

Medical & ITE

General Purpose

Rated **200W** Max. 300W **Peak 400W SNP-G20 Series**



x 5" x 1.56"

Features:

- Peak load $(1.4 \sim 2 \text{ x rated current}, \text{Vo=rated for 5 sec})$
- Design for BF application
- Convection cooling for Rated power
- Built-in PFC and 12V output for fan, available for G12x, G16x, and G20x
- EMI class B
- -20°C to +70°C operating temperature

Applications:

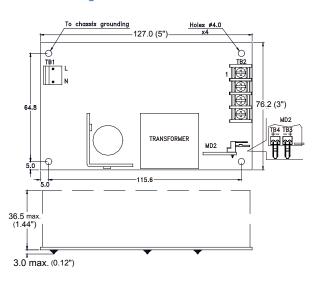
- For peak load and surge load applications, such as motor drive, coffee machine, vending machine, gaming machine, and other industrials.
- For EMI class B application, such as home healthcare device, and other medical devices.

General Specifications:

Input voltage	90 VAC to 264 VAC
Input frequency	47 Hz to 63 Hz
Inrush current	< 30/60A at 115/230VAC
Hold up time	20ms typical
Over load/Short circuit protection	auto recovery
Over voltage protection	latch off
Operating temperature	20°C to 70°C
derating: $2.5\% / ^{\circ}\text{C} > 50^{\circ}$	°C for convection cooling
Storage temperature	40°C to +85°C

EMI	EN55022 "B", EN61000-3-3
Harmonics	EN61000-3-2, class D
EMS	EN61000-4-2,-3,-4,-5,-6,-8,-11
Safety	UL/CSA 60950-1, 2 nd edition, EN 62368-1
	ANSI/AMMI/CSA/EN60601-1, 3.1 edition
	CB report, CE mark, RM report/file
Energy Savin	(for w/o -A suffix)ENERGY STAR
	for computers version 6.0
	for displays version 6.0
	ErP regulation EC(No) 1275/2008

Mechanical Specifications:



Notes:

- 3" x 5" x 1.56" / 76.2 x 127 x 39.5 (mm)
- Mounting Hole: 64.8 x 115.6 (mm)
- Connectors:

AC input: Molex 5277-02A or equivalent DC output: Terminal blocks (default for SNP-G207) or Molex 5273-08A (default for others) or equivalent Fan, Remote sense: Molex 5045-02A or equivalent

Output Pin assignment:

Function Pin assignment:

Pin No.	1	2	3	4	5	6	7	8
SNP-G207	+Vo	+Vo	GND	GND				
OTHER MODELS	+Vo	+Vo	+Vo	+Vo	GND	GND	GND	GND

	TB3	TB4
Function Pin	FAN Output	Remote Sense
1	GND	Sense -
2	+12V	Sense+

Packing:

Net weight: 353 g approx./unit Gross weight: 15 kg approx./carton, 16 units/carton Carton size (mm): 384 (L) x 339 (W) x 327 (H)

10 years Warranty (contact Skynet's Distributors for details)

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Rated **200W** Max. 300W Peak **400W SNP-G20 Series**

Output Specifications:

MODEL	OUTPUT	LOAD		INITIAL	STEP EFFICIENCY			AVERAGE		
NO.	RAIL	MIN.	RATED	MAX.	PEAK	ACCURACY	@ 20% LOAD	@ 50% LOAD	@ 100% LOAD	EFFICIENCY
SNP-G207 SNP-G207 -A SNP-G207 -M SNP-G207 -MA	+12V	0A	16.5A	25A	33A	+11.9V~+12.1V	82%	88.5%	89.5%	86.5%
SNP-G208 SNP-G208 -A SNP-G208 -M SNP-G208 -MA	+15V	0A	12A	18A	22.5A	+14.9V~+15.1V	82%	88.5%	89.5%	86.5%
SNP-G205 SNP-G205 -A SNP-G205 -M SNP-G205 -MA	+18V	0A	11.1A	16.6A	23.3A	+17.9V~+18.1V	82%	88.5%	89.5%	86.5%
SNP-G209 SNP-G209 -A SNP-G209 -M SNP-G209 -MA	+24V	0A	8.4A	12.5A	16.7A	+23.9V~+24.1V	83%	89.5%	91%	88%
SNP-G20G SNP-G20G-A SNP-G20G-M SNP-G20G-MA	+28V	0A	7.2A	10.7A	13A	+27.9V~+28.1V	83%	89.5%	91%	88%
SNP-G20J SNP-G20J -A SNP-G20J -M SNP-G20J -MA	+36V	0A	5.6A	8.3A	11A	+35.8V~+36.2V	84%	90.6%	91%	88%
SNP-G20T SNP-G20T-A SNP-G20T-M SNP-G20T-MA	+48V	0A	4.2A	6.3A	8.4A	+47.8V~+48.2V	84%	90.6%	91%	88%

Note:

Standby Power Cosumption with System:

For computers and displays, ENERGY STAR in U.S. and ErP regulation in Europe require the input power should be less than 0.5W at standby mode.

