# GXE600/HDA

## A263-01-01/HDA-A

# SPECIFICATIONS(1/2)

MODEL				GXE600-24/HDA	GXE600-48/HDA
$\vdash$	ITEMS				
1	Nominal Output Voltage		V	24	48
2	Maximum Output Current		A	25.0	12.5
3	Maximum Output Power	1	W	600	600
4	Efficiency (Typ.)	100/115VAC	%	92 / 92	92 / 92
	• • •	200/230VAC	%	94 / 95	94 / 95
5	Input Voltage Range	(*2)(*10)	-	85 - 265VAC	
6	Input Current	100/115VAC	A	7.0	
	` /	200/230VAC	A	3.6 /	
7	Inrush Current (Typ.)	100/200VAC	A	20 / 40 at 1st Inrush,	40 / 40 at 2nd Inrush
	(*1)(*3)				
8	PFHC		-	Designed to meet IEC61000-3-2	
9	Power Factor (Typ.) (*1)	100/200VAC	-	0.99 /	
10	Output Voltage Range	(*12)	V	4.8 - 28.8	9.6 - 57.6
L	(With PV control)				
11	Output Voltage Range	(*12)	V	19.2 - 28.8	38.4 - 57.6
	(With the output voltage adjustme				
12	Maximum Ripple & Noise	0 <u>≤</u> Ta <u>≤</u> 70°C		150	350
	. ,	-20 <u>≤</u> Ta<0°C		200	400
13	Maximum Line Regulation	(*5)(*10)		96	192
14	Maximum Load Regulation	(*6)(*10)	mV	144	288
15	Temperature Coefficient		-	Less than (	
16	Over Current Protection	(*7)	A	27.5 -	13.8 -
17	Over Voltage Protection	(*8)	V	28.8 - 31.2	57.6 - 62.4
18	Hold-up Time (Typ.)	(*1)	-	201	
19	Leakage Current (*9)		-	Less than 0.3mA	
20	External Output Voltage Control (PV) (*12)		-	Possible	
21	External Output Current Control (CC) (*12)		-	Possible	
22	Remote Sensing	(*12)	-	Poss	
23	Monitoring Signal	(*12)	-	Power Fail, AC Fail (C	1 1
24	Remote ON/OFF Control	(*12)	-	Poss	
25	Communication Function	(*12)	-	Possible	· · · · · ·
26	Parallel Operation	(*12)	-	Possible (U <sub>1</sub>	
27	Series Operation	(*12)	-	Poss	
28	Operating Temperature	(*10)(*14)	-	-20 - +70°C (-20 - +40°C	
					up : -4020°C
29	Operating Humidity		-	20 - 90%RH (N	
30	Storage Temperature		-	-40 - H	
31	Storage Humidity		-	10 - 90%RH (N	
32	Cooling	(*10)	-	Convectio	<u>e</u>
33	Withstand Voltage		-	Input-FG: 2kVAC (20mA) 1MOPP, In	
				•	AC (20mA) 1MOPP,
2.1	T. 1.4. D. C.			Output - Signal : 100VAC (20mA	
34	Isolation Resistance	(44.0) (44.5)	-	More than $100\text{M}\Omega$ at 25°C and 7	
35	Vibration	(*13)(*15)	-	At no operating, $10 - 5$	
				19.6m/s <sup>2</sup> Constant,	
2.5	C1 1	/d-4 @\		Designed to meet MIL-STD	
36	Shock	(*13)	-	Less than	
				Designed to meet MIL-STD-	-810G 516.7 Procedure I, VI

### SPECIFICATIONS(2/2)

MODEL ITEMS				GXE600-24/HDA	GXE600-48/HDA
37	Safety		-	Approved by UL60950-1, CSA60950-1,	
				UL62368-1, CSA62	368-1, EN62368-1,
				ES60601-1, I	EN60601-1,
				CSA-C22.2 No.60601-1	, EN62477-1 (OVC III).
				Designed to meet Den-an Appe	ndix 12 (J60950-1, J62368-1).
38	Line DIP		-	Designed to meet SEMI-	F47 (200VAC Line only)
39	Conducted Emission	(*11)	•	Designed to meet EN55011/E	EN55032-B, FCC-B, VCCI-B
40	Radiated Emission	(*11)	-	Designed to meet EN55011/E	EN55032-B, FCC-B, VCCI-B
41	Immunity	(*11)	-	Designed to meet IEC61000-6-2, II	EC61000-4-2, -3, -4, -5, -6, -8, -11,
				IEC60601-1-	-2 Edition 4.
42	Weight (Typ.)		g	14	00
43	Size (W x H x D)		mm	127.5 x 50 x 254 (Refe	er to Outline Drawing)
44	Standby Supply		-	5V /	'1A

<sup>\*</sup>To improve resistance against dust environment, both sides of assembled PCB are coated.

