

### SPECIFICATIONS

PA579-01-01A

ITEMS		MODEL	LS150-3.3	LS150-5	LS150-12	LS150-15	LS150-24	LS150-36	LS150-48
1	Nominal Output Voltage	V	3.3	5	12	15	24	36	48
2	Maximum Output Current	A	30	26	12.5	10	6.5	4.3	3.3
3	Maximum Output Power	W	99	130	150	150	156	154.8	158.4
4	Efficiency (Typ) (230VAC) (* 1)	%	75	79	83	85	86	87	87
5	Input Voltage Range (* 2)	-	88 ~ 132VAC / 176 ~ 264VAC (47-63Hz) Input Selectable or 248 ~ 373VDC (Withstand 300VAC Surge for 5 seconds)						
6	Input Current (Typ) (115/230VAC) (* 1)	A	3.5 / 2.0						
7	Inrush Current (Typ) (* 3)	-	40A at 230VAC, Ta=25°C (Cold Start)						
8	Harmonic Current (230VAC) (* 1)	-	Built to meet IEC61000-3-2, -3						
9	Output Voltage Range	V	3 ~ 3.6	4.75 ~ 5.5	10.8 ~ 13.2	13.5 ~ 16.5	22 ~ 27.2	32 ~ 40	42 ~ 54
10	Ripple and Noise (* 1, 4)	mV	80	80	120	120	120	150	200
11	Line Regulation (* 5, 6)	mV	20	20	48	60	96	144	192
12	Load Regulation (* 5, 7)	mV	40	40	96	120	192	288	384
13	Temperature Coefficient	-	Less than 0.02%/°C						
14	Over Current Protection (* 8)	A	> 110% rated output power						
15	Over Voltage Protection (* 9)	V	3.8 ~ 4.45	5.75 ~ 6.75	13.8 ~ 16.2	17.25 ~ 20.25	27.6 ~ 32.4	41.4 ~ 48.6	55.2 ~ 64.8
16	Hold-Up Time (Typ) (115/230VAC) (* 1)	mS	25 / 30						
17	Leakage current (* 10)	-	< 1mA at 230VAC, 60Hz						
18	Series Operation	-	Possible						
19	Operating Temperature (* 11)	-	- 25 ~ + 70 °C (Refer to Output Derating Curve)						
20	Operating Humidity	-	20 ~ 90 %RH (No dewdrop)						
21	Storage Temperature	-	- 40 ~ +85°C						
22	Storage Humidity	-	10 ~ 95%RH (No dewdrop)						
23	Cooling	-	Convection cooling						
24	Withstand Voltage	-	Input - Output : 3.0kVAC (20mA), Input - FG : 1.5kVAC (20mA) Output - FG : 500VAC (100mA) for 1min.						
25	Isolation Resistance	-	Input - FG, Input - Output and Output - FG: More than 100MΩ (500VDC) at 25°C and 70%RH						
26	Vibration	-	At no operating, 10 - 55Hz (sweep for 1min) 19.6m/s <sup>2</sup> Constant, X, Y, Z 1hour each.						
27	Shock (In package)	-	Less than 196.1m/s <sup>2</sup>						
28	Safety	-	Approved by UL60950-1, EN60950-1, IEC60950-1						
29	EMI	-	Built to meet EN55011/EN55022-B, FCC-B						
30	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						
31	Weight (Typ)	g	700						
32	Dimension (L x W x H)	mm	199 x 98 x 38 (Refer to Outline Drawing)						

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

= NOTES=

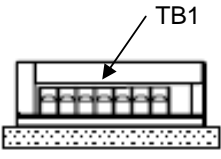
- \* 1 : At Maximum Output Power, nominal input voltage, Ta = 25°C.
- \* 2 : For cases where conformance to various safety specs ( UL, CSA, EN ) are required, to be described as 100 - 240VAC, 50 / 60Hz on name plate.
- \* 3 : Not applicable for the in-rush current to Noise Filter for less than 0.2mS.
- \* 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 : 88 ~ 132VAC or 176 ~ 264VAC, constant load.
- \* 7 : No load - Full load (Maximum power ), constant input voltage.
- \* 8 : Current limit with automatic recovery.  
Avoid to operate at overload or dead short for more than 30 seconds.
- \* 9 : OVP circuit will shutdown output, manual reset (Re-power on).
- \* 10 : Measured by each measuring method of UL and EN (at 60Hz), Ta=25°C.
- \* 11 : Refer to Output Derating Curve (PA579-01-02\_) for details of output derating versus ambient temperature and mounting method.
- \* 12 : All parameters NOT specifically mentioned are measured at 115/230VAC input, rated load and Ta = 25°C.

**LS150**

PA579-01-02

OUTPUT DERATING

**\*COOLING : CONVECTION COOLING**

Ta (°C)	LOAD (%)	STANDARD MOUNTING
-25 ~ +40	100	
50	83.3 (3.3 & 5V), 100 (OTHERS)	
70	50 (3.3 & 5V), 70 (OTHERS)	

