

SPECIFICATIONS

PA607-01-01/L-C

| ITEMS | | MODEL | LS200-3.3/L | LS200-5/L | LS200-7.5/L | LS200-12/L | LS200-15/L | LS200-24/L | LS200-36/L | LS200-48/L | | |
|-------|---|-------|--|-------------|-------------|--------------|---------------|--------------|-------------|------------|-----|---|
| 1 | Nominal Output Voltage | V | 3.3 | 5 | 7.5 | 12 | 15 | 24 | 36 | 48 | | |
| 2 | Maximum Output Current | A | 40 | 40 | 26.7 | 16.7 | 13.4 | 8.4 | 5.6 | 4.2 | | |
| 3 | Peak Output Current (115/230VAC) (* 12) | A | | | | | | | | 10.4 | 6.9 | - |
| 4 | Maximum Output Power | W | 132 | 200 | 200.3 | 200.4 | 201 | 201.6 | 201.6 | 201.6 | | |
| 5 | Max. Peak Output Pow(115/230VAC) (* 12) | W | | | | | | | | 250 | 250 | - |
| 6 | Efficiency (Typ.) (115/230VAC) (* 1) | % | 67 / 68 | 72 / 75 | 74 / 77 | 76 / 79 | 80 / 83 | 82 / 84 | 82 / 85 | 82 / 85 | | |
| 7 | Input Voltage Range (* 2) | - | 85 ~ 264 VAC (47 ~ 63Hz) or 120 ~ 373VDC (Withstand 300VAC Surge for 5 seconds) | | | | | | | | | |
| 8 | Input Current (Typ.) (115/230VAC) (* 1) | A | 3.5 / 1.7 | | | | | | | | | |
| 9 | Inrush Current (Typ.) (* 3) | - | 60A at 230VAC, Ta=25°C (Cold Start) | | | | | | | | | |
| 10 | Harmonic Current (230VAC) (* 1) | - | Designed to meet IEC61000-3-2, -3 | | | | | | | | | |
| 11 | Power Factor (Typ) (115/230VAC) (* 1) | - | > 0.98 / 0.95 | | | | | | | | | |
| 12 | Output Voltage Range | V | 3 ~ 3.6 | 4.75 ~ 5.5 | 6.8 ~ 8.2 | 10.8 ~ 14.4 | 13.5 ~ 16.5 | 22 ~ 28.8 | 32 ~ 40 | 42 ~ 57.6 | | |
| 13 | Ripple & Noise (* 1, 4) | mV | 80 | 80 | 80 | 120 | 120 | 120 | 150 | 200 | | |
| 14 | Line Regulation (* 5, 6) | mV | 16 | 20 | 20 | 48 | 60 | 96 | 144 | 192 | | |
| 15 | Load Regulation (* 5, 7) | mV | 50 | 50 | 50 | 96 | 120 | 192 | 288 | 384 | | |
| 16 | Temperature Coefficient | - | Less than 0.02%/°C | | | | | | | | | |
| 17 | Over Current Protection (* 8) | A | 105% - (maximum output current) for 3.3V ~ 15V & 48V and 105% - (peak output current) for 24V ~ 36V | | | | | | | | | |
| 18 | Over Voltage Protection (* 9) | V | 3.8 ~ 4.45 | 5.75 ~ 6.75 | 8.6 ~ 10.1 | 15.1 ~ 17.75 | 17.25 ~ 20.25 | 30.25 ~ 35.5 | 41.4 ~ 48.6 | 60 ~ 72.5 | | |
| 19 | Over Temperature Protection (* 9) | - | Yes | | | | | | | | | |
| 20 | Remote ON/OFF | - | CN2: 3 ~ 12VDC POWER OFF, < 0 ~ 0.8VDC POWER ON | | | | | | | | | |
| 21 | Hold-up Time (Typ.) (115/230VAC) (* 1) | - | 20ms | | | | | | | | | |
| 22 | Leakage Current (* 10) | - | < 1mA at 230VAC, 60Hz | | | | | | | | | |
| 23 | Series Operation | - | Possible | | | | | | | | | |
| 24 | Operating Temperature (* 11) | - | - 25 ~ + 70 °C (Refer to Output Derating Curve) | | | | | | | | | |
| 25 | Operating Humidity | - | 20 ~ 90%RH (No Dewdrop) | | | | | | | | | |
| 26 | Storage Temperature | - | -40°C ~ +85°C | | | | | | | | | |
| 27 | Storage Humidity | - | 10 ~ 95%RH (No Dewdrop) | | | | | | | | | |
| 28 | Cooling (* 11, 12) | - | Convection Cooling Or Forced Air (Exhale) With Airflow > 3 m/s | | | | | | | | | |
| 29 | Withstand Voltage | - | Input - Output : 3.0kVAC (20mA), Input - FG : 1.5kVAC (20mA). Output - FG : 500VAC (100mA) for 1min. | | | | | | | | | |
| 30 | Isolation Resistance | - | Input - FG, Input - Output and Output - FG: More than 100MΩ (500VDC) at 25°C and 70%RH | | | | | | | | | |
| 31 | Vibration | - | At no operating, 10 - 55Hz (sweep for 1min) 19.6m/s ² Constant, X, Y, Z 1hour each. | | | | | | | | | |
| 32 | Shock (In package) | - | Less than 196.1m/s ² | | | | | | | | | |
| 33 | Safety | - | Approved by UL62368-1, CSA62368-1, IEC62368-1, IEC60950-1, CE, UKCA | | | | | | | | | |
| 34 | EMI | - | Designed to meet EN55011/EN55032-B, FCC-B | | | | | | | | | |
| 35 | Immunity | - | Designed to meet EN61000-4-2 (Level 2,3), -3 (Level 3), -4 (Level 3), -5 (Level 3,4), -6 (Level 3), -8 (Level 4), -11 | | | | | | | | | |
| 36 | Weight (Typ.) | g | 600 | | | | | | | | | |
| 37 | Warranty | - | 3 Year | | | | | | | | | |
| 38 | Dimension (L x W x H) | mm | 199 x 98 x 41 (Refer to Outline Drawing) | | | | | | | | | |

