

# SIMOVERT® MASTERDRIVES Motion Control

## Overview

### Application

The MASTERDRIVES Motion Control (MC) frequency converters are specially designed for industrial servo drive applications.

In addition to the well-proven modular hardware concept, MASTERDRIVES Motion Control offers a modular software featuring

- freely interconnectable function blocks and
- integrated technology functions.

The MASTERDRIVES Motion Control series is compatible regarding

- communication,
- technology,
- operator control and visualization

and is available for line voltages of 3-ph. 380 V to 480 V AC, 50/60 Hz, and in the following designs, depending on the power rating:

- Compact PLUS 0.55 kW to 18.5 kW (0.75 HP to 25 HP)
- Compact units 2.2 kW to 37 kW (3 HP to 50 HP)
- Chassis units 45 kW to 250 kW (60 HP to 335 HP).

The MASTERDRIVES Motion Control concept is characterized by:

- a very high-level dynamic response
- positioning
- angular synchronism between drives
- cam plates.

It thus satisfies the most stringent demands placed on servo technology.

The MASTERDRIVES Motion Control converters are excellently matched to Siemens compact and highly dynamic servomotors.

These synchronous servomotors and asynchronous servomotors are primarily suited for highly dynamic applications.

Corresponding to highly dynamic MC control on the motor side, MASTERDRIVES AFE (Active Front End) using active line-angle-

### Compact PLUS units



oriented vector control is now available on the line side for optimum energy supply.

MASTERDRIVES AFE is characterized by:

- absence of system perturbations, i.e. very good overall power factor
- stall-protected operation even in the event of supply dips and supply failure
- highly dynamic rectifier and regenerative units
- reactive-power compensation possible
- four-quadrant operation.

The program is rounded off by a complete spectrum of system components and accessories.

Customer-specific, integrated solutions (automation –

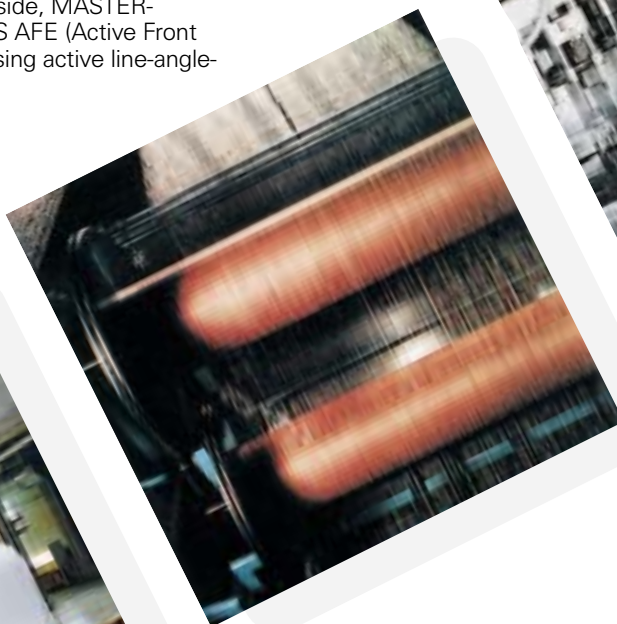
### Compact and chassis units



converter – motor) are available for many applications in all industrial sectors.

For MASTERDRIVES, easy-to-use project-planning tools (PATH) and start-up tools (DriveMonitor) are available.

Siemens' world-wide service and sales network enable all our customers and MASTERDRIVES users to obtain direct access to expert advice and project planning as well as training and service.

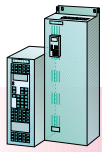


### Customized solutions

The compact and chassis units can be used in air-cooled or water-cooled control cabinets and plant configurations.

Rectifier and regenerative units can also be provided as Active Front End units.

Our sales departments, working with our applications workshops, will help you to find the best solution for your requirements.



Compact and  
chassis units



Compact  
PLUS units

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Optimal integration of drives into the world of automation

