



- Universal AC input
- Built-in PFC function, PF >0.95
- Protections: Short circuit / Overload / Over voltage
- Fixed switching frequency at PFC:67KHz PWM:134KHz
- Forced air cooling by built-in DC fan
- With power good and fail output(Optional)



Model Number	Output Volts	Output Amps	Ripple & Noise	Line Reg	Load Reg	Peak Current	Tolerance	Min Load
<b>Quad OUTPUT</b>								
QP200-D	5 Volts(DC)	15 Amps	100mVpk-pk	±1.0%	±2.0%	75%	±3.0%	3.0~20Amps
	12 Volts(DC)	4 Amps	150mVpk-pk	±1.0%	±2.0%	75%	±3.0%	0~6.0Amps
	24 Volts(DC)	3 Amps	150mVpk-pk	±2.0%	±6.0%	75%	+10,-6%	0.4~5.0Amps
	-12 Volts(DC)	0.7 Amps	150mVpk-pk	±1.0%	±2.0%	75%	±6.0%	0~1.0Amps
QP200-F	5 Volts(DC)	15 Amps	100mVpk-pk	±1.0%	±2.0%	75%	±3.0%	3.0~20Amps
	15 Volts(DC)	3 Amps	150mVpk-pk	±1.0%	±2.0%	75%	±3.0%	0~5Amps
	24 Volts(DC)	3 Amps	150mVpk-pk	±2.0%	±6.0%	75%	+10,-6%	0.4~5.0Amps
	-15 Volts(DC)	0.7 Amps	150mVpk-pk	±1.0%	±2.0%	75%	±6.0%	0~1.0Amps
QP200-3A	5 Volts(DC)	15 Amps	100mVpk-pk	±1.0%	±2.0%	72%	±3.0%	3.0~20Amps
	3.3 Volts(DC)	15 Amps	100mVpk-pk	±1.0%	±2.0%	72%	±3.0%	0~20Amps
	12 Volts(DC)	6.0 Amps	150mVpk-pk	±2.0%	±6.0%	72%	+8,-10%	0.5~8.0Amps
	-5 Volts(DC)	0.7 Amps	150mVpk-pk	±1.0%	±2.0%	72%	±6.0%	0~1.0Amps
QP200-3B	5 Volts(DC)	15 Amps	100mVpk-pk	±1.0%	±2.0%	72%	±3.0%	3.0~20Amps
	3.3 Volts(DC)	15 Amps	100mVpk-pk	±1.0%	±2.0%	72%	±3.0%	0~20Amps
	12 Volts(DC)	6.0 Amps	150mVpk-pk	±2.0%	±6.0%	72%	+8,-10%	0.5~8.0Amps
	-12 Volts(DC)	0.7 Amps	150mVpk-pk	±1.0%	±2.0%	72%	±6.0%	0~1.0Amps
QP200-3C	5 Volts(DC)	15 Amps	100mVpk-pk	±1.0%	±2.0%	72%	±3.0%	3.0~20Amps
	3.3 Volts(DC)	15 Amps	100mVpk-pk	±1.0%	±2.0%	72%	±3.0%	0~20Amps
	15 Volts(DC)	5.0 Amps	150mVpk-pk	±2.0%	±6.0%	72%	+10-6%	0.5~6.0Amps
	-15 Volts(DC)	0.7 Amps	150mVpk-pk	±1.0%	±2.0%	72%	±6.0%	0~1.0Amps
QP200-3D	5 Volts(DC)	10 Amps	100mVpk-pk	±1.0%	±2.0%	74%	±3.0%	3.0~15Amps
	3.3 Volts(DC)	15 Amps	100mVpk-pk	±1.0%	±2.0%	74%	±3.0%	0~20Amps
	24 Volts(DC)	4.0 Amps	150mVpk-pk	±2.0%	±6.0%	74%	+10,-6%	0.4~5.0Amps
	-12 Volts(DC)	0.7 Amps	150mVpk-pk	±1.0%	±2.0%	74%	±6.0%	0~1.0Amps
QP200-3E	5 Volts(DC)	10 Amps	100mVpk-pk	±1.0%	±2.0%	74%	±3.0%	3.0~15Amps
	3.3 Volts(DC)	15 Amps	100mVpk-pk	±1.0%	±2.0%	74%	±3.0%	0~20Amps
	-24 Volts(DC)	4.0 Amps	150mVpk-pk	±2.0%	±6.0%	74%	+10,-6%	0.4~5Amps
	-15 Volts(DC)	0.7 Amps	150mVpk-pk	±1.0%	±2.0%	74%	±6.0%	0~1.0Amps

