

**EVS300W/A****SPECIFICATIONS**

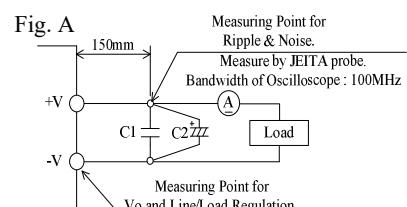
A269-01-01/A-A

ITEMS		MODEL		EVS18-16R7/A	EVS36-8R4/A	EVS57-5R3/A
1	Nominal Output Voltage	V	18	36	57	
2	Maximum Output Current	A	16.7	8.4	5.3	
3	Maximum Output Power	W	300.6	302.4	302.1	
4	Efficiency (Typ)	100VAC (*1) 200VAC	%	86 89	88 91	87 90
5	Input Voltage Range	(*2)(*3)	-	85 - 265VAC (47 - 63Hz) or 120 - 370VDC		
6	Input Current (Typ)	(*1)	A	3.6/1.8		
7	Inrush Current (Typ)	(*1)(*4)	-	15A at 100VAC, 30A at 200VAC, Ta=25°C, Cold Start		
8	PFHC	-	Designed to meet IEC61000-3-2			
9	Power Factor (Typ)	(*1)	-	0.97/0.93		
10	Output Voltage Range	V	12 - 18	24 - 36	48 - 57	
11	Maximum Ripple & Noise	0≤Ta≤70°C (*5) -20≤Ta<0°C	mV	200 250	250 300	250 400
12	Maximum Line Regulation	(*5)(*6)	mV	72	144	228
13	Maximum Load Regulation	(*5)(*7)	mV	144	252	285
14	Temperature Coefficient	(*5)	-	Less than 0.02% / °C		
15	Output Constant Current Limit Range	(*8)	A	8.35 - 16.70	4.20 - 8.40	2.65 - 5.30
16	Constant Current Setting accuracy	-	-	±10%		
17	Over Voltage Protection	(*9)	V	19.8 - 23.4	39.6 - 46.8	62.7 - 74.1
18	Hold-up Time (Typ)	(*1)	-	10ms(typ) at 100VAC & Rated O/P Power		
19	Leakage Current	(*10)	-	Less than 0.5mA. 0.2mA (Typ) at 100VAC / 0.4mA (Typ) at 230VAC		
20	Parallel Operation	-	-	Possible		
21	Series Operation	-	-	Possible		
22	Operating Temperature	(*11)	-	-20 - +60°C (-20 - +30°C:100%, +40°C:80%, +50°C:60%, 60°C:40%)		
23	Operating Humidity	-	-	30 - 90%RH (No Condensing)		
24	Storage Temperature	-	-	-30 - +75°C		
25	Storage Humidity	-	-	10 - 90%RH (No Condensing)		
26	Cooling	-	-	Convection Cooling		
27	Withstand Voltage	-	-	Input - FG : 2kVAC (10mA), Input - Output : 3kVAC (10mA) Output - FG : 500VAC (20mA)		
28	Isolation Resistance	-	-	More than 100MΩ at 25°C and 70%RH Output - FG : 500VDC		
29	Vibration	-	-	At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s² Constant, X,Y,Z 1hour each.		
30	Shock	-	-	Less than 196.1m/s²		
31	Safety	-	-	Approved by UL62368-1, CSA62368-1, EN62368-1, UL60950-1, CSA60950-1, EN60950-1 (Expire date of 60950-1 : 20/12/2020) Designed to meet Den-an Appendix 8 at 100VAC only.		
32	Conducted Emission	(*12)	-	Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B		
33	Radiated Emission	(*12)	-	Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B		
34	Immunity	(*12)	-	Designed to meet IEC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11		
35	Weight (Typ)	g	-	800		
36	Size (W x H x D)	mm	-	95 x 53 x 212 ( Refer to Outline Drawing )		

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

## =NOTES=

- \*1. At 100VAC/200VAC, Ta=25°C, nominal output voltage and maximum output power.
- \*2. For cases where conformance to various safety specs (UL, CSA, EN) are required, to be described as 100 - 240VAC (50-60Hz).
- \*3. Output derating needed when input voltage less than 90VAC. Refer to LOAD vs. INPUT VOLTAGE (A269-01-02/A- ).
- \*4. Not applicable for the in-rush current to Noise Filter for less than 0.2ms.
- \*5. Please refer to Fig. A for measurement of Vo, line & load regulation and ripple voltage.
- \*6. 90 - 265VAC, constant load.
- \*7. No load-Full load, constant input voltage.
- \*8. Constant current limit with automatic recovery. Avoid to operate at short circuit condition.  
Avoid to operate at constant current condition that output voltage is less than 50% of setting output voltage.  
Avoid to adjust rotary switch(S1) when power supply is operating.
- \*9. OVP circuit will shut down output, manual reset (Re power on).
- \*10. Measured by the each measuring method of UL, CSA, EN and DENAN (at 60Hz), Ta=25°C.
- \*11. Output Derating
  - Derating at standard mounting. Refer to LOAD vs. AMBIENT TEMPERATURE (A269-01-02/A- ).
  - When forced air cooling, refer to forced air cooling specifications (A269-01-03/A- ).
  - Load (%) is percent of maximum output power or maximum output current, do not exceed its derating of maximum load.
- \*12. The power supply is considered a component which will be installed into a final equipment.  
The final equipment should be re-evaluated that it meets EMC directives.



