Drive	Input Voltage (VAC)	Output Voltage Range (VDC)	Max. Armature Current	HP Rating @ 90 VDC Output	HP Rating @ 180 VDC Output	Enclosure	Reversing *****	Isolation ***	Field Supply (VDC) ****	UL Listed	CSA	CE TUV
M1	115	0-90	10*	1/15 - 1	–	CHASSIS	–	–	YES	YES	–	–

* Heat sink number 223-0159 must be used when the output is above 5 amps.
*** Built in isolation is not available on the M1 series. Minarik Drives recommends using the MM-PCM (Pg 8), PCM20000A (Pg 9), MM300 (Pg 10), or PCM4 (Pg 42).
**** The field supply is not available on the M1 series. Minarik Drives recommends using the MM23000C series (Pg 4).
***** See regenerative drives in Section C for SCR drives that can reverse on-the-fly.

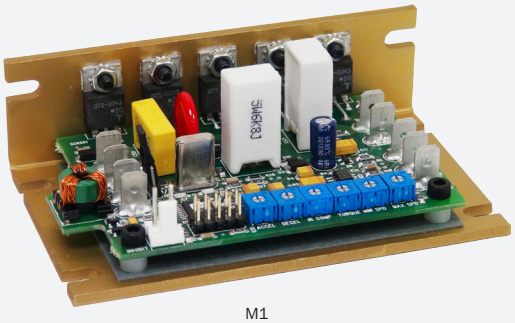
The size and the design of the M1 set it apart from the other SCR chassis drives. The very compact M1 has a footprint of only 4.30" x 2.64" while maintaining the industry standard MM mounting hole locations.

The M1 is a microprocessor based design which allows the drive to be more flexible. Adjustments such as the acceleration, deceleration, torque limit, and IR compensation can be factory programmed for OEMs. The microprocessor also allows for increased performance over a wider range of motor sizes.

The microprocessor on the M1 also makes the drive more intelligent than competitor SCR drives. For example, assume a motor stalls because of a jam. The M1 will allow the motor to ramp up to speed based on the acceleration setting once the jam is removed. Competitor drives would have immediately supplied full voltage to the motor once the jam was removed, and not followed the acceleration setting. Features such as this make the M1 a safer and more reliable drive.

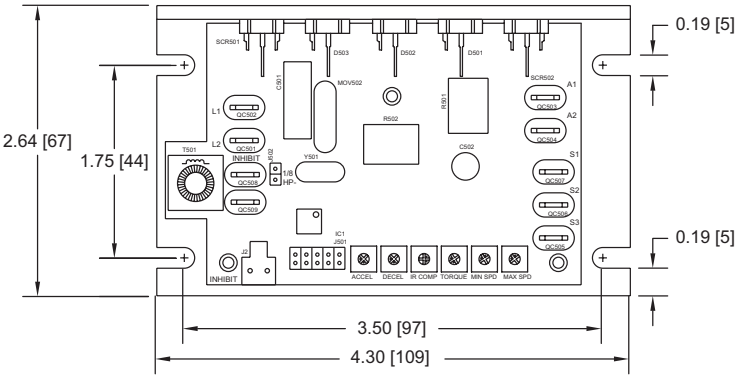
The compact size and additional features of the M1 make it an excellent choice for those looking for power and performance in a small package.

See page 50 for an in-depth comparison of the different 1Q SCR drives.



M1

M1 DIMENSIONS



Height: 1.45 [37]
All dimensions in inches [millimeters]

Wiring diagram can be found on page 62.

FEATURES

- **Compact size:** Standard "MM" mounting hole locations but with only a 4.30" x 2.64" footprint.
- **Speed range, regulation, & form factor:** 1% of base speed regulation with a 60:1 speed range and a 1.37 form factor at maximum rated voltage.
- **User adjustable calibration pots:** Minimum Speed, Maximum Speed, Current Limit, IR Compensation, Acceleration and Deceleration.
- **Stopping modes:** Inhibit (N.O.) for coasting to a stop.
- **Spade terminals:** Easy to use, lower cost and able to fit in a smaller package.
- **Two choices for inhibit connection:** Remote start/stop control with an inhibit plug or simply connect to spade terminals.
- **Programmable trim pot ranges:** Unique application requirements for acceleration, deceleration, torque limit and IR compensation can be programmed into a chip without expensive hardware changes.
- **Additional features:** Wider than typical IR comp range for finer tuning, wide accel/decel range (0.5 to 26 secs), and vibration tested to 1G.
- **Accessories**: Heatsink 223-0159. 201-0024 inhibit plug with 18" leads, DLC600 digital closed loop controller, PCM4 isolation card.