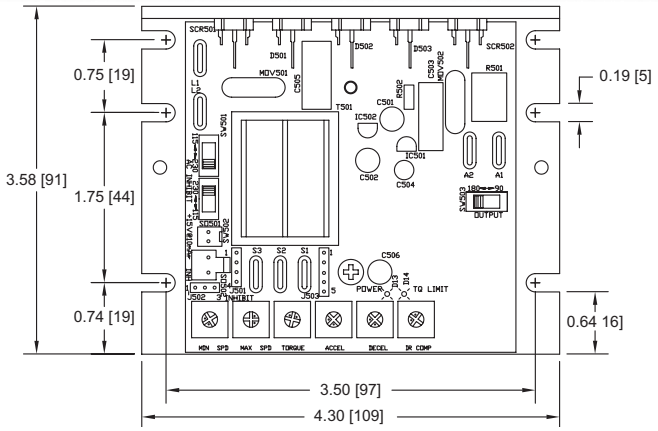
Drive	Input Voltage (VAC)	Output Voltage Range (VDC)	Max. Armature Current	HP Rating @ 90 VDC Output	HP Rating @ 180 VDC Output	Enclosure	Reversing *****	Isolation ***	Field Supply (VDC) ****	UL Listed	CSA	CE TUV
MM23012D	115 / 230	0-90 / 0-180	1.5	1/20 - 1/8	1/10 - 1/4	CHASSIS	–	–	–	YES	YES	Pending
MM23112D	115 / 230	0-90 / 0-180	1.5	1/20 - 1/8	1/10 - 1/4	NEMA 1	–	–	–	YES	YES	Pending
MM23212D	115 / 230	0-90 / 0-180	1.5	1/20 - 1/8	1/10 - 1/4	NEMA 1	YES	–	–	YES	YES	Pending
MM23412D	115 / 230	0-90 / 0-180	1.5	1/20 - 1/8	1/10 - 1/4	NEMA 4X	–	–	–	YES	YES	Pending
MM23002D	115 / 230	0-90 / 0-180	10*	1/8 - 1	1/4 - 2	CHASSIS	–	–	–	YES	YES	Pending
MM23102D	115 / 230	0-90 / 0-180	10**	1/8 - 1	1/4 - 2	NEMA 1	–	–	–	YES	YES	Pending
MM23202D	115 / 230	0-90 / 0-180	10**	1/8 - 1	1/4 - 2	NEMA 1	YES	–	–	YES	YES	Pending
MM23402D	115 / 230	0-90 / 0-180	10	1/8 - 1	1/4 - 2	NEMA 4X	–	–	–	YES	YES	Pending

* Heat sink number 223-0159 must be used when the output is above 5 amps.
** Heat sink number 223-0174 must be used when the output is above 5 amps.
*** Built in isolation is not available on the MM23000D 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 MM23000D series. Minarik Drives recommends using the MM23000C series (Pg 4).
***** Reversing models are designed for dynamic braking and reversing using the switches on the enclosure. See regenerative drives in Section C for SCR drives that can reverse on-the-fly or for drives with the ability to remote mount direction and braking switches.

MM23002D & MM23012D DIMENSIONS



Height: 1.60 [41]
All dimensions in inches [millimeters]

Dimensions of drives not shown above can be found on page 55.
Wiring diagrams can be found on pages 61 and 62.

FEATURES

- **MM footprint:** Chassis drives have a compact industry standard 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.
- **Diagnostic LEDs:** LEDs for power and current limit status.
- **Stopping modes:** Coast to minimum speed or to stop with selectable N.O. or N.C. inhibit contacts. Dynamic braking included on MM232x2D.
- **Spade and screw terminals:** Easy to use spade terminals on chassis; screw terminals on enclosed units.
- **Speed or Torque control:** Choose operating mode using jumper pins.
- **Accessories:** Heatsink 223-0159 or 223-0174. 201-0024 inhibit plug with 18" leads, DLC600 digital closed loop controller, PCM4 isolation card.
- **RoHS:** All MM23000D series models are RoHS compliant.

The MM23000D Series is similar to the MM23000C Series except for the addition of the following features. The MM23000D Series has a flexible inhibit circuit that can be set for a normally open or normally closed input. A torque mode option was also added to this family of drives where the drive will control the current to the motor, perfect for tension control applications. The logic circuit in the MM23000D Series contains additional filtering that allows the drive to run better and longer in electrically noisy environments. Also the MM23000D Series can accept a 5K or 10K Ohm potentiometer and that allows the drive to be a drop in replacement for many competitor drives.

Choose the MM23000D Series for the best ***value*** single quadrant SCR drive on the market.

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


MM23002D
MM23012D

MM23102D
MM23112D


MM23202D
MM23212D

MM23402D
MM23412D