



MD120 Series 120W DINergy™ Power Supply

- ✧ Compact size, high efficiency and DIN Rail mounting
- ✧ 60° ambient rated design, no derating necessary
- ✧ 100-240VAC wide-range auto-selection input
- ✧ Overcurrent, shortcircuit, and overvoltage protection
- ✧ DC OK LED Indicator w/remote indicator contact
- ✧ Adjustable DC output voltage
- ✧ Power boost for unusual start-up loading
- ✧ Parallel operation capable for power and redundancy
- ✧ Safety meets UL508, UL60950 and IEC60950
- ✧ CE EN61000-3-2 compliant active PFC filtering
- ✧ EMI meets FCC15 B, EN55022 B and CISPR22 B
- ✧ High reliability, MTBF>200,000 hrs
- ✧ Operating temperature: -10°C to 70°C
- ✧ 5 year warranty



Applications

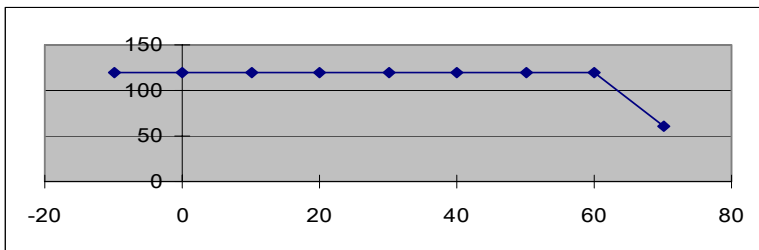
Micron DINergy™ units are suitable for industrial and commercial process and control systems, office facilities, telecom equipment, mechanical equipment, transport equipment, service and building automation, and electronic and electrical instrumentation.

Specifications

Model	MD120-12-1	MD120-24-1	MD120-48-1
Input Voltage	Rated 100-240VAC		
	Range 85-264VAC		
Input Current	0.6A/240VAC, 1.3A/110VAC	0.7A/240VAC, 1.6A/110VAC	
Frequency	50-60Hz, ±6%		
Inrush Current	Typ.<15A		
Earth Leakage Current	<3.5mA		
Start-up Time	<1S		
PFC/Harmonics	>0.95/Meets EN61000-3-2		
Rated Output Voltage/Current	12VDC/8A	24VDC/5A	48VDC/2.5A
Output Pre-regulation (Set Point)	12.5±0.5%	24.5±0.5%	48.5±0.5%

Output Voltage Regulation	10-16VDC	22-28VDC	46-52VDC
Rated Output Current	8-6A	5-4.3A	2.5-2.3A
Min. Output Current	0A	0A	0A
Output Peak Current	120% of rated output current		
Efficiency	86%/230V	88%/230V	88%/230V
Ripple & Noise	<=100mV		
Load Regulation	1%		
Voltage Regulation	0.5%		
Temperature Coefficient	0.02%/°C		
Hold-up Time	>=20mS		
Transient Overshoot	Load is changed from 50% to 100% step by step at a rate of 0.2A/μS, overshoot<500mV		
Reverse Voltage Immunity	<16V	<35V	<63V
Safety	UL60950, UL508, EN60950		
EMC	FCC 15B, EN55022 B, EN61000-3-2, IEC61000-4-2,3, 4, 5, 6,8& 11		
Reliability	MIL HDBK 217F, 200,000hrs		
Case Safety Standard	IEC60529, IP 20		
Pollution Standard	EN50178 Class 2		
Electrical Surge Protection	UL60950 Class I, PE is connected to ground		
Outside Dimension	2.56 (65.0) × 4.13 (105.0) × 4.89 (124.0)		
Weight	750g (1.37 lb)		

Temperature Corresponding Curve (T-P) (Output power 120W)



Protection

Method	Threshold	Mode
Fuse	3.15AT, 250V	Delay
Shortcircuit Protection	Automatic Recovery	Automatically recovers to normal operation after failure is removed.
Overcurrent Protection	125-135% of rated output	
Overvoltage Protection	110-130% of rated output	
Overheat Protection	95°C	