* Read instruction manual carefully , before using the power supply unit.

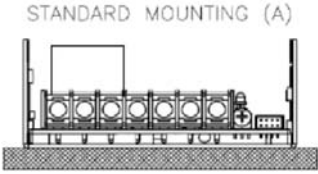
= NOTES=

- * 1 : At Maximum Output Power, nominal input voltage, Ta=25°C.
- * 2 : For cases where conformance to various safety specs (UL, CSA, IEC) are required, to be described as 100 ~ 240VAC, 50 / 60Hz on name plate.
- * 3 : Not applicable for the in-rush current to Noise Filter for less than 0.2ms.
- * 4 : Ripple & noise are measured at 20MHz by using a 300mm twisted pair of load wires terminated with a 0.1uF film capacitor and a 47uF electrolytic capacitor.
- * 5 : Measure line & load regulation at output terminal M3.5 tapped point.
- * 6 : 85 ~ 264VAC, constant load.
- * 7 : No load ~ Full load (Maximum power) , constant input voltage.
- * 8 : Constant current limiting with automatic recovery. Avoid to operate at overload and dead short for more than 30 seconds
- * 9 : OVP, OTP circuit will shutdown output, manual reset (Re-power on).
- * 10 : Measured by each measuring method of UL and IEC (at 60Hz), Ta=25°C.
- * 11 : Refer to Output Derating Curve (PA607-01-02/L-_) for details of output derating versus ambient temperature.
- * 12 : Refer to Output Derating Curve (PA607-01-03/L-_) for details of output derating versus input voltage.
- * 13 : Operating period at peak output current is less than 10sec., duty < 0.35%
- * 14 : All parameters NOT specifically mentioned are measured at 230VAC input, rated load and Ta=25°C.

