## **SPECIFICATIONS**

## A264-01-01/ADIN-C

		MODEL		HWS80A-	HWS80A-	HWS80A-	HWS80A-	HWS80A-
	ITEMS			5/ADIN	12/ADIN	15/ADIN	24/ADIN	48/ADIN
1	Nominal Output Voltage		V	5	12	15	24	48
2	Maximum Output Current		A	16	6.7	5.4	3.4	1.7
3	Maximum Output Power		W	80.0	80.4	81.0	81.6	81.6
4	Efficiency (Typ.) (*1	100VAC	%	83	85	85	86	87
		200VAC	%	85	87	87	88	89
5	Input Voltage Range	(*2)	•	85 - 265VAC (47 - 63Hz) or 120 - 370VDC				
6	Input Current (Typ.)	(*1)	Α	1.04/0.52				
7	Inrush Current (Typ.)	(*1)(*3)	•	14A at 100VAC, 28A at 200VAC, Ta=25°C, Cold Start				
8	PFHC		-	Designed to meet IEC61000-3-2				
9	Power Factor (Typ.)	(*1)	-			0.98/0.91		
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
		-10 <u>≤</u> Ta<0°C	mV	160	180	180	180	240
12	Maximum Line Regulation	(*5)	mV	20	48	60	96	192
13	Maximum Load Regulation	(*6)	mV	40	96	120	150	240
14	Temperature Coefficient		-	Less than 0.02% / °C				
15	Over Current Protection	(*7)	A	16.8 <u>≤</u>	7.04 <u>&lt;</u>	5.67 <u>≤</u>	3.57 ≤	1.79 <u>&lt;</u>
16	Over Voltage Protection	(*8)	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	(*9)	-	Less than 0.5mA. 0.2mA (Typ) at 100VAC / 0.4mA (Typ) at 230VAC				
19	Remote Sensing		-			Possible		
20	Parallel Operation		-			-		
21	Series Operation	(#10)	-	Possible -10 to +70°C (-10 to +50°C:100%, +60°C:80%, +70°C:60%)				
22	Operating Temperature	(*10)	-	-101				50%)
23	Operating Humidity		-		30 to 9	0%RH (No Cond	ensing)	
24	Storage Temperature		-	-30 to +85°C				
25	Storage Humidity		-	10 to 95%RH (No Condensing)				
26 27	Cooling Withstand Voltage		-	T	t - FG : 2kVAC (2	Convection Coolin		0 4)
27	withstand voltage		-	Input				UmA)
20	Isolation Resistance			M		G: 500VAC (20m		OVDC
28 29	Vibration Resistance		-	More than 100MΩ at 25°C and 70%RH Output - FG: 500VDC At no operating, 10 - 55Hz (Sweep for 1min)				
29	v ioiailoli		_					
30	Shock		_	9.8m/s <sup>2</sup> Constant, X,Y,Z 1hour each. Less than 147m/s <sup>2</sup>				
31	Safety		-	Annroved by I				CSA60950-1
31	Salety		_	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.				
32	Line DIP		_	Designed to meet Den-an Appendix 8 at 100VAC only.  Designed to meet SEMI-F47 (200VAC Line only)				
33	Conducted Emission	(*11)		Designed to meet SEM1-F47 (200 VAC Line only)  Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B				
34	Radiated Emission	(*11)		Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B				
35	Immunity	(*11)		Designed to meet EC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11				
36	Weight (Typ)	(11)	_	740g				
37	Size (W x H x D)		mm		47 x 113 x 19a	6.8 ( Refer to Out	line Drawing )	
<u> </u>	Dize (W X II X B)				., A 115 A 17	e.e ( Refer to Out	me Bianing)	

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

=NOTES=

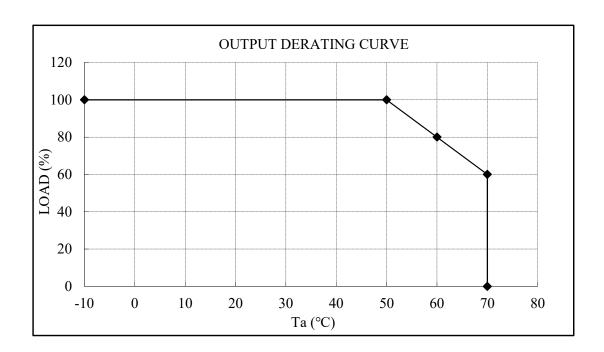
- \*1. At 100VAC/200VAC, Ta=25°C, nominal output voltage and maximum output power.
- \*2. For cases where conformance to various safety specs (UL, CSA, EN) are required, to be described as 100 240VAC(50 60Hz).
- \*3. Not applicable for the inrush current to Noise Filter for less than 0.2ms.
- \*4. Measure with JEITA RC-9131B probe, Bandwidth of scope :100MHz.
- \*5. 85 265VAC, constant load.
- \*6. No load-Full load, constant input voltage.
- \*7. Constant current limit and Hiccup with automatic recovery. Avoid to operate at over load or short circuit condition.
- \*8. OVP circuit will shut down output, manual reset (Re power on).
- \*9. Measured by the each measuring method of UL, CSA, EN and Den-an (at 60Hz), Ta=25°C.
- \*10. Output Derating
  - Derating at standard mounting. Refer to OUTPUT DERATING CURVE (A264-01-02/ADIN- ).
  - Load (%) is percent of maximum output power or maximum output current, do not exceed its derating of maximum load.
- \*11. 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.

## **OUTPUT DERATING**

A264-01-02/ADIN

Ta (°C)	LOAD (%)				
	STANDARD MOUNTING				
-10 - +50	100				
60	80				
70	60				



## STANDARD MOUNTING

