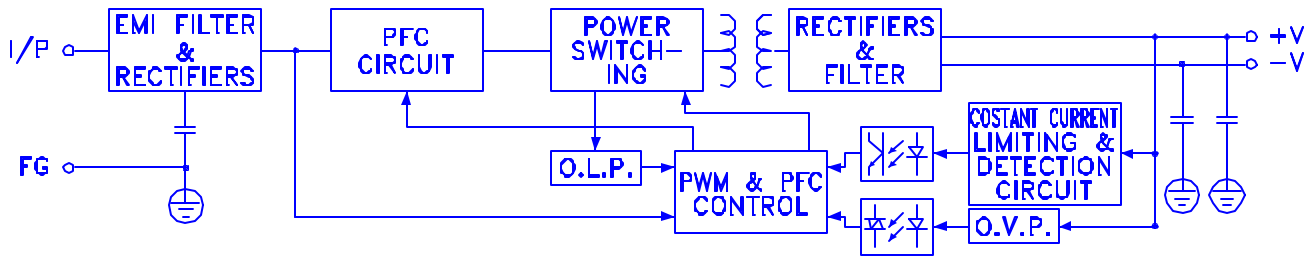
DIMENSION (mm)

- ☒ CASE 920A
- ☒ TERMINAL PIN NO. ASSIGNMENT
 - ☒ CN3: MOLEX 5046-02 COMPATIBLE REMOTE CONTROL (OPTION)
 - ☒ PIN 1 : DC OUTPUT +V
 - ☒ PIN 2 : DC OUTPUT -V
 - ☒ PIN 3 : FG
 - ☒ PIN 4,5 : AC INPUT
- ☒ MATING CONNECTORS
 - ☒ CN3 MATING CONNECTOR TYPE MOLEX 5051 OR 5102 SERIES OR EQUIVALENT WITH MOLEX 2759 AND 5103 OR QUIVALENT CRIMP TERMINALS.



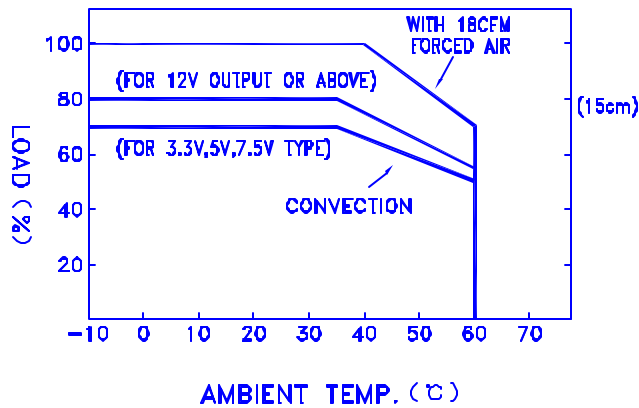
SP-75P SERIES

BLOCK DIAGRAM

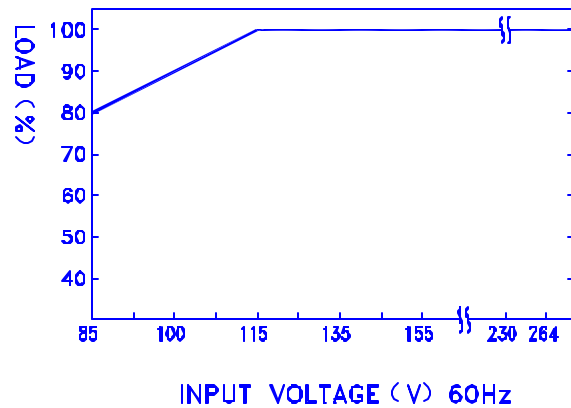


PFC fosc: 67KHz
PWM fosc: 134KHz

OUTPUT DERATING VS T_d



OUTPUT DERATING VS INPUT VOLTAGE



DIMENSION (mm)

☒ TERMINAL PIN NO. ASSIGNMENT

- ☒ PIN 1 : DC OUTPUT +V
- ☒ PIN 2 : DC OUTPUT -V
- ☒ PIN 3 : FG \perp
- ☒ PIN 4,5 : AC INPUT

☒ TERMINAL PIN NO. ASSIGNMENT

- ☒ CN3 : REMOTE CONTROL (OPTION)
- MOLEX 5046-02 COMPATIBLE

☒ MATING CONNECTORS

- ☒ CN3 MATING CONNECTOR TYPE
- MOLEX 5051 OR 5102 SERIES OR
- EQUIVALENT WITH MOLEX 2759
- AND 5103 OR QUIVALENT CRIMP
- TERMINALS.

