



■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan
- CH1,2 can be adjustable from -5~+10%
- With power good and fail signal output(Optional)
- Built-in remote sense function for CH1,2
- 100% full load burn-in test
- CH4 can set to positive after consult us before delivery(Optional)
- Fixed switching frequency at PFC:67KHz PWM:134KHz
- 3 years warranty



SPECIFICATION

| MODEL | | QP-200D | | | | QP-200F | | | | QP-200-3A | | | |
|--------------------------------------|---|---|----------|-----------------------------|----------|-------------------|----------|--------------------|----------|------------------|----------|-------------------|----------|
| OUTPUT | OUTPUT NUMBER | CH1 | CH2 | CH3 | CH4 | CH1 | CH2 | CH3 | CH4 | CH1 | CH2 | CH3 | CH4 |
| | DC VOLTAGE | 5V | 12V | 24V | -12V | 5V | 15V | 24V | -15V | 5V | 3.3V | 12V | -5V |
| | RATED CURRENT | 15A | 4A | 3A | 0.7A | 15A | 3A | 3A | 0.7A | 15A | 15A | 6A | 0.7A |
| | CURRENT RANGE | 3 ~ 20A | 0 ~ 6A | 0.4 ~ 5A | 0 ~ 1A | 3 ~ 20A | 0 ~ 5A | 0.4 ~ 5A | 0 ~ 1A | 3 ~ 20A | 0 ~ 20A | 0.5 ~ 8A | 0 ~ 1A |
| | RATED POWER | 203.4W | | | | 202.5W | | | | 200W | | | |
| | PEAK CURRENT <small>Note.4</small> | 20A | 7A | 6A | 1A | 20A | 6A | 6A | 1A | 20A | 20A | 8A | 1A |
| | RIPPLE & NOISE (max.) <small>Note.2</small> | 100mVp-p | 150mVp-p | 150mVp-p | 150mVp-p | 100mVp-p | 150mVp-p | 150mVp-p | 150mVp-p | 100mVp-p | 100mVp-p | 150mVp-p | 150mVp-p |
| | VOLTAGE ADJ. RANGE | CH1: 4.75 ~ 5.5V | | CH2: 11.4 ~ 13.2V | | CH1: 4.75 ~ 5.5V | | CH2: 14.25 ~ 16.5V | | CH1: 4.75 ~ 5.5V | | CH2: 3.14 ~ 3.63V | |
| | VOLTAGE TOLERANCE <small>Note.3</small> | ±3.0% | ±3.0% | +10,-6% | ±6.0% | ±3.0% | ±3.0% | +10,-6% | ±6.0% | ±3.0% | ±3.0% | +8,-10% | ±6.0% |
| | LINE REGULATION | ±1.0% | ±1.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | ±2.0% | ±1.0% |
| | LOAD REGULATION | ±2.0% | ±2.0% | ±6.0% | ±2.0% | ±2.0% | ±2.0% | ±6.0% | ±2.0% | ±2.0% | ±2.0% | ±6.0% | ±2.0% |
| | SETUP, RISE TIME | 800ms, 50ms at full load | | | | | | | | | | | |
| | HOLD UP TIME (Typ.) | 24ms at full load | | | | | | | | | | | |
| INPUT | VOLTAGE RANGE <small>Note.6</small> | 90 ~ 264VAC | | 127 ~ 370VDC | | | | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | | | | |
| | POWER FACTOR (Typ.) | PF>0.95/230VAC | | PF>0.98/115VAC at full load | | | | | | | | | |
| | EFFICIENCY (Typ.) | 75% | | | | 75% | | | | 72% | | | |
| | AC CURRENT (Typ.) | 3.5A/115VAC | | 2A/230VAC | | | | | | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 30A | | | | | | | | | | | |
| | LEAKAGE CURRENT | <2mA / 240VAC | | | | | | | | | | | |
| PROTECTION | OVERLOAD | 105 ~ 150% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed | | | | | | | | | | | |
| | OVER VOLTAGE | CH1:5.75 ~ 6.75V | | CH2:13.8 ~ 16.2V | | CH1: 5.75 ~ 6.75V | | CH2:17.25 ~ 20.25V | | CH1:5.75 ~ 6.75V | | CH2:3.8 ~ 4.4V | |
| | OVER TEMPERATURE | Shut down o/p voltage, recovers automatically after temperature goes down | | | | | | | | | | | |
| FUNCTION | POWER GOOD / POWER FAIL(OPTIONAL) | 10ms/1ms | | | | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +60°C (Refer to "Derating Curve") | | | | | | | | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85°C, 10 ~ 95% RH | | | | | | | | | | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0~50°C) | | | | | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes | | | | | | | | | | | |
| SAFETY & EMC <small>(Note 5)</small> | SAFETY STANDARDS | UL60950-1, TUV EN60950-1 approved | | | | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC | | | | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH | | | | | | | | | | | |
| | EMC EMISSION | Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3 | | | | | | | | | | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A | | | | | | | | | | | |
| OTHERS | MTBF | 160.6K hrs min. MIL-HDBK-217F (25°C) | | | | | | | | | | | |
| | DIMENSION | 215*115*50mm (L*W*H) | | | | | | | | | | | |
| | PACKING | 1.2Kg; 12pcs/15.4Kg/0.92CUFT | | | | | | | | | | | |
| NOTE | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. 33.3% Duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power.</p> <p>5. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)</p> <p>6. Derating may be needed under low input voltages. Please check the derating curve for more details.</p> | | | | | | | | | | | | |



