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Find the *Tolomatic Axidyne MSD* at our website: ***Click HERE***

MSD MICROSTEPPING MOTOR DRIVE

FEATURES • SPECIFICATIONS • DIMENSIONS • ORDERING



The MSD is a stand alone microstepping drive, making it a low cost solution for use within multi-axis stepper applications. With switch selectable current settings the MSD is the perfect drive for all of Tol-O-Matic's MRS high torque stepper motors.

Features:

- ***Motor current from 0.5 to 5.5 amps/phase*** (switch selectable, 51 settings)
- ***Built-in 80 V power supply*** (accepts 110 or 220 VAC power)
- ***MOSFET pulse width modulation switching amplifiers*** (3 state)
- ***Step, direction, amplifier enable inputs, fault output, optically isolated***
- ***2 MHz max input frequency***
- ***16 switch selectable microstepping resolutions***: 200, 400, 1000, 2000, 5000, 10000, 12800, 18000, 20000, 21600, 25000, 25400, 25600, 36000, 50000, 508000,steps/rev
- ***Over-temperature protection***
- ***Short circuit protection***
- ***Surge protection***
- ***Idle current reduction*** (50% switch selectable)
- ***Pluggable screw terminal connectors***, mating connectors included
- ***Integral heat sink***

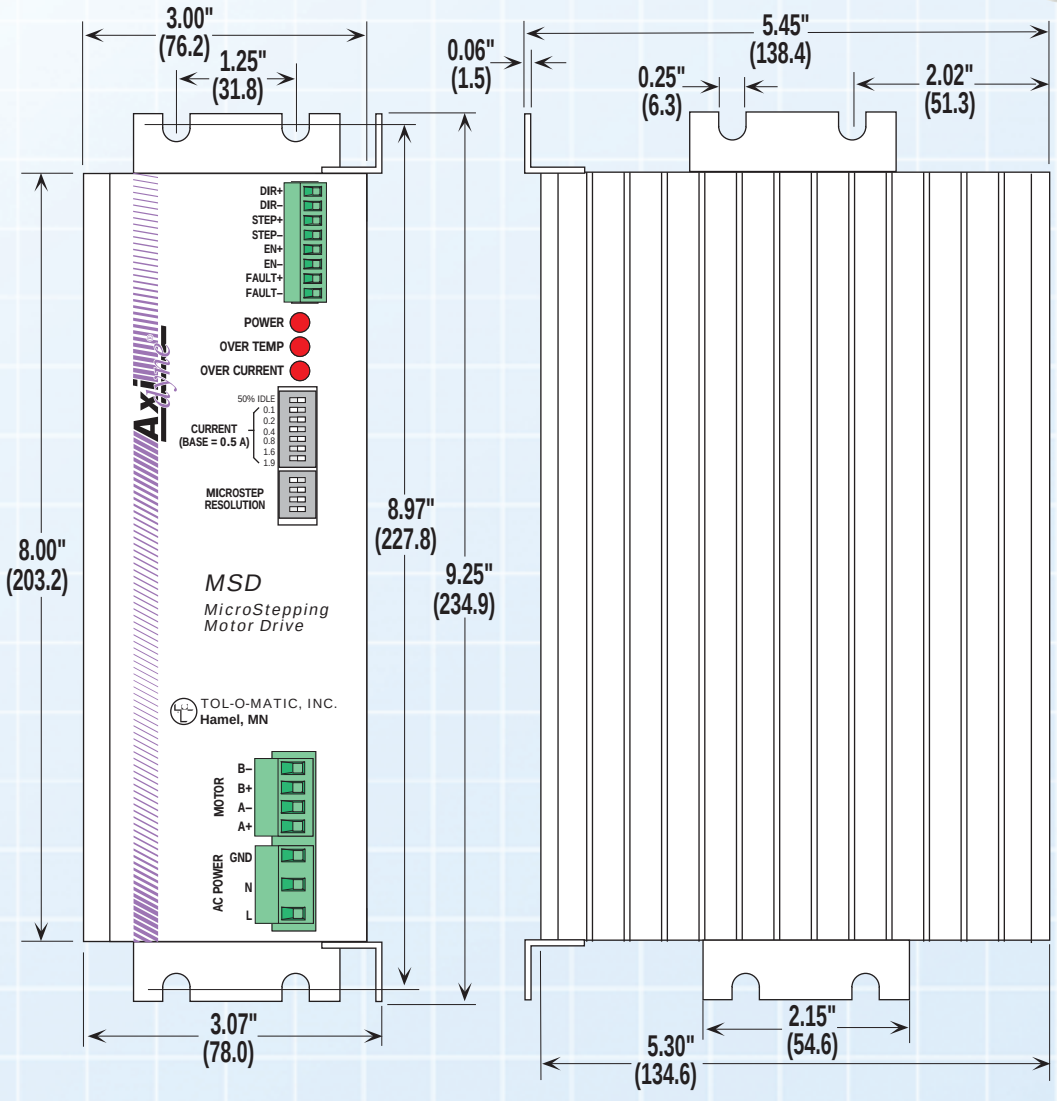
SPECIFICATIONS

SPECIFICATIONS	MSD Microstepping Motor Drive
Power	
Input Voltages (AC line):	110 or 220 Vac, 60Hz (switch selected) 400 W max (a 50/60Hz version can be special ordered)
Input Voltage (DC line):	75 Vdc full load, 90 Vdc no load
Amplifiers	
Pulse Width Modulated Switching:	Dual, MOSFET H-bridge, 3 state at 20 kHz
Phase Peak Output Current:	0.5 - 5.5 Amps
Output Power:	400 watts max
Protection:	Overcurrent and over-temperature
Automatic Idle Current Reduction:	Reduces current to 50% of setting after one second (defeatable)
Inputs	
Step, Direction & Enable:	Optically isolated differential 5-12V logic
Input Current:	5 mA minimum, 20 mA maximum
Motor Steps	on falling edge of step input
Minimum Pulse	1 µsec
Maximum Step Rate	2 MHz
Minimum Set Up Time:	1 µsec
Directional Signal Minimum Hold Time:	50 µs
Fault Output	
Photo Transistor:	Optically isolated, uncommitted (open collector, open emitter)
Voltage:	30V max.
Current	20 mA max.
Environment	
Max Case Temperature:	158° F (70° C)

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DIMENSIONS

MSD MICROSTEPPING MOTOR DRIVE



Tol-O-Matic System Compatibility

- Drives MRS series stepper motors to provide motor/drive system performance shown in the MRS motor section (see pages 55-56)
- Easily integrated to the SSC multi-axis/multi-function controller (see pages 21-26). When ordering with controller all interconnecting cabling is automatically configured and included.
- Integral to single axis controller - (MSS see pages 31-33)
- Dip switch covers included
- Two (2) mounting brackets included

Ordering Information

Configuration Code	Includes	Tol-O-Matic Part #
MSD	• Microstepping Drive • User Manual	3600-0039

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