However, complete effect is not guaranteed because some areas on the board are not coated.

#### =NOTES=

- \*1. 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. Refer to Fig. A for measurement of ripple voltage.
- \*5. 85 265VAC, constant load.
- \*6. No load Full load, constant input voltage.
- \*7. Over current protection (OCP) mode is selectable, "Constant current limit with automatic recovery" or "Output shutdown".

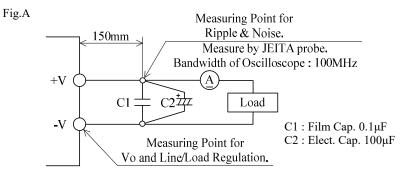
  Manual reset is executed by "Re power on" or "Restart by remote on/off control". OCP point can be adjusted by communication function.

  Avoid to operate at over load or short circuit condition.
- \*8. Over voltage protection (OVP) mode is selectable, "Automatic recovery" or "Output shutdown".

  Manual reset is executed by "Re power on" or "Restart by remote on/off control". OVP point can be adjusted by communication function.
- \*9. Measured by the each measuring method of UL, CSA, EN and Den-an (at 60Hz), Ta=25°C.
- \*10. Output Derating
  - When ambient temperature is more than 40°C, refer to OUTPUT CURRENT vs. AMBIENT TEMPERATURE (A263-01-02/HDA).
  - When input voltage is less than 170VAC. Refer to OUTPUT POWER vs. INPUT VOLTAGE (A263-01-02/HDA).
- \*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.

- \*12. Refer to instruction manual (A263-04-01\_).
- \*13. Using 4 Mount Holes at bottom side.
- \*14. At -40 -20°C, the electrical characteristics are not guaranteed.
- \*15. Category 4 exposure levels: Track transportation over US highways, Composite two-wheeled trailer.



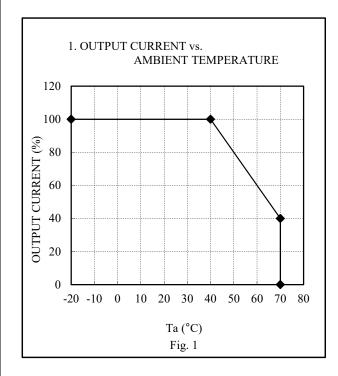
<sup>\*</sup>Read instruction manual carefully, before using the power supply unit.

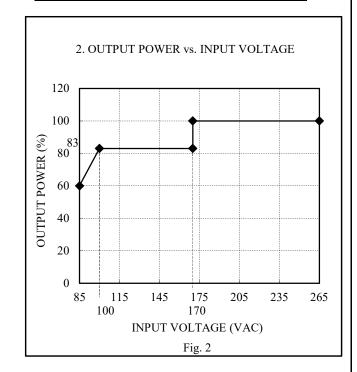
A263-01-02/HDA

#### **OUTPUT DERATING**

	OUTPUT CURRENT (%)	
Ta (°C)	MOUNTING A-D	
-20 - +45	100	
40	100	
70	40	

INPUT VOLTAGE	OUTPUT POWER (%)
(VAC)	MOUNTING A-D
85	60 (360W)
100	83 (500W)
<170	83 (500W)
170 <u>≤</u>	100 (600W)





#### =NOTES=

Use so that both of 1. and 2. shall be satisfied.

- 1. Derating is necessary to output current in case of ambient temperature more than 40°C. (Fig.1)
- 2. Derating is necessary to output power in case of input voltage less than 170VAC. (Fig.2)

For example, in case of input voltage 100VAC and ambient temperature 50°C and mounting A at 24V model .

According to 1. ambient temperature derating, output current limit is 80% (20.0A). ---(1)

According to 2. input voltage derating, output power limit is 500W. ---(2)

When  $Vo \le 25.0V$ , the derating is determined by output current (1). Because output power is less than 500W (25.0V x 20.0A). When  $Vo \ge 25.0V$ , the derating is determined by output power (2).

