

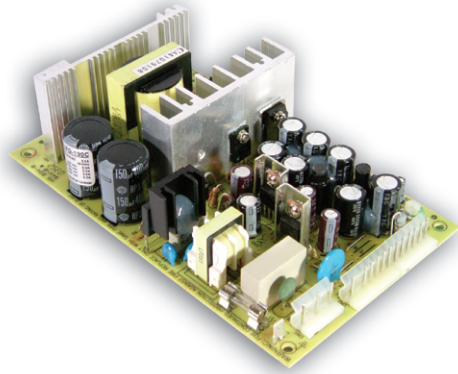
■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- With power good signal output(Optional)
- 100% full load burn-in test
- Fixed switching frequency at 45KHz
- 2 years warranty



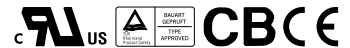
SPECIFICATION

| MODEL                 |   | PQ-100B  |            |             |          | PQ-100C         |          |         |          |
|-----------------------|---|--|------------|-------------|----------|-----------------|----------|---------|----------|
| OUTPUT                | OUTPUT NUMBER   | CH1  | CH2        | CH3         | CH4      | CH1             | CH2      | CH3     | CH4      |
|                       | DC VOLTAGE  | 5V   | 12V        | -5V         | -12V     | 5V              | 15V      | -5V     | -15V     |
|                       | RATED CURRENT   | 10A  | 3.5A       | 0.5A        | 0.5A     | 8A              | 3.5A     | 0.5A    | 0.5A     |
|                       | CURRENT RANGE   | 2 ~ 10A  | 0.5 ~ 4.5A | 0 ~ 1A      | 0 ~ 1A   | 2 ~ 8A          | 0.5 ~ 4A | 0 ~ 1A  | 0 ~ 1A   |
|                       | RATED POWER   | 100.5W   |            |             |          | 102.5W          |          |         |          |
|                       | RIPPLE & NOISE (max.) Note.2  | 80mVp-p  | 250mVp-p   | 80mVp-p     | 120mVp-p | 80mVp-p         | 150mVp-p | 80mVp-p | 150mVp-p |
|                       | VOLTAGE ADJ. RANGE  | CH1:4.75 ~ 5.5V  |            |             |          | CH1:4.75 ~ 5.5V |          |         |          |
|                       | VOLTAGE TOLERANCE Note.3  | ±3.0%  | ±12%       | ±6.0%       | ±6.0%    | ±2.0%           | ±6.0%    | ±6.0%   | ±6.0%    |
|                       | LINE REGULATION   | ±1.0%  | ±5.0%      | ±1.0%       | ±1.0%    | ±1.0%           | ±3.0%    | ±1.0%   | ±1.0%    |
|                       | LOAD REGULATION   | ±2.0%  | ±5.0%      | ±1.0%       | ±1.0%    | ±1.0%           | ±5.0%    | ±1.0%   | ±1.0%    |
|                       | SETUP, RISE TIME  | 1200ms, 50ms at full load  |            |             |          |                 |          |         |          |
| HOLD UP TIME (Typ.)   | 80ms at full load   |  |            |             |          |                 |          |         |          |
| INPUT                 | VOLTAGE RANGE   | 100 ~ 264VAC 141 ~ 370VDC (90 ~ 100VAC 90% load max.)  |            |             |          |                 |          |         |          |
|                       | FREQUENCY RANGE   | 47 ~ 63Hz  |            |             |          |                 |          |         |          |
|                       | EFFICIENCY(Typ.)  | 72%  |            |             |          | 74%             |          |         |          |
|                       | AC CURRENT (Typ.)   | 3A/115VAC  |            | 1.5A/230VAC |          |                 |          |         |          |
|                       | INRUSH CURRENT (Typ.)   | COLD START 50A   |            |             |          |                 |          |         |          |
| LEAKAGE CURRENT       | <1mA/240VAC   |  |            |             |          |                 |          |         |          |
| PROTECTION            | OVERLOAD  | 105% ~ 135% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |            |             |          |                 |          |         |          |
|                       | OVER VOLTAGE  | CH1: 5.75 ~ 6.75VDC<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed            |            |             |          |                 |          |         |          |
| FUNCTION              | POWER GOOD  | ≥ 1ms  |            |             |          |                 |          |         |          |
| ENVIRONMENT           | WORKING TEMP.   | -10 ~ +50°C, 60 °C with cooling fan (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, period for 60min. each along X, Y, Z axes  |            |             |          |                 |          |         |          |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS  | UL60950-1, TUV EN60950-1 approved  |            |             |          |                 |          |         |          |
|                       | 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:100M Ohms / 500VDC / 25°C / 70% RH   |            |             |          |                 |          |         |          |
|                       | EMC EMISSION  | Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3  |            |             |          |                 |          |         |          |
|                       | EMC IMMUNITY  | Compliance to EN61000-4-2,3,4,5,6,11, light industry level, criteria A   |            |             |          |                 |          |         |          |
| OTHERS                | MTBF  | 258.6K hrs min. MIL-HDBK-217F (25°C)   |            |             |          |                 |          |         |          |
|                       | DIMENSION   | 177.8*107.95*46mm (L*W*H)  |            |             |          |                 |          |         |          |
|                       | PACKING   | 0.56Kg; 24pcs/14.5Kg/1.19CUFT  |            |             |          |                 |          |         |          |
| 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 &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. The power supply is considered a component which will be installed into a final equipment. 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."<br/>(as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</p> <p>5. Heat Sink HS1,HS2 can not be shorted.</p> |  |            |             |          |                 |          |         |          |



