

**GXE600/HD**

A263-01-01/HD-A

SPECIFICATIONS(1/2)

ITEMS		MODEL	GXE600-24/HD	GXE600-48/HD
1	Nominal Output Voltage	V	24	48
2	Maximum Output Current	A	25.0	12.5
3	Maximum Output Power	W	600	600
4	Efficiency (Typ.)	100/115VAC	92 / 92	92 / 92
		(*1) 200/230VAC	94 / 95	94 / 95
5	Input Voltage Range	(*2)(*10) -	85 - 265VAC (47 - 63Hz)	
6	Input Current	100/115VAC	7.0 / 6.1	
		(*1) 200/230VAC	3.6 / 3.1	
7	Inrush Current (Typ.)	100/200VAC	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 / 0.95	
10	Output Voltage Range	(*12) V	4.8 - 28.8	9.6 - 57.6
	(With PV control)			
11	Output Voltage Range	(*12) V	19.2 - 28.8	38.4 - 57.6
	(With the output voltage adjustment trimmer)			
12	Maximum Ripple & Noise	0≤Ta≤70°C	150	350
		(*4) -20≤Ta<0°C	200	400
13	Maximum Line Regulation	(*5)(*10) mV	96	192
14	Maximum Load Regulation	(*6)(*10) mV	144	288
15	Temperature Coefficient	-	Less than 0.02% / °C	
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) -	20ms	
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) -	Possible	
23	Monitoring Signal	(*12) -	Power Fail, AC Fail (Open Collector Output)	
24	Remote ON/OFF Control	(*12) -	Possible	
25	Communication Function	(*12) -	Possible (RS-485)	
26	Parallel Operation	(*12) -	Possible (Up to 5 units)	
27	Series Operation	(*12) -	Possible	
28	Operating Temperature	(*10)(*14) -	-20 - +70°C (-20 - +50°C : 100%, +70°C : 50%), Guarantee Start up : -40 - -20°C	
29	Operating Humidity	-	20 - 90%RH (No Condensing)	
30	Storage Temperature	-	-40 - +85°C	
31	Storage Humidity	-	10 - 90%RH (No Condensing)	
32	Cooling	(*10) -	Convection Cooling, Forced Air Cooling	
33	Withstand Voltage	-	Input-FG : 2kVAC (20mA) 1MOPP, Input-Output : 4kVAC (20mA) 2MOPP, Output-FG : 1.5kVAC (20mA) 1MOPP, Output - Signal : 100VAC (20mA) functional insulation, for 1min.	
34	Isolation Resistance	-	More than 100MΩ at 25°C and 70%RH Output to FG : 500VDC	
35	Vibration	(*13)(*15) -	At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s <sup>2</sup> Constant, X,Y,Z 1hour each. Designed to meet MIL-STD-810G 514.7 Category 4, 10	
36	Shock	(*13) -	Less than 196m/s <sup>2</sup> Designed to meet MIL-STD-810G 516.7 Procedure I, VI	

**GXE600/HD**

SPECIFICATIONS(2/2)

ITEMS		MODEL	GXE600-24/HD	GXE600-48/HD
37	Safety	-	Approved by UL60950-1, CSA60950-1, UL62368-1, CSA62368-1, EN62368-1, ES60601-1, EN60601-1, CSA-C22.2 No.60601-1, EN62477-1 (OVC III). Designed to meet Den-an Appendix 12 (J60950-1, J62368-1).	
38	Line DIP	-	Designed to meet SEMI-F47 (200VAC Line only)	
39	Conducted Emission	(*11)	Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B	
40	Radiated Emission	(*11)	Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B	
41	Immunity	(*11)	Designed to meet IEC61000-6-2, IEC61000-4-2, -3, -4, -5, -6, -8, -11, IEC60601-1-2 Edition 4.	
42	Weight (Typ.)	g	1300	
43	Size (W x H x D)	mm	127 x 41 x 254 (Refer to Outline Drawing)	
44	Standby Supply	-	5V / 1A	

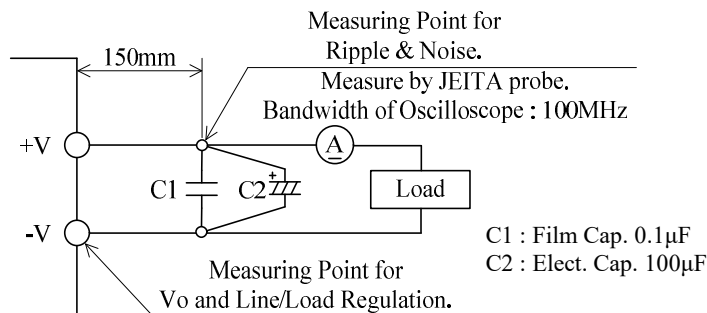
\*To improve resistance against dust environment, both sides of assembled PCB are coated.  
However, complete effect is not guaranteed because some areas on the board are not coated.

