

MICROMASTER 440

The Powerful All-rounder

Even in the world of drives, there are often forces which are difficult to control. Until the most powerful of our frequency inverters enters the field. The MICROMASTER 440 has been specially designed for those applications which require broader functionality and a greater dynamic response than is usually the case. The sophisticated vector control system ensures a uniformly high drive quality, even when sudden load changes occur. Fast response inputs and positioning deceleration ramps allow movement to target positions even without an encoder. Due to an integrated brake chopper, it works with outstanding precision, even during braking and short declaration ramps. All this is possible within a power range starting at 0.12 kW (0.16 HP) and going up to 250 kW (350 HP).

Typical Uses

Numerous applications in areas such as material handling systems, the textile industry, elevators, hoisting gear, mechanical engineering and the food, beverages and tobacco industries.



MICROMASTER 440 – Technical Data

Voltage and power ranges	200-240 V, ± 10%, 1 AC, 0.12 to 3 kW (0.16 to 4 HP) 200-240 V, ± 10%, 0.12 to 45 kW (0.16 to 60 HP) 380-480 V, ± 10%, 0.37 to 250 kW (0.5 to 350 HP) 500-600 V, ± 10%, 0.75 to 90 kW (1.0 to 125 HP)
Operating temperature	0.12 to 75 kW (0.16 to 1.0 HP) (CT): -10 °C to +50 °C 90 to 200 kW (125 to 276 HP) (CT): 0 °C to +40 °C
Process control	Internal PID controller (autotuning)
Types of control	Vector control, FCC (Flux Current Control), multipoint characteristic (parameterizable V/f characteristic), V/f characteristic
Inputs	6 digital inputs, 2 analog inputs, 1 PTC/KTY input
Outputs	2 analog outputs, 3 relay outputs
Link-up to automation	The ideal partner for your automation needs, from connection to SIMATIC S7-200 to integration in TIA with SIMATIC and SIMOTION.

Its Strengths in Brief

- Compact housing
- Easy to install
- Sophisticated vector control (speed/torque)
- Versatile inputs and outputs
- Guided commissioning
- Kinetic buffering against voltage dips
- Compound braking for controlled rapid braking
- Integrated brake chopper for power outputs up to 90 kW (125 HP)
- Free function blocks

High overload capacity

- Evaluation of motor pulse encoders (optional) for maximum control of torque at the lowest speeds (even at zero speed)
- Modular system of extension options
- Can be dimensioned for CT (constant torque) or VT (quadratic, i. e. variable torque)
- 3 selectable drive data to adapt the inverter to different operating circumstances
- Load torque monitoring

4 skip frequencies minimize machine stress when resonance occurs

- Automatic restart
- Minimal stress on motor when inverter connected to rotating motor
- Evaluation of motor temperature for integrated motor protection
- Prepared for use in IT networks
Available with and without integrated EMC filter

MICROMASTER 440 has everything needed to keep machine wear to a minimum.