

CONTROLLERS

Model EC-2000



Description

The EC-2000 Digital Controller can be used with any eddy current product. It consists of a single printed circuit board rated for 115 VAC, 1 phase, 60 Hz input. It has the flexibility of 45 or 90 VDC coil voltage at 8 Amps and is available for use with a wide range of drives and brakes rated 1 through 200 horsepower. *For higher power applications up to 2,000 HP, please review the section on the EC-2000HP.* A power relay is a standard feature. The basic circuit board includes provisions for many control functions. Some of these functions are multiple cascading, linear accel/decel, manual or auto signal follower. The EC-2000 can also be run in speed mode or in torque mode. Selection of these options is made through the soft touch keypad. Many other modifications are included. This controller is designed to offer all standard industrial modifications without the need for auxiliary modification boards. Input transformers are available upon request.

Features & Benefits

- Precise speed control standard with 0.1% speed regulation.
- Digital processing allows easy, repeatable setup and control.
- PC computer programming capability.
- Dual output voltage is compatible with 45, 90, 180, & 220 VDC and auto 45 VDC forcing.
- Low power requirements allow virtually no electrical noise.
- No line harmonic distortion
- Idle motor start with approximately 250% starting torque capability.
- No additional cost for low-speed operations.
- No speed runaway.
- Choice continuation or stop at loss of reference.
- Automatic troubleshooting of coil loss.

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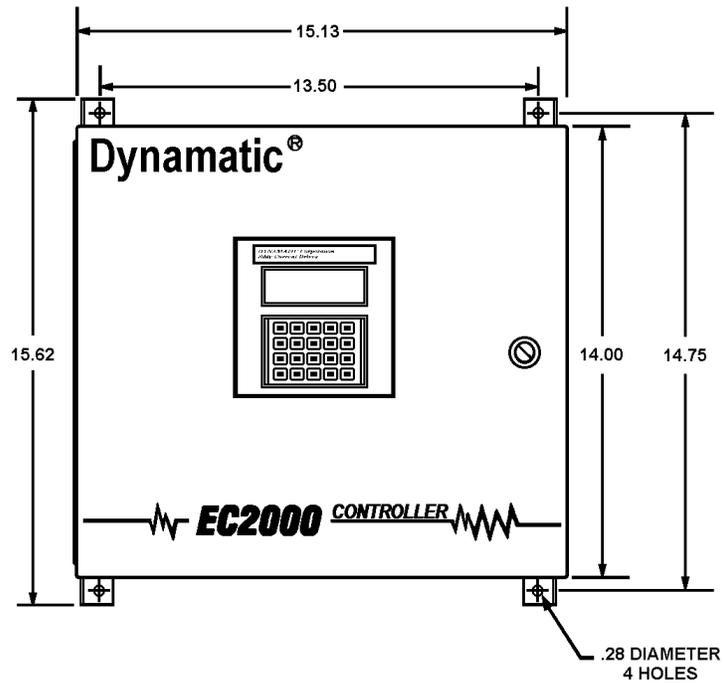
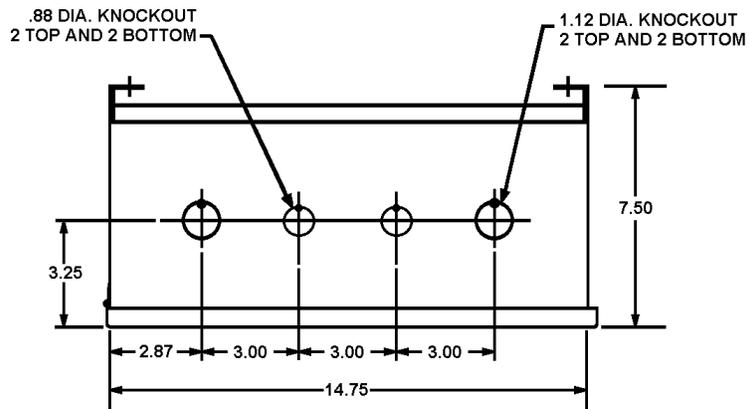
Model EC-2000 Specifications