C1 : Film Cap. 0.1 μF

C2 : Elect. Cap. 100 μF

**EVS300W/A****OUTPUT DERATING**

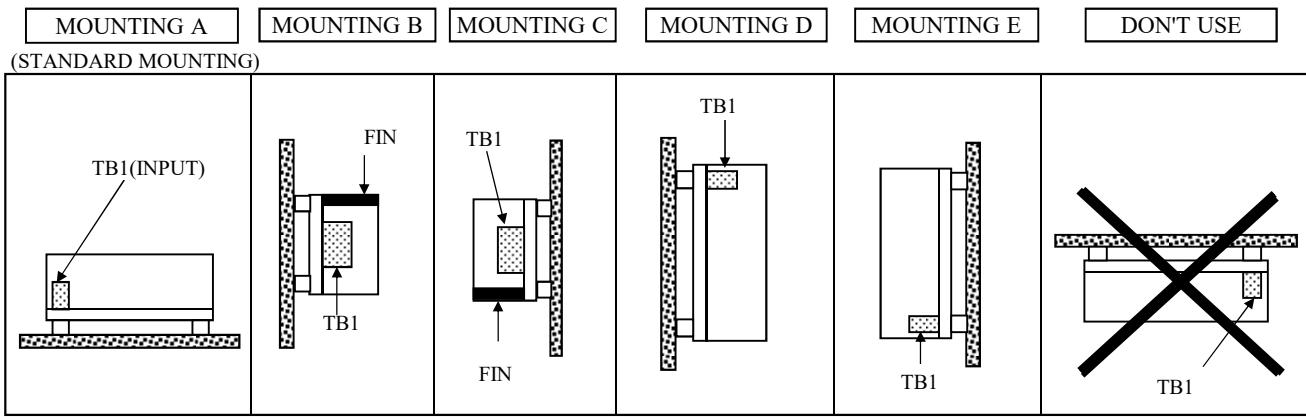
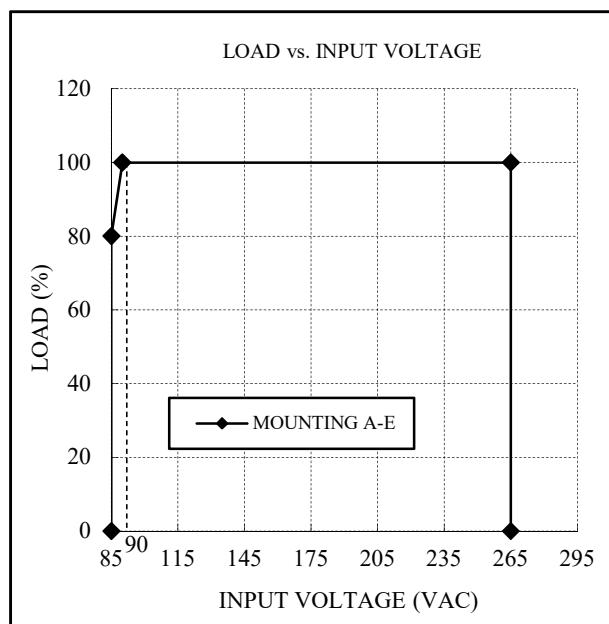
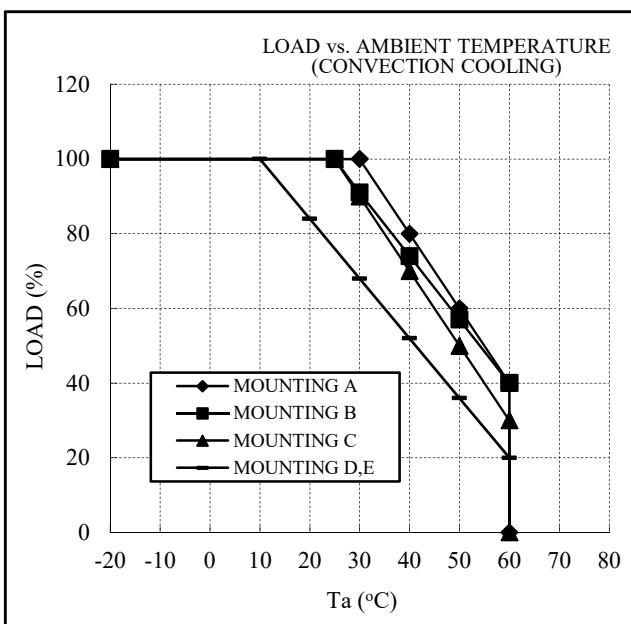
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**\*COOLING : CONVECTION COOLING**

Ta (°C)	LOAD (%)		
	MOUNTING A	MOUNTING B	MOUNTING C
-20 - +25	100	100	100
30	100	91	90
40	80	74	70
50	60	57	50
60	40	40	30

Ta (°C)	LOAD (%)	
	MOUNTING D,E	
-20 - +10	100	
20	84	
30	68	
40	52	
50	36	
60	20	

INPUT VOLTAGE (VAC)	LOAD (%)	
	MOUNTING A-E	
85	80	
90 - 265	100	



**EVS300W/A****OUTPUT DERATING**

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\*COOLING : FORCED AIR COOLING

Ta (°C)	LOAD (%)
	MOUNTING A-E
-20 - +50	100
60	70

Air velocity  $\geq 1.4\text{m/s}$  :

Air must flow through component side.

LOAD vs. AMBIENT TEMPERATURE  
(FORCED AIR COOLING)