

**GXE600/A**

A263-01-01/A

SPECIFICATIONS(1/2)

ITEMS		MODEL	GXE600-24/A	GXE600-48/A
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.) (*1)	100/115VAC	92 / 92	92 / 92
		200/230VAC	94 / 95	94 / 95
5	Input Voltage Range (*2)(*10)	-	85 - 265VAC (47 - 63Hz)	
6	Input Current (*1)	100/115VAC	7.0 / 6.1	
		200/230VAC	3.6 / 3.1	
7	Inrush Current (Typ.) (*1)(*3)	A	20 / 40 at 1st Inrush, 40 / 40 at 2nd Inrush	
8	PFHC	-	Designed to meet IEC61000-3-2	
9	Power Factor (Typ.) (*1)	100/200VAC	0.99 / 0.95	
10	Output Voltage Range (With PV control) (*12)	V	4.8 - 28.8	9.6 - 57.6
11	Output Voltage Range (With the output voltage adjustment trimmer) (*12)	V	19.2 - 28.8	38.4 - 57.6
12	Maximum Ripple & Noise (*4)	0≤Ta≤70°C	150	350
		-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	28.8 -	14.4 -
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)	-	PowerFail, ACFail (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 - +40°C : 100%, +70°C : 40%), 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	
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)	-	At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s <sup>2</sup> Constant, X,Y,Z 1hour each.	
36	Shock (*13)	-	Less than 196m/s <sup>2</sup>	

SPECIFICATIONS(2/2)

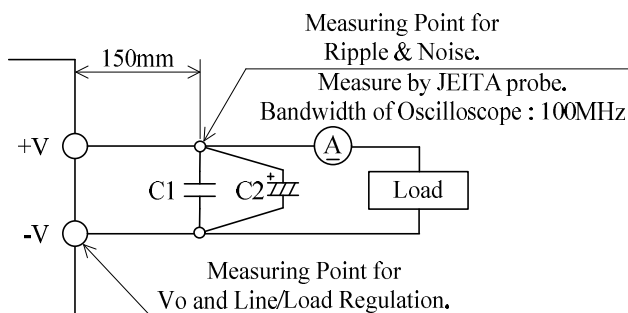
ITEMS		MODEL	GXE600-24/A	GXE600-48/A
37	Safety	-	Approved by UL60950-1, CSA60950-1, EN60950-1, UL62368-1, CSA62368-1, EN62368-1, ES60601-1 3rd Edition, EN60601-1 3rd Edition, CSA-C22.2 No.60601-1 3rd Edition, EN62477-1 (OVC III). Designed to meet Den-an Appendix 12 (J60950-1).	
38	Line DIP	-	Designed 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	1400	
43	Size (W x H x D)	mm	127.5 x 50 x 254 (Refer to Outline Drawing)	
44	Standby Supply	-	5V / 1A	

\*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 40°C, refer to OUTPUT CURRENT vs. AMBIENT TEMPERATURE (A263-01-02/A\_).
  - When input voltage is less than 170VAC. Refer to OUTPUT POWER vs. INPUT VOLTAGE (A263-01-02/A\_).
- \*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.

