



- Universal AC input
- Protections: Short circuit/Over load/Over voltage/Over temperature
- Built-in active PFC function, PF >0.93
- Built-in cooling fan speed control
- Built-in constant current limiting circuit
- Remote ON-OFF control (optional)
- Built-in fan speed control
- Fixed switching frequency at PFC: 67KHz PWM: 134KHz
- LED indicator for power on



Model Number	Output Volts	Output Amps	OVP	Min Load	DC Volt Adjust	Efficiency
SINGLE OUTPUT						
SP200-3.3	3.3 Volts(DC)	40 Amps	3.63 ~ 4.46Volt(DC)	0~40Amps	3.14~3.63Volt(DC)	65%
SP200-5	5 Volts(DC)	40 Amps	5.5 ~ 6.75Volt(DC)	0~40Amps	4.75~5.5Volt(DC)	71%
SP200-7.5	7.5 Volts(DC)	26.7 Amps	8.25 ~ 10.13Volt(DC)	0~26.7Amps	7.13~8.25Volt(DC)	76%
SP200-12	12 Volts(DC)	16.7 Amps	13.2 ~ 16.2Volt(DC)	0~16.7Amps	11.4~13.2Volt(DC)	79%
SP200-13.5	13.5 Volts(DC)	14.9 Amps	14.85 ~ 18.2Volt(DC)	0~14.9Amps	12.8~14.9Volt(DC)	80%
SP200-15	15 Volts(DC)	13.4 Amps	16.5 ~ 20.25Volt(DC)	0~13.4Amps	14.3~16.5Volt(DC)	81%
SP200-24	24 Volts(DC)	8.4 Amps	26.4~ 32.4Volt(DC)	0~8.4Amps	22.8~26.4Volt(DC)	83%
SP200-27	27 Volts(DC)	7.5 Amps	29.7 ~ 36.45Volt(DC)	0~7.5Amps	25.7~29.7Volt(DC)	83%
SP200-48	48 Volts(DC)	4.2 Amps	52.8~ 64.8Volt(DC)	0~4.2Amps	45.6~52.8Volt(DC)	84%



200W Single Output with PFC Function

SP200 series

INPUT SPECIFICATIONS

Input Voltage Range	90 ~ 264VAC 120~370 Volts(DC)
Frequency Range	47-63 Hz
Inrush Current, typ: (cold start)	20Amps/115VAC; 40Amps 230VAC
Input Current, typ	3.5Amps @115VAC
	1.7 Amps @ 230VAC
Leakage current	< 2mAmps / 240VAC
Min Load	See Selection Chart
Power Factor @ FL	PF> 0.93 / 230VAC
	0.98 / 115VAC

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Line Regulation	±0.5%
Load Regulation	±0.1%: 3.3~7.5Volts(DC)
	±0.5%: 12~48Volts(DC)
Voltage Tolerance (Note 2)	±2.0%: 3.3;15Volts(DC)
	±1.0%: 24~48Volts(DC)
Ripple/Noise (Note 1)	100mVpk-pk: 3.3~15Volts(DC)
	150mVpk-pk: 24;27Volts(DC)
	250mVpk-pk: 48Volts(DC)
Hold Up Time (typ)	20mS @ FL
Setup, Rise Time	600mS, 30mS @ FL
Over Voltage Protection	See Selection Chart
	Shut down o/p voltage, re-power
Over Current Protection	105 ~ 150% rated output power
	Constant current limiting, auto recover
Over Temperature	95°C ±5°C TSW1: detect on
	heatsink of power transistor
	Shut down o/p voltage, auto recover
DC Volt Adjust	See Selection Chart

GENERAL SPECIFICATIONS

Safety	UL60950-1,
	TUV EN60950-1 Approved
Insulation Resistance	≥ 100MΩ / 500Volts(DC)
EMI	Compliance to EN55022 (CISPR22)
	Class B

All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

EMS	Compliance to
	EN61000-4-2,3,4,5,6,8,11
	ENV50204,EN55024,
	light Industry Level, Criteria A
Harmonic Current	Compliance to EN61000-3-2,-3
Efficiency	See Selection Chart
Isolation	
	3000VAC Input - Output
	1500VAC Input - Ground
	500VAC Output - Ground
Remote Control (option)	CN1:4~10Volts(DC) Power On
	<0~0.8Volts(DC) Power off

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-10°C to +60°C (See Derate Curve)
Storage Temperature	-20°C to +85°C, 10~95% RH
Relative Humidity	20~90% RH non cond
Temperature Coefficient	0.05% / °C (0-50°C)
MTBF	183.8KHrs min, MIL-HDBK-217F(25°C)
Vibration	10~500Hz, 2G10min./1cycle, period for
	60min. each along X, Y, Z axes