■ Features :

- Universal AC input / Full range
- Protections: Short circuit/Over load/Over voltage
- Cooling by free air convection
- With power good signal output(Optional)
- 100% full load burn-in test
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- 2 years warranty

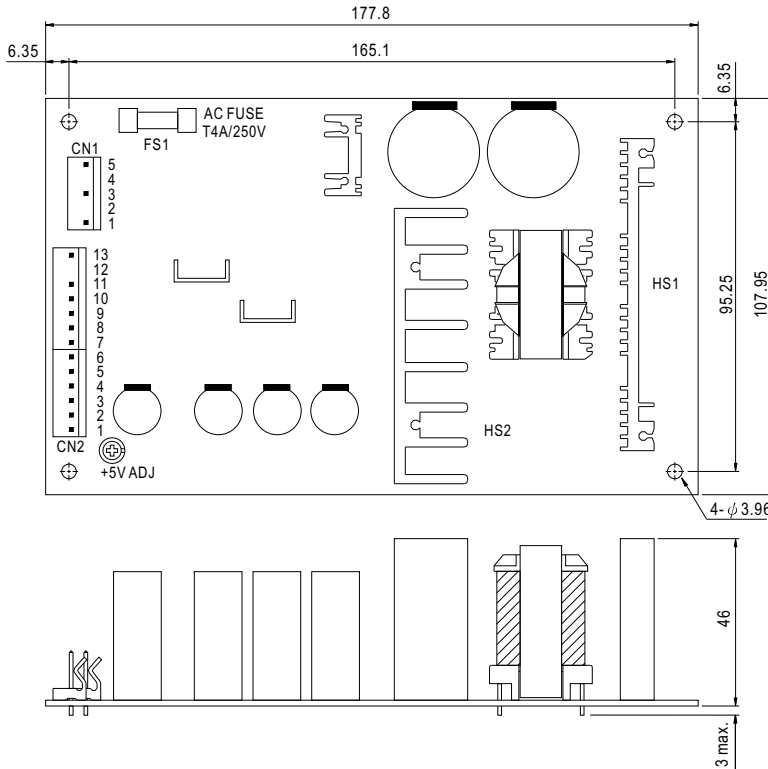


SPECIFICATION

| MODEL                 |   | PQ-100D  |            |             |          | PQ-100E         |          |          |          |  |
|-----------------------|---|--|------------|-------------|----------|-----------------|----------|----------|----------|--|
| OUTPUT                | OUTPUT NUMBER   | CH1  | CH2        | CH3         | CH4      | CH1             | CH2      | CH3      | CH4      |  |
|                       | DC VOLTAGE  | 5V   | 12V        | 24V         | -12V     | 5V              | 12V      | 15V      | 24V      |  |
|                       | RATED CURRENT   | 5A   | 2A         | 2A          | 0.5A     | 8A              | 3A       | 0.6A     | 0.6A     |  |
|                       | CURRENT RANGE   | 2 ~ 5A   | 0.5 ~ 4.5A | 0.4 ~ 2A    | 0 ~ 1A   | 2 ~ 8A          | 0.5 ~ 3A | 0 ~ 1A   | 0 ~ 1A   |  |
|                       | RATED POWER   | 103W   |            |             |          | 99.4W           |          |          |          |  |
|                       | RIPPLE & NOISE (max.) Note.2  | 80mVp-p  | 120mVp-p   | 180mVp-p    | 120mVp-p | 80mVp-p         | 120mVp-p | 150mVp-p | 120mVp-p |  |
|                       | VOLTAGE ADJ. RANGE  | CH1:4.75 ~ 5.5V  |            |             |          | CH1:4.75 ~ 5.5V |          |          |          |  |
|                       | VOLTAGE TOLERANCE Note.3  | ±2.0%  | ±6.0%      | ±10%        | ±6.0%    | ±2.0%           | ±6.0%    | ±6.0%    | ±6.0%    |  |
|                       | LINE REGULATION   | ±1.0%  | ±3.0%      | ±1.0%       | ±1.0%    | ±1.0%           | ±3.0%    | ±1.0%    | ±1.0%    |  |
|                       | LOAD REGULATION   | ±1.0%  | ±5.0%      | ±5.0%       | ±1.0%    | ±1.0%           | ±5.0%    | ±1.0%    | ±1.0%    |  |
|                       | SETUP, RISE TIME  | 1200ms, 50ms at full load  |            |             |          |                 |          |          |          |  |
| HOLD TIME (Typ.)      | 80ms at full load   |  |            |             |          |                 |          |          |          |  |
| INPUT                 | VOLTAGE RANGE   | 100 ~ 264VAC 141 ~ 370VDC (90 ~ 100VAC 90% load max.)  |            |             |          |                 |          |          |          |  |
|                       | FREQUENCY RANGE   | 47 ~ 63Hz  |            |             |          |                 |          |          |          |  |
|                       | EFFICIENCY (Typ.)   | 77%  |            |             |          | 74%             |          |          |          |  |
|                       | AC CURRENT (Typ.)   | 3A/115VAC  |            | 1.5A/230VAC |          |                 |          |          |          |  |
