

ML/MN SERIES: BULK POWER FRONT ENDS

800 & 1000 Watts: 24, 28 & 48 VDC with PFC



KEY FEATURES

- Cost Effective
- Active Power Factor Correction
- Meets EN61000-3-2
- Up to 6 Watts / Cu. Inch
- Class B Input EMI Filter
- Single-Wire Current Share
- No Minimum Load
- 85% Efficiency
- Remote Inhibit
- Remote Output Voltage Adjust
- Overvoltage Protection
- Overload & Short Circuit Protection
- Thermal Protection
- AC Power Fail & DC Power Good
- 12V, 500mA Standby Output
- 5V, 100mA Standby Output



TWO-YEAR WARRANTY

STANDARD MODELS

(Other Outputs Available, Consult Factory)

MAX. OUTPUT POWER	OUTPUT VOLTAGE	OUTPUT CURRENT	PFC	MINIMUM LOAD	TOTAL REGULATION	AC INPUT RANGE	MODEL NUMBER
800W	24VDC	33A	✓	0A	1%	85-264VAC	ML5000
800W	28VDC	29A	✓	0A	1%	85-264VAC	ML6000
800W	48VDC	16.7A	✓	0A	1%	85-264VAC	ML7000
1000W	24VDC	42A	✓	0A	1%	85-264VAC	MN5000
1000W	28VDC	36A	✓	0A	1%	85-264VAC	MN6000
1000W	48VDC	21A	✓	0A	1%	85-264VAC	MN7000

SAFETY CERTIFICATIONS

AGENCY	STANDARD
UL	UL1950
CUL	CSA22.2, No. 950

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SPECIFICATIONS, ML/MN SERIES

Typical at Nominal 115/230VAC Line, Full Load and 25°C Unless Otherwise Noted.

OUTPUT SPECIFICATIONS

Voltage Adjustment Range	±5%
Total Regulation ¹	1.0%
Ripple & Noise, Pk-Pk ²	1%
Holdup	15mS
Dynamic Response ³	300µS
Temperature Coefficient	±0.02%/°C
Minimum Load	0A
Overload Protection	Constant Current Limiting
Overvoltage Protection	Power Shutdown
Remote Sense	Up to 0.25V Per Wire

INPUT SPECIFICATIONS

Input Voltage Range	85-264VAC, Single Phase
Power Factor	0.99
Input Frequency	47-63Hz
Inrush Limiting	30A Peak
Input Current, Full Load	
800W	7.9A, 120VAC; 4.1A, 230VAC
1000W	9.9A, 120VAC; 5.2A, 230VAC
Input EMI Filter, Conducted	EN55022 Curve B FCC20780 pt. 15J Curve B
Harmonic Distortion	EN61000-3-2
Input Immunity, Conducted	
Fast Transients, Line-Line	±2kV (EN61000-4-4 Level 3)
Surges, Line-Line	±2kV (EN61000-4-5 Level 2)
Surges, Line-Ground	±2kV (EN61000-4-5 Level 3)
Input Protection	Internal Fuse

GENERAL SPECIFICATIONS

Efficiency	85% at Full Load
Switching Frequency	150kHz Nominal
Isolation, class 1 ⁴	3000VAC Input - Output >1500VAC Input - Ground >50VDC Output - Ground
Safety Standards	EN60-950, UL1950, CSA22.2-950

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0°C to 70°C Ambient
Derating	2.5% / °C, 50°C to 70°C
Storage Temperature	-40°C to +85°C
Cooling	Integral Ball Bearing Fans

PHYSICAL SPECIFICATIONS

Case Material	Aluminum
Dimensions, Inches(mm)	3.25 H x 5 W x 10.5 D (82.6 x 127 x 267)

NOTES:

- No load to full load, including line regulation and load regulation.
- Whichever is greater, 20MHz bandwidth. Measured with 0.1µF ceramic and 10µF tantalum capacitors in parallel across the output.
- <4% deviation recovering to within 1% for 25% load change.
- Input - output isolation figure is for isolation components only. 100% production Hipot tested.

J1 CONTROL & SUPERVISORY SIGNALS

PIN	FUNCTION	PIN	FUNCTION
1	+Sense	6	DC Power Good
2	-Sense	7	Inhibin (N.O.)
3	Remote Adjust	8	Not Used
4	Not Used	9	AC Power Fail
5	Current Share	10	Control Common

J2: 12V, 500mA STANDBY SUPPLY	
PIN	FUNCTION
1	12V Return
2	+12VDC

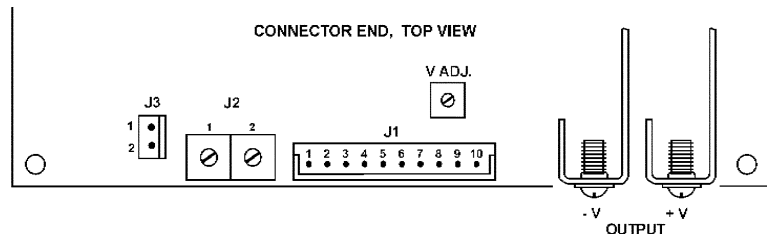
J3: 5V, 100mA STANDBY SUPPLY	
PIN	FUNCTION
1	+5VDC
2	5V Return

CONNECTORS

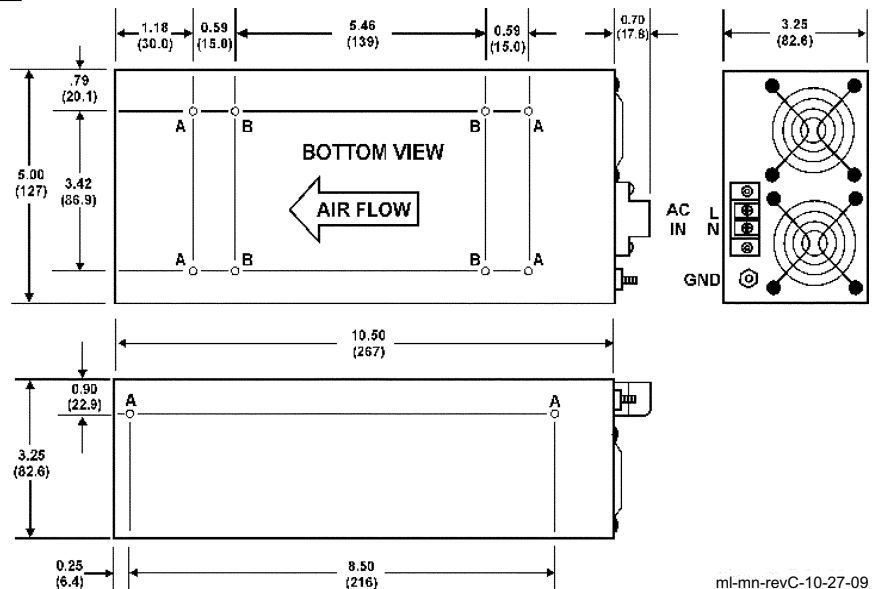
J1: AMP 173981-0	10-PIN
J2: LMI 9105.102.02	2-PIN
J3: AMP 171825-2	2-PIN

MATING CONNECTOR KIT

Kit provides mating connectors for all ML and MN Series models.
Order Kit No.: 775-1417-000



CASE OUTLINE



NOTE:

"A" Mounting holes are No. 6-32 threaded inserts. "B" mounting holes are M3 threaded inserts. Max. penetration is 0.25" (6.4mm).

ALL DIMENSIONS IN INCHES (mm).

All specifications subject to change without notice.

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