

## LS200

PA607-01-01

## SPECIFICATIONS

MODEL		LS200-3.3	LS200-5	LS200-7.5	LS200-12	LS200-15	LS200-24	LS200-36	LS200-48	REV
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)	-	Built 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 ~ 69.6
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)	-	Forced Air (Exhale)							
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 <sup>2</sup> Constant, X, Y, Z 1hour each.							
32	Shock (In package)	-	Less than 196.1m/s <sup>2</sup>							
33	Safety	-	Approved by UL60950-1, IEC60950-1 2nd editions, CE							
34	EMI	-	Built to meet EN55011/EN55022-B, FCC-B							
35	Immunity	-	Built to meet EN61000-4-2 (Level 2,3), -3 (Level 3), -4 (Level 3), -5 (Level 4), -6 (Level 3), -8 (Level 4), -11							
36	Weight (Typ.)	g	700							
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=

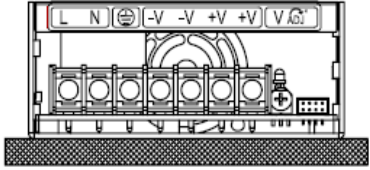
- \* 1 : At Maximum Output Power, nominal input voltage, Ta=25°C.
- \* 2 : For cases where conformance to various safety specs ( UL, CSA, IEC) are required, to be described as 100 ~ 240VAC, 50 / 60Hz on name plate.
- \* 3 : Not applicable for the in-rush current to Noise Filter for less than 0.2ms.
- \* 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-\_) for details of output derating versus ambient temperature.
- \* 12: Operating period at peak output current is less than 10sec., duty < 0.35%
- \* 13: All parameters NOT specifically mentioned are measured at 230VAC input, rated load and Ta=25°C.

LS200

PA579-01-02

OUTPUT DERATING

\*COOLING : FORCED AIR (EXHALE)

Ta ( °C)	LOAD (%)	STANDARD MOUNTING
-25 ~ + 50	100	<p>STANDARD MOUNTING (A)</p> 
70	60	

OUTPUT DERATING CURVE