### INPUT SPECIFICATIONS

Input Voltage Range (Note 4)	90-264VAC / 127-370 Volts(DC)
Frequency Range	47~63Hz
Inrush Current, typ: (cold start)	30 Amps
Input Current	3.5Amps max @115VAC 2.0Amps max @230VAC
Leakage current	< 2.0mAmps / 240VAC
Power Factor @ FL	PF >0.95/230VAC >0.98/115VAC

### OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Line Regulation	See Selection Chart
Load Regulation	See Selection Chart
Voltage Tolerance (Note 2)	See Selection Chart
Ripple/Noise (Note 1)	See Selection Chart
Hold Up Time @ FL	24mS
Setup, Rise Time @ FL	800mS, 50mS
Over Voltage Protection	5Volts(DC): 5.75~6.75Volts(DC) 3.3Volts(DC): 3.8~4.4Volts(DC) QP200-D: 12Volts(DC): 13.8~16.2Volts(DC) QP200-F: 17.25~20.25Volts(DC) Shutdown o/p voltage, re-power
Over Current Protection	105~150% rated output power Constant Current limiting, auto recover
Over Temperature Protection	95°C±5°C (TSW1) detect of Q1,Q2, power transistor Shutdown o/p voltage, re-power after cool down
DC Voltage Adjust	5Volts(DC): 4.75~5.5Volts(DC) 3.3Volts(DC): 3.14~3.63Volts(DC) QP200-D(12Volts): 11.4~13.2Volts(DC) QP200-F(15Volts): 14.25~16.5Volts(DC)
Peak Current (Note3)	See Selection Chart

### GENERAL SPECIFICATIONS

Safety	UL60950-1 TUV EN60950-1 Approved
Insulation Resistance	≥ 100MΩ / 500Volts(DC)

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

EMI	Compliance to EN55022B (CISPR22B)
Harmonic Current	Compliance to EN61000-3-2,-3
Efficiency	73% typ.
Isolation	3000VAC Input - Output 1500VAC Input - Ground 500VAC Output - Ground
EMS	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024 light industry level, criteria A
Power Good/Power Fail (optional)	10mS/1mS

### 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 to +90% RH
Temperature Coefficient	±0.03% / °C (0-50°C)
MTBF	160.6K Hrs min, MIL-HDBK-217F (25°C)
Vibration	10~500Hz, 2G10min./1cycle, period for 60min. each along X, Y, Z axes

### PHYSICAL SPECIFICATIONS

Size	Millimeters	215 x 115 x 50
	Inches	8.46" x 4.53" x 1.97"
Weight		42.33 oz (1200g)