|                       | INRUSH CURRENT (Typ.)   | COLD START 50A   |            |             |          |                 |          |          |          |  |
|                       | LEAKAGE CURRENT   | <1mA/240VAC  |            |             |          |                 |          |          |          |  |
| PROTECTION            | OVER LOAD   | 105% ~ 135% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |            |             |          |                 |          |          |          |  |
|                       | OVER VOLTAGE  | CH1: 5.75 ~ 6.75VDC<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed            |            |             |          |                 |          |          |          |  |
| FUNCTION              | POWER GOOD  | ≥ 1ms  |            |             |          |                 |          |          |          |  |
| ENVIRONMENT           | WORKING TEMP.   | -10 ~ +50°C, 60 °C with cooling fan (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, period for 60min. each along X, Y, Z axes  |            |             |          |                 |          |          |          |  |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS  | UL60950-1, TUV EN60950-1 approved  |            |             |          |                 |          |          |          |  |
|                       | 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:100M Ohms / 500VDC / 25°C / 70% RH   |            |             |          |                 |          |          |          |  |
|                       | EMC EMISSION  | Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3  |            |             |          |                 |          |          |          |  |
|                       | EMC IMMUNITY  | Compliance to EN61000-4-2,3,4,5,6,11, light industry level, criteria A   |            |             |          |                 |          |          |          |  |
| OTHERS                | MTBF  | 258.6K hrs min. MIL-HDBK-217F (25°C)   |            |             |          |                 |          |          |          |  |
|                       | DIMENSION   | 177.8*107.95*46mm (L*W*H)  |            |             |          |                 |          |          |          |  |
|                       | PACKING   | 0.56Kg; 24pcs/14.5Kg/1.19CUFT  |            |             |          |                 |          |          |          |  |
| 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 &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. The power supply is considered a component which will be installed into a final equipment. 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."<br/>(as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</p> <p>5. Heat Sink HS1,HS2 can not be shorted.</p> |  |            |             |          |                 |          |          |          |  |

