

**ELV12**

SPECIFICATIONS

V002-01-01E

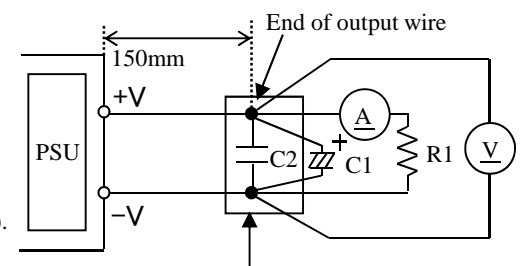
ITEMS		MODEL	ELV12-12-1R0	ELV12-24-R50
1	Nominal Output Voltage	V	12	24
2	Minimum Output Current	A	0.1	0.05
3	Maximum Output Current	A	1	0.5
4	Maximum Output Power	W	12	12
5	Efficiency (Typ) (*1)	100VAC	81	83
		200VAC	82	84
6	Input Voltage Range (*2)	-	90 - 265 VAC (47Hz - 63Hz)	
7	Input Current (Typ.) (*1)	A	0.28A at 100VAC, 0.18A at 200VAC	
8	Inrush Current (Typ.) (*3)	-	25A at 100VAC, 50A at 200VAC, Ta = 25°C, Cold Start	
9	Output Voltage Accuracy (*4,5)	-	±3%	
10	Total Regulation (*5)	-	±3%	
11	Output Ripple & Noise (*4,5)	mV	100	150
12	Over Current Protection (*6)	-	>105% Rated Output Power	
13	Over Voltage Protection (*7)	-	>110%	
14	Turn On Time (Typ.)	ms	30	
15	Operating Temperature (*8)	-	-10 - +60°C	
16	IP Class (*9)	-	IP66	
17	Operating Humidity	-	15 - 90%RH (No Condensing)	
18	Storage Temperature	-	-30 - +85°C	
19	Storage Humidity	-	15 - 90%RH (No Condensing)	
20	Cooling	-	Convection Cooling	
21	Withstand Voltage	-	Input - FG : 2kVAC, Input - Output : 3kVAC, for 1 min (10mA Max.)	
22	Isolation Resistance	-	>100MΩ at 25°C and 70%RH. Output - FG : 500 VDC	
23	Leakage Current (*10)	-	Less than 0.5mA. 0.15mA(Typ.) at 100VAC / 0.3mA(Typ.) at 200VAC	
24	Vibration	-	At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s <sup>2</sup> Constant, X,Y,Z 1hour each.	
25	Shock (In Package)	-	Less than 196.1m/s <sup>2</sup>	
26	EMI (Conducted & Radiated Emission)	-	Designed to meet EN55015 ; EN55022-B ; VCCI-B ; CISPR 22-B ; FCC-B	
27	Immunity	-	Designed to meet IEC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11	
28	Safety Standard	-	PSE mark (Den-an Appendix 8) Designed to meet UL8750 (Class2), EN61347-1, EN-61347-2-13, EN62384	
29	Weight (Typ.)	g	230	
30	Size (L x W x H)	mm	L:104(122 including mounting bracket) W:36.5 H:27.2	

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

=NOTES=

- \*1 : At maximum output power , Ta = 25°C.
- \*2 : For cases where conformance to safety spec (Den-an) is 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 : At Vin=100/200VAC & maximum output power, Ta = 25°C.
- \*5 : Refer to Fig. A for measurement determination.
- \*6 : Current limiting with automatic recovery or shutdown output (at high temperature).  
Please refer instruction manual.  
Avoid over load and short circuit condition.
- \*7 : OVP circuit will shutdown output, manual reset ( Re-power on).
- \*8 : For cases where conformance to safety specs, operating case or ambient temperature will be specified.  
Please refer instruction manual.
- \*9 : Conditions : Please refer instruction manual.
- \*10 : Measured by measuring method of Den-an (at 60Hz), Ta=25°C.

**Figure A measurement set up**



Measurement point for output voltage, regulation and ripple & noise voltage. Measure with JEITA probe.

Bandwidth of oscilloscope : 20MHz

R1 = Electronic load

C1 = Elect. Cap. 100uF

C2 = Film Cap. 0.1uF

**ELV12**

OUTPUT DERATING

V002-01-02

\*COOLING : CONVECTION COOLONG

Ta (°C)	LOAD (%)
-10 - +60	100