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

=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 50°C, refer to OUTPUT CURRENT vs. AMBIENT TEMPERATURE (A263-01-02/HD\_).
  - When input voltage is less than 170VAC. Refer to OUTPUT POWER vs. INPUT VOLTAGE (A263-01-02/HD\_).
- \*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.

Fig.A



**GXE600/HD**

A263-01-02/HD

**OUTPUT DERATING**

Ta (°C)	OUTPUT CURRENT (%)	
	MOUNTING A,B,D	MOUNTING C
-20 - +45	100	100
50	100	90
70	50	50

INPUT VOLTAGE (VAC)	OUTPUT POWER (%)	
	CONVECTION	FORCED AIR *
85	60 (360W)	100 (600W)
100	83 (500W)	
<170	83 (500W)	
170≤	100 (600W)	

\*Refer to NOTES

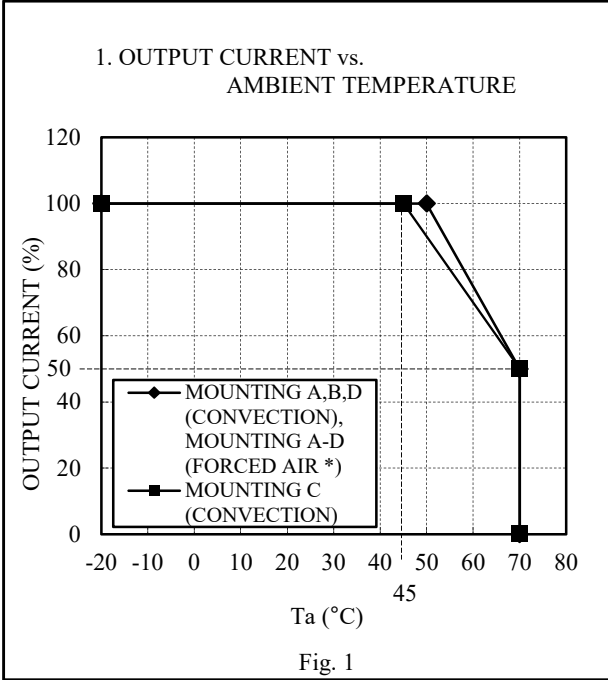


Fig. 1

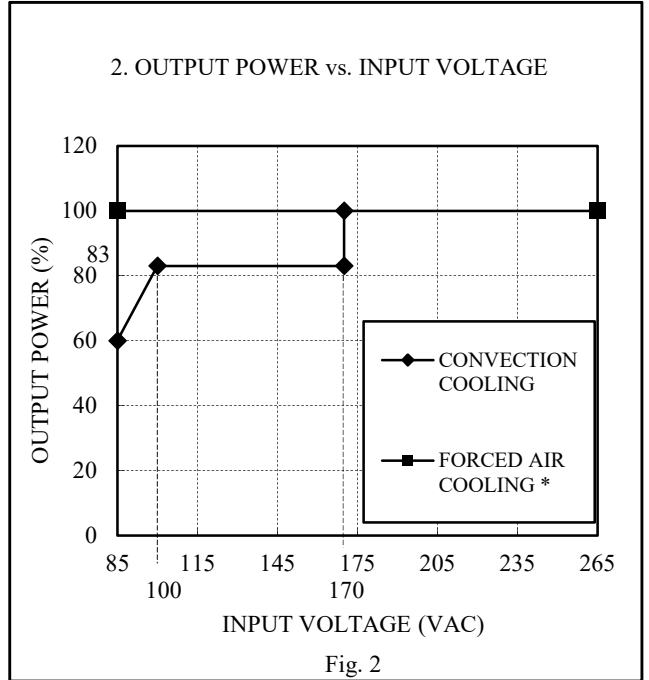


Fig. 2

=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 50°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 60°C and mounting A at 24V model .

According to 1. ambient temperature derating, output current limit is 75% (18.75A). ---(1)

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

When  $V_o \leq 26.6V$ , the derating is determined by output current (1). Because output power is less than 500W ( $26.6V \times 18.75A$ ).

When  $V_o > 26.6V$ , the derating is determined by output power (2).

\*In forced air condition, the entire components shall be cooled. Temperature of L2 and L5 need to be less than 85 °C.

(Refer to instruction manual for more information)

MOUNTING A

MOUNTING B

MOUNTING C

MOUNTING D

DON'T USE

(STANDARD MOUNTING)