EC-2000 Controller	Units used with	Fractional HP Drives AS-14 - 27 Drives AT-140 - 440 Drives DCD-132 - 160 Drives AS-703 - 705 (45 or 90 VDC) AS-706 - 707 (90 VDC only) Air-Cooled Brakes WC-620 - WC-640 Water-Cooled Brakes
	Horsepower range	1-200 HP - Standard
	Digital	Standard
	Input, power maximum	115 VAC, +/- 10%, 1 Ph, 50/60 Hz, 285 to 1295 watts
	Standard Output, power maximum	45 VDC, 8 Amps; 90 VDC, 8 Amps
	High Power	45 VDC, 20 Amps; 45 VDC, 50 Amp; 90 VDC, 20 Amps; 90 VDC, 50 Amps – Consult Factory for other ratings
	Speed regulation 25% to full load change	0.1% - Standard
	Regulated speed range	68:1 - Standard
	Enclosure	NEMA 1 - Standard
	Operator devices (Keypad)	Run & Jog operation, Stop button and Run Speed settable reference from the keypad - Standard
	Built-in modifications	Linear accel/decel, torque control, 0.01% regulation, adjustable braking, spring set braking (relay contacts available), signal follower input, adjustable jog, torque/speed control and threading - Standard
	Field modifications	None
	Closed Loop speed control	Standard
	Controller protective features	Input fuses, low line voltage, line transients, isolated signal circuits output over-current, trip or indication only
	Line regulation for +/-10% input line voltage change	+/-0.3%
	Thermal drift per degree C	0%
	Minimum regulated speed range	25 RPM
Maximum ambient	104° F (40° C) enclosed 149° F (65° C) panel mount	

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Model EC-2000 Specifications

Standard EC-2000 NEMA-1 Enclosure Outline Drawing



DIMENSIONS ARE IN INCHES

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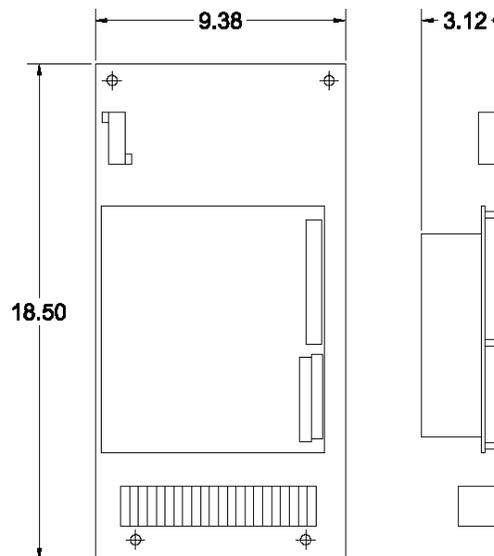
EC-2000 Ordering Information

The Model EC-2000 Controller can be provided as a panel mount, or it can be provided in a NEMA 1 or NEMA 12 Enclosure. The NEMA 1 and NEMA 12 enclosures include the installed keypad. The panel mount versions do not include the keypad, cable or mounting hardware, but may be ordered loose (see below). A power relay is built in. Optional current transformers are required for torque limit operation and are available upon request. Input transformers are not required but are available upon request.

EC-2000 Controller Selection Table

Description	Part Number
Panel Mount Control w/o Keypad	15-002000-0100
Panel Mount Replacement for Mark III Control w/o Keypad (Dimensional Replacement)	15-002000-0200
Includes NEMA 1 Enclosure and Keypad	15-002000-0300
Includes NEMA 12 Enclosure and Keypad	15-002000-0400
Press Drive Control (keypad not included, CT extra)	15-002000-0500
Panel Mount Replacement for Mark III Control w/o keypad. Includes 230/460v Panel Mount Transformer	15-002000-1201
Press Drive Control with 230/460V transformer. (Keypad not included, CT extra)	15-002000-1501
Includes NEMA 1 Enclosure, Keypad and 230/460V transformer. Speed-pot Auto-Man Switch in cover.	15-002000-2201
Press Drive Control in NEMA 1 Enclosure, keypad in cover. CT extra.	15-002000-2500
Power XFMR 230/460V Prim 500VA 5.5 Amp	15-000360-0001
Power XFMR 230/460V Prim 1000VA 8.0 Amp	15-000361-0001
Keypad Kit with Cable & Mounting Hardware	37-000544-0100
Current XFMR (Req. for Torque Limit) 0-70 Amp	15-000203-0003
Current XFMR (Req. for Torque Limit) 70 – 125 Amp	15-000203-0125
Current XFMR (Req. for Torque Limit) 125 – 250 Amp	15-000203-0250

Standard EC-2000 Open Panel Outline Drawing



DIMENSIONS ARE IN INCHES