

GUS600

SPECIFICATIONS (1/2)

CA973-01-01

ITEMS			MODEL	GUS600-12	GUS600-24	GUS600-36	GUS600-48
INPUT							
Input Voltage Range & Input Frequency		(*2)(*12)	-	85 - 265VAC (47 - 63Hz)			
Efficiency (Typ.)	(*1)	115VAC	%	92.0	93.0	93.0	93.0
		230VAC	%	94.0	95.0	95.0	95.0
Input Current (Typ.)	(*1)	115VAC	A	6.0			
		230VAC	A	3.0			
Inrush Current (Typ.)	(*1)(*3)	115/230VAC	A	25 / 50 at Cold Start			
Power Factor (Typ.)	(*1)	115/230VAC	-	0.99 / 0.95			
Leakage Current		(*9)	-	Less than 0.75mA			
OUTPUT							
Nominal Output Voltage			V	12	24	36	48
Output Voltage Initial Set Accuracy			-	+/- 1%			
Output Voltage Adjustment Range			V	11.7 - 12.9	23.4 - 25.9	35.1 - 38.8	46.8 - 51.8
Maximum Output Current			A	50.0	25.0	16.7	12.6
Maximum Output Power			W	600.0	600.0	601.2	604.8
Maximum Line Regulation			(*4)(*5)	mV	48	96	144
Maximum Load Regulation			(*4)(*6)	mV	96	192	288
Temperature Coefficient			(*4)	-	Less than 0.02% / °C		
Maximum Ripple & Noise			(*1)(*4)(*16)	mV	240	360	480
Hold-up Time (Typ.)			(*1)	ms	12		
PROTECTIVE FUNCTION							
Over Current Protection			(*7)	A	> 52.50	> 26.25	> 17.54
Over Voltage Protection			(*8)	V	13.80 - 16.20	27.60 - 32.40	41.40 - 48.60
FUNCTION							
Remote ON/OFF Control			(*13)(*15)	-	Possible		
Remote Sensing				-	None		
Parallel Operation				-	None		
Series Operation			(*13)	-	Possible		
ENVIRONMENT							
Operating Temperature			(*10)	-	-20 to +70°C, start up at -40°C		
Storage Temperature				-	-40 to +70°C		
Operating Humidity				-	10 to 95%RH (Non Condensing)		
Storage Humidity				-	10 to 95%RH (Non Condensing)		
Vibration			(*14)	-	At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s ² Constant, X,Y,Z 1hour each.		
Shock			(*14)	-	Less than 196m/s ² (time : 11 ± 5 ms)		
Cooling				-	Forced air cooling by Intake FAN		
ISOLATION							
Withstand Voltage				-	Input - FG : 2.0kVAC (20mA), Input - Output : 3.0kVAC (20mA) Output - FG : 500VAC (100mA) for 1min		
Isolation Resistance				-	More than 100MΩ at 25°C and 70%RH, Output - FG : 500VDC		

GUS600

SPECIFICATIONS (2/2)

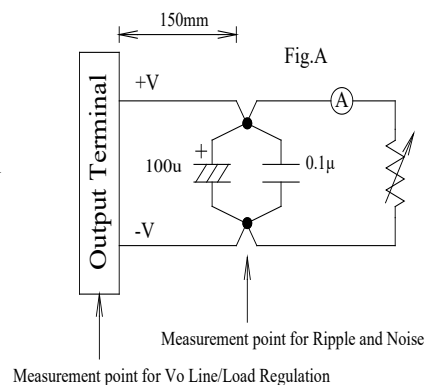
CA973-01-01

ITEMS		MODEL	GUS600-12	GUS600-24	GUS600-36	GUS600-48	
STANDARD AND COMPLIANCE							
Safety		-	Approved by IEC/EN/UL/CSA 62368-1 (Altitude ≤ 5,000m) Designed to meet IEC61010-1 (Altitude ≤ 5,000m) Designed to meet IEC62477-1 (OVC III) (Altitude ≤ 4,000m)				
Conducted Emission		(*11)	Designed to meet EN55011/EN55032-B, FCC-ClassB, VCCI-B				
Radiated Emission		(*11)	Designed to meet EN55011/EN55032-B, FCC-ClassB, VCCI-B				
Harmonic Current		(*1)(*11)	-	Designed to meet IEC61000-3-2, Class A			
Immunity		(*11)(*17)	-	Designed to meet IEC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11			
Line DIP		-	Designed to meet SEMI-F47 at input voltage ≥ 200VAC				
MECHANICAL							
Weight (Typ.)		g	850				
Size (W x H x D)		mm	101.6 x 41 x 152.4 (Refer to Outline Drawing)				

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

=NOTES=

- *1. At 115VAC/230VAC, $T_a=25^\circ\text{C}$, nominal output voltage, maximum output power.
- *2. For cases where conformance is required to meet various safety specs (UL, CSA, EN), input voltage range shall be from 100 - 240VAC (50-60Hz).
- *3. Not applicable for the in-rush current to Noise Filter for less than 0.2ms.
- *4. Refer to Fig. A for measurement of V_o , line and load regulation, and ripple voltage.
- *5. Input voltage from 85 to 265VAC at constant output current.
- *6. Constant input voltage and output current from no load to maximum output current.
- *7. Hiccup with automatic recovery, however power supply may be latched for protection when output is shorted and manual reset is required (Re power on) .
Avoid operating at over load or short circuit condition.
- *8. Inverter shut down method. When OVP is triggered, output will be shut down, and manual reset of power supply is required to re-power on.
- *9. Apply the appropriate measurement method according to the required standard: UL, CSA, and EN (at 60Hz), $T_a=25^\circ\text{C}$.
- *10. For details, Refer to OUTPUT DERATING CURVE (CA973-01-02).
Maximum load start up at -40°C is possible. However, it may not fulfill all the specifications.
- *11. The specifications are based on TDK-Lambda standard measurement conditions.
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 requirement.
- *12. When the input voltage is less than 90VAC, output derating is required. Refer to OUTPUT DERATING CURVE (CA973-01-02).
Avoid operating the unit out of the specified input voltage range.
- *13. Refer to instruction manual (CA973-04-01).
- *14. Using 4 mounting holes on chassis. The result is evaluated by TDK-Lambda standard measurement condition.
The equipment should be re-evaluated to meet its vibration and shock requirement.
- *15. Remote ON/OFF control function is provided on option model /R.
- *16. Ripple & noise are measured at 20MHz by using a 150mm twisted pair of load wires terminated with a 0.1uF and 100uF capacitor.
- *17. Refer to immunity test data (CA973-58-01).



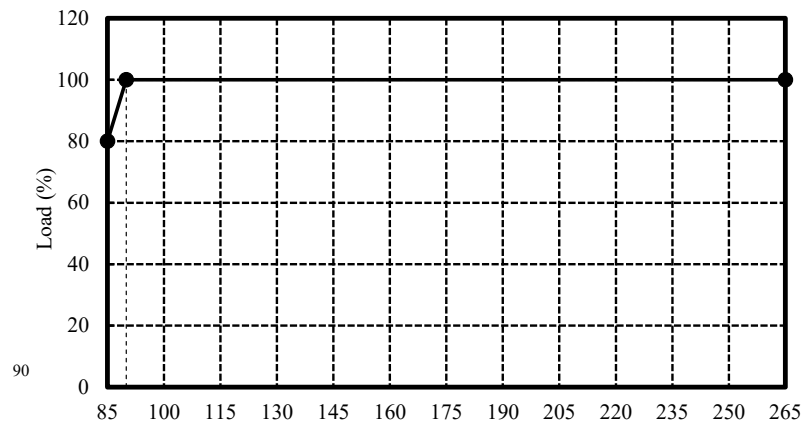
SPECIFICATIONS (1/1)

OUTPUT DERATING

CA973-01-02

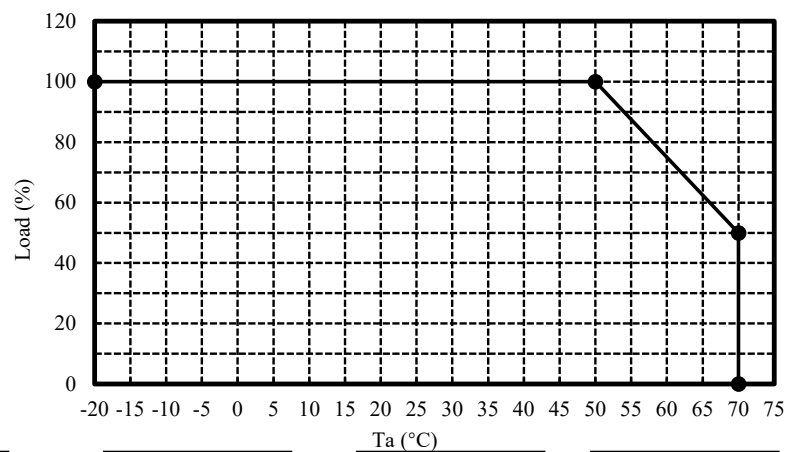
OUTPUT DERATING VERSUS INPUT VOLTAGE

Input Voltage (VAC)	Load (%)
85	80
90~265	100



OUTPUT DERATING VERSUS OPERATING AMBIENT TEMPERATURE (Ta)

Ta (°C)	Load (%)
-20~+50	100
+70	50

MOUNTING A
(STANDARD MOUNTING)

MOUNTING B

MOUNTING C

MONTING D

MOUNTING E

