



# MEAN WELL

## SWITCHING POWER SUPPLY

ISO-9001 CERTIFIED MANUFACTURER

## SP-200 SERIES

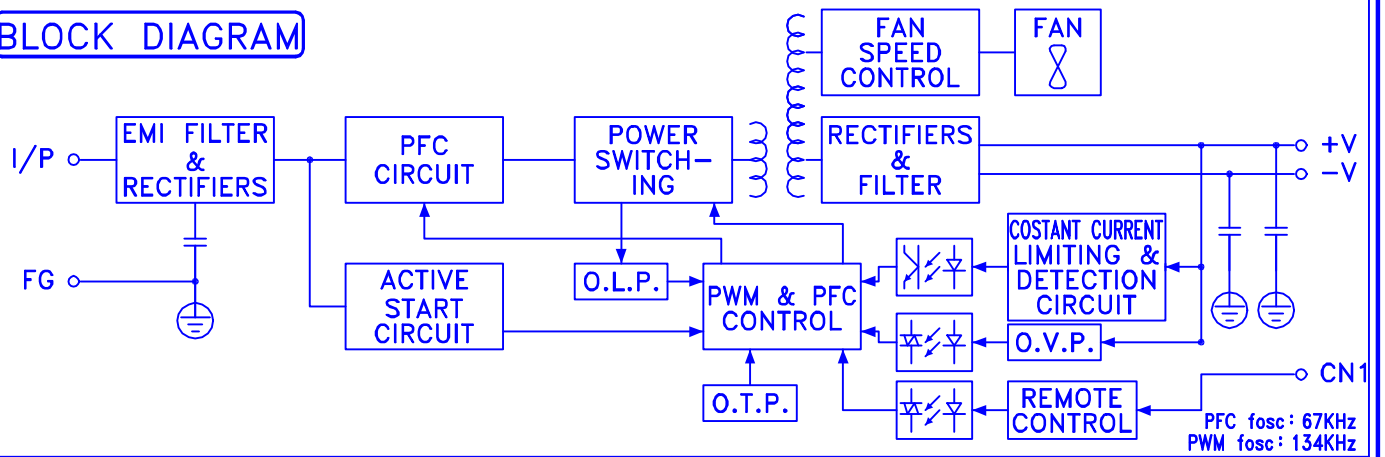
- .LOW COST, HIGH RELIABILITY
- .105°C OUTPUT CAPACITOR
- .INTERNATIONAL AC INPUT RANGE
- .HIGH EFFICIENCY, LOW WORKING TEMPERATURE
- .SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
- .SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE
- .FAN SPEED CONTROL (DEPEND ON LOADING & WORKING TEMPERATURE)
- .COMPACT SIZE,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



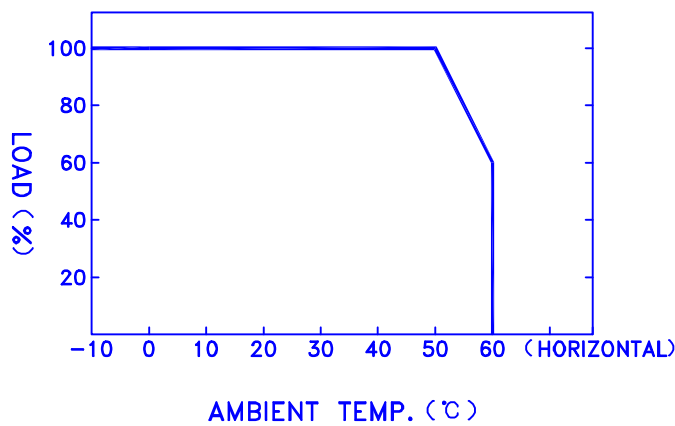
SPECIFICATION	MODEL	SP-200 -3.3	SP-200 -5	SP-200 -7.5	SP-200 -12	SP-200 -13.5	SP-200 -15	SP-200 -24	SP-200 -27	SP-200 -48
DC OUTPUT VOLTAGE		3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48V
OUTPUT V. TOLERANCE		±2%	±2%	±2%	±2%	±2%	±2%	±1%	±1%	±1%
OUTPUT RATED CURRENT		40A	40A	26.7A	16.7A	14.9A	13.4A	8.4A	7.5A	4.2A
OUTPUT CURRENT		0-40A	0-40A	0-26.7A	0-16.7A	0-14.9A	0-13.4A	0-8.4A	0-7.5A	0-4.2A
RIPPLE & NOISE		100mV	100mV	100mV	100mV	100mV	100mV	150mV	150mV	250mV
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		132W	200W	200.2W	200.4W	201.1W	201W	201.6W	202.5W	201.6W
EFFICIENCY		65%	71%	76%	79%	80%	81%	83%	83%	84%
DC VOLTAGE ADJ.		+10,-5%								
INPUT VOLTAGE RANGE		85-264VAC 47-63Hz 120-370VDC								
AC CURRENT		2.8A/115V 1.4A/230V		3.3V: 2A/115V 1.0A/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		110%-135% TYPE:SHUTDOWN RESET:RE POWER ON								
OVER TEMP. PROTECTION		95°C±5°C (TSW1) TYPE:SHUTDOWN RESET:AUTO RECOVERY								
REMOTE CONTROL (OPTION)		CN1: 3 -15VDC POWER ON, <1VDC POWER OFF								
TEMP. COEFFICIENT		±0.05% / °C (0-50°C)								
SETUP, RISE, HOLD UP TIME		600ms, 30ms, 20ms								
POWER FACTOR		PF>0.93/230VAC, PF>0.98/115VAC								
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		199*99*50mm (L*W*H)		CASE:916B						
WEIGHT		800gs								
SAFETY STANDARDS		UL1950, TUV EN60950, S-MARK 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.

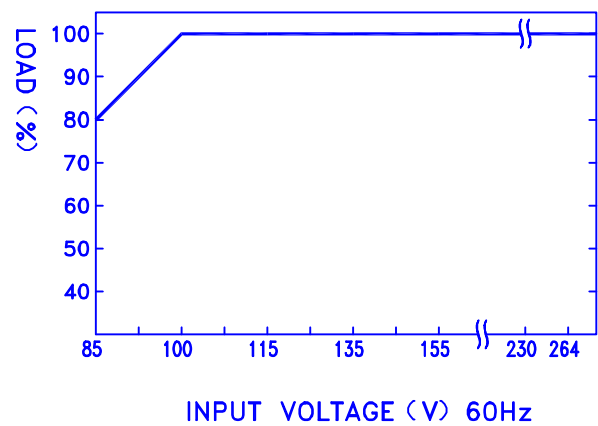
## BLOCK DIAGRAM



## OUTPUT DERATING VS $T_a$



## OUTPUT DERATING VS INPUT VOLTAGE



## DIMENSION (mm)

- ☒ CASE : 916B
- ☒ TERMINAL PIN NO. ASSIGNMENT
  - ☒ PIN 1,2 : AC INPUT
  - ☒ PIN 3 : FG  $\perp$
  - ☒ PIN 4,5 : DC OUTPUT -V
  - ☒ PIN 6,7 : DC OUTPUT +V
  - ☒ CN1 : REMOTE CONTROL (OPTION)  
(JST S2B-XH COMPATIBLE)