Fig.A



C1 : Film Cap. 0.1μF  
C2 : Elect. Cap. 100μF

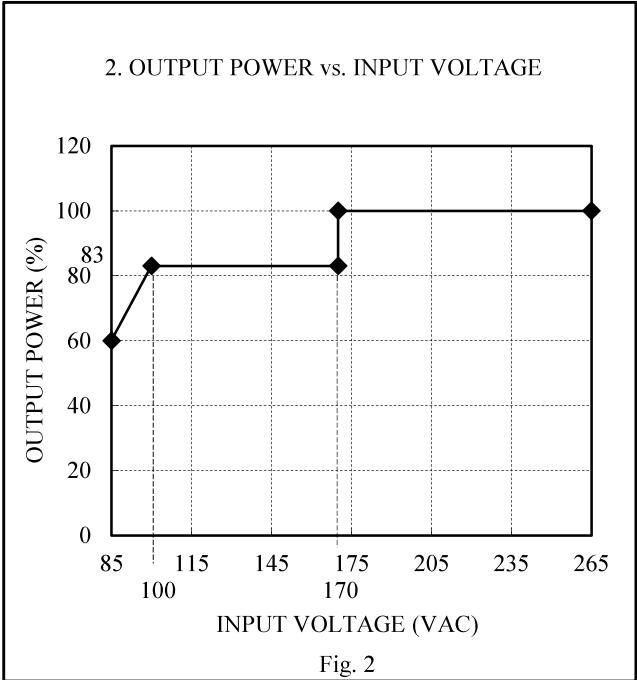
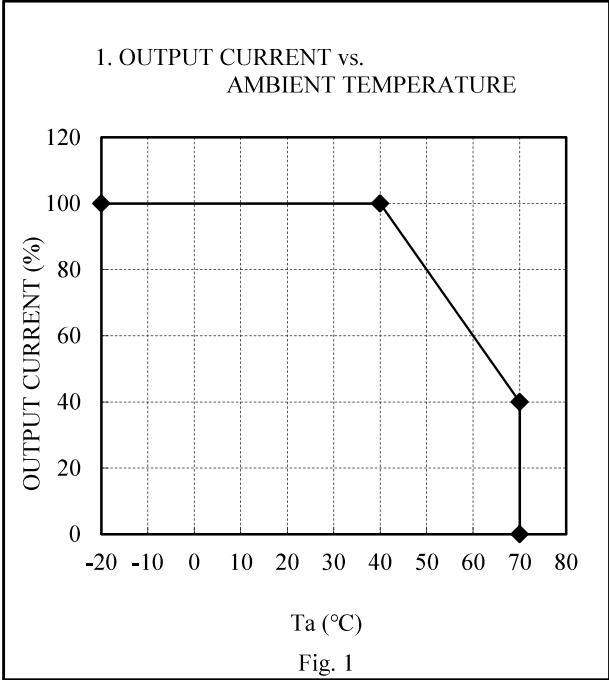
**GXE600/A**

A263-01-02/A

**OUTPUT DERATING**

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

INPUT VOLTAGE (VAC)	OUTPUT POWER (%)
	MOUNTING A-D
85	60 (360W)
100	83 (500W)
<170	83 (500W)
170≤	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  $V_o \leq 25.0V$ , the derating is determined by output current (1). Because output power is less than 500W ( $25.0V \times 20.0A$ ).

When  $V_o > 25.0V$ , the derating is determined by output power (2).