PHYSICAL SPECIFICATIONS

Size	199x99 x 50mm (7.83"x3.90"x1.97")
Weight	29.99 oz (850g)

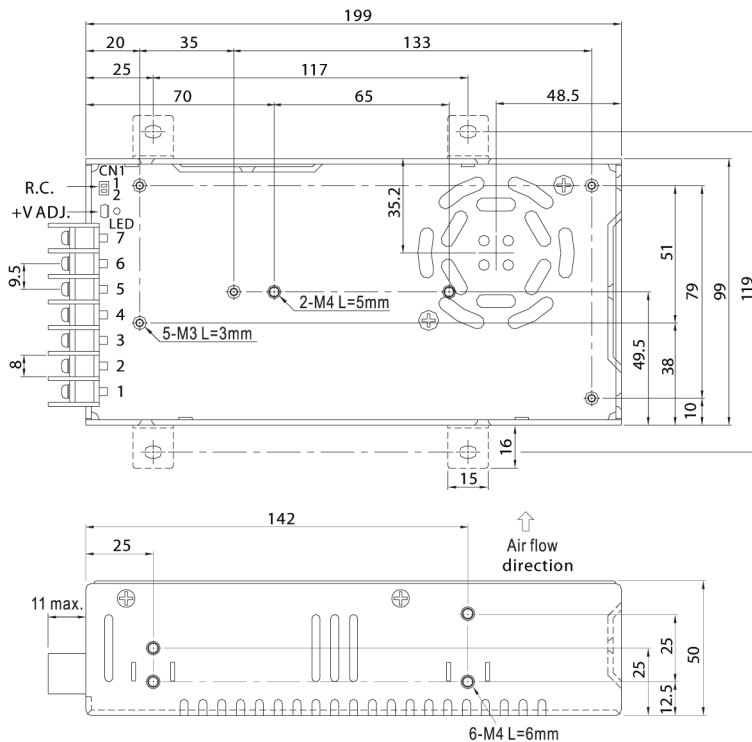
NOTE

1. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
2. Tolerance : includes set up tolerance, line regulation and load regulation.

Astrodyne products are not authorized or warranted for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.

Mechanical Specification

Case No. 916B Unit:mm



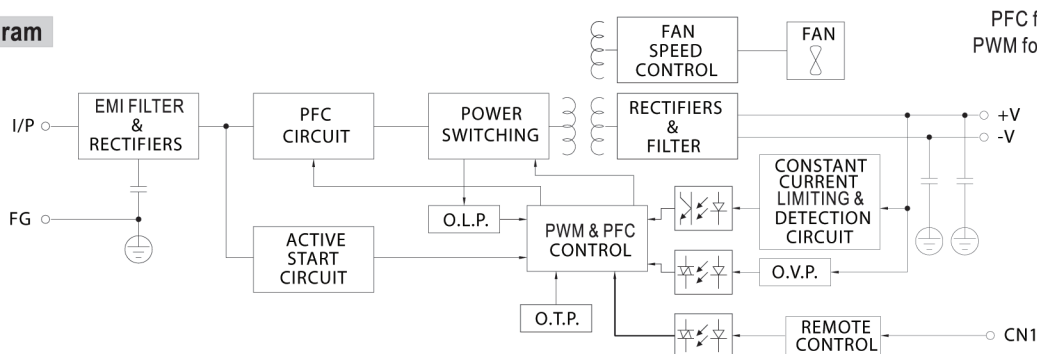
Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,5	DC OUTPUT -V
2	AC/N	6,7	DC OUTPUT +V
3	FG \perp		

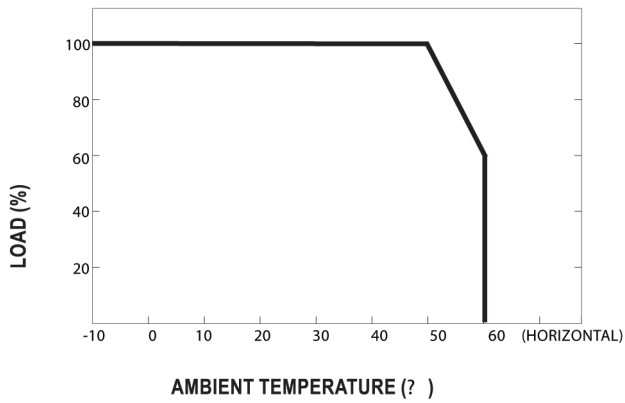
Remote ON/OFF(CN1):JST S2B-XH or equivalent(optional)

Pin No.	Assignment	Mating Housing	Terminal
1	RC+	JST XHP or equivalent	JST SXH-001T-P0.6 or equivalent
2	RC-		

Block Diagram



Derating Curve



Output Derating VS Input Voltage