**Mechanical Specification**

Unit:mm



AC Input Connector (CN1) : Molex 5273-05 or equivalent

| Pin No. | Assignment | Mating Housing           | Terminal                 |
|---------|------------|--------------------------|--------------------------|
| 1       | FG $\pm$   | Molex 5195 or equivalent | Molex 5194 or equivalent |
| 2,4     | No Pin     |                          |                          |
| 3       | AC/N       |                          |                          |
| 5       | AC/L       |                          |                          |

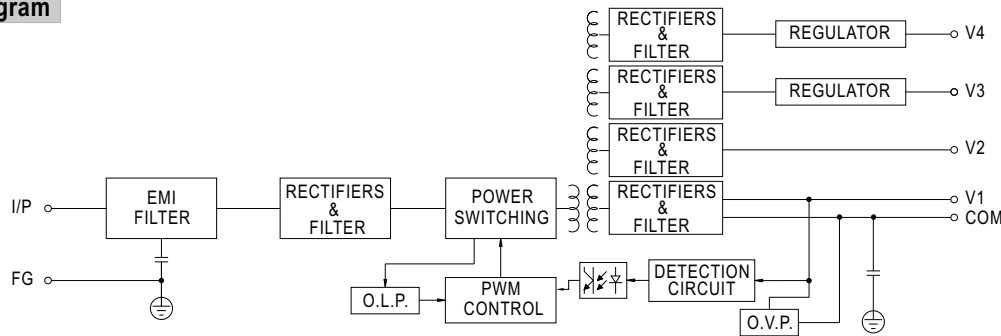
DC Output Connector (CN2) : Molex 5273-06,07 or equivalent

| Pin No. | Assignment           | Mating Housing           | Terminal                 |
|---------|----------------------|--------------------------|--------------------------|
| 1,2,3   | V1                   | Molex 5195 or equivalent | Molex 5194 or equivalent |
| 4,5,6,7 | COM                  |                          |                          |
| 8,9     | V2                   |                          |                          |
| 10      | Power Good(Optional) |                          |                          |
| 11      | V3                   |                          |                          |
| 12      | No Pin               |                          |                          |
| 13      | V4                   |                          |                          |

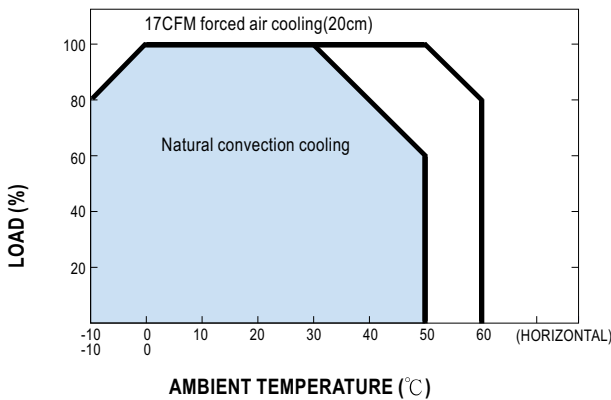
⚠ HS1,HS2 can not be shorted

fosc : 45KHz

**Block Diagram**



**Derating Curve**



**Static Characteristics (B)**