■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan
- CH1,2 can be adjustable from -5~+10%
- With power good and fail signal output(Optional)
- Built-in remote sense function for CH1,2
- 100% full load burn-in test
- CH4 can set to positive after consult us before delivery(Optional)
- Fixed switching frequency at PFC:67KHz PWM:134KHz
- 3 years warranty



SPECIFICATION

| MODEL | | QP-200-3B | | | | QP-200-3C | | | | QP-200-3D | | | |
|--------------------------------------|--|---|----------|-------------------|----------|-----------------------------|----------|-------------------|----------|------------------|----------|-------------------|----------|
| OUTPUT | OUTPUT NUMBER | CH1 | CH2 | CH3 | CH4 | CH1 | CH2 | CH3 | CH4 | CH1 | CH2 | CH3 | CH4 |
| | DC VOLTAGE | 5V | 3.3V | 12V | -12V | 5V | 3.3V | 15V | -15V | 5V | 3.3V | 24V | -12V |
| | RATED CURRENT | 15A | 15A | 6A | 0.7A | 15A | 15A | 5A | 0.7A | 10A | 15A | 4A | 0.7A |
| | CURRENT RANGE | 3 ~ 20A | 0 ~ 20A | 0.5 ~ 8A | 0 ~ 1A | 3 ~ 20A | 0 ~ 20A | 0.5 ~ 6A | 0 ~ 1A | 3 ~ 15A | 0 ~ 20A | 0.4 ~ 5A | 0 ~ 1A |
| | RATED POWER | 204.9W | | | | 210W | | | | 203.9W | | | |
| | PEAK CURRENT <small>Note.4</small> | 20A | 20A | 8A | 1A | 20A | 20A | 7A | 1A | 20A | 20A | 6A | 1A |
| | RIPPLE & NOISE (max.) <small>Note.2</small> | 100mVp-p | 100mVp-p | 150mVp-p | 150mVp-p | 100mVp-p | 100mVp-p | 150mVp-p | 150mVp-p | 100mVp-p | 100mVp-p | 150mVp-p | 150mVp-p |
| | VOLTAGE ADJ. RANGE | CH1: 4.75 ~ 5.5V | | CH2: 3.14 ~ 3.63V | | CH1: 4.75 ~ 5.5V | | CH2: 3.14 ~ 3.63V | | CH1: 4.75 ~ 5.5V | | CH2: 3.14 ~ 3.63V | |
| | VOLTAGE TOLERANCE <small>Note.3</small> | ±3.0% | ±3.0% | +8,-10% | ±6.0% | ±3.0% | ±3.0% | +10,-6% | ±6.0% | ±3.0% | ±3.0% | +10,-6% | ±6.0% |
| | LINE REGULATION | ±1.0% | ±1.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | ±2.0% | ±1.0% |
| | LOAD REGULATION | ±2.0% | ±2.0% | ±6.0% | ±2.0% | ±2.0% | ±2.0% | ±6.0% | ±2.0% | ±2.0% | ±2.0% | ±6.0% | ±2.0% |
| | SETUP, RISE TIME | 800ms, 50ms at full load | | | | | | | | | | | |
| HOLD UP TIME (Typ.) | 24ms at full load | | | | | | | | | | | | |
| INPUT | VOLTAGE RANGE <small>Note.6</small> | 90 ~ 264VAC | | 127 ~ 370VDC | | | | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | | | | |
| | POWER FACTOR (Typ.) | PF>0.95/230VAC | | | | PF>0.98/115VAC at full load | | | | | | | |