MOUNTING A

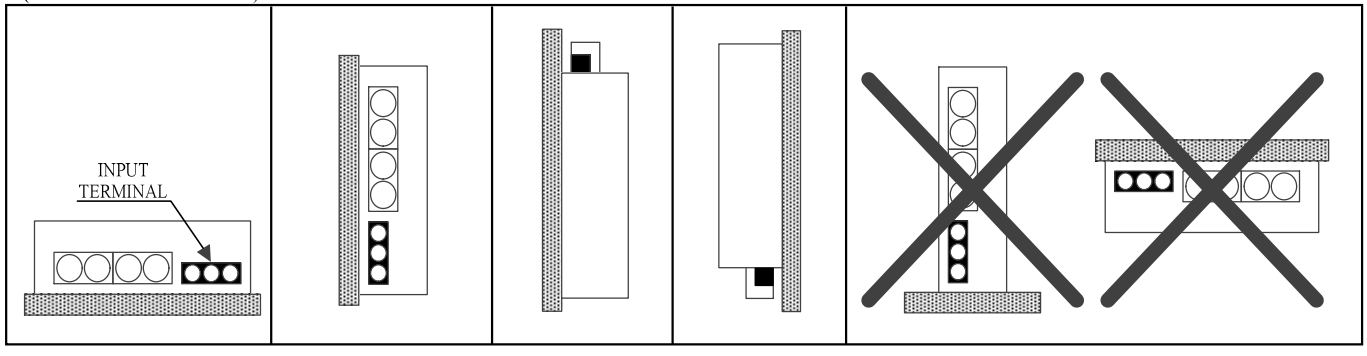
MOUNTING B

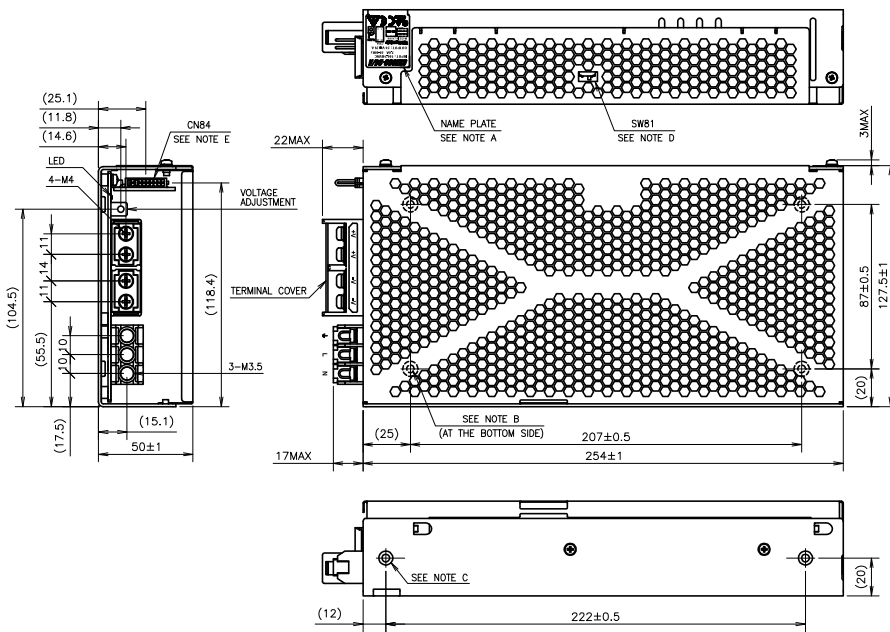
MOUNTING C

MOUNTING D

DON'T USE

(STANDARD MOUNTING)





== NOTES ==

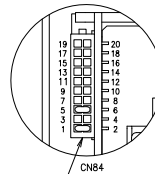
A : MODEL NAME, INPUT VOLTAGE RANGE, NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT AND COUNTRY OF MANUFACTURE ARE SHOWN HERE IN ACCORDANCE WITH THE SPECIFICATIONS.

B : 4-M4 TAPPED & STANDOFF ARE FOR CUSTOMER'S CHASSIS MOUNTING. (SCREW PENETRATION DEPTH 4mm MAX.)

C : 2-M4 TAPPED & STANDOFF ARE FOR CUSTOMER'S CHASSIS MOUNTING. \*NOT ENSURED SPECIFICATION OF VIBRATION AND SHOCK. (SCREW PENETRATION DEPTH 4mm MAX.)

D : SW81 IS "EN" SIDE POSITION AT SHIPMENT.

E : SIGNAL CONNECTOR INFORMATION  
PIN CONFIGURATION AND FUNCTION OF CN84.



== SIGNAL CONNECTOR USED ==

PART DESCRIPTION	PART NAME	MANUFACT
PIN HEADER	S20B-PHDS5	JST

== MATCHING HOUSINGS, PIN & TOOL ==

PART DESCRIPTION	PART NAME	MANUFACT
SOCKET HOUSING	PHDR-20VS	JST
TERMINAL PINS	SPHD-002T-P0.5(AWG28~24) SPHD-001T-P0.5(AWG26~22)	JST
HAND CRIMPING TOOL	YRS-620(SPHD-002T-P0.5) YC-610R(SPHD-001T-P0.5)	JST

== ACCESSORIES ==

- \* TERMINAL COVER -----1  
(ATTACHED ON TERMINAL AT SHIPMENT)
- \* SHORT PIECE -----1  
SHORTING +Vm ---+S, -Vm --- -S  
(ATTACHED ON CN84 AT SHIPMENT)

PIN No.	CONFIGURATION	FUNCTION
1	+Vm	OUTPUT MONITOR TERMINAL (+V)
2	+S	REMOTE SENSING TERMINAL FOR +OUTPUT
3	NC	-
4	NC	-
5	-Vm	GND FOR OUTPUT MONITOR TERMINAL (-V)
6	-S	REMOTE SENSING TERMINAL FOR -OUTPUT
7	PC	CURRENT BALANCE TERMINAL
8	CC	OUTPUT CURRENT EXTERNAL CONTROL TERMINAL
9	PV	OUTPUT VOLTAGE EXTERNAL CONTROL TERMINAL
10	COM	GND FOR CC AND PV AND PC SIGNAL
11	PF	POWER FAIL SIGNAL TERMINAL
12	AC FAIL	AC FAIL (LOW AC) ALARM SIGNAL TERMINAL
13	CNT 1	REMOTE ON/OFF CONTROL TERMINAL (1)
14	+STB	STANDBY SUPPLY+ (5V,1A)
15	CNT 2	REMOTE ON/OFF CONTROL TERMINAL (2)
16	-STB	STANDBY SUPPLY- (CONNECTED TO TOG INTERNALLY)
17	SG	GND FOR +-DATA (CONNECTED TO TOG INTERNALLY)
18	TOG	GND FOR CNT AND PF, AC FAIL SIGNALS
19	+DATA	RS485 +DATA (NON-INVERSION)
20	-DATA	RS485 -DATA (INVERSION)

NAME PLATE DETAILS



SCALE FOR NAME PLATE : 2/1

(unit : mm)	
MODEL NAME	GXE600/A
<b>TDK-Lambda</b>	
A263-02-01/A	