

SPECIFICATIONS

A00G 01-01A

Items	Model	MS-9	MS-9	MS-9	MS-9	MS-9	MS-9	MS-9	MS-9	MS-9	MS-9				
		-2	-5	-6	-9	-12	-15	-18	-24	-28	-48				
1	Nominal Output Voltage	V	2	5	6	9	12	15	18	24	28	48			
2	Maximum Output Current	A	6.0	6.0	5.0	3.8	3.0	2.6	2.3	1.8	1.6	0.9			
3	Maximum Output Power	W	12	30	30	34.2	36	39	41.4	43.2	44.8	43.2			
4	Efficiency (Typ) (*)	%	61	71	71	73	75	77	78	78	79	79			
5	Input Voltage Range (*9)	—	85-132VAC (47-440Hz) or 90-165VDC												
6	Input Current (Typ) (*)	A	0.3	0.7	0.7	0.75	0.8	0.8	0.85	0.9	0.9	0.9			
7	In-rush Current (Typ) (*2)	A	20A at 100VAC												
8	Output Voltage Range	%	+10% (Typ)												
9	Maximum Ripple & Noise	mV	50	50	50	60	60	60	80	80	80	100			
10	Maximum Line Regulation (*3)	mV	20	20	24	36	48	60	72	96	112	192			
11	Maximum Load Regulation (*4)	mV	20	20	24	36	48	60	72	96	112	192			
12	Over Current Protection (*5)	A	5.6	5.6	5.5	4.2	3.3	2.9	2.5	2.0	1.8	0.99			
			-7.8	-7.8	-6.5	-5.0	-4.0	-3.4	-3.0	-2.4	-2.2	-1.17			
13	Over Voltage Protection (*6)	V	2.7	5.75	6.9	10.5	14.0	17.5	21.0	28.0	32.7	56.2			
			-2.9	-6.25	-7.5	-11.2	-15.0	-18.7	-22.5	-30.0	-35.0	-60.0			
14	Hold-Up Time (*7)	ms	More than 20ms												
15	Remote Sensing	—	Possible												
16	Remote ON/OFF Control (*8)	—	Possible												
17	Parallel Operation	—	Possible												
18	Series Operation	—	Possible												
19	Operating Temperature (*9)	°C	-10 ~ +71												
20	Operating Humidity	%	30% ~ 90% RH												
21	Storage Temperature	°C	-30 ~ +85												
22	Storage Humidity	%	10% ~ 95% RH												
23	Cooling	—	Convection cooled												
24	Temperature Coefficient	%	Less than 1% at -10°C ~ +71°C												
25	Withstand Voltage	kV	Input-Output, Input-Chassis...2.0kVAC 1min (20mA)												
26	Isolation Resistance	Ω	More than 100MΩ at 25°C and 70%RH Output-Chassis...500VDC												
27	Vibration	—	Less than 19.6m/s ²												
28	Shock	—	Less than 196.1m/s ²												
29	Weight	g	630												
30	Size	—	Refer to Outline Drawing												

NOTES

- *1 : At 100VAC & maximum output power.
- *2 : When resuming operation in less than 5 sec after power failure at no load, softstart circuit will not limit the in-rush current at turn-on.
- *3 : From 85-132VAC or 90-165VDC, constant load.
- *4 : From No load ~ Full load, constant input voltage.
- *5 : Constant current limiting with automatic recovery.
- *6 : Inverter shut-down method, manual reset.
- *7 : At 100VAC input, and output power of 30 W.
- *8 : TTL compatible input : greater than 2V or open...shutdown, 0V-0.8V...power on. Supply voltage to CNT must not exceed 7V.
- *9 : Ratings : Percent of maximum output current or maximum output power, whichever is greater.
 - i) With respect to operating temperature
 - 10°C... 60% , 60°C...70%
 - 0-50°C...100% , 71°C...50% (61°C-71°C Forced air cooling)
 - ii) With respect to input voltage
 - 85-132VAC or 110-165VDC...100%
 - 90-110VDC... 80%