

MS - 1 Q

A007-01-01A

SPECIFICATIONS

Items	Model	MS-10	MS-10	MS-10	MS-10	MS-10	MS-10	MS-10	MS-10	MS-10		
1 Nominal Output Voltage	V	2	5	6	9	12	15	18	24	28	48	
2 Maximum Output Current	A	10	10	8.5	6.0	5.0	4.0	3.5	3.0	2.5	1.5	
3 Maximum Output Power	W	20	50	51	54	60	60	63	72	70	72	
4 Efficiency (Typ)	(*)%	65	75	75	75	78	80	80	82	83	83	
5 Input Voltage Range	(*)V	—	—	—	—	85~132VAC (47~440Hz) or 90~165VDC	—	—	—	—	—	
6 Input Current (Typ)	(*)A	0.5	1.2	1.2	1.3	1.35	1.3	1.4	1.5	1.45	1.45	
7 In-rush Current (Typ)	(*)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 (**)%	V	20	20	24	36	48	60	72	96	112	192	
11 Maximum Load Regulation (**)%	V	20	20	24	36	48	60	72	96	112	192	
12 Over Current Protection (**)A	A	11.0	11.0	9.4	6.6	5.5	4.4	3.9	3.3	2.8	1.7	
		~13.0	~13.0	~11.0	~7.8	~6.3	~5.2	~4.6	~4.0	~3.3	~2.0	
13 Over Voltage Protection (**)V	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	(*)ms	—	—	—	—	—	—	More than 20ms	—	—	—	
15 Remote Sensing	—	—	—	—	—	—	—	Possible	—	—	—	
16 Remote ON/OFF Control (**)—	—	—	—	—	—	—	—	Possible	—	—	—	
17 Parallel Operation	—	—	—	—	—	—	—	Possible	—	—	—	
18 Series Operation	—	—	—	—	—	—	—	Possible	—	—	—	
19 Operating Temperature (**)°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	G	—	—	—	—	—	—	Less than 19.6m/s²	—	—	—	
28 Shock	G	—	—	—	—	—	—	Less than 196.1m/s²	—	—	—	
29 Weight	g	—	—	—	—	—	—	690	—	—	—	
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 50 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%

ANEMIC-LAMBDA