HWS100A/ADIN

SPECIFICATIONS

A258-01-01/ADIN-C

	ITEMS	MODEL		HWS100A-5/ADIN	HWS100A-12/ADIN	HWS100A-15/ADIN	HWS100A-24/ADIN	HWS100A-48/ADIN
1	Nominal Output Voltage		V	5	12	15	24	48
2	Maximum Output Current		A	20	8.5	7	4.5	2.1
3	Maximum Output Power		W	100.0	102.0	105.0	108.0	100.8
4	Efficiency (Typ.) (*1)	100VAC	%	84	86	86	87	88
		200VAC	%	86	88	88	89	90
5	Input Voltage Range (*2)(*3)		-	85 - 265VAC (47 - 63Hz) or 120 - 370VDC				
6	Input Current (Typ.) (*1)		A	1.3/0.65				
7	Inrush Current (Typ.) (*1)(*4)		-	14A at 100VAC, 28A at 200VAC, Ta=25°C, Cold Start				
8	PFHC		-	Designed to meet IEC61000-3-2				
9	Power Factor (Typ.) (*1)		-	0.98/0.93				
10	Output Voltage Range		V	4.0 - 6.0	9.6 - 14.4	12.0 - 18.0	19.2 - 28.8	38.4 - 52.8
11	Maximum Ripple & Noise	0≤Ta≤70°C	mV	120	150	150	150	200
	(*5)	-10≤Ta<0°C	mV	160	180	180	180	240
12	Maximum Line Regulation (*6)		mV	20	48	60	96	192
13	Maximum Load Regulation (*7)		mV	40	96	120	150	240
14	Temperature Coefficient		-	Less than 0.02% / °C				
15	Over Current Protection (*8)		A	21.0 ≤	8.92 ≤	7.35 ≤	4.72 ≤	2.20 ≤
16	Over Voltage Protection (*9)		V	6.25 - 7.25	15.0 - 17.4	18.8 - 21.8	30.0 - 34.8	55.2 - 64.8
17	Hold-up Time (Typ.) (*1)		-	20ms				
18	Leakage Current (*10)		-	Less than 0.5mA. 0.2mA (Typ) at 100VAC / 0.4mA (Typ) at 230VAC				
19	Remote Sensing		-	Possible				
20	Parallel Operation		-	-				
21	Series Operation		-	Possible				
22	Operating Temperature (*11)		-	-10 to +70°C (-10 to +50°C:100%, +60°C:60%, +70°C:20%)				
23	Operating Humidity		-	30 to 90%RH (No Condensing)				
24	Storage Temperature		-	-30 to +85°C				
25	Storage Humidity		-	10 to 95%RH (No Condensing)				
26	Cooling		-	Convection Cooling				
27	Withstand Voltage		-	Input - FG : 2kVAC (20mA), Input - Output : 3kVAC (20mA) Output - FG : 500VAC (20mA) for 1min				
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) 9.8m/s^2 Constant, X,Y,Z 1hour each.				
30	Shock		-	Less than 147m/s^2				
31	Safety		-	Approved by UL62368-1, CSA62368-1, EN62368-1, UL60950-1, CSA60950-1, EN60950-1 (Expire date of 60950-1 : 20/12/2020) UL508, CSA C22.2 No.107.1-01. Designed to meet Den-an Appendix 8 at 100VAC only.				
32	Line DIP		-	Designed to meet SEMI-F47 (200VAC Line only)				
33	Conducted Emission (*12)		-	Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B				
34	Radiated Emission (*12)		-	Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B				
35	Immunity (*12)		-	Designed to meet IEC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11				
36	Weight (Typ)		-	740g				
37	Size (W x H x D)		mm	47 x 113 x 196.8 (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 OUTPUT DERATING CURVE (A258-01-02/ADIN-_).

*4. Not applicable for the inrush current to Noise Filter for less than 0.2ms.

*5. Measure with JEITA RC-9131B probe, Bandwidth of scope :100MHz.

*6. 85 - 265VAC, constant load.

*7. No load-Full load, constant input voltage.

*8. Constant current limit and Hiccup with automatic recovery.
    Avoid to operate at over load or short circuit condition.

*9. OVP circuit will shut down output, manual reset (Re power on).

*10. Measured by the each measuring method of UL, CSA, EN and Den-an (at 60Hz), Ta=25°C.

*11. Output Derating
    - Derating at standard mounting. Refer to OUTPUT DERATING CURVE (A258-01-02/ADIN-_).
    - 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.
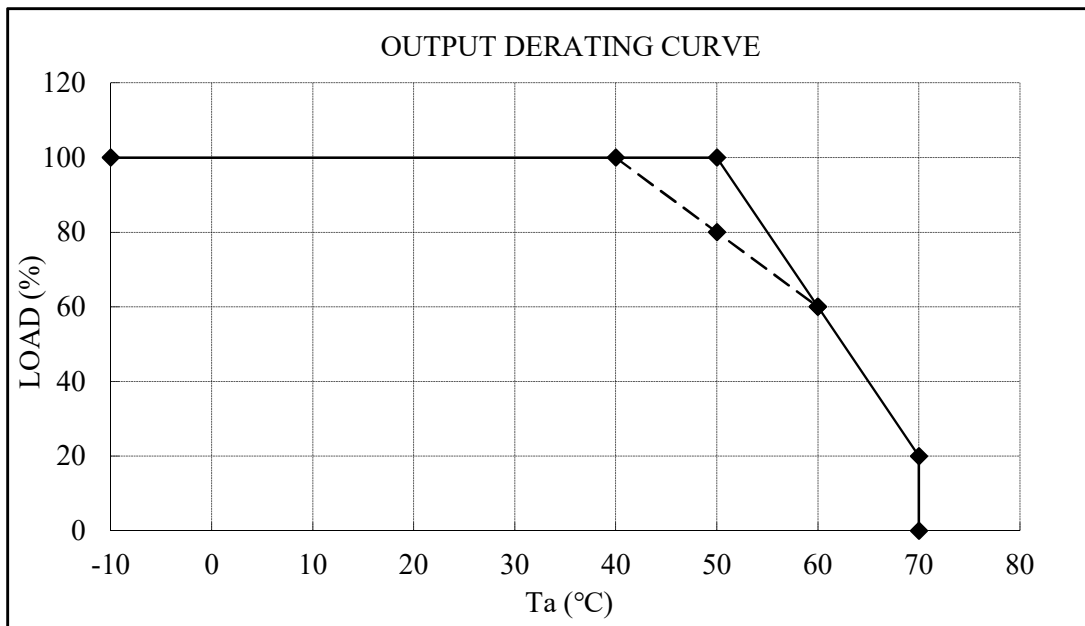   The final equipment should be re-evaluated that it meets EMC directives.

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OUTPUT DERATING

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Ta (°C)	LOAD (%)
	STANDARD MOUNTING
-10 - +50	100
60	60
70	20

*Refer to dotted line for output derating curve, when input voltage range is "85≦Vin<90".

OUTPUT DERATING CURVE

STANDARD MOUNTING