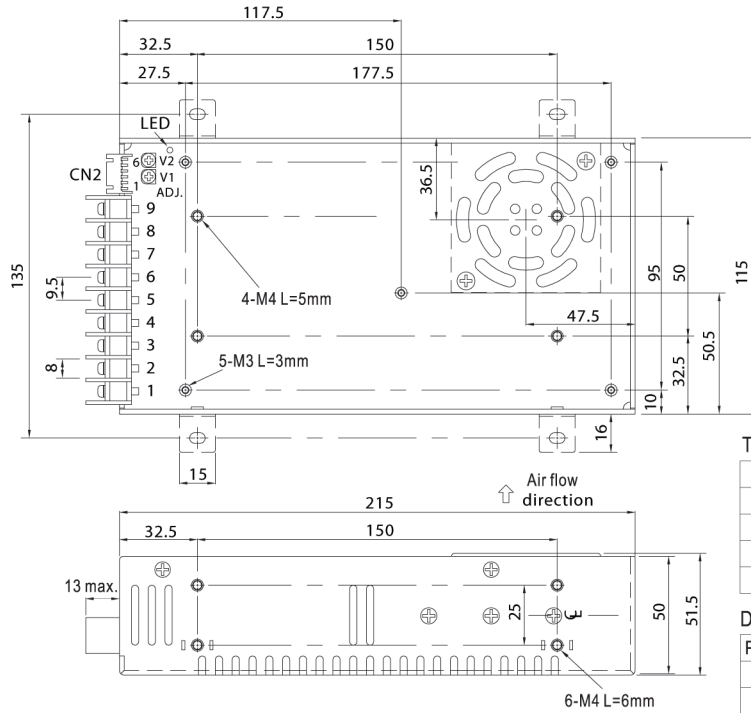
### NOTE

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.
3. 33.3% Duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power.
4. Derating may be needed under low input voltages. Please check the derating curve for more details.

**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. 912B Unit:mm



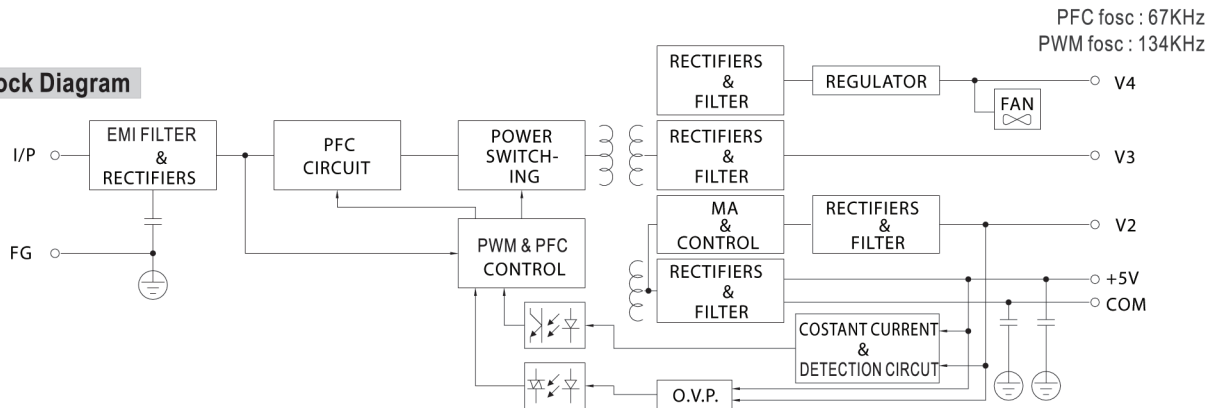
### Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5	DC OUTPUT V3
2	AC/N	6	DC OUTPUT V1
3	FG	7,8	DC OUTPUT COM
4	DC OUTPUT V4	9	DC OUTPUT V2

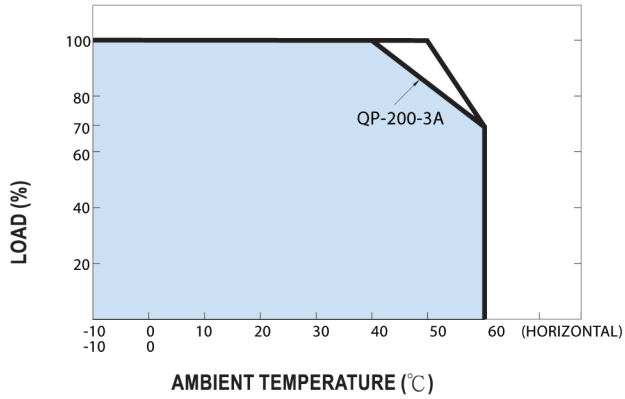
### DC Output Connector (CN2) : JST S6B-XH-A-1 or equivalent

Pin No.	Assignment	Pin No.	Assignment	Mating Housing	Terminal
1	V1(+S)	4	V2(-S)	JST XHP or equivalent	JST SXH-001T-P0.6 or equivalent
2	V1(-S)	5	PF/PG		
3	V2(+S)	6	GND		

### Block Diagram



■ Derating Curve



■ Output Derating VS Input Voltage

