

Drive	Input Voltage (VAC)	Output Voltage (VDC)	Max Current (ADC)	HP Rating @ 90 VDC Output	HP Rating @ 180 VDC Output	Enclosure	Reversing *****	Isolation	Field Supply (VDC) ****	Form Factor	UL 	CUL 	CE 
MM23011C	115/230	0-90 / 0-180	1.5	1/20 - 1/8	1/10 - 1/4	Chassis	-	***	YES	1.37	YES	YES	YES
MM23111C	115/230	0-90 / 0-180	1.5	1/20 - 1/8	1/10 - 1/4	NEMA 1	-	***	YES	1.37	YES	YES	YES
MM23211C	115/230	0-90 / 0-180	1.5	1/20 - 1/8	1/10 - 1/4	NEMA 1	YES	***	YES	1.37	YES	YES	YES
MM23411C	115/230	0-90 / 0-180	1.5	1/20 - 1/8	1/10 - 1/4	NEMA 4X	-	***	YES	1.37	YES	YES	YES
MM23001C	115/230	0-90 / 0-180	10*	1/8 - 1	1/4-2	Chassis	-	***	YES	1.37	YES	YES	YES
MM23101C	115/230	0-90 / 0-180	10**	1/8 - 1	1/4-2	NEMA 1	-	***	YES	1.37	YES	YES	YES
MM23201C	115/230	0-90 / 0-180	10**	1/8 - 1	1/4-2	NEMA 1	YES	***	YES	1.37	YES	YES	YES
MM23401C	115/230	0-90 / 0-180	10	1/8 - 1	1/4-2	NEMA 4X	-	***	YES	1.37	YES	YES	YES

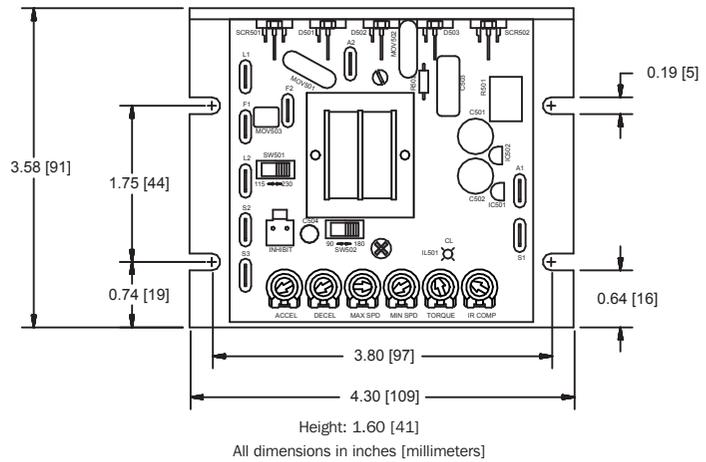
* Heatsink number 223-0159 must be used when the output is above 5 Amps.
 ** Heatsink number 223-0174 must be used when the output is above 5 Amps.
 *** Built in isolation is not available on the MM23000C family of drives. Minarik Drives recommends using the PCM23001A (Pg 8), MM-PCM (Pg 10), MM300 Series (Pg 9), or PCM4 (Pg 45).
 **** The field supply is rated at 1 Amp DC. A 50/100 VDC field is available with 115 VAC input, and a 100/200 VDC field is available with 230 VAC input.
 ***** Reversing models are designed for occasional reversing and braking using the switches on the enclosure. See Regenerative drives in Section C for drives that can reverse on-the-fly or for drives with the ability to remote mount direction and braking switches.

The MM23000C Series of drives are a reliable and cost-effective solution for controlling your permanent magnet or shunt-wound DC motors in variable-speed applications. The MM23000C series uses SCRs to provide full-wave rectification of the AC line input. These dual voltage drives operate using 115 VAC or 230 VAC, 50/60 Hz, to run 90 or 180 VDC SCR brush-type motors. These drives control motors from 1/20 to 2 HP and come in chassis, NEMA 1, and NEMA 4X models. Cased models include AC line fuses.

See page 50 for an in-depth comparison of the different models of drives.



MM230x1C DIMENSIONS



Dimensions of drives not shown above can be found on page 54. Wiring diagrams of chassis drives can be found on page 59 and 68.

FEATURES

- **MM footprint:** Chassis drives have a compact industry standard footprint.
- **Speed range and regulation:** 1% regulation over 60:1 speed range.
- **User adjustable calibration pots:** IR compensation, min speed, max speed, current limit, acceleration and deceleration.
- **Diagnostic LED:** LED for current limit status on all models. Cased models have a green power light.
- **Stopping Modes:** Inhibit (N/O) for coasting to a stop on all models. Dynamic braking included on MM232x1C.
- **Spade and screw terminals:** Easy to use spade terminals on chassis; screw terminals on enclosed units.
- **Options:** "-Q" option on chassis drives include quick disconnect terminal block and power LED.
- **Accessories:** Heatsink 223-0159 or 223-0174. 201-0024 inhibit plug with 18" leads, DLC600 digital closed loop controller, PCM4 isolation card.