| | EFFICIENCY (Typ.) | 72% | | | | 72% | | | | 74% | | | |
| | AC CURRENT (Typ.) | 3.5A/115VAC | | 2A/230VAC | | | | | | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 30A | | | | | | | | | | | |
| | LEAKAGE CURRENT | <2mA / 240VAC | | | | | | | | | | | |
| PROTECTION | OVERLOAD | 105 ~ 150% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed | | | | | | | | | | | |
| | OVER VOLTAGE | CH1:5.75 ~ 6.75V CH2:3.8 ~ 4.4V Protection type : Shut down o/p voltage, re-power on to recover | | | | | | | | | | | |
| | OVER TEMPERATURE | Shut down o/p voltage, recovers automatically after temperature goes down | | | | | | | | | | | |
| FUNCTION | POWER GOOD / POWER FAIL(OPTIONAL) | 10ms/1ms | | | | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +60°C (Refer to "Derating Curve") | | | | | | | | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85°C, 10 ~ 95% RH | | | | | | | | | | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0~50°C) | | | | | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes | | | | | | | | | | | |
| SAFETY & EMC <small>(Note 5)</small> | SAFETY STANDARDS | UL60950-1, TUV EN60950-1 approved | | | | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC | | | | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH | | | | | | | | | | | |
| | EMC EMISSION | Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3 | | | | | | | | | | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A | | | | | | | | | | | |
| OTHERS | MTBF | 160.6K hrs min. MIL-HDBK-217F (25°C) | | | | | | | | | | | |
| | DIMENSION | 215*115*50mm (L*W*H) | | | | | | | | | | | |
| | PACKING | 1.2Kg; 12pcs/15.4Kg/0.92CUFT | | | | | | | | | | | |
| NOTE | <ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. 33.3% Duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power. 5. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com) 6. Derating may be needed under low input voltages. Please check the derating curve for more details. | | | | | | | | | | | | |



■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan
- CH1,2 can be adjustable from -5~+10%
- With power good and fail signal output(Optional)
- Built-in remote sense function for CH1,2
- 100% full load burn-in test
- CH4 can set to positive after consult us before delivery(Optional)
- Fixed switching frequency at PFC:67KHz PWM:134KHz
- 3 years warranty