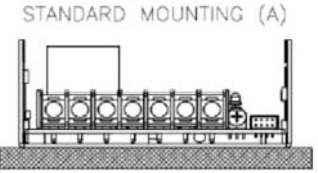
OUTPUT DERATING

PA607-01-02/L

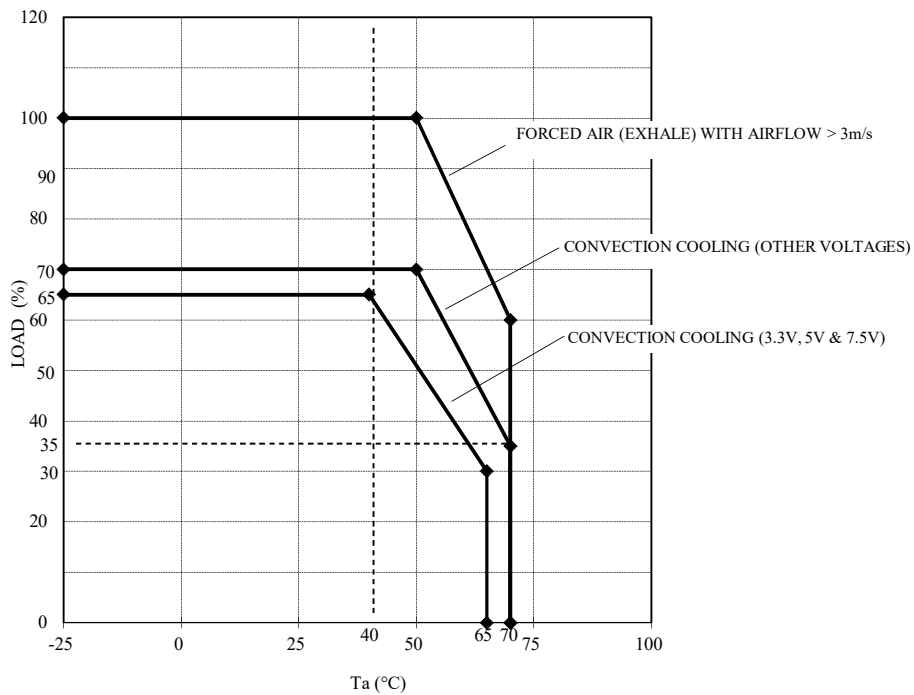
*COOLING : FORCED AIR (EXHALE) with AIRFLOW > 3 m/s

| Ta (°C) | LOAD (%) | NOTE : CUSTOMER AIR FLOW SHOULD COOL DOWN ALL THE COMPONENT EVENLY. READ INSTRUCTION MANUAL FOR DETAILS. |
|----------|------------|--|
| | MOUNTING A | |
| -25 ~ 50 | 100 |  |
| 70 | 60 | |

*COOLING : CONVECTION COOLING

| Ta (°C) | LOAD (%) | STANDARD MOUNTING |
|----------|-------------------------------------|--|
| -25 ~ 40 | 65 (3.3V, 5V & 7.5V), 70 (OTHERS) |  |
| 50 | 50.5 (3.3V, 5V & 7.5V), 70 (OTHERS) | |
| 65 | 30 (3.3V, 5V & 7.5V), 44 (OTHERS) | |
| 70 | -(3.3V, 5V & 7.5V), 35 (OTHERS) | |

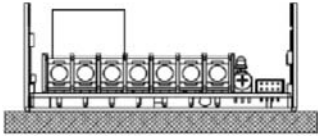
OUTPUT DERATING CURVE



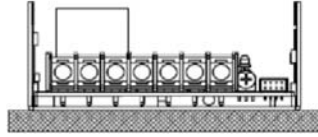
OUTPUT DERATING

PA607-01-03/L

*COOLING : FORCED AIR (EXHALE) with AIRFLOW > 3 m/s

| Ta (°C) | LOAD (%) | NOTE : CUSTOMER AIR FLOW SHOULD COOL DOWN ALL THE COMPONENT EVENLY. READ INSTRUCTION MANUAL FOR DETAILS. |
|----------|------------|---|
| | MOUNTING A | |
| 85 ~ 264 | 100 | <p>STANDARD MOUNTING (A)</p>  |

*COOLING : CONVECTION COOLING

| Vin (VAC) | LOAD (%) | STANDARD MOUNTING |
|-----------|-----------------------------------|---|
| 85 | 65 | <p>STANDARD MOUNTING (A)</p>  |
| 115 ~ 264 | 65 (3.3V, 5V & 7.5V), 70 (OTHERS) | |

*Ta=25 °C

