

M-Max™ Series Adjustable Frequency Drives

Maximize your potential.



Presenting the M-Max™ Series

The M-Max Series of adjustable frequency drives represents the next drive generation engineered to solve your specific application requirements. With a compact design, impressive torque response and simple handling, Eaton's new M-Max Series offers increased efficiency and product life. Including both single and three-phase devices, the easy-to-use microprocessor based drives incorporate standard features that can be programmed to tailor the drive's performance to suit a wide variety of application requirements. The M-Max Series is designed for today's machinery applications, including: conveyor belts, transport drives, packaging machines, as well as pumps and fans.

Key features

- On-board start-up wizards and preset macros to simplify commissioning
- Side-by-side mounting and orientation flexibility to maximize panel space
- Modbus-RTU as standard serial fieldbus
- Temperature controlled cooling fan to increase efficiency and extend life
- NEMA 1 kits available

Protective features

- Overcurrent
- Overvoltage and undervoltage
- Ground fault
- Stall
- Input and output phase loss
- Motor overload and underload
- Motor temperature
- Communication loss

EATON

Powering Business Worldwide



Easy installation.
Minimal maintenance.
Maximum flexibility.

Enable your application to
achieve its maximum potential

Eaton drive products lower your application costs by saving installation and startup time. They are also easy to maintain and troubleshoot, saving you time and money. With their unique feature set, M-Max Series drives make the maximum impact, with a minimum amount of energy.

Although programming drives can often seem complicated, the M-Max Series preserves your valuable time. The menu structure of the M-Max Series is designed to get you up and running quickly, so you don't have to spend hours programming and commissioning the device. A start-up wizard guides you through user-friendly parameterization and operations menus. Four application specific parameter sets are available for quick, out-of-box commissioning, a menu for the most important parameters and well-structured submenus enable simple settings for your most complex applications.



AVAILABLE MODELS

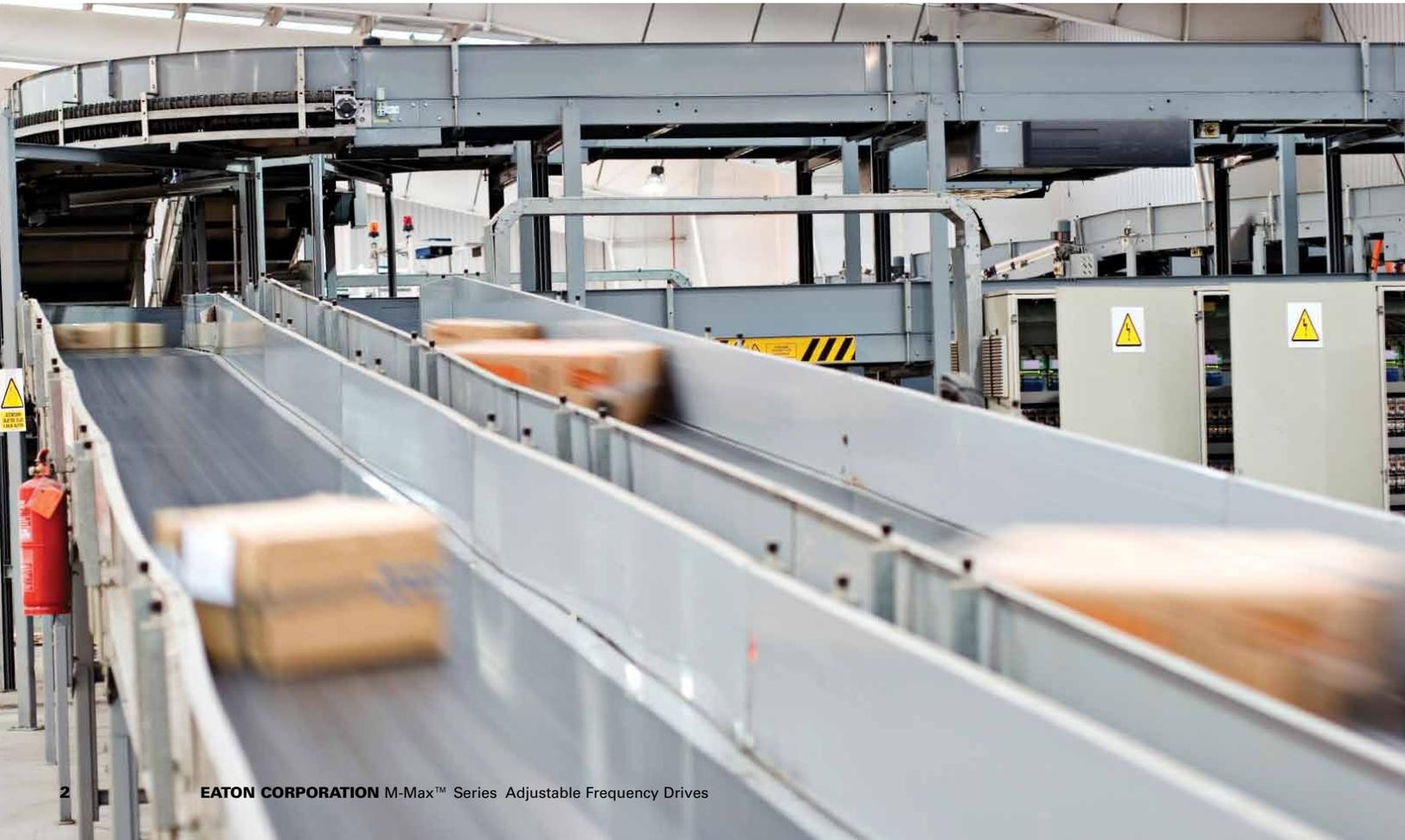
Models are rated at:

¼–1½ hp @ 115V
single-phase 50/60 Hz

¼–3 hp @ 240V
single- or three-phase 50/60 Hz

½–10 hp @ 480V
three-phase 50/60 Hz

1–7½ hp @ 575V
three-phase 50/60 Hz



The ideal drive for machine applications.

Make the maximum impact

The M-Max Series uses a 32-bit microprocessor and insulated gate bipolar transistors (IGBTs) that provide quiet motor operation, high motor efficiency, and smooth low speed performance. The integrated proportional-integral (PI) controller, RFI filter and brake chopper, as well as the extensive motor-protective functions ensure a high level of operational reliability and allow significant energy savings—all while keeping the drive compact for use in tight spaces. M-Max drives come with a host of functions dedicated to solving your application needs including flying start (starting into a running motor), configurable responses in the event of a fault, and Modbus-RTU protocol as standard. All enable robust, efficient performance.

Get the maximum performance

The rugged M-Max Series was designed to meet a host of performance criteria for machinery applications.

With a maximum ambient temperature of +50°C, 150% overload for 1 minute and 200% overload for 2 seconds, the M-Max Series meets every expectation. Its conformal-coated control boards allow for use in highly humid and aggressive environments, such as sewage treatment plants. Worried about electromagnetic compliance? Built in EMI/RFI filters and shielding clamps that allow connection of control and motor cable shields enable the drive to meet EMC requirements categories C2 and C3.

And because it loses less power—30% less wattage on average compared to competitive devices—the M-Max drive exhibits highly energy efficient behavior. In addition, the performance of the sensorless vector control ensures high speed accuracy; even with load deviations and low motor speeds.

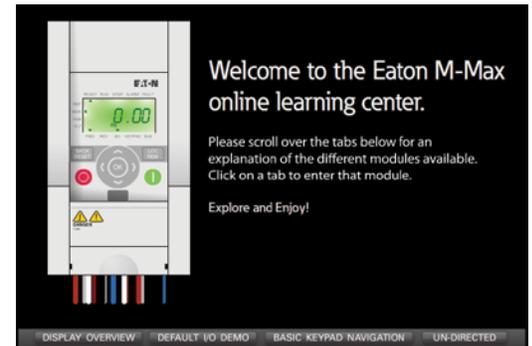
Designed for durability, the M-Max Series provides maximum performance when you need it most.

Explore M-Max drives on line

The link below takes you directly to the Eaton Online Learning Center where you can discover the features and ease-of-use of M-Max drives.

Interact with the keypad controls, navigation, displays and parameter changes. You can also control M-Max in an unscripted “do whatever you want” mode to explore the full functionality of this virtual demo case.

www.eaton.com/m-maxdemo



M-Max Series

FS1	FS2	FS3
6.2 x 2.6 x 3.9 in	7.7 x 3.5 x 4 in	10.3 x 3.9 x 4.3 in
156.5 x 65.5 x 98.5 mm	195 x 90 x 101.5 mm	262.5 x 100 x 108.5 mm



Eaton is dedicated to ensuring that reliable, efficient and safe power is available when it's needed most. With unparalleled knowledge of electrical power management across industries, experts at Eaton deliver customized, integrated solutions to solve our customers' most critical challenges.

Our focus is on delivering the right solution for the application. But, decision makers demand more than just innovative products. They turn to Eaton for an unwavering commitment to personal support that makes customer success a top priority. For more information, **visit www.eaton.com/electrical**.

Eaton Corporation
Electrical Sector
1111 Superior Ave.
Cleveland, OH 44114
United States
877-ETN-CARE (877-386-2273)
Eaton.com

© 2011 Eaton Corporation
All Rights Reserved
Printed in USA
Publication No. PA04020001E
November 2011



All trademarks are property of their respective owners.