

## MSF80-S SPECIFICATIONS



MODEL		MSF80-3R3	MSF80-05	MSF80-09	MSF80-12	MSF80-15
INPUT	VOLTAGE, FREQUENCY	AC100-120V / 200-240V (AC90 ~ 132V / 180 ~ 264V or DC240 ~ 370V), 50/60Hz (47 ~ 440Hz) User Selectable.				
	CURRENT [A]	110V	2.5 (I <sub>o</sub> =100%)			
		220V	1.4 (I <sub>o</sub> =100%)			
	EFFICIENCY [%]	110V	70 typ	80 typ	81 typ	81 typ
220V						
INRUSH CURRENT		20A typ (AC IN 110V, I <sub>o</sub> =100%), 40A typ (AC IN 220V, I <sub>o</sub> =100%) at cold start.				
OUTPUT	VOLTAGE [V]	3.3	5	9	12	15
	CURRENT [A]	20	20	11.1	8.3	6.7
	REGULATION, LINE [mV]	25 Max	25 Max	45 Max	60 Max	75 Max
	REGULATION, LOAD [mV]	50 Max	50 Max	90 Max	120 Max	150 Max
	RIPPLE [mVp-p]	50 Max	50 Max	90 Max	120 Max	150 Max
	RIPPLE, NOISE [mVp-p]	100 Max	100 Max	140 Max	170 Max	200 Max
	TEMPERATURE DRIFT 0~+50°C [mV]	50 Max	75 Max	135 Max	180 Max	225 Max
	RISE TIME [ms]	500 max (AC IN 110V, I <sub>o</sub> =100%)				
	HOLDING TIME [ms]	16 typ (AC IN 110V, I <sub>o</sub> =100%)				
PROTECTION CIRCUIT	OVER CURRENT PROTECTION	Works at over 110% of rating and recovers automatically				
	OVER VOLTAGE PROTECTION	Works at 115 ~ 140% of rating				
ELECTRICALLY ISOLATED	INPUT-OUTPUT	AC 3,000V 1 minute current 20mA, DC 500V 100MΩ (At room temperature & Humidity)				
	INPUT-CASE, FG	AC 2,000V 1 minute current 20mA, DC 500V 100MΩ (At room temperature & Humidity)				
	OUTPUT-CASE, FG	AC 500V 1 minute current 100mA, DC 500V 100MΩ (At room temperature & Humidity)				
ENVIRONMENT	OPERATING TEMP AND HUMID	0 ~ +50°C, 20 ~ 90% RH(Non condensing)				
	STORAGE TEMP AND HUMID	-20 ~ +75°C, 20 ~ 90% RH(Non condensing)				
	VIBRATION	10 ~ 55Hz at 1G, 3 minutes period, 30 minutes along X, Y and Z axis				
	IMPACT	10G for 20ms once on each X, Y and Z axis				
SAFETY	SAFETY REGULATION	UL, C-UL, CE	UL, C-UL, CE	UL, C-UL, CE	UL, C-UL, CE	UL, C-UL, CE
	LINE CONDUCTED RF VOLTAGE	Complied with FCC Part15 and EN55022 Class A Limits				

## MSF80-S SPECIFICATIONS



MODEL		MSF80-24	MSF80-28	MSF80-36	MSF80-48	
INPUT	VOLTAGE, FREQUENCY	AC100-120V / 200-240V (AC90 ~ 132V / 180 ~ 264V or DC240 ~ 370V), 50/60Hz (47~440Hz) User Selectable.				
	CURRENT [A]	110V	2.5 (I <sub>o</sub> =100%)			
		220V	1.4 (I <sub>o</sub> =100%)			
	EFFICIENCY [%]	110V	82 typ	82 typ	82 typ	82 typ
220V						
INRUSH CURRENT		20A typ (AC IN 110V, I <sub>o</sub> =100%), 40A typ (AC IN 220V, I <sub>o</sub> =100%) at cold start.				
OUTPUT	VOLTAGE [V]	24	28	36	48	
	CURRENT [A]	4.2	3.5	2.8	2.1	
	REGULATION, LINE [mV]	120 Max	140 Max	180 Max	240 Max	
	REGULATION, LOAD [mV]	240 Max	280 Max	360 Max	480 Max	
	RIPPLE [mVp-p]	240 Max	280 Max	360 Max	480 Max	
	RIPPLE, NOISE [mVp-p]	290 Max	330 Max	410 Max	530 Max	
	TEMPERATURE DRIFT 0~+50°C [mV]	360 Max	420 Max	540 Max	720 Max	
	RISE TIME [ms]	500 max (AC IN 110V, I <sub>o</sub> =100%)				
	HOLDING TIME [ms]	16 typ (AC IN 110V, I <sub>o</sub> =100%)				
PROTECTION CIRCUIT	OVER CURRENT PROTECTION	Works at over 110% of rating and recovers automatically				
	OVER VOLTAGE PROTECTION	Works at 115 ~ 140% of rating				
ELECTRICALLY ISOLATED	INPUT-OUTPUT	AC3,000V 1 minute current 20mA, DC 500V 100MΩ (At room temperature & Humidity)				
	INPUT-CASE, FG	AC2,000V 1 minute current 20mA, DC 500V 100MΩ (At room temperature & Humidity)				
	OUTPUT-CASE, FG	AC500V 1 minute current 100mA, DC 500V 100MΩ (At room temperature & Humidity)				
ENVIRONMENT	OPERATING TEMP AND HUMID	0 ~ +50°C, 20 ~ 90% RH(Non condensing)				
	STORAGE TEMP AND HUMID	-20 ~ +75°C, 20 ~ 90% RH(Non condensing)				
	VIBRATION	10 ~ 55Hz at 1G, 3 minutes period, 30 minutes along X, Y and Z axis				
	IMPACT	10G for 20ms once on each X, Y and Z axis				
SAFETY	SAFETY REGULATION	UL, C-UL, CE	UL, C-UL, CE	UL, C-UL, CE	UL, C-UL, CE	
	LINE CONDUCTED RF VOLTAGE	Complied with FCC Part15 and EN55022 Class A Limits				