GWS250

TDK-Lambda

PA589-01-01F SPECIFICATIONS

	ITEMS / MODEL			GWS250-12	GWS250-24	GWS250-36	GWS250-48
1	Nominal Output Voltage		V	12	24	36	48
2	Maximum Output Current		A	21	10.5	7	5.3
3	Peak Output Current	(*12)	A	-	12.5	8.4	-
4	Maximum Output Power		W	252	252	252	254.4
5	Peak Output Power	(*12)	W	-	300	302.4	-
6	Standby Input Power	(*13)	W	0.5			
7	Standby Output		-	5V @ 300mA			
8	Efficiency (Typ) (230VAC)	(*1)	%	92	92	93	93
9	Input Voltage Range	(*2)	V	85 ~ 264VAC (47-63Hz) or 120 ~ 373VDC (Withstand 300VAC Surge for 5 seconds)			
10	Input Current (Typ) (115/230VAC)	(*1)	A	3.0 / 1.4			
11	Inrush Current (Typ)	(*3)	A	20A / 115VAC, 40A / 230VAC (Cold Start)			
12	PFHC		-	Designed To Meet IEC61000-3-2 Class A & Class C (Load : 35% ~ 100%)			
13	Power Factor (Typ) (115/230VAC)	(*1)	-	0.98 / 0.95			
14	Output Voltage Range (By Trim Pot)		V	10.8~13.2	22~28.8	32~40	42~57.6
15	Output Voltage Range (By Programmable Voltage)		V	7.2~13.2	14.4~28.8	21.6~40	38.4~57.6
16	Ripple & Noise	(*1,4)	mV	120	150	200	250
17	Line Regulation	(*5,6)	mV	48	96	144	192
18	Load Regulation	(*5,7)	mV	96	192	288	384
19	Temperature Coefficient		-	Less than 0.02% / °C			
20	Over Current Protection	(*8)	-	Hiccup	Constant Current Limit		
				>105% rated output power Or >101% of peak output power			
21	Over Voltage Protection	(*9)	V	13.8~16.2	30.3~35.5	41.4 ~ 48.6	60 ~ 69.6
22	Over Temperature Protection		-	Yes. Shutdown output and manual reset (CNT or Re-power on)			
23	Hold-up Time (Typ)	(*1)	ms	16			
24	Leakage Current (Typ)	(*10)	-	0.75mA at 230VAC			
25	Remote Sensing		-	-			
26	Remote ON/OFF control		-	Possible (Active Low)			
27	Monitoring Signal		-	DCOK (Open Collector Output - Active Low)			
28	Series Operation		-	Possible			
29	Operating Temperature	(*11,15)	-	-25°C ~ +70°C (Refer to Output Derating Curve) Guarantee Start Up At -40°C			
30	Operating Humidity		-	30 to 90%RH (No dewdrop)			
31	Storage Temperature		-	-30°C ~ +85°C			
32	Storage Humidity		-	10 to 95%RH (No dewdrop)			
33	Cooling		-	Convection Cooling			
34	Withstand Voltage		-	Input - Output : 3.0kVAC (20mA), Input - FG : 1.5kVAC (20mA) Output - FG : 500VAC (100mA) for 1min.			
35	Isolation Resistance		-	Input - FG, Input - Output and Output - FG More than 100MΩ (500VDC) at 25°C and 70%RH			
36	Vibration		-	At no operating, 10 - 55Hz (sweep for 1min) 19.6m/s^2 Constant, X, Y, Z 1hour each.			
37	Shock		-	Less than 196.1m/s^2			
38	Safety		-	Approved by IEC/EN/UL/CSA 62368-1, IEC/UL/CSA/EN 60950-1 (Expiry date for EN60950-1: 20 Dec 2020), CE			
39	EMI		-	Designed to meet EN55032-B, CISPR32-B			
40	Immunity		-	Designed to meet EN61000-4-2 (Level 2,3), -3 (Level 3), -4 (Level 3), -5 (Level 3,4), -6 (Level 3), -8 (Level 4), -11			
41	Weight(Typ.)		g	850			
42	Size (L x W x H)		mm	198 x 105 x 41 (Refer to Outline Drawing)			

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

=NOTES=

*1. At Maximum Output Power, nominal input voltage, Ta = 25°C.
*2. For cases where conformance to various safety specs (UL, CSA, EN) are required, to be described as 100 - 240VAC, 50 / 60Hz on name plate.
*3. Not applicable for the in-rush current to Noise Filter for less than 0.2mS.
*4. Ripple & noise are measured at 20MHz by using a 300mm twisted pair of load wires terminated with a 0.1uF Film Capacitor and a 47uF Electrolytic Capacitor.
*5. Measure line & load regulation at output terminal.
*6. 85 - 264VAC, constant load.
*7. No load - Full load, constant input voltage.
*8. Current limiting with automatic recovery. Avoid to operate at overload or dead short for more than 30 seconds.
*9. OVP circuit will shutdown output, manual reset (CNT reset or Re power on).
*10. Measured by each measuring method of UL and EN (at 60Hz), Ta = 25°C.
*11. Refer to Output Derating Curve (PA589-01-02_) for details of output derating versus ambient temperature.
*12. Operating period at peak output current is less than 10sec., duty ≤ 0.35
*13. Standby input power refers to the power consumption during remote off and 5V is at no load condition.
*14. All parameters NOT specifically mentioned are measured at 230VAC input, rated load and Ta = 25°C.
*15. For cases where conformance to various safety specs (UL, CSA, EN), operating temperature is -25 ~ +50°C.

GWS250

PA589-01-02

DERATING CURVE

***COOLING : CONVECTION COOLING**

Ta (°C)	LOAD (%)	STANDARD MOUNTING
-25 ~ +50 70	100 50