



200W Quad Output with PFC Function



- 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 Currei | nt Tolerance | Min Load |
|--------------|---------------|-------------|----------------|----------|----------|-------------|--------------|-------------|
| Quad OUTPUT | - | • | | | | | | |
| 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% | ±60% | 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 |
| | | | | | | | | |

ASTRODYNE USA: 1-800-823-8082 ASTRODYNE PACIFIC: 886-2-26983458





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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

| OUTPUT SPECIFICATIONS | <u> </u> |
|-----------------------------|---|
| 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 | i~6.75Volts(DC) |
| 3.3Volts(DC): 3. | 8~4.4Volts(DC) |
| QP200-D: 12Vol | ts(DC): 13.8~16.2Volts(DC) |
| QP200-F: 17.25 | ~20.25Volts(DC) |
| Shutdown o/p vo | oltage, re-power |
| Over Current Protection | 105~150% rated output power |
| | Constent 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 (opt | ional) 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

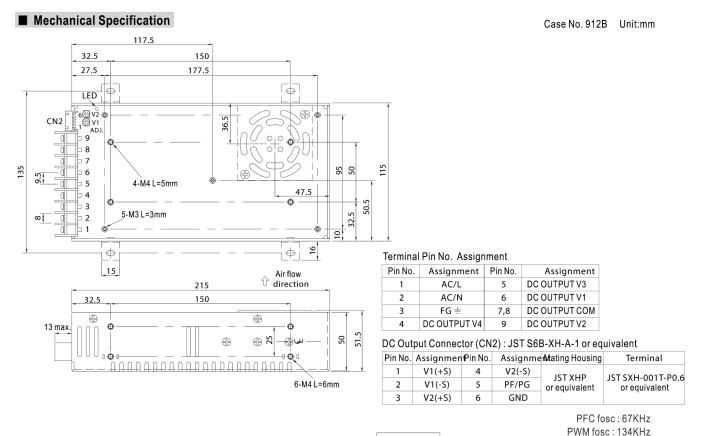
| Size | |
|-------------|-----------------------|
| Millimeters | 215 x 115 x 50 |
| Inches | 8.46" x 4.53" x 1.97" |
| Weight | 42.33 oz (1200g) |

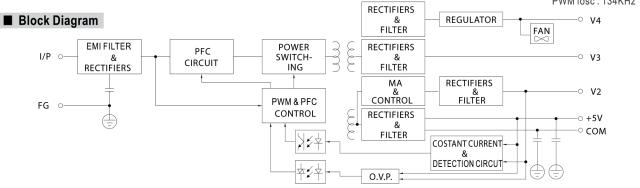
NOTE

- 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.

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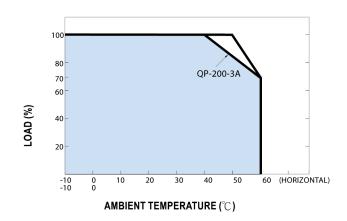




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■ Derating Curve



■ Output Derating VS Input Voltage