Output Load:

200W for convection cooling; 300W for forced air cooling.

Peak Load Duration:

Peak 400W can last for 5 sec.

Isolation Grade:

: 1MOPP (1500Vac) Primary ←→ Ground $\begin{array}{ll} \longleftrightarrow & \text{Secondary} : 2\text{MOPP} (4000\text{Vac}) \\ \longleftrightarrow & \text{Ground} : 1\text{MOPP} (1500\text{Vac}) \end{array}$ Primary Secondary ←→ Ground

Leakage Current: Earth leakage current < 300uA Touch current < 100uA

EMI Grounding:

If there is a metal sheet under the power supply, connect the EMI ground to the metal sheet.

Most of power supplies will create audible burst sound at light load, if the application wants to meet input power < 0.5W at standby mode.

SNP-G20x is for ITE application which requires standby mode. SNP-G20x-A is for ITE application but without burst sound and no standby mode.

SNP-G20x-M is for medical application which requires standby mode.

SNP-G20x-MA is for medical application but without burst sound and no standby mode.

-Jim-

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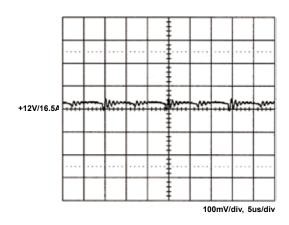


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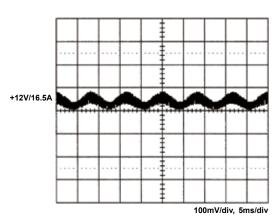
Rated 200W Max. 300W Peak 400W SNP-G20 Series

Performance for SNP-G207:

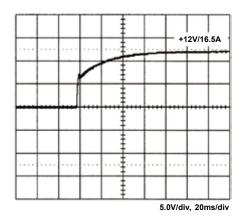
1. Switching frequency ripple



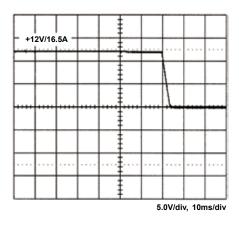
2. Line frequency ripple



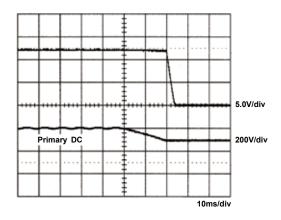
3. Output turn on wave form



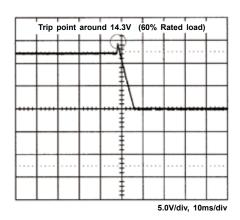
4. Output turn off wave form



5. Hold-up time



6. Over voltage protection



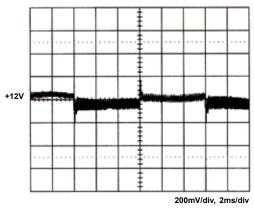
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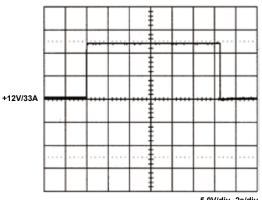
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7. +12V step response



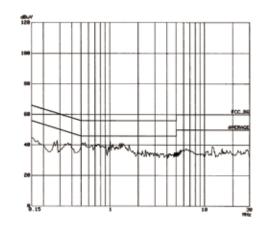
+12V step from 4.95A to 16.4A

8. Peak load

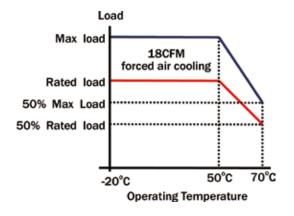


5.0V/div, 2s/div

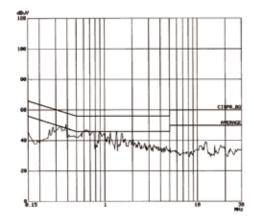
9. FCC B



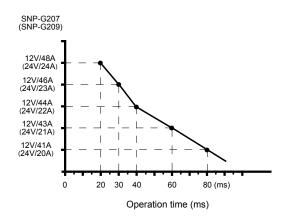
11. Power derating curve



10. EN55022 B



12. Capability for driving motor



-Jim-

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