MS－12

SPECIFICATIONS

A009-01-01A

	Items			Model	MS-12 -2	MS-12 -5	MS-12 6	MS-12 9	MS-12 -12	MS-12 -15	MS-12 -18	MS-12 -24	MS-12 -28	MS-12 -48
1	Nominal Output Voltage		V		2	5	6	9	12	15	18	24	28	48
2	Maximum Output Current		A		30	30	26	18	15	12	10	7.5	6.5	3.8
3	Maximum Output Power		W		60	150	156	162	180	180	180	180	182	182
4	Efficiency (Typ)	(*1)	%		69	78	78	78	81	81	83	84	85	85
5	Input Voltage Range	(*9)	—		85~132VAC (47~440Hz) or 90~165VDC									
6	Input Current (Typ)	(*1)	A		1.4	3.2	3.2	3.4	3.5	3.5	3.5	3.5	3.5	3.5
7	In-rush Current (Typ)	(*2)	—		30A 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		33.0 ~39.0	33.0 ~39.0	28.6 ~33.8	19.8 ~23.4	16.5 ~19.5	13.0 ~15.7	11.0 ~13.0	8.3 ~9.8	7.2 ~8.5	4.2 ~5.0
13	Over Voltage Protection	(*6)	V		2.7 ~2.9	5.75 ~6.25	6.9 ~7.5	10.5 ~11.2	14.0 ~15.0	17.5 ~18.7	21.0 ~22.5	28.0 ~30.0	32.7 ~35.0	56.2 ~60.0
14	Hold-Up Time	(*7)	—		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)	℃		-10 ~ +71									
20	Operating Humidity		—		30% ~ 90% RH									
21	Storage Temperature		℃		-30 ~ +85									
22	Storage Humidity		—		10% ~ 95% RH									
23	Cooling		—		Convection cooled									
24	Temperature Coefficient		—		Less than 1% at -10℃ ~ +71℃									
25	Withstand Voltage		—		Input-Output , Input-Chassis…2.0kVAC 1min (20mA)									
26	Isolation Resistance		—		More than 100MΩ at 25℃ and 70%RH Output-Chassis…500VDC									
27	Vibration		—		Less than 11.6m/s²									
28	Shock		—		Less than 196.1m/s²									
29	Weight		—		1600g									
30	Size		—		Refer to Outline Drawing									

NOTES

*1 : At 100VAC & maximum output power.

*2 : When resuming operation in less than 10 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 150 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℃… 60% , 60℃…70%
0~50℃…100% , 71℃…50% (61℃~71℃ Forced air cooling)

ii) With respect to input voltage
85~132VAC or 110~165VDC…100%
90~110VDC… 80%