

Yuan Dean Scientific CO.,LTD **GB100-GB130 SERIES**

100-130Watt, Single & Multiple Output, AC-DC Open Frame Converter



FEATURES:

- Greater than 80% Efficiency.
- Internal EMI filter.
- Small size 127x76.2x35.56mm .
- Power Factor Correction.
- Output Voltage Protection (Crowbar Design).
- 100-130W With Convection Cooled (MAX 18 CFM).
- Single & Multiple Outputs.
- Wide Input Voltage 90 to 264VAC, 47 to 63 Hz.
- Input Surge Current, Over Voltage and Over Load protection.



Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

Part Number	Output Voltage	Output Current		Ripple & Noise	Output Power
	V	Convection cooled	Max 18 CFM	mVp-p	W
GB100-S03-01	3.3	20.0A	25.7A	150	85
GB110-S05-01	5	18.0A	22.0A	150	110
GB120-S09-01	9	10.4A	13.0A	150	117
GB130-S12-01	12	8.3A	10.4A	150	125
GB130-S15-01	15	7.0A	8.7A	150	130
GB130-S24-01	24	4.5A	5.4A	150	130
GB130-S36-01	36	2.8A	3.6A	150	130
GB130-S48-01	48	2.3A	2.7A	150	130
GB120-T051212-01	5	10.0A	13.2A	150	120
	12	3.0A	4.0A	150	
	-12	0.5A	0.5A	150	
GB120-T0305P12-01	3.3	10.0A	15.0A	150	120
	5	6.0A	8.0A	150	
	12	0.5A	0.5A	150	

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
AC Input Voltage		90	100-240	264	Vac
Input Frequency		47	50/60	63	Hz
DC Input Voltage		127		370	Vdc
Inrush Current	115Vac			30	A
	230Vac			60	A

Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Set Point Accuracy		V1±5%,V2&V3±10%,Measured at 20%~100% Load			
Output Power		To 130 Watt			
Minimum Load		No Minimum Load Required(Note 1)			
Line Regulation		±0.5%,For Nominal Line ±10%			
Load Regulation	±3%,±7% For all Secondary Outputs on Multiple Output Models(Note 2)				
Tolerance			±2	±5	%

Coefficient Specifications

Parameters	Conditions	Min	Typ	Max	Units
Hold Up Time			16		mS
Start Up Time	Io=Full load, Vin=100Vac	0.3	1	2	S
Safety Ground Leakage Current	Io=Full load, Vin=240Vac		0.4	0.75	mA
Overcurrent Protection		110%		150%	
Short Protection		Continuous With auto recovery			
Overvoltage Protection		130% To 150%, Protection recycle input to reset			

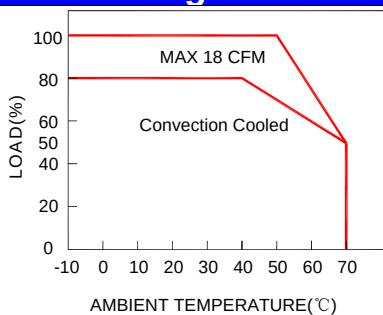
Note:

- 1). 20% minimum load required on V1 to maintain stated regulation for auxiliary rails.
- 2). Load regulation of auxiliaries is defined over the range of 60% of rated output ±40%.
- 3). Ripple & noise is measured by using 20 MHz bandwidth, each output terminated with a 0.47 µF capacitor and a 47 µF electrolytic capacitor at rated load and nominal line.

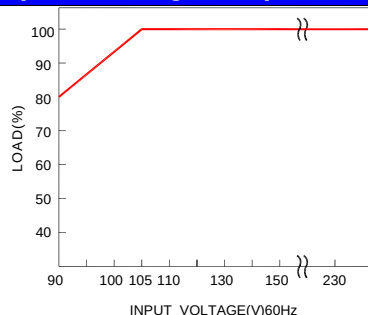
General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Efficiency(Typical)		>80%,nominal line full load			
MTBF		100,000			Hrs
Isolation Voltage		3000V AC Input To Output			
		1500V AC Input To Ground			
		500V AC Output To Ground			
Size		127x76.2x35.56(5.0x3.0x1.4)			mm(inches)
Weight			340		g
Operating Temperature		-10		+70	°C
Storage Temperature		-45		+85	°C
Safety and EMC		Meets UL60950,EN60950,CE Mark LVD			

Derating Curve



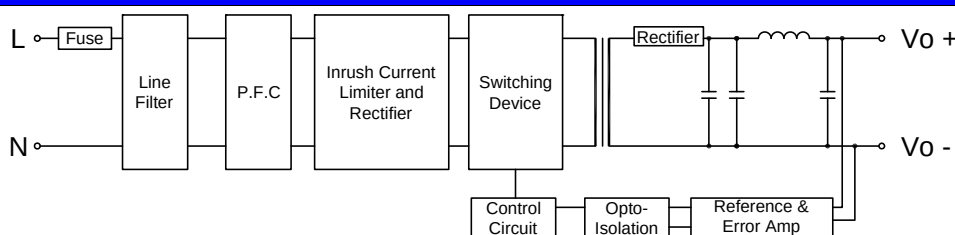
Output Derating VS Input Voltage



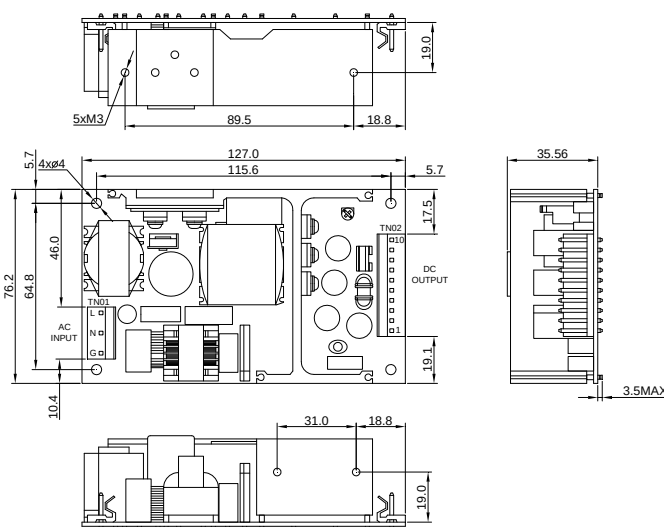
Part Number

G B 130 - T 051212 -01
A B C D E F
 A:Series
 B:Open Frame
 C:Output Watt
 D:Single(S) Triple(T)
 E:Output Voltage
 F:Types

Circuit Schematic



Markings and dimensions



Notes:

- 1.Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal.
- 2.Output connector mates with Molex housing 09-50-3101 and Molex 2478 series crimp terminal.

TN01	Models		
1	ACL	ACL	ACL
2	NO PIN	NO PIN	NO PIN
3	ACN	ACN	ACN
4	NO PIN	NO PIN	NO PIN
5	FG	FG	FG
TN02			
Pins	Single	T051212	T0305P12
1	+v	+5V	+3.3V
2	+v	+5V	+3.3V
3	+v	+5V	+3.3V
4	+v	RET	RET
5	+v	RET	RET
6	RET	RET	RET
7	RET	RET	RET
8	RET	+12V	+5V
9	RET	-12V	+5V
10	RET	N/A	+12V

UNIT:mm Unless otherwise specified,all tolerances are ± 0.50