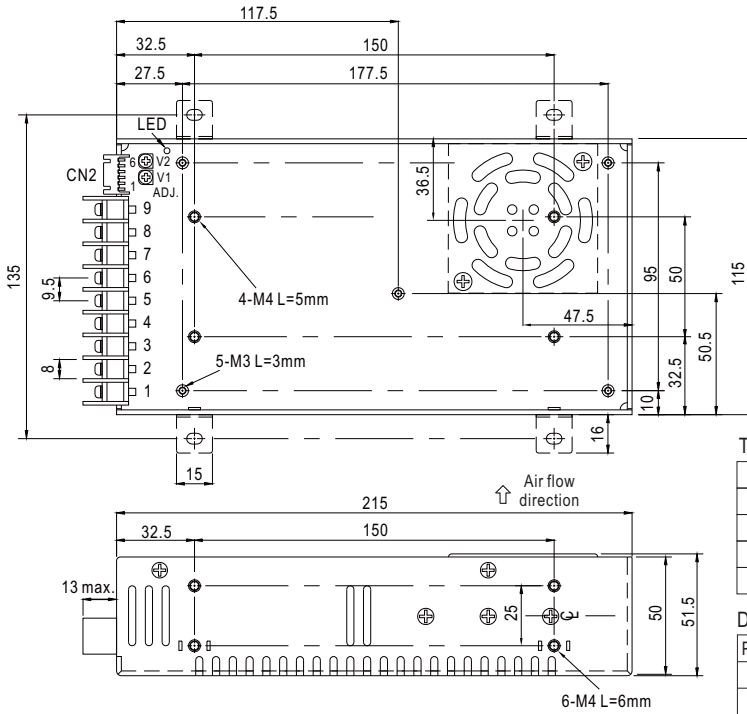


SPECIFICATION

| MODEL | | QP-200-3E | | | |
|--------------------------------------|---|---|---------|----------|----------|
| OUTPUT | OUTPUT NUMBER | CH1 | CH2 | CH3 | CH4 |
| | DC VOLTAGE | 5V | 3.3V | 24V | -15V |
| | RATED CURRENT | 10A | 15A | 4A | 0.7A |
| | CURRENT RANGE | 3 ~ 15A | 0 ~ 20A | 0.4 ~ 5A | 0 ~ 1A |
| | RATED POWER | 206W | | | |
| | PEAK CURRENT <small>Note.4</small> | 20A | 20A | 6A | 1A |
| | RIPPLE & NOISE (max.) <small>Note.2</small> | 100mVp-p | | 150mVp-p | 150mVp-p |
| | VOLTAGE ADJ. RANGE | CH1: 4.75 ~ 5.5V CH2: 3.14 ~ 3.63V | | | |
| | VOLTAGE TOLERANCE <small>Note.3</small> | ±3.0% | ±3.0% | +10,-6% | ±6.0% |
| | LINE REGULATION | ±1.0% | ±1.0% | ±2.0% | ±1.0% |
| | LOAD REGULATION | ±2.0% | ±2.0% | ±6.0% | ±2.0% |
| | SETUP, RISE TIME | 800ms, 50ms at full load | | | |
| HOLD TIME (Typ.) | 24ms at full load | | | | |
| INPUT | VOLTAGE RANGE <small>Note.6</small> | 90 ~ 264VAC 127 ~ 370VDC | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | |
| | POWER FACTOR (Typ.) | PF>0.95/230VAC PF>0.98/115VAC at full load | | | |
| | EFFICIENCY (Typ.) | 74% | | | |
| | AC CURRENT (Typ.) | 3.5A/115VAC 2A/230VAC | | | |
| | INRUSH CURRENT (Typ.) | COLD START 30A | | | |
| | LEAKAGE CURRENT | <2mA / 240VAC | | | |
| PROTECTION | OVERLOAD | 105 ~ 150% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed | | | |
| | OVER VOLTAGE | CH1:5.75 ~ 6.75V CH2:3.8 ~ 4.4V Protection type : Shut down o/p voltage, re-power on to recover | | | |
| | OVER TEMPERATURE | Shut down o/p voltage, recovers automatically after temperature goes down | | | |
| FUNCTION | POWER GOOD / POWER FAIL(OPTIONAL) | 10ms/1ms | | | |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +60°C (Refer to "Derating Curve") | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85°C, 10 ~ 95% RH | | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0~50°C) | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes | | | |
| SAFETY & EMC <small>(Note 5)</small> | SAFETY STANDARDS | UL60950-1, TUV EN60950-1 approved | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH | | | |
| | EMC EMISSION | Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3 | | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A | | | |
| OTHERS | MTBF | 160.6K hrs min. MIL-HDBK-217F (25°C) | | | |
| | DIMENSION | 215*115*50mm (L*W*H) | | | |
| | PACKING | 1.2Kg; 12pcs/15.4Kg/0.92CUFT | | | |
| NOTE | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. 33.3% Duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power.</p> <p>5. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)</p> <p>6. Derating may be needed under low input voltages. Please check the derating curve for more details.</p> | | | | |

Mechanical Specification

Case No. 912B Unit:mm



Terminal Pin No. Assignment

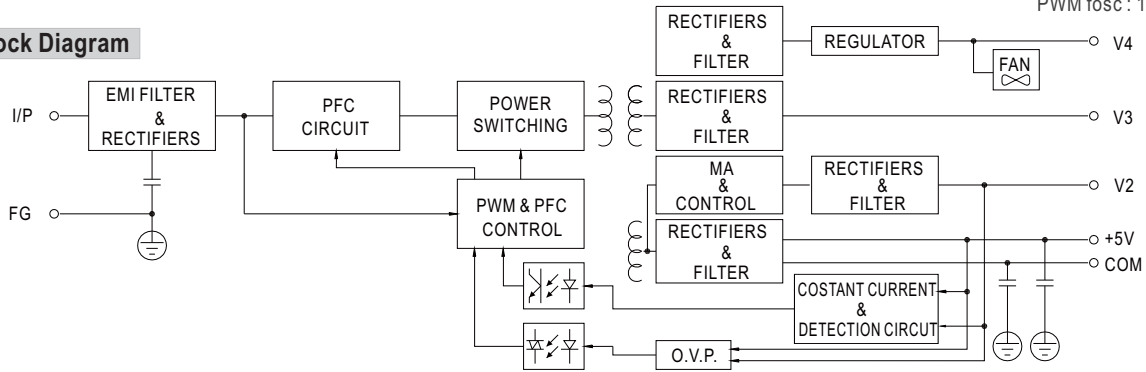
| Pin No. | Assignment | Pin No. | Assignment |
|---------|--------------|---------|---------------|
| 1 | AC/L | 5 | DC OUTPUT V3 |
| 2 | AC/N | 6 | DC OUTPUT V1 |
| 3 | FG \perp | 7,8 | DC OUTPUT COM |
| 4 | DC OUTPUT V4 | 9 | DC OUTPUT V2 |

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

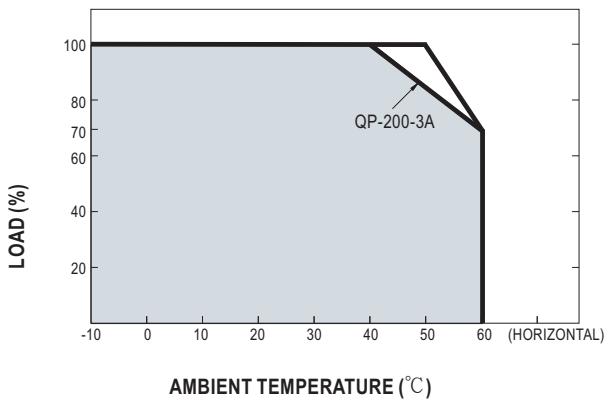
| Pin No. | Assignment | Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|---------|------------|-----------------------|---------------------------------|
| 1 | V1(+S) | 4 | V2(-S) | JST XHP or equivalent | JST SXH-001T-P0.6 or equivalent |
| 2 | V1(-S) | 5 | PF/PG | | |
|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

PFC fosc : 67KHz
PWM fosc : 134KHz

Block Diagram



Derating Curve



Output Derating VS Input